

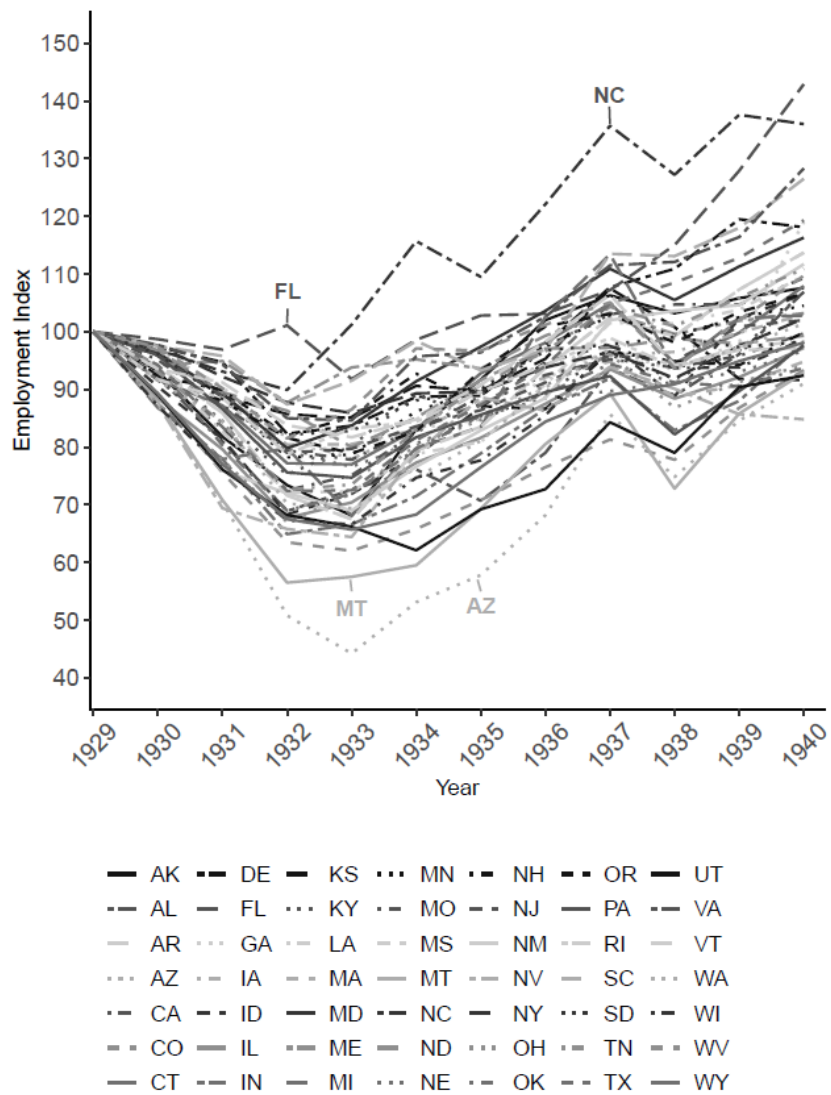
## **Online Appendix for**

Early-life Exposure to the Great Depression and Long-term Health and Economic Outcomes

Valentina Duque and Lauren L. Schmitz

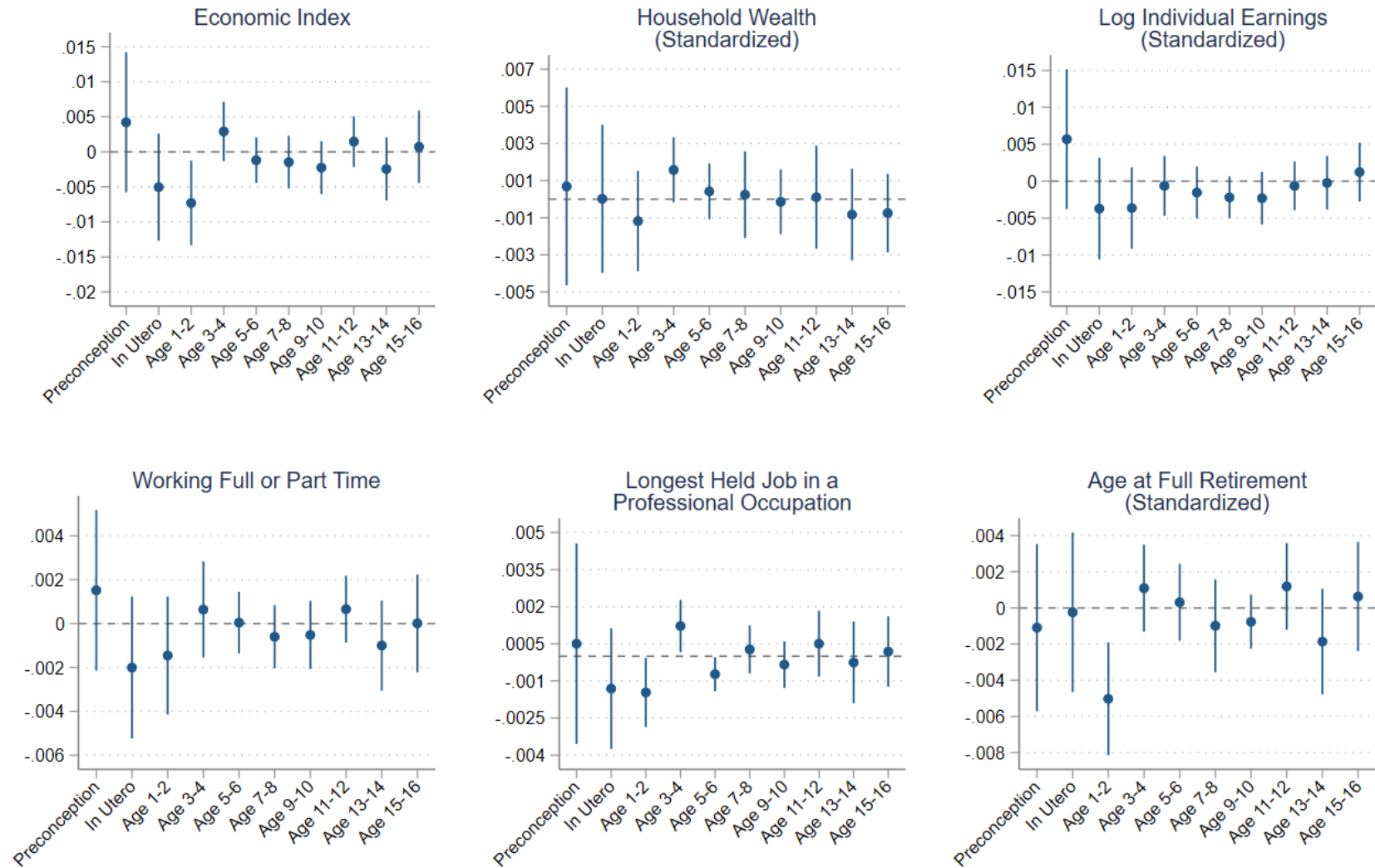
Corresponding author: Lauren L. Schmitz  
Email: [llschmitz@wisc.edu](mailto:llschmitz@wisc.edu)

**Appendix Figure 1.** Variation in the employment index across states, 1929-1940



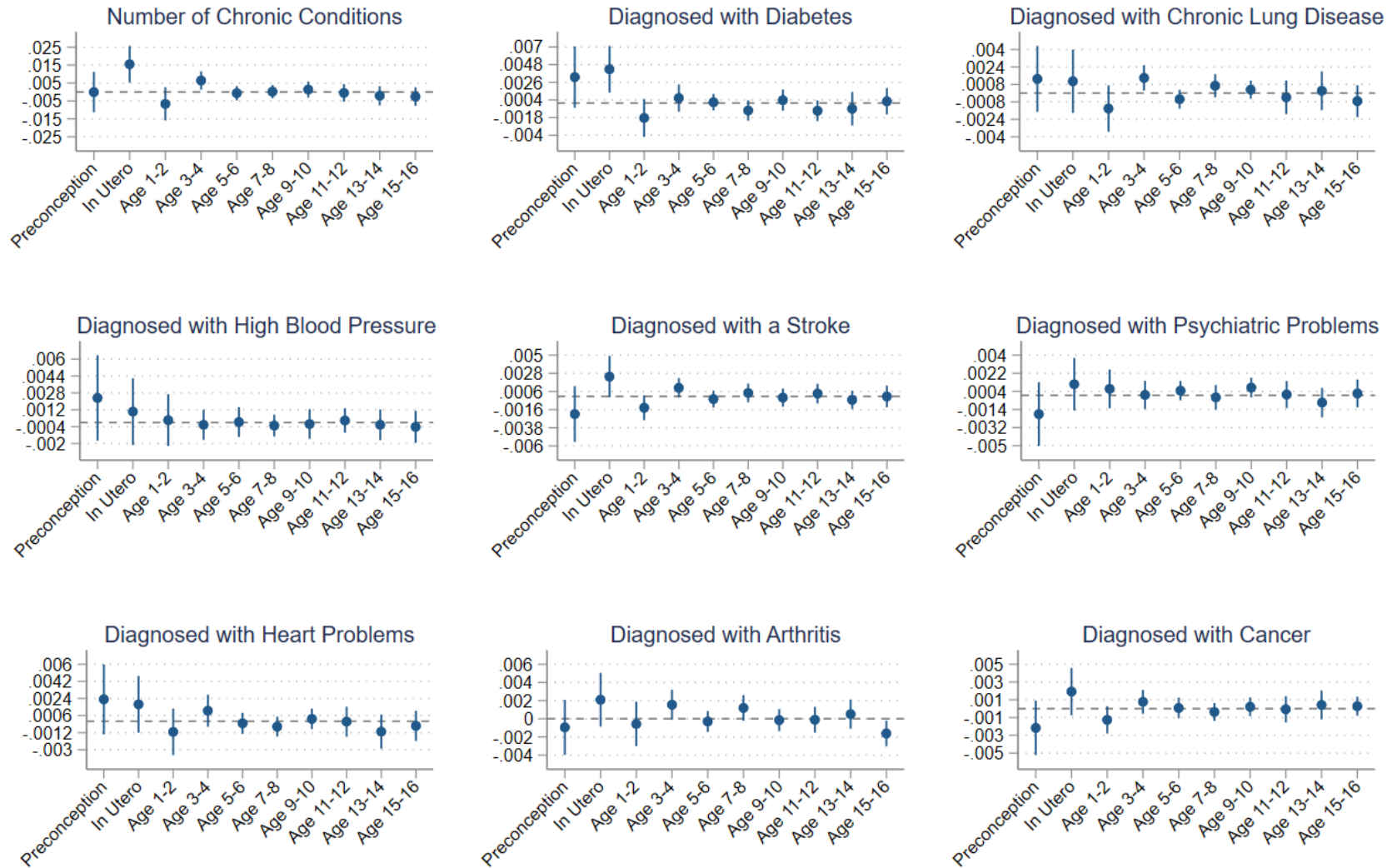
*Note:* The figure depicts variation in the employment index across states, which includes employment in manufacturing and non-manufacturing sectors. Data were obtained from Wallis (1989) in index form (base year=1929).

**Appendix Figure 2.** Effect of wage index declines during the preconception, in utero, childhood, and adolescent periods on the economic index and its components in the HRS



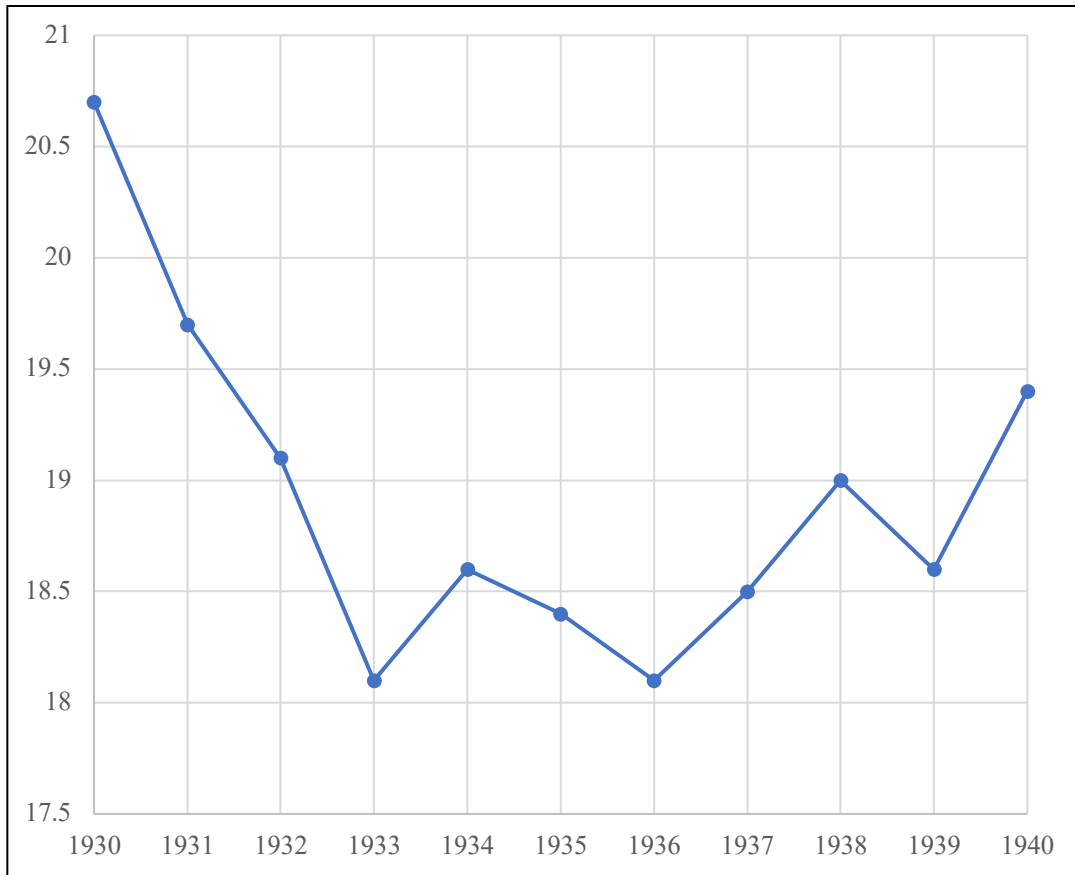
*Note:* The figure reports estimated coefficients from models that condition on the wage index in the preconception, prenatal, childhood, and early adolescent periods as described in Equation 2 for individuals born between 1929 and 1940 who were between the ages of 50 and 65 when they were sampled in the HRS (n=5,125). Coefficients in each figure are from separate regressions. The signs on the effect sizes have been flipped so that values correspond to a one-unit decline in the wage index. Robust 95% confidence intervals. Please see Figure 2 notes for additional details on model estimation and covariates.

**Appendix Figure 3.** Effect of wage index declines during the preconception, in utero, childhood, and adolescent periods on the total number of chronic disease conditions and specific chronic diseases in the HRS



*Note:* The figure reports estimated coefficients from a model that conditions on the wage index in the preconception, prenatal, childhood, and early adolescent periods as described in Equation 2 for HRS respondents born between 1929 and 1940 (n=7,425). Coefficients in each figure are from separate regressions. The signs on the effect sizes have been flipped so that values correspond to a one-unit decline in the wage index. Robust 95% confidence intervals. Please see Figure 2 notes for additional details on model estimation and covariates.

**Appendix Figure 4.** Crude Birth Rate in the U.S., 1930-1940  
(Number of Live Births per 1,000 Population)



Note: Figure was created using data from Vital Statistics Rates in the United States 1900-1940 available on the NBER website: [https://data.nber.org/vital-stats-books/vsrates1900\\_40.CV.pdf](https://data.nber.org/vital-stats-books/vsrates1900_40.CV.pdf)

**Appendix Table 1.** Effect of wage index declines on the economic index by model specification

	(1)	(2)	(3)	(4)	(5)
Wage index declines preconception	0.0053 [0.0042]	0.0071* [0.0035]	0.0043 [0.0037]	0.0058 [0.0038]	0.0050 [0.0042]
Wage index declines in utero	-0.0064* [0.0035]	-0.0078** [0.0032]	-0.0104*** [0.0036]	-0.0093** [0.0034]	-0.0072** [0.0034]
Wage index declines ages 1-2	0.0001 [0.0014]	0.0003 [0.0014]	-0.0010 [0.0015]	-0.0001 [0.0018]	-0.0007 [0.0018]
Observations	5,125	5,125	5,125	5,125	5,125
R-squared	0.036	0.121	0.123	0.124	0.127
YOB FE	X	X	X	X	X
SOB FE	X	X	X	X	X
HRS Survey Year FE	X	X	X	X	X
Individual Covariates		X	X	X	X
Birth Region FE*YOB LTT			X	X	X
Additional state controls*YOB LTT				X	X
Share of Manufacturing*YOB FE					X

*Note:* SOB=state of birth; FE=fixed effects; YOB=year of birth; LTT=linear time trends. Each column is obtained from a separate regression of the economic index on the wage index at different ages using data from the HRS. Each model incrementally adds covariates as reported. The additional state-level controls interacted with YOB LTT include: the 1928 infant mortality rate, the 1929 maternal mortality rate, and whether a state's share of farmland was in the 75th percentile. The sample includes cohorts born between 1929 and 1940 who were between the ages of 50 and 65 when they were sampled in the HRS. Estimates are weighted using the HRS sample weights and robust standard errors are clustered at the state of birth level. \*\*\*p < 0.01, \*\*p < 0.05, \*p < 0.10.

**Appendix Table 2.** Effect of wage index declines on the total number of chronic disease conditions by model specification

	(1)	(2)	(3)	(4)	(5)
Wage index declines preconception	-0.0068 [0.0057]	-0.0047 [0.0050]	-0.0028 [0.0042]	-0.0003 [0.0051]	-0.0007 [0.0051]
Wage index declines in utero	0.0107*** [0.0037]	0.0094** [0.0035]	0.0118*** [0.0040]	0.0130*** [0.0043]	0.0137*** [0.0045]
Observations	7,425	7,425	7,425	7,425	7,425
R-squared	0.018	0.112	0.114	0.114	0.116
YOB FE	X	X	X	X	X
SOB FE	X	X	X	X	X
HRS Survey Year FE	X	X	X	X	X
Individual Covariates		X	X	X	X
Birth Region FE*YOB LTT			X	X	X
Additional state controls*YOB LTT				X	X
Share of Manufacturing*YOB FE					X

*Note:* SOB=state of birth; FE=fixed effects; YOB=year of birth; LTT=linear time trends. Each column is obtained from a separate regression of the total number of doctor diagnosed chronic disease conditions on the wage index at different ages using data from the HRS. Each model incrementally adds covariates as reported. The additional state-level controls interacted with YOB LTT include: the 1928 infant mortality rate, the 1929 maternal mortality rate, and whether a state's share of farmland was in the 75th percentile. The sample includes cohorts born between 1929 and 1940. Estimates are weighted using the HRS sample weights and robust standard errors are clustered at the state of birth level. \*\*\*p < 0.01, \*\*p < 0.05, \*p < 0.10.

**Appendix Table 3.** Effect of wage index declines in utero on cause of death probabilities

	Heart condition	Metabolic conditions	Digestive system	Neurological/sensory condition	Emotional/psychological condition
Wage index declines in utero	-0.0005 [0.0017]	0.0021*** [0.0007]	-0.0011 [0.0011]	0.0010 [0.0007]	-0.0002 [0.0002]
Outcome mean	0.361	0.057	0.109	0.042	0.004
Observations	2,204	2,204	2,204	2,204	2,204
R-squared	0.040	0.040	0.044	0.039	0.038

*Note:* The table reports results from separate regressions that estimate the relationship between wage index declines in utero and the cause of death for all individuals in the HRS who were born between 1929 and 1940 (N=2,204). The signs on the effect sizes for the wage index have been flipped so that values correspond to a one-unit decline in the wage index. Results were calculated using all information on mortality through the 2018 HRS wave and were estimated using a linear probability model. “Heart condition” includes deaths related to heart, circulatory, and blood conditions; “metabolic conditions” includes deaths related to endocrine, metabolic, and nutritional conditions; “digestive system” includes deaths related to stomach, liver, gallbladder, kidney, and bladder conditions. All models control for SOB FE, YOB FE, sex, race, and maternal education and were estimated using sample weights for the HRS sample provided by the HRS. Robust standard errors clustered at the SOB level are in brackets. \*\*\* p<0.01.



**Appendix Table 4.** Comparison of mean demographic and socioeconomic characteristics in childhood in the 1% 1940 Census and HRS samples

	1940 Census	HRS
Lived in an urban area	0.44	0.45
Father was absent in the household	0.10	0.07
Female	0.49	0.51
White	0.86	0.87
Mother's education= No degree	0.76	0.53
Observations	313,780	7,425

*Note:* Means were calculated for individuals born in the U.S. between 1929 and 1940 in the 1% 1940 Census and the HRS, respectively. HRS statistics were weighted using HRS sample weights.

**Appendix Table 5.** Effect of wage index declines on the probability of migration in childhood

	Moved to a different state during primary schooling years	
Wage index declines preconception	-0.0003 [0.0011]	-0.0003 [0.0011]
Wage index declines in utero (IU)-age 2	0.0011 [0.0008]	0.0013 [0.0012]
Wage index declines IU-age 2*Child is female		-0.00002 [0.0004]
Wage index declines IU-age 2*Child is black		-0.0002 [0.0004]
Wage index declines IU-age 2*Child is other race		-0.0019 [0.0012]
Wage index declines IU-age 2*Mother has no degree		-0.0000 [0.0008]
Wage index declines IU-age 2*Mother has HS degree		-0.0003 [0.0008]
Wage index declines IU-age 2*Mother's education is missing		0.0007 [0.0009]
Wage index declines IU-age 2*Father not present		0.00004 [0.0006]
Wage index declines IU-age 2*Father's presence missing		0.00000 [0.0005]
Observations	7,425	7,425
R-squared	0.358	0.358
YOB FE	X	X
SOB FE	X	X
Survey Year FE	X	X
Individual Covariates	X	X
Birth Region FE*YOB LTT	X	X
Additional state controls*YOB LTT	X	X
Share of Manufacturing*YOB FE	X	X

*Note:* HS=high school; SOB=state of birth; FE=fixed effects; YOB=year of birth; LTT=linear time trends. Each column is obtained from a separate regression of the outcome variable on the wage index at different ages in the HRS. The outcome variable is a dummy that takes the value of 1 if an individual reports a state of residence in their primary schooling years that was different from their state of birth and 0 otherwise. The additional state-level controls interacted with YOB LTT include: the 1928 infant mortality rate, the 1929 maternal mortality rate, and whether a state's share of farmland was in the 75th percentile. The sample includes cohorts born between 1929 and 1940. Estimates are weighted using the HRS sample weights and robust standard errors are clustered at the state of birth level. \*\*\*p<0.01, \*\*p<0.05, \*p<0.10.

**Appendix Table 6.** Effect of wage index declines in utero on educational attainment and labor market outcomes in the 1960-1990 decennial Censuses

<i>Panel A: 1960 Census</i>					
	Years of Education	Less than HS	Employed	Log income	Occupational income score
Wage declines in utero (std.)	-1.4549** [0.6512]	0.1088 [0.0727]	0.0652* [0.0353]	0.0506 [0.2508]	-6.2272** [2.4818]
Observations	202,342	208,432	133,842	145,431	208,432
Mean of dependent variable	12.33	0.376	0.939	7.54	20.07
Percent change in outcome	-11.80%	28.94%	6.94%	0.67%	-31.03%
<i>Panel B: 1970 Census</i>					
	Years of Education	Less than HS	Employed	Log income	Occupational income score
Wage declines in utero (std.)	-1.3258*** [0.4619]	0.1546** [0.0665]	0.0125 [0.0194]	-0.1929* [0.1089]	-0.3291 [1.5365]
Observations	202,334	206,669	144,512	144,764	206,669
Mean of dependent variable	12.80	0.320	0.967	8.499	22.36
Percent change in outcome	-10.36%	48.31%	1.29%	-2.27%	-1.47%
<i>Panel C: 1980 Census</i>					
	Years of Education	Less than HS	Employed	Log income	Occupational income score
Wage declines in utero (std.)	-1.2398*** [0.3569]	0.2332*** [0.0549]	0.0151 [0.0092]	-0.1407** [0.0525]	-1.7764** [0.6955]
Observations	1,010,243	1,069,997	833,074	789,292	1,069,997
Mean of dependent variable	12.97	0.270	0.958	9.264	23.31
Percent change in outcome	-9.56%	86.38%	1.58%	-1.51%	-7.59%
<i>Panel D: 1990 Census</i>					
	Years of Education	Less than HS	Employed	Log income	Occupational income score
Wage declines in utero (std.)	-1.2230*** [0.4433]	0.2762*** [0.0574]	0.0126 [0.0125]	0.0475 [0.0610]	-0.4924 [0.5939]
Observations	147,813	1,046,204	737,826	693,568	1,046,204
Mean of dependent variable	10.49	0.223	0.960	9.762	22.78
Percent change in outcome	-11.66%	123.86%	1.31%	0.49%	-2.16%

*Note:* Each column is obtained from a separate regression of education or labor market outcomes on the wage index in utero using data from consecutive Decennial Censuses, including the 1% 1960 Census, the 1% Form 2 State Sample 1970 Census, and the 5% State Sample 1980 and 1990 Censuses. The sample includes all individuals born between 1929 and 1940 with state of birth information. The signs on the effect sizes have been flipped and mean standardized so that values correspond to a one SD decline in the wage index. "Less than HS" takes a value of 1 if education level is less than high school and 0 otherwise. "Employed" takes a value of 1 if the person is employed and 0 if unemployed. "Log Income" includes individual pre-tax wage and salary income. "Occupational income score" is a Census-constructed income score based on the relative economic standing of occupations in 1950 and is constructed by assigning the median total income of each occupation (in \$100s) to persons in that occupation, which allows for a continuous, consistent classification scheme of occupational standing over time. All regressions control for sex, race, year of birth (YOB) fixed effects (FE), state of birth (SOB) FE, and region of birth FE times YOB FE. Estimates are weighted using person-level sample weights from the Census. Robust standard errors clustered at the SOB level in brackets. \*\*\* p<0.01, \*\* p<0.05, \*p<0.10.

**Appendix Table 7.** Effect of employment index declines on the economic index and the number of chronic disease conditions

	Economic Index		Number of Chronic Disease Conditions	
	Wages	Employment	Wages	Employment
	(1)	(2)	(1)	(2)
Index declines preconception	0.0049 [0.0043]	0.0026 [0.0039]	-0.0007 [0.0051]	0.0047 [0.0031]
Index declines in utero	-0.0076** [0.0033]	-0.0042 [0.0040]	0.0137*** [0.0045]	0.0136*** [0.0039]
Observations	5,125	5,125	7,425	7,425
R-squared	0.127	0.127	0.116	0.116
YOB FE	X	X	X	X
SOB FE	X	X	X	X
Survey Year FE	X	X	X	X
Individual Covariates	X	X	X	X
Birth Region FE*YOB LTT	X	X	X	X
Additional state controls*YOB LTT	X	X	X	X
Share of Manufacturing*YOB FE	X	X	X	X

*Note:* SOB=state of birth; FE=fixed effects; YOB=year of birth; LTT=linear time trends. Each column is obtained from a separate regression of the economic index or the number of chronic disease conditions on 1) declines in the wage index or 2) declines in the employment index at different ages using data from the HRS. The additional state-level controls interacted with YOB LTT include: the 1928 infant mortality rate, the 1929 maternal mortality rate, and whether a state's share of farmland was in the 75th percentile. The economic index sample includes cohorts born between 1929 and 1940 who were between the ages of 50 and 65 when they were sampled in the HRS. The number of chronic diseases sample includes individuals from the same birth cohorts sampled at 50+. Estimates are weighted using the HRS sample weights and robust standard errors are clustered at the state of birth level. \*\*\*p < 0.01, \*\*p < 0.05, \*p < 0.10.

**Appendix Table 8.** Effect of wage index declines on the economic index in Dust Bowl and neighboring states

	Full sample	Only DB and neighboring states	Excluding DB and neighboring states
Wage index declines preconception	0.0041 [0.0044]	0.0125 [0.0136]	0.0031 [0.0047]
Wage index declines in utero-age 2	-0.0110*** [0.0036]	-0.0259* [0.0124]	-0.0119*** [0.0039]
Observations	5,125	1,159	3,966
R-squared	0.128	0.147	0.128
YOB FE	X	X	X
SOB FE	X	X	X
Survey Year FE	X	X	X
Individual Covariates	X	X	X
Birth Region FE*YOB LTT	X	X	X
Additional state controls*YOB LTT	X	X	X
Share of Manufacturing*YOB FE	X	X	X

*Note:* SOB=state of birth; FE=fixed effects; YOB=year of birth; LTT=linear time trends. Each column is obtained from a separate regression of the economic index on the wage index at different ages using data from the HRS. Wage index declines in utero through age two represents the average wage index decline across these ages. Dust Bowl states include New Mexico, Colorado, Oklahoma, Kansas, and Texas, and the neighboring states include Arkansas, Iowa, Louisiana, Minnesota, Missouri, Montana, Nebraska, North Dakota, South Dakota, and Wyoming. The additional state-level controls interacted with YOB LTT include: the 1928 infant mortality rate, the 1929 maternal mortality rate, and whether a state's share of farmland was in the 75th percentile. Models also control for average wage index declines for ages 3-4. The sample includes cohorts born between 1929 and 1940 who were between the ages of 50 and 65 when they were sampled in the HRS. Estimates are weighted using the HRS sample weights and robust standard errors are clustered at the state of birth level. \*\*\*p<0.01, \*\*p<0.05, \*p<0.10.

**Appendix Table 9.** Effect of wage index declines on the number of chronic disease conditions in Dust Bowl and neighboring states

	Full sample	Only DB and neighboring states	Excluding DB and neighboring states
Wage index declines preconception	-0.0007 [0.0051]	-0.0006 [0.0134]	-0.0009 [0.0049]
Wage index declines in utero	0.0137*** [0.0045]	0.0280** [0.0120]	0.0083* [0.0046]
Observations	7,425	1,698	5,727
R-squared	0.116	0.159	0.112
YOB FE	X	X	X
SOB FE	X	X	X
Survey Year FE	X	X	X
Individual Covariates	X	X	X
Birth Region FE*YOB LTT	X	X	X
Additional state controls*YOB LTT	X	X	X
Share of Manufacturing*YOB FE	X	X	X

*Note:* SOB=state of birth; FE=fixed effects; YOB=year of birth; LTT=linear time trends. Each column is obtained from a separate regression of the total number of doctor diagnosed chronic disease conditions on the wage index at different ages using data from the HRS. Dust Bowl states include New Mexico, Colorado, Oklahoma, Kansas, and Texas, and the neighboring states include Arkansas, Iowa, Louisiana, Minnesota, Missouri, Montana, Nebraska, North Dakota, South Dakota, and Wyoming. The additional state-level controls interacted with YOB LTT include: the 1928 infant mortality rate, the 1929 maternal mortality rate, and whether a state's share of farmland was in the 75th percentile. The sample includes cohorts born between 1929 and 1940. Estimates are weighted using the HRS sample weights and robust standard errors are clustered at the state of birth level. \*\*\*p<0.01, \*\*p<0.05, \*p<0.10.

**Appendix Table 10.** Effect of wage index declines and New Deal spending on the economic index

	(1)	(2)
Wage index declines preconception	0.0041 [0.0044]	0.0043 [0.0044]
Wage index declines in utero-age 2	-0.0110*** [0.0036]	-0.0111*** [0.0036]
Wage index declines in utero-age 2*ND spending		-0.0008 [0.0032]
Observations	5,125	5,125
R-squared	0.128	0.128
YOB FE	X	X
SOB FE	X	X
Survey Year FE	X	X
Individual Covariates	X	X
Birth Region FE*YOB LTT	X	X
Additional state controls*YOB LTT	X	X
Share of Manufacturing*YOB FE	X	X

*Note:* ND=New Deal; SOB=state of birth; FE=fixed effects; YOB=year of birth; LTT=linear time trends. The table reports the estimated effect of wage index declines in utero through age 2 on the economic index with and without adjustments for New Deal spending and its interaction with the wage index using data from the HRS. Wage index declines in utero through age two represents the average wage index decline across these ages. Results in Column (1) are from the preferred specification. Results in Column (2) include a dichotomous variable for New Deal spending equal to one if an individual was born in a state that was in the top quartile of total per capita national spending in the 1930s and its interaction with the wage index. The additional state-level controls interacted with YOB LTT include: the 1928 infant mortality rate, the 1929 maternal mortality rate, and whether a state's share of farmland was in the 75th percentile. Models also control for average wage index declines for ages 3-4. Models in Column 2 also control for the main effect of ND spending. The sample includes cohorts born between 1929 and 1940 who were between the ages of 50 and 65 when they were sampled in the HRS. Estimates are weighted using the HRS sample weights and robust standard errors are clustered at the state of birth level. \*\*\*p<0.01, \*\*p<0.05, \*p<0.10.

**Appendix Table 11.** Effect of wage index declines and New Deal spending on the number of chronic disease conditions

	(1)	(2)
Wage index declines preconception	-0.0007 [0.0051]	0.0006 [0.0046]
Wage index declines in utero	0.0137*** [0.0045]	0.0163*** [0.0046]
Wage index declines in utero*ND spending		-0.0073*** [0.0023]
Observations	7,425	7,425
R-squared	0.116	0.117
YOB FE	X	X
SOB FE	X	X
Survey Year FE	X	X
Individual Covariates	X	X
Birth Region FE*YOB LTT	X	X
Additional state controls*YOB LTT	X	X
Share of Manufacturing*YOB FE	X	X

*Note:* ND=New Deal; SOB=state of birth; FE=fixed effects; YOB=year of birth; LTT=linear time trends. The table reports the estimated effect of wage index declines in utero through age 2 on the number of chronic disease conditions with and without adjustments for New Deal spending and its interaction with the wage index using data from the HRS. Results in Column (1) are from the preferred specification. Results in Column (2) include a dichotomous variable for New Deal spending equal to one if an individual was born in a state that was in the top quartile of total per capita national spending in the 1930s and its interaction with the wage index. The additional state-level controls interacted with YOB LTT include: the 1928 infant mortality rate, the 1929 maternal mortality rate, and whether a state's share of farmland was in the 75th percentile. Models in Column 2 also control for the main effect of ND spending. The sample includes cohorts born between 1929 and 1940. Estimates are weighted using the HRS sample weights and robust standard errors are clustered at the state of birth level. \*\*\*p<0.01, \*\*p<0.05, \*p<0.10.



**Appendix Table 12.** Effect of wage index declines and WWII mobilization rates on the economic index

	(1)	(2)
Wage index declines preconception	0.0041 [0.0044]	0.0045 [0.0045]
Wage index declines in utero-age 2	-0.0110*** [0.0036]	-0.0108*** [0.0036]
Wage index declines in utero-age 2*HMR		0.0015 [0.0041]
Observations	5,125	5,125
R-squared	0.128	0.128
YOB FE	X	X
SOB FE	X	X
Survey Year FE	X	X
Individual Covariates	X	X
Birth Region FE*YOB LTT	X	X
Additional state controls*YOB LTT	X	X
Share of Manufacturing*YOB FE	X	X

*Note:* HMR=high mobilization rate; SOB=state of birth; FE=fixed effects; YOB=year of birth; LTT=linear time trends. The table reports the estimated effect of wage index declines in utero through age 2 on the economic index with and without adjustments for WWII mobilization rates and its interaction with the wage index using data from the HRS. Wage index declines in utero through age two represents the average wage index decline across these ages. Results in Column (1) are from the preferred specification. Results in Column (2) include a dichotomous variable for WWII mobilization equal to one if an individual was born in a state that had a WWII mobilization rate that was above the national average (i.e., a high mobilization rate (HMR)), and its interaction with the wage index. The additional state-level controls interacted with YOB LTT include: the 1928 infant mortality rate, the 1929 maternal mortality rate, and whether a state's share of farmland was in the 75th percentile. Models also control for average wage index declines for ages 3-4. Models in Column 2 also control for the main effect of HMR. The sample includes cohorts born between 1929 and 1940 who were between the ages of 50 and 65 when they were sampled in the HRS. Estimates are weighted using the HRS sample weights and robust standard errors are clustered at the state of birth level. \*\*\*p<0.01, \*\*p<0.05, \*p<0.10.

**Appendix Table 13.** Effect of wage index declines and WWII mobilization rates on the number of chronic disease conditions

	(1)	(2)
Wage index declines preconception	-0.0007 [0.0051]	-0.0011 [0.0049]
Wage index declines in utero	0.0137*** [0.0045]	0.0149*** [0.0047]
Wage index declines in utero*HMR		-0.0043 [0.0028]
Observations	7,425	7,425
R-squared	0.116	0.117
YOB FE	X	X
SOB FE	X	X
Survey Year FE	X	X
Individual Covariates	X	X
Birth Region FE*YOB LTT	X	X
Additional state controls*YOB LTT	X	X
Share of Manufacturing*YOB FE	X	X

*Note:* HMR=high mobilization rate; SOB=state of birth; FE=fixed effects; YOB=year of birth; LTT=linear time trends. The table reports the estimated effect of wage index declines in utero on the number of chronic disease conditions with and without adjustments for WWII mobilization rates and its interaction with the wage index using data from the HRS. Results in Column (1) are from the preferred specification. Results in Column (2) include a dichotomous variable for WWII mobilization equal to one if an individual was born in a state that had a WWII mobilization rate that was above the national average (i.e., a high mobilization rate (HMR)), and its interaction with the wage index. The additional state-level controls interacted with YOB LTT include: the 1928 infant mortality rate, the 1929 maternal mortality rate, and whether a state's share of farmland was in the 75th percentile. Models in Column 2 also control for the main effect of HMR. The sample includes cohorts born between 1929 and 1940. Estimates are weighted using the HRS sample weights and robust standard errors are clustered at the state of birth level. \*\*\*p<0.01, \*\*p<0.05, \*p<0.10.

**Appendix Table 14.** Association between wage index declines and female fertility in the 1930s

	Total fertility	
	(1)	(2)
Wage index declines ages -3 to -2	0.0046 [0.0040]	0.0042 [0.0030]
Wage index declines in utero	0.0004 [0.0029]	0.0138*** [0.0021]
Wage index declines in utero*Female		-0.00001 [0.0008]
Wage index declines in utero*White		-0.0029* [0.0015]
Wage index declines in utero*Maternal age <=30		0.0221*** [0.0038]
Wage index declines in utero*Maternal age 31-39		0.0007 [0.0026]
Wage index declines in utero*Married		-0.0225*** [0.0027]
Wage index declines in utero*Maternal education < High School		-0.0043** [0.0016]
Wage index declines in utero*Maternal education = High School		-0.0049*** [0.0016]
Wage index declines in utero*Urban residence		-0.0023 [0.0018]
Outcome variable mean (SD)	3.03 (2.44)	
Mean of wage index declines (SD)	-81.06 (14.82)	
Observations	155,178	155,178
R-squared	0.108	0.319

*Note:* The table reports the association between wage index declines and total fertility after the focal child, or the first child born in the 1930s, using data from the 1% representative sample of the 1940 Census. The signs on the effect sizes for the wage index have been flipped so that values correspond to a one-unit decline in the wage index. Results in Column (2) add interactions between sex, race, marital status, maternal education (omitted category=college degree), maternal age (omitted category=mothers aged 40+), and urban residence. The preconception period was measured using average wage declines between ages -2 and -3. All models control for the main effects of sex, race, marital status, maternal education, and urban residence as well as SOB FE, YOB FE, YOB LTT for the infant mortality rate in 1928, the maternal mortality rate in 1929, and whether a state's share of farmland was in the 75th percentile nationally in 1930. Regressions also control for whether a state's employment in manufacturing was in the 75th percentile nationally in 1929 times YOB FE, and YOB LTT for region of birth. Models were estimated using linear regression. Robust standard errors clustered at the SOB level are in brackets. Results also control for the main effects of sex, race, maternal education, marital status and urban residence. \*\*\*p<0.01, \*\*p<0.05, \*p<0.1

**Appendix Table 15.** Association between wage index declines and selective survival at birth

	<b>Log (Cohort Size)</b>	<b>Log (Sex Ratio)</b>
Wage index declines preconception	-0.0005 [0.0021]	0.0011 [0.0036]
Wage index declines in utero	-0.0043** [0.0019]	-0.0078* [0.0041]
Observations	405	405
Number of states	45	45
Outcome mean	5.71	0.02
Effect size per 1 SD increase in wage index declines	-0.08	-0.14

*Note:* The table reports the association between wage index declines, the log of birth cohort size, and log of the birth cohort sex ratio (males/females) using data from the 1% representative sample of the 1940 Census. Coefficients are reported in raw (non-standardized) units. The signs on the effect sizes for the wage index have been flipped so that values correspond to a one-unit decline in the wage index. The preconception period was measured using average wage declines between ages -2 and -3. All models control for the main effects of sex, race, marital status, maternal education, and urban residence as well as SOB FE, YOB FE, YOB LTT for the infant mortality rate in 1928, the maternal mortality rate in 1929, and whether a state's share of farmland was in the 75th percentile nationally in 1930. Regressions also control for whether a state's employment in manufacturing was in the 75th percentile nationally in 1929 times YOB FE, and YOB LTT for region of birth. Models were estimated at the state-of-birth-year level using linear regression. Robust standard errors clustered at the SOB level are in brackets. \*\*p<0.05, \*p<0.1