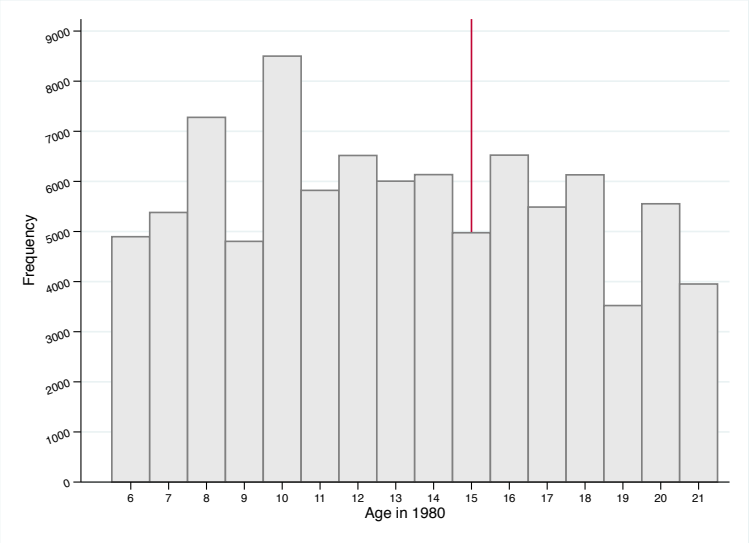
Online Appendix: not for publication

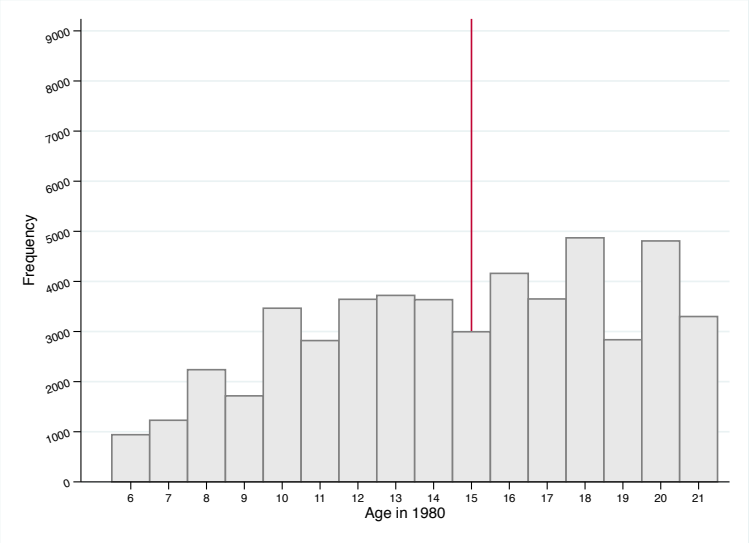
Table A1: Additional summary statistics for parents

Variable	Mean	SD	Min	Max	Observations
Sample: black mothers					
Is married	0.88	0.32	0	1	91480
Partner co-resides	0.63	0.48	0	1	91480
Partner years of schooling	8.97	3.51	0	16	55661
Partner has secondary or higher level of schooling	0.55	0.50	0	1	55661
Participates in labor force	0.75	0.43	0	1	91480
Engages in paid work	0.95	0.22	0	1	68451
Works in the primary sector	0.71	0.46	0	1	67026
Holds a high-skill job	0.10	0.29	0	1	67026
Age at first birth	19.49	3.10	12	39	91480
Number of children born to the mother	4.72	2.08	1	15	91480
Height (cm)	160.2	6.32	115.2	197.4	2031
Height (z-score)	-0.58	1.00	-3.99	5.65	2027
Sample: black fathers					
Is married	0.98	0.13	0	1	50026
Partner co-resides	0.93	0.26	0	1	50026
Partner years of schooling	8.85	2.98	0	16	44767
Partner has secondary or higher level of schooling	0.60	0.49	0	1	44767
Participates in labor force	0.98	0.14	0	1	50026
Engages in paid work	0.96	0.19	0	1	49090
Works in the primary sector	0.46	0.50	0	1	47407
Holds a high-skill job	0.23	0.42	0	1	47407
Height (cm)	171.3	6.76	146.4	191.5	1648
Height (z-score)	1.28	1.11	-2.90	4.66	1648

Notes: Sample is restricted household heads and head-spouses aged six through twenty-one years of age in 1980. All the variables, except for height, are obtain from the 2002 Population Census. The height information comes from the 2010-2011 Zimbabwe Demographic and Health Survey.



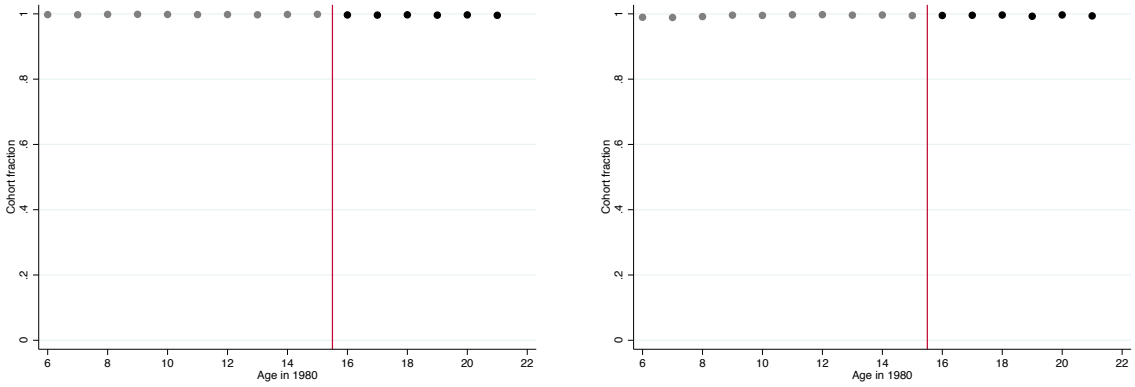
(a) Black mothers



(b) Black fathers

Figure A1: Parent age in 1980

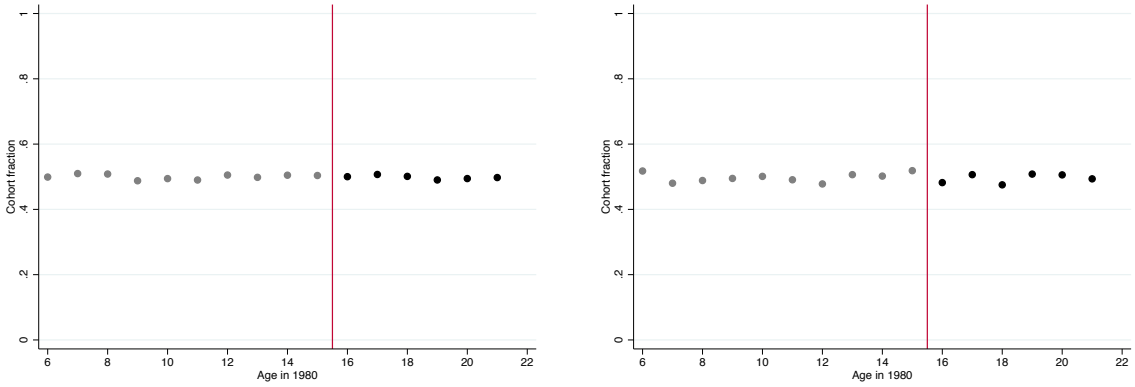
Notes: figure A1a and figure A1b show histograms of age in the respective samples of black mothers and black fathers. The vertical line at age fifteen represents the treatment threshold under the reforms.



(a) Women (b) Men

Figure A2: Race composition of adult cohorts

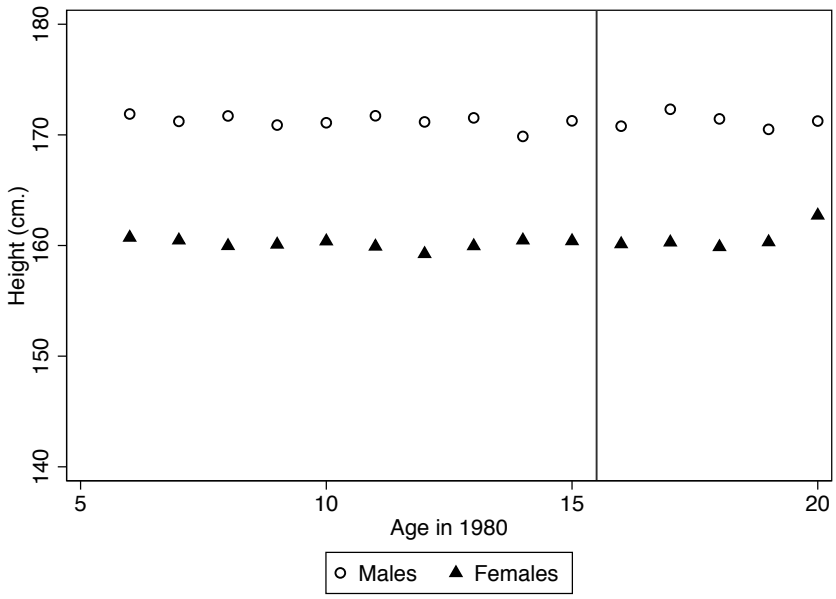
Notes: figure A2a shows the fraction of Zimbabwean women who are black by age in 1980; similarly, figure A2b shows the fraction of Zimbabwean men who are black by age in 1980. The samples in these figures are respectively, 91,718 women and 50,267 men in the ages of 6 through 21 years in 1980. The vertical line at age fifteen represents the treatment threshold under the reforms.



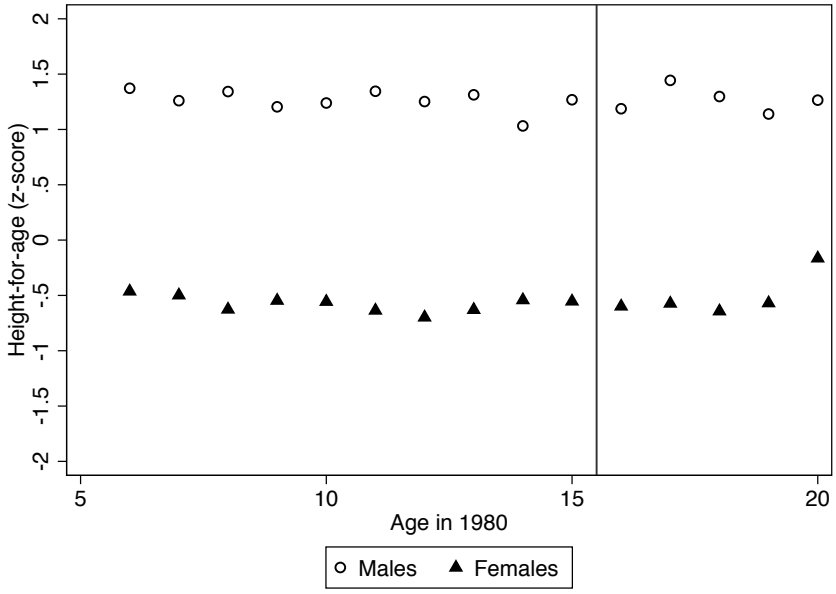
(a) Black mothers (b) Black fathers

Figure A3: Sex composition of children by parent age in 1980

Notes: figure A3a shows the fraction of daughters among the children in the sample of black mothers by the mother's age in 1980; similarly, figure A3b shows the fraction of daughters among the children in the sample of black fathers by the father's age in 1980. All children included in the two samples are in the ages of six through fifteen years in 2002. The vertical line at age fifteen represents the treatment threshold under the reforms.



(a) Height (cm.)



(b) Height-for-age (Z score)

Figure A4: Mean height and mean height-for-age of parent cohorts

Notes: figure A4a shows mean height by age in 1980, while figure A4b shows mean height-for-age by age in 1980. Height data for men and women were taken from the 1999 Zimbabwe DHS.

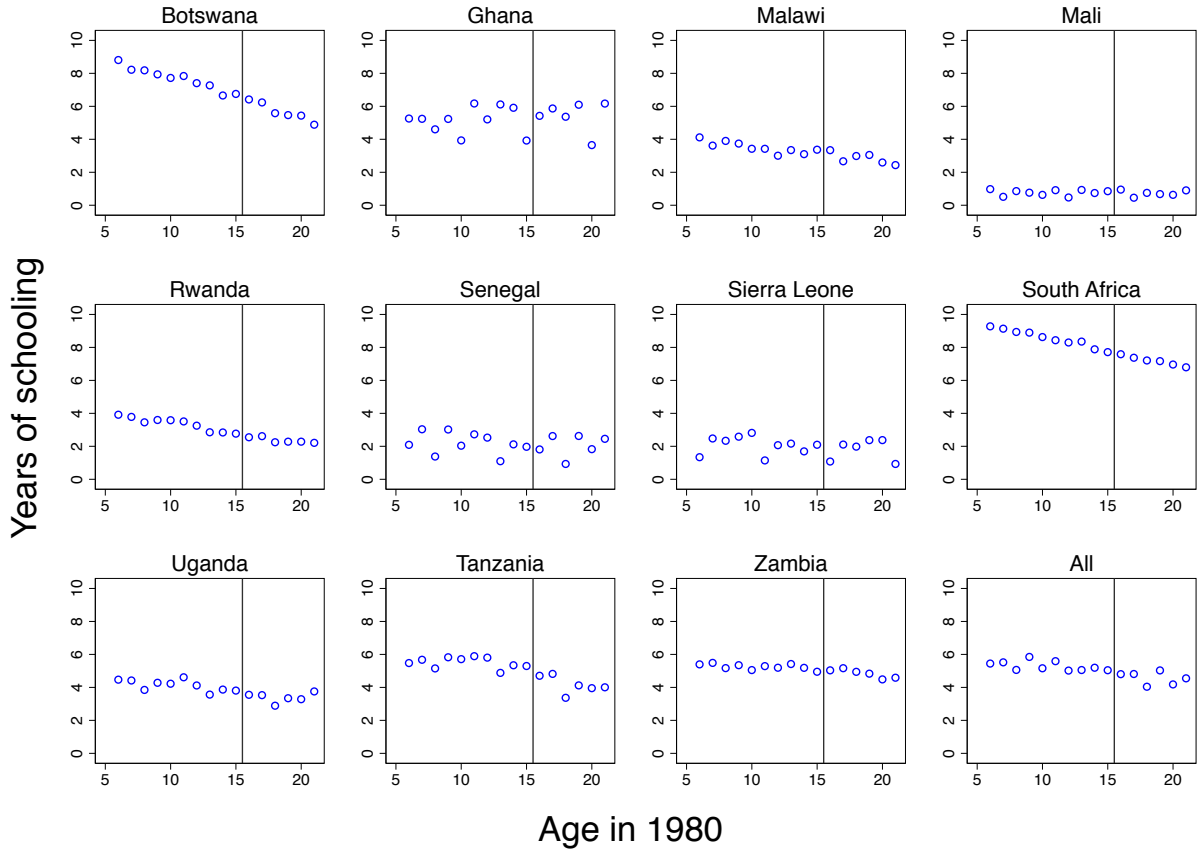


Figure A5: Women's years of schooling by age in 1980: Sub-Saharan Africa

Notes: figures show women's mean years of schooling by age in 1980 for each age from six through 21 years in 1980. In this placebo test, the vertical line represents the threshold at the relevant age for those exposed to the Zimbabwean education reform.

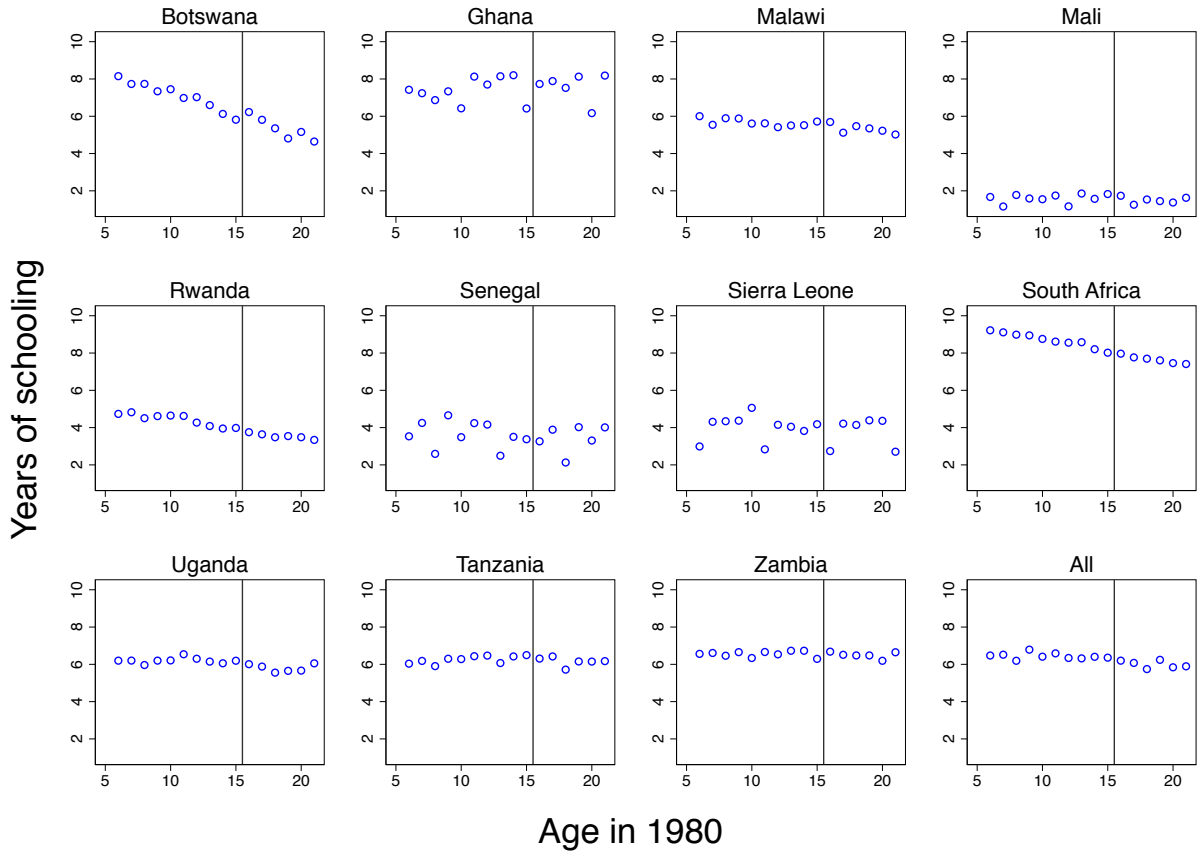


Figure A6: Men's years of schooling by age in 1980: Sub-Saharan Africa

Notes: figures show men's mean years of schooling for each age from six through 21 years in 1980. In this placebo test, the vertical line represents the threshold at the relevant age for those exposed to the Zimbabwean education reform.

Table A2: Placebo: schooling attainment in Sub-Saharan African countries by age in 1980

	Dependent variable: Years of schooling											
	Botswana [1]	Ghana [2]	Malawi [3]	Mali [4]	Rwanda [5]	Senegal [6]	Sierra Leone [7]	South Africa [8]	Uganda [9]	Tanzania [10]	Zambia [11]	All [12]
Panel A. mothers sample												
$1\{A_i \leq 15\}$	0.018	-1.390*	-0.266	0.066	0.161	0.353	0.480	0.093	0.467	0.743	-0.196	0.154
	[0.143]	[0.759]	[0.290]	[0.266]	[0.104]	[0.698]	[0.470]	[0.069]	[0.303]	[0.456]	[0.131]	[0.133]
Observations	16793	185989	102527	91152	64439	89574	48432	445089	193751	343002	88876	1833418
Mean schooling	7.087	4.878	3.318	0.678	3.012	1.861	1.578	8.112	3.884	5.047	5.125	4.870
Panel B. fathers sample												
$1\{A_i \leq 15\}$	-0.352**	-0.967	-0.095	0.124	0.212**	0.572	0.693	0.111	0.362*	0.224	-0.175	0.109
	[0.157]	[0.638]	[0.251]	[0.285]	[0.075]	[0.770]	[0.696]	[0.076]	[0.195]	[0.228]	[0.148]	[0.090]
Observations	14930	158696	100292	72630	52279	79552	41087	383281	204518	315705	93011	1666480
Mean schooling	6.657	7.201	5.557	1.488	4.116	3.302	3.464	8.371	6.063	6.166	6.513	6.184
Census year	2001	2000	1998	1998	2002	2002	2004	2001	2002	2002	2000	

Note: each cell represents the OLS estimate from regressing years of schooling on the placebo threshold (indicated by age fifteen in 1980) in a sample of adults in the ages of six through twenty-one in 1980 from a different Sub-Saharan African country. Cluster-robust standard errors appear below the estimates in brackets. Clustering is at age in 1980. All regressions include linear splines in age (coefficients not shown).
* indicates statistical significance at 10%, ** at 5% and *** at 1%.

Table A3: Intergenerational transmission of schooling in Sub-Saharan African countries (OLS)

Dependent variable: Child years of schooling											
	Botswana	Ghana	Malawi	Mali	Rwanda	Senegal	Sierra Leone	South Africa	Uganda	Tanzania	Zambia
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
Panel A. mothers sample											
Mother's schooling	0.092***	0.077***	0.183***	0.288***	0.116***	0.238***	0.149***	0.068***	0.133***	0.115***	0.143***
	[0.002]	[0.001]	[0.001]	[0.002]	[0.001]	[0.002]	[0.002]	[0.000]	[0.001]	[0.001]	[0.001]
Observations	25236	315363	190120	206406	153552	212507	85429	620775	541167	714032	204347
Mean of dependent variable	3.051	2.628	2.207	0.856	1.790	1.860	2.020	3.729	2.364	2.023	2.157
Panel B. fathers sample											
Father's schooling	0.080***	0.080***	0.157***	0.215***	0.109***	0.206***	0.116***	0.073***	0.117***	0.120***	0.107***
	[0.003]	[0.001]	[0.001]	[0.002]	[0.001]	[0.001]	[0.002]	[0.001]	[0.001]	[0.001]	[0.001]
Observations	12163	249929	149117	175547	99124	183489	65783	344173	456783	512498	174748
Mean of dependent variable	3.144	2.543	2.222	0.794	1.762	1.786	1.991	3.862	2.325	2.014	2.173
Census year	2001	2000	1998	1998	2002	2002	2004	2001	2002	2002	2000

Note: each cell represents the OLS estimate from regressing child years of schooling on her/his parent's years of schooling. All regressions control for the child's sex, and include age fixed effects for parents as well as children (coefficients not shown). Samples are restricted to native children aged 6-15 at the time of the census. Cluster-robust standard errors appear below the estimates in brackets. Clustering is at parent age in 1980.
* indicates statistical significance at 10%, ** at 5% and *** at 1%.

Table A4: FIRST-STAGE ESTIMATES: IMPACT OF THE REFORMS ON PARENTAL SCHOOL ATTAINMENT

Sample	Black mothers (N=91,480)						Black fathers (N=50,026)							
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]
$1\{A_i \leq 15\}$	0.819***	0.819***	0.819***	0.819***	0.819***	0.819***	0.819***	0.683***	0.683***	0.683***	0.683***	0.683***	0.683***	0.683***
Standard error	[0.047]	[0.216]	[0.076]	[0.017]			[0.073]	[0.060]	[0.133]	[0.058]	[0.003]			[0.081]
F test	300.12	14.44	117.53				125.69	130.04	26.40	140.27				71.09
p value for F test	0.000	0.002	0.000				0.000	0.000	0.000	0.000				0.000
χ^2				2259.36							47260.45			
p value for χ^2				0.000							0.000			
Wald (t) statistic					3.799	10.841						5.138	11.844	
Standard normal percentile					0.000	0.000						0.000	0.000	
Wild cluster bootstrap-t %le					0.054	0.001						0.010	0.000	
T %le for finite clusters					0.002	0.000						0.000	0.000	

Each column represents a separate regression. All regressions fit a piece-wise linear regression to parental schooling around the point of discontinuity in treatment-probability. Robust standard error in brackets. The sample is restricted to black Zimbabweans. The standard errors are robust but not clustered in column [1] and [8]; they are clustered by parent year of birth (i.e. parent age) in [2] and [9], by province in [3] and [10], by both age and province in [4] and [11], and by parent district of birth in [7] and [14]. The standard errors are derived from a wild-cluster bootstrap-t procedure in [5], [6], [12] and [13]; clustering is on age in [5] and [12] and on province in [6] and [13]. The number of bootstrap reps is 999. The number of clusters is 16 in columns [5] and [12] and 10 in columns [6] and [13]. For asymptotically-consistent inference in the presence of finite clusters, the degrees of freedom invoked in the T distribution = number of clusters -1. The F statistics correspond to the null that the impact of $1\{A_i \leq 15\}$ is zero. The p values refer to the probability of obtaining the calculated F statistic under the null.
* indicates statistical significance at 10, ** at 5 and *** at 1.

Table A5: THE INTERGENERATIONAL EFFECT IN AN EXPANDING INTERVAL AROUND THE DISCONTINUITY (2SLS)

Dependent variable: Child grade attainment				
	IV	Observations	F test	p value
	(1)	(2)	(3)	(4)
Panel A. mothers sample				
14–15 v. 16–17	0.409***	23122	1681.52	0.000
	[0.005]			
13–15 v. 16–18	-0.023	35258	15.36	0.011
	[0.073]			
12–15 v. 16–19	0.146**	45297	9.30	0.019
	[0.060]			
11–15 v. 16–20	0.096***	56671	11.28	0.008
	[0.037]			
10–15 v. 16–21	0.096***	69123	8.96	0.012
	[0.021]			
Panel B. fathers sample				
14–15 v. 16–17	0.170***	14441	36570.30	0.000
	[0.004]			
13–15 v. 16–18	0.146***	23032	38.64	0.002
	[0.016]			
12–15 v. 16–19	0.188**	29511	45.76	0.000
	[0.028]			
11–15 v. 16–20	0.129***	37138	29.72	0.000
	[0.020]			
10–15 v. 16–21	0.128***	43902	19.12	0.001
	[0.011]			

Note: each row reports the 2SLS estimate with cluster-robust standard error, sample size, F test and associated p value from a different regression; each row corresponds to a specific interval around the discontinuity; robust standard errors are clustered by age in 1980 and shown in brackets. All regressions include linear splines in parent age in 1980 and control for binary indicators for child ages 7 through 15 (omitted age is 6). The 2SLS regressions instrument parental schooling with the discontinuity at age 15 in 1980. The reported F-statistics refer to this excluded instrument.
* indicates statistical significance at 10%, ** at 5% and *** at 1%.