Social origin, education and socio-economic inequalities: trends in the United Kingdom

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1. Introduction

In the United Kingdom, the public and academic debate has paid close attention to social mobility. The ideal of a meritocratic society, in which achievement and effort are the cornerstones of occupational status and economic success, has traditionally been strong in British society. The very term 'meritocracy' originated in post-war Britain (Young, 1958), and after the Second World War several policy measures were introduced with the purpose of creating more equal opportunities for educational and occupational success. Secondary education was made free by the Education Act of 1944, and with further reforms also higher education became more accessible. During the 1990s, New Labour made greater equality of opportunity a central policy concern, and also the current coalition government claims that social mobility enabling people to climb the social ladder is a core aim of its social policy (Cabinet Office, 2011). Since the Second World War, social science researchers have examined the evidence for signs of the onset of a more meritocratic society. However, despite the substantial policy attention to social mobility, the research evidence to date does not seem to suggest major leaps towards more fluidity and social mobility.

This chapter conducts an analysis of the British Household Panel Survey which expands knowledge about the role of education in reducing the intergenerational transmission of inequalities. In what follows, I review the previous literature for the United Kingdom on trends in the effects of social origin and education on labour-market outcomes, as well as the literature on the mediating and moderating effect of education on social mobility. Thereafter, I present the data and the results of the empirical analysis with respect to the four research questions of the project.

2. Trends in the effect of social origin and education on labour-market outcomes

While comparative studies show that some countries exhibit a clear trend towards the declining effect of social origin on people's labour-market outcomes (Breen, 2004), in the United Kingdom the research evidence mainly shows that the intergenerational transmission of advantage and disadvantage is still strong.

British research on trends in the effect of social origin on social position has a long tradition. The earliest study tracked trends in social mobility over the first half of the twentieth century (Glass, 1954). After the 1944 Education Act, which abolished fees for secondary education, it was hoped that increasing equality of opportunity would ensue. However, Glass's and many further studies found a relatively stable pattern in the way in which social position is passed from one generation to the next

(Erikson & Goldthorpe, 2002; Goldthorpe & Jackson, 2007; Goldthorpe & Mills, 2008). Other studies, however, found a slight increase in social fluidity (Heath & Payne, 2000; Li & Devine, 2011). Lambert, Prandy and Bottero (2007) broadened the time span to study mobility patterns from 1800 to 2004, finding slow and steady increases in social fluidity over that period. Research specifically focused on the direct effect of class origin on social class destination has found no decrease over time in the role of social origin when controlling for educational level (Breen & Goldthorpe, 2001; Bukodi & Goldthorpe, 2011a, 2011b).

Since the turn of the twenty-first century, concern has been expressed about whether British society has become less fluid, thereby strengthening the intergenerational transmission of social positions. This concern has been raised by studies on intergenerational income mobility which have compared the relative income position of the household in which an individual grew up with their own relative income position at adult age (Blanden, Goodman, Gregg, & Machin, 2004; Blanden, Gregg, & Machin, 2005; Blanden & Machin, 2007). These studies have shown a trend towards less fluidity and less social mobility between different parts of the income distribution. Because these findings were not confirmed by trend studies of social class mobility, a debate began on the right unit of measurement to use when studying trends in social mobility patterns: income or social class (Erikson & Goldthorpe, 2010).

If the effect of social origin has not decreased drastically over time, the next question concerns the extent to which the importance of education for labour-market attainment has increased over time. It is widely established that occupational position and earnings are stratified by skill level. In regard to trends over time in the returns to education, skill-biased technological change (SBTC) would predict an increasing trend in the returns to education (Katz & Autor, 1999; Machin, 2008). Confirming this theory, labour-market researchers find that the wage returns to education grew over the 1980s and 1990s in the United Kingdom, although this growth was slower in the 1990s (Machin, 2003). However, when controlling for the effect of parental background, the research evidence does not seem to support the finding of an increase in the returns to education, neither for occupational position nor for earnings (Bukodi & Goldthorpe, 2011a, 2011b).

The question of trends in the returns to education is related to the question of supply of and demand for high-skilled labour. If there are more jobs requiring highly-educated employees than there are people with higher education levels, we can expect the returns to education to increase over time. If there are more high-skilled people than high-skilled jobs, we can expect the reverse to happen. In the United Kingdom, evidence shows that there are simultaneously a growing segment of professional jobs at the top of the occupational structure and a growth of low-skilled jobs, whilst the middle of the occupational distribution is hollowed out; Goos and Manning (2007) speak of an increase in both 'lovely' jobs and 'lousy' jobs.

Indeed, the data used for this chapter show a growth in service class jobs for earlier cohorts, but this trend stagnated for the cohort of 1961-1970 and even reversed for the youngest cohort of 1971-1980.[1] Simultaneously, the likelihood of obtaining the first job in the urban working class increased for the youngest cohort. This is in line with the results of Schmelzer (2008), who found that the quality of the first job had decreased for the youngest cohorts. Comparative evidence shows that there has been growth of high-skilled jobs in the United Kingdom, but that this has occurred at a slower rate than in other countries. Furthermore, the increase in high-skilled employees has occurred faster than the growth of high-skilled jobs (UK Commission for Employment and Skills, 2009), which leads to a risk of over-qualification. For the youngest cohort there are more university graduates

[1] The full table of descriptive statistics is available in the on-line appendix to the volume.

than people occupying a service class position in their first job. While this trend is limited to the first job, research evidence has shown that early career occupational mobility has exhibited a trend towards more volatility overall, i.e. more chances of upward mobility but also more downward mobility (Schmelzer, 2008). From these trends, we would not expect an increasing trend in the occupational returns to education, at least not in an absolute sense.

3. Social mobility and the mediating and moderating role of education

Most research on social mobility in the United Kingdom has been concerned with inflow and outflow rates between distinct social classes or income quintiles. As such, a large part of the literature has focused on mobility tables, and the effect of educational level has not been routinely included in these analyses. It is however useful to examine the mediating effect of educational level since it gives an indication of the extent to which existing social mobility patterns are explained by educational achievement. Goldthorpe and Mills (2004) showed a small reduction in the intergenerational transmission of social class after the mediating effect of education level has been taken into account. The mediating effect of education is largest for long-range mobility between the service class & small employers and the non-skilled working class on the one hand, and between the service class & small employers and the self-employed on the other hand.

Next we are interested in the question of whether the origin-destination link is moderated by the role of education. In particular we are interested in the less frequently examined question of whether the effect of social origin on labour-market outcomes is weaker among those with higher educational levels. When this is the case, one would expect that, with time, as more people attain higher educational levels, the direct effect of social class background would slowly disappear. Using data from the General Household Survey, Goldthorpe and Jackson showed that the probability of entering the salariat does not differ according to parental class background for persons with degree-level educational qualifications. For those with lower educational levels, however, there is a clear effect of social class background. Using the same data but comparing more classes with each other, Breen and Luijkx (2007) could not replicate this finding. They concluded that there is no clear one-directional result in Britain. The effect of some parental social classes is stronger at higher education levels, while the effect of other social origin positions is lower with higher education levels, or is the same across educational levels. While Goldthorpe and Jackson's finding could be interpreted as a move towards more meritocratic occupational allocation for degree-holders, the authors frame this interaction effect in an alternative manner by focusing on the repercussion that educational attainment is less important for children from higher parental class backgrounds. They argue that for true meritocracy to manifest, the direct effect of parental background would have to be small across people of all educational levels.

4. Data

The analysis was conducted with the cross-sectional samples of the British Household Panel Survey (BHPS) for the years 1991, 2000 and 2008. The BHPS is a socio-economic household panel that started with a sample of more than 5000 households in 1991 (Taylor, Brice, Buck, & Prentice-Lane, 2007). The sample selected for analysis included all UK-born people between 28 and 65 years of age.[2]

[2] Most analyses in this chapter are based on the 2008 data, which include a sample for Northern Ireland. The analyses for the years 1991 and 2000 do not include a Northern Irish sample and hence are restricted to Great Britain.

People who were not born in the United Kingdom were excluded from the analysis, because social mobility patterns are substantially influenced by migration processes which are not examined in this study.

The outcome variables of interest were occupational status of first job (measured as ISEI), occupational status of current or most recent job, and net monthly earnings. The analysis for earnings was limited to persons currently in employment, and it referred to the usual net pay or the net pay at the last payment.

The categories of educational level were based on the CASMIN scheme and included the following categories: none or elementary, basic vocational, middle general or vocational, higher general or vocational, lower tertiary and higher tertiary education. Occupational status of the family of origin was based on the dominance principle and referred to either the mother's or the father's occupational position when the respondent was 14, whichever was higher. The analysis included a dummy variable for self-employment. Further controls for region and ethnicity were left out after it was established that the results did not change substantially.

In order to assess trends over time, two strategies were used. First, the variation in the effect of educational level and parental occupational status on the respondent's first job was assessed for respondents born at different times in the sample of 2008. These constructed birth cohorts were compared with respect to the direct effect of parental background and educational level. Secondly, for occupational status of the most recent job and earnings, the effects were assessed in the cross-sectional samples of 1991, 2000 and 2008.

The analysis technique used was OLS regression for ISEI of first job, ISEI of most recent job and monthly net labour earnings, with robust standard errors. The analysis was weighted with the cross-sectional weights in order to correct bias due to non-response as well as sample design effects.

5. Results

I will discuss the findings with respect to the four research questions per outcome variable and for men and women separately. The models are presented in a stepwise manner, and include the results for the four research questions:

1. Is there a direct effect of parental background over and above the effect of educational level? (Model 1 & 2)
2. Is the direct effect of parental background smaller among those with higher educational qualifications? (Model 3)
3. Has the direct effect of parental background changed over time? (Model 4)
4. Have the returns to education changed over time? (Model 4)

Table 1 sets out the results for the ISEI of the first job for men. Comparison of Model 1 with Model 2 shows that there is a direct effect of parental ISEI on the ISEI of the first job for men, over and above the effect of educational level. The size of the effect of parental ISEI becomes smaller when educational level is introduced as a covariate.

Table 1 - OLS regression for ISEI of first job for men, robust standard errors, BHPS 2008

	Model 1			Model 2			Model 3			Model 4		
	coeff.	**s.e.**		**coeff.**	**s.e.**		**coeff.**	**s.e.**		**coeff.**	**s.e.**	
Parental ISEI	0.313	0.02	***	0.140	0.02	***	0.250	0.06	***	0.130	0.08	+
Level of education												
higher general or vocational (Ref)												
none or elementary				-10.505	1.12	***	-8.859	3.17	**	-11.245	2.96	***
basic vocational				-7.893	1.16	***	-2.689	3.27		-9.125	2.78	***
middle general or vocational				-5.640	1.08	***	-0.113	3.19		-8.346	3.06	**
lower tertiary				0.369	1.21		6.514	3.57	+	1.267	3.20	
higher tertiary				10.360	1.41	***	19.205	4.64	***	11.964	4.47	**
Parental ISEI * Level of education												
* none or elementary							-0.020	0.08				
* basic vocational							-0.122	0.08				
* middle general or vocational							-0.128	0.07	+			
* lower tertiary							-0.141	0.08	***			
* higher tertiary							-0.185	0.09	***			
Cohort												
1931-1940 (Ref)												
1941-1950	2.008	1.16	+	0.011	1.04		0.326	1.04		-2.163	4.86	
1951-1960	0.268	1.17		-0.039	1.06		-1.539	1.06		-3.630	4.67	
1961-1970	-1.759	1.17		-0.112	1.08	***	-4.081	1.08	***	-3.785	4.81	
1971-1980	-2.619	1.20	*	-0.101	1.07	***	-4.367	1.06	***	-2.816	4.75	

Parental ISEI * Cohort		
* 1941-1950	0.078	0.09
* 1951-1960	0.022	0.09
* 1961-1970	0.006	0.09
* 1971-1980	-0.0488	0.1
Level of education * Cohort		
Cohort: 1941-1950		
* none or elementary	-0.553	3.82
* basic vocational	0.523	3.84
* middle general or vocational	2.610	3.96
* lower tertiary	-3.031	4.19
* higher tertiary	-1.046	5.58
Cohort: 1951-1960		
* none or elementary	1.302	3.72
* basic vocational	1.933	3.69
* middle general or vocational	4.663	3.78
* lower tertiary	0.817	4.09
* higher tertiary	-1.417	5.37
Cohort: 1961-1970		
* none or elementary	2.644	3.88
* basic vocational	-0.957	3.71
* middle general or vocational	1.978	3.86
* lower tertiary	-1.639	4.13
* higher tertiary	-3.439	5.21

Cohort: 1971-1980												
* none or elementary										1.413	3.77	
* basic vocational										5.292	3.71	
* middle general or vocational										2.792	3.65	
* lower tertiary										-1.673	3.90	
* higher tertiary										-0.207	5.38	
Self-employed	-1.518	0.97		-0.208	0.88		-0.337	0.89		-0.339	0.88	
Constant	27.023	1.23	***	37.609	1.50	***	32.961	2.81	***	38.356	3.78	***
R^2	0.0993			0.2674			0.2711			0.274		
N	1870			1839			1839			1839		

+p ≤ 0.10 * p ≤ 0.05 ** p ≤ 0.01 *** p ≤ 0.001

As regards the effect of educational level, we see that mainly two groups stand out: the higher tertiary graduates and people with no or only elementary-level qualifications. Compared to the reference category of higher general and vocational qualifications (which include A-levels), it is especially higher tertiary graduates that have substantially higher ISEI levels in their first jobs, while on the other hand those with no or elementary-level qualifications obtain first jobs with much lower ISEI scores. Model 3 includes the interaction effect between parental ISEI and respondent's level of education. The result shows that the direct effect of parental ISEI is smaller among lower and higher tertiary graduates. This is in line with the result obtained by Goldthorpe and Jackson for access to the salariat (Goldthorpe & Jackson, 2008). Model 4 examines the trends over time. The results show very little change. The effect of parental ISEI does not decrease over time, while the effect of educational level does not become stronger over the cohorts. These results are in line with the findings of previous research (Bukodi & Goldthorpe, 2011a; Goldthorpe & Mills, 2008).

The results for the ISEI of the first job for women are presented in Table 2. The main patterns are similar to these for men. First, we find that the direct effect of parental ISEI on the ISEI of British women's first jobs reduces somewhat in size but remains sizeable when the mediating effect of the own educational level is taken into account. The effect of educational level on the ISEI of women's first jobs is slightly smaller than it was for men. At the same time, the effect of parental ISEI on a woman's ISEI is smaller than that for men. This suggests that, for many women, social class reproduction happens via the husband, and as such the direct influence of parental background is less important. Model 3 shows that, unlike for men, the effect of parental ISEI is equally strong for women of all educational levels. This seems to suggest that the phenomenon of a more meritocratic labour market for the highly educated is only valid for men.

As for the trends over time, there are hardly any effects. The effect of parental ISEI remains more or less similar over time; it appears only slightly less strong for the 1961- 1970 cohort. Also as regards the effect of education on occupational attainment in the first job, there appears to be a more or less trendless development. The effect of having no or elementary-level qualifications seems slightly stronger for the 1961-1970 cohort and slightly less strong for the 1971-1980 cohort.

The results on the current job (available in the online appendix) show that the overall effect of parental ISEI is stronger than the ISEI of the first job, even when controlling for education. This shows that the repercussions of childhood conditions create inequalities which grow over the lifecourse and create a pattern of cumulative advantage and disadvantage (DiPrete & Eirich, 2006; Price, 1965). This is perhaps surprising, because we might expect the direct effect of parental conditions to wane as the lifecourse progresses. As for the ISEI of the first job, the effect of parental ISEI is again stronger for men than for women; the effect of parental background appears to be smaller for men with tertiary educational levels; and there are no substantial interaction effects for women. The gender difference in the interaction effect can be explained by the overall smaller effect of parental background on the occupational attainment of women. Indeed, after taking into account the interaction effect between parental ISEI and own educational level, the effect of parental ISEI for highly-educated men is the same as that for highly-educated women. For every unit change in the parental ISEI, a person's current or more recent ISEI increases by 0.05 on the ISEI scale.

Table 2 - OLS regression for ISEI of first job for women, robust standard errors, BHPS 2008

	Model 1			Model 2			Model 3			Model 4		
	coeff.	s.e.		coeff.	s.e.		coeff.	s.e.		coeff.	s.e.	
Parental ISEI	0.232	0.02	***	0.127	0.02	***	0.132	0.05	**	0.163	0.05	**
Level of education												
higher general or vocational (Ref)												
none or elementary				-7.736	1.04	***	-7.835	2.90	**	-7.516	2.46	**
basic vocational				-2.159	1.13	+	-0.372	3.39		-1.553	2.85	
middle general or vocational				-1.296	0.96		0.226	2.85		-2.677	2.63	
lower tertiary				-0.280	1.00		0.727	3.00		1.465	2.84	
higher tertiary				7.758	1.21	***	4.575	3.80		8.529	6.02	
Parental ISEI * Level of education												
* none or elementary							0.005	0.07				
* basic vocational							-0.045	0.08				
* middle general or vocational							-0.036	0.06				
* lower tertiary							-0.022	0.06				
* higher tertiary							0.058	0.07				
Cohort												
1931-1940 (Ref)												
1941-1950	1.712	0.89	+	0.446	0.84		0.498	0.84		-1.033	4.18	
1951-1960	0.756	0.89		-1.185	0.86		-1.129	0.86		-2.209	4.11	
1961-1970	-0.983	0.92		-3.786	0.90	***	-3.742	0.90	***	4.923	3.84	
1971-1980	-0.704	0.98		-4.199	1.01	***	-4.156	1.00	***	-5.053	4.00	

Parental ISEI * Cohort			
* 1941-1950	-0.036	0.07	
* 1951-1960	-0.015	0.07	
* 1961-1970	-0.107	0.06	+
* 1971-1980	-0.001	0.07	
Level of education * Cohort			
Cohort: 1941-1950			
* none or elementary	2.064	3.47	
* basic vocational	2.326	3.78	
* middle general or vocational	3.875	3.56	
* lower tertiary	3.699	3.84	
* higher tertiary	2.435	6.70	
Cohort: 1951-1960			
* none or elementary	2.405	3.38	
* basic vocational	1.448	3.89	
* middle general or vocational	3.845	3.45	
* lower tertiary	-1.540	3.67	
* higher tertiary	1.294	6.66	

Cohort: 1961-1970												
* none or elementary										-5.633	3.30	+
* basic vocational										-5.397	3.68	
* middle general or vocational										-2.420	3.10	
* lower tertiary										-6.327	3.27	+
* higher tertiary										-4.570	6.37	
Cohort: 1971-1980												
* none or elementary										6.873	3.55	+
* basic vocational										0.086	4.02	
* middle general or vocational										2.796	3.20	
* lower tertiary										-1.981	3.45	
* higher tertiary										-0.616	6.34	
Self-employed	0.209	1.33		-0.009	1.18		-0.026	1.18		0.190	1.16	
Constant	32.230	0.97	***	39.792	1.35	***	39.512	2.52	***	38.159	3.10	***
R^2	0.0837			0.1969			0.1984			0.210		
N	2125			2108			2108			2108		

+p ≤ 0.10 * p ≤ 0.05 ** p ≤ 0.01 *** p ≤ 0.001

Concerning trends over time, the evidence shows that the effect of parental occupational status on both men and women's current ISEI does not change much over the time frame studied, and in any case does not show signs of a decrease. At the same time, moreover, there are no signs that the returns to education have increased over the period studied, and this holds for both men and women.

Tables 3 and 4 consider log net earnings. To be noted first is that the results for men and women are similar. While there is an effect of parental ISEI on log net earnings in Model 1, once the mediating effect of education has been taken into account, the direct effect of parental ISEI becomes smaller and is no longer statistically significant. This is the case for both men and women. Second, there are no substantial interaction terms between parental ISEI and educational level: hence for log net earnings the effect of parental background is not smaller among the highly educated. This diverges from the effects found for occupational status, at least for men. A consideration to be made here concerns the nature of inequality of social status versus earnings inequality. Earnings inequality in the United Kingdom is characterized by a wide dispersion at the top of the earnings distribution in particular. This implies that there is a large amount of earnings inequality within the group of university graduates. When there is more variation in the earnings outcome within educational groups, there is more scope for the parental background mechanisms to influence the earnings outcome. Lastly, the results for the trends over time are similar to the trends for the other outcome variables. There is no sizeable trend in the direction of a diminishing effect of parental background or an increasing effect of the effect of educational level over the time period studied.

6. Conclusion

In this chapter I have addressed the returns to education and the direct effect of social background in the United Kingdom from different perspectives. In what follows, the four research questions are discussed.

First, it has been found that there is an association between parental occupational status and a person's own occupational status in the first job, in the current or most recent job, as well as the net monthly earnings. Furthermore, this association is partly mediated by a person's educational level. This means that part of the pathway between parental background and a person's labour-market outcomes is explained by those with higher-status parents achieving on average higher educational levels. For the earnings outcome, the size of the pathway via education is so large that the remaining direct effect of parental background is no longer statistically significant. For both the ISEI of first job and current job ISEI, there remains a direct association between parental occupational status and the person's occupational status. These results are in line with previous research findings.

Table 3 - OLS regression for log net wage for men, robust standard errors, BHPS

	Model 1 2008			Model 2 2008			Model 3 2008		Model 4 2008		
	coeff.	**s.e.**		**coeff.**	**s.e.**		**coeff.**	**s.e.**	**coeff.**	**s.e.**	
Parental ISEI	0.008	0.00	*	0.003	0.00		-0.005	0.01	0.005	0.00	***
Level of education											
higher general or vocational (Ref)											
none or elementary				-0.398	0.16	*	-0.949	0.69	-0.205	0.04	***
basic vocational				-0.180	0.16		-0.362	0.74	-0.145	0.05	**
middle general or vocational				-0.276	0.14	*	-0.793	0.61	-0.100	0.04	*
lower tertiary				0.102	0.12		0.016	0.64	0.075	0.04	+
higher tertiary				0.249	0.12	*	-0.273	0.61	0.075	0.08	
Parental ISEI * Level of education											
* none or elementary							0.014	0.02			
* basic vocational							0.004	0.02			
* middle general or vocational							0.012	0.02			
* lower tertiary							0.002	0.02			
* higher tertiary							0.011	0.02			
Year (ref. 1991)											
2000									0.288	0.12	*
2008									0.532	0.13	***

Year * Level of education												
2000												
* none or elementary										0.119	0.11	
* basic vocational										-0.043	0.16	
* middle general or vocational										0.008	0.11	
* lower tertiary										-0.015	0.11	
* higher tertiary										0.121	0.13	
2008												
* none or elementary										-0.217	0.17	
* basic vocational										-0.034	0.17	
* middle general or vocational										-0.177	0.15	
* lower tertiary										0.035	0.13	
* higher tertiary										0.211	0.15	
Parental ISEI * Year												
* 2000										-0.003	0.00	*
* 2008										-0.003	0.00	
Age	0.101	0.04	**	0.090	0.04	*	0.088	0.04	*	0.102	0.02	***
Age squared	-0.001	0.00	**	-0.001	0.00	*	-0.001	0.00	*	-0.001	0.00	***
Self-employed	-1.155	0.19	***	-1.080	0.19	***	-1.066	0.18	***	-0.614	0.07	***
Constant	4.884	0.85	***	5.441	0.80	**	5.816	1.06	***	4.684	0.33	***
R^2	0.1328			0.1555			0.1585			0.1463		
N	1365			1354			1354			5080		

+p ≤ 0.10 * p ≤ 0.05 ** p ≤ 0.01 *** p ≤ 0.001

Table 4 - OLS regression for log net wage for women, robust standard errors, BHPS

	Model 1 2008			**Model 2** 2008			**Model 3** 2008		**Model 4** 2008		
	coeff.	**s.e.**		**coeff.**	**s.e.**		**coeff.**	**s.e.**	**coeff.**	**s.e.**	
Parental ISEI	0.008	0.00	***	0.003	0.00		0.003	0.01	0.001	0.00	
Level of education											
higher general or vocational (Ref)											
none or elementary				-0.298	0.13	*	-0.287	0.39	-0.384	0.08	***
basic vocational				0.006	0.14		0.079	0.48	-0.106	0.09	
middle general or vocational				-0.107	0.12		-0.261	0.37	-0.119	0.08	
lower tertiary				0.127	0.12		0.250	0.41	0.282	0.08	***
higher tertiary				0.499	0.11	***	0.517	0.37	0.596	0.10	***
Parental ISEI * Level of education											
* none or elementary							0.000	0.01			
* basic vocational							-0.002	0.01			
* middle general or vocational							0.004	0.01			
* lower tertiary							-0.003	0.01			
* higher tertiary							0.000	0.01			
Year (ref. 1991)											
2000									0.554	0.16	***
2008									0.624	0.18	***
Year * Level of education											
2000											
* none or elementary									-0.183	0.12	
* basic vocational									-0.080	0.14	
* middle general or vocational									-0.089	0.11	
* lower tertiary									-0.235	0.12	+

* higher tertiary										-0.043	0.13	
2008												
* none or elementary										0.109	0.15	
* basic vocational										0.117	0.17	
* middle general or vocational										0.034	0.14	
* lower tertiary										-0.135	0.15	
* higher tertiary										-0.078	0.15	
Parental ISEI * Year												
* 2000										-0.002	0.00	
* 2008										0.001	0.00	
Age	0.090	0.03	**	0.089	0.03	**	0.089	0.03	**	0.067	0.02	***
Age squared	-0.001	0.00	**	-0.001	0.00	**	-0.001	0.00	**	-0.001	0.00	***
Self-employed	-1.159	0.28	***	-1.181	0.28	***	-1.183	0.28	***	-0.868	0.13	***
Constant	4.720	0.76	***	4.796	0.76	***	4.782	0.84	***	4.684	0.34	***
R^2	0.1181			0.1678			0.1688			0.2505		
N	1361			1351			1351			4789		

+p ≤ 0.10 * p ≤ 0.05 ** p ≤ 0.01 *** p ≤ 0.001

The direct influence of parental background on occupational status is larger for men than for women. One reason for the smaller effect of parental social background for women could be that women are more likely than men to rely on another pathway – that of marriage – for status attainment. This may mean that the mechanisms through which higher-status parents ensure that their offspring attain higher social status focus more on the occupational achievement of their sons than the occupational achievement of their daughters. We do not find this gender difference for the earnings outcome. Here it should be borne in mind that the earnings findings relate only to those women who are currently in employment, while ISEI relates to current or most recent job. Due to the tendency of a substantial share of women to have employment interruptions, the group currently in employment is a select group of women for whom we can assume that they will on average display more similar characteristics than men.

The next question relates to the variation in the direct effect of parental background over different educational levels, and in particular whether there is less room for such effects in the labour market for the highly educated. We find that the direct effect of parental occupational status on the own occupational status is less strong among highly-educated men. In the previous literature on this topic, it was suggested that the labour market for highly-educated people operates in a more meritocratic manner. This implies that as more people achieve higher educational levels, the overall influence of parental background on people's outcomes would slowly disappear (Breen & Jonsson, 2007). To what extent this prognosis can be made for the UK is doubtful. On the one hand, participation in higher education has increased over the past decades in the United Kingdom, and the occupational status of the highly-educated is less linked to social origin. However, another important element is the extent to which participation in higher education is linked to social origin. Blanden and Machin (2004) found that the educational expansion in the UK between the 1970s and 1990s benefited children from richer parents more than children from poorer backgrounds. Moreover, for women and for the earnings outcome an interaction between educational level and parental background was not found. The divergent results for the earnings outcome could be explained on the basis of the nature of earnings inequality in the United Kingdom. Earnings inequality in the United Kingdom is characterized by a wide dispersion at the top of the income distribution in particular, which affects the group of people with higher educational qualifications. Whenever there is more within-group variation in outcomes, there is more scope for the mechanisms of parental background influence to affect people's outcomes.

The last research question is the one concerning trends over time. In a more meritocratic society, one would expect parental background to become less important over time, while the influence of a person's educational qualifications in explaining their labour-market outcomes becomes more important. This chapter does not find evidence for either of these trends. In fact, a high level of stability is found in both the effect of parental background and educational level over time, in line with previous findings (Bukodi & Goldthorpe, 2011a; Goldthorpe & Mills, 2004, 2008). For social class mobility, the majority of studies have found stability in the association between parental origin and own class position over time. For the returns to education, this pattern was expected on the basis of the figures related to the supply of and demand for highly-educated people. The growth of higher education attainment has been large over the time frame studied, so that the size of the group of people with university-level qualifications is larger than the number of jobs in the service class for the younger cohorts. Under such constellation, we would not expect the returns to education to rise over time. This expectation is also in line with previous studies which control for the effect of parental background and do not find an increase in the returns to education (Bukodi & Goldthorpe, 2011a,

2011b). Research not controlling for parental background effects has found that the wage returns to education grew over the 1980s, while this growth slowed down over the 1990s (Machin, 2003).

References

Blanden, J., Goodman, A., Gregg, P., & Machin, S. (2004). Changes in intergenerational income mobility in Birtain. In M. Corak (Ed.), *Generational income mobility in North America and Europe* (pp. 122-146). Cambridge: Cambridge University Press.

Blanden, J., Gregg, P., & Machin, S. (2005). Educational inequality and intergenerational mobility. In S. Machin & A. Vignoles (Eds.), *What's the good of education? The economics of education in the UK*. Princeton: Princeton University Press.

Blanden, J., & Machin, S. (2004). Educational Inequality and the Expansion of UK Higher Education *Scottish Journal of Political Economy, 51*(2), 230-249.

Blanden, J., & Machin, S. (2007). Recent Changes in Intergenerational Mobility in Britain: Sutton Trust.

Breen, R. (2004). *Social Mobility in Europe*. Oxford, UK: Oxford University Press.

Breen, R., & Goldthorpe, J. H. (2001). Class, mobility and merit - The experience of two British birth cohorts. *European Sociological Review, 17*(2), 81-101.

Breen, R., & Jonsson, J. O. (2007). Explaining change in social fluidity: Educational equalization and educational expansion in twentieth-century Sweden. *American Journal of Sociology, 112*(6), 1775-1810.

Breen, R., & Luijkx, R. (2007). Social mobility and education: A Comparative Analysis of Period and Cohort Trends in Britain and Germany. In S. Scherer, R. Pollak, G. Otte & M. Gangl (Eds.), *From Origin to Destination*. New York: Campus.

Bukodi, E., & Goldthorpe, J. H. (2011a). Class origins, education and occupational attainment in Britain Secular trends or cohort-specific effects? *European Societies, 13*(3), 347-375.

Bukodi, E., & Goldthorpe, J. H. (2011b). Social class returns to higher education: chances of access to the professional and managerial salariat for men in three British birth cohorts. *Longitudinal and Life Course Studies, 2*(2), 185-201.

Cabinet Office. (2011). Opening Doors, Breaking Barriers: A Strategy for Social Mobility. London.

DiPrete, T. A., & Eirich, G. M. (2006). Cumulative Advantage as a Mechanmism for Inequality: A Review of Theoretical and Empirical Developments. *Annual Review of Sociology, 32*, 271–297.

Erikson, R., & Goldthorpe, J. H. (2002). Intergenerational Inequality: A Sociological Perspective. *Journal of Economic Perspectives, 16*(3), 31-44.

Erikson, R., & Goldthorpe, J. H. (2010). Has social mobility in Britain decreased? Reconciling divergent findings on income and class mobility. *British Journal of Sociology, 61*(2), 211-230.

Glass, D. V. (1954). *Social mobility in Britain* (1. Aufl. ed.). London: Routledge & Kegan Paul.

Goldthorpe, J. H., & Jackson, M. (2007). Intergenerational class mobility in contemporary Britain: political concerns and empirical findings. *British Journal of Sociology, 58*(4), 525-546.

Goldthorpe, J. H., & Jackson, M. (2008). Education-based meritocracy: the barriers to its realisation. In A. Lareau & D. Conley (Eds.), *Social Class: How does it work?* (pp. 93-117). New York: Russell Sage.

Goldthorpe, J. H., & Mills, C. (2004). Trends in intergenerational class mobility in Britain in the late twentieth century. In R. Breen (Ed.), *Social mobility in Europe*. Oxford: Oxford University Press.

Goldthorpe, J. H., & Mills, C. (2008). Trends in intergenerational class mobility in modern Britain: evidence from national surveys, 1972–2005. *National Institute Economic Review, 205*(1), 83-100.

Goos, M., & Manning, A. (2007). Lousy and Lovely Jobs: The Rising Polarization of Work in Britain. *The Review of Economics and Statistics, 89*, 118–133.

Harmon, C., Walker, I., & Westergaard-Nielsen, N. (2001). *Education and earnings in Europe: a cross country analysis of the returns to education*. Cheltenham/Massachusetts: Edward Elgar Publishing.

Heath, A., & Payne, C. (2000). Social Mobility. In A. H. Halsey & J. Webb (Eds.), *Twentieth-CenturyBritish Social Trends* (pp. 254-278). Basingstoke: MacMillan.

Katz, L. F., & Autor, D. H. (1999). Changes in the Wage Structure and Earnings Inequality. In O. Ashenfelter & D. Card (Eds.), *Handbook of Labor Economics*. Amsterdam.

Lambert, P., Prandy, K., & Bottero, W. (2007). By slow degrees: Two centuries of social reproduction and mobility in Britain. *Sociological Research Online, 12*(1).

Li, Y., & Devine, F. (2011). Is Social Mobility Really Declining? Intergenerational Class Mobility in Britain in the 1990s and the 2000s. *Sociological Research Online, 16*(3).

Machin, S. J. (2003). Wage Inequality Since 1975. In R. Dickens, P. Gregg & J. Wadsworth (Eds.), *The Labour Market Under New Labour: The State of Working Britain.* London: Palgrave.

Machin, S. J. (2008). An Appraisal of Economic Research on Changes in Wage Inequality. *Labour 22*, 7 – 26.

Price, D. (1965). Networks of scientific papers. *Science, 149*, 510-515.

Schmelzer, P. (2008). Increasing employment instability among young people? Labor market entries and early careers in Great Britain since the 1980s. In H.-P. Blossfeld, S. Buchholz, E. Bukodi & K. Kurz (Eds.), *Young Workers, Globalization and the Labor Market*. Cheltenham: Edward Elgar.

Taylor, M. F., Brice, J., Buck, N., & Prentice-Lane, E. (2007). British Household Panel Survey User Manual Volume A: Introduction, Technical Report and Appendices. Colchester: University of Essex.

UK Commission for Employment and Skills. (2009). Ambition 2020: World Class Skills and Jobs for the UK.

Young, M. (1958). *The rise of the meritocracy : 1870 - 2033; an essay on education and equality*. London: Thames and Hudson.