Return to and Departure from Social Origin: Trends in Social Fluidity in the Czech Republic between 1990 and 2011[1]

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Return to and Departure from Social Origin: Trends in Social Fluidity in the Czech Republic between 1990 and 2011. The authors analyse trends in social fluidity between 1990 and 2011 in Czech society and examine how the transition from socialism to capitalism has affected these trends. The data consist of 28 annual surveys conducted in the Czech Republic between 1990 and 2011 (N=28,726). The results show that social fluidity in Czech society decreased between 1989 and 2000. This is the result of social change (the period effect), namely, intragenerational changes, which the authors conceptualise as a return to social origin. These changes are related to the re-stratification of Czech society after 1989. The period of return to social origin ends sometime around the year 2000. After that, the trend reverses and social fluidity slowly increases. The authors argue that the period of return to social origin is replaced by a period of departure from social origin. This shift is the effect of the educational expansion that has occurred since 1989 in Czech society and cohort replacement.
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The political, cultural, and social changes that took place in the 1990s transformed the societies of Central and Eastern Europe into a research laboratory for the social sciences. While the countries of Western Europe developed economically, matured politically, and came into their own socially since the end of the Second World War, the socialist countries of Central and Eastern Europe more or less stagnated during the second half of the twentieth century (Kornai 1992; Kaplan 1993; Turek 1995). All the more pronounced, then, were the changes after 1989 and so much greater the impact on people's lives. All the greater, too, is the amount of research being done by social scientists on the trends in post-socialist societies, for there is now a unique opportunity to analyse the effects of institutional changes on selected aspects of social life.

The goal of this paper is to map from an intergenerational perspective the inequality connected to positions on the Czech labour market between 1990 and 2011, to show their development and changes, and at the same time to examine how social change over the last twenty years (the transition from

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socialism to capitalism) has affected these inequalities. The basic questions addressed in the text include: How has the transition from a state-planned socialist economy to a market economy and political democracy affected intergenerational inequality in Czech society? How has intergenerational social mobility changed for people from different socioeconomic backgrounds? Is contemporary Czech society becoming more or less open in terms of social opportunity?

Intergenerational social mobility from a macro-structural standpoint indicates the degree of rigidity of class structures (Breen 2004). Where it is high, class inequality is low, and therefore easily overcome. In social stratification research, intergenerational social mobility is divided into absolute and relative (Goldthorpe 2000; Breen 2004). Absolute social mobility is a concept encompassing all the movement within a society, regardless of whether the cause is structural (mobility takes place, for example, due to new jobs being created) or social (mobility takes place due to differing social and economic advantages based on social origin). Relative social mobility (or social fluidity) refers to differences in chances among social origins to attain a certain class positions. These chances comprise the economic, social, and cultural differences between families, which must be overcome by children (c.f. Goldthorpe 2000).

The main message of this paper is: social fluidity decreases in Czech society between 1989 and 2000. This decrease is the result of social change (the period effect); namely, intragenerational changes that we conceptualise as a return to social origin, which are related to the re-stratification of Czech society in the analysed years. The Czech occupational structure has changed to such a degree that intragenerational mobility changes the trends in social (intergenerational) fluidity. In this process, the importance of social origin increases: a person's starting position − indicated by father's position on the labour market (social origin) more strongly determines the offspring's position on the labour market (social destination). In other words, the changes in occupational positions between 1990 and 2000 in Czech society have brought children closer to the positions of their fathers. The period of return to social origin finishes sometimes around the year 2000. After that, the trend in social fluidity reverses and social fluidity slowly increases. The period of return to social origin is replaced by a period of departure from social origin. This shift is the effect of the educational expansion that occurs after 1989 in Czech society and cohort replacement.

Explanation of changes in social fluidity after 1989: two hypotheses

Changes in social fluidity after 1989 in Czech society have thus far not been satisfactorily explained. Nevertheless, on the basis of available arguments about other populations, we may assume that it can be both positive (social

fluidity increases), or negative (social fluidity decreases). The positive trend is supported by the argument of Richard Breen and Jan Jonsson (2007), according to whom the expansion of the educational system in Sweden has increased equality of educational and job opportunities for every succeeding birth cohorts. The younger the people on the labour market, the weaker the effect of social origin on the education and occupational status they have attained. If the presence of such cohorts on the labour market increases over time, then overall social fluidity increases. We are talking about a compositional transformation of society. If such a transformation has occurred in Czech society over the last twenty years, then we can expect an increase in social fluidity.

A negative trend is supported by the argument of Theodor Gerber and Michael Hout (2004). In their opinion, the deregulation of income and the elimination of special state treatment for politically loyal employees in post-socialist Russia in the 1990s led to increased competition for occupational positions. A model of career (intragenerational) mobility has appeared that reduces differences between social origin and destination. An occupational career in the direction of the class position of the parents – regression towards social origin – means a strengthening of intergenerational reproduction (and a decrease in social fluidity). On the basis of this argument, we might expect a weakening of social fluidity in Czech society. Class reproduction should strengthen as a result of institutional changes (political and economic transformation) in Czech society.

First hypothesis: Social fluidity in Czech society after 1989 has increased

According to Breen and Jonsson (2007), changes in intergenerational social fluidity are caused by expansion of the educational system. These sociologists analyse the trends in social fluidity in Sweden between 1976 and 1999, utilising data from annual surveys.[4] They base their study on the finding that Swedish society became more socially open over the course of the 20th century (the relationship between social origin and destination weakened), and attempt to explain why this occurred, utilising the cohort perspective. The labour markets comprise a "sandwich" of cohorts born during different years. Each year one birth cohort leaves the labour market and retires and a new birth cohort, who has just left the educational system, appears on the labour market. Their analysis revealed that the younger a cohort on the labour market, the more social fluidity we observe within it. They thus see cohort replacement on the Swedish labour market as the cause of changes in overall social fluidity over time[5].

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[4] They worked with 24 sample surveys with an overall number of 63,280 respondents.

[5] The same approach to social mobility, in which cohort effect is controlled for period effect and vice versa, but for Great

Why do we observe greater social fluidity in each successively birth cohort on the Swedish labour market? Breen and Jonsson (2007) focus on the role of education in mobility trends and analyse equalisation and compositional effects. Both effects are the result of equality-promoting measures implemented in the Swedish education system during the second half of the 20th century. The equalisation effect implies the rise of equal chances in access to educational system; the compositional effect implies the weakening of bonds between class origin and destination at higher levels of education. The test of the equalisation effect shows that from cohort to cohort the influence of class origin on education attained declines; for each successive cohort on the Swedish labour market, class origin has less effect on the education acquired. The test of the compositional effect shows that with increasing educational level, the influence of class origin on class destination weakens. The higher the educational levels, the higher the chances that class position will be less influenced by class origin. The effects coexist and are identifiable among the later-born cohorts that replace earlier cohorts in the Swedish labour market. Cohort replacement changes the association between class origin and destination. Social fluidity increases, not as the result of transformation of the whole population, but as the result of the gradually increasing hegemony of later-born and meritocratic cohorts over the earlier-born and ascriptive cohorts in the Swedish labour market.

Because the labour market in every society is composed of cohorts born in different years, and because there was something of an expansion of the educational system in Czech society before 1989[6], we might assume that social fluidity in Czech society increased between 1989 and 2011. We test this assumption as our first hypothesis, even though its applicability to Czech society is placed in doubt by the limitations formulated in Breen and Jonsson's analysis. Their argument deals only with stable democratic societies not undergoing major institutional change. It applies to societies in which cohorts with differing intergenerational opportunities are being replaced, and not to the intergenerational chances themselves among the population on the labour market. But cohort replacement with differing intergenerational chances was not the only development in Czech society over the last twenty years. The Czech labour market as a whole has changed, and, we assume, the intergenerational chances within it as well.

Britain and Germany, was used by Breen and Luijkx (2007).

[6] According to the Census of People, Houses, and Apartments from 1950 to 1989 in the Czech Republic, there has been a constant while slight decline in the proportion of people with basic education, and growth in the proportion of people with secondary and tertiary education. This is a gradual (historically grounded) transformation of the educational structure of the population towards higher levels of education.

Second hypothesis: Social fluidity in Czech society after 1989 has decreased

According to Gerber and Hout (2004), change in intergenerational social fluidity in post-socialist countries is not caused by cohort replacement, but by the transformation processes typical for such countries during the 1990s. Gerber and Hout analyse data from six annual surveys carried out in Russian society between 1993 and 2000 (they also had information about the respondents' occupation in 1988 contained in the 1993 survey). They show that social origin did affect social destination during the Soviet era. The transition to a market economy further strengthened this connection. The relationship between the occupations of fathers and offspring increases due to class-determined intragenerational mobility, part of which is regression to social origin.

It is well known that most socialist governments strove to eliminate class-based differences between people. From an economic standpoint, this meant eliminating income differences among employees (everyone received the same wage) and ideological justifications of equality among them (labour is for the benefit of society, not for personal enrichment). Motivation towards social mobility was therefore low. Efforts to rise socially brought neither economic nor social advantages. Gerber and Hout (2004) use the case of Russian society to show that low income differences were associated with low efforts by parents to invest economically and culturally in the social advancement of their offspring.

After the collapse of the Soviet Union, the Russian government stopped regulating the income of the population and centrally controlling the labour market. Many jobs disappeared. A class of small proprietors and artisans (with or without employees) formed, and positions on the labour market began to sort themselves out by income. More prestigious positions, in which a person is not easily replaceable, began to be much better-rewarded economically than positions in which a person is replaceable. Differences in income began to be accompanied by differences in occupational conditions – they began to be linked to social classes. However, they also began to have an impact on economic security and opportunity (different occupational positions have differing degrees of vulnerability to unemployment, and differences in income generate differing social chances). In post-socialist Russia, the transition to a market economy increased the importance of labour market positions.

In such a situation, the more prestigious and better-paid positions on the labour market become the subject of competition. People who held these positions on the basis of political criteria lose them under the "new" competition, because they do not have the appropriate skills and education. They are pushed out by people from higher social backgrounds. This means that those who were

upwardly mobile during the Soviet era return to jobs closer to their social origin, and vice versa. From an intergenerational standpoint, this intragenerational movement strengthens the relationship between social origin and class destination. Changes in intragenerational mobility – labelled as a regression towards social origin by Gerber and Hout (2004) – are, in short, the cause of intergenerational changes over time (there is a strengthening of the relationship between parents and offspring' social classes).

Although in many ways Soviet society before 1989 was different from Czech society, the fundamental contours of economic transformation were similar. On the basis of this argument, then, we might assume that social fluidity in Czech society weakened after 1989, not as a result of cohort replacement, as argued by Breen and Jonsson (2007), but rather as a result of time effect, which is dominated by a return to social origin within the framework of intragenerational mobility. This assumption is tested as our second hypothesis.

Analysed data and variables

Our two hypotheses imply two main research questions. Has cohort replacement over the last 20 years changed the Czech labour market so that it has a positive impact on intergenerational mobility (i.e. social fluidity has increased)? Or have the intragenerational changes been so fundamental that they overshadow cohort replacement and negatively influence the pattern of intergenerational mobility (i.e. social fluidity has decreased)?

Our data consist of 28 annual surveys carried out in the Czech Republic between 1990 and 2011, containing all relevant information for the analysis of social fluidity.[7] Table 1 shows the original sample, response rates, the presence or absence of weights in each dataset and the number of valid cases analysed, absolutely and as a percentage of the original size of the dataset.

Twenty-five surveys utilise random stratified samples representative of Czech society at the time the data were gathered and three surveys are quota samples of the population[8]. We consider the quality of the datasets high and as far as we know, no any other data are available for the analysis of social mobility after 1989 in Czech society.

Because our interest is in respondents on the labour market and their social mobility, we confine our analysis to those aged 25 to 64. The total number of analysed cases is 28,726. Where weights are available in the analysed datasets, we utilise them.

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[7] The surveys are accessible via the Czech Social Science Data Archive (http://archiv.soc.cas.cz/en/), the European Social Survey website (http://www.europeansocialsurvey.org/), and the *Zentralarchiv für Empirische Sozialforschung* (http://www.gesis.org/za/).

[8] The quota samples include 1990 Czechoslovakian Pre-Election, 1990 Post-Election Surveys, and 2009 Class structure and social mobility.

Table 1. **Sample surveys carried out between 1990 and 2011 in the Czech Republic, including all relevant variables for analysis of social mobility**

N	Year	Title of survey	Original sample size	Response rate %	Sample weights	Analyzed cases	Analyzed cases %
1	1990	Czechoslovakian Pre-Election Survey	1761	-	no	1073	3.74
2	1990	Czechoslovakian Post-Election Survey	1705	-	no	938	3.27
3	1991	Social Justice	810	82.7	no	368	1.28
4	1991	Transformation of Social Structures	1872	65.0	no	958	3.33
5	1992	ISSP: Social Inequality II	678	78.4	no	452	1.57
6	1993	ISSP: The Environment and Attitudes towards Local Politics	1005	72.0	no	559	1.95
7	1993	Social Stratification in Eastern Europe After 1989	4737	75.6	yes	2704	9.41
8	1993	Opinions on Social Changes	1902	-	yes	1215	4.23
9	1994	ISSP: The Family	1157	78.8	no	685	2.38
10	1995	Social Justice	1246	78.0	no	637	2.22
11	1995	ISSP: National Identity	1111	65.4	yes	605	2.11
12	1996	ISSP: The Role of the Government III	1100	47.6	no	603	2.10
13	1997	ISSP: Employment Orientation	1080	54.3	no	598	2.08
14	1998	SIALS: Secondary International Adult Literacy Survey	3132	82.0	yes	1984	6.91
15	1999	Ten Years of Social Transformation	4744	65.3	yes	2342	8.15
16	1999	ISSP: Social Inequality and Justice	1834	48.9	no	1039	3.62
17	2001	ISSP: The Social Safety Net II	1200	65.2	yes	699	2.43
18	2002	ESS 1 - European Social Survey	1360	43.3	yes	773	2.69
19	2003	ISSP: National Identity	1276	52.3	yes	613	2.13
20	2004	ESS 2 - European Social Survey	3026	55.3	yes	1502	5.23
21	2005	Social Cohesion	3468	54.0	yes	1426	4.96
22	2006	ISSP: The Role of the Government IV	1201	45.3	yes	613	2.13
23	2007	ISSP: Leisure Time and Sport I	1222	49.1	yes	637	2.22
24	2008	EVS - European Values Survey	1821	68.9	yes	903	3.14
25	2009	ESS 4 - European Social Survey	2018	69.5	yes	1208	4.21
26	2009	ISSP: Social Inequality	1205	60.0	yes	711	2.4827
27	2009	Class Structure and Social Mobility	3006	87.0	yes	1505	5.24
28	2011	ESS 5: European Social Survey	2387	70.2	yes	1376	4.79
Total			**53064**			**28726**	**100**

Note: The column "Analyzed cases" shows the number of respondents age 25-64 among whom all of the relevant variables for analysis of social mobility were observed. The column "Analyzed cases %" show the same in percent (it is a relative analytical contribution of each dataset to analysis).

The variables we work with are fathers and respondents' EGP social class positions (Erikson – Goldthorpe – Portocarero 1979; Erikson – Goldthorpe

1992).[9] The EGP is a standard social class scheme used in social mobility analysis and its validity has been tested several times both with regard to post-socialistic societies generally (c.f. Evans – Mills 1999; Titma et al. 2003) and to Czech society exclusively (Matějům – Vlachová 2000; Katrňák 2012). Altogether, EGP distinguishes eleven classes. But this complete version of EGP is rarely used in social stratification analyses. We utilise a modified version of EGP: 1) Service class I (original EGP I: higher-grade professionals, high-level executives and administrators, senior civil servants); 2) Service class II (original EGP II: lower-grade professionals, middle-level administrators and officials); 3) Routine non-manuals (original EGP IIIa+b: routine non-manual employees, clerks); 4) Skilled manuals (original EGP V+VI: skilled manual workers); and 5) Unskilled manuals (original EGP VIIa+b: unskilled manual workers). These social class positions were converted from standardised ISCO-88 codes [10]. Unfortunately, we cannot include the category of self-employed, because not all of the 28 surveys contain the questions necessary for the construction of this social class. Nevertheless, this social class did not exist in the socialist era, which means that it should be very rare, at least in surveys from the beginning of the 1990s (c.f. Saar 2010).

In order to distinguish the effects of period and birth cohort on social fluidity, we aggregate the data in terms of years into 11 two-year periods (1990 – 1991, 1992 – 1993, ... 2010 – 2011) (c.f. Table A in the Appendix). The number of OD (origin-destination) tables per period ranges from two to four. We aggregated OD tables into 11 periods according to the statistical results of the estimated log-linear model known in social stratification research as common social fluidity (Erikson – Goldthorpe 1992). This model assumes that the structure (pattern) of OD association in the analysed tables is the same. Table A (in the Appendix) shows that this model fits the data satisfactorily for nearly each period. There are no statistically significant differences in association among OD tables in most periods (α level 0.05), which means that surveys can be regarded as common. The relative analytical contribution of number of respondents per period ranges from 4.18 per cent to 17.16 per cent (last column in Table A in the Appendix)[11].

In each period, we identified 20 two-year age groups (25-26, 27-28, ... 63-64). By subtracting the age groups from each period we arrived at 30

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[9] We agree with Hout and Hauser (1992) that fathers' social class positions in surveys are primarily characteristic of respondents, not fathers. In the surveys we used, these positions are indicated by a question concerning the father's occupation when the respondent was age 14.

[10] In surveys conducted in the Czech Republic between 1990 and 1993, positions on the labour market are still indicated using ISCO68, which we modified into the ISCO88 with the help of the Ganzeboom algorithm (see more on this algorithm at http://home.fsw.vu.nl/~ganzeboom/isco68/index.htm).

[11] The survey "Class structure and social mobility" was conducted in the autumn of 2009 but we included it in the period 2010/2011. The general dataset European Social Survey 5 for all countries is labelled 2010, but these data were collected during the spring of 2011 in the Czech Republic. Therefore, we categorised these data under the year 2011.

cohorts born between 1927 and 1986. The first cohort was born in 1927 – 1928, the next in 1929 – 1930, and the last one in 1985 – 1986 (see Table B in the Appendix).[12]

Table 2 shows the number of respondents divided into 30 birth cohorts and 11 periods. Differentiating among them allows us to examine not only how, but also mainly why social mobility in Czech society changed between 1990 and 2011. If the cohort effect influences trends in social mobility more strongly than the effect of period, this means that each later-born cohort will differ from the previously born cohort in this regard. Cohort replacement (Ryder 1965) is then the cause of change in social mobility over time. If the effect of period affects social mobility more strongly than the cohort effect, it would mean that the years 1990 to 2011 were so "turbulent" a period that not only was the intergenerational social mobility of later-born cohorts affected, but also that intergenerational social mobility for the majority of the labour force was transformed.[13]

Class structure and absolute social mobility

Table 3 shows the distribution of our EGP class structure by period. The noteworthy change is that this social class structure gains service class jobs and loses working class jobs between 1990 and 2011. A similar trend has been observed in most European countries (c.f. Breen 2004). This trend is accompanied by an increase in self-employed people (with or without employees) and a decrease in farmers. According to Czech Statistical Office data from 2011, there were about 4 per cent self-employed people with employees and about 12 per cent self-employed without employees within the economically active population. At the end of our analysed period (2011), more than one third of the labour market was part of the service classes (I + II) and about two fifths were part of the working classes (skilled and unskilled manuals). The rest were in intermediate positions, to which the petit bourgeoisie social class belongs.

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[12] As our data are limited to respondents 25-64 years, they do not include all birth cohorts during all periods. For example cohort 1 (born in 1927 – 1928) is represented only in the data for 1990 – 1991, while cohort 11 (born in 1947 – 1948) is present in all periods. The table, with age in the rows, periods in the columns, and cohorts in the diagonals, is called the standard cohort table (Glenn 1977; 2005). In such a table, all cohorts cannot be presented in their whole range. The result is a triangular data matrix of birth cohorts. In our case, we do not have real cohorts, but "artificial" cohorts (Mason – Fienberg 1985). Only panel research, investigating the same individual over time, contains information about actual cohorts. The advantage of artificial cohort data is that it usually represents a longer time period than panel data and it contains information about all age groups (based on surveys from individual years) (Yang 2008).

[13] Taking into account the effects of period in controlling for birth cohort or else age effects on trends in social mobility is thus far not very widespread in social stratification research. The majority of social mobility analyses are either from the standpoint of birth cohort (changes in social mobility are observed across birth cohorts) in one or more countries or from the standpoint of countries over the same period (differences in social mobility were then observed from country to country). For more on the use of period as well as birth cohorts in the analysis of social mobility, see Müller and Pollak (2004), Breen and Jonsson (2007) or Breen and Luijkx (2007).

Table 2. **Number of respondents by period and birth cohort**

Birth cohorts		1990-1991	1992-1993	1994-1995	1996-1997	1998-1999	2000-2001	2002-2003	2004-2005	2006-2007	2008-2009	2010-2011	Total
1	1927/1928	33	0	0	0	0	0	0	0	0	0	0	33
2	1929/1930	39	51	0	0	0	0	0	0	0	0	0	90
3	1931/1932	55	90	72	0	0	0	0	0	0	0	0	217
4	1933/1934	128	119	52	37	0	0	0	0	0	0	0	336
5	1935/1936	164	127	67	40	72	0	0	0	0	0	0	471
6	1937/1938	93	177	59	61	71	61	0	0	0	0	0	521
7	1939/1940	106	182	69	47	101	65	49	0	0	0	0	620
8	1941/1942	135	269	85	55	128	82	64	83	0	0	0	901
9	1943/1944	177	302	104	64	174	81	82	88	51	0	0	1123
10	1945/1946	200	309	122	69	202	103	67	92	48	133	0	1345
11	1947/1948	230	413	120	71	303	93	76	133	80	152	96	1768
12	1949/1950	232	351	131	72	335	97	71	165	67	161	115	1796
13	1951/1952	274	347	115	86	304	104	97	165	62	142	145	1842
14	1953/1954	277	344	109	57	308	101	98	188	57	158	121	1819
15	1955/1956	240	335	101	67	281	114	78	150	60	177	119	1723
16	1957/1958	243	301	131	68	281	88	87	145	69	129	117	1659
17	1959/1960	170	272	104	66	239	100	66	151	61	174	138	1541
18	1961/1962	174	258	103	50	199	88	73	161	80	139	141	1466
19	1963/1964	179	256	102	61	237	82	69	162	81	143	146	1520
20	1965/1966	188	236	98	69	222	90	58	194	68	145	200	1568
21	1967/1968	0	190	89	58	179	73	67	133	52	133	176	1150
22	1969/1970	0	0	93	48	194	76	51	155	55	167	172	1012
23	1971/1972	0	0	0	55	220	80	59	129	60	147	192	941
24	1973/1974	0	0	0	0	276	89	63	175	62	121	158	944
25	1975/1976	0	0	0	0	0	69	55	165	54	121	148	612
26	1977/1978	0	0	0	0	0	0	55	151	73	121	148	547
27	1979/1980	0	0	0	0	0	0	0	142	67	140	131	479
28	1981/1982	0	0	0	0	0	0	0	0	42	112	147	301
29	1983/1984	0	0	0	0	0	0	0	0	0	108	156	264
30	1985/1986	0	0	0	0	0	0	0	0	0	0	116	116
Total		3337	4930	1927	1201	4326	1738	1385	2928	1250	2823	2881	28726

Table 3. **Trends in modified Erikson – Goldthorpe class schema between 1990 and 2011 in the Czech**

	1990-1991	1992-1993	1994-1995	1996-1997	1998-1999	2000-2001	2002-2003	2004-2005	2006-2007	2008-2009	2010-2011	Total
Salariat I	10.0	7.1	7.8	7.7	7.8	8.8	4.6	5.0	5.7	6.4	12.1	7.71
Salariat II	17.8	17.8	22.5	20.5	22.8	18.0	20.9	22.0	18.4	21.1	20.2	20.15
Routine non-manuals III	18.2	17.6	22.3	20.6	21.3	24.0	24.7	34.6	24.1	22.4	24.0	21.55
Skilled manuals V, VI	27.0	26.3	23.8	25.4	25.2	24.7	23.9	22.4	26.8	20.7	18.8	24.11
Unskilled manuals VIIa, VIIb	27.1	31.2	23.6	25.8	23.0	24.6	25.8	26.0	25.0	29.4	24.9	26.47
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**

Table 4 shows the trends in the dissimilarity index between class origin and destination by period and by gender. This index provides a view of structural shifts in the labour market over time.[14] There are obvious structural changes between social origin-destination distributions after 1989. The dissimilarity index increases, especially in the earlier part of our analysis (from 1990 to 2000). This finding represents significant changes in class structure. Mobility patterns are driven by structural changes in the labour market in this period. From a gender perspective, the dissimilarity index is higher for women than for men. But the trends are in both cases very similar: there is an increase in these indices in the first part of our analysis (until about 2000) and after that, they remain at the same level with periodic deviations.

Table 4. **Origin-destination dissimilarity index by period and gender**

	1990-1991	1992-1993	1994-1995	1996-1997	1998-1999	2000-2001	2002-2003	2004-2005	2006-2007	2008-2009	2010-2011
Total	**17.3**	**18.5**	**24.0**	**20.4**	**23.7**	**23.3**	**27.7**	**27.0**	**23.8**	**24.4**	**27.1**
Men	6.7	10.9	13.5	8.1	11.1	9.0	16.5	15.7	13.7	12.3	14.6
Women	32.7	32.9	35.9	34.7	38.4	37.6	38.5	39.4	34.7	36.5	39.4

The identification of an increase or decrease in social mobility entails ordering and collapsing EGP classes. Following Erikson and Goldthorpe (1992), we collapsed our version of EGP to three social classes: 1) Salariat (Salariat I + II); 2) Intermediate positions (Routine non-manuals III + Skilled manuals V, VI); and 3) Unskilled manuals (VIIa, VIIb). Movement among these three classes represents increased social mobility (from class 3 to higher classes and from class 2 to class 1), decreased social mobility (from class 1 to lower social classes, and from class 2 to class 3), or social reproduction (from and to the same social class).

Figure 1 shows the absolute intergenerational reproduction and the absolute increase and decrease in social mobility. The highest proportion of individuals experienced social reproduction in the labour market after 1989 (about 45 per cent). Over time, there are not large differences in this proportion if we do not consider the temporal increase of social reproduction at the beginning of 1990's and then a slight decrease until the end of our analysis. There are not substantial differences in this proportion by gender. More than one third experiences the social increase. This proportion grew moderately between 1990

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[14] Index of dissimilarity is based on the comparison of origin and destination distributions (it is expressed in percentages). It means that this index shows the proportion of cases that are necessary the origin and destination distributions to be identical (Breen 2004; Katrňák 2005).

and 2011. The remaining one third on the labour market experienced the social decrease. And this proportion becomes smaller.

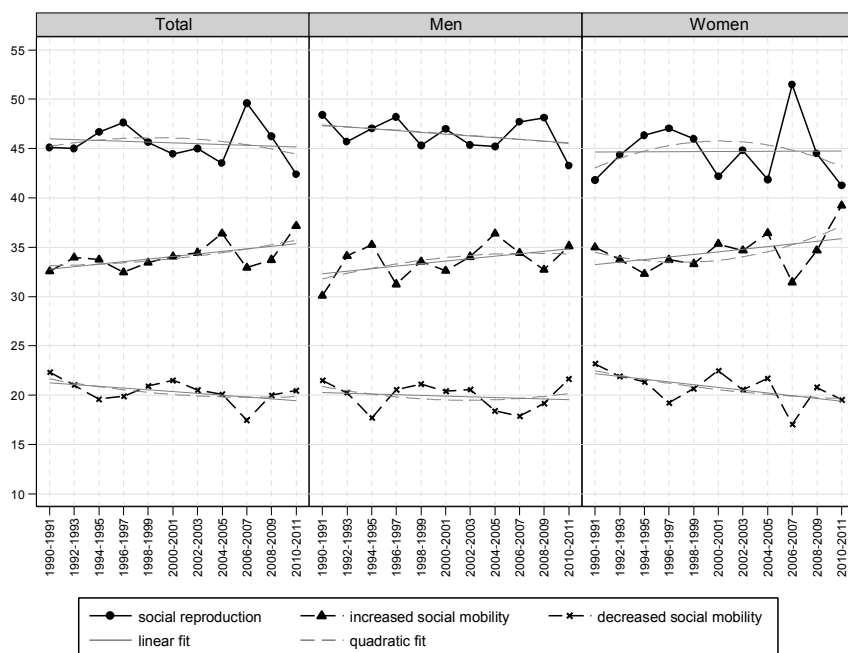Figure 1. **Absolute social mobility by period in the Czech Republic** (%)

Figure 2 shows intergenerational reproduction and upward and downward social mobility by birth cohort. From a cohort perspective, we can also see that the proportion of Czech population that experienced social reproduction is larger than the proportion of people that experienced an increase or decrease in social mobility. Quadratic fit to the data shows that the proportion of social reproduction up to cohorts born in the beginning of 1970s continually inclines. After that, this trend stops and reverts to decline. We see a mirror image of this trend in the case of quadratic fit for increased social mobility: the proportion decreases up to cohorts born in the beginning of 1970s and after that, the proportion increases. These trends are a bit stronger among men in comparison to women but they are not different in structure.

Figure 2. **Absolute social mobility by birth cohort in the Czech Republic** (%)
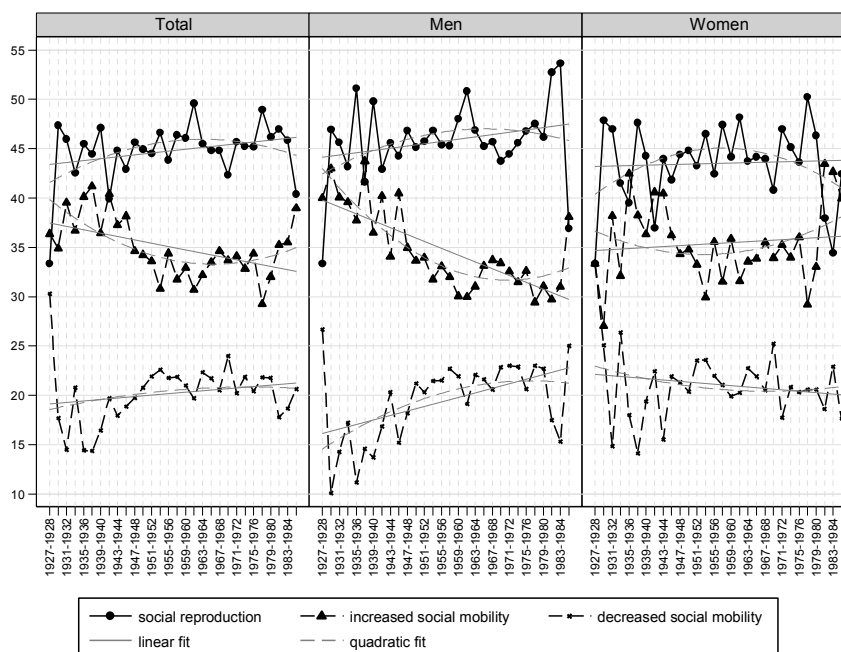
Trends in social fluidity: period or cohort effect?

The first question that arises from our two hypotheses is whether period or cohort effect has a greater impact on trends in social fluidity (relative social mobility) after 1989 in the Czech Republic – is it cohort replacement or rather the changes in Czech society since 1989? In order to answer this question, we need to control social fluidity for both the cohorts and the periods. We analyse a 5 x 5 table with the following variables: social origin, social destination, periods, and cohorts (O x D x P x C; table dimensions 5 x 5 x 11 x 30).[15] The first part of Table 5 shows the goodness-of-fit statistics of estimated models for these data (numbered from 1 to 5).

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[15] We have not included gender in the analysis of social fluidity for two reasons. Firstly, the dissimilarity indices as well as the analysis of absolute social mobility by periods and cohorts have shown that trends concerning the labour market are very similar for men and women. Secondly, the larger number of observations in mobility tables leads to higher certainty in the conclusions about social fluidity that we draw. Because not all cohorts are represented in all periods, this structure of the data has 2,750 structural zeroes that we consider in the analysis. We estimate all the models using the LEM program (Vermunt, 1997). All data and LEM syntaxes are available on request.

Table 5. **Goodness-of-fit statistics of log-linear models for mobility tables by period and cohort**

Models	Model descriptions	L^2	Δ	d.f.	BIC
1) PCO PCD	Null association OD by P	7205.85	17.19%	5280	-46992
2) model 1 + OD	OD constant association by PC	4284.70	12.33%	5264	-49749
3) model 1 + OD*φP	Log-multiplicative uniform OD layer effect by P	4214.85	12.25%	5254	-49717
4) model 1 + OD*φC	Log-multiplicative uniform OD layer effect by C	4265.01	12.28%	5235	-49471
5) model 1 + OD*φPC	Log-multiplicative uniform OD layer effect by PC	3984.53	11.83%	4935	-46672
6) PO PD	Null association OD by P	3238.19	12.43%	176	1432
7) model 6 + OD	OD constant association by P	299.39	3.16%	160	-1343
8) model 7 + OD*φP	Log-multiplicative uniform OD layer effect by P	234.07	2.95%	150	-1306
9) model 8 + OD(dis)*φP	Log-multiplicative uniform OD layer effect by P, distance association pattern	275.56	3.17%	158	-1346
10) model 9 + OD(dis)*φP(lin)	Linear uniform OD layer effect by P, distance association pattern	338.82	3.41%	167	-1375
11) model 10 + OD(dis)*φP(curvilin)	Curvilinear uniform OD layer effect by P, distance association pattern	324.38	3.41%	166	-1380
12) CO CD	Null association OD by C	3515.42	12.91%	480	-1412
13) model 12 + OD	OD constant association by C	540.64	4.50%	464	-4222
14) model 12 + OD*φC	Log-multiplicative uniform OD layer effect by C	521.80	4.40%	435	-3943
15) model 12 + OD(dis)*φC	Log-multiplicative uniform OD layer effect by C, distance association pattern	560.46	4.53%	443	-3987
16) model 12 + OD(dis)*φC(lin)	Linear uniform OD layer effect by C, distance association pattern	580.00	4.65%	471	-4255
17) model 12 + OD(dis)*φC(curvilin)	Curvilinear uniform OD layer effect by C, distance association pattern	579.87	4.65%	470	-4245

P-period, C-cohort, O-social origin, D-social destination, BIC is the Bayesian information criterion (BIC = L2 - (df) ln(N)) where N is the total number of cases; Δ is the difference index showing the difference of incorrectly classified cases in the estimated model, dis-distance pattern for OD association, lin-linear trend in OD association, curvilin-curvilinear trend in OD association

Model 1 builds on the assumption that the OD association disappears when both the cohort and period variables are considered (it is the null association model). Model 2 assumes that this association is constant across all cohorts and periods. It is the constant association model (Erikson – Goldthorpe 1992). According to model 3, the OD association changes log-multiplicatively with respect to the period, and not cohorts. The log-multiplicative model is constructed on the principle that the OD association is estimated as constant for all sub-tables, and its higher-order interactions are modelled as a product of this two-way association and the estimated parameter φ, which shows the changes in the strength of the two-way association by P. [16] Model 4 is also log-multiplicative but it suggests that OD association changes only in relation to cohorts, and not periods. And finally, model 5 posits that the association between O and D changes log-multiplicatively in relation to the periods as well as the cohorts.

Based on the BIC (Bayesian Information Criterion), we must assume either no change (model 2) or the change dependent on the period (model 3) for our interpretation. The chi–square test shows that model 3 is not statistically different from model 5 ($L2_{diff}$ = 230.32, df = 319, p = 0,999) and therefore, we should interpret the data on the basis of the parameters of this model. Nevertheless, model 4 is not statistically different from model 5 ($L2_{diff}$ = 280.49, df = 300, p = 0.784), even though the difference between this model and model 5 is higher. Thus, we prefer model 3 rather than models 4 or 5 for the interpretation of our data, although the cohort differences also contribute by some weight to the explanation of social fluidity changes in the Czech population after 1989.

According to model 3, the period effect related to the post-1989 societal transformation has a stronger effect on social fluidity than cohort replacement. But because our data indicate that cohort effect also plays a role, we reject partially our first hypothesis about cohort replacement in social fluidity trends. The rejection is consistent with the cohort replacement premise: a cohort effect shows only in stable democratic societies that do not undergo significant social, economic, or political changes (c.f. Ryder 1965; Glenn 1977, 2005; Breen – Jonsson 2007). And that was not the case in Czech society after 1989.

In the second analysis, we have focused on modelling trends in social fluidity only by period. We create a 5 x 5 table by period (O x D x P; table dimensions 5 x 5 x 11). The second part of Table 5 shows the goodness-of-fit statistics of estimated models for these data (numbered from 6 to 11). Model 6 assumes that the OD association does not exist by period. Model 7 is a model of constant social fluidity. Model 8 presumes that the pattern of social fluidity

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[16] For a log-multiplicative model, and change in the strength of the association between two variables according to a third variable, see Erikson and Goldthorpe (1992), Xie (1992), or Powers and Xie (2008).

changes log-multiplicatively by period. Model 9 is based on model 8 but moreover, it specifies the more parsimonious pattern of OD association known as the distance model (Goodman 1984). The two-way interaction parameters (inside the OD tables) are estimated as the same for each equally distant cell above and below the main diagonal of the OD table (for the design of this pattern of association, see Table C in the Appendix). In the last two models, we constrain the parameters for the log-multiplicative trend by period (among OD tables). Our first premise is that the trend of OD association by period is linear (model 10) and the second assumption is that it is quadratic (model 11). Both of these models are based on model 9, but they are more parsimonious.

The estimates of parameters from models 9, 10, and 11 are shown in Figure 3. In model 9, an estimate of one phi-parameter is made for each period, and all these parameters are interpreted with respect to their first parameter set on 1 (the 1990–1991 period). In model 10, estimates for only two parameters (a, b) are made in an equation describing the linear trend (Y = a + bX, where X represents period and each Y demonstrates a linear trend). In model 11, estimates of three parameters (a, b, c) were made for an equation of a quadratic trend (Y = a + bX + cX^2, where X represents period and each Y shows the quadratic trend). One rule guides all models: the higher the phi parameter, the lower social fluidity and vice versa.

Figure 3. **Social Fluidity by period in the Czech Republic**
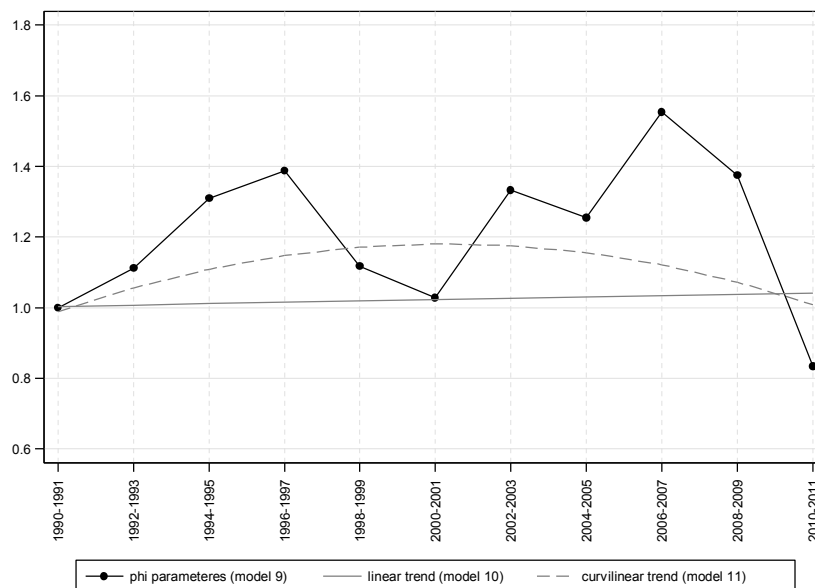
All three curves suggest diminishing social fluidity in the post-1989 period. Model 9 (one phi parameter for each year) suggests two almost identical curves split in half of the analysed time (period 2000 – 2001): decrease and increase and again decrease and increase of social fluidity. According to model 10, there is a linear decrease in social fluidity (based on two parameters). The model 11 curve suggests a decrease in social fluidity after 1989 and this trend changes sometime around the year 2000 (quadratic trend based on three parameters). We interpret the data on the basis of this model. It fits the data more satisfactorily then model 10, and the BIC criterion is lower than in the case of model 9. We thus conclude: from 1990 up to 2000, social fluidity decreases among the Czech population and after that, we witness a slight increase in social fluidity. We are convinced that the decrease in social fluidity in the earlier period of our analysis (from 1990 to about 2000) is driven by a period effect, which then diminishes and is replaced by cohort effect.

In the third analysis, we have focused on modelling trends in social fluidity by birth cohorts. We again create a 5 x 5 table but only by birth cohort (O x D x C; table dimensions 5 x 5 x 30). The last part of Table 5 shows the goodness-of-fit statistics of the estimated models for these data (models 12 to 17). All these models are the same as models for trends in social fluidity by period. In other words, model 12 assumes that the OD association does not exist by cohort, model 13 is a model of constant social fluidity, model 14 is a log-multiplicative model, model 15 constraints the pattern of OD association as a distance model, and models 16 and 17 constraint the trends in social fluidity by cohort as linear and curvilinear, respectively.

When we look at the estimates from models 15, 16, and 17 in the full range (Figure 4), these are consistent with the assumption of model 14: there are no changes in social fluidity by birth cohort. This finding corresponds to conclusion that socialism did not significantly strengthen intergenerational social mobility (c.f. Machonin – Tuček 1996). Nevertheless, in the last six cohorts in our data (Figure 4) we can see the tendency toward an increase in social fluidity. We believe that this trend has a positive effect, though not dramatic, on the increase in social fluidity in the last third of our analysis, which we present in Figure 3. This finding is probably the result of the educational expansion that occurs during the 1990s and continues until 2011..[17]

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[17] Over the last 20 years, the Czech educational system has expanded considerably. For instance, graduates with a secondary school-leaving certificate comprised 50 per cent of all graduates of secondary education in 1995, while in 2010, the figure was nearly three-quarters (OECD 2012). In 1995, 20 per cent of secondary school graduates went on to tertiary education, and in 2010, this figure was 60 per cent (this proportion was comparable to the number admitted to university in European Union and OECD countries). In 2010, 38 per cent of young people completed a university degree, while the average proportion in European Union and OECD countries in the same year was 40 per cent and 39 per cent, respectively. The result of educational expansion in recent years is that nearly half of all young people attain a higher education than their parents. This proportion exceeds both European Union and OECD countries. Only 6 per cent of young people in the Czech Republic receive a lower education in comparison with their parents (OECD 2012).

We should not overvalue this effect, but we are convinced that it cannot be completely ignored. It is not dramatic, but our analysis shows it exists.

Because the first analysis has shown that period effect is stronger than cohort effect, we regard it as primary. Over the years 1990 to 2000, social fluidity decreases in Czech society. The cohort effect has not worked against this trend for this period; it has not increased social fluidity. It is mainly societal transformation concentrated in a relatively short period of several years (up to 2000), which influences the decrease in social fluidity. After that, the situation changes slightly and we can witness an increase in social fluidity.

Figure 4. **Social fluidity by cohort in the Czech Republic**
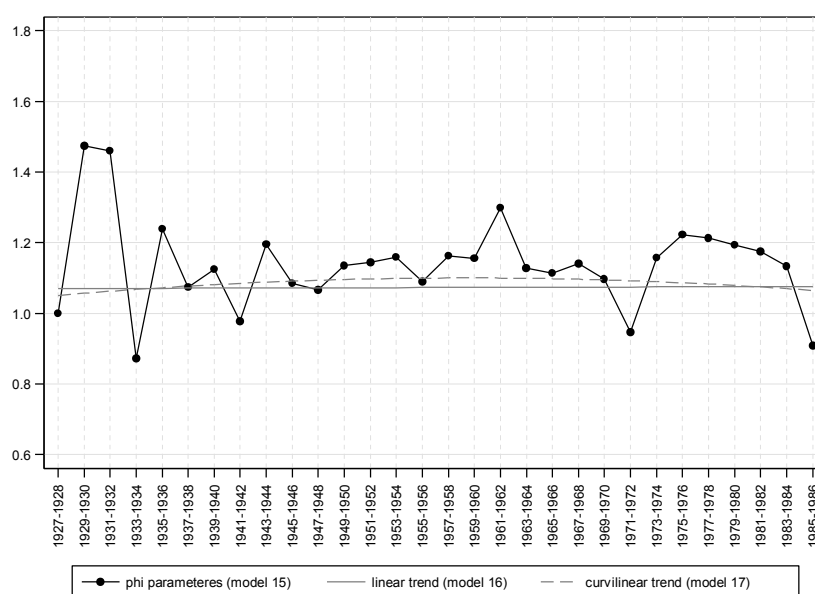
Decrease in social fluidity as an effect of the period

On the basis of a set of log-linear and log-multiplicative models, we reject our second hypothesis on the decrease in social fluidity in Czech society between 1989 and 2000 (c.f. Gerber – Hout 2004). We find the causes of this decrease in intragenerational changes in the institutional transformation of the labour market. After 1989, paid jobs in the Czech Republic are no longer controlled by the state. New legislative measures allow private enterprise. Some of the jobs connected to the pre-November 1989 political regime disappear. New jobs are created linked to the financial sector, services, the legislative   and legal sectors,

Figure 5: **Trends in pattern of OD association (Model 21) by period in the Czech Republic**
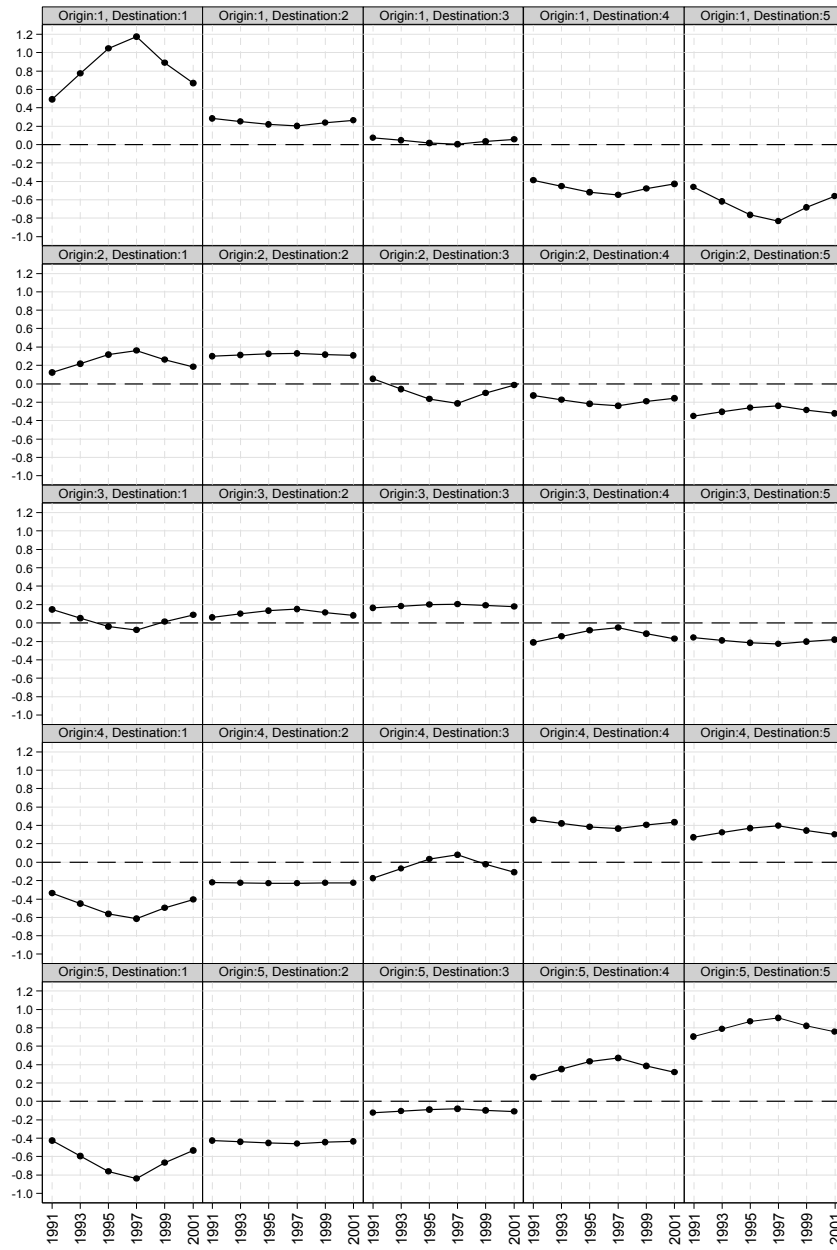
retail and media, and information sectors. People in different jobs begin to be threatened by varying risks of unemployment. Income becomes a differentiating criterion of occupations, and begins to function as a reward for the job accomplished (Večerník 1998; Tuček 2003).

In the next analysis, we work only with data from the year 2009 (from the survey *Class Structure and Social Mobility*, sample 3600 respondents, c.f. Table 1) that contain information about respondents' labour market history. Table 6 shows the change in occupational positions (downward, upward or reproduction, as indicated by the three classes of EGP) between 1988 and 2009 for respondents who were on the labour market in 1988.[18] In the table, we see intragenerational mobility in 1995 and later years (versus 1988) according to intergenerational mobility from social origin to social destination in 1988. We are interested in how the position of those who had experienced upward or downward social mobility (or reproduction) until 1988 changed after 1989. That is, we want to see whether those who were upwardly mobile before 1989 continue to be upwardly mobile after 1989, or whether instead we can observe downward social mobility. Table 6 shows that of those upwardly mobile until 1988, a greater number experience downward mobility than upward mobility after 1989 (10.5 per cent in 1995, 9 per cent in 2000, 4 per cent in 2005, and 3 per cent in 2009 versus 1988). On the other hand, by 1995, a much greater proportion of those who had suffered from downward mobility prior to 1989 (25 per cent) experiences upward mobility. During the period observed, this proportion fell, which indicates major social turbulence shortly after 1989, and later the consolidation of a "new" occupational structure.[19]

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[18] In 2009, this group consists of people aged 38 to 78, meaning that in 1988 they were aged 18 to 58. Since then, some have retired; thus, the overall number of respondents has decreased.

[19] A quarter of the Czech population economically active before 1989 experienced intragenerational mobility after 1989, as they found their positions on the newly constituted labour market during the 1990s (Machonin – Tuček 1996; Matějů – Vlachová 2000; Katrňák – Fučík 2010). The majority of the communist elite after 1989 went into early retirement, which lowered the proportion of people who experienced occupational change. The remaining three quarters did not experience a major change in their occupational position after 1989. This was either because they were successful in transferring their social and political capital from the era of socialism into economic capital (see Hankiss 1990; Možný 1991; Eyal – Szelényi – Townsley 1998), or simply because they already occupied their place in the socialist economy based on their qualifications and education (Šrubař 1991). The former, however, were fewer than the latter. It is understood that before 1989 it was impossible to get into most occupational positions only based on political criteria. Socialism needed to produce if it did not want to suffer economic collapse. Thus, its leaders did have to take into account to a certain extent education and qualifications in filling occupational positions (Hanley – McKeever 1997). People exchanged loyalty to the socialist system for occupations, according to their education and qualifications. They participated in public events and took part in the political rituals that allowed socialist society in the 1970s and 1980s to survive (Kabele – Hájek 2008). According to oral historians recording the stories of job careers before 1989 (Vaněk 2009), this phenomenon occurred mainly because people reasoned pragmatically. They knew that a showy and in many cases, pro-forma demonstration of loyalty to the regime (these were not committed party members) would not hurt anyone. Meanwhile, that demonstration of loyalty would allow them to do what they were trained to do. In this way, they were able to stabilise their own social positions. In short, they paid for desirable occupations with membership in the Communist Party and loyalty to the regime. After 1989, the great majority of these people kept their positions. Capitalism needed them for the same reason socialism did: it is impossible to create and produce without educated and qualified professionals.

Table 6. **Intragenerational mobility from 1988 to 2009 by intergenerational mobility (respondent in 1988 versus social origin) (EGP 3 classes)**

Intergen. mobility (1988 vs. origin)	Intragen. mobility 1995 (vs. 1988)				Intragen. mobility 2000 (vs. 1988)				Intragen. mobility 2005 (vs. 1988)				Intragen. mobility 2009 (vs. 1988)			
	Up	Repro	Down	Total	Up	Repro	Down	Total	Up	Repro	Down	Total	Up	Repro	Down	Total
Upward	16	201	25	242	10	186	19	216	3	187	7	198	5	168	6	179
	6.6%	82.9%	10.5%	100%	4.7%	86.3%	9.0%	100%	1.5%	94.8%	3.7%	100%	2.7%	94.0%	3.3%	100%
Repro-duction	59	358	14	431	18	342	12	372	21	319	7	347	13	280	10	303
	13.7%	83.1%	3.2%	100%	4.9%	91.9%	3.2%	100%	6.1%	92.0%	1.9%	100%	4.2%	92.5%	3.3%	100%
Downward	43	129	2	175	19	137	2	158	9	131	6	146	8	123	6	137
	24.7%	73.9%	1.4%	100%	12.3%	86.3%	1.4%	100%	6.0%	90.1%	3.9%	100%	5.8%	89.8%	4.4%	100%
Total	**118**	**688**	**42**	**848**	**48**	**664**	**34**	**746**	**33**	**638**	**20**	**690**	**26**	**571**	**22**	**619**
	13.9%	**81.1%**	**4.9%**	**100%**	**6.4%**	**89.1%**	**4.5%**	**100%**	**4.7%**	**92.4%**	**2.9%**	**100%**	**4.5%**	**92.3%**	**3.6%**	**100%**

In our final analysis, we focus only on the first decade after 1989. If social fluidity decreases over this period (as we demonstrated in our previous analysis), and if it happens because of intragenerational movement conceptualised as regression to social origin (Gerber – Hout 2004), we should then identify the change in pattern of social fluidity over this period toward social origin. In other words, descendants' odds of obtaining higher or lower labour market positions in comparison to the positions of their fathers should diminish over time. Conversely, the odds of obtaining the same or very similar labour market position to fathers' positions should increase over time. In the mobility tables, we should measure the decrease in chances to occupy cells outlying from main diagonal, and vice versa: the increase in chances to occupy cells in the main diagonals of mobility tables.

Table 7 presents the goodness-of-fit statistics of estimated log-linear models only for the first six periods (1990/1991, 1992/1993, 1994/1995, 1996/1997, 1998/1999, and 2000/2001). We create a 5 x 5 table with the following variables: social origin, social destination and period (O x D x P; table dimensions 5 x 5 x 6). Model 18 assumes that the OD association does not exist by period. Model 19 is a constant social fluidity model. Model 20 presumes that the pattern of social fluidity (OD) changes log-multiplicatively by period and model 21 is a regression-type layer effect model (Goodman – Hout 1998, 2001). This model is an alternative way of analysing the trends in association between two categorical variables over a third variable. Whereas in the log-multiplicative model the pattern of OD association is the same for all layers (periods), and only the deviation from this pattern is estimated for each layer (the strength of the association), in the regression-type layer effect model, the change in the pattern of OD association as well as the change in the strength of OD association is estimated. This model is not as parsimonious as our previous ones (it needs more parameters for interpretation, indicated by the BIC criterion), but according to L^2, delta and p, it fits the data extremely satisfactorily. This finding indicates that not only the change in the strength of OD association but also the change in the pattern of OD association are typical for the years 1990 to 2001.

Figure 5 shows the trends in estimated parameters for each mobility table cell from model 21. In the rows of Figure 5, we see social origin categories (O1, O2… O5); in the columns, we see social destination categories (D1, D2… D5). Inside of each square, we see the effect coding parameters for each period that we must interpret to 0 (dash line). If these parameters are higher than 0, it means higher chances of this OD combination; if they are lower, it means lower chances for this OD combination. The association O1D1 increases from 1990 to 1997, as does O5D5. In contrast, O1D5 and D5O1 decrease over the same period. We are convinced that these changes are a reflection of the re-struc-

turalisation of occupational structure in Czech society. The odds for large differences between O and D decrease and we can see an increase of the odds for strengthening of an OD association. People move toward social class origin and social fluidity decreases. This pattern is typical for the 1990s, the most turbulent time period socially and politically.

Table 7. **Goodness-of-fit statistics of log-linear models for mobility tables by period**

Models		Model descriptions	L^2	Δ	d.f.	p	BIC
18)	PO PD	Null association OD by P	1891.01	12.52%	96	0.000	953
19)	model 1 + OD	OD constant association by P	104.42	2.45%	80	0.035	-677
20)	model 1 + OD*φ^P	Log-multiplicative uniform OD layer effect by P	87.32	2.36%	75	0.058	-645
21)	model 1 + OD*r^P	Regression-type OD layer effect by P	63.86	1.83%	60	0.343	-522

P-period, O-social origin, D-social destination, BIC is the Bayesian information criterion (BIC = L2 – (df) ln(N)) where N is the total number of cases; Δ is the difference index showing the difference of incorrectly classified cases in the estimated model.

Conclusion

The occupational structure of Czech society changed after 1989 because the social context and institutions that comprise its framework changed. The labour market consolidated itself, economic rationality determined the filling of occupational positions, and wage differences between people increased. The number of working-class jobs fell, and the number of jobs in the service class and small business increased (Machonin – Tuček 1996; Večerník 1998; Tuček 2003; Katrňák – Fučík 2010). With the change in the occupational structure, however, there has been also a change in social fluidity.

In this text, we have shown that intragenerational changes in Czech society during the 1990s were so fundamental that their effects dominate over cohort replacement and act to weaken social fluidity. Between 1990 and 2000, social fluidity decreased, due to institutional, economic, and social changes in Czech society.

Since 1989, the economic rationality of the labour market has increased, as have the income differences between occupational positions. People now land paid jobs according to different criteria (mainly related to education and qualification). Their occupational positions begin to resemble those of their parents. On one hand, this is a result of the de-stratification of socialist society prior to 1989 (different criteria for obtaining jobs, implying a loosening of the relationships among occupation, education, and income). Even though chances on the labour market as a whole have increased since 1989, this increase

applies only to a certain segment of the population. For another segment of the population, the result has been precisely the opposite. However, the improvement in life chances does not take people further from their social origins, as would be expected in European democratic societies, but paradoxically seems to return them there. The same holds true for those that experience a decline in life chances due to institutional change after 1989. The return to social origin within the framework of intragenerational mobility has strengthened the connection between family origin and current class position: in society as a whole, intergenerational reproduction has grown.

A weakening of social fluidity has also been observed in other post-socialist countries and Eastern Europe (on post-socialist Russia, see Gerber – Hout 2004; for Poland, see Mach 2004; on Hungary, see Robert – Bukodi 2004). These observations reflect the ways in which transformation of socialist countries to capitalism during the 1990s was accompanied by the closing of class structures and a strengthening of the intergenerational link between social origin and destination. This phenomenon is the paradox of post-socialist countries. The transition to capitalism was supposed to be accompanied by a general growth in social chances and a weakening of the bonds between family origin and current position on the labour market. Such growth was expected because the number of small proprietors has grown and the political criteria that controlled access to symbolic goods (education, occupation) were replaced by meritocratic criteria, skills, and human capital. People began to obtain their occupations based on these criteria, which have meant more equitable access to occupational positions, because education decouples the connection between class origin and class destination in democratic societies (Blau – Duncan 1967; Breen 2004; Breen – Jonsson 2007).

All that has occurred in Czech society during the 1990s has not translated into automatic growth in life chances across all of society. The prior social structure in Czech society became so distorted by political criteria during the era of socialism that the changes associated with an increase in life chances in Western European countries produced rather the opposite effect after 1989 for a significant segment of Czech society. First, there had to be a re-stratification, meaning a reinforcement of the link between social origin and destination: a return to social origin and solidification of the social stratification structure. Only afterward can we expect the departure from social origin driven by cohort replacement together with the educational expansion as our analysis indicated. If we generalise to the context of the other post-socialist countries of Central and Eastern Europe, we may say that the institutional changes that have meant increased life chances in Western European countries (the chance to open businesses, the effect of education, increased qualifications, and meritocratic principles in occupations) have, in post-socialist countries, paradoxically led to

strengthening the ties between social origin and destination. This paradox occurs not because the effects of these institutional changes were different in Western European and post-socialist countries, but because the previously existing social stratification structures that they acted upon were qualitatively different. Nevertheless, the period of return to social origin is over and now, as we believe and as our data indicate, there is a departure from social origin.

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Tables for appendix

Table A. **Sample surveys aggregated into 11 periods, statistics of constant social fluidity models, number of respondents, and contribution (%) for each period of analysis of social mobility**

n	Year	Title of survay	Period	Statistics of Common Social Fluidity Model (PO PD OD)				
				L^2	d.f.	p	N	%
1	1990	Czechoslovakian Pre-Election Survey						
2	1990	Czechoslovakian Post-Election Survey	(1) 1990/1991	32.46	48	0.958	3337	11.62
3	1991	Social Justice						
4	1991	Transformation of Social Structures						
5	1992	ISSP: Social Inequality II						
6	1993	ISSP: The Environment and Attitudes towards Local Politics	(2) 1992/1993	64.31	48	0.058	4930	17.16
7	1993	Social Stratification in Eastern Europe After 1989						
8	1993	Opinions on Social Changes						
9	1994	ISSP: The Family						
10	1995	Social Justice	(3) 1994/1995	26.61	32	0.736	1927	6.71
11	1995	ISSP: National Identity						
12	1996	ISSP: The Role of the Government III	(4) 1996/1997	17.12	16	0.378	1201	4.18
13	1997	ISSP: Employment Orientation						
14	1998	SIALS: Secondary International Adult Literacy Survey	(5) 1998/1999	30.90	16	0.014	4326	15.06
15	1999	Ten Years of Social Transformation						
16	1999	ISSP: Social Inequality and Justice	(6) 2000/2001	27.63	16	0.035	1738	6.05
17	2001	ISSP: The Social Safety Net II						
18	2002	ESS 1 - European Social Survey	(7) 2002/2003	26.80	16	0.044	1385	4.82
19	2003	ISSP: National Identity						
20	2004	ESS 2 - European Social Survey	(8) 2004/2005	21.06	16	0.176	2928	10.19
21	2005	Social Cohesion						
22	2006	ISSP: The Role of the Government IV	(9) 2006/2007	12.36	16	0.719	1250	4.35
23	2007	ISSP: Leisure Time and Sport I						
24	2008	EVS - European Values Survey						
25	2009	ESS 4 - European Social Survey	(10) 2008/2009	36.72	32	0.259	2823	9.83
26	2009	ISSP: Social Inequality						
27	2009	Class Structure and Social Mobility	(11) 2010/2011	28.22	16	0.030	2881	10.03
28	2011	ESS 5: European Social Survey						
Total							28726	100

Table B. **Age groups, periods and birth cohorts in analyzed data**

Age groups	Periods (years)										
	1989-1990	1991-1992	1993-1994	1995-1996	1997-1998	1999-2000	2001-2002	2003-2004	2005-2006	2007-2008	2009-2010
25-26	**20** *1965/1966*	**21** *1967/1968*	**22** *1969/1970*	**23** *1971/1972*	**24** *1973/1974*	**25** *1975/1976*	**26** *1977/1978*	**27** *1979/1980*	**28** *1981/1982*	**29** *1983/1984*	**30** *1985/1986*
27-28	**19** *1963/1964*	**20** *1965/1966*	**21** *1967/1968*	**22** *1969/1970*	**23** *1971/1972*	**24** *1973/1974*	**25** *1975/1976*	**26** *1977/1978*	**27** *1979/1980*	**28** *1981/1982*	**29** *1983/1984*
29-30	**18** *1961/1962*	**19** *1963/1964*	**20** *1965/1966*	**21** *1967/1968*	**22** *1969/1970*	**23** *1971/1972*	**24** *1973/1974*	**25** *1975/1976*	**26** *1977/1978*	**27** *1979/1980*	**28** *1981/1982*
31-32	**17** *1959/1960*	**18** *1961/1962*	**19** *1963/1964*	**20** *1965/1966*	**21** *1967/1968*	**22** *1969/1970*	**23** *1971/1972*	**24** *1973/1974*	**25** *1975/1976*	**26** *1977/1978*	**27** *1979/1980*
33-34	**16** *1957/1958*	**17** *1959/1960*	**18** *1961/1962*	**19** *1963/1964*	**20** *1965/1966*	**21** *1967/1968*	**22** *1969/1970*	**23** *1971/1972*	**24** *1973/1974*	**25** *1975/1976*	**26** *1977/1978*
35-36	**15** *1955/1956*	**16** *1957/1958*	**17** *1959/1960*	**18** *1961/1962*	**19** *1963/1964*	**20** *1965/1966*	**21** *1967/1968*	**22** *1969/1970*	**23** *1971/1972*	**24** *1973/1974*	**25** *1975/1976*
37-38	**14** *1953/1954*	**15** *1955/1956*	**16** *1957/1958*	**17** *1959/1960*	**18** *1961/1962*	**19** *1963/1964*	**20** *1965/1966*	**21** *1967/1968*	**22** *1969/1970*	**23** *1971/1972*	**24** *1973/1974*
39-40	**13** *1951/1952*	**14** *1953/1954*	**15** *1955/1956*	**16** *1957/1958*	**17** *1959/1960*	**18** *1961/1962*	**19** *1963/1964*	**20** *1965/1966*	**21** *1967/1968*	**22** *1969/1970*	**23** *1971/1972*
41-42	**12** *1949/1950*	**13** *1951/1952*	**14** *1953/1954*	**15** *1955/1956*	**16** *1957/1958*	**17** *1959/1960*	**18** *1961/1962*	**19** *1963/1964*	**20** *1965/1966*	**21** *1967/1968*	**22** *1969/1970*
43-44	**11** *1947/1948*	**12** *1949/1950*	**13** *1951/1952*	**14** *1953/1954*	**15** *1955/1956*	**16** *1957/1958*	**17** *1959/1960*	**18** *1961/1962*	**19** *1963/1964*	**20** *1965/1966*	**21** *1967/1968*
45-46	**10** *1945/1946*	**11** *1947/1948*	**12** *1949/1950*	**13** *1951/1952*	**14** *1953/1954*	**15** *1955/1956*	**16** *1957/1958*	**17** *1959/1960*	**18** *1961/1962*	**19** *1963/1964*	**20** *1965/1966*
47-48	**9** *1943/1944*	**10** *1945/1946*	**11** *1947/1948*	**12** *1949/1950*	**13** *1951/1952*	**14** *1953/1954*	**15** *1955/1956*	**16** *1957/1958*	**17** *1959/1960*	**18** *1961/1962*	**19** *1963/1964*
49-50	**8** *1941/1942*	**9** *1943/1944*	**10** *1945/1946*	**11** *1947/1948*	**12** *1949/1950*	**13** *1951/1952*	**14** *1953/1954*	**15** *1955/1956*	**16** *1957/1958*	**17** *1959/1960*	**18** *1961ú1962*
51-52	**7** *1939/1940*	**8** *1941/1942*	**9** *1943/1944*	**10** *1945/1946*	**11** *1947/1948*	**12** *1949/1950*	**13** *1951/1952*	**14** *1953/1954*	**15** *1955/1956*	**16** *1957/1958*	**17** *1959/1960*
53-54	**6** *1937/1938*	**7** *1939/1940*	**8** *1941/1942*	**9** *1943/1944*	**10** *1945/1946*	**11** *1947/1948*	**12** *1949/1950*	**13** *1951/1952*	**14** *1953/1954*	**15** *1955/1956*	**16** *1957/1958*
55-56	**5** *1935/1936*	**6** *1937/1938*	**7** *1939/1940*	**8** *1941/1942*	**9** *1943/1944*	**10** *1945/1946*	**11** *1947/1948*	**12** *1949/1950*	**13** *1951/1952*	**14** *1953/1954*	**15** *1955/1956*
57-58	**4** *1933/1934*	**5** *1935/1936*	**6** *1937/1938*	**7** *1939/1940*	**8** *1941/1942*	**9** *1943/1944*	**10** *1945/1946*	**11** *1947/1948*	**12** *1949/1950*	**13** *1951/1952*	**14** *1953/1954*
59-60	**3** *1931/1932*	**4** *1933/1934*	**5** *1935/1936*	**6** *1937/1938*	**7** *1939/1940*	**8** *1941/1942*	**9** *1943/1944*	**10** *1945/1946*	**11** *1947/1948*	**12** *1949/1950*	**13** *1951/1952*
61-62	**2** *1929/1930*	**3** *1931/1932*	**4** *1933/1934*	**5** *1935/1936*	**6** *1937/1938*	**7** *1939/1940*	**8** *1941/1942*	**9** *1943/1944*	**10** *1945/1946*	**11** *1947/1948*	**12** *1949/1950*
63-64	**1** *1927/1928*	**2** *1929/1930*	**3** *1931/1932*	**4** *1933/1934*	**5** *1935/1936*	**6** *1937/1938*	**7** *1939/1940*	**8** *1941/1942*	**9** *1943/1944*	**10** *1945/1946*	**11** *1947/1948*

Note: Bold numbers in each cell show birth cohort, italic numbers show birth interval for cohorts in given period.

Table C. **Distance pattern for OD association**

1	2	3	4	5
2	6	2	3	4
3	2	7	2	3
4	3	2	8	2
5	4	3	2	0