Is Rising Household Debt Affecting Retirement Decisions?

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Remaking Retirement? Debt in an Aging Economy
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*The views expressed in this presentation are the authors' and should not be interpreted as the views of the Congressional Budget Office.

Background

- Labor force participation rates have been rising among older Americans. Possible explanations include:
  - Increases in educational attainment
  - Changes to Social Security policy and employer-sponsored pension plans
  - More people living healthier and longer
  - Declines in physically demanding jobs
  - Cohort effects, particularly among women
  - **Rise in household debt**
- Previous Literature:
  - On debt at older ages
  - On work and retirement decisions
  - Butrica and Karamcheva (2013; 2018) were the first known studies to analyze in detail how debt or liquidity constraints affect benefit claiming and receipt

Research Question

- This paper builds on previous literature by examining
  - **trends in debt among older households between 1989 and 2016** and
  - **the relationship between their debt and work and retirement decisions** using data from the Survey of Consumer Finances.

- In addition, this study separately examines the role of categories of debt such as credit card and student loan debt.

Data and Methods

- Survey of Consumer Finances (1989-2016)
  - Triennial cross-sectional household survey
  - Sample includes households between the ages of 55 and 70
  - Social Security analyses include households between the ages of 62 and 70
  - Regression analyses limited to non-disabled individuals with at least 10 years of work experience
- Outcomes of interest:
  - Probability of working
  - Probability of being retired
  - Probability of receiving Social Security benefits
  - Expected age of stopping work

Data and Methods

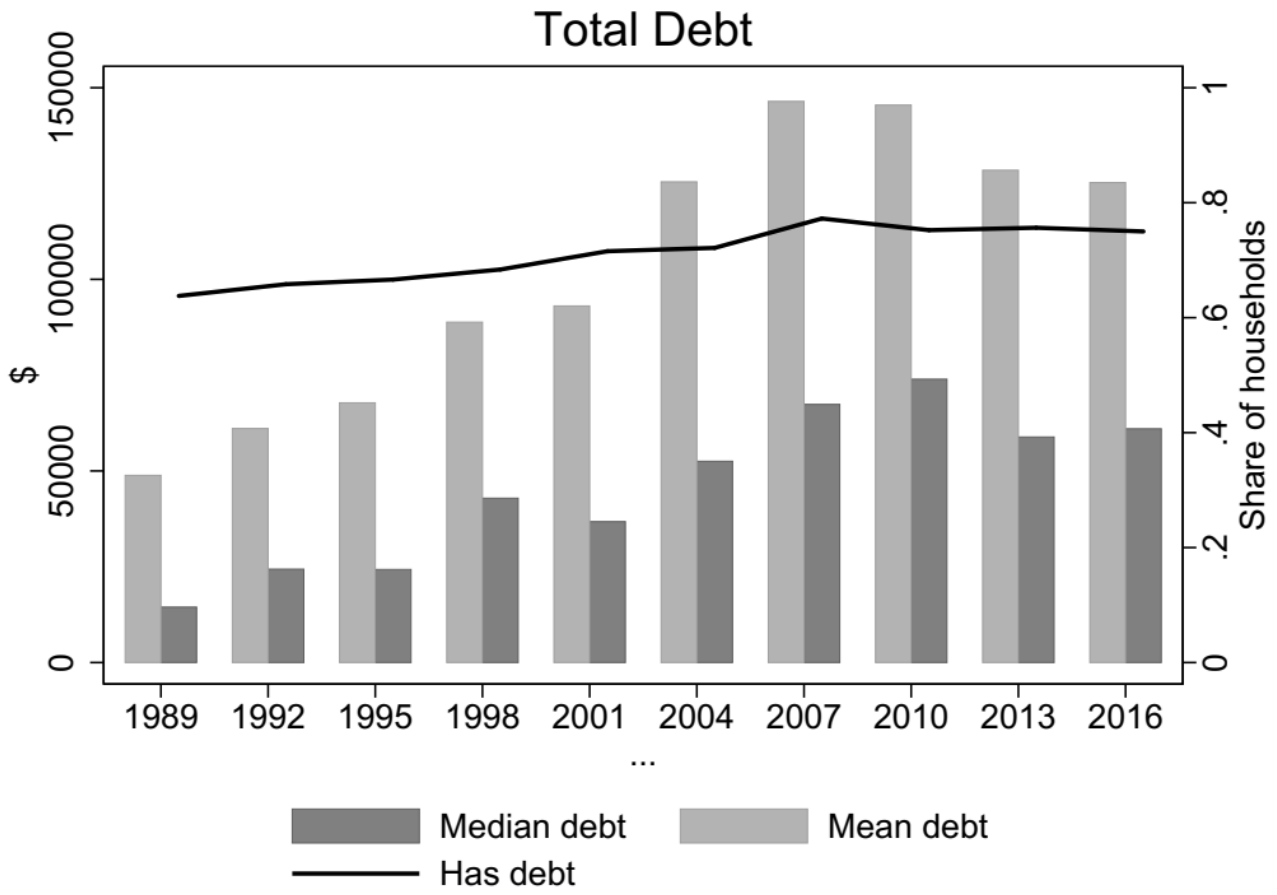
- Independent variables of interest:
  - Presence of debt, and presence of categories of debt (mortgage debt, credit card debt, student loan debt, other debt)
  - Value of total debt, and value of categories of debt
  - Degree of leverage (total debt/total assets), whether household has negative net worth, whether the household has more debt than financial assets

- Set of controls:
  - Demographics (e.g. education, race, marital status), health, spouse's labor supply and benefit receipt, other household income, presence of health insurance, DB plans, net worth, age and time dummies.

Older Households' Indebtedness - SCF

The share of older adults with debt and the value of debt has been increasing over time

- Share of Adults with **Debt** and Mean and Median Value of Debt – Ages 55 to 70

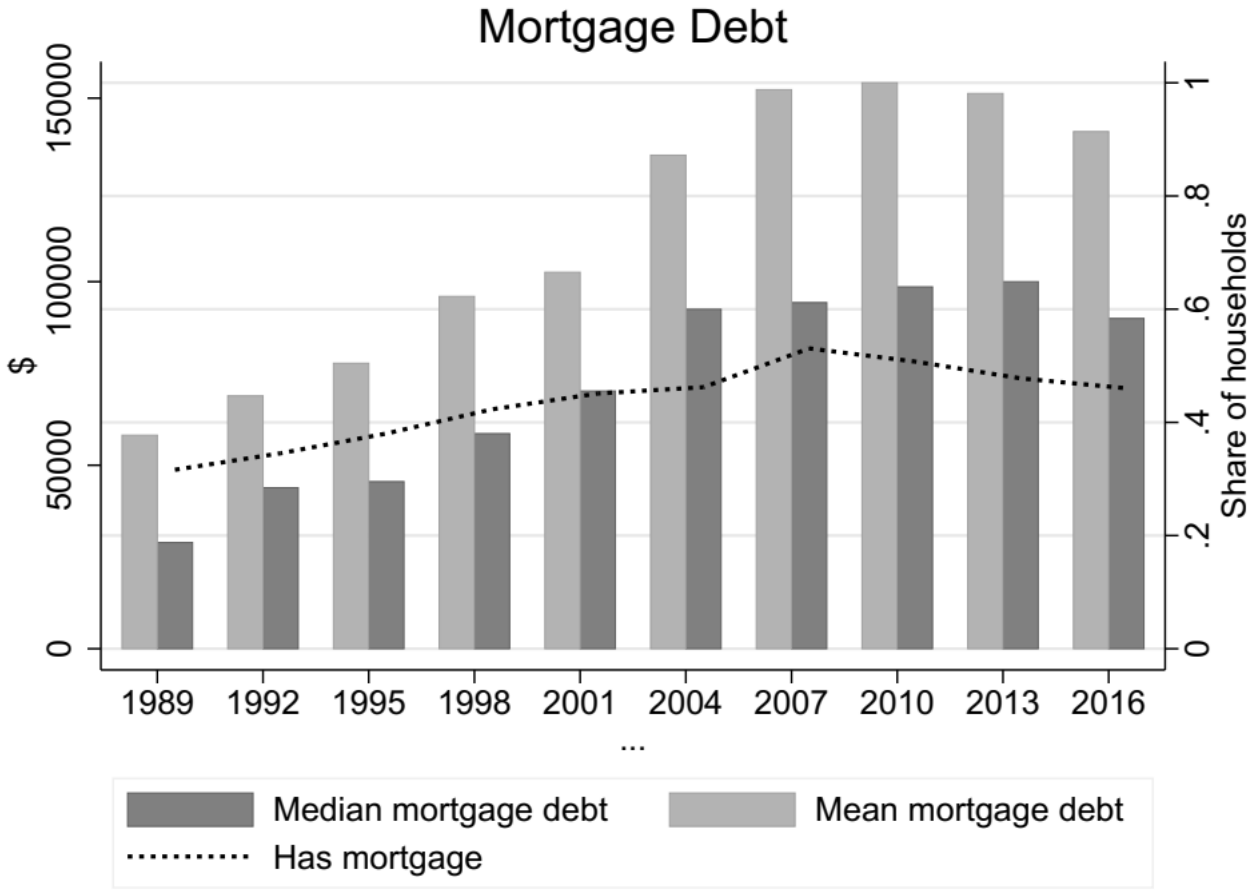


Source: Authors' calculations using the 1989-2016 SCF.

Older Households' Indebtedness - SCF (cont)

The share of older adults with mortgage debt and the value of debt has also been rising over time

- Share of Adults with **Mortgage Debt** and Mean and Median Value of Mortgage Debt – Ages 55 to 70

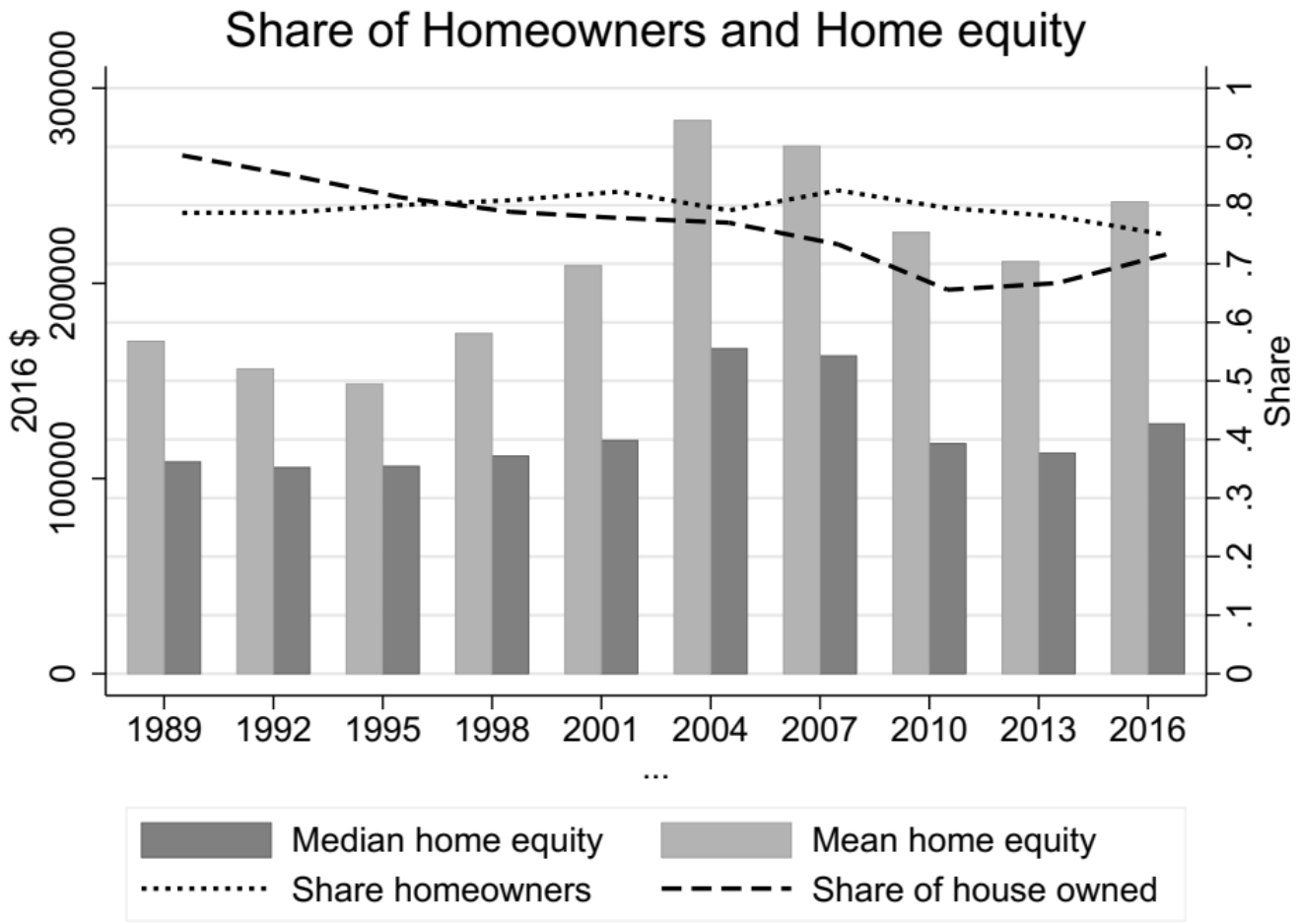


Source: Authors' calculations using the 1989-2016 SCF.

Older Households' Indebtedness - SCF (cont)

On average, older adults own a smaller share of their homes in 2016 than they did in 1989.

- Percent of House Owned for those with a House – Ages 55 to 70

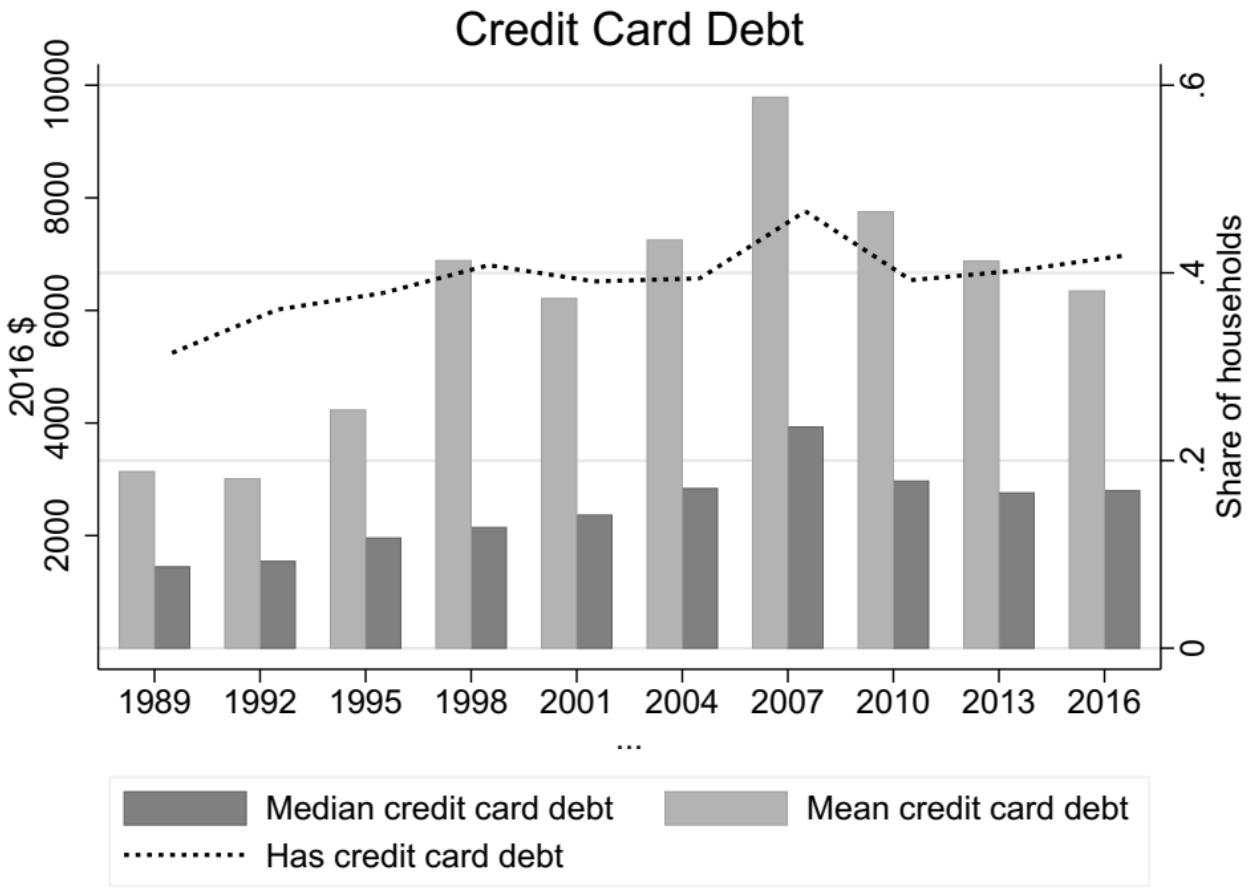


Source: Authors' calculations using the 1989-2016 SCF.

Older Households' Indebtedness - SCF (cont)

The share of older adults with credit card debt and the value of debt has also been rising over time

- Share of Adults with **Credit Card Debt** and Mean and Median Value of Credit Card Debt – Ages 55 to 70

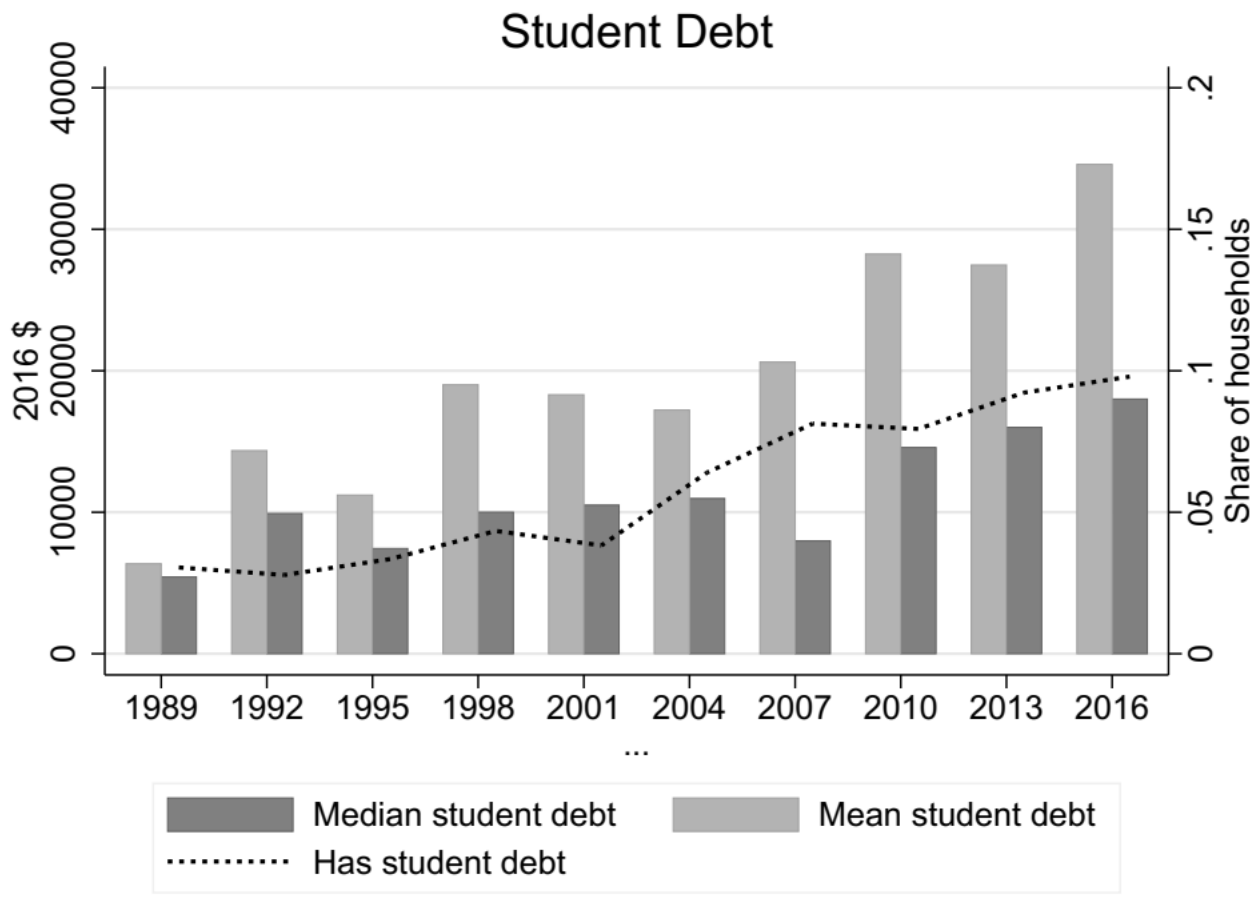


Source: Authors' calculations using the 1989-2016 SCF.

Older Households' Indebtedness - SCF (cont)

The share of older adults with student loan debt and the value of debt has also been rising over time

- Share of Adults with **Student Loan Debt** and Mean and Median Value of Student Loan Debt– Ages 55 to 70

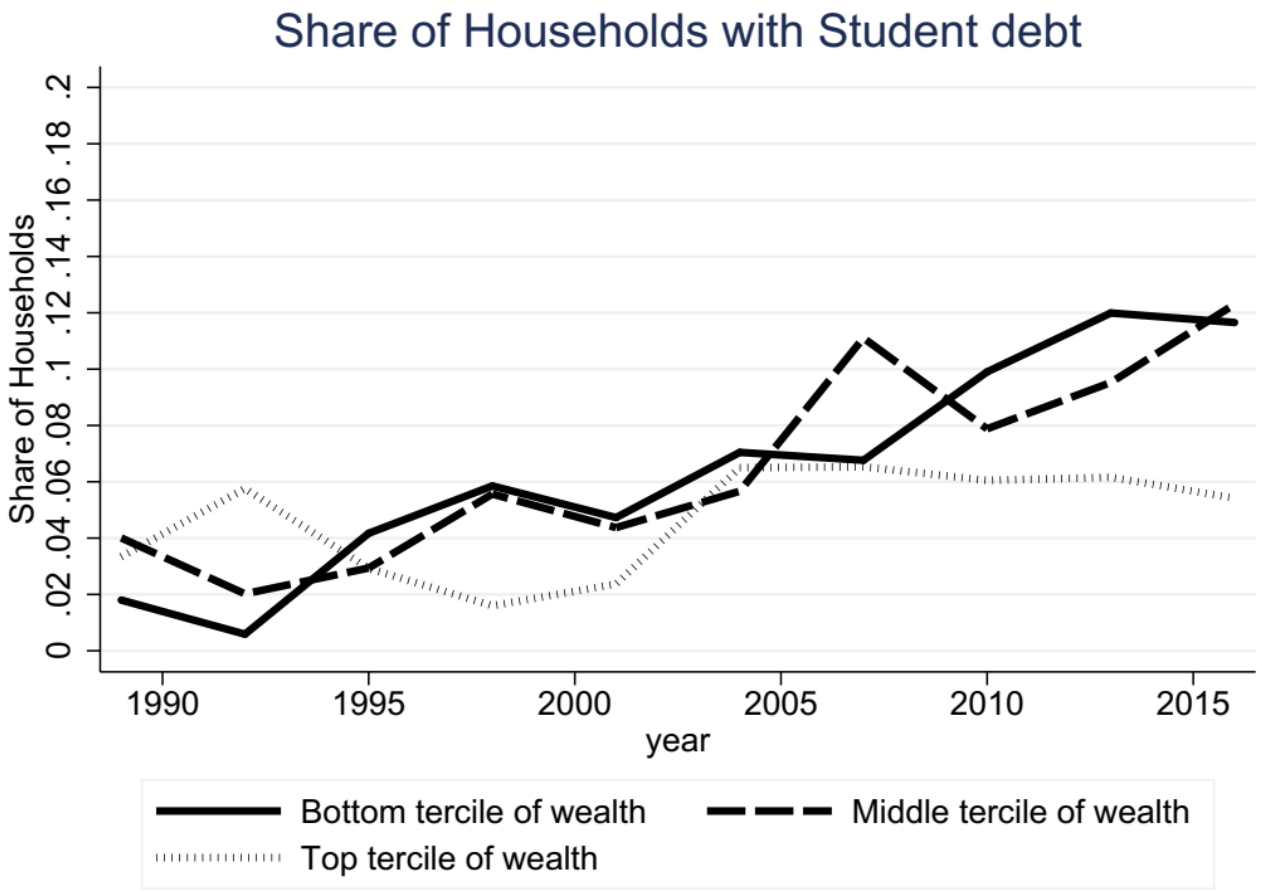


Source: Authors' calculations using the 1989-2016 SCF.

Older Households' Indebtedness - SCF (cont)

The increase in student loan debt has occurred mostly among households in the bottom two-thirds of the wealth distribution

- Share of Adults with **Student Loan Debt**– Ages 55 to 70

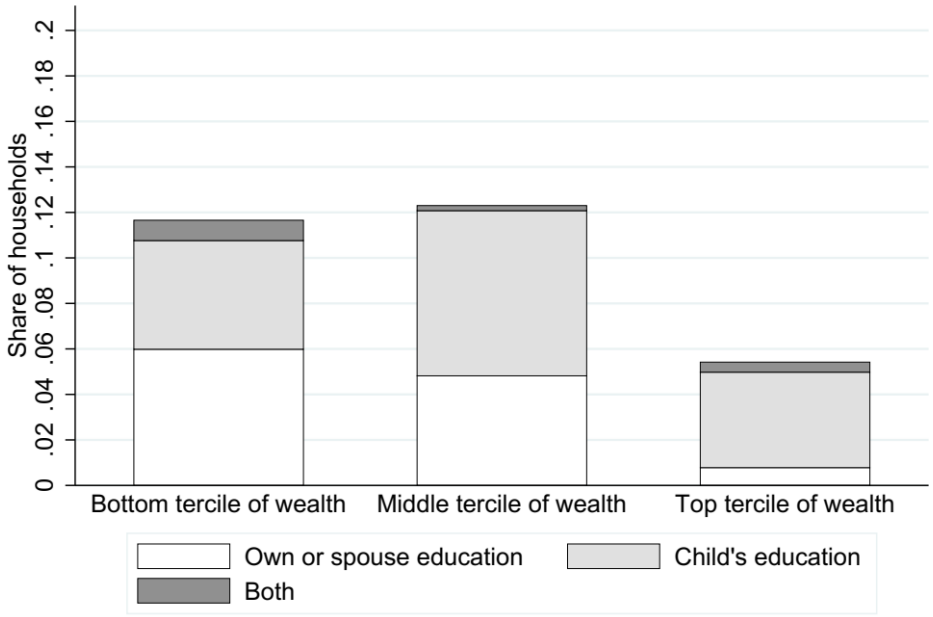


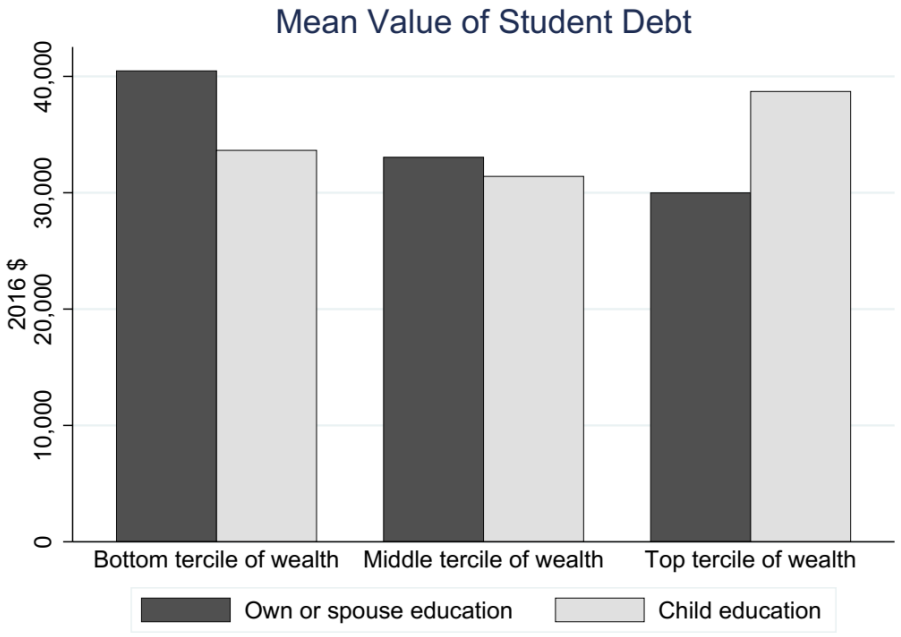
Source: Authors' calculations using the 1989-2016 SCF.

Older Households' Indebtedness - SCF (cont)

Roughly half of the student loan debt in older households is for their children's education

- Mean Value of **Student Loan Debt in 2016** by Wealth Tercile– Ages 55 to 70



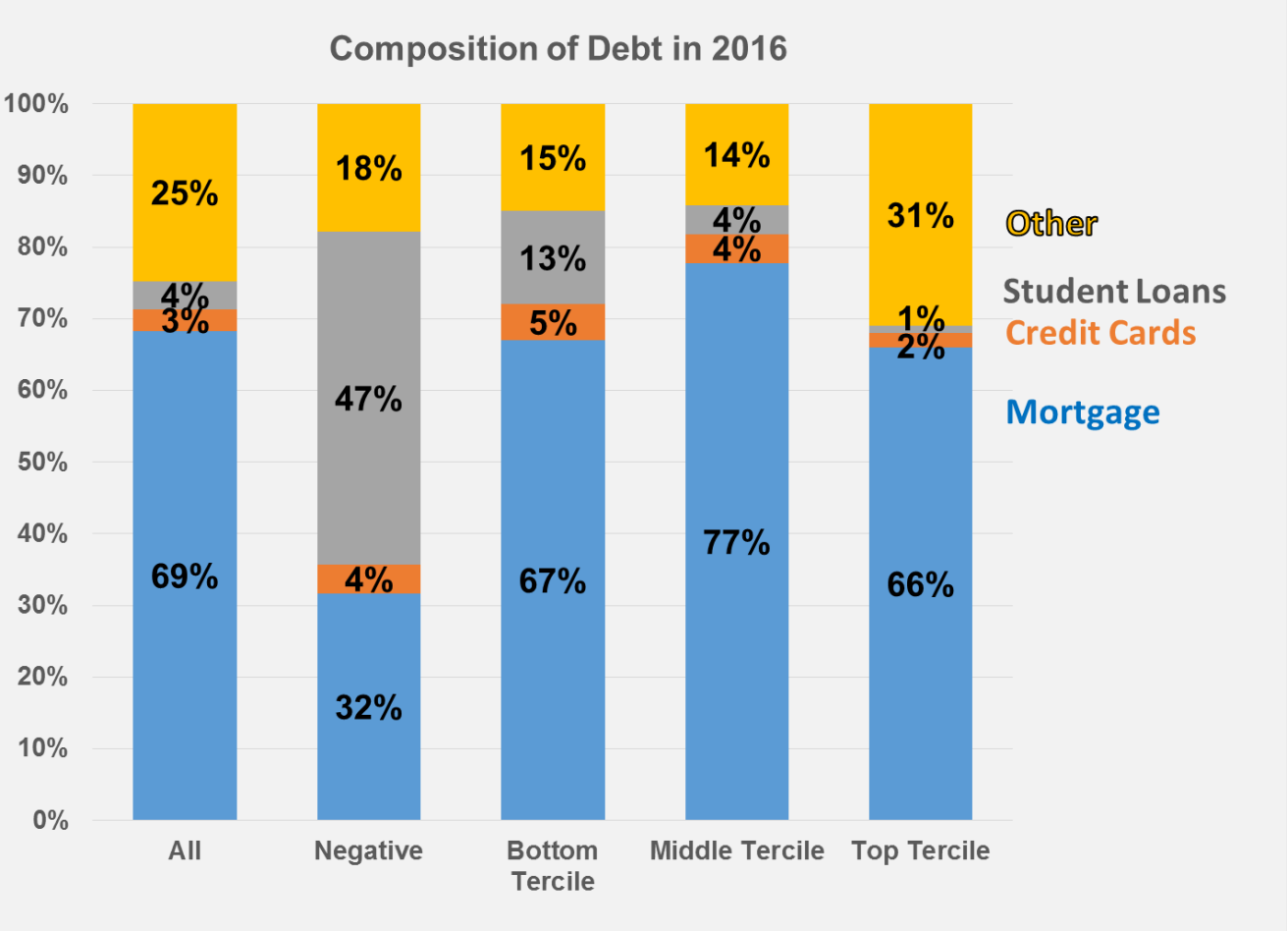


Source: Authors' calculations using the 1989-2016 SCF.

Older Households' Indebtedness - SCF (cont)

The composition of household debt varies by the household's position in the wealth distribution

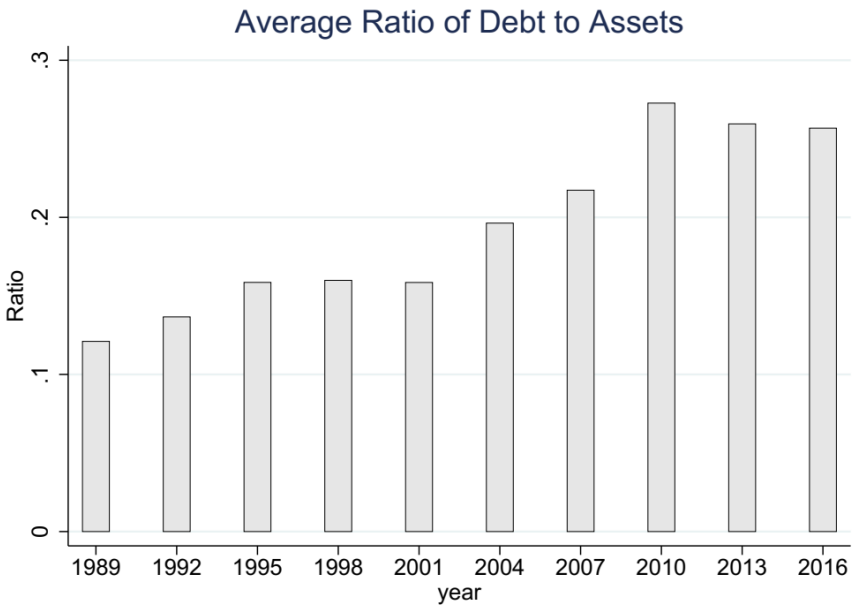
- Composition of household debt in 2016– Ages 55 to 70

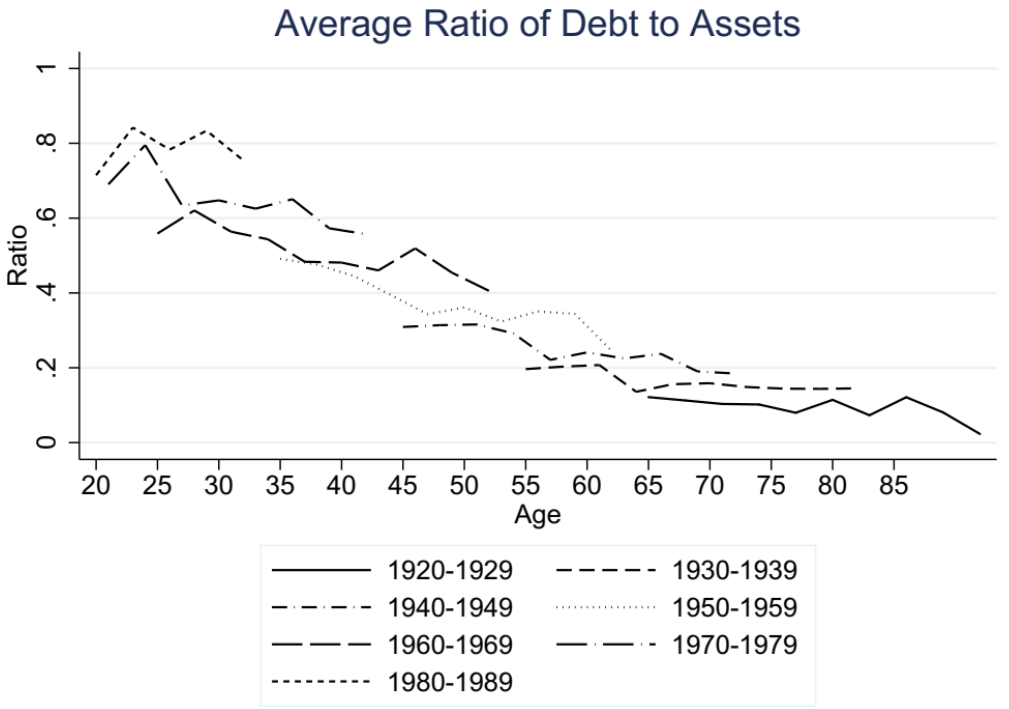


Source: Authors' calculations using the 2016 SCF.

Older Households' Indebtedness - SCF (cont)

Older adults are increasingly leveraged



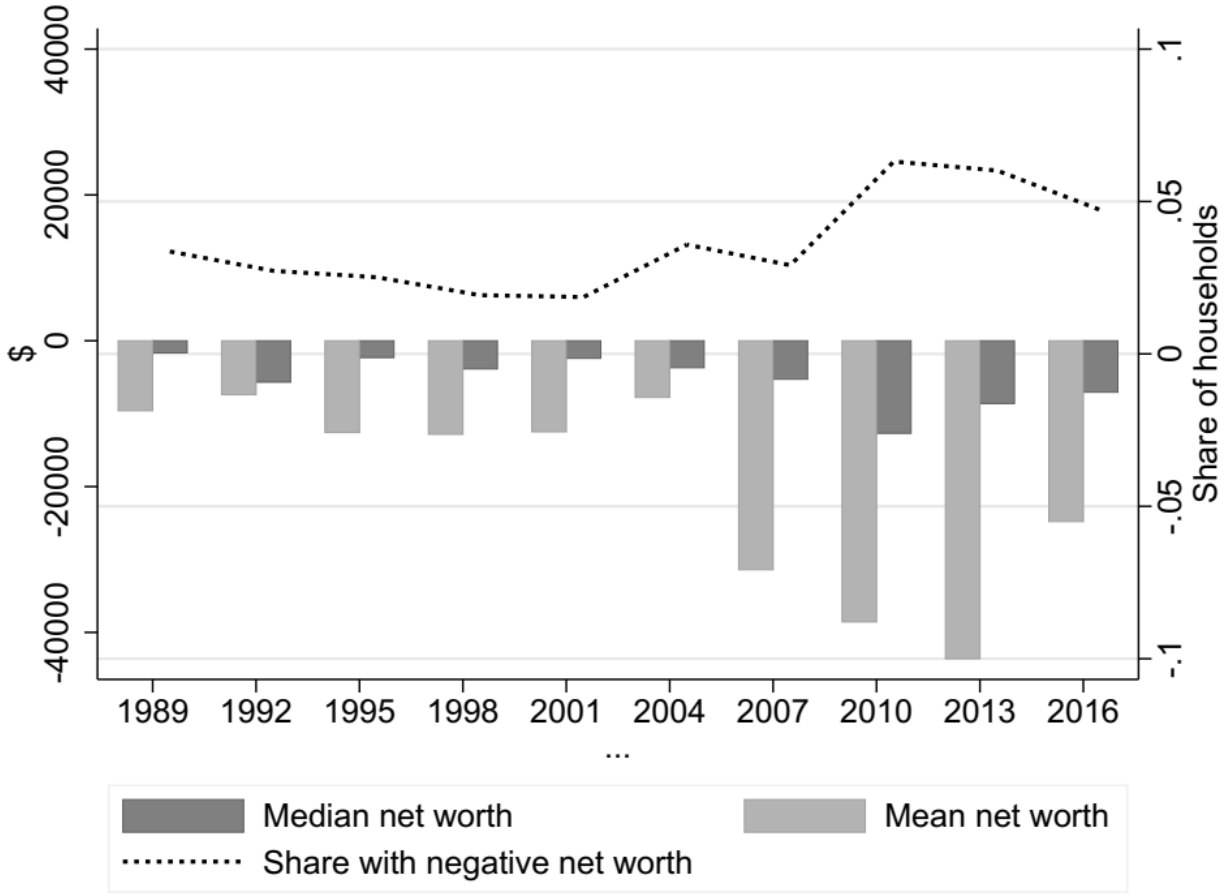


Source: Authors' calculations using the 1989-2016 HRS. Top 1 percent

Older Households' Indebtedness - SCF(cont)

The share of older households with negative net worth and the value of their indebtedness has also increased

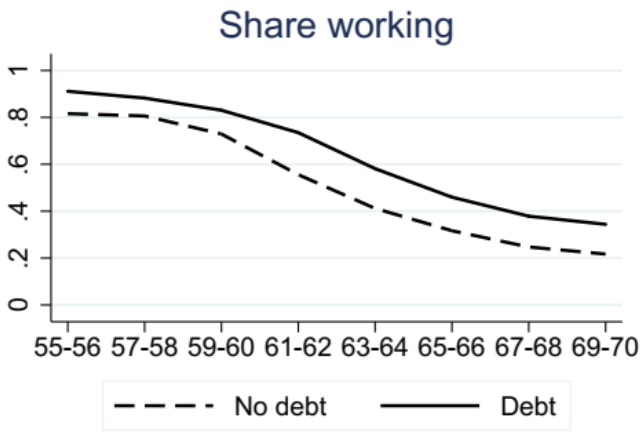
Share of Adults with **Negative Net Worth** and Median and Mean Value of Negative Net Worth – Ages 55 to 70

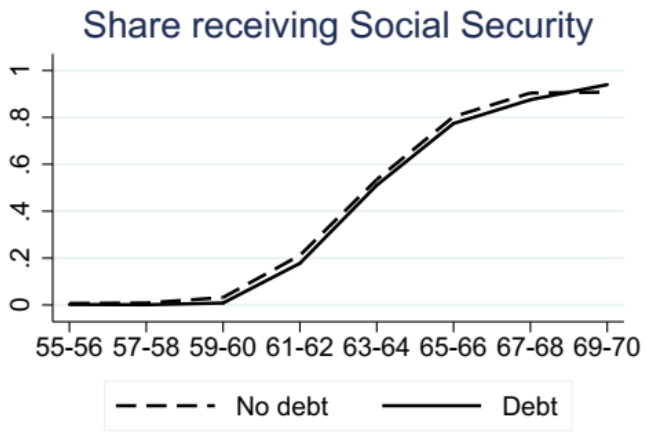


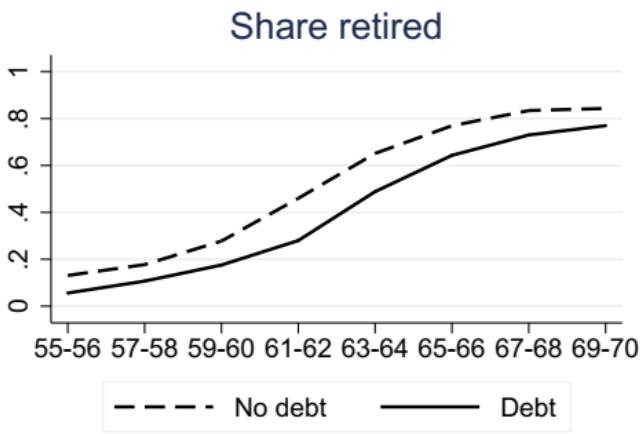
Source: Authors' calculations using the 1989- 2016 SCF.

Older Households' Debt and Work Relationship - SCF

- The share of older adults who are working is higher and the share receiving Social Security benefits and the share retired is lower for those with debt







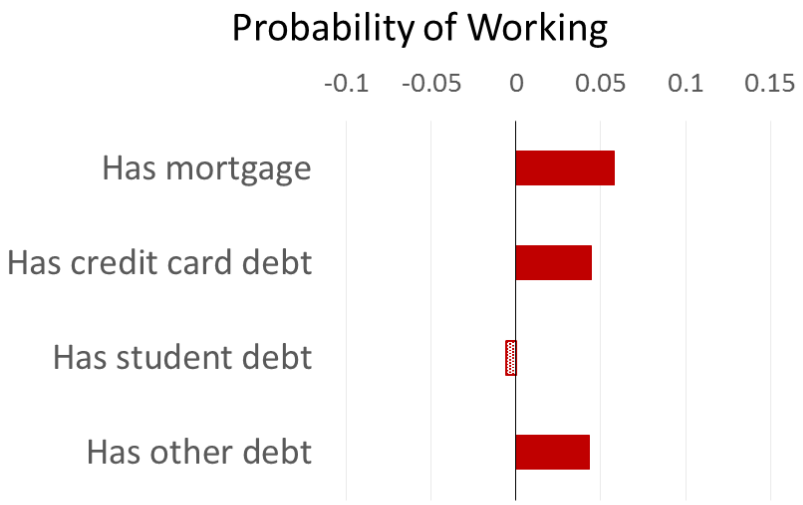
Source: Authors' calculations using the 1989-2016 SCF

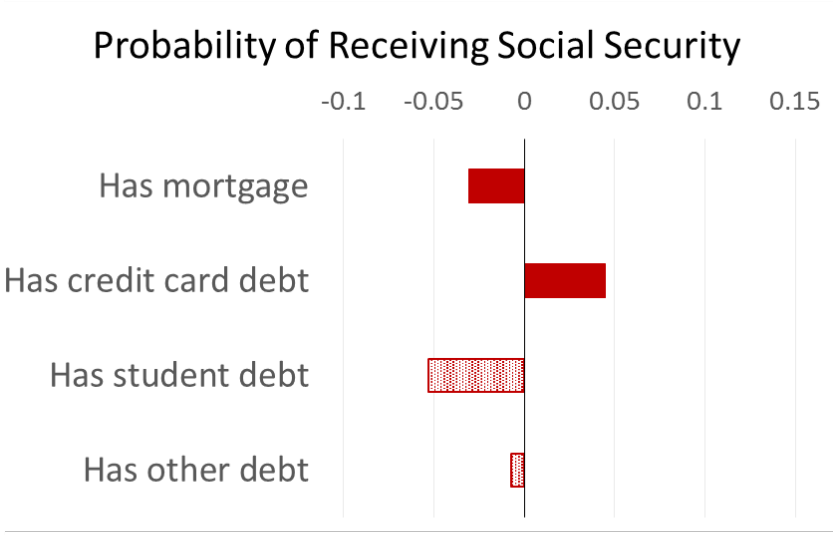
<u>Multivariate regression results</u>: Having debt **positively** influences the likelihood of **working**, and **negatively** influences the likelihood of being retired: **nuanced** relationship between debt and **receiving SS benefits**

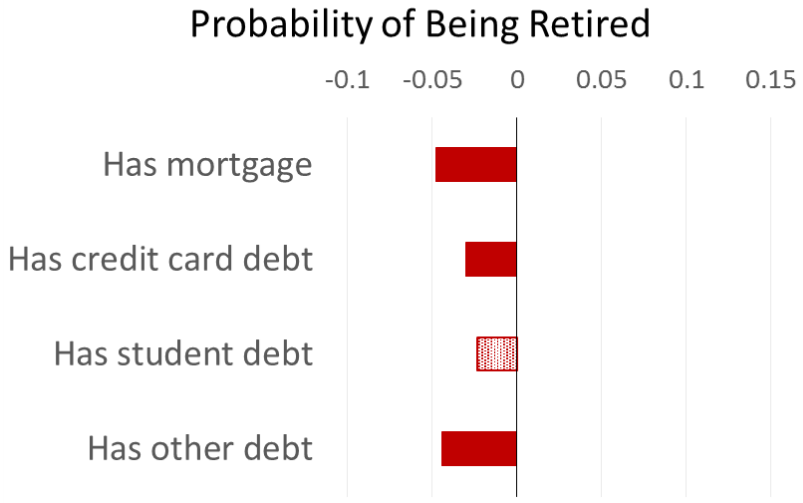
	Probability of Working Sample - Ages 55 to 70		**Probability of Receiving Social Security** Sample - Ages 62 to 70		**Probability of Being Retired** Sample - Ages 55 to 70	
Has debt	0.1119***		-0.0088		-0.1028***	
	(0.0115)		(0.0125)		(0.0108)	
Has mortgage		0.0578***		-0.0306**		-0.0478***
		(0.0098)		(0.0128)		(0.0092)
Has credit card debt		0.0447***		0.0448***		-0.0304***
		(0.0099)		(0.0126)		(0.0091)
Has student debt		-0.0056		-0.0530		-0.0232
		(0.0162)		(0.0336)		(0.0153)
Has other debt		0.0433***		-0.0074		-0.0441***
Adjusted R squared	0.2946	0.2950	0.3087	0.3116	0.3887	0.3881
Sample Size	16,006	16,006	7,833	7,833	16,006	16,006

Source: Authors' calculations using the 1989-2016 SCF

<u>Multivariate regression results</u>: Having debt **positively** influences the likelihood of **working**, and **negatively** influences the likelihood of being retired: **nuanced** relationship between debt and **receiving SS benefits**







Source: Authors' calculations using the 1989-2016 SCF; Solid shades significance p<0.01.

Multivariate regression results:

Among those with debt, the value of debt **positively** influences the likelihood of **working**, and **negatively** influences the likelihood of **being retired** or of **receiving SS benefits**

Similar in magnitude effect of a % change in debt, but the dollar value of credit card debt has a stronger effect on retirement decisions than the dollar value of other categories of debt

For a person with median debt **a $10,000 increase** translates to

- an **increase of 0.5** percentage points in the propensity to **work**
- a **decrease of 0.6** percentage points in the propensity of **receiving Social Security**
- or a **decrease of 0.5** percentage points in the likelihood of being **retired**

<u>Multivariate regression results</u>: Among those with debt, the value of debt **positively** influences the likelihood of **working**, and **negatively** influences the likelihood of **being retired** or of **receiving SS benefits**

↑ $10,000 in mortgage debt => ↓0.3pp work; ↓0.4pp retirement; ↓0.1pp SS receipt

↑ $10,000 in credit card debt => ↓9.4pp work; ↓ 11.0pp retirement; ↓ 9.1pp SS receipt

↑ $10,000 in other debt =>↓1.1pp work; ↓1.9pp retirement; ↓1.7pp SS receipt

↑$10,000 in student loan debt – similar in magnitude to other debt but statistically insignificant

<u>Multivariate regression results</u>: Degree of leverage negatively influences the likelihood of being retired, nuanced relationship with SS benefits

Variables	Probability of Working Sample - Ages 55 to 70			Probability of Receiving Social Security Sample - Ages 62 to 70			Probability of Being Retired Sample - Ages 55 to 70		
Log leverage ratio (Debt/Assets)	0.0220			0.0423***			-0.0206		
	(0.0145)			(0.0139)			(0.0135)		
Whether negative networth (Debt>Assets)		0.0189			0.0648*			0.0094	
		(0.0266)			(0.0350)			(0.0227)	
(Omitted category=no debt)									
Has debt (debt<=financial assets)			0.1016***			-0.0295**			-0.0932***
			(0.0122)			(0.0137)			(0.0114)
Has debt (debt>financial assets)			0.1234***			0.0349**			-0.1114***
			(0.0132)			(0.0153)			(0.0123)
Adjusted R squared	0.2857	0.2854	0.2949	0.3061	0.3054	0.3081	0.3814	0.3811	0.3887
Sample size	16,005	16,006	16,006	7,832	7,833	7,833	16,005	16,006	16,006

Multivariate regression results: Household debt associated with higher expected retirement age

Variables	Expected Age of Stopping Full-time Work Sample - Ages 55 to 61					Expected Age of Stopping Work Sample - Ages 55 to 61				
Has debt	0.2361					0.9986*				
	(0.4487)					(0.5397)				
Log debt		0.0504					0.1442***			
		(0.0380)					(0.0462)			
Log leverage ratio (Debt/Assets)			1.8864***					2.6299***		
			(0.4949)					(0.5930)		
Whether negative networth (Debt>Assets)				0.8452					2.0079*	
				(0.7384)					(1.1805)	
(Omitted category=no debt)										
Has debt (debt<=financial assets)					-0.5960					0.0693
					(0.4564)					(0.5569)
Has debt (debt>financial assets)					1.3710***					2.3171***
					(0.4987)					(0.6022)
Adjusted R squared	0.4402	0.4405	0.4426	0.4394	0.4454	0.2444	0.2444	0.2477	0.2426	0.2501
Sample size	5,495	5,495	5,495	5,495	5,495	5,495	5,495	5,495	5,495	5,495

Other Multivariate Regression Results

- Similar effect of household debt across net worth terciles
  - Exception: student loan debt has stronger effect on behavior of workers in the bottom of the wealth distribution

- Can household debt be considered exogenous?
  - Instrumental variable regressions confirm least squares results (Instruments – attitudes towards debt)
  - Specifications in previous literature (e.g. Butrica and Karamcheva 2018, 2013) that address endogeneity reveal similar findings

Conclusion and Discussion

- Consistent with the HRS findings from Butrica and Karamcheva (2018), this study using the SCF finds that indebtedness among older households:
  - Has been increasing over time
  - Is associated with a higher propensity to work, lower likelihood of being retired, and higher expected age of retirement for those still working
- The relationship between household debt and Social Security benefit receipt is more nuanced.

Conclusion and Discussion

- Unlike the HRS, the SCF data suggest a slowing down or reversal of the trend in the years following the Great Recession.

- While the percent change effects are similar, regardless of the source of debt, the dollar amount of credit card debt has a significantly larger effect on work and retirement than a similar dollar amount of mortgage or other debt.

- Rising debt potentially concerning. The likelihood of experiencing a negative event increases with age. Starting retirement with debt could exacerbate the impact of any impending negative shocks.