nccr trade regulation
swiss national centre of competence in research

Working Paper No 2015/10

Catching-up: The educational mobility of migrants' and natives' children in Europe

Doris A. Oberdabernig / Alyssa Schneebaum

Abstract

Migrants into European countries are often less educated than European natives. We investigate whether migrants' children are able to catch up to their native counterparts in educational attainment, and analyze the drivers of differences in intergenerational educational upward mobility between natives' versus migrants' descendants. We find that migrants' children are more likely than natives' children to surpass their parents' educational attainment in the majority of countries studied. Their parents' low education is often the strongest determinant for their ability to move up in education class across generations.

Research for this paper was funded by the Swiss National Science Foundation under a grant to the National Centre of Competence in Research on Trade Regulation, based at the World Trade Institute of the University of Bern, Switzerland.

FNSNF
FONDS NATIONAL SUISSE
SCHWEIZERISCHER NATIONALFONDS
FONDO NAZIONALE SVIZZERO
SWISS NATIONAL SCIENCE FOUNDATION

Die Nationalen Forschungsschwerpunkte (NFS) sind ein Förderinstrument des Schweizerischen Nationalfonds.
Les Pôles de recherche nationaux (PRN) sont un instrument d'encouragement du Fonds national suisse.
The National Centres of Competence in Research (NCCR) are a research instrument of the Swiss National Science Fondation.

Catching-up: The educational mobility of migrants' and natives' children in Europe

Doris A. Oberdabernig*[1] and Alyssa Schneebaum†[2]

[1]World Trade Institute, University of Bern.
[2]Department of Economics, Vienna University of Economics and Business.

April 2015

Abstract

Migrants into European countries are often less educated than European natives. We investigate whether migrants' children are able to catch up to their native counterparts in educational attainment, and analyze the drivers of differences in intergenerational educational upward mobility between natives' versus migrants' descendants. We find that migrants' children are more likely than natives' children to surpass their parents' educational attainment in the majority of countries studied. Their parents' low education is often the strongest determinant for their ability to move up in education class across generations.

JEL Classifications: I21, I24, J11

Key Words: Intergenerational Mobility; Immigrants; School System

*World Trade Institute (WTI), University of Bern. Hallerstrasse 6, 3012 Bern, Switzerland. Tel.: +41 (0)31 631 3270, doris.oberdabernig@wti.org

†Corresponding Author. Department of Economics, Vienna University of Economics and Business. Welthandelsplatz 1, 1020 Wien, Austria. Tel.: +43 (0)1 31336 5936, alyssa.schneebaum@wu.ac.at

1 Introduction

The tremendous influx of immigrants into Europe over the past several decades, particularly of people from poorer and politically less stable countries, has been the source of large social and demographic shifts. Immigrants into European countries are typically less educated than the native population. If immigrants' children are unable to catch up to natives' education levels, migrant communities will remain at a disadvantage and more likely be a burden for their host countries' public welfare systems (e.g. Boeri, 2010; Huber and Oberdabernig, 2014). In this paper, we examine the probability that descendants of native born vs. foreign born parents reach higher education levels than their parents in 11 European countries, and identify the drivers of mobility differences in the two groups.

The literature on migrants' educational attainment shows that their academic success is often significantly lower than that of natives (e.g. Schütz et al., 2008; Schneeweis, 2011; Dustmann et al., 2012; Aydemir et al., 2013; Schneebaum et al., 2015), but we know relatively little about migrants' success in surpassing their parents' education and making strides in catching up to natives over generations. A challenge for migrants is that school performance is strongly related to social and economic background. Migrants' worse educational outcomes are due at least in part to the socioeconomic conditions related to their families having come from another country (e.g. Schneeweis, 2011; Lüdemann and Schwerdt, 2013).

The evidence on whether these disadvantages prevent migrants' children from reaching higher education than their parents is mixed. Previous studies have shown that depending on their origin and host countries, migrants face either higher or lower levels of intergenerational persistence compared to natives (e.g. Bauer and Riphahn, 2006; Gang and Zimmermann, 2000; Dustmann, 2008). The reasons for the disparities in intergenerational mobility by migration background have received limited attention in the literature. This study fills this gap and sheds light on the driving factors of mobility differences.

2 Empirical Analysis

2.1 Data

We use data from the 2011 European Union Statistics on Income and Living Conditions (EU-SILC), which include information on respondents' parents and household circumstances when the respondent was 14, along with standard demographic and socioeconomic information. Upward mobility is a dummy variable equal to one if the respondent achieves a higher education level than their more highly educated parent, where education is measured in four categories (illiterate; ISCED 0-2; ISCED 3-4; ISCED 5-6). We focus on respondents born in the country of residence and form two groups: natives (whose parents were born in the same country as the respondent) and migrants' descendants (whose parents were born in another country). We exclude respondents whose parents have reached

the highest education class.

Table A.1 shows the educational attainment of parents and descendants by migration background. In every country in our sample except Estonia and Latvia, descendants of migrants are more often upwardly mobile than their native counterparts. These are also the countries in which migrant parents have on average lower education levels than native parents.

Table 1: Mean Education Levels, by Migration Background

	Natives				*2nd Generation Migrants*			
	Parent	Child	Mobile	N	Parent	Child	Mobile	N
Austria	1.61	2.07	44.4%	3903	1.46	1.86	47.1%	87
Belgium	1.38	2.13	62.1%	2911	1.08	2.04	71.4%	140
Switzerland	1.82	2.19	37.5%	3455	1.42	2.15	61.6%	281
Czech Republic	1.37	2.06	65.8%	5415	1.14	1.89	68.9%	103
Germany	1.90	2.28	39.6%	5361	1.65	2.29	53.6%	153
Estonia	1.65	2.13	48.5%	2378	1.67	2.12	44.8%	239
France	1.14	2.12	77.1%	6466	0.99	2.12	82.1%	420
Croatia	1.42	1.92	48.3%	4024	1.37	1.91	54.8%	219
Luxembourg	1.56	1.91	40.3%	2503	1.27	1.92	58.7%	332
Latvia	1.56	2.09	52.4%	3059	1.58	2.03	46.7%	409
UK	1.33	2.23	71.8%	3466	1.19	2.47	90.5%	116

Mean education levels of respondents and their highest educated parent are reported. *Mobile* indicates the proportion of upwardly mobile individuals. More detailed descriptives are available in the appendix.

2.2 Econometric Methods

To unveil the drivers of educational mobility for the two different groups, we estimate logit models for both groups separately. These models explain the probability of upward mobility in each country, controlling for individual, parental, and household characteristics. The logit model

$$Pr(EC_i > EC_i^p | X_i) = \Lambda(X_i' \beta^j) \tag{1}$$

links the probability of each individual i being in a higher education class (EC) than their most highly educated parent p to covariates X. In X we consider five groups of characteristics: individual (birth year and gender of the respondent); parental (parents' age at birth and its square, parental age difference, and an indicator of whether the mother was out of labor force when the respondent was 14); education (education levels of both parents and of the highest educated parent); household (number of adults and children in the household when the respondent was 14); and financial (financial situation of the household at that time and its interaction with the highest parental education level). Λ

stands for the logistic cumulative distribution function and β^j is the coefficient vector where j is defined over migration status.

We use the logit results to decompose the difference in educational mobility with the Oaxaca-Blinder method for nonlinear models (see Bauer and Sinning, 2008; Fairlie, 2005). Defining natives as the base group, mobility differences between second generation migrants and natives are decomposed into

$$Pr(EC_i > EC_i^p)^m - Pr(EC_i > EC_i^p)^n = [\bar{\Phi}(X^m\widehat{\gamma^n}) - \bar{\Phi}(X^n\widehat{\gamma^n})] + [\bar{\Phi}(X^m\widehat{\gamma^m}) - \bar{\Phi}(X^m\widehat{\gamma^n})]. \quad (2)$$

where the first term in square brackets is a difference in characteristics and the second term an unexplained difference in parameters effect.

3 Results

In all countries but Latvia, migrants' children are equally (four countries) or more probable (six countries) than natives' to reach a higher education class than their parents (table 2). This difference is mainly due to differences in characteristics, while differences in parameters usually remain insignificant. The difference in parental education is the biggest contributor to the mobility gap in most countries. While higher education levels—especially of the mother but also the father—have a positive impact on upward mobility, lower education levels of the most educated parent are, *ceteris paribus*, related to a higher probability of offspring surpassing their parents in terms of education.[1] The latter effect outweighs the former. Thus, the on average lower education of migrant parents is the main driver of the higher mobility of their children as compared to natives'.

Statistically significant positive contributions of individual characteristics, such as those in France, stem from the on average younger age of migrants' children as compared to natives' and *vice versa*. Household characteristics, which are the biggest contributor in Estonia, contribute positively to the mobility gap whenever migrants' households were smaller than natives' (especially in terms of the number of children).

The results suggest that migrants are more upwardly mobile than natives in large part because they have less to achieve in order to pass their parents' education level. We see a clear catch-up effect: within one generation, migrants' children are able to make significant strides in having their educational levels match those of their native counterparts.

4 Conclusions

Migrants into the European countries analyzed here display a clear catching up to natives in educational attainment across generations. Migrant parents are less educated than native parents, but their children are often able to surpass their parents' education

[1] Parental gender differences and detailed results are available in the appendix.

Table 2: Decomposition Results

	Austria	Belgium	Switzerland	Czech Rep.	Germany	Estonia	France	Croatia	Luxembourg	Latvia	UK
	Probability of upward mobility										
Migrants	0.471***	0.714***	0.616***	0.689***	0.536***	0.448***	0.821***	0.548***	0.587***	0.467***	0.905***
	(9.17)	(18.19)	(23.09)	(15.69)	(13.06)	(14.57)	(44.66)	(16.64)	(21.50)	(20.81)	(36.09)
Natives	0.444***	0.621***	0.375***	0.658***	0.396***	0.485***	0.771***	0.483***	0.403***	0.524***	0.718***
	(59.89)	(69.33)	(46.72)	(119.61)	(59.21)	(49.32)	(148.81)	(63.08)	(41.29)	(59.89)	(97.14)
Mobility Gap	0.027	0.094*	0.240***	0.032	0.140***	-0.037	0.050**	0.065	0.185***	-0.057*	0.188***
	(0.52)	(2.32)	(8.63)	(0.72)	(3.36)	(-1.15)	(2.63)	(1.91)	(6.36)	(-2.38)	(7.18)
	Contribution of differences in characteristics										
Individual	0.001	0.019**	0.005	-0.028***	-0.001	-0.001	**0.020*** **	0.001	0.049***	-0.007	0.010*
	(0.10)	(3.24)	(0.89)	(-3.32)	(-0.19)	(-0.09)	(5.37)	(0.24)	(5.95)	(-1.21)	(2.07)
Parents	-0.001	-0.017*	-0.003	-0.009	0.012**	0.001	0.001	0.008*	-0.014*	0.005	0.002
	(-0.21)	(-2.30)	(-0.89)	(-1.19)	(2.71)	(0.08)	(0.31)	(2.24)	(-2.51)	(1.55)	(0.47)
Education	**0.070** **	**0.057***	**0.197*** **	**0.167*** **	**0.122*** **	-0.001	0.013	**0.011**	**0.126*** **	**-0.008**	**0.039*** **
	(2.63)	(2.32)	(5.96)	(7.50)	(4.39)	(-0.11)	(1.64)	(1.01)	(4.34)	(-1.00)	(3.38)
Household	0.004	-0.011*	0.011**	-0.052**	-0.000	**0.002**	-0.020***	-0.004	0.003	0.002	-0.039*
	(1.47)	(-2.52)	(2.99)	(-2.94)	(-0.29)	(0.08)	(-5.65)	(-1.17)	(1.15)	(0.86)	(-2.44)
Finance	0.009	-0.010	-0.006	0.005	-0.003	0.000	0.005	0.003	-0.025	-0.004	0.016
	(0.87)	(-0.50)	(-0.19)	(0.35)	(-0.13)	(0.07)	(0.88)	(0.46)	(-0.88)	(-1.09)	(1.72)
	Contribution of differences in parameters										
Individual	-32.267	6.715	-2.191	-6.681	0.902	22.530	-11.037*	-7.330	0.029	0.138	2.783
	(-1.12)	(1.64)	(-0.74)	(-0.80)	(0.29)	(1.08)	(-2.44)	(-1.18)	(0.00)	(0.02)	(0.47)
Parents	2.191	0.224	-0.244	0.719	0.179	2.049	0.405	0.893	0.144	-0.689	0.378
	(1.28)	(0.70)	(-0.70)	(0.90)	(0.32)	(0.93)	(1.19)	(1.10)	(0.20)	(-1.16)	(0.77)
Education	-0.249	-0.476	-0.177	0.208	-0.198	1.440	-0.033	0.173	-2.162	0.266	-0.171
	(-0.36)	(-1.83)	(-1.16)	(0.53)	(-0.33)	(0.80)	(-0.25)	(0.67)	(-1.77)	(0.70)	(-0.75)
Household	-0.151	-0.137*	-0.085	-0.073	0.002	-0.324	0.063	-0.082	-0.073	0.102	0.140
	(-0.58)	(-2.03)	(-1.50)	(-0.63)	(0.07)	(-1.01)	(1.80)	(-0.93)	(-0.58)	(0.96)	(1.54)
Finance	0.008	-0.025	0.021	-0.139	-0.064	0.282	-0.020	-0.058	0.057	-0.103	0.018
	(0.04)	(-0.41)	(0.40)	(-1.15)	(-0.33)	(0.70)	(-0.35)	(-0.67)	(0.29)	(-0.86)	(0.15)
N	3990	3051	3736	5518	5514	2617	6886	4243	2835	3468	3582

t-statistics in parentheses. Constant omitted.

levels and get closer to their native peers. The socio-economic background of the parents in both groups does not explain much of the difference in educational upward mobility between migrants' and natives' offsprings. If this process persists over generations, people with a migration background will soon have similar education levels as the native population. The results suggest that if current trends continue, concerns about migrants' dependence on welfare systems stemming from low educational attainment will be irrelevant in one or two more generations.

References

Aydemir, A., Chen, W.-H., and Corak, M., (2013). Intergenerational educational mobility among the children of Canadian immigrants. *Canadian Public Policy*, 39:107–122.

Bauer, P. C., and Riphahn, R. T., (2006). Education and its intergenerational transmission: Country of origin-specific evidence for natives and immigrants from Switzerland. *Portugese Economic Journal*, 5:89–110.

Bauer, T., and Sinning, M., (2008). An extension of the Blinder-Oaxaca decomposition to non-linear models. *Advances in Statistical Analysis*, 78(2):432–451.

Boeri, T., (2010). Immigration to the land of redistribution. *Economica*, 77:651–687.

Dustmann, C., (2008). Return migration, investment in children, and intergenerational mobility: Comparing sons of foreign- and native-born fathers. *The Journal of Human Resources*, 43(2):299–324.

Dustmann, C., Frattini, T., and Lanzara, G., (2012). Education of second-generation immigrants: An international comparison. *Economic Policy*, 27(69):143–185.

Fairlie, R., (2005). An extension of the Blinder Oaxaca decomposition to logit and tobit models. *Journal of Economic and Social Measurement*, 30(4):305–316.

Gang, I. N., and Zimmermann, K. F., (2000). Is child like parent? Educational attainment and ethnic origin. *The Journal of Human Resources*, 35(3):550–569.

Huber, P., and Oberdabernig, D. A., (2014). Decomposing welfare wedges: An analysis of welfare dependence of immigrants and natives in Europe. *WIFO Working Papers*, 459: 1–42.

Lüdemann, E., and Schwerdt, G., (2013). Migration background and educational tracking. Is there a double disadvantage for second-generation immigrants? *Journal of Population Economics*, 26(2):455–481.

Schneebaum, A., Rumplmaier, B., and Altzinger, W., (2015). Gender and migration background in intergenerational educational persistence. *Education Economics*, Forthcoming.

Schneeweis, N., (2011). Educational institutions and the integration of migrants. *Journal of Population Economics*, 24(4):1281–1308.

Schütz, G., Ursprung, H. W., and Wößmann, L., (2008). Education policy and equality of opportunity. *Kyklos*, 61(2):279–308.

A Appendix

A.1 Detailed descriptive statistics

Table A.1: Education level by migration background

	Parent			*Child*				
	Illiterate	ISCED 0-2	ISCED 3-4	Illiterate	ISCED 0-2	ISCED 3-4	ISCED 5-6	N
				Natives and their children				
AT	0.0%	38.8%	61.2%	0.0%	11.8%	69.3%	18.9%	3903
BE	0.2%	61.2%	38.6%	0.0%	21.5%	44.4%	34.0%	2911
CH	0.1%	18.2%	81.6%	0.0%	5.9%	69.5%	24.6%	3455
CZ	0.0%	63.3%	36.7%	0.0%	7.1%	80.2%	12.7%	5415
DE	0.1%	10.2%	89.8%	0.0%	5.3%	61.0%	33.7%	5361
EE	0.0%	35.2%	64.8%	0.0%	12.8%	61.1%	26.1%	2378
FR	0.5%	85.0%	14.6%	0.0%	18.0%	52.2%	29.8%	6466
HR	0.1%	57.4%	42.5%	0.0%	21.2%	66.0%	12.8%	4024
LU	0.1%	43.5%	56.5%	0.2%	28.8%	50.9%	20.1%	2503
LV	0.3%	43.0%	56.7%	0.3%	15.5%	59.5%	24.7%	3059
UK	0.6%	66.0%	33.3%	0.0%	11.4%	54.1%	34.5%	3466
				Migrants and their children				
AT	0.0%	54.0%	46.0%	0.0%	27.6%	58.6%	13.8%	87
BE	10.0%	72.1%	17.9%	0.0%	22.1%	52.1%	25.7%	140
CH	6.4%	45.2%	48.4%	0.0%	6.8%	71.2%	22.1%	281
CZ	3.9%	78.6%	17.5%	0.0%	20.4%	69.9%	9.7%	103
DE	0.0%	35.3%	64.7%	0.0%	3.3%	64.7%	32.0%	153
EE	0.0%	33.1%	66.9%	0.0%	12.1%	63.6%	24.3%	239
FR	10.0%	81.0%	9.0%	0.0%	17.9%	51.9%	30.2%	420
HR	0.5%	62.6%	37.0%	0.0%	22.8%	63.5%	13.7%	219
LU	0.6%	72.3%	27.1%	0.3%	25.3%	56.6%	17.8%	332
LV	0.0%	41.6%	58.4%	0.2%	14.4%	67.5%	17.8%	409
UK	3.4%	74.1%	22.4%	0.0%	3.4%	45.7%	50.9%	116

Parent and Child stand for the education level of the highest educated parent or the respondent respectively. The percentages indicate the percentage of persons in our sample in each education class. N indicates the sample size. Respondents whose parents have reached the highest education level (ISCED 5-6) are excluded from the analysis.

Table A.2: Upward mobility by parental education level and in total

	Natives' children				*Migrants' children*			
	Illiterate	ISCED 0-2	ISCED 3-4	Total	Illiterate	ISCED 0-2	ISCED 3-4	Total
AT	-	79.8%	22.1%	44.4%	-	63.8%	27.5%	47.1%
BE	100%	71.2%	47.5%	62.1%	100%	75.2%	40.0%	71.4%
CH	100%	83.8%	27.1%	37.5%	100%	92.9%	27.2%	61.6%
CZ	100%	90.0%	23.9%	65.8%	100%	76.5%	27.8%	68.9%
DE	100%	85.0%	34.4%	39.6%	-	92.6%	32.3%	53.6%
EE	-	83.6%	29.4%	48.5%	-	82.3%	26.3%	44.8%
FR	100%	80.3%	57.9%	77.1%	100%	82.6%	57.9%	82.1%
HR	100%	68.3%	21.2%	48.3%	100%	70.1%	28.4%	54.8%
LU	100%	58.0%	26.5%	40.3%	100%	71.3%	24.4%	58.7%
LV	75%	79.8%	31.6%	52.4%	-	83.5%	20.5%	46.7%
UK	100%	85.5%	44.0%	71.8%	100%	96.5%	69.2%	90.5%

The percentages indicate the proportion of upwardly mobile respondents given the (highest) education level of their parents. Respondents whose parents have reached the highest education level (ISCED 5-6) are excluded from the analysis.

Table A.3: Descriptive statistics of all variables

	AT	BE	CH	CZ	DE	EE	FR	HR	LU	LV	UK
					Natives' children						
Birth year	1966	1966	1965	1966	1965	1966	1966	1965	1965	1967	1966
Gender	0.48	0.49	0.46	0.43	0.47	0.49	0.46	0.51	0.49	0.45	0.45
Fathers' age at birth	30.36	29.98	31.56	28.14	29.51	30.59	29.62	29.47	31.04	29.76	29.98
Mothers' age at birth	26.96	27.49	28.31	24.94	26.71	27.65	26.87	26.00	27.67	27.37	27.14
Age diff. of parents	4.26	3.23	4.11	3.63	3.58	4.34	3.59	4.19	4.17	3.91	3.62
Mother in labor force	0.44	0.54	0.46	0.08	0.48	0.08	0.44	0.56	0.64	0.08	0.26
Mothers' education	1.36	1.24	1.50	1.24	1.65	1.52	1.07	1.19	1.29	1.48	1.09
Fathers' education	1.56	1.28	1.75	1.25	1.86	1.48	1.08	1.40	1.51	1.41	1.28
Highest parental educ.	1.61	1.38	1.82	1.37	1.90	1.65	1.14	1.42	1.56	1.56	1.33
# of adults in hh	2.76	2.38	2.54	2.17	2.30	2.29	2.44	2.63	2.61	2.17	2.30
# of children in hh	2.54	2.53	2.53	2.24	2.22	2.35	1.62	2.22	2.35	2.37	2.29
Financial situation	3.63	4.25	4.25	3.99	3.95	3.93	3.86	3.59	4.16	4.04	3.93
					Migrants' children						
Birth year	1971	1971	1969	1961	1965	1966	1970	1968	1972	1966	1968
Gender	0.44	0.51	0.46	0.39	0.46	0.52	0.51	0.49	0.52	0.52	0.40
Fathers' age at birth	30.87	31.94	31.13	28.71	31.35	29.05	32.48	30.55	30.72	29.81	31.77
Mothers' age at birth	27.74	27.51	27.63	26.26	28.03	27.59	27.54	27.40	27.36	28.00	28.43
Age diff of parents	4.15	5.21	4.37	3.65	4.10	3.32	5.37	4.00	4.32	3.22	4.53
Mother in labor force	0.34	0.69	0.31	0.15	0.50	0.06	0.58	0.66	0.50	0.05	0.33
Mothers' education	1.16	0.91	1.09	1.07	1.39	1.56	0.84	1.12	1.12	1.46	0.99
Fathers' education	1.34	1.01	1.35	1.07	1.61	1.53	0.92	1.34	1.20	1.46	1.16
Highest parental educ.	1.46	1.08	1.42	1.14	1.65	1.67	0.99	1.37	1.27	1.58	1.19
# of adults in hh	2.66	2.51	2.40	2.32	2.38	2.28	2.95	2.89	2.42	2.15	2.72
# of children in hh	2.31	3.06	1.95	3.06	2.20	1.95	2.27	2.43	2.51	2.32	2.89
Financial situation	3.72	3.82	4.21	3.78	3.90	3.95	3.71	3.49	4.07	4.06	3.88

Age difference refers to the absolute age difference between the parents. Mother in labor force is an indicator whether the respondents' mother was in or out of the labor force when the respondent was 14. # of persons in the household refers to the number of adults and children, respectiviely, in the household in which the respondents lived when they were 14 years old. Financial situation refers to the financial situation of the household in which the respondents lived when they were 14 years old. A detailed definition of variables can be found in the variable table A.4.

A.2 Variable definitions

Table A.4: Variable definitions

Variable	Variable definition
Upward mobility	Dummy variable equal to one if the respondent reaches a higher education class than the highest educated parent.
Birth year	Birth year of the respondent.
Gender	Dummy variable equal to 1 for male respondents.
Father' age at birth	Age of the father when the respondent was born.
Mothers' age at birth	Age of the mother when the respondent was born.
Age diff of parents	Absolute value of the age difference between the parents.
Mother in labor force	Dummy variable equal to 1 if the respondents' mother was out of the labor force when the respondent was 14.
Mother's education	Highest education level reached by the mother (0 "illiterate", 1 "ISCED 0-2", 2 "ISCED 3-4"; highest level 3 "ISCED 5-6" excluded).
Fathers' education	Highest education level reached by the father (0 "illiterate", 1 "ISCED 0-2", 2 "ISCED 3-4"; highest level 3 "ISCED 5-6" excluded).
Highest parental educ	Highest education level reached by the highest educated parent (0 "illiterate", 1 "ISCED 0-2", 2 "ISCED 3-4"; highest level 3 "ISCED 5-6" excluded).
# of adults in hh	Number of adults living in the same household as the respondent when she/he was 14 years old.
# of children in hh	Number of chilren living in the same household as the respondent when she/he was 14 years old.
Financial situation	Financial situation of the household in which the respondent lived when she/he was 14 years old (ranging from 1 "very bad" to 6 "very good").

A.3 Logit results

Table A.5: Logit result for natives' children

	AT	BE	CH	CZ	DE	EE	FR	HR	LU	LV	UK
Birth year	0.006	0.021***	0.007	0.025***	-0.003	-0.035***	0.043***	0.004	0.030***	-0.030***	0.030***
	(1.23)	(4.43)	(1.47)	(5.74)	(-0.93)	(-6.03)	(12.00)	(0.94)	(6.09)	(-6.03)	(6.10)
Fathers' age at birth	0.047	0.095	0.115*	0.011	0.066	0.036	0.022	0.123**	0.081	0.029	-0.044
	(1.04)	(1.79)	(2.06)	(0.19)	(1.60)	(0.68)	(0.54)	(2.63)	(1.34)	(0.61)	(-0.83)
Fathers' age at birth, sq	-0.000	-0.001	-0.002*	0.000	-0.000	-0.000	0.000	-0.001	-0.001	-0.000	0.001
	(-0.33)	(-1.21)	(-2.04)	(0.41)	(-0.36)	(-0.60)	(0.01)	(-1.83)	(-0.89)	(-0.22)	(1.18)
Mothers' age at birth	0.118	0.108	0.159*	0.032	0.103	0.021	0.105*	-0.006	0.187*	0.087	0.163*
	(1.95)	(1.71)	(2.25)	(0.44)	(1.94)	(0.30)	(2.03)	(-0.11)	(2.31)	(1.37)	(2.52)
Father' age at birth, sq	-0.002*	-0.002	-0.002*	-0.001	-0.002*	-0.000	-0.002*	-0.000	-0.003*	-0.001	-0.002*
	(-2.22)	(-1.96)	(-2.00)	(-0.69)	(-2.27)	(-0.21)	(-2.31)	(-0.26)	(-2.21)	(-1.31)	(-2.36)
Age diff of parents	-0.024	-0.046*	0.005	-0.013	-0.044**	-0.022	-0.023	-0.032	-0.016	-0.032*	-0.031
	(-1.34)	(-2.45)	(0.25)	(-0.54)	(-2.72)	(-1.19)	(-1.63)	(-1.82)	(-0.68)	(-2.06)	(-1.52)
Mother's education	0.562***	0.366**	0.369***	0.635***	0.320***	0.939***	0.409**	0.839***	0.611***	0.897***	0.115
	(4.92)	(2.60)	(4.03)	(4.94)	(4.37)	(5.46)	(2.85)	(6.75)	(4.59)	(5.19)	(0.82)
Fathers' education	0.312	0.371*	0.206	0.620***	0.041	0.348*	0.302*	0.787**	0.473*	0.610***	-0.019
	(1.72)	(2.41)	(1.33)	(4.81)	(0.29)	(2.45)	(2.06)	(3.09)	(2.10)	(4.70)	(-0.09)
Highest parental educ	-3.302***	-1.622***	-3.451***	-4.398***	-2.731***	-3.485***	-1.601***	-2.667***	-2.765***	-2.747***	-1.625***
	(-10.54)	(-4.28)	(-7.96)	(-11.62)	(-6.41)	(-6.41)	(-4.45)	(-7.36)	(-5.91)	(-6.57)	(-4.07)
# of adults in hh	-0.065	-0.082*	-0.163***	-0.174**	-0.041	-0.132	-0.153***	0.017	-0.097*	-0.146	-0.310***
	(-1.84)	(-1.96)	(-3.93)	(-2.63)	(-1.36)	(-1.95)	(-5.14)	(0.50)	(-2.24)	(-1.93)	(-6.24)
# of children in hh	-0.045	-0.081**	-0.071*	-0.270***	-0.054*	-0.094*	-0.121***	-0.112***	-0.035	-0.152***	-0.140***
	(-1.62)	(-2.96)	(-2.13)	(-6.56)	(-2.04)	(-2.42)	(-5.90)	(-3.57)	(-1.03)	(-4.33)	(-3.99)
Financial situation	0.219	0.242*	-0.010	0.160	0.001	0.199	0.241*	0.425***	0.102	0.329*	0.308*
	(1.87)	(2.10)	(-0.05)	(1.26)	(0.01)	(0.87)	(2.56)	(4.88)	(0.73)	(2.08)	(2.40)
Finance * highest educ	-0.045	-0.033	0.018	-0.052	0.013	-0.008	-0.104	-0.217***	0.072	-0.162	-0.166*
	(-0.65)	(-0.42)	(0.19)	(-0.61)	(0.12)	(-0.06)	(-1.36)	(-3.46)	(0.76)	(-1.74)	(-2.00)
Gender	0.516***	-0.213**	0.788***	0.279***	0.439***	-0.935***	0.132*	0.332***	0.362***	-1.024***	0.012
	(6.41)	(-2.64)	(9.56)	(3.47)	(7.32)	(-9.08)	(2.12)	(4.52)	(4.06)	(-11.37)	(0.14)
Mother in labor force	0.016	-0.168	0.089	-0.538***	-0.016	0.063	-0.052	0.036	0.084	0.161	-0.075
	(0.19)	(-1.95)	(1.07)	(-3.70)	(-0.25)	(0.31)	(-0.78)	(0.43)	(0.89)	(0.99)	(-0.75)
Constant	-10.844	-43.223***	-13.328	-43.064***	7.796	72.550***	-84.512***	-8.506	-61.141***	60.596***	-57.345***
	(-1.15)	(-4.56)	(-1.42)	(-5.10)	(1.10)	(6.27)	(-11.81)	(-1.04)	(-6.34)	(6.13)	(-5.83)
N	3903	2911	3455	5415	5361	2378	6466	4024	2503	3059	3466

Table A.6: Logit results for migrants' children

	AT	BE	CH	CZ	DE	EE	FR	HR	LU	LV	UK
Birth year	-0.069	0.067*	-0.012	-0.004	0.014	0.008	-0.006	-0.017	0.030	-0.030	0.056
	(-1.90)	(2.34)	(-0.48)	(-0.11)	(0.51)	(0.39)	(-0.38)	(-0.98)	(1.68)	(-1.86)	(1.00)
Fathers' age at birth	0.940*	-0.008	0.252	0.327	0.031	0.372	0.237	0.470	-0.199	-0.186	-0.523
	(2.20)	(-0.03)	(0.83)	(1.18)	(0.08)	(1.43)	(1.22)	(1.68)	(-1.13)	(-1.01)	(-0.66)
Fathers' age at birth, sq	-0.010	-0.001	-0.003	-0.005	-0.003	-0.005	-0.002	-0.006	0.006*	0.003	0.006
	(-1.73)	(-0.25)	(-0.64)	(-1.27)	(-0.58)	(-1.23)	(-0.59)	(-1.42)	(1.97)	(1.09)	(0.59)
Mothers' age at birth	-0.267	0.459	-0.303	0.083	0.636	0.268	0.068	-0.098	0.554*	0.047	1.185
	(-0.56)	(1.44)	(-0.84)	(0.16)	(1.42)	(0.82)	(0.30)	(-0.31)	(2.47)	(0.25)	(1.61)
Father' age at birth, sq	0.003	-0.006	0.006	-0.001	-0.008	-0.006	-0.002	0.001	-0.012**	-0.000	-0.019
	(0.37)	(-1.28)	(0.91)	(-0.06)	(-1.17)	(-1.11)	(-0.68)	(0.24)	(-3.05)	(-0.09)	(-1.81)
Age diff of parents	-0.182	-0.011	-0.117	0.056	0.038	-0.025	-0.098	-0.042	-0.065	-0.028	0.332
	(-1.04)	(-0.09)	(-1.41)	(0.50)	(0.31)	(-0.36)	(-1.15)	(-0.47)	(-0.96)	(-0.55)	(1.27)
Mother's education	-0.492	0.858	0.723	-0.487	-0.180	-0.458	0.709	0.768	0.586	1.511**	0.281
	(-0.59)	(1.27)	(1.96)	(-0.33)	(-0.34)	(-0.81)	(1.93)	(1.54)	(1.04)	(2.80)	(0.23)
Fathers' education	-0.809	1.236	-0.152	0.614	0.819	0.349	0.419	1.991	1.454*	0.437	1.636
	(-0.72)	(1.37)	(-0.24)	(0.36)	(0.66)	(0.57)	(0.76)	(1.60)	(2.32)	(1.02)	(0.71)
Highest parental educ	-2.213	-8.788**	-5.493**	-1.815	-7.542*	1.109	-2.259	-3.093	-10.708***	-2.233	-5.989
	(-0.97)	(-2.66)	(-2.99)	(-0.60)	(-2.45)	(0.50)	(-1.75)	(-1.89)	(-5.05)	(-1.59)	(-1.45)
# of adults in hh	-0.383	-0.404	-0.801**	-0.562	0.049	-0.257	-0.127	-0.219	-0.016	-0.006	0.101
	(-1.30)	(-1.80)	(-2.73)	(-1.88)	(0.16)	(-0.85)	(-1.63)	(-1.80)	(-0.10)	(-0.03)	(0.26)
# of children in hh	0.021	-0.419**	-0.024	-0.174	-0.123	-0.582**	0.087	-0.017	-0.233*	-0.041	0.357
	(0.08)	(-2.80)	(-0.11)	(-1.35)	(-0.57)	(-2.62)	(1.12)	(-0.14)	(-2.14)	(-0.39)	(0.66)
Financial situation	-0.063	-0.863	-0.174	0.029	-1.818	2.415*	0.158	0.519	-1.758**	0.865	0.060
	(-0.09)	(-1.19)	(-0.26)	(0.04)	(-1.50)	(2.26)	(0.47)	(1.58)	(-3.20)	(1.77)	(0.04)
Finance * highest educ	0.152	0.887	0.193	-0.202	0.743	-1.173*	-0.070	-0.345	1.584***	-0.579	0.110
	(0.31)	(1.42)	(0.51)	(-0.31)	(1.18)	(-2.04)	(-0.25)	(-1.42)	(3.55)	(-1.90)	(0.13)
Gender	0.774	-1.232*	1.170**	-0.141	0.062	-1.436***	0.315	0.209	0.554*	-0.891**	-1.772
	(1.28)	(-2.33)	(2.96)	(-0.26)	(0.14)	(-3.91)	(1.12)	(0.64)	(2.01)	(-3.24)	(-1.52)
Mother in labor force	-0.553	-0.395	-0.292	-0.012	-0.672	-0.190	-0.767*	-0.130	0.166	0.223	-0.928
	(-0.78)	(-0.66)	(-0.71)	(-0.02)	(-1.38)	(-0.25)	(-2.35)	(-0.30)	(0.57)	(0.37)	(-0.89)
Constant	128.774	-126.571*	32.509	6.125	-21.952	-26.366	9.116	27.325	-52.838	61.831	-110.482
	(1.80)	(-2.27)	(0.67)	(0.09)	(-0.41)	(-0.62)	(0.30)	(0.80)	(-1.50)	(1.93)	(-0.98)
N	87	140	281	103	153	239	420	219	332	409	116

A.4 Detailed decomposition results

Table A.7: Detailed decomposition results

	AT	BE	CH	CZ	DE	EE
Migrants	0.471***	0.714***	0.616***	0.689***	0.536***	0.448***
Natives	0.444***	0.621***	0.375***	0.658***	0.396***	0.485***
Mobility gap	0.0270	0.0935*	0.240***	0.0317	0.140***	-0.0372
Differences in characteristics	0.0815**	0.0382*	0.204***	0.0836***	0.130***	0.00108
Differences in parameters	-0.0545	0.0554	0.0359	-0.0519	0.00965	-0.0382
Difference in characteristics						
Birth year	0.00580	0.0198***	0.00522	-0.0260**	0.0000429	0.000548
Fathers' age at birth	0.00511	0.0382	-0.00852	0.00129	0.0252	-0.00220
Fathers' age at birth, sq	-0.00174	-0.0262	0.00982	0.00285	-0.00505	0.00207
Mothers' age at birth	0.0192	0.000291	-0.0191	0.00905	0.0281	-0.0000534
Father' age at birth, sq	-0.0240	-0.00534	0.0167	-0.0142	-0.0314	0.000109
Age diff of parents	0.000589	-0.0186*	0.000215	-0.0000446	-0.00483	0.000906
Mother's education	-0.0235**	-0.0247*	-0.0262***	-0.0226***	-0.0175***	0.00144
Fathers' education	-0.0140	-0.0203*	-0.0145	-0.0237***	-0.00211	0.000676
Highest parental educ	0.107***	0.102***	0.238***	0.213***	0.142***	-0.00293
# of adults in hh	0.00150	-0.00219	0.00408*	-0.00534	-0.000666	0.0000295
# of children in hh	0.00225	-0.00883*	0.00711*	-0.0467**	0.000254	0.00151
Financial situation	0.00437	-0.0212	0.0000755	-0.00729	-0.0000147	0.0000957
Finance * highest educ	0.00425	0.0117	-0.00577	0.0127	-0.00278	-0.0000144
Gender	-0.00252	-0.000442	-0.000151	-0.00119	-0.000393	-0.000525
Mother in labor force	-0.000158	-0.00257	-0.00118	-0.00374	-0.0000309	-0.0000290
Difference in parameters						
Birth year	-32.26	6.716	-2.190	-6.687	0.901	22.53
Fathers' age at birth	6.008	-0.245	0.252	1.092	-0.0296	2.561
Fathers' age at birth, sq	-2.257	0.00633	-0.0796	-0.569	-0.0765	-1.084
Mothers' age at birth	-2.326	0.717	-0.755	0.159	0.401	1.785
Father' age at birth, sq	0.889	-0.265	0.366	0.0297	-0.125	-1.239
Age diff of parents	-0.143	0.0137	-0.0316	0.0301	0.00900	-0.00201
Mother's education	-0.267	0.0332	0.0229	-0.144	-0.0186	-0.570
Fathers' education	-0.329	0.0653	-0.0285	-0.000756	0.0336	0.000580
Highest parental educ	0.347	-0.575	-0.172	0.352	-0.213	2.009
# of adults in hh	-0.184	-0.0602	-0.0903	-0.108	0.00580	-0.0747
# of children in hh	0.0333	-0.0769	0.00544	0.0355	-0.00412	-0.249
Financial situation	-0.230	-0.314	-0.0408	-0.0598	-0.190	2.291
Finance * highest educ	0.237	0.289	0.0621	-0.0789	0.127	-2.009
Gender	-0.0158	0.0184	-0.00606	0.0155	0.00274	0.0316
Mother in labor force	-0.0214	-0.00585	-0.00348	0.00460	-0.00437	-0.00195
Constant	30.41	-6.244	2.711	5.914	-0.812	-26.02
N	3990	3051	3736	5518	5514	2617

Table A.8: Detailed decomposition results II

	FR	HR	LU	LV	UK
Migrants	0.821***	0.548***	0.587***	0.467***	0.905***
Natives	0.771***	0.483***	0.403***	0.524***	0.718***
Mobility gap	0.0502**	0.0646	0.185***	-0.0574*	0.188***
Differences in characteristics	0.0189*	0.0185	0.140***	-0.0125	0.0291
Differences in parameters	0.0312	0.0461	0.0442	-0.0449*	0.159***
Difference in characteristics					
Birth year	0.0195***	0.00214	0.0464***	0.00776*	0.0104*
Fathers' age at birth	0.00821	0.0283	-0.00571	0.000257	-0.0146
Fathers' age at birth, sq	0.000207	-0.0166	0.00262	0.000200	0.0188
Mothers' age at birth	0.00915	-0.00183	-0.0128	0.0112	0.0386
Father' age at birth, sq	-0.0104	-0.00422	0.00514	-0.00992	-0.0345
Age diff of parents	-0.00534	0.00125	-0.000531	0.00442	-0.00512
Mother's education	-0.0122**	-0.0126*	-0.0220***	-0.00345	-0.00219
Fathers' education	-0.00599*	-0.00902	-0.0320*	0.00634*	0.000440
Highest parental educ	0.0314***	0.0329	0.180***	-0.0109	0.0410**
# of adults in hh	-0.0102***	0.000956	0.00409	0.000661	-0.0237*
# of children in hh	-0.0101***	-0.00503	-0.00120	0.00143	-0.0153*
Financial situation	-0.00459	-0.00929	-0.00186	0.00143	-0.00288
Finance * highest educ	0.00949	0.0122	-0.0227	-0.00564	0.0191
Gender	0.000428	-0.000649	0.00150	-0.00762**	-0.0000610
Mother in labor force	-0.000468	0.000353	-0.00124	-0.000474	-0.000444
Difference in parameters					
Birth year	-11.04*	-7.330	0.0274	0.137	2.773
Fathers' age at birth	0.798	1.913	-2.095	-1.166	-0.835
Fathers' age at birth, sq	-0.190	-0.771	1.526	0.523	0.268
Mothers' age at birth	-0.117	-0.456	2.439	-0.206	1.594
Father' age at birth, sq	-0.0335	0.218	-1.675	0.163	-0.748
Age diff of parents	-0.0460	-0.00707	-0.0511	0.00241	0.0900
Mother's education	0.0288	-0.0144	-0.00690	0.163	0.00902
Fathers' education	0.0123	0.292	0.286	-0.0460	0.105
Highest parental educ	-0.0744	-0.105	-2.441	0.148	-0.285
# of adults in hh	0.00893	-0.124	0.0477	0.0547	0.0613
# of children in hh	0.0539*	0.0418	-0.121	0.0468	0.0787
Financial situation	-0.0352	0.0590	-1.840	0.396	-0.0528
Finance * highest educ	0.0147	-0.117	1.897	-0.500	0.0707
Gender	-0.00510	0.00570	-0.0111	-0.00584	0.0295
Mother in labor force	-0.0236*	-0.00983	0.00496	0.000303	-0.00767
Constant	10.65*	6.449	2.050	0.243	-2.989
N	6886	4243	2835	3468	3582