C Country-specific details & results

C.1 Country-specific details & results: Denmark (benchmark country)

C.1.1 Data details and deviations

We rely on a number of administrative registers supplied by Statistics Denmark to construct the relevant datasets on children and parents (Statistics Denmark, 2020). The administrative registers provide information on the full Danish population from people are 0 to 70 years old. Researchers and their research assistants are allowed to use these data if their research project is approved by Statistics Denmark and if they are affiliated with a research institution approved by Statistics Denmark. Guidance on how to access the data are provided by Statistics Denmark here: https://www.dst.dk/en/TilSalg/Forskningsservice

C.1.1.1 Cross-sectional data

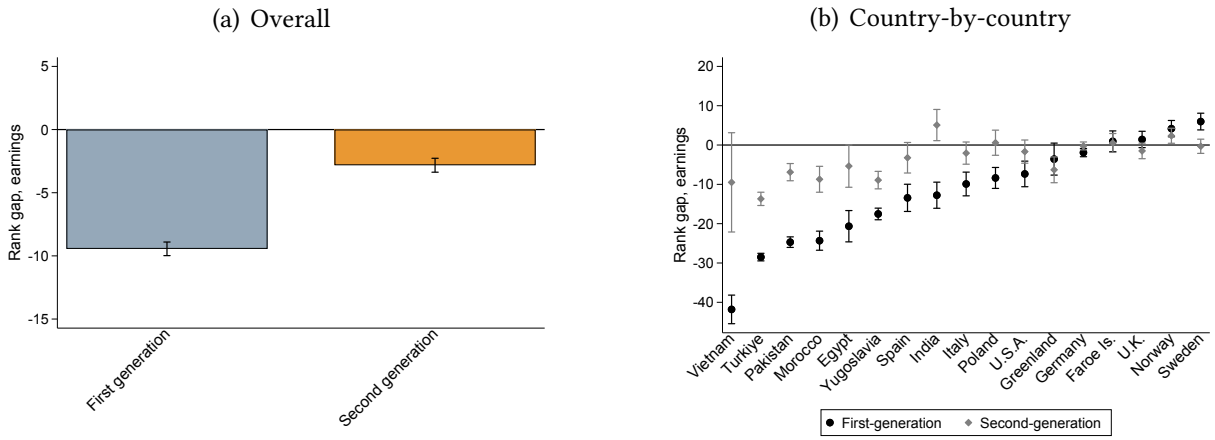
We use 1980-data from the FAIN-register to identify men, parental status (any children present in the population), and age. The measure of paternal total income is from the 1980 IND-register (PERINDKIALT). We use 2010-data from the BEF-register to identify sons and their age. The measure of sons' total income is from the 2010 IND-register (PERINDKIALT_13). Countries of birth of both fathers and sons are determined from FAIN/FABE- and BEF-data spanning 1980-2018.

C.1.1.2 Linked data

We use 2014- and 2015-data from the AKM-register to identify people who are fully tax liable in Denmark. 2014- and 2015-data from the BEF-register provides year of birth, parental IDs, and information on legal sex on children. Total income child income from 2014-2015 and parental income from 1994-2000 is from the IND-register (PERINDKIALT_13). Countries of birth of both fathers and children are determined from FAIN/FABE- and BEF-data spanning 1980-2018. School grades are obtained from the UDFK-register, college enrolment from the KOTRE-register, and highest level of education from the UDDA-register.

C.1.2 Cross-sectional results

Figure C.1.1: Cross-sectional results using earnings: Denmark, 1980-2010 cohort



Notes: This figure plots the estimated coefficients from Equation 1 from Abramitzky et al. (2021) for the earnings of fathers and sons in 1980 and 2010 respectively. We use measures of earnings for both generations. Panel a) includes a non-DK dummy rather than country-of-origin dummies. Immigration status is determined by father's country of birth. Income ranks are determined within cohorts. Sample includes men aged 30-50. 95%-confidence interval indicated.

Table C.1.1: Cross-sectional data: Summary statistics, Denmark

Fathers: 1980 cohort

	Immigrants	Danish-born	Diff.	Std. Error
Age	37.991	39.281	1.289***	0.052
Rank gap, total income	41.194	50.226	9.031***	0.255
Rank gap, earnings	40.795	50.236	9.441***	0.255
ln(total income)	11.640	11.770	0.130***	0.005
ln(earnings)	11.473	11.658	0.185***	0.006
Total income > 0	0.980	0.993	0.013***	0.001
Earnings > 0	0.906	0.968	0.062***	0.002
Share of population	0.025	0.975		
N	13152	513072		

Sons: 2010 cohort

	Immigrant father	Danish-born father	Diff.	Std. Error
Age	37.169	40.242	3.073***	0.053
Rank gap, total income	47.270	50.050	2.779***	0.263
Rank gap, earnings	47.226	50.050	2.825***	0.263
ln(total income)	12.603	12.752	0.149***	0.007
ln(earnings)	12.596	12.695	0.099***	0.009
Total income > 0	0.985	0.986	0.001	0.001
Earnings > 0	0.848	0.897	0.049***	0.003
Share of population	0.018	0.982		
N	12260	673701		

Notes: This table reports summary statistics of the cross-sectional sample, including sons and fathers in 1980 and 2010 respectively. Immigration status is determined by father's country of birth. Income ranks are determined within cohorts. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

C.1.3 Main results

C.1.3.1 Summary statistics

Table C.1.2: Linked data: Summary statistics, Denmark

Sons

	Immigrant father	Danish-born father	Diff.	Std. Error
Child age	32.501	32.619	0.118***	0.020
Child income rank	46.073	54.433	8.360***	0.350
Child labour force part.	0.839	0.913	0.074***	0.003
Mother's age at child birth	26.803	26.974	0.171***	0.055
Father's age at child birth	30.484	29.762	-0.722***	0.065
Parental income rank	32.330	50.852	18.522***	0.329
Parental wealth rank, 1994	47.198	50.110	2.911***	0.332
Child share of population	0.051	0.949		
N	7971	147875		

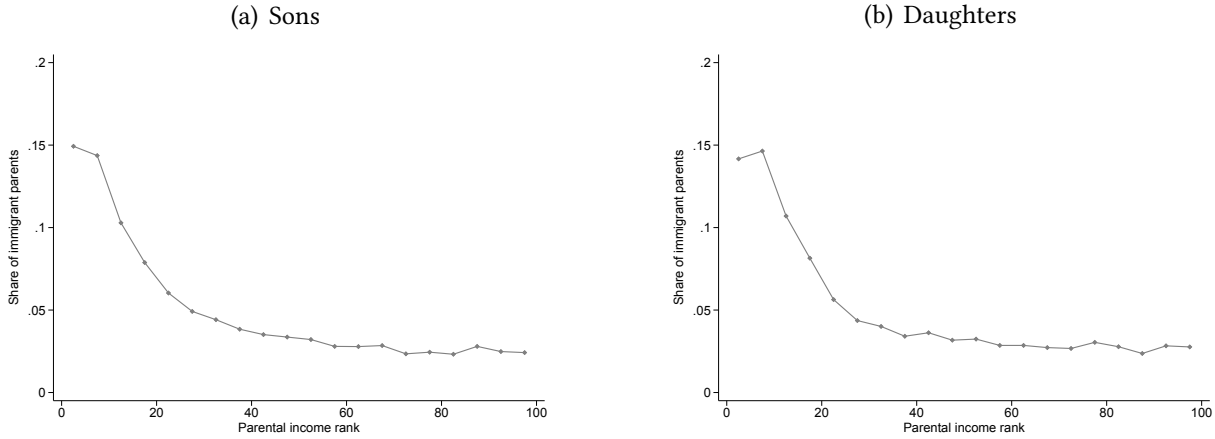
Daughters

	Immigrant father	Danish-born father	Diff.	Std. Error
Child age	32.505	32.622	0.116***	0.020
Child income rank	41.819	46.085	4.266***	0.312
Child labour force part.	0.821	0.886	0.066***	0.004
Mother's age at child birth	26.547	26.948	0.401***	0.056
Father's age at child birth	30.467	29.753	-0.715***	0.067
Parental income rank	33.241	50.985	17.744***	0.338
Parental wealth rank, 1994	46.928	50.204	3.276***	0.341
Child share of population	0.050	0.950		
N	7561	143666		

Notes: This table reports summary statistics of the estimation sample. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income and wealth 1994-2000. Child age is measured in 2014. Income ranks, 0-100, determined within cohorts. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

C.1.3.2 Parental income distribution

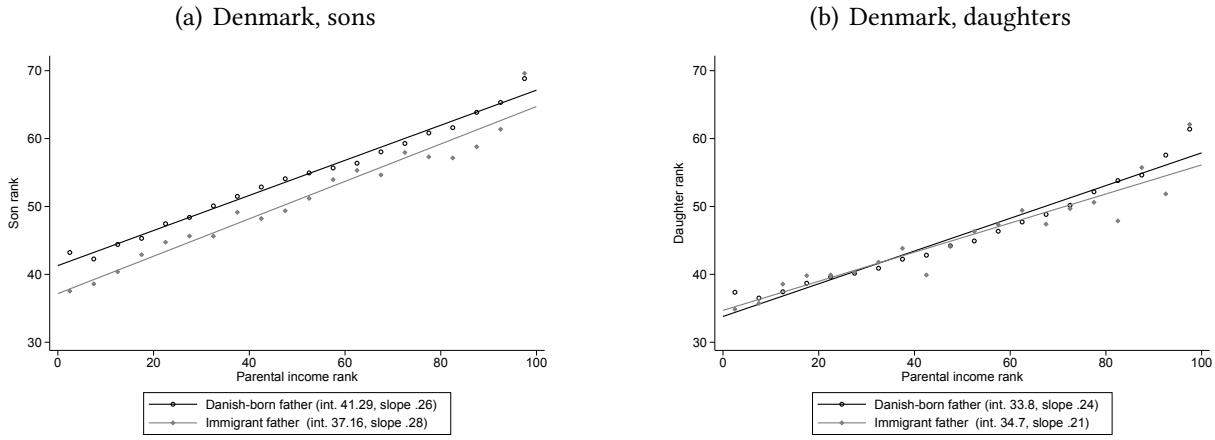
Figure C.1.2: Linked data: Denmark, share of total number of children with immigrants parents



Notes: This figure shows the share of children of immigrant parents in each ventile out of the total number of children with immigrant parents. The numerator is the number of children of immigrants within each ventile. The denominator is the total number of children with immigrant parents (across all ventiles). Children born in 1978-1983. Immigration status is determined by father's country of birth. Parental income measured in 1994-2000. Income ranks, 0-100, determined within child cohorts.

C.1.3.3 Rank-rank relationship

Figure C.1.3: Linked data: Intergenerational mobility, Denmark



Notes: This figure plots estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts.

Table C.1.3: Linked data: Intergenerational mobility estimates, Denmark

	(1)	(2)
VARIABLES	Sons	Daughters
Immigrant father = 1	-4.128***	0.900*
	(0.564)	(0.481)
Parents' rank	0.258***	0.241***
	(0.00273)	(0.00241)
Immigrant father # rank	0.0171	-0.0267**
	(0.0128)	(0.0111)
Constant	41.29***	33.80***
	(0.157)	(0.135)
Observations	155,846	151,227
R-squared	0.063	0.068

Notes: This table reports estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

C.1.3.4 Oaxaca-Blinder decomposition

Table C.1.4: Oaxaca-Blinder decompositions, child income rank, Denmark

	(1) Sons: pooled	(2) Sons: non-immi. ref.	(3) Sons: . immi. ref	(4) Daughters: pooled	(5) Daughters: non-immi. ref.	(6) Daughters:. immi. ref
Mean child income rank: Immigrant father	46.07***	46.07***	46.07***	41.82***	41.82***	41.82***
	(0.370)	(0.370)	(0.370)	(0.315)	(0.315)	(0.315)
Mean child income rank: No immigrant father	54.43***	54.43***	54.43***	46.09***	46.09***	46.09***
	(0.0788)	(0.0788)	(0.0788)	(0.0696)	(0.0696)	(0.0696)
Difference in means	-8.360***	-8.360***	-8.360***	-4.266***	-4.266***	-4.266***
	(0.378)	(0.378)	(0.378)	(0.323)	(0.323)	(0.323)
Total explained difference	-4.803***	-4.787***	-5.104***	-4.252***	-4.277***	-3.803***
due to differences in parental income distributions	(0.0986)	(0.0989)	(0.250)	(0.0926)	(0.0935)	(0.207)
Total unexplained difference	-3.557***	-3.574***	-3.256***	-0.0140	0.0108	-0.464
due to differences in mobility parameters	(0.370)	(0.370)	(0.435)	(0.317)	(0.316)	(0.377)
- Parental income rank (*relative mobility*)	0.570	0.554	0.872	-0.914**	-0.889**	-1.364**
	(0.428)	(0.415)	(0.653)	(0.381)	(0.371)	(0.568)
- Intercept (*absolute mobility*)	-4.128***	-4.128***	-4.128***	0.900*	0.900*	0.900*
	(0.564)	(0.564)	(0.564)	(0.481)	(0.481)	(0.481)
Observations	155,846	155,846	155,846	151,227	151,227	151,227

Notes: This table reports a Oaxaca-Blinder decompositions of the gap in income ranks between children of immigrants and children of locals (Specification 4). We follow the approach and terminology of Fortin et al. (2011), and estimate the fraction of the income rank gap that can be "explained" by differences in parental income distributions, and the fraction that is "unexplained" by parental income distribution differences, and rather due to differences in intergenerational mobility parameters. We report versions using pooled estimated coefficients and each of the groups' coefficients as reference levels. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

C.1.4 Mechanisms

C.1.4.1 Various sets of controls

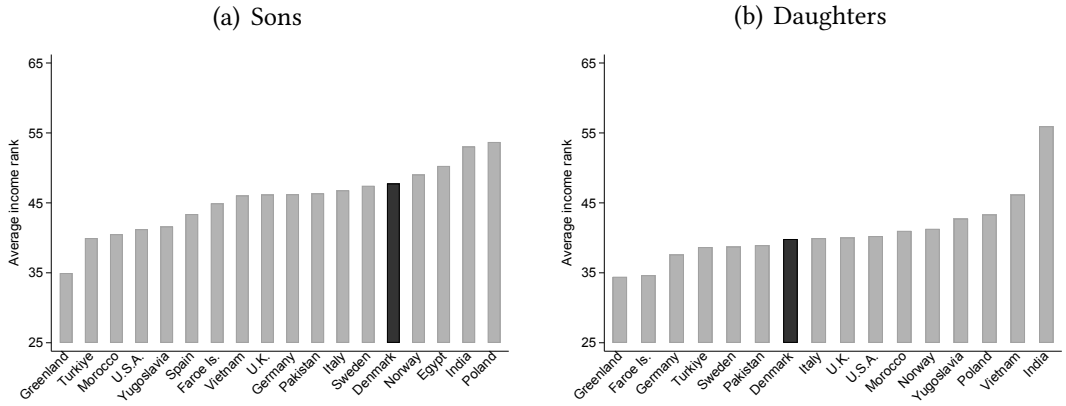
Table C.1.5: Linked data: Intergenerational mobility estimates with various sets of controls, Denmark

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
VARIABLES	Sons	Sons	Sons	Sons	Sons	Sons	Sons	Sons	Daughters	Daughters	Daughters	Daughters	Daughters	Daughters	Daughters	Daughters
Immigrant father = 1	-4.128***	-3.377***	-2.189***	-2.558***	-1.522***	-1.343**	-0.213	0.363	0.900*	-0.0216	0.685	2.112***	1.956***	2.102***	2.077***	2.450***
	(0.564)	(0.571)	(0.576)	(0.565)	(0.572)	(0.573)	(0.575)	(0.579)	(0.481)	(0.487)	(0.492)	(0.483)	(0.488)	(0.490)	(0.491)	(0.495)
Parents' rank	0.258***	0.267***	0.264***	0.226***	0.215***	0.209***	0.196***	0.195***	0.241***	0.246***	0.241***	0.215***	0.205***	0.195***	0.183***	0.181***
	(0.00273)	(0.00280)	(0.00286)	(0.00284)	(0.00333)	(0.00345)	(0.00342)	(0.00347)	(0.00241)	(0.00248)	(0.00253)	(0.00251)	(0.00295)	(0.00305)	(0.00303)	(0.00307)
Immigrant father # rank	0.0171	0.0156	0.00418	0.00124	-0.0104	-0.00764	-0.0189	-0.0235*	-0.0267**	-0.0161	-0.0231**	-0.0387***	-0.0365***	-0.0370***	-0.0388***	-0.0427***
	(0.0128)	(0.0129)	(0.0129)	(0.0128)	(0.0129)	(0.0129)	(0.0129)	(0.0129)	(0.0111)	(0.0112)	(0.0112)	(0.0112)	(0.0112)	(0.0112)	(0.0112)	(0.0112)
Constant	41.29***	41.26***	35.19***	46.56***	33.91***	34.08***	39.15***	35.08***	33.80***	33.59***	31.93***	38.51***	29.85***	30.09***	34.02***	33.51***
	(0.157)	(0.249)	(0.377)	(0.381)	(0.299)	(0.300)	(0.515)	(0.584)	(0.135)	(0.217)	(0.335)	(0.334)	(0.252)	(0.253)	(0.441)	(0.510)
Observations	155,846	155,846	155,846	155,846	155,846	155,846	155,846	155,846	151,227	151,227	151,227	151,227	151,227	151,227	151,227	151,227
R-squared	0.063	0.065	0.070	0.076	0.074	0.079	0.085	0.089	0.068	0.070	0.074	0.081	0.084	0.090	0.094	0.097
Parental region	0	1	0	0	0	0	1	0	0	1	0	0	0	0	1	0
Parental municipality	0	0	1	0	0	0	0	1	0	0	1	0	0	0	0	1
Parental wealth	0	0	0	1	0	0	1	1	0	0	0	1	0	0	1	1
Parental industry, 27 grp.	0	0	0	0	1	0	1	1	0	0	0	0	1	0	1	1
Parental industry, 3-digit	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0

Notes: This table reports estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts. Other parental characteristics are all determined in 1994 and included as fixed effects. We have 5 regions and 99 municipalities. Parental industries include categories for unknown industry as well as no industry (if not working). Parental wealth FEs are included as ventiles. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

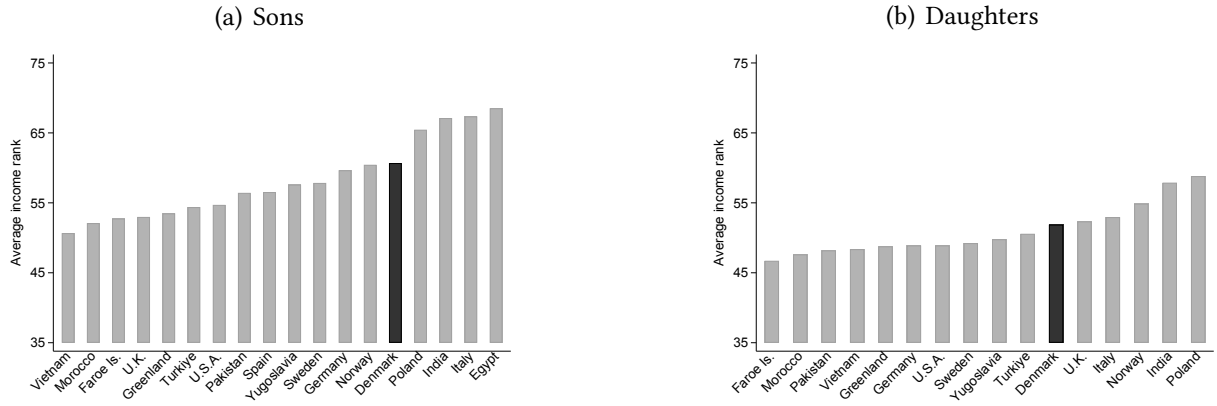
C.1.4.2 Heterogeneity across sending countries

Figure C.1.4: Average income at 25th percentile: Denmark



Notes: This figure plots the predicted child income rank if parental income rank equals 25 from a paternal country of origin-level estimation of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts.

Figure C.1.5: Average income at 75th percentile: Denmark



Notes: This figure plots the predicted child income rank if parental income rank equals 75 from a paternal country of origin-level estimation of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts.

C.1.4.3 Employment

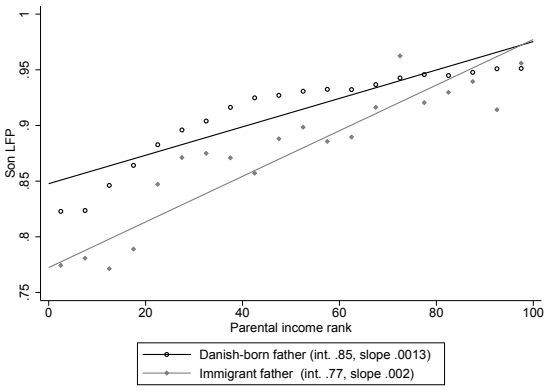
Table C.1.6: Linked data: Intergenerational mobility estimates, employment, Denmark

	(1)	(2)
VARIABLES	Sons	Daughters
Immigrant father = 1	-0.0754***	-0.0574***
	(0.00649)	(0.00692)
Parents' rank	0.00128***	0.00163***
	(2.54e-05)	(2.82e-05)
Immigrant father # rank	0.000773***	0.000615***
	(0.000120)	(0.000125)
Constant	0.848***	0.803***
	(0.00166)	(0.00186)
Observations	155,846	151,227
R-squared	0.023	0.028

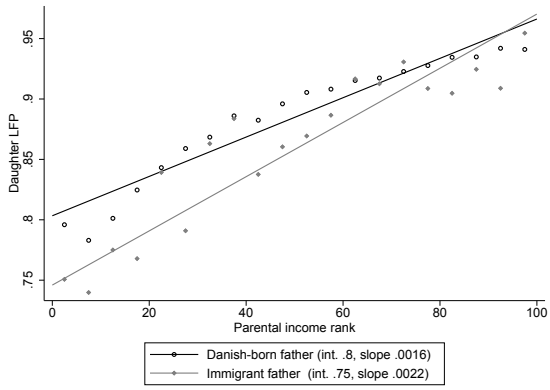
Notes: This table reports estimates of Specification 1, regressing employment of sons/daughters on income ranks of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child employment measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Figure C.1.6: Linked data: Intergenerational mobility, employment, Denmark

(a) Denmark, sons



(b) Denmark, daughters



Notes: This figure plots estimates of Specification 1, regressing employment of sons/daughters on income ranks of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child employment measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts.

C.1.4.4 Educational mobility

Because gaps in child income ranks may be due to both labour market conditions and due to differences in educational mobility, we now consider educational outcomes. Because labour market

outcomes are only appropriately measured when children are sufficiently old, considering educational outcomes will also allow us to better understand the trajectories of more recent birth cohorts.

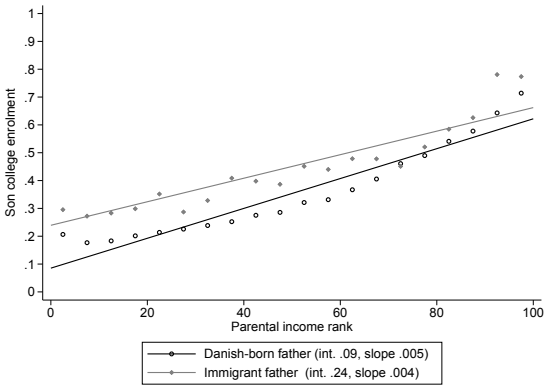
We first consider college enrolment (measured as any college enrolment prior to or in the calendar year a child turns 25), and next, primary school grades (children typically finish school at age 16 in Denmark). We want to consider both educational outcomes together for our initial 1980s-cohort, so we start with considering children born in 1986 as they are the first children for whom we observe primary school grades in Denmark.

College enrolment

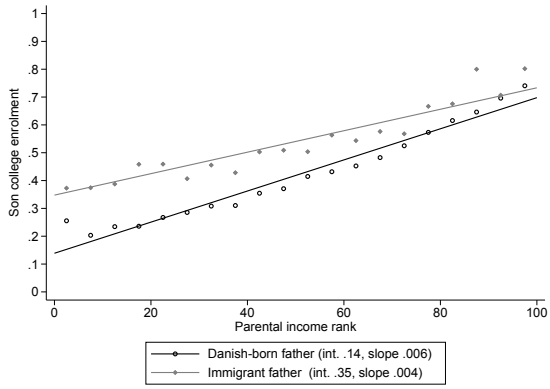
First, we measure if a child has ever been enrolled in college by the end of the calendar year in which they turn 25. Because the last calendar year want to include in our analysis is 2019 (due to the COVID-19 pandemic), the last birth cohort we consider are those born in 1994. Next, we see how the probability of college enrolment relate to parental income rank for children with local-born fathers vs. immigrant fathers. We compare the outcomes of the more recent birth cohorts to those born in the 1980s. Figure C.1.7 shows the result of this exercise. We see that the level of absolute mobility is higher for children with immigrant fathers, and that the level of absolute mobility has increased over time. In contrast, the relative mobility appears to be stable across the two cohorts, and that is the case for both children with and without immigrant fathers.

Figure C.1.7: Linked data: College enrolment by age 25, Denmark, comparison across cohorts

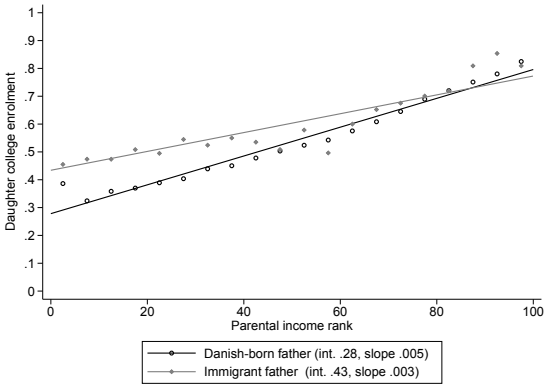
(a) Denmark, sons, born 1986-1988



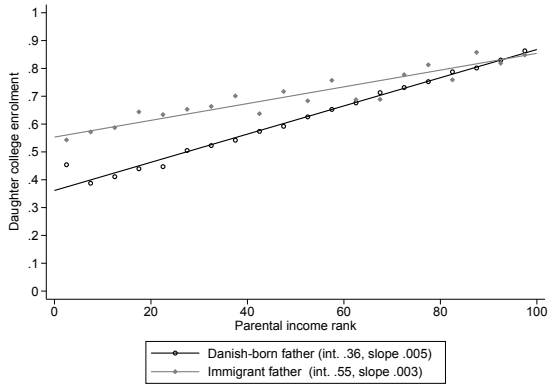
(b) Denmark, sons, born 1992-1994



(c) Denmark, daughters, born 1986-1988



(d) Denmark, daughters, born 1992-1994



Notes: This figure plots estimates of Specification 1, regressing an indicator of college enrolment in the year the children turn 25 or earlier on the income rank of parents. Children born in 1986-1988 and 1992-1994 respectively. Immigration status is determined by father's country of birth. Parental income measured in 1997-2003 and 2003-2009 respectively. Parental income ranks, 0-100, are determined within cohorts.

Primary school grades

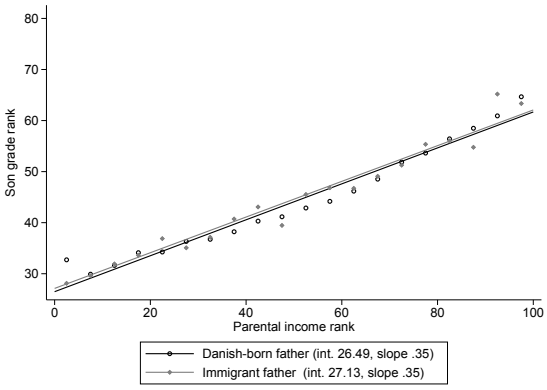
The most recent cohorts we consider are children born in the early 2000s. We consider each child's average grade from primary school, which ends when children are approximately 16 years old in Denmark. The average includes grades from all primary school subjects. Similarly to when we consider child income, we can construct grade ranks within cohorts for the children of interest.[47] Again, we compare the outcomes of children from more recent birth cohorts with those born in the 1980s. Figure C.1.8 shows the result of this exercise. We see that in the early cohorts (born 1986-1988), the relationship between parental income rank and child grade rank is very similar for children with and without immigrant fathers. In the later cohorts (born 2000-2003), the level of absolute mobility is slightly higher for both sons and daughters with immigrant fathers when

[47]Note here that ranking may not be optimal for measures of grades in your country if the grades are sufficiently coarse or measured infrequently. If the Danish case is not representative of the data from your country, we are more than happy to discuss this further with you.

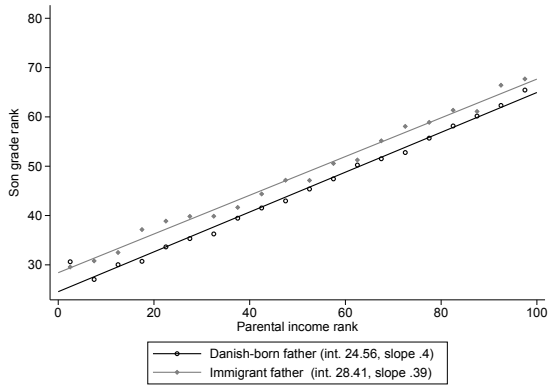
compared to children with local-born fathers. The level of relative mobility, however, remains similar between the two groups of children.

Figure C.1.8: Linked data: Primary school grades, Denmark, comparison across cohorts

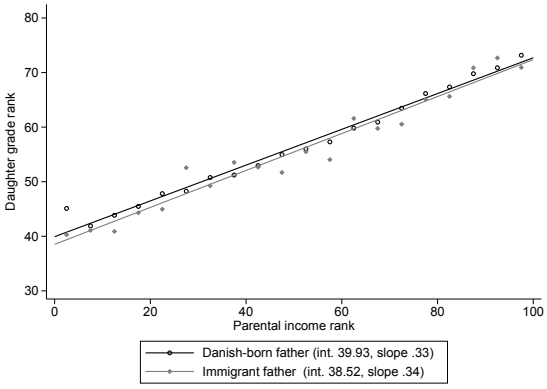
(a) Denmark, sons, born 1986-1988



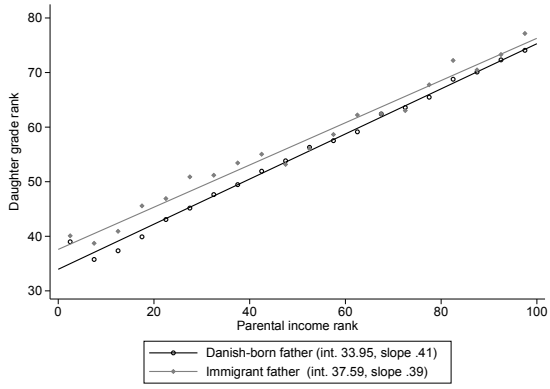
(b) Denmark, sons, born 2000-2002



(c) Denmark, daughters, born 1986-1988



(d) Denmark, daughters, born 2000-2002

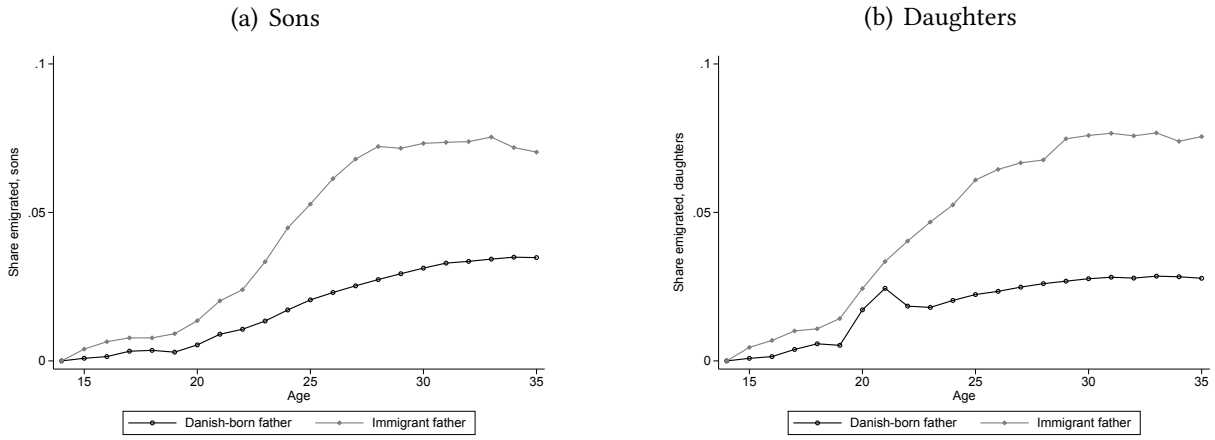


Notes: This figure plots estimates of Specification 1, regressing the average primary school grade ranks of sons/daughters on the income rank of parents. If children have not completed school by age 17, they are assigned the lowest possible grade. Children born in 1986-1988 and 2000-2002 respectively. Immigration status is determined by father's country of birth. Parental income measured in 1997-2003 and 2011-2017 respectively. Parental income ranks, 0-100, are determined within cohorts.

C.1.5 Robustness

C.1.5.1 Emigration

Figure C.1.9: Denmark, cumulative share of emigrated children

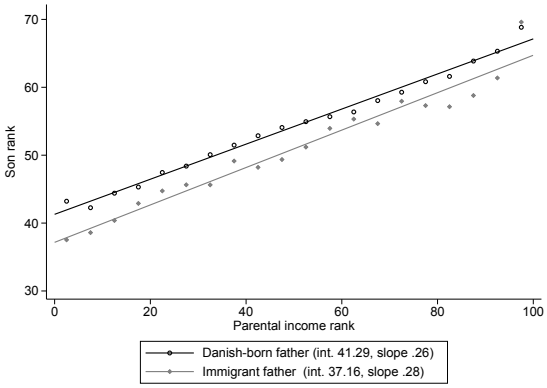


Notes: This figure shows the share of children who have emigrated (i.e. no longer living in Denmark) across age groups. We consider all children who were part of the Danish population at age 14 and calculate the share of emigrated children as they age. If children move back to Denmark after a period abroad, they are no longer counted as emigrants. Children born in 1978-1983. Immigration status is determined by father's country of birth.

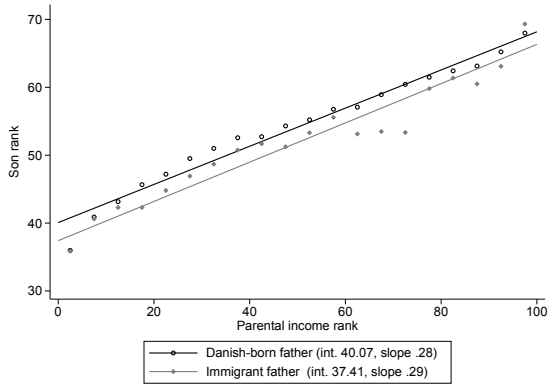
C.1.5.2 Additional years of parental income data

Figure C.1.10: Intergenerational mobility: Denmark by number of years of parental income data

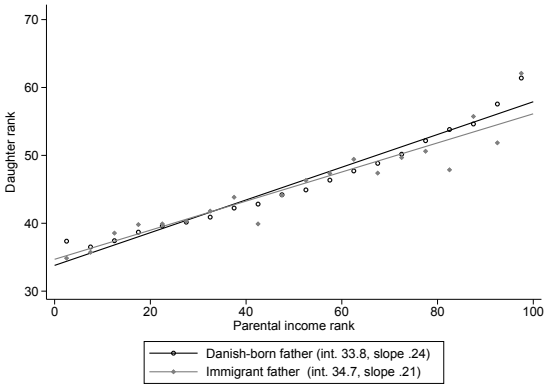
(a) Sons, parental income 1994-2000



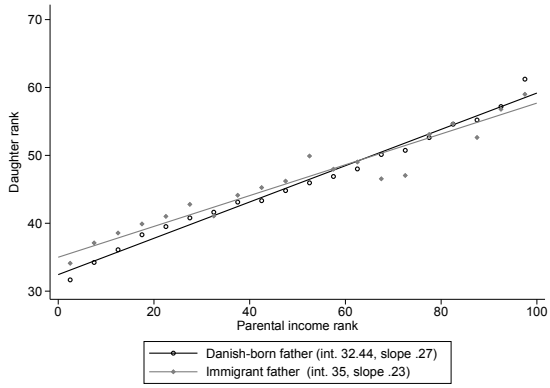
(b) Sons, parental income 1980-2000



(c) Daughters, parental income 1994-2000



(d) Daughters, parental income 1980-2000



Notes: This figure plots estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000 and 1980-2000 respectively. Income ranks, 0-100, determined within cohorts.

Table C.1.7: Intergenerational mobility estimates: Denmark, parental income 1980-2000

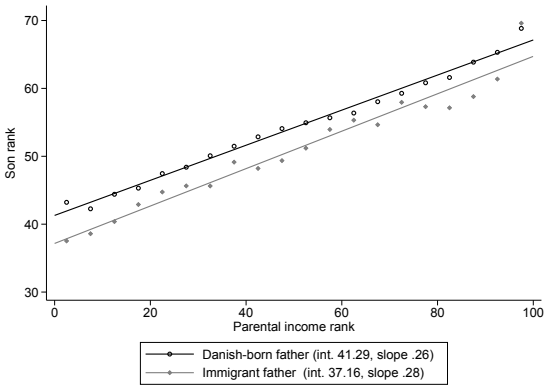
VARIABLES	(1) Sons	(2) Daughters
Immigrant father = 1	-2.667***	2.559***
	(0.537)	(0.454)
Parents' rank	0.281***	0.267***
	(0.00271)	(0.00237)
Immigrant father # rank	0.00814	-0.0404***
	(0.0128)	(0.0112)
Constant	40.07***	32.44***
	(0.155)	(0.131)
Observations	156,081	151,456
R-squared	0.073	0.083

Notes: This table reports estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1980-2000 respectively. Income ranks, 0-100, determined within cohorts. 95%-confidence interval indicated. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$

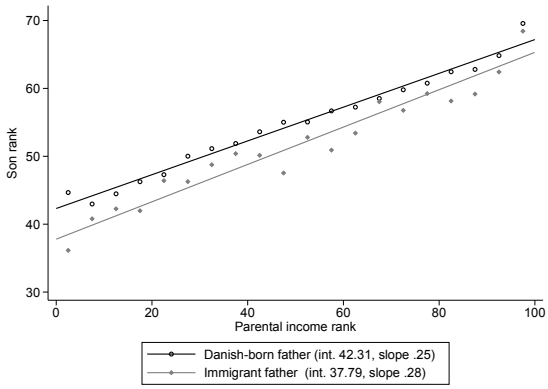
C.1.5.3 More recent birth cohorts, income rank

Figure C.1.11: Linked data: Intergenerational mobility, Denmark, comparison across cohorts

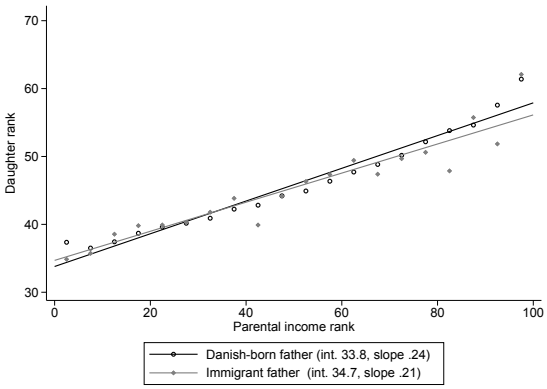
(a) Denmark, sons, born 1978-1983



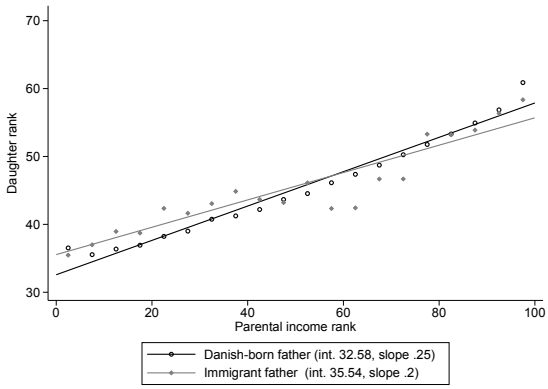
(b) Denmark, sons, born 1982-1987



(c) Denmark, daughters, born 1978-1983



(d) Denmark, daughters, born 1982-1987



Notes: This figure plots estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983 and 1982-1987 respectively. Immigration status is determined by father's country of birth. Child income measured in 2014-2015 and 2018-2019, and parental income 1994-2000 and 1998-2004 respectively. Income ranks, 0-100, determined within cohorts.

Table C.1.8: Linked data: Intergenerational mobility estimates, Denmark, comparing cohorts

	(1)	(2)	(3)	(4)
	Sons	Daughters	Sons	Daughters
VARIABLES	1978-1983	1978-1983	1982-1987	1982-1987
Immigrant father = 1	-4.128***	0.900*	-4.517***	2.967***
	(0.564)	(0.481)	(0.516)	(0.454)
Parents' rank	0.258***	0.241***	0.249***	0.253***
	(0.00273)	(0.00241)	(0.00279)	(0.00247)
Immigrant father # rank	0.0171	-0.0267**	0.0264**	-0.0515***
	(0.0128)	(0.0111)	(0.0119)	(0.0108)
Constant	41.29***	33.80***	42.31***	32.58***
	(0.157)	(0.135)	(0.162)	(0.138)
Observations	155,846	151,227	150,417	145,135
R-squared	0.063	0.068	0.060	0.074

Notes: This table reports estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Immigration status is determined by father's country of birth. Income ranks, 0-100, determined within cohorts. Columns (1) & (2): Children born in 1978-1983, child income measured in 2014-2015, and parental income 1994-2000. Columns (3) & (4): Children born in 1982-1987, child income measured in 2018-2019, and parental income 1998-2004. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

C.2 Country-specific details & results: Australia

C.2.1 Data details and deviations

We rely on the Person Level Integrated Data Asset (PLIDA) supplied by the Australian Bureau of Statistics to construct the relevant datasets on children and parents (Person-Level Integrated Data Asset (PLIDA), 2016).[48] PLIDA is a secure data asset combining information on health, education, government payments, income and taxation, employment, and population demographics over time.[49] PLIDA was established in 2015 and includes full-population administrative data along with an Australian Census (2006, 2011, 2016 or 2021). A person linkage spine allows for links between these datasets.

Population Census. The Australian Census is collected every five years. The 2016 Census is used to identify all children born between 1989-1992. This data contains self-reported information on legal gender, year of birth, country of birth and the parents' country of birth.

Combined demographics and locations data. We use data from PLIDA's combined demographics file to fill in missing demographic information from the 2016 Census. PLIDA's combined locations data from 2006 to 2007 inclusive is used in the parent-child linking process via common and overlapping place of residence. This is also used to capture the parents place of residence. Unlike the Danish case, parents' place of residence is captured for last year of income data (2006-07) rather than the first. Our measure of region is Australian State or Territory and our measure of municipality is the Australian Statistical Geography Standard, Statistical Area Level 4 (SA4).

Tax Data. Tax return data include detailed information on income. It covers all individuals who lodge a tax return with the Australian Tax Office. Individuals are the primary unit of taxation in Australia, and the tax year runs from 1 July to 30 June the following year—hence we reference the financial years when referring to when income is measured. We use this data to measure income for both the first and second generation. Wage and salary earnings are also measured in the Income Tax Return data for 2017-18 to 2018-19 for children.

We use payment summaries data linked with the Australian Bureau of Statistics' Business Longitudinal Analysis Data Environment (BLADE) data to identify the parents' highest-earnings industry they worked in for the last year of income data (2006-07).

[48]Disclaimer: The results of these studies are based, in part, on data supplied to the ABS under the Taxation Administration Act 1953, A New Tax System (Australian Business Number) Act 1999, Australian Border Force Act 2015, Social Security (Administration) Act 1999, A New Tax System (Family Assistance) (Administration) Act 1999, Paid Parental Leave Act 2010 and/or the Student Assistance Act 1973. Such data may only used for the purpose of administering the Census and Statistics Act 1905 or performance of functions of the ABS as set out in section 6 of the Australian Bureau of Statistics Act 1975. No individual information collected under the Census and Statistics Act 1905 is provided back to custodians for administrative or regulatory purposes. Any discussion of data limitations or weaknesses is in the context of using the data for statistical purposes and is not related to the ability of the data to support the Australian Taxation Office, Australian Business Register, Department of Social Services and/or Department of Home Affairs' core operational requirements. Legislative requirements to ensure privacy and secrecy of these data have been followed. For access to PLIDA and/or BLADE data under Section 16A of the ABS Act 1975 or enabled by section 15 of the Census and Statistics (Information Release and Access) Determination 2018, source data are de-identified and so data about specific individuals has not been viewed in conducting this analysis. In accordance with the Census and Statistics Act 1905, results have been treated where necessary to ensure that they are not likely to enable identification of a particular person or organisation.

[49]For more information, see: https://www.abs.gov.au/about/data-services/data-integration/integrated-data/person-level-integrated-data-asset-plida

Data Access. Approved government and non-government researchers, within Australia, are allowed to use these data subject to approval from the Australian Bureau of Statistics. It may involve an access fee. Guidance on how to access the data are provided here: https://www.abs.gov.au/about/data-services/data-integration/access-and-services.

C.2.1.1 Cross-sectional data

For the cross-sectional results, we compare the 1986 and 2016 Census data (Australian Bureau of Statistics, 1986, 2016). The 1981 and 2011 censuses would be more comparable with the Danish case, but the birthplace of the male parent is not available in the 2011 Census.

First-generation sample. We use the 1986 Census one per cent sample to identify fathers with at least one child. Given individual years of age are not available, our analysis uses four age-group categories: 30-34; 35-39; 40-44; and, 45-49.

First-generation migration status. Following the Danish case, immigration status is based on country of birth.

First-generation income. Total income is grouped into eight self-reporting categories (including, missing). Total income is observed in the tax data and includes: salary and wages; overtime; Government allowances, pensions and benefits; interest and dividends; rents received; business or farm income (less operation expenses); superannuation and workers compensation. By definition, all income is greater than zero in the 1986 Census data (limiting the availability to measure the extensive margin). Given the age and income brackets, mid-point income ranks by age-categories are calculated. Wage and salary income is not separately identified in the 1986 Census.

Second-generation sample. We use the 2016 Census full sample frequency data to identify children aged 30 to 50 years old.

Second-generation migration status. Following the Danish case, immigration status is based on child's and father's country of birth.

Second-generation income. Total income is grouped into 16 self-reporting categories (including, missing). Total income includes: salary and wages; Government allowances, pensions, benefits and allowances; interest and dividends; taxable capital gains; and other income less any loss amounts in the financial year. All negative incomes are dropped for 2016. Unlike the Danish case where missing income is treated as zero income, missings are not re-defined as zero - they are "true missings" in Census data. Given the income brackets, mid-point income ranks by age are calculated. Wage and salary income is not separately identified in the 2016 Census.

C.2.1.2 Linked data

Sample definition. The linked data analysis is conducted on individuals born between 1989-1992 in the 2016 Census. The analysis is based on a person-level parent-child linkage using the 2016 Census, combined demographic and locations data in PLIDA. Our cohort of interest is younger than the Danish case as we could not capture parent-child links for those born between 1978-1983. Links may be missing if a child moved out of home at a young age, or lived in group homes where no possible parent could be identified. Observations were dropped if there was no income recorded for both 2017-18 and 2018-19 for the child and/or no combined parental income in the tax data over the 2000-01 to 2006-07 period.

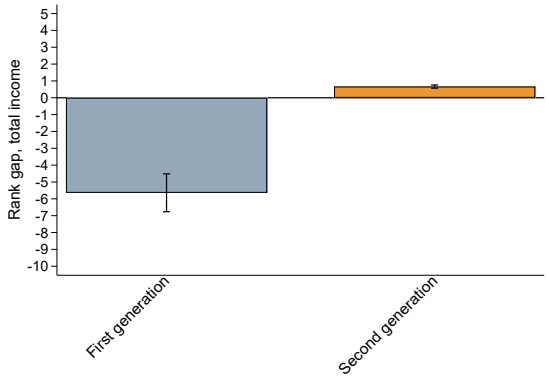
First-generation income. Parent income is measured from 2000-01 to 2006-07. Total income is observed in the tax data and includes: salary and wages; Government allowances; pensions and payments; interest and dividends; taxable capital gains; and other taxable income less any loss amounts in the financial year. Parental income is measured when the children were slightly younger compared to the Danish case. Income is adjusted to 2013 levels using the December quarter consumer price index series from the Australian Bureau of Statistics.

Second-generation income. Child income is measured over 2017-18 and 2018-19 and follows the same definition outlined above. Our children are slightly younger compared to the Danish case.

Immigration status. The 2016 Census and combined demographics data are used to identify child and father's country of origin. Observations were dropped if father's country of origin were missing. This means that single mothers and their children are not included in the sample.

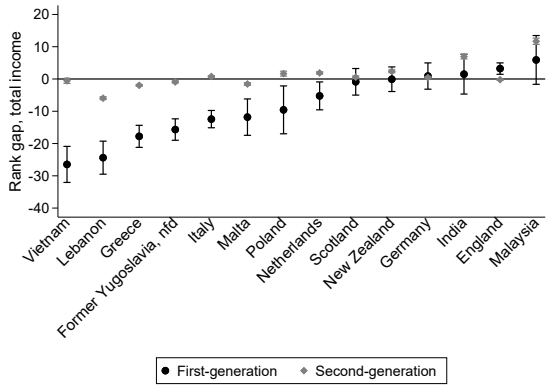
C.2.2 Main results

Figure C.2.1: Cross-sectional results using total income: Australia, 1986-2016 cohort, overall gaps



Notes: This figure plots the estimated coefficients from Equation 1 from Abramitzky et al. (2021) for the total income and of sons and fathers in 1986 and 2016 respectively, but with a non-Australia dummy rather than country dummies. Immigration status is determined by father's country of birth. Income ranks are determined within cohorts. Sample includes men aged 30-49 (1986) and 30-50 (2016). 95%-confidence interval indicated.

Figure C.2.2: Cross-sectional results using total income: Australia, 1986-2016 cohort, by country



Notes: This figure plots the estimated coefficients from Equation 1 from Abramitzky et al. (2021) for the total income of sons and fathers in 1986 and 2016 respectively. Immigration status is determined by father's country of birth. Income ranks are determined within cohorts. Sample includes men aged 30-49 (1986) and 30-50 (2016). 95%-confidence interval indicated.

Table C.2.1: Cross-sectional data: Summary statistics, Australia

Fathers: 1986 cohort

	Immigrants	Australian-born	Diff.	Std. Error
Age	34-39	34-39		
Rank gap, total income	46.05	51.69	5.64***	0.57
ln(total income(midpoint))	9.81	9.90	0.09***	0.01
Total income > 0	1.00	1.00	0.00	0.00
Share of population	0.26	0.74		
N	3284.00	9445.00		

Sons: 2016 cohort

	Immigrant father	Australian-born father	Diff.	Std. Error
Age	40.14	39.98	-0.17***	0.01
Rank gap, total income	50.64	49.97	-0.66***	0.05
ln(total income(midpoint))	11.10	11.07	-0.03***	0.00
Total income > 0	0.98	0.98	0.00***	0.00
Share of population	0.25	0.75		
N	973245.00	2932439.00		

Notes: This table reports summary statistics of the cross-sectional sample for Australia, including sons and fathers in 1986 and 2016, respectively. Immigration status is determined by father's country of birth. Income ranks are determined within cohorts. 1986 data only includes income above zero and ages are grouped into categories. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

C.2.3 Main results

C.2.3.1 Summary statistics

Table C.2.2: Linked data: Summary statistics, Australia

Sons

	Immigrant father	Australian-born father	Diff.	Std. Error
Child age	27.425	27.492	0.067***	0.006
Child income rank	54.626	56.004	1.378***	0.154
Child labour force part	0.877	0.888	0.011***	0.002
Mother's age at child birth	29.469	28.398	-1.071***	0.028
Father's age at child birth	32.658	30.602	-2.057***	0.030
Parental income rank	45.097	51.080	5.982***	0.152
Child share of population	0.194	0.806		
N	44417.000	184318.000		

Daughters

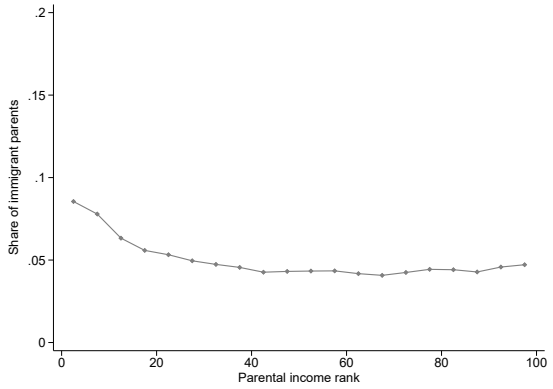
	Immigrant father	Australian-born father	Diff.	Std. Error
Child age	27.417	27.499	0.082***	0.006
Child income rank	47.453	43.579	-3.874***	0.146
Child labour force part	0.896	0.881	-0.015***	0.002
Mother's age at child birth	29.445	28.405	-1.040***	0.029
Father's age at child birth	32.648	30.577	-2.072***	0.031
Parental income rank	45.207	51.246	6.038***	0.153
Child share of population	0.190	0.810		
N	43684.000	186165.000		

Notes: This table reports summary statistics of the estimation sample. Children born in 1989-1992. Immigration status is determined by father's country of birth. Child income measured in 2017-18 to 2018-19, and parental income 2000-01 to 2006-07. Income ranks, 0-100, determined within cohorts. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

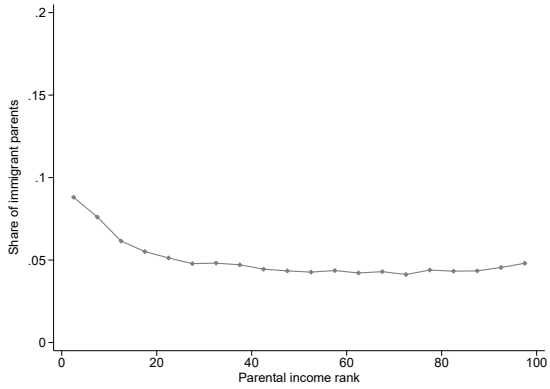
C.2.3.2 Parental income distribution

Figure C.2.3: Linked data: Australia, share of total number of children with immigrants parents

(a) Sons



(b) Daughters

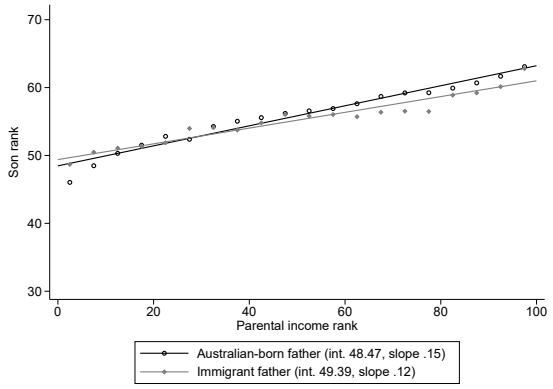


Notes: This figure shows the share of children of immigrant parents in each ventile out of the total number of children with immigrant parents. The numerator is the number of children of immigrants within each ventile. The denominator is the total number of children with immigrant parents (across all ventiles). Children born in 1989-1992. Immigration status is determined by father's country of birth. Parental income measured in 2000-01 to 2006-07. Income ranks, 0-100, determined within child cohorts.

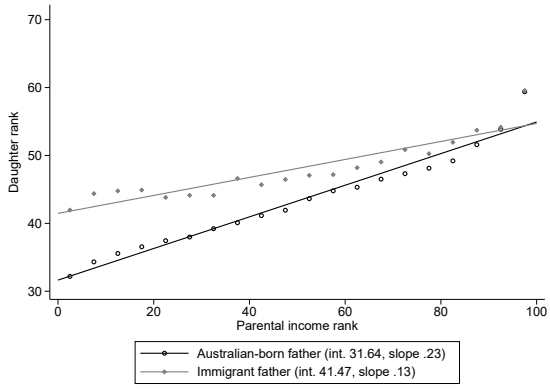
C.2.3.3 Rank-rank relationship

Figure C.2.4: Linked data: Intergenerational mobility, Australia

(a) Australia, sons



(b) Australia, daughters



Notes: This figure plots estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1989-1992. Immigration status is determined by father's country of birth. Child income measured in 2017-18 to 2018-19, and parental income 2000-01 to 2006-07. Income ranks, 0-100, determined within cohorts.

Table C.2.3: Linked data: Intergenerational mobility estimates, Australia

	(1)	(2)
	Sons	Daughters
VARIABLES	1989-1992	1989-1992
Immigrant father = 1	0.927***	9.825***
	(0.286)	(0.269)
Parents rank	0.148***	0.233***
	(0.00238)	(0.00219)
Immigrant father # rank	-0.0315***	-0.101***
	(0.00524)	(0.00499)
Constant	48.47***	31.64***
	(0.137)	(0.124)
Observations	228,735	229,849
R-squared	0.020	0.054

Notes: This table reports estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1989-1992. Immigration status is determined by father's country of birth. Child income measured in 2017-18 to 2018-19, and parental income 2000-01 to 2006-07. Income ranks, 0-100, determined within cohorts. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

C.2.3.4 Oaxaca-Blinder decomposition

Table C.2.4: Oaxaca-Blinder decompositions, child income rank, Australia

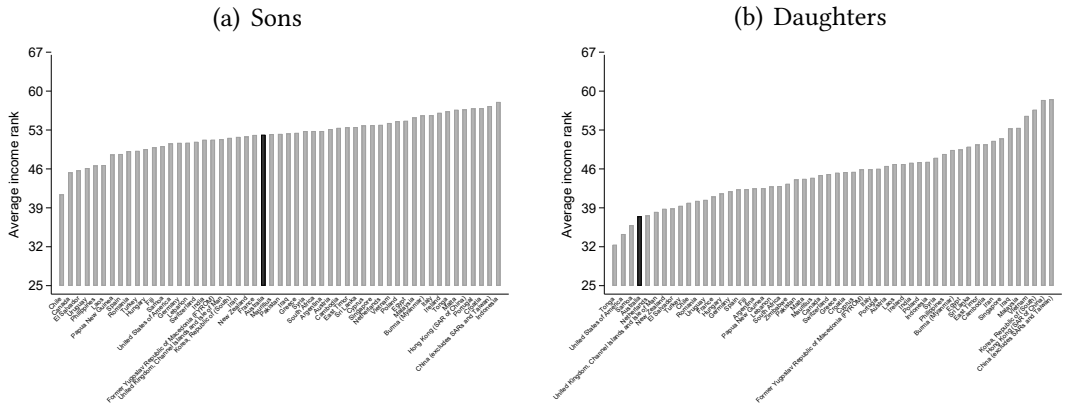
	(1)	(2)	(3)	(4)	(5)	(6)
	Sons: pooled	Sons: no immi. ref.	Sons: immi. ref.	Daughters: pooled	Daughters: no immi. ref.	Daughters: immi. ref.
Immigrant father	54.63***	54.63***	54.63***	47.45***	47.45***	47.45***
	(0.140)	(0.140)	(0.140)	(0.134)	(0.134)	(0.134)
No immigrant father	56.00***	56.00***	56.00***	43.58***	43.58***	43.58***
	(0.0674)	(0.0674)	(0.0674)	(0.0633)	(0.0633)	(0.0633)
Difference	-1.378***	-1.378***	-1.378***	3.874***	3.874***	3.874***
	(0.156)	(0.156)	(0.156)	(0.148)	(0.148)	(0.148)
Total explained difference	-0.842***	-0.883***	-0.694***	-1.278***	-1.407***	-0.800***
due to differences in parental income distributions	(0.0257)	(0.0274)	(0.0334)	(0.0358)	(0.0394)	(0.0343)
Total unexplained difference	-0.536***	-0.496***	-0.684***	5.153***	5.281***	4.674***
due to differences in mobility parameters	(0.155)	(0.155)	(0.157)	(0.147)	(0.147)	(0.150)
- Parental income rank (*relative mobility*)	-1.463***	-1.422***	-1.611***	-4.673***	-4.545***	-5.152***
	(0.243)	(0.236)	(0.268)	(0.232)	(0.226)	(0.256)
- Intercept (*absolute mobility*)	0.927***	0.927***	0.927***	9.825***	9.825***	9.825***
	(0.286)	(0.286)	(0.286)	(0.269)	(0.269)	(0.269)
Observations	228,735	228,735	228,735	229,849	229,849	229,849

Notes: This table reports a Oaxaca-Blinder decompositions of the gap in income ranks between children of immigrants and children of locals (Specification 4). We follow the approach and terminology of Fortin et al. (2011), and estimate the fraction of the income rank gap that can be "explained" by differences in parental income distributions, and the fraction that is "unexplained" by parental income distribution differences, and rather due to differences in intergenerational mobility parameters. We report versions using pooled estimated coefficients and each of the groups' coefficients as reference levels. Children born in 1989-1992. Immigration status is determined by father's country of birth. Child income measured in 2017-18 to 2018-19, and parental income 2000-01 to 2006-07. Income ranks, 0-100, determined within cohorts. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

C.2.4 Mechanisms

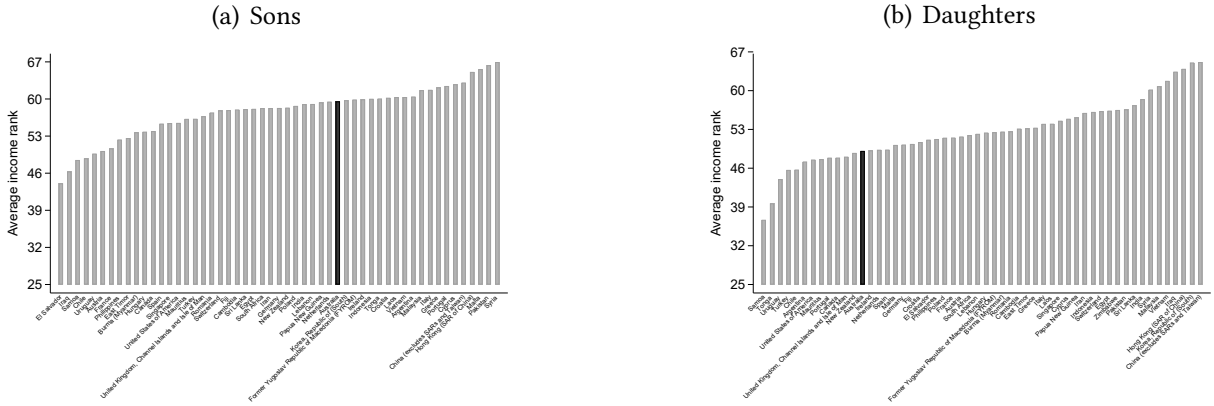
C.2.4.1 Heterogeneity across sending countries

Figure C.2.5: Average income at 25th percentile: Australia



Notes: This figure plots the predicted child income rank if parental income rank equals 25 from a paternal country of origin-level estimation of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1989-1992. Immigration status is determined by father's country of birth. All countries that belong to the United Kingdom, are grouped together under the United Kingdom. Child income measured in 2017-18 to 2018-19, and parental income 2000-01 to 2006-07. Income ranks, 0-100, determined within cohorts.

Figure C.2.6: Average income at 75th percentile: Australia



Notes: This figure plots the predicted child income rank if parental income rank equals 75 from a paternal country of origin-level estimation of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1989-1992. Immigration status is determined by father's country of birth. All countries that belong to the United Kingdom, are grouped together under the United Kingdom. Child income measured in 2017-18 to 2018-19, and parental income 2000-01 to 2006-07. Income ranks, 0-100, determined within cohorts.

C.2.4.2 Employment

Table C.2.5: Linked data: Intergenerational mobility estimates, employment, Australia

VARIABLES	(1) Sons	(2) Daughters
Immigrant father = 1	-0.0144***	0.0561***
	(0.00321)	(0.00315)
Parents rank	0.000484***	0.00132***
	(2.52e-05)	(2.61e-05)
Immigrant father # rank	0.000142**	-0.000727***
	(5.53e-05)	(5.26e-05)
Constant	0.864***	0.813***
	(0.00153)	(0.00167)
Observations	228,735	229,849
R-squared	0.003	0.013

Notes: This table reports estimates of Specification 1, regressing employment of sons/daughters on income ranks of parents. Children born in 1989-1992. Immigration status is determined by father's country of birth. Child employment measured in 2017-18 to 2018-19, and parental income 2000-01 to 2006-07. Income ranks, 0-100, determined within cohorts. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

C.2.4.3 Educational mobility

Educational mobility could be measured using Level of Highest Educational Attainment, from the 2016 Census. Unlike the Danish case, we do not know the exact age of attainment.

C.2.5 Robustness

C.2.5.1 Emigration

The Australian data are currently not well set up to examine emigration in this context. Past work with a pseudo-panel of Census data suggests that emigration in Australia is relatively modest Deutscher (2020) perhaps unsurprising given Australia is a long-distance move in the first place with no neighbouring higher income countries.

C.2.5.2 Additional years of parental income data

The Australian income data is not available for years prior to 1999-2000. Parental income could be measured later in life.

C.2.5.3 More recent birth cohorts

The Australian data by necessity is already focused on more recent cohorts—those born between 1989-1992 versus the 1978-83 and 1982-87 cohorts considered in the Danish case.

C.3 Country-specific details & results: Austria

C.3.1 Data details and deviations

We utilize a range of administrative registers available through the *JKU Data Center* to construct the relevant datasets on children and their parents.[50] The primary data source is the *Austrian Social Security Database*, which offers wage information for the entire Austrian workforce dating back to 1972 (Zweimüller et al., 2009). To establish links between parents and children, we utilize additional administrative sources to perform a partially probabilistic matching process. A more detailed description of the data and the matching methodology is provided in Section C.3.1.2.

To the best of our knowledge, this is the only data source in Austria that provides a large-scale match between parents and children, enabling the observation of income for both generations within the age range of 30 to 40. Notably, the newly established *Austrian Micro Data Center*, hosted by *Statistics Austria*, also facilitates matching between parents and children. However, it is limited to more recent birth cohorts and lacks income data prior to 2000.

C.3.1.1 Cross-sectional data

There is no data available for Austria that meets all the requirements of the cross-sectional analysis.

C.3.1.2 Linked data

Income data is sourced from the *Austrian Social Security Database* (henceforth ASSD). To establish links between parents and children, we leverage additional administrative sources, such as coinsurance records.

Linking parents and children While the matching process incorporates a probabilistic component, we ensure that only unique matches are retained. Columns (1) and (2) of Table C.3.6 report the number of births recorded by *Statistics Austria* and those in the micro-level *Austrian Birth Register*, respectively. Column (3) indicates the proportion of children for whom a unique match has been established between their birth records and their entries in the ASSD. Across all birth cohorts, nearly 90% of children can be uniquely matched. The proportion of children for whom a mother can also be uniquely linked in the ASSD is slightly lower, at 88.33%, while the proportion for uniquely matched fathers is significantly lower, at 78.79%. This discrepancy arises because the *Austrian Birth Register* records fathers only in the case of marital births, making it more challenging to identify their fathers in other datasets. For 77.79% of children, both parents can be uniquely matched.

Information on income The ASSD records all events affecting individuals' eligibility for and the amount of their social security benefits in the domains of health, accident, and pension insurance. The calculation of benefit amounts depends on social security contributions, which are

[50] The *JKU Data Center* was established as part of "The Austrian Center for Labor Economics and the Analysis of the Welfare State," a National Research Network (S103) funded by the *Austrian Science Fund*. For more information, see https://www.labornrn.at.

Table C.3.6: Match quality between children and parents

	Number of children/observations					
Cohort	(1) Births according to Statistics Austria	(2) in the micro-level Birthregister	(3) matched in the ASSD	(4) with matched mother	(5) with matched father	(6) with matched m & f
1978	85,402	84,722	67,593	65,915	59,527	57,849
1979	86,388	85,727	74,828	73,202	65,920	64,294
1980	90,872	90,136	79,942	78,531	70,716	69,305
1981	93,942	93,139	83,074	81,908	73,129	71,963
1982	94,840	94,054	83,132	82,200	73,146	72,214
1983	90,118	89,391	80,873	80,148	71,547	70,822
1984	89,234	88,905	82,070	81,629	73,051	72,610
1985	87,440	87,121	80,677	80,315	71,699	71,337
1986	86,964	86,694	80,375	80,078	70,682	70,385
1987	86,503	86,305	79,121	78,880	68,835	68,594
Total	806,301	886,194	791,685	782,806	698,252	689,373
Percent of (2)			89.34%	88.33%	78.79%	77.79%

derived from individuals' annual earnings. As a result, the ASSD includes (imperfect) data on yearly earnings.

The contribution basis, used to calculate social security benefits, is directly tied to an individual's annual earnings. However, this contribution basis is subject to lower and upper limits. Consequently, earnings below the lower boundary are not captured, and earnings above the upper boundary are observed only up to this limit, resulting in right-censoring at the upper tail of the earnings distribution. Importantly, these boundaries vary over time.

Additionally, the dataset provides basic demographic information, including sex and citizenship.

C.3.2 Cross-sectional results

There is no data available for Austria that meets all the requirements of the cross-sectional analysis.

C.3.3 Main results

C.3.3.1 Summary statistics

Table C.3.7: Linked data: Summary statistics, Austria

Sons

	Immigrant father	Austrian-born father	Diff.	Std. Error
Child age	31.924	31.834	-0.090***	0.022
Child income rank	50.962	62.666	11.704***	0.293
Child labour force part.	0.961	0.972	0.011***	0.002
Mother's age at child birth	25.361	24.913	-0.448***	0.062
Father's age at child birth	28.940	28.558	-0.382***	0.068
Parental income rank	48.832	50.070	1.238***	0.326
Child share of population	0.040	0.960		
N	8153.000	195202.000		

Daughters

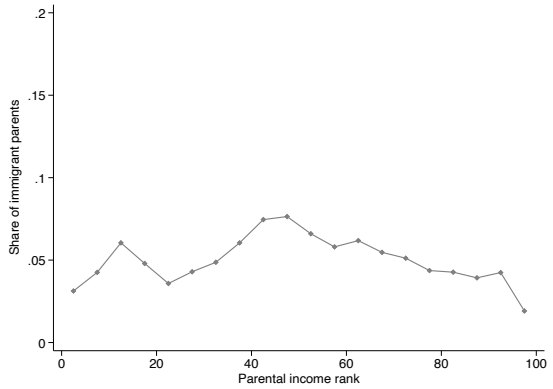
	Immigrant father	Austrian-born father	Diff.	Std. Error
Child age	31.895	31.798	-0.097***	0.023
Child income rank	31.191	37.308	6.116***	0.307
Child labour force part.	0.942	0.945	0.003	0.003
Mother's age at child birth	25.365	24.917	-0.448***	0.064
Father's age at child birth	28.853	28.574	-0.279***	0.071
Parental income rank	48.060	50.056	1.996***	0.342
Child share of population	0.039	0.961		
N	7408.000	184438.000		

Notes: This table reports summary statistics of the estimation sample. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child earnings measured in 2014-2015, and parental earnings 1994-2000. Austrian data does not include wealth variables. Child age is measured in 2014. Income ranks, 0-100, determined within cohorts. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

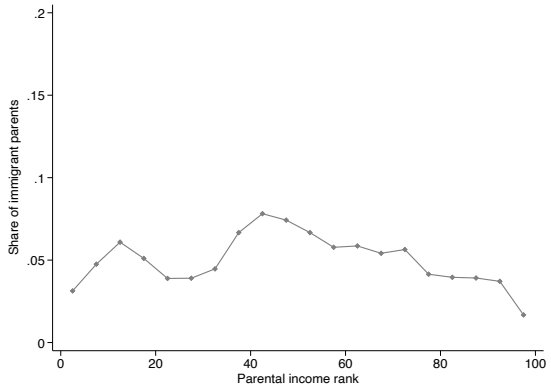
C.3.3.2 Parental income distribution

Figure C.3.7: Linked data: Austria, share of total number of children with immigrant parents

(a) Sons



(b) Daughters

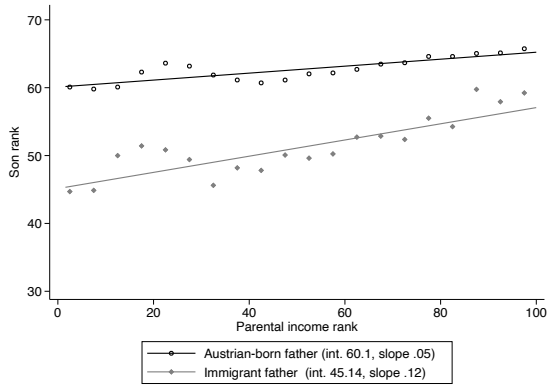


Notes: This figure shows the share of children of immigrant parents in each ventile out of the total number of children with immigrant parents. The numerator is the number of children of immigrants within each ventile. The denominator is the total number of children with immigrant parents (across all ventiles). Children born in 1978-1983. Immigration status is determined by father's country of birth. Parental income measured in 1994-2000. Income ranks, 0-100, determined within child cohorts.

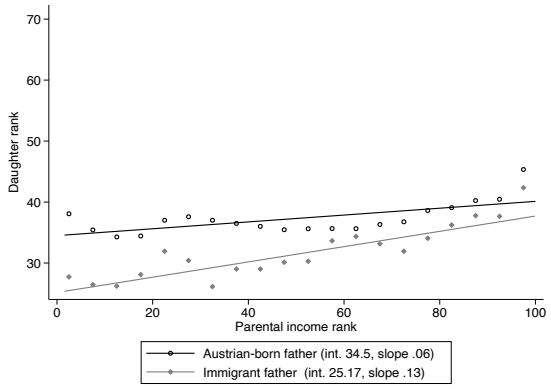
C.3.3.3 Rank-rank relationship

Figure C.3.8: Linked data: Intergenerational mobility, Austria

(a) Austria, sons



(b) Austria, daughters



Notes: This figure plots estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts.

Table C.3.8: Linked data: Intergenerational mobility estimates, Austria

VARIABLES	(1) Sons	(2) Daughters
Immigrant father = 1	-14.96***	-9.330***
	(0.643)	(0.543)
Parents' rank	0.0513***	0.0562***
	(0.00207)	(0.00213)
Immigrant father # rank	0.0680***	0.0692***
	(0.0116)	(0.0104)
Constant	60.10***	34.50***
	(0.119)	(0.121)
Observations	203,355	191,846
R-squared	0.011	0.006

Notes: This table reports estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

C.3.3.4 Oaxaca-Blinder decomposition

Table C.3.9: Oaxaca-Blinder decompositions, child income rank, Austria

	(1) Sons: pooled	(2) Sons: no immi. ref.	(3) Sons: immi. ref.	(4) Daughters: pooled	(5) Daughters: no immi. ref.	(6) Daughters: immi. ref.
Immigrant father	50.96***	50.96***	50.96***	31.19***	31.19***	31.19***
	(0.295)	(0.295)	(0.295)	(0.257)	(0.257)	(0.257)
No immigrant father	62.67***	62.67***	62.67***	37.31***	37.31***	37.31***
	(0.0586)	(0.0586)	(0.0586)	(0.0607)	(0.0607)	(0.0607)
Difference	−11.70***	−11.70***	−11.70***	−6.116***	−6.116***	−6.116***
	(0.300)	(0.301)	(0.301)	(0.264)	(0.264)	(0.264)
Total explained difference	−0.0662***	−0.0635***	−0.148***	−0.116***	−0.112***	−0.250***
due to differences in parental income distributions	(0.0159)	(0.0153)	(0.0378)	(0.0183)	(0.0177)	(0.0434)
Total unexplained difference	−11.64***	−11.64***	−11.56***	−6.000***	−6.004***	−5.866***
due to differences in mobility parameters	(0.299)	(0.299)	(0.299)	(0.262)	(0.262)	(0.264)
- Parental income rank (relative mobility)	3.324	3.321	3.405	3.330	3.326	3.464
	(0.570)	(0.569)	(0.583)	(0.499)	(0.499)	(0.519)
- Intercept (absolute mobility)	-14.961	-14.961	-14.961	-9.330	-9.330	-9.330
	(0.643)	(0.643)	(0.643)	(.543)	(.543)	(.543)
Observations	203,355	203,355	203,355	191,846	191,846	191,846

Notes: This table reports a Oaxaca-Blinder decompositions of the gap in income ranks between children of immigrants and children of locals (Specification 4). We follow the approach and terminology of Fortin et al. (2011), and estimate the fraction of the income rank gap that can be "explained" by differences in parental income distributions, and the fraction that is "unexplained" by parental income distribution differences, and rather due to differences in intergenerational mobility parameters. We report versions using pooled estimated coefficients and each of the groups' coefficients as reference levels. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

C.3.4 Mechanisms

C.3.4.1 Various sets of controls

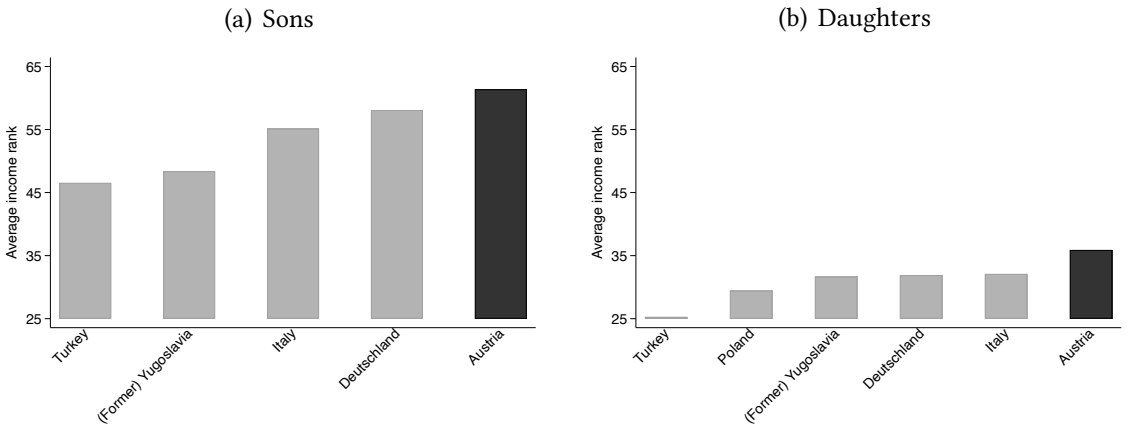
Table C.3.10: Linked data: Intergenerational mobility estimates with various sets of controls, Austria

VARIABLES	(1) Sons	(2) Sons	(3) Sons	(4) Sons	(5) Sons	(6) Sons	(7) Sons	(8) Sons	(9) Daughters	(10) Daughters	(11) Daughters	(12) Daughters	(13) Daughters	(14) Daughters	(15) Daughters	(16) Daughters
Immigrant father = 1	-14.96***	-15.03***	-15.00***	-14.96***	-13.68***	-13.21***	-13.56***	-13.37***	-9.330***	-9.246***	-9.217***	-9.330***	-5.662***	-6.981***	-6.027***	-6.240***
	(0.643)	(0.641)	(0.641)	(0.643)	(1.008)	(0.645)	(1.006)	(1.008)	(0.543)	(0.545)	(0.546)	(0.543)	(0.859)	(0.551)	(0.859)	(0.861)
Parents' rank	0.0513***	0.0458***	0.0446***	0.0513***	0.0418***	0.0537***	0.0409***	0.0410***	0.0562***	0.0624***	0.0637***	0.0562***	0.0592***	0.0664***	0.0591***	0.0588***
	(0.00207)	(0.00214)	(0.00216)	(0.00207)	(0.00335)	(0.00241)	(0.00335)	(0.00336)	(0.00213)	(0.00220)	(0.00221)	(0.00213)	(0.00345)	(0.00248)	(0.00345)	(0.00346)
Immigrant father # rank	0.0680***	0.0704***	0.0718***	0.0680***	0.0716***	0.0690***	0.0719***	0.0722***	0.0692***	0.0676***	0.0642***	0.0692***	0.0413***	0.0619***	0.0435***	0.0432***
	(0.0116)	(0.0116)	(0.0116)	(0.0116)	(0.0160)	(0.0116)	(0.0159)	(0.0159)	(0.0104)	(0.0104)	(0.0104)	(0.0104)	(0.0142)	(0.0104)	(0.0142)	(0.0142)
Constant	60.10***	82.98***	60.71***	60.10***	65.07***	63.79***	88.29***	64.34***	34.50***	60.40***	33.94***	34.50***	34.17***	30.52***	59.99***	34.94***
	(0.119)	(0.169)	(0.211)	(0.119)	(3.817)	(3.241)	(3.821)	(3.800)	(0.121)	(0.121)	(0.221)	(0.121)	(5.669)	(3.871)	(5.723)	(5.675)
Observations	203,355	203,355	203,355	203,355	93,461	203,355	93,461	93,461	191,846	191,846	191,846	191,846	88,378	191,846	88,378	88,378
R-squared	0.011	0.015	0.016	0.011	0.020	0.022	0.023	0.024	0.006	0.013	0.016	0.006	0.018	0.022	0.024	0.025
Parental region	0	1	0	0	0	0	1	0	0	1	0	0	0	0	1	0
Parental municipality	0	0	1	0	0	0	0	1	0	0	1	0	0	0	0	1
Parental wealth	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Parental industry, 27 grp.	0	0	0	0	1	0	1	1	0	0	0	0	1	0	1	1
Parental industry, 3-digit	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0

Notes: This table reports estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts. Other parental characteristics are all determined in 1990 and included as fixed effects. We have 27 regions and 95 municipalities (we use the 95 French departments as municipalities to be consistent with the Danish geography). Parental industry can only be aggregated into 100 groups. French data does not include wealth variables. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

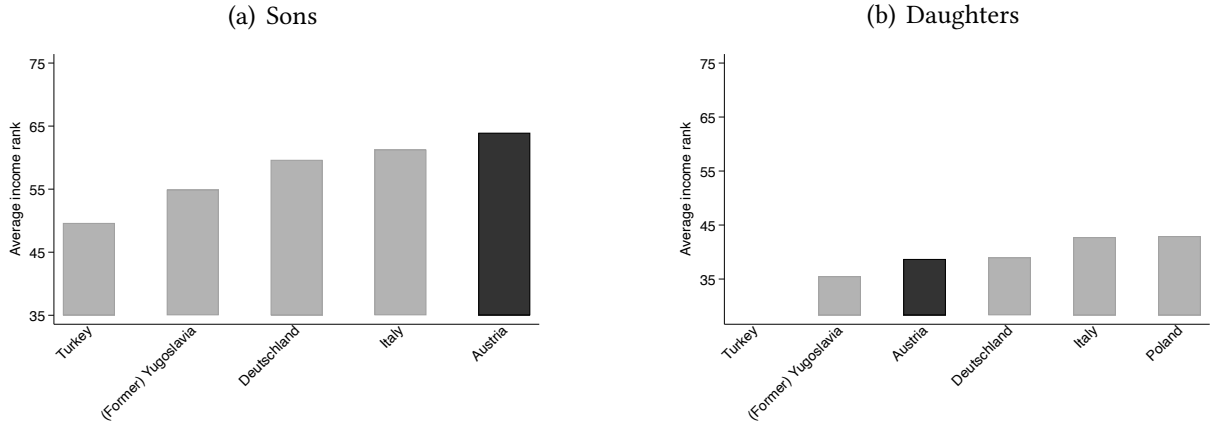
C.3.4.2 Heterogeneity across sending countries

Figure C.3.9: Average income at 25th percentile: Austria



Notes: This figure plots the predicted child income rank if parental income rank equals 25 from a paternal country of origin-level estimation of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts.

Figure C.3.10: Average income at 75th percentile: Austria



Notes: This figure plots the predicted child income rank if parental income rank equals 75 from a paternal country of origin-level estimation of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts.

C.3.4.3 Employment

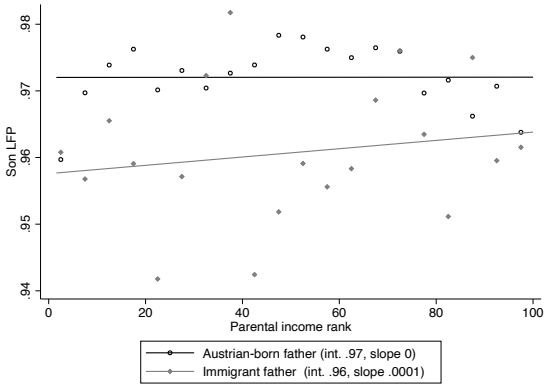
Table C.3.11: Linked data: Intergenerational mobility estimates, employment, Austria

VARIABLES	(1) Sons	(2) Daughters
Immigrant father = 1	-0.0144***	-0.0125**
	(0.00470)	(0.00626)
Parents' rank	3.72e-07	0.000146***
	(1.36e-05)	(1.83e-05)
Immigrant father # rank	6.20e-05	0.000203*
	(8.35e-05)	(0.000109)
Constant	0.972***	0.937***
	(0.000777)	(0.00109)
Observations	203,355	191,846
R-squared	0.000	0.000

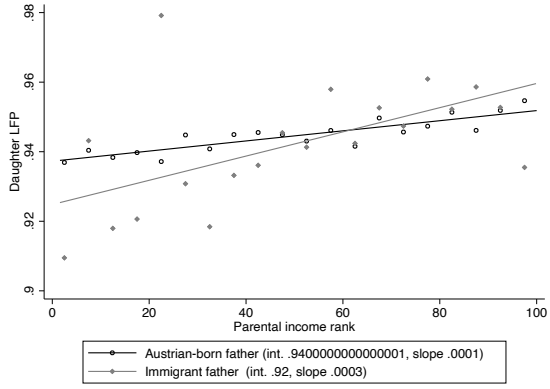
Notes: This table reports estimates of Specification 1, regressing employment of sons/daughters on income ranks of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child employment measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Figure C.3.11: Linked data: Intergenerational mobility, employment, Austria

(a) Austria, sons



(b) Austria, daughters



Notes: This figure plots estimates of Specification 1, regressing employment of sons/daughters on income ranks of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child employment measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts.

C.3.4.4 Educational mobility

College enrolment

College enrolment are not available in Austria linked data.

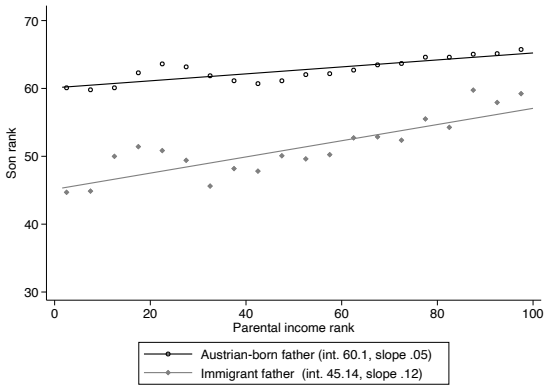
Primary school grades
School grades are not available in Austria linked data.

C.3.5 Robustness

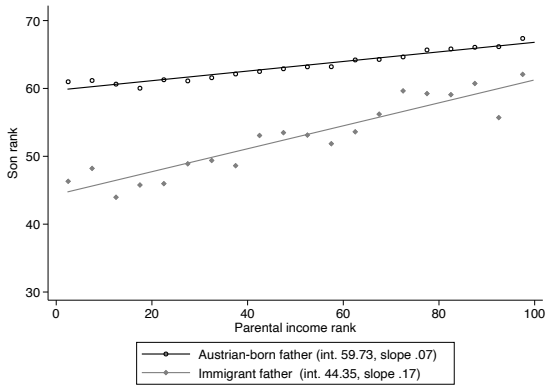
C.3.5.1 More recent birth cohorts, income rank

Figure C.3.12: Linked data: Intergenerational mobility, Austria, comparison across cohorts

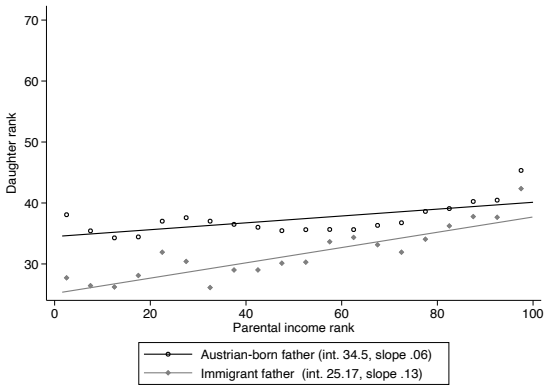
(a) Austria, sons, born 1978-1983



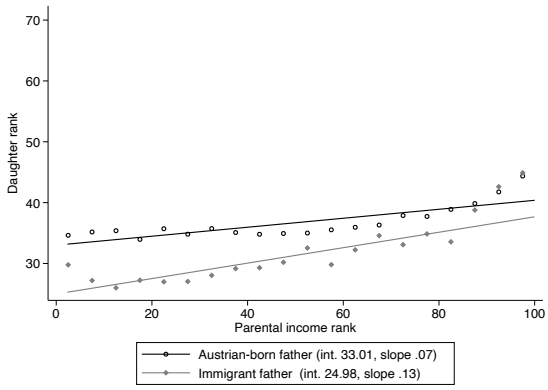
(b) Austria, sons, born 1982-1987



(c) Austria, daughters, born 1978-1983



(d) Austria, daughters, born 1982-1987



Notes: This figure plots estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983 and 1982-1987 respectively. Immigration status is determined by father's country of birth. Child income measured in 2014-2015 and 2018-2019, and parental income 1994-2000 and 1998-2004 respectively. Income ranks, 0-100, determined within cohorts.

Table C.3.12: Linked data: Intergenerational mobility estimates, Austria, comparing cohorts

	(1)	(2)	(3)	(4)
	Sons	Daughters	Sons	Daughters
VARIABLES	1978-1983	1978-1983	1982-1987	1982-1987
Immigrant father = 1	-14.96***	-9.330***	-15.38***	-8.024***
	(0.643)	(0.543)	(0.630)	(0.530)
Parents' rank	0.0513***	0.0562***	0.0707***	0.0738***
	(0.00207)	(0.00213)	(0.00214)	(0.00220)
Immigrant father # rank	0.0680***	0.0692***	0.0984***	0.0531***
	(0.0116)	(0.0104)	(0.0132)	(0.0119)
Constant	60.10***	34.50***	59.73***	33.01***
	(0.119)	(0.121)	(0.122)	(0.123)
Observations	203,355	191,846	187,293	177,901
R-squared	0.011	0.006	0.015	0.010

Notes: This table reports estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Immigration status is determined by father's country of birth. Income ranks, 0-100, determined within cohorts. Columns (1) & (2): Children born in 1978-1983, child income measured in 2014-2015, and parental income 1994-2000. Columns (3) & (4): Children born in 1982-1987, child income measured in 2018-2019, and parental income 1998-2004. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

C.4 Country-specific details & results: Canada

C.4.1 Data details and deviations

The Canadian results are based on two main data sources: the Intergenerational Income Database or IID (Statistics Canada, 2019) and the Canadian Census of Population (Statistics Canada, 2018b). Additionally, the linkage keys between the IID and the Census are used to supplement the administrative tax files with information contained in the Census (Statistics Canada, 2023).

Census of Population. The Canadian long-form Census is a mandatory survey administered to 20 to 25% of the Canadian population every five years. The target population does not include people living in institutions and collective dwellings, or armed forces personnel stationed outside of Canada (Statistics Canada, 2018a). In 2011, the long-form Census was replaced with the voluntary National Household Survey (NHS) (Statistics Canada, 2014). In 2016, the mandatory long-form census was reinstated. The 1981 Census and 2011 NHS files are used in the cross-sectional analyses. The 1996 to 2016 files are used to retrieve information on immigrant status, country of origin, and educational attainment to link to the intergenerational tax files.

Intergenerational Income Database. The Intergenerational Income Database is a set of administrative tax files covering children born between 1963 and 1985, inclusively (but not including 1971, 1976 and 1981), who lived in Canada for at least one year between the ages of 16 to 19. The IID contains annual tax files starting in 1978 up to 2016, for the children as well as their parents. Parents are linked to their children using information contained in the tax files when the children are aged 16 to 19. Note that the data do not identify biological links, but rather the family structure at those ages—a child may thus be living with their two biological parents, but also with adoptive parents, or with one biological parent and one step-parent. The IID does not contain information on country of birth, immigration status, or educational attainment. To obtain these variables, we use linkage keys provided by Statistics Canada to find the IID individuals (children, fathers, mothers) in one of the Census waves between 1996 and 2016 (NHS in 2011). Since the long-form Census is administered to 20-25% of households, we are unable to get a Census linkage for all the IID individuals, but the selection should be random. The IID comes with a set of weights meant to make sure that the data are representative of its target population (see Statistics Canada (2017) for more on weights). These weights are used in all computations, and the number of observations shown in the Canadian results are weighted counts (rounded to base 10).

Data access. Access to all the above datasets is done through an online application via the (*Microdata Access Portal*). Only researchers affiliated with academic or governmental institutions are eligible to apply. The application consists of a research proposal and a security clearance, and is subject to the approval of Statistics Canada. Data access is through Research Data Centres, located in several academic institutions throughout Canada (https://www.statcan.gc.ca/en/microdata/data-centres/community).

C.4.1.1 Cross-sectional data

First-generation sample. We follow the same sample definition as in the Danish case, using the 1981 population census to identify fathers aged 30 to 50 with at least one child, residing in Canada in 1980, and who were born in Canada or in one of the top 20 sending countries.

First-generation immigration status. Following the Danish case, immigration status is based on country of birth.

First-generation income. The 1981 Census contains self-reported labor (employment) income and total household income. Labor income is measured in 1980 and includes wages, salaries, self-employment income and net farm/business income. Total household income is the sum of all sources of income (including labour market income, capital income, and benefits/transfers), across all household members.

Second-generation sample. We use the 2011 NHS to identify sons aged 30 to 50, residing in Canada in 2010, who were born in Canada from fathers born either in Canada or in one of the top 20 sending countries.

Second-generation immigration status. The 2011 NHS contains information on the place of birth of sons as well as the place of birth of their fathers.

Second-generation income. In the 2011 NHS, around seventy percent of respondents gave permission to Statistics Canada to pull their income records from their tax files instead of self-reporting. We use employment income and total household income as for the first-generation sample. Net capital gains and losses were not included in the definition of total income.

C.4.1.2 Linked data

Sample definition. The linked data analysis is conducted on IID children born between 1978 and 1983, inclusively, for whom Census information could be retrieved.

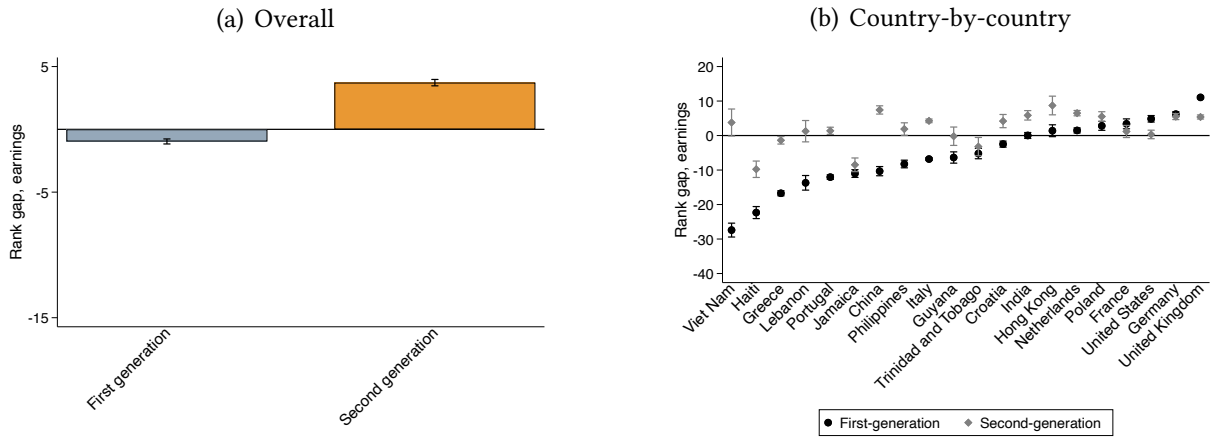
First-generation income. Parental total income is observed in the tax data and includes income from all sources: labor market income, capital income, and benefits/transfers. Dollar figures are adjusted for inflation using the Consumer Price Index (Statistics Canada, 2021). We use the sum of both the father's and mother's income, averaged over the years 1994 to 2000, as in the Danish case. Percentile ranks are computed within child birth year, regardless of the age of the parents.

Second-generation income. Child individual total income is observed in the tax data and averaged over the years 2014 and 2015. Percentile ranks are computed within child birth year.

Immigration status. Using the IID-Census linkage keys, we can retrieve information on father's country of birth for a large (and random) share of our IID individuals. As in the Danish case, we keep children who were born in Canada, with fathers who were born outside of Canada. Note that since the child-parent link in the tax data is based on family structure during adolescence, we are unable to find a father ID for some children. However, we can link such children to the Census, where there is information on their father's country of birth for around 2/3 of these individuals. We do not use mother's country of birth when father's country of birth is unavailable, we simply drop those children from our analysis sample, so immigration status is solely based on father's country of birth.

C.4.2 Cross-sectional results

Figure C.4.13: Cross-sectional results using earnings: Canada, 1981-2011 cohort



Notes: This figure plots the estimated coefficients from Equation 1 from Abramitzky et al. (2021) for the earnings of fathers and sons in 1981 and 2011 respectively. We use measures of earnings for both generations. Panel a) includes a non-Canadian dummy rather than country-of-origin dummies. Immigration status is determined by father's country of birth. Income ranks are determined within cohorts. Sample includes men aged 30-50. 95%-confidence interval indicated.

Table C.4.13: Cross-sectional data: Summary statistics, Canada

Fathers: 1981 cohort

	Immigrants	Canadian-born	Diff.	Std. Error
Age	39.760	38.858	-0.920***	0.021
Rank gap, total income	50.280	49.911	-1.030***	0.101
Rank gap, earnings	49.251	50.215	0.271***	0.101
ln(total income)	10.211	10.195	-0.033***	0.002
ln(earnings)	9.805	9.820	-0.004	0.003
Total income > 0	0.993	0.996	0.003***	0.000
Earnings > 0	0.958	0.954	-0.006***	0.001
Share of population	0.222	0.778		
N	105980	371260		

Sons: 2011 cohort

	Immigrant father	Canadian-born father	Diff.	Std. Error
Age	39.799	40.589	0.658***	0.020
Rank gap, total income	54.529	49.097	-6.022***	0.093
Rank gap, earnings	53.098	49.380	-4.640***	0.094
ln(total income)	11.324	11.192	-0.154***	0.003
ln(earnings)	10.782	10.688	-0.121***	0.003
Total income > 0	0.999	0.999	0.000	0.000
Earnings > 0	0.894	0.883	-0.017***	0.001
Share of population	0.161	0.839		
N	114,330	597,190		

Notes: This table reports summary statistics of the cross-sectional sample, including sons and fathers in 1981 and 2011 respectively. Immigration status is determined by father's country of birth. Income ranks are determined within cohorts. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

C.4.3 Main results

C.4.3.1 Summary statistics

Table C.4.14: Linked data: Summary statistics, Canada

Sons

	Immigrant father	Canadian-born father	Diff.	Std. Error
Child age in 2014	33.666	33.589	-0.077***	0.007
Child income rank	55.379	54.209	-1.170***	0.126
Child labour force part.	0.766	0.789	0.023***	0.002
Mother's age at child birth	28.866	27.167	-1.698***	0.025
Father's age at child birth	32.380	29.508	-2.873***	0.028
Parental income rank	52.060	48.616	-3.444***	0.121
Child share of population	0.195	0.804		
N	90,680	373,990		

Daughters

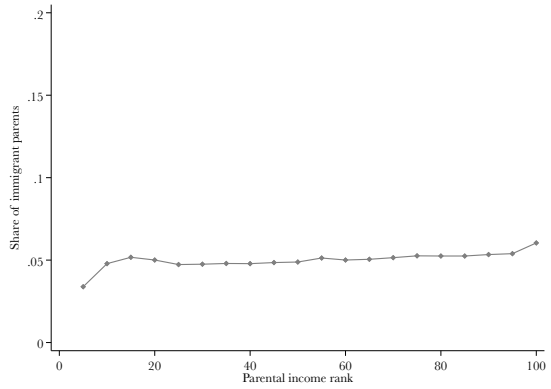
	Immigrant father	Canadian-born father	Diff.	Std. Error
Child age in 2014	33.678	33.579	-0.099***	0.008
Child income rank	48.213	44.711	-3.502***	0.117
Child labour force part.	0.764	0.776	0.012***	0.002
Mother's age at child birth	28.909	27.215	-1.694***	0.026
Father's age at child birth	32.436	29.556	-2.880***	0.028
Parental income rank	52.432	50.300	-2.133***	0.125
Child share of population	0.203	0.797		
N	91,660	359,020		

Notes: This table reports summary statistics of the estimation sample. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child earnings measured in 2014-2015, and parental earnings 1994-2000. Canadian data does not include wealth variables. Child age is measured in 2014. Income ranks, 0-100, determined within cohorts. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

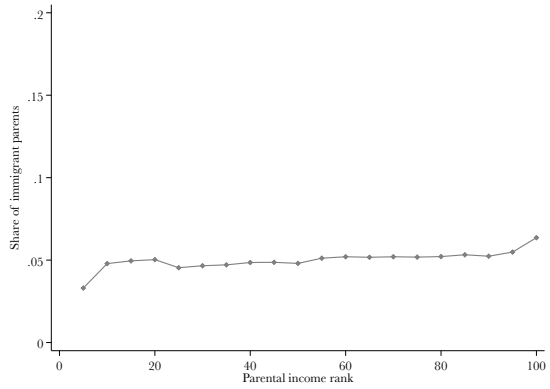
C.4.3.2 Parental income distribution

Figure C.4.14: Linked data: Canada, share of total number of children with immigrant parents

(a) Sons



(b) Daughters

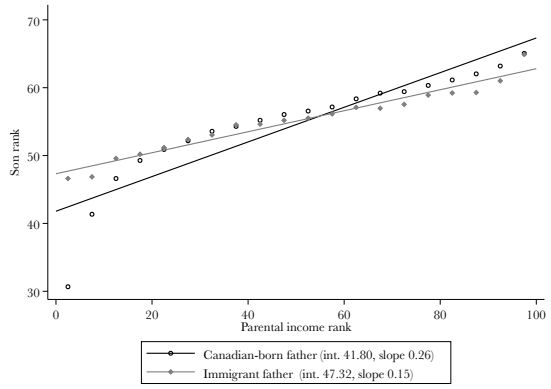


Notes: This figure shows the share of children of immigrant parents in each ventile out of the total number of children with immigrant parents. The numerator is the number of children of immigrants within each ventile. The denominator is the total number of children with immigrant parents (across all ventiles). Children born in 1978-1983. Immigration status is determined by father's country of birth. Parental income is measured in 1994-2000. Income ranks, 0-100, are determined within child cohorts.

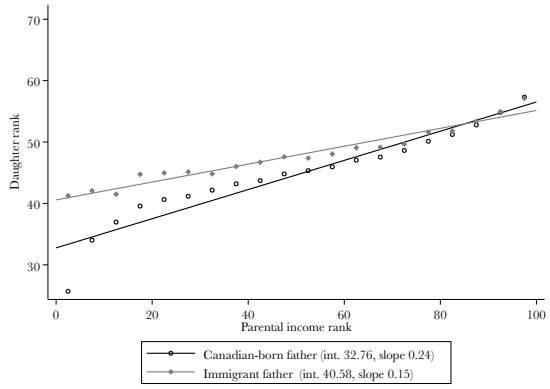
C.4.3.3 Rank-rank relationship

Figure C.4.15: Linked data: Intergenerational mobility, Canada

(a) Canada, sons



(b) Canada, daughters



Notes: This figure plots estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts.

Table C.4.15: Linked data: Intergenerational mobility estimates, Canada

	(1)	(2)
VARIABLES	Sons	Daughters
Immigrant father = 1	5.525***	7.811***
	(0.273)	(0.249)
Parents' rank	0.255***	0.238***
	(0.00194)	(0.00177)
Immigrant father # rank	-0.101***	-0.0918***
	(0.00446)	(0.00413)
Constant	41.80***	32.76***
	(0.116)	(0.104)
Observations	464,670	450,680
R-squared	0.053	0.060

Notes: This table reports estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

C.4.3.4 Oaxaca-Blinder decomposition

Table C.4.16: Oaxaca-Blinder decompositions, child income rank, Canada

	(1) Sons: pooled	(2) Sons: non-immi. ref.	(3) Sons: . immi. ref	(4) Daughters: pooled	(5) Daughters: non-immi. ref.	(6) Daughters:. immi. ref
Mean child income rank: Immigrant father	55.38***	55.38***	55.38***	48.21***	48.21***	48.21***
	(0.108)	(0.113)	(0.113)	(0.101)	(0.105)	(0.105)
Mean child income rank: No immigrant father	54.21***	54.21***	54.21***	44.71***	44.71***	44.71***
	(0.0563)	(0.0558)	(0.0558)	(0.0519)	(0.0513)	(0.0513)
Difference in means	1.170***	1.170***	1.170***	3.502***	3.502***	3.502***
	(0.122)	(0.126)	(0.126)	(0.113)	(0.117)	(0.117)
Total explained difference	0.812***	0.533***	0.187***	0.467***	0.311***	0.115***
due to differences in parental income distributions	(0.0280)	(0.0226)	(0.0291)	(0.0265)	(0.0192)	(0.0176)
Total unexplained difference	0.358***	0.637***	0.984***	3.035***	3.191***	3.387***
due to differences in mobility parameters	(0.120)	(0.126)	(0.131)	(0.112)	(0.116)	(0.118)
- Parental income rank (*relative mobility*)	-5.167***	-4.888***	-4.542***	-4.776***	-4.620***	-4.424***
	(0.222)	(0.217)	(0.202)	(0.207)	(0.208)	(0.199)
- Intercept (*absolute mobility*)	5.525***	5.525***	5.525***	7.811***	7.811***	7.811***
	(0.264)	(0.273)	(0.273)	(0.241)	(0.249)	(0.249)
Observations	464,670	464,670	464,670	450,680	450,680	450,680

Notes: This table reports a Oaxaca-Blinder decompositions of the gap in income ranks between children of immigrants and children of locals (Specification 4). We follow the approach and terminology of Fortin et al. (2011), and estimate the fraction of the income rank gap that can be "explained" by differences in parental income distributions, and the fraction that is "unexplained" by parental income distribution differences, and rather due to differences in intergenerational mobility parameters. We report versions using pooled estimated coefficients and each of the groups' coefficients as reference levels. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

C.4.4 Mechanisms

C.4.4.1 Various sets of controls

Table C.4.17: Linked data: Intergenerational mobility estimates with various sets of controls, Canada

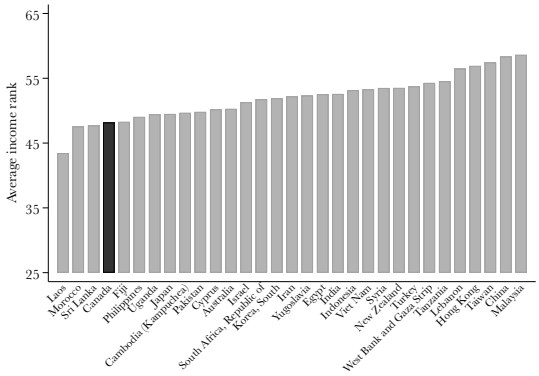
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
VARIABLES	Sons	Sons	Sons	Sons	Daughters	Daughters	Daughters	Daughters
Immigrant father = 1	5.525***	5.465***	6.699***	7.926***	7.811***	7.939***	9.428***	9.044***
	(0.273)	(0.307)	(0.311)	(0.319)	(0.249)	(0.286)	(0.290)	(0.298)
Parents' rank	0.255***	0.242***	0.252***	0.261***	0.238***	0.233***	0.245***	0.241***
	(0.00194)	(0.00210)	(0.00214)	(0.00220)	(0.00177)	(0.00193)	(0.00196)	(0.00203)
Immigrant father # rank	-0.101***	-0.0965***	-0.102***	-0.110***	-0.0918***	-0.0913***	-0.0973***	-0.0964***
	(0.00446)	(0.00487)	(0.00487)	(0.00489)	(0.00413)	(0.00457)	(0.00458)	(0.00460)
Constant	41.80***	42.83***	51.54***	54.95***	32.76***	33.04***	35.97***	35.90***
	(0.116)	(0.128)	(0.337)	(0.427)	(0.104)	(0.117)	(0.310)	(0.400)
Observations	464,670	405,920	405,920	405,920	450,680	389,900	389,900	389,900
R-squared	0.053	0.046	0.059	0.064	0.060	0.055	0.062	0.065
Non-missing father's geo	0	1	1	1	0	1	1	1
Parental region	0	0	1	0	0	0	1	0
Parental municipality	0	0	0	1	0	0	0	1

Notes: This table reports estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts. Father's geographical information is determined in 1994 and included as fixed effects. Not all fathers have geographical information for residence in 1994, so the sample size decreases when using region or municipality fixed effects. Column 2) reports estimates of Specification 1 on the sample for which father's geography is available, but without residence fixed effects. We have 10 provinces (used as regions) and 137 Census Agglomerations or Census Metropolitan Areas (CAs or CMAs, used as municipalities to be consistent with the Danish geography). Canadian data do not include wealth or industry variables. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

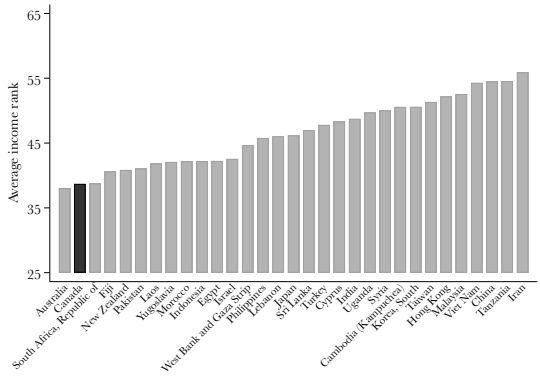
C.4.4.2 Heterogeneity across sending countries

Figure C.4.16: Average income at 25th percentile: Canada

(a) Sons



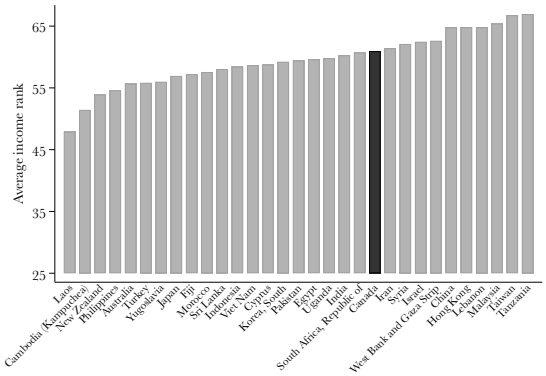
(b) Daughters



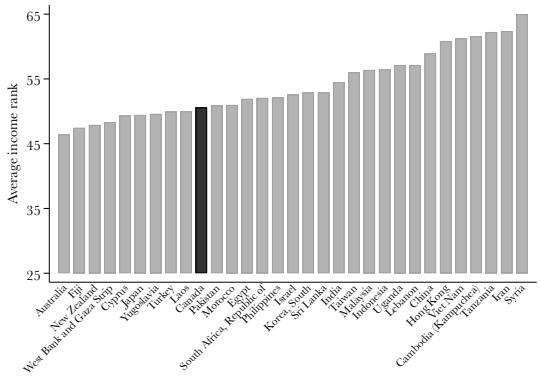
Notes: This figure plots the predicted child income rank if parental income rank equals 25 from a paternal country of origin-level estimation of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts.

Figure C.4.17: Average income at 75th percentile: Canada

(a) Sons



(b) Daughters



Notes: This figure plots the predicted child income rank if parental income rank equals 75 from a paternal country of origin-level estimation of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts.

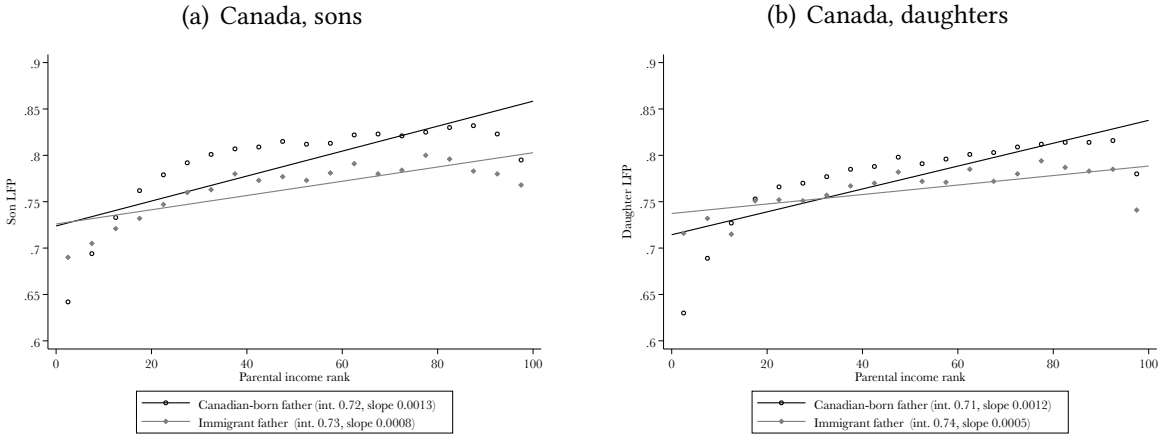
C.4.4.3 Employment

Table C.4.18: Linked data: Intergenerational mobility estimates, employment, Canada

	(1)	(2)
VARIABLES	Sons	Daughters
Immigrant father = 1	0.00213	0.0229***
	(0.00368)	(0.00384)
Parents' rank	0.00135***	0.00123***
	(2.61e-05)	(2.83e-05)
Immigrant father # rank	-0.000577***	-0.000722***
	(5.84e-05)	(6.08e-05)
Constant	0.724***	0.714***
	(0.00162)	(0.00179)
Observations	464,670	450,680
R-squared	0.010	0.007

Notes: This table reports estimates of Specification 1, regressing employment of sons/daughters on income ranks of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child employment measured in 2014-2015 (defined as having non-zero earnings), and parental income 1994-2000. Income ranks, 0-100, determined within cohorts. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Figure C.4.18: Linked data: Intergenerational mobility, employment, Canada



Notes: This figure plots estimates of Specification 1, regressing employment of sons/daughters on income ranks of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child employment measured in 2014-2015 (defined as having non-zero earnings), and parental income 1994-2000. Income ranks, 0-100, determined within cohorts.

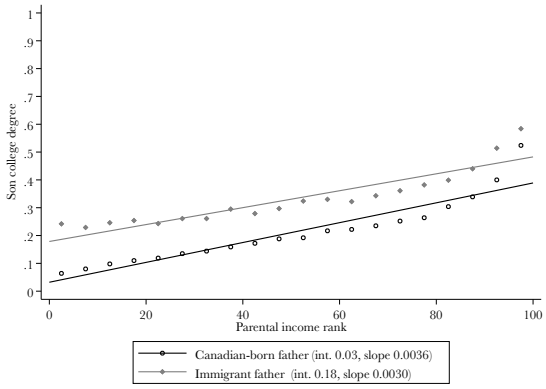
C.4.4.4 Educational mobility

College and postsecondary graduation College enrollment at a given age is not available in the Canadian linked data. However, from the Census, we can retrieve information on the highest

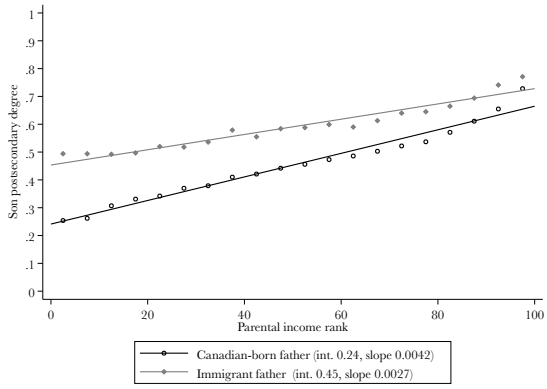
degree, certificate or diploma obtained by the child. We classify someone as having a postsecondary degree if the highest degree obtained is a college, CEGEP or other university certificate or diploma, a university certificate or diploma below bachelor level, or a university certificate, diploma or degree at bachelor level or above. We define college graduation as having any university degree at the Bachelor's level or above.

Figure C.4.19: Linked data: Postsecondary and college graduation, Canada

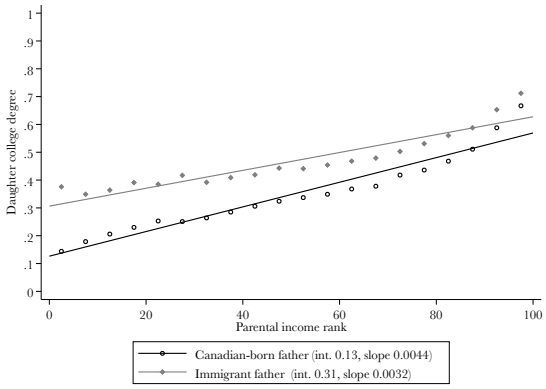
(a) Canada, sons, college degree



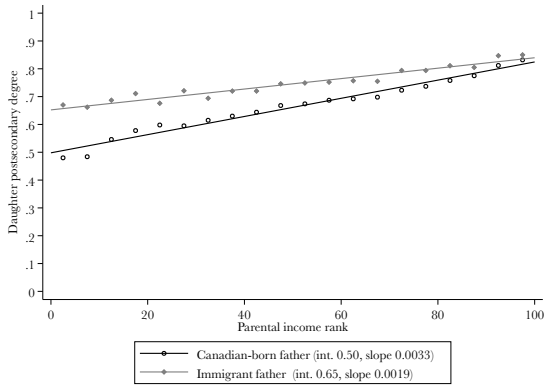
(b) Canada, sons, postsecondary degree



(c) Canada, daughters, college degree



(d) Canada, daughters, postsecondary degree



Notes: This figure plots estimates of Specification 1, regressing an indicator of college or postsecondary graduation on the income rank of parents. We use either college graduation or postsecondary graduation (including university, college, CEGEP) as a proxy for enrollment because the structure of Canadian Census does not allow us to observe enrollment at a given age. Children born in 1978-1983. Immigration status is determined by father's country of birth. Parental income measured in 1994-2000. Parental income ranks, 0-100, are determined within cohorts.

Primary school grades

School grades are not available in Canadian linked data.

C.4.5 Robustness

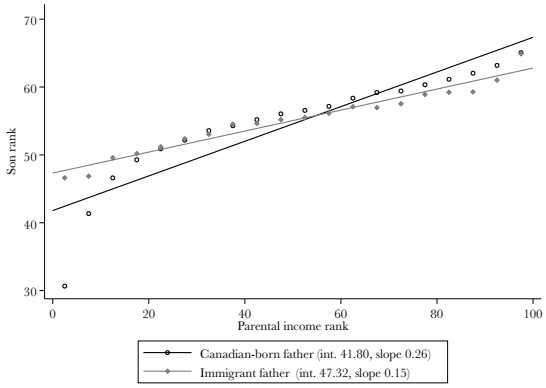
C.4.5.1 Emigration

The Intergenerational Income Database is not well suited to study emigration.

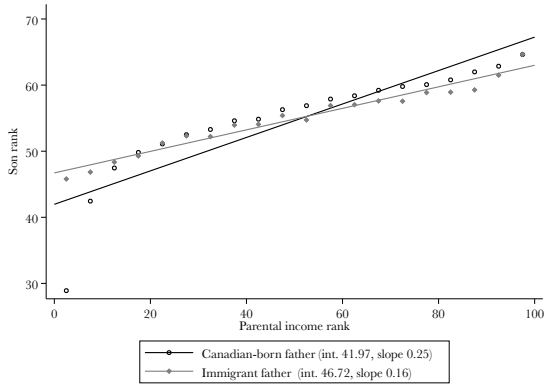
C.4.5.2 Additional years of parental income data

Figure C.4.20: Intergenerational mobility: Canada by number of years of parental income data

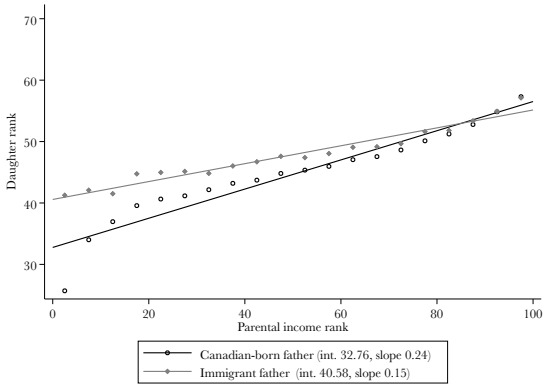
(a) Sons, parental income 1994-2000



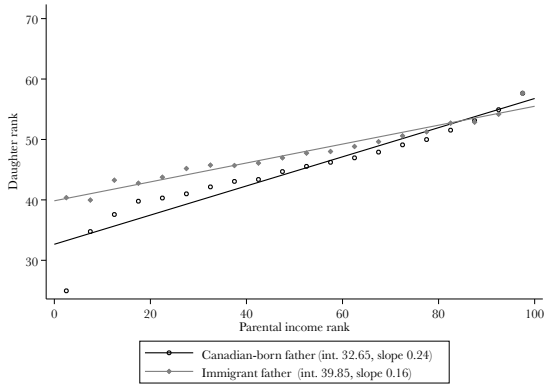
(b) Sons, parental income 1981-2000



(c) Daughters, parental income 1994-2000



(d) Daughters, parental income 1981-2000



Notes: This figure plots estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000 and 1981-2000 respectively. Income ranks, 0-100, determined within cohorts.

Table C.4.19: Intergenerational mobility estimates: Canada, parental income 1981-2000

VARIABLES	(1) Sons	(2) Daughters
Immigrant father = 1	4.752***	7.194***
	(0.278)	(0.252)
Parents' rank	0.253***	0.241***
	(0.00193)	(0.00175)
Immigrant father # rank	-0.0901***	-0.0848***
	(0.00451)	(0.00415)
Constant	41.97***	32.65***
	(0.115)	(0.102)
Observations	464,670	450,680
R-squared	0.052	0.063

Notes: This table reports estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1981-2000 respectively. Income ranks, 0-100, determined within cohorts. 95%-confidence interval indicated. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

C.4.5.3 More recent birth cohorts, income rank

The Intergenerational Income Database covers birth years up to 1985 (inclusively), adding only up to two birth years to the main sample. We decided not to perform the robustness analysis on the 1982-1985 birth cohort.

C.5 Country-specific details & results: France

C.5.1 Data details and deviations

The Permanent Demographic Sample (*Échantillon Démographique Pemanent* - EDP) is the only large-scale administrative French dataset that contains information on both immigration background and earnings and which enables to link individuals' information to their parents' information. Since 1968, this database combines information from various administrative sources on individuals born during the first 4 days of October. Specifically, we rely on EDP variables from the following sources.

Population Census. Exhaustive population censuses were collected every 7 to 9 years from 1968 to 1999. They contain socio-demographic information but not earnings. We use this data source to measure immigration status in the first generation.

Annual Census Surveys. Since 2004, about 20% of dwellings have been censused every year, such that a complete survey wave can be obtained out of any set of 5 consecutive yearly census surveys. We use this data source to measure immigration status in the second generation.

All Employee Panel. Employer-employee data contains the wages of employees since 1968. Farmers and the self-employed are not included in this dataset, and public-sector jobs were progressively included in the 1980s. Until 2001, only individuals born in an even year were included. We use this data source to measure earnings in the first generation.

Tax Data. Tax returns include detailed information on income. It covers individuals known by the tax authorities via an income tax form or a housing tax form. This source was included in the EDP in 2010. We use this data source to measure income in the second generation.

Data access. Access to the Permanent Demographic Sample is coordinated by the CASD (*Secure Data Access Center*). It involves an access fee and it is subject to the approval of the French Statistical Secret Committee. The connection to secure servers is handled by a specific device that can be located at researchers' own institutions provided that secure access conditions to the device are met. However, access to the *Permanent Demographic Sample* is not authorized from North America.

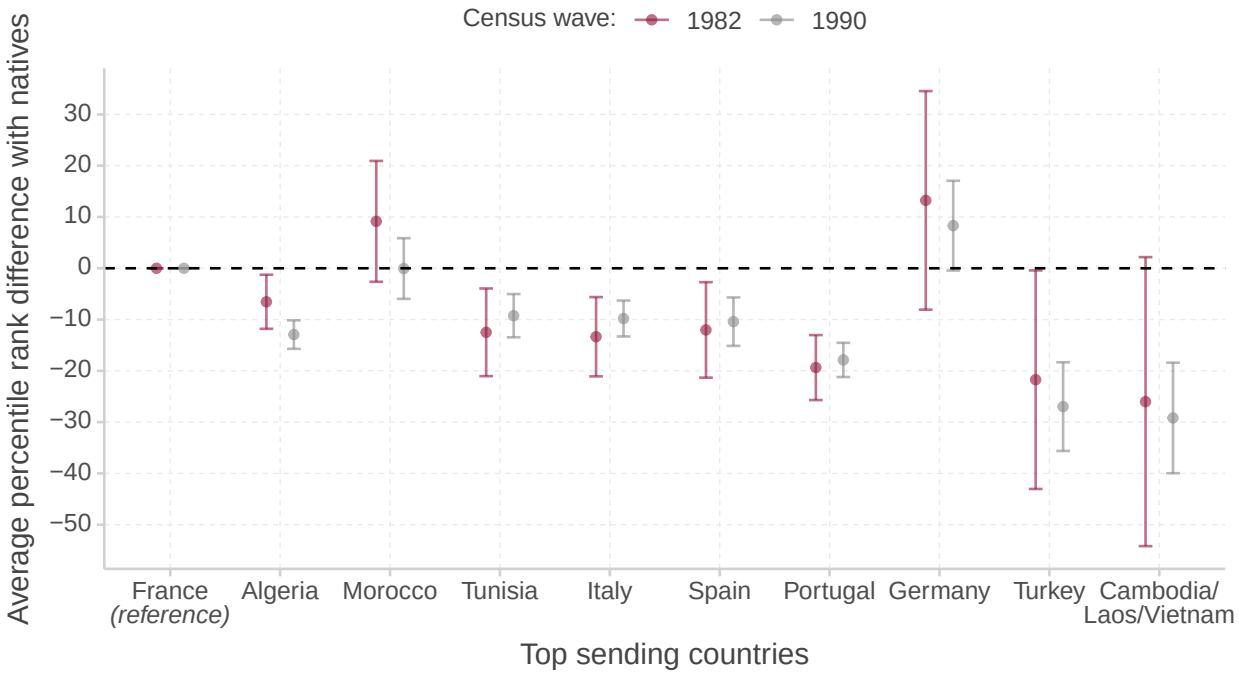
Permanent Demographic Sample - 2020
Producer: Insee & French Ministry for Finance (DGFiP)
Provider: Centre d'Accès Sécurisé aux Données (CASD)
Metadata: https://www.casd.eu/en/source/permanent-demographic-sample/
DOI: http://doi.org/10.34724/CASD.11.4855.V1

C.5.1.1 Cross-sectional data

First-generation sample. We follow the same sample definition as in the Danish case, using the 1990 population census to identify fathers aged 30 to 50 with at least one child, residing in France in the 1980s, and who were born in France or in one of the top-sending countries. We chose to use the 1990 census wave instead of the 1982 census wave because the latter was subject to data collection issues making the sample smaller than it should be. Specifically, we identify fathers in the 1990 census and observe their labor market outcomes in 1980 in the employer-

employee panel data. Figure C.5.21 compares the income-rank gaps between immigrant groups and natives for the two sample waves.

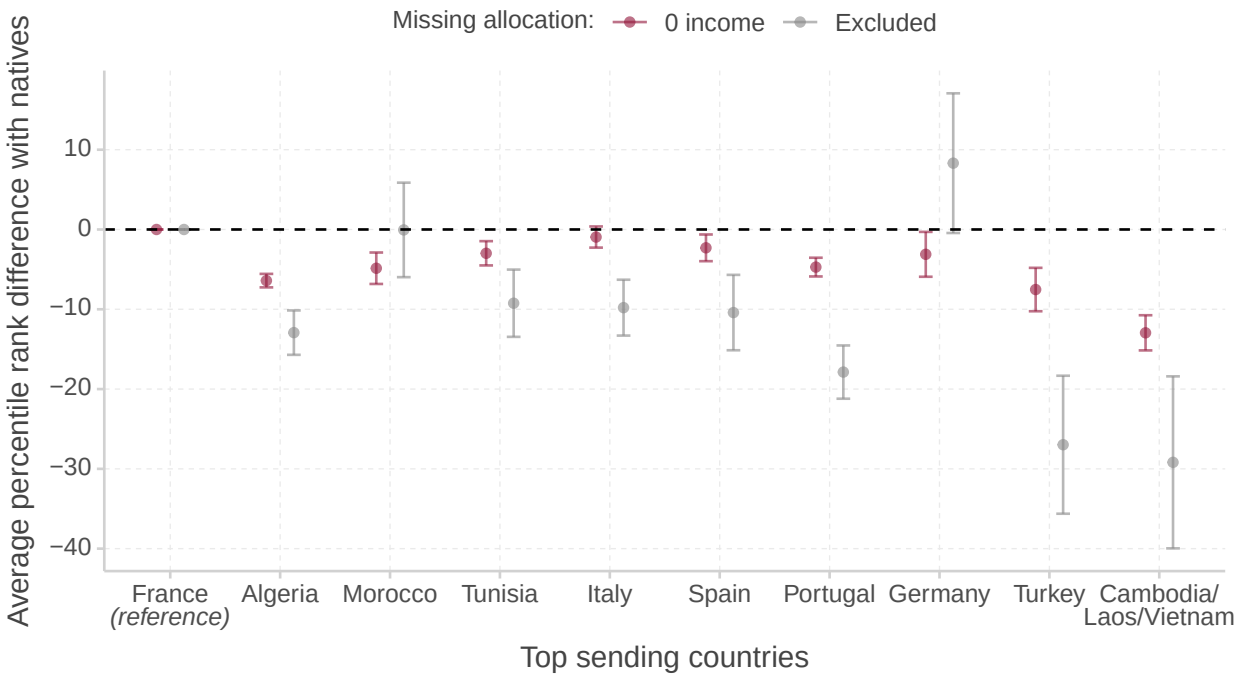
Figure C.5.21: Sample waves comparison



First-generation immigration status. Following the Danish case, immigration status is based on country of birth. This implies that individuals born with French citizenship in the French colonies are considered foreign-born.

First-generation income. Unlike the Danish case, the only income source observed in the 1980s is wages, from employer-employee data. Since self-employment and other types of income are not included in employer-employee data, missing information does not necessarily imply zero income. Thus, we chose not to attribute a zero income to individuals for whom we do not observe an income. Figure C.5.22 compares the income-rank gaps between immigrant groups and natives resulting from each approach.

Figure C.5.22: Exclusion of missing earnings versus replacement with 0 earnings

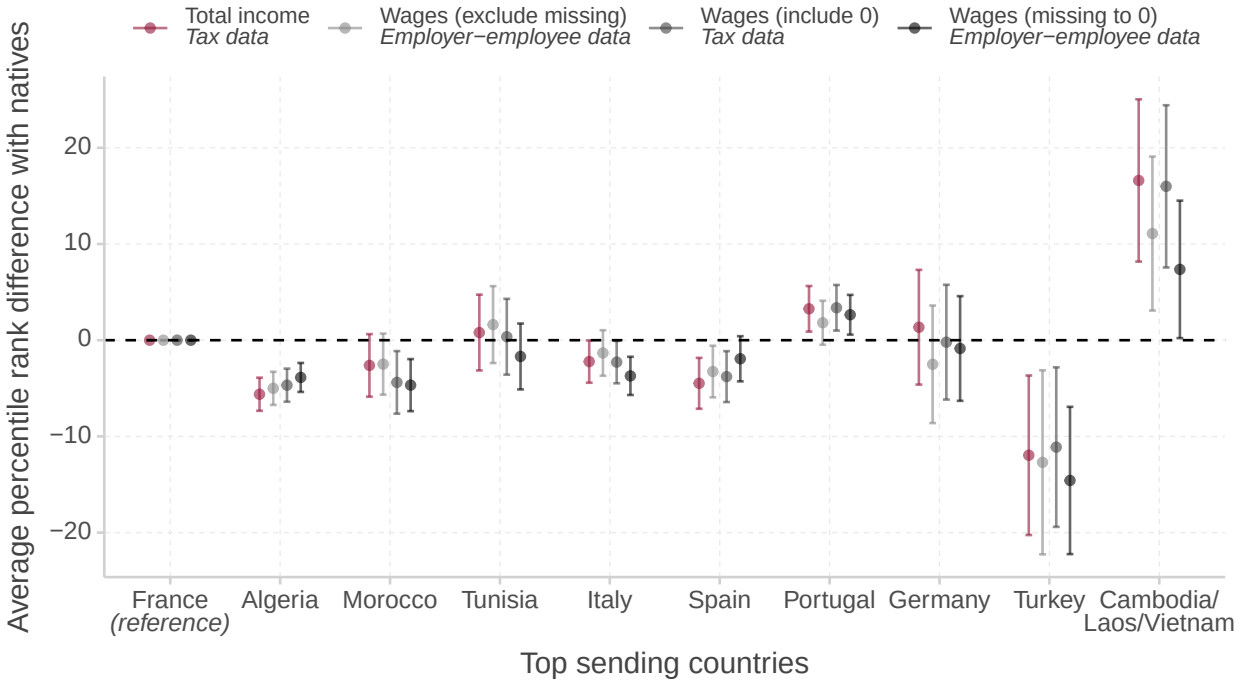


Second-generation sample. We use the 2010-2015 annual census surveys to identify sons aged 30 to 50, residing in France in the 2010s, who were born in France from fathers born either in France or in one of the top-sending countries. Since the census data only collects information on parents' places of birth for children, we rely on the linked structure of the EDP to recover fathers' information in earlier census rounds, when the son lived in the same household as the father (rounds 1975, 1982, 1990, and 1999). We recover fathers' information for 92% of individuals.

Second-generation immigration status. The definition varies depending on the census round in which the father's information was found. When the father's information comes from rounds 1990-1999 the definition is based on the father's place of birth, as in the Danish case. However, parents' places of birth are not available in census rounds 1975-1982, so we have to use the father's nationality instead. We rely on the father's nationality in 12% of cases, and the exclusion of these observations does not change our results.

Second-generation income. Since 2010, tax data is available in the EDP on top of employer-employee data, which allows us to use the total income for the second generation. Figure C.5.23 compares the income-rank gaps between immigrant groups and natives across income definitions.

Figure C.5.23: Income definitions comparison



C.5.1.2 Linked data

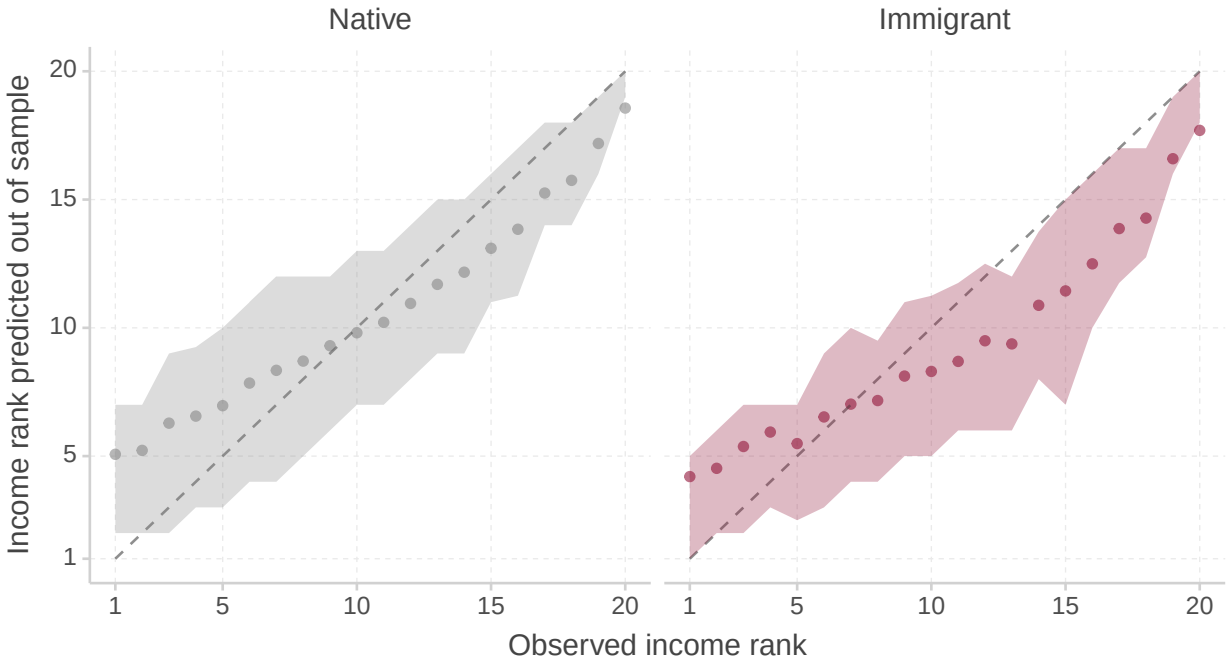
Sample definition. The linked data analysis is conducted on individuals observed in the 1990 census as dependent children, which is where the link with parents' information can be made. Individuals with one or two parents who were always either farmers or self-employed cannot be included in the analysis because these professional categories are not covered by employer-employee data.

First-generation income. Child income is observed in tax data and includes labor earnings (wages and self-employment income), unemployment benefits, retirement, and alimony.

Second-generation income. Unless individuals' parents were also born during one of the first four days of October, no data source in the EDP documents the earnings of EDP individuals' parents. Following Kenedi & Sirugue (2023), we rely on the fact that the 1990 census includes predictors of parents' earnings to estimate a prediction model on individuals from the parents' generation who were born during the first four days of October. We predict separately father earnings and mother earnings from the employer-employee data based on their 1990 census information: birth cohort, birth nationality, place of birth, education level, detailed occupation, household structure, and the average socio-economic characteristics in their municipality of residence. Figure C.5.24 shows the average individual income ventiles predicted out of sample against the observed individual income ventiles, for native and immigrant parents separately. For each parent, we average the yearly income observations in the employer-employee data instead of summing all income observations because missing observations can either reflect that the individual has no labor income or has a profession that is not covered by the employer-employee data. Also, given that household structure is observed only in 1990, summing the income of both par-

ents would disproportionately affect single parents. Thus, we use the average predicted income of parent(s) as parents' income.

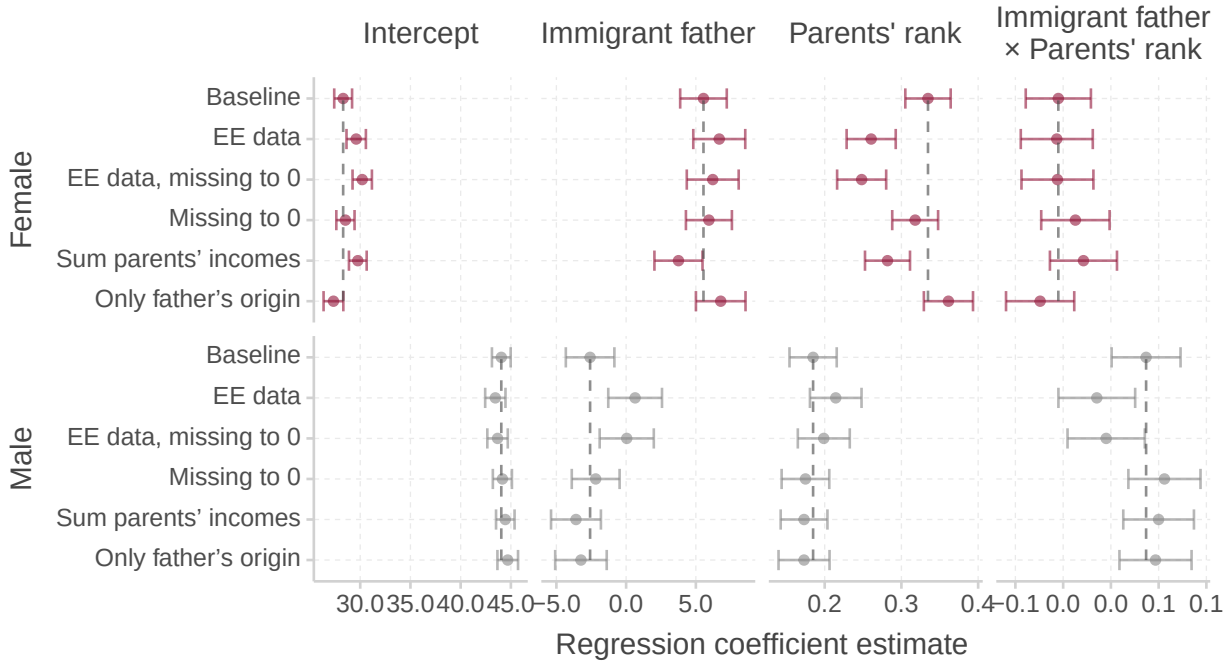
Figure C.5.24: Parents' income rank predictions



Immigration status. As in the cross-sectional analysis, following the Danish case, immigration status is based on country of birth. This implies that individuals born with French citizenship in the French colonies are considered foreign-born. If the father was not part of the household in 1990, his place of birth is not observed. To avoid dropping children of single mothers, in such cases ($\approx 10\%$) we use mothers' place of birth instead of fathers' place of birth to determine immigration status.

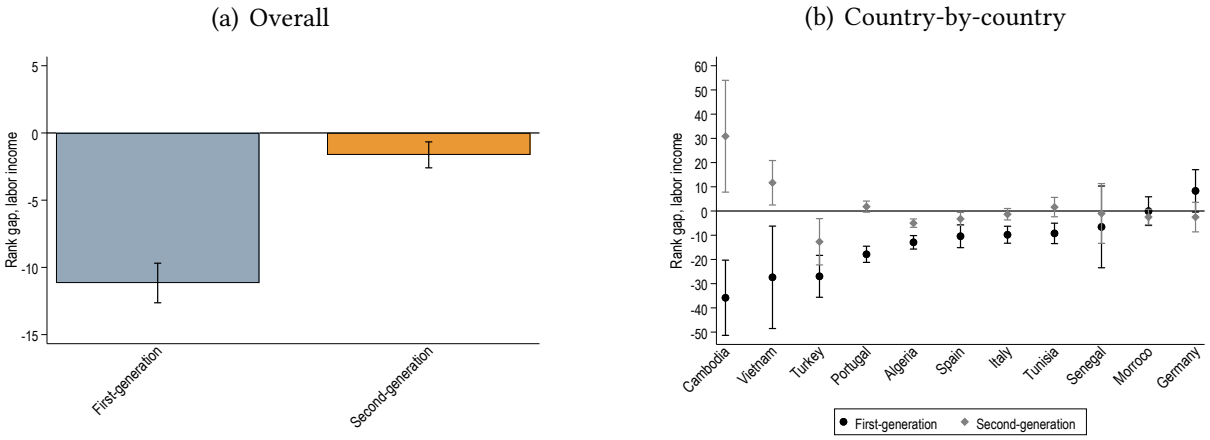
Figure C.5.25 shows the robustness of each coefficient from the baseline intergenerational mobility regression to variations in the definition of income and immigration status.

Figure C.5.25: Robustness to deviations from baseline variable definition choices



C.5.2 Cross-sectional results

Figure C.5.26: Cross-sectional results using earnings: France, 1980-2010 cohort



Notes: This figure plots the estimated coefficients from Equation 1 from Abramitzky et al. (2021) for the earnings of fathers and sons in 1980 and 2010 respectively. We use measures of earnings for both generations. Panel a) includes a non-French dummy rather than country-of-origin dummies. Immigration status is determined by father's country of birth. Income ranks are determined within cohorts. Sample includes men aged 30-50. 95%-confidence interval indicated.

Table C.5.20: Cross-sectional data: Summary statistics, France

Fathers: 1980 cohort

	Immigrants	French-born	Diff.	Std. Error
Age	47.677	46.987	-0.691***	0.155
Rank gap, earnings	40.248	51.406	11.159***	0.751
ln(earnings)	9.794	9.986	0.192***	0.021
Share of population	0.126	0.874		
N	1667.000	11561.000		

Sons: 2010 cohort

	Immigrant father	French-born father	Diff.	Std. Error
Age	38.831	40.193	1.362***	0.100
Rank gap, earnings	48.541	50.148	1.607***	0.494
ln(earnings)	9.869	9.963	0.095***	0.015
Share of population	0.092	0.908		
N	3769.000	37210.000		

Notes: This table reports summary statistics of the cross-sectional sample, including sons and fathers in 1980 and 2010 respectively. Immigration status is determined by father's country of birth. Income ranks are determined within cohorts. These computations are made on employer-employee data that only contains earnings of wage earners, hence the absence of row on total income and on non-positive earnings/income. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

C.5.3 Main results

C.5.3.1 Summary statistics

Table C.5.21: Linked data: Summary statistics, France

Sons

	Immigrant father	French-born father	Diff.	Std. Error
Child age	33.981	34.025	0.044	0.030
Child income rank	51.055	57.130	6.075***	0.548
Child labour force part.	0.928	0.955	0.027***	0.004
Mother's age at child birth	27.270	26.307	-0.963***	0.088
Father's age at child birth	32.174	28.585	-3.589***	0.107
Parental income rank	34.337	53.959	19.622***	0.536
Child share of population	0.153	0.847		
N	3816.000	21112.000		

Daughters

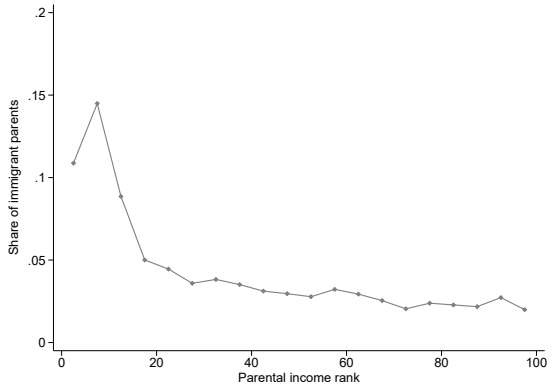
	Immigrant father	French-born father	Diff.	Std. Error
Child age	34.002	34.027	0.025	0.030
Child income rank	43.066	45.243	2.177***	0.537
Child labour force part.	0.876	0.910	0.034***	0.005
Mother's age at child birth	27.109	26.195	-0.914***	0.088
Father's age at child birth	31.958	28.542	-3.416***	0.106
Parental income rank	35.147	53.391	18.244***	0.540
Child share of population	0.152	0.848		
N	3666.000	20498.000		

Notes: This table reports summary statistics of the estimation sample. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child earnings measured in 2014-2015, and parental earnings 1994-2000. French data does not include wealth variables. Child age is measured in 2014. Income ranks, 0-100, determined within cohorts. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

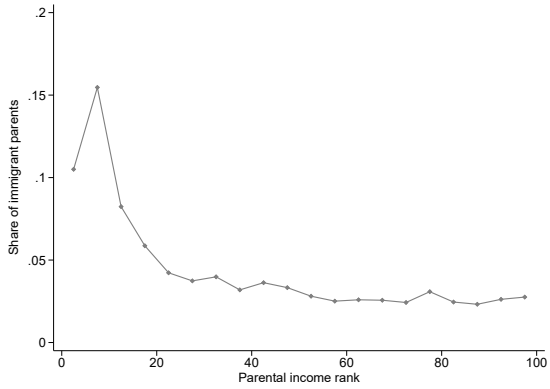
C.5.3.2 Parental income distribution

Figure C.5.27: Linked data: France, share of total number of children with immigrant parents

(a) Sons



(b) Daughters

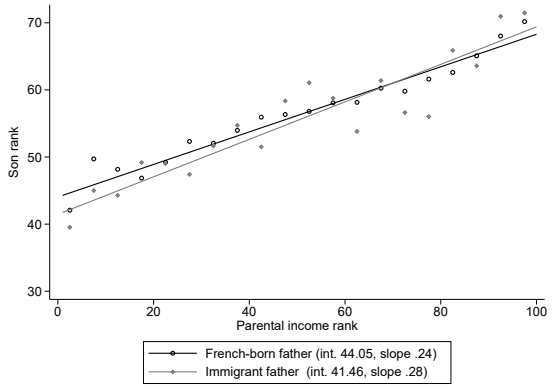


Notes: This figure shows the share of children of immigrant parents in each ventile out of the total number of children with immigrant parents. The numerator is the number of children of immigrants within each ventile. The denominator is the total number of children with immigrant parents (across all ventiles). Children born in 1978-1983. Immigration status is determined by father's country of birth. Parental income measured in 1994-2000. Income ranks, 0-100, determined within child cohorts.

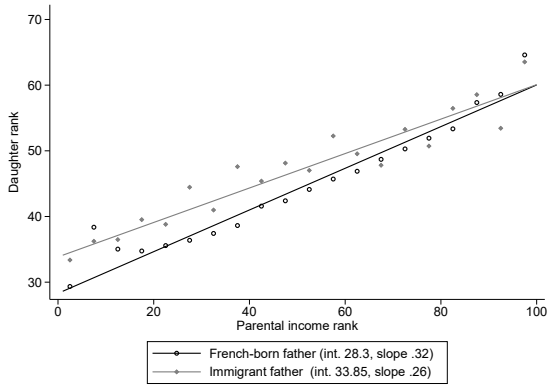
C.5.3.3 Rank-rank relationship

Figure C.5.28: Linked data: Intergenerational mobility, France

(a) France, sons



(b) France, daughters



Notes: This figure plots estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts.

Table C.5.22: Linked data: Intergenerational mobility estimates, France

VARIABLES	(1) Sons	(2) Daughters
Immigrant father = 1	-2.583***	5.547***
	(0.920)	(0.892)
Parents' rank	0.242***	0.317***
	(0.00795)	(0.00756)
Immigrant father # rank	0.0369*	-0.0550***
	(0.0196)	(0.0192)
Constant	44.05***	28.30***
	(0.466)	(0.437)
Observations	19,535	19,373
R-squared	0.065	0.096

Notes: This table reports estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

C.5.3.4 Oaxaca-Blinder decomposition

Table C.5.23: Oaxaca-Blinder decompositions, child income rank, France

	(1) Sons: pooled	(2) Sons: no immi. ref.	(3) Sons: immi. ref.	(4) Daughters: pooled	(5) Daughters: no immi. ref.	(6) Daughters: immi. ref.
Immigrant father	51.05***	51.05***	51.05***	43.07***	43.07***	43.07***
	(0.530)	(0.531)	(0.531)	(0.522)	(0.522)	(0.522)
No immigrant father	57.13***	57.13***	57.13***	45.24***	45.24***	45.24***
	(0.221)	(0.221)	(0.221)	(0.216)	(0.216)	(0.216)
Difference	−6.075***	−6.075***	−6.075***	−2.177***	−2.177***	−2.177***
	(0.575)	(0.575)	(0.575)	(0.565)	(0.565)	(0.565)
Total explained	−4.889***	−4.758***	−5.481***	−5.601***	−5.789***	−4.785***
	(0.198)	(0.206)	(0.384)	(0.215)	(0.226)	(0.354)
Total unexplained	−1.186**	−1.317**	−0.594	3.424***	3.612***	2.608***
	(0.570)	(0.572)	(0.662)	(0.559)	(0.558)	(0.646)
- Parental income rank	1.398*	1.266*	1.990*	−2.123***	−1.935***	−2.939***
	(0.743)	(0.674)	(1.058)	(0.740)	(0.675)	(1.025)
- Constant	−2.583***	−2.583***	−2.583***	5.547***	5.547***	5.547***
	(0.920)	(0.920)	(0.920)	(0.892)	(0.893)	(0.893)
Observations	19,535	19,535	19,535	19,373	19,373	19,373

Notes: This table reports a Oaxaca-Blinder decompositions of the gap in income ranks between children of immigrants and children of locals (Specification 4). We follow the approach and terminology of Fortin et al. (2011), and estimate the fraction of the income rank gap that can be "explained" by differences in parental income distributions, and the fraction that is "unexplained" by parental income distribution differences, and rather due to differences in intergenerational mobility parameters. We report versions using pooled estimated coefficients and each of the groups' coefficients as reference levels. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

C.5.4 Mechanisms

C.5.4.1 Various sets of controls

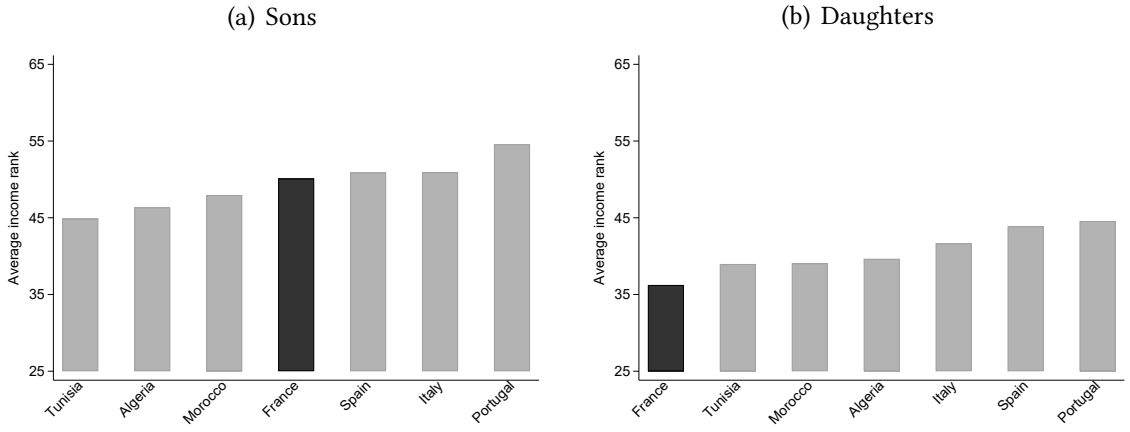
Table C.5.24: Linked data: Intergenerational mobility estimates with various sets of controls, France

VARIABLES	(1) Sons	(2) Sons	(3) Sons	(4) Sons	(5) Sons	(6) Sons	(7) Daughters	(8) Daughters	(9) Daughters	(10) Daughters	(11) Daughters	(12) Daughters	(13) Daughters
Immigrant father = 1	-2.583***	-2.908***	-2.831***	-1.959**	-2.403**	-2.367**	5.547***	4.576***	4.414***	5.973***	4.912***	4.729***	4.729***
	(0.920)	(0.939)	(0.947)	(0.930)	(0.950)	(0.958)	(0.892)	(0.908)	(0.914)	(0.901)	(0.918)	(0.925)	(0.925)
Parents' rank	0.242***	0.236***	0.234***	0.234***	0.225***	0.223***	0.317***	0.301***	0.300***	0.271***	0.256***	0.255***	0.255***
	(0.00795)	(0.00820)	(0.00831)	(0.0106)	(0.0109)	(0.0110)	(0.00756)	(0.00779)	(0.00786)	(0.0104)	(0.0106)	(0.0107)	(0.0107)
Immigrant father # rank	0.0369*	0.0399**	0.0408**	0.0293	0.0330*	0.0339*	-0.0550***	-0.0526***	-0.0508***	-0.0616***	-0.0569***	-0.0550***	-0.0550***
	(0.0196)	(0.0196)	(0.0197)	(0.0197)	(0.0197)	(0.0198)	(0.0192)	(0.0192)	(0.0192)	(0.0193)	(0.0193)	(0.0194)	(0.0194)
Constant	44.05***	45.31***	48.12***	54.86***	56.98***	59.32***	28.30***	32.90***	31.30***	34.27***	39.08***	37.30***	37.30***
	(0.466)	(0.754)	(2.332)	(3.068)	(3.155)	(3.888)	(0.437)	(0.718)	(2.731)	(3.225)	(3.288)	(4.257)	(4.257)
Observations	19,535	19,535	19,535	19,535	19,535	19,535	19,373	19,373	19,373	19,373	19,373	19,373	19,373
R-squared	0.065	0.068	0.072	0.082	0.085	0.088	0.096	0.104	0.108	0.114	0.121	0.124	0.124
Parental region	0	1	0	0	1	0	0	1	0	0	1	0	0
Parental municipality	0	0	1	0	0	1	0	0	1	0	0	1	1
Parental industry, 100 grp.	0	0	0	1	1	1	0	0	0	1	1	1	1

Notes: This table reports estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts. Other parental characteristics are all determined in 1990 and included as fixed effects. We have 27 regions and 95 municipalities (we use the 95 French departments as municipalities to be consistent with the Danish geography). Parental industry can only be aggregated into 100 groups. French data does not include wealth variables. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

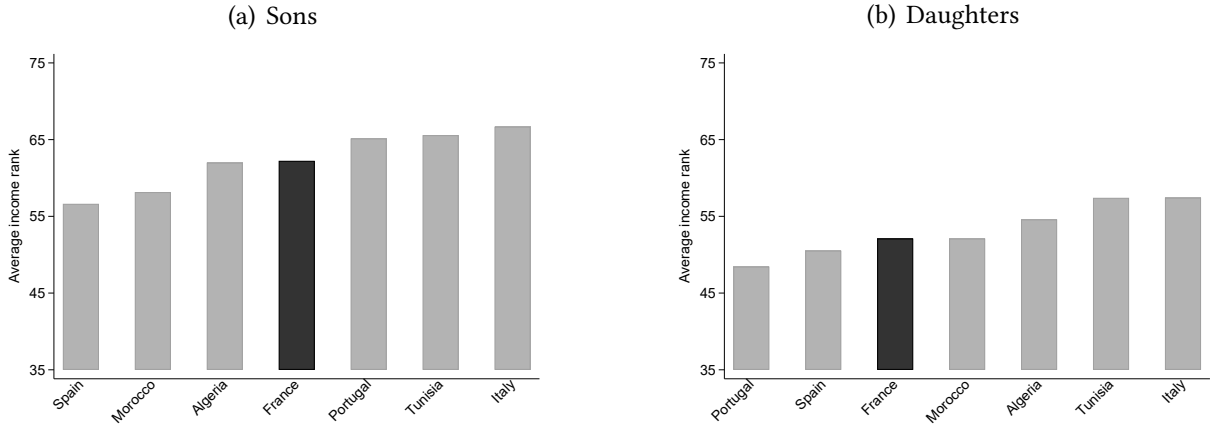
C.5.4.2 Heterogeneity across sending countries

Figure C.5.29: Average income at 25th percentile: France



Notes: This figure plots the predicted child income rank if parental income rank equals 25 from a paternal country of origin-level estimation of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts.

Figure C.5.30: Average income at 75th percentile: France



Notes: This figure plots the predicted child income rank if parental income rank equals 75 from a paternal country of origin-level estimation of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts.

C.5.4.3 Employment

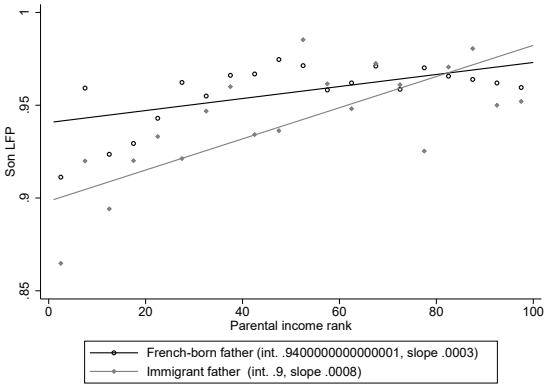
Table C.5.25: Linked data: Intergenerational mobility estimates, employment, France

VARIABLES	(1) Sons	(2) Daughters
Immigrant father = 1	-0.0424***	-0.0232**
	(0.00856)	(0.0111)
Parents' rank	0.000324***	0.00141***
	(5.95e-05)	(7.73e-05)
Immigrant father # rank	0.000516***	0.000199
	(0.000154)	(0.000196)
Constant	0.941***	0.841***
	(0.00381)	(0.00530)
Observations	18,360	18,705
R-squared	0.008	0.026

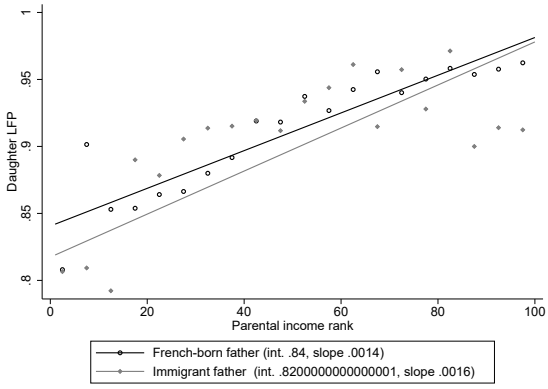
Notes: This table reports estimates of Specification 1, regressing employment of sons/daughters on income ranks of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child employment measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Figure C.5.31: Linked data: Intergenerational mobility, employment, France

(a) France, sons



(b) France, daughters



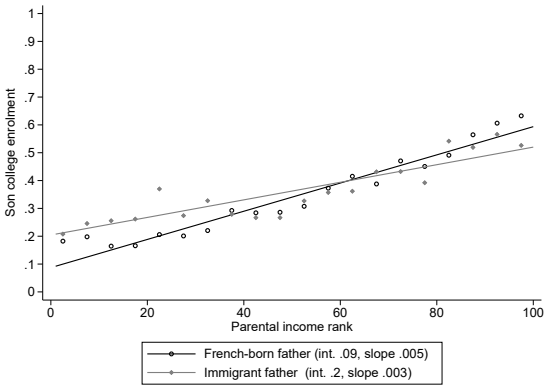
Notes: This figure plots estimates of Specification 1, regressing employment of sons/daughters on income ranks of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child employment measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts.

C.5.4.4 Educational mobility

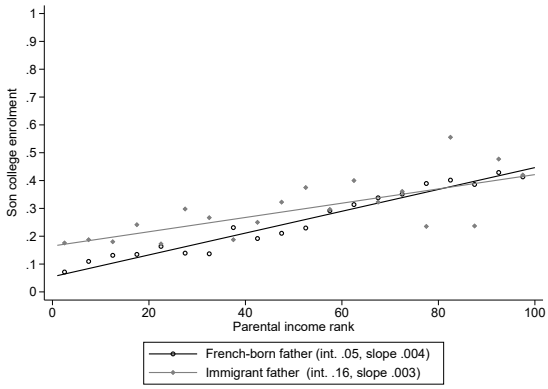
College enrolment

Figure C.5.32: Linked data: College graduation, France, comparison across cohorts

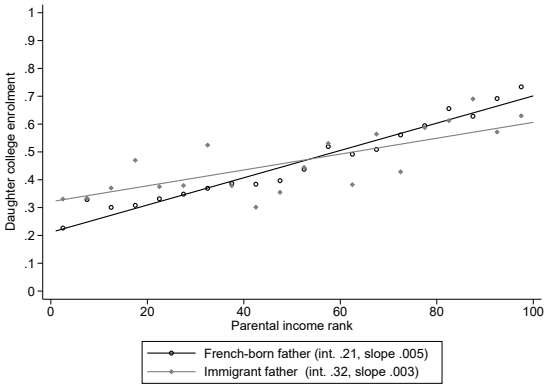
(a) France, sons, born 1986-1988



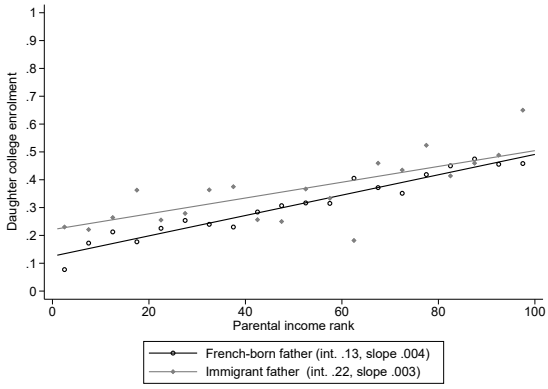
(b) France, sons, born 1992-1994



(c) France, daughters, born 1986-1988



(d) France, daughters, born 1992-1994



Notes: This figure plots estimates of Specification 1, regressing an indicator of college graduation on the income rank of parents. We use graduation as a proxy for enrolment because the structure of French Census Surveys does not allow us to observe enrolment at a given age. Children born in 1986-1988 and 1992-1994 respectively. Immigration status is determined by father's country of birth. Parental income measured in 1997-2003 and 2003-2009 respectively. Parental income ranks, 0-100, are determined within cohorts.

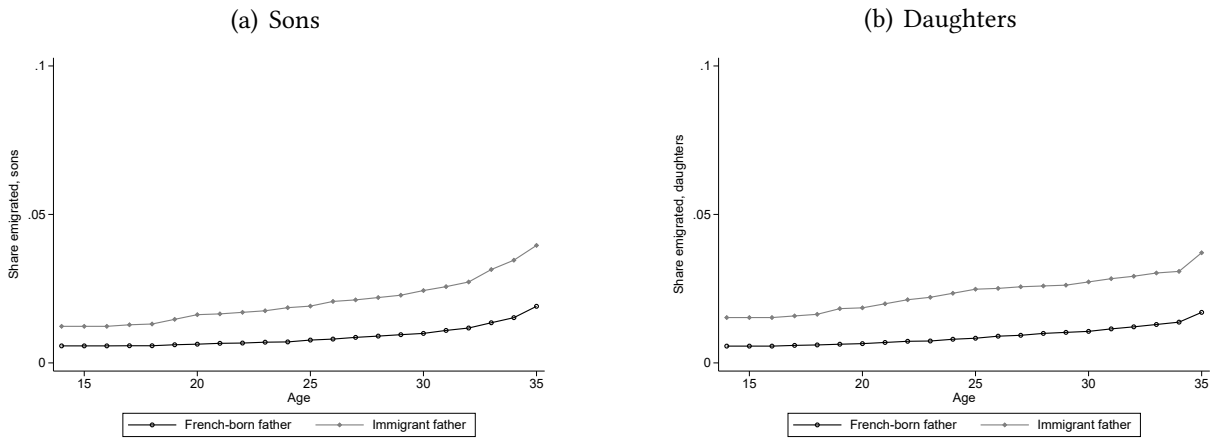
Primary school grades

School grades are not available in French linked data.

C.5.5 Robustness

C.5.5.1 Emigration

Figure C.5.33: France, cumulative share of emigrated children

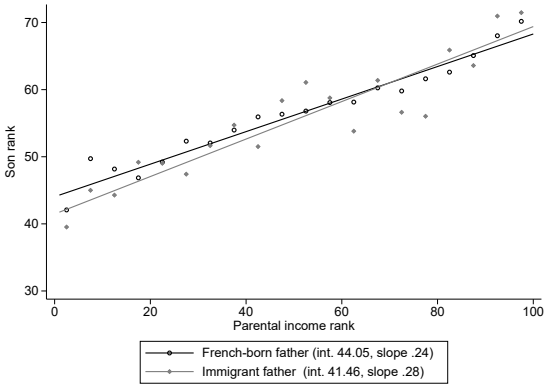


Notes: This figure shows the share of children who have emigrated (i.e. no longer living in France) across age groups. We consider all children who were part of the French population at age 14 and calculate the share of emigrated children as they age. If children move back to France after a period abroad, they are no longer counted as emigrants. Children born in 1978-1983. Immigration status is determined by father's country of birth.

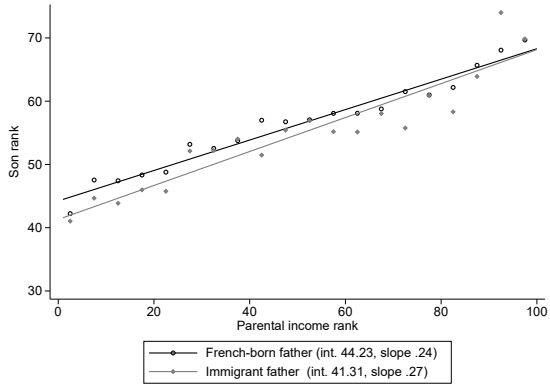
C.5.5.2 Additional years of parental income data

Figure C.5.34: Intergenerational mobility: France by number of years of parental income data

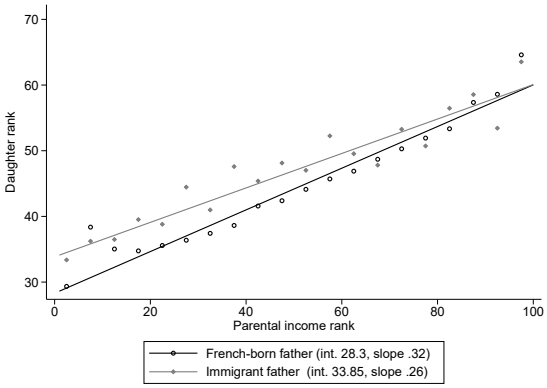
(a) Sons, parental income 1994-2000



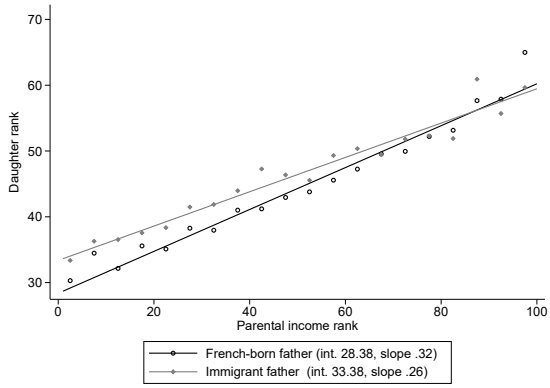
(b) Sons, parental income 1980-2000



(c) Daughters, parental income 1994-2000



(d) Daughters, parental income 1980-2000



Notes: This figure plots estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000 and 1980-2000 respectively. Income ranks, 0-100, determined within cohorts.

Table C.5.26: Intergenerational mobility estimates: France, parental income 1980-2000

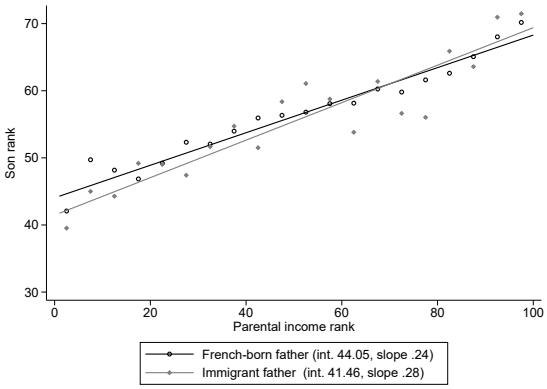
VARIABLES	(1) Sons	(2) Daughters
Immigrant father = 1	-2.927***	4.995***
	(0.938)	(0.910)
Parents' rank	0.241***	0.318***
	(0.00783)	(0.00744)
Immigrant father # rank	0.0278	-0.0575***
	(0.0197)	(0.0192)
Constant	44.23***	28.38***
	(0.456)	(0.426)
Observations	19,535	19,373
R-squared	0.065	0.098

Notes: This table reports estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1980-2000 respectively. Income ranks, 0-100, determined within cohorts. 95%-confidence interval indicated. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

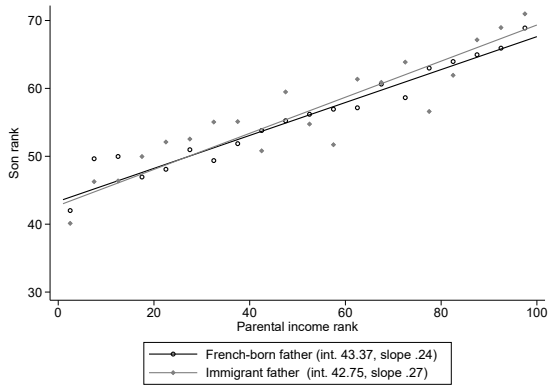
C.5.5.3 More recent birth cohorts, income rank

Figure C.5.35: Linked data: Intergenerational mobility, France, comparison across cohorts

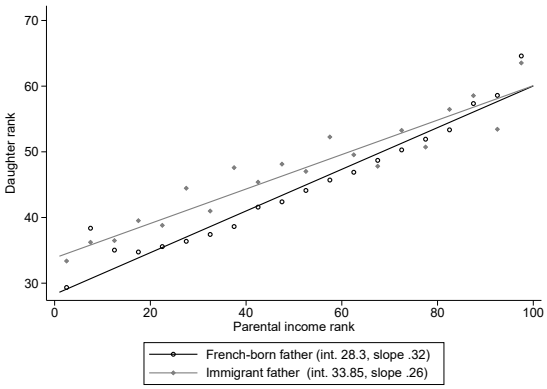
(a) France, sons, born 1978-1983



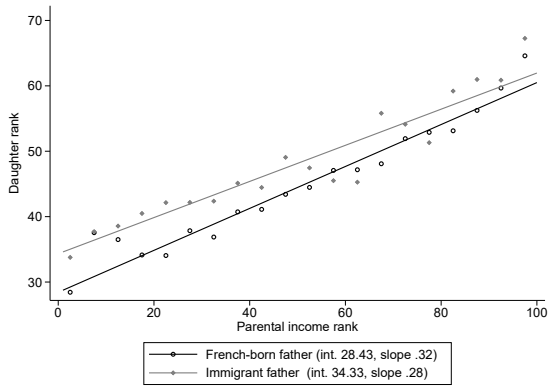
(b) France, sons, born 1982-1987



(c) France, daughters, born 1978-1983



(d) France, daughters, born 1982-1987



Notes: This figure plots estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983 and 1982-1987 respectively. Immigration status is determined by father's country of birth. Child income measured in 2014-2015 and 2018-2019, and parental income 1994-2000 and 1998-2004 respectively. Income ranks, 0-100, determined within cohorts.

Table C.5.27: Linked data: Intergenerational mobility estimates, France, comparing cohorts

	(1)	(2)	(3)	(4)
	Sons	Daughters	Sons	Daughters
VARIABLES	1978-1983	1978-1983	1982-1987	1982-1987
Immigrant father = 1	-2.583***	5.547***	-0.620	5.901***
	(0.920)	(0.892)	(0.938)	(0.872)
Parents' rank	0.242***	0.317***	0.243***	0.321***
	(0.00795)	(0.00756)	(0.00814)	(0.00755)
Immigrant father # rank	0.0369*	-0.0550***	0.0233	-0.0444**
	(0.0196)	(0.0192)	(0.0208)	(0.0197)
Constant	44.05***	28.30***	43.37***	28.43***
	(0.466)	(0.437)	(0.481)	(0.440)
Observations	19,535	19,373	19,551	19,418
R-squared	0.065	0.096	0.060	0.099

Notes: This table reports estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Immigration status is determined by father's country of birth. Income ranks, 0-100, determined within cohorts. Columns (1) & (2): Children born in 1978-1983, child income measured in 2014-2015, and parental income 1994-2000. Columns (3) & (4): Children born in 1982-1987, child income measured in 2018-2019, and parental income 1998-2004. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

C.6 Country-specific details & results: Germany

C.6.1 Data details and deviations

We use two different data sets for the cross-sectional and linked analysis since a linked administrative dataset is not available for Germany. The Micro-census is used to construct the cross-sectional analysis and the German Socio-economic Panel (GSOEP) is used to create a linked parent-child dataset.

Microcensus. The microcensus is the biggest annual household survey in Germany. Since 1957, it has been conducted yearly by the federal and state statistical offices. Around 810,000 people in 370,000 private households are interviewed, representing around one percent of the German population. There is demographic information on their nationality and immigration history, as well as information about their incomes as well as working and living conditions.

GSOEP. The German Socio-Economic Panel is a representative longitudinal survey of private households starting in 1984. The data provides information on every member of the household and allows linking information for a subset of parents and children. Topics like migration background, education, employment, and earnings are covered in the survey. We use all available data, ranging from 1984 to 2020.

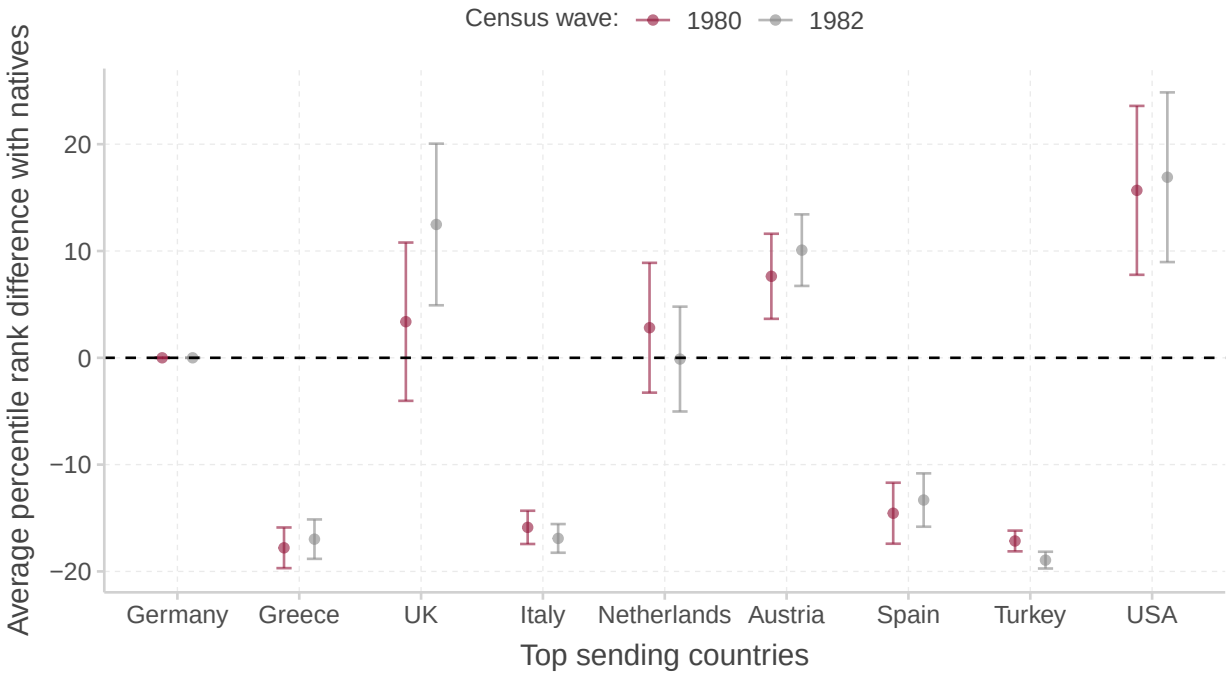
Data access. For the Microcensus, we use standardized versions of the full datasets (scientific use files) generated by the Research Data Centers. This data can only be used by researchers who are employed by a research institution that is registered and located in Germany and has been granted data access. A fee is charged to the user for each survey year accessed. Further information on access can be found on the official website: https://www.forschungsdatenzentrum.de/en/access. The GSOEP data can be accessed by individuals affiliated with a research institution after submitting an application and signing a contract with DIW Berlin. Further information on access can be found on the following website: https://www.diw.de/en/diw_01.c.601584.en/data_access.html#c_diw_01.c.741351.de

C.6.1.1 Cross-sectional data

First-generation sample. We use the 1982 Mikrozensus to identify fathers between the age of 30-50 in Germany, either born there or in a top sending country. This wave is used instead of the 1980 wave as the 1980 wave only has birth information on country groupings and very few big sending countries are ungrouped. We compare the income-rank gaps between immigrants and natives for some of the big countries which we can identify in both Mikrozensuses in Figure C.6.1.

Immigration status is based on the country of origin. The income sources in the Mikrozensus are intervals of the net total income of each household member. We take the midpoint of the interval as the income measure, exchange it from the German currency at the time (Deutsche Mark) and deflate it to arrive at the final measure. Following the same specification as for the Netherlands, we assign an income of zero to missing values, but we also compare this approach to coding only 'No income' as zero. The differences are not large so we use the coding of all missing values as zeros in our main specification. The comparison between the two approaches is shown in Figure C.6.2

Figure C.6.1: Sample waves comparison, Germany

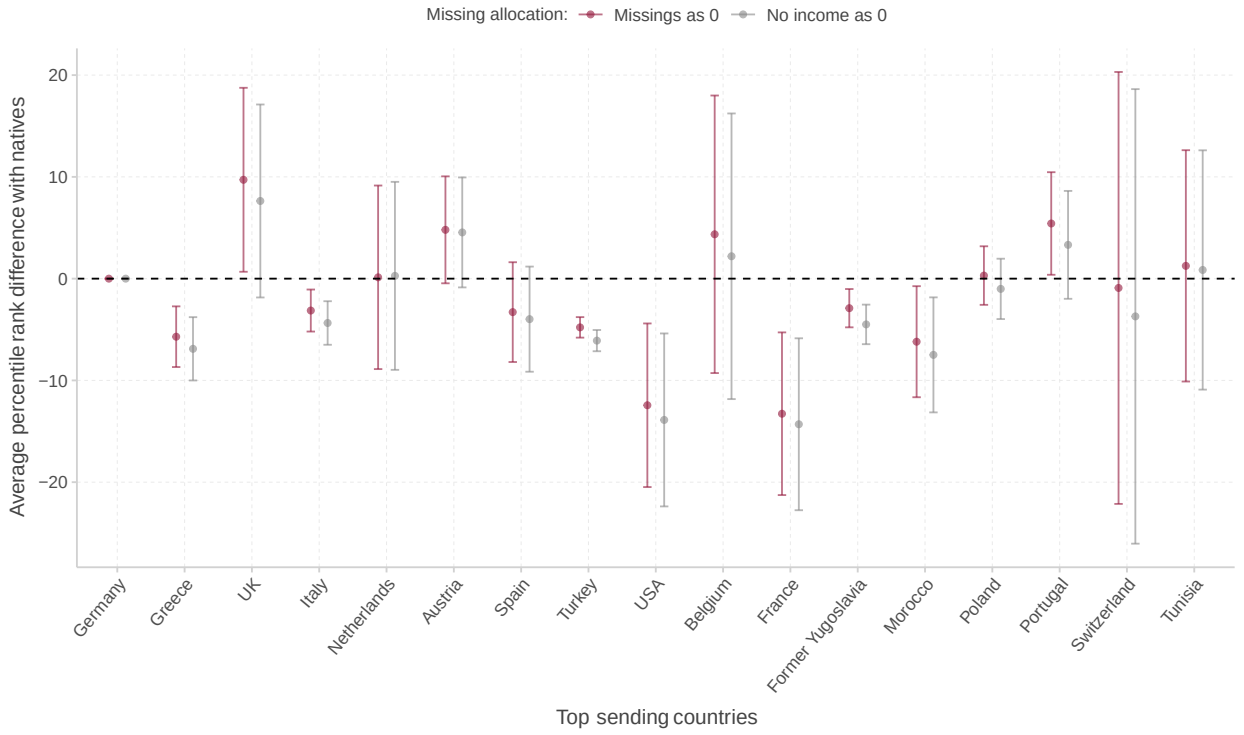


Second-generation sample. We merge the Mikrozensus from 2009 and 2013 to create the sample of sons aged 30 to 50 in Germany. The children are all born in Germany, but their fathers could be born in Germany or one of the top sending countries. The income is retrieved similarly as for the first-generation, but the measures for sons are in euros so no exchange rate is applied, only deflation. We check again whether the results are sensitive to coding missing values as zeros or only coding 'no income' as zero. The results are shown in Figure C.6.3

C.6.1.2 Linked data

Since the German linked analysis is based on a survey dataset, the number of observations in all years is quite low. For that reason, we do not make a year restriction in the data and instead include all observations from the SOEP dataset under the age of 65. We drop missing income values as it is not certain that it means these people had no income. For both parents and children we use the measure of household post-governmental income, which includes the household labor income and government transfers and excludes taxes (the variable 'i11102' in the dataset). The panel dataset intends to follow people yearly, but they may be observed at different points in time, have gaps in their responses for some years, or drop out of the survey for many reasons. This is another reason we do not restrict to certain years, but rather consider all the years in which the individual has reported their income (other than reportings over the age 65). For children, only observations over 30 years old are taken into account. We note that the selection of immigrant households into the German Socio-Economic Panel is more positive than in the full cross-section (compare the 14.7 rank point gap between immigrant fathers and local-born fathers in Table C.6.4

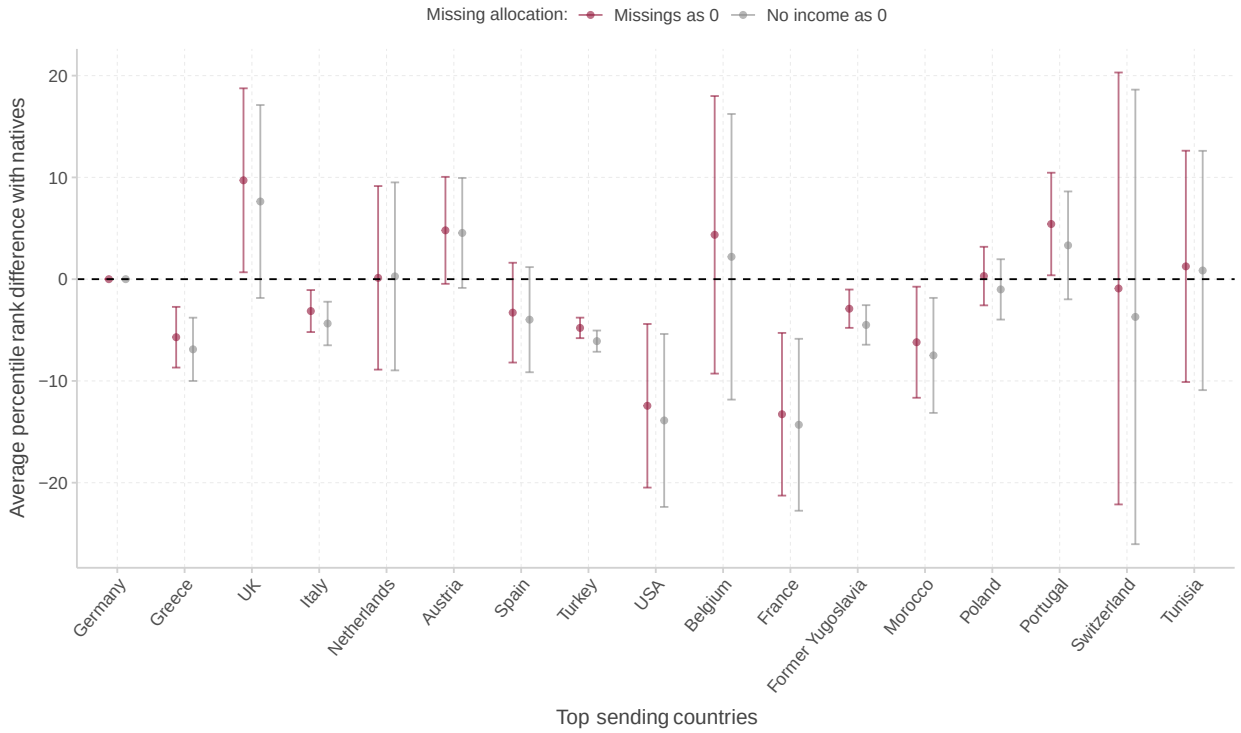
Figure C.6.2: Different approaches to dealing with missing values, Germany (1982 Mikrozensus)



to the 6.5 rank point gap in Table C.6.2.

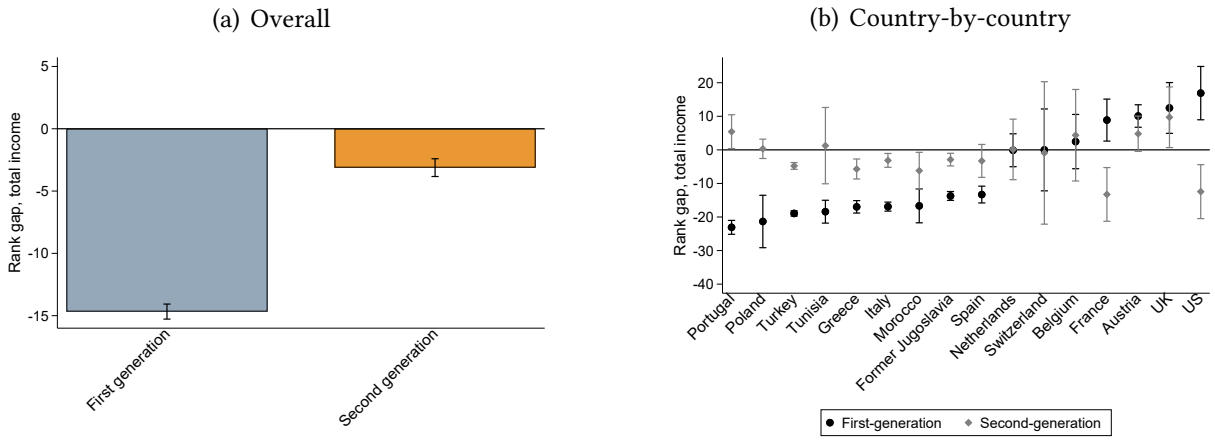
The dataset contains two variables that identify the parental IDs if the parents are also observed in the dataset (namely the variables fnr and mnr). As parents and children are only linked when a permission has been obtained, we do not observe too many direct links which leaves us with a limited dataset. The father's and children's country of origin is observed in the data (variable corigin) and used to determine the immigration status.

Figure C.6.3: Different approaches to dealing with missing values, Germany (2009/13 Mikrozensus)



C.6.2 Cross-sectional results

Figure C.6.4: Cross-sectional results using earnings: Germany, 1982-2009/13 cohort



Notes: This figure plots the estimated coefficients from Equation 1 from Abramitzky et al. (2021) for the earnings of fathers and sons in 1982 and 2009 plus 2013 respectively. We use measures of earnings for both generations. Panel a) includes a non-German dummy rather than country-of-origin dummies. Immigration status is determined by father's country of origin. Income ranks are determined within cohorts. Sample includes men aged 30-50. 95%-confidence interval indicated.

Table C.6.1: Cross-sectional data: Summary statistics, Germany

Fathers: 1982 cohort

	Immigrants	German-born	Diff.	Std. Error
Age	39.209	40.579	1.370***	0.075
Rank gap, total income	36.732	51.405	14.674***	0.369
ln(total income)	8.096	8.307	0.211***	0.006
Share of population	0.096	0.904		
N	6555	61885		

Sons: 2009/2013 cohort

	Immigrants	German-born	Diff.	Std. Error
Age	38.448	41.243	2.911***	0.079
Rank gap, total income	46.181	49.731	3.120***	0.387
ln(total income)	7.505	7.636	0.124***	0.009
Share of population	0.044	0.956		
N	5798	124975		

Notes: This table reports summary statistics of the cross-sectional sample, including sons and fathers in 1982 and 2009/13 respectively. This is cross-sectional data, therefore the sons are not necessarily the sons of the fathers observed 30 years earlier due to compositional changes and return migration. Immigration status is determined by father's country of origin. Income ranks are determined within cohorts. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

C.6.3 Main results

C.6.3.1 Summary statistics

Table C.6.2: Linked data: Summary statistics, Germany

Sons

	Immigrant father	German-born father	Diff.	Std. Error
Child age	30.107	30.280	0.173*	0.091
Child income rank	47.603	50.836	3.233	2.186
Child labour force part.	0.920	0.934	0.014	0.015
Mother's age at child birth	27.137	26.662	-0.476	0.401
Father's age at child birth	30.864	29.341	-1.523***	0.425
Parental income rank	45.415	51.900	6.484***	2.158
Child share of population	0.117	0.883		
N	206	1558		

Daughters

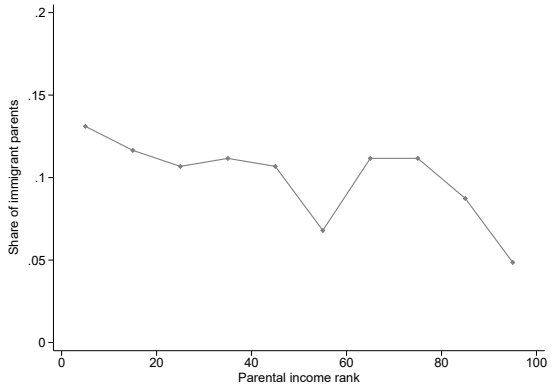
	Immigrant father	German-born father	Diff.	Std. Error
Child age	30.108	30.178	0.070	0.087
Child income rank	47.405	49.731	2.326	2.330
Child labour force part.	0.795	0.856	0.061***	0.022
Mother's age at child birth	26.686	26.472	-0.214	0.414
Father's age at child birth	31.063	29.315	-1.748***	0.461
Parental income rank	43.177	49.377	6.200***	2.352
Child share of population	0.119	0.881		
N	176	1300		

Notes: This table reports summary statistics of the estimation sample. Immigration status is determined by father's country of origin. Due to low numbers of observations (see C.6.1.2), all available data on child income and parental income is used. Income ranks, 0-100, determined within cohorts. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

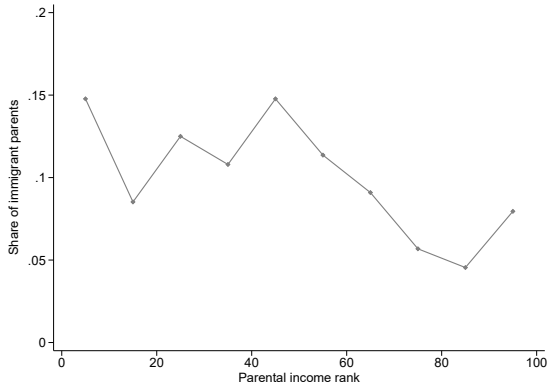
C.6.3.2 Parental income distribution

Figure C.6.5: Linked data: Germany, share of total number of children with immigrants parents

(a) Sons



(b) Daughters

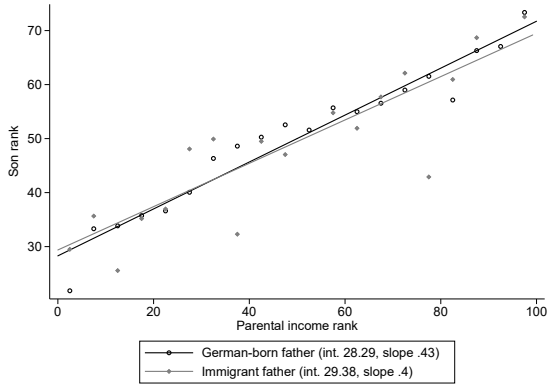


Notes: This figure shows the share of children of immigrant parents in each decile out of the total number of children with immigrant parents. The numerator is the number of children of immigrants within each decile. The denominator is the total number of children with immigrant parents (across all deciles). Immigration status is determined by father's country of origin. Due to low numbers of observations (see C.6.1.2), all available data on child income and parental income is used. Income ranks, 0-100, determined within child cohorts. Due to sample size limitations, we do this graph for deciles instead of ventiles in the German case. The graph for ventiles can be found in the German folder.

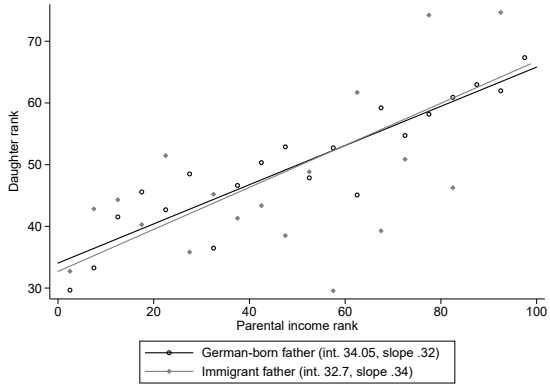
C.6.3.3 Rank-rank relationship

Figure C.6.6: Linked data: Intergenerational mobility, Germany

(a) Germany, sons



(b) Germany, daughters



Notes: This figure plots estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Due to low numbers of observations (see C.6.1.2), all available data on child income and parental income is used. Immigration status is determined by father's country of origin. Income ranks, 0-100, determined within cohorts.

Table C.6.3: Linked data: Intergenerational mobility estimates, Germany

Dependent variable: Child income rank	(1) Sons	(2) Daughters
Immigrant father = 1	1.091	-1.353
	(3.538)	(3.875)
Parents' rank	0.434***	0.318***
	(0.0233)	(0.0257)
Immigrant father # rank	-0.0332	0.0231
	(0.0672)	(0.0776)
Intercept	28.29***	34.05***
	(1.309)	(1.451)
Observations	1,761	1,475
R-squared	0.182	0.105

Notes: This table reports estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Due to low numbers of observations (see C.6.1.2), all available data on child income and parental income is used. Immigration status is determined by father's country of origin. Income ranks, 0-100, determined within cohorts. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

C.6.3.4 Oaxaca-Blinder decomposition

Table C.6.4: Oaxaca-Blinder decompositions, child income rank, Germany

	(1) Sons: pooled	(2) Sons: non-immi. ref.	(3) Sons: . immi. ref	(4) Daughters: pooled	(5) Daughters: non-immi. ref.	(6) Daughters:. immi. ref
Immigrant father	47.60***	47.60***	47.60***	47.41***	47.41***	47.41***
	(2.016)	(2.024)	(2.024)	(2.184)	(2.195)	(2.195)
No immigrant father	50.84***	50.84***	50.84***	49.73***	49.73***	49.73***
	(0.749)	(0.749)	(0.749)	(0.805)	(0.805)	(0.805)
Difference	−3.233	−3.233	−3.233	−2.326	−2.326	−2.326
	(2.151)	(2.158)	(2.158)	(2.328)	(2.338)	(2.338)
Total explained	−2.793***	−2.817***	−2.602***	−1.984***	−1.969***	−2.112**
	(0.917)	(0.926)	(0.938)	(0.721)	(0.718)	(0.879)
Total unexplained	−0.439	−0.416	−0.631	−0.342	−0.357	−0.214
	(1.978)	(1.983)	(2.054)	(2.213)	(2.220)	(2.306)
- Parental income rank	−1.530	−1.507	−1.722	1.011	0.996	1.139
	(3.097)	(3.062)	(3.498)	(3.395)	(3.362)	(3.845)
- Constant	1.091	1.091	1.091	−1.353	−1.353	−1.353
	(3.535)	(3.549)	(3.549)	(3.871)	(3.889)	(3.889)
Observations	1,761	1,761	1,761	1,475	1,475	1,475

Notes: This table reports a Oaxaca-Blinder decompositions of the gap in income ranks between children of immigrants and children of locals (Specification 4). We follow the approach and terminology of Fortin et al. (2011), and estimate the fraction of the income rank gap that can be "explained" by differences in parental income distributions, and the fraction that is "unexplained" by parental income distribution differences, and rather due to differences in intergenerational mobility parameters. We report versions using pooled estimated coefficients and each of the groups' coefficients as reference levels. Due to low numbers of observations (see C.6.1.2), all available data on child income and parental income is used. Immigration status is determined by father's country of origin. Income ranks, 0-100, determined within cohorts. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

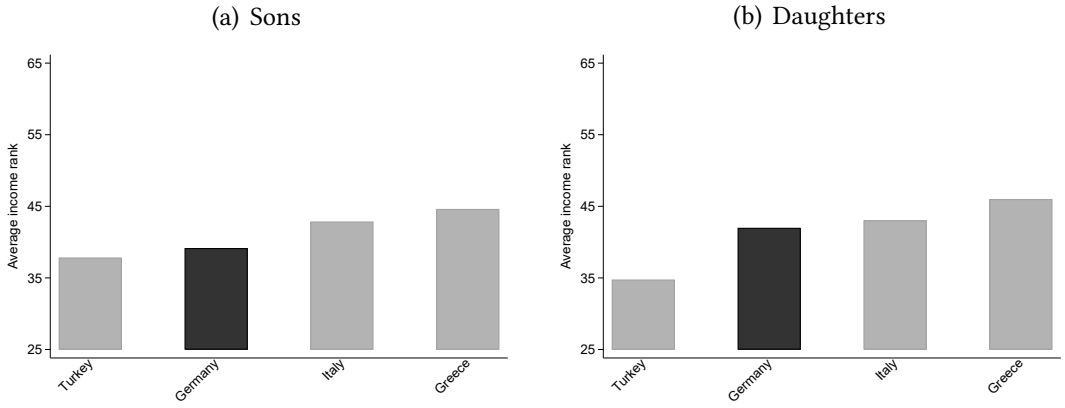
C.6.4 Mechanisms

C.6.4.1 Various sets of controls

This analysis cannot be done in the case of Germany due to the limited number of observations, and limited availability of the controls in the data.

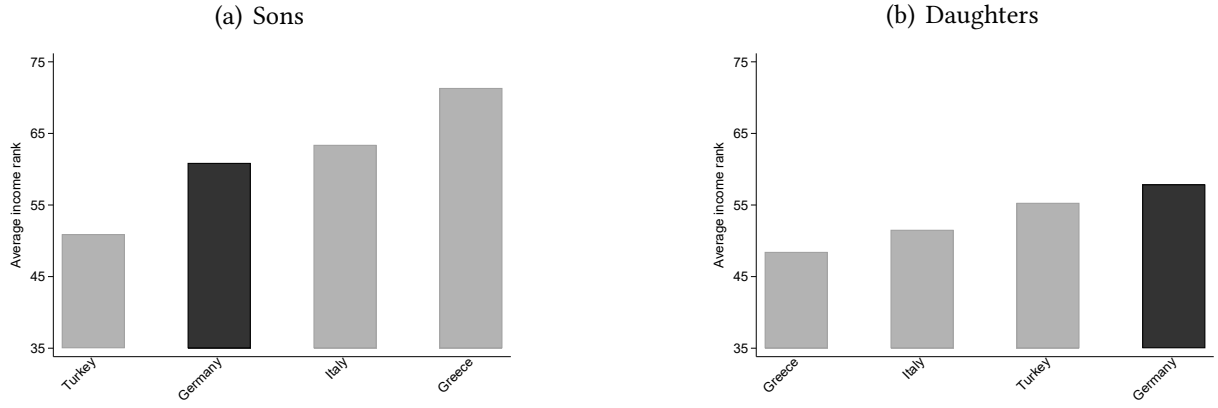
C.6.4.2 Heterogeneity across sending countries

Figure C.6.7: Average income at 25th percentile: Germany



Notes: This figure plots the predicted child income rank if parental income rank equals 25 from a paternal country of origin-level estimation of Specification 1, regressing the income ranks of sons/daughters on that of parents. Due to low numbers of observations (see C.6.1.2), all available data on child income and parental income is used. Immigration status is determined by father's country of origin. Income ranks, 0-100, determined within cohorts. The observation numbers the bins are based on are as follows: Sons - Turkey (48), Germany (1558), Italy (41), Greece (22); Daughters - Turkey (42), Germany (1300), Italy (39), Greece (22).

Figure C.6.8: Average income at 75th percentile: Germany



Notes: This figure plots the predicted child income rank if parental income rank equals 75 from a paternal country of origin-level estimation of Specification 1, regressing the income ranks of sons/daughters on that of parents. Due to low numbers of observations (see C.6.1.2), all available data on child income and parental income is used. Immigration status is determined by father's country of origin. Income ranks, 0-100, determined within cohorts. The observation numbers the bins are based on are as follows: Sons - Turkey (48), Germany (1558), Italy (41), Greece (22); Daughters - Greece (22), Italy (39), Turkey (42), Germany (1300).

C.6.4.3 Employment

We present the results from using child employment as the dependent variable below. Due to the small number of observations, the coefficient estimates for immigrants are quite dispersed. We include the same results using deciles instead of ventiles in the Germany folder.

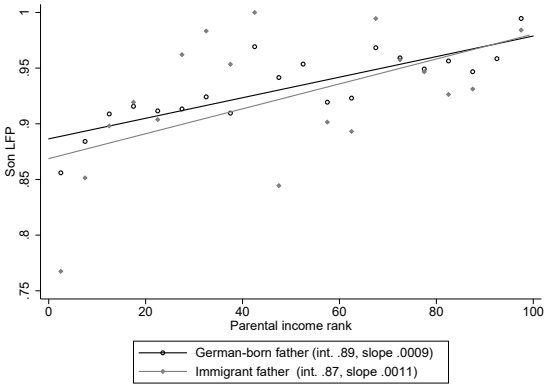
Table C.6.5: Linked data: Intergenerational mobility estimates, employment, Germany

	(1)	(2)
VARIABLES	Sons	Daughters
Immigrant father = 1	-0.0178	-0.00138
	(0.0363)	(0.0462)
Parents' rank	0.000923***	0.000860***
	(0.000188)	(0.000260)
Immigrant father # rank	0.000195	-0.00127
	(0.000575)	(0.000960)
Constant	0.886***	0.814***
	(0.0128)	(0.0155)
Observations	1,761	1,475
R-squared	0.018	0.013

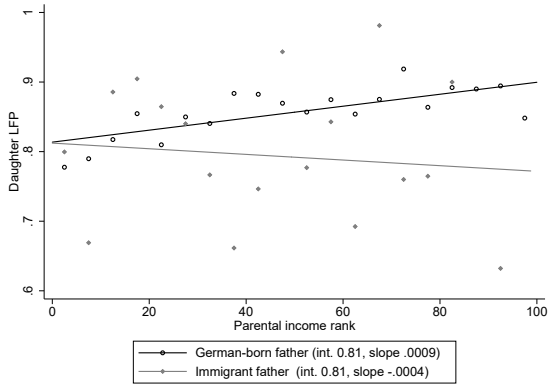
Notes: This table reports estimates of Specification 1, regressing employment of sons/daughters on income ranks of parents. Due to low numbers of observations (see C.6.1.2), all available data on child income and parental income is used. Immigration status is determined by father's country of origin. Income ranks, 0-100, determined within cohorts. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Figure C.6.9: Linked data: Intergenerational mobility, employment, Germany

(a) Germany, sons



(b) Germany, daughters



Notes: This figure plots estimates of Specification 1, regressing employment of sons/daughters on income ranks of parents. Due to low numbers of observations (see C.6.1.2), all available data on child income and parental income is used. Immigration status is determined by father's country of origin. Income ranks, 0-100, determined within cohorts.

C.6.4.4 Educational mobility

College attainment

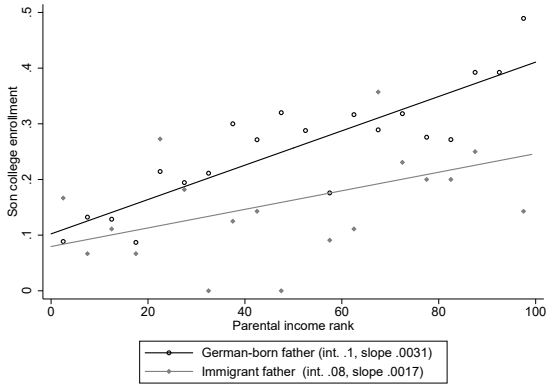
The German linked data only provides a variable to indicate if a person has finished college education or not. Thus, pinpointing the exact time when a person was in college is not possible in the setting. This also leaves out people who have attended college at some point but have not finished it, and only considers children who have attained a college degree. As in previous analyses, all children from all birth cohorts in the dataset are considered due to the small sample size.

In the German data, we define college attainment as individuals who completed a university degree or any degree from an institute of higher education. We perform the analysis similarly to the Danish case with this outcome variable.

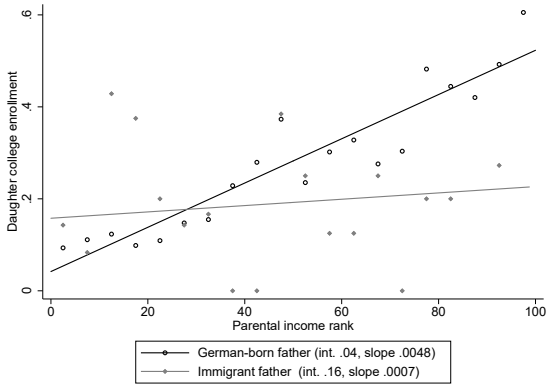
We present the results below. Due to the small number of observations, the coefficient estimates for immigrants are quite dispersed.

Figure C.6.10: Linked data: College degree attainment, Germany

(a) Germany, sons



(b) Germany, daughters



Notes: This figure plots estimates of Specification 1, regressing an indicator of college attainment on the income rank of parents. Immigration status is determined by father's country of origin. Due to low numbers of observations (see C.6.1.2), all available data on child income and parental income is used. Parental income ranks, 0-100, are determined within cohorts.

Primary school grades

Primary school grades are not available in the German data.

C.6.5 Robustness

C.6.5.1 Emigration

Data on children who emigrated is not available in the German case.

C.6.5.2 Additional years of parental income data

The German case considers all available income information for parents due to the limited availability of data. Different people are also observed in different years, so considering all the information increases our final sample. Thus, this additional analysis is not possible in the German case.

C.6.5.3 More recent birth cohorts, income rank

The German case considers all available income information for children due to the limited availability of data. Different people are also observed in different years, so considering all the information increases our final sample. Thus, this additional analysis is not possible in the German case.

C.7 Country-specific details & results: Israel

C.7.1 Data details and deviations

We rely on a number of administrative registers supplied by the Israeli Central Bureau of Statistics to construct the relevant datasets on children and parents.

C.7.1.1 Cross-sectional data

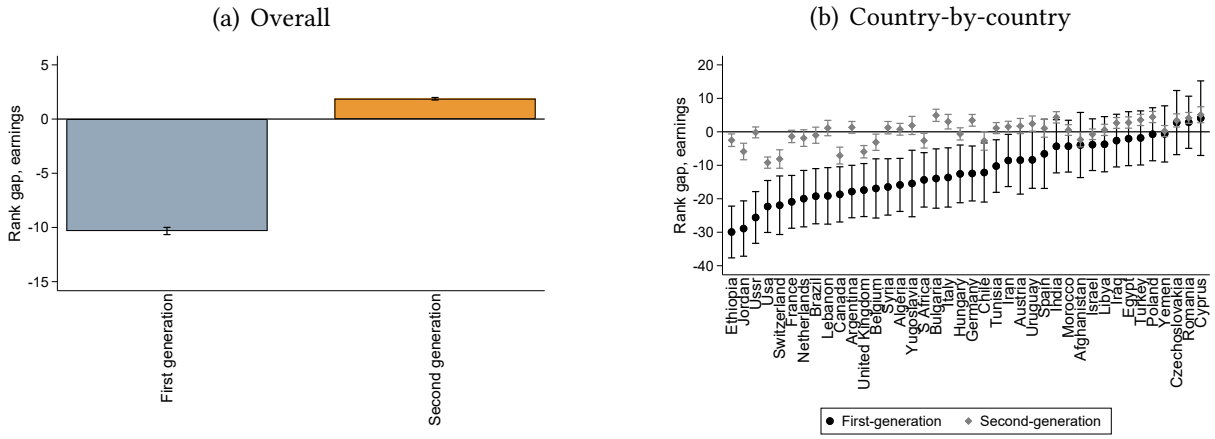
We use the population register for information on sex, birth year, countries of birth, and children. The measure of paternal labor income is from the 1987 income tax data. We use same population register data to identify sons and their age. The measure of sons' labor income is from the 2019 income tax data.

C.7.1.2 Linked data

We use the population register for information on sex, birth year, countries of birth, and parents identifiers. Child labor income from 2014-2015 and parental labor income from 1994-2000 is from the income tax data.

C.7.2 Cross-sectional results

Figure C.7.1: Cross-sectional results using earnings: Israel, 1987-2019 cohort



Notes: This figure plots the estimated coefficients from Equation 1 from Abramitzky et al. (2021) for the earnings of fathers and sons in 1987 and 2019 respectively. We use measures of earnings for both generations. Panel a) includes a non-Israel dummy rather than country-of-origin dummies. Immigration status is determined by father's country of birth. Income ranks are determined within cohorts. Sample includes men aged 30-50. 95%-confidence interval indicated.

Table C.7.1: Cross-sectional data: Summary statistics, Israel

Fathers: 1987 cohort

	Immigrants	Danish-born	Diff.	Std. Error
Age	34.251	32.906	-1.345***	0.021
Rank gap, earnings	43.860	54.188	10.328***	0.170
ln(earnings)	9.412	9.401	-0.010	0.010
Earnings > 0	0.416	0.631	0.215***	0.003
Share of population	0.405	0.595		
N	42193.000	61862.000		

Sons: 2019 cohort

	Immigrant father	Danish-born father	Diff.	Std. Error
Age	41.206	38.493	-2.713***	0.012
Rank gap, earnings	51.136	49.263	-1.873***	0.058
ln(earnings)	11.832	11.594	-0.239***	0.003
Earnings > 0	0.657	0.684	0.027***	0.001
Share of population	0.393	0.607		
N	392121.000	604598.000		

Notes: This table reports summary statistics of the cross-sectional sample, including sons and fathers in 1987 and 2019 respectively. Immigration status is determined by father's country of birth. Income ranks are determined within cohorts. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

C.7.3 Main results

C.7.3.1 Summary statistics

Table C.7.2: Linked data: Summary statistics, Israel

Sons

	Immigrant father	Israeli-born father	Diff.	Std. Error
Child age	34.074	33.762	-0.312***	0.009
Child labour income rank	58.869	54.794	-4.075***	0.129
Child labour force part.	0.955	0.951	-0.005***	0.001
Mother's age at child birth	15.926	16.240	0.314***	0.009
Father's age at child birth	15.925	16.238	0.312***	0.009
Parental labour income rank	53.048	47.133	-5.915***	0.126
Child share of population	0.365	0.635		
N	82236.000	143272.000		

Daughters

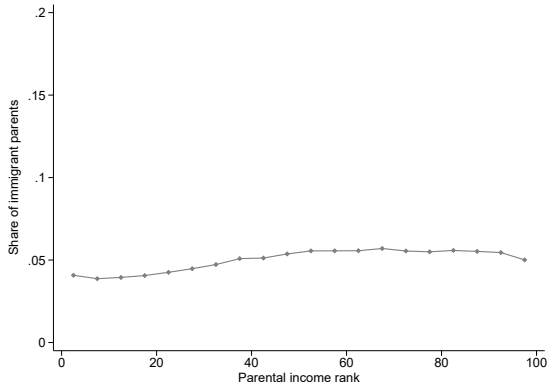
	Immigrant father	Israeli-born father	Diff.	Std. Error
Child age	34.085	33.757	-0.328***	0.009
Child labour income rank	45.099	42.461	-2.638***	0.117
Child labour force part.	0.954	0.943	-0.011***	0.001
Mother's age at child birth	15.915	16.245	0.330***	0.009
Father's age at child birth	15.914	16.242	0.329***	0.009
Parental labour income rank	52.465	49.609	-2.856***	0.126
Child share of population	0.394	0.606		
N	85896.000	132001.000		

Notes: This table reports summary statistics of the estimation sample. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income and wealth 1994-2000. Child age is measured in 2014. Income ranks, 0-100, determined within cohorts. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

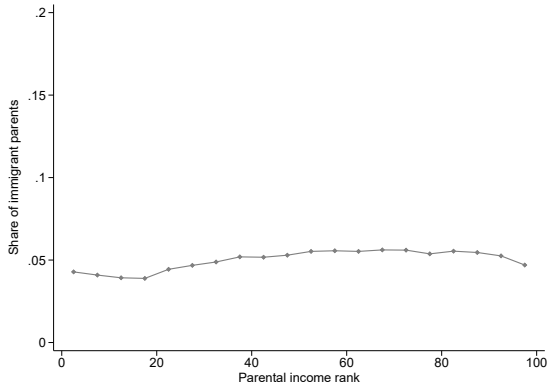
C.7.3.2 Parental income distribution

Figure C.7.2: Linked data: Israel, share of total number of children with immigrants parents

(a) Sons



(b) Daughters

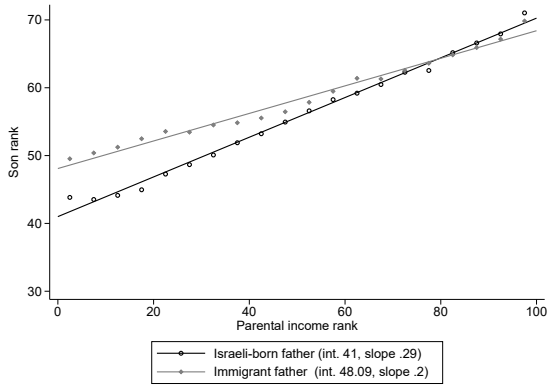


Notes: This figure shows the share of children of immigrant parents in each ventile out of the total number of children with immigrant parents. The numerator is the number of children of immigrants within each ventile. The denominator is the total number of children with immigrant parents (across all ventiles). Children born in 1978-1983. Immigration status is determined by father's country of birth. Parental income measured in 1994-2000. Income ranks, 0-100, determined within child cohorts.

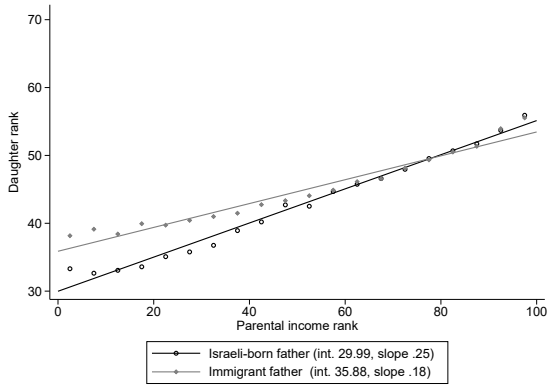
C.7.3.3 Rank-rank relationship

Figure C.7.3: Linked data: Intergenerational mobility, Israel

(a) Israel, sons



(b) Israel, daughters



Notes: This figure plots estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts.

Table C.7.3: Linked data: Intergenerational mobility estimates, Israel

VARIABLES	(1) Sons	(2) Daughters
Immigrant father = 1	7.090***	5.890***
	(0.256)	(0.232)
Parents' labour rank	0.293***	0.251***
	(0.00255)	(0.00249)
Immigrant father # rank	-0.0895***	-0.0757***
	(0.00443)	(0.00407)
Constant	41.00***	29.99***
	(0.138)	(0.139)
Observations	225,508	217,897
R-squared	0.072	0.061

Notes: This table reports estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

C.7.3.4 Oaxaca-Blinder decomposition

Table C.7.4: Oaxaca-Blinder decompositions, child income rank, Israel

	(1) Sons: pooled	(2) Sons: non-immi. ref.	(3) Sons: . immi. ref	(4) Daughters: pooled	(5) Daughters: non-immi. ref.	(6) Daughters:. immi. ref
Mean child income rank: Immigrant father	58.87***	58.87***	58.87***	45.10***	45.10***	45.10***
	(0.102)	(0.102)	(0.102)	(0.0898)	(0.0898)	(0.0898)
Mean child income rank: No immigrant father	54.79***	54.79***	54.79***	42.46***	42.46***	42.46***
	(0.0778)	(0.0779)	(0.0779)	(0.0742)	(0.0742)	(0.0742)
Difference in means	4.075***	4.075***	4.075***	2.638***	2.638***	2.638***
	(0.128)	(0.128)	(0.128)	(0.116)	(0.116)	(0.116)
Total explained difference	1.551***	1.731***	1.202***	0.637***	0.718***	0.502***
due to differences in parental income distributions	(0.0349)	(0.0395)	(0.0332)	(0.0283)	(0.0321)	(0.0237)
Total unexplained difference	2.525***	2.344***	2.873***	2.001***	1.920***	2.136***
due to differences in mobility parameters	(0.126)	(0.126)	(0.127)	(0.114)	(0.114)	(0.114)
- Parental income rank (*relative mobility*)	-4.565***	-4.746***	-4.217***	-3.890***	-3.971***	-3.754***
	(0.226)	(0.235)	(0.209)	(0.209)	(0.214)	(0.202)
- Intercept (*absolute mobility*)	7.090***	7.090***	7.090***	5.890***	5.890***	5.890***
	(0.256)	(0.256)	(0.256)	(0.232)	(0.232)	(0.232)
Observations	225,508	225,508	225,508	217,897	217,897	217,897

Notes: This table reports a Oaxaca-Blinder decompositions of the gap in income ranks between children of immigrants and children of locals (Specification 4). We follow the approach and terminology of Fortin et al. (2011), and estimate the fraction of the income rank gap that can be "explained" by differences in parental income distributions, and the fraction that is "unexplained" by parental income distribution differences, and rather due to differences in intergenerational mobility parameters. We report versions using pooled estimated coefficients and each of the groups' coefficients as reference levels. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

C.7.4 Mechanisms

C.7.4.1 Various sets of controls

Table C.7.5: Linked data: Intergenerational mobility estimates with various sets of controls, Israel

VARIABLES	(1) Sons	(2) Sons	(3) Daughters	(4) Daughters
Immigrant father = 1	7.090***	6.478***	5.890***	5.209***
	(0.256)	(0.260)	(0.232)	(0.233)
Parents' labour rank	0.293***	0.295***	0.251***	0.247***
	(0.00255)	(0.00317)	(0.00249)	(0.00303)
Immigrant father # rank	-0.0895***	-0.0811***	-0.0757***	-0.0635***
	(0.00443)	(0.00447)	(0.00407)	(0.00408)
Constant	41.00***	39.83***	29.99***	23.31***
	(0.138)	(0.723)	(0.139)	(0.694)
Observations	225,508	225,508	217,897	217,897
R-squared	0.072	0.079	0.061	0.074
Parental region	0	0	0	0
Parental municipality	0	0	0	0
Parental wealth	0	0	0	0
Parental industry, 27 grp.	0	0	0	0
Parental industry, 2-digit	0	1	0	1

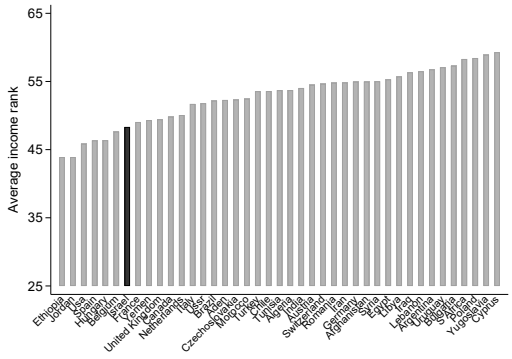
Notes: This table reports estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts. Other parental characteristics are all determined in 1994 and included as fixed effects. Parental industries include categories for unknown industry as well as no industry (if not working). Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

C.7.4.2 Heterogeneity across sending countries

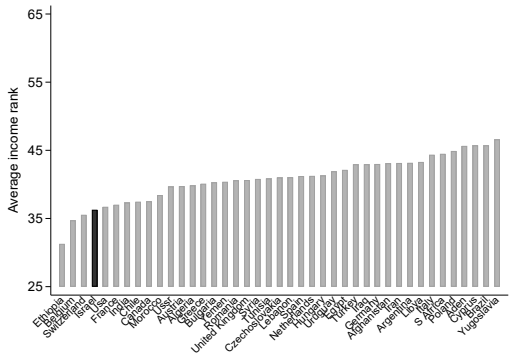
Compositions of sending countries may vary across destination countries. To check this, we can compare mobility parameters for each sending country across destination countries.

Figure C.7.4: Average income at 25th percentile: Israel

(a) Sons



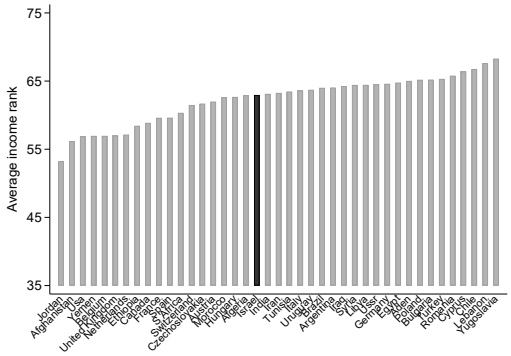
(b) Daughters



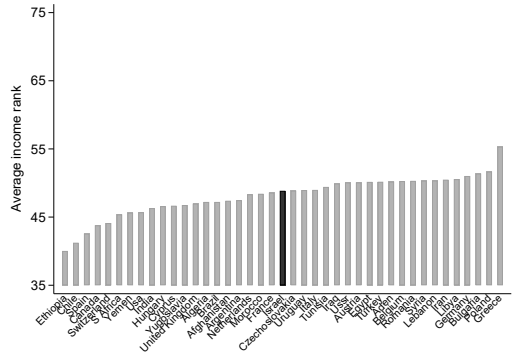
Notes: This figure plots the predicted child income rank if parental income rank equals 25 from a paternal country of origin-level estimation of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts.

Figure C.7.5: Average income at 75th percentile: Israel

(a) Sons



(b) Daughters



Notes: This figure plots the predicted child income rank if parental income rank equals 75 from a paternal country of origin-level estimation of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts.

C.7.4.3 Employment

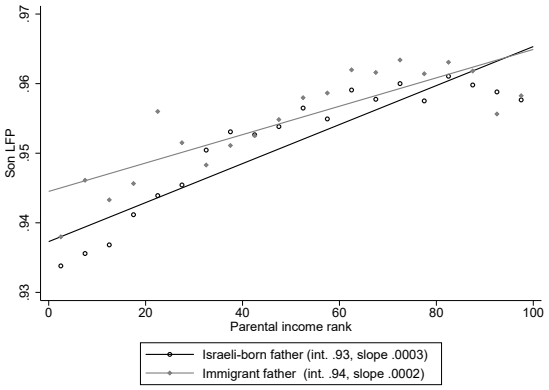
Table C.7.6: Linked data: Intergenerational mobility estimates, employment, Israel

VARIABLES	(1) Sons	(2) Daughters
Immigrant father = 1	0.00721***	0.0293***
	(0.00139)	(0.00147)
Parents' labour rank	0.000280***	0.000555***
	(1.36e-05)	(1.53e-05)
Immigrant father # rank	-7.62e-05***	-0.000374***
	(2.28e-05)	(2.37e-05)
Constant	0.937***	0.916***
	(0.000798)	(0.000962)
Observations	225,508	217,897
R-squared	0.003	0.008

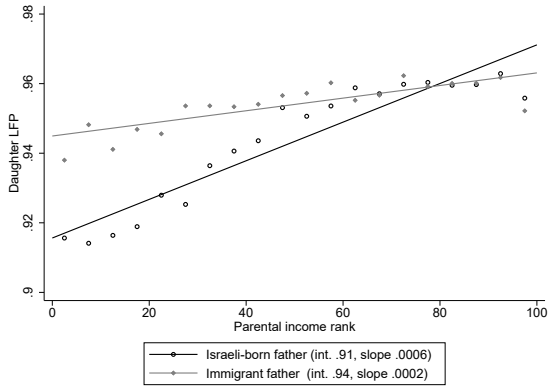
Notes: This table reports estimates of Specification 1, regressing employment of sons/daughters on income ranks of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child employment measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Figure C.7.6: Linked data: Intergenerational mobility, employment, Israel

(a) Israel, sons



(b) Israel, daughters



Notes: This figure plots estimates of Specification 1, regressing employment of sons/daughters on income ranks of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child employment measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts.

C.7.4.4 Educational mobility

Because gaps in child income ranks may be due to both labour market conditions and due to differences in educational mobility, we now consider educational outcomes. Because labour market

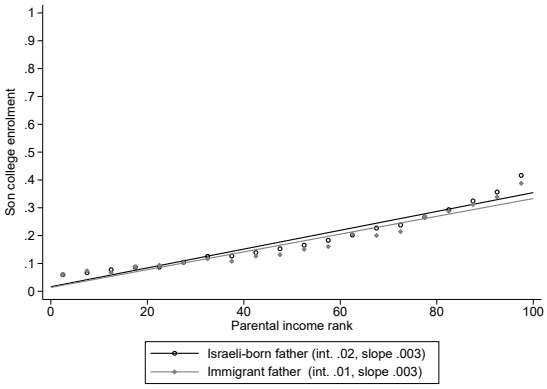
outcomes are only appropriately measured when children are sufficiently old, considering educational outcomes will also allow us to better understand the trajectories of more recent birth cohorts.

We consider a college degree measured as receiving any college degree prior to or in the calendar year a child turns 28.

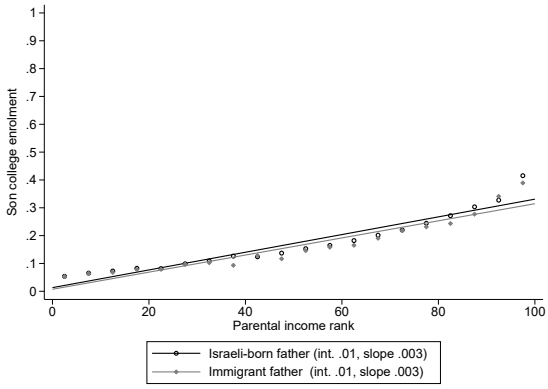
We see that the level of both absolute and relative mobility are similar for children with and without immigrant fathers, and they are stable over time.

Figure C.7.7: Linked data: College degree by age 28, Israel, comparison across cohorts

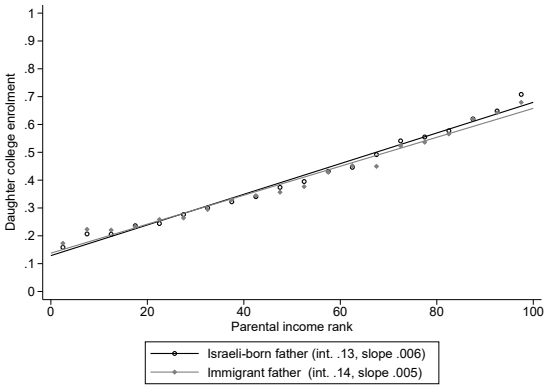
(a) Israel, sons, born 1986-1988



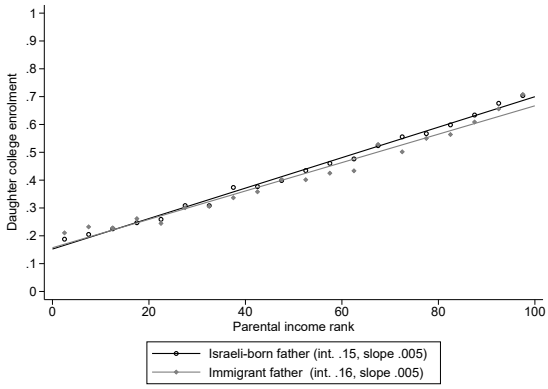
(b) Israel, sons, born 1989-1991



(c) Israel, daughters, born 1986-1988



(d) Israel, daughters, born 1989-1991



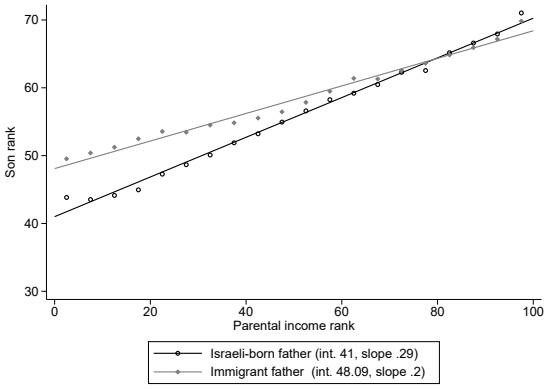
Notes: This figure plots estimates of Specification 1, regressing an indicator of college degree in the year the children turn 28 or earlier on the income rank of parents. Children born in 1986-1988 and 1989-1991 respectively. Immigration status is determined by father's country of birth. Parental income measured in 1997-2003 and 2003-2009 respectively. Parental income ranks, 0-100, are determined within cohorts.

C.7.5 Robustness

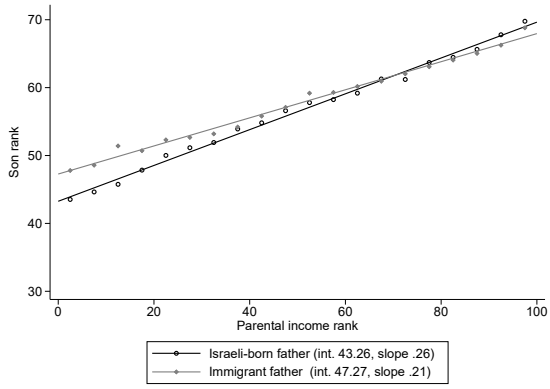
C.7.5.1 Additional years of parental income data

Figure C.7.8: Intergenerational mobility: Israel by number of years of parental income data

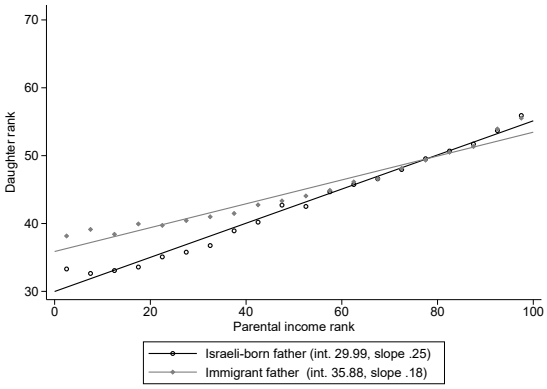
(a) Sons, parental income 1994-2000



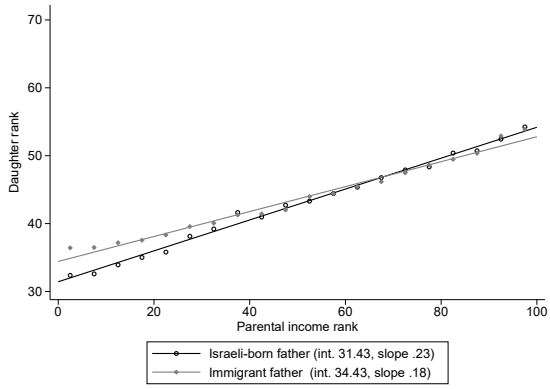
(b) Sons, parental income 1985-2000



(c) Daughters, parental income 1994-2000



(d) Daughters, parental income 1985-2000



Notes: This figure plots estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000 and 1985-2000 respectively. Income ranks, 0-100, determined within cohorts.

Table C.7.7: Intergenerational mobility estimates: Israel, parental income 1985-2000

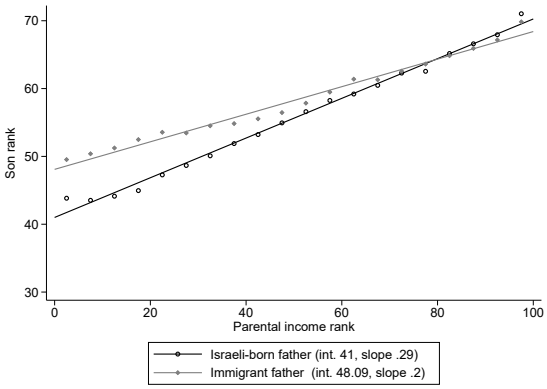
VARIABLES	(1) Sons	(2) Daughters
Immigrant father = 1	4.014***	2.992***
	(0.282)	(0.247)
Parents' rank	0.264***	0.228***
	(0.00306)	(0.00283)
Immigrant father # rank	-0.0570***	-0.0438***
	(0.00497)	(0.00447)
Constant	43.26***	31.43***
	(0.173)	(0.158)
Observations	171,264	172,792
R-squared	0.058	0.053

Notes: This table reports estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1985-2000 respectively. Income ranks, 0-100, determined within cohorts. 95%-confidence interval indicated. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$

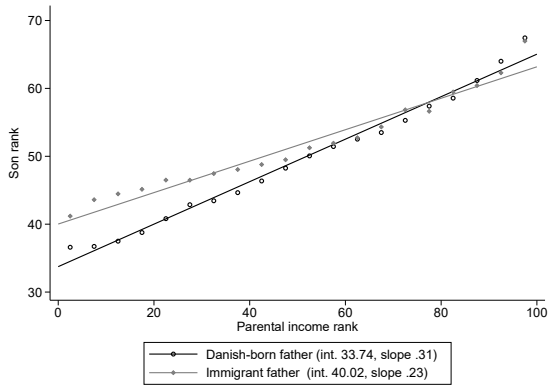
C.7.5.2 More recent birth cohorts, income rank

Figure C.7.9: Linked data: Intergenerational mobility, Israel, comparison across cohorts

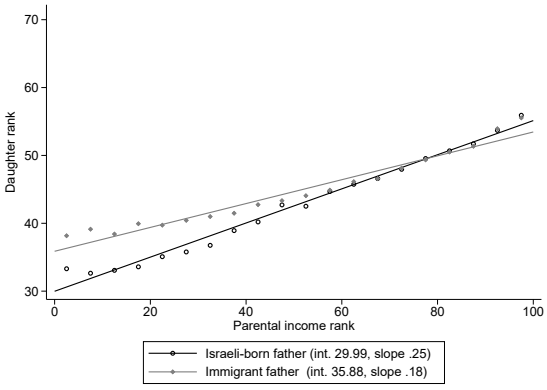
(a) Israel, sons, born 1978-1983



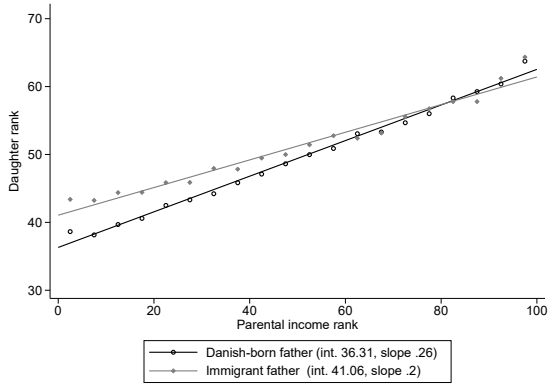
(b) Israel, sons, born 1982-1987



(c) Israel, daughters, born 1978-1983



(d) Israel, daughters, born 1982-1987



Notes: This figure plots estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983 and 1982-1987 respectively. Immigration status is determined by father's country of birth. Child income measured in 2014-2015 and 2018-2019, and parental income 1994-2000 and 1998-2004 respectively. Income ranks, 0-100, determined within cohorts.

Table C.7.8: Linked data: Intergenerational mobility estimates, Israel, comparing cohorts

	(1)	(2)	(3)	(4)
	Sons	Daughters	Sons	Daughters
VARIABLES	1978-1983	1978-1983	1982-1987	1982-1987
Immigrant father = 1	7.090***	5.890***	6.273***	4.749***
	(0.256)	(0.232)	(0.292)	(0.286)
Parents' rank	0.293***	0.251***	0.313***	0.262***
	(0.00255)	(0.00249)	(0.00268)	(0.00281)
Immigrant father # rank	-0.0895***	-0.0757***	-0.0813***	-0.0587***
	(0.00443)	(0.00407)	(0.00505)	(0.00498)
Constant	41.00***	29.99***	33.74***	36.31***
	(0.138)	(0.139)	(0.147)	(0.160)
Observations	225,508	217,897	179,610	177,624
R-squared	0.072	0.061	0.087	0.061

Notes: This table reports estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Immigration status is determined by father's country of birth. Income ranks, 0-100, determined within cohorts. Columns (1) & (2): Children born in 1978-1983, child income measured in 2014-2015, and parental income 1994-2000. Columns (3) & (4): Children born in 1982-1987, child income measured in 2018-2019, and parental income 1998-2004. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

C.8 Country-specific details & results: Italy

C.8.1 Data details and deviations

The data source is the Electronic Database of Personal Income Tax Returns maintained by the Department of Finance of the Italian Ministry of Economy and Finance and used in Acciari et al. (2022). The dataset allows to link children to their parents as explained below. It contains a range of demographic and income variables.

The database combines information from all three income tax forms available to Italian taxpayers: (i) form Modello Unico (MU), which is the most common; (ii) form 730, a simplified income tax form available to employees and pensioners whose income consists of only a few sources; and (iii) form 770, which is filled in by the withholding agent of employees, pensioners, and self-employed individuals and can be used when the taxpayer has only one source of income, no other properties than their primary home, and no itemized deductions.[51]

The demographic variables in the dataset include province of birth (or whether the individual was born abroad), municipality and province of residence, birth year, and marital status. The income variables include total gross income and all its components, namely wages, self-employment income from businesses and farms, income from financial assets, housing, and land, unemployment benefits, and retirement income. A few income sources are unobserved in the Italian data, namely some forms of financial income (such as interest on bonds and deposits), income form fellowships and scholarships, child and family benefits, and social assistance transfers.

Data access. The Electronic Database of Personal Income Tax Returns is confidential. Researchers interested in accessing it may contact the Italian Ministry of Economy and Finance at urp@mef.gov.it and propose a joint research project. Access is not guaranteed, as the Ministry needs to have an interest to engage in the project and available resources to carry it out.

C.8.1.1 Cross-sectional data

No data that meets all the requirements of the cross-sectional analysis is available for Italy.

C.8.1.2 Linked data

Sample definition. Linking parents and children in the database is possible starting from 1998. This is the first year in which parents had to report their children's Social Security Numbers (SSN) on their own tax returns to claim deductions for dependent children. Data for parents is taken from tax returns of years 1998, 1999, and 2000 by selecting all taxpayers who claim allowances for children born between 1979 and 1983. Then, through children's SSNs, we recover their tax returns when they are adult in years 2014 and 2016.[52][53] Each record in our dataset

[51] E.g. medical expenses, charitable donations, mortgage interest. Standard deductions such as allowances for children and dependent spouses are applied by the withholding agent.

[52] The small differences relative to other countries in the years of data being used are due to the extraction of the Personal Income Tax Returns database made available to Acciari et al. (2022). For instance, while other countries use child income in 2014 and 2015, 2015 is not available in the Italian data and the closest year is 2016.

[53] Specifically, parents-children relationships can be identified because a taxpayer must indicate on the form the name and SSN of the spouse and the SSN and relationship for each of the dependents for whom a deduction is

contains information on a child, their father, and their mother. The resulting dataset comprises of 1,871,474 records.

First- and second-generation income. Income is total gross income reported in the tax data.

Immigration status. While the foreign country of birth is not available in the Italian data, a flag is provided if the individual was not born in Italy. This is how the immigration status is defined.

Other deviations. Labor force participation of children is constructed based on wages of children in 2017 – not 2014 or 2016 – since this is the only year of data for which we have child income components. For labour force participation, we use wages only, because self-employment income can be negative in the Italian data. Furthermore, Italian data does not include information on wealth. However, for the first year of parental data available – 1998 – we have capital income data and use this instead of wealth.

claimed. Even if spouses are separated or divorced and live apart, we can retrace couples when they both claim a positive percentage of deduction for the same individual SSN. If only one adult claims a 100 percent deduction and there is no information about the spouse on the tax return, we conclude that that taxpayer is a single parent.

C.8.2 Main results

C.8.2.1 Summary statistics

Table C.8.9: Linked data: Summary statistics, Italy

Sons

	Immigrant father	Italian-born father	Diff.	Std. Error
Child age	32.360	32.421	0.061***	0.014
Child income rank	57.538	55.423	-2.115***	0.238
Child labour force part.	0.793	0.791	-0.003	0.003
Mother's age at child birth	28.170	27.760	-0.411***	0.049
Father's age at child birth	31.514	31.279	-0.235***	0.044
Parental income rank	54.541	49.358	-5.183***	0.234
Parental wealth rank, 1998	49.837	49.911	0.073	0.232
Child share of population	0.016	0.984		
N	15545.000	952548.000		

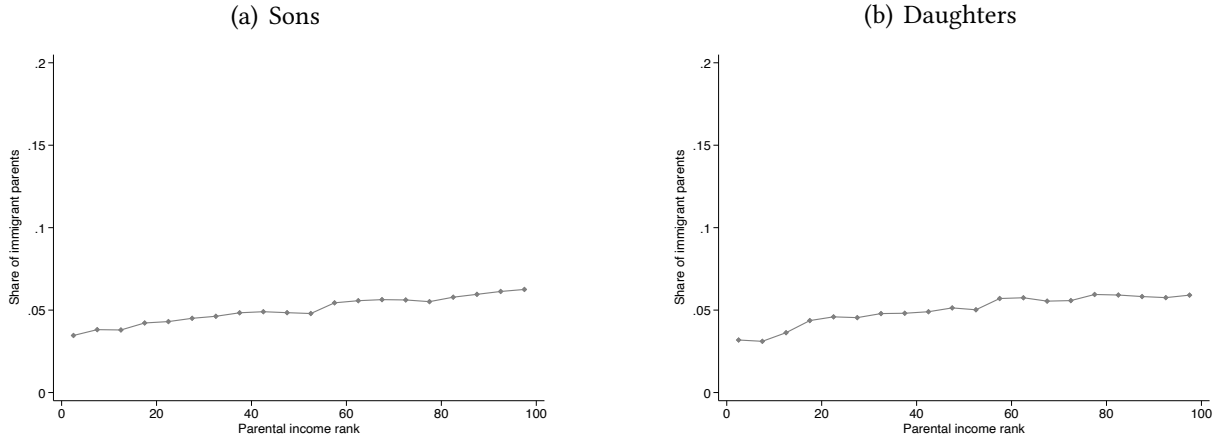
Daughters

	Immigrant father	Italian-born father	Diff.	Std. Error
Child age	32.406	32.470	0.064***	0.014
Child income rank	46.106	44.119	-1.987***	0.223
Child labour force part.	0.842	0.838	-0.004	0.003
Mother's age at child birth	27.962	27.740	-0.222***	0.050
Father's age at child birth	31.413	31.306	-0.107**	0.045
Parental income rank	54.670	50.529	-4.141***	0.236
Parental wealth rank, 1998	48.684	50.121	1.437***	0.236
Child share of population	0.017	0.983		
N	15097.000	888284.000		

Notes: This table reports summary statistics of the estimation sample. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child earnings measured in 2014 and 2016, and parental earnings in 1998-2000. Wealth is proxied with capital income since Italian data does not include wealth. Child age is measured in 2014. Income ranks, 0-100, determined within cohorts. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

C.8.2.2 Parental income distribution

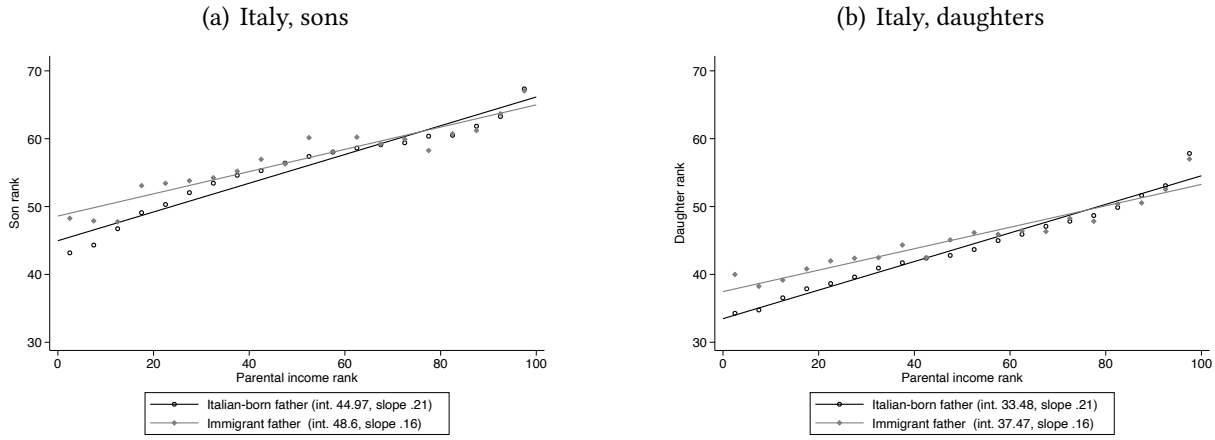
Figure C.8.10: Linked data: Italy, share of total number of children with immigrant parents



Notes: This figure shows the share of children of immigrant parents in each ventile out of the total number of children with immigrant parents. The numerator is the number of children of immigrants within each ventile. The denominator is the total number of children with immigrant parents (across all ventiles). Children born in 1978-1983. Immigration status is determined by father's country of birth. Parental income measured in 1998-2000. Income ranks, 0-100, determined within child cohorts.

C.8.2.3 Rank-rank relationship

Figure C.8.11: Linked data: Intergenerational mobility, Italy



Notes: This figure plots estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014 and 2016, and parental income in 1998-2000. Income ranks, 0-100, determined within cohorts.

Table C.8.10: Linked data: Intergenerational mobility estimates, Italy

VARIABLES	(1) Sons	(2) Daughters
Immigrant father = 1	3.632***	3.998***
	(0.514)	(0.478)
Parents' rank	0.212***	0.211***
	(0.00104)	(0.000997)
Immigrant father # rank	-0.0479***	-0.0527***
	(0.00863)	(0.00817)
Constant	44.97***	33.48***
	(0.0576)	(0.0551)
Observations	968,093	903,381
R-squared	0.043	0.050

Notes: This table reports estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014 and 2016, and parental income in 1998-2000. Income ranks, 0-100, determined within cohorts. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

C.8.2.4 Oaxaca-Blinder decomposition

Table C.8.11: Oaxaca-Blinder decompositions, child income rank, Italy

	(1) Sons: pooled	(2) Sons: no immi. ref.	(3) Sons: immi. ref.	(4) Daughters: pooled	(5) Daughters: no immi. ref.	(6) Daughters: immi. ref.
Immigrant father	57.54***	57.54***	57.54***	46.11***	46.11***	46.11***
	(0.240)	(0.240)	(0.240)	(0.222)	(0.222)	(0.222)
No immigrant father	55.42***	55.42***	55.42***	44.12***	44.12***	44.12***
	(0.0301)	(0.0301)	(0.0301)	(0.0288)	(0.0288)	(0.0288)
Difference	2.115***	2.115***	2.115***	1.987***	1.987***	1.987***
	(0.241)	(0.241)	(0.241)	(0.224)	(0.224)	(0.224)
Total explained	1.094***	1.098***	0.849***	0.869***	0.872***	0.654***
	(0.0487)	(0.0488)	(0.0582)	(0.0481)	(0.0483)	(0.0493)
Total unexplained	1.022***	1.018***	1.266***	1.118***	1.115***	1.333***
	(0.239)	(0.239)	(0.240)	(0.221)	(0.221)	(0.220)
- Parental income rank	−2.610***	−2.614***	−2.366***	−2.879***	−2.883***	−2.664***
	(0.470)	(0.471)	(0.426)	(0.446)	(0.447)	(0.413)
- Constant	3.632***	3.632***	3.632***	3.998***	3.998***	3.998***
	(0.514)	(0.514)	(0.514)	(0.478)	(0.478)	(0.478)
Observations	968,093	968,093	968,093	903,381	903,381	903,381

Notes: This table reports a Oaxaca-Blinder decompositions of the gap in income ranks between children of immigrants and children of locals (Specification 4). We follow the approach and terminology of Fortin et al. (2011), and estimate the fraction of the income rank gap that can be "explained" by differences in parental income distributions, and the fraction that is "unexplained" by parental income distribution differences, and rather due to differences in intergenerational mobility parameters. We report versions using pooled estimated coefficients and each of the groups' coefficients as reference levels. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014 and 2016, and parental income in 1998-2000. Income ranks, 0-100, determined within cohorts. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

C.8.3 Mechanisms

C.8.3.1 Various sets of controls

Table C.8.12: Linked data: Intergenerational mobility estimates with various sets of controls, Italy

VARIABLES	(1) Sons	(2) Sons	(3) Sons	(4) Sons	(5) Sons	(6) Sons	(7) Daughters	(8) Daughters	(9) Daughters	(10) Daughters	(11) Daughters	(12) Daughters
Immigrant father = 1	3.632***	2.018***	1.409***	3.711***	2.108***	1.512***	3.998***	2.205***	1.895***	4.242***	2.473***	2.182***
	(0.514)	(0.507)	(0.523)	(0.514)	(0.507)	(0.523)	(0.478)	(0.466)	(0.483)	(0.476)	(0.464)	(0.481)
Parents' rank	0.212***	0.164***	0.157***	0.209***	0.163***	0.155***	0.211***	0.173***	0.166***	0.196***	0.158***	0.152***
	(0.00104)	(0.00110)	(0.00114)	(0.00108)	(0.00113)	(0.00118)	(0.000997)	(0.00105)	(0.00109)	(0.00103)	(0.00107)	(0.00111)
Immigrant father # rank	-0.0479***	-0.0422***	-0.0363***	-0.0488***	-0.0432***	-0.0373***	-0.0527***	-0.0448***	-0.0404***	-0.0547***	-0.0470***	-0.0426***
	(0.00863)	(0.00852)	(0.00861)	(0.00863)	(0.00852)	(0.00861)	(0.00817)	(0.00802)	(0.00812)	(0.00814)	(0.00799)	(0.00809)
Constant	44.97***	46.27***	47.69***	40.90***	42.04***	43.77***	33.48***	36.39***	35.74***	29.40***	29.98***	28.29***
	(0.0576)	(0.119)	(0.0614)	(9.103)	(9.093)	(8.933)	(0.0551)	(0.109)	(0.0585)	(6.548)	(6.115)	(6.241)
Observations	968,093	968,093	968,093	968,093	968,093	968,093	903,381	903,381	903,381	903,381	903,381	903,381
R-squared	0.043	0.076	0.093	0.044	0.077	0.094	0.050	0.085	0.099	0.053	0.089	0.103
Parental region	0	1	0	0	1	0	0	1	0	0	1	0
Parental municipality	0	0	1	0	0	1	0	0	1	0	0	1
Parental wealth	0	0	0	1	1	1	0	0	0	1	1	1

Notes: This table reports estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014 and 2016, and parental income in 1998-2000. Income ranks, 0-100, determined within cohorts. Other parental characteristics are all determined in 1998 and included as fixed effects. We have 21 regions (treating separately the provinces of Trento and Bolzano) and 8,079 municipalities. Italian data does not include industry. Wealth is proxied with capital income since Italian data does not include wealth. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

C.8.3.2 Heterogeneity across sending countries

The specific country of origin is not available in the Italian data.

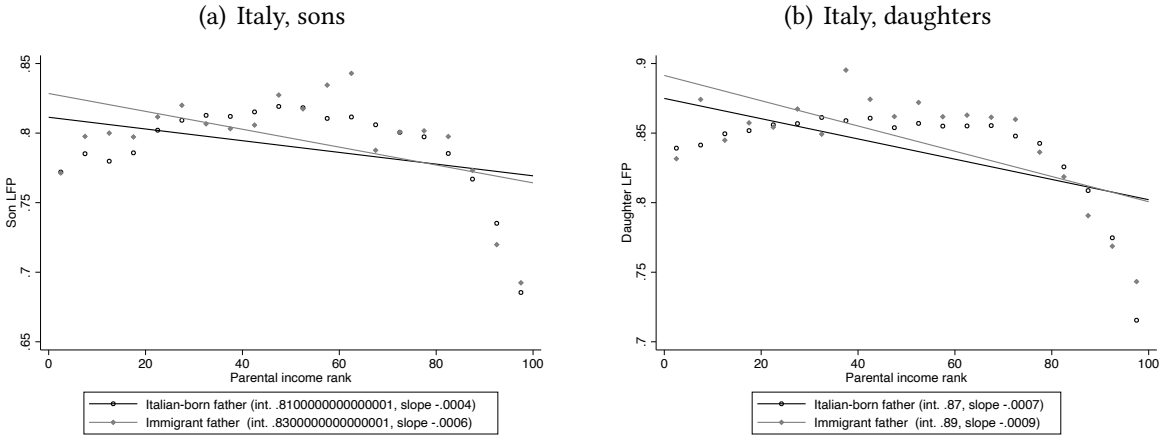
C.8.3.3 Employment

Table C.8.13: Linked data: Intergenerational mobility estimates, employment, Italy

VARIABLES	(1) Sons	(2) Daughters
Immigrant father = 1	0.0171**	0.0165**
	(0.00712)	(0.00653)
Parents' rank	-0.000421***	-0.000728***
	(1.50e-05)	(1.42e-05)
Immigrant father # rank	-0.000221*	-0.000180
	(0.000120)	(0.000113)
Constant	0.811***	0.875***
	(0.000835)	(0.000786)
Observations	968,093	903,381
R-squared	0.001	0.003

Notes: This table reports estimates of Specification 1, regressing employment of sons/daughters on income ranks of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child employment measured in 2017, and parental income in 1998-2000. Income ranks, 0-100, determined within cohorts. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Figure C.8.12: Linked data: Intergenerational mobility, employment, Italy



Notes: This figure plots estimates of Specification 1, regressing employment of sons/daughters on income ranks of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child employment measured in 2017, and parental income in 1998-2000. Income ranks, 0-100, determined within cohorts.

C.8.3.4 Educational mobility

College enrolment
College enrolment is not available in the Italian data.

Primary school grades
School grades are not available in the Italian data.

C.8.4 Robustness

C.8.4.1 Emigration

Emigration information is not available in the Italian data.

C.8.4.2 Additional years of parental income data

No additional years of parental income are available in the Italian data.

C.8.4.3 More recent birth cohorts

No other birth cohorts are available in the Italian data.

C.9 Country-specific details & results: The Netherlands

C.9.1 Data details and deviations

We rely on administrative data provided by Statistics Netherlands to construct the relevant datasets on parents and children. Each dataset contains the personal identification number assigned to individuals living in the Netherlands, which allows merging information from different datasets for a given individual, and allows biological parents and children to be linked.

Specifically, this project relies on the following datasets:

GBAPERSOONTAB. This dataset provides basic individual demographic information (e.g. gender, birth date, and origin) on the universe of all registered inhabitants in The Netherlands, provided they have resided in The Netherlands since 1995. Residents who have left The Netherlands prior to the start of the registry in 1995 cannot be observed. This data source is used to select a sample of children born in The Netherlands, and determine the country of birth (immigration status) of their parents. Contrary to the Danish example, day of birth is not available, so birthdate is defined by month and year of birth only.

KINDOUDERTAB. This dataset provides identification numbers of children and their parents, which allows to link different generations of family members.

INPATAB. This dataset provides information on the different income sources of all individuals, which is used to define income ranks of children in 2014 and 2015.

IPO. This survey data on approximately 250,000 Dutch inhabitants provides information on parental income sources for the period 1989-2000. Due to lack of wealth information for 1994, we proxy this by using information on house value, and received dividends and interest.

GBAADRESOBJECTBUS. This dataset provides information on addresses of all Dutch inhabitants, which is used to define the parental region of residence on October 1^st, 1994.

BAANKENMERKENBUS. This dataset provides information on job characteristics of all paid employment contracts, which is used to define the parental employment industry. Contrary to the Danish example, due to lack of information on industry in 1994, we rely on industry information in 1999.

CITOTAB. This dataset provides information on standardized scores of a high-stakes test that is taken in the final year of primary school, and is available from 2006 onwards. This implies that test scores are available for cohorts born 1994-1996, instead of the 1986-1988 cohorts that were considered in the Danish case.

HOOGSTEOPLTAB. This dataset provides information on the highest degree of completed schooling. Due to lack of reliable information for 2011-2012, we identify whether children have been enrolled in college at ages 25/26/27, i.e. reaching a college degree in 2013 (first cohort) and

2019 (second cohort).

Data access. Researchers interested in working with the data have to apply for data access. Guidance on how to apply for data access is provided here: https://www.cbs.nl/en-gb/our-services/customised-services-microdata/microdata-conducting-your-own-research/applying-for-access-to-microdata. Once data access is granted, the data will be made available to researchers within a secure Remote Access environment provided by Statistics Netherlands.

C.9.1.1 Cross-sectional data

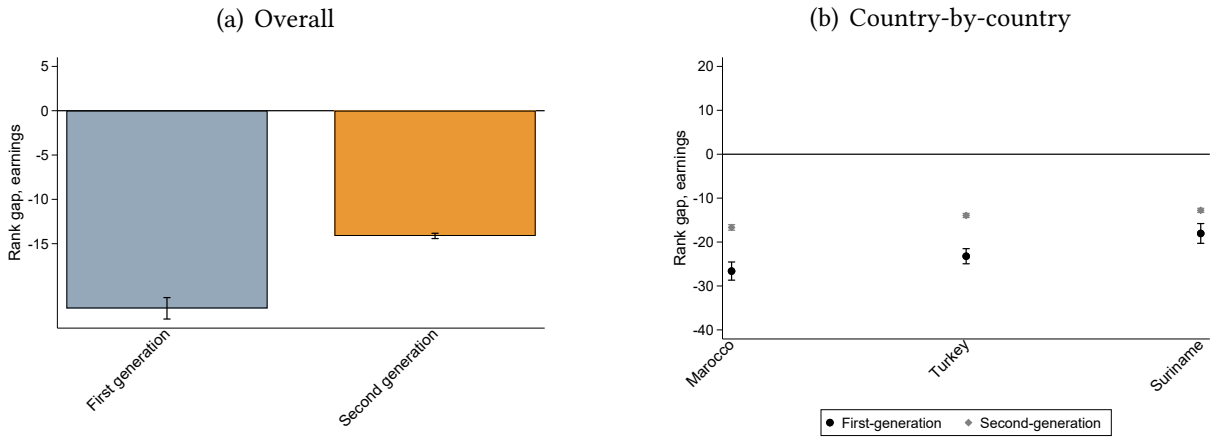
Similar to the Danish example, we identify fathers aged 30 to 50 with at least one child, residing in The Netherlands in the 1980s, and who were born in The Netherlands or in one of the top-sending countries (i.e. Suriname, Morocco, Turkey). We identify sons aged 30 to 50 in 2011 and 2015, residing in The Netherlands in the 2010s, who were born in The Netherlands from fathers born either in The Netherlands or in one of the top-sending countries. Immigration status is based on country of birth of the father. We measure parents' income in 1981 and 1985 using IPO, and their sons' income in 2011 and 2015 using INPATAB. Although we use the same income definition as in the Danish case, transfers in The Netherlands are defined at the household level, and are only paid to one member of the household. Robustness results show that the results are not sensitive to including or excluding transfer income.

C.9.1.2 Linked data

Following the Danish example, we use the 2014 and 2015 population registries (GBAPERSOONTAB) to identify children born in the Netherlands between 1978-1983. Total income for children is based on the 2014-2015 tax registries (INPATAB), whereas income for parents is based on 1994-2000 income surveys (IPO). All income measures are deflated to 2013-values. Again, we use both an income measure including household transfers (following the Danish example) and an alternative which excludes transfers.

C.9.2 Cross-sectional results

Figure C.9.13: Cross-sectional results using total earnings: The Netherlands, 1981-2011 cohort



Notes: This figure plots the estimated coefficients from Equation 1 from Abramitzky et al. (2021) for the earnings of fathers and sons in 1981 and 2011 respectively. We use measures of total earnings for both generations. Panel a) includes a non-Dutch dummy rather than country-of-origin dummies. Immigration status is determined by father's country of birth. Income ranks are determined within cohorts. Sample includes men aged 30-50. 95%-confidence interval indicated.

Table C.9.14: Cross-sectional data: Summary statistics, Netherlands

Fathers: 1981 cohort

	Immigrants	Dutch-born	Diff.	Std. Error
Age	38.403	38.856	0.453***	0.172
Rank gap, total income_incl	27.416	50.627	23.211***	0.835
rank_all_inc_incl	31.549	50.512	18.963***	0.837
Rank gap, earnings	28.310	50.602	22.292***	0.835
ln(total income_incl)	10.456	10.759	0.303***	0.015
ln_all_inc_incl	10.453	10.733	0.280***	0.016
ln(earnings)	10.389	10.716	0.327***	0.020
Total income_incl > 0	0.931	0.969	0.038***	0.005
ext_margin_all_inc_incl	0.945	0.974	0.029***	0.005
Earnings > 0	0.807	0.922	0.115***	0.008
Share of population	0.027	0.973		
N	1211	43587		

Sons: 2011 cohort

	Immigrant father	Dutch-born father	Diff.	Std. Error
Age	34.702	40.893	6.192***	0.030
Rank gap, total income_incl	36.583	50.250	13.667***	0.148
rank_all_inc_incl	35.394	50.272	14.878***	0.148
Rank gap, earnings	36.134	50.258	14.124***	0.148
ln(total income_incl)	10.515	10.811	0.296***	0.005
ln_all_inc_incl	10.573	10.972	0.399***	0.006
ln(earnings)	10.550	10.817	0.267***	0.006
Total income_incl > 0	0.874	0.929	0.055***	0.001
ext_margin_all_inc_incl	0.888	0.935	0.047***	0.001
Earnings > 0	0.742	0.879	0.137***	0.002
Share of population	0.018	0.982		
N	38547	2068374		

Notes: This table reports summary statistics of the cross-sectional sample, including sons and fathers in 1981 and 2011 respectively. Immigration status is determined by father's country of birth. Income ranks are determined within cohorts. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

C.9.3 Main results

C.9.3.1 Summary statistics

Table C.9.15: Linked data: Summary statistics, The Netherlands

Sons

	Immigrant father	Dutch-born father	Diff.	Std. Error
Child age	32.333	32.619	0.286***	0.052
Child income rank	45.945	60.490	14.545***	0.865
Child income rank_incl	45.546	61.343	15.797***	0.868
Child labour force part.	0.730	0.882	0.153***	0.010
Mother's age at child birth	-513.792	-513.717	0.075	0.060
Father's age at child birth	-512.641	-513.053	-0.411***	0.065
Parental income rank	33.200	53.045	19.845***	0.870
Parental income rank_incl	34.783	52.731	17.948***	0.873
Parental house value rank, 1994	30.911	53.135	22.224***	0.941
Parental mortgage interest paid rank, 1994	33.622	52.716	19.095***	0.948
Parental interest received rank, 1994	27.971	53.440	25.468***	0.951
Parental dividend received rank, 1994	43.764	51.061	7.298***	0.655
Child share of population	0.135	0.865		
N	1227	7868		

Daughters

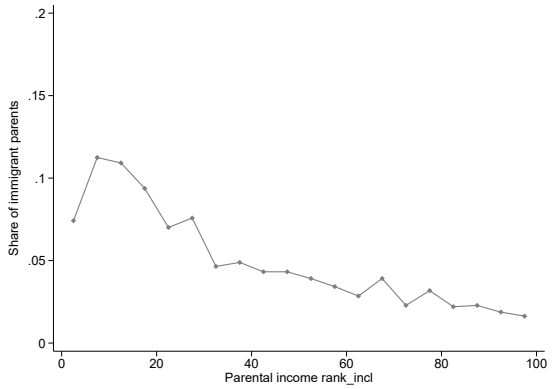
	Immigrant father	Dutch-born father	Diff.	Std. Error
Child age	32.338	32.635	0.297***	0.053
Child income rank	39.550	41.424	1.874**	0.820
Child income rank_incl	39.253	40.651	1.398*	0.799
Child labour force part.	0.689	0.840	0.151***	0.011
Mother's age at child birth	-513.736	-513.749	-0.013	0.062
Father's age at child birth	-512.581	-513.064	-0.483***	0.067
Parental income rank	33.539	52.160	18.621***	0.876
Parental income rank_incl	35.406	51.936	16.530***	0.881
Parental house value rank, 1994	29.863	52.317	22.454***	0.947
Parental mortgage interest paid rank, 1994	32.669	51.968	19.299***	0.949
Parental interest received rank, 1994	27.941	52.693	24.752***	0.951
Parental dividend received rank, 1994	43.758	50.672	6.913***	0.656
Child share of population	0.136	0.864		
N	1198	7584		

Notes: This table reports summary statistics of the estimation sample. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child earnings measured in 2014-2015, and parental earnings 1994-2000. Child age is measured in 2014. Income ranks, 0-100, determined within cohorts. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

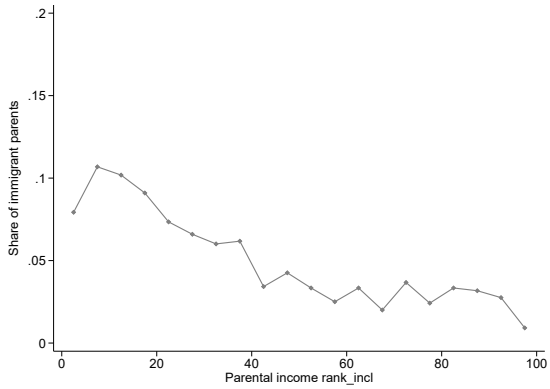
C.9.3.2 Parental income distribution

Figure C.9.14: Linked data: The Netherlands, share of total number of children with immigrant parents

(a) Sons



(b) Daughters

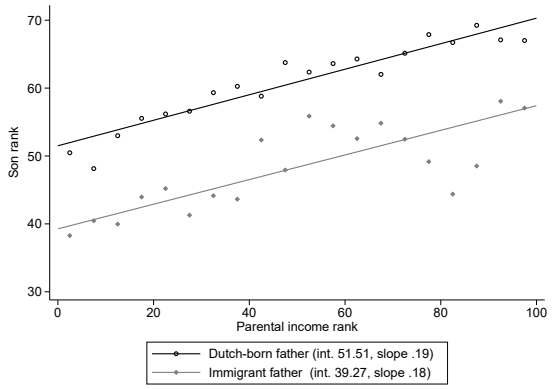


Notes: This figure shows the share of children of immigrant parents in each ventile out of the total number of children with immigrant parents. The numerator is the number of children of immigrants within each ventile. The denominator is the total number of children with immigrant parents (across all ventiles). Children born in 1978-1983. Immigration status is determined by father's country of birth. Parental income measured in 1994-2000. Income ranks, 0-100, determined within child cohorts.

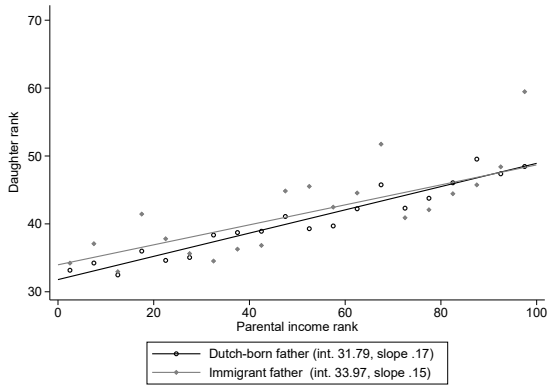
C.9.3.3 Rank-rank relationship

Figure C.9.15: Linked data: Intergenerational mobility, The Netherlands

(a) The Netherlands, sons



(b) The Netherlands, daughters



Notes: This figure plots estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts.

Table C.9.16: Linked data: Intergenerational mobility estimates, The Netherlands

VARIABLES	(1) Sons	(2) Daughters
Immigrant father = 1	-10.39***	2.480
	(1.478)	(1.539)
Parents' rank	0.205***	0.206***
	(0.0114)	(0.0115)
Immigrant father # rank	-0.0226	-0.0255
	(0.0336)	(0.0340)
Constant	41.31***	39.50***
	(0.654)	(0.658)
Observations	9,014	8,721
R-squared	0.070	0.040

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Notes: This table reports estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

C.9.3.4 Oaxaca-Blinder decomposition

Table C.9.17: Oaxaca-Blinder decompositions, child income rank, The Netherlands

	Sons: pooled	Sons: non-immi. ref.	Sons: immi. ref.	Daughters: pooled	Daughters: non-immi. ref.	Daughters: immi. ref.
Immigrant father	45.58***	45.58***	45.58***	39.18***	39.18***	39.18***
	(0.870)	(0.870)	(0.870)	(0.763)	(0.763)	(0.763)
No immigrant father	61.42***	61.42***	61.42***	40.69***	40.69***	40.69***
	(0.316)	(0.316)	(0.316)	(0.295)	(0.295)	(0.295)
Difference	-15.84***	-15.84***	-15.84***	-1.503*	-1.503*	-1.503*
	(0.925)	(0.926)	(0.926)	(0.818)	(0.818)	(0.818)
Total explained	-3.360***	-3.374***	-3.256***	-2.781***	-2.831***	-2.434***
	(0.246)	(0.254)	(0.617)	(0.214)	(0.223)	(0.489)
Total unexplained	-12.48***	-12.46***	-12.58***	1.279	1.328	0.931
	(0.934)	(0.936)	(1.103)	(0.821)	(0.819)	(0.961)
Parents' rank_incl	-0.241	-0.227	-0.345	-0.900	-0.851	-1.248
	(1.298)	(1.225)	(1.857)	(1.137)	(1.075)	(1.577)
- Constant	-12.24***	-12.24***	-12.24***	2.179	2.179	2.179
	(1.577)	(1.578)	(1.578)	(1.350)	(1.350)	(1.350)
Observations	9,014	9,014	9,014	8,721	8,721	8,721

Notes: This table reports Oaxaca-Blinder decompositions of the gap in income ranks between children of immigrants and children of locals (Specification 4). We follow the approach and terminology of Fortin et al. (2011), and estimate the fraction of the income rank gap that can be "explained" by differences in parental income distributions, and the fraction that is "unexplained" by parental income distribution differences, and rather due to differences in intergenerational mobility parameters. We report versions using pooled estimated coefficients and each of the groups' coefficients as reference levels. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

C.9.4 Mechanisms

C.9.4.1 Various sets of controls

Table C.9.18: Linked data: Intergenerational mobility estimates with various sets of controls, The Netherlands

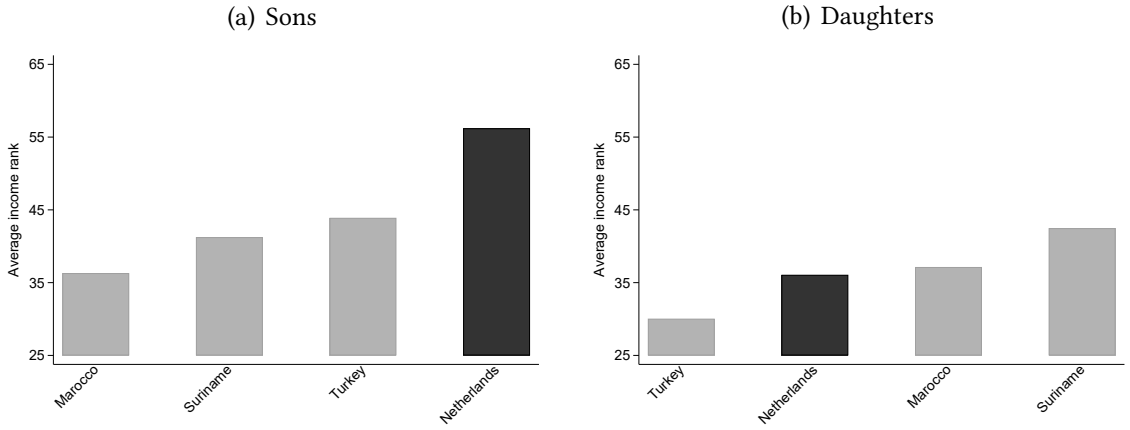
VARIABLES	(1) Sons	(2) Sons	(3) Sons	(4) Sons	(5) Sons	(6) Sons	(7) Sons	(8) Daughters	(9) Daughters	(10) Daughters	(11) Daughters	(12) Daughters	(13) Daughters	(14) Daughters
Immigrant father = 1	-13.01***	-13.86***	-11.65***	-9.182***	-11.64***	-9.267***	-7.320***	1.198	0.599	0.508	2.615	1.086	1.712	1.448
	(1.522)	(1.532)	(1.598)	(1.887)	(1.554)	(1.942)	(2.052)	(1.298)	(1.304)	(1.384)	(1.604)	(1.326)	(1.653)	(1.777)
Parents' rank_incl	0.186***	0.164***	0.151***	0.102***	0.168***	0.0905***	0.0872***	0.170***	0.182***	0.179***	0.122***	0.137***	0.0867***	0.0914***
	(0.0113)	(0.0123)	(0.0128)	(0.0144)	(0.0122)	(0.0153)	(0.0159)	(0.0103)	(0.0113)	(0.0118)	(0.0133)	(0.0114)	(0.0143)	(0.0149)
Immigrant father # rank	0.0162	0.0173	0.00808	0.00651	0.0174	0.0112	-0.00411	0.00557	0.00980	0.0119	0.0118	0.00891	0.0180	0.0172
	(0.0350)	(0.0349)	(0.0358)	(0.0391)	(0.0357)	(0.0401)	(0.0414)	(0.0302)	(0.0302)	(0.0316)	(0.0333)	(0.0308)	(0.0344)	(0.0364)
Constant	51.62***	46.35***	54.11***	50.24***	60.68***	49.66***	58.22***	31.84***	31.69***	16.61*	28.63***	34.71***	33.40***	11.04
	(0.671)	(1.815)	(11.11)	(1.303)	(3.053)	(3.683)	(11.63)	(0.576)	(1.668)	(9.347)	(1.140)	(3.746)	(4.344)	(9.449)
Observations	8,986	8,986	8,986	7,917	8,986	7,917	7,917	8,689	8,689	8,689	7,674	8,689	7,674	7,674
R-squared	0.069	0.078	0.141	0.087	0.090	0.113	0.180	0.035	0.039	0.115	0.057	0.066	0.088	0.167
Parental region	0	1	0	0	0	1	0	0	1	0	0	0	1	0
Parental municipality	0	0	1	0	0	0	1	0	0	1	0	0	0	1
Parental wealth	0	0	0	1	0	1	1	0	0	0	1	0	1	1
Parental industry	0	0	0	0	1	1	1	0	0	0	0	1	1	1
Parental industry, 3-digit	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Notes: This table reports estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts. Other parental characteristics are all determined in 1990 and included as fixed effects. Parental region covers province and municipality. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

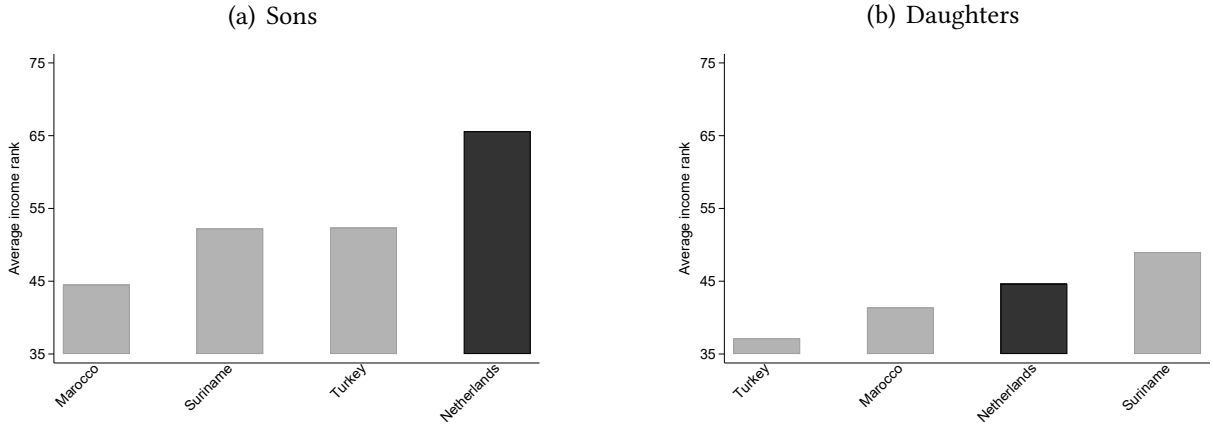
C.9.4.2 Heterogeneity across sending countries

Figure C.9.16: Average income at 25th percentile: Netherlands



Notes: This figure plots the predicted child income rank if parental income rank equals 25 from a paternal country of origin-level estimation of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts.

Figure C.9.17: Average income at 75th percentile: The Netherlands



Notes: This figure plots the predicted child income rank if parental income rank equals 75 from a paternal country of origin-level estimation of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts.

C.9.4.3 Employment

Table C.9.19: Linked data: Intergenerational mobility estimates, employment, The Netherlands

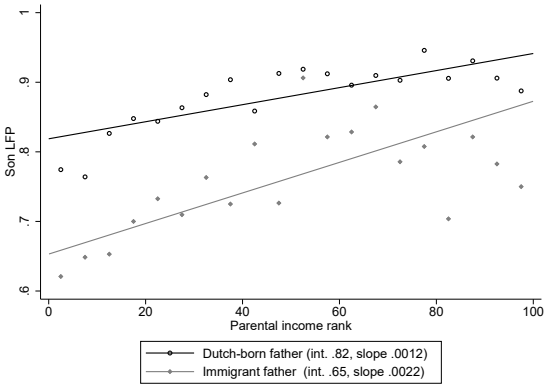
	(1)	(2)
	Sons	Daughters
VARIABLES	1978-1983	1978-1983
Immigrant father = 1	-12.24***	2.179
	(1.577)	(1.350)
Parents' rank_incl	0.188***	0.171***
	(0.0112)	(0.0103)
Immigrant father # rank_incl	-0.00654	-0.0240
	(0.0352)	(0.0304)
Constant	51.51***	31.79***
	(0.670)	(0.575)
Observations	9,014	8,721
R-squared	0.069	0.035

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

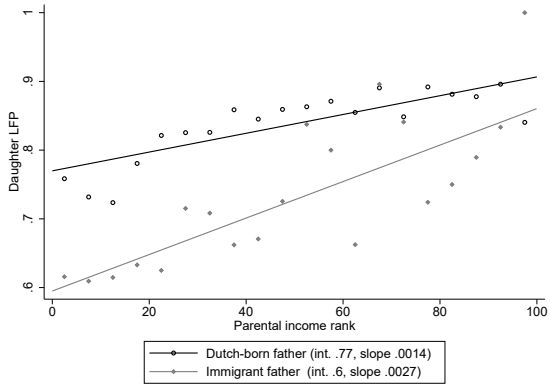
Notes: This table reports estimates of Specification 1, regressing employment of sons/daughters on income ranks of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child employment measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Figure C.9.18: Linked data: Intergenerational mobility, employment, Netherlands

(a) The Netherlands, sons



(b) The Netherlands, daughters



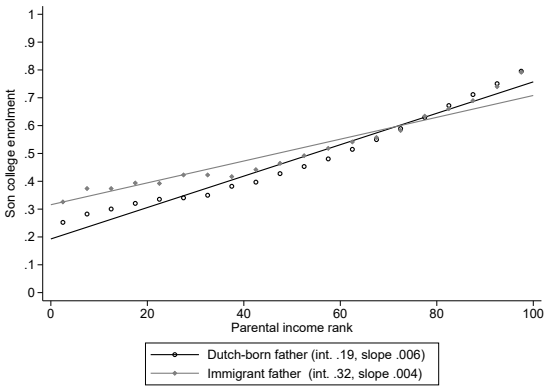
Notes: This figure plots estimates of Specification 1, regressing employment of sons/daughters on income ranks of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child employment measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts.

C.9.4.4 Educational mobility

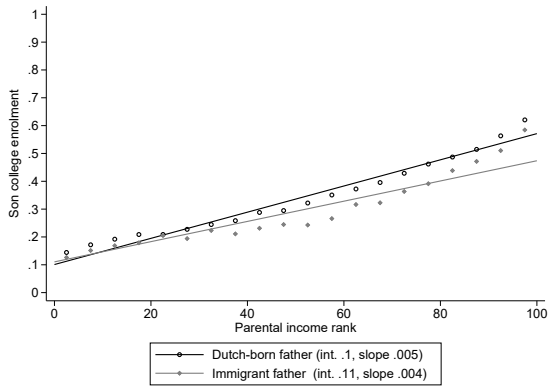
College enrolment

Figure C.9.19: Linked data: College graduation, The Netherlands, comparison across cohorts

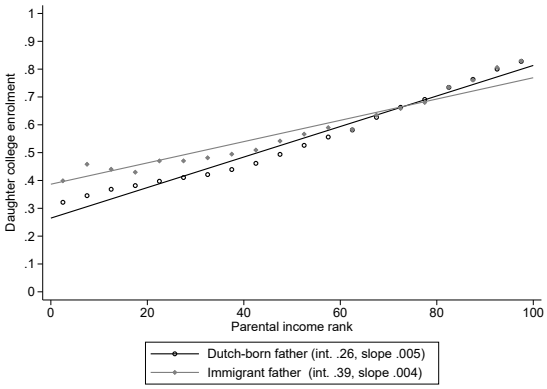
(a) The Netherlands, sons, born 1994-1996



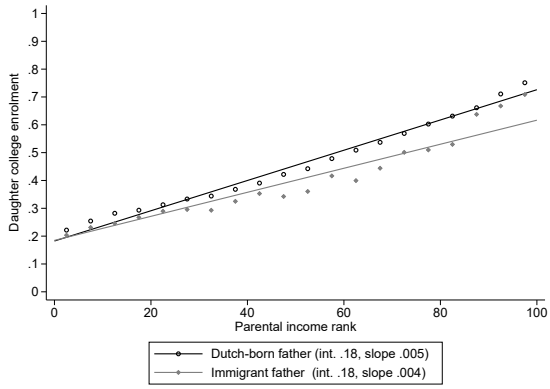
(b) The Netherlands, sons, born 2000-2002



(c) The Netherlands, daughters, born 1994-1996



(d) The Netherlands, daughters, born 2000-2002

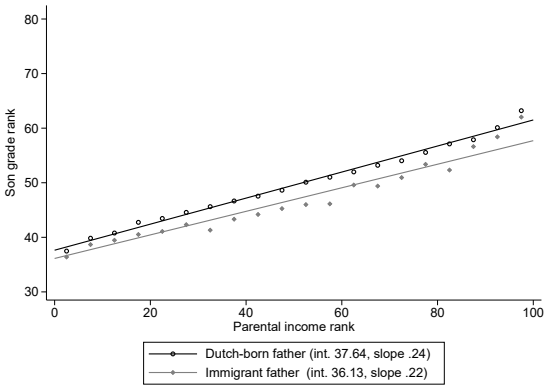


Notes: This figure plots estimates of Specification 1, regressing an indicator of college graduation on the income rank of parents. Children born in 1994-1996 and 2000-2002 respectively. Immigration status is determined by father's country of birth. Parental income measured in 2003-2006 and 2006-2009 respectively. Parental income ranks, 0-100, are determined within cohorts.

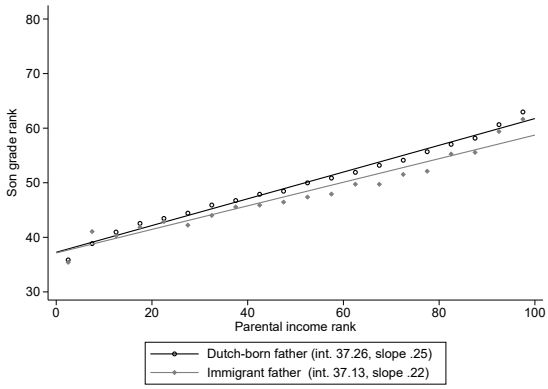
Primary school grades

Figure C.9.20: Linked data: Primary school grades, The Netherlands, comparison across cohorts

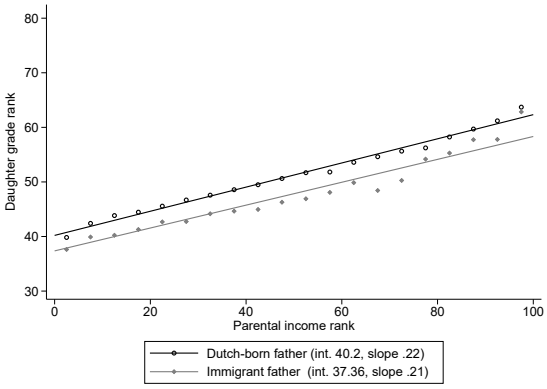
(a) The Netherlands, sons, born 1994-1996



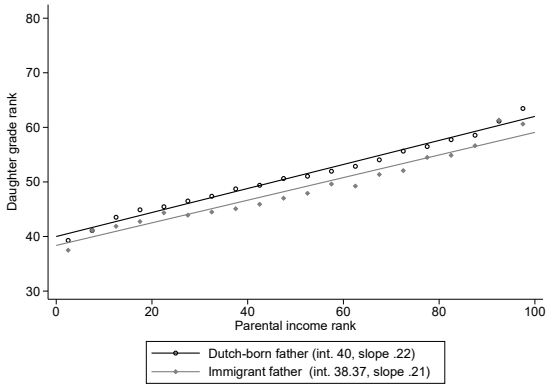
(b) The Netherlands, sons, born 2000-2002



(c) The Netherlands, daughters, born 1994-1996



(d) The Netherlands, daughters, born 2000-2002

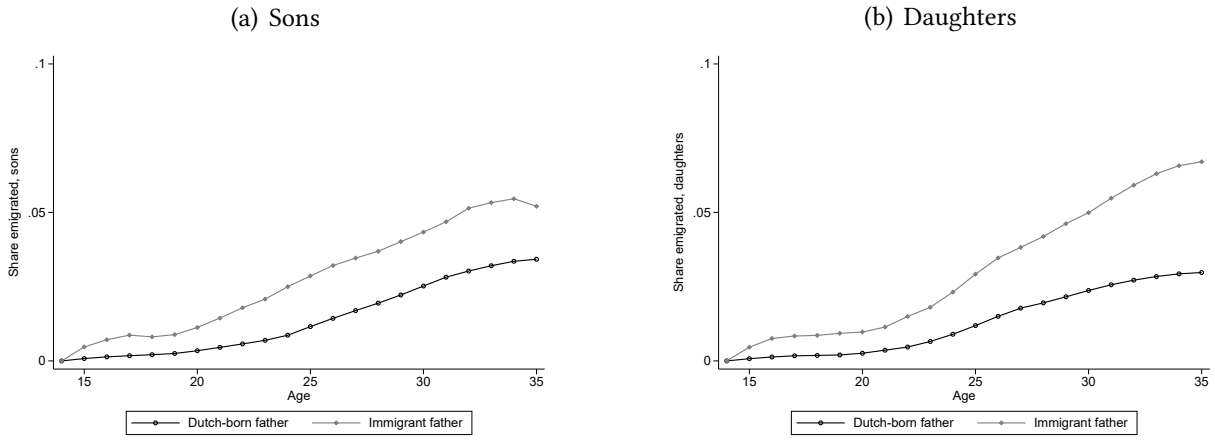


Notes: This figure plots estimates of Specification 1, regressing test score rank on the income rank of parents. Children born in 1994-1996 and 2000-2002 respectively. Immigration status is determined by father's country of birth. Parental income measured in 2003-2006 and 2006-2009 respectively. Parental income ranks, 0-100, are determined within cohorts.

C.9.5 Robustness

C.9.5.1 Emigration

Figure C.9.21: The Netherlands, cumulative share of emigrated children

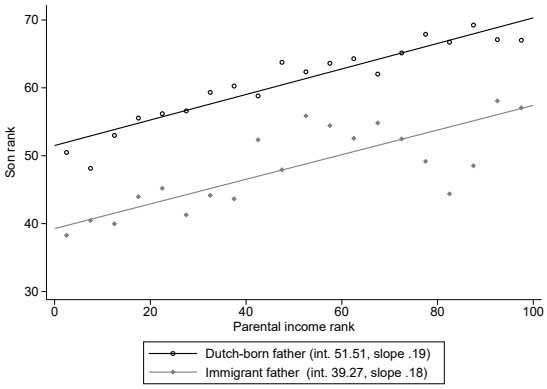


Notes: This figure shows the share of children who have emigrated (i.e. no longer living in the Netherlands) across age groups. We consider all children who were part of the Dutch population since 1995 at age 14 and calculate the share of emigrated children as they age. If children move back to The Netherlands after a period abroad, they are no longer counted as emigrants. Children born in 1978-1983. Immigration status is determined by father's country of birth.

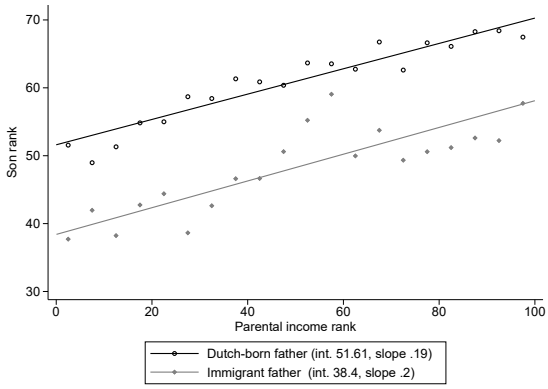
C.9.5.2 Additional years of parental income data

Figure C.9.22: Intergenerational mobility: The Netherlands by number of years of parental income data

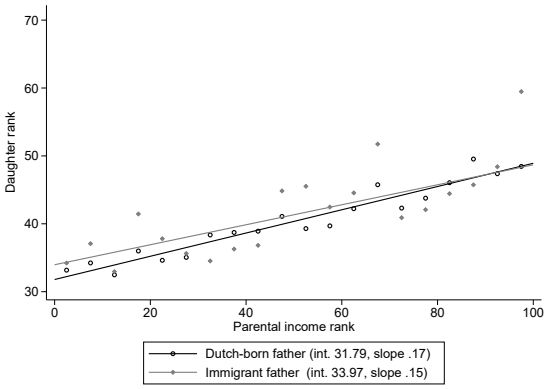
(a) Sons, parental income 1994-2000



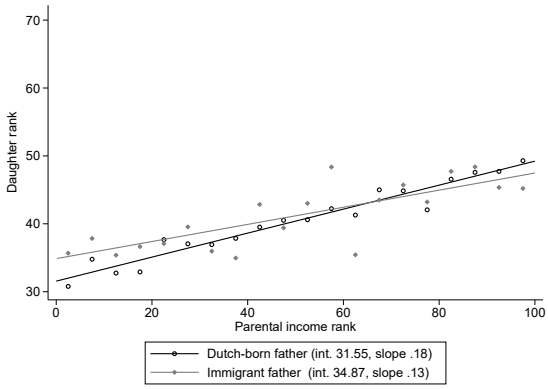
(b) Sons, parental income 1989-2000



(c) Daughters, parental income 1994-2000



(d) Daughters, parental income 1989-2000



Notes: This figure plots estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000 and 1989-2000 respectively. Income ranks, 0-100, determined within cohorts.

Table C.9.20: Intergenerational mobility estimates: The Netherlands, parental income 1989-2000

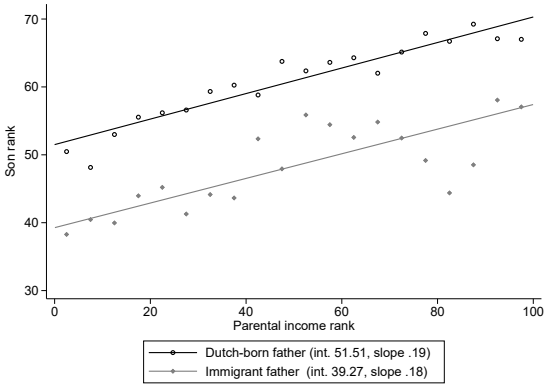
VARIABLES	(1) Sons	(2) Daughters
Immigrant father = 1	-13.20***	3.315***
	(1.476)	(1.256)
Parents' rank_incl	0.187***	0.177***
	(0.0107)	(0.00978)
Immigrant father # rank_incl	0.0103	-0.0506*
	(0.0326)	(0.0283)
Constant	51.61***	31.55***
	(0.636)	(0.547)
Observations	9,968	9,677
R-squared	0.072	0.035

Notes: This table reports estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1989-2000 respectively. Income ranks, 0-100, determined within cohorts. 95%-confidence interval indicated. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

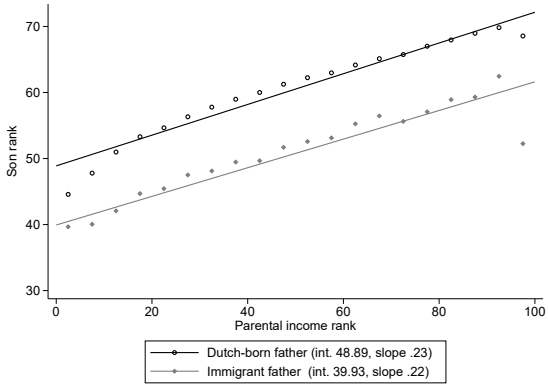
C.9.5.3 More recent birth cohorts, income rank

Figure C.9.23: Linked data: Intergenerational mobility, The Netherlands, comparison across cohorts

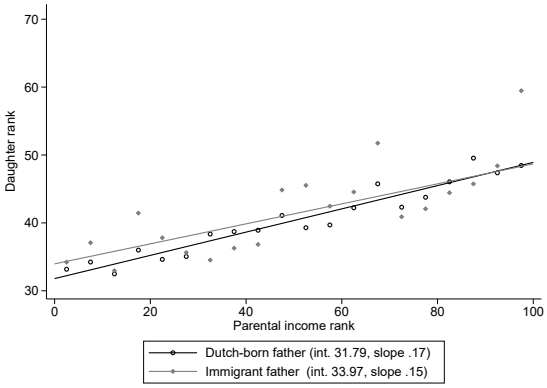
(a) The Netherlands, sons, born 1978-1983



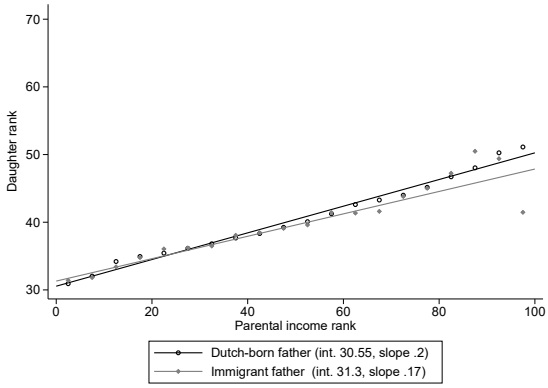
(b) The Netherlands, sons, born 1982-1987



(c) The Netherlands, daughters, born 1978-1983



(d) The Netherlands, daughters, born 1982-1987



Notes: This figure plots estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983 and 1982-1987 respectively. Immigration status is determined by father's country of birth. Child income measured in 2014-2015 and 2018-2019, and parental income 1994-2000 and 1998-2004 respectively. Income ranks, 0-100, determined within cohorts.

Table C.9.21: Linked data: Intergenerational mobility estimates, The Netherlands, comparing cohorts

	(1)	(2)
	Sons	Daughters
VARIABLES	1982-1987	1982-1987
Immigrant father = 1	-7.179***	0.289
	(0.195)	(0.204)
Parents' rank	0.244***	0.217***
	(0.00149)	(0.00152)
Immigrant father # rank	-0.0348***	-0.0324***
	(0.00468)	(0.00475)
Constant	38.93***	39.33***
	(0.0875)	(0.0882)
Observations	518,108	495,744
R-squared	0.077	0.047

Notes: This table reports estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Immigration status is determined by father's country of birth. Income ranks, 0-100, determined within cohorts. Columns (1) & (2): Children born in 1978-1983, child income measured in 2014-2015, and parental income 1994-2000. Columns (3) & (4): Children born in 1982-1987, child income measured in 2018-2019, and parental income 1998-2004. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

C.10 Country-specific details & results: Norway

C.10.1 Data details and deviations

As in the Danish case, we use several administrative registers covering the population of Norwegian residents from the 1980s onward to construct the relevant datasets on children and parents.

Data access. These administrative registers were provided by Statistics Norway. Researchers can gain access to the same registries by submitting a written application to Statistics Norway. The application should include a detailed research proposal, a comprehensive list of datasets and variables, and the selection criteria to be used. Guidance on how to access the data is provided by Statistics Norway here: https://www.ssb.no/data-til-forskning/utlan-av-data-til-forskere.

C.10.1.1 Cross-sectional data

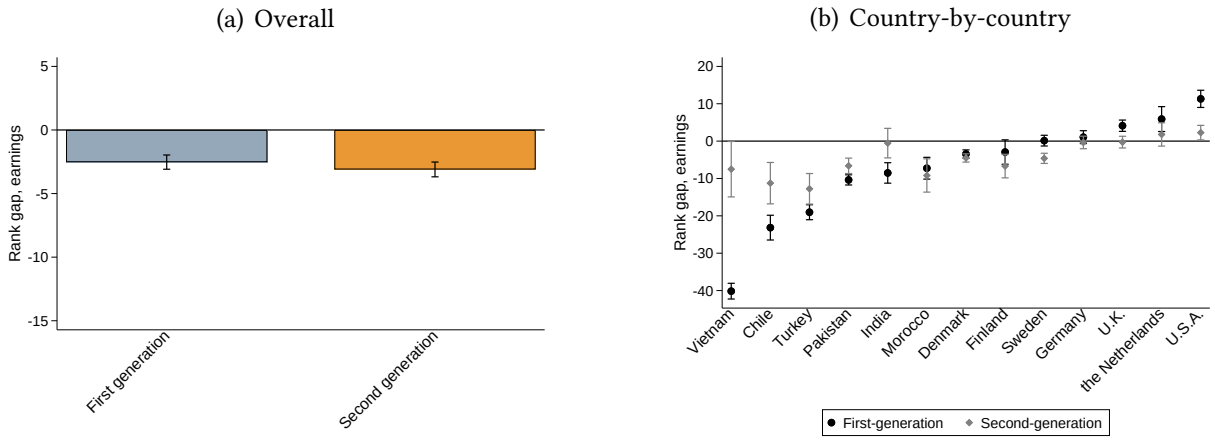
Similar to the Danish case, we use data from 1980 population registers of Norwegian residents (BUSTAD and FASTEOPPL registers) to identify men, their age, parental status, and immigration status (defined by their country of birth). Measures of paternal total income and earnings are derived from the 1980 tax registers (SKATT and PINNT). We use data from 2010 population registers (REGSTATUS and FASTEOPPL registers) to identify sons, their age, and their immigration status (defined by their fathers' country of birth). The measures of sons' total income and earnings come from the 2010 tax register (INNTEKT).

C.10.1.2 Linked data

As in the Danish case, we use data from 2014 and 2015 population registers (REGSTATUS and FASTEOPPL) to identify Norwegian residents. These registers also provide individuals' year of birth, parental IDs, children's IDs, and immigration status (defined by country of birth). Total income and earnings for children and parents are obtained from the 1994 and 2000 tax registers (INNTEKT). To define parental industry, we use the "International Standard Industrial Classification" (version 1994) rather than the Statistical Classification of Economic Activities in the European Community (NACE) used in the Danish. With this classification, we have 35 broad industrial categories (first 2 digits), and 85 more detailed categories (first 3 digits).

C.10.2 Cross-sectional results

Figure C.10.24: Cross-sectional results using total earnings: Norway, 1980-2010 cohort



Notes: This figure plots the estimated coefficients from Equation 1 from Abramitzky et al. (2021) for sons and fathers in 1980 and 2010 respectively. We use measures of earnings for both generations. Panel a) includes a non-Norwegian dummy rather than country-of-origin dummies. Immigration status is determined by father's country of birth. Income ranks are determined within cohorts. Sample includes men aged 30-50. 95%-confidence interval indicated.

Table C.10.22: Cross-sectional data: Summary statistics, Norway

Fathers: 1980 cohort

	Immigrants	Norwegian-born	Diff.	Std. Error
Age	37.709	38.794	1.085***	0.055
Rank gap, total income	48.504	50.044	1.541***	0.261
Rank gap, earnings	47.546	50.073	2.527***	0.261
ln(total income)	11.621	11.591	-0.031***	0.005
ln(earnings)	11.438	11.439	0.001	0.005
Total income > 0	0.910	0.945	0.035***	0.002
Earnings > 0	0.962	0.982	0.020***	0.001
Share of population	0.029	0.971		
N	12631.000	425707.000		

Sons: 2010 cohort

	Immigrant father	Norwegian-born father	Diff.	Std. Error
Age	38.345	40.369	2.025***	0.058
Rank gap, total income	46.972	50.054	3.082***	0.285
Rank gap, earnings	46.952	50.054	3.102***	0.285
ln(total income)	12.877	13.023	0.147***	0.008
ln(earnings)	12.859	12.965	0.106***	0.009
Total income > 0	0.992	0.996	0.004***	0.001
Earnings > 0	0.910	0.931	0.021***	0.003
Share of population	0.017	0.983		
N	10416.000	586865.000		

Notes: This table reports summary statistics of the cross-sectional sample, including sons and fathers in 1980 and 2010 respectively. Immigration status is determined by father 's country of birth. Income ranks are determined within cohorts. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

C.10.3 Main results

C.10.3.1 Summary statistics

Table C.10.23: Linked data: Summary statistics, Norway

Sons

	Immigrant father	Norwegian-born father	Diff.	Std. Error
Child age	33.360	33.516	0.157***	0.022
Child income rank	52.538	57.535	4.997***	0.376
Child labour force part.	0.896	0.932	0.036***	0.003
Mother's age at child birth	27.304	26.799	-0.505***	0.063
Father's age at child birth	31.176	29.508	-1.668***	0.072
Parental income rank	38.630	50.354	11.724***	0.364
Parental wealth rank, 1994	47.442	50.109	2.667***	0.366
Child share of population	0.045	0.955		
N	6541.000	140319.000		

Daughters

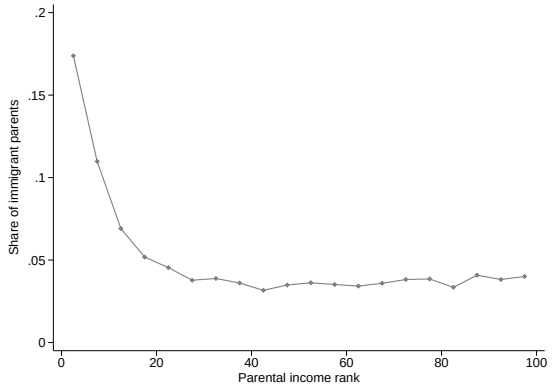
	Immigrant father	Norwegian-born father	Diff.	Std. Error
Child age	33.385	33.519	0.134***	0.022
Child income rank	41.417	42.365	0.948***	0.340
Child labour force part.	0.880	0.925	0.046***	0.003
Mother's age at child birth	27.439	26.777	-0.662***	0.066
Father's age at child birth	31.139	29.512	-1.627***	0.075
Parental income rank	38.311	50.710	12.399***	0.379
Parental wealth rank, 1994	47.283	50.132	2.849***	0.379
Child share of population	0.043	0.957		
N	6018.000	133888.000		

Notes: This table reports summary statistics of the estimation sample. Children born in 1978-1983. Immigration status is determined by father 's country of birth. Child income measured in 2014-2015, and parental income and wealth 1994-2000. Child age is measured in 2014. Income ranks, 0-100, determined within cohorts. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

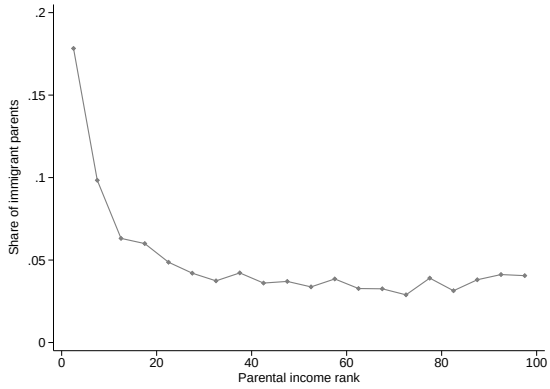
C.10.3.2 Parental income distribution

Figure C.10.25: Linked data: Norway, share of total number of children with immigrants parents

(a) Sons



(b) Daughters

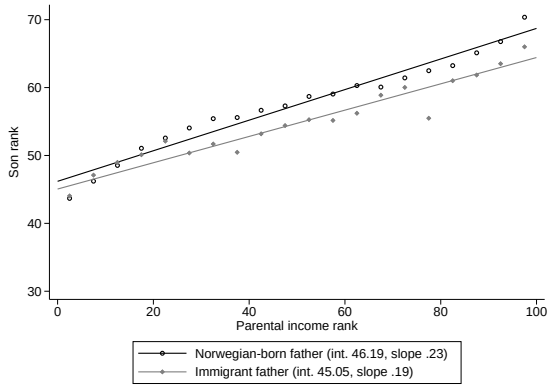


Notes: This figure shows the share of children of immigrant parents in each ventile out of the total number of children with immigrant parents. The numerator is the number of children of immigrants within each ventile. The denominator is the total number of children with immigrant parents (across all ventiles). Children born in 1978-1983. Immigration status is determined by father's country of birth. Parental income measured in 1994-2000. Income ranks, 0-100, determined within child cohorts.

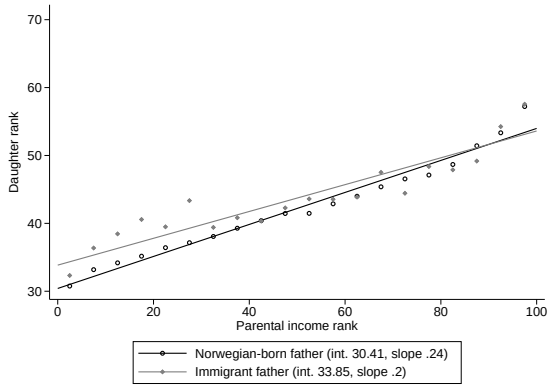
C.10.3.3 Rank-rank relationship

Figure C.10.26: Linked data: Intergenerational mobility, Norway

(a) Norway, sons



(b) Norway, daughters



Notes: This figure plots estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts.

Table C.10.24: Linked data: Intergenerational mobility estimates, Norway

VARIABLES	(1) Sons	(2) Daughters
Immigrant father = 1	-1.139*	3.434***
	(0.645)	(0.561)
Parents' rank	0.225***	0.236***
	(0.00274)	(0.00241)
Immigrant father # rank	-0.0315**	-0.0381***
	(0.0128)	(0.0117)
Constant	46.19***	30.41***
	(0.157)	(0.132)
Observations	146,860	139,906
R-squared	0.048	0.068

Notes: This table reports estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

C.10.3.4 Oaxaca-Blinder decomposition

Table C.10.25: Oaxaca-Blinder decompositions, child income rank, Norway

	(1) Sons: pooled	(2) Sons: non-immi. ref.	(3) Sons: . immi. ref	(4) Daughters: pooled	(5) Daughters: non-immi. ref.	(6) Daughters:. immi. ref
Mean child income rank: Immigrant father	52.54***	52.54***	52.54***	41.42***	41.42***	41.42***
	(0.400)	(0.400)	(0.400)	(0.361)	(0.361)	(0.361)
Mean child income rank: No immigrant father	57.53***	57.53***	57.53***	42.37***	42.37***	42.37***
	(0.0790)	(0.0790)	(0.0790)	(0.0701)	(0.0701)	(0.0701)
Difference in means	−4.997***	−4.997***	−4.997***	−0.948***	−0.948***	−0.948***
	(0.408)	(0.408)	(0.408)	(0.367)	(0.367)	(0.367)
Total explained difference	−2.620***	−2.641***	−2.271***	−2.898***	−2.923***	−2.450***
due to differences in parental income distributions	(0.0951)	(0.0959)	(0.166)	(0.101)	(0.102)	(0.164)
Total unexplained difference	−2.376***	−2.356***	−2.725***	1.950***	1.975***	1.502***
due to differences in mobility parameters	(0.402)	(0.402)	(0.425)	(0.359)	(0.359)	(0.393)
- Parental income rank (*relative mobility*)	−1.237**	−1.217**	−1.586**	−1.484***	−1.460***	−1.932***
	(0.502)	(0.494)	(0.643)	(0.456)	(0.448)	(0.593)
- Intercept (*absolute mobility*)	−1.139*	−1.139*	−1.139*	3.434***	3.434***	3.434***
	(0.645)	(0.645)	(0.645)	(0.561)	(0.561)	(0.561)
Observations	146,860	146,860	146,860	139,906	139,906	139,906

Notes: This table reports a Oaxaca-Blinder decompositions of the gap in income ranks between children of immigrants and children of locals (Specification 4). We follow the approach and terminology of Fortin et al. (2011), and estimate the fraction of the income rank gap that can be "explained" by differences in parental income distributions, and the fraction that is "unexplained" by parental income distribution differences, and rather due to differences in intergenerational mobility parameters. We report versions using pooled estimated coefficients and each of the groups' coefficients as reference levels. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

C.10.4 Mechanisms

C.10.4.1 Various sets of controls

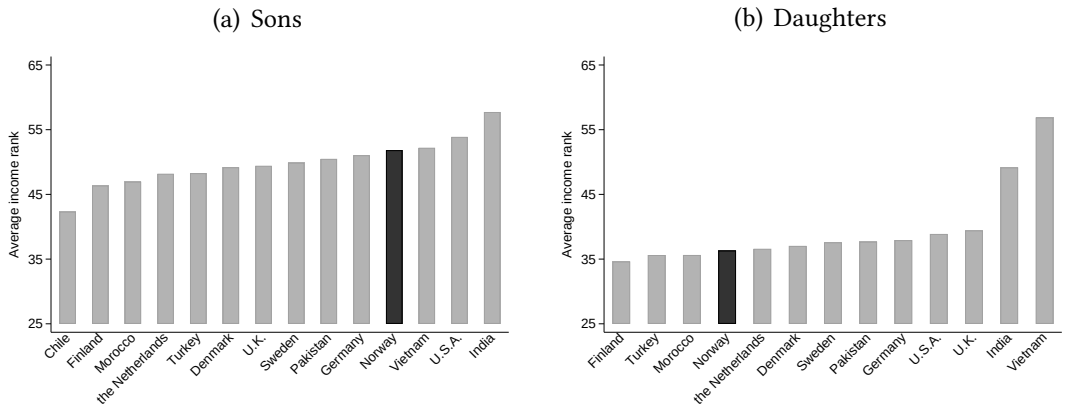
Table C.10.26: Linked data: Intergenerational mobility estimates with various sets of controls, Norway

VARIABLES	(1) Sons	(2) Sons	(3) Sons	(4) Sons	(5) Sons	(6) Sons	(7) Sons	(8) Sons	(9) Daughters	(10) Daughters	(11) Daughters	(12) Daughters	(13) Daughters	(14) Daughters	(15) Daughters	(16) Daughters
Immigrant father = 1	-1.139*	-0.426	0.831	-0.550	-0.141	0.0279	0.852	1.753***	3.434***	2.795***	2.489***	3.879***	3.647***	3.569***	3.522***	3.023***
	(0.645)	(0.654)	(0.661)	(0.645)	(0.647)	(0.648)	(0.655)	(0.661)	(0.561)	(0.567)	(0.574)	(0.562)	(0.563)	(0.564)	(0.569)	(0.575)
Parents' rank	0.225***	0.227***	0.231***	0.236***	0.209***	0.208***	0.217***	0.216***	0.236***	0.240***	0.237***	0.241***	0.218***	0.213***	0.222***	0.220***
	(0.00274)	(0.00283)	(0.00288)	(0.00280)	(0.00306)	(0.00311)	(0.00320)	(0.00322)	(0.00241)	(0.00250)	(0.00255)	(0.00247)	(0.00273)	(0.00278)	(0.00285)	(0.00288)
Immigrant father # rank	-0.0315**	-0.0351***	-0.0447***	-0.0322**	-0.0392***	-0.0396***	-0.0405***	-0.0471***	-0.0381***	-0.0305***	-0.0285**	-0.0397***	-0.0406***	-0.0410***	-0.0366***	-0.0325***
	(0.0128)	(0.0128)	(0.0129)	(0.0127)	(0.0128)	(0.0128)	(0.0128)	(0.0128)	(0.0117)	(0.0117)	(0.0117)	(0.0117)	(0.0117)	(0.0117)	(0.0117)	(0.0117)
Constant	46.19***	43.66***	46.67***	41.87***	49.20***	49.25***	43.86***	46.63***	30.41***	31.15***	27.76***	28.24***	30.83***	31.06***	30.37***	26.81***
	(0.157)	(0.263)	(1.012)	(0.408)	(1.026)	(1.027)	(1.098)	(1.473)	(0.132)	(0.229)	(0.920)	(0.361)	(0.921)	(0.921)	(0.990)	(1.339)
Observations	146,860	146,860	146,860	146,860	146,860	146,860	146,860	146,860	139,906	139,906	139,906	139,906	139,906	139,906	139,906	139,906
R-squared	0.048	0.056	0.069	0.059	0.052	0.054	0.071	0.082	0.068	0.070	0.076	0.075	0.075	0.077	0.083	0.089
Parental region	0	1	0	0	0	0	1	0	0	1	0	0	0	0	1	0
Parental municipality	0	0	1	0	0	0	0	1	0	0	1	0	0	0	0	1
Parental wealth	0	0	0	1	0	0	1	1	0	0	0	1	0	0	1	1
Parental industry, 35 grp.	0	0	0	0	1	0	1	1	0	0	0	0	1	0	1	1
Parental industry, 3-digit	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0

Notes: This table reports estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts. Other parental characteristics are all determined in 1994 and included as fixed effects. We have 8 regions and 434 municipalities. Parental industries include categories for unknown industry as well as no industry (if not working). Parental wealth FEs are included as ventiles. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

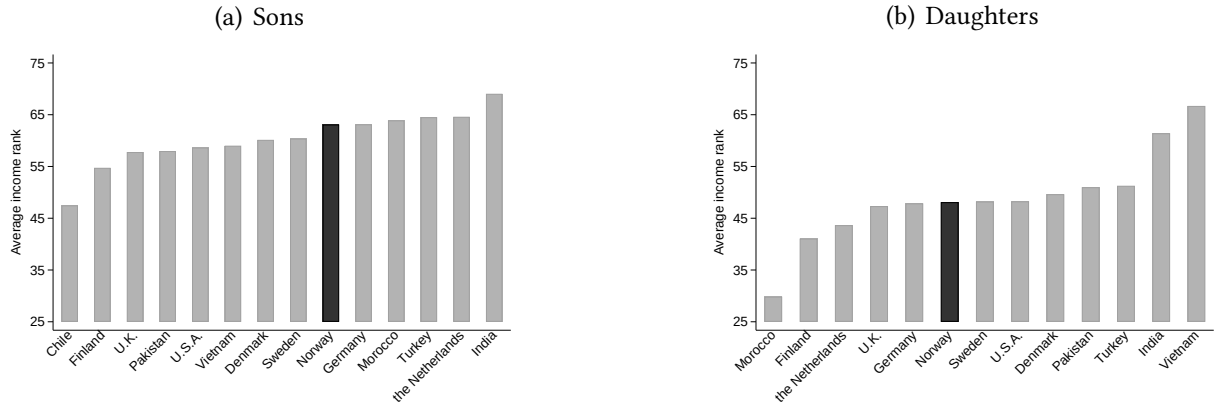
C.10.4.2 Heterogeneity across sending countries

Figure C.10.27: Average income at 25th percentile: Norway



Notes: This figure plots the predicted child income rank if parental income rank equals 25 from a paternal country of origin-level estimation of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts.

Figure C.10.28: Average income at 75th percentile: Norway



Notes: This figure plots the predicted child income rank if parental income rank equals 75 from a paternal country of origin-level estimation of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts.

C.10.4.3 Employment

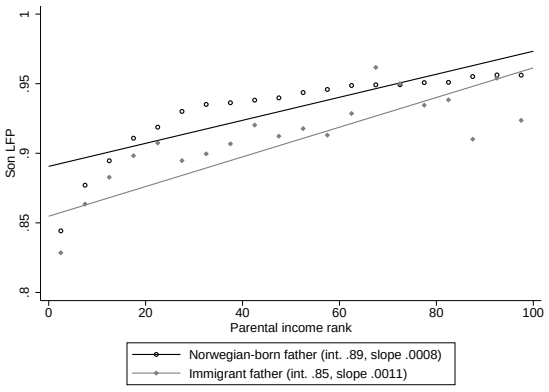
Table C.10.27: Linked data: Intergenerational mobility estimates, employment, Norway

VARIABLES	(1) Sons	(2) Daughters
Immigrant father = 1	-0.0358***	-0.0459***
	(0.00647)	(0.00721)
Parents' rank	0.000827***	0.00104***
	(2.38e-05)	(2.54e-05)
Immigrant father # rank	0.000239**	0.000340***
	(0.000112)	(0.000124)
Constant	0.891***	0.873***
	(0.00152)	(0.00165)
Observations	146,860	139,906
R-squared	0.011	0.016

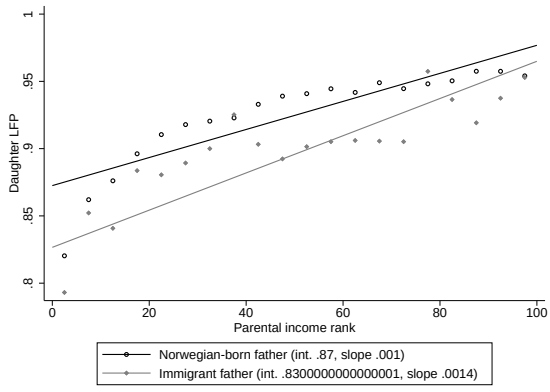
Notes: This table reports estimates of Specification 1, regressing employment of sons/daughters on income ranks of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child employment measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Figure C.10.29: Linked data: Intergenerational mobility, employment, Norway

(a) Norway, sons



(b) Norway, daughters



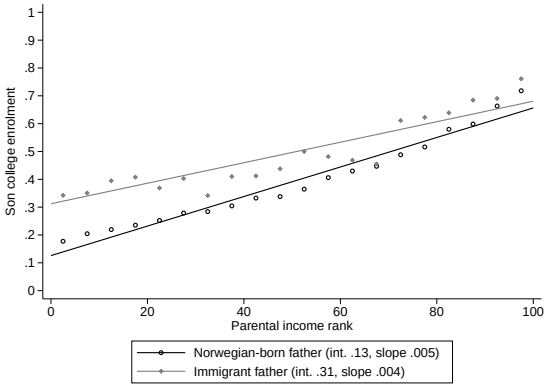
Notes: This figure plots estimates of Specification 1, regressing employment of sons/daughters on income ranks of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child employment measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts.

C.10.4.4 Educational mobility

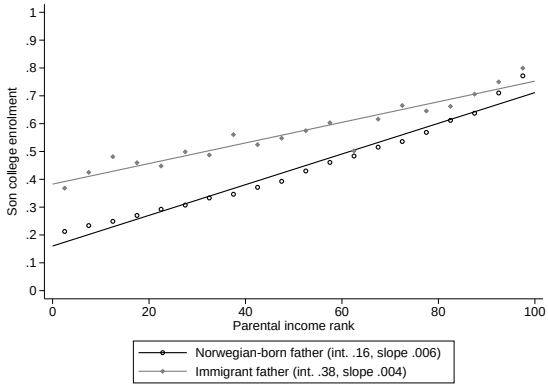
College enrollment

Figure C.10.30: Linked data: College enrolment by age 25, Norway, comparison across cohorts

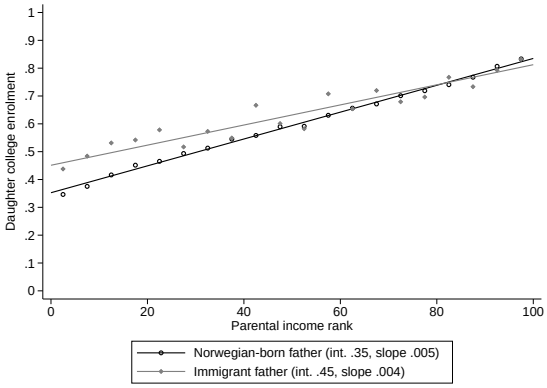
(a) Norway, sons, born 1986-1988



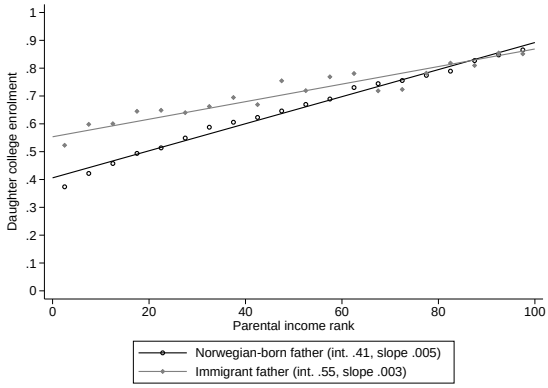
(b) Norway, sons, born 1992-1994



(c) Norway, daughters, born 1986-1988



(d) Norway, daughters, born 1992-1994

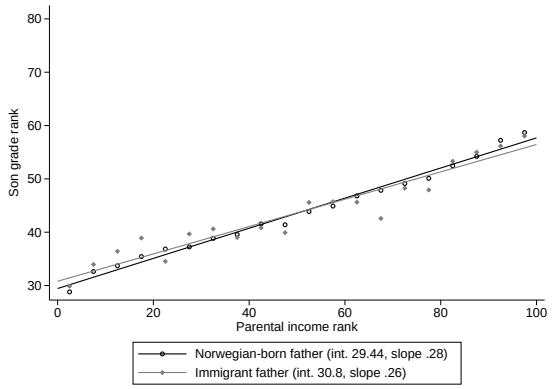


Notes: This figure plots estimates of Specification 1, regressing an indicator of college enrolment in the year the children turn 25 or earlier on the income rank of parents. Children born in 1986-1988 and 1992-1994 respectively. Immigration status is determined by father's country of birth. Parental income measured in 1997-2003 and 2003-2009 respectively. Parental income ranks, 0-100, are determined within cohorts.

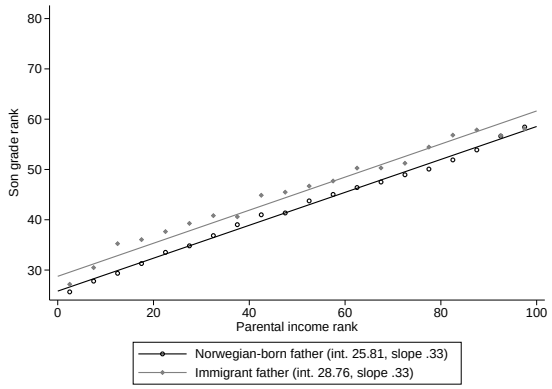
End-of-middle school grades

Figure C.10.31: Linked data: End-of-middle school grades, Norway, comparison across cohorts

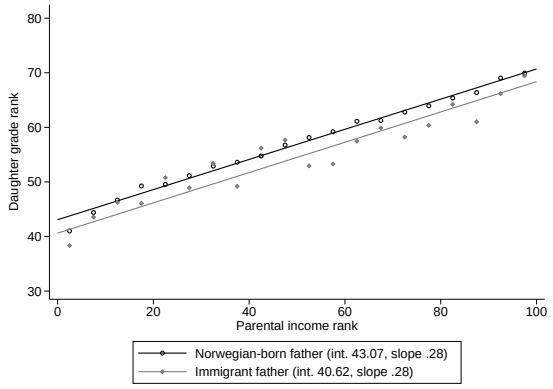
(a) Sons, born 1986-1988



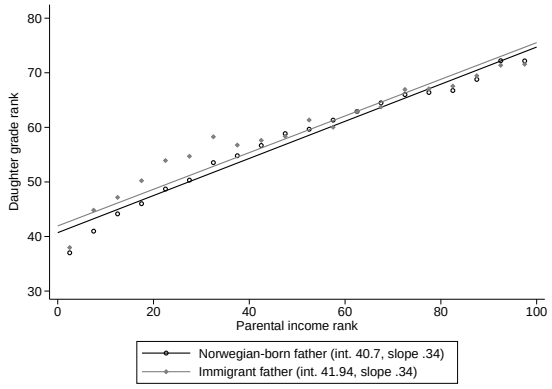
(b) Sons, born 1992-1994



(c) Daughters, born 1986-1988



(d) Daughters, born 1992-1994

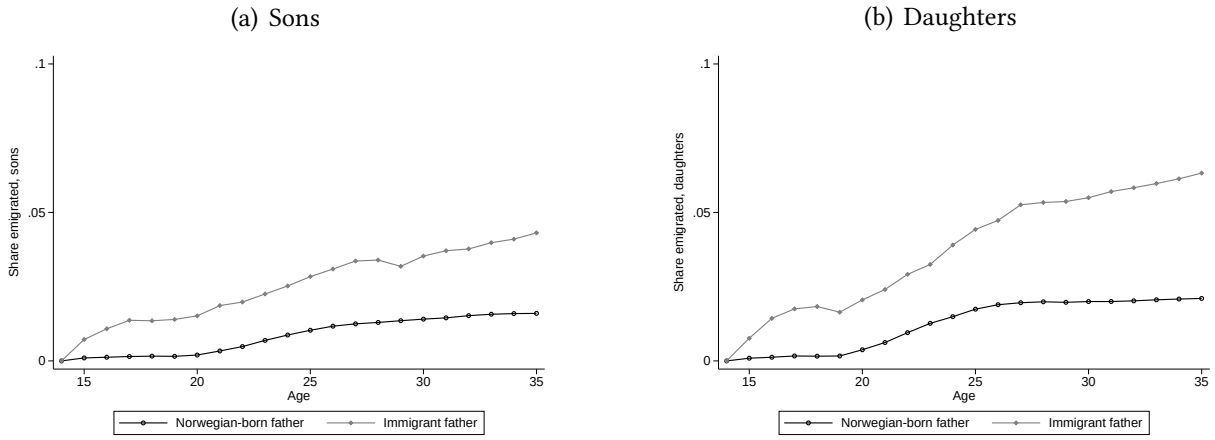


Notes: This figure plots estimates of Specification 1, regressing the average end-of-middle school grade ranks of sons/daughters on the income rank of parents. If children have not completed middle school by age 16, they are assigned the lowest possible grade. Children born in 1986-1988 and 2000-2002 respectively. Immigration status is determined by father's country of birth. Parental income measured in 1997-2003 and 2011-2017 respectively. Parental income ranks, 0-100, are determined within cohorts.

C.10.5 Robustness

C.10.5.1 Emigration

Figure C.10.32: Norway, cumulative share of emigrated children

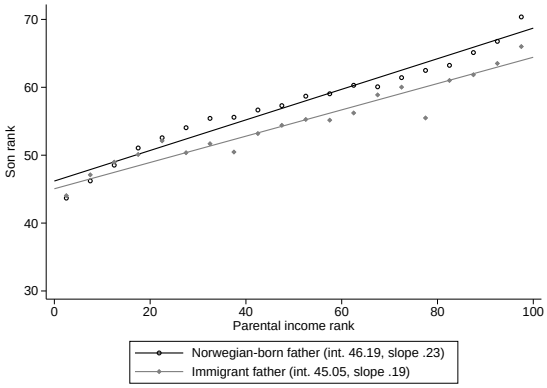


Notes: This figure shows the share of children who have emigrated (i.e. no longer living in Norway) across age groups. We consider all children who were part of the Norwegian population at age 14 and calculate the share of emigrated children as they age. If children move back to Norway after a period abroad, they are no longer counted as emigrants. Children born in 1978-1983. Immigration status is determined by father's country of birth.

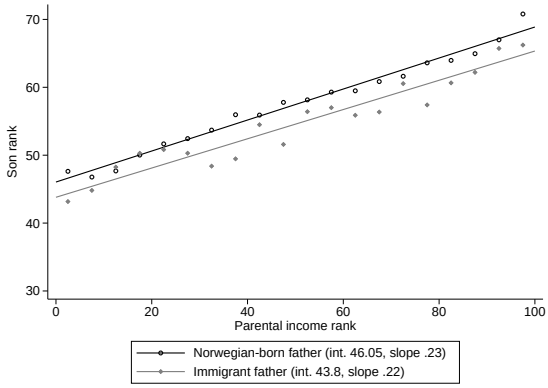
C.10.5.2 Additional years of parental income data

Figure C.10.33: Intergenerational mobility: Norway by number of years of parental income data

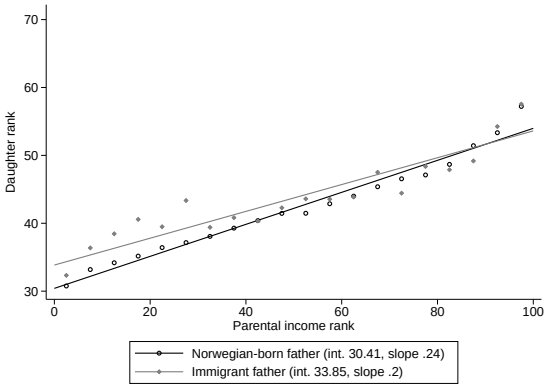
(a) Sons, parental income 1994-2000



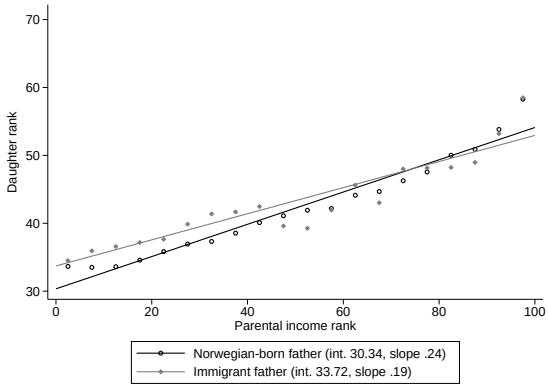
(b) Sons, parental income 1980-2000



(c) Daughters, parental income 1994-2000



(d) Daughters, parental income 1980-2000



Notes: This figure plots estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000 and 1980-2000 respectively. Income ranks, 0-100, determined within cohorts.

Table C.10.28: Intergenerational mobility estimates: Norway, parental income 1980-2000

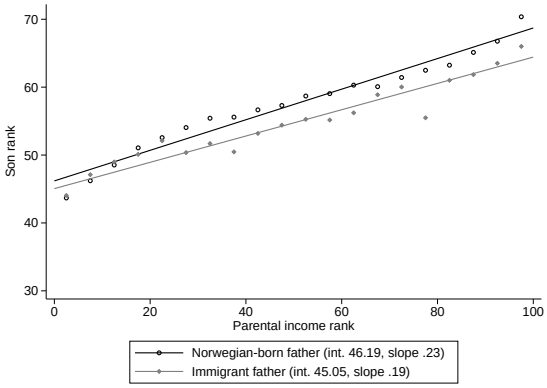
VARIABLES	(1) Sons	(2) Daughters
Immigrant father = 1	-2.245***	3.372***
	(0.668)	(0.587)
Parents' rank	0.228***	0.238***
	(0.00274)	(0.00242)
Immigrant father # rank	-0.0129	-0.0454***
	(0.0129)	(0.0120)
Constant	46.05***	30.34***
	(0.159)	(0.133)
Observations	146,740	139,780
R-squared	0.050	0.069

Notes: This table reports estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1980-2000 respectively. Income ranks, 0-100, determined within cohorts. 95%-confidence interval indicated. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$

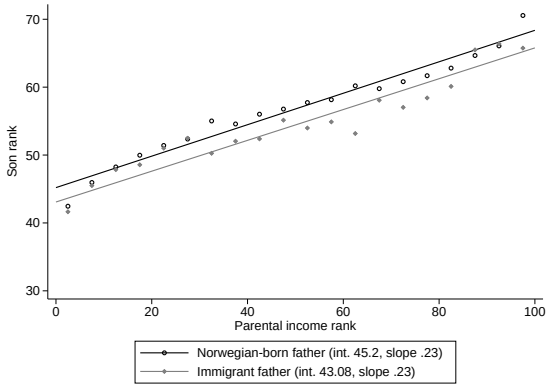
C.10.5.3 More recent birth cohorts, income rank

Figure C.10.34: Linked data: Intergenerational mobility, Norway, comparison across cohorts

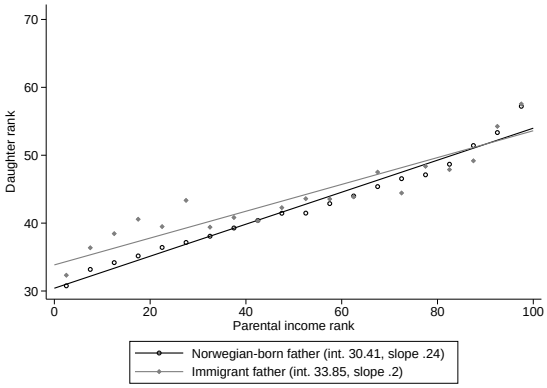
(a) Norway, sons, born 1978-1983



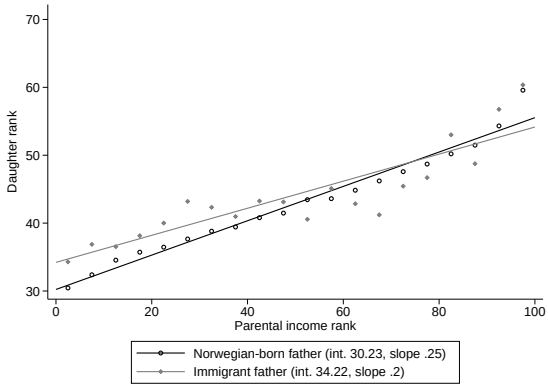
(b) Norway, sons, born 1982-1987



(c) Norway, daughters, born 1978-1983



(d) Norway, daughters, born 1982-1987



Notes: This figure plots estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983 and 1982-1987 respectively. Immigration status is determined by father's country of birth. Child income measured in 2014-2015 and 2018-2019, and parental income 1994-2000 and 1998-2004 respectively. Income ranks, 0-100, determined within cohorts.

Table C.10.29: Linked data: Intergenerational mobility estimates, Norway, comparing cohorts

	(1)	(2)	(3)	(4)
	Sons	Daughters	Sons	Daughters
VARIABLES	1978-1983	1978-1983	1982-1987	1982-1987
Immigrant father = 1	-1.139*	3.434***	-2.121***	3.991***
	(0.645)	(0.561)	(0.588)	(0.508)
Parents' rank	0.225***	0.236***	0.232***	0.253***
	(0.00274)	(0.00241)	(0.00275)	(0.00243)
Immigrant father # rank	-0.0315**	-0.0381***	-0.00467	-0.0537***
	(0.0128)	(0.0117)	(0.0116)	(0.0106)
Constant	46.19***	30.41***	45.20***	30.23***
	(0.157)	(0.132)	(0.158)	(0.133)
Observations	146,860	139,906	148,652	141,293
R-squared	0.048	0.068	0.051	0.076

Notes: This table reports estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Immigration status is determined by father's country of birth. Income ranks, 0-100, determined within cohorts. Columns (1) & (2): Children born in 1978-1983, child income measured in 2014-2015, and parental income 1994-2000. Columns (3) & (4): Children born in 1982-1987, child income measured in 2018-2019, and parental income 1998-2004. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

C.11 Country-specific details & results: Sweden

C.11.1 Data details and deviations

We use administrative registers compiled by Statistics Sweden and held by the Institute for Evaluation of Labor Market and Education Policy (IFAU) to construct the datasets on children and parents. These data cover all individuals residing in Sweden from around 1980 to 2022 (ages 0–74). Specifically, we rely on FOB (*Folk- och bostadsräkningen*), LISA (*Longitudinell integrationsdatabas för sjukförsäkrings- och arbetsmarknadsstudier*), registers from the National Board of Education, a multi-generation register linking parents and children, and information on migration.

Access to these data is restricted and protected according to chapter 24, 8 § of the Public Access to Information and Secrecy Act (2009:400) https://www.riksdagen.se/sv/dokument-lagar/dokument/svensk-forfattningssamling/offentlighets--och-sekretesslag-2009400_sfs-2009-400. Researchers wanting to replicate results can apply for access to the analysis data from the IFAU https://www.ifau.se/.

C.11.1.1 Cross-sectional data

We use 1980-data from FOB and 2010-data from LISA to identify men residing in Sweden and calculate their income (variables "arbink" and "forvers", respectively). Parental status (any children present in the population), age, and country/region of birth are determined from the multi-generation register.

Our income measure includes labor earnings, business income, taxable benefits and some labor-related benefits, such as short-term sick pay and parental benefits; capital income, pensions and long-term sickness and parental leave benefits are not included. It thereby deviates from the Danish measure of total income. We only observe capital income from 1990 and onwards, which is why this is not included in the cross-sectional comparison.

C.11.1.2 Linked data

We use 2014- and 2015-data from LISA to identify individuals residing in Sweden and calculate their income (variables "forvers" and "kapink"). The multi-generation register provides year of birth, parental IDs, information on legal sex, and region/country of birth of both parents and children. Parental income from 1994 to 2000 is also retrieved from LISA.

Our main income measure differs from the Danish measure of total income in the comparison based on linked data too, but in contrast to the measure used in the cross sectional comparison, we here include capital income in addition to labor earnings, business income, taxable benefits and (some) labor-related benefits. As a robustness check, we also do the main comparisons using a measure of disposable income (the sum of labor earnings, business income, capital income, child benefits, sick pay and other benefits after tax; "dispinc04" from the LISA register).

The comparison using additional years of parental income is based on the same income measure as the cross-sectional comparison, as we do not have access to capital income data before 1990. This analysis deviates from the Danish case also in that we measure parental income 1985–2000 rather than 1980–2000, due to data restrictions.

We do not control for parental wealth in the linked data comparison with various sets of controls, as we do not have access to such data.

C.11.1.3 Additional notes on deviations

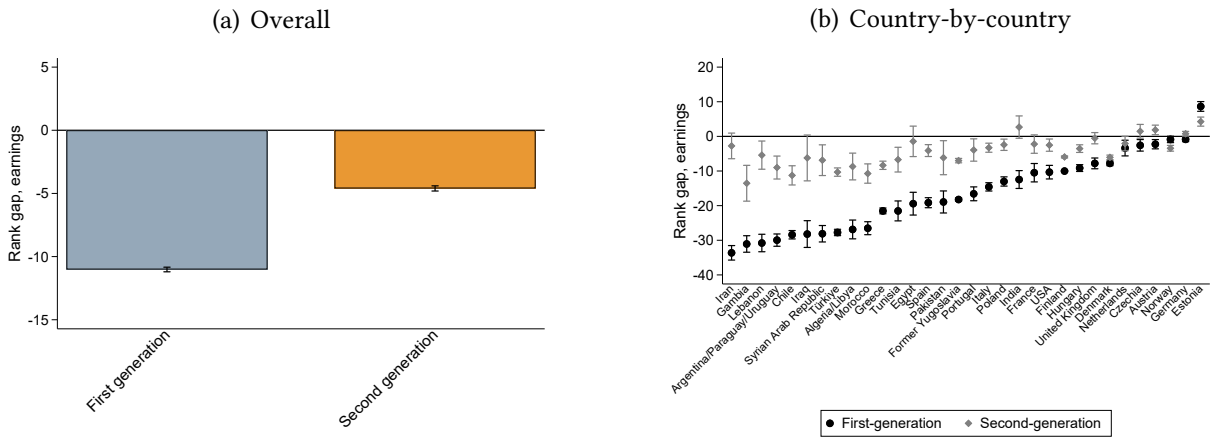
The Swedish data include a mix of countries and regions of birth (95 categories), which means our measure is less granular than that used in the Danish comparisons. We group all countries that were part of former Yugoslavia, which leaves us with 89 categories.

We only observe individuals in LISA from age 16. The emigration figure for Sweden is therefore based on individuals aged 16–35, rather than 14–35, as in the Danish case.

Educational outcomes are retrieved from registers from the National Board of Education (variables "meritvarde" from the primary school graduation register and "ffgar", first registration, from post secondary education data). We only observe primary school grades for cohorts born 1988 and later. The first comparison of grades is therefore based on cohorts born 1988–1990, rather than 1986–1988, as in the case of Denmark. We consequently measure parental income 1999–2005 rather than 1997–2003 for this analysis.

C.11.2 Cross-sectional results

Figure C.11.35: Cross-sectional results using earnings: Sweden, 1980-2010 cohort



Notes: This figure plots the estimated coefficients from Equation 1 from Abramitzky et al. (2021) for the earnings of fathers and sons in 1980 and 2010 respectively. We use measures of earnings for both generations. Panel a) includes a non-SE dummy rather than country-of-origin dummies. Immigration status is determined by father's country of birth. Income ranks are determined within cohorts. Sample includes men aged 30-50. 95%-confidence interval indicated.

Table C.11.30: Cross-sectional data: Summary statistics, Sweden

Fathers: 1980 cohort

	Immigrants	Sweden-born	Diff.	Std. Error
Age	39.049	38.957	-0.091***	0.020
Rank gap, earnings	40.182	51.204	11.022***	0.094
ln(earnings)	6.464	6.632	0.168***	0.002
Earnings > 0	0.955	0.985	0.031***	0.000
Share of population	0.109	0.891		
N	103,425	843,516		

Sons: 2010 cohort

	Immigrant father	Sweden-born father	Diff.	Std. Error
Age	39.541	40.301	0.761***	0.021
Rank gap, earnings	45.786	50.391	4.605***	0.101
ln(earnings)	7.975	8.061	0.087***	0.003
Earnings > 0	0.876	0.925	0.049***	0.001
Share of population	0.085	0.915		
N	89,643	965,805		

Notes: This table reports summary statistics of the cross-sectional sample, including sons and fathers in 1980 and 2010 respectively. Immigration status is determined by father's country of birth. Income ranks are determined within cohorts. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

C.11.3 Main results

C.11.3.1 Summary statistics

Table C.11.31: Linked data: Summary statistics, Sweden

Sons

	Immigrant father	Sweden-born father	Diff.	Std. Error
Child age	33.485	33.504	0.019*	0.011
Child income rank	52.281	58.526	6.245***	0.187
Child labour force participation	0.895	0.945	0.049***	0.001
Mother's age at child birth	27.548	27.889	0.340***	0.032
Father's age at child birth	31.075	30.457	-0.618***	0.036
Parental income rank	34.329	51.728	17.399***	0.183
Child share of population	0.102	0.898		
N	26,600	234,407		

Daughters

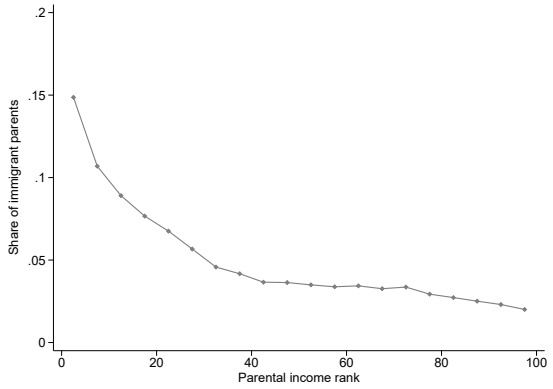
	Immigrant father	Sweden-born father	Diff.	Std. Error
Child age	33.476	33.513	0.037***	0.011
Child income rank	39.281	41.954	2.673***	0.174
Child labour force participation	0.894	0.937	0.042***	0.002
Mother's age at child birth	27.542	27.876	0.334***	0.033
Father's age at child birth	31.013	30.456	-0.557***	0.037
Parental income rank	34.591	51.816	17.225***	0.188
Child share of population	0.103	0.897		
N	25,409	222,088		

Notes: This table reports summary statistics of the estimation sample. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000. Child age is measured in 2014. Income ranks, 0-100, determined within cohorts. *** $p<0.01$, ** $p<0.05$, * $p<0.1$
.

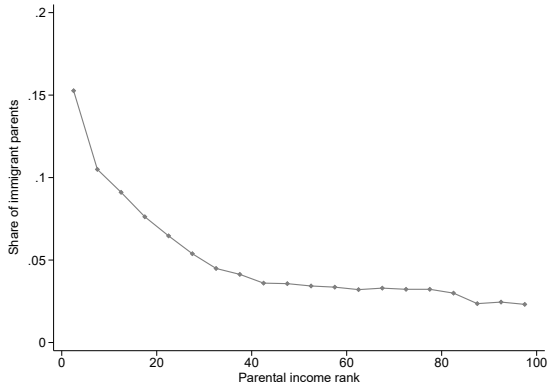
C.11.3.2 Parental income distribution

Figure C.11.36: Linked data: Sweden, share of total number of children with immigrants parents

(a) Sons



(b) Daughters

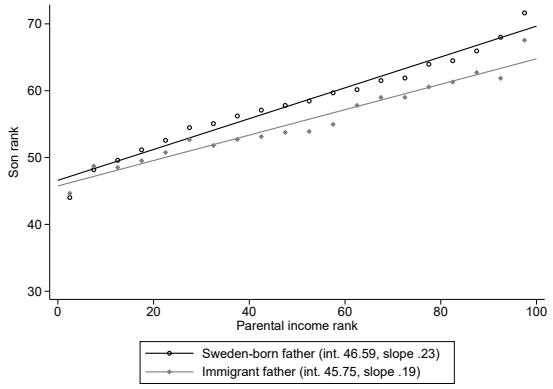


Notes: This figure shows the share of children of immigrant parents in each ventile out of the total number of children with immigrant parents. The numerator is the number of children of immigrants within each ventile. The denominator is the total number of children with immigrant parents (across all ventiles). Children born in 1978-1983. Immigration status is determined by father's country of birth. Parental income measured in 1994-2000. Income ranks, 0-100, determined within child cohorts.

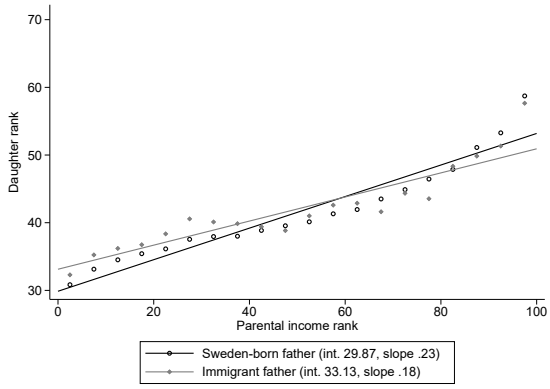
C.11.3.3 Rank-rank relationship

Figure C.11.37: Linked data: Intergenerational mobility, Sweden

(a) Sweden, sons



(b) Sweden, daughters



Notes: This figure plots estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts.

Table C.11.32: Linked data: Intergenerational mobility estimates, Sweden

VARIABLES	(1) Sons	(2) Daughters
Immigrant father = 1	-0.843***	3.252***
	(0.326)	(0.281)
Parents' rank	0.231***	0.233***
	(0.00209)	(0.00195)
Immigrant father # rank	-0.0405***	-0.0552***
	(0.00707)	(0.00638)
Constant	46.59***	29.87***
	(0.123)	(0.109)
Observations	261,007	247,497
R-squared	0.054	0.061

Notes: This table reports estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

C.11.3.4 Oaxaca-Blinder decomposition

Table C.11.33: Oaxaca-Blinder decompositions, child income rank, Sweden

	(1) Sons: pooled	(2) Sons: non-immi. ref.	(3) Sons: . immi. ref	(4) Daughters: pooled	(5) Daughters: non-immi. ref.	(6) Daughters:. immi. ref
Mean child income rank: immigrant father	52.28***	52.28***	52.28***	39.28***	39.28***	39.28***
	(0.192)	(0.192)	(0.192)	(0.171)	(0.171)	(0.171)
Mean child income rank: no immigrant father	58.53***	58.53***	58.53***	41.95***	41.95***	41.95***
	(0.0590)	(0.0590)	(0.0590)	(0.0557)	(0.0557)	(0.0557)
Difference in means	−6.245***	−6.245***	−6.245***	−2.673***	−2.673***	−2.673***
	(0.201)	(0.201)	(0.201)	(0.179)	(0.179)	(0.179)
Total explained difference	−3.941***	−4.013***	−3.309***	−3.916***	−4.016***	−3.065***
due to differences in parental income distributions	(0.0543)	(0.0559)	(0.123)	(0.0539)	(0.0557)	(0.110)
Total unexplained difference	−2.304***	−2.232***	−2.936***	1.243***	1.343***	0.392*
due to differences in mobility parameters	(0.201)	(0.201)	(0.228)	(0.179)	(0.178)	(0.211)
- Parental income rank*(relative mobility)*	−1.461***	−1.389***	−2.093***	−2.009***	−1.909***	−2.860***
	(0.255)	(0.243)	(0.366)	(0.232)	(0.221)	(0.331)
- Intercept*(absolute mobility)*	−0.843***	−0.843***	−0.843***	3.252***	3.252***	3.252***
	(0.326)	(0.326)	(0.326)	(0.281)	(0.281)	(0.281)
Observations	261,007	261,007	261,007	247,497	247,497	247,497

Notes: This table reports a Oaxaca-Blinder decompositions of the gap in income ranks between children of immigrants and children of locals (Specification 4). We follow the approach and terminology of Fortin et al. (2011), and estimate the fraction of the income rank gap that can be "explained" by differences in parental income distributions, and the fraction that is "unexplained" by parental income distribution differences, and rather due to differences in intergenerational mobility parameters. We report versions using pooled estimated coefficients and each of the groups' coefficients as reference levels. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

C.11.4 Mechanisms

C.11.4.1 Various sets of controls

Table C.11.34: Linked data: Intergenerational mobility estimates with various sets of controls, Sweden

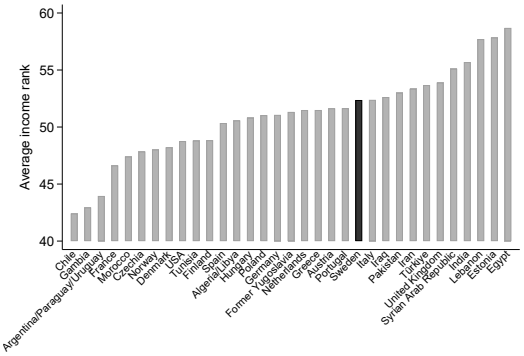
VARIABLES	(1) Sons	(2) Sons	(3) Sons	(4) Sons	(5) Sons	(6) Sons	(7) Sons	(8) Daughters	(9) Daughters	(10) Daughters	(11) Daughters	(12) Daughters	(13) Daughters	(14) Daughters
Immigrant father = 1	-0.843***	-1.385***	-0.970***	-0.475	-0.377	-0.827**	-0.474	3.252***	1.648***	1.590***	2.187***	2.246***	1.365***	1.351***
	(0.326)	(0.331)	(0.334)	(0.335)	(0.336)	(0.337)	(0.339)	(0.281)	(0.285)	(0.288)	(0.287)	(0.289)	(0.289)	(0.292)
Parents' rank	0.231***	0.228***	0.228***	0.229***	0.223***	0.225***	0.225***	0.233***	0.228***	0.223***	0.233***	0.221***	0.225***	0.221***
	(0.00209)	(0.00215)	(0.00218)	(0.00246)	(0.00255)	(0.00249)	(0.00252)	(0.00195)	(0.00200)	(0.00202)	(0.00231)	(0.00240)	(0.00234)	(0.00236)
Immigrant father # rank	-0.0405***	-0.0367***	-0.0403***	-0.0394***	-0.0391***	-0.0383***	-0.0409***	-0.0552***	-0.0425***	-0.0416***	-0.0353***	-0.0356***	-0.0327***	-0.0328***
	(0.00707)	(0.00709)	(0.00710)	(0.00715)	(0.00717)	(0.00715)	(0.00716)	(0.00638)	(0.00638)	(0.00639)	(0.00643)	(0.00643)	(0.00642)	(0.00643)
Constant	46.59***	47.85***	48.30***	44.89***	47.05***	46.01***	46.79***	29.87***	33.66***	35.36***	30.67***	28.58***	33.76***	34.14***
	(0.123)	(0.198)	(0.400)	(0.260)	(2.249)	(0.295)	(0.437)	(0.109)	(0.185)	(0.352)	(0.225)	(2.089)	(0.263)	(0.383)
Observations	261,007	261,007	261,007	261,007	261,007	261,007	261,007	247,497	247,497	247,497	247,497	247,497	247,497	247,497
R-squared	0.054	0.056	0.059	0.058	0.060	0.060	0.063	0.061	0.067	0.070	0.069	0.073	0.072	0.075
Parental region	0	1	0	0	0	1	0	0	1	0	0	0	1	0
Parental municipality	0	0	1	0	0	0	1	0	0	1	0	0	0	1
Parental industry, 2-digit	0	0	0	1	0	1	1	0	0	0	1	0	1	1
Parental industry, 3-digit	0	0	0	0	1	0	0	0	0	0	0	1	0	0

Notes: This table reports estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts. Other parental characteristics are all determined in 1994 and included as fixed effects. We have 289 municipality categories and 25 region categories (including categories for unknown region/municipality). Parental industries include categories for unknown industry as well as no industry (if not working). Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

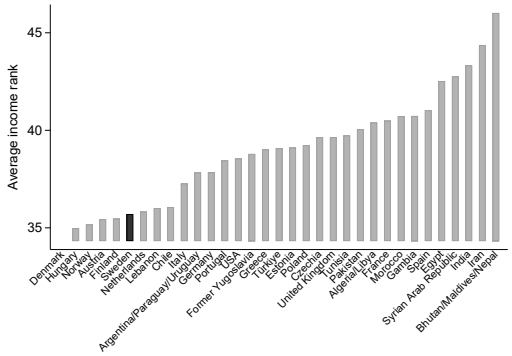
C.11.4.2 Heterogeneity across sending countries

Figure C.11.38: Average income at 25th percentile: Sweden

(a) Sons



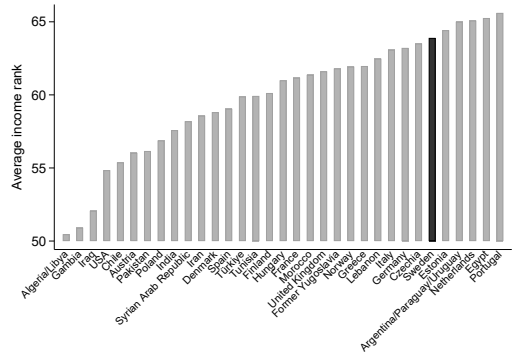
(b) Daughters



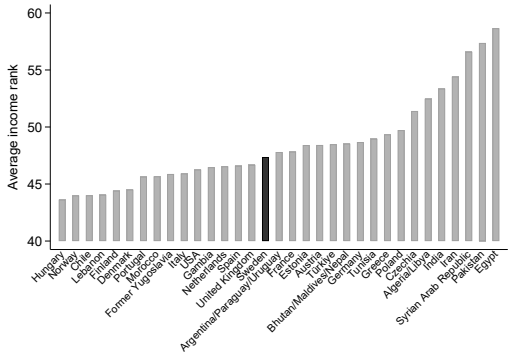
Notes: This figure plots the predicted child income rank if parental income rank equals 25 from a paternal country of origin-level estimation of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts.

Figure C.11.39: Average income at 75th percentile: Sweden

(a) Sons



(b) Daughters



Notes: This figure plots the predicted child income rank if parental income rank equals 75 from a paternal country of origin-level estimation of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts.

C.11.4.3 Employment

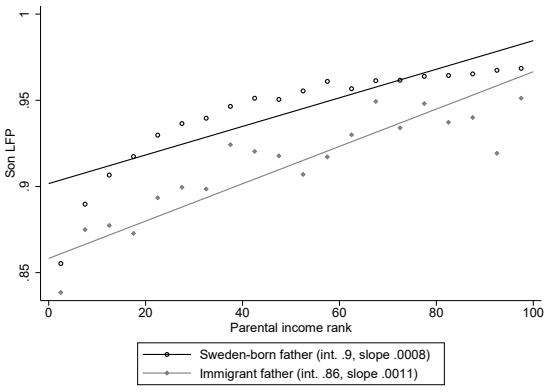
Table C.11.35: Linked data: Intergenerational mobility estimates, employment, Sweden

VARIABLES	(1) Sons	(2) Daughters
Immigrant father = 1	-0.0434***	-0.0321***
	(0.00318)	(0.00325)
Parents' rank	0.000829***	0.000958***
	(1.68e-05)	(1.77e-05)
Immigrant father # rank	0.000254***	0.000177***
	(6.03e-05)	(6.02e-05)
Constant	0.902***	0.887***
	(0.00111)	(0.00118)
Observations	261,007	247,497
R-squared	0.017	0.018

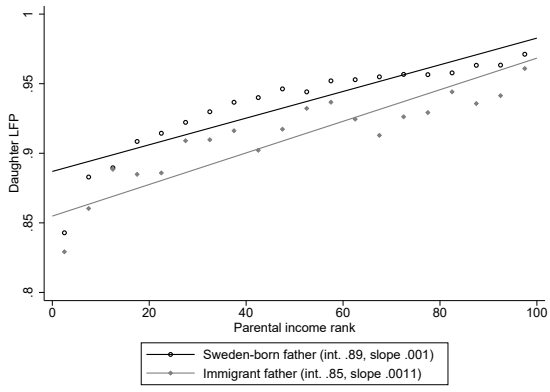
Notes: This table reports estimates of Specification 1, regressing employment of sons/daughters on income ranks of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child employment measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Figure C.11.40: Linked data: Intergenerational mobility, employment, Sweden

(a) Sweden, sons



(b) Sweden, daughters

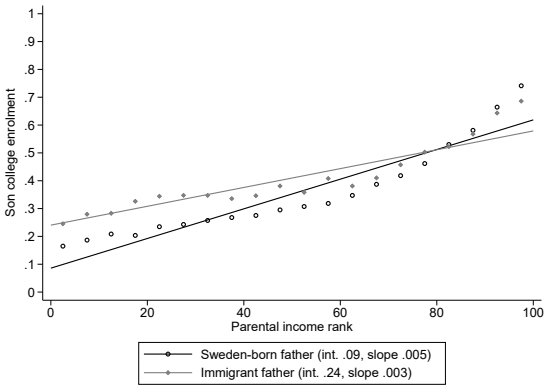


Notes: This figure plots estimates of Specification 1, regressing employment of sons/daughters on income ranks of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child employment measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts.

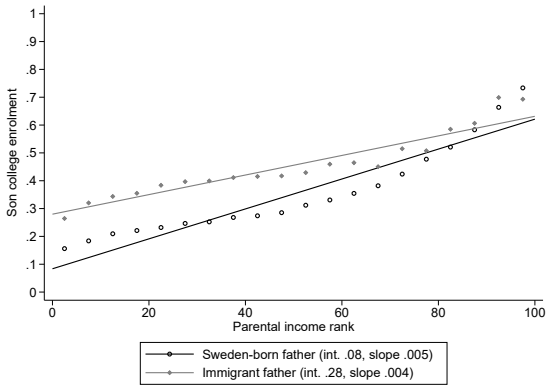
C.11.4.4 Educational mobility

Figure C.11.41: Linked data: College enrolment by age 25, Sweden, comparison across cohorts

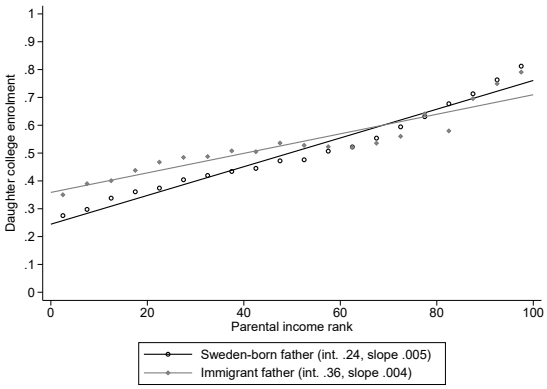
(a) Sweden, sons, born 1988-1990



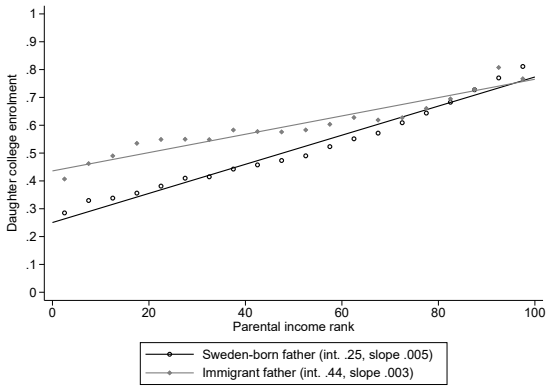
(b) Sweden, sons, born 1992-1994



(c) Sweden, daughters, born 1988-1990



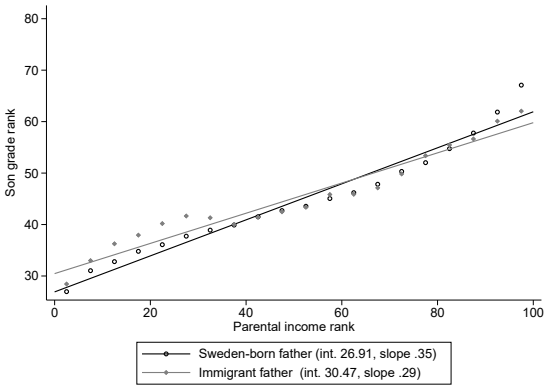
(d) Sweden, daughters, born 1992-1994



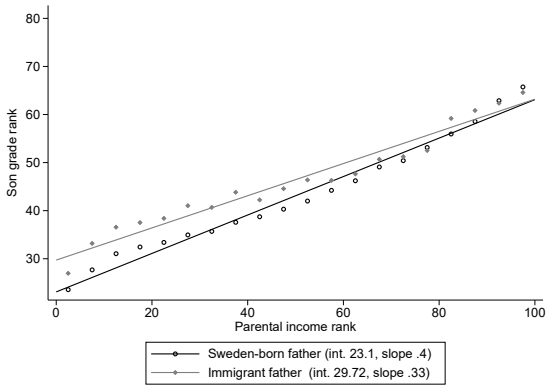
Notes: This figure plots estimates of Specification 1, regressing an indicator of college enrolment in the year the children turn 25 or earlier on the income rank of parents. Children born in 1988-1990 and 1992-1994 respectively. Immigration status is determined by father's country of birth. Parental income measured in 1999-2005 and 2003-2009 respectively. Parental income ranks, 0-100, are determined within cohorts.

Figure C.11.42: Linked data: Primary school grades, Sweden, comparison across cohorts

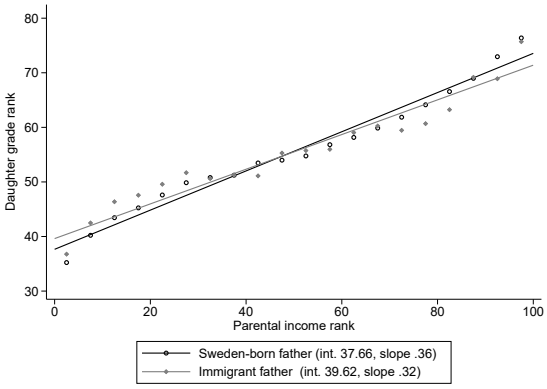
(a) Sweden, sons, born 1988-1990



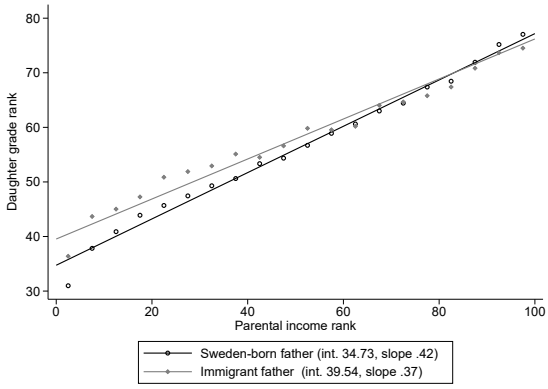
(b) Sweden, sons, born 2000-2002



(c) Sweden, daughters, born 1988-1990



(d) Sweden, daughters, born 2000-2002



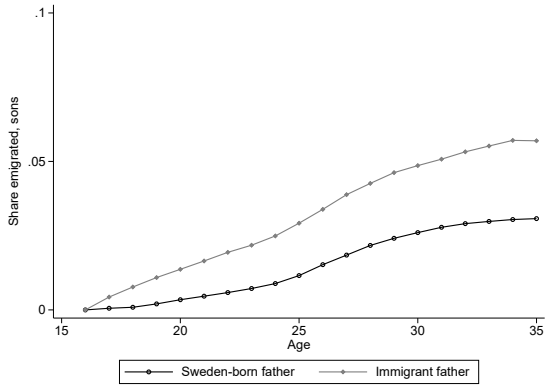
Notes: This figure plots estimates of Specification 1, regressing the average primary school grade ranks of sons/daughters on the income rank of parents. If children have not completed school by age 17, they are assigned the lowest possible grade. Children born in 1988-1990 and 2000-2002 respectively. Immigration status is determined by father's country of birth. Parental income measured in 1999-2005 and 2011-2017 respectively. Parental income ranks, 0-100, are determined within cohorts.

C.11.5 Robustness

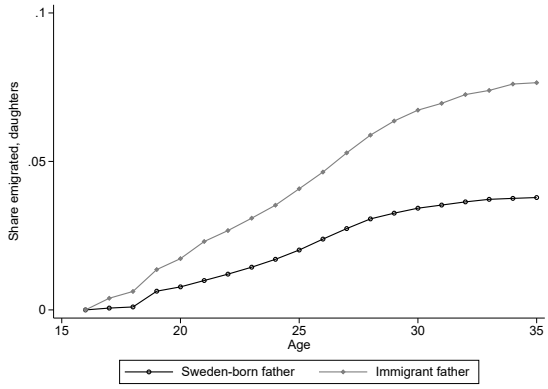
C.11.5.1 Emigration

Figure C.11.43: Sweden, cumulative share of emigrated children

(a) Sons



(b) Daughters

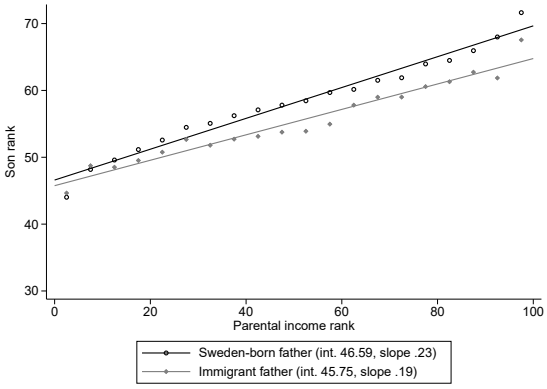


Notes: This figure shows the share of children who have emigrated (i.e. are no longer living in Sweden) across age groups. We consider all children who were part of the Swedish population at age 16 and calculate the share of emigrated children as they age. If children move back to Sweden after a period abroad, they are no longer counted as emigrants. Children born in 1978-1983. Immigration status is determined by father's country of birth.

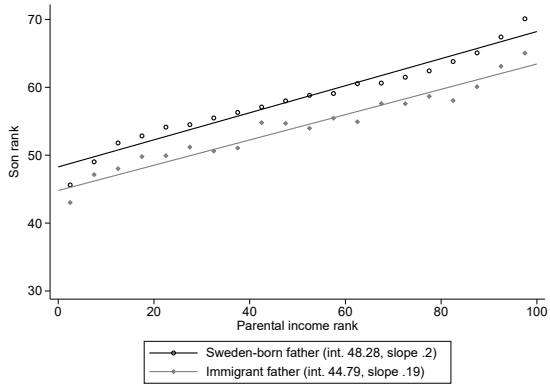
C.11.5.2 Additional years of parental income data

Figure C.11.44: Intergenerational mobility: Sweden, by number of years of parental income data

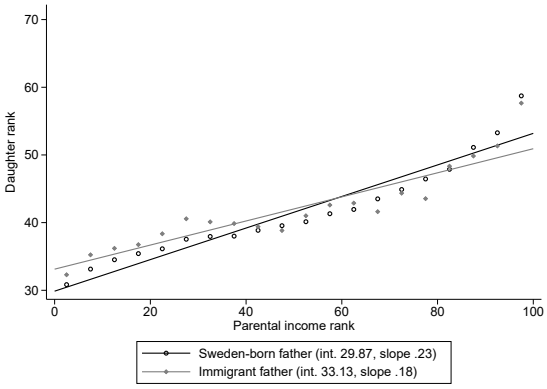
(a) Sons, parental income 1994-2000



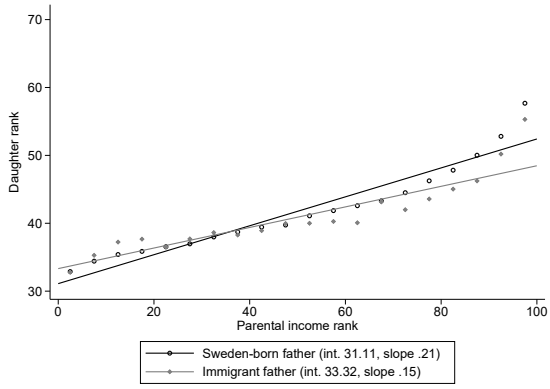
(b) Sons, parental income 1985-2000



(c) Daughters, parental income 1994-2000



(d) Daughters, parental income 1985-2000



Notes: This figure plots estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000 and 1985-2000 respectively. Income ranks, 0-100, determined within cohorts.

Table C.11.36: Intergenerational mobility estimates: Sweden, parental income 1985-2000

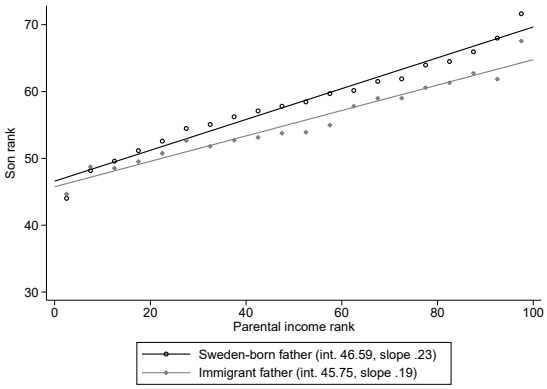
VARIABLES	(1) Sons	(2) Daughters
Immigrant father = 1	-3.490***	2.215***
	(0.329)	(0.284)
Parents' rank	0.199***	0.213***
	(0.00209)	(0.00196)
Immigrant father # rank	-0.0129*	-0.0616***
	(0.00663)	(0.00599)
Constant	48.28***	31.11***
	(0.122)	(0.109)
Observations	264,979	251,292
R-squared	0.043	0.052

Notes: This table reports estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1985-2000 respectively. Income ranks, 0-100, determined within cohorts. 95%-confidence interval indicated. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$

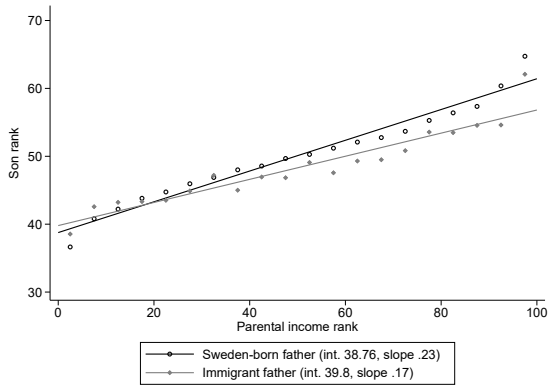
C.11.5.3 More recent birth cohorts, income rank

Figure C.11.45: Linked data: Intergenerational mobility, Sweden, comparison across cohorts

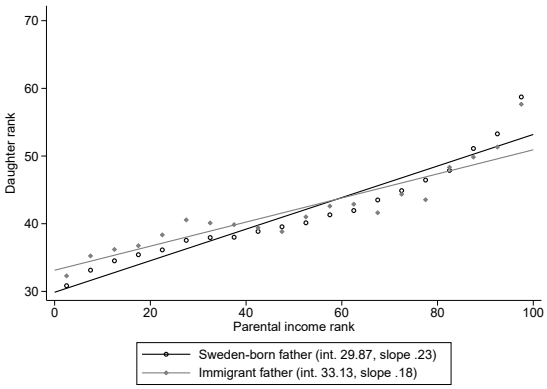
(a) Sweden, sons, born 1978-1983



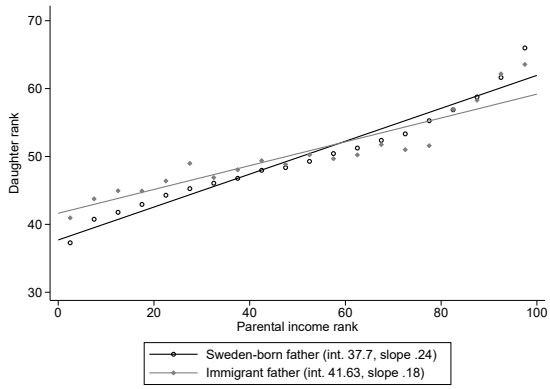
(b) Sweden, sons, born 1982-1987



(c) Sweden, daughters, born 1978-1983



(d) Sweden, daughters, born 1982-1987



Notes: This figure plots estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1978-1983 and 1982-1987 respectively. Immigration status is determined by father's country of birth. Child income measured in 2014-2015 and 2018-2019, and parental income 1994-2000 and 1998-2004 respectively. Income ranks, 0-100, determined within cohorts.

Table C.11.37: Linked data: Intergenerational mobility estimates, Sweden, comparing cohorts

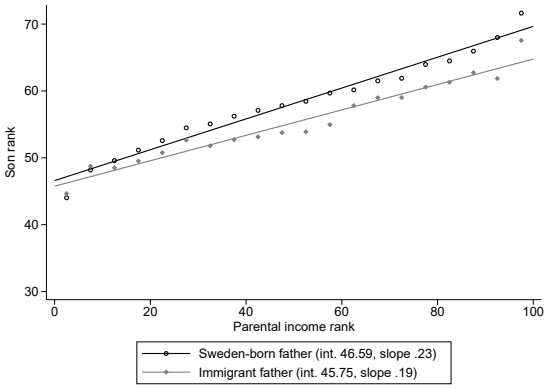
	(1)	(2)	(3)	(4)
	Sons	Daughters	Sons	Daughters
VARIABLES	1978-1983	1978-1983	1982-1987	1982-1987
Immigrant father = 1	-0.843***	3.252***	1.031***	3.931***
	(0.326)	(0.281)	(0.299)	(0.304)
Parents' rank	0.231***	0.233***	0.227***	0.242***
	(0.00209)	(0.00195)	(0.00205)	(0.00209)
Immigrant father # rank	-0.0405***	-0.0552***	-0.0564***	-0.0669***
	(0.00707)	(0.00638)	(0.00660)	(0.00665)
Constant	46.59***	29.87***	38.76***	37.70***
	(0.123)	(0.109)	(0.117)	(0.121)
Observations	261,007	247,497	273,281	258,651
R-squared	0.054	0.061	0.050	0.054

Notes: This table reports estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Immigration status is determined by father's country of birth. Income ranks, 0-100, determined within cohorts. Columns (1) & (2): Children born in 1978-1983, child income measured in 2014-2015, and parental income 1994-2000. Columns (3) & (4): Children born in 1982-1987, child income measured in 2018-2019, and parental income 1998-2004. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

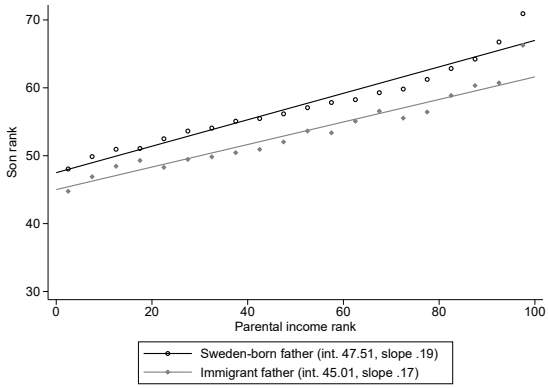
C.11.5.4 Alternative income measure, income rank

Figure C.11.46: Linked data: Intergenerational mobility, Sweden, comparison across income measures

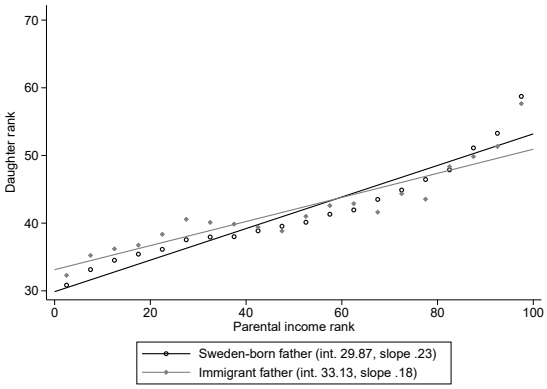
(a) Sweden, sons, main



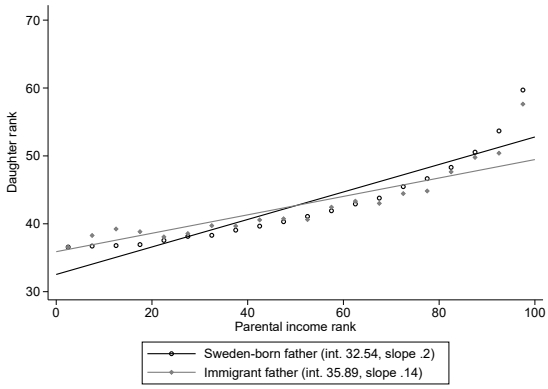
(b) Sweden, sons, disposable income



(c) Sweden, daughters, main



(d) Sweden, daughters, disposable income



Notes: This figure plots estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Main income measure and disposable income respectively. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income in 1994-2000 respectively. Income ranks, 0-100, determined within cohorts.

Table C.11.38: Linked data: Intergenerational mobility estimates, Sweden, comparing income measures

VARIABLES	(1) Sons main	(2) Daughters main	(3) Sons disp inc	(4) Daughters disp inc
Immigrant father = 1	-0.843***	3.252***	-2.494***	3.356***
	(0.326)	(0.281)	(0.333)	(0.293)
Parents' rank	0.231***	0.233***	0.195***	0.203***
	(0.00209)	(0.00195)	(0.00210)	(0.00199)
Immigrant father # rank	-0.0405***	-0.0552***	-0.0288***	-0.0668***
	(0.00707)	(0.00638)	(0.00705)	(0.00639)
Constant	46.59***	29.87***	47.51***	32.54***
	(0.123)	(0.109)	(0.121)	(0.110)
Observations	261,007	247,497	264,885	251,190
R-squared	0.054	0.061	0.040	0.045

Notes: This table reports estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Immigration status is determined by father's country of birth. Income ranks, 0-100, determined within cohorts. Children born in 1978-1983, child income measured in 2014-2015, and parental income 1994-2000. Columns (1) & (2): Main income measure. Columns (3) & (4): Alternative income measure, disposable income. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

C.12 Country-specific details & results: Spain

C.12.1 Data details and deviations

We use the Spanish Opportunity Atlas (Soria, 2022), augmented with individuals' country-of-birth information. This database features information from the tax records of the Spanish Tax Agency, focusing on the population of parents whose children were born between 1980 and 1990, with information on those children when they became adults. Specifically, we observe parents' and children's outcomes from 1998 to 2022, covering more than 3 million children, which represents around 90% of the children born between 1980 and 1990 in Spain (excluding the Basque Country and Navarre regions). We measure parental household income between 1998 and 2000 (and also separately for fathers and mothers), and children's individual income in 2021 and 2022, when the children are between 31 and 42 years old. Our measure of income is defined ad total gross income (labour income, capital income and self-employed income), both at the household and individual level, for both generations.

Some features of the database are worth noting. First, in Spain, there are two fiscal regimes: the special regime (for the Basque Country and Navarra) and the general regime (for the rest of Spain). These data exclude households from the the Basque Country and Navarra regions because it uses tax returns of people living the general regime territory. Second, parent households are included in the data if they filed tax returns in 1998, claiming children born between 1980 and 1990 as dependents. As such, parents who did not file income tax returns in 1998—likely among the poorest in Spain—are excluded from the data. However, since the minimum personal income threshold for filing a return was 550,000 *pesetas* (about €6,000 in 2024 Euro), the share of households with at least one child below this threshold is likely very small. Finally, the dataset does not include information on employment nor educational attainment.

C.12.2 Immigration in Spain: Immigrants in our sample and immigrants nowadays

Spain had a very low number of immigrants up until the end of the 20th century. From 2000-2009, there was an exceptional immigration boom which drove the percentage of foreigners in the population from less than 2% in 1998 to about 12% in 2009.[54] The countries that fed most of this immigration boom were Romania, Morocco, and Latin American countries such as Colombia and Ecuador.

Since the immigrant parents in our sample where residing in Spain in 1998, they are representative of the small pre-2000s immigrant community in Spain, not the vast majority of immigrants in Spain nowadays. Among our sample of children, only 1.36% have a foreign-born father. Unfortunately, it is still too early to properly study the labor market outcomes of the children of immigrants who arrived during the early 2000s, as the earliest 2nd generation immigrants from this wave are currently in their early twenties.

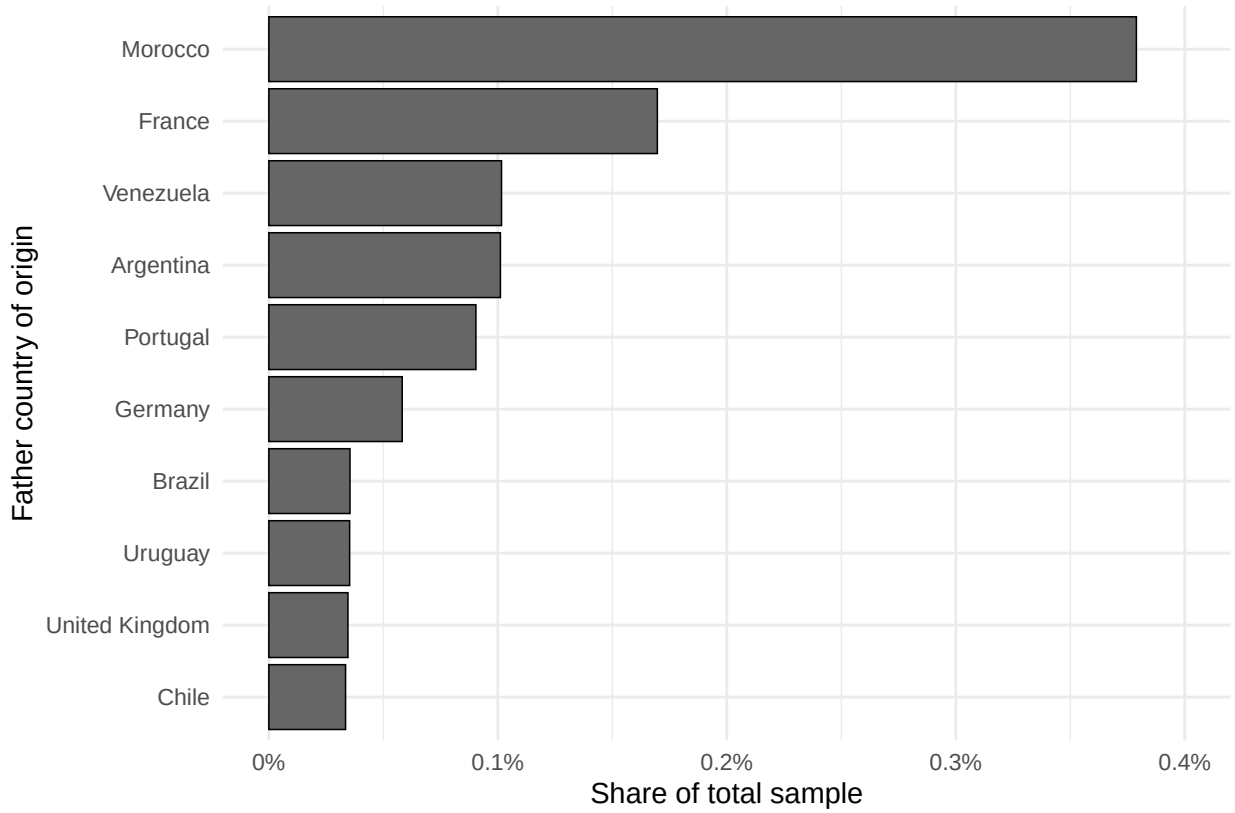
Two facts illustrate how the composition of first-generation immigrants we study in this paper is quite different from the composition of immigrants nowadays. First, C.12.47 shows the

[54]These percentages, from the Spanish Statistical Institute, refer to "foreigners" on the basis on nationality. Our analyses instead define immigrants based on place of birth.

distribution of top 10 fathers' country of origin in our sample [55]. While some countries in our sample are still top sending countries nowadays (i.e. Morocco or Venezuela), we are missing the huge influx of Latin American and Eastern Europe immigration that took place during the first decade of this century and therefore other modern top sending countries are not represented (i.e. Ecuador, Colombia, Romania, Peru). Second, our results in Figure C.12.48 show that immigrants in 1998–2000 on average earned more than natives. This is consistent with the notion that the small minority of immigrants that resided in Spain before the 2000s were positively selected in terms of their skills and labor market opportunities in Spain.

C.12.3 Additional summary statistics and results for Spain

Figure C.12.47: Country of birth distribution for non-Spanish fathers (Spain)

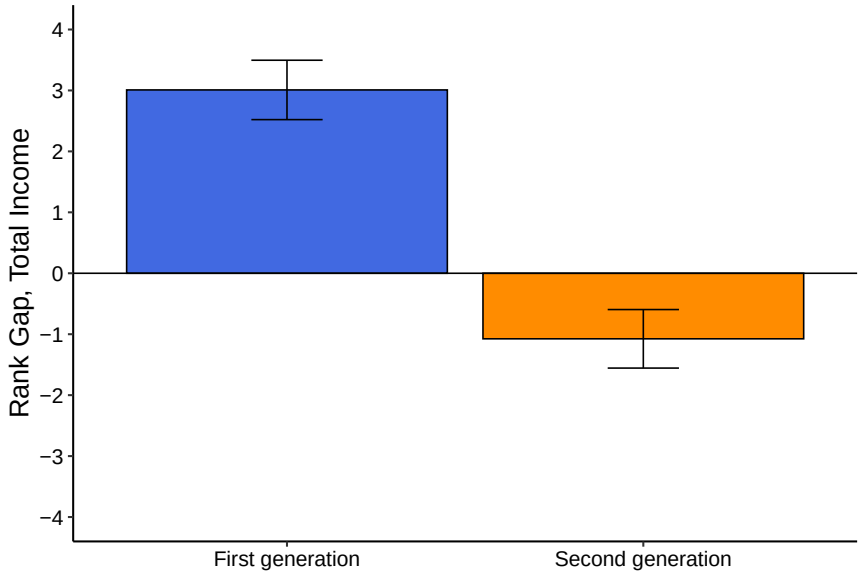


Notes: Ten most common countries of origin among our sample of non-Spanish fathers. The horizontal axis represents the share each group represents, out of the total sample of fathers (including Spanish ones). 1% of all fathers are born outside Spain.

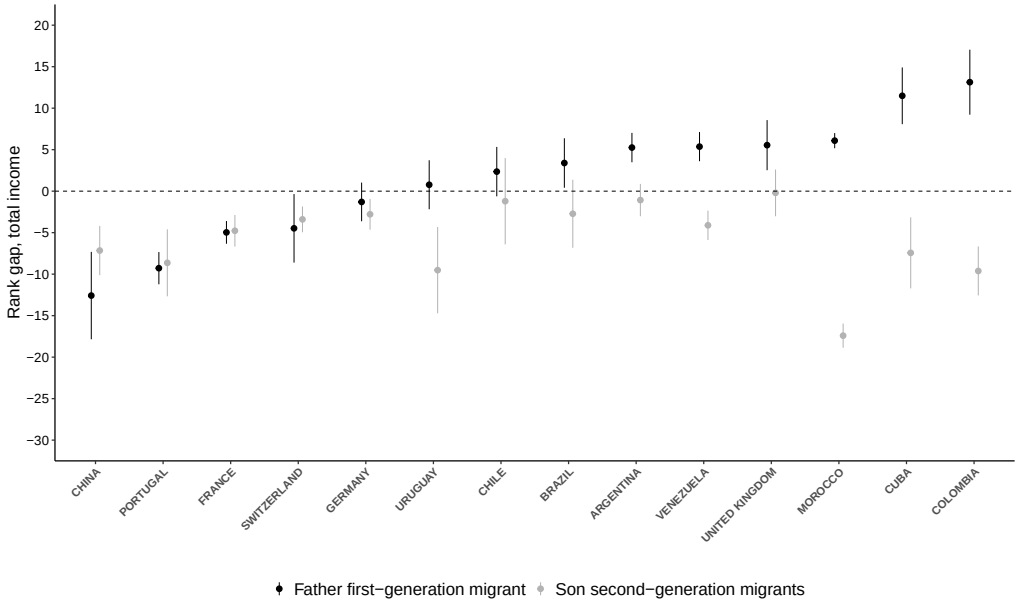
[55] In the Spanish Opportunity Atlas, a significant majority, 98.6%, of individuals in the sample have a father of Spanish origin. In contrast, only a small fraction, 1.36%, have a father who is foreign-born. If we focus on fathers, 99% of them are Spain-born and 1% are foreign-born

Figure C.12.48: Cross-sectional immigrant-native income gap (Spain)

(a) Overall gaps



(b) Country-specific gaps



Notes: Estimated coefficients and 95%-confidence interval for the immigrant-native income gap, for first-generation and second-generation immigrants (equation (1) from Abramitzky et al. (2021)) for income of fathers and sons measured in 1998-2000 an 2021-2022 respectively. Panel b) is reported for the countries of origin that are most common for non-Spanish born fathers.

Table C.12.39: Summary statistics, cross-sectional sample (Spain)

Fathers: income measured in 1998-2000

	Immigrant	Spanish-born	Diff.	Std. Error
Age	44.5	45.3	-0.75***	0.039
Rank gap, earnings	53.59	50.45	3.13***	0.17
Share of population	1.32%	98.67%		
N	28009	2083199		

Sons: income measured in 2021-2022

	Immigrant Father	Spanish-born Father	Diff.	Std. Error
Age	36.32	36.78	-0.46***	0.017
Rank gap, earnings	50.53	50.78	-0.24	0.17
Share of population	1.36%	98.63%		
N	28017	2023665		

Notes: Summary statistics of the cross-sectional sample, including father information measured between 1998-2000 and sons information measured between 2021-2022. Immigration status is determined by father's country of birth. Income ranks are determined within cohorts. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Table C.12.40: Summary statistics, linked sample (Spain)

Sons

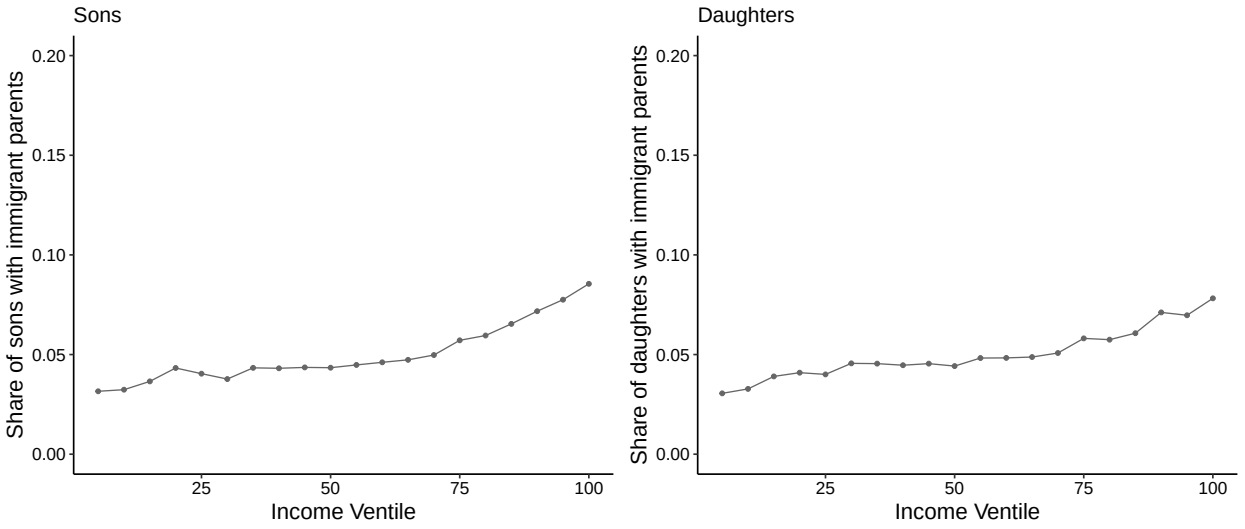
	Immigrant father	Spanish-born father	Diff.	Std. Error
Child age	36.20	36.65	-0.44***	0.025
Child income rank	54	54.65	-0.64**	0.027
Father's age at child birth	30.15	30.44	-0.29 ***	0.049
Parental income rank	56.57	51.18	5.39***	0.027
Child share of population	1.24%	98.75%		
N	13904	1100327		

Daughters

	Immigrant father	Spanish-born father	Diff.	Std. Error
Child age	36.43	36.96	-0.52***	0.025
Child income rank	47.10	46.58	0.51**	0.026
Father's age at child birth	30.07	30.35	-0.28 ***	0.005
Parental income rank	55.36	49.72	5.64***	0.026
Child share of population	1.19%	98.81%		
N	14105	1168063		

Notes: This table reports summary statistics of the estimation sample. Children born in 1980. Immigration status is determined by father's country of birth. Child income measured in 2021-2022, and parental income 1998-2000. Spanish data does not include wealth variables. Child age is measured in 2022. Income ranks, 0-100, determined within cohorts. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

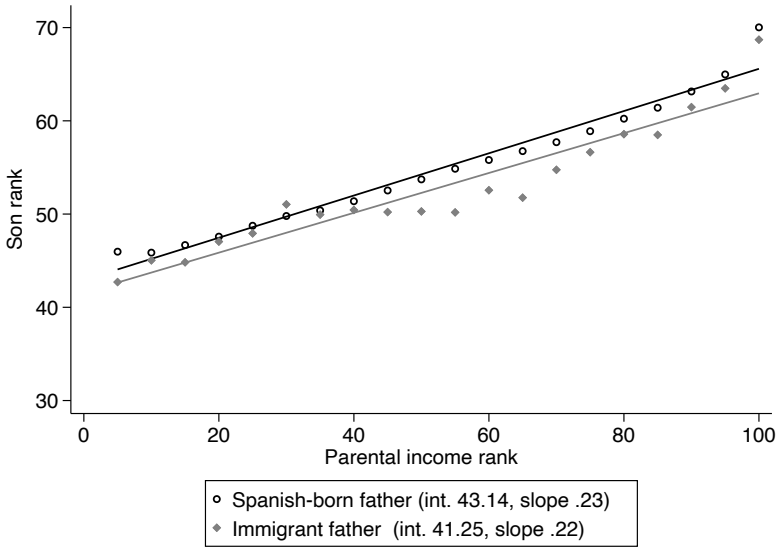
Figure C.12.49: Parental income distribution for children of immigrants (Spain)



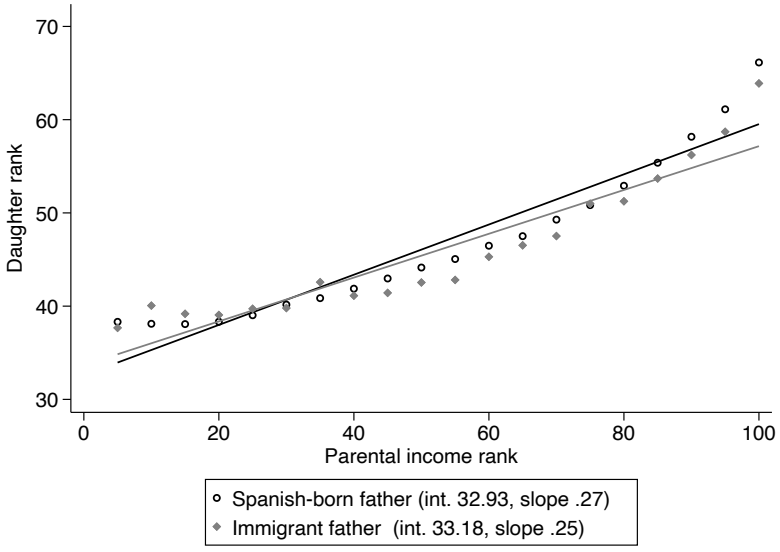
Notes: Share of children of immigrant parents in each ventile of the parental income distribution, out of the total number of children with immigrant parents. The numerator is the number of children of immigrants within each ventile. The denominator is the total number of children with immigrant parents (across all ventiles). Children born in 1980-1990. Immigration status is determined by father's country of birth. Parental income measured in 1998-2000. Income ranks, 0-100, determined within child cohorts.

Figure C.12.50: Income rank-rank relationship: Children of Spanish-born and children of immigrants

(a) Sons



(b) Daughters



Notes: Rank-rank relationship between the income of parents and children, separately for children of Spanish-born and foreign-born parents. Children born in 1980-1990. Immigration status is determined by father's country of birth. Child income measured in 2021-2022, and parental income in 1998-2000. Income ranks, 0-100, determined within cohorts.

Table C.12.41: Income rank-rank intergenerational mobility estimates (Spain)

VARIABLES	(1) Sons	(2) Daughters
Immigrant father = 1	-1.883***	0.241***
	(0.511)	(0.502)
Parents' rank	0.225***	0.269***
	(0.0009)	(0.0009)
Immigrant father =1 × Parents' rank	-0.002	-0.019
	(0.008)	(0.008)
Intercept	43.13***	32.93***
	(0.058)	(0.055)
Observations	999,748	1,056,384
R-squared	0.054	0.076

Notes: Estimates from a regression of the income ranks of sons/daughters on that of parents, with separate intercept and slope for children of immigrant parents and children of Spanish-born parents. Children born in 1980-1990. Immigration status is determined by father's country of birth. Child income measured in 2021-2022, and parental income 1998-2000. Income ranks, 0-100, determined within cohorts. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Table C.12.42: Oaxaca-Blinder decompositions, child income rank (Spain)

	Sons: pooled	Sons: non-immi. ref.	Sons: immi. ref.	Daughters: pooled	Daughters: non-immi. ref.	Daughters: immi. ref.
Mean child income rank (Immigrant father)	53.9	53.9	53.9	47.06	47.06	47.06
	(0.254)	(0.254)	(0.254)	(0.249)	(0.249)	(0.249)
Mean child income rank (No immigrant father)	55.01	55.01	55.01	46.73	46.73	46.73
	(0.0287)	(0.0287)	(0.0287)	(0.0281)	(0.0281)	(0.0281)
Difference in means	-1.108	-1.108	-1.108	0.322	0.322	0.322
	(0.256)	(0.256)	(0.256)	(0.25)	(0.25)	(0.25)
Total explained difference	0.909	0.9	0.909	1.132	1.053	1.133
	(0.06)	(0.071)	(0.06)	(0.057)	(0.065)	(0.057)
Total unexplained difference	-2.016	-2.007	-2.017	-0.809	-0.73	-0.81
	(0.213)	(0.21)	(0.214)	(0.268)	(0.266)	(0.268)
Parental income rank (relative mobility)	-0.133	-0.124	-0.134	-1.055	-0.976	-1.056
	(0.5)	(0.465)	(0.501)	(0.442)	(0.409)	(0.442)
Intercept (absolute mobility)	-1.883	-1.883	-1.883	0.246	0.246	0.246
	(0.507)	(0.507)	(0.507)	(0.486)	(0.486)	(0.486)
Observations	992866	992866	992866	1049876	1049876	1049876

Notes: Oaxaca-Blinder decompositions of the gap in income ranks between children of immigrants and children of locals. We estimate the fraction of the income rank gap that can be "explained" by differences in parental income distributions, and the fraction that is "unexplained" by parental income distribution differences, and rather due to differences in intergenerational mobility parameters. We report versions using pooled estimated coefficients and each of the groups' coefficients as reference levels. Children born in 1980-1990. Immigration status is determined by father's country of birth. Child income measured in 2021-2022, and parental income in 1998-2000. Income ranks, 0-100, determined within cohorts. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

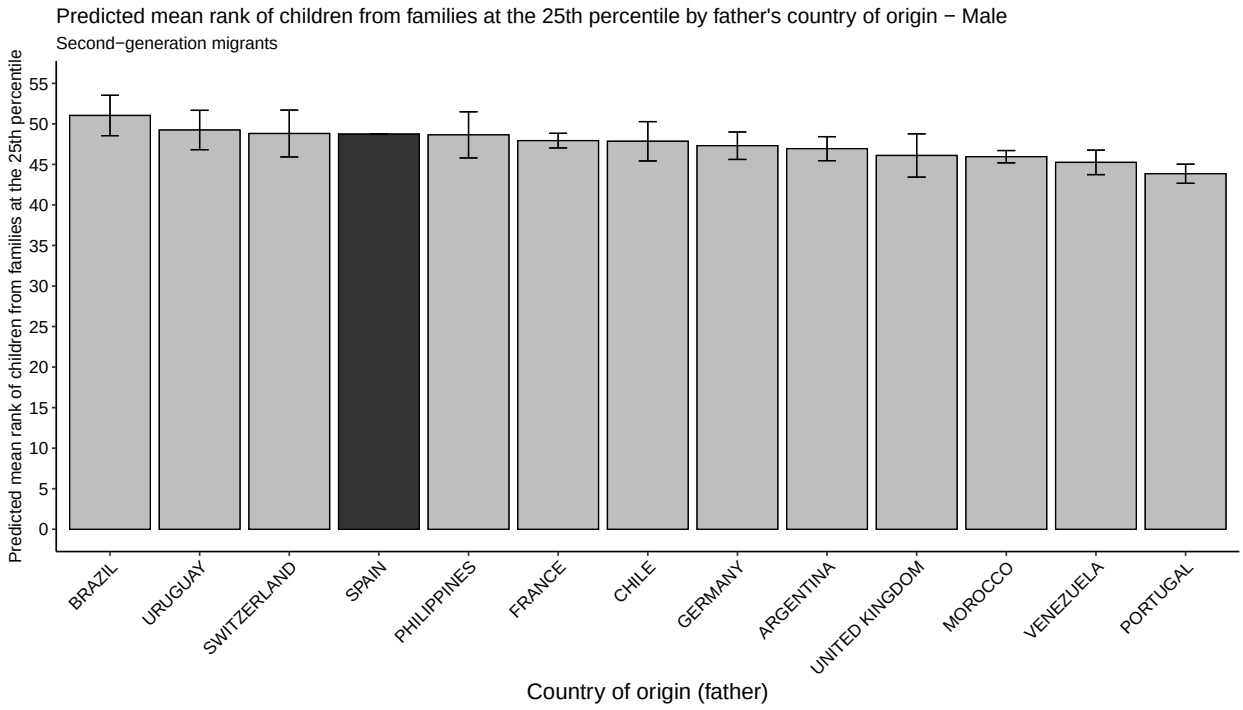
Table C.12.43: Income rank-rank intergenerational mobility estimates with various sets of controls (Spain)

	Dependent variable:					
	Mean Child Rank					
	Sons	Sons - Region FE	Sons - MUN FE	Daughters	Daughters - Region FE	Daughters - MUN FE
	(1)	(2)	(3)	(4)	(5)	(6)
Immigrant father = 1	−1.635***	−2.132***	−1.965***	0.415	−0.491	0.044
	(0.509)	(0.504)	(0.508)	(0.499)	(0.495)	(0.498)
Parents' Rank	0.228***	0.200***	0.216***	0.277***	0.246***	0.263***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Immigrant father = 1 × Parents' Rank	−0.005	0.005	−0.0002	−0.021***	−0.008	−0.016**
	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)
Intercept	43.00***	39.79***	41.37***	32.56***	28.70***	31.13**
	(0.058)	(0.008)	(0.074)	(0.609)	(0.071)	(0.577)
Observations	981,081	981,081	981,081	1,037,956	1,037,956	1,037,956
R^2	0.054	0.071	0.060	0.076	0.094	0.084

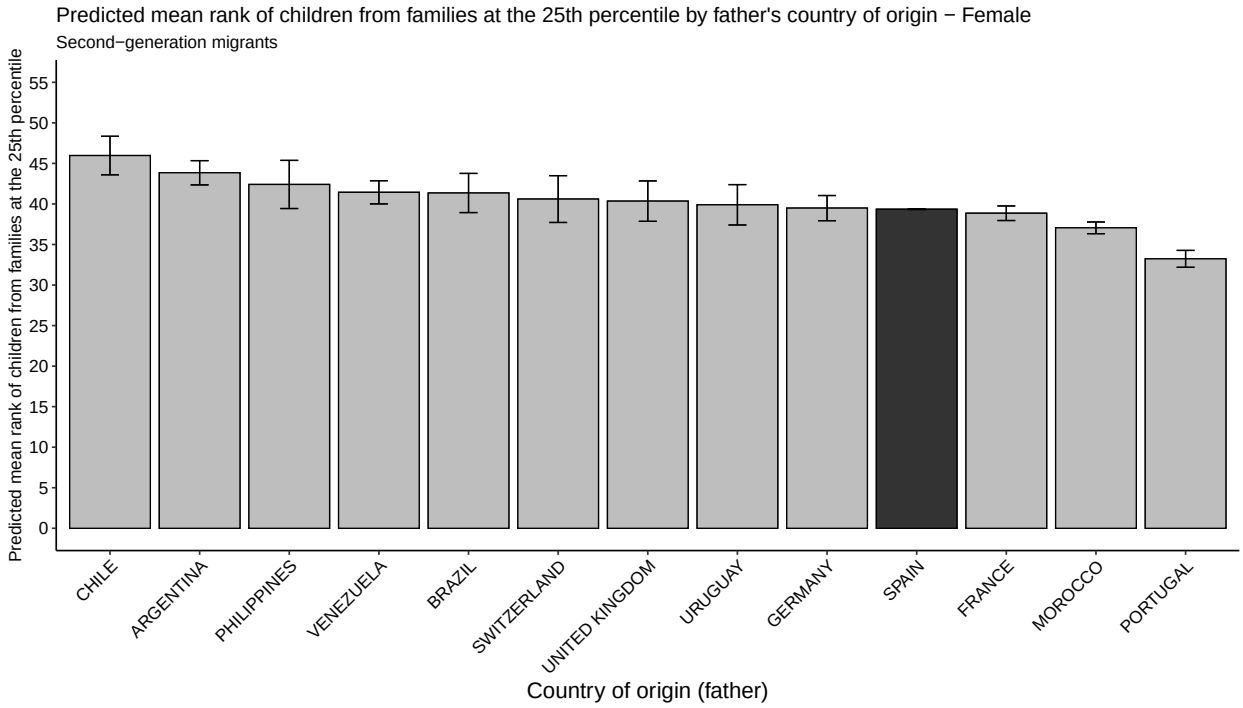
Notes: Estimates from a regression of the income ranks of sons/daughters on that of parents, with separate intercept and slope for children of immigrant parents and children of Spanish-born parents, with various sets of controls. Children born in 1980-1990. Immigration status is determined by father's country of birth. Child income measured in 2021-2022, and parental income 1998-2000. Income ranks, 0-100, determined within cohorts. Columns (1) and (3) are baseline estimates without controls. Columns (2) and (4) include region fixed effects. Columns (3) and (6) include municipality fixed effects. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Figure C.12.51: Average income at 25th percentile, by country of origin (Spain)

(a) Sons



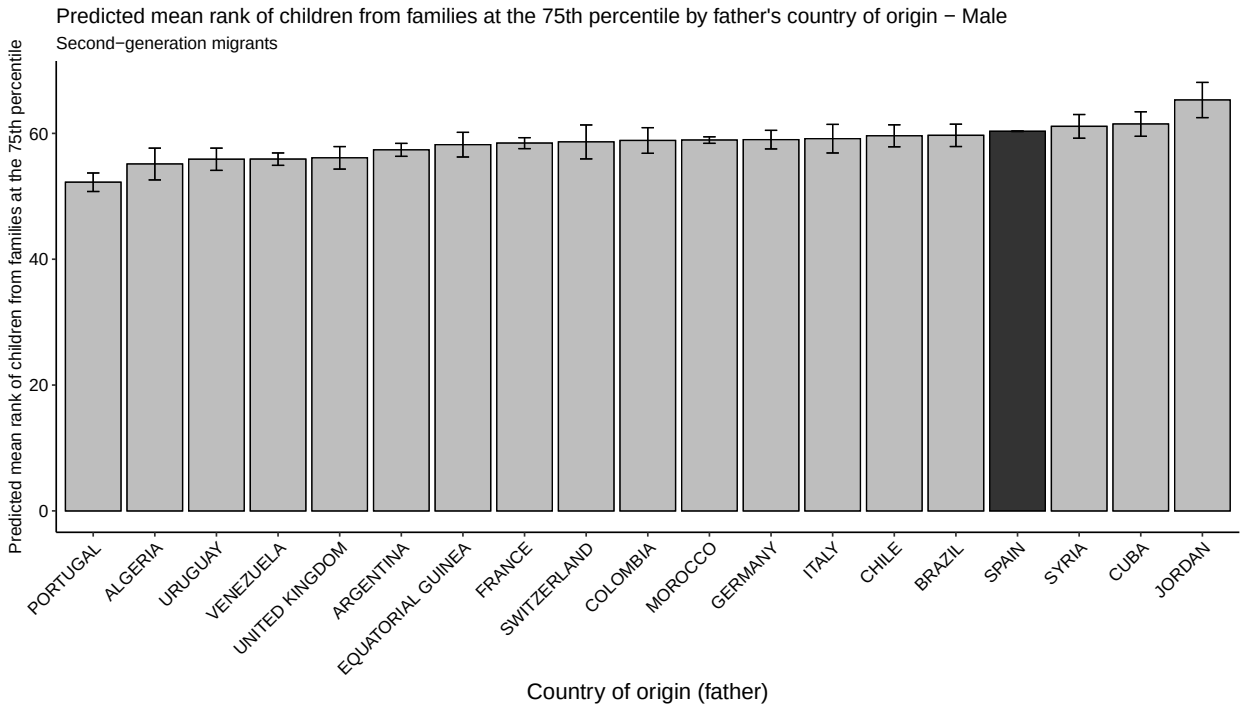
(b) Daughters



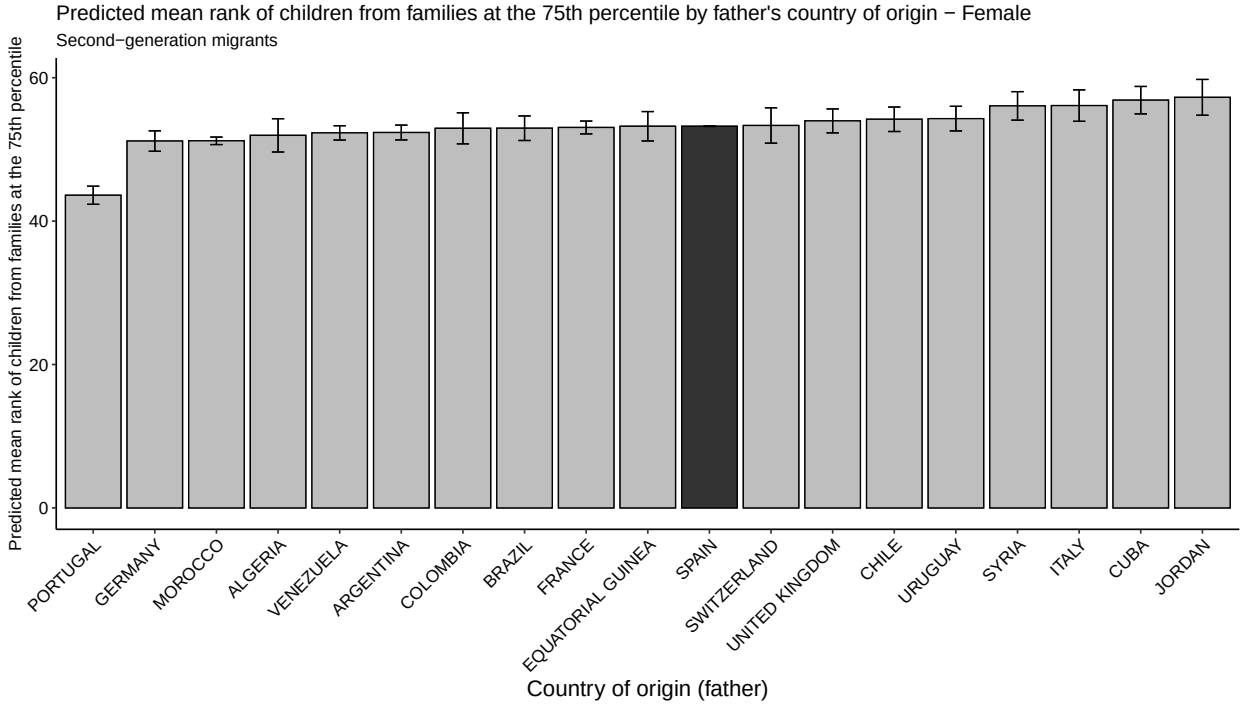
Notes: Predicted child income rank when parental income rank equals 25. Predictions from a regression of the income ranks of sons/daughters on that of parents, with country-specific intercept and slope for children of immigrant parents and children of Spanish-born. Immigration status is determined by father's country of birth. Child income measured in 2021-2022, and parental income 1998-2000. Income ranks, 0-100, determined within cohorts.

Figure C.12.52: Average income at 75th percentile, by country of origin (Spain)

(a) Sons



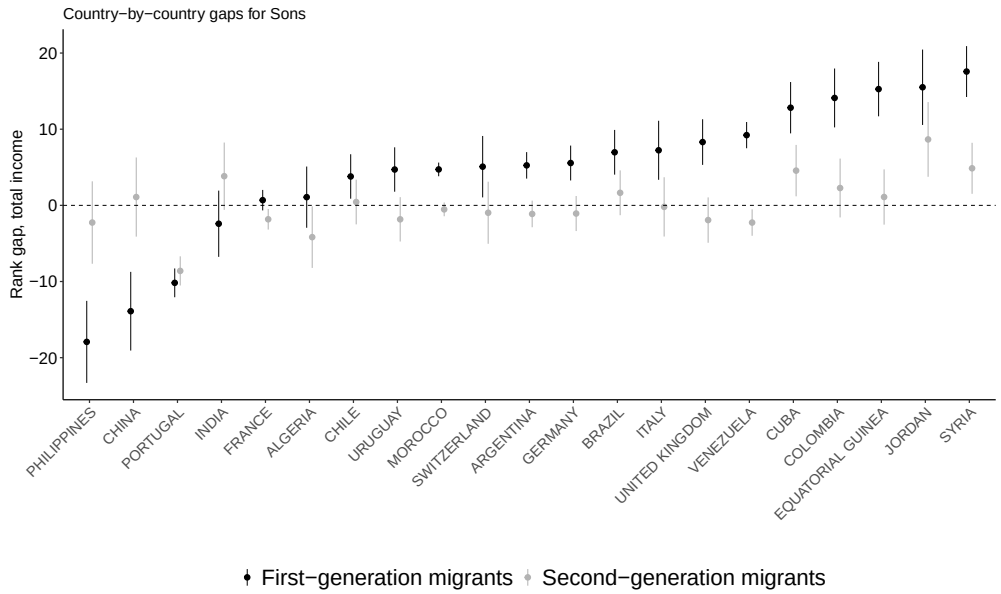
(b) Daughters



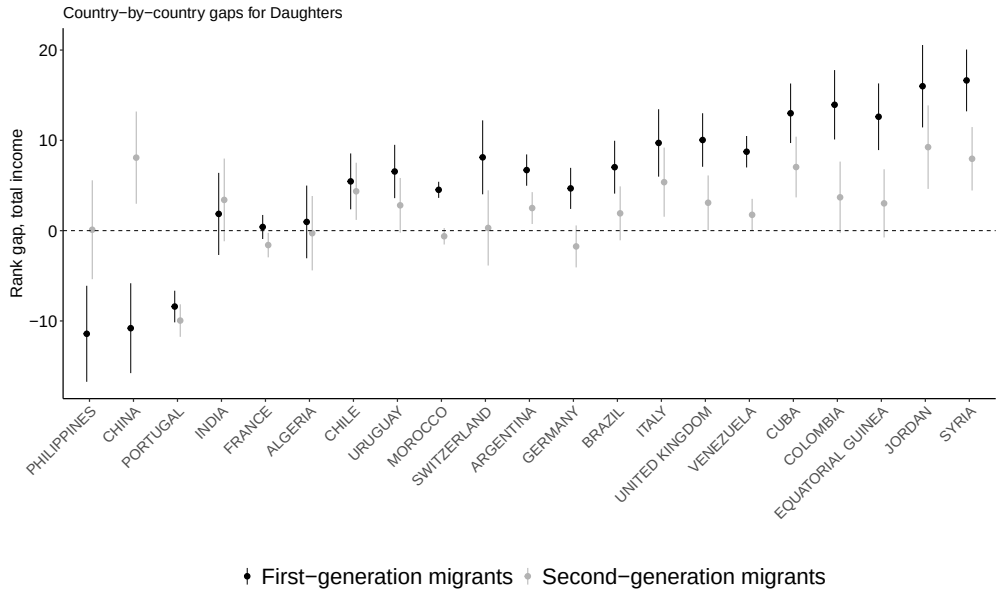
Notes: Predicted child income rank when parental income rank equals 75. Predictions from a regression of the income ranks of sons/daughters on that of parents, with country-specific intercept and slope for children of immigrant parents and children of Spanish-born. Immigration status is determined by father's country of birth. Child income measured in 2021-2022, and parental income 1998-2000. Income ranks, 0-100, determined within cohorts.

Figure C.12.53: First- and second-generation income gaps by parents' country of origin and children's gender (Spain)

(a) Sons

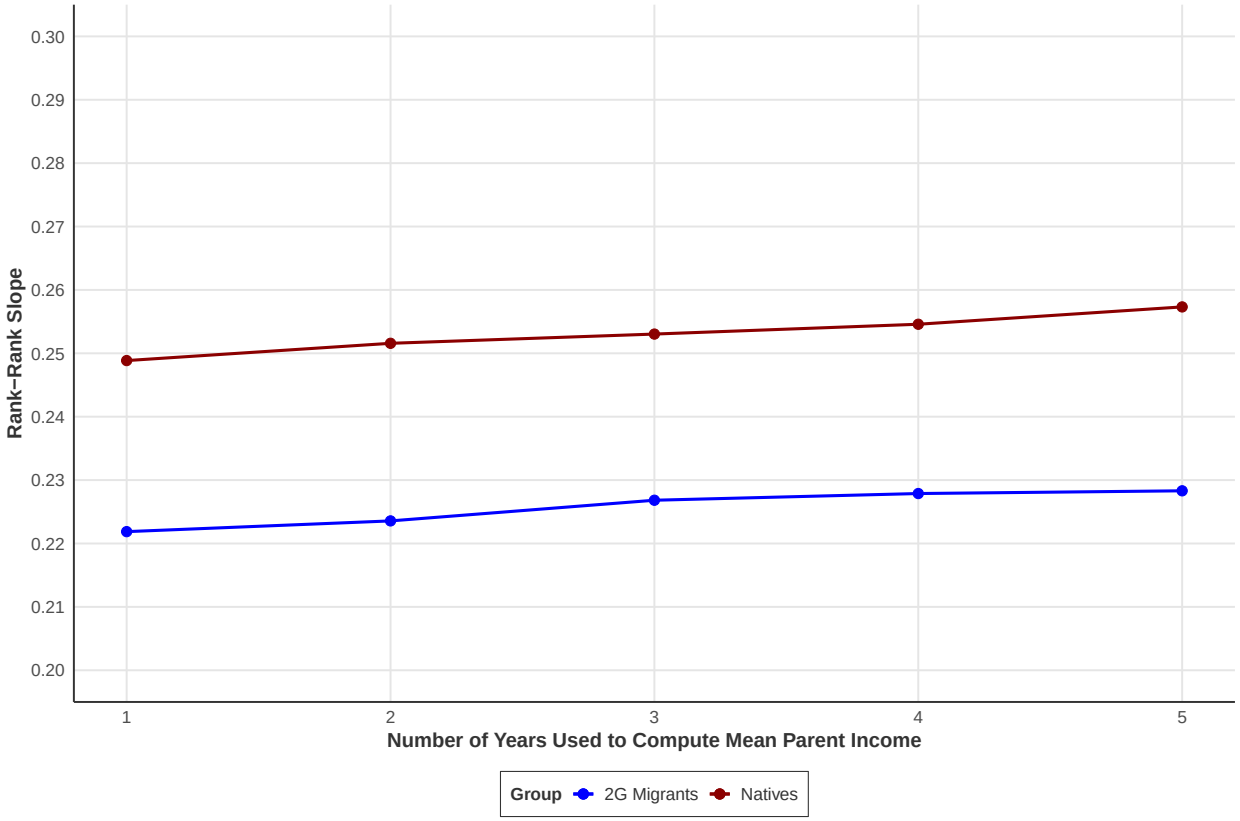


(b) Daughters



Notes: This figure plots the estimated coefficients from Equation 1 from Abramitzky et al. (2021) for earnings of fathers and children measured in 1998-2000 an 2021-2022 respectively. Panel (a) reports the results for Sons, while Panel (b) reports the results for daughters. We report the results for the 10 countries that are the most common places of birth of fathers among second-generation immigrants. Immigration status is determined by father's country of birth. 95%-confidence interval indicated.

Figure C.12.54: Robustness: Rank-rank relationship, by number of years used to measure parental income



Notes: This figure illustrates how the precision of parental income measurement, based on the number of years used to compute mean parent income, impacts estimates of intergenerational mobility for children of Spanish-born (red) and children of immigrants (blue). The Rank-Rank Slope, shown on the y-axis, increases for both groups as the number of years (x-axis) rises from one to five, reflecting a reduction in measurement error. This trend indicates attenuation bias, whereby using fewer years to measure parental income underestimates the true slope due to transitory income fluctuations. However, the figure shows that slope variations are marginal. We use three years to measure parental income (the mid point in this figure). The persistent gap between the slopes for children of Spanish-born and children of immigrants highlights differences in intergenerational mobility between these groups, even as measurement precision improves.

C.13 Country-specific details & results: Switzerland

C.13.1 Data details and deviations

We rely on a number of administrative register datasets and census data supplied by the Federal Statistical Office of Switzerland (SFSO) to construct the relevant datasets on children and parents. Researchers are allowed to use these data subject to signing a data sharing agreement with the SFSO. Guidance on how to access the data are provided by the SFSO here: https://www.bfs.admin.ch/bfs/en/home/services/data-linkages/for-third-parties.html.

Annual Population Census (STATPOP). The STATPOP represents Switzerland's register-based annual population census, is available 2010–2021, and contains socio-demographic information on all permanent residents in Switzerland. We use this data to identify year and place of birth, legal gender, residence history at the municipality level, and parent-child linkages.
Unlike the Danish case, the data do not provide information on grades or college enrolment at age 25.

Parent-Child Linkage. We observe parent-child links if father or mother and the child are permanent residents in Switzerland in at least one year between 2003–2021 and if the child is permanent resident in at least one year 2010–2021. Parents and children are linked through their social security number. However, linkages might be missing if both parent and child have foreign citizenship, and if the parent never had any changes in the civil register between 1978 and 1989. One limitation of our data, therefore, is that parent-child linkages for children born 1978–1984 with migrant background are not fully captured unless the parents had a civil register entry from 1990 onward, which happens in case of marriage, divorce, widowhood, and birth of a child in Switzerland.

Social Security Earnings Records (SSER). This data contains individual's entire annual earnings history from employment and self-employment 1981–2021. These incomes are subject to contribution to the Old-Age and Survivors' Insurance (OASI). Contributing to the OASI is mandatory from age 20 onward, and contributions are uncapped. We use this data to measure labor earnings (adjusted for inflation with the 2022 CPI).
Unlike the Danish case, total income including capital gains is not available for Switzerland.

Population Censuses in 1990 and 2000 (SNC). We use data from the paper-based 1990 and 2000 decennial full population censuses to update our information about individuals' place of residence in the years prior to 2001.

C.13.1.1 Cross-sectional data

We use the STATPOP data to identify cohorts of interest, age, legal sex, and country of origin. Parental country of origin is not recorded directly in the data. We therefore extract this information for cohorts 1978-1982 exploiting the parent-child links in STATPOP.

The income measures for parents are total labor earnings in the years 1981–1983 according to the SSER. We restrict the sample to parents aged 30–50 in those years. Children's income represents labor earnings as measured in the SSER in the years 2010 and 2015.

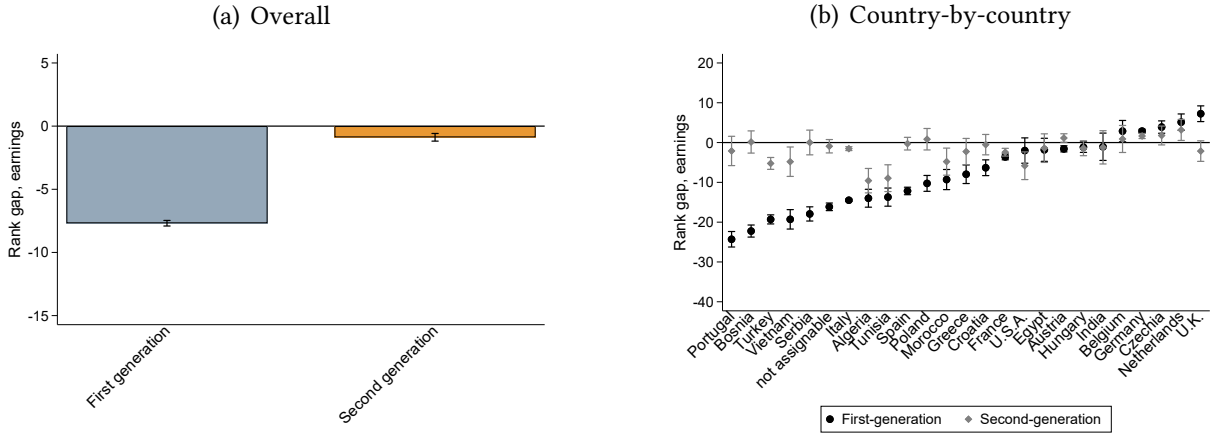
C.13.1.2 Linked data

The analysis is based on a person-level linkage between STATPOP and SSER. Parent-child relationships, countries of birth of fathers and children, as well as individuals' age and legal sex are obtained from STATPOP. Earnings of parents and children are labor earnings as measured in the SSER in the respective years (2014–2015 for children, 1994–2000 for parents in the main analysis). Information on the municipality of residence in years prior to 2001 stems from the decennial population censuses in 1990 and 2000. Because the censuses in 1990 and 2000 contain information on the municipality of residence in census year t and in $t-5$, we use parental residence location in 1995 instead of 1994.

Sample Selection. We include children for whom we find at least one parent in the data with parent-child linkages. This means that we could underestimate total parental income because we do not observe the other parent's income. This problem is mitigated by eliminating families with an income of zero. Income of the mother is missing in 6% of cases, that of fathers in 9% for the 1978-1982 cohort.

C.13.2 Cross-sectional results

Figure C.13.1: Cross-sectional results using labor earnings: Switzerland, 1981-2010 cohort



Notes: This figure plots the estimated coefficients from Equation 1 from Abramitzky et al. (2021) for the labor earnings of fathers and sons in 1981 and 2010, respectively, but, in panel (a), with a non-Swiss dummy rather than country dummies. We use measures of labor earnings for both generations. Immigration status is determined by father's country of birth. Income ranks are determined within cohorts. Sample includes men aged 30-50. 95%-confidence interval indicated.

Table C.13.1: Cross-sectional data: Summary statistics, Switzerland

Fathers: 1981 cohort

	Immigrants	Swiss-born	Diff.	Std. Error
Age	38.186	37.536	-0.650***	0.025
Rank gap, earnings	43.316	51.002	7.687***	0.114
ln(earnings)	10.623	10.692	0.070***	0.003
Earnings > 0	0.931	0.955	0.024***	0.001
Share of population	0.130	0.870		
N	73606	490845		

Sons: 2010 cohort

	Immigrant father	Swiss-born father	Diff.	Std. Error
Age	35.539	35.903	0.364***	0.037
Rank gap, earnings	49.203	50.088	0.885***	0.148
ln(earnings)	11.145	11.179	0.033***	0.004
Earnings > 0	0.936	0.955	0.020***	0.001
Share of population	0.099	0.901		
N	42128	381555		

Notes: This table reports summary statistics of the cross-sectional sample of Switzerland, including sons and fathers in 1981 and 2010 respectively. Earnings are only labor earnings. Immigration status is determined by father's country of birth. Labor income ranks are determined within cohorts. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

C.13.3 Main results

C.13.3.1 Summary statistics

Table C.13.2: Linked data: Summary statistics, Switzerland

Sons

	Immigrant father	Swiss-born father	Diff.	Std. Error
Child age	32.380	32.430	0.050***	0.014
Child labor income rank	59.304	62.157	2.853***	0.218
Child labor force part.	0.932	0.961	0.029***	0.002
Mother's age at child birth	28.142	27.816	-0.326***	0.038
Father's age at child birth	31.574	30.575	-0.999***	0.041
Parental labor income rank	47.555	50.258	2.703***	0.239
Child share of population	0.105	0.895		
N	16202	138336		

Daughters

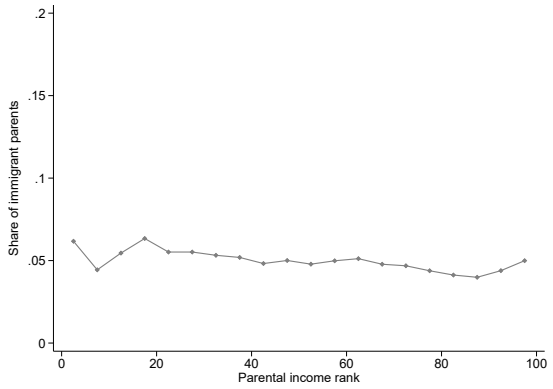
	Immigrant father	Swiss-born father	Diff.	Std. Error
Child age	32.370	32.438	0.068***	0.014
Child labor income rank	40.442	37.303	-3.139***	0.219
Child labor force part.	0.888	0.892	0.004	0.002
Mother's age at child birth	28.162	27.798	-0.364***	0.039
Father's age at child birth	31.533	30.580	-0.953***	0.042
Parental labor income rank	47.441	50.338	2.897***	0.242
Child share of population	0.108	0.892		
N	15970	132303		

Notes: This table reports summary statistics of the estimation sample. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000. Child age is measured in 2014. Income ranks, 0-100, determined within cohorts. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

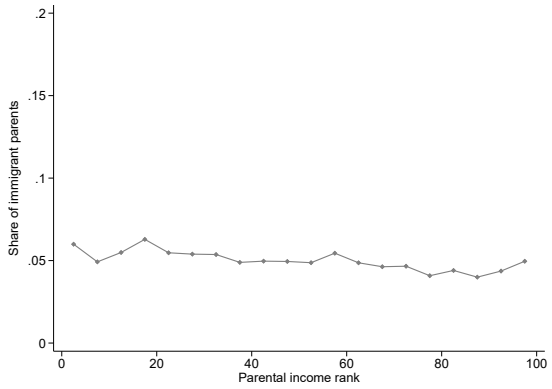
C.13.3.2 Parental income distribution

Figure C.13.2: Linked data: Switzerland, share of total number of children with immigrants parents

(a) Sons



(b) Daughters

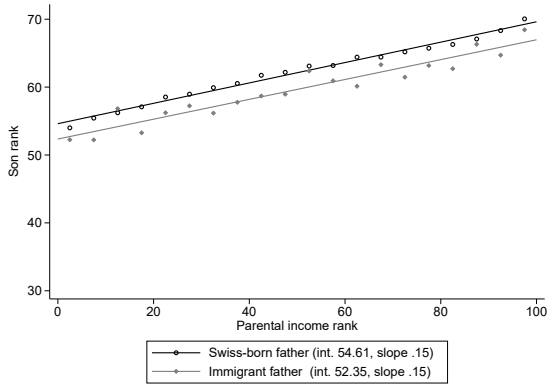


Notes: This figure shows the share of children of immigrant parents in each ventile out of the total number of children with immigrant parents. The numerator is the number of children of immigrants within each ventile. The denominator is the total number of children with immigrant parents (across all ventiles). Children born in 1978-1983. Immigration status is determined by father's country of birth. Parental income measured in 1994-2000. Income ranks, 0-100, determined within child cohorts.

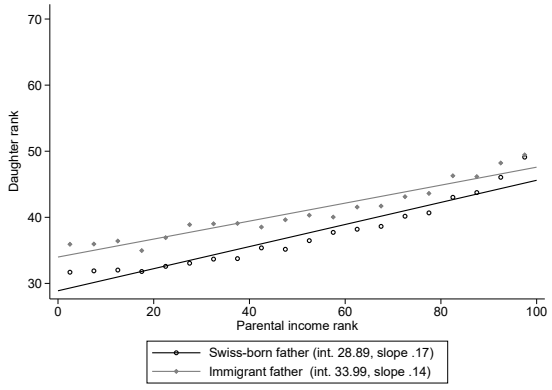
C.13.3.3 Rank-rank relationship

Figure C.13.3: Linked data: Intergenerational mobility, Switzerland

(a) Switzerland, sons



(b) Switzerland, daughters



Notes: This figure plots estimates of Specification 1, regressing the labor income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts.

Table C.13.3: Linked data: Intergenerational mobility estimates, Switzerland

VARIABLES	(1) Sons	(2) Daughters
Immigrant father = 1	-2.264***	5.102***
	(0.456)	(0.422)
Parents' rank	0.150***	0.167***
	(0.00246)	(0.00247)
Immigrant father # rank	-0.00387	-0.0312***
	(0.00833)	(0.00789)
Constant	54.61***	28.89***
	(0.138)	(0.136)
Observations	154,538	148,273
R-squared	0.028	0.034

Notes: This table reports estimates of Specification 1, regressing the labor income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

C.13.3.4 Oaxaca-Blinder decomposition

Table C.13.4: Oaxaca-Blinder decompositions, child income rank, Switzerland

	(1) Sons: pooled	(2) Sons: no immi. ref.	(3) Sons: immi. ref.	(4) Daughters: pooled	(5) Daughters: no immi. ref.	(6) Daughters: immi. ref.
Immigrant father	59.30***	59.30***	59.30***	40.44***	40.44***	40.44***
	(0.225)	(0.225)	(0.225)	(0.214)	(0.214)	(0.214)
No immigrant father	62.16***	62.16***	62.16***	37.30***	37.30***	37.30***
	(0.0699)	(0.0699)	(0.0699)	(0.0714)	(0.0714)	(0.0714)
Difference	−2.853***	−2.853***	−2.853***	3.139***	3.139***	3.139***
	(0.235)	(0.235)	(0.235)	(0.226)	(0.226)	(0.226)
Total explained	−0.405***	−0.406***	−0.395***	−0.475***	−0.484***	−0.394***
	(0.0364)	(0.0365)	(0.0411)	(0.0402)	(0.0411)	(0.0394)
Total unexplained	−2.449***	−2.447***	−2.458***	3.613***	3.623***	3.533***
	(0.233)	(0.233)	(0.234)	(0.223)	(0.223)	(0.226)
- Parental income rank	−0.185	−0.184	−0.194	−1.489***	−1.479***	−1.570***
	(0.399)	(0.396)	(0.419)	(0.377)	(0.374)	(0.397)
- Constant	−2.264***	−2.264***	−2.264***	5.102***	5.102***	5.102***
	(0.456)	(0.456)	(0.456)	(0.422)	(0.422)	(0.422)
Observations	154,538	154,538	154,538	148,273	148,273	148,273

Notes: This table reports a Oaxaca-Blinder decompositions of the gap in labor income ranks between children of immigrants and children of locals (Specification 4). We follow the approach and terminology of Fortin et al. (2011), and estimate the fraction of the income rank gap that can be "explained" by differences in parental income distributions, and the fraction that is "unexplained" by parental income distribution differences, and rather due to differences in intergenerational mobility parameters. We report versions using pooled estimated coefficients and each of the groups' coefficients as reference levels. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

C.13.4 Mechanisms

C.13.4.1 Various sets of controls

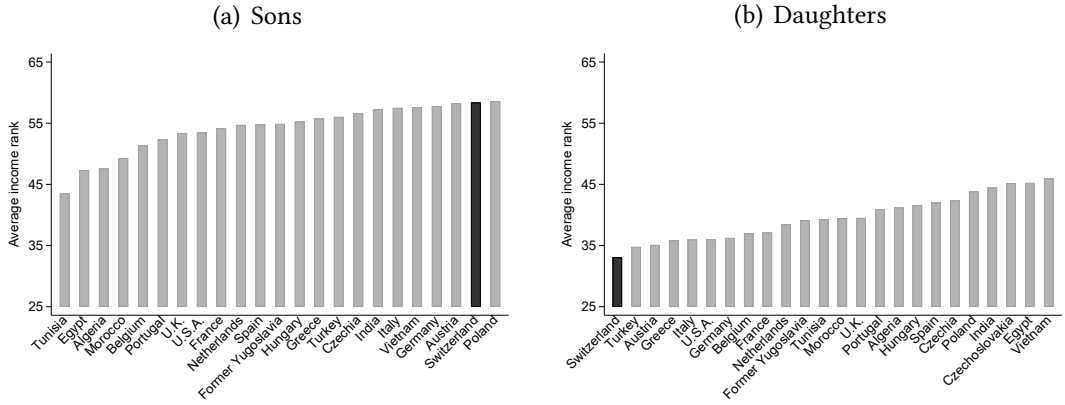
Table C.13.5: Linked data: Intergenerational mobility estimates with various sets of controls, Switzerland

VARIABLES	(1) Sons	(2) Sons	(3) Sons	(4) Daughters	(5) Daughters	(6) Daughters
Immigrant father = 1	-2.264***	-1.485***	-0.349	5.102***	4.771***	3.696***
	(0.456)	(0.457)	(0.469)	(0.422)	(0.425)	(0.437)
Parents' rank	0.150***	0.148***	0.152***	0.167***	0.162***	0.147***
	(0.00246)	(0.00250)	(0.00266)	(0.00247)	(0.00252)	(0.00267)
Immigrant father # rank	-0.00387	-0.00776	-0.0120	-0.0312***	-0.0320***	-0.0254***
	(0.00833)	(0.00832)	(0.00847)	(0.00789)	(0.00788)	(0.00802)
Constant	54.61***	52.26***	57.46***	28.89***	31.75***	37.77***
	(0.138)	(0.232)	(3.537)	(0.136)	(0.225)	(4.434)
Observations	154,538	154,538	154,068	148,273	148,273	147,844
R-squared	0.028	0.034	0.059	0.034	0.037	0.061
Parental region	0	1	0	0	1	0
Parental municipality	0	0	1	0	0	1

Notes: This table reports estimates of Specification 1, regressing the labor income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts. Parental region and municipality of residence are determined in 1995 and included as fixed effects. We have 7 regions and 2,872 municipalities. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

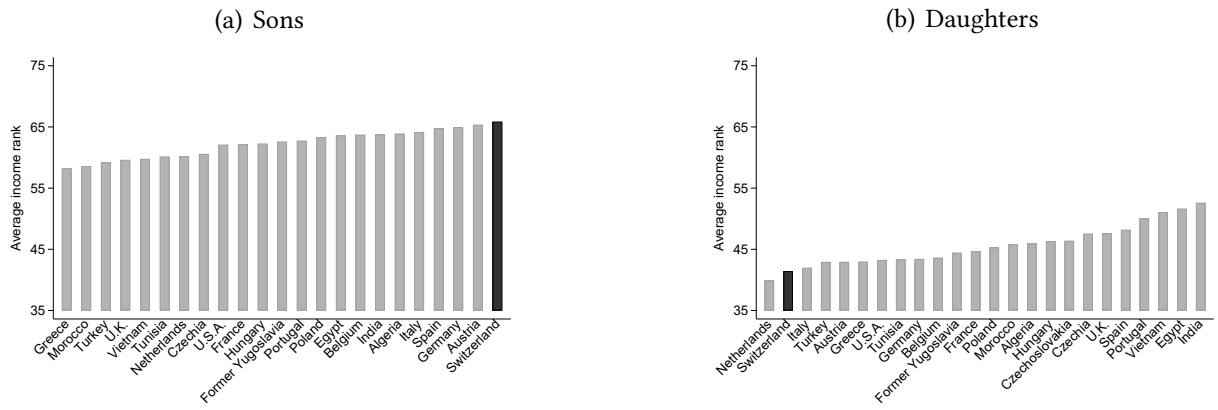
C.13.4.2 Heterogeneity across sending countries

Figure C.13.4: Average income at 25th percentile: Switzerland



Notes: This figure plots the predicted child income rank if parental income rank equals 25 from a paternal country of origin-level estimation of Specification 1, regressing the labor income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Country of birth assigned according to historical borders. All countries that once belonged to Yugoslavia, are grouped into Former Yugoslavia. Child income measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts.

Figure C.13.5: Average income at 75th percentile: Switzerland



Notes: This figure plots the predicted child income rank if parental income rank equals 75 from a paternal country of origin-level estimation of Specification 1, regressing the labor income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Country of birth assigned according to historical borders. All countries that once belonged to Yugoslavia, are grouped into Former Yugoslavia. Child income measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts.

C.13.4.3 Employment

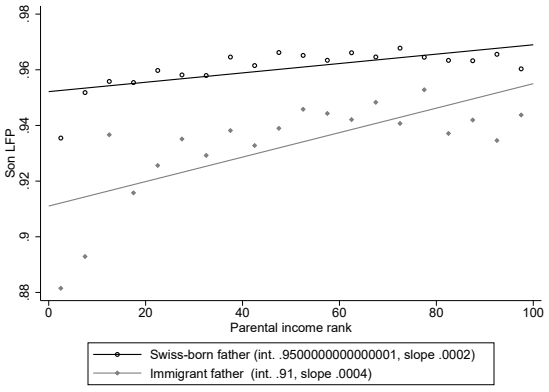
Table C.13.6: Linked data: Intergenerational mobility estimates, employment, Switzerland

VARIABLES	(1) Sons	(2) Daughters
Immigrant father = 1	-0.0411***	0.00198
	(0.00410)	(0.00513)
Parents' rank	0.000168***	0.000815***
	(1.77e-05)	(2.77e-05)
Immigrant father # rank	0.000271***	-7.56e-05
	(6.95e-05)	(8.60e-05)
Constant	0.952***	0.850***
	(0.00107)	(0.00174)
Observations	154,538	148,273
R-squared	0.003	0.006

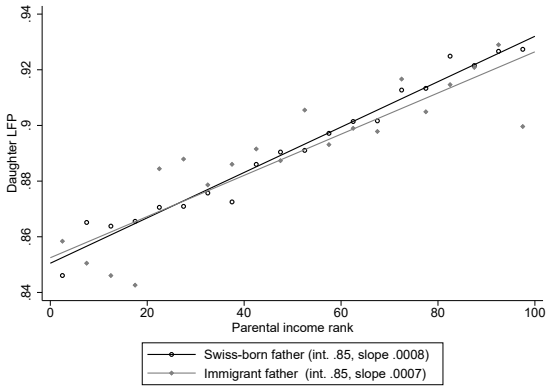
Notes: This table reports estimates of Specification 1, regressing employment of sons/daughters on labor income ranks of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child employment measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Figure C.13.6: Linked data: Intergenerational mobility, employment, Switzerland

(a) Switzerland, sons



(b) Switzerland, daughters



Notes: This figure plots estimates of Specification 1, regressing employment of sons/daughters on labor income ranks of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child employment measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts.

C.13.4.4 Educational mobility

Unlike the Danish case, no information on grades or college enrollment status at age 25 is available in the Swiss data.

C.13.5 Robustness

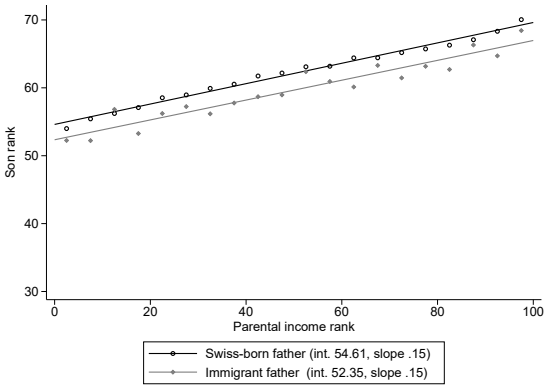
C.13.5.1 Emigration

The Swiss data does not include information on return migration, and before 2010, we do not have the yearly universe of residents (only the universe of workers). We can therefore not compute return-migration from age 14 onward.

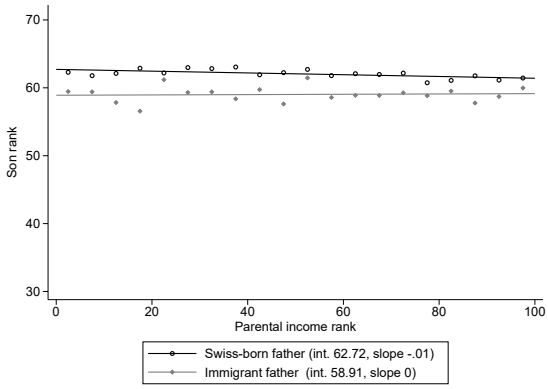
C.13.5.2 Additional years of parental income data

Figure C.13.7: Intergenerational mobility: Switzerland by number of years of parental income data

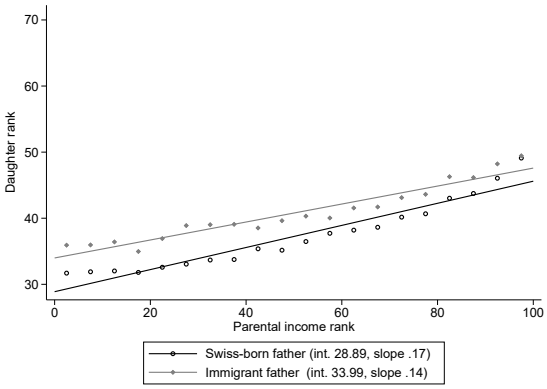
(a) Sons, parental income 1994-2000



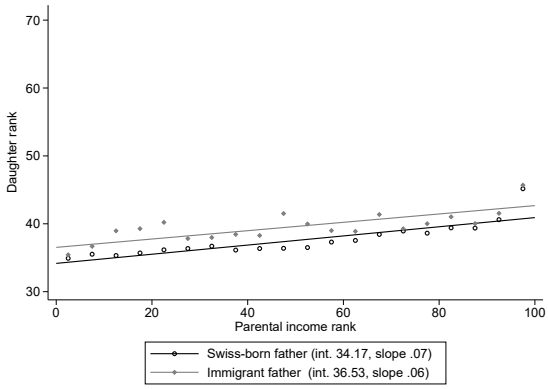
(b) Sons, parental income 1981-2000



(c) Daughters, parental income 1994-2000



(d) Daughters, parental income 1981-2000



Notes: This figure plots estimates of Specification 1, regressing the labor income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000 and 1981-2000 respectively. Income ranks, 0-100, determined within cohorts.

Table C.13.7: Intergenerational mobility estimates: Switzerland, parental income 1981-2000

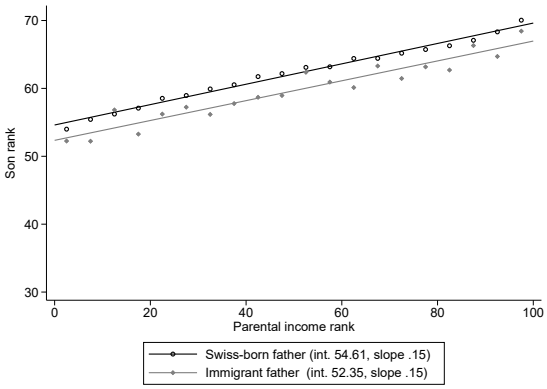
VARIABLES	(1) Sons	(2) Daughters
Immigrant father = 1	-3.810***	2.358***
	(0.580)	(0.554)
Parents' rank	-0.0131***	0.0675***
	(0.00271)	(0.00274)
Immigrant father # rank	0.0154*	-0.00592
	(0.00871)	(0.00828)
Constant	62.72***	34.17***
	(0.149)	(0.152)
Observations	132,007	126,779
R-squared	0.001	0.007

Notes: This table reports estimates of Specification 1, regressing the labor income ranks of sons/daughters on that of parents. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1981-2000 respectively. Income ranks, 0-100, determined within cohorts. 95%-confidence interval indicated. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$

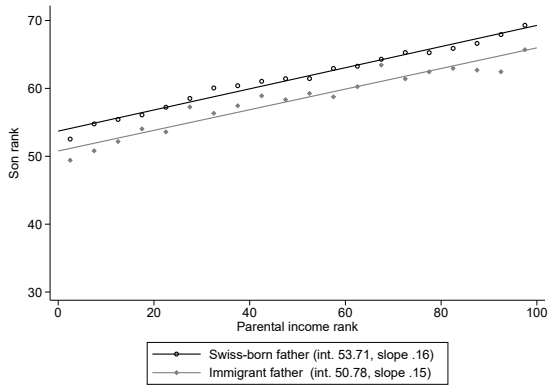
C.13.5.3 More recent birth cohorts, income rank

Figure C.13.8: Linked data: Intergenerational mobility, Switzerland, comparison across cohorts

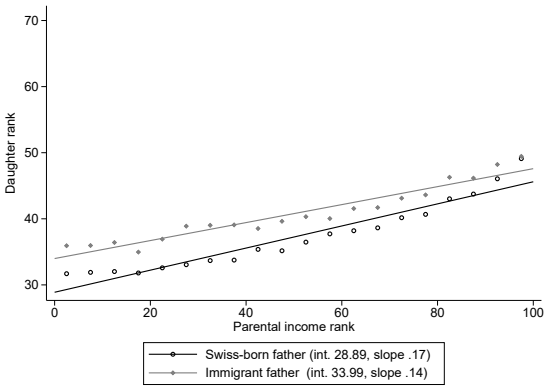
(a) Switzerland, sons, born 1978-1983



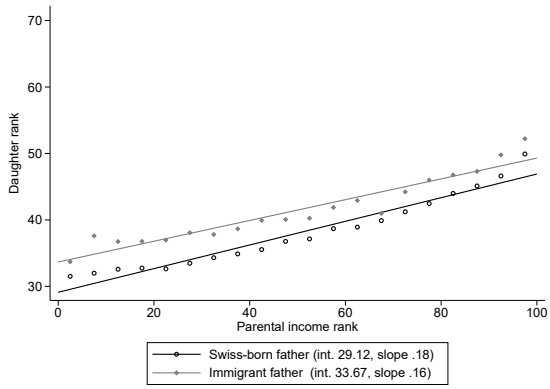
(b) Switzerland, sons, born 1982-1987



(c) Switzerland, daughters, born 1978-1983



(d) Switzerland, daughters, born 1982-1987



Notes: This figure plots estimates of Specification 1, regressing the labor income ranks of sons/daughters on that of parents. Children born in 1978-1983 and 1982-1987 respectively. Immigration status is determined by father's country of birth. Child income measured in 2014-2015 and 2018-2019, and parental income 1994-2000 and 1998-2004 respectively. Income ranks, 0-100, determined within cohorts.

Table C.13.8: Linked data: Intergenerational mobility estimates, Switzerland, comparing cohorts

	(1)	(2)	(4)	(6)
	Sons	Daughters	Sons	Daughters
VARIABLES	1978-1983	1978-1983	1982-1987	1982-1987
Immigrant father = 1	-2.264***	5.102***	-2.924***	4.548***
	(0.456)	(0.422)	(0.409)	(0.374)
Parents' rank	0.150***	0.167***	0.156***	0.178***
	(0.00246)	(0.00247)	(0.00242)	(0.00238)
Immigrant father # rank	-0.00387	-0.0312***	-0.00381	-0.0215***
	(0.00833)	(0.00789)	(0.00756)	(0.00711)
Constant	54.61***	28.89***	53.71***	29.12***
	(0.138)	(0.136)	(0.137)	(0.132)
Observations	154,538	148,273	170,348	163,969
R-squared	0.028	0.034	0.030	0.038

Notes: This table reports estimates of Specification 1, regressing the labor income ranks of sons/daughters on that of parents. Immigration status is determined by father's country of birth. Income ranks, 0-100, determined within cohorts. Columns (1) & (2): Children born in 1978-1983, child income measured in 2014-2015, and parental income 1994-2000. Columns (3) & (4): Children born in 1982-1987, child income measured in 2018-2019, and parental income 1998-2004. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

C.14 Country-specific details & results: United Kingdom

C.14.1 Data details and deviations

Two different survey studies are used for the cross-sectional and linked analyses due to the unavailability of a linked administrative dataset for the UK. For the cross-sectional analysis, we use the General Household Survey (GHS), and for the linked parent-child analysis, we use the 1970 British Cohort Study (BCS70).

GHS. The GHS was a repeated cross-sectional study conducted continuously from 1971 to 2007 on private households in the UK by the Office for National Statistics (ONS). Its primary purpose was to collect data on the demographic, economic, and social characteristics of private households. In the 2006 survey, a sample of 9,731 households was interviewed. Individual questionnaires, completed by all adults aged 16 and over residing in a household, collected information on earnings, income, as well as the country of origin of respondents and their parents.

BCS70. The BCS70 is a longitudinal birth cohort study that follows a nationally representative sample of over 17,000 individuals born in England, Scotland, and Wales during a single week in 1970. Since 1970, cohort members have been surveyed throughout their childhood and adult lives on a range of topics, including their own and their parents' migration background, employment, earnings, and income.

Data access. Both studies are accessible through the UK Data Service (UKDS): https://ukdataservice.ac.uk/. We use the safeguarded versions of the datasets, which can be downloaded by registering and accepting the UK Data Service End User Licence Agreement. Further details on safeguarded access can be found here: https://ukdataservice.ac.uk/find-data/access-conditions/safeguarded-access/.

C.14.1.1 Cross-sectional data

First-generation sample. We use 1980 data from the GHS to identify fathers aged 30 to 50 with at least one child in the household, as well as available immigration status and income data. Since we rely on household survey data, we do not have information on children who do not reside in the same household as their fathers.

Following the Danish case, immigration status is determined based on place of birth. However, the GHS provides specific country-of-birth information for only four countries: the UK, Ireland, India, and Pakistan. For individuals born in other countries, the data includes only broader country groupings, which aligns with the birth information available in the linked datasets we used. Consequently, we compare income-rank gaps across immigrant groups (Ireland, Europe, Africa, Southern Asia, the Caribbean, and others) rather than specific top-sending countries. For income, we use the self-reported individual gross total income .We assign a value of zero for missing income data.

Second-generation sample.We use data from 2006 instead of 2010 because the GHS was replaced by the General Lifestyle Survey (GLS) in 2007, and accessing the latter requires controlled data application. Using the 2006 GHS data, we identify sons aged 30 to 50 who were born in the UK and have available income data and information on their fathers' immigration status.

A father's immigration status is determined based on place of birth. Unlike the 1980 data, the 2006 data provides specific country-of-birth information for both fathers and sons. However,

to maintain consistency with the first-generation sample and the linked data, we still compare income-rank gaps across immigrant groups rather than individual countries.

The income measure is similar to that used for the first-generation sample, with one difference: the 2006 measure is recorded in pence instead of pounds. Accordingly, we convert the measure to pounds and code missing values as zeros.

C.14.1.2 Linked data

Unlike the Danish study, which focuses on birth cohorts from 1978 to 1983, we focus on the 1970 birth cohort. Immigrant status is determined by the birth father's place of birth. In the BCS70, we only have information on parental regions rather than separate regions for the father and mother, and parental wealth data is unavailable.

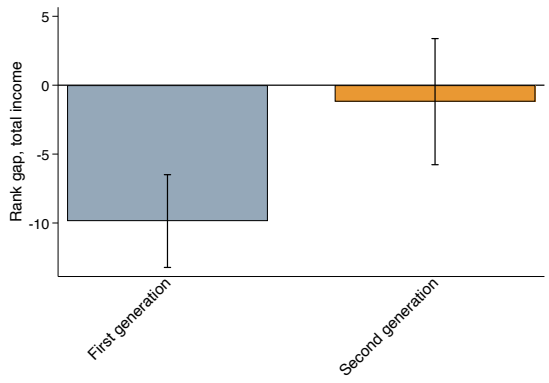
Parental income is measured in 1980 and 1986, corresponding to child ages 10 and 16. The income data is banded and self-reported, capturing all earned and unearned income of both parents before deductions for tax, national insurance, and other contributions. It excludes income from other household members and child benefits. We convert the banded income into continuous income using interval regression. Since missing values in the self-reported income data do not necessarily indicate zero income, we exclude cases where parental income is missing for both 1980 and 1986. For cases with income missing in one year, we impute the missing value using the available income from the other year, adjusted for inflation, to maximize the sample size.

Child income is measured in 2000, when the child is aged 30. We construct a total income variable that includes labor income, self-employment income, net profits, investment income, benefits and allowances, and other income types, excluding cash transfers from relatives and insurance payouts. Due to the sensitivity of our results to missing values, we exclude individuals who are employed but lack labor income data, self-employed but lack self-employment income data, or unemployed but lack data on main benefits.

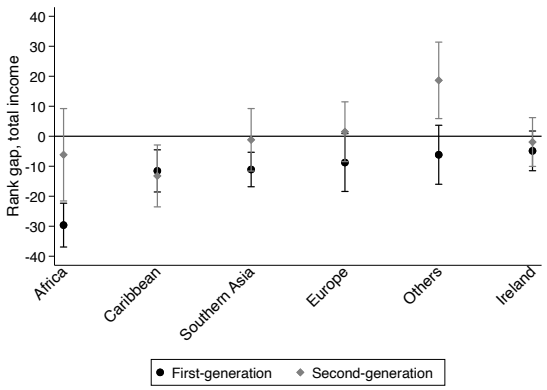
C.14.2 Cross-sectional results

Figure C.14.1: Cross-sectional results: UK, 1980-2006 cohort

(a) Overall



(b) Country-by-country



Notes: This figure plots the estimated coefficients from Equation 1 from Abramitzky et al. (2021) for the income and earnings of sons and fathers in 1980 and 2006 respectively, using a non-UK dummy rather than country-specific dummies. Immigration status is determined by father's country of birth. We control for age-fixed effects. 95%-confidence interval indicated.

Table C.14.1: Cross-sectional data: Summary statistics, UK

Fathers: 1980 cohort

	Immigrants	UK-born	Diff.	Std. Error
Age	40.068	39.511	-0.557	0.389
Rank gap, total income	40.940	50.800	9.860***	1.911
ln(total income)	8.517	8.632	0.115*	0.062
Total income > 0	0.831	0.860	0.028	0.023
Share of population	0.081	0.919		
N	249	2819		

Sons: 2006 cohort

	Immigrant father	UK-born father	Diff.	Std. Error
Age	39.741	40.254	0.514	0.439
Rank gap, total income	48.884	50.079	1.195	2.187
ln(total income)	10.048	10.042	-0.006	0.083
Total income > 0	0.852	0.877	0.025	0.025
Share of population	0.066	0.934		
N	189	2669		

Notes: This table reports summary statistics of the cross-sectional sample, including sons and fathers in 1980 and 2006 respectively. Immigration status is determined by father's country of birth. Income ranks are determined within cohorts. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

C.14.3 Main results

C.14.3.1 Summary statistics

Table C.14.2: Linked data: Summary statistics, UK

Sons

	Immigrant father	UK-born father	Diff.	Std. Error
Child income rank	62.304	57.760	-4.545***	1.734
Child labour force part.	0.810	0.843	0.033	0.023
Mother's age at child birth	27.038	25.901	-1.137***	0.338
Father's age at child birth	31.984	28.693	-3.291***	0.474
Parental income rank	45.201	50.095	4.894***	1.843
Child share of population	0.069	0.931		
N	263	3564		

Daughters

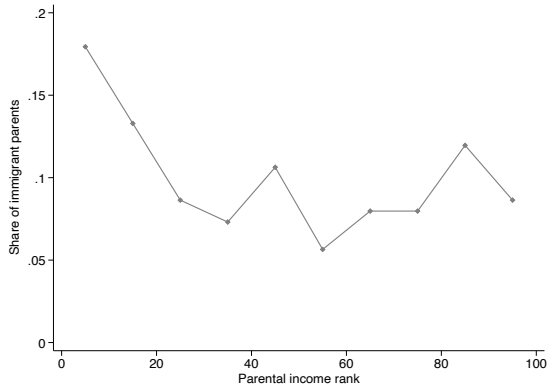
	Immigrant father	UK-born father	Diff.	Std. Error
Child income rank	47.614	40.013	-7.601***	1.859
Child labour force part.	0.893	0.911	0.018	0.019
Mother's age at child birth	26.807	26.096	-0.711**	0.351
Father's age at child birth	31.080	28.762	-2.318***	0.493
Parental income rank	45.688	50.649	4.962***	1.912
Child share of population	0.074	0.926		
N	243	3035		

Notes: This table reports summary statistics of the estimation sample. Children born in 1970. Immigration status is determined by father's country of birth. Child income measured in 2000, and parental income in 1980 and 1986. Income ranks, 0-100. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

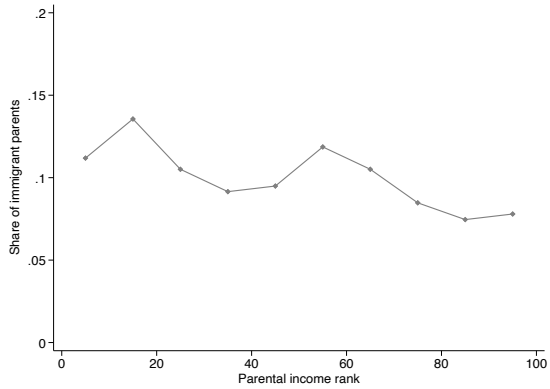
C.14.3.2 Parental income distribution

Figure C.14.2: Linked data: UK, share of total number of children with immigrants parents

(a) Sons



(b) Daughters

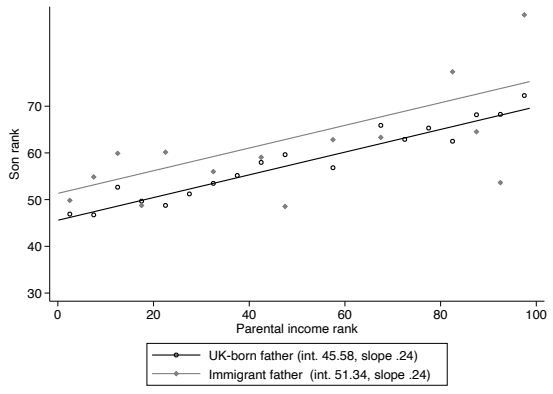


Notes: This figure shows the share of children of immigrant parents in each decile out of the total number of children with immigrant parents. The numerator is the number of children of immigrants within each decile. The denominator is the total number of children with immigrant parents (across all deciles). Immigration status is determined by father's country of origin. Income ranks, 0-100. Due to sample size limitations, we do this graph for deciles instead of ventiles in the UK case.

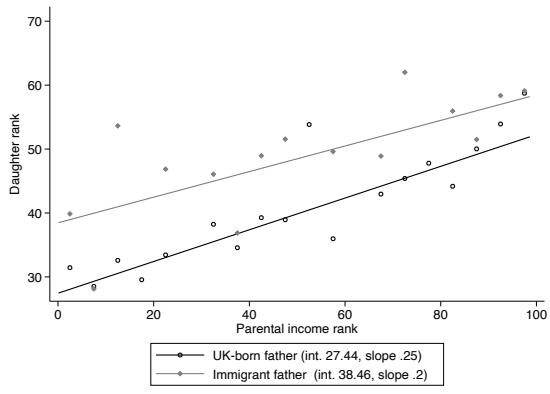
C.14.3.3 Rank-rank relationship

Figure C.14.3: Linked data: Intergenerational mobility, UK

(a) UK, sons



(b) UK, daughters



Notes: This figure plots estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1970. Immigration status is determined by father's country of birth. Child income measured in 2000, and parental income in 1980 and 1986. Income ranks, 0-100, determined within cohorts.

Table C.14.3: Linked data: Intergenerational mobility estimates, UK

	(1)	(2)
	Sons	Daughters
VARIABLES	1970	1970
Immigrant father = 1	5.757*	11.02***
	(3.123)	(3.248)
Parents' rank	0.243***	0.248***
	(0.0155)	(0.0172)
Immigrant father # rank	-0.000499	-0.0478
	(0.0542)	(0.0612)
Constant	45.58***	27.44***
	(0.905)	(0.933)
Observations	3,827	3,278
R-squared	0.068	0.068

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Notes: This table reports estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1970. Immigration status is determined by father's country of birth. Child income measured in 2000, and parental income in 1980 and 1986. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$
.

C.14.3.4 Oaxaca-Blinder decomposition

Table C.14.4: Oaxaca-Blinder decompositions, child income rank, UK

	(1) Sons: pooled	(2) Sons: non-immi. ref.	(3) Sons: . immi. ref	(4) Daughters: pooled	(5) Daughters: non-immi. ref.	(6) Daughters:. immi. ref
Mean child income rank: Immigrant father	62.30***	62.30***	62.30***	47.61***	47.61***	47.61***
	(1.728)	(1.734)	(1.734)	(1.715)	(1.722)	(1.722)
Mean child income rank: No immigrant father	57.76***	57.76***	57.76***	40.01***	40.01***	40.01***
	(0.453)	(0.453)	(0.453)	(0.508)	(0.508)	(0.508)
Difference in means	4.545**	4.545**	4.545**	7.601***	7.601***	7.601***
	(1.786)	(1.792)	(1.792)	(1.789)	(1.795)	(1.795)
Total explained difference	−1.190**	−1.190**	−1.187**	−1.214**	−1.231**	−0.994**
due to differences in parental income distributions	(0.485)	(0.486)	(0.542)	(0.472)	(0.480)	(0.480)
Total unexplained difference	5.734***	5.735***	5.732***	8.815***	8.832***	8.595***
due to differences in mobility parameters	(1.721)	(1.729)	(1.725)	(1.747)	(1.753)	(1.788)
- Parental income rank (*relative mobility*)	−0.0228	−0.0226	−0.0250	−2.202	−2.185	−2.422
	(2.469)	(2.456)	(2.722)	(2.819)	(2.808)	(3.111)
- Intercept (*absolute mobility*)	5.757*	5.757*	5.757*	11.02***	11.02***	11.02***
	(3.122)	(3.132)	(3.132)	(3.246)	(3.258)	(3.258)
Observations	3,827	3,827	3,827	3,278	3,278	3,278

Notes: This table reports a Oaxaca-Blinder decompositions of the gap in income ranks between children of immigrants and children of locals (Specification 4). We follow the approach and terminology of Fortin et al. (2011), and estimate the fraction of the income rank gap that can be "explained" by differences in parental income distributions, and the fraction that is "unexplained" by parental income distribution differences, and rather due to differences in intergenerational mobility parameters. We report versions using pooled estimated coefficients and each of the groups' coefficients as reference levels. Children born in 1970. Immigration status is determined by father's country of birth. Child income measured in 2000, and parental income in 1980 and 1986. Income ranks, 0-100. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

C.14.4 Mechanisms

C.14.4.1 Various sets of controls

Table C.14.5: Linked data: Intergenerational mobility estimates with various sets of controls, UK

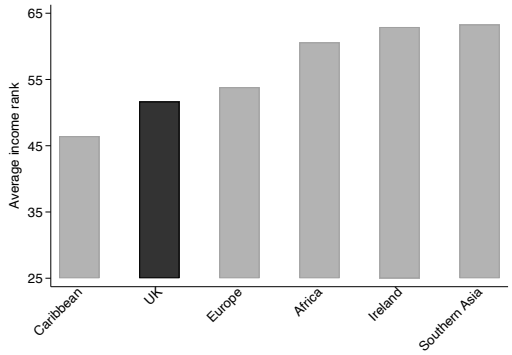
VARIABLES	(1) Sons	(2) Sons	(3) Sons	(4) Sons	(5) Daughters	(6) Daughters	(7) Daughters	(8) Daughters
Immigrant father = 1	5.757*	4.318	4.907	3.311	11.02***	9.703***	10.51***	9.192**
	(3.123)	(3.129)	(3.443)	(3.448)	(3.248)	(3.249)	(3.851)	(3.877)
Parents' rank	0.243***	0.219***	0.230***	0.209***	0.248***	0.236***	0.216***	0.204***
	(0.0155)	(0.0159)	(0.0190)	(0.0193)	(0.0172)	(0.0175)	(0.0214)	(0.0217)
Immigrant father # rank	-0.000499	-0.00404	-0.00859	-0.00646	-0.0478	-0.0415	-0.0255	-0.0189
	(0.0542)	(0.0543)	(0.0616)	(0.0614)	(0.0612)	(0.0612)	(0.0703)	(0.0699)
Constant	45.58***	42.18***	73.66***	72.82***	27.44***	26.24***	21.51***	21.25***
	(0.905)	(1.798)	(5.099)	(6.178)	(0.933)	(1.926)	(5.131)	(5.494)
Observations	3,827	3,827	3,827	3,827	3,278	3,278	3,278	3,278
R-squared	0.068	0.084	0.212	0.224	0.068	0.077	0.226	0.232
Parental region	0	1	0	1	0	1	0	1
Parental industry	0	0	1	1	0	0	1	1

Notes: This table reports estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1970. Immigration status is determined by father's country of birth. Child income measured in 2000, and parental income in 1980 and 1986. Income ranks, 0-100. Other parental characteristics are all determined in 1980 and included as fixed effects. We have 10 regions. Parental industries include categories for unknown industry as well as no industry (if not working). Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

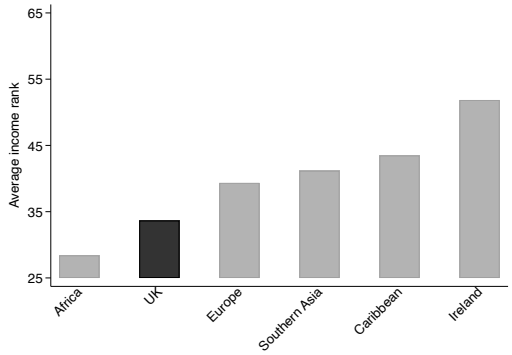
C.14.4.2 Heterogeneity across sending countries

Figure C.14.4: Average income at 25th percentile: UK

(a) Sons



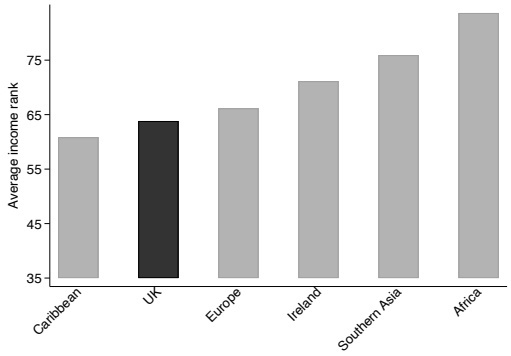
(b) Daughters



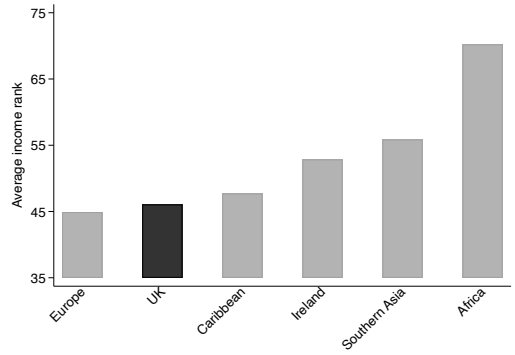
Notes: This figure plots the predicted child income rank if parental income rank equals 25 from a paternal country of origin-level estimation of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1970. Immigration status is determined by father's country of birth. Child income measured in 2000, and parental income in 1980 and 1986. Income ranks, 0-100.

Figure C.14.5: Average income at 75th percentile: UK

(a) Sons



(b) Daughters



Notes: This figure plots the predicted child income rank if parental income rank equals 75 from a paternal country of origin-level estimation of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1970. Immigration status is determined by father's country of birth. Child income measured in 2000, and parental income in 1980 and 1986. Income ranks, 0-100.

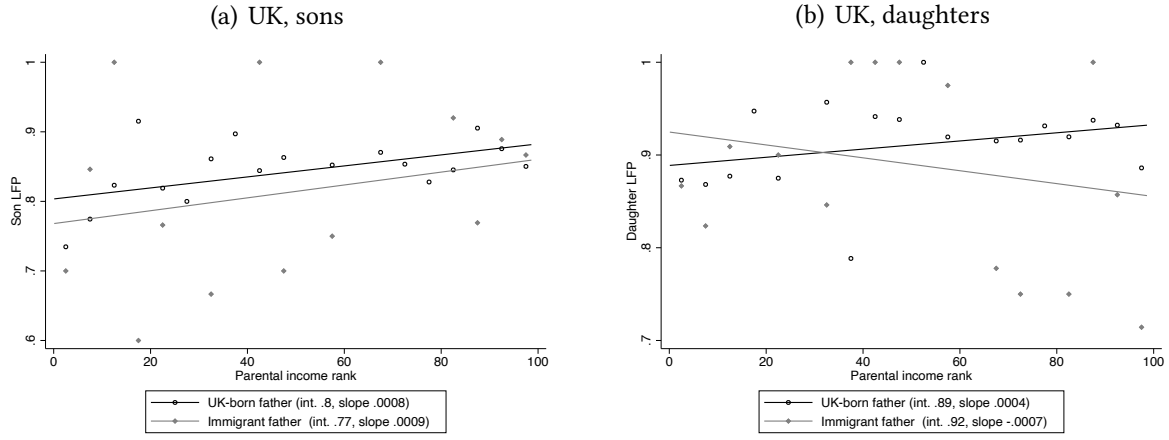
C.14.4.3 Employment

Table C.14.6: Linked data: Intergenerational mobility estimates, employment, UK

VARIABLES	(1) Sons	(2) Daughters
Immigrant father = 1	-0.0354	0.0360
	(0.0458)	(0.0417)
Parents' rank	0.000792***	0.000440**
	(0.000219)	(0.000191)
Immigrant father # rank	0.000134	-0.00114
	(0.000777)	(0.000841)
Constant	0.804***	0.889***
	(0.0131)	(0.0115)
Observations	3,827	3,278
R-squared	0.005	0.002

Notes: This table reports estimates of Specification 1, regressing employment of sons/daughters on income ranks of parents. Children born in 1970. Immigration status is determined by father's country of birth. Child employment measured in 2000, and parental income in 1980 and 1986. Income ranks, 0-100. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Figure C.14.6: Linked data: Intergenerational mobility, employment, UK



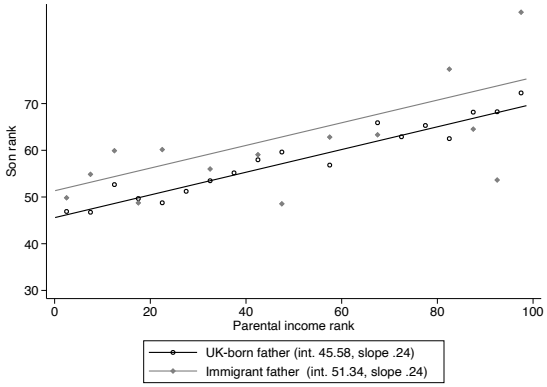
Notes: This figure plots estimates of Specification 1, regressing employment of sons/daughters on income ranks of parents.Children born in 1970. Immigration status is determined by father's country of birth. Child employment measured in 2000, and parental income in 1980 and 1986. Income ranks, 0-100.

C.14.5 Robustness

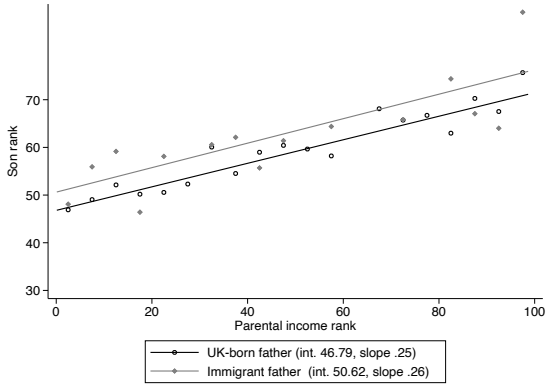
C.14.5.1 Additional years of child income data

Figure C.14.7: Intergenerational mobility: UK number of years of child income data

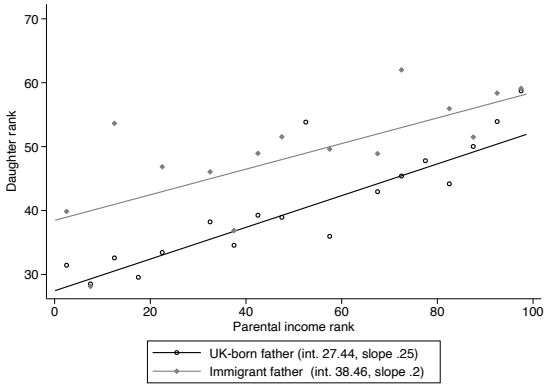
(a) Sons, child income 2000



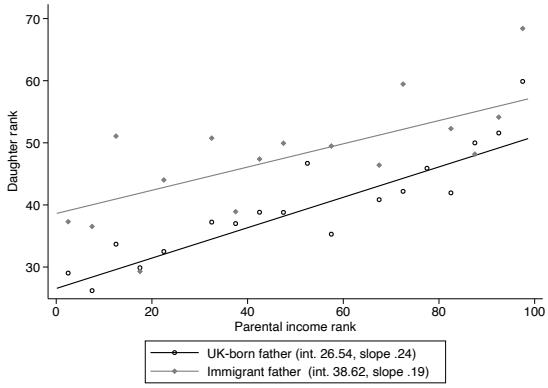
(b) Sons, child income 2000 and 2004



(c) Daughters, child income 2000



(d) Daughters, child income 2000 and 2004



Notes: This figure plots estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1970. Immigration status is determined by father's country of birth. Child income measured in 2000 and 2004, and parental income in 1980 and 1986 respectively. Income ranks, 0-100.

Table C.14.7: Intergenerational mobility estimates: UK, child income 2000 and 2004

VARIABLES	(1) Sons	(2) Daughters
Immigrant father = 1	3.827	12.07***
	(2.754)	(2.794)
Parents' rank	0.247***	0.245***
	(0.0140)	(0.0158)
Immigrant father # rank	0.00996	-0.0576
	(0.0476)	(0.0551)
Constant	46.79***	26.54***
	(0.822)	(0.864)
Observations	4,383	3,930
R-squared	0.075	0.067

Notes: This table reports estimates of Specification 1, regressing the income ranks of sons/daughters on that of parents. Children born in 1970. Immigration status is determined by father's country of birth. Child income measured in 2000 and 2004, and parental income in 1980 and 1986 respectively. Income ranks, 0-100. 95%-confidence interval indicated. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$

C.15 Country-specific details & results: United States

C.15.1 Linked data

We make use of aggregate data that has been made public by the Opportunity Insights project (available at https://opportunityinsights.org/data/). This dataset includes all children born between 1978 and 1983 who can be linked to their parents. Parents are identified as individuals who claimed these children as dependents in their tax records (i.e., on a 1040 tax form) at some point between 1994 and 2015, and who were between the ages of 15 and 50 at the time of the child's birth (to minimize links to grandparents or other guardians). The process used to identify children and their parents relies on Social Security Numbers, and thus prevents the inclusion of unauthorized immigrants in either generation. For additional details on the linking process, we refer the reader to Chetty et al. (2014a) and Chetty et al. (2020).

In the parental generation, income refers to total pre-tax income at the household level. Each child's parental household income is the average of parents' income in 1994, 1995, 1998, 1999, and 2000. Non-filers in any particular year are assigned an income of zero. In the children's generation, income refers to the average annual income across 2014 and 2015 (either individual or household income).

The primary sample used in this paper comes from the file titled "Non-Parametric Estimates of Income Ranks for Second Generation Immigrant Children by Parent Income, Country of Origin, and Gender." This table reports predicted outcomes separately by country of origin, income ventile, and gender, allowing us to study children of US-born parents and of immigrant parents. The sample used to produce this file only considers children born in the United States. Parental country of birth comes from linking parents to the 2000 Census Long Form or the 2005–2015 American Community Surveys. To classify individuals as being the children of immigrants, this table prioritizes father's country of origin. Given Census disclosure rules, this table omits countries of origin with fewer than 500 children in each statistic. The sample size of children with US-born parents and foreign-born parents is approximately 5.6 million and 311,000 individuals, respectively. The 21 parental countries of origin in this table (henceforth, "21 top sending countries") are Canada, China, Colombia, Cuba, the Dominican Republic, Ecuador, El Salvador, Germany, Greece, Guatemala, Haiti, India, Israel, Italy, Jamaica, Japan, Mexico, the Philippines, South Korea, the United Kingdom, and Vietnam.

As a robustness check, we also use statistics from the file titled "All Outcomes at the National Level by Race, Gender and Parental Income Percentile." This table reports predicted outcomes for children by mother's immigrant status (i.e., whether she was born in the U.S.), income percentile, and gender. The two main differences between the sample in this table and the one for our baseline sample are that this table includes children who were not born in the United States and that this table prioritizes mother's country of birth. Immigrant children in this sample grew up in slightly lower-income households compared to immigrant children in our baseline sample (Figure C.15.10). However, they exhibit a similar advantage in intergenerational mobility than those in our baseline sample (Figures C.15.8 and C.15.9).

C.15.2 Cross-sectional data

For cross-sectional results, we rely on publicly available Census data. For the children's generation, we use the 2006–2015 Current Population surveys (CPS; Flood et al., 2024). We restrict the sample to US-born men ages 30–50. We further restrict the sample to men with a father born in the United States or in one of the 21 top sending countries as identified by Opportunity Insights. Throughout the analysis, we rely on the CPS survey weights to maintain sample representativeness.

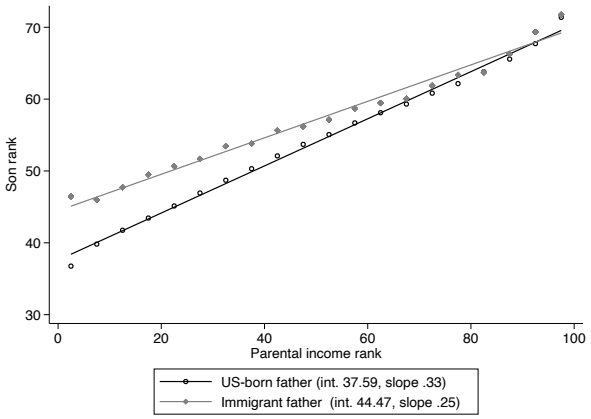
For the parental generation, we use the 5% sample of the 1980 Census (Ruggles et al., 2020). We restrict the sample to men ages 30–50 and who were father of an individual younger than 18 in the household. To implement this final restriction, we use the variable "poploc" indicating father-child relationships within the household. Finally, we restrict the sample to US-born men and to men born in the 21 top sending countries as identified by Opportunity Insights.

For both generations, we use two variables to measure income: the one corresponding to pre-tax wage and salary income (i.e., earnings), and the one corresponding to total pre-tax personal income or losses from all sources (i.e., total income). Note that this differs from Abramitzky et al. (2021), which uses predicted income (i.e., occupation-based income scores) to measure income for both generations.

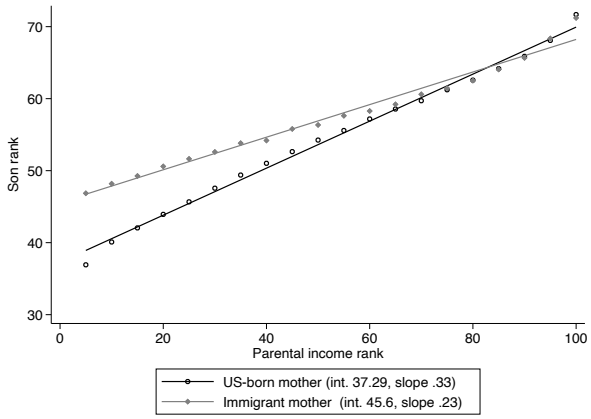
C.15.3 Linked data results

Figure C.15.8: Rank-Rank Relationship of Men

(a) Using father's birthplace



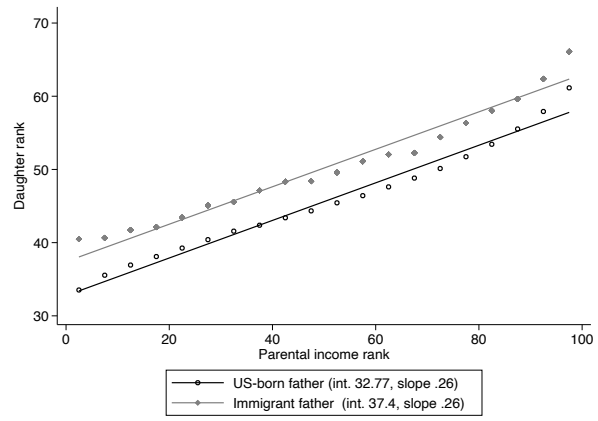
(b) Using mother's birthplace



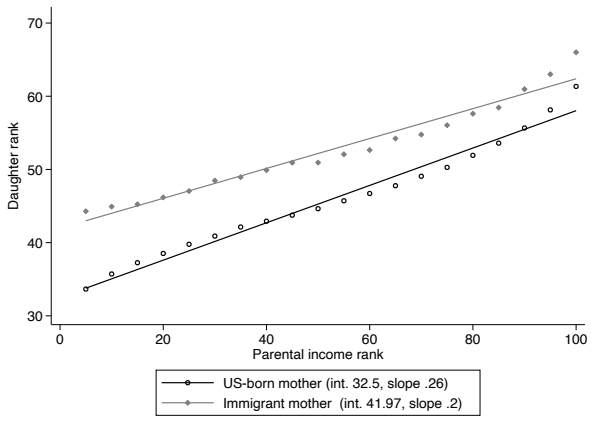
Notes: This figure plots the relationship between parental household income rank (x-axis) and sons' own adult individual-level income rank (y-axis). In panel (a), immigration status is determined by the father's country of birth. In panel (b), immigration status is determined by the mother's country of birth. Income ranks are determined within cohorts.

Figure C.15.9: Rank-Rank Relationship of Women

(a) Using father's birthplace



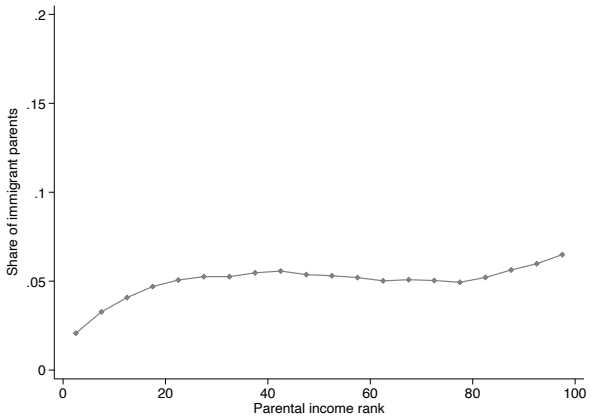
(b) Using mother's birthplace



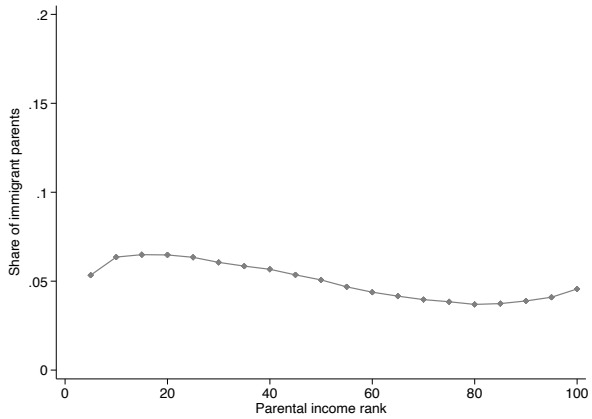
Notes: This figure plots the relationship between parental household income rank (x-axis) and daughters' own adult individual-level income rank (y-axis). In panel (a), immigration status is determined by the father's country of birth. In panel (b), immigration status is determined by the mother's country of birth. Income ranks are determined within cohorts.

Figure C.15.10: Share of children with immigrant parents by parental income ventile

(a) Using father's birthplace



(b) Using mother's birthplace



Notes: This figure shows the proportion of children of immigrants at each parental income ventile depending on whether we use the father's or mother's birthplace to determine immigration status.

Table C.15.8: Oaxaca-Blinder decompositions, child income rank, United States

	(1) Sons: pooled	(2) Sons: no immi. ref.	(3) Sons: immi. ref.	(4) Daughters: pooled	(5) Daughters: no immi. ref.	(6) Daughters: immi. ref.
Immigrant father	58.08***	58.08***	58.08***	51.16***	51.16***	51.16***
	(0.0178)	(0.0178)	(0.0178)	(0.0187)	(0.0187)	(0.0187)
No immigrant father	55.31***	55.31***	55.31***	46.61***	46.61***	46.61***
	(0.00532)	(0.00532)	(0.00532)	(0.00430)	(0.00430)	(0.00430)
Difference	2.776***	2.776***	2.776***	4.559***	4.559***	4.559***
	(0.0186)	(0.0186)	(0.0186)	(0.0192)	(0.0192)	(0.0192)
Total explained	−0.120***	−0.121***	−0.0940***	−0.0280	−0.0280	−0.0279
	(0.0231)	(0.0233)	(0.0181)	(0.0188)	(0.0188)	(0.0188)
Total unexplained	2.896***	2.897***	2.870***	4.587***	4.587***	4.587***
	(0.00553)	(0.00577)	(0.00291)	(0.00375)	(0.00375)	(0.00376)
- Parental income rank	−4.169***	−4.167***	−4.195***	−0.0525***	−0.0525***	−0.0526***
	(0.00836)	(0.00852)	(0.00694)	(0.00979)	(0.00978)	(0.00980)
- Constant	7.064***	7.064***	7.064***	4.640***	4.640***	4.640***
	(0.00530)	(0.00530)	(0.00530)	(0.00832)	(0.00832)	(0.00832)
Observations	3,021,620	3,021,620	3,021,620	2,900,490	2,900,490	2,900,490

Notes: This table reports a Oaxaca-Blinder decompositions of the gap in income ranks between children of immigrants and children of locals (Specification 4). We follow the approach and terminology of Fortin et al. (2011), and estimate the fraction of the income rank gap that can be "explained" by differences in parental income distributions, and the fraction that is "unexplained" by parental income distribution differences, and rather due to differences in intergenerational mobility parameters. We report versions using pooled estimated coefficients and each of the groups' coefficients as reference levels. Children born in 1978-1983. Immigration status is determined by father's country of birth. Child income measured in 2014-2015, and parental income 1994-2000. Income ranks, 0-100, determined within cohorts. Robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

C.15.4 Cross-sectional results

Table C.15.9: Cross-sectional data: Summary Statistics, United States

Fathers: 1980 Census

	Immigrants	US-born
Age	38.946	38.525
Rank gap, total income	41.391	50.494
Rank gap, earnings	42.764	50.415
ln(total income)	9.553	9.763
ln(earnings)	9.516	9.734
Total income > 0	0.976	0.986
Earnings > 0	0.881	0.887
Share of population	0.054	0.946
N	46190.000	805785.000

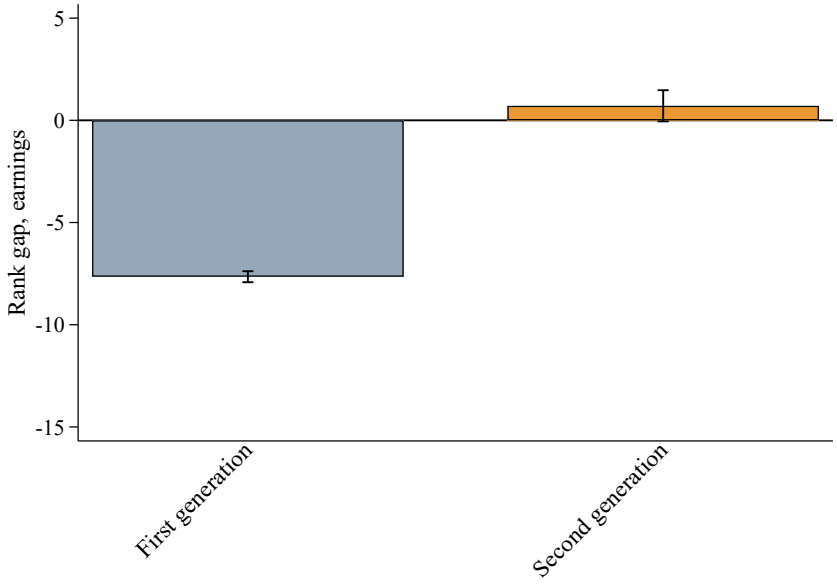
Sons: 2006–2015 Current Population Survey

	Immigrant father	US-born father
Age	38.257	40.455
Rank gap, total income	50.305	49.986
Rank gap, earnings	50.797	49.963
ln(total income)	10.584	10.589
ln(earnings)	10.652	10.679
Total income > 0	0.949	0.951
Earnings > 0	0.851	0.828
Share of population	0.044	0.956
N	9347.000	215952.000

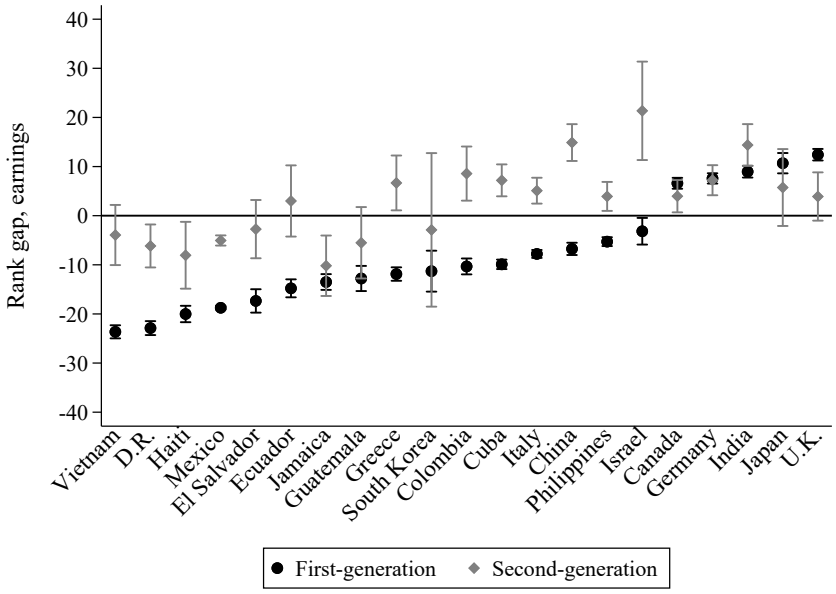
Notes: This table reports summary statistics of the cross-sectional sample. Fathers are observed in the 1980 Census and the children's generation is observed in the 2006–2015 Current Population Surveys. Immigration status is determined by the father's country of birth. Income ranks are determined within cohorts.

Figure C.15.11: Cross-sectional results using earnings, 1980–2010 cohort

(a) Overall



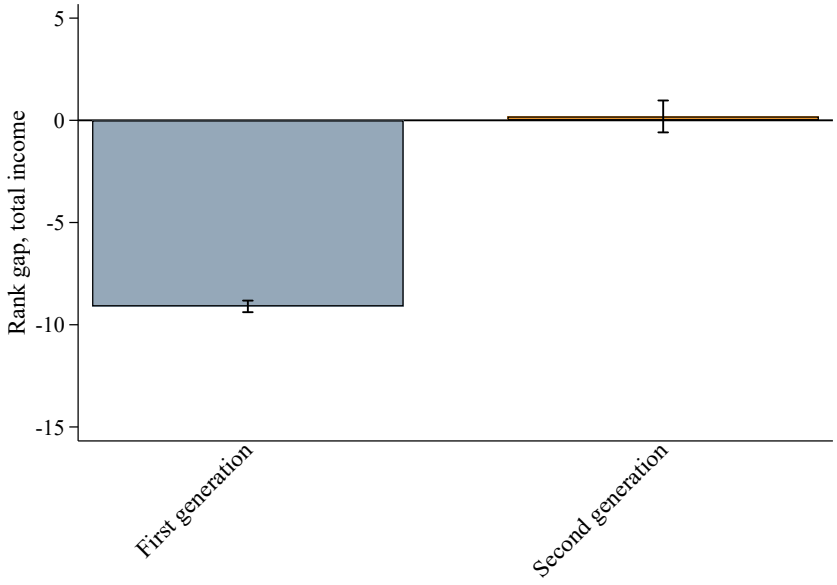
(b) Country-by-country



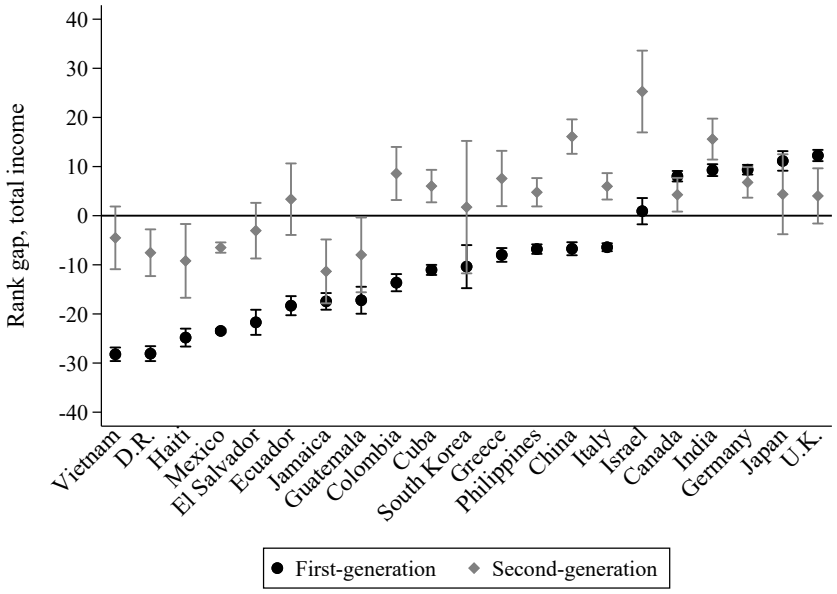
Notes: Both panels in this figure use a measure of earnings for both generations. Panel (a) plots the difference in ranked earnings between foreign-born and US-born fathers in the 1980 Census. Panel (b) plots the difference in ranked earnings between the children of immigrants and of US-born parents using the 2006–2015 Current Population Survey. Immigration status is determined by the father's country of birth. Income ranks are determined within cohorts.

Figure C.15.12: Cross-sectional results using income, 1980–2010 cohort

(a) Overall



(b) Country-by-country



Notes: Both panels in this figure use a measure of total income for both generations. Panel (a) plots the difference in ranked earnings between foreign-born and US-born fathers in the 1980 Census. Panel (b) plots the difference in ranked earnings between the children of immigrants and of US-born parents using the 2006–2015 Current Population Survey. Immigration status is determined by the father's country of birth. Income ranks are determined within cohorts.