The Longevity Benefits of Homeownership

Session 202, Social Science and History Association

Casey F. Breen[1]

[1]University of Oxford | Nuffield College

July 5, 2024

Homeownership: Core component of the American Dream

- The home is the single largest source of family wealth in the U.S.

Homeownership: Core component of the American Dream

- The home is the single largest source of family wealth in the U.S.
- Dominant narrative of success in the U.S. involves owning a home

Homeownership: Core component of the American Dream

- The home is the single largest source of family wealth in the U.S.
- Dominant narrative of success in the U.S. involves owning a home
- Striking historical and contemporary disparities in who owns a home

Homeownership: Core component of the American Dream

- The home is the single largest source of family wealth in the U.S.
- Dominant narrative of success in the U.S. involves owning a home
- Striking historical and contemporary disparities in who owns a home

Research Question

- Homeownership and health is relatively understudied

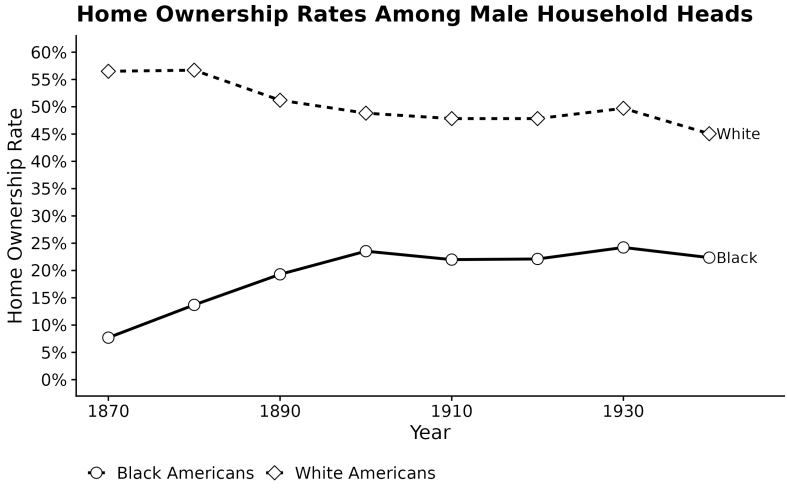
Research Question

- Homeownership and health is relatively understudied
- What is the (unadjusted) difference in life expectancy between **homeowners** and renters? Black / White differences?

Research Question

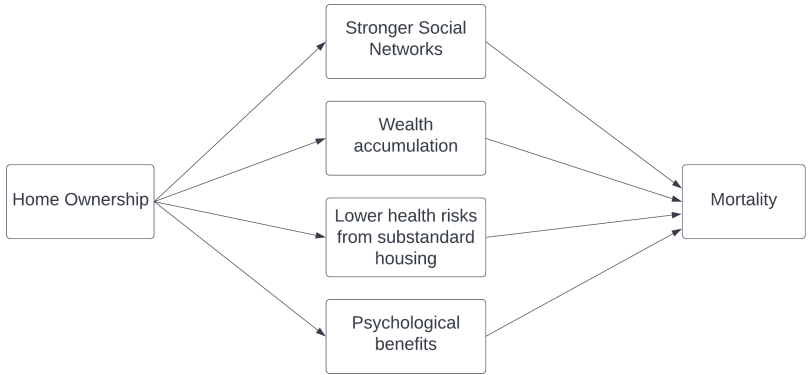
- Homeownership and health is relatively understudied
- What is the (unadjusted) difference in life expectancy between **homeowners** and renters? Black / White differences?
- Is there a **causal impact** of homeownership on longevity?

Huge Black-White disparities in homeownership



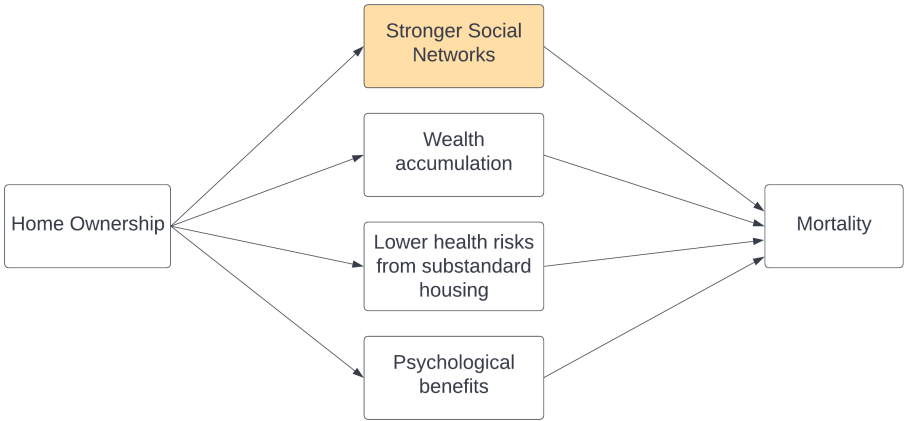
Source: IPUMS-USA Full Count Census Data

How does homeownership affect mortality?



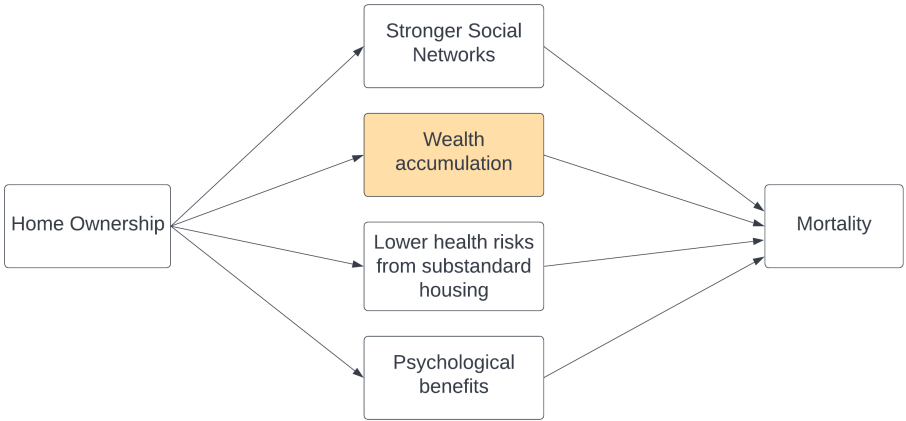
Causal pathways between homeownership and longevity

Causal pathways



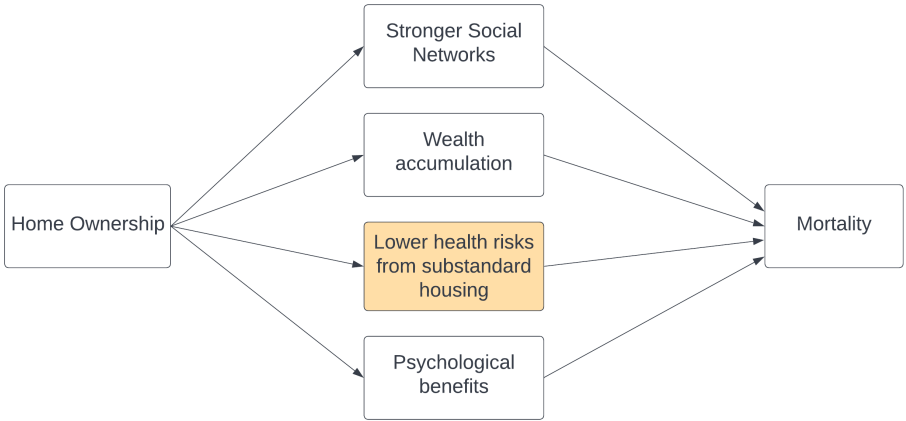
Causal pathways between homeownership and longevity

Causal pathways



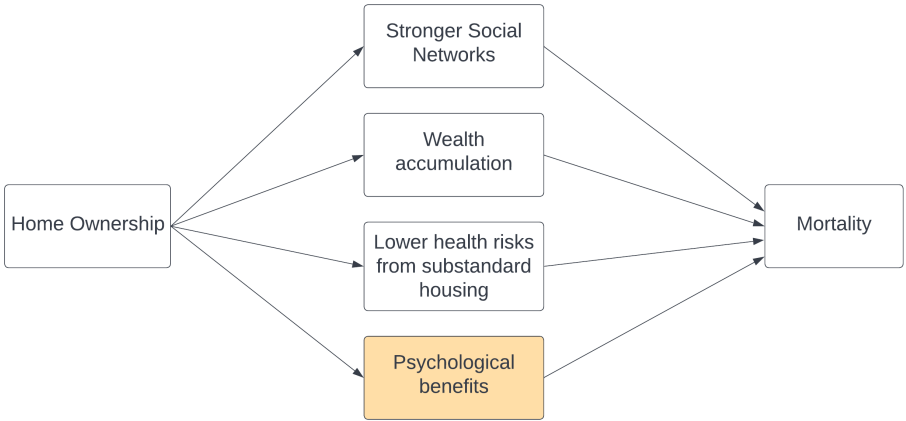
Causal pathways between homeownership and longevity

Causal pathways



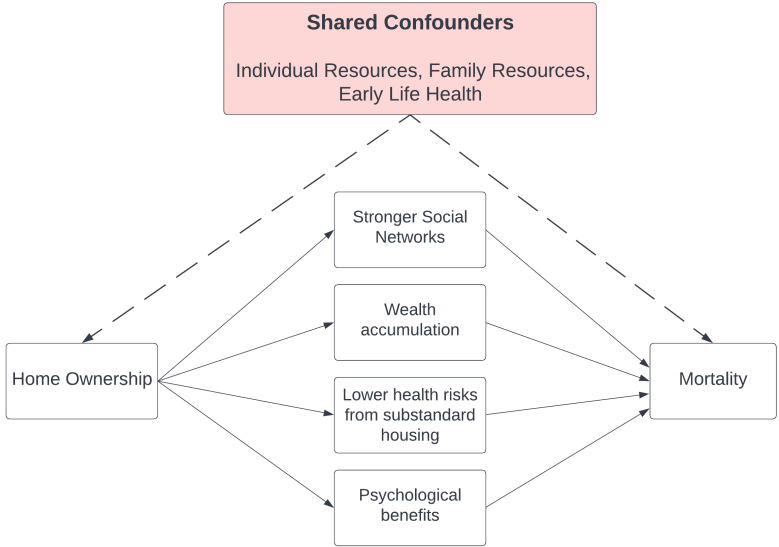
Causal pathways between homeownership and longevity

Causal pathways

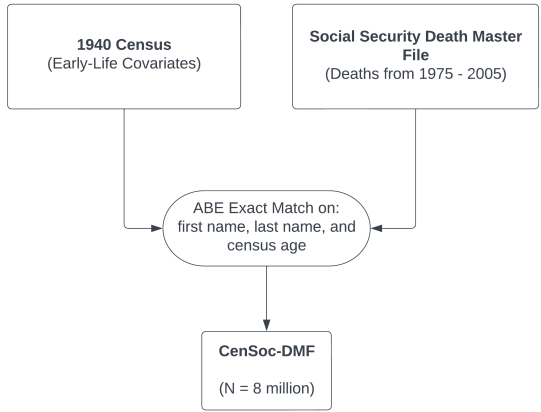


Causal pathways between homeownership and longevity

Causal pathways with shared confounders



CenSoc-DMF: Linked IPUMS 1940 Census and mortality records



Creating longitudinal panel of brothers (N = 80,000)

- Identify same-household brothers (age 5-15) in Full-Count 1920 Census (IPUMS-USA)

Creating longitudinal panel of brothers (N = 80,000)

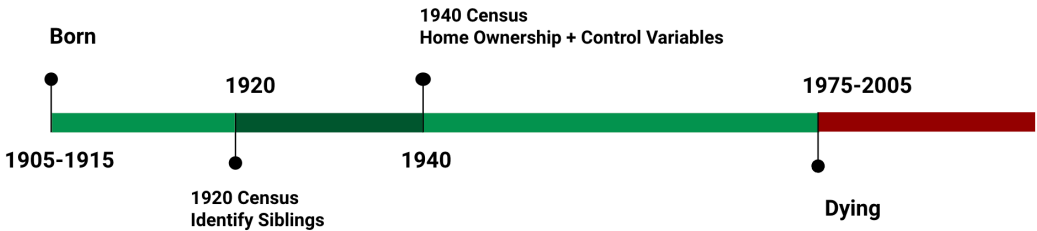
- Identify same-household brothers (age 5-15) in Full-Count 1920 Census (IPUMS-USA)
- Link brothers to Full-Count 1940 Census (ages 25-35) to obtain homeownership status and covariates (Census Linking Project)

Creating longitudinal panel of brothers (N = 80,000)

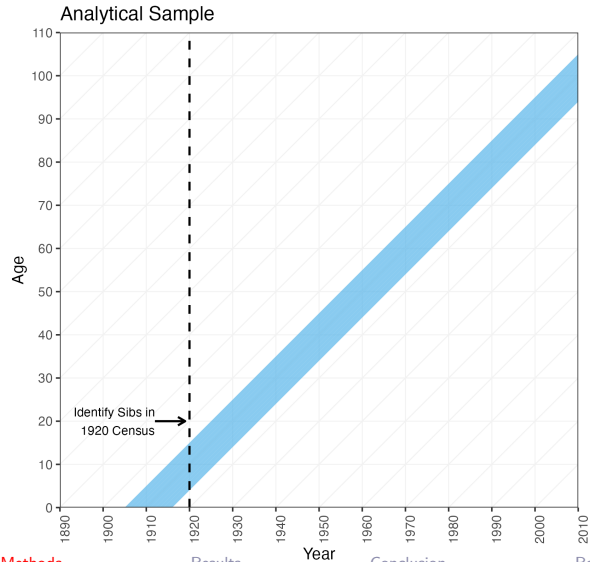
- Identify same-household brothers (age 5-15) in Full-Count 1920 Census (IPUMS-USA)
- Link brothers to Full-Count 1940 Census (ages 25-35) to obtain homeownership status and covariates (Census Linking Project)
- Link brothers to Social Security Death Master File (CenSoc Project)

Creating longitudinal panel of brothers (N = 80,000)

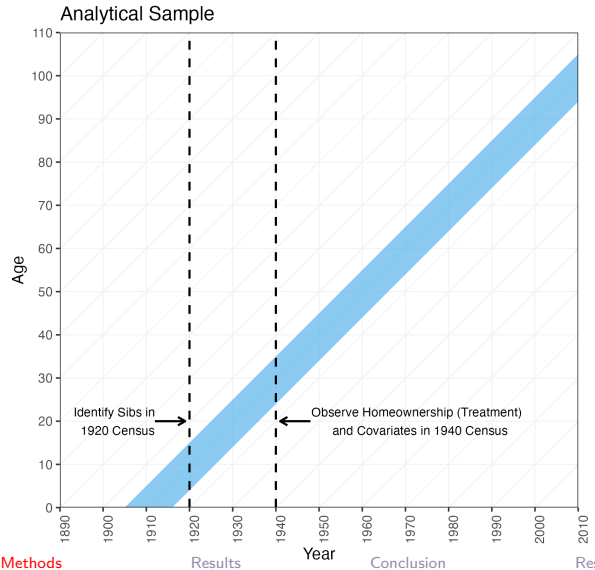
- Identify same-household brothers (age 5-15) in Full-Count 1920 Census (IPUMS-USA)
- Link brothers to Full-Count 1940 Census (ages 25-35) to obtain homeownership status and covariates (Census Linking Project)
- Link brothers to Social Security Death Master File (CenSoc Project)



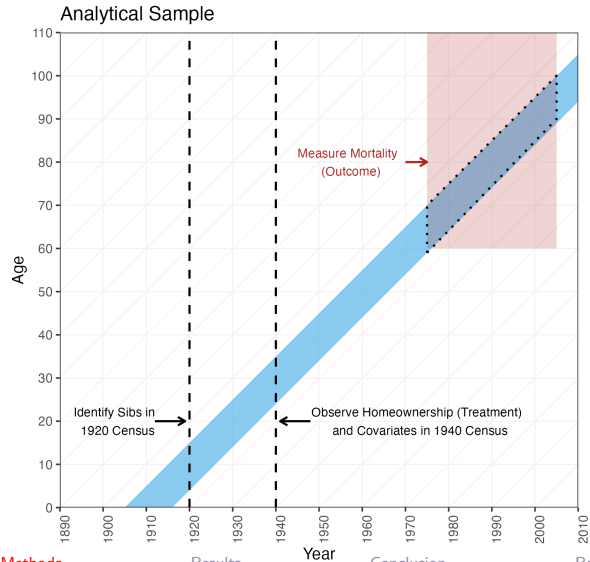
Analytic Sample – Lexis diagram



Analytic Sample – Lexis diagram



Analytic Sample – Lexis diagram



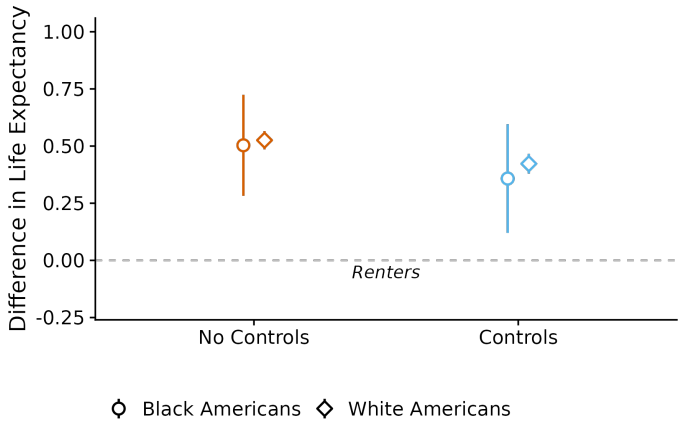
Methods: OLS regression on age of death

$$\text{Death age} = \beta_0 + \lambda_{byear} + \delta_{homeown} + \epsilon \qquad \textbf{(Model 1)}$$

$$\text{Death age} = \beta_0 + \lambda_{byear} + \delta_{homeown} + \boldsymbol{\beta} Z_{controls} + \epsilon \qquad \textbf{(Model 2)}$$

- Controls: education, income, occupation, marital status, state, and urbanicity
- Fit separately for White (N = 821k) and Black Americans (N = 34k)

Full sample results: similar association for Blacks and Whites



Causal identification with sibling subsample

Sibling fixed effects identification strategy: control for hard-to-measure confounders (e.g., family wealth).

$$\text{Death age} = \beta_0 + \lambda_{byear} + \delta_{homeown} + \epsilon \quad \textbf{(Model 1)}$$

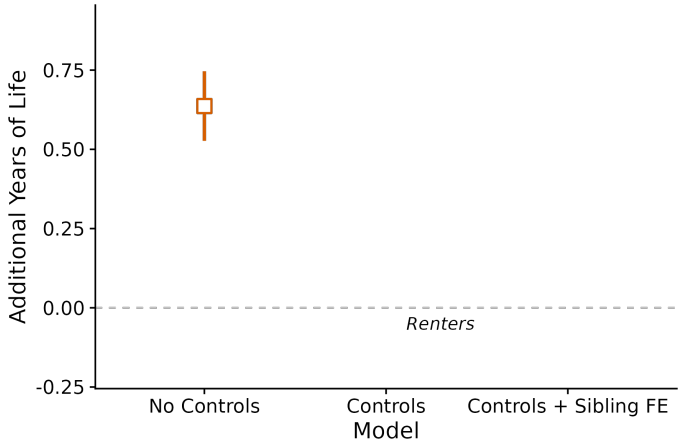
$$\text{Death age} = \beta_0 + \lambda_{byear} + \delta_{homeown} + \boldsymbol{\beta} Z_{controls} + \epsilon \quad \textbf{(Model 2)}$$

$$\text{Death age} = \beta_0 + \lambda_{byear} + \delta_{homeown} + \boldsymbol{\beta} Z_{controls} + \Omega_{FamilyFE} + \epsilon \quad \textbf{(Model 3)}$$

Causal Estimand

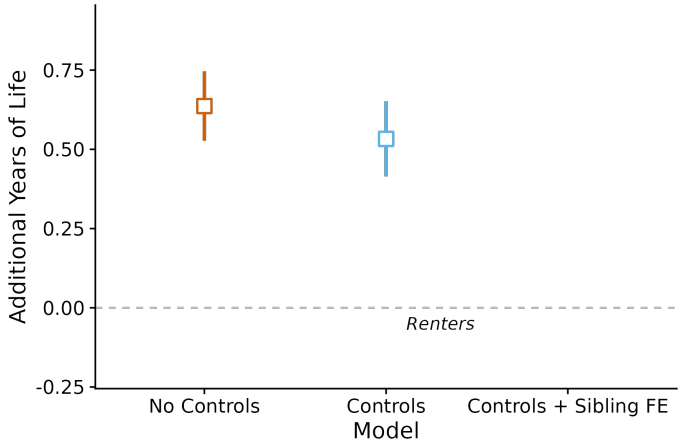
$$\Psi_{\text{ATE}} = \underbrace{\underbrace{\frac{1}{n}\sum_{i=1}^{n}}_{\substack{\text{Mean over every } i \text{ among} \\ \text{male household heads}}}}_{\text{Target Population}} \underbrace{\left(\underbrace{D_i(homeowner)}_{\substack{\text{Life expectancy if} \\ \text{homeowner in early adulthood}}} - \underbrace{D_i(renter)}_{\substack{\text{Life expectancy if} \\ \text{renter in early adulthood}}} \right)}_{\text{Unit-Specific Quantity}} \quad (1)$$

Mortality advantage of homeowners



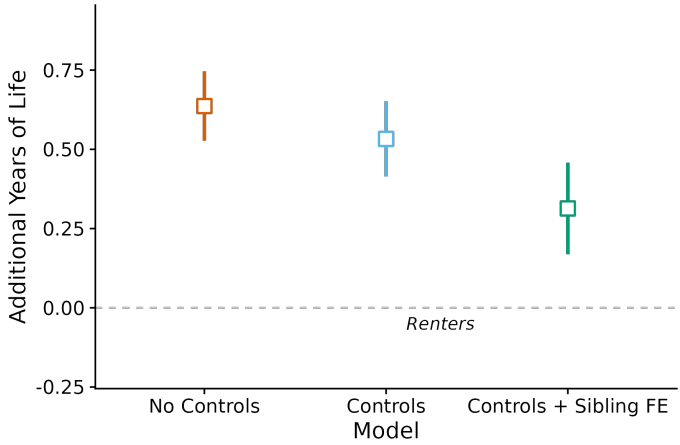
Baseline model with birth year fixed effects

Mortality advantage of homeowners



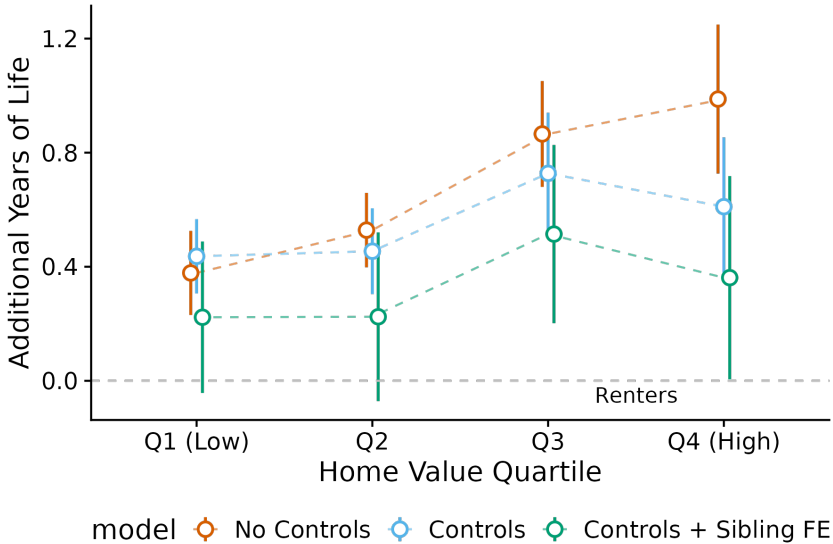
Add controls for education, race, income, occupation, marital status, state, and urbanicity

Mortality advantage of homeowners



Baseline model + controls + sibling fixed effects + birth order

Does the effect vary by home value?



Considerations and future directions

- Threats to causal inference: **residual confounding** within brothers

Considerations and future directions

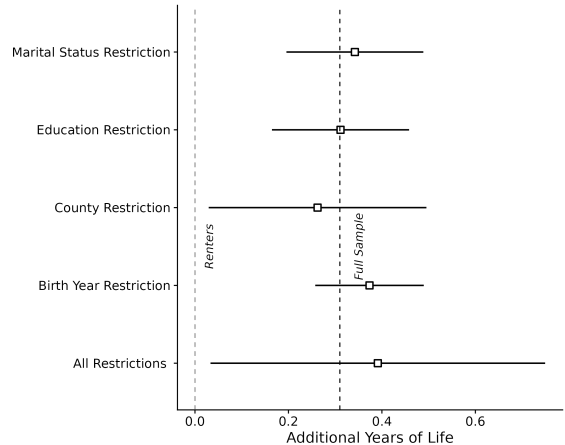
- Threats to causal inference: **residual confounding** within brothers
- Homeownership is dynamic – longitudinally track homeownership

Considerations and future directions

- Threats to causal inference: **residual confounding** within brothers
- Homeownership is dynamic – longitudinally track homeownership
- Future work could investigate other historical time periods and cohorts

Robustness checks

- Restrict to brothers living in the same county in 1940
- Restrict to brothers with same marital status
- Restrict to brothers with similar education (within 2 years)
- Restrict to brothers with similar birth year (within 5 years)



Conclusions

- There is a **causal impact** of homeownership in early adulthood for men on longevity (4 month advantage)

Conclusions

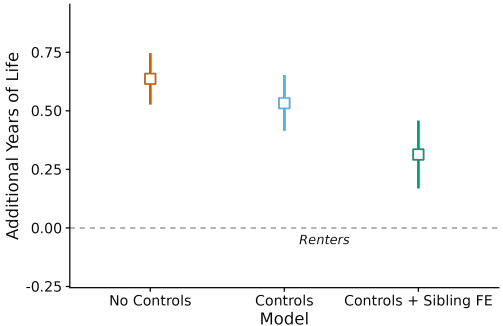
- There is a **causal impact** of homeownership in early adulthood for men on longevity (4 month advantage)
- Black-White disparities in homeownership partially account for Black-White disparities in mortality

Conclusions

- There is a **causal impact** of homeownership in early adulthood for men on longevity (4 month advantage)
- Black-White disparities in homeownership partially account for Black-White disparities in mortality
- **Policy implications:**
  - Policies that equitably expand homeownership can help mitigate mortality disparities
  - Address larger systematic issues advantaging homeowners (e.g., expanding policies protecting renters)

Thank You

- Questions?



Working paper

caseyfbreen

casey.breen@demography.ox.ac.uk

Reserve Slides

Representativeness of samples

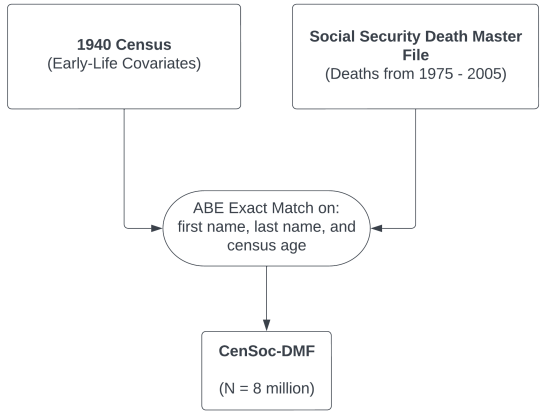
	General Pop		CenSoc-DMF		CenSoc-DMF Siblings	
	No.	%	No.	%	No.	%
Educational Attainment						
<High School	4951782	67.3	608639	64.7	26137	66.7
High School or some college	1783203	24.3	247103	26.3	10133	25.9
Bachelors Degree	339072	4.6	48024	5.1	1664	4.2
Advanced Degree	162122	2.2	24559	2.6	820	2.1
NA	117086	1.6	12091	1.3	441	1.1
Race						
Black	656027	8.9	34159	3.6	278	0.7
Other	27778	0.4	3296	0.4	43	0.1
White	6669460	90.7	902961	96.0	38874	99.2
Marital Status						
Married	7013184	95.4	905924	96.3	38102	97.2
Not married	340081	4.6	34492	3.7	1093	2.8
Homeownership						
Homeowner	1780906	24.2	249379	26.5	11553	29.5
Not Homeowner	5572359	75.8	691037	73.5	27642	70.5
Socioeconomic Status Indicator						
Sei 1-9	1293523	17.6	138209	14.7	5513	14.1
Sei 10-14	1170543	15.9	149673	15.9	7962	20.3
Sei 15-25	1862967	25.3	246484	26.2	10028	25.6
Sei 26+	2776321	37.8	380226	40.4	14745	37.6
NA	249911	3.4	25824	2.7	947	2.4
Rural						
Rural	3183160	43.3	397739	42.3	19754	50.4
Urban	4170105	56.7	542677	57.7	19441	49.6

Full regression output

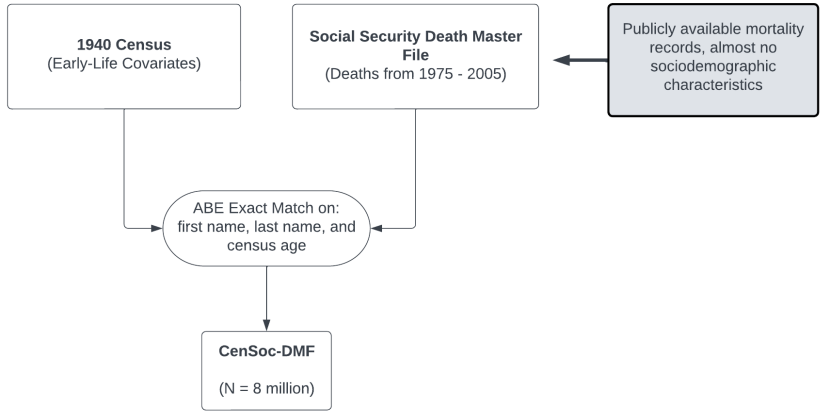
Dependent Variable:	Age of Death		
Model:	(1)	(2)	(3)
Variables			
Own Home	0.6595***	0.5823***	0.3933***
	(0.0505)	(0.0551)	(0.0626)
Education (Years)		0.1663***	0.1425***
		(0.0123)	(0.0221)
Race (White)		-0.0952	-0.4184
		(0.1804)	(0.7135)
Urban		-0.3318***	-0.0377
		(0.0729)	(0.1051)
Fixed-effects			
Birth Year	Yes	Yes	Yes
Occupation, Marital Status		Yes	Yes
State		Yes	Yes
Family Fixed Effects			Yes
Birth Order			Yes
Fit statistics			
Observations	79,679	78,426	78,426
R^2	0.03276	0.04670	0.55442
Within R^2	0.00141	0.00386	0.00154

Clustered (byear) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

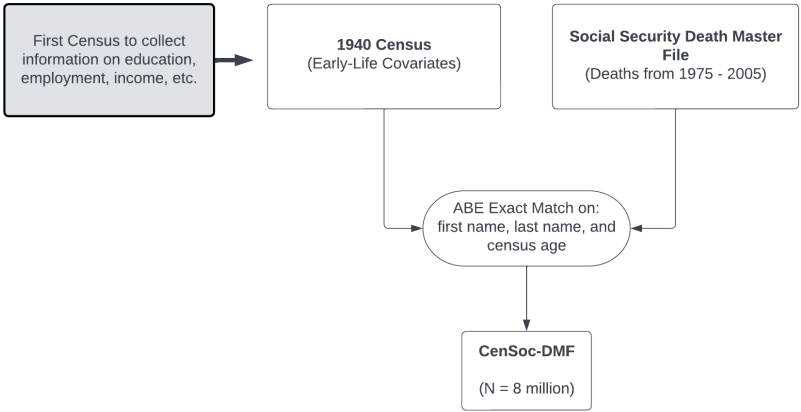
CenSoc-DMF: Linked IPUMS 1940 Census and mortality records



CenSoc-DMF: Linked IPUMS 1940 Census and mortality records



CenSoc-DMF: Linked IPUMS 1940 Census and mortality records



1940 Census

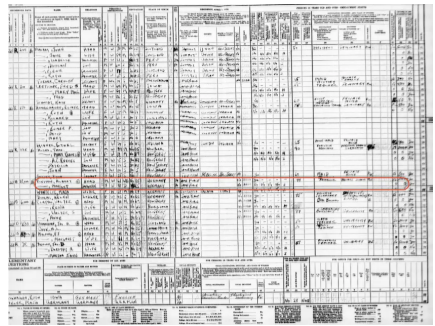
- 1940 Census reflected heightened time of social awareness brought about by Great Depression

1940 Census

- 1940 Census reflected heightened time of social awareness brought about by Great Depression
- First decennial census to include question on educational attainment, wage and salary income, and detailed questions on employment
- Question on homeownership status (rent vs. own) and estimate of home value for owners

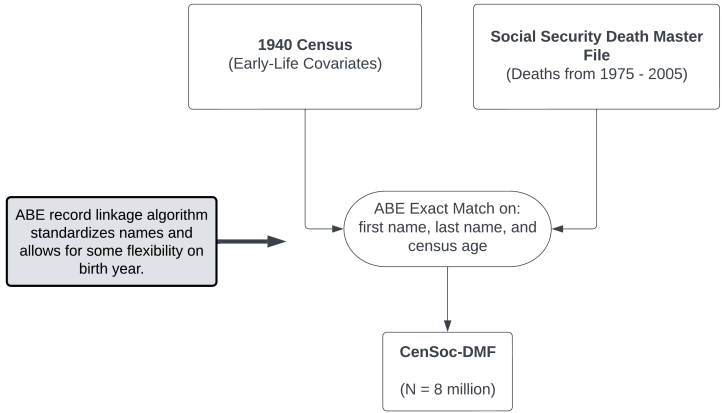
1940 Census

- 1940 Census reflected heightened time of social awareness brought about by Great Depression
- First decennial census to include question on educational attainment, wage and salary income, and detailed questions on employment
- Question on homeownership status (rent vs. own) and estimate of home value for owners



1940 Census Form

CenSoc-DMF: Linked census and mortality records



References