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Understanding Debt in the Older Population

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This project received funding from the TIAA Institute and the Wharton School's Pension Research Countil/ Boettner Center. The content is solely the responsibility of the authors and does not necessarily represent the official views of the above-named institutions.

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Poor financial capability can have important consequences for wellbeing in later life. To explore aspects of financial management related to debt, we have designed and analyzed a new module in the 2018 Health and Retirement Study (HRS). We use these new data, along with information from the 2018 National Financial Capability Study (NFCS), to evaluate the factors associated with debt and debt management close to retirement. We show that a sizeable proportion of older Americans carry debt in the form of student loans and unpaid medical bills. We also find that women and Nonwhites are more likely to report feeling financially distressed, across a range of self-assessed measures. In addition, we see that having children contributes to older persons' indebtedness, even on the verge of retirement. Income shocks are predictive of negative financial perceptions and behaviors such as feeling over-indebted, being contacted by a debt collector, having student loans for themselves or partners, and carrying medical debt. By contrast, the more financially literate have more positive financial perceptions and behaviors. Specifically, being able to answer one additional financial literacy question correctly is associated with a higher probability by 3-6 percentage points of reporting an above average credit record and planning for retirement. Therefore, people also need financial knowledge to limit their debt exposure at older ages.

GW Business

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Understanding Debt in the Older Population

Recent research has demonstrated that older Americans are increasingly likely to carry debt into retirement, and over time, the volume of household debt has also grown substantially (Lusardi and Mitchell, 2013, 2017, forthcoming; Lusardi, Mitchell, and Oggero, 2018, 2019). This reality is giving rise to concerns regarding retirement security, for several reasons. For one, the increased debt burden may affect how much older persons can contribute to their retirement accounts and how they will manage their retirement savings. Additionally, when interest rates rise, near-retirees and retirees will be required to allocate larger fractions of their income to service their debts. Rising debt can also prompt delayed retirement in order to recover one's financial standing.

In this paper, we first evaluate an experimental debt module that we devised and fielded in the 2018 US Health and Retirement Study (HRS), seeking to better understand older persons' attitudes toward and understanding of debt. To this end, we have developed a new set of questions permitting us to examine how people perceive their financial situations and the role of debt in their financial circumstances. While there are many studies about wealth and wealth accumulation, we know much less about debt and debt management, and many data sets provide only information on highly aggregated measures of debt.[1] In our module, by contrast, we are able to examine the prevalence of debt in the form of student loans and unpaid medical bills, evaluate peoples' assessment of their credit records, and examine their understanding of fundamental concepts such as interest compounding. This information is helpful in evaluating debt and debt management close to retirement. Second, we explore data for the same age group from the 2018 National Financial Capability Study (NFCS), a survey we also helped

[1] For some of the few exceptions to this point, see M. Brown et al. (forthcoming), J. Brown, Dynan, and Figinski (forthcoming), and Li and White (forthcoming).

design and that provides additional information that can help us understand debt among older respondents, in addition to assessing whether findings from our module are confirmed in larger samples.

We confirm that many people carry debt close to retirement, including unpaid medical debt and student loans. For many older respondents, debt is felt to be excessive; moreover, many had not given any thought to debt 10 years previous. There are also several signs of financial distress and mismanagement, including being contacted by debt collectors, and feeling unsatisfied about peoples' own financial situations. Having children, low education and income, and being female is linked to these financial outcomes.

The NFCS data confirm our HRS findings regarding the prevalence of negative financial perceptions and behaviors among older Americans. We show that having children and facing income shocks are predictive of people feeling over-indebted, as well as being contacted by debt collectors, having outstanding student loans, and carrying medical debt. Conversely, we show that financial literacy is a factor contributing to positive financial perceptions and behaviors, such as reporting an above average credit record and planning for retirement. In the 2018 NFCS, we also find that women and African Americans tend to be those most financially distressed at older ages, thus more in need of assistance with financial management.

The paper is organized as follows: first we describe our findings from the 2018 HRS debt module, reporting descriptive statistics and also results from a multivariate analysis to assess whom is most affected by debt and financial outcomes related to debt. We then turn to the NFCS, to assess whether the HRS results are confirmed in this larger sample of older respondents (also age 51-61), and to shed additional lights on the effects of debt close to retirement. A final section offers a discussion and conclusions.

Methodology and Data

The HRS is a nationally representative longitudinal survey following older Americans over the age of 50 every other year, until they die or otherwise attrite from the sample. Our 2018 HRS experimental module on debt was offered to 1,679 survey participants; of these, 1,336 individuals agreed to fill it out, for an 80% response rate. The module tries to shed more light on the causes and consequences of debt late in life and whether, in the spirit of basic intertemporal models of decision-making, people anticipated having the amount of debt they currently have. Specifically, the module incorporated a set of questions we devised about whether people were satisfied with their financial conditions, whether they believed they had too much debt, how they rated their credit records, and whether they had student loans outstanding (on their own account, or for partners/children/grandchildren). In addition, we asked them whether they had unpaid past due medical bills, and whether they had been contacted by a debt collector. We also asked whether these respondents had anticipated having the level of debt they currently held, to focus on this specific component of a balance sheet. Finally, our module asked a question about interest rates in the context of debt, namely whether people knew how many years it would take for a loan at 20% to double, to assess whether basic financial knowledge that is most relevant for debt and debt management matters. In other papers, we have provided a framework for decisions related to debt and also documented several facts about debt close to retirement. In this paper, we aim to shed additional light on this topic and, in particular, try to understand the implications of carrying debt close to and into retirement, and whether for example the high amounts of debt we observe close to retirement should be cause for concern.

Here we focus on respondents age 51-61, so to be able to study respondents before they can withdraw Social Security benefits. We then linked the responses to a rich variety of other variables available in the HRS for these same respondents, to generate insights into which socio-economic groups face most trouble with regard to debt, and the extent to which they know it.

Some, but not all, of the HRS module questions were also asked in the NFCS, an online survey commissioned by the FINRA Investor Education Foundation. Here we use the latest wave collected in 2018 to assess the quality of the data using the same age range as in the HRS, but for a larger set of observations (FINRA, 2018). This survey provides unique information on how households manage their assets and liabilities, including subjective measures of financial distress and debt burden. In particular, the 2018 NFCS added several new questions about how people describe their personal financial situations. For example, the new queries measure financial anxiety, stress and concern, whether people are just getting by financially or have no money left at the end of the month. The NFCS also asked individuals a set of questions aimed to measure financial well-being. Additionally, it offers a rich set of data on the potential determinants of financial perceptions and behaviors, such as socio-demographic characteristics and income shocks. And finally and very importantly, since its inception in 2009, the NFCS has included a set of financial literacy questions, also known as the Big Five (Hastings, Madrian, and Skimmyhorn, 2013), permitting us to assess respondents' understanding of simple interest, inflation, risk diversification, bond prices, and mortgages. In more recent waves, there is also a question on interest compounding in the context of debt, which was included in the HRS module. For the present purposes, we focus on 4,422 respondents age 51-61 who provided information on financial literacy and financial capability.

For both sets of survey responses, we first offer a descriptive overview of the data, followed by a multivariate analysis of the responses to the new questions of key interest here. The key survey questionnaires are provided in the Appendix.

Debt at Older Ages in the HRS

The bottom panel of Table 1 reports the demographic characteristics of our HRS sample.[2]

[2] Appendix Table A defines and describes all key HRS variables.

About 58% of the respondents were women; most were married, white, and had at least a high school degree. Moreover, many respondents (69%) stated they were in good health or better. Household income averaged $103,000 and average net assets amounted to $274,000. The top panel of Table 1 provides an overview of key financial perceptions and behaviors, differentiating between positive versus negative financial perceptions.[3] Starting with the positive outcomes, we find that only about one quarter (24%) of the HRS respondents in our age range (51-61) were completely/very satisfied with their personal financial situations, and only around two-fifths (39%) believed they had very good/excellent credit scores.

Table 1 here

Turning to the negative perceptions, we find that about two-fifths (41%) of respondents agreed/strongly agreed that they had too much debt, and almost one quarter (23%) said that they had been contacted by a bill collector in the last year. These are high percentages, given that these are older respondents who should be close to the peak of their wealth accumulation. About one quarter (24%) indicated that they had unpaid/past due bills from a healthcare or medical service provider, while 15% had outstanding student loans for themselves or partners. We consider outstanding student loans as a negative behavior because of the age range we are considering, with only limited possibilities to take advantage of long-term payoffs from education. Overall, we find that debt looms large for substantial groups of pre-retirees, perhaps because of their inability to manage their debt appropriately.

This interpretation is supported by our additional evidence about older persons' lack of understanding regarding interest compounding, in the context of debt. When they were asked how long it takes for debt to double if a loan's interest rate was 20 percent, fewer than one third (31%) of our older respondents could answer this correctly. Evidently, financial illiteracy regarding compound interest is a

[3] We focus here on persons age 51-61 to complement as closely as possible the results in the NFCS reported in the next section.

widespread phenomenon, even in the older population, despite the fact that this group had likely already dealt with several types of debt over their lifetimes.

The top panel of Table 2 reports the extent of heterogeneity in positive financial perceptions and behaviors among this older population. Generally speaking, those who were more financially satisfied were men, the college-educated, those with higher incomes, and Whites. A similar pattern applies to peoples' beliefs that they had a good credit score; in fact, Whites were twice as likely to report having a good credit score compared to Nonwhites. The least-educated systematically reported less satisfaction with personal finance and worse credit scores.

Table 2 here

The lower panel of Table 2 reports which types of respondents felt they had too much debt. Women, less-educated, low-income, and Nonwhites are all far more likely to report feeling that they are overburdened by debt, with the largest difference between Whites (37%) versus Nonwhites (47%).

Whereas almost one-quarter (23%) of this population had been contacted by a debt collector, the rate was higher (31%) among low-income households and high school dropouts. Women were much more likely (29%) to report having unpaid medical bills than men (20%), low-income respondents were more likely (33%) than their highest paid counterparts (13%), and Nonwhites (28%) than Whites (21%). Differences by socio-demographics were narrower for student loans, though again 17% of the women said they held these, versus 12% of the men. Unsurprisingly, the college-educated and higher paid were more likely to have student loans. The final row of Table 2 shows that two-thirds (66%) of the respondents indicated that 10 years earlier, they had given no thought to how much debt they would hold today, and the lack of thought to debt was more prevalent among the least-educated (76%), the low-income (79%) and Nonwhites (77%). In sum, a majority of the HRS respondents confirmed that they devoted very little attention to financial planning, including planning related to debt, for later life.

To assess whether peoples' positive and negative financial perceptions and behaviors are associated with one another, Table 3 reports simple correlations between the key outcomes measured in the HRS module. Being satisfied with one's personal finances is positively related to having a good credit score, and negatively correlated with reporting too much debt. The highest correlation (0.55) observed is between people having unpaid medical bills and being contacted by debt collectors. Overall, the results are commensurate with expectations: the least financially satisfied also had student loans, unpaid medical bills, and had been contacted by debt collectors. They also were less likely to have given thought to debt 10 years previously. Thus, debt and debt management behaviors appear to have serious implications for older people's financial situation and well-being. Next we examine how well we can explain these outcomes.

Table 3 here

Tables 4 and 5 offer multivariate analyses of the positive and negative financial perceptions and behaviors, respectively. In each case, we estimate OLS models as the means of the dependent variables are relatively far from 0 and 100, so nonlinear models are not essential (and the OLS models are easier to interpret). The first column of the tables includes only socio-demographic controls, an indicator of whether the respondent knew the correct answer to the interest compounding question, and household income indicators (by quartile). The subsequent column includes all of those controls and adds total net wealth (by quartiles), to account broadly for different levels of resources.

Tables 4 and 5 here

Table 4 focuses on two outcomes: whether people reported that they were personally financially satisfied, and whether they believed that their credit score was at least good or better. Education, marital status, and race were not consistently associated with positive financial outcomes. Nevertheless, having more children was negatively associated with both personal satisfaction and credit scores. Being in good/excellent health was associated with positive financial satisfaction and having better credit scores,

as was higher wealth. Interestingly, the variable measuring knowledge of interest compounding was not statistically significant with either key outcome. All told, our set of controls account for at most one quarter of the variation in outcomes.

Results in Table 5 summarize the factors associated with four negative financial perceptions and behaviors, namely whether the respondent said he had too much debt, had been contacted by a debt collector, had unpaid medical bills, or had a student loan (for self or partner). As we saw in the simple correlational analysis above, women were more likely to indicate they had unpaid medical bills, and older people were less likely to report having too much debt. Nevertheless, relatively few controls are systematically and robustly linked to negative financial outcomes. Those with more children were weakly more likely to having been contacted by a debt collector, but not to having unpaid medical bills or student loans. Those with some college were more likely to report having unpaid medical bills and student loans, holding other factors constant, and those in good health were less likely to report being contacted by debt collectors. Moreover, the lowest-income households were not more likely to report negative financial outcomes, though being wealthier was strongly correlated with fewer negative outcomes. No racial differences was detected in these models either, after controlling on other factors. Additionally, as before, knowing about interest compounding and debt was not statistically associated with having fewer negative outcomes. In sum, then, it appears there is no single strong driver of the negative financial perceptions and experiences summarized in Table 5; also, these variables can account for at most 15 percent of the variation in these outcomes. Thus, we may need to go beyond preferences and economic circumstances to understand debt and outcomes related to debt.

In Table 6 we report the multivariate OLS estimates of a model where a response is coded as equal to 1 if the respondent had given no thought to debt 10 years prior, and 0 otherwise. Here we see that older individuals were more likely to have thought about debt, as were Whites and the better-educated. No significant differences were found for women, those in better health, or by income;

moreover, only those in the highest wealth quartile appeared to have thought about debt a decade previously. And finally, those who answered the interest compounding question were no more likely to have thought about debt ten years previously compared to their less informed counterparts.

Table 6 here

In sum, the HRS module confirms that a sizeable proportion of older Americans expresses negative financial perceptions and carries debt, including student loans and unpaid medical bill, despite their being on the verge of retirement. Debt management is also a concern, in view of the fact that such large segments of the population report being contacted by debt collectors, thought they had too much debt, and had not thought much about debt ten years prior. We turn now to the NFCS, with its larger number of observations and additional information to help us understand other facets of debt behavior close to retirement.

Findings in the NFCS

The NFCS sample size for the same age group is roughly 10 times larger than the HRS module examined above, which suggests that estimated effects may be measured with more precision than in the smaller sample. Moreover, the NFCS include additional questions relevant to understanding debt and debt management. For example, the NFCS included the Big Five financial literacy questions (Lusardi and Mitchell, 2014) which were not available for our HRS debt module respondents, and it also included the interest compounding question. It also contains a set of questions related to self-assessed financial well-being.

We start by examining the questions most similar to those in the HRS module. The top panel of Table 7 shows that only 33% of the older NFCS respondents were satisfied with their personal financial conditions (answering 8 to 10 out of a 10-point scale), a percentage that is similar to the that reported in

our HRS Module. Almost three-fourths of the NFCS sample (70%) believed it had above average credit records, and more than half (55%) had ever tried to figure out how much to save for retirement.

Table 7 here

While the top panel of Table 7 displays positive financial perceptions and behaviors, the lower panel reports negative situations. Once again, the NFCS data confirm the HRS results: over one-third (36%) of older adults reported being over-indebted. Specifically, on a scale from 1 to 7, they answered 5, 6, or 7 to the question: "How strongly do you agree or disagree with the following statement: 'I have too much debt right now.'" Finally, 15% had been contacted by a debt-collection agency in the previous year, 20% had unpaid medical bills that were past due, and 9% had student loans for themselves or spouses and partners. Again, these percentages are consistent with the HRS results and confirm that older Americans are likely to carry debt into retirement. Appendix Table B provides summary statistics on socio-demographics of the NFCS analysis sample.

The NFCS also asked respondents the interest compounding question cited above. Here we find that fewer than one-third (32%) of older adults could answer the question correctly, and 43% overestimated the amount of time it would take for debt at 20% to double (consistent with the percentage reported in the HRS, i.e., 45%). Accordingly, both datasets confirm that older people have limited knowledge about interest compounding, even though many hold debt close to retirement. When we look at the Big Five financial literacy questions, we find that older respondents are also uninformed about simple economic concepts such as the working of inflation, risk diversification, mortgages, and basic asset pricing. On average, older respondents were able to answer only 3.25 of the five financial literacy questions.

Table 8 provides an overview of some other indicators in the NFCS, to provide more insight into these older respondents' financial situations and well-being. We find that 50% of respondents on the verge of retirement reported that they were anxious about their personal finances, and 40% stated they

were stressed about financial matters. More than one-fourth (27%) reported lacking things they wanted due to insufficient money, while almost a third (32%) indicated they were only "getting by" financially. Moreover, 40% were concerned about running out of money, 28% believed that finances controlled their lives, and over a quarter (29%) said they had no money left over at the end of the month. Finally, 8% reported that they were uncomfortable asking questions about financial products. Thus, as with the HRS results above, we again see strong signs of low financial wellbeing among the older population.

Table 8 here

Simple correlations between these distress indicators are provided in Table 9, where we find that many of these factors are strongly associated. For instance, people who were anxious about their finances were also stressed about their finances (0.71), concerned about running short (0.52), felt finances ran their lives (0.42), and had no money left at the end of the month (0.34). Table 10 offers some additional partial correlations between these indicators and sex, education, and income. Not surprisingly, the groups most anxious and stressed about finances were women, the least educated, and those with low income.

Tables 9 and 10 here

Tables 11 and 12 dig more deeply into the NFCS data using multivariate models of individuals' financial perceptions and behaviors, similar to the analysis above using the HRS module. Here we explore both positive and negative outcomes using socio-demographic controls similar to those in the HRS analysis, along with two additional important pieces of information available only in the NFCS. The first indicates whether respondents had experienced a large and unexpected income drop in the previous year, and the second one is a comprehensive measure of respondents' financial knowledge. In particular, we constructed a financial literacy index ("Big 5 FinLit"), which is the sum of the correct answers to the Big Five financial literacy questions.[4] In addition, we include a separate question identical to that asked in the HRS module, on interest compounding knowledge.

[4] Appendix B reports the Big Five financial literacy questions.

Tables 11 and 12 here

In Table 11 we report the estimates about positive perceptions and behaviors, where responses equal 1 if the respondent indicated being satisfied with his personal finances or if he stated that he had at least a good credit score, and 0 otherwise. In the NFCS, we have information on retirement planning and we consider that variable as well, as our previous work indicated that planning is strongly linked to positive outcomes, such as higher wealth accumulation (Lusardi and Mitchell, 2014). In this case, we use a dummy equal to 1 if the respondent had planned for retirement, and 0 otherwise. As in the HRS analysis, we use OLS estimation. Confirming the HRS evidence, older people are more likely to be satisfied with their personal financial conditions and more likely to report having a good credit score. The larger NFCS sample size provides additional statistical power to the results here, in that married persons were more likely to have positive financial perceptions, whereas singles were less likely to have planned for retirement, and separated/widowed individuals were less satisfied with their personal finances and credit scores. Having more dependent children contributed to poorer financial satisfaction, lower credit scores, and less retirement planning. We also show that African-Americans were significantly less sanguine about their financial situations. Interestingly, respondents with more education were more likely to report good credit scores and be more likely to plan for retirement, but their financial satisfaction was no better than average. Persons having experienced an income shock in the previous year were also less likely to report good credit scores and financial satisfaction.

As noted above, the NFCS includes the questions needed to construct respondents' financial literacy index, which we lacked in the HRS module. In the NFCS, this index was positively related to reporting good credit scores and planning for retirement, even above and beyond the role of education. In particular, being able to answer one additional financial literacy question correctly was associated with a 3-6 percentage point higher probability of reporting these two positive financial perceptions and behaviors. We should also note that those who could answer the interest compounding question correctly

were not systematically more likely to express positive views of their financial conditions, but they were more likely to say they planned for retirement. We conclude, therefore, that the interest compounding question is insufficient to capture financial knowledge affecting older persons' debt outcomes. Instead, a more comprehensive set of financial literacy questions is needed to explain debt at older ages.

Table 12 displays multivariate analyses of four negative perceptions and behaviors related to one's debt position, using the NFCS data. Here we see that older individuals were significantly less likely to report having too much debt, being contacted by a debt collector, hold medical debt, and have student loans for themselves or partners. The fact that indebtedness and over-indebtedness decrease as people age echoes what we found in the HRS and other papers as well (Lusardi, Mitchell, and Oggero, 2019). This implies that debt continues to be repaid at older ages, though debt remains pervasive among people approaching retirement.

Here we also see that that having dependent children strongly contributes to feeling over indebted, even for older individuals. African Americans were more likely to be contacted by a debt collector and have unpaid medical bills as well as student loans, even after controlling on income. Interestingly, we find that people reporting an income shock were much more likely to report all four negative outcomes, exacerbating their debt situations. By contrast, those scoring higher on the financial literacy index questions were less likely to report negative debt perceptions, while those who knew the correct answer to the interest compounding question did not differ, overall, from those who did not. Accordingly, we conclude that having basic and general financial literacy helps limit debt exposure at older ages. For negative outcomes, we are able to explain up to 14 percent of the variation in the dependent variables.

Given the large sample size in the NFCS, we can also consider a narrower age group (56-61) to look at respondents very close to retirement, to see whether results change substantially and whether debt appears concentrated among those in the younger versus the older age group. In results not detailed

here, we show that findings are similar overall, i.e., there is evidence of distress related to debt even in this older age group.[5]

Conclusions

In sum, our analysis of these two invaluable datasets on older Americans confirms that many older respondents continue to carry debt close to retirement. Many felt that the debt they held was excessive and created problems and stress, including being contacted by debt collectors. Our analysis confirmed the importance of demographic characteristics, such as having children, being Nonwhite, having low income, and being separated or divorced as drivers of negative outcomes. The NFCS dataset also highlighted the negative role of being hit by shocks, and the positive impact of financial literacy. Specifically, the more financially literate reported more positive financial perceptions and behaviors: being able to answer one additional financial literacy question correctly was associated with a 3-6 percentage point greater probability of reporting an above average credit record and planning for retirement. Accordingly, it is clear that older people also require financial knowledge if they are to better manage their debt exposure.

To date, the economics literature has devoted relatively little attention to debt and debt management, particularly at older ages. Therefore our project has contributed to knowledge by identifying which older individuals may need assistance coping with money mismanagement problems, and we also explored how guidance and programs can be used to enhance financial literacy, capability, and retirement planning/saving outcomes. In other words, in addition to focusing on retirement savings as a means to enhance retirement security, it is also crucial to understand debt at older ages.

More generally, additional attention could be devoted to older peoples' complete balance sheets if we are to better understand how well people are positioned to manage their finances in retirement. For

[5] For brevity, findings are not reported here in detail, but are available from the authors upon request.

instance, in view of the incidence of older peoples' medical debt, more attention could be brought to bear on how to better protect against health shocks in later life. Moreover, the extent and prevalence of student loans at older ages could benefit from additional policymaker attention. Finally, employer-provided retirement security programs could explore not only how to foster savings, but also to help protect against high debt nearing retirement, particularly at a time when interest rates may be rising. Enhancing financial literacy is also likely to help improve a variety of debt related outcomes at older ages.

In sum, our analysis shows clearly that many older people suffer from financial distress and anxiety. Beyond age 50, people might be expected to be nearing their peak wealth, rather than climbing a mountain of debt.

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Table 1. Descriptive statistics on key variables: HRS

	N	Mean	St Dev
Positive financial perceptions and behaviors			
Personal finance satisfaction	444	0.24	0.43
Good credit score	419	0.39	0.49
Negative financial perceptions and behaviors			
Too much debt	444	0.41	0.49
Contacted by a debt collector	442	0.23	0.42
Unpaid medical bills	445	0.24	0.43
Own/partner student loan	445	0.15	0.36
No debt thought	436	0.66	0.47

	N	Mean	St Dev
Female	446	0.58	0.49
Age	446	56.71	2.81
Married	446	0.57	0.50
Number of children	446	2.52	1.74
White	446	0.57	0.50
Hispanic	446	0.18	0.39
<High school	446	0.13	0.34
High school	446	0.30	0.46
Some college	446	0.29	0.45
≥College	446	0.27	0.44
Good health	446	0.69	0.46
HH income (/100k, 2018$)	446	1.03	3.92
Interest compounding knowledge	446	0.31	0.46
Total net assets (/100k, 2018$)	446	2.74	7.61

Source: N=446 HRS respondents (age 51-61) to the 2018 Debt Module.

Table 2. Demographics of self-reported financial behaviors and perceptions: HRS (%)

	Total	Male	Female	≤High school	Some college	≥College	Income <$35K	Income $35K-75K	Income >$75K	White	Non-white
Positive financial perceptions and behaviors											
Personal finance satisfaction	23.6	25.3	22.5	21.6	20.0	30.8	13.7	25.0	30.8	26.8	19.5
Good credit score	38.7	39.0	38.4	26.4	43.2	52.9	18.2	34.1	55.5	50.6	22.2
Negative financial perceptions and behaviors											
Too much debt	41.0	38.2	43.0	45.1	39.2	36.1	50.6	38.5	34.5	36.6	46.8
Contacted by a debt collector	23.3	20.4	25.4	27.6	23.1	16.7	30.7	26.3	16.0	21.4	25.8
Unpaid medical bills	23.8	16.7	29.0	23.6	30.0	17.5	32.5	31.3	13.3	20.5	28.3
Own/partner student loan	15.3	12.4	17.4	7.2	16.9	26.7	9.7	26.0	14.4	14.6	16.1
No debt thought	66.3	63.7	68.1	76.0	63.0	53.8	78.5	71.3	54.4	58.3	76.7
N	*446*	*187*	*259*	*196*	*130*	*120*	*154*	*96*	*196*	*254*	*192*

Sample: HRS respondents (age 51-61) to the 2018 Debt Module.

Table 3. Correlation of self-reported financial behaviors and perceptions: HRS

	Personal finance satisfaction	Good credit score	Too much debt	Contacted by a debt collector	Unpaid medical bills	Own/partner student loan	No debt thought
Personal finance satisfaction	1.00						
Good credit score	0.27	1.00					
Too much debt	-0.30	-0.30	1.00				
Contacted by a debt collector	-0.21	-0.35	0.26	1.00			
Unpaid medical bills	-0.21	-0.34	0.35	0.55	1.00		
Own/partner student loan	-0.08	-0.15	0.15	0.08	0.08	1.00	
No debt thought	-0.13	-0.29	0.19	0.06	0.17	0.07	1.00

Sample: HRS respondents (age 51-61) to the 2018 Debt Module.

Table 4. Multivariate analysis of positive financial perceptions and behaviors: HRS

	Personal finance satisfaction (0/1)		*Good credit score (0/1)*	
	(1)	(2)	(3)	(4)
Female	-0.010	-0.010	0.003	0.007
	(0.042)	(0.041)	(0.045)	(0.045)
Age	0.016 **	0.015 **	0.012	0.011
	(0.007)	(0.007)	(0.008)	(0.008)
Married	0.014	-0.010	0.126 **	0.075
	(0.048)	(0.048)	(0.052)	(0.054)
Number of children	-0.025 **	-0.021 **	-0.037 ***	-0.028 **
	(0.011)	(0.010)	(0.013)	(0.013)
White	0.055	0.036	0.199 ***	0.162 ***
	(0.041)	(0.040)	(0.046)	(0.046)
Hispanic	0.046	0.054	-0.038	-0.044
	(0.057)	(0.054)	(0.058)	(0.061)
High school	-0.043	-0.049	-0.033	-0.047
	(0.064)	(0.062)	(0.068)	(0.069)
Some college	-0.107	-0.137 **	0.024	-0.023
	(0.068)	(0.066)	(0.076)	(0.075)
≥College	-0.017	-0.057	0.043	-0.025
	(0.078)	(0.075)	(0.082)	(0.081)
Good health	0.138 ***	0.124 ***	0.127 **	0.120 **
	(0.040)	(0.041)	(0.050)	(0.049)
HH income 2nd quartile ($24-60K)	0.098 *	0.077	0.093	0.054
	(0.055)	(0.056)	(0.063)	(0.066)
HH income 3rd quartile ($60-113K)	0.123 *	0.081	0.106	0.031
	(0.068)	(0.072)	(0.072)	(0.074)
HH income 4th quartile (>$113K)	0.106	-0.022	0.243 ***	0.094
	(0.070)	(0.078)	(0.080)	(0.090)
Interest compounding knowledge	-0.012	-0.003	0.048	0.056
	(0.043)	(0.042)	(0.047)	(0.047)
Total net wealth 2nd quartile ($10-94K)		0.027		0.068
		(0.051)		(0.064)
Total net wealth 3rd quartile ($94-281K)		0.065		0.266 ***
		(0.063)		(0.073)
Total net wealth 4th quartile (>$281K)		0.292 ***		0.328 ***
		(0.075)		(0.083)
Intercept	-0.758 *	-0.710 *	-0.589	-0.574
	(0.410)	(0.401)	(0.459)	(0.453)
N	444	444	419	419
R-sq	0.10	0.14	0.23	0.27
Mean of dep. var.	0.236		0.387	
Std. dev. of dep. var.	0.425		0.488	

Sample: HRS respondents (age 51-61) to the 2018 Debt Module.

Table 5. Multivariate analysis of negative financial perceptions and behaviors: HRS

	Too much debt (0/1)		*Contacted by a debt collector (0/1)*		*Unpaid medical bills (0/1)*		*Own/partner student loan (0/1)*	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Female	0.042	0.040	0.042	0.042	0.117 ***	0.113 ***	0.039	0.036
	(0.047)	(0.048)	(0.040)	(0.040)	(0.039)	(0.039)	(0.034)	(0.034)
Age	-0.032 ***	-0.031 ***	-0.004	-0.003	-0.012 *	-0.012 *	-0.006	-0.006
	(0.008)	(0.008)	(0.007)	(0.007)	(0.007)	(0.007)	(0.006)	(0.006)
Married	0.039	0.082	-0.127 **	-0.106 **	-0.053	-0.013	-0.052	-0.022
	(0.055)	(0.056)	(0.049)	(0.051)	(0.049)	(0.051)	(0.040)	(0.039)
Number of children	0.027 *	0.021	0.028 **	0.024 *	0.013	0.010	0.016	0.013
	(0.014)	(0.014)	(0.014)	(0.014)	(0.014)	(0.014)	(0.010)	(0.010)
White	-0.080	-0.051	0.006	0.021	-0.069	-0.048	-0.038	-0.022
	(0.049)	(0.050)	(0.043)	(0.044)	(0.043)	(0.044)	(0.037)	(0.037)
Hispanic	-0.065	-0.061	-0.023	-0.022	-0.021	-0.026	-0.005	-0.008
	(0.060)	(0.060)	(0.056)	(0.057)	(0.056)	(0.059)	(0.039)	(0.040)
High school	0.065	0.078	-0.029	-0.023	0.047	0.055	0.032	0.038
	(0.077)	(0.076)	(0.075)	(0.075)	(0.071)	(0.071)	(0.041)	(0.044)
Some college	0.061	0.096	-0.037	-0.018	0.162 **	0.185 **	0.125 **	0.144 ***
	(0.081)	(0.080)	(0.078)	(0.079)	(0.077)	(0.076)	(0.049)	(0.052)
≥College	0.042	0.095	-0.051	-0.021	0.070	0.105	0.231 ***	0.260 ***
	(0.087)	(0.085)	(0.080)	(0.081)	(0.079)	(0.079)	(0.057)	(0.060)
Good health	-0.096 *	-0.079	-0.173 ***	-0.165 ***	-0.085 *	-0.065	0.024	0.037
	(0.057)	(0.058)	(0.054)	(0.055)	(0.051)	(0.050)	(0.040)	(0.040)
HH income 2nd quartile ($24-60K)	-0.147 **	-0.111	0.076	0.093	-0.010	0.034	0.031	0.062
	(0.071)	(0.072)	(0.065)	(0.068)	(0.066)	(0.067)	(0.049)	(0.053)
HH income 3rd quartile ($60-113K)	-0.067	0.000	0.093	0.127 *	-0.086	-0.015	0.027	0.079
	(0.080)	(0.081)	(0.071)	(0.075)	(0.070)	(0.073)	(0.059)	(0.065)
HH income 4th quartile (>$113K)	-0.208 **	-0.074	-0.008	0.067	-0.172 **	-0.056	-0.004	0.084
	(0.084)	(0.091)	(0.070)	(0.080)	(0.073)	(0.078)	(0.058)	(0.070)
Interest compounding knowledge	-0.022	-0.030	0.057	0.052	0.081 *	0.070	-0.041	-0.049
	(0.050)	(0.049)	(0.042)	(0.043)	(0.043)	(0.043)	(0.036)	(0.037)
Total net wealth 2nd quartile ($10-94K)		-0.067		-0.024		-0.150 **		-0.099 *
		(0.072)		(0.070)		(0.068)		(0.055)
Total net wealth 3rd quartile ($94-281K)		-0.219 ***		-0.101		-0.190 **		-0.142 **
		(0.079)		(0.076)		(0.075)		(0.061)
Total net wealth 4th quartile (>$281K)		-0.288 ***		-0.162 **		-0.280 ***		-0.207 ***
		(0.084)		(0.081)		(0.076)		(0.072)
Intercept	2.274 ***	2.258 ***	0.519	0.503	0.918 **	0.956 **	0.362	0.384
	(0.489)	(0.485)	(0.416)	(0.417)	(0.424)	(0.420)	(0.330)	(0.333)
N	444	444	442	442	445	445	445	445
R-sq	0.09	0.12	0.10	0.12	0.12	0.15	0.08	0.10
Mean of dep. var.	0.410		0.233		0.238		0.153	
Std. dev. of dep. var.	0.492		0.423		0.426		0.360	

Sample: HRS respondents (age 51-61) to the 2018 Debt Module.

Table 6. Multivariate regression model of no debt thought: HRS

	No debt thought (0/1)	
	(1)	(2)
Female	0.048	0.049
	(0.047)	(0.046)
Age	-0.021 ***	-0.020 ***
	(0.008)	(0.007)
Married	-0.120 **	-0.099 *
	(0.050)	(0.051)
Number of children	0.026 **	0.022 *
	(0.013)	(0.013)
White	-0.120 ***	-0.101 **
	(0.044)	(0.044)
Hispanic	0.132 **	0.129 **
	(0.053)	(0.055)
High school	-0.122 **	-0.114 *
	(0.061)	(0.061)
Some college	-0.148 **	-0.116 *
	(0.069)	(0.069)
≥College	-0.228 ***	-0.190 **
	(0.076)	(0.075)
Good health	0.027	0.039
	(0.050)	(0.049)
HH income 2nd quartile ($24-60K)	0.012	0.023
	(0.061)	(0.062)
HH income 3rd quartile ($60-113K)	-0.073	-0.048
	(0.074)	(0.077)
HH income 4th quartile (>$113K)	-0.061	0.050
	(0.079)	(0.085)
Interest compounding knowledge	0.023	0.017
	(0.048)	(0.047)
Total net wealth 2nd quartile ($10-94K)		0.017
		(0.062)
Total net wealth 3rd quartile ($94-281K)		-0.049
		(0.073)
Total net wealth 4th quartile (>$281K)		-0.251 ***
		(0.083)
Intercept	2.013 ***	1.939 ***
	(0.447)	(0.441)
N	436	436
R-sq	0.14	0.17
Mean of dep. var.	0.663	
Std. dev. of dep. var.	0.473	

Sample: HRS respondents (age 51-61) to the 2018 Debt Module.

Table 7. Self-reported financial behaviors and perceptions: NFCS

	Mean	*Std*	*Median*
Positive financial perceptions and behaviors			
Personal finance satisfaction	0.33	0.47	0
Good credit score	0.70	0.46	1
Planning for retirement	0.55	0.50	1
Interest compounding knowledge	0.32	0.47	0
Debt planning	N/A	N/A	N/A
Negative financial perceptions and behaviors			
Too much debt	0.36	0.48	0
Contacted by a debt collector	0.15	0.36	0
Complaint about debt collectors (conditional %)	N/A	N/A	N/A
Unpaid medical bills	0.20	0.40	0
Own/partner student loan	0.09	0.29	0

Note: 2018 NFCS respondents age 51-61 (N=4,422).

Table 8. Financial distress indicators: NFCS

	Mean	*Std*
Anxious about personal finances	0.50	0.50
Stressed about finances	0.40	0.49
Feeling of not having the things they want because of the money situation	0.27	0.44
Getting by financially	0.32	0.47
Concerned of running out of money	0.40	0.49
Finances control their lives	0.28	0.45
No money left over at the end of the month	0.29	0.45
Uncomfortable asking questions about financial products	0.08	0.27

Note: 2018 NFCS respondents age 51-61 (N=4,422).

Table 9. Correlation of financial distress indicators: NFCS

	Anxious about personal finances	Stressed about finances	Feeling of not having the things they want because of the money situation	Getting by financially	Concerned of running out of money	Finances control their lives	No money left over at the end of the month
Stressed about finances	0.71						
Feeling of not having the things they want because of the money situation	0.41	0.42					
Getting by financially	0.39	0.40	0.59				
Concerned of running out of money	0.52	0.49	0.61	0.55			
Finances control their lives	0.42	0.43	0.56	0.53	0.51		
No money left over at the end of the month	0.34	0.34	0.45	0.51	0.43	0.46	
Uncomfortable asking questions about financial products	0.12	0.14	0.21	0.17	0.17	0.18	0.19

Note: 2018 NFCS respondents age 51-61 (N=4,422).

Table 10. Demographics of financial distress indicators: NFCS (%)

	Full sample	Male	Female	≤High school	Some college	≥College	Income <$35K	Income $35-75K	Income >$75K	White	Non-white
Anxious about personal finances	50.1	43.7	55.9	54.6	51.8	45.0	64.6	53.1	39.4	50.3	49.4
Stressed about finances	39.6	32.2	46.3	45.9	40.8	33.4	53.3	43.1	28.9	39.4	40.6
Feeling of not having the things they want because of the money situation	26.7	23.8	29.4	35.2	29.5	17.3	50.7	28.4	11.3	25.9	30.4
Getting by financially	32.4	28.0	36.3	40.6	37.2	20.9	60.0	34.3	14.6	31.4	36.6
Concerned of running out of money	40.0	34.0	45.5	48.3	42.8	30.7	62.9	41.8	25.2	39.7	41.4
Finances control their lives	27.7	24.7	30.4	34.2	30.8	19.5	48.4	29.3	14.3	27.2	29.8
No money left over at the end of the month	28.6	24.0	32.8	35.2	32.2	19.7	56.3	29.3	11.7	27.4	33.7
Uncomfortable asking questions about financial products	7.7	6.2	9.2	10.4	8.7	4.6	15.2	6.9	3.9	7.0	11.0
N	*4,422*	*2,086*	*2,336*	*1,197*	*1,673*	*1,552*	*1,125*	*1,398*	*1,899*	*3,588*	*834*

Notes: 2018 NFCS respondents age 51-61.

Table 11. Multivariate analysis of positive financial perceptions and behaviors: NFCS

	Personal finance satisfaction	Good credit score	Planning for retirement
Female	-0.011	0.024*	0.020
	(0.014)	(0.013)	(0.014)
Age	0.015***	0.013***	0.005**
	(0.002)	(0.002)	(0.002)
Single	-0.031	-0.029	-0.049**
	(0.020)	(0.018)	(0.020)
Separated or divorced	-0.052***	-0.080***	-0.048**
	(0.019)	(0.018)	(0.020)
Widow	-0.030	-0.076**	-0.080**
	(0.035)	(0.032)	(0.036)
Having dependent children	-0.064***	-0.067***	-0.038**
	(0.015)	(0.014)	(0.015)
African American	-0.026	-0.176***	-0.037
	(0.026)	(0.024)	(0.027)
Hispanic	0.027	-0.031	-0.037
	(0.028)	(0.025)	(0.028)
Asian	0.077*	0.050	-0.012
	(0.040)	(0.037)	(0.041)
Others	-0.057	-0.101***	0.012
	(0.039)	(0.036)	(0.040)
High school	0.038	0.206***	0.070
	(0.052)	(0.047)	(0.053)
Some college	0.014	0.186***	0.136***
	(0.052)	(0.047)	(0.052)
>=College	0.058	0.255***	0.200***
	(0.053)	(0.048)	(0.054)
Income $15-25K	-0.022	0.039	0.073**
	(0.033)	(0.030)	(0.033)
Income $25-35K	0.073**	0.143***	0.133***
	(0.033)	(0.030)	(0.034)
Income $35-50K	0.092***	0.209***	0.207***
	(0.032)	(0.029)	(0.032)
Income $50-75K	0.156***	0.323***	0.251***
	(0.031)	(0.028)	(0.031)
Income $75-100K	0.228***	0.367***	0.305***
	(0.033)	(0.030)	(0.033)
Income $100-150K	0.254***	0.407***	0.417***
	(0.033)	(0.030)	(0.034)
Income $150K+	0.434***	0.430***	0.480***
	(0.036)	(0.033)	(0.037)
Income shock	-0.149***	-0.145***	-0.015
	(0.018)	(0.017)	(0.018)
Big 5 FinLit	0.009	0.029***	0.061***
	(0.006)	(0.005)	(0.006)
Interest compounding knowledge	0.015	0.015	0.047***
	(0.015)	(0.014)	(0.015)
Observations	4,422	4,422	4,422
R-squared	0.147	0.247	0.218

Notes: 2018 NFCS respondents age 51-61. Coefficient estimates from OLS regression, standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table 12. Multivariate analysis of negative financial perceptions and behaviors: NFCS

	Too much debt	Contacted by a debt collector	Unpaid medical bills	Own/partner student loan
Female	0.023	-0.007	0.001	0.014
	(0.015)	(0.011)	(0.012)	(0.009)
Age	-0.012***	-0.008***	-0.010***	-0.008***
	(0.002)	(0.002)	(0.002)	(0.001)
Single	0.002	0.001	-0.087***	-0.008
	(0.021)	(0.015)	(0.017)	(0.013)
Separated or divorced	-0.012	0.033**	0.004	-0.006
	(0.020)	(0.015)	(0.017)	(0.012)
Widow	-0.060	0.008	-0.008	-0.062***
	(0.037)	(0.027)	(0.030)	(0.023)
Having dependent children	0.077***	0.030**	0.034***	0.015
	(0.016)	(0.012)	(0.013)	(0.010)
African American	-0.030	0.089***	0.089***	0.108***
	(0.028)	(0.020)	(0.023)	(0.017)
Hispanic	0.009	0.016	-0.003	0.001
	(0.029)	(0.021)	(0.024)	(0.018)
Asian	-0.172***	-0.040	-0.092***	-0.071***
	(0.042)	(0.031)	(0.034)	(0.026)
Others	0.038	0.047	0.012	0.038
	(0.041)	(0.030)	(0.033)	(0.025)
High school	0.008	-0.066*	-0.115***	0.012
	(0.055)	(0.040)	(0.044)	(0.033)
Some college	0.056	-0.044	-0.090**	0.093***
	(0.054)	(0.040)	(0.044)	(0.033)
>=College	0.016	-0.072*	-0.143***	0.124***
	(0.056)	(0.041)	(0.045)	(0.034)
Income $15-25K	0.053	-0.017	0.046	-0.044**
	(0.035)	(0.025)	(0.028)	(0.021)
Income $25-35K	-0.035	-0.067***	-0.012	-0.032
	(0.035)	(0.026)	(0.029)	(0.021)
Income $35-50K	-0.047	-0.101***	-0.032	-0.038*
	(0.034)	(0.025)	(0.027)	(0.020)
Income $50-75K	-0.082**	-0.160***	-0.073***	-0.053***
	(0.033)	(0.024)	(0.026)	(0.020)
Income $75-100K	-0.108***	-0.201***	-0.135***	-0.070***
	(0.034)	(0.025)	(0.028)	(0.021)
Income $100-150K	-0.171***	-0.220***	-0.186***	-0.096***
	(0.035)	(0.025)	(0.028)	(0.021)
Income $150K+	-0.245***	-0.211***	-0.213***	-0.127***
	(0.038)	(0.028)	(0.031)	(0.023)
Income shock	0.218***	0.178***	0.192***	0.049***
	(0.019)	(0.014)	(0.015)	(0.012)
Big 5 FinLit	-0.014**	-0.012***	-0.015***	-0.006*
	(0.006)	(0.004)	(0.005)	(0.004)
Interest compounding knowledge	-0.006	-0.005	-0.022*	-0.007
	(0.016)	(0.011)	(0.013)	(0.009)
Observations	4,422	4,422	4,422	4,422
R-squared	0.098	0.139	0.140	0.060

Notes: 2018 NFCS respondents age 51-61. Coefficient estimates from OLS regression, standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Appendix A: HRS Module questions

V201_SATISFD: SATISFACTION WITH PERSONAL FINANCIAL CONDITION
Overall, thinking of your assets, debts, and savings, how satisfied are you with your current personal financial condition? Are you completely satisfied, very satisfied, somewhat satisfied, not very satisfied, or not at all satisfied?

V202_2MUCH: TOO MUCH CURRENT DEBT
How strongly do you agree or disagree with the following statement? I have too much debt right now. Do you strongly disagree, disagree, neither agree nor disagree, agree, or strongly agree?

V203_CREDIT: HOW RATE YOUR CREDIT RECORD
How would you rate your current credit record such as FICO score? (it's OK to guess if you aren't sure).

V204_STULOAN: R HAS ANY STUDENT LOANS OUTSTANDING
Do you currently have any outstanding student loans on which you are a signer or co-signer that are for your or someone else's education beyond high school?

V205_WHOFOR: PERSON THE EDUCATION LOANS WERE FOR
For whose education were the loans taken out? Select all that apply.

V206_OWEMED: IF UNPAID BILLS FOR HEALTH CARE
Do you currently have any unpaid bills from a health care or medical service provider – for example, a hospital, a doctor's office, or a medical lab -- that are past due?

V207_COLLECT: IF CONTACTED BY A DEBT COLLECTION AGENCY
Have you been contacted by a debt collection agency in the past 12 months?

V208_CMPLAIN: IF COMPLAINED ABOUT COLLECTOR TACTICS
Have you submitted complaints about debt collection in the past 12 months -- for example, because the money is not owed, the amount is wrong, or collectors used coercive or misleading tactics?

V209_PLNDEBT: IF PLANNED TO HAVE CURRENT AMOUNT OF DEBT
As of ten years ago, did you think you would have about the amount of debt that you have at this point in your life?

V211_LOANINT: IF 1000 DOLLAR LOAN AT 20PCT INTEREST
Suppose you owe $1,000 on a loan and the interest rate you are charged is 20% per year compounded annually. If you didn't pay anything off, at this interest rate how many years would it take for the amount you owe to double? Would you say less than 2 years, at least 2 years but less than 5 years, at least 5 but less than 10 years, or at least 10 years?

Appendix Table A: Descriptive statistics for the 2018 HRS Module variables

Variable	N	Mean	St Dev
Personal finance satisfaction	444	0.24	0.43
Good credit score	419	0.39	0.49
Too much debt	444	0.41	0.49
Contacted by a debt collector	442	0.23	0.42
Unpaid medical bills	445	0.24	0.43
Own/partner student loan	445	0.15	0.36
No debt thought	436	0.66	0.47
Female	446	0.58	0.49
Age	446	56.71	2.81
Married	446	0.57	0.50
Number of children	430	2.52	1.77
White	446	0.57	0.50
Hispanic	445	0.18	0.39
<High school	444	0.14	0.34
High school	444	0.31	0.46
Some college	444	0.29	0.45
≥College	444	0.27	0.44
Good health	446	0.69	0.46
HH income (/100k, 2018$)	432	1.03	3.98
Interest compounding knowledge	417	0.34	0.47
Total net assets (/100k, 2018$)	445	2.74	7.62

Sample: HRS respondents (age 51-61) to the 2018 Debt Module

Appendix B: NFCS questions

J1: PERSONAL FINANCE SATISFACTION
Overall, thinking of your assets, debts and savings, how satisfied are you with your current personal financial condition? Please use a 10-point scale, where 1 means "Not At All Satisfied" and 10 means "Extremely Satisfied."

J8/J9: PLANNING FOR RETIREMENT
Have you ever tried to figure out how much you need to save for retirement?
[IF Q.A10a = 2 INSERT: Before you retired, did you try to figure out how much you needed to save for retirement?][IF Q.A10a = 3 INSERT: Before your [spouse/partner] retired, did you try to figure out how much you needed to save for retirement?]

J10: INCOME SHOCK
In the past 12 months, [IF Q.A7a = 3 INSERT: have you/ IF Q.A7a = 1 OR 2 INSERT: has your household] experienced a large drop in income which you did not expect?

J32: GOOD CREDIT SCORE
How would you rate your current credit record? Very bad, bad, about average, good, or very good?

J33_40: ANXIOUS ABOUT PERSONAL FINANCES
How strongly do you agree or disagree with the following statement? Thinking about my personal finances can make me feel anxious. Please give your answer on a scale of 1 to 7, where 1 = "Strongly Disagree," 7 = "Strongly Agree," and 4 = "Neither Agree Nor Disagree". You can use any number from 1 to 7.

J33_41: STRESSED ABOUT FINANCES
How strongly do you agree or disagree with the following statement? Discussing my finances can make my heart race or make me feel stressed. Please give your answer on a scale of 1 to 7, where 1 = "Strongly Disagree," 7 = "Strongly Agree," and 4 = "Neither Agree Nor Disagree". You can use any number from 1 to 7.

J41_1: FEELING OF NOT HAVING THE THINGS THEY WANT BECAUSE OF THE MONEY SITUATION
How well do these statements describe you or your situation? Because of my money situation, I feel like I will never have the things I want in life. Not at all, very little, somewhat, very well, or completely?

J41_2: GETTING BY FINANCIALLY
How well do these statements describe you or your situation? I am just getting by financially. Not at all, very little, somewhat, very well, or completely?

J41_3: CONCERNED OF RUNNING OUT OF MONEY
How well do these statements describe you or your situation? I am concerned that the money I have or will save won't last. Not at all, very little, somewhat, very well, or completely?

J42_1: NO MONEY LEFT OVER AT THE END OF THE MONTH
How often do these statements apply to you? I have money left over at the end of the month. Never, rarely, sometimes, often, or always?

J42_2: FINANCES CONTROL THEIR LIVES
How often do these statements apply to you? My finances control my life. Never, rarely, sometimes, often, or always?

B40: UNCOMFORTABLE ASKING QUESTIONS ABOUT FINANCIAL PRODUCTS
How strongly do you agree or disagree with the following statement? I would feel comfortable going to a bank or credit union branch to ask a question about a product or service. Please give your answer on a scale of 1 to 7, where 1 = "Strongly Disagree," 7 = "Strongly Agree," and 4 = "Neither Agree Nor Disagree". You can use any number from 1 to 7.

G20: UNPAID MEDICAL BILLS
Do you currently have any unpaid bills from a health care or medical service provider (e.g., a hospital, a doctor's office, or a testing lab) that are past due?

G30: OWN/PARTNER STUDENT LOAN
Do you currently have any student loans? If so, for whose education was this/were these loan(s) taken out? Select all that apply. Yes, have student loan(s) for: yourself, your spouse/partner, your child(ren), your grandchild(ren), other person, or No, do not currently have any student loans.

G38: CONTACTED BY A DEBT COLLECTOR
Have you been contacted by a debt collection agency in the past 12 months?

G23: TOO MUCH DEBT
How strongly do you agree or disagree with the following statement? I have too much debt right now. Please give your answer on a scale of 1 to 7, where 1 = "Strongly Disagree," 7 = "Strongly Agree," and 4 = "Neither Agree Nor Disagree". You can use any number from 1 to 7.

M6: INTEREST QUESTION
Suppose you had $100 in a savings account and the interest rate was 2% per year. After 5 years, how much do you think you would have in the account if you left the money to grow?
More than $102
Exactly $102
Less than $102
Don't know
Prefer not to say

M7: INFLATION QUESTION
Imagine that the interest rate on your savings account was 1% per year and inflation was 2% per year. After 1 year, how much would you be able to buy with the money in this account?
More than today
Exactly the same
Less than today
Don't know
Prefer not to say

M8: BOND QUESTION
If interest rates rise, what will typically happen to bond prices?
They will rise
They will fall
They will stay the same
There is no relationship between bond prices and the interest rate
Don't know
Prefer not to say

M9: MORTGAGE QUESTION
Please indicate whether each statement is true or false. A 15-year mortgage typically requires higher monthly payments than a 30-year mortgage, but the total interest paid over the life of the loan will be less.
True
False
Don't know
Prefer not to say

M10: RISK DIVERSIFICATION QUESTION
Please indicate whether each statement is true or false. Buying a single company's stock usually provides a safer return than a stock mutual fund.
True
False
Don't know
Prefer not to say

M31: INTEREST COMPOUNDING KNOWLEDGE
Suppose you owe $1,000 on a loan and the interest rate you are charged is 20% per year compounded annually. If you didn't pay anything off, at this interest rate, how many years would it take for the amount you owe to double?
Less than 2 years
At least 2 years but less than 5 years
At least 5 years but less than 10 years
At least 10 years
Don't know
Prefer not to say

Appendix Table B: Descriptive statistics for the 2018 NFCS variables

	Mean	*Std*
Personal finance satisfaction	0.33	0.47
Good credit score	0.70	0.46
Planning for retirement	0.55	0.50
Interest compounding knowledge	0.32	0.47
Too much debt	0.36	0.48
Contacted by a debt collector	0.15	0.36
Unpaid medical bills	0.20	0.40
Own/partner student loan	0.09	0.29
Anxious about personal finances	0.50	0.50
Stressed about finances	0.40	0.49
Feeling of not having the things they want because of the money situation	0.27	0.44
Getting by financially	0.32	0.47
Concerned of running out of money	0.40	0.49
Finances control their lives	0.28	0.45
No money left over at the end of the month	0.29	0.45
Uncomfortable asking questions about financial products	0.08	0.27
Female	0.53	0.50
Age	56.05	3.17
Single	0.16	0.37
Separated or divorced	0.18	0.38
Widow	0.04	0.20
Having dependent children	0.29	0.45
African American	0.07	0.26
Hispanic	0.06	0.24
Asian	0.03	0.16
Others	0.03	0.17
High school	0.25	0.43
Some college	0.38	0.48
≥College	0.35	0.48
Income $15-25K	0.09	0.29
Income $25-35K	0.09	0.29
Income $35-50K	0.12	0.33
Income $50-75K	0.19	0.39
Income $75-100K	0.15	0.36
Income $100-150K	0.17	0.38
Income $150K+	0.11	0.31
Income shock	0.16	0.37
Big 5 FinLit	3.25	1.37

Sample: NFCS respondents (age 51-61)

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