Supplementary Appendix for:

"The Broad Decline of Health and Human Capital of Americans Born after 1947"

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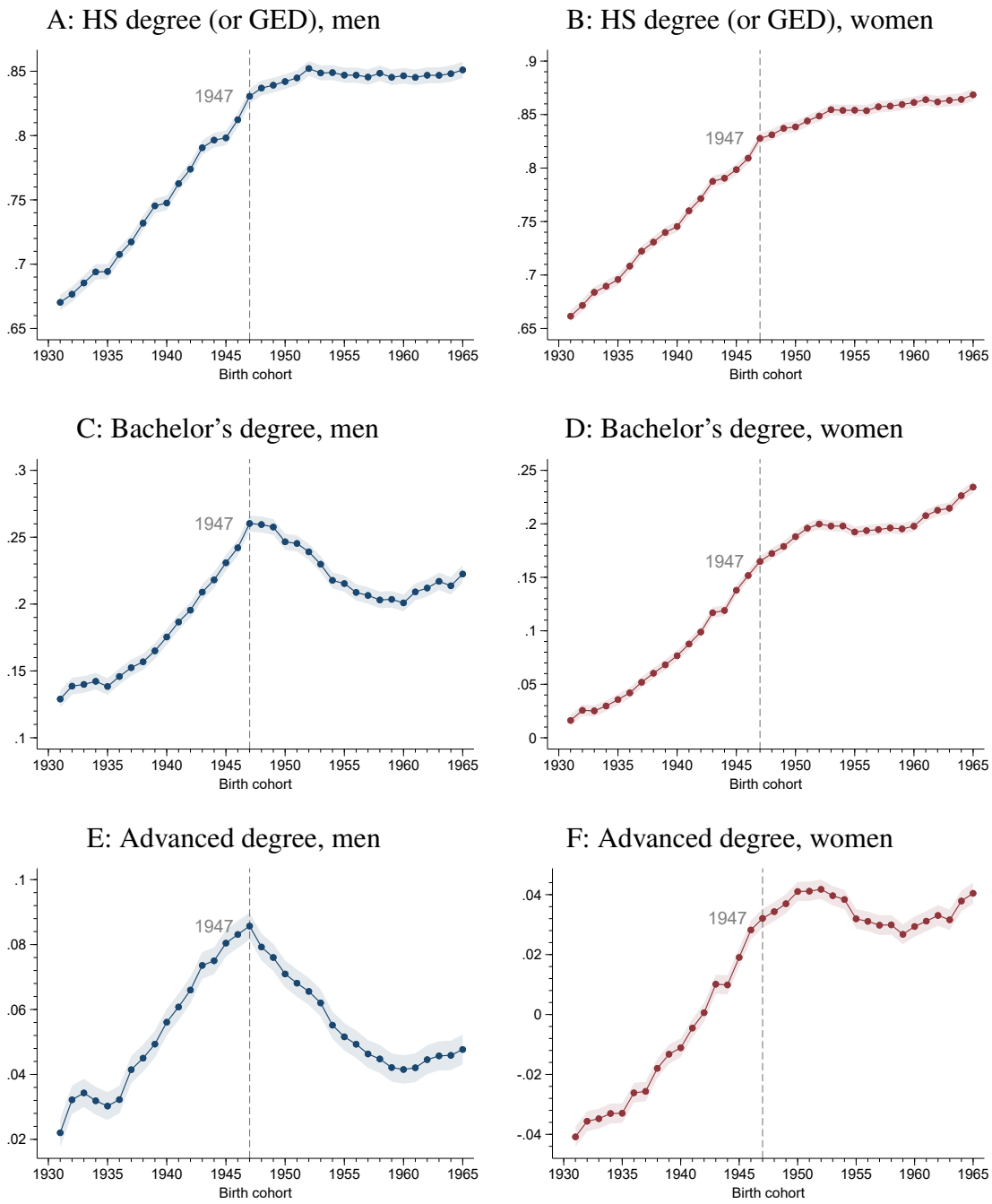
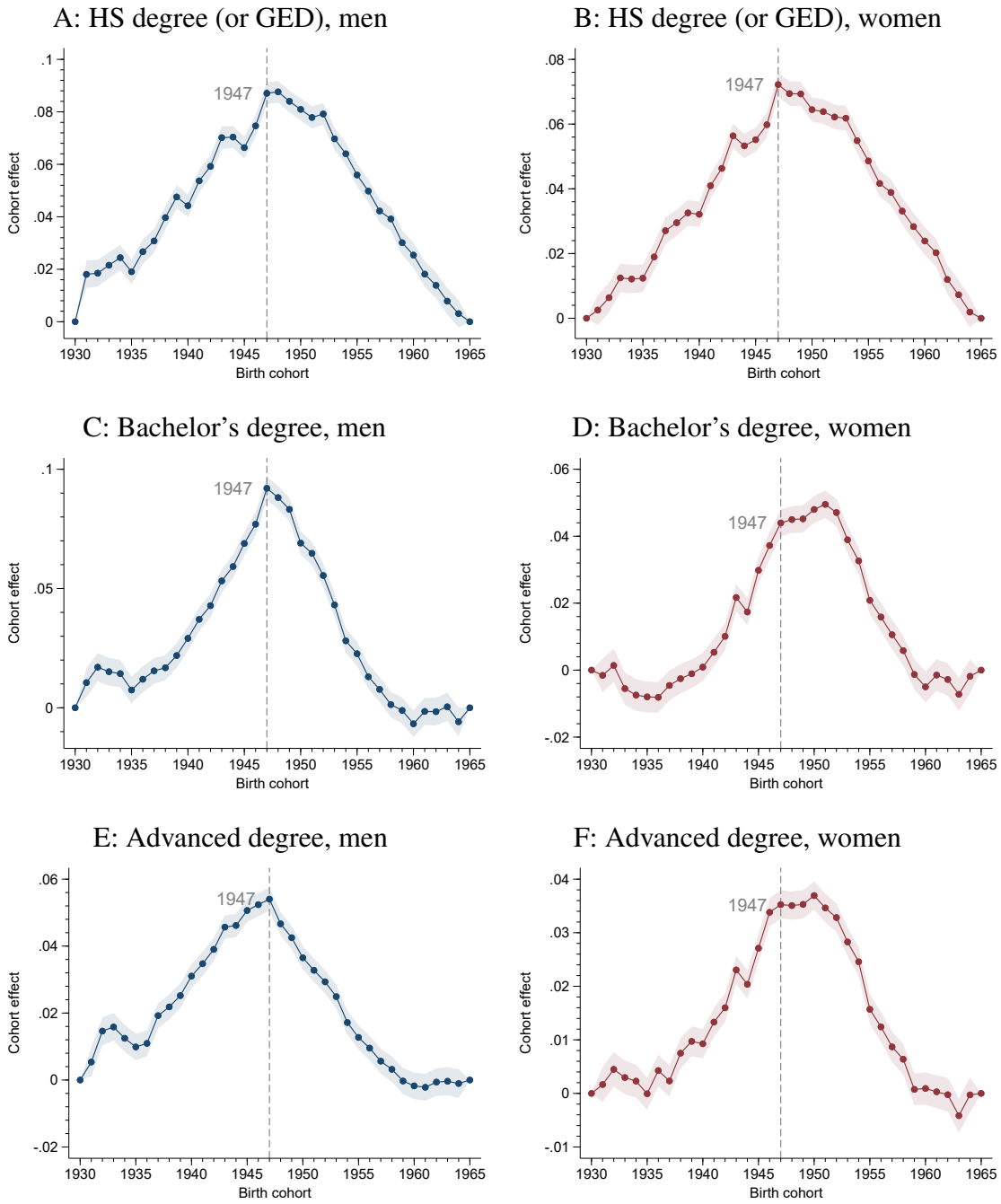
Figure A1: Age-adjusted educational attainment by birth cohort



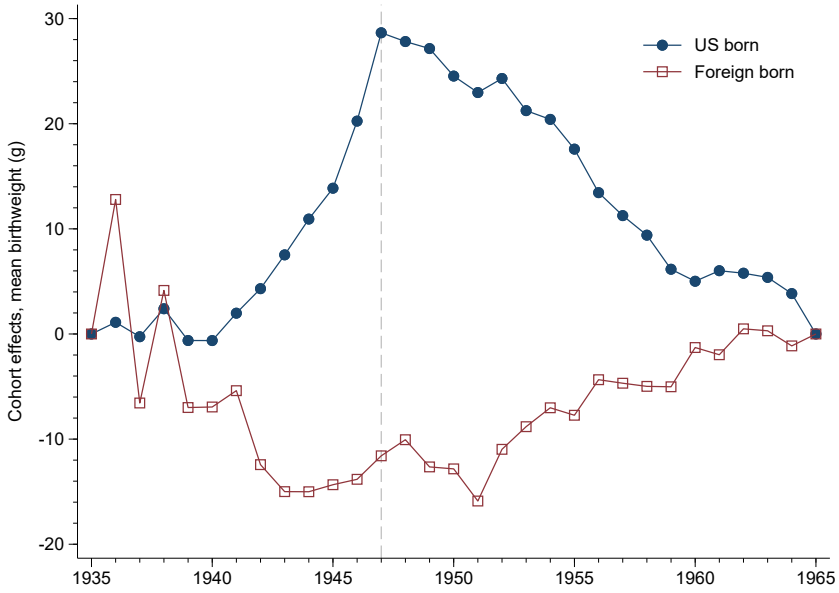
Each panel plots age-adjusted outcomes by birth cohort. Age adjustment is done by regressing the outcome on a full set of cohort fixed effects and age effects, and plotting predicted values. All panels are based on CPS-MORG data (Center for Economic and Policy Research, 2020), 1979-2016, and includes men and women aged 25-75, who were born from 1930 to 1965.

Figure A2: Detrended cohort effects, educational attainment



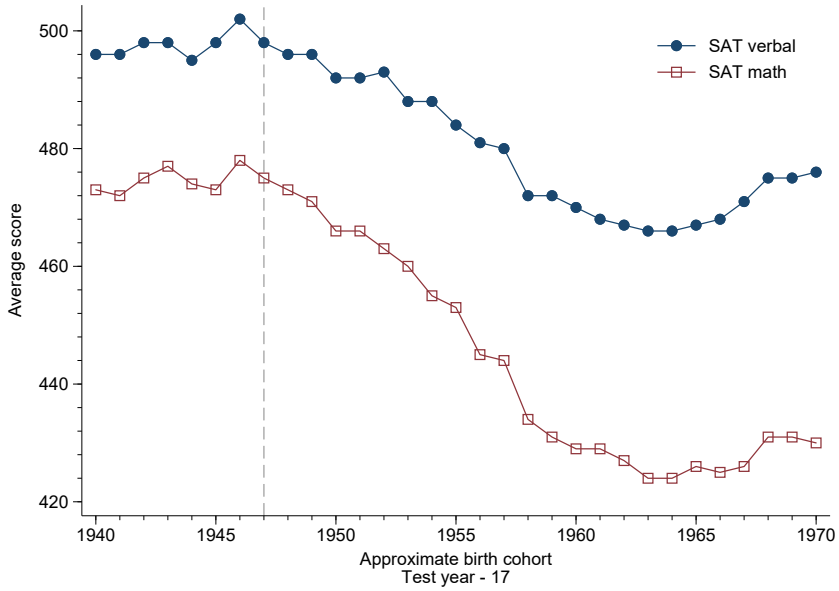
Each panel plots detrended cohort effects from estimation of age-period-cohort models based on Equation 2. All panels are based on CPS-MORG data (Center for Economic and Policy Research, 2020), 1979-2016, and includes men and women aged 25-75, who were born from 1930 to 1965.

Figure A3: Detrended cohort effects, intergenerational infant birth weight, by mother's place of birth



This figure plots detrended cohort effects from estimation of age-period-cohort models based on Equation 2 — separately for mothers born in one of the 50 states or D.C., and those born outside of the US. Results are based on Birth data files, (National Center for Health Statistics, n.d.*a*), 1970-1985, including mothers age 18-40, who were born from 1935-1965.

Figure A4: Scholastic Aptitude Test (SAT) score decline



This figure shows verbal and mathematics scores on the Scholastic Aptitude Test. Approximate birth cohort is defined as the year the test was given minus 17. Data is from Harnischfeger and Wiley (1975).

Table A1: Piecewise linear cohort effect models

robustness to varying age-by-year control function

	(1)	(2)	(3)	(4)
Panel A: Mean birth weight				
Size	-1.83	-6.35	-5.52	-6.91
	(0.13)	(0.35)	(0.54)	(0.70)
Location	1948	1948	1947	1947
	[1947, 1949]	[1948, 1948]	[1947, 1947]	[1947, 1947]
P-value for existence	$< .001$	$< .001$	$< .001$	$< .001$
Panel B: Low birth weight percentage				
Size	0.085	0.241	0.195	0.200
	(0.004)	(0.014)	(0.022)	(0.029)
Location	1947	1948	1947	1947
	[1947, 1948]	[1948, 1948]	[1947, 1948]	[1947, 1947]
P-value for existence	$< .001$	$< .001$	$< .001$	$< .001$
Panel C: Median log wage				
Size	-0.016	-0.016	0.015	-0.017
	(0.0005)	(0.001)	(0.002)	(0.003)
Location	1947	1947	1953	1947
	[1947, 1947]	[1946, 1947]	[1946, 1947], [1952, 1953]	[1947, 1947]
P-value for existence	$< .001$	$< .001$	$< .001$	$< .001$
Panel D: Log mortality, men				
Size	0.016	0.028	0.029	0.029
	(0.001)	(0.001)	(0.001)	(0.001)
Location	1942	1947	1947	1947
	[1941, 1943]	[1947, 1947]	[1947, 1947]	[1947, 1947]
P-value for existence	$< .001$	$< .001$	$< .001$	$< .001$
Panel E: Log mortality, women				
Size	0.017	0.029	0.021	0.019
	(0.000)	(0.001)	(0.001)	(0.002)
Location	1948	1949	1950	1950
	[1948, 1948]	[1949, 1949]	[1950, 1950]	[1949, 1950]
P-value for existence	$< .001$	$< .001$	$< .001$	$< .001$
Year FEs	Yes	Yes	Yes	Yes
Age FEs	Yes	Yes	Yes	Yes
Quadratic-age-by-year	No	Yes	No	No
Cubic-age-by-year	No	No	Yes	No
Quartic-age-by-year	No	No	No	Yes

Each column shows the results of estimation of a model based on Equation 3, with the listed outcome in single age-by-year bins as the dependent variable. All models are estimated by least squares, following the approach outlined in (Hansen, 2000). The row titled "Size" reports the size of the trend break in cohort effects, δ, with the standard error in parentheses. The row titled "Location" reports the estimated cohort at which a trend break occurs, with a 99 % confidence region in brackets calculated by inverting the likelihood ratio statistic. The row titled "P-value for existence" reports a p-value from an F-type test, based on 1000 bootstrap samples, for the null hypothesis that no trend break occurs, ie. that cohort effects are linear. Data and sample restrictions are the same as Table 1.

Table A2: Cohort decline concentrated among those born in the US — piecewise linear cohort effect models of intergenerational infant birth weight

robustness to varying age-by-year control function

	(1)	(2)	(3)	(4)
Panel A: Mothers born in US				
Size	-4.178	-7.939	-6.027	-7.164
	(0.155)	(0.454)	(0.632)	(0.820)
Location	1948	1947	1947	1947
	[1948, 1949]	[1947, 1947]	[1947, 1947]	[1947, 1947]
P-value for existence	$< .001$	$< .001$	$< .001$	$< .001$
Panel B: Mothers born outside US				
Size	2.151	2.485	5.088	7.339
	(0.348)	(1.400)	(1.977)	(1.846)
Location	1944	1942	1942	1951
	[1942, 1951]	[1938, 1962]	[1938, 1962]	[1951, 1951]
P-value for existence	.109	$< .001$	$< .001$	$< .001$
Year FEs	Yes	Yes	Yes	Yes
Age FEs	Yes	Yes	Yes	Yes
Quadratic-age-by-year	No	Yes	No	No
Cubic-age-by-year	No	No	Yes	No
Quartic-age-by-year	No	No	No	Yes

Each column shows the results of estimation of a model based on Equation 3, with the listed outcome in single age-by-year bins as the dependent variable. All models are estimated by least squares, following the approach outlined in Hansen (2000). The row titled "Size" reports the size of the trend break of cohort effects, δ, with the standard error in parentheses. The row titled "Location" reports the estimated cohort at which a trend break occurs, with a 99 $\%$ confidence region in brackets calculated by inverting the likelihood ratio statistic. The row titled "P-value for existence" reports a p-value from an F-type test, based on 1000 bootstrap samples, for the null hypothesis that no trend break occurs, ie. that cohort effects are linear. Results are based on Birth data files, (National Center for Health Statistics, n.d.*a*), 1970-1995, mothers age 18-40 who were born between 1930 to 1970.

Table A3: Trend break in cohort effects for share of employed men working in white-collar occupations — native-born versus foreign-born

robustness to varying age-by-year control function

	(1)	(2)	(3)	(4)
Panel A: Born in US				
Size	-0.007	-0.017	-0.016	-0.015
	(0.0004)	(0.0008)	(0.002)	(0.002)
Location	1947	1947	1947	1947
	[1946, 1947]	[1947, 1947]	[1947, 1947]	[1947, 1947]
P-value for existence	$< .001$	$< .001$	$< .001$	$< .001$
Born outside US				
Size	-0.007	0.019	0.025	0.014
	(0.001)	(0.003)	(0.007)	(0.006)
Location	1942	1934	1934	1957
	[1940, 1944]	[1933, 1935], [1944, 1945]	[1933, 1935]	[1933, 1943], [1946, 1948] [1952, 1953], [1956, 1962]
P-value for existence	$< .001$	$< .001$	$< .001$	$< .001$
Year FEs	Yes	Yes	Yes	Yes
Age FEs	Yes	Yes	Yes	Yes
Quadratic-age-by-year	No	Yes	No	No
Cubic-age-by-year	No	No	Yes	No
Quartic-age-by-year	No	No	No	Yes

Based on Integrated Public Use Microdata Samples from the Decennial Censuses of 1970, 1980, 1990 and 2000 (Ruggles et al., 2024). The share of employed men in white-collar occupations corresponds to the "managers /professionals /technicians /finance /public safety" category in Autor and Dorn (2013), and I use the occupational crosswalk from these authors Autor and Dorn (n.d.) to obtain consistent occupational categories. Sample includes men age 25 to 54, born 1930 to 1965.
Each column shows the results of estimation of a model based on Equation 3, with the the share of employed men in white-collar occupations as the dependent variable in single age-by-year bins as the dependent variable. All models are estimated by least squares, following the approach outlined in Hansen (2000). The row titled "Size" reports the size of the trend break of cohort effects, δ, with the standard error in parentheses. The row titled "Location" reports the estimated cohort at which a trend break occurs, with a 99 $\%$ confidence region in brackets calculated by inverting the likelihood ratio statistic. The row titled "P-value for existence" reports a p-value from an F-type test, based on 1000 bootstrap samples, for the null hypothesis that no trend break occurs, ie. that cohort effects are linear.

Table A4: Evidence of cohort decline across racial groups — piecewise linear cohort effect models

controlling for age FEs and year FEs

		(1) White	(2) Black	(3) Hispanic	(4) Other races
Median log wage	*Size*	-0.0130	-0.0251	-0.0133	-0.0142
		(0.0005)	(0.0018)	(0.0023)	(0.0036)
	Location	1946	1948	1949	1949
		[1945, 1947]	[1947, 1949]	[1946, 1953]	[1936, 1953]
Low birth weight (%)	*Size*	0.10	0.08		0.07
		(0.005)	(0.01)		(0.03)
	Location	1949	1947		1950
		[1948, 1949]	[1945, 1949]		[1938, 1957]
Log mortality					
Men	*Size*	0.0236	-0.0294		.0118
		(0.0005)	(0.0023)		(0.0012)
	Location	1944	1956		1945
		[1944, 1945]	[1954, 1956]		[1943, 1947]
Women	*Size*	0.0218	0.0125		0.0175
		(0.0005)	(0.0007)		(0.0027)
	Location	1950	1945		1953
		[1950, 1950]	[1944, 1947]		[1946, 1955]

Shows the results of estimation of a model based on Equation 3, with the listed outcome as a dependent variable. All models are estimated by least squares, following the approach outlined in Hansen (2000). Intergenerational infant health results are based on Birth data files (National Center for Health Statistics, n.d.*a*) 1968-1990, mothers age 18-40 who were born between 1930 to 1960. Labor market results are based on CPS-MORG data (Bureau Of The Census, n.d.*a*,n), 1979-1993, and includes men age 25-54, who were born from 1930 to 1960. Log mortality results are based on death counts from the Multiple Cause of Death File (National Center for Health Statistics, n.d.*b*) and population counts from Surveillance, Epidemiology, and End Results (SEER), and include the years 1975-2019, ages 25-84, cohorts born from 1930 to 1960.

Table A5: Evidence of cohort decline across Census Regions — piecewise linear cohort effect models

		(1) Northeast	(2) Midwest	(3) South	(4) West
Median log wage	*Size*	-0.0104	-0.0188	-0.0166	-0.0140
		(0.0008)	(0.0007)	(0.0009)	(0.0009)
	Location	1947	1947	1947	1947
		[1945, 1948]	[1946, 1947]	[1947, 1947]	[1946, 1948]
Low birth weight (%)	*Size*	0.12	0.11	0.13	0.09
		(.01)	(.01)	(.01)	(.01)
	Location	1947	1949	1948	1948
		[1946, 1947]	[1948, 1950]	[1947, 1948]	[1946, 1949]
Log mortality					
Men	*Size*	0.0284	0.0287	0.0341	0.0286
		(0.0016)	(0.0014)	(0.0012)	(0.0015)
	Location	1946	1946	1946	1946
		[1946, 1946]	[1946, 1946]	[1946, 1946]	[1946, 1946]
Women	*Size*	0.0320	0.0288	0.0331	0.0269
		(0.0019)	(0.0019)	(.0016)	(0.0019)
	Location	1948	1950	1950	1949
		[1948, 1949]	[1950, 1950]	[1949, 1950]	[1949, 1949]

Each column shows the results of estimation of a model based on Equation 3, with the listed outcome as a dependent variable. All models are estimated by least squares, following the approach outlined in Hansen (2000). Wages and birth weight include controls for age fixed effects and year fixed effects — mortality also includes a separate quadratic-in-age in each year. The column titled "Size" reports the estimated size of the cohort break δ, with the standard error in parentheses. The column titled "Location " reports the cohort at which the trend break is estimated to occur, with a 99 $\%$ confidence interval in brackets calculated by inverting a likelihood ratio statistic. The row titled "Existence" reports a p-value from an F-type test, based on 1000 bootstrap samples, for the null hypothesis that no trend break occurs, ie. that cohort effects are linear. Intergenerational infant health results are based on Birth data files (National Center for Health Statistics, n.d.*a*) 1968-1995, mothers age 18-40 who were born between 1930 to 1970. Labor market results are based on CPS-MORG data (Bureau Of The Census, n.d.*a*,n), 1979-1993, and includes men age 25-54, who were born from 1930 to 1965. Log mortality results are based on data from the United States Mortality Database (University of California, Berkeley, 2024), and include the years 1975-2019, ages 25-85, cohorts born from 1930 to 1965.

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