Development and Testing of a Comprehensive Financial Well-Being Measure

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Abstract

In recent years, financial well-being—a topic brought into focus due to the pandemic—has gained importance, as it has become evident that financial struggles can cause stress and anxiety, affecting overall well-being and health. In this project, we developed and tested a comprehensive financial well-being score that is novel in three ways: it is based on microeconomic theory; includes both objective and subjective measures of well-being; and is comprehensive, as it considers access to informal financial support networks. The 10-item score was informed by theory and in-depth expert interviews and was extensively tested with two rounds of survey data collected using a nationally representative panel. We find that this new financial well-being score differentiates well across the full spectrum of financial well-being, aligns with other indicators assessing financial situations and money management, and depicts financial distress. It also compares well with but seems to provide a more refined measure than an existing scale due to its comprehensive nature. Moreover, financial literacy proves to play an important role in financial well-being, with those who are financially literate scoring significantly higher on the well-being scale than those lacking financial literacy. This tested and comprehensive financial well-being score can be used by policy makers, financial service institutions, and academics to better understand the objective and subjective financial situations of individuals.

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1. Introduction

Well-being, in general, became an important topic during the pandemic, and individual conceptions of what constitutes well-being may have changed in recent years. Within the larger concept of well-being, financial well-being[1] has become increasingly significant in the U.S. and many other countries, with the understanding that financial well-being is not only about long-term financial security (retirement planning) but also about short-term financial preparedness. Stimulus checks and unemployment assistance may have helped vulnerable individuals make ends meet during the worst of the pandemic, and the necessity of drastic government action highlights the importance of paying attention to individuals' short-term financial preparedness (Chetty et al. 2020; Schneider et al. 2020). Our research has shown that the ability of U.S. households to weather a mid-sized financial shock ($2,000) was already disturbingly low immediately prior to the pandemic (Lusardi et al. 2020).

Further, there is strong evidence of financial anxiety and stress in the U.S. population (Hasler et al. 2021; Thoits 2010). In 2021, 56% of U.S. adults reported feeling anxious when thinking about their personal finances.[2] Financial anxiety is widespread in the population and across demographics: a high share of respondents (52%) with greater than median income ($50–99K) reported feeling financial anxiety, indicating that financial anxiety is not just a matter of lack of assets. This goes to show that it is important to take a holistic approach to measuring financial well-being by considering objective measures (the actual financial situation) alongside subjective measures (how people perceive their situation).

According to our research, few such comprehensive measures exist; there is no score that is based on microeconomic theory, measures objective and subjective well-being, and considers access to informal financial support. This project sets out to fill this gap by developing a measure of financial well-being that is comprehensive, theory-based, and consists of both objective and

[1] Compared with financial well-being, financial wellness is a broader concept and is generally taken to mean financial satisfaction, objective financial status, financial behavior, financial attitudes, and financial knowledge (Joo 2008; Gerrans 2013). This paper focuses on financial well-being rather than financial wellness.

[2] This statistic is from the FINRA Investor Education Foundation's 2021 National Financial Capability Study (NFCS).

subjective measures of financial well-being. We address several key questions: *What is financial well-being? Which key aspects define it? What questions best assess each aspect of financial well-being?* and *How does our novel financial well-being score compare to financial behavior and other well-being indicators?*

Our financial well-being score is a 10-item score that is based on five building blocks of financial well-being: making ends meet, coping with shocks, managing debt, planning for the long term, and having access to a financial support network. Based on these building blocks, someone is classified as financially well if he/she can make ends meet on a daily basis, can cope with a mid-sized financial shock, has a sustainable debt load, is planning for the long term, and has an informal financial support network. There are two questions for each building block: one measures objective well-being and one measures subjective well-being. An item response theory (IRT)–based technique is then used to compute a single well-being score. The development of the score was informed by an extensive analysis of existing scores and in-depth interviews with experts in this field. The questions from which the score is derived are newly developed and were tested with a pilot survey (500 observations), further adjusted, and then comprehensively assessed with a large survey (2,000 observations). For both surveys, data was collected using the nationally representative YouGov panel.

This paper is organized as follows: Section 2 describes the development of the financial well-being score, including an overview of the background research and an explanation of the theoretical foundation on which the score is based. Section 3 discusses the empirical research findings.

2. Development of the Financial Well-Being Score

a. Background Research and In-depth Interviews

There is no generally agreed-upon definition of financial well-being in the literature. Most definitions can be split into three categories: objective, subjective, and a mix of objective and subjective.[3] Objective definitions consider actual gauges of financial situations and distress; these are usually measured with data about financial information, financial ratios, and a household's

[3] An overview of various financial well-being definitions in the literature can be found in Kempson et al. (2017).

ability to obtain and maintain financial liquidity (Brüggen et al. 2017). Subjective definitions of financial well-being focus on individuals' perception of their well-being, including how they feel about their finances and the kinds of emotions their financial situation produces (security, satisfaction, anxiety). Moreover, existing definitions often make reference to both the current financial situation and to future financial security.

There is also no generally agreed-upon method of measurement or questionnaire content for assessing financial well-being. An early example of an objective measure is the Financial Capability Scale; it was developed by Collins and O'Rouke (2013) and uses six questions.[4] The questions were designed to measure outcomes deemed important in financial coaching and based on focus group discussions as well as prior use in surveys such as the Health and Retirement Study and the FINRA Investor Education Foundation's National Financial Capability Survey (NFCS). The six-question survey assigns values to responses ranging from 0 to 2, depending on how many answer options are available. A score is then determined by adding up the value of each response.

Another popular objective measure, especially in the private sector in the US, is the Financial Health Score developed by Parker et al. (2016). Their focus is on measuring financial health on four dimensions: spending, saving, borrowing, and planning. The measure uses eight self-assessment questions that were developed using pre-existing questions from large surveys. The score is calculated in a straightforward way, by using a 100-point scale and equal weighting for the eight questions.[5] Other household finance research has used objective measures, such as emergency and retirement savings or the ability to withstand a financial shock, as indicators of financial well-being (see e.g., Yakoboski et al. 2021; Hasler et al. 2022).

Subjective measures tend to be more common in the existing literature. A prominent example of a subjective financial well-being measure is the Consumer Financial Protection Bureau's Financial Well-Being Scale (CFPB 2017). The CFPB scale was developed based on a consumer-defined meaning of financial well-being using qualitative interviews and focus groups. It is available as a 10-item scale as well as a 5-item abbreviated scale derived from respondents' subjective responses to a series of statements. To obtain the final score, the CFPB uses item

[4] More information on the Financial Capability Scale can be found here: Financial Capability Scale (FCS) – Financial Coaching Strategies (wisc.edu)
[5] More information on the scoring logic can be found here: Methodology-Memo-01.pdf

response theory (IRT).[6] Even though the CFPB financial well-being questions have only been available for a few years, they are being included in a growing number of surveys in the US, including the NFCS. This has led to recent academic research being conducted on the scale (see e.g., Netemeyer et al. 2017; Lusardi 2019; Collins and Urban 2020; Clark et al. 2021). Because of this growing popularity in the US, we will provide a comparison between our financial well-being score and the CFPB scale. Other studies from around the world have undertaken financial well-being measurements primarily using subjective measures (e.g., Vlaey and Elliott 2014; Delafrooz and Paim, 2013; Gutter and Copur, 2011; Prawitz et al, 2006).

Mixed measures, comprising both subjective and objective dimensions, generally offer a more comprehensive approach to determining household financial well-being. One mixed measure is a 13-item financial well-being scale developed by Kempson et al. (2017) comprised of three subjective and ten objective questions designed using a qualitative analysis of focus group discussions. This framework has been taken up by other researchers around the world, such as Kong et al. (2019), who analyzed Canadians' financial well-being, and Prendergast et al. (2018), who assessed Australians' financial well-being.

In addition to our comprehensive review of the existing literature on financial well-being scales, we conducted ten in-depth interviews with experts familiar with the topic. These experts included human resources leaders and managers of financial wellness programs targeted at employees or students at institutions of higher education; directors of financial well-being and financial stability programs at foundations, non-profits, government, and community organizations; and academic researchers working in the field of financial well-being. The experts were chosen because they could provide knowledge about the population across a diversity of demographic dimensions, including race, ethnicity, and age. The goal of the in-depth interviews was twofold: (1) to gather information on how financial well-being is defined, including the areas of personal finance that are seen as contributing to financial well-being, and (2) to receive feedback on some of our newly designed financial well-being questions.

[6] Their metric requires that the raw IRT score be multiplied by 15, added to 50, and then rounded to the nearest whole number. Their adjustment provides a score distribution that ranges from approximately 0 to 100 and is centered at 50. See CFPB (2017) for further details on the score calculation.

Our extensive analysis of existing literature and well-being scores together with the in-depth interviews informed our definition of financial well-being and our development of the survey questions presented in the following subsections.

b. Definition and Building Blocks of Financial Well-Being

We define financial well-being as *being and feeling financially secure in the short and long term and having the financial freedom to make choices that allow one to enjoy their life.* This definition includes two fundamental components of financial well-being: (1) possessing financial security (both short and long term) and (2) having the financial freedom to make choices. The latter reflects both feeling in control of one's finances and having enough financial flexibility to make desired financial decisions; in other words, the capacity for meeting all regular commitments and having money left over for non-essentials. The definition also accounts for both objective financial security ("being" financially secure) and subjective financial security ("feeling" financially secure).

Building upon this definition we defined five aspects of financial well-being; the so-called building blocks of financial well-being. These building blocks are:

1. Making ends meet
2. Coping with shocks
3. Managing debt
4. Planning for the long term
5. Having access to a financial support network

These building blocks build the foundation of our well-being score. Based on these building blocks, the assumption is that an individual is financially well if they have the means to make ends meet, they are able to cover financial emergencies, they have a manageable amount of debt, they are set up for long-term financial security, and they have an informal financial support network.

c. Theoretical Foundation

The novelty of our financial well-being score is that it is based on the microeconomic theory of the utility function. The utility function measures the welfare or satisfaction of a consumer as a

function of their consumption of products or services. In other words, it measures the preferences of a consumer for different bundles of consumer goods. These bundles are ranked by assigning a number to each (known as the utility), with larger numbers indicating preferred bundles. Applying this framework to our topic means that financial well-being is defined as a measurement of the welfare or satisfaction received from a financial situation; in our model, an individual's financial situation is analogous to a bundle of consumer goods. Taking this one step further, we define a financial situation as the combined outcome of the five building blocks of financial well-being. A financial situation, therefore, reflects all aspects of an individual's personal finances, from making ends meet to having access to a financial support network. The financial well-being function, then, represents an ordering of all possible financial situations in such a way that financial situation A is assigned a higher financial well-being score than financial situation B if, and only if, A is preferred to B.

For example, a troubling financial situation may be characterized by an inability to make ends meet, having no capacity to cope with shocks, being debt-constrained, having no long-term financial security, and having no access to an informal financial support network. This financial situation is associated with low welfare and satisfaction and, thus, assigned a low financial well-being score. A prospering financial situation, however, may be related to being able to make ends meet, having the capacity to withstand shocks, not being debt-constrained, having long-term financial security, and having access to an informal network of financial support. The latter situation is assumed to be preferred over the former and, thus, is assigned a higher financial well-being score.

To measure the satisfaction a person receives from a financial situation, we need to know that person's preferences; i.e., we need their rank ordering of the various financial situations. As with consumer goods, where one person prefers apples to pears and bananas and a second person prefers bananas to pears and apples, one person might not be at all concerned about their $20,000 outstanding debt balance whereas another person might be distressed about a $200 outstanding credit card balance because of their differing comfort levels with (or preference for) debt. Thus, knowing the amount of an individual's debt does not provide enough information to comprehensively measure their financial well-being. Discussions during the in-depth interviews confirmed that people perceive their financial situations differently. We took this into account and attain the financial well-being score with both an objective and a subjective measure for each

building block. This means that for each building block, a respondent is asked an objective question, which measures their financial standing, and a subjective question, which measures their perception of their financial standing.

Preferences are individual but have to follow three fundamental conditions in order to be represented by a utility function (Debreu 1954): preferences need to be complete (meaning the consumer is able to determine which of any two consumption bundles is preferred or that they are equal), need to be transitive (meaning the preferences are internally consistent), and need to be monotone (meaning more is better than less, all else being constant).[7] The answer options for the well-being questions are designed to fulfill these conditions. More information on this will be provided in subsequent sections.

d. Financial Well-Being Questions

We developed a 10-item financial well-being score based on responses to the two questions (one objective and one subjective) for each of the five building blocks. The exact question wording is shown in Table 1. The questions are organized by building block with the objective question in column 1 and the subjective question in column 2.

[Insert Table 1 here]

Each objective question assesses a respondent's situation relevant to each of the five building blocks, measuring their ability to make ends meet, cope with a shock, manage debt, and plan for the long term and whether they have access to a financial support network. The subjective questions assess a respondent's preference for each building block, asking about their *satisfaction* with the way they handle their day-to-day finances, whether they *feel* financially secure in the short and long run, and whether they feel *comfortable* with the amount of debt their household has.[8] The focus is on measuring a person's subjective financial well-being.

[7] The theoretical development of mathematical utility functions for financial well-being would go beyond the scope of this paper and will be addressed in a future paper.

[8] Please note that for the building block associated with managing debt, we intentionally chose to refer to the amount of debt on the household level rather than the individual level because debt, e.g., a mortgage, is often carried by multiple household members.

An additional novelty of our financial well-being score is the inclusion of informal financial support networks (last building block). Discussions with Hispanic as well as Asian American, Native Hawaiian, and Pacific Islander advocacy groups revealed that informal financial support networks are of particular importance for minority racial and ethnic groups. Informal financial support networks can shape people's perceptions of their long-term financial security and capacity for responding to shocks. In terms of feeling financially secure, building a financial support network can serve as an alternative to building savings. However, not everyone wants to rely on a network of family and friends for financial support. Some respondents will prefer financial independence and the ability to cope with a financial shock on their own. Hence, some respondents will place a high value on an informal financial safety net and some will not.

To differentiate between these two groups, we use responses to an introductory question that assesses the importance the respondent assigns to having an informal financial support network. Which subjective well-being question about financial security a survey respondent receives is then conditional on his/her answer to this introductory question. This question design allows us to measure the perceived well-being people assign to an informal support network if this network is important to them. At the same time, we are able to measure the perceived well-being people assign to their ability to cope on their own with financial shocks.

The objective question does not differentiate between these two groups because it simply assesses whether the respondent has access to an informal financial support network in the event of financial distress. Irrespective of the respondent's preferences, having access to a support network can be attributed to higher financial well-being.

Lastly, a note about the design of the answer options. The response to each item (i.e., to each of the ten questions) is measured on a five-point Likert response scale. This was chosen so that two answer options reflect low capability, which then corresponds to a low score, and two answer options reflect high capability, which then corresponds to a high score. The "middle" option is for those that are indifferent and would choose an option like "don't know" in a different survey setting.

e. Statistical Score Methodology

Many existing financial well-being scores (see Section 2a) are simple sums or means of the responses to individual items (i.e., financial well-being questions). These methods assume that all items are equally good indicators of financial well-being. Other scores use weights (usually calculated using a principal component analysis approach or other methods that assess the relatedness of each item to financial well-being) before summing or averaging.

Our score is calculated using item response theory (IRT) modeling, which is the same approach the CFPB uses to calculate their subjective well-being scale. This is a more rigorous way of calculating a single score from multiple items (i.e., financial well-being questions). IRT assigns items to measure a latent ability, trait, or behavioral characteristic; in our case, financial well-being.[9] The assumption is that the items (single questions) might differ in their relationship to financial well-being. This assumption often allows the score to more accurately reflect the real-world situation than other ways of scoring (summed scores, for example). With IRT, each question response has unique weights and may contribute in a different way to the overall score (see e.g., Edwards 2009; Edelen and Reeve 2007). More specifically, IRT calculates the score by considering each item along two parameters: (1) a discrimination parameter, which is the item's relatedness to financial well-being; in other words, how well that item distinguishes between respondents of lower and higher financial well-being; and (2) a difficulty parameter, which is the degree of relatedness and measures how much financial well-being is needed for a respondent to have a 50% chance of choosing a certain item response. A high difficulty parameter means that it is difficult for an item to contribute to financial well-being; thus, a high level of financial well-being is needed for this item to be picked with a better-than-50% probability. Additionally, the higher the discrimination parameter, the stronger the relationship between financial well-being and item response. Thus, items with very low discrimination parameters are considered less desirable because of their weak link to financial well-being. In the extreme case, a discrimination parameter

[9] IRT is widely used in education to calibrate and evaluate items in tests and questionnaires to score subjects on their abilities, attitudes, or other latent traits. Many major standardized educational tests are developed by using item response theory. IRT is also popular in other areas in which score precision is critical (e.g., health outcomes).

of 0 indicates that all respondents have the same predicted probability of picking this item response; hence, the item is not related to financial well-being. [10]

Therefore, IRT has the advantage of considering characteristics of the individual items—both item difficulty and discrimination—when calculating the financial well-being score. Building a simple sum of the individual items would fail to account for these important attributes of the financial well-being questions. Once calculated, our financial well-being score is transformed into a score ranging from 0 to 100.

3. Testing of the Financial Well-Being Score

a. Data Source and Demographic Statistics

The testing of the financial well-being questions and score was done in two stages. First, we collected 500 observations as part of a pilot survey to validate the financial well-being questions and make appropriate adjustments to their wording. Then, a large survey with a sample of 2,000 observations was fielded in early 2023. For both data collections, we used YouGov Direct, which is a nationally representative panel. YouGov is a market research and data analytics firm providing a platform that enables accurate and timely data collection and reaches over 9 million people in North America, Europe, the Middle East, and the Asia-Pacific.[11] All statistics presented in this paper use sampling weights provided by YouGov, which makes our results nationally representative of the U.S. population.

Table 2 presents the demographic characteristics of the two samples (Column 1 is the pilot sample and Column 2 is the full sample). The last column provides comparison data from the most recent 2021 National Financial Capability Study (NFCS), as this is a survey with an even larger sample.[12] Observations with missing demographics were deleted from both YouGov samples and, thus, not included in the data analysis of this paper.[13]

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[10] For more information on the application of IRT on the example of a financial knowledge scale see Knoll and Houts (2012).

[11] Further information on YouGov is available at yougov.com.

[12] The NFCS is a large-scale, nationally representative survey commissioned by the FINRA Investor Education Foundation and has been administered every three years since 2009. Here we use the 2021 wave, which has a total of 27,118 observations.

[13] Deleting the observations with missing demographics leaves us with 350 total observations for the pilot sample and 1,723 observations for the full sample.

[Insert Table 2 here]

As Table 2 shows, both samples align well with the NFCS. There are small discrepancies that we need to take into consideration when interpreting our findings: our samples are slightly skewed toward older individuals, individuals with only a high school degree or less, and individuals not in the labor force.

Both of the YouGov surveys that were fielded included our financial well-being questions plus additional questions that differed across the two surveys. In the pilot survey, we added so-called proxy questions that we used for the validation of our financial well-being questions. In the full survey, we added questions on money management and financial outcomes to further assess our financial well-being score.

In both surveys, the financial well-being questions were ordered so that for each building block, the subjective question was asked first and the objective question was asked second. This order was important to avoid the objective question affecting the response to the subjective question, in other words, affecting the respondent's perception of the financial situation. Further, the well-being questions related to debt were asked last to prevent debt worries from negatively influencing responses to the subsequent questions. In what follows, we discuss the analysis of each of the financial well-being questions as well as the composite score in detail.

b. Analysis of Individual Well-Being Questions

Before building a score, we analyzed each financial well-being question separately.[14] Table 3 shows that a high percentage of the sample—almost 80%—is able to make ends meet and is satisfied with their day-to-day money management.[15] It seems that short-term money management might not be a high barrier to financial well-being when looking at the average. A shift happens, however, when we turn to the ability to cover a financial shock and the related perception of feeling financially secure with the household's current finances. Only 41% are very or moderately confident that they could come up with an amount equivalent to their monthly paycheck if an

[14] The distribution of the responses to each question is shown in Figure A1 of Appendix A.

[15] For the analysis in this section, we combined answer options as follows: for the first scale, we combined the answer options "strongly agree" and "somewhat agree" as well as "strongly disagree" and "somewhat disagree." Similarly, for the second scale we combined the answer options "very confident" and "moderately confident" as well as "not at all confident" and "slightly confident." Shown in Table 3 is only the combined response option that is positively associated with financial well-being.

unexpected need arose within the next 30 days. Comparably, 45% reported feeling secure with their current financial situation. Related to this is debt. Our question does not ask about the amount of debt, as this would not be as informative of financial well-being, but we rather assess whether debt and debt payments impose constraints on respondents' financial decision making. Being debt-constrained means that respondents most likely do not have the capacity to save or the ability to cope with financial shocks. Thus, it is not surprising that comparable percentages of the sample reported not being debt-constrained (44%) and feeling comfortable with the amount of debt they have (47%). Interestingly, long-term financial security appears to be the weakest building block in terms of achievement so far. Only around one-third of respondents reported being set up for long-term financial security and feeling secure for the future. Lastly, only 27% of respondents are very or moderately confident that they could rely on a network of family and friends for support in the event of financial distress. This matches previous research finding that financial fragility is widespread in the population (e.g., Hasler and Lusardi, 2019; Hasler et al., 2022b). Intentionally, the question wording did not specify what kind of support the respondent could receive. Financial support might be the most obvious, but support could also come in the form of childcare, for example. Among those who deem an informal financial support network to be very to moderately important, a comparable percentage (35%), feel more financially secure because they know they could rely on their network of family and friends.[16]

[Insert Table 3 here]

Going beyond the analysis of national averages, Table 3 reports differences across demographics as well. There are three main takeaways:

First, women score lower than men on both the objective and subjective financial well-being questions across almost all building blocks. This corroborates previous research findings on financial well-being indicators for women (e.g., Clark et al. 2021b; Yakoboski 2021). However, women are significantly more likely than men to report that they can rely on an informal support network in case of financial distress and women also value that support more highly than men. This leads to the question of whether—for women—these networks compensate for lower

[16] This statistic is based only on the 65% of the surveyed population that deem an informal financial support network to be very to moderately important.

objective and subjective financial well-being. This result indicates that the consideration of informal financial support is important if we are to comprehensively gauge financial well-being.

Second, younger respondents seem to struggle the most with making ends meet, coping with emergency expenses, not being debt-constraint, and having long-term financial security. This is in line with previous research done on young adults' financial well-being (e.g., Lusardi 2019). However, a much higher percentage can rely on family and friends in case of financial distress. Among 18- to 34-year-olds, 40% are very or moderately confident that they could receive support from their network of family and friends compared to around one-fourth of the older cohorts. This finding is not surprising, as many young adults are still in college or early in their careers and likely benefit from parental financial support. At the same time, this young cohort likely carries student debt and is still too early in their careers to have a substantial amount of savings for the long- or the short-term. Even though expected, these findings show us that our questions are robust in measuring what they are supposed to measure.[17]

Third, large and highly significant differences occur across racial and ethnic groups. The differences are most striking for the managing-debt building block. In fact, only 29% of Black Americans and 34% of Hispanics reported not being constrained by their debt compared to 51% of White Americans. Interestingly, when asked about feeling comfortable with the amount of debt they have, the differences are not as large. This confirms the importance of including both subjective and objective questions to comprehensively measure financial well-being. Moreover, slightly more Black (35%) than White (27%) Americans are able to access an informal network in the event of financial distress. This is backed by a large percentage of Black Americans who value having a financial support network (84%) and the higher perceived security this group assigns to having a network they can rely on (45%). This finding aligns well with topics brought up in the in-depth interviews during which experts highlighted cultural differences that likely contribute to greater availability of and reliance on informal networks. Strong family ties, multi-generational homes, and strong communities are just a few reasons why we might see these differences. This once again is proof of the need for a measure of informal financial support.

[17] Another expected result is the distribution across different income groups. Not surprising, income seems to matter. This result again shows that our questions are robust and correct measures.

Overall, the above-discussed demographic patterns align well with what we have learned through extensive research GFLEC has done over the past 11 years on topics such as financial fragility, debt, and retirement planning.[18] These findings also match what we learned from our experts during the in-depth interviews. Thus, we take this as a first indication that our newly designed questions work in terms of measuring financial situations.

To further test our financial well-being questions, we compared them to proxy questions. These proxy questions are established, objective questions from the NFCS that measure respondents' financial situations.[19] The proxy questions we chose for each building block are presented in the last column of Table 1. Overall, the average results for the proxy questions align well with the financial well-being questions and depict demographic patterns similar to those discussed above (Table A1 of Appendix A). For example, the findings resulting from the debt well-being questions closely match those of the debt proxy question. Overall, the comparison holds well, which is an indication that our questions measure what they are intended to measure. Further, the correlations between the proxy questions and the well-being questions are relatively high, which is another finding that supports the reliability of our questions (Table A2 of Appendix A). Additionally, for each financial well-being question, we analyzed the Item Characteristic Curve (ICC), a feature of the IRT model. The ICC graphically presents the difficulty and discrimination parameters for each item of the score.[20] These curves possess the required properties and provide further evidence that our questions are suitable for measuring financial well-being.

c. Analysis of Financial Well-Being Score

The distribution of the financial well-being score, which was computed using the IRT methodology, is shown in Figure 1. It is evident that the score differentiates well across a wide spectrum of financial well-being, meaning that it is able to depict very low as well as very high financial well-being. The average score in our sample is 54 points.

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[18] For some of the most recent findings, see, e.g., Hasler et al. (2022b); Clark et al. (2021a); Almenberg et al. (2020); Schneider et al. (2020); Lusardi and Mitchell (2020); Yakoboski et al. (2020b); Lusardi et al. (2020a); and Hasler and Lusardi (2019).

[19] The proxy questions were asked in the pilot survey only because we were restricted to a maximum of 30 questions. Thus, the findings reported in this paragraph are based on the pilot sample. The pilot survey includes a much smaller sample; thus, some of the demographic comparisons might not be as accurate.

[20] The ICC curves are available upon request.

[Insert Figure 1 here]

The financial well-being scores across demographic subgroups are shown in Table 4 and illustrate two important findings: First, the composite score shows the same demographic patterns as the individual well-being questions discussed in the previous section. Lower average well-being scores are found among women and among individuals who are younger, have lower levels of education, are single, have lower income, and are unemployed. It is important to note that this table only presents univariate average financial well-being scores; the multivariate regression findings described in Section 3e provide a more robust analysis by accounting for a range of socio-demographic characteristics.

Second, our scores compare well to the established CFPB scale, which is shown in Column 2 of Table 4.[21] The correlation coefficient between the two scores is 0.8054, reinforcing this finding. Even though the averages compare well across the different demographics, our score seems to better map the full spectrum of financial well-being.[22] This is shown in the scatter plot of Figure 2, which compares the CFPB scale (x-axis) to the financial well-being score (y-axis) for each respondent in our sample. It appears that the CFPB scale is truncated for very low and very high scores whereas ours provides a more nuanced measure. This finding makes sense given that the CFPB scale is a purely subjective measure whereas our score covers both objective and subjective financial well-being. Hence, our more comprehensive score holds up to the test and appears to depict financial well-being in a more refined way.

[Insert Table 4 here]
[Insert Figure 2 here]

To add more depth to the analysis and exploit the nuanced feature of our score, we constructed three cohorts: the 20% of the population with a score between 0 and 37 are classified as having a low financial well-being score; the 38% with a score between 38 and 57 are categorized as having a medium financial well-being score; and the 42% with a score between 58 and 100 are classified as having a high financial well-being score. Looking at Table 5, we find that the ability to cope with shocks, manage debt, and plan for the long term might be the driving forces for achieving

[21] The exact question wording for the CFPB questions can be found in Appendix B.
[22] Compare the distribution of the CFPB scale in Figure A2 of Appendix A.

high financial well-being. For those building blocks, the percentage gaps between low- and high-score cohorts are by far the largest.

Moreover, the observed differences in the perceived security associated with a financial support network (subjective well-being question) across cohorts might indicate that people in a respondent's financial support network share the respondent's level of financial well-being. For example, few in the low-score cohort (9%) reported that their informal network provides them with financial security whereas nearly two-thirds of those in the high-score cohort (61%) report a sense of security from their network. Unfortunately, our data does not include enough information to provide proof of this hypothesis.

Interestingly, for each building block, the results for the objective measures are comparable to the results for the subjective measures. This holds across all cohorts, with a slight tendency for those in the high-score cohort to feel more financially secure than their objective measures confirm.

[Insert Table 5 here]

d. Comparison to Financial Situation, Money Management, and Anxiety Indicators

Next, we analyzed the relationship between our financial well-being score and various other indicators of respondents' financial situations, money management, and anxiety.[23] The goal was to further shed light on respondents' financial well-being and simultaneously assess the validity of the score.

Those reporting dissatisfaction with their current personal financial condition have, on average, a well-being score of 35 points, whereas those reporting satisfaction have a significantly higher score (74 points), on average (Table 6). We see a similar finding when looking at the score distribution: a large percentage of those in the low-score cohort (88%) reported not being satisfied with their current financial condition compared to only 3% of those in the high-score cohort. The question about satisfaction with one's financial condition is an encompassing measure of assets,

[23] An overview of the questions as well as the exact question wording can be found in Appendix B.

debt, and savings, similar to our score. Hence, the strong relationship is an indicator that our score provides a comprehensive measure of individuals' financial situation. We also tested a single asset—the possession of retirement accounts—to see how well our score aligns. Both employer-provided accounts (such as 401(k) plans) and private accounts that were set up by the respondent (such as IRAs) were considered. As shown in Table 6, the relationship between having a retirement account and the financial well-being score is less strong, as expected. However, the expected patterns are still reflected: those with a retirement account possess, on average, a higher well-being score (62 points) compared to those with no retirement assets (46 points).

[Insert Table 6 here]

Additionally, the financial well-being score seems to depict financial distress well: among those in the low-score cohort, a much higher percentage (91%) stated that they probably or certainly could not come up with $2,000 within a month if an unexpected need arose (i.e., they are financially fragile) compared to those in the high-score cohort (8%). Figure 3 shows the well-being score distribution for those classified as financially fragile compared to those who are not. There is a clear difference between the two score distributions, with the not-fragile distribution shifted to the right on the well-being scale. The question measuring financial fragility has proven to be informative of individuals' financial distress, and according to our previous research comprises not only lack of assets but also too much debt (Hasler et al. 2018). Measures of both assets and debt are included in our well-being score, and the strong relationship between the financial fragility measure and our score confirms that the score can detect financial distress.

[Insert Figure 3 here]

Financial distress appears to be associated with costly money management practices. Table 6 shows that about one-fourth of credit card owners in the U.S. population were charged interest or fees in the past 12 months for missing payments, making late payments, making only the minimum payment, exceeding their credit limit, or using the card for cash advances. In line with financial fragility findings, the average well-being score for those that used their credit cards in an expensive way (46 points) is significantly lower than for those that did not do so (60 points). Moreover, we also considered the ultimate indicator of financial distress: the use of alternative financial services (AFS) such as auto title loans, short-term payday loans, advances on tax refunds, pawn shops, and rent-to-own stores. Even though a much smaller percentage of the population used any of these

services in the past five years, the same pattern persists: a higher percentage of those in the low-score cohort used AFS compared to those in the high-score cohort. These findings reemphasize the score's ability to depict financial distress, indicating that it provides robust findings that align with our expectations.

Financial distress can also cause individuals to feel financially anxious, an indicator that we expect to correlate with our score because half of our financial well-being questions assess respondents' perceived financial well-being. This is exactly what we find, as shown in Table 6: on average, those who feel anxious when thinking about their personal finances score significantly lower on the financial well-being scale (46 points) compared to those who do not feel anxious (72 points); and across the score distribution, among those in the low-score cohort, 90% feel financially anxious when they think about their personal finances. This percentage is much lower, at 32%, for those in the high-score cohort. In addition to confirming the strong relationship we expected, these findings emphasize how important financial well-being is: being financially distressed can have consequential effects on other aspects of someone's life (besides financial decision making), including health and daily schedules. As an indicator of the latter, we asked how many hours per week respondents typically spend thinking about and dealing with issues and problems related to their personal finances. On average, the 23% of the population that spend more than five hours per week score significantly lower on the financial well-being scale compared to the 77% of the population that spend less than five hours per week. The relationships between the well-being score and both indicators—anxiety and hours spent—are shown in Figure 4. It is obvious that the score is able to differentiate between financial situations that can cause anxiety and many hours spent worrying about and dealing with personal finance issues.

[Insert Figure 4 here]

e. Relationship with Financial Literacy

There is a lot of proof that financial literacy matters and is highly correlated with financial situations and money management practices (see e.g., Lusardi and Mitchell 2014). Therefore, in this last section, we want to compare the financial well-being score with the Big 3 financial literacy questions. The Big 3 financial literacy questions are widely used to assess respondents' basic

understanding of interest rates, inflation, and risk diversification.[24] Overall, we see in Table 6 that financial literacy levels are low in the U.S. Only 30% of respondents could correctly answer all three of these fundamental financial literacy questions.[25] Further, financial literacy seems to correlate with our financial well-being score, in line with previous research findings. Those who are financially literate, or those able to correctly answer the Big 3 questions, score—on average—62 points on the well-being scale. However, those that could not correctly answer all Big 3 questions had, on average, a 51-point score. Figure 5 graphically indicates this by showing the distribution of the well-being score for those that can correctly answer the Big 3 financial literacy questions compared to those that cannot.

[Insert Figure 5 here]

In line with the financial literacy finding is that those who were exposed to financial education—meaning they participated in financial education offered by a school or college they attended or by a workplace where they were employed—scored significantly higher on the well-being scale than those that did not participate in financial education that was offered to them (Table 6). This is an indication that financial education works and equips individuals with the knowledge to manage their money in a way that ultimately leads to financial well-being.

One might argue that the strong relationship to financial literacy could be driven by factors such as education or income. To address this, we used OLS regressions that allow us to control for those demographic characteristics in a robust way. The regression findings are reported in Table 7. Column 1 is a regression of the financial well-being score on all demographic characteristics, on a variable measuring exogenous financial income shocks, and on financial literacy. Columns 2 to 4 are score-cohort subsample regressions, where the regression's dependent variable is a dummy variable that takes the value of 1 for being in that score cohort, and 0 otherwise. The financial literacy coefficient is highly significant. Those who can correctly answer the Big 3 financial literacy questions have a significantly higher financial well-being score (Column 1). Analogously,

[24] The exact question wording for the three questions can be found in Appendix B.
[25] The Big 3 financial literacy questions are also in the NFCS and the same distribution of correct answers is found in the 2021 NFCS that we got with our sample.

their likelihood of ending up in the high-score cohort is significantly higher than for those who cannot correctly answer all three questions (Column 4, high-score cohort subsample regression).[26]

Additionally, the more robust regression analysis confirms what we saw when we analyzed the financial well-being score across demographics: respondents who are younger, are single, have low income, are unemployed, and are not in the labor force score significantly lower on the financial well-being scale. The subsample regressions for low-, medium-, and high-score cohorts support these findings. In addition to the demographics, we added a variable measuring whether a respondent has experienced an income shock in the past 12 months. First, experiencing an unexpected and large drop in income likely affects the respondent's financial well-being. Second, research has shown that financial shocks can change how people perceive their financial security in the long run (Pew Charitable Trust 2015). We find that experiencing an income shock has a significant correlation with lower well-being scores compared to not experiencing a shock, all else being equal. Thus, controlling for income shocks in our regression model is important.

[Insert Table 7 here]

To conclude, the regression findings confirm the univariate findings previously discussed and provide further proof that the created well-being score is robust and working as expected. Nevertheless, the analysis provided in this paper is just the start, and much more will be done in future research to evaluate the score and shed light on the financial well-being of individuals in the U.S.

4. Conclusion

With long lines at food banks all around the country and drastic government actions in the form of stimulus checks and unemployment assistance, the topics of financial resilience and well-being became increasingly important during the pandemic. It became obvious that financial well-being includes not only long-term financial security but also short-term financial preparedness, as

[26] Financial literacy could be seen as endogenous variable which can bias the regression findings. As a robustness check, we calculated the same regression but used the variable "financial education offered" as an instrumental variable for the "Big 3 correct" variable. Whether financial education was offered is less in the respondent's control and can, therefore, be treated as exogenous. The regression findings are shown in Table A3 of Appendix A.

many households were not prepared to weather even a mid-sized financial shock. Thus, it emerged the question of how to measure financial well-being.

There is no generally agreed-upon method of assessing financial well-being, and no comprehensive and theory-based financial well-being measure exists. This study addresses this gap by developing a well-being score that is novel along three dimensions: it consists of both objective and subjective measures of financial well-being, is based on microeconomic theory, and is comprehensive, as it also considers access to informal financial support. The score is based on five building blocks of financial well-being: making ends meet, coping with shocks, managing debt, planning for the long term, and having access to a financial support network. It is a 10-item score with two questions for each building block—one measures objective well-being and one measures subjective well-being—and is computed using item response theory (IRT).

The financial well-being score was developed and tested using extensive analysis of existing scores, microeconomic theory of the utility function, in-depth interviews with experts in this field, and two rounds of data collected from the nationally representative YouGov panel.

In summary, our analysis showed that the new financial well-being score differentiates well across the full spectrum of financial well-being, aligns with other indicators that assess a respondent's financial situation, and depicts financial distress along multiple measures, including credit card mismanagement, the use of alternative financial services, and financial anxiety. Further, it compares well against the CFPB well-being scale in general while seeming to provide a more nuanced and transparent measure.

We find that financial well-being is particularly low among respondents who are younger, are single, have low income, are unemployed, are not in the labor force, and have low financial literacy. Financial well-being proved to be highly correlated with financial literacy and financial education. Those that could correctly answer three fundamental financial literacy questions on interest rates, inflation, and risk diversification (the Big 3) are significantly more likely to have a higher financial well-being score. Similarly, those that participated in financial education offered to them by a school they attended or a workplace where they were employed scored significantly higher on the well-being scale compared to those that did not participate. Therefore, investing in financial education in both schools and workplaces can provide U.S. adults with the necessary

resources to make informed financial decisions over the course of their lives and is important for improvements in individual financial well-being.

The new well-being score presented in this paper can provide researchers, policymakers, and financial service providers with an improved way to comprehensively assess and promote financial well-being. It could be used to refine workplace financial wellness programs and identify potential areas for improvement in program offerings.

References

Almenberg, Johan, Annamaria Lusardi, Jenny Säve-Söderbergh, and Roine Vestman. 2020. "Attitudes towards Debt and Debt Behavior." *The Scandinavian Journal of Economics* 123(3): 780-809. DOI: 10.1111/sjoe.12419.

Chetty, Raj, John N. Friedman, Nathanial Hendren, Michael Stepner, and The Opportunity Insights Team. 2022. "The Economic Impacts of COVID-19: Evidence from a New Public Database Built Using Private Sector Data." NBER Working Paper 27431, National Bureau of Economic Research, Cambridge MA. DOI: 10.3386/w27431.

Clark, Robert L., Annamaria Lusardi, and Olivia S. Mitchell. 2021a. "Financial Fragility during the COVID-19 Pandemic." AEA Papers and Proceedings 111: 292-96. DOI: 10.1257/pandp.20211000.

Clark, Robert L., Annamaria Lusardi, Olivia S. Mitchell, and Hallie Davis. 2021b. "Factors Contributing to Financial well-being among Black and Hispanic women" *Journal of Retirement* 9(1): 71–97. DOI: 10.3905/jor.2021.1.088.

Consumer Financial Protection Bureau. 2017. *CFPB Financial Well-Being Scale: Scale Development Technical Report*. Consumer Financial Protection Bureau. http://www.sjdm.org/dmidi/files/CFPB_Financial_Well-Being_Scale_Technical_Report.pdf

Collins, J. Michael and Collin O"Rourke. 2013. "Financial Capability Scale". *University of Wisconsin Madison, Center for Financial Security.* https://fyi.extension.wisc.edu/financialcoaching/measures/

Collins, J. Michael and Carly Urban. 2020. "Measuring Financial Well-being Over the Life-course" *European Journal of Finance* 26(4-5): 341-359. DOI: 10.1080/1351847X.2019.1682631.

Debreu, Gérard. 1954. “Representation of a preference ordering by a numerical function”, In *Decision processes*, edited by Robert M. Thrall, Clyde H. Coombs, and Howard Raiffa, 159-167. New York: Wiley.

Delafrooz, Narges, and Laily Hj Paim. 2013. “Role of financial stress on relationship between financial problem and financial wellness among Malaysia workers.” *African Journal of Business Management* 7(20), 1966-1972. DOI: 10.5897/AJBM12.082.

Edelen, Maria Orlando and Bryce B Reeve. 2007. “Applying item response theory (IRT) modeling to questionnaire development, evaluation, and refinement.” *Quality of Life Research* 16, 5-18. DOI: 10.1007/s11136-007-9198-0.

Edwards, Michael C. 2009. “An introduction to item response theory using the Need for Cognition Scale.” *Social and Personality Psychology Compass* 3(4), 507-529. DOI: 10.1111/j.1751-9004.2009.00194.x.

Gerrans, Paul, Craig P. Speelman, and Guillermo J. Campitelli. 2013. “The relationship between personal financial wellness and financial wellbeing: a structural equation modelling approach.” *Journal of Family and Economic Issues* 35(2), 145-160. DOI: 10.1007/s10834-013-9358-z.

Gutter, Michael and Zeynep Copur. 2011. “Financial Behaviors and Financial Well-Being of College Students: Evidence from a National Survey.” *Journal of Family and Economic Issues* 32, 699–714. DOI: 10.1007/s10834-011-9255-2.

Hasler, Andrea, Annamaria Lusardi, Olivia S. Mitchell, and Alessia Sconti. 2022a. “Understanding Financial Vulnerability among Asians, Blacks, and Hispanics in the United States.” The TIAA Institute and Global Financial Literacy Excellence Center Report.

Hasler, Andrea, Jialu Liu Streeter, and Olivia Valdes. 2022b. “Using Factor Analysis to Assess

Financial Vulnerability in the United States." GFLEC Working Paper Series. WP 2022-1. https://gflec.org/wp-content/uploads/2022/03/WP2022-1_Hasler-Streeter-Valdes.pdf

Hasler, Andrea, Annamaria Lusardi, and Olivia Valdes. 2021. "Financial Anxiety and Stress among U.S. Households: New Evidence from the National Financial Capability Study and Focus Groups." The FINRA Foundation and Global Financial Literacy Excellence Center Report. https://gflec.org/wp-content/uploads/2021/04/Anxiety-and-Stress-Report-GFLEC-FINRA-FINAL.pdf

Hasler, Andrea and Annamaria Lusardi. 2019. "Financial Fragility among Middle-Income Households: Evidence Beyond Asset Building." GFLEC Working Paper Series, WP 2019-1. https://gflec.org/wp-content/uploads/2018/04/Financial-Fragility-Research-Paper-04-16-2018-Final.pdf

Hasler, Andrea, Annamaria Lusardi, and Noemi Oggero. 2018. "Financial Fragility in the U.S.: Evidence and Implications." GFLEC Working Paper Series, WP 2018-1.

Knoll, Melissa A. Z. and Carrie R. Houts. 2012. "The Financial Knowledge Scale: An Application of Item Response Theory to the Assessment of Financial Literacy." *Journal of Consumer Affairs* 46(3), 381–410. DOI: j.1745-6606.2012.01241.x.

Kong, Rebecca, Mathieu Saindon, Steve Trites, Michael Olson, and Bruno Lévesque. 2019."Financial Well-Being in Canada: Survey Results." *Financial Consumer Agency of Canada*. https://www.canada.ca/en/financial-consumer-agency/programs/research/financial-well-being-survey-results.html

Lusardi, Annamaria, and Olivia S. Mitchell. 2020. "Debt in an Aging Economy." in *Remaking Retirement. Debt in an Aging Economy*, edited by Annamaria Lusardi and Olivia S. Mitchell, Oxford University Press, 1-11. DOI: 10.1093/OSO/9780198867524.003.0001.

Lusardi, Annamaria, Olivia S. Mitchell, and Noemi Oggero. 2020a. "Debt and Financial Vulnerability on the Verge of Retirement." *Journal of Money, Credit, and Banking* 52: 1005-1034. DOI: 10.1111/JMCB.12671.

Lusardi, Annamaria, Andrea Hasler, and Paul J. Yakoboski. 2020b. "Building up financial literacy and financial resilience." *Mind & Society* 20(2): 181-187. DOI: 10.1007/s11299-020-00246-0

Lusardi, Annamaria. 2019. "Financial Well-Being of the Millennial Generation: An In-Depth Analysis of Its Drivers and Implications." GFLEC Working Paper Series, WP 2019-5. https://gflec.org/wp-content/uploads/2019/12/Research-Brief-Financial-Well-Being-of-the-Millennial-Generation-GFLEC-format.pdf

Lusardi, Annamaria, and Olivia S. Mitchell. 2014. "The Economic Importance of Financial Literacy: Theory and Evidence." *Journal of Economic Literature* 52 (1): 5–44. DOI: 10.1257/jel.52.1.5.

Joo, Sohyun. 2008. "Personal financial wellness". In *Handbook of Consumer Finance Research*, edited by Jing Jian Xiao, 21-33. Springer New York. DOI: 10.1007/978-0-387-75734-6_2.

Kempson, Elaine, Andrea Finney, and Christian Poppe. 2017. "Financial Well-Being A Conceptual Model and Preliminary Analysis." Consumer Research Norway - SIFO, Oslo and Akershus University College of Applied Sciences, Olso, Norway. https://www.bristol.ac.uk/media-library/sites/geography/pfrc/pfrc1705-financial-well-being-conceptual-model.pdf

Netemeyer, Richard G., Dee Warmath, Daniel Fernandes, and John G. Lynch Jr. 2017. "How Am I Doing? Perceived Financial Well-Being, Its Potential Antecedents, and Its Relation to Overall Well-Being." *Journal of Consumer Research* 45(1), 68–89. DOI: 10.1093/jcr/ucx109.

Parker, Sarah, Nancy Castillo, Thea Garon, and Rob Levy. 2016. "Eight Ways to Measure Financial Health." Center for Financial Services Innovation, Chicago, Illinois. https://s3.amazonaws.com/cfsi-innovation-files-2018/wp-content/uploads/2016/05/09212818/Consumer-FinHealth-Metrics-FINAL_May.pdf

The Pew Charitable Trusts. 2015. "How Do Families Cope With Financial Shocks?" Philadelphia: The Pew Charitable trusts. https://www.pewtrusts.org/~/media/assets/2015/10/emergency-savings-report-1_artfinal.pdf

Prawitz, Aimee D., Thomas E. Garman., Benoit Sorhaindo, Barbara O'Neill., Jinhee Kim, and Patricia Drentea. 2006. "Incharge Financial Distress/Financial Well-Being Scale: Development, Administration, and Score Interpretation." *Financial Counseling and Planning* 17(1), 34–50. DOI: 10.1037/t60365-000.

Prendergast, Stephen, David Blackmore, Elaine Kempson, Roslyn Russell, and Jozica Kutin. 2018. "Financial well-being: a survey of adults in Australia." Australia and New Zealand Banking Group, https://www.researchgate.net/publication/327467669_Financial_well-being_a_survey_of_adults_in_Australia

Schneider, Daniel, Peter Tufano, and Annamaria Lusardi. 2020. "Household Financial Fragility during COVID-19: Rising Inequality and Unemployment Insurance Benefit Reductions." GFLEC Working Paper 2020-4. https://gflec.org/wp-content/uploads/2020/10/Working-Paper-Household-Financial-Fragility-COVID-19-December.pdf

Thoits, Peggy A. 2010. "Stress and health: Major findings and policy implications." *Journal of Health and Social Behavior* 51(1), 41-53. DOI: 10.1177/0022146510383499.

Vlaev, Ivo and Antony Elliott. 2014. "Financial Well-Being Components". *Social Indicators Research* 118, 1103-1123. DOI: 10.1007/s11205-013-0462-0.

Yakoboski, Paul J., Annamaria Lusardi, and Andrea Hasler. 2021. "Financial Well-being and Literacy in the Midst of a Pandemic." The TIAA Institute and Global Financial Literacy Excellence Center Report. TIAA_GFLEC_Report_PFinIndex_April2021_04.pdf

Yakoboski, Paul J., Annamaria Lusardi, and Andrea Hasler. 2020a. "The 2020 TIAA Institute-

GFLEC Personal Finance Index." The TIAA Institute and Global Financial Literacy Excellence Center Report. https://gflec.org/wp-content/uploads/2020/04/TIAA-Institute-GFLEC_2020-P-Fin-Index_April-2020.pdf?x67582t

Yakoboski, Paul J., Annamaria Lusardi, Andrea Hasler. 2020b. "Financial Literacy and Wellness among African–Americans: New Insights from the Personal Finance (P-Fin) Index." *The Journal of Retirement* 8(1), 22-31. DOI: 10.3905/jor.2020.1.070.

Table 1: GFLEC Financial Well-Being and Proxy Questions

Building Blocks of Financial Well-Being	**GFLEC Financial Well-Being Questions**		**Proxy Questions**
	Objective	**Subjective**	
Making ends meet	In a typical month, I am able to make ends meet. *1 strongly agree* *2 somewhat agree* *3 neither agree nor disagree* *4 somewhat disagree* *5 strongly disagree*	I'm satisfied with the way I handle my day-to-day finances. *1 strongly agree* *2 somewhat agree* *3 neither agree nor disagree* *4 somewhat disagree* *5 strongly disagree*	In a typical month, how difficult is it for you to cover your expenses and pay all your bills? *1 Very difficult* *2 Somewhat difficult* *3 Not at all difficult*
Coping with shocks	How confident are you that you could come up with an amount roughly equivalent to your monthly paycheck if an unexpected need arose within the next 30 days? *1 Not at all confident* *2 Slightly confident* *3 Somewhat confident* *4 Moderately confident* *5 Very confident*	In thinking about my current household's finances, I feel financially secure. *1 strongly agree* *2 somewhat agree* *3 neither agree nor disagree* *4 somewhat disagree* *5 strongly disagree*	Have you set aside emergency or rainy day funds that would cover your expenses for 3 months, in case of sickness, job loss, economic downturn, or other emergencies? *1 Yes* *2 No*

Managing debt*	My household's current debt and debt payments prevent me and others in my household from addressing other financial priorities. *1 strongly agree* *2 somewhat agree* *3 neither agree nor disagree* *4 somewhat disagree* *5 strongly disagree*	I'm comfortable with the amount of debt my household has. *1 strongly agree* *2 somewhat agree* *3 neither agree nor disagree* *4 somewhat disagree* *5 strongly disagree*	I have too much debt right now. *1 strongly agree* *2 somewhat agree* *3 neither agree nor disagree* *4 somewhat disagree* *5 strongly disagree*
Planning for the long term	I am set up for long-term financial security. *1 strongly agree* *2 somewhat agree* *3 neither agree nor disagree* *4 somewhat disagree* *5 strongly disagree*	I feel financially secure for the future. *1 strongly agree* *2 somewhat agree* *3 neither agree nor disagree* *4 somewhat disagree* *5 strongly disagree*	Have you ever tried to figure out how much you need to save for retirement? [If you are retired: Did you try to figure out how much you needed to save for retirement before you retired?] *1 Yes* *2 No*
Having access to a financial support network	How confident are you that you could rely on a network of family and friends for support in the event of financial distress? *1 Not at all confident* *2 Slightly confident*	[introduction question] Q1. How important is it for you to have a network of family and friends for financial support? *1 very important* *2 moderately important* *3 not important*	

	3 Somewhat confident *4 Moderately confident* *5 Very confident*	Q1a. [Asked only if answered *very important* or *moderately important* to Q1] Because I know that I could rely on my network of family and friends for financial support, I feel much more financially secure. *1 strongly agree* *2 somewhat agree* *3 neither agree nor disagree* *4 somewhat disagree* *5 strongly disagree* Q1b. [Asked only if answered *not important* to Q1] I feel financially secure because I know that I can cope on my own with unexpected expenses. *1 strongly agree* *2 somewhat agree* *3 neither agree nor disagree* *4 somewhat disagree* *5 strongly disagree*	

Notes: The GFLEC financial well-being questions were developed by the authors. The proxy questions were taken from the 2021 NFCS. *The well-being questions around debt were asked last to avoid that debt worries negatively influenced the responses to the subsequent questions.

Table 2: Socio-demographic characteristics of the YouGov samples and the NFCS 2021

	Pilot Sample	Full Sample	2021 NFCS
Age			
18-39	30%	31%	38%
40-55	26%	24%	26%
56-70	31%	32%	25%
70+	13%	14%	11%
Gender			
Male	49%	49%	49%
Female	51%	51%	51%
Race/Ethnicity			
White	67%	63%	63%
Black	13%	13%	12%
Hispanic	13%	16%	16%
Asian and other	7%	9%	9%
Highest degree obtained			
High school or less	36%	39%	31%
Some college	32%	29%	39%
Bachelor's degree or higher	31%	32%	30%
Marital status			
Married	52%	54%	47%
Single	33%	29%	36%
Divorced/Separated/Widowed	15%	17%	17%
Financially dependent children			
No children	NA	69%	66%
1 or 2 children	NA	22%	27%
3 or more children	NA	8%	7%

Household income			
YouGov: Less than $30K/NFCS: Less than $25K	29%	29%	25%
YouGov: $30-49K/NFCS: $25-49K	25%	20%	25%
YouGov: $50-79K/NFCS: $50-74K	18%	22%	18%
YouGov: $80-99K/NFCS: $75-99K	9%	9%	13%
$100K+	19%	20%	19%
Work status			
Employed	48%	48%	54%
Unemployed	9%	8%	9%
Not in labor force	20%	21%	16%
Retired	22%	23%	21%
Total Observations	350	1,723	27,118

Source: Authors' calculations using two samples of the YouGov panel (column 1: Pilot sample and column 2: Full sample) and the 2021 National Financial Capability Study (NFCS) (column 3).

Note: All statistics are weighted. Respondents who chose "White" were coded as *White*; respondents who chose "Black" were coded as *Black*; respondents who chose "Hispanic" were coded as *Hispanic*; and respondents who chose "Asian" or "Two or more races" were coded as *Asian and other*. The education variable highest degree obtained includes the categories *High school or less*, indicating that the highest degree received is a high school diploma; *some college*, indicating that respondents have attended a post-secondary institution and earned, at most, a two-year degree (i.e., an associate's degree); and *bachelor's degree or higher*, indicating that respondents have earned a four-year degree or post-graduate degree. The variable *financially dependent children* is based on the question: "How many children do you have who are financially dependent on you or your spouse/partner? Please include children not living at home, and step-children as well." The available *household income* categories for the YouGov and NFCS samples do not exactly match. There are slight discrepancies between the household income brackets across the two samples. An individual's *work status* is defined by four categories: *Employed* for those who either have a full- or a part-time occupation or are self-employed; *unemployed* for those with no occupation at the time of the survey; *not in labor force* for those who are full-time students, full-time homemakers, or permanently sick, disabled, or unable to work (other); and *retired* for those who classify themselves as being retired.

Table 3: Financial well-being questions across demographic groups

	Total population	**Men[m]**	**Women[w]**	**Young (18-34 years)[y]**	**Middle (35-54 years)[ma]**	**Old (55+ years)[o]**	**Low Income (<30K)[l]**	**Middle Income (50-79K)[mi]**	**High Income (>100K)[h]**	**Black[b]**	**Hispanic[hi]**	**White[wh]**
A: Making ends meet												
Able to make ends meet	79%	81%	78%	76%	74% [o]	84% [ma]	61% [mi h]	82% [l h]	95% [l mi]	77%	72% [wh]	82% [hi]
Satisfied with day-to-day mgt	77%	77%	76%	66% [o]	74% [o]	83% [y ma]	68% [mi h]	79% [l]	83% [l]	76%	81%	78%
B: Coping with shocks												
Able to cover an emergency expense	41%	44% [w]	39% [m]	30% [o]	36% [o]	50% [y ma]	17% [mi h]	50% [l h]	66% [l mi]	40%	34% [wh]	45% [hi]
Feeling financially secure currently	45%	48% [w]	43% [m]	38% [o]	40% [o]	53% [y ma]	25% [mi h]	54% [l h]	65% [l mi]	42%	42%	49%
C: Managing debt												
Not constrained by debt	44%	46% [w]	41% [m]	35% [o]	33% [o]	55% [y ma]	25% [mi h]	51% [l h]	60% [l mi]	29% [wh]	34% [wh]	51% [b hi]
Comfortable with amount of debt	47%	49%	46%	36% [o]	41% [o]	57% [y ma]	31% [mi h]	52% [l h]	64% [l mi]	40% [wh]	44%	52% [b]
D: Planning for the long term												
Set up for long-term security	35%	39% [w]	31% [m]	27% [o]	30% [o]	42% [y ma]	13% [mi h]	37% [l h]	59% [l mi]	30% [wh]	29% [wh]	39% [b hi]
Feeling financially secure future	38%	42% [w]	35% [m]	33% [o]	32% [o]	45% [y ma]	19% [mi h]	42% [l h]	59% [l mi]	36%	28% [wh]	43% [hi]
E: Having access to a financial support network												
Able to rely on network	27%	25% [w]	29% [m]	40% [ma o]	25% [y]	23% [y]	25% [h]	29%	32% [l]	35% [hi]	22% [b]	27%

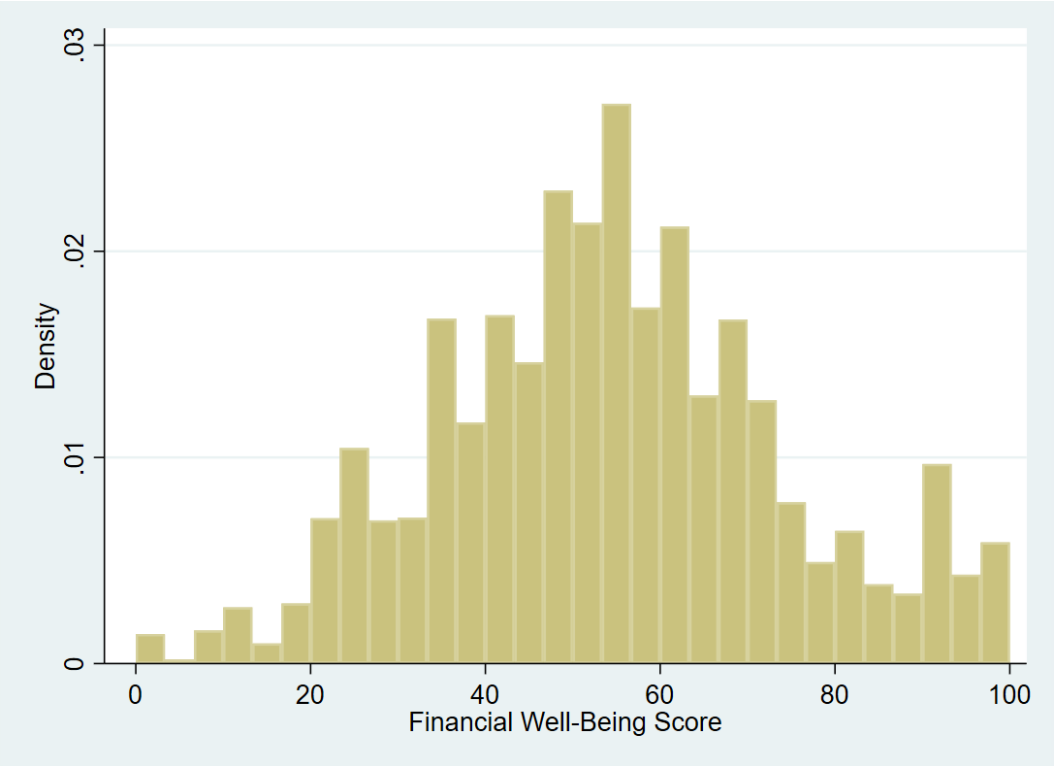
Network very/moderately important	65%	63%	67%	81% [ma o]	71% [y o]	53% [y ma]	79% [mi h]	63% [l h]	51% [l mi]	84% [wh hi]	69% [wh b]	58% [b hi]
Feeling secure bc of network**	35%	34%	37%	40%	36%	31%	28% [mi h]	40% [l]	39% [l]	45% [wh hi]	30% [b]	36% [b]
Network not important	35%	37%	33%	19% [ma o]	29% [y o]	47% [y ma]	21% [mi h]	37% [l h]	49% [l mi]	16% [wh hi]	31% [wh b]	42% [b hi]
Feeling secure bc own capacity**	59%	66% [w]	51% [m]	32% [o]	46% [o]	69% [y ma]	31% [mi h]	55% [l h]	83% [l mi]	49%	57%	61%
Total Observations	1,723	777	946	95	418	1,210	423	398	390	164	113	1,339

Source: Authors' calculations using the full sample collected using the YouGov panel.

Note: The financial well-being score is based on 10 questions and calculated using IRT methodology. Statistics are weighted. *Able to make ends meet* is a dummy variable that equals 1 if the respondent answered "Strongly agree" or "Somewhat agree" to the statement "In a typical month, I am able to make ends meet," and 0 otherwise. *Satisfied with day-to-day mgt i*s a dummy variable that equals 1 if the respondent answered "Strongly agree" or "Somewhat agree" to the statement "I'm satisfied with the way I handle my day-to-day finances," and 0 otherwise. *Able to cover an emergency expense i*s a dummy variable that equals 1 if the respondent answered "Very confident" or "Moderately confident" to the following question "How confident are you that you could come up with an amount roughly equivalent to your monthly paycheck if an unexpected need arose within the next 30 days?" and 0 otherwise. *Feeling financially secure currently i*s a dummy variable that equals 1 if the respondent answered "Strongly agree" or "Somewhat agree" to the statement "In thinking about my current household's finances, I feel financially secure," and 0 otherwise. *Not constrained by debt i*s a dummy variable that equals 1 if the respondent answered "Strongly disagree" or "Somewhat disagree" to the statement "My household's current debt and debt payments prevent me and others in my household from addressing other financial priorities," and 0 otherwise. *Comfortable with amount of debt i*s a dummy variable that equals 1 if the respondent answered "Strongly agree" or "Somewhat agree" to the statement "I'm comfortable with the amount of debt my household has," and 0 otherwise. *Set up for long-term security i*s a dummy variable that equals 1 if the respondent answered "Strongly agree" or "Somewhat agree" to the statement "I am set up for long-term financial security," and 0 otherwise. *Feeling financially secure future i*s a dummy variable that equals 1 if the respondent answered "Strongly agree" or "Somewhat agree" to the statement "I feel financially secure for the future," and 0 otherwise. *Able to rely on network i*s a dummy variable that equals 1 if the respondent answered "Moderately confident" or "Very confident" to the question "How confident are you that you could rely on a network of family and friends for support in the event of financial distress?" and 0 otherwise. *Network very/moderately important i*s a dummy variable that equals 1 if the respondent answered "Very important" or "Moderately important" to the statement "How important is it for you to have a network of family and friends for financial support?" and 0 otherwise. *Feeling secure bc of network* is a dummy variable that equals 1 if the respondent answered "Strongly agree" or "Somewhat agree" to the statement: "Because I know that I could rely on my network of family and friends for financial support, I feel much more financially secure," and 0 otherwise. *Network not important* is a dummy variable that equals 1 if the respondent answered "Not important" to the statement "How important is it for you to have a network of family and friends for financial support?" and 0 otherwise. *Feeling secure bc own capacity i*s a dummy variable that equals 1 if the respondent answered "Strongly agree" or "Somewhat agree" to the statement "I feel financially secure because I know that I can cope on my own with unexpected expenses," and 0 otherwise.

Superscripts *w* and *m* indicate the means are statistically different at the 5% level from Women and Men, respectively. Superscripts *y, ma*, and *o* indicate the means are statistically different at the 5% level from Young, Middle Age, and Old cohorts, respectively. Superscripts *l, mi*, and *h*, indicate the means are statistically different at the 5% level from Low, Middle, and High-income people, respectively. Superscripts *wh, b,* and *hi*, indicate the means are statistically different at the 5% level from Whites, Blacks, and Hispanics, respectively. **Proportion conditional on whether the respondent values a network of family and friends for financial support (Network very/moderately important or not important, respectively).

Figure 1: Distribution of the financial well-being score



Source: Authors' calculations using the full sample.
Note: The financial well-being score is based on 10 questions and calculated using IRT methodology. Statistics are weighted.

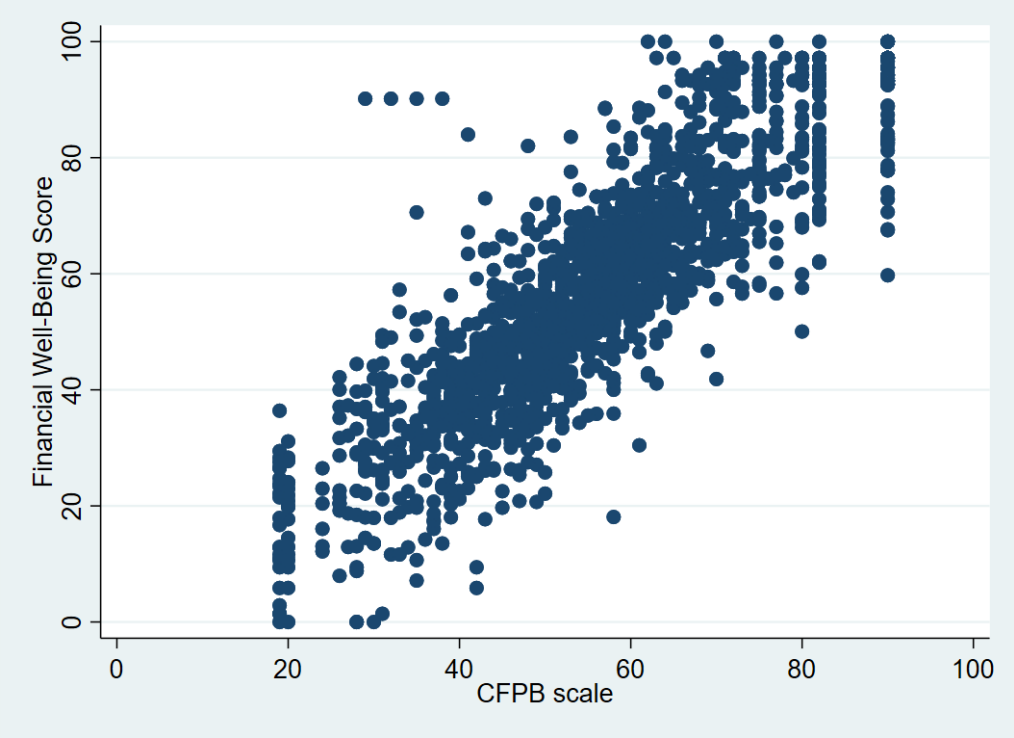
Table 4: Financial well-being score and CFPB scale across socio-demographic characteristics

	Financial Well-Being Score	CFPB Scale
Total sample	54	52
Age		
18-39	52	48
40-55	51	50
56-70	55	55
70+	64	62
Gender		
Male	56	54
Female	53	51
Race/Ethnicity		
White	55	54
Black	54	51
Hispanic	53	51
Asian and other	47	48
Highest degree obtained		
High school or less	51	50
Some college	52	52
Bachelor's degree or higher	59	55
Marital status		
Married	58	55
Single	47	47
Divorced/Separated/Widowed	52	52

Financially dependent children			
	No children	55	53
	1 or 2 children	53	51
	3 or more children	55	50
Household income			
	Less than $30K	44	46
	$30-49K	51	50
	$50-79K	57	55
	$80-99K	62	57
	$100K+	65	59
Work status			
	Employed	57	53
	Unemployed	38	42
	Not in labor force	46	47
	Retired	62	60
Total Observations		1,723	1,723

Source: Authors' calculations using the full sample collected using the YouGov panel.
Note: The financial well-being score is based on 10 questions and calculated using IRT methodology. Statistics are weighted. The variable CFPB Scale refers to the Consumer Financial Protection Bureau's financial well-being scale. Respondents who chose "White" were coded as *White*; respondents who chose "Black" were coded as *Black*; respondents who chose "Hispanic" were coded as *Hispanic*; and respondents who chose "Asian" or "Two or more races" were coded as *Asian and other*. The education variable highest degree obtained includes the categories *High school or less*, indicating that the highest degree received is a high school diploma; *some college*, indicating that respondents have attended a post-secondary institution and earned, at most, a two-year degree (i.e., an associate's degree); and *bachelor's degree or higher*, indicating that respondents have earned a four-year degree or post-graduate degree. The variable *financially dependent children* is based on the question: "How many children do you have who are financially dependent on you or your spouse/partner? Please include children not living at home, and step-children as well." An individual's *work status* is defined by four categories: *Employed* for those who either have a full- or a part-time occupation or are self-employed; *unemployed* for those with no occupation at the time of the survey; *not in labor force* for those who are full-time students, full-time homemakers, or permanently sick, disabled, or unable to work (other); and *retired* for those who classify themselves as being retired.

Figure 2: Scatter plot for comparison of financial well-being score to CFPB scale



Source: Authors' calculations using the full sample collected using the YouGov panel.
Notes: The financial well-being score is based on 10 questions and calculated using IRT methodology.

Table 5: Drivers of financial well-being score across three subgroups (low, medium and high)

	Low score (0-37)	**Medium score (38-57)**	**High score (58-100)**
A: Making ends meet			
Able to make ends meet	41%	78%	99%
Satisfied with day-to-day mgt	50%	68%	97%
B: Coping with shocks			
Able to cover an emergency expense	4%	18%	80%
Feeling financially secure currently	1%	20%	90%
C: Managing debt			
Not constrained by debt	11%	26%	75%
Comfortable with amount of debt	9%	30%	82%
D: Planning for the long term			
Set up for long-term security	0%	6%	78%
Feeling financially secure future	0%	6%	85%
E: Having access to a financial support network			
Able to rely on network	17%	19%	40%
Network very/moderately important	75%	72%	54%
Feeling secure bc of network**	9%	28%	61%

Network not important	25%	28%	46%
Feeling secure bc own capacity**	0%	25%	92%
Total Observations	292	600	831

Source: Authors' calculations using the full sample collected using the YouGov panel.

Note: The financial well-being score is based on 10 questions and calculated using IRT methodology. Statistics are weighted. The variables *Low score, Medium score, High score,* are all based on the Financial Well-Being Score. *Low score* means a respondent has a score of 37 or less. *Medium score* means a respondent has a score of between 38 and 57. *High score* means a respondent has a score of 58 or more. *Able to make ends meet* is a dummy variable that equals 1 if the respondent answered "Strongly agree" or "Somewhat agree" to the statement "In a typical month, I am able to make ends meet," and 0 otherwise. *Satisfied with day-to-day mgt i*s a dummy variable that equals 1 if the respondent answered "Strongly agree" or "Somewhat agree" to the statement "I'm satisfied with the way I handle my day-to-day finances," and 0 otherwise. *Able to cover an emergency expense i*s a dummy variable that equals 1 if the respondent answered "Very confident" or "Moderately confident" to the following question "How confident are you that you could come up with an amount roughly equivalent to your monthly paycheck if an unexpected need arose within the next 30 days?" and 0 otherwise. *Feeling financially secure currently i*s a dummy variable that equals 1 if the respondent answered "Strongly agree" or "Somewhat agree" to the statement "In thinking about my current household's finances, I feel financially secure," and 0 otherwise. *Not constrained by debt i*s a dummy variable that equals 1 if the respondent answered "Strongly disagree" or "Somewhat disagree" to the statement "My household's current debt and debt payments prevent me and others in my household from addressing other financial priorities," and 0 otherwise. *Comfortable with amount of debt i*s a dummy variable that equals 1 if the respondent answered "Strongly agree" or "Somewhat agree" to the statement "I'm comfortable with the amount of debt my household has," and 0 otherwise. *Set up for long-term security i*s a dummy variable that equals 1 if the respondent answered "Strongly agree" or "Somewhat agree" to the statement "I am set up for long-term financial security," and 0 otherwise. *Feeling financially secure future i*s a dummy variable that equals 1 if the respondent answered "Strongly agree" or "Somewhat agree" to the statement "I feel financially secure for the future," and 0 otherwise. *Able to rely on network i*s a dummy variable that equals 1 if the respondent answered "Moderately confident" or "Very confident" to the question "How confident are you that you could rely on a network of family and friends for support in the event of financial distress?" and 0 otherwise. *Network very/moderately important i*s a dummy variable that equals 1 if the respondent answered "Very important" or "Moderately important" to the statement "How important is it for you to have a network of family and friends for financial support?" and 0 otherwise. *Feeling secure bc of network* is a dummy variable that equals 1 if the respondent answered "Strongly agree" or "Somewhat agree" to the statement: "Because I know that I could rely on my network of family and friends for financial support, I feel much more financially secure," and 0 otherwise. *Network not important* is a dummy variable that equals 1 if the respondent answered "Not important" to the statement "How important is it for you to have a network of family and friends for financial support?" and 0 otherwise. *Feeling secure bc own capacity i*s a dummy variable that equals 1 if the respondent answered "Strongly agree" or "Somewhat agree" to the statement "I feel financially secure because I know that I can cope on my own with unexpected expenses," and 0 otherwise. **Proportion conditional on whether the respondent values a network of family and friends for financial support (Network very/moderately important or not important, respectively).

Table 6: Financial well-being score and financial behavior

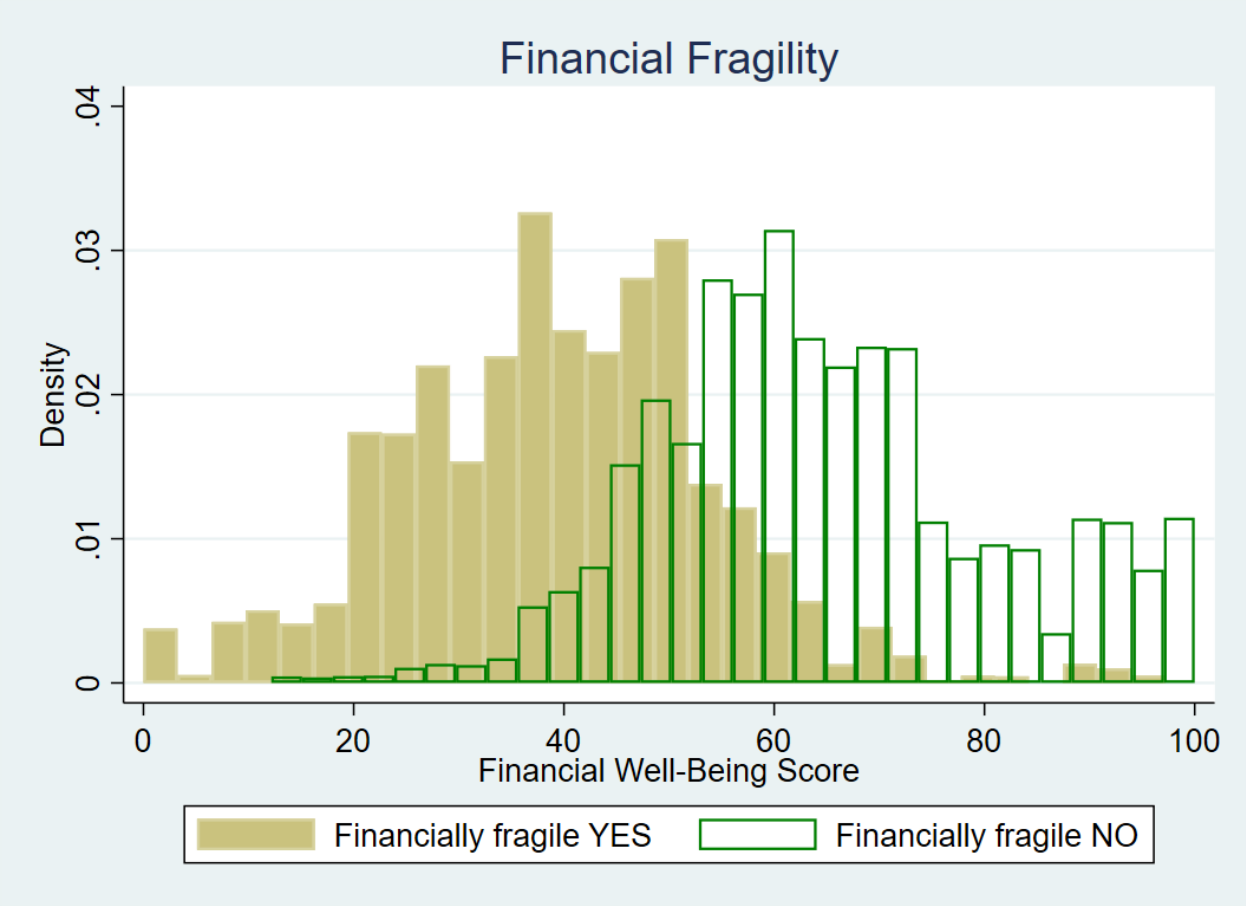
	Total population	Financial Well-Being Score	Low score (0-37)	Medium score (38-57)	High score (58-100)
Financial Situation					
Satisfied with financial condition NO	30%	35[s]	88%	30%	3%
Satisfied with financial condition YES	29%	74	4%	5%	62%
Retirement account NO	50%	46[s]	77%	61%	26%
Retirement account YES	50%	62	23%	39%	74%
Financially fragile YES	41%	39[s]	91%	51%	8%
Financially fragile NO	59%	65	9%	49%	91%
Money management					
Expensive CC use YES**	26%	46[s]	48%	32%	14%
Expensive CC use NO**	74%	60	52%	68%	86%
AFS use YES	9%	50[s]	14%	8%	8%
AFS use NO	91%	55	86%	92%	92%
Anxiety and hours spent					
Feeling anxious YES	51%	46[s]	90%	52%	32%
Feeling anxious NO	23%	72	1%	11%	45%
Spend more than 5 hours per week thinking	23%	44[s]	42%	25%	11%
Spend less than 5 hours per week thinking	77%	57	58%	75%	89%
Financial literacy & education					
Not financially literate (Big 3 not correct)	70%	51[s]	83%	79%	55%
Financially literate (Big 3 correct)	30%	62	17%	21%	45%
Did not participate in financial education*	24%	52[s]	40%	22%	19%

Participated in financial education*	76%	59	60%	78%	81%

Source: Authors' calculations using the full sample collected using the YouGov panel.

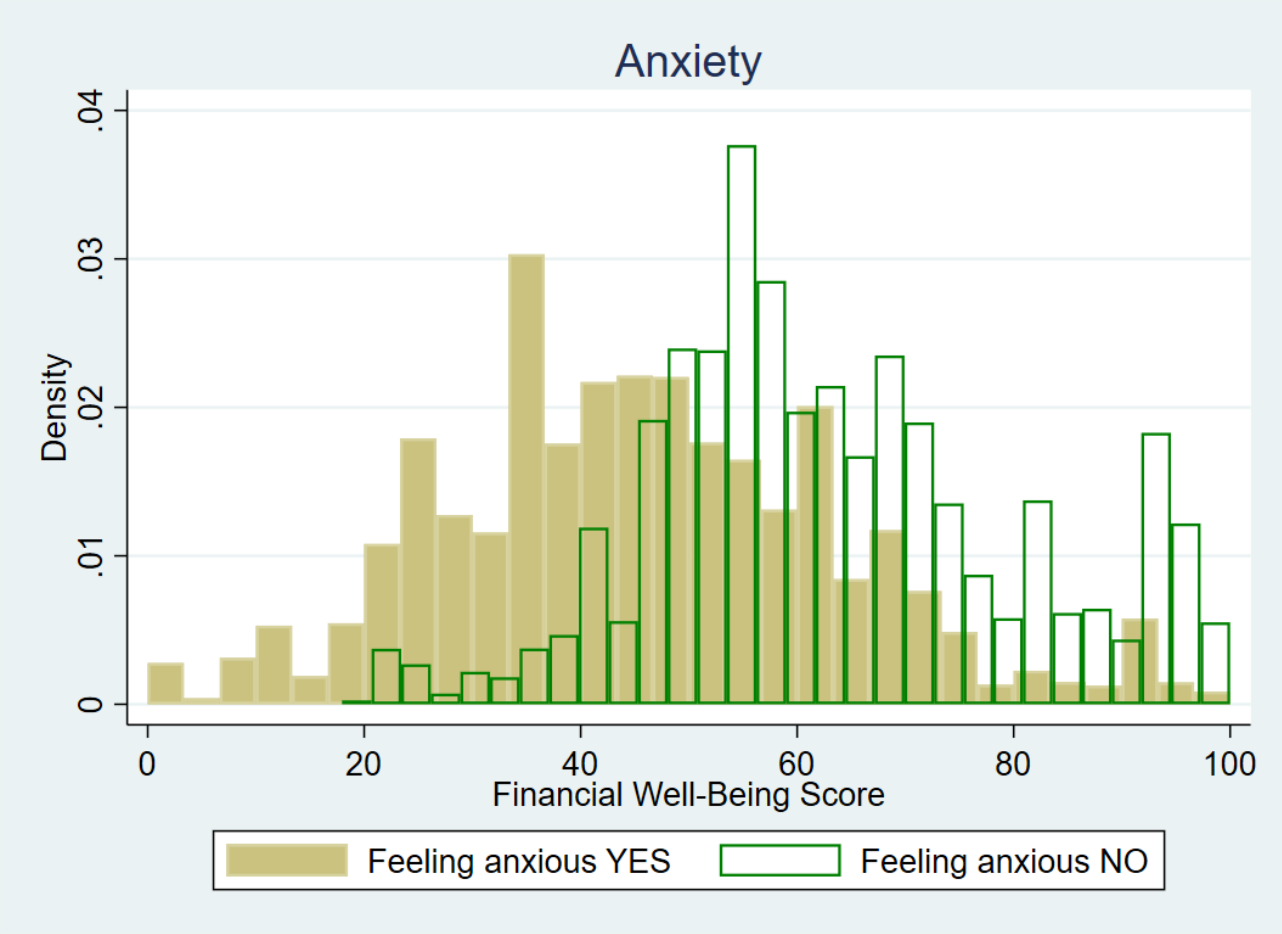
Note: The financial well-being score is based on 10 questions and calculated using IRT methodology. Statistics are weighted. The variables *Low score, Medium score, High score,* are all based on the Financial Well-Being Score. *Low score* means a respondent has a score of 37 or less. *Medium score* means a respondent has a score of between 38 and 57. *High score* means a respondent has a score of 58 or more. *Satisfied with financial condition NO* is a dummy variable that equals 1 if the respondent answered 1, 2, or 3 to the question: "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," and 0 otherwise. *Satisfied with financial condition YES* is a dummy variable that equals 1 if the respondent answered 8, 9, or 10 to the previous question, and 0 otherwise. *Retirement account NO* is a dummy variable that equals 1 if the respondent answered "No" to the question: "Do you have any retirement plans through a current or previous employer (such as a pension plan, a Thrift Savings Plan, or a 401(k)) or any other retirement account that you have set up yourself (such as an IRA, Keogh, SEP)?" and 0 otherwise. *Retirement account YES* is a dummy variable that equals 1 if the respondent answered "Yes" to the previous question, and 0 otherwise. *Financially fragile YES* is a dummy variable that equals 1 if the respondent answered "I could probably not come up with $2,000" or "I am certain I could not come up with $2,000" to the question: "How confident are you that you could come up with $2,000 if an unexpected need arose within the next month?" and 0 otherwise. *Financially fragile NO* is a dummy variable that equals 1 if the respondent answered "I am certain I could come up with the full $2,000" or "I could probably come up with $2,000" to the previous question, and 0 otherwise. *Expensive CC use YES*** is a dummy variable that equals 1 if the respondent answered "Yes" to the question: "In the past 12 months, have you been charged interest or a fee on your credit card(s)? Such as for missing or making a late payment, paying the minimum payment only, exceeding your credit line, or using the card(s) for a cash advance," and 0 otherwise. *Expensive CC use NO*** is a dummy variable that equals 1 if the respondent answered "No" to the previous question, and 0 otherwise. **Proportion conditional on having a credit card. *AFS use YES i*s a dummy variable that equals 1 if the respondent used one of the following alternative financial services at least once in the five years prior to the survey: a) took out an auto title loan; b) took out a payday loan; c) used a pawn shop; and d) used a rent-to-own store, and 0 otherwise. *AFS use NO i*s a dummy variable that equals 1 if the respondent did not use any of the alternative financial services reported in the previous question, and 0 otherwise. *Feeling anxious YES* is a dummy variable that equals 1 if the respondent answered "Strongly agree" or "Somewhat agree" to the statement: "Thinking about my personal finances can make me feel anxious," and 0 otherwise. *Feeling anxious NO* is a dummy variable that equals 1 if the respondent answered "Strongly disagree" or "Somewhat disagree" to the previous statement, and 0 otherwise. *At least 5 hours per week thinking* is a dummy variable that equals 1 if the respondent answered five hours or more to the statement: "How much time do you typically spend thinking about and dealing with issues and problems related to your personal finances? Please report approximate hours per week," and 0 otherwise. *Less than 5 hours per week thinking* is a dummy variable that equals 1 if the respondent answered four hours or less to the previous statement, and 0 otherwise. *Not financially literate (Big 3 not correct)* is a dummy variable that equals 1 if the respondent answered at least one of the three basic financial literacy questions (Big 3) on interest rate, inflation, and risk diversification incorrectly. *Financially literate (Big 3 correct)* is a dummy variable that equals 1 if the respondent answered all the Big 3 questions mentioned above correctly, and 0 otherwise. *The two financial education variables *Did not participate in financial education* and *Participated in financial education* are based on the question "Was any kind of financial education offered by a school or college you attended, or a workplace where you were employed?" The superscript *s* indicates the means are statistically different at the 5% level from the paired behaviors.

Figure 3: Financial well-being score distribution and financial fragility

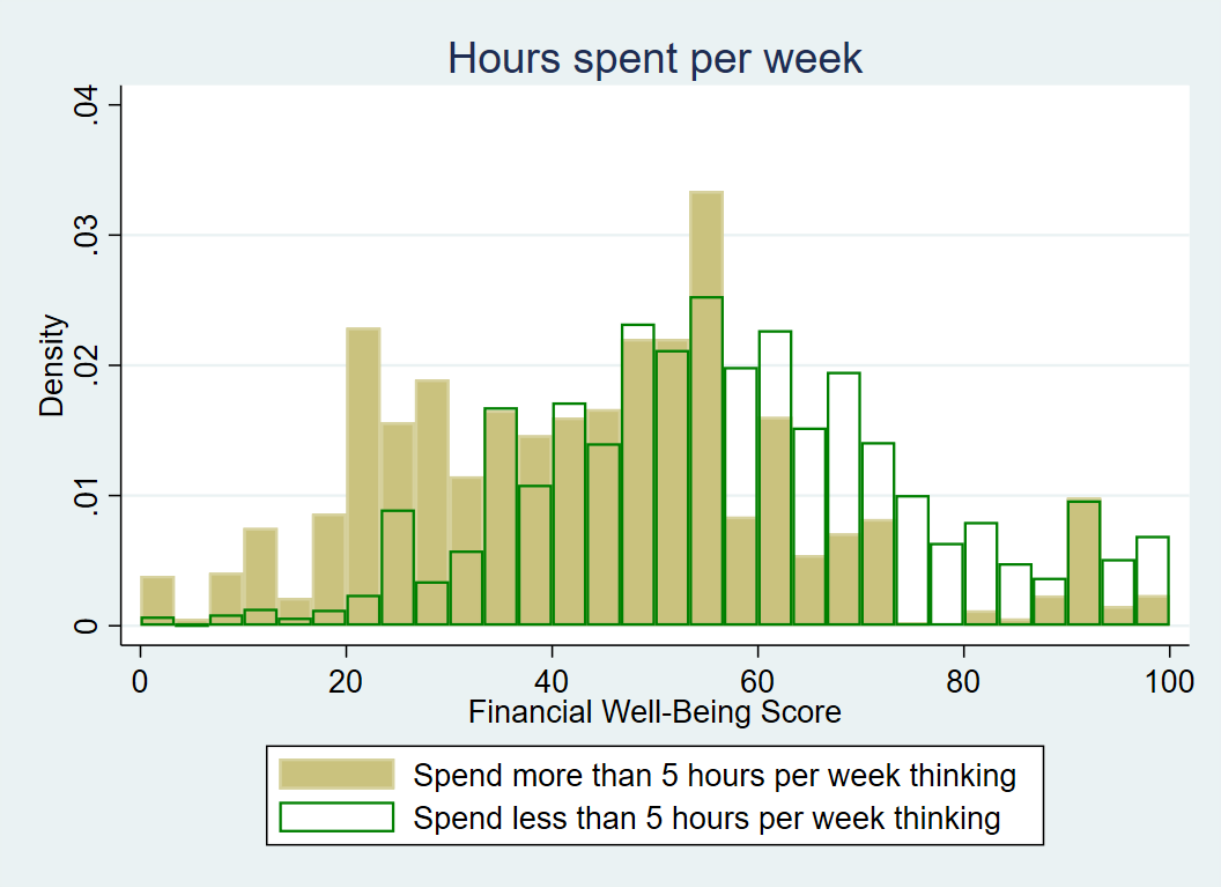


Source: Authors' calculations using the full sample collected using the YouGov panel.
Note: The financial well-being score is based on 10 questions and calculated using IRT methodology. Statistics are weighted.

Figure 4: Financial well-being score distribution and anxiety and hours spent.

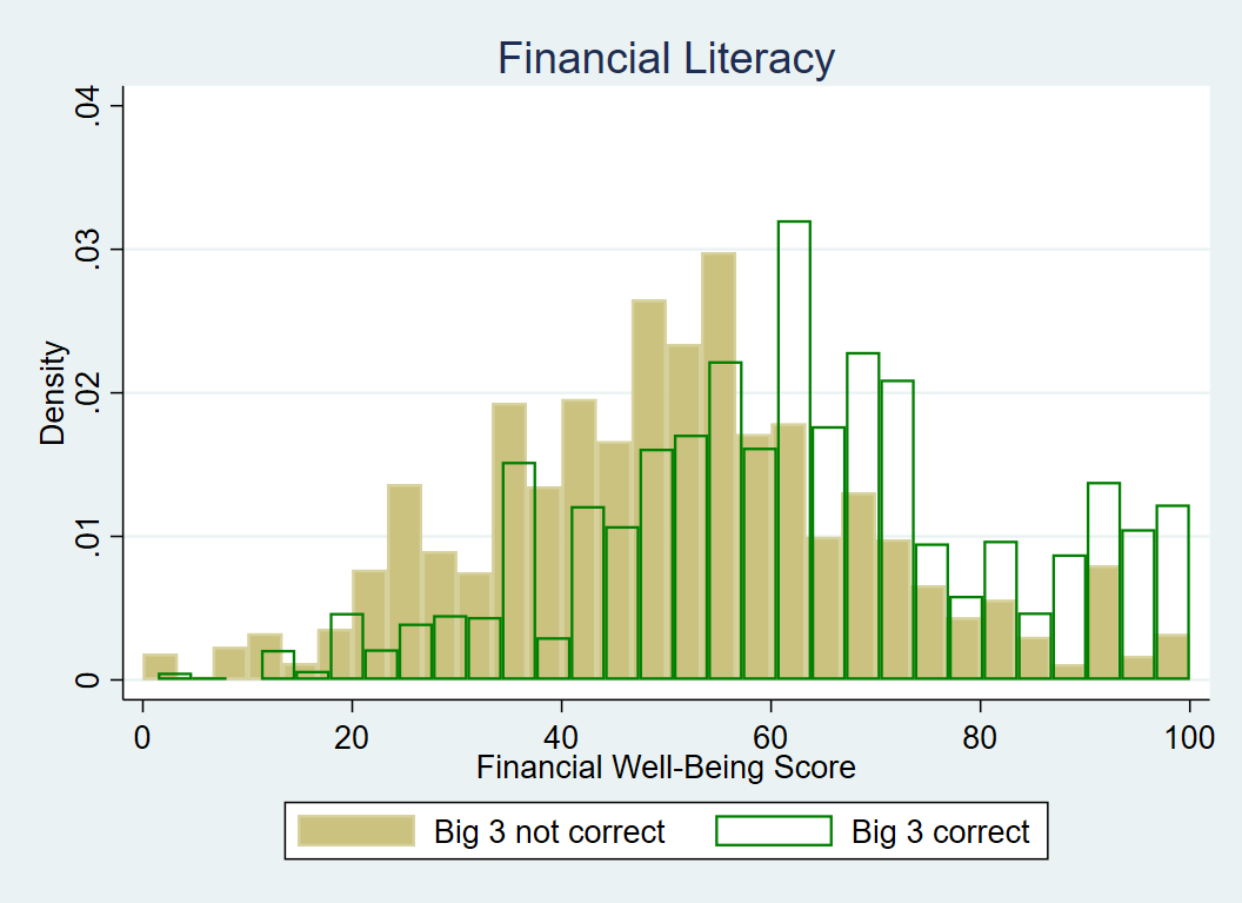


Source: Authors' calculations using the full sample collected using the YouGov panel.
Note: The financial well-being score is based on 10 questions and calculated using IRT methodology. Statistics are weighted.



Source: Authors' calculations using the full sample collected using the YouGov panel.
Note: The financial well-being score is based on 10 questions and calculated using IRT methodology. Statistics are weighted.

Figure 5: Financial well-being score distribution and financial literacy



Source: Authors' calculations using the full sample collected using the YouGov panel.
Note: The financial well-being score is based on 10 questions and calculated using IRT methodology. Statistics are weighted.

Table 7: Regressions of financial well-being score

	Financial Well-Being Score	Low score (0-37)	Medium score (38-57)	High score (58-100)
Age (Ref.: 18-39)				
40-55	-2.188	-0.000	0.028	-0.028
	(1.759)	(0.044)	(0.055)	(0.048)
56-70	-1.221	0.010	-0.008	-0.002
	(1.697)	(0.041)	(0.054)	(0.048)
70+	4.985**	-0.040	-0.093	0.133**
	(2.199)	(0.047)	(0.066)	(0.060)
Gender (Ref.: male)				
Female	-0.626	-0.003	0.024	-0.021
	(1.120)	(0.030)	(0.036)	(0.030)
Race/ethnicity (Ref.: White)				
Black	5.322***	-0.079*	0.030	0.049
	(1.965)	(0.043)	(0.064)	(0.055)
Hispanic	1.681	-0.048	0.062	-0.014
	(1.739)	(0.042)	(0.062)	(0.055)
Asian and other	-3.368	0.138*	-0.069	-0.069
	(2.255)	(0.073)	(0.064)	(0.050)
Highest degree obtained (Ref.: High school or less)				
Some college	-0.936	-0.025	0.027	-0.002
	(1.342)	(0.033)	(0.043)	(0.036)
Bachelor's degree or higher	0.352	-0.004	0.017	-0.013
	(1.652)	(0.039)	(0.048)	(0.041)
Marital status (Ref.: Married)				
Single	-4.081***	0.072*	0.035	-0.108**

	(1.557)	(0.043)	(0.053)	(0.047)
Divorced/Separated/Widowed	-2.827**	0.023	0.056	-0.079**
	(1.333)	(0.033)	(0.039)	(0.033)
Financially dependent children (Ref.: No Children)				
1 or 2 children	-2.108	0.043	-0.013	-0.030
	(1.425)	(0.040)	(0.045)	(0.037)
3 or more children	0.585	-0.042	0.012	0.029
	(2.656)	(0.048)	(0.075)	(0.073)
Household income (Ref.: Less than $30K)				
$30–49K	1.952	-0.040	0.011	0.029
	(1.734)	(0.050)	(0.055)	(0.049)
$50–79K	6.221***	-0.107**	0.006	0.100**
	(1.669)	(0.044)	(0.056)	(0.048)
$80–99K	10.360***	-0.128*	-0.105	0.232***
	(2.346)	(0.066)	(0.070)	(0.057)
$100K+	12.261***	-0.156***	-0.085	0.241***
	(2.084)	(0.056)	(0.065)	(0.059)
Work status (Ref.: Employed)				
Unemployed	-9.484***	0.227***	-0.024	-0.203***
	(2.736)	(0.078)	(0.082)	(0.053)
Not in labor force	-6.013***	0.094**	0.086	-0.180***
	(1.706)	(0.047)	(0.053)	(0.045)
Retired	1.635	0.001	-0.006	0.005
	(1.472)	(0.029)	(0.044)	(0.042)
Exogenous financial shock				
Income shock in past 12 months	-11.405***	0.219***	-0.018	-0.201***
	(1.349)	(0.042)	(0.045)	(0.036)
Financial literacy				
Big 3 correct	5.812***	-0.045	-0.109***	0.154***
	(1.339)	(0.028)	(0.039)	(0.039)
Constant	53.674***	0.189***	0.380***	0.431***

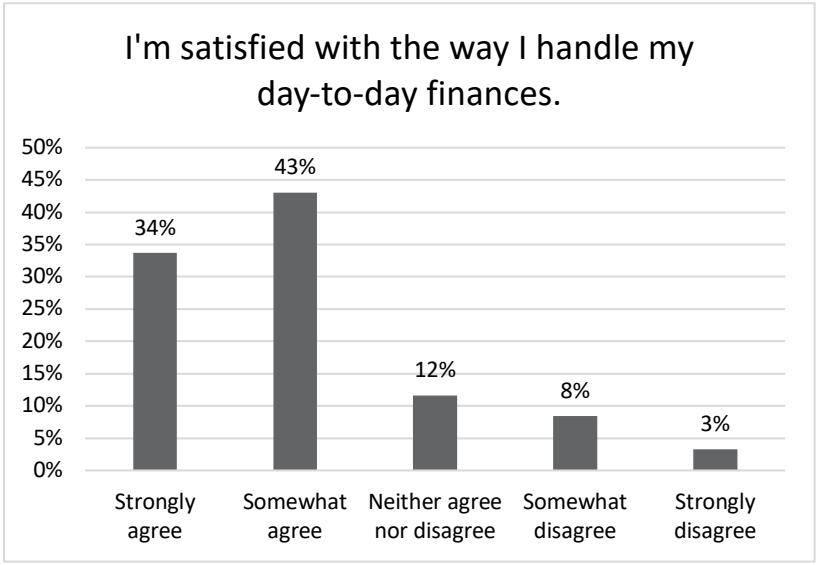
	(2.504)	(0.061)	(0.082)	(0.068)
Observations	1,723	1,723	1,723	1,723
R-squared	0.334	0.201	0.055	0.249

Source: Authors' calculations using the full sample collected using the YouGov panel.

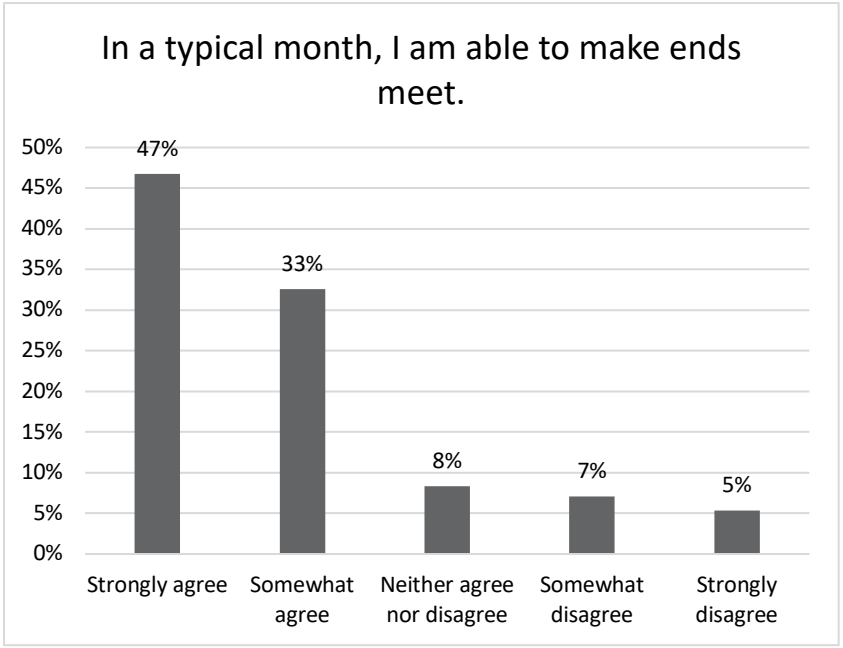
Note: The financial well-being score is based on 10 questions and calculated using IRT methodology. The variables *Low score, Medium score, High score,* are all based on the Financial Well-Being Score. *Low score* means a respondent has a score of 37 or less. *Medium score* means a respondent has a score of between 38 and 57. *High score* means a respondent has a score of 58 or more. Respondents who chose "White" were coded as *White*; respondents who chose "Black" were coded as *Black*; respondents who chose "Hispanic" were coded as *Hispanic*; and respondents who chose "Asian" or "Two or more races" were coded as *Asian and other*. The education variable highest degree obtained includes the categories *High school or less*, indicating that the highest degree received is a high school diploma; *some college*, indicating that respondents have attended a post-secondary institution and earned, at most, a two-year degree (i.e., an associate's degree); and *bachelor's degree or higher*, indicating that respondents have earned a four-year degree or post-graduate degree. The variable *financially dependent children* is based on the question: "How many children do you have who are financially dependent on you or your spouse/partner? Please include children not living at home, and step-children as well." . An individual's *work status* is defined by four categories: *Employed* for those who either have a full- or a part-time occupation or are self-employed; *unemployed* for those with no occupation at the time of the survey; *not in labor force* for those who are full-time students, full-time homemakers, or permanently sick, disabled, or unable to work (other); and *retired* for those who classify themselves as being retired. The variable *financial literacy* represents respondents that correctly answered the three basic financial literacy questions (Big 3) on interest rate, inflation, and risk diversification. Weighted OLS regressions were used. Ref. indicates the reference value of categorical variables. Robust standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Appendix A: Tables and Figures

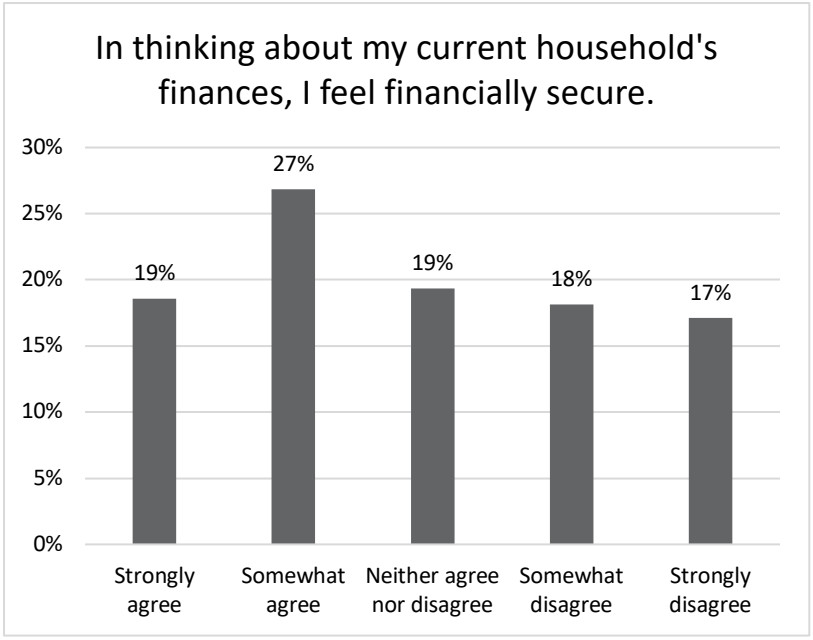
Figure A1: Response distributions for all individual financial well-being questions



Source: Authors' calculations using the full sample collected using the YouGov panel.
Note: Statistics are weighted.



Source: Authors' calculations using the full sample collected using the YouGov panel.
Note: Statistics are weighted.



Source: Authors' calculations using the full sample collected using the YouGov panel.
Note: Statistics are weighted.

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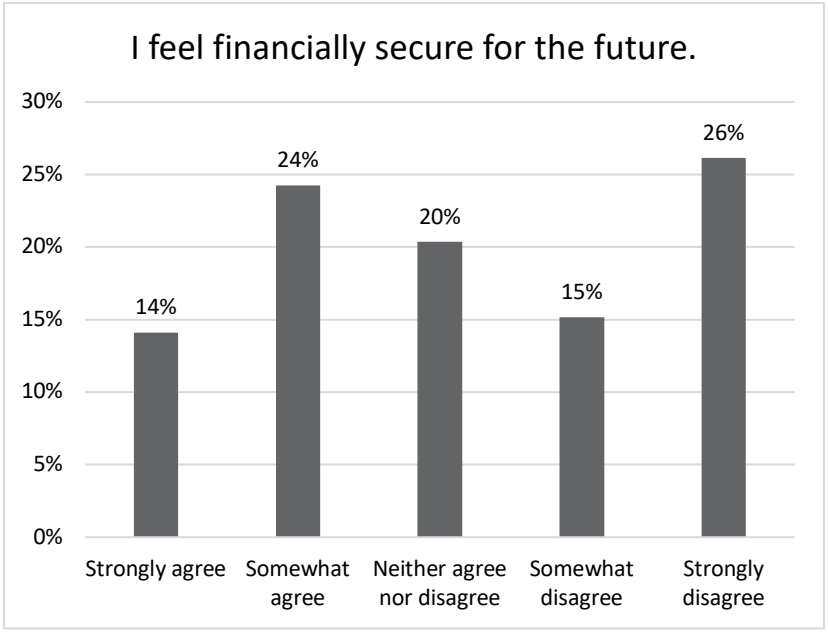
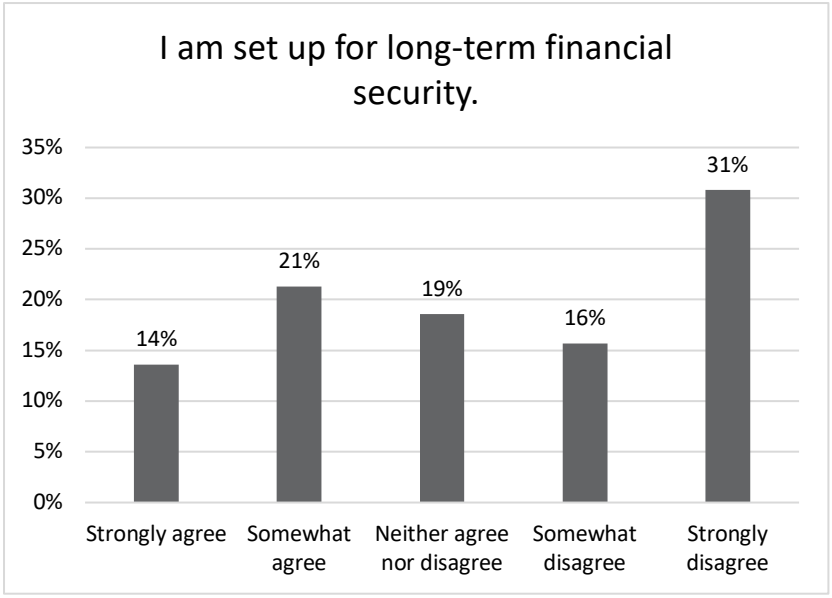
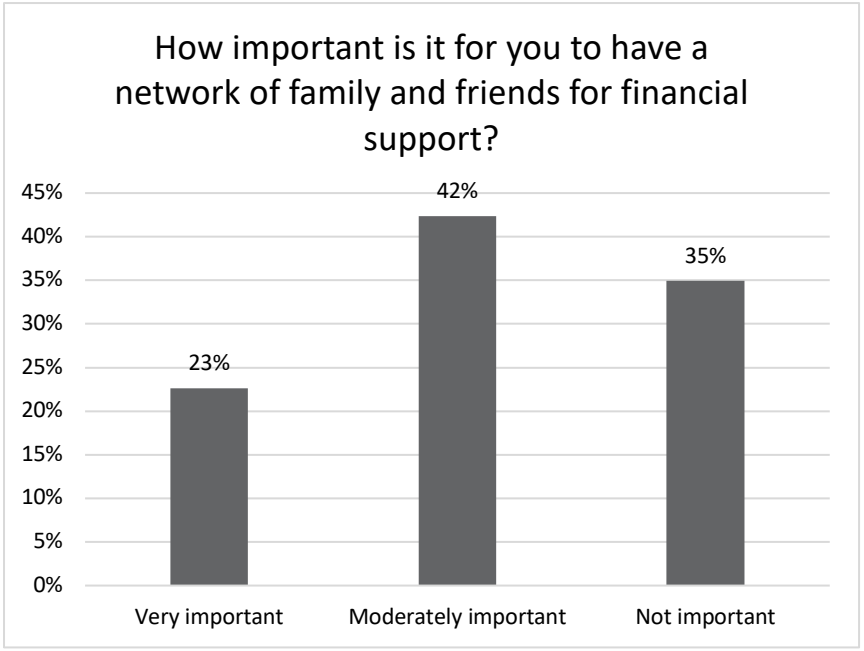
Note: Statistics are weighted.



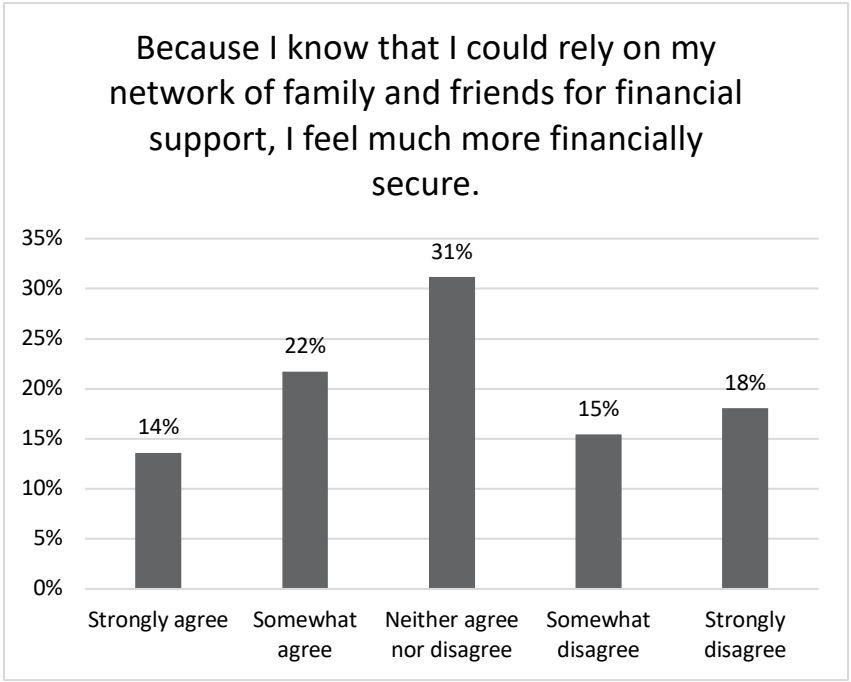
Source: Authors' calculations using the full sample collected using the YouGov panel.
Note: Statistics are weighted.



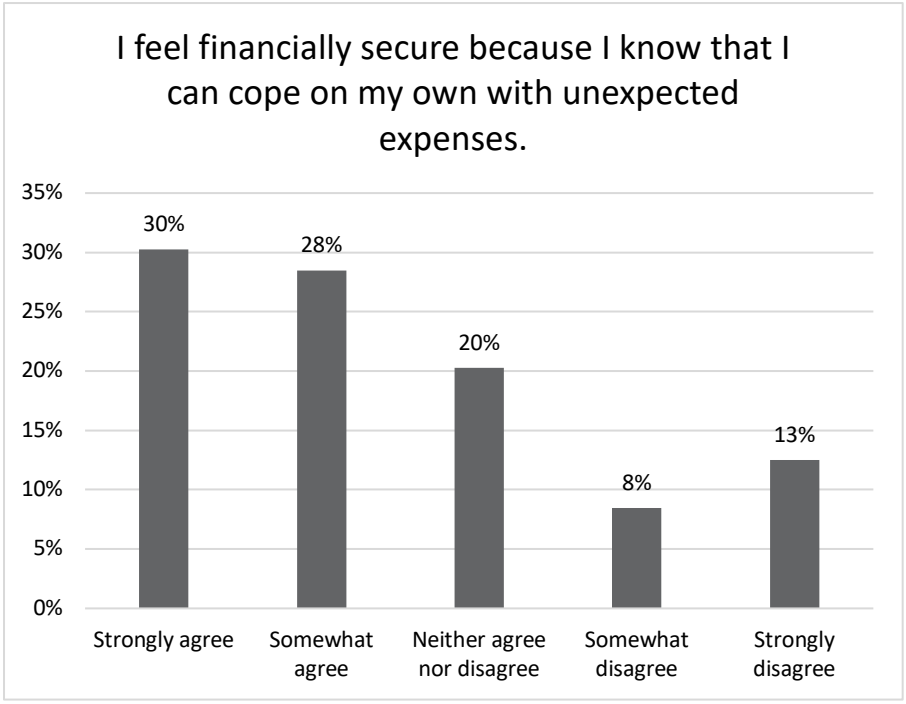
Source: Authors' calculations using the full sample collected using the YouGov panel.
Note: Statistics are weighted.



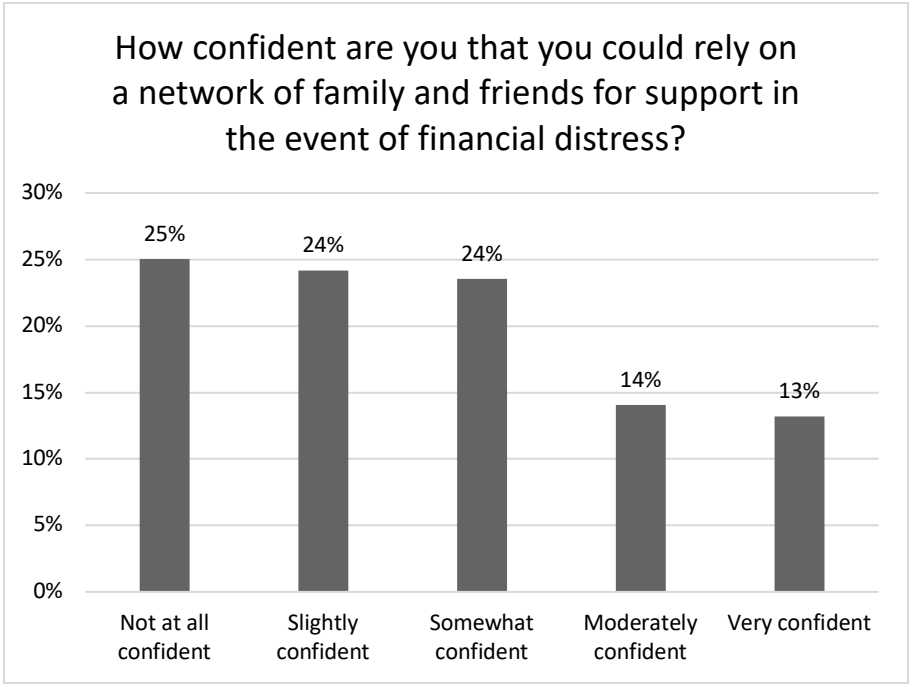
Source: Authors' calculations using the full sample collected using the YouGov panel.
Note: Statistics are weighted.



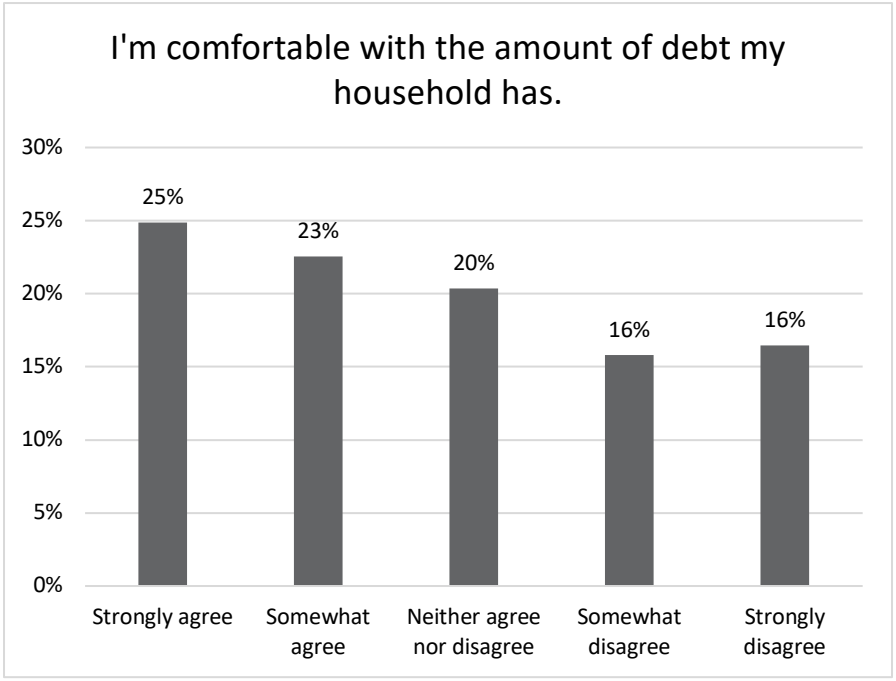
Source: Authors' calculations using the full sample collected using the YouGov panel.
Note: Statistics are weighted.



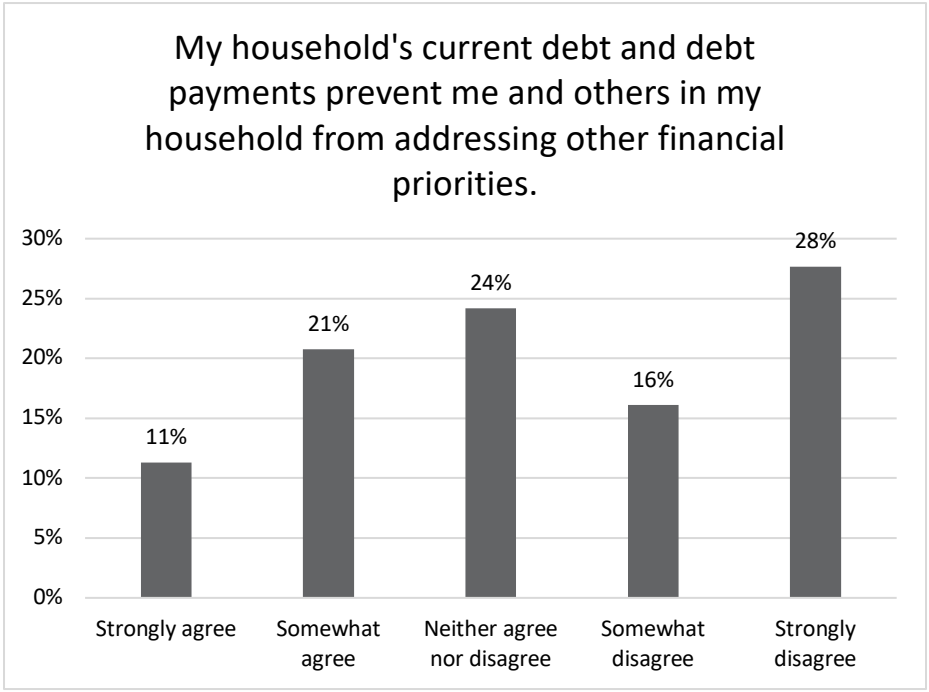
Source: Authors' calculations using the full sample collected using the YouGov panel.
Note: Statistics are weighted.



Source: Authors' calculations using the full sample collected using the YouGov panel.
Note: Statistics are weighted.



Source: Authors' calculations using the full sample collected using the YouGov panel.
Note: Statistics are weighted.



Source: Authors' calculations using the full sample collected using the YouGov panel.
Note: Statistics are weighted.

Table A1: Individual financial well-being questions and proxy variables

	Total population	Men	Women	Young (18-34 years)	Middle (35-54 years)	Old (55+ years)	Low Income (<30K)	Middle Income (50-79K)	High Income (>100K)	Black	Hispanic	White
A: Making ends meet												
Able to make ends meet	72%	81 %	63%	56%	72%	78%	52%	65%	90%	68%	66%	76%
Satisfied with day-to-day mgt	63%	73 %	55%	29%	65%	78%	51%	60%	77%	56%	58%	67%
Not difficult cover monthly expenses	*43%*	*43 %*	*43%*	*28%*	*50%*	*45%*	*26%*	*39%*	*65%*	*32%*	*48%*	*48%*
B: Coping with shocks												
Able to cover an emergency expense	28%	34 %	21%	3%	30%	37%	11%	26%	57%	11%	20%	34%
Feeling financially secure currently	32%	27 %	27%	20%	34%	36%	9%	26%	57%	16%	17%	40%
Having emergency funds 3 months of expenses	*34%*	*36 %*	*32%*	*29%*	*28%*	*41%*	*18%*	*34%*	*56%*	*24%*	*33%*	*38%*
C: Managing debt												
Not constrained by debt	34%	40 %	29%	17%	32%	44%	17%	30%	63%	33%	22%	38%
Comfortable with amount of debt	34%	42 %	27%	13%	34%	46%	15%	34%	60%	19%	17%	43%
Not having too much debt	*34%*	*39 %*	*30%*	*25%*	*29%*	*42%*	*22%*	*20%*	*54%*	*14%*	*35%*	*40%*
D: Planning for the long term												
Set up for long-term security	28%	36 %	20%	21%	26%	32%	8%	24%	56%	18%	23%	32%

Feeling financially secure future	30%	35 %	24%	30%	27%	32%	17%	25%	55%	40%	23%	31%
Retirement planning	*34%*	*47 %*	*22%*	*21%*	*31%*	*43%*	*14%*	*44%*	*59%*	*15%*	*34%*	*38%*
E: Having access to a financial support network												
Able to rely on network	22%	23 %	21%	21%	25%	20%	14%	20%	34%	20%	7%	26%
Feeling secure bc of network*	29%	33 %	26%	31%	31%	28%	20%	32%	41%	29%	32%	29%
Feeling secure bc own capacity*	45%	56 %	34%	9%	37%	64%	19%	34%	80%	13%	28%	53%
Total Observations	350	158	192	26	95	229	94	68	66	43	26	264

Source: Authors' calculations using the pilot sample collected using the YouGov panel.

Note: All statistics are weighted. Low-income individuals are defined as those who make less than $30,000 a year, middle-income individuals are those who make between $50,000 and $79,000 a year, and high-income individuals are those who make more than $100,000 a year. *Able to make ends meet* is a dummy variable that equals 1 if the respondent answered "Strongly agree" or "Somewhat agree" to the statement: "In a typical month, I am able to make ends meet," and 0 otherwise. *Satisfied with day-to-day mgt i*s a dummy variable that equals 1 if the respondent answered "Strongly agree" or "Somewhat agree" to the statement: "I'm satisfied with the way I handle my day-to-day finances," and 0 otherwise. *Not difficult cover monthly* expenses is a dummy variable that equals 1 if the respondent answered "Not at all difficult" to the following question: "In a typical month, how difficult is it for you to cover your expenses and pay all your bills?" and 0 otherwise. *Able to cover an emergency expense i*s a dummy variable that equals 1 if the respondent answered "Very confident" or "Moderately confident" to the question: "How confident are you that you could come up with an amount roughly equivalent to your monthly paycheck if an unexpected need arose within the next 30 days?" and 0 otherwise. *Feeling financially secure currently i*s a dummy variable that equals 1 if the respondent answered "Strongly agree" or "Somewhat agree" to the statement: "In thinking about my current household's finances, I feel financially secure," and 0 otherwise. *Not constrained by debt i*s a dummy variable that equals 1 if the respondent answered "Strongly disagree" or "Somewhat disagree" to the statement: "My household's current debt and debt payments prevent me and others in my household from addressing other financial priorities," and 0 otherwise. *Comfortable with amount of debt i*s a dummy variable that equals 1 if the respondent answered "Strongly agree" or "Somewhat agree" to the statement: "I'm comfortable with the amount of debt my household has," and 0 otherwise. *Set up for long-term security i*s a dummy variable that equals 1 if the respondent answered "Strongly agree" or "Somewhat agree" to the statement: "I am set up for long-term financial security," and 0 otherwise. *Not having too much debt* is a dummy variable equal to 1 if respondents answer "Strongly disagree" or "Somewhat disagree," to the statement: "I have too much debt right now," and 0 otherwise. *Feeling financially secure future i*s a dummy variable that equals 1 if the respondent answered "Strongly agree" or "Somewhat agree" to the statement: "I feel financially secure for the future," and 0 otherwise. *Retirement planning* is a variable that equals 1 if respondents answer "Yes" to the question: "Have you ever tried to figure out how much you need to save for retirement?" or "If you are retired: Did you try to figure out how much you needed to save for retirement before you retired?" and 0 otherwise. *Able to rely on network i*s a dummy variable that equals 1 if the respondent answered "Very confident" or "Moderately confident" to the following question: "How confident are you that you could rely on a network of family and friends for support in the event of financial distress?" and 0 otherwise. *Feeling secure bc of network* is a dummy variable that equals 1 if the respondent answered "Strongly agree" or "Somewhat agree" to the statement: "Because I know that I could rely on my network of family and friends for financial support, I feel much more financially secure," and 0 otherwise. *Feeling secure bc own capacity i*s a dummy variable that equals 1 if the respondent answered "Strongly agree" or "Somewhat agree" to the statement: "I feel financially secure because I know that I can cope on my own with unexpected expenses," and 0 otherwise. *Proportion conditional on whether the respondent values a network of family and friends for financial support (Network very/moderately important or not important, respectively).

Table A2: Correlation matrix of the individual well-being questions and proxy variables

Variables

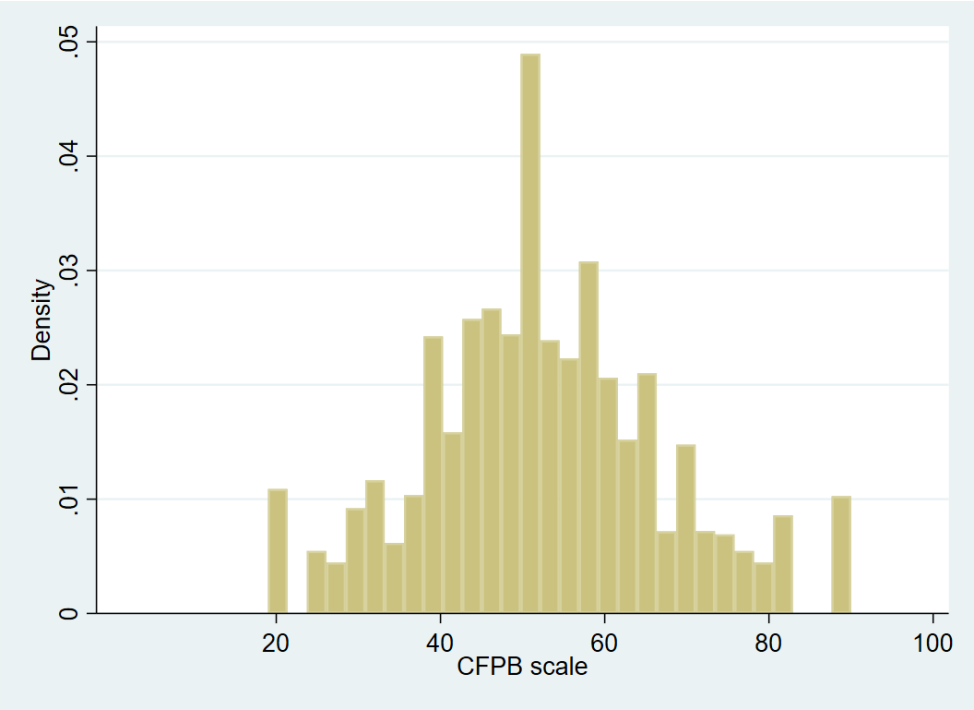
A: Making ends meet	Satisfied with day-to-day mgt	Able to make ends meet	Not difficult cover monthly expenses
Satisfied with day-to-day mgt	1.000	-	-
Able to make ends meet	0.384*	1.000	-
Not difficult cover monthly expenses	0.336*	0.416*	1.000
B: Coping with shocks	Feeling financially secure currently	Able to cover an emergency expense	Having emergency funds 3 months of expenses
Feeling financially secure currently	1.000	-	-
Able to cover an emergency expense	0.493*	1.000	-
Having emergency funds 3 months of expenses	0.391*	0.461*	1.000
C: Managing debt	Comfortable with amount of debt	Not constrained by debt	Not having too much debt
Comfortable with amount of debt	1.000	-	-
Not constrained by debt	0.477*	1.000	-
Not having too much debt	0.583*	0.497*	1.000
D: Planning for the long term	Feeling financially secure future	Set up for long-term security	Retirement planning
Feeling financially secure future	1.000	-	-
Set up for long-term security	0.673*	1.000	-
Retirement planning	0.288*	0.368*	1.000
E: Having access to a financial support network	Feeling secure bc of network	Feeling secure bc own capacity	Able to rely on network

Feeling secure bc of network	1.000	-	-
Feeling secure bc own capacity	-	1.000	-
Able to rely on network	0.539*	0.345*	1.000

Source: Authors' calculations using the pilot sample collected using the YouGov panel.

Note: All statistics are weighted. Low-income individuals are defined as those who make less than $30,000 a year, middle-income individuals are those who make between $50,000 and $79,000 a year, and high-income individuals are those who make more than $100,000 a year. *Able to make ends meet* is a dummy variable that equals 1 if the respondent answered "Strongly agree" or "Somewhat agree" to the statement: "In a typical month, I am able to make ends meet," and 0 otherwise. *Satisfied with day-to-day mgt i*s a dummy variable that equals 1 if the respondent answered "Strongly agree" or "Somewhat agree" to the statement: "I'm satisfied with the way I handle my day-to-day finances," and 0 otherwise. *Not difficult cover monthly* expenses is a dummy variable that equals 1 if the respondent answered "Not at all difficult" to the following question: "In a typical month, how difficult is it for you to cover your expenses and pay all your bills?" and 0 otherwise. *Able to cover an emergency expense i*s a dummy variable that equals 1 if the respondent answered "Very confident" or "Moderately confident" to the question: "How confident are you that you could come up with an amount roughly equivalent to your monthly paycheck if an unexpected need arose within the next 30 days?" and 0 otherwise. *Feeling financially secure currently i*s a dummy variable that equals 1 if the respondent answered "Strongly agree" or "Somewhat agree" to the statement: "In thinking about my current household's finances, I feel financially secure," and 0 otherwise. *Not constrained by debt i*s a dummy variable that equals 1 if the respondent answered "Strongly disagree" or "Somewhat disagree" to the statement: "My household's current debt and debt payments prevent me and others in my household from addressing other financial priorities," and 0 otherwise. *Comfortable with amount of debt i*s a dummy variable that equals 1 if the respondent answered "Strongly agree" or "Somewhat agree" to the statement: "I'm comfortable with the amount of debt my household has," and 0 otherwise. *Set up for long-term security i*s a dummy variable that equals 1 if the respondent answered "Strongly agree" or "Somewhat agree" to the statement: "I am set up for long-term financial security," and 0 otherwise. *Not having too much debt* is a dummy variable equal to 1 if respondents answer "Strongly disagree" or "Somewhat disagree" to the statement: "I have too much debt right now," and 0 otherwise. *Feeling financially secure future i*s a dummy variable that equals 1 if the respondent answered "Strongly agree" or "Somewhat agree" to the statement: "I feel financially secure for the future," and 0 otherwise. *Retirement planning* is a variable that equals 1 if respondents answer "Yes" to the question: "Have you ever tried to figure out how much you need to save for retirement?" or "If you are retired: Did you try to figure out how much you needed to save for retirement before you retired?" and 0 otherwise. *Feeling secure bc of network i*s a dummy variable that equals 1 if the respondent answered "Strongly agree" or "Somewhat agree" to the statement: "Because I know that I could rely on my network of family and friends for financial support, I feel much more financially secure," and 0 otherwise. *Feeling secure bc own capacity i*s a dummy variable that equals 1 if the respondent answered "Strongly agree" or "Somewhat agree" to the statement: "I feel financially secure because I know that I can cope on my own with unexpected expenses," and 0 otherwise. Those two variables are conditional on whether the respondent values a network of family and friends for financial support (Network very/moderately important or not important, respectively). *Able to rely on network i*s a dummy variable that equals 1 if the respondent answered "Very confident" or "Moderately confident" to the following question: "How confident are you that you could rely on a network of family and friends for support in the event of financial distress?" and 0 otherwise. Using a Bonferroni-adjusted significance level, all correlation coefficients are statistically significant at the five percent level.

Figure A2: Distribution of the CFPB scale



Source: Authors' calculations using the full sample.
Note: Statistics are weighted.

Table A3: Regressions of financial well-being score using offered financial education as an instrumental variable

	Financial Well-Being Score	Low score (0-37)	Medium score (38-57)	High score (58-100)
Age (Ref.: 18-39)				
40-55	-1.848	-0.003	0.023	-0.020
	(1.794)	(0.044)	(0.056)	(0.049)
56-70	-0.797	0.006	-0.016	0.010
	(1.745)	(0.041)	(0.055)	(0.049)
70+	5.658**	-0.045	-0.108	0.153**
	(2.257)	(0.047)	(0.067)	(0.062)
Gender (Ref.: male)				
Female	-1.100	0.001	0.029	-0.030
	(1.131)	(0.029)	(0.035)	(0.031)
Race/ethnicity (Ref.: White)				
Black	3.637*	-0.066	0.065	0.001
	(1.934)	(0.043)	(0.063)	(0.056)
Hispanic	0.864	-0.042	0.080	-0.038
	(1.772)	(0.042)	(0.062)	(0.055)
Asian and other	-3.865	0.142*	-0.059	-0.083
	(2.424)	(0.075)	(0.062)	(0.055)
Highest degree obtained (Ref.: High school or less)				
Some college	-0.523	-0.028	0.023	0.005
	(1.342)	(0.033)	(0.043)	(0.036)
Bachelor's degree or higher	1.457	-0.013	0.001	0.012
	(1.792)	(0.040)	(0.047)	(0.044)
Marital status (Ref.: Married)				
Single	-4.496***	0.076*	0.042	-0.117**

	(1.591)	(0.043)	(0.053)	(0.048)
Divorced/Separated/Widowed	-2.966**	0.024	0.057	-0.081**
	(1.351)	(0.033)	(0.039)	(0.034)
Financially dependent children (Ref.: No Children)				
1 or 2 children	-2.402*	0.045	-0.007	-0.039
	(1.421)	(0.040)	(0.044)	(0.037)
3 or more children	-0.202	-0.036	0.034	0.002
	(2.885)	(0.049)	(0.078)	(0.077)
Household income (Ref.: Less than $30K)				
$30–49K	2.400	-0.043	0.000	0.043
	(1.753)	(0.050)	(0.055)	(0.050)
$50–79K	6.536***	-0.109**	-0.001	0.110**
	(1.734)	(0.044)	(0.055)	(0.049)
$80–99K	11.128***	-0.134**	-0.119*	0.252***
	(2.430)	(0.066)	(0.069)	(0.057)
$100K+	13.324***	-0.164***	-0.106*	0.269***
	(2.124)	(0.056)	(0.062)	(0.060)
Work status (Ref.: Employed)				
Unemployed	-9.848***	0.230***	-0.016	-0.214***
	(2.837)	(0.079)	(0.080)	(0.054)
Not in labor force	-6.391***	0.097**	0.093*	-0.190***
	(1.795)	(0.048)	(0.053)	(0.047)
Retired	1.363	0.004	0.000	-0.004
	(1.528)	(0.029)	(0.045)	(0.043)
Exogenous financial shock				
Income shock in past 12 months	-11.543***	0.220***	-0.015	-0.205***
	(1.373)	(0.042)	(0.045)	(0.036)
Financial literacy				
Financial education offered	3.266**	-0.025	-0.094**	0.118***
	(1.312)	(0.032)	(0.040)	(0.037)
Constant	54.454***	0.183***	0.372***	0.445***

	(2.549)	(0.062)	(0.081)	(0.072)
Observations	1,723	1,723	1,723	1,723
R-squared	0.325	0.200	0.054	0.244

Source: Authors' calculations using the full sample collected using the YouGov panel.

Note: The financial well-being score is based on 10 questions and calculated using IRT methodology. The variables *Low score, Medium score, High score,* are all based on the Financial Well-Being Score. *Low score* means a respondent has a score of 37 or less. *Medium score* means a respondent has a score of between 38 and 57. *High score* means a respondent has a score of 58 or more. Respondents who chose "White" were coded as *White*; respondents who chose "Black" were coded as *Black*; respondents who chose "Hispanic" were coded as *Hispanic*; and respondents who chose "Asian" or "Two or more races" were coded as *Asian and other*. The education variable highest degree obtained includes the categories *High school or less*, indicating that the highest degree received is a high school diploma; *some college*, indicating that respondents have attended a post-secondary institution and earned, at most, a two-year degree (i.e., an associate's degree); and *bachelor's degree or higher*, indicating that respondents have earned a four-year degree or post-graduate degree. The variable *financially dependent children* is based on the question: "How many children do you have who are financially dependent on you or your spouse/partner? Please include children not living at home, and step-children as well." An individual's *work status* is defined by four categories: *Employed* for those who either have a full- or a part-time occupation or are self-employed; *unemployed* for those with no occupation at the time of the survey; *not in labor force* for those who are full-time students, full-time homemakers, or permanently sick, disabled, or unable to work (other); and *retired* for those who classify themselves as being retired. The variable *financial education offered* is based on the question: "Was any kind of financial education offered by a school or college you attended, or a workplace where you were employed?" Weighted OLS regressions were used. Ref. indicates the reference value of categorical variables. Robust standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Appendix B: List of Non-Score Questions asked in the Full Survey

CFPB financial well-being scale questions:

How often does this statement apply to you? I have money left over at the end of the month.
1 Never
2 Rarely
3 Sometimes
4 Often
5 Always

I'm just getting by financially.
1 Does not describe me at all
2 Describes me very little
3 Describes me somewhat
4 Describes me very well
5 Describes me completely

My finances control my life.
1 Never
2 Rarely
3 Sometimes
4 Often
5 Always

Because of my money situation, I feel like I will never have the things I want in life.
1 Does not describe me at all
2 Describes me very little
3 Describes me somewhat
4 Describes me very well
5 Describes me completely

I am concerned that the money I have or will save won't last.
1 Does not describe me at all

2 Describes me very little
3 Describes me somewhat
4 Describes me very well
5 Describes me completely

Overall personal financial situation:
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.”

Do you have any retirement plans through a current or previous employer (such as a pension plan, a Thrift Savings Plan, or a 401(k)) or any other retirement account that you have set up yourself (such as an IRA, Keogh, SEP)?
1 Yes
2 No

How confident are you that you could come up with $2,000 if an unexpected need arose within the next month?
1 I am certain I could come up with the full $2,000
2 I could probably come up with $2,000
3 I could probably not come up with $2,000
4 I am certain I could not come up with $2,000
98 Don’t know

Costly money management behavior:
In the past 12 months, have you been charged interest or a fee on your credit card(s)? Such as for missing or making a late payment, paying the minimum payment only, exceeding your credit line, or using the card(s) for a cash advance.
1 Yes
2 No
3 Don’t have a credit card

In the past 5 years, have you used any of the following services? a) Auto title loan (Auto title loans are loans where a car title is used to borrow money for a short period of time. They are not loans used to purchase an automobile.); b) Short term "payday" loan; c) Advance on your tax refund (this is sometimes called a "refund anticipation check" or "Rapid Refund". Not the same as e-filing); d) Pawn shop; e) Rent-to-own store
1 Yes

2 No

Financial anxiety and time spent worrying:
Thinking about my personal finances can make me feel anxious.
1 Strongly agree
2 Somewhat agree
3 Neither agree nor disagree
4 Somewhat disagree
5 Strongly disagree

How much time do you typically spend thinking about and dealing with issues and problems related to your personal finances? Please report approximate hours per week.
1 Less than 1 hour
2 1 to 2 hours
3 3 to 4 hours
4 5 to 7 hours
5 8 to 10 hours
6 11 to 15 hours
7 16 to 20 hours
8 20+ hours

Big 3 financial literacy questions and financial education:
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?
1 More than $102
2 Exactly $102
3 Less than $102
98 Do not know

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?
1 More than today
2 Exactly the same

3 Less than today
98 Do not know

Do you think that the following statement is true or false? “Buying a single company stock usually provides a safer return than a stock mutual fund.”
1 True
2 False
98 Do not know

Was any kind of financial education offered by a school or college you attended, or a workplace where you were employed?
1 Yes, but I did not participate in the financial education offered
2 Yes, and I did participate in the financial education offered
3 No
98 Do not know