Debt and Debt Management among Older Adults

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Research Goals

- Evaluate factors associated with debt/debt management for those on verge of retirement.
- Evaluate if/why patterns changed over time.
- Empirical strategy:
  - Health and Retirement Study (HRS)

    3 cohorts of people (age 56-61) at three different time periods: 1992, 2002 and 2008.
  - National Financial Capability Study, 2009 & 2012

Previous Literature

Many papers:

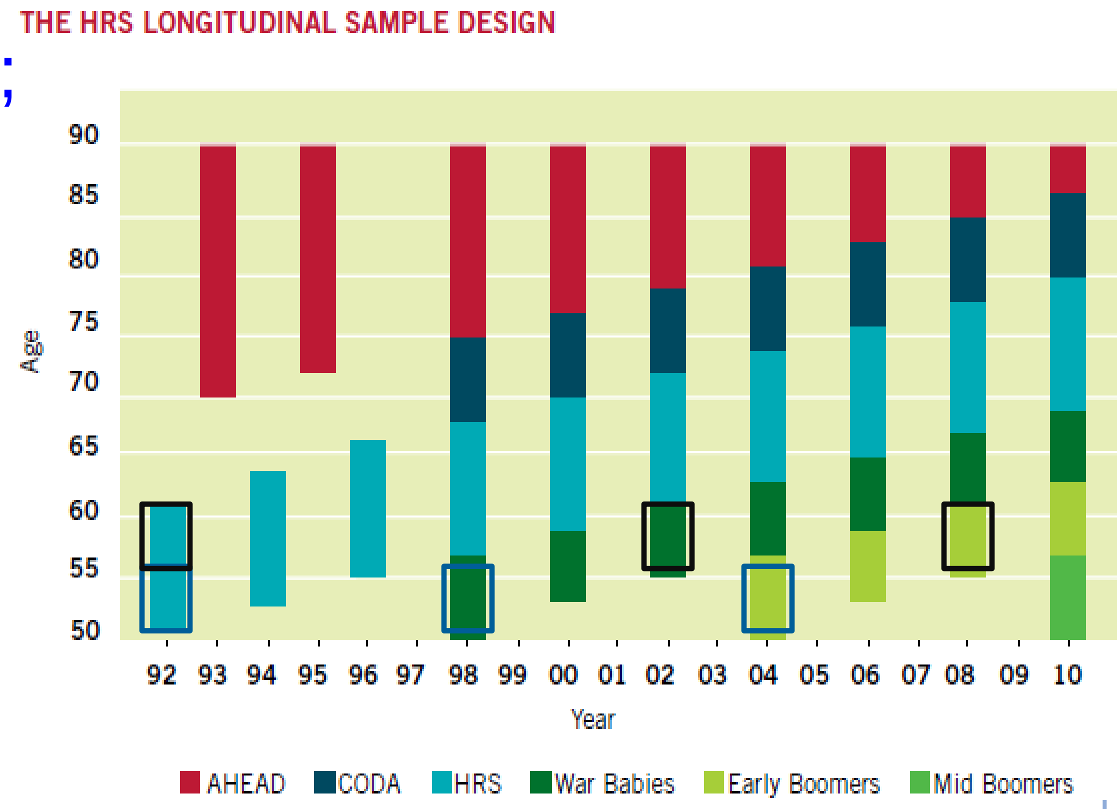
- Bucks/Kennickell/Mach/Moore (2009)
- Agarwal et al (2009), hump-shape profile of mistakes
- Delavande/Rohwedder/Willis (2008) –cognitive function and preparation for retirement
- Lusardi/Mitchell (forthcoming) JEL review.

➔**What's happened to debt over time?**

Health & Retirement Study

- 3 cohorts of 56-61 year olds: *Baseline* HRS in 1992; *War Baby in* 2002; *Early Boomers in* 2008 .

- Different Ns as 1992 HRS survey larger than subsequent groups.
  Results unweighted.



Debt Patterns in HRS

	% debt owners in sample	p50 ($)	p90 ($)
Total debt			
HRS	63.8%	6,218	106,363
War Babies	67.6%	19,147	191,470
Baby Boomers	71.4%	28,259	259,130
Value of all mortgages/land contracts (1y residence)			
HRS	40.5%	0	81,818
War Babies	47.2%	0	165,941
Baby Boomers	47.8%	0	207,944
Value of other home loans (1y residence)			
HRS	10.0%	0	0
War Babies	12.0%	0	10,212
Baby Boomers	16.0%	0	19,195

Value of primary residence

Value of residence	*p50*	*p75*	*p90*
HRS	131,909	212,726	327,271
War Babies	178,706	306,352	478,676
Baby Boomers	213,275	351,904	533,189

More on Rising Debt by Cohort

	% debt owners in total sample	*p50*	*p90*
Value of other debt			
HRS	36.9%	0	8,182
War Babies	37.0%	0	15,318
Baby Boomers	44.4%	0	21,328

Financial Fragility in the HRS

Total debt/Total assets > 0.5	
HRS	9.6%
War Babies	16.0%
Baby Boomers	22.9%
All 1ry res. loans/1ry res value > 0.5	
HRS	17.0%
War Babies	26.4%
Baby Boomers	29.3%
Other debt/Liquid assets >0.5	
HRS	17.5%
War Babies	21.4%
Baby Boomers	28.8%
Respondents with < $25,000 in savings	
HRS	18.0%
War Babies	16.4%
Baby Boomers	24.3%

Multivariate Regression Analysis of Financial Fragility

We study four outcomes:

- Total debt/asset ratio of more than 0.5,
- Ratio of primary residence loans to value of over 0.5;
- Other debt/liquid asset ratio over 0.5
- Total net worth under $25,000.

Full Sample - Factors Associated with Financial Fragility in the HRS

	Total debt/Total	1ry residence ratio > 0.50	Other debt/Liquid assets > 0.50	Total net wealth < $25,000
War babies	0.068 ***	0.074 ***	0.053 ***	0.013
	(0.013)	(0.018)	(0.016)	(0.012)
Early boomers	0.132 ***	0.101 ***	0.127 ***	0.071 ***
	(0.014)	(0.017)	(0.017)	(0.012)
Married	-0.04 ***	-0.038 **	-0.04 ***	-0.214 ***
	(0.011)	(0.015)	(0.014)	(0.012)
Male	0.011	0.034 ***	0.01	0.006
	(0.007)	(0.009)	(0.008)	(0.007)
Childnum	0.004 *	0.014 ***	0.016 ***	0.011 ***
	(0.002)	(0.003)	(0.003)	(0.002)
White	-0.041 ***	-0.032 **	-0.082 ***	-0.13 ***
	(0.012)	(0.016)	(0.017)	(0.013)
Education_hs	-0.02 *	0.012	-0.012	-0.126 ***
	(0.011)	(0.014)	(0.014)	(0.012)
Education_smcl	-0.021	0.022	-0.038 **	-0.158 ***
	(0.015)	(0.018)	(0.018)	(0.014)
Education_gtcl	-0.036 **	0.035	-0.056 ***	-0.158 ***
	(0.017)	(0.023)	(0.020)	(0.015)
Hitot	-0.001 **	0.004 ***	-0.003 ***	-0.004 ***
	(0.001)	(0.001)	(0.001)	(0.001)
Poorhealth	0.051 ***	-0.005	0.083 ***	0.153 ***
	(0.011)	(0.014)	(0.015)	(0.012)
Constant	0.43 ***	0.793 ***	0.592 ***	1.025 ***
	(0.146)	(0.200)	(0.187)	(0.147)
N	7,141	6,022	6,241	7,480
R2	0.045	0.034	0.053	0.254

Married Only Sample - Factors Associated with Financial Fragility in the HRS

	Total debt/Total assets > 0.50		1ry Residence Ratio > 0.50		Other debt/Liquid assets > 0.50		Total net wealth < $25,000	
War babies	0.074	***	0.086	***	0.041	**	0.024	*
	(0.016)		(0.021)		(0.019)		(0.012)	
Early boomers	0.142	***	0.12	***	0.117	***	0.076	***
	(0.017)		(0.021)		(0.020)		(0.014)	
Male	0.029	***	0.051	***	0.025	***	0.006	
	(0.007)		(0.009)		(0.009)		(0.007)	
Childnum	0.006	**	0.016	***	0.019	***	0.013	***
	(0.003)		(0.004)		(0.004)		(0.003)	
White	-0.042	***	-0.037	*	-0.099	***	-0.128	***
	(0.016)		(0.019)		(0.022)		(0.016)	
Education_hs	-0.029	**	0.015		-0.014		-0.097	***
	(0.013)		(0.015)		(0.016)		(0.013)	
Education_smcl	-0.028	*	0.018		-0.022		-0.108	***
	(0.017)		(0.021)		(0.020)		(0.014)	
Education_gtcl	-0.056	***	-0.001		-0.048	**	-0.098	***
	(0.019)		(0.025)		(0.022)		(0.015)	
Hitot	-0.001	**	0.004	***	-0.003	***	-0.004	***
	(0.001)		(0.001)		(0.001)		0.000	
Poorhealth	0.041	***	-0.01		0.085	***	0.114	***
	(0.013)		(0.016)		(0.018)		(0.014)	
Constant	0.524	***	0.728	***	0.756	***	0.707	***
	(0.157)		(0.219)		(0.207)		(0.145)	
N	5,321		4,819		4,779		5,386	
R2	0.049		0.042		0.052		0.146	

Single Only Sample - Factors Associated with Financial Fragility in the HRS

	Total debt/Total assets > 0.50	1ry Residence ratio > 0.50	Other debt/Liquid assets > 0.50	Total net wealth < $25,000
War babies	0.051 **	0.034	0.082 ***	-0.024
	(0.025)	(0.034)	(0.031)	(0.026)
Early boomers	0.104 ***	0.035	0.155 ***	0.058 **
	(0.024)	(0.031)	(0.029)	(0.024)
Age	0.002	-0.015 *	0.006	-0.012 *
	(0.006)	(0.008)	(0.007)	(0.006)
Male	-0.05 ***	-0.045 *	-0.052 **	0.014
	(0.019)	(0.026)	(0.024)	(0.021)
Childnum	-0.003	0.007	0.005	0
	(0.004)	(0.006)	(0.006)	(0.005)
White	-0.035 *	-0.016	-0.046 *	-0.116 ***
	(0.021)	(0.027)	(0.027)	(0.021)
Education_hs	0.007	-0.002	-0.002	-0.183 ***
	(0.023)	(0.030)	(0.031)	(0.025)
Education_smcl	-0.005	0.028	-0.088 **	-0.276 ***
	(0.031)	(0.042)	(0.037)	(0.033)
Education_gtcl	0.011	0.151 ***	-0.085 **	-0.295 ***
	(0.037)	(0.052)	(0.043)	(0.039)
Hitot	-0.002	0.005 **	-0.004 ***	-0.017 ***
	(0.001)	(0.003)	(0.001)	(0.004)
Poorhealth	0.075 ***	0.015	0.077 ***	0.203 ***
	(0.022)	(0.028)	(0.029)	(0.023)
Constant	0.068	1.05 **	-0.072	1.29 ***
	(0.351)	(0.480)	(0.430)	(0.368)
N	1,820	1,203	1,462	2,094
R2	0.03	0.029	0.052	0.222

Findings

1. Early Boomers significantly more financially fragile and War Babies too, than reference group (1992 cohort).

2. Magnitudes of the cohort differences conform well to those in tabulations.

3. Directional conclusions from earlier results are confirmed after including controls for potential differences in socio-demographic factors (these include age, marital status, sex, number of children ever born, race, education, income, and whether in poor health).

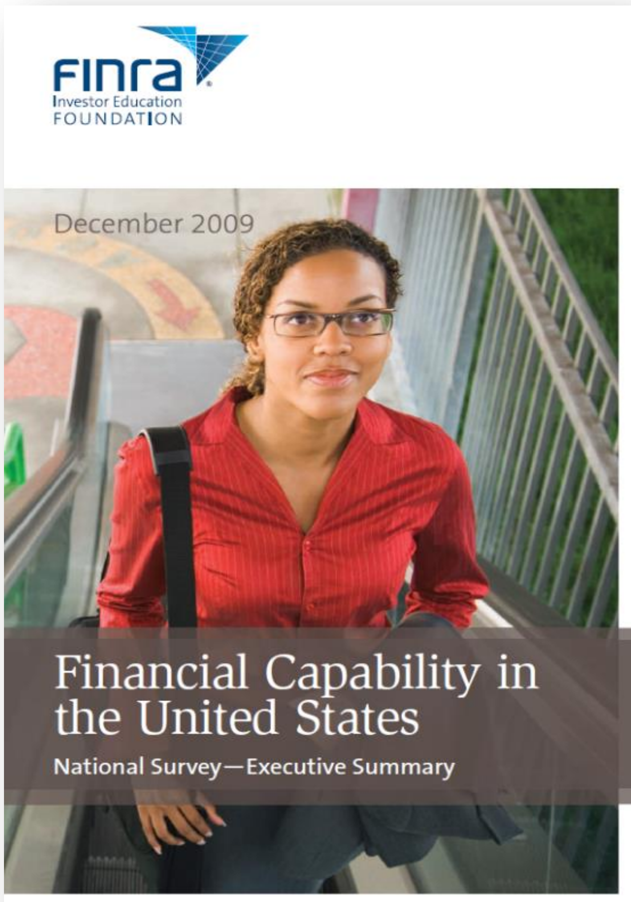
More findings

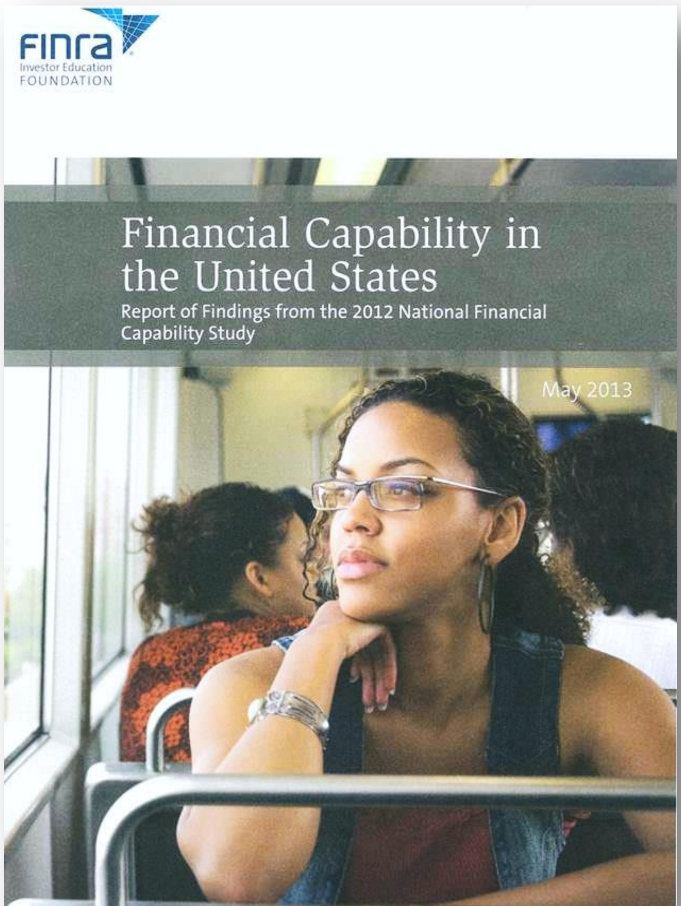
Factors associated with LESS financial fragility: being married, White, better educated, and higher income

Factors significantly associated with greater fragility include having had more children and being in poor health.

National Financial Capability Study (NFCS)

The 2009 and 2012 NFCS





2009 NFCS

The 2009 wave aligns with 2008 HRS respondents 56-61 to prove similarities.

- Over ½ of homeowners approaching retirement with mortgages.
- Downpayments ↓ over time: recent home buyers put down only 5-10%.
- Many older respondents pay only minimums on credit cards.
- Many use high-cost methods of borrowing, such as payday loans, pawn shops, etc.

Evidence from the 2012 NFCS

- 2012 NFCS shows near-retirement respondents a few years after housing market/financial collapse.
- Again focus on respondents age 56-61.
- Many older respondents have high mortgage debt and other debt.

Level and Composition of Self-Reported Household Debt and Debt Concerns

	Age 56-61
Underwater with home value*	17.0%
Credit card fees, at least one type*	31.4%
Loan on retirement accounts*	7.0%
Hardship withdrawal from retirement accounts*	5.7%
Unpaid medical bills	23.4%
High-cost borrowing	21.2%
Too much debt	39.9%
Cannot come up with $2,000	35.5%
N	2,983

Note: The sample includes all age-eligible individuals age 56-61 in the 2012 NCFS. Statistics related to hardship withdrawal and loan and retirement account are conditional to owning a retirement account. Statistics weighted using sample weights.
*** Values conditional on holding the asset or debt.**

Multivariate regression analysis

Dependent variables:

- Too much debt (1=strongly disagree, 7=strongly agree, to I have too much debt right now). Proxies for problems with debt (instead of HRS ratios)
- Indicator = 1 if could not (probably/certainly) come up with $2,000 in an emergency within a month.

Controls:

- Socio-demographic controls + whether respondents experienced large/unexpected income drop previous year + financial literacy.
- All age-eligible individuals age 56-61 in the 2012 NCFS; estimates are weighted using sample weights.

Multivariate Regression Model of Self-assessed Debt (N= 2,940).

How strongly do you agree or disagree with the following statement? 'I have too much debt right now.'"		
	(1)	(2)
Age	-0.080***	-0.079***
	(0.026)	(0.026)
Number of dependent Children	0.236***	0.233***
	(0.056)	(0.056)
Ed. High School	-0.120	-0.071
	(0.221)	(0.221)
Ed. Some College	-0.117	-0.036
	(0.222)	(0.223)
Ed. College or More	-0.237	-0.128
	(0.229)	(0.233)
Income$50k-$75k	-0.418**	-0.365*
	(0.193)	(0.195)
Income $75k-$100k	-0.760***	-0.691***
	(0.221)	(0.224)
Income $100k-$150k	-0.820***	-0.751***
	(0.224)	(0.227)
Income >$150k	-1.359***	-1.280***
	(0.232)	(0.236)
Income Shock	0.750***	0.750***
	(0.107)	(0.107)
Fin. Lit. Index		-0.080**
		(0.038)
Constant	8.986***	9.006***
	(1.572)	(1.571)
R-squared	0.085	0.086

Multivariate Regression Model of Financial Fragility

Dependent variable: Respondent certainly or probably can NOT come up with $2,000 within the next month				
	(1)		(2)	
	Probit	Dy/dx	Probit	Dy/dx
White	-0.319***	-0.090***	-0.276***	-0.077***
	(0.074)	(0.021)	(0.075)	(0.021)
Male	-0.145**	-0.041**	-0.075	-0.021
	(0.064)	(0.018)	(0.066)	(0.018)
Number of dependent Children	0.075*	0.021*	0.073*	0.021*
	(0.042)	(0.012)	(0.042)	(0.012)
Ed. Some College	-0.385***	-0.109***	-0.277*	-0.078*
	(0.141)	(0.040)	(0.143)	(0.040)
Ed. College or More	-0.565***	-0.160***	-0.417***	-0.117***
	(0.145)	(0.041)	(0.150)	(0.042)
Income$50k-$75k	-1.271***	-0.360***	-1.202***	-0.337***
	(0.124)	(0.032)	(0.126)	(0.033)
Income $75k-$100k	-1.623***	-0.459***	-1.536***	-0.430***
	(0.146)	(0.037)	(0.149)	(0.038)
Income $100k-$150k	-2.027***	-0.573***	-1.939***	-0.543***
	(0.167)	(0.042)	(0.169)	(0.042)
Income >$150k	-2.099***	-0.594***	-2.003***	-0.561***
	(0.203)	(0.053)	(0.202)	(0.053)
Income Shock	0.450***	0.127***	0.458***	0.128***
	(0.067)	(0.018)	(0.067)	(0.018)
FinLit Index			-0.111***	-0.031***
			(0.027)	(0.007)
Constant	2.192**		2.228**	
	(1.074)		(1.074)	

Implications and policy relevance

- Recent cohorts: more debt, face more financial insecurity
- Why?
  - Bought more expensive homes with smaller down payments.
  - Use alternative financial services (payday loans, etc.) ; carried credit card debt; borrowed on retirement accounts
- Less debt exposure: higher income, more education, and greater financial literacy
- More financial fragility: more children, poor health, and unexpected large income declines.
- Shocks do play a role in debt accumulation near to retirement. But people also need the capacity to manage those resources

Implications for research on debt

- Most theoretical models focus on savings/portfolio choice but do not devote much attention to debt.
- Analysts and policymakers may want to incorporate debt and debt management into the factors driving retirement security.

Thank you

Financial Literacy: Implications for Retirement Security and the Financial Marketplace
Olivia S. Mitchell and Annamaria Lusardi, Editors