Financial well-being in America



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Executive summary

An essential part of the Consumer Financial Protection Bureau (CFPB or Bureau)'s mission is empowering consumers to take control over their financial lives. In addition to a safe, transparent marketplace, consumers need the financial capability to effectively navigate that marketplace to achieve their own financial and life goals. Defining, measuring, and studying what contributes to financial well-being—the "ultimate goal" of financial education, has been a key part of the CFPB's strategy for improving financial capability. CFPB's rigorous set of research activities has produced a consumer-driven definition of financial well-being,¹ and a reliable and validated scale for measuring it. Using this scale, which produces a financial well-being score that falls between 0 and 100, financial well-being can be meaningfully compared between people and over time.

In late 2016, the CFPB fielded for the first time the financial well-being scale in a nationwide survey of adults in the United States. In addition to measuring individuals' financial well-being, the survey collected a host of other measures, including items related to: (1) individual characteristics; (2) household and family characteristics; (3) income and employment characteristics; (4) savings and safety nets; (5) financial experiences; and (6) financial behaviors, skills, and attitudes. This report presents the survey's findings on the distribution of financial well-being scores for the U.S. adult population overall and for selected subgroups defined by these additional measures. These descriptive findings provide insight into which

¹ CFPB defines financial well-being as a state of being wherein a person can fully meet current and ongoing financial obligations, can feel secure in their financial future, and is able to make choices that allow enjoyment of life. See "Financial Well-Being: The goal of financial education" for more information on this definition, available at: consumerfinance.gov/data-research/research-reports/financial-well-being/

subgroups are faring relatively well and which ones are facing greater financial challenges.² At the same time, the report raises important questions about what may drive variations in financial well-being *within* subgroups and how these factors may work together to determine an individual's level of financial well-being.

This report provides a first-of-its-kind view into the state of financial well-being in America. By showing whether and how a wide range of characteristics, opportunities, experiences, behaviors, skills, and attitudes are associated with financial well-being, we hope this report will catalyze researchers, policymakers, and practitioners to further explore these relationships to determine the factors that drive an individual's financial well-being and opportunities to help improve people's financial lives through financial education and related supports.

Key findings

There is wide variation in how people in the U.S. feel about their financial well-

being. The average financial well-being score for U.S. adults is 54 on a scale that falls between zero and 100. ³ However, there is a 35-point spread between the top 10 percent and the bottom 10 percent of scores. About a third of all adults in the United States have financial well-being scores of 50 or below, about a third have scores between 51 and 60, and about a third have scores of 61 or above.

² While all differences presented in this report have been found to be statistically significant, the findings are nonetheless descriptive in nature. Importantly, the descriptive relationships between various characteristics and financial well-being do not necessarily mean there is a causal relationship. Such characteristics may be related to financial well-being for many reasons. While it is possible that one or more of these factors may influence how individuals perceive their financial security and freedom to make financial choices, it is also possible that the reverse is true—that financial well-being influences one or more of these factors. There may also be underlying, unobserved factors that are correlated with both financial well-being and these characteristics and that account for the observed associations. For similar reasons, in cases where these initial findings do not indicate an association between a particular factor and financial well-being, it does not necessarily mean that a relationship does not exist. Only through deeper analysis that controls for multiple factors can the true relationships between these characteristics and financial well-being be identified.

³ 54 is also the median level.

Financial well-being scores reflect real differences in underlying financial

circumstances. Scores of 50 or below are associated with both a high probability (well above 50%) of struggling to make ends meet and of experiencing material hardship.⁴ By contrast, scores of 61 and above are associated with low probability (less than 10%) of having trouble paying for basic needs or making ends meet. These results suggest that the financial well-being scale is a helpful measure for gauging how individuals are faring financially.

Financial well-being scores provide information beyond traditional financial

measures. For example, at all household income levels financial well-being scores vary widely, and someone with lower income can have higher financial well-being than someone with higher income. The fact that, for a given score, some individuals have faced or are facing difficult financial circumstances (i.e., material hardships or difficulty making ends meet) and some are not shows that the same financial well-being score can reflect a diversity of circumstances, conditions, or perceptions.

Savings and financial cushions provide the greatest differentiation between people with different levels of financial well-being. Of all the factors that we examined, disparities in financial well-being are greatest between subgroups that have different levels of liquid savings. The average financial well-being for adults with the lowest level of savings (less than \$250) is 41, compared to 68 for adults with the highest level of liquid saving (\$75,000 or more). When we look at a related measure—the capacity to absorb unexpected expenses—we observe similar differences in scores. These findings highlight the importance of savings and other safety nets in helping people to feel financially secure, one of the basic elements of financial well-being.

Certain experiences with debt and credit seem to be strongly—and negatively—associated with financial well-being. These include whether someone has been denied credit, has used a non-bank short-term credit product,⁵ and has been contacted by a debt

⁴ Defined as running out, or worrying about running out, of food, not being able to afford medical treatment or a place to live, or having utilities turned off.

⁵ Non-bank, short-term credit products include, for example, payday loans, pawn loans, and auto title loans.

collector. It is possible that these associations simply reflect the correlation between these experiences and a general lack of financial resources, which could be at the root of the lower financial well-being. However, it is also possible that these experiences have more specific and direct relationships with financial well-being.

Higher levels of financial know-how, confidence, and certain day-to-day money management behaviors appear to have strong and positive relationships with financial well-being. In particular, confidence in one's ability to achieve financial goals, having a regular habit of saving money, and engaging in effective day-to-day money management behaviors⁶ are all associated with higher average financial well-being. In addition, individuals with relatively high levels of financial knowledge and financial skills have higher average financial well-being (with larger differences in financial well-being between subgroups with different levels of financial skills than between subgroups with different levels of financial knowledge). ⁷

Many financial and demographic characteristics are associated with financial well-being, but several are not. Many standard financial and sociodemographic characteristics appear to be related to financial well-being. Not surprisingly, employment status, income, and educational attainment all seem to have a strong relationship with financial well-being. In addition, it appears that financial well-being is higher for older adults, especially those aged 65 and older. ⁸

⁶ Specific money management practices that respondents were asked about included: (1) paying bills on time; (2) staying within their budget or spending plan; (3) paying credit card balances in full each month; and (4) checking their statements, bills, and receipts to make sure there were no errors.

⁷ We measure financial skill using a 10-item financial skill scale developed by the CFPB. We measure financial knowledge using the 10-item version of the Knoll-Houts Financial Knowledge Scale (see The Financial Knowledge Scale: An Application of Item Response Theory to the Assessment of Financial Literacy, available at http://onlinelibrary.wiley.com/doi/10.1111/j.1745-6606.2012.01241.x/abstract).

⁸ There are many possible factors that may contribute to these results. The positive association between financial well-being and age, for instance, could be due to changes in financial factors that correspond to the life course, such as higher incomes that come with longer tenure in the job market for those who are still working, increased asset accumulation over time, or the security that comes with access to social benefits such as Social Security retirement

However, other sociodemographic categorizations do not appear to have such a strong relationship with financial well-being. For example, there are no differences in average financial well-being based on U.S. region; nor is there a difference in average financial well-being between men and women. And, while we do find some differences between financial well-being for various racial/ethnic groups (non-Hispanic white adults report higher levels than all other racial/ethnic groups), these differences are relatively small compared to the differences between subgroups based on financial experiences, attitudes, behaviors, and skills mentioned above.⁹

Multiple factors likely affect the exact level of financial well-being of any particular individual. The high degree of variation in financial well-being found within almost all subgroups suggests that none of these factors determines financial well-being on its own. For the subgroups examined for this report, the average spread between the lower end (10th percentile) and upper end (90th percentile) financial well-being score is more than 30 points. As a result, even when there are large differences in the average financial well-being between subgroups (for example, adults with a graduate or professional degree versus those with only a high school diploma), some people in the lower average score subgroup still have higher scores than many people in the higher average score subgroup.¹⁰

These wide and overlapping distributions suggest that, even when an individual is a member of a group that is at a relative disadvantage, there may be compensating factors or strategies that offer opportunities for these individuals to boost their financial well-being. Future multivariate

benefits and Medicare. It could also be due to differences in expectations, life goals, and priorities at different life stages that also may affect financial well-being.

⁹ The largest difference in average scores between racial/ethnic groups is five points.

¹⁰ Continuing with the education example, adults with a graduate or professional degree have an average financial well-being that is 9 points higher than adults with only a high school diploma. Yet, the top quarter of individuals with a high school degree have financial well-being scores that (at 61 or more points) are higher than the bottom half of those with a graduate degree (at less than 61 points). Such findings suggest that, though education has a strong association with financial well-being on average, there are likely other factors besides education that figure into financial well-being.

analysis can lead to better understanding of how various factors may interact to determine financial well-being.

Characteristics that have relatively little *within-subgroup* variation in financial well-being and low overlap of scores *between* subgroups may be more closely tied to financial well-being. While we do observe a general pattern of wide and overlapping distributions, we find some exceptions. Most notable is the pattern emerging when we look at financial well-being by liquid savings. Financial well-being scores for each liquid savings subgroup are distributed relatively narrowly, and the overlap of scores between the highest and lowest savings subgroups is very limited. ¹¹ The relatively low variation in scores within savings subgroups—and the very low overlap between savings subgroups—provides further evidence that financial cushions may be particularly closely related to financial well-being, as previously noted.

Opportunities to advance financial wellbeing

CFPB's financial well-being measure provides a new perspective on the financial conditions of U.S. adults. As these initial descriptive findings show, financial well-being—while correlated with traditional household financial measures such as employment status and income—is capturing something fundamentally different than these traditional measures, namely an individual's financial security and financial freedom of choice. Differences in financial well-being between groups, as well as wide variations in scores within groups, suggest that many

¹¹ The spread between the top 10 percent and bottom 10 percent of financial well-being scores for each liquid savings subgroup ranges from 24 to 29 points, compared to 35 for the overall population of U.S. adults. In addition, the scores for individuals with low levels of savings barely overlap those with high levels of savings. Only 10 percent of adults with less than \$250 in liquid savings have financial well-being scores of 55 or higher, while only ten percent of adults with more than \$75,000 in liquid savings have scores *under* 55. We observe a similar, though less extreme pattern, for perceived ability to absorb an unexpected expense. For adults who said they are certain they could *not* come up with \$2,000 in 30 days, only 10 percent had a financial well-being score of 52 or higher. For those who said they are certain they could come up with \$2000 in 30 days, only 25 percent had scores *under* 54.

individual, household, and situational factors play a part in the financial well-being of any given individual.

Encouragingly for financial educators and others who work to help consumers take greater control over their financial lives, a number of indicators that are the target outcomes of such programs, such as financial skills, confidence, and effective money management behaviors, appear to have strong and positive relationships with financial well-being. That being said, it is critical to keep in mind that the findings presented in this report are descriptive in nature, based on simple comparisons of financial well-being for selected groups. When we compare the financial well-being of two subgroups, we are not attempting to establish the causes or drivers of financial well-being.

Rather, this report lays the groundwork for future analyses. The findings highlighted above suggest several avenues for future research, such as whether the relationships between various characteristics and financial well-being hold when controlling for other factors and, if so, what drives within-group variations. Once the drivers are identified, the next step will be to examine how financial education and other policies and programs can influence those drivers to enhance financial well-being. Meanwhile, financial educators and their partner researchers can already use the CFPB Financial Well-Being Scale to assess and track changes in financial well-being and to measure how different programmatic approaches contribute to the financial well-being of the people they serve.

Along with this report, we are releasing a new public dataset containing the financial well-being score and a host of personal and situational characteristics for more than 6,000 U.S. adults. We hope that researchers, policymakers, and practitioners will use this dataset, the findings presented in this report, and the CFPB Financial Well-Being Scale to explore the relationships between financial well-being and these and other characteristics so that we can all help move individuals along on the pathway to greater financial well-being.

1. Introduction

This report presents the first results from the National Financial Well-Being Survey, a national survey on the financial well-being of adults in the United States, conducted by the Consumer Financial Protection Bureau (CFPB) between October and December, 2016. The survey represents the first time the CFPB's tool for measuring individual financial well-being, the CFPB Financial Well-Being Scale, has been asked of a sample of U.S. adults broadly representative of the U.S. population.¹²

This report presents descriptive information on the level and distribution of financial well-being for the U.S. adult population. In addition, it presents descriptive information on the financial well-being of subgroups defined by: (1) individual characteristics; (2) household and family characteristics; (3) income and employment characteristics; (4) savings and safety nets; (5) financial experiences; and (6) financial behaviors, skills and attitudes.

These initial descriptive statistics, along with the public use dataset from the National Financial Well-Being Survey, lay the groundwork for future, deeper analysis to identify the factors that drive financial well-being and successful programmatic and policy approaches for doing so. We also hope that it provides inspiration and encouragement to the many policymakers, program directors, and other professionals whose mission it is to help people improve their finances to continue their efforts to address barriers to financial well-being.

¹² The sample for the National Financial Well-Being Survey was drawn from the GfK Knowledge Panel[®] (GfK panel), a recruited internet panel designed to be nationally representative of U.S. households. As described in Appendix C, the study sample was also weighted to ensure that the weighted sample matches the U.S. population with respect to key demographics. However, it is possible that coverage error or nonresponse error may result in differences between the sample and the U.S. population that are not corrected for by using weights.

The rest of this report is organized as follows. Section 1.1 provides a brief background on the CFPB's research activities leading up to the National Financial Well-Being Survey. Section 2 describes the design and data collection for the National Financial Well-Being Survey. Section 3 presents the averages and distributions of financial well-being for the U.S. population as a whole and broken out by selected characteristics. Section 4 provides concluding remarks. The appendices provide detailed tabulations of results from our descriptive analysis, information about the survey measures presented in this report, technical details on the National Financial Well-Being Survey methodology, and a description of methods used to test the statistical significance of subgroup differences in average financial well-being scores.

1.1 Background

An essential part of the CFPB's mission is empowering consumers to take control over their financial lives. In addition to a safe, transparent marketplace, consumers need the financial capability or literacy to navigate that marketplace effectively. The Bureau has been charged with working to improve the financial literacy of consumers in America.¹³

Over the past several years, a key part of CFPB's strategy for improving financial capability has revolved around a rigorous set of research activities designed to define and measure "success" for financial literacy initiatives. ¹⁴ This work has included the development of an evidence-based, consumer-driven definition of financial well-being and a scale—a set of questions along with a

¹³ An important financial literacy mandate is set forth in Section 1013(d) of the Dodd-Frank Act, which directs the CFPB, through its Office of Financial Education, to develop and implement initiatives intended to "educate and empower consumers to make better informed financial decisions" and to "develop and implement a strategy to improve the financial literacy of consumers....consistent with the National Strategy for Financial Literacy...." (12 U.S.C. § 5493(d) (1)&(2)). The Dodd-Frank Act also mandated the creation of other offices within the Bureau that are responsible for, among other things, developing financial education and policy initiatives to support the financial well-being of particular segments of the consumer population (12 U.S.C. § 5493(b),(e),(g)).

¹⁴ Another key component of CFPB's strategy to improve financial literacy is by providing consumers with tools and resources to increase their financial capability.

scoring procedure—to measure it. This definition and scale lay the groundwork for the National Financial Well-Being Survey.

1.1.1 Defining financial well-being

A foundational step in providing evidence of what works in financial education is knowing how to define and measure success. A growing consensus in the field has recognized that financial education should go beyond simply helping individuals acquire financial facts and actually equip people to act on that knowledge, and that the ultimate goal for financial capability efforts should be improved *financial well-being*. ¹⁵ Because financial well-being had not been previously defined in this context, the CFPB set out to create a standard, comprehensive definition of financial well-being from the consumer perspective that would be relevant across a range of individual circumstances: ¹⁶

Financial well-being is a state of being wherein a person can fully meet current and ongoing financial obligations, can feel secure in their financial future and is able to make choices that allow them to enjoy life.

More specifically, an individual's financial well-being corresponds to the extent to which the individual feels that he or she: (1) has control over day-to-day and month-to-month finances;

¹⁵ This measure is consistent with the guiding vision of FLEC's national strategy of achieving "sustained financial wellbeing for all individuals and families in the United States." This vision is also consistent with that of the Organisation for Economic Co-operation and Development's (OECD's) International Network on Financial Education (INFE), in which CFPB participates, which describes the ultimate goal of financial literacy as "individual financial well-being."

¹⁶ To develop this definition, CFPB conducted a three-pronged research approach consisting of: (1) literature-based research; (2) qualitative research that included in-depth interviews with 59 adult consumers and 30 financial practitioners; and (3) consultation with experts.

(2) has the capacity to absorb a financial shock; (3) is on track to meet his or her financial goals; and (4) has the financial freedom to make the choices that allow one to enjoy life.¹⁷

Although specific goals and vision of the good life vary from person to person, these four elements reflect two common and consistent themes: security and freedom of choice, in the present and for the future, as summarized in the figure below.

FIGURE 1: THE FOUR ELEMENTS OF FINANCIAL WELL-BEING

	Present	Future
Security	Control over your day-to-day, month-to-month finances	Capacity to absorb a financial shock
Freedom of choice	Financial freedom to make choices to enjoy life	On track to meet your financial goals

1.1.2 Measuring financial well-being

With an evidence-based, consumer-driven definition of financial well-being in place, CFPB proceeded to the next phase of this work: determining how to measure it. With the support of a number of experts and using state-of-the-art methods, we developed, tested and validated a financial well-being scale. A scale is an instrument, made up of multiple questions or "items," that together yield a composite measure of something that is nuanced or challenging to observe directly, such as an attitude or ability. A scale is the natural choice to measure the inherently subjective concept of financial well-being. ¹⁸

¹⁷ For more on CFPB's development of the definition of financial well-being, see *Financial Well-Being: The goal of financial education*, available at consumerfinance.gov/data-research/research-reports/financial-well-being/

¹⁸ The process for developing the CFPB Financial Well-Being Scale included: (1) Cognitive interviews to ensure that people understand the questions and what they are designed to ask; (2) Psychometric analyses of responses

The CFPB Financial Well-Being Scale consists of 10 items. ¹⁹ An individual's responses to each of the 10 items in the scale are converted into a single score. ²⁰ The CFPB Financial Well-Being Scale allows financial educators and researchers to accurately and consistently quantify the extent to which U.S. adults' financial situations and the financial capability they have developed have provided them with financial security and freedom of choice. It provides a common metric that allows an apples-to-apples comparison of financial well-being across individuals. It also can be used to assess someone's current state of financial well-being, to track his or her progress over time, and to understand how various factors, including financial education approaches, affect financial well-being.

Through the National Financial Well-Being Survey, the CFPB has used the scale to measure the level and distribution of financial well-being in the U.S. adult population, and to begin to study the relationship between financial well-being and other factors. The survey included both the CFPB Financial Well-Being Scale and measures of demographic, financial, experiential, attitudinal, behavioral and other characteristics that prior research suggests may influence adults' levels of financial well-being.

provided by more than 10,000 U.S. adults to create the scale model, narrow down the items in the final scale, and assess the reliability of the measure; and (3) Using validation questions in the surveys to check for content and criterion-related validity. The statistical analysis used to develop the scale and scoring procedures was conducted by Vector Psychometric Group using Item Response Theory (IRT) methods. For more information on the development of the scale, see *CFPB Financial Well-Being Scale: Scale Development Technical Report*, available at consumerfinance.gov/data-research/research-reports/financial-well-being-technical-report

¹⁹ The 10 items of the CFPB Financial Well-Being Scale are listed in Section 2, Table 1.

The CFPB Financial Well-Being Scale uses item response theory (IRT) methods to convert the ten responses into a single score. While there are a number of ways to create a composite score from the individual item responses in a scale, we rely on IRT because it takes into account that each of the scale's items may have a unique relationship with financial well-being. Specifically, IRT allows for each item's *relatedness* to financial well-being and *degree of severity* to be accounted for when scoring. Degree of severity refers to how "much" of the attribute being measured, in this case financial well-being, is needed for a respondent to choose a certain item response. IRT also allows scoring to reflect respondent characteristics or the mode of survey administration. During our research and testing, we determined that consumers did answer the CFPB Financial Well-Being Scale questions slightly differently depending on their age group (i.e. "working age adults" under 62 and "older consumers" 62+) or whether it was self- versus interviewer-administered. However, our IRT method adjusts for these differences, normalizing the scores so that they can be compared across groups.

The National Financial Well-Being Survey

This section describes the development and fielding of the National Financial Well-Being Survey including the design of the survey sample, data collection, and survey measures.

2.1 Data collection and survey sample

The sample for the National Financial Well-Being Survey was drawn from the GfK Knowledge Panel® (GfK panel), a recruited internet panel designed to be nationally representative of U.S. households. The GfK panel is the largest U.S. probability-based non-volunteer Internet panel, with a total of about 55,000 panel members. The large size of the panel provides a sufficient base to allow for oversampling of particular populations of interest. Oversampling ensures that there are sufficient numbers of interviews from members of small groups in the final sample so that statistically valid analyses can be conducted. In addition to the standard GfK panel, the survey drew upon GfK's Knowledge Panel LatinoSM to ensure adequate representation of the Latino population.

For the National Financial Well-Being Survey, the sampling strategy was designed to ensure adequate representation across key population groups as well as an oversample of adults ages 62

and above. Specifically, the sample design called for 5,000 completed surveys of adults in proportion to the U.S. population with respect to age, race, ethnicity, and the percentage below 200 percent of the federal poverty level (FPL), plus an additional oversample of 1,000 completed surveys of adults age 62 and older.²¹

A pilot survey was conducted in October 2016 followed by the main survey that was conducted between October 27 and December 5, 2016. The main survey additionally included a Spanishlanguage option.²²

Overall, 6,394 surveys were completed: 5,395 from the general population sample and 999 from the oversample of those aged 62 or older. To account for both the differential sampling and the differential non-response rates, we applied survey weights to ensure that our sample broadly reflects the U.S. population across geographic and demographic dimensions. Additional information on the weighting procedure and all aspects of the survey methodology are available in Appendix C.

2.2 Survey measures

The National Financial Well-Being Survey collected over 70 personal and situational measures.²³ Below, we describe the ten items used to construct the financial well-being score and the other measures used to define the subgroups analyzed in this report.

Financial Well-Being. An individual's score on the CFPB Financial Well-Being Scale is a standardized number between 0 and 100 that aims to quantify that person's underlying level of financial well-being.²⁴ The questions that make up the scale are presented in Table 1, below.

²¹ Targets of completed surveys were assigned proportional to their representation in the U.S. population. We included the following target groups in the main sample: black non-Hispanic; Hispanic (any race); income less than 200 percent of federal poverty level; and six age ranges (18-34, 35-54, 55-61, 62-74, and 75+). For more on the sampling design and demographics of the final sample, see Appendix C: Survey methodology technical appendix.

²² The survey protocol was approved by the Office of Management and Budget (OMB) under OMB No. 3170-0063.

²³ A dataset containing most of these measures is available to the public at <u>consumerfinance.gov/data-research/financial-well-being-survey-data/</u>

TABLE 1: CFPB FINANCIAL WELL-BEING SCALE

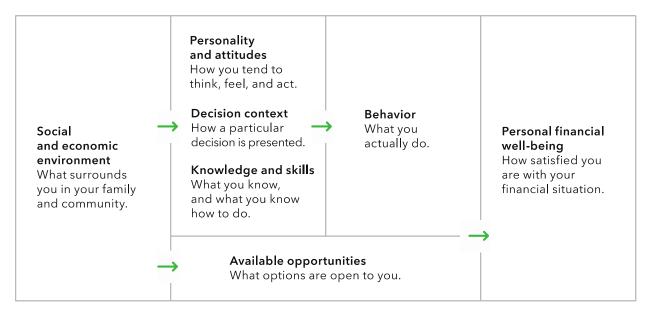
Questions		Response options		
How well does this statement describe you or your situation? 1 Locald handle a major unexpected expense				
1. 2.	I could handle a major unexpected expense. I am securing my financial future.	Describes me very well		
3.	Because of my money situation, I feel like I will never have the things I want in life.	 Describes me somewhat Describes me very little 		
4.	I can enjoy life because of the way I'm managing my money	 Does not describe me at all 		
5.	I am just getting by financially.			
6.	I am concerned that the money I have or will save won't last.			
How often does this statement apply to you? • Always				
7.	Giving a gift for a wedding, birthday or other occasion would put a strain on my finances for the month.	• Often		
8.	I have money left over at the end of the month.	Sometimes		
9.	I am behind with my finances.	Rarely		
10.	My finances control my life.	 Never 		

Subgroup Measures. The subgroup measures included in this report were identified from the qualitative research and literature review in earlier phases of our research as well as from discussions with experts conducted as part of the current phase of work. This research led to a general understanding that, at any given time, a combination of personal and situational factors contribute to financial well-being. Some of these factors are fixed, while some are malleable. Some are within a person's control, and some are not.

²⁴ The "natural" scale for scores derived from item response theory (IRT) such as this one is a standard normal distribution, a "bell-shaped" curve that has a mean of zero and a standard deviation of one. For ease of interpretation, the obtained scores are converted to the CFPB Financial Well-Being Scale metric, providing a score distribution that ranges from approximately 0 to 100 and is centered at 50. For more information on the composite score and instructions on using a custom Stata package for scoring individual responses, see *CFPB Financial Well-Being Scale: Scale Development Technical Report*, available at consumerfinance.gov/data-research/research-reports/financial-well-being-technical-report/.

Figure 2 below provides a visual guide to our prior findings on the factors that may affect an individual's financial well-being. ²⁵

FIGURE 2: WHAT INFLUENCES FINANCIAL WELL-BEING



As demonstrated by Figure 2, our earlier research suggests that financial well-being is determined by the combination of the opportunities available to a person and their own actions and behavior. One's social and economic environment²⁶ can expand or limit a person's opportunities. ²⁷ Available opportunities, including access to jobs, benefits, sufficient income, and family resources likely play a major role a person's financial well-being. Furthermore, consumers with low or volatile incomes are less likely to have access to financial products and

²⁵ A full description of our prior research findings on the factors that likely influence a person's level of financial well-being can be found in *Financial Well-Being: The goal of financial education*, available at: consumerfinance.gov/data-research/research-reports/financial-well-being/

²⁶ This includes everything from one's family and social circle to his or her employment, location, and other factors that may provide resources in support of financial well-being.

²⁷ Opportunities can also be expanded or limited due to external forces or shocks (e.g., health issues).

services that meet their needs and could contribute to their financial stability.²⁸ Financial behaviors can also be influenced by personality, attitudes, knowledge, and skills, as well as the context in which a decision is made.²⁹

Our prior qualitative research into the factors that may be associated with higher (or lower) levels of financial well-being, however, revealed how diverse the pathways to financial well-being can be. The interviews we conducted with consumers and financial practitioners indicated that there seems to be no single set of characteristics or circumstances that lead an individual to have higher or lower financial well-being. Instead, the interviews suggested that changes in one's level of financial well-being can arise from a combination of many factors. Our goal in this report is to highlight the distributions of financial well-being for many of these potential contributing factors. Trying to understand how these various factors interact to drive financial well-being is a subject for future analyses.

The measures identified as potential contributing factors include indicators of financial socialization (e.g., early parental financial education, instruction, or observation), social context (e.g., social circle, employment, location, and other factors that may provide resources in support of financial well-being), and personal factors (e.g., demographic characteristics, attitudes, and personality; knowledge and skills). In the interviews from the earlier phases of our research, consumers also described the importance of past financial experiences (or learning by doing and succeeding or failing) as a means of acquiring the knowledge and skill required to achieve and maintain a higher level of financial well-being. Then there were the external forces or shocks that can affect financial well-being as well as the buffers or safety nets that can protect consumers from negative shocks.

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²⁸ Federal Deposit Insurance Corporation (FDIC), 2015 *National Survey of Unbanked and Underbanked Households*, (2015) at p. 17, available at https://www.fdic.gov/householdsurvey/; Theresa Schmall and Eva Wolkowitz, *2016 Financially Underserved Market Size Study*, Center for Financial Services Innovation, (2016) at p. 7, available at https://cfsinnovation.org/research/2016-financially-underserved-market-size-study/

²⁹We are referring here to the widely established Social Psychology principle that human behavior is a function of both the person and the situation in which the action is taken (or not taken). See, e.g. Ross, Lee and Richard E. Nisbett. *The person and the situation: Perspectives of social psychology.* New York, NY: McGraw-Hill Book Company. (1991)

In this report, we group these measures into six categories described below. A detailed description of how each measure was defined for this analysis, including the relevant survey question, is in Appendix B.

 TABLE 2:
 SELECT NATIONAL FINANCIALWELL-BEING SURVEY MEASURES

Category	Measures		
Individual characteristics	Education; Age; Physical health; Race/ethnicity; and Sex		
Household and family characteristics	Housing satisfaction; Housing status; Marital status; Financially supporting children; Census region		
Income and employment characteristics	Employment status; Household income; Federal poverty status; Income volatility; Receiving Social Security retirement benefits; Military service (service member or dependent); Veteran status; Employer-provided benefits		
Savings and safety nets	Liquid savings; Ability to absorb an unexpected expense; Have non- retirement investments; Have health insurance; Have friends/family safety net for emergency needs		
Financial experiences	Turned down for credit; Contacted by debt collector; Have checking or savings account; Use non-bank, short-term credit; Use non-bank transaction product; Housing cost burden; Negative financial services experience; Experienced any negative financial shocks; Have student loan; Financial socialization; Responsibility for own finances		
Financial behaviors, skills, and attitudes	Confidence in ability to achieve a financial goal; Have a habit of saving; Effective day-to-day money management behaviors; Planning horizon of 5+ years; Propensity to plan for finances; Financial knowledge; Financial skills		

3. Financial well-being of U.S. adults

This section describes the distribution of financial well-being scores for the U.S. adult population, as measured by the CFPB Financial Well-Being Scale, and provides context for understanding the financial circumstances for individuals at different scores. Following the discussion of the financial well-being of the overall U.S. adult population, we examine the financial well-being of selected subgroups.

As described in Appendix D, all comparisons reported as "differences" in the narrative are statistically significant at the 95-percent confidence level.³⁰ That being said, the findings presented are descriptive in nature, based on simple comparisons of financial well-being for selected groups. When we compare the financial well-being of two subgroups, we are not attempting to establish the causes or drivers of financial well-being.

Appendix A provides the statistics (average, standard deviation, and distribution at the 10th, 25th, 50th, 75th, and 90th percentiles) for each survey measure described in this section. It also

³⁰ In our analysis, we conducted two kinds of comparisons. First, we compared the financial well-being of subgroups to the national average, using a pairwise t-test to identify statistically significant differences at the p<.05 level (i.e., 95-percent confidence level). These results are presented in the graphics at the beginning of each section. Second, we compared subgroups to each other using analysis of variance (ANOVA) methods and post-hoc pairwise t-tests to understand whether average financial well-being differs significantly between subgroups. The results are presented in Appendix A and described in the narrative of each findings section. In our narrative, we only describe as different those subgroups where financial well-being scores differed significantly (at the p<.05 level).

indicates whether or not subgroup averages are statistically significantly different from the national average and from each other. Appendix B lists the survey questions described in this section.

How to read the findings

In describing the distribution of financial well-being scores, we present the following types of information:

Averages. For each group or subgroup, we show the average (mean) financial well-being score. Any comparison reported as a "difference" between two groups in the narrative is statistically significant at the 95 percent confidence level. All subgroup averages and the statistical significance of their differences are reported in Appendix A.

Variation. When comparing the financial well-being of subgroups, it is also important to look at the distribution of scores within each subgroup. If everyone in a group had the same level of financial well-being, there would be no variation; conversely, if the financial well-being score of people in the same group varied widely, you would see a wide distribution or range of scores. We use standard deviations, percentiles, spread, and overlap when describing and comparing the variation in financial well-being.

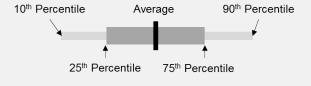
Standard Deviation is a value describing how financial well-being scores are spread or are distributed around an average value. A large standard deviation indicates that financial well-being scores vary a lot from the average—that is, that the distribution of financial well-being is fairly wide. Small standard deviations suggest that financial well-being tends to concentrate around the average—i.e. that the range of values is narrower. We present standard deviations in our appendix tables but typically use other terms (i.e. percentile, spread, and overlap) to describe variation in the text.

Percentile is the value below which a given percentage of scores fall. For example, the "10th percentile value" is the level of financial well-being below which 10 percent of adults' scores fall (and above which 90 percent of scores fall). In this report, we present the 10th, 25th, 50th, 75th, and 90th percentiles. We use the 10th and 90th percentile scores to illustrate the bottom and top ranges of the distribution.

Spread refers to the number of points (or "range") between two percentile scores for a given subgroup. For example, in this report we often examine the spread between the financial well-being at the 10th percentile and the 90th percentile (the "10th to 90th percentile spread").

Overlap measures the degree to which people in different subgroups fall into the same range of financial well-being scores. Two subgroups may have financial well-being that overlap completely or may have financial well-being that overlaps very little. We consider overlap to be "substantial" if the top 25 percent of scores from the subgroup with the lower average financial well-being score has higher financial well-being scores than at least half of the subgroup with higher average scores. We consider overlap to be "low" if the top 25 percent of scores from the lower group exceeds the scores of only 25-50 percent of members of the higher scoring group. We consider overlap to be "very low" if the top 25 percent of scores from the lower subgroup exceeds less than 25 percent of the higher scoring subgroup (i.e. the subgroup with higher average scores).

To observe overlap in our exhibits on distributions, compare the 75th percentile point of one subgroup to the midpoint of another.



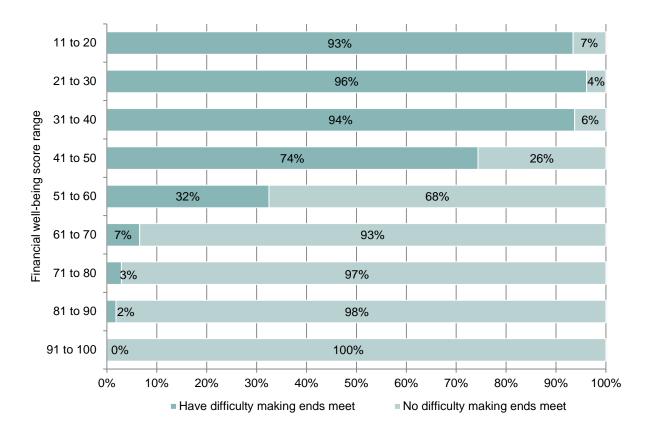
3.1 Interpreting the financial well-being score

Because the CFPB Financial Well-Being Scale score is a new metric, it is useful to provide some context into what the scores mean before presenting the distributions of financial well-being scores for the overall population of U.S. adults. Below we present information on the financial circumstances for individuals at different levels of financial well-being. Specifically, we show the proportion of individuals within 10-point financial well-being score ranges who report having difficulty making ends meet or experiencing material hardships over the prior year. ³¹ In general, and as would be expected, the data show that higher financial well-being scores are associated with less difficulty making ends meet and lower incidence of material hardship.

As shown in Figure 3, more than nine out of ten individuals with financial well-being scores ranging from 11 to 40 report having difficulty making ends meet. The proportion falls sharply—to about 70 percent—for individuals with financial well-being scores between 41 and 50. The proportion drops an additional 32 percentage points to about 30 percent for those with financial well-being score between 51 and 60, and it falls to less than one in ten for those with financial well-being score over 60.

³¹ Material hardships include running out of food (or worrying about running out of food), not being able to afford a place to live or medical treatment, or having utilities turned off.





We find a similar pattern in the way experiencing material hardship over the past 12 months tracks with financial well-being score. As shown in Figure 4, approximately nine out of ten individuals with financial well-being scores between 11 and 30 had experienced material hardships in the 12 months prior to the survey. This proportion drops to eight in ten for those with scores between 31 and 40. In the middle of the spectrum, the proportion of individuals who experienced hardships drops sharply as the financial well-being score range increases. For people with financial well-being scores over 60, less than one in ten report having experienced material hardships.

11 to 20 13% 87% 21 to 30 92% 8% Financial well-being score range 31 to 40 **79%** 21% 41 to 50 55% 45% 51 to 60 21% 79% 61 to 70 8% 92%

98%

97%

98%

50%

60%

70%

80%

No material hardship

90%

100%

MATERIAL HARDSHIP BY FINANCIAL WELL-BEING SCORE RANGE

Taken together, these findings suggest the people with financial well-being scores up to 40 are experiencing very significant financial insecurity, with those in the 41-50 score range doing somewhat better but still largely struggling to make ends meet. People in the 51–60 score range seem to have more stable finances for the most part. At the upper end of the distribution, scores greater than 60 appear to be associated with largely secure financial circumstances, with nearly universal financial security at scores greater than 70.

40%

Total U.S. adult population 3.2

With the above context for the meaning of the different score bands in mind, below is the distribution of financial well-being scores for all U.S. adults. The average financial well-being for U.S. adults is 54. However, financial well-being has a wide distribution. As shown in Figure 5,

71 to 80

81 to 90

91 to 100

2%

3%

2%

10%

20%

30%

Experienced material hardship

0%

70 percent of adults fall below 51 or above 60 (with 13 percent of scores at or below 40 and 14 percent above 70).

FIGURE 5: DISTRIBUTION OF FINANCIAL WELL-BEING SCORES FOR THE U.S. ADULT POPULATION

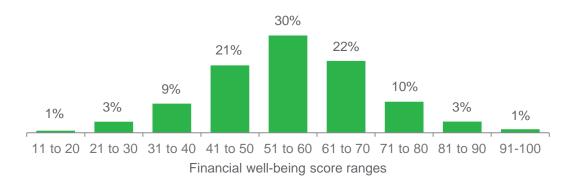


Table 3 presents the financial well-being distribution for the U.S. population of adults by percentile. The median or 50th percentile score, like the mean, is 54 and there is a 35-point spread between the 10th and 90th percentiles.

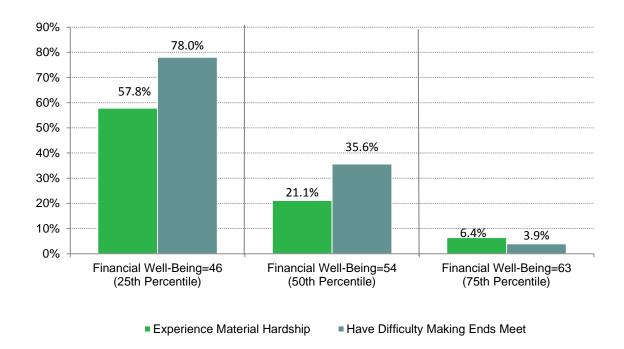
TABLE 3: DISTRIBUTION OF FINANCIAL WELL-BEING SCORES, U.S. ADULT POPULATION

Mean	10th percentile	25th percentile	50th percentile (median)	75th percentile	90th percentile
54	37	46	54	63	72

Below, we display the financial circumstances of individuals with scores of 46 (25th percentile), 54 (median), and 63 (75th percentile).³²

 $^{^{32}}$ In our sample, 115 individuals received a financial well-being score of 46. Another 187 individuals scored 54 on the financial well-being scale, and 177 received a score of 63.

FIGURE 6: FINANCIAL CIRCUMSTANCES BY FINANCIAL WELL-BEING SCORE (25TH, 50TH, AND 75TH PERCENTILES)



The observed distribution of financial well-being scores suggests three important things. First, there is wide variation in how adults in the United States feel about their financial security and freedom of choice. Second, the positive correlation between financial well-being scores and more traditional financial situation measures such as difficulty in making ends meet and material hardship suggests that subjective financial well-being is a practical assessment of how an individual is doing financially. And third, the fact that, for a given score, some individuals have faced or are facing difficult financial circumstances (i.e., material hardships or difficulty making ends meet) and some are not suggests that the same financial well-being score can reflect a diversity of circumstances, conditions, or perceptions.

For example, at the average U.S. financial well-being score, roughly one-third of individuals has difficulty making ends meet and approximately one out of five sometimes has difficulty paying for basic needs like food, housing, and medical care. However, the majority of individuals at the average score are not facing such adversity. This reaffirms that different people can arrive at their level of financial well-being through different pathways or for different reasons.

To further explore this diversity in the ways that people can arrive at their level of financial well-being, we turn to comparisons of financial well-being for selected subgroups, defined by: (1) individual characteristics; (2) household and family characteristics; (3) income and employment characteristics; (4) savings and safety nets; (5) financial experiences; and (6) financial behaviors, skills, and attitudes.

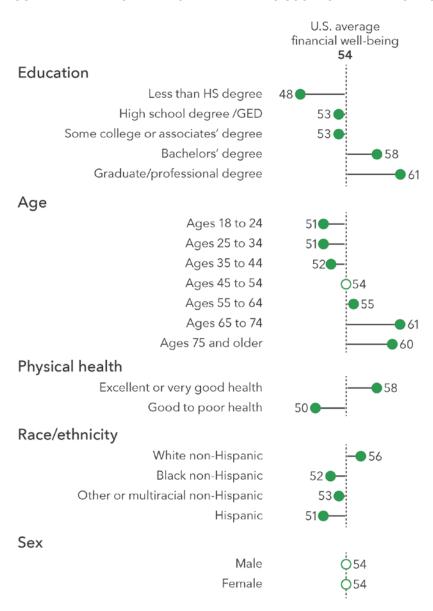
3.3 Individual characteristics

This section describes and compares the financial well-being of U.S. adults according to the following individual characteristics: education, age, physical health, race/ethnicity, and sex.

Overall, among these characteristics, financial well-being seems to be most strongly associated with education, followed by age and physical health. Interestingly, average financial well-being appears to be the same for men and women. Within each subgroup, financial well-being varies widely, with the 10^{th} -to- 90^{th} percentile spread exceeding 30 points for all groups except for those aged 18-24 (spread = 28 points) and those with less than a high school degree (spread= 29 points).

³³ These subgroup score distributions are provided in Appendix A.

FIGURE 7: AVERAGE FINANCIAL WELL-BEING SCORES BY INDIVIDUAL CHARACTERISTICS



The distributions for these and other variables, and the results of tests of whether subgroups' means differ significantly from each other, are presented in Appendix A

- Subgroup mean is significantly different from the total population mean
- O Subgroup mean is <u>not</u> significantly different from the total population mean

Below, we present more detailed findings for each of these individual characteristics. As a reminder, the reported sub-group averages are simple descriptive statistics, and other, correlated factors may explain some of the observed differences, or lack thereof.

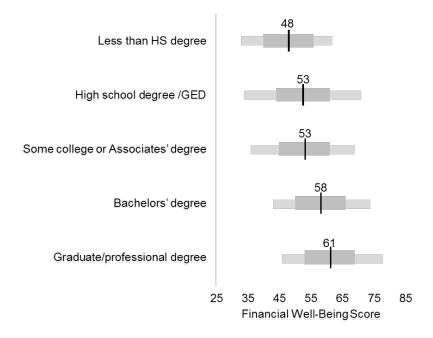
Individuals with higher levels of education tend to have higher average levels of financial well-being.

On average, the more education someone has, the higher their financial well-being tends to be. Adults with less than a high-school degree have an average financial well-being score of 48. By contrast, those with a graduate or professional degree have an average financial well-being score of 61. This difference by education level is larger than the differences in average financial well-being observed for all other individual characteristics examined for this report.

As shown in the exhibit below, there is substantial overlap in the distribution of financial wellbeing scores across most education subgroups. That is, notwithstanding the large differences in average financial well-being between individuals with different levels of educational attainment, for most levels of educational attainment there are individuals across the financial well-being spectrum, suggesting that factors beyond formal education relate to financial well-being. For example, there may be other factors or strategies that can help individuals with lower levels of education enhance their financial well-being. Having said that, there is low overlap between the distributions of scores for individuals with less than a high school education and those with at least a Bachelors' degree. ³⁴ We do not know why the overlap is lower for this group, but it may be that the economic barriers faced by adults without high school degrees are particularly challenging, making any compensatory strategies and factors insufficient for reaching the highest levels of financial well-being. More research is needed to understand the nuance of this relationship.

³⁴ In other words, less than 25 percent of those with less than a high school degree have financial well-being scores that exceed the score of the bottom half of those with a Bachelors' degree.

FIGURE 8: DISTRIBUTION OF FINANCIAL WELL-BEING SCORE BY EDUCATION



Older adults tend to have higher financial well-being than younger adults.

On average, younger adults (those ages 34 and younger) tend to have the lowest financial well-being with an average score of 51, while older adults (those 65 and over) have the highest financial well-being.³⁵ While financial well-being appears to be positively associated with age, there is wide variation in the level of financial well-being within all age groups.

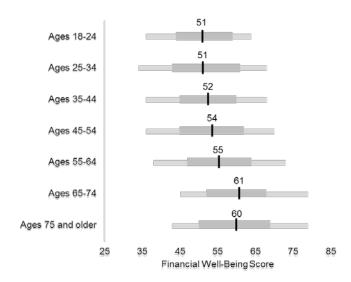
There are many possible factors that may contribute to these results. The positive association between financial well-being and age, for instance, could be due to changes in financial factors that correspond to the life course, such as higher incomes that come with longer tenure in the

³⁵ Adults aged 65-74 have an average financial well-being score of 61 and those ages 75 and older have an average score of 60. These scores are not statistically different from one another.

job market for those who are still working, increased asset accumulation over time, or the security conferred by access to social benefits such as Social Security retirement benefits and Medicare.

Average differences in financial well-being by age could also be due to differences in expectations, life goals, and priorities at different life stages that also may affect financial well-being. Regardless of the underlying cause, it is an important finding to keep in mind, as other observed associations between financial well-being and other factors may be, at least in part, due to correlations with life stage. ³⁶ Furthermore, while the data analyzed for this report provide only a snapshot view of the relationship between age and financial well-being, these results also raise many questions that may be better examined with longitudinal data.





³⁶ For example, the associations between financial well-being and Social Security receipt, financially supporting children, and employment status may reflect underlying relationships with age.

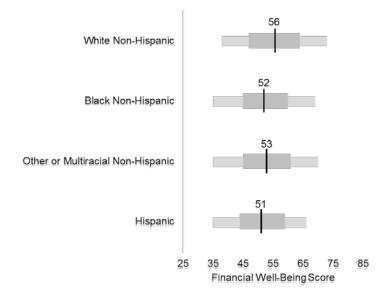
Adults in better physical health tend to have higher financial well-being.

U.S. adults who report their general physical health as "excellent" or "very good" have an average financial well-being score of 58, compared to an average of 50 for those who report their health is good to poor. However, for both groups, there is wide variation in financial well-being within each group (for each, the spread between the bottom 10 percent and top 10 percent is in the low 30-points).

Financial well-being differs somewhat by race and ethnicity.

In the U.S. population, white non-Hispanic adults have an average financial well-being of 56. This is somewhat higher than the averages for other racial and ethnic groups: 52 for black, non-Hispanic adults, 51 for Hispanic adults and 53 for other or multiracial non-Hispanic adults. However, there is wide variation within and substantial overlap between the distributions of scores for all racial/ethnic subgroups, suggesting that the relationship of race/ethnicity with financial well-being may not be as strong as other factors.

FIGURE 10: DISTRIBUTION OF FINANCIAL WELL-BEING SCORE BY RACE/ETHNICITY



Women and men have similar average levels of financial well-being.

For both women and men, the average financial well-being score is 54. The distributions in financial well-being for the two sexes are almost identical.

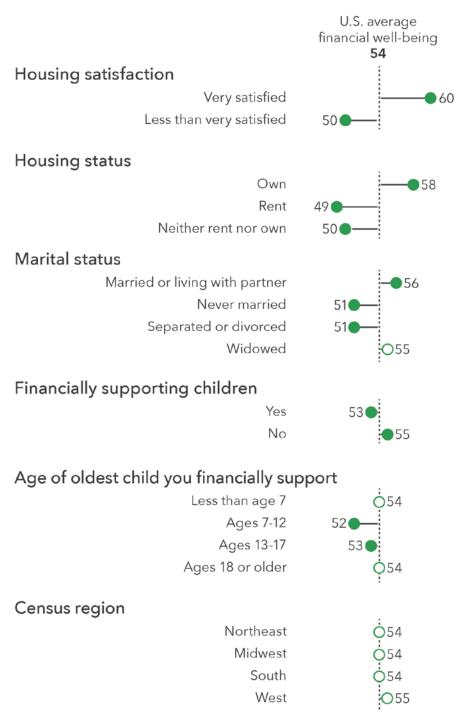
Of course, it is possible that an analysis that controls for age (or other variables that are correlated with both sex and financial well-being) would suggest an alternative relationship between gender and financial well-being. For example, this analysis does not take into account differences between women and men in lifespan; women tend to live longer than men and, as described earlier, older adults tend to have higher financial well-being.

3.4 Household and family characteristics

This section describes and compares financial well-being by household and family characteristics—namely, housing satisfaction, housing status, marital status, financially supporting children, and census region.

Figure 11 provides a summary of the average financial well-being for subgroups by household and family characteristics. Overall, differences in average financial well-being by housing satisfaction (i.e., how satisfied individuals are with the place they live) and housing status (i.e., whether they own or rent their residence) are greater than differences by marital status or whether an individual is financially supporting children. The variation in financial well-being within each group is wide, with a spread between the 10th and 90th percentile of at least 30 points (see Appendix A).

FIGURE 11: AVERAGE FINANCIAL WELL-BEING SCORES BY HOUSEHOLD AND FAMILY CHARACTERISTICS



The distributions for these and other variables, and the results of tests of whether subgroups' means differ significantly from each other, are presented in Appendix A

37

Subgroup mean is significantly different from the total population mean

O Subgroup mean is **not** significantly different from the total population mean

Below, we provide more detailed information on each of the household and family characteristics.

Adults with high levels of housing satisfaction tend to have higher financial well-being than those with lower levels of housing satisfaction.

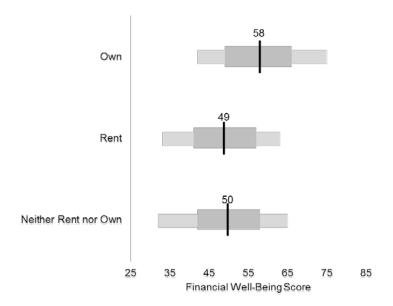
Adults who report they are "very satisfied" with the place they live currently have an average financial well-being score of 60, 10 points higher than for those who report being less than "very satisfied" (average of 50). It is possible that being satisfied with one's residence influences financial well-being, but it is also possible that individuals with greater financial resources and higher financial well-being have greater flexibility to select housing that meets their needs.

Homeowners have higher financial well-being than non-homeowners.

Homeowners have an average financial well-being of 58, higher than both renters (average of 49) and those who neither rent nor own³⁷ (average of 50). Again, this finding does not necessarily mean that homeownership *causes* higher levels of financial well-being. While it is possible that owning a home enhances financial well-being, it is also possible that those who are able to purchase a home are in a stronger financial position (i.e., have higher levels of income and savings) than those who are not and that those factors are associated with higher levels of financial well-being (see Sections 3.4 and 3.5).

³⁷ People who neither rent nor own include students who live with their families or other people who live with family or friends and don't pay rent.

FIGURE 12: DISTRIBUTION OF FINANCIAL WELL-BEING SCORE BY HOUSING STATUS



Single adults tend to have lower financial well-being.

On average, adults who are married or living with a partner (cohabitating) have higher financial well-being (average financial well-being of 56) than those who have never been married or who are separated or divorced (average financial well-being of 51). Adults who are widowed have an average financial well-being score that is not statistically different from married adults. This finding is likely due at least in part, however, to the fact that widows and widowers tend to be older and, as noted earlier, older adults tend to have higher financial well-being.³⁸

³⁸ That is, because widowhood is correlated with age and age is positively correlated with financial well-being, it is likely that controlling for age would result in an altered relationship between financial well-being and widowhood.

Adults who financially support children have slightly lower levels of financial well-being.

Overall, average financial well-being among adults who financially support at least one child is slightly lower than those for adults who do not support any children financially (averages of 53 and 55, respectively). The distributions between the two groups are very similar, with the financial well-being score for those supporting children being one-to-three points lower than those not supporting children at each percentile. It seems logical that supporting children might impact financial well-being (i.e., supporting children can put strains on available resources, constraining other choices). However, this finding could also reflect in part the fact that adults who are financially supporting children are more likely to be younger and that younger adults have, on average, lower financial well-being than older adults. Further analysis is needed to understand the precise nature of these relationships.

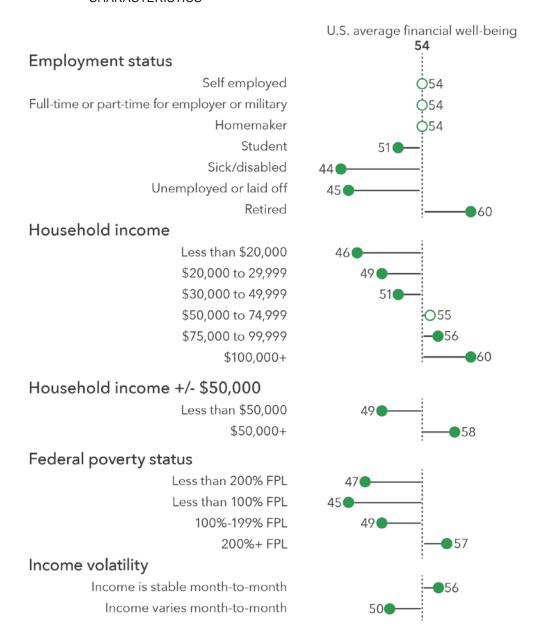
There are no regional differences in average financial well-being.

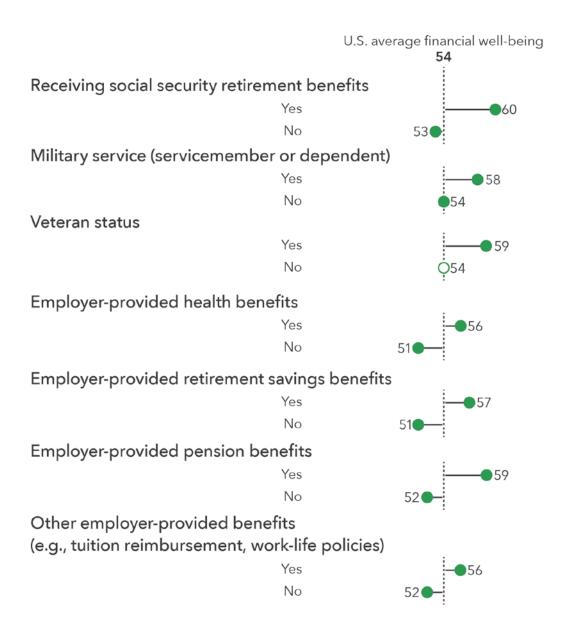
On average, financial well-being did not differ across the four U.S. census regions (Northeast, Midwest, South, and West).

3.5 Income and employment characteristics

In this section, we describe and compare the associations between financial well-being and variables related to income and employment. Specifically, we examine employment status, household income, federal poverty status, income volatility, receiving Social Security retirement benefits, military service, veteran status, and availability of employer-provided benefits.

FIGURE 13: AVERAGE FINANCIAL WELL-BEING SCORES BY INCOME AND EMPLOYMENT CHARACTERISTICS





The distributions for these and other variables, and the results of tests of whether subgroups' means differ significantly from each other, are presented in Appendix A

- Subgroup mean is significantly different from the total population mean
- O Subgroup mean is <u>not</u> significantly different from the total population mean

Figure 13 provides a summary of the average financial well-being of subgroups by income and employment characteristics. Among the characteristics examined in this chapter, financial well-being seems to be most strongly associated with employment status, household income, and the relationship of that income to federal poverty thresholds. This is not surprising, given CFPB's prior research in which individuals rated good employment and the ability to pay bills and afford "wants" as being important to financial well-being.³⁹

Retired adults have the highest levels of financial well-being, while people who are sick or disabled have the lowest levels.

Overall, retired adults in the U.S. have the highest financial well-being of any employment category, with an average of 60, which is consistent with older adults having higher average financial well-being. Adults who are homemakers, self-employed, and employed full-time or part-time all have an average financial well-being score of 54 (equivalent to the national average) while students have an average of 51. Among employment status subgroups, financial well-being tends to be lowest for adults who are unemployed or laid off (average of 45) and sick or disabled (average of 44).

³⁹ See *Financial Well-Being: The goal of financial education*, available at: consumerfinance.gov/data-research/research-reports/financial-well-being/

Self employed Full-time or part-time for employer or military Homemaker 51 Student Sick/Disabled 45 Unemployed or laid off 60 Retired 25 35 45 55 65 75 85 Financial Well-Being Score

FIGURE14: DISTRIBUTION OF FINANCIAL WELL-BEING SCORE BY EMPLOYMENT STATUS

Financial well-being varies greatly by household income.

As might be expected, individuals with higher household incomes have, on average, higher levels of financial well-being. Average financial well-being for those with incomes under \$20,000 is 46, rising to 60 for those with incomes of \$100,000 or more. However, despite the differences in averages, the distributions of financial well-being for income subgroups are wide and overlap substantially with one another, suggesting that factors other than income may also be at play in determining one's level of financial well-being. It is, however, noteworthy that the overlap is low between the lowest two income groups and the highest income group. That is, the top 25 percent of the scores from the lowest two income groups is lower than the midpoint of scores for

 $^{^{40}}$ Interestingly, we found no significant difference between the financial well-being of those with incomes of \$50,000 to \$74,999 and those with incomes of \$75,000 to \$99,999. All other differences were significant.

the highest income group.⁴¹ Though more research is needed to understand how income and financial well-being are related, it may be that compensatory factors or strategies that can enhance financial well-being are insufficient to help individuals with very low household incomes achieve the highest levels of financial well-being given other barriers they face.

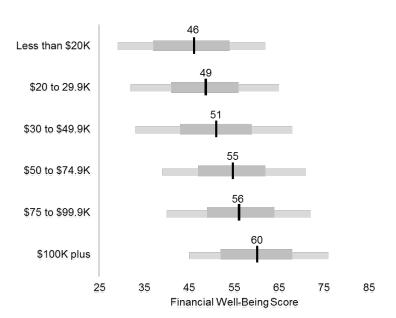


FIGURE 15: DISTRIBUTION OF FINANCIAL WELL-BEING SCORE BY INCOME

We also looked at the relationship between financial well-being and income through a slightly different lens—by how the household income compares to the federal poverty level.⁴² Looking at income through this perspective reveals the same general pattern. Individuals with household incomes under the federal poverty level have an average financial well-being score of 45,

⁴¹In other words, less than a quarter of the individuals in the lowest subgroups have financial well-being scores that are higher than the scores of the bottom half of those individual in the top income group. In addition, individuals in the lowest two groups are underrepresented at the highest levels of financial well-being (over 70).

⁴² Federal poverty level is set at different levels of household income based on household size and composition.

compared to 49 for adults between 100 and 200 percent of the federal poverty level and 57 for adults with household incomes that are more than 200 percent of the federal poverty level.

Interestingly, the distributions of financial well-being for the first two groups (i.e., those under the poverty level and those between 100-200 percent of poverty) overlap substantially. This suggests that there may be compensating factors or strategies that help some individuals with incomes under the poverty level exceed the financial well-being of those with incomes between 100-200 percent of the poverty level. For example, individuals who are under the federal poverty level may qualify for a greater number of means-tested social safety net programs that add a sense of financial security for which those above the poverty line (but who still face serious resource constraints) do not qualify. Importantly, the amount of overlap between those two subgroups (individuals with household incomes below 200 percent of the poverty level) and individuals who are over 200 percent of the poverty level are low. This suggests that being below the poverty level threshold itself may be less important to financial well-being than the general condition of having constrained resources.

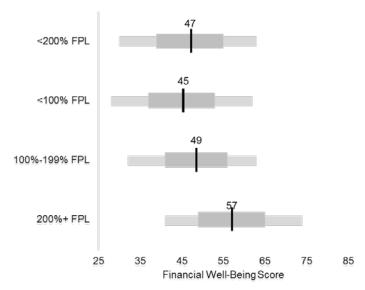


FIGURE 16: DISTRIBUTION OF FINANCIAL WELL-BEING SCORE BY FEDERAL POVERTY LEVEL

Adults with stable incomes have, on average, higher financial well-being than those with volatile incomes.

Financial well-being is also associated with income stability. U.S. adults with income that is stable month-to-month have an average financial well-being score of 56, while those with

income that varies month-to-month have an average financial well-being score of 50. Though on average those who have stable incomes fare better than those who do not, there is substantial overlap between the two distributions, with more than one quarter of individuals with variable incomes having higher financial well-being than half of those with stable incomes.

Adults who receive Social Security retirement benefits have higher financial well-being than those who do not.

Receipt of Social Security retirement benefits is also associated with higher levels of financial well-being. Recipients of Social Security retirement benefits have an average financial well-being score of 60 compared to those of adults of all ages without such benefits who have an average of 53.

Being a veteran, an active service member, or a military dependent is associated with higher financial well-being.

Individuals who are active duty service members or are members of military families have, on average, a financial well-being score of 58, compared to an average of 54 for individuals who are not among those groups. Veterans have, on average, a financial well-being score of 59, 5 points higher than non-veterans (average financial well-being score of 54).

Working for an employer who offers benefits is associated with higher levels of financial well-being.

On average, adults who work for an employer who offers health benefits, retirement savings benefits, or pension benefits have higher levels of financial well-being than those who do not. The difference in average financial well-being between adults working for employers who do versus do not provide pensions is seven points, compared to a difference of six points for employers who do versus do not provide non-pension retirement savings benefits, and five points for employers who do versus do not provide health insurance.

The findings highlighted in this section suggest that multivariate analysis exploring the relationship between income level, income volatility, job conditions and benefits, and financial well-being is a potentially fruitful area for further research.

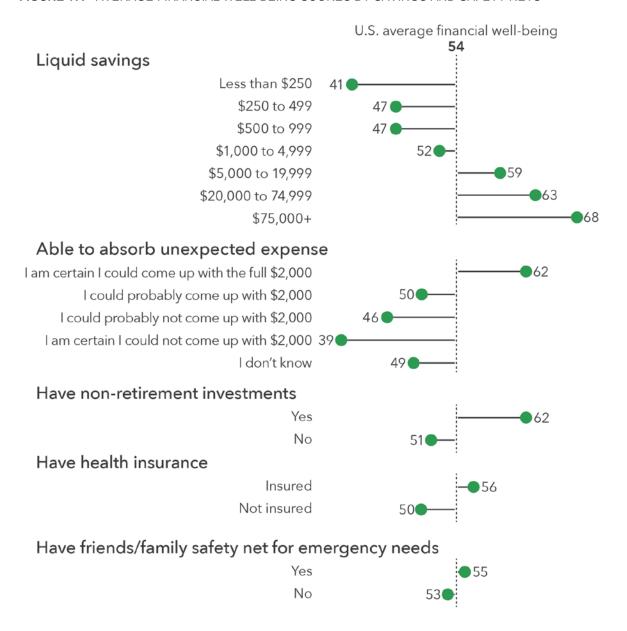
3.6 Savings and safety nets

This section describes and compares financial well-being based on adults' savings and other formal and informal safety nets, focusing on their liquid savings, ability to absorb an unexpected expense, having non-retirement investments, having health insurance, and having friends or family they can turn to for emergency needs.

Figure 17 summarizes the average financial well-being of subgroups by savings level and availability of financial safety nets. Differences in average financial well-being are largest based on level of liquid savings and ability to absorb an unexpected \$2,000 expense. In addition, of all the categories we examined, the least amount of financial well-being variation *within* subgroups occurred for liquid savings and ability to absorb an unexpected expense, suggesting that these factors may be closely tied to financial well-being. ⁴³ Differences are more modest for the other factors examined.

⁴³ In other words, for each subgroup with the liquid savings and ability to absorb an unexpected expense factors, the financial well-being distributions were relatively narrow compared to distributions for factor subgroups.

FIGURE 17: AVERAGE FINANCIAL WELL-BEING SCORES BY SAVINGS AND SAFETY NETS



The distributions for these and other variables, and the results of tests of whether subgroups' means differ significantly from each other, are presented in Appendix A

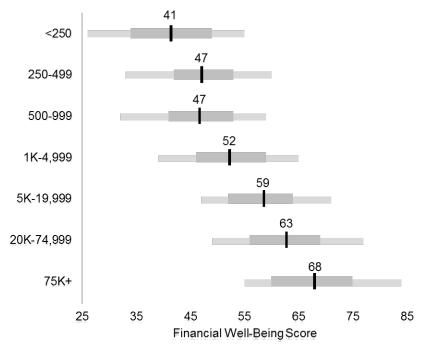
- Subgroup mean is significantly different from the total population mean
- O Subgroup mean is **not** significantly different from the total population mean

Having liquid savings and certainty in one's ability to cover unexpected expenses are associated with higher levels of financial well-being.

On average, adults with greater liquid savings (total savings held in cash, checking, and savings accounts) have higher financial well-being. At the lowest savings level, adults with less than \$250 in liquid savings have an average financial well-being score of 41, compared to 68 for those with \$75,000 or more in savings (a 26-point difference, the largest difference observed across any factor examined in this report). Also of note is that the within-subgroup variations are relatively small. That is, within each liquid savings subgroup, the financial well-being scores cluster more tightly around the median score, with 10^{th} -to- 90^{th} percentile spreads of less than 30 points. In addition to these distributions being relatively narrow, there is *very little* overlap in the distributions for adults who have the lowest and highest levels of savings. Very few individuals in the lowest savings category scored at the highest financial well-being levels and very few individuals from the highest savings category scored at the lowest financial well-being levels.⁴⁴

⁴⁴ Approximately one percent of individuals with less than \$250 in liquid assets have financial well-being scores of 70 or higher (compared to 14 percent of the overall U.S. population of adults) and about one-half of one percent of individuals with more than \$75,000 in liquid assets have financial well-being scores under 40 (compared to 13 percent for the overall U.S. population of adults).



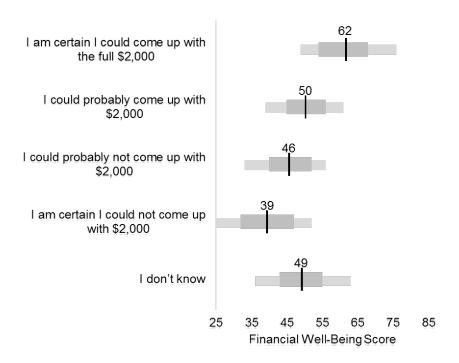


There is similarly a strong positive relationship between financial well-being and the ability to absorb an unexpected expense (defined as certainty in the ability to come up with \$2,000 in 30 days). Adults who are certain they *could* come up with \$2,000 for an unexpected expense have an average financial well-being score of 62, 23 points higher than the average for those who are certain they *could not* come up with the funds. As was true with liquid savings, the variation in financial well-being scores within subgroups is relatively narrow (compared to other factors examined in this report) 45 and there is *very little* overlap between the distributions of those who are certain they could come up with \$2,000 and those who are certain they could not. Few individuals who are certain they could come up with \$2,000 are in the lowest financial well-

⁴⁵ The standard deviations for financial well-being distributions for the subgroups by liquid savings and capacity to absorb unexpected expenses are the smallest of all factors examined in this report (see Appendix A).

being ranges and few who are certain they could not come up with this amount are in the highest ranges. 46





It is interesting to compare these results to the patterns for income (Section 3.4). The variations of financial well-being within income subgroups were wider than the variations within groups defined by liquid savings or ability to absorb a financial expense. The overlap between the highest and lowest income groups, though small, was greater than the overlap for groups based on liquid assets and ability to absorb an unexpected financial expense. These differences

⁴⁶ Less than one percent of individuals who are certain they could not come up with \$2,000 had financial well-being scores of at least 70 (compared to 14 percent of the overall U.S. population of adults) and about two percent of individuals who are certain they could come up with \$2,000 have financial well-being under 40 (compared to 13 percent for the overall U.S. population of adults).

suggest that financial cushions may be more closely tied to financial well-being than income.⁴⁷ While these patterns are purely descriptive, this is consistent with CFPB's earlier research, which suggests that: (1) savings are fundamental to feelings of financial security; and (2) income, while important, does not fully capture all of the underlying elements of financial well-being.⁴⁸

Adults with non-retirement investments tend to have higher levels of financial well-being.

Having non-retirement investments (such as stocks, bonds or mutual funds) is associated with higher financial well-being. Adults with any amount of non-retirement investments have an average financial well-being score that is 11 points higher than those who do not have such accounts (averages of 62 and 51, respectively).

Having health insurance is associated with higher levels of financial well-being.

In the U.S. population, adults with health insurance coverage from any source (employer-provided, independently purchased, or government subsidized) have an average financial well-being score of 56, 6 points higher than uninsured adults (average of 50).

⁴⁷ To ensure these patterns were not simply the result of how we created the savings and income categories, we conducted sensitivity analyses using simple quintile categories for each factor. When divided this way, there is no change in the overlap of the highest and lowest income categories. The highest and lowest savings categories overlap slightly more (i.e., the top 10 percent of the lowest savings category has financial well-being scores between the 10th and 25th percentiles of the highest category) but still much less than the income groups.

⁴⁸A full description of our prior research findings on consumers' perspectives on financial well-being can be found in *Financial Well-Being: The goal of financial education*, available at: consumerfinance.gov/data-research/research-reports/financial-well-being/

Being able to rely on friends and family for emergency financial needs is somewhat associated with higher financial well-being.

Adults who report that they would be able to borrow or receive funds with no expectation of repayment from friends or family in case of an emergency have, on average, slightly higher financial well-being (average of 55) than those who do not report having this safety net (average of 53). 49

3.7 Financial experiences

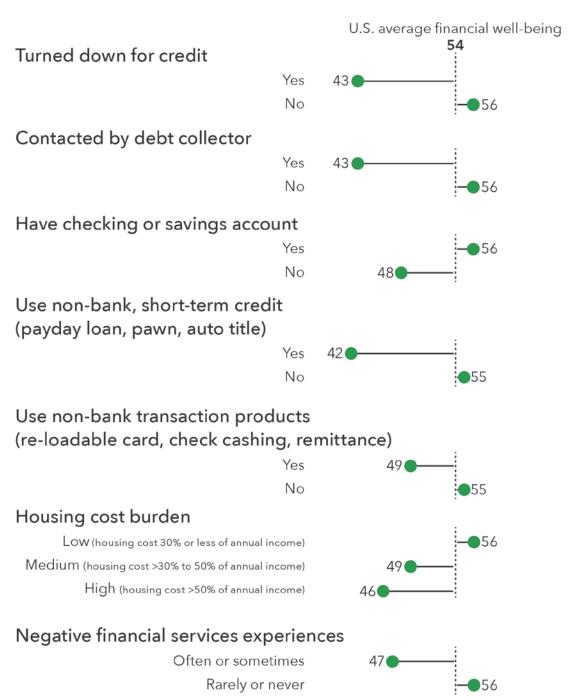
In this section, we describe the associations between financial well-being and a host of financial experiences, such as whether individuals have been turned down for credit, contacted by a debt collector, have a checking or savings account, have used non-bank credit products, or have used non-bank transaction products.

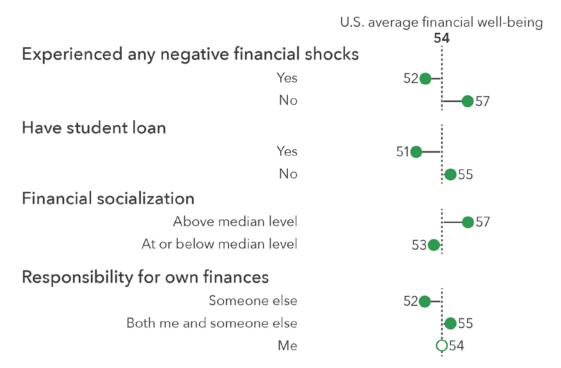
In addition, we examine the association between financial well-being and housing cost burden, negative experiences with financial services, and negative financial shocks. It is worth noting that these experiences are closely related to the conditions of being resource constrained, so observed relationships between these factors and financial well-being may be, at least in part, due to underlying correlations.

Finally, in this section we examine the relationship between financial well-being and having a student loan, early financial socialization (i.e., the number of ways individuals were exposed to financial matters growing up), and whether individuals are responsible for their own financial matters.

 $^{^{49}}$ This measure combines individuals who say they would be expected to repay their friends/family and those who say no such repayment would be expected.

FIGURE 20: AVERAGE FINANCIAL WELL-BEING SCORES BY FINANCIAL EXPERIENCES





The distributions for these and other variables, and the results of tests of whether subgroups' means differ significantly from each other, are presented in Appendix A

Figure 20 provides a summary of the average financial well-being scores for subgroups by financial experiences. Among the financial experience categories we examine, the largest differences in average financial well-being are based on whether an individual has been turned down for credit, been contacted by a debt collector, and has used non-bank short-term credit products, all of which may be associated with the conditions and constraints of living with limited financial resources.

Those who have been denied credit or who have been contacted by a debt collector tend to have lower financial well-being.

The average financial well-being scores for adults who indicated that they had been turned down for credit and for those who had been contacted by a debt collector were both 43. By comparison, the average score for those who did not report being turned down for credit or being contacted by a debt collector were both 56. Importantly, these two negative financial experiences are more common among individuals who are experiencing economic instability or

Subgroup mean is significantly different from the total population mean

O Subgroup mean is <u>not</u> significantly different from the total population mean

facing serious resource constraints. Therefore, it is possible that the negative relationship between these experiences and financial well-being is the result of underlying financial vulnerabilities. However, it is also possible that these experiences do have a direct relationship to financial well-being as well. More research is necessary to examine the relationship between these factors.

Financial product use appears to be related to financial well-being.

Adults who have a checking or savings account have an average financial well-being of 56, compared to 48 for adults without these accounts. Adults who reported using non-bank, short-term credit (such as a payday loan, pawn loan or auto title loan) over the prior 12 months have an average financial well-being score of 42, 13 points lower than the average financial well-being for adults who did not use this type of credit (average of 55). Users of non-bank transaction products (i.e., reloadable debit card not linked to a bank account, check cashing products or services, or remittance products or services) have an average financial well-being score of 49, six points lower than the average score of 55 for adults who do not use such services (this latter group could include people who use only bank or credit union transaction products and people who use no transaction products at all).

Interestingly, the degree of overlap of the distribution of financial well-being scores between subgroups is much lower for non-bank short-term credit than for non-bank transaction products or for checking or savings accounts. There is substantial overlap between the distributions of financial well-being scores for those who do and do not have bank accounts and for those who have and have not used non-bank transaction products, but there is little overlap in scores for those who have and have not used non-bank credit products.

FIGURE 21: DISTRIBUTION OF FINANCIAL WELL-BEING SCORE BY BANK ACCOUNT OWNERSHIP



FIGURE 22: DISTRIBUTION OF FINANCIAL WELL-BEING SCORE BY USE OF NON-BANK CREDIT PRODUCTS

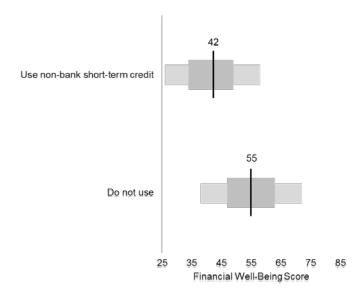
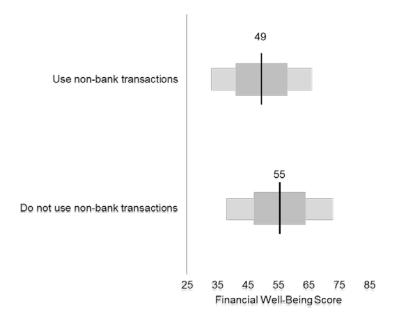


FIGURE 23: DISTRIBUTION OF FINANCIAL WELL-BEING SCORE BY USE OF NON-BANK TRANSACTION PRODUCTS



Adults who spend a high percentage of their income on housing tend to have lower financial well-being.

Adults in the U.S. who spend more than 50 percent of their income on housing have an average financial well-being score of 46.⁵⁰ By contrast, adults who spend 30 percent or less of their income on housing have an average financial well-being score of 56.⁵¹ Families who spend half or more of their income on housing costs may not have enough money left over for other needs like food, medical expenses, or clothing.

⁵⁰ The Department of Housing and Urban Development defines a *housing cost burden* as spending more than 30 percent of household income on housing costs, and a *severe cost burden* as spending more than 50 percent of household income on housing costs.

⁵¹ To compute these proportions, we compare self-reported housing costs to self-reported household incomes. See Appendix B for details.

Negative financial services experiences are associated with lower levels of financial well-being.

Consumers who had a negative financial services experience (i.e., where they felt mistreated or not respected) have, on average, financial well-being of 47. Conversely, consumers with no negative financial services experiences have an average financial well-being of 56.

Financial shocks are associated with lower levels of financial well-being.

Financial shocks include losing a job, having work hours or pay reduced, foreclosure, major car or home repair, health emergency, divorce or separation, new child, death of breadwinner, child starting daycare or college, or provision of unexpected financial support to family or a friend. Adults who experienced one or more such negative shocks had, on average, lower levels of financial well-being (average of 52) than adults who experienced none of these negative financial shocks (average of 57).

Having a student loan is associated with lower financial well-being.

Adults who have student loans have an average financial well-being score of 51 compared to 55 for adults without student loans.

Learning about positive financial practices while growing up tends to be associated with higher levels of financial well-being.

Learning positive money management norms and skills while growing up (also known as "financial socialization") appears to be associated with higher financial well-being in adulthood. Adults who experienced more types of childhood financial socialization activities have an average financial well-being of 57, compared to 53 for those had fewer such experiences. ⁵²

⁵² Specifically, we asked whether individuals' families did the following while they were growing up: (1) discussed family financial matters with them; (2) spoke to them about the importance of saving; (3) discussed how to establish

Having responsibility for one's finances is associated with somewhat higher levels of financial well-being.

Adults who have responsibility for all or most money matters and those who share the responsibility with someone else have an average financial well-being of 54 and 55, respectively. These levels are statistically different from one another and they are higher than the average level for adults who leave money matters to the care of another (average of 52).

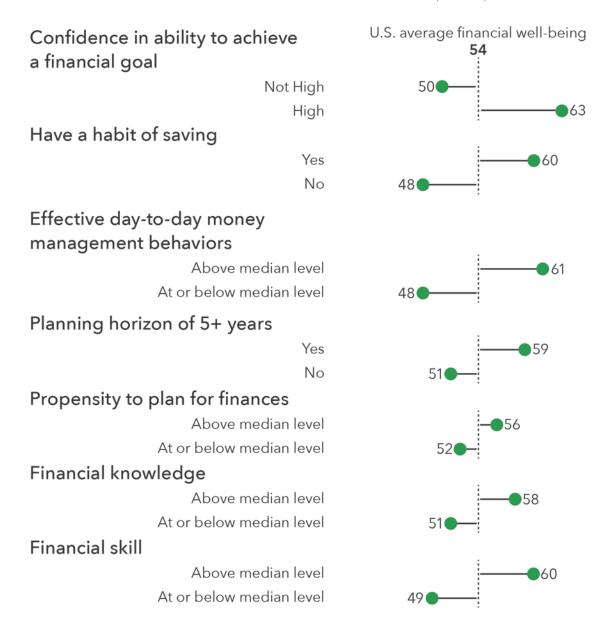
3.8 Financial behaviors, skills, and attitudes

In this section, we describe the associations between financial well-being and a range of attitudes, financial behaviors, knowledge, and skills. Specifically, we look at how financial well-being varies based on confidence in achieving financial goals, having a habit of savings, routine money management behaviors, financial planning behavior, and levels of financial knowledge and financial skill. These are each factors that emerged during earlier phases of our research as particularly important drivers of financial well-being.

Figure 24 summarizes the average financial well-being scores for subgroups by financial behaviors, skills, and attitudes. Among the factors we examine, differences in average financial well-being are largest based on the presence or absence of these characteristics: confidence in one's ability to achieve a financial goal, having a habit of saving, and effective day-to-day money management. For all groups, there is wide variation in financial well-being within each category.

a good credit rating; (4) taught them how to be a smart shopper; (5) taught them that their actions determine success in life; (6) provided them with a regular allowance; and (6) provided them with a savings account.

FIGURE 24: AVERAGE FINANCIAL WELL-BEING SCORES BY BEHAVIORS, SKILLS, AND ATTITUDES



The distributions for these and other variables, and the results of tests of whether subgroups' means differ significantly from each other, are presented in Appendix A

Subgroup mean is significantly different from the total population mean

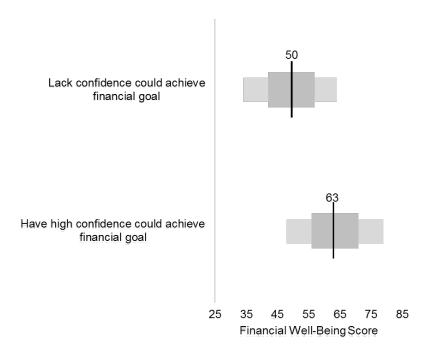
O Subgroup mean is <u>not</u> significantly different from the total population mean

Confidence in your ability to achieve a financial goal is associated with higher levels of financial well-being.

Consumers with high levels of confidence in achieving financial goals (also known as financial self-efficacy) have an average financial well-being score of 63 compared to those with lower confidence levels who have an average financial well-being score of 50.53 It will be interesting in future research to further explore the direction of this association. On the one hand, individuals with higher levels of goal confidence may generally feel more secure in their financial situation or may be more likely to take steps to improve their financial situation, leading to greater financial well-being. On the other hand, individuals with higher financial well-being are likely to have achieved more (or at least made greater progress toward) their financial goals and, therefore, may feel more confident. It is also possible that both goal confidence and financial well-being are related to other factors which drive their positive association.

⁵³ For purposes of this analysis, "high" confidence is defined as having answered "Very confident" to the question "If you were to set a financial goal for yourself today, how confident are you in your ability to achieve it?" "Lower" confidence is defined as answering "Not at all confident" to "Somewhat confident."

FIGURE 25: DISTRIBUTION OF FINANCIAL WELL-BEING SCORE BY CONFIDENCE IN ABILITY TO ACHIEVE A FINANCIAL GOAL



Savings habits and other day-to-day money management practices are associated with higher financial well-being.

Adults who make a habit of saving money have, on average, a 12 point financial well-being advantage over those who do not (average of 60 versus 48). Similarly, adults who report engaging in a higher number of effective day-to-day money management behaviors—paying all their bills on time, staying within their budget or spending plan, paying off credit card balances in full each month and checking their statements, bills and receipts to make sure there were no errors—have an average financial well-being score of 61 compared to an average of 48 for those who have fewer such behaviors. It is worth noting that several of these practices—for example, paying bills on time and paying off credit card balances in full—are dependent upon having enough money to make these behaviors possible. Therefore, the observed relationship between engaging in routine money management practices and financial well-being might be, at least in part, a reflection of the relationship between financial well-being and having sufficient financial resources.

Financial planning behavior, especially long-term planning, is associated with higher financial well-being.

Adults with a financial planning horizon⁵⁴ that is five years or more into the future have average financial well-being of 59 compared to those with less than a five year horizon who have an average of 51. Adults with a higher propensity to plan⁵⁵ for their money have average financial well-being of 56 compared to those without such a propensity who have an average of 52. Despite an association between planning and financial well-being, the planning variables show significant overlap between the distributions of those who plan and those who do not. For both factors, at least one-quarter of the non-planners have higher financial well-being than half of the planners.

Having higher financial knowledge and, even more so, financial skill is positively associated with financial well-being.

Financial literacy is widely acknowledged to include both financial knowledge, which refers to explicit understanding of financial concepts (e.g. compound interest), and financial skill, which can be applied to a range of situations and decisions. Earlier CFPB research defined financial skill as *knowing when and how to find reliable information to make a financial decision; knowing how to process financial information to make sound financial decisions; and knowing how to execute financial decisions, adapting as necessary to stay on track.* ⁵⁶ In this report, we measure financial knowledge using the 10-item version of the Knoll-Houts Financial

⁵⁴ We asked respondents what time period was most important in planning their (or their family's) saving and spending (see Appendix B).

⁵⁵ Propensity to plan was measured using a 4-point scale (see Appendix B).

⁵⁶ See Section 4.2.1 of "Financial well-being: the goal of financial education" for further discussion of this finding and definition.

Knowledge Scale⁵⁷ and financial skill using a 10-item financial skill scale developed by the CFPB during earlier phases of our financial well-being research.

Adults with higher levels of financial knowledge have an average financial well-being score of 58, compared to 51 for adults with lower levels of financial knowledge, a seven point gap.⁵⁸ There is a substantial overlap between the distributions of scores between the two groups. Meanwhile, there is a larger, 11-point difference in average financial well-being scores for adults with higher versus lower levels of financial skills (average scores of 60 and 49, respectively), and the overlap between the distributions is low, suggesting that the financial skill relationship with financial well-being may be stronger than that of financial knowledge.⁵⁹

⁵⁷ The Financial Knowledge Scale: An Application of Item Response Theory to the Assessment of Financial Literacy, available at: http://onlinelibrary.wiley.com/doi/10.1111/j.1745-6606.2012.01241.x/abstract

⁵⁸ "Higher levels" of these attributes refers to scores above the median score. "Lower levels" of these attributes refers to scores at or below the median score.

⁵⁹ This is consistent with our earlier qualitative research which led to our hypothesis that financial skill is perhaps more important in driving financial well-being than knowledge.

FIGURE 26: DISTRIBUTION OF FINANCIAL WELL-BEING SCORE BY FINANCIAL KNOWLEDGE

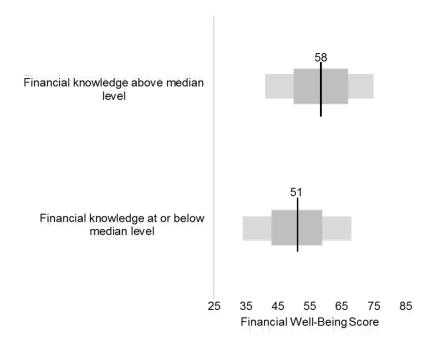
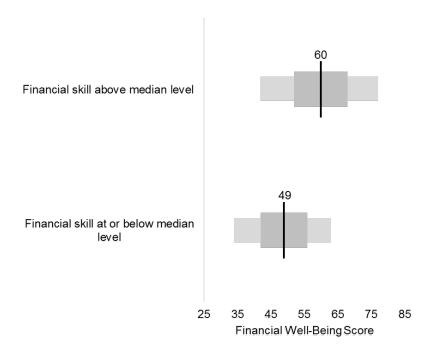


FIGURE 27: DISTRIBUTION OF FINANCIAL WELL-BEING SCORE BY FINANCIAL SKILLS



4. Conclusion

This report provides a first-of-its-kind view into the state of financial well-being in America. Overall, we find that the financial well-being of U.S. adults varies widely, and that a large percentage of people are financially fragile. At the average U.S. financial well-being score, roughly one-third of individuals have difficulty making ends meet and approximately one out of five sometimes have difficulty paying for basic needs like food, housing, and medical care. At the same time, the results show numerous potential opportunities to improve the financial well-being of significant portions of the U.S. adult population.

We learned from this study that while financial circumstances are highly correlated with financial well-being scores, individuals with quite different experiences can arrive at the same score. This suggests that no one factor is responsible for or indicative of an individual's level of financial well-being. Rather, financial well-being seems to reflect the interaction of many factors, combined with each individual's specific life goals and priorities.

Several findings in particular point to potential opportunities to improve financial well-being.

Opportunities to improve financial well-being through practice and policy innovation

Many of the characteristics that appear to be most associated with financial well-being are the explicit target of a wide range of financial capability programs and policies, which suggests that a high level – the financial capability field is on the right track. These include the findings that:

 The strongest relationships to financial well-being appear to be related to savings and safety nets. This is not altogether surprising, given that feeling financially secure is fundamental to the definition of financial well-being. But this observed relationship emphasizes the need for financial capability practitioners and policy makers to continue to develop and promote innovative programs that help individuals build savings and leverage other safety nets.

- Certain experiences with debt and credit seem to be strongly—and negatively—associated with financial well-being. These include whether someone has been denied credit, has used a non-bank short-term credit product, and has been contacted by a debt collector. While we do not know if these associations simply reflect the correlation between these experiences and a general lack of financial resources, which could be at the root of the lower financial well-being, or if they have more specific and direct relationships with financial well-being, a range of product, program and policy solutions to these issues exist.
- Many of the strongest positive relationships with financial well-being correspond to financial attitudes, behaviors, and skills. Several financial attitudes and behaviors—including having a habit of savings, engaging in routine money management practices, having a long-term planning horizon and having confidence in one's ability to achieve a financial goal—are associated with higher financial well-being. In addition, individuals with higher financial skills and financial knowledge have, on average, higher financial well-being. These types of characteristics are the explicit target of a wide range of existing financial education programs and approaches.

The fact that many of the factors with the strongest apparent relationships with financial well-being are not fixed is encouraging, as is the fact that many strategies have been shown to improve financial decision-making and financial outcomes. ⁶⁰ We hope that financial educators and other financial capability practitioners will take inspiration from these findings, and use available tools such as our *Principles for Effective Financial Education*, and the CFPB Financial

⁶⁰ The CFPB has documented and catalogued these strategies in *Effective financial education: Five principles and how to use them*, available at consumerfinance.gov/data-research/research-reports/effective-financial-education-five-principles-and-how-use-them/

Well-Being Scale, to innovate in program design and delivery and to measure progress in the financial well-being of the people they serve.

Opportunities to advance understanding of financial wellbeing through further research

That being said, it is critical to keep in mind that the findings presented in this report are descriptive in nature, based on simple statistical comparisons of financial well-being for selected groups. Additional analysis is needed to understand more deeply the relationships highlighted here. In particular, more research is needed to understand what drives financial well-being—and how these drivers might vary based on an individual's social and economic circumstances— so that we can begin to better tailor financial education policy and programmatic approaches to increase financial well-being. We hope that the findings presented here, along with the data available in the public use dataset, encourage and inspire other researchers to join this effort.

Our earlier research suggests that, given the particular opportunities an individual has and the context in which those opportunities are presented, financial knowledge, skills, attitudes, and behaviors do have the potential to influence financial well-being. For the first time, the dataset produced by the National Financial Well-Being Survey affords the opportunity to (1) quantitatively test these associations and (2) model pathways to identify the specific individual and situational characteristics that predict financial well-being.

While we have much more work to do, we are excited to embark on this next phase of research. We hope you will play a part in working to identify the drivers of financial well-being and in developing new approaches to financial education that can more effectively help individuals manage their financial lives in ways that help them achieve their life goals.

APPENDIX A:

Summary statistics for all characteristics

Appendix A presents the summary statistics for all the characteristics for subgroups defined by: (1) financial circumstances; (2) individual characteristics; (3) household and family characteristics; (4) income and employment characteristics; (5) savings and safety nets; (6) financial experiences; and (7) financial behaviors, skills and attitudes. Statistics include the weighted percent of cases; the weighted mean financial well-being score and its standard deviation; the financial well-being score at the 10th, 25th, 50th, 75th and 90th percentiles; and the weighted sample size. The table also shows the significant differences between subgroups' average financial well-being score and the national average as well as significant differences in average financial well-being among subgroups for a given characteristic.

EXHIBIT A1: FINANCIAL WELL-BEING SCORES BY FINANCIAL CIRCUMSTANCES

Characteristic	Group Label	Response Category	Weighted % of Cases	Weighted Mean ^a	Significantly Different From ^b	Weighted Standard Deviation	10th PCTL	25th PCTL	50th PCTL	75th PCTL	90th PCTL	Weighted N ^c
Total population	-		100%	54		14	37	46	54	63	72	6,389
Have difficulty making ends meet	а	Yes	43%	44***	b	10	30	38	46	51	56	2,747
Have difficulty making ends meet	b	No	57%	62***	а	11	50	55	61	68	76	3,600
Experience material hardship	а	Yes	34%	44***	b	11	29	37	45	50	57	2,145
Experience material hardship	b	No	66%	60***	а	12	47	52	59	67	75	4,210

^a Stars indicate a subgroup mean is significantly different from the total population mean of 54 (* p<.05, ** p<.01, *** p<.001).

EXHIBIT A2: FINANCIAL WELL-BEING SCORES BY INDIVIDUAL CHARACTERISTICS

Characteristic	Group Label	Response Category	Weighted % of Cases	Weighted Mean ^a	Significantly Different From ^b	Weighted Standard <u>D</u> eviation	10th PCTL	25th PCTL	50th PCTL	75th PCTL	90th PCTL	Weighted N ^c
Total population		-	100%	54		14	37	46	54	63	72	6,389
Education	а	Less than HS degree	12%	48***	bcde	13	33	40	49	56	62	750
Education	b	High school degree/GED	29%	53***	ade	14	34	44	52	61	71	1,849
Education	С	Some college or Associates' degree	29%	53**	ade	13	36	45	53	61	69	1,830

^b Letters indicate the subgroups within the same characteristic with a significantly different mean (at the p<.05 level).

 $^{^{\}rm c}$ Weighted Ns of each characteristic do not necessarily sum to the total population weighted N

Characteristic	Group Label	Response Category	Weighted % of Cases	Weighted Mean ^a	Significantly Different From ^b	Weighted Standard <u>D</u> eviation	10th PCTL	25th PCTL	50th PCTL	75th PCTL	90th PCTL	Weighted N ^c
Education	d	Bachelors' degree	19%	58***	abce	13	43	50	59	66	74	1,245
Education	е	Graduate/prof essional degree	11%	61***	abcd	13	46	53	61	69	78	715
Age	а	Ages 18 to 24	10%	51***	defg	12	36	44	51	59	64	625
Age	b	Ages 25 to 34	21%	51***	defg	13	34	43	50	61	68	1,354
Age	С	Ages 35 to 44	14%	52***	efg	13	36	45	53	60	68	904
Age	d	Ages 45 to 54	19%	54	abefg	13	36	45	54	62	70	1,215
Age	е	Ages 55 to 64	16%	55*	abcdfg	14	38	47	55	64	73	1,029
Age	f	Ages 65 to 74	12%	61***	abcde	14	45	52	60	68	79	750
Age	g	Ages 75 and older	8%	60***	abcde	14	43	50	59	69	79	512
Age group	а	18 to 64 years old	80%	53***	b	13	35	45	53	61	69	5,127
Age group	b	65 years and older	20%	60***	а	14	44	51	60	69	79	1,262
Generation	а	Millennial (ages 18-35)	32%	51***	bcd	13	35	43	51	60	67	2,054
Generation	b	Gener-ation X (ages 36-51)	25%	53***	acd	13	35	45	54	61	69	1,597
Generation	С	Baby Boomer (ages 52-70)	31%	56***	abd	14	38	48	56	65	74	1,964
Generation	d	Silent Generation (ages 71 and older)	12%	60***	abc	14	44	51	60	69	79	773
Physical health	а	Excellent or very good health	51%	58***	b	13	42	50	58	66	74	3,198
Physical health	b	Good to poor health	49%	50***	а	13	33	42	50	59	67	3,129
Race/ethnicity	а	White non- Hispanic	64%	56***	bcd	14	38	47	56	64	73	4,110

Characteristic	Group Label	Response Category	Weighted % of Cases	Weighted Mean ^a	Significantly Different From ^b	Weighted Standard <u>D</u> eviation	10th PCTL	25th PCTL	50th PCTL	75th PCTL	90th PCTL	Weighted N ^c
Race/ethnicity	b	Black non- Hispanic	12%	52***	а	13	35	45	51	60	69	757
Race/ethnicity	С	Other or multiracial non-Hispanic	8%	53*	а	14	35	45	53	61	70	514
Race/ethnicity	d	Hispanic	16%	51***	а	13	35	44	51	59	66	1,008
Sex	а	Male	48%	54		14	36	46	55	63	72	3,094
Sex	b	Female	52%	54	_	14	37	46	54	63	71	3,295

^a Stars indicate a subgroup mean is significantly different from the total population mean of 54 (* p<.05, ** p<.01, *** p<.001).

^b Letters indicate the subgroups within the same characteristic with a significantly different mean (at the p<.05 level).

^c Weighted Ns of each characteristic do not necessarily sum to the total population weighted N

EXHIBIT A3: FINANCIAL WELL-BEING SCORES BY HOUSEHOLD AND FAMILY CHARACTERISTICS

Characteristic	Group Label	Response Category	Weighted % of Cases	Weighted Mean ^a	Significantly Different From ^b	Weighted Standard Deviation	10th PCTL	25th PCTL	50th PCTL	75th PCTL	90th PCTL	Weighted N ^c
Total population	-	-	100%	54	-	14	37	46	54	63	72	6,389
Housing satisfaction	а	Very satisfied	44%	60***	b	13	44	51	59	68	77	2,805
Housing satisfaction	b	Less than very satisfied	56%	50***	а	13	33	42	50	58	65	3,515
Housing status	а	Own	59%	58***	bc	13	42	49	58	66	75	3,728
Housing status	b	Rent	30%	49***	а	12	33	41	49	57	63	1,873
Housing status	С	Neither rent nor own	12%	50***	а	13	32	42	50	58	65	744
Marital status	а	Married or living with partner	62%	56***	bc	14	39	48	56	65	73	3,959
Marital status	b	Never married	22%	51***	ad	13	34	43	50	59	66	1,431
Marital status	С	Separated or divorced	11%	51***	ad	14	33	41	50	59	68	692
Marital status	d	Widowed	5%	55	bc	15	37	45	54	63	76	307
Financially supporting children	а	Yes	37%	53***	b	13	36	45	53	62	70	2,332
Financially supporting children	b	No	63%	55*	а	14	37	47	55	63	73	4,054
Age of oldest child you financially support	а	Less than age 7	18%	54		13	37	46	55	62	70	424
Age of oldest child you financially support	b	Ages 7-12	20%	52***		13	35	44	52	60	69	468
Age of oldest child you financially	С	Ages 13-17	22%	53**		13	36	44	53	62	69	519

Characteristic	Group Label	Response Category	Weighted % of Cases	Weighted Mean ^a	Significantly Different From ^b	Weighted Standard Deviation	10th PCTL	25th PCTL	50th PCTL	75th PCTL	90th PCTL	Weighted N ^c
support												
Age of oldest child you financially support	d	Ages 18 or older	39%	54		14	36	46	54	62	72	918
Census region	а	Northeast	18%	54		14	36	46	54	63	72	1,147
Census region	b	Midwest	21%	54		14	37	46	54	62	72	1,340
Census region	С	South	37%	54		14	36	45	54	63	72	2,393
Census region	d	West	24%	55		13	38	47	55	62	71	1,509

^a Stars indicate a subgroup mean is significantly different from the total population mean of 54 (* p<.05, ** p<.01, *** p<.001).

EXHIBIT A4: FINANCIAL WELL-BEING SCORES BY INCOME AND EMPLOYMENT CHARACTERISTICS

Characteristic	Group Label	Response Category	Weighted % of Cases	Weighted Mean ^a	Significantly Different From b	Weighted Standard Deviation	10th PCTL	25th PCTL	50th PCTL	75th PCTL	90th PCTL	Weighted N ^c
Total population	•	-	100%	54	-	14	37	46	54	63	72	6,389
Employment status	а	Self employed	7%	54	defg	13	37	46	53	62	71	436
Employment status	b	Full-time or part-time for employer or military	50%	54	defg	13	38	47	54	62	70	3,161
Employment status	С	Home-maker	7%	54	defg	13	36	47	54	62	71	433
Employment status	d	Student	5%	51***	abcefg	11	38	45	51	58	64	302
Employment status	е	Sick/disabled	5%	44***	abcdg	14	25	35	43	52	61	328
Employment	f	Unemployed	5%	45***	abcdg	13	29	35	46	51	61	297

^b Letters indicate the subgroups within the same characteristic with a significantly different mean (at the p<.05 level).

 $^{^{\}rm c}$ Weighted Ns of each characteristic do not necessarily sum to the total population weighted N

Characteristic	Group Label	Response Category	Weighted % of Cases	Weighted Mean ^a	Significantly Different From b	Weighted Standard Deviation	10th PCTL	25th PCTL	50th PCTL	75th PCTL	90th PCTL	Weighted N ^c
status		or laid off										
Employment status	g	Retired	21%	60***	abcdef	14	43	51	60	69	79	1,303
Household income	а	Less than \$20,000	13%	46***	bcdef	13	29	37	47	54	62	852
Household income	b	\$20,000 to 29,999	9%	49***	acdef	13	32	41	49	56	65	563
Household income	С	\$30,000 to 49,999	17%	51***	abdef	13	33	43	51	59	68	1,068
Household income	d	\$50,000 to 74,999	17%	55	abcf	13	39	47	54	62	71	1,075
Household income	е	\$75,000 to 99,999	13%	56***	abcf	13	40	49	56	64	72	849
Household income	f	\$100,000+	31%	60***	abcde	13	45	52	60	68	76	1,981
Household income +/- \$50,000	а	Less than \$50,000	39%	49***	b	13	32	40	49	57	65	2,483
Household income +/- \$50,000	b	\$50,000+	61%	58***	а	13	42	50	58	66	74	3,905
Federal poverty status	-	Less than 200% FPL	29%	47***	‡	13	30	39	48	55	63	1,830
Federal poverty status	а	Less than 100% FPL	12%	45***	bc	13	28	37	47	53	62	746
Federal poverty status	b	100%-199% FPL	17%	49***	ac	13	32	41	49	56	63	1,084
Federal poverty status	С	200%+ FPL	71%	57***	ab	13	41	49	57	65	74	4,558
Income volatility	а	Income is stable month-to- month	70%	56***	Ь	14	38	48	56	64	73	4,427
Income volatility	b	Income varies month-to-	30%	50***	а	13	34	42	50	58	67	1,888

Characteristic	Group Label	Response Category	Weighted % of Cases	Weighted Mean ^a	Significantly Different From b	Weighted Standard Deviation	10th PCTL	25th PCTL	50th PCTL	75th PCTL	90th PCTL	Weighted N°
		month										
Receiving social security retirement benefits	а	Yes	20%	60***	Ь	14	42	50	59	68	79	1,271
Receiving social security retirement benefits	b	No	80%	53***	а	13	36	45	53	61	70	5,107
Military service (service- member or dependent)	а	Yes	16%	58***	b	14	41	49	58	67	76	994
Military service (service-member or dependent)	b	No	84%	54**	а	14	36	46	54	62	70	5,341
Veteran status	а	Yes	9%	59***	b	14	42	50	59	67	77	543
Veteran status	b	No	91%	54	а	14	37	46	54	62	71	5,846
Employer- provided health benefits	а	Yes	70%	56***	b	13	39	48	56	64	72	4,422
Employer- provided health benefits	b	No	30%	51***	а	14	33	42	50	59	68	1,922
Employer- provided retirement savings benefits	а	Yes	53%	57***	b	13	41	49	58	65	74	3,334
Employer- provided retirement savings benefits	b	No	47%	51***	а	14	33	42	50	59	68	3,012
Employer- provided pension	а	Yes	28%	59***	b	13	44	51	59	67	76	1,777

Characteristic	Group Label	Response Category	Weighted % of Cases	Weighted Mean ^a	Significantly Different From b	Weighted Standard Deviation	10th PCTL	25th PCTL	50th PCTL	75th PCTL	90th PCTL	Weighted N ^c
benefits												
Employer- provided pension benefits	b	No	72%	52***	а	14	35	44	52	61	69	4,559
Other employer- provided benefits (e.g., tuition reimbursement, work-life policies)	а	Yes	47%	56***	b	13	40	49	57	65	72	2,979
Other employer- provided benefits (e.g., tuition reimbursement, work-life policies)	b	No	53%	52***	а	14	34	43	52	61	70	3,356

^a Stars indicate a subgroup mean is significantly different from the total population mean of 54 (* p<.05, ** p<.01, *** p<.001).

^b Letters indicate the subgroups within the same characteristic with a significantly different mean (at the p<.05 level).

 $^{^{\}rm c}$ Weighted Ns of each characteristic do not necessarily sum to the total population weighted N

[‡] Significantly different from individuals with household incomes at or above 200 percent of the federal poverty level.

EXHIBIT A5: FINANCIAL WELL-BEING SCORES BY SAVINGS AND SAFETY NETS

Characteristic	Group Label	Response Category	Weighted % of Cases	Weighted Mean ^a	Significantly Different From ^b	Weighted Standard Deviation	10th PCTL	25th PCTL	50th PCTL	75th PCTL	90th PCTL	Weighted N ^c
Total population	_	-	100%	54	-	14	37	46	54	63	72	6,389
Liquid savings	а	Less than \$250	24%	41***	bcdefg	12	26	34	41	49	55	1,227
Liquid savings	b	\$250 to 499	5%	47***	adefg	10	33	42	48	53	60	240
Liquid savings	С	\$500 to 999	6%	47***	adefg	10	32	41	48	53	59	303
Liquid savings	d	\$1,000 to 4,999	19%	52***	abcefg	11	39	46	52	59	65	971
Liquid savings	е	\$5,000 to 19,999	20%	59***	abcdfg	10	47	52	59	64	71	1,020
Liquid savings	f	\$20,000 to 74,999	14%	63***	abcdeg	11	49	56	62	69	77	731
Liquid savings	g	\$75,000+	13%	68***	abcdef	11	55	60	67	75	84	54
Able to absorb unexpected expense	а	I am certain I could come up with the full \$2,000	54%	62***	bcde	11	49	54	61	68	76	3,398
Able to absorb unexpected expense	b	I could probably come up with \$2,000	16%	50***	acd	9	39	45	50	56	61	1,036
Able to absorb unexpected expense	С	I could probably not come up with \$2,000	8%	46***	abde	9	33	40	47	52	56	511
Able to absorb unexpected expense	d	I am certain I could not come up with \$2,000	16%	39***	abce	11	25	32	40	47	52	988
Able to absorb unexpected expense	е	l don't know	6%	49***	acd	11	36	43	49	55	63	412
Have non- retirement	а	Yes	26%	62***	b	12	47	55	62	70	78	1,672

Characteristic	Group Label	Response Category	Weighted % of Cases	Weighted Mean ^a	Significantly Different From ^b	Weighted Standard Deviation	10th PCTL	25th PCTL	50th PCTL	75th PCTL	90th PCTL	Weighted N ^c
investments												
Have non- retirement investments	b	No	74%	51***	а	13	34	43	51	60	67	4,716
Have health insurance	а	Insured	67%	56***	b	13	39	48	57	65	73	4,268
Have health insurance	b	Not insured	33%	50***	а	13	33	41	50	58	67	2,121
Have friends/family safety net for emergency needs	а	Yes	75%	55*	Ь	14	37	47	55	63	72	4,720
Have friends/family safety net for emergency needs	b	No	25%	53***	а	14	34	44	52	62	71	1,582

^a Stars indicate a subgroup mean is significantly different from the total population mean of 54 (* p<.05, ** p<.01, *** p<.001).

EXHIBIT A6: FINANCIAL WELL-BEING SCORES BY FINANCIAL EXPERIENCES

Characteristic	Group Label	Response Category	Weighted % of Cases	Weighted Mean ^a	Significantly Different From ^b	Weighted Standard Deviation	10th PCTL	25th PCTL	50th PCTL	75th PCTL	90th PCTL	Weighted N ^c
Total population			100%	54		14	37	46	54	63	72	6,389
Turned down for credit	а	Yes	11%	43***	b	12	27	36	43	50	58	726
Turned down for credit	b	No	89%	56***	а	13	39	48	56	64	72	5,587

^b Letters indicate the subgroups within the same characteristic with a significantly different mean (at the p<.05 level).

 $^{^{\}rm c}$ Weighted Ns of each characteristic do not necessarily sum to the total population weighted N

Characteristic	Group Label	Response Category	Weighted % of Cases	Weighted Mean ^a	Significantly Different From ^b	Weighted Standard Deviation	10th PCTL	25th PCTL	50th PCTL	75th PCTL	90th PCTL	Weighted N ^c
Contacted by debt collector	а	Yes	15%	43***	b	12	26	34	43	51	58	934
Contacted by debt collector	b	No	85%	56***	а	13	40	49	56	64	73	5,388
Have checking or savings account	а	Yes	82%	56***	b	14	38	47	56	64	73	5,243
Have checking or savings account	b	No	18%	48***	а	13	30	40	49	56	64	1,146
Use non- bank, short- term credit (payday loan, pawn, auto title)	а	Yes	5%	42***	b	13	26	34	42	49	58	314
Use non-bank, short-term credit (payday loan, pawn, auto title)	b	No	95%	55*	а	14	38	47	55	63	72	6,075
Use non-bank transaction products (re-loadable card, check cashing, remittance)	а	Yes	20%	49***	Ь	13	33	41	49	58	66	1,256
Use non-bank transaction products (re-loadable card, check cashing, remittance)	b	No	80%	55***	а	14	38	47	56	64	73	5,132

Characteristic	Group Label	Response Category	Weighted % of Cases	Weighted Mean ^a	Significantly Different From ^b	Weighted Standard Deviation	10th PCTL	25th PCTL	50th PCTL	75th PCTL	90th PCTL	Weighted N ^c
Housing cost burden	а	Low (housing cost 30% or less of annual income)	79%	56***	bc	13	39	48	56	64	72	4,289
Housing cost burden	b	Medium (housing cost >30% to 50% of annual income)	11%	49***	ac	13	33	41	49	57	65	624
Housing cost burden	С	High (housing cost >50% of annual income)	10%	46***	ab	13	29	38	47	54	62	539
Negative financial services experiences	а	Often or sometimes	20%	47***	b	14	29	39	48	55	64	1,245
Negative financial services experiences	b	Rarely or never	80%	56***	а	13	39	48	56	64	73	5,090
Experienced any negative financial shocks	а	Yes	49%	52***	b	14	33	43	51	61	69	3,122
Experienced any negative financial shocks	b	No	51%	57***	а	13	41	49	57	65	74	3,267
Have student loan	а	Yes	15%	51***	b	13	35	43	51	59	66	961
Have student loan	b	No	85%	55*	а	14	37	47	55	63	72	5,427
Financial socialization	а	Above median level	37%	57***	b	13	41	49	57	65	73	2,345

Characteristic	Group Label	Response Category	Weighted % of Cases	Weighted Mean ^a	Significantly Different From ^b	Weighted Standard Deviation	10th PCTL	25th PCTL	50th PCTL	75th PCTL	90th PCTL	Weighted N ^c
Financial socialization	b	At or below median level	63%	53***	а	14	35	44	52	62	70	4,008
Responsibility for own finances	а	Someone else	16%	52***	bc	13	34	44	51	60	68	995
Responsibility for own finances	b	Both me and someone else	36%	55**	ac	13	38	47	56	64	72	2,294
Responsibility for own finances	С	Me	48%	54	ab	14	37	46	54	63	72	3,023

^a Stars indicate a subgroup mean is significantly different from the total population mean of 54 (* p<.05, ** p<.01, *** p<.001).

^b Letters indicate the subgroups within the same characteristic with a significantly different mean (at the p<.05 level).

 $^{^{\}rm c}$ Weighted Ns of each characteristic do not necessarily sum to the total population weighted N

EXHIBIT A7: FINANCIAL WELL-BEING SCORES BY BEHAVIORS, SKILLS AND ATTITUDES

Characteristic	Group Label	Response Category	Weighted % of Cases	Weighted Mean ^a	Significantly Different From ^b	Weighted Standard Deviation	10th PCTL	25th PCTL	50th PCTL	75th PCTL	90th PCTL	Weighted N ^c
Total population	-	-	100%	54		14	37	46	54	63	72	6,389
Confidence in ability to achieve a financial goal	а	Not high	65%	50***	b	12	34	42	50	57	64	4,119
Confidence in ability to achieve a financial goal	b	High	35%	63***	а	13	48	56	62	71	79	2,236
Have a habit of saving	а	Yes	52%	60***	b	13	45	52	60	68	76	3,291
Have a habit of saving	b	No	48%	48***	а	12	32	41	49	56	62	3,075
Effective day- to-day money management behaviors	а	Above median level	47%	61***	b	12	47	54	61	68	77	2,998
Effective day- to-day money management behaviors	b	At or below median level	53%	48***	а	12	32	41	49	56	63	3,383
Planning horizon of 5+ years	а	Yes	39%	59***	b	14	42	50	59	67	76	2,475
Planning horizon of 5+ years	b	No	61%	51***	а	13	34	43	51	59	67	3,821
Propensity to plan for finances	а	Above median level	50%	56***	b	14	39	49	57	64	73	3,170
Propensity to plan for finances	b	At or below median level	50%	52***	а	14	35	44	51	61	70	3,213

Characteristic	Group Label	Response Category	Weighted % of Cases	Weighted Mean ^a	Significantly Different From ^b	Weighted Standard Deviation	10th PCTL	25th PCTL	50th PCTL	75th PCTL	90th PCTL	Weighted N ^c
Financial knowledge	а	Above median level	42%	58***	b	13	41	50	59	67	75	2,694
Financial knowledge	b	At or below median level	58%	51***	а	13	34	43	51	59	68	3,695
Financial skill	а	Above median level	48%	60***	b	14	42	52	61	68	77	3,090
Financial skill	b	At or below median level	52%	49***	а	11	34	42	49	56	63	3,295

^a Stars indicate a subgroup mean is significantly different from the total population mean of 54 (* p<.05, ** p<.01, *** p<.001).

b Letters indicate the subgroups within the same characteristic with a significantly different mean (at the p<.05 level).

 $^{^{\}rm c}$ Weighted Ns of each characteristic do not necessarily sum to the total population weighted N

Detailed information about survey measures included

This appendix provides detailed information on all the survey measures included in this report. The first column of each table describes the characteristic being measured, the second column gives the survey question and response options as presented to respondents, and the final column describes how the measure was recoded for analysis in this report, if applicable.

EXHIBIT B1: FINANCIAL WELL-BEING

Characteristic	Survey Question and Response Options	Recoding for Analysis
Financial Well-Being	Please select the response that best indicates how well, in general, each of the following statements describes you or your situation. 1. I could handle a major unexpected expense 2. I am securing my financial future 3. Because of my money situation, I feel like I will never have the things I want in life 4. I can enjoy life because of the way I'm managing my money 5. I am just getting by financially 6. I am concerned that the money I have or will save won't last	Item response theory (IRT) methods were used to produce the financial well-being scale from these 10 items. For more information on this scoring procedure and custom Stata code available for scoring, see CFPB Financial Well-Being Scale: Scale Development Technical Report.
	This statement describes me	
	Response options:	
	For this next set of statements, we are interested in learning how often you would say that each statement applies to you and/or your situation.	
	 How often would you say? Giving a gift for a wedding, birthday or other occasion would put a strain on my finances for the month I have money left over at the end of the month I am behind with my finances My finances control my life 	
	Response options:	
	AlwaysOftenSometimesRarelyNever	

EXHIBIT B2: FINANCIAL CIRCUMSTANCES

Characteristic	Survey Question and Response Options	Recoding for Analysis
Have Difficulty Making Ends Meet	In a typical month, how difficult is it for you to cover your expenses and pay all your bills? Response options: Very difficult Somewhat difficult Not at all difficult	Recoded as: Experienced difficulty making ends meet ("very" or "somewhat" difficult) No difficulty making ends meet ("not at all" difficult)
Experience Material Hardship	 Please indicate whether each of the following statements were often, sometimes, or never true for you in the past 12 months? I worried whether our food would run out before I got money to buy more. The food that I bought just didn't last and I didn't have money to get more. I couldn't afford a place to live. I or someone in my household needed to see a doctor or go to the hospital but did not go because we couldn't afford it. I or someone in my household stopped taking a medication or took less than directed due to the costs. One or more of my utilities was shut off due to non-payment. Response options: Often Sometimes Never 	Recoded as: Experienced material hardship ("often" or "sometimes" experienced one or more of the six forms of material hardship) No material hardship ("never" experienced any of the six forms of material hardship)

EXHIBIT B3: INDIVIDUAL CHARACTERISTICS

Characteristic	Survey Question and Response Options	Recoding for Analysis
Education	Highest degree received from GfK panel data: No formal education 1st, 2nd, 3rd, or 4th grade 5th or 6th grade 7th or 8th grade 9th grade 10th grade	Recoded as: Less than high school High school degree or GED Some college or Associate's degree Bachelor's degree or graduate/professional degree

Characteristic	Survey Question and Response Options	Recoding for Analysis
	 11th grade 12th grade no diploma High school graduate - high school diploma or the equivalent (GED) Some college, no degree Associate degree Bachelor's degree Master's degree Professional or Doctorate degree 	
Age	Self-reported age from GfK panel data: Continuous age in years (sample range from 18– 94)	Recoded as a 7-category variable: Ages 18-24 Ages 25-34 Ages 35-44 Ages 45-54 Ages 55-64 Ages 65-74 Ages 75 and older Recoded as a 2-category variable: Ages 65 and older-34
Generation	Self-reported age from GfK panel data: Continuous age in years (sample range from 18-94)	Recoded as: Millennial (Ages 18 to 35) Generation X (Ages 36 to 51) Baby Boomer (Ages 52 to 70) Silent Generation (Ages 71 and older)
Physical Health	In general, would you say your health is Excellent Very good Good Fair Poor	Recoded as: In excellent or very good health In good to poor health
Race/Ethnicity	Self-reported race and ethnicity from GfK panel data: White Non-Hispanic Black Non-Hispanic Other Non-Hispanic Hispanic 2 or more races Non-Hispanic	Recoded as: White Non-Hispanic Black Non-Hispanic Other or Multiracial Non-Hispanic Hispanic
Sex	Self-reported biological sex from GfK panel data: Male Female	No recoding

EXHIBIT B4: HOUSEHOLD AND FAMILY CHARACTERISTICS

Characteristic	Survey Question and Response Options	Recoding for Analysis
Housing Satisfaction	How satisfied are you with the place you live currently? Very satisfied Somewhat satisfied Not very satisfied Not at all satisfied	Recoded as: Very satisfied Less than very satisfied (i.e., not at all to somewhat satisfied)
Housing Status	Which one of the following best describes your housing situation? I own my home I rent I do not currently own or rent	No recoding
Marital Status	Self-reported marital status from GfK panel data: Married Widowed Divorced Separated Never married Living with partner	Recoded as: Married or living with partner Never married Separated or divorced Widowed
Financially Supporting Children	I have no children that I support financially Yes No	Recoded as: Financially support one or more children (regardless of residence with respondent): Yes No
Age of Oldest Child You Financially Support	How many children in each of the following age ranges do you currently support financially either living with you or not? # Less than 7 years old: # 7 to 12 years old: # 13 to 17 years old: # More than 18 years old:	Recoded as: Age of the oldest child financially supported (regardless of residence with respondent) is: Less than Age 7 Ages 7-12 Ages 13-17 Ages 18 or Older
Census Region	Census region constructed by GfK using panel data	No recoding

EXHIBIT B5: INCOME AND EMPLOYMENT CHARACTERISTICS

Characteristic	Survey Question and Response Options	Recoding for Analysis
Employment Status	Which of the following describe(s) your current employment	Recoded as:
	or work status? (Check all that apply)	Self employed

Characteristic	Survey Question and Response Options	Recoding for Analysis
	 Self-employed Work full-time for an employer or the military Work part-time for an employer or the military Homemaker Full-time student Permanently sick, disabled or unable to work Unemployed or temporarily laid off Retired 	 Work full-time or part-time for an employer or the military Homemaker Full-time student Permanently sick, disabled or unable to work Unemployed or laid off Retired
Household Income	Self-reported annual household income from GfK panel data: Less than \$5,000 \$5,000 to \$7,499 \$7,500 to \$9,999 \$10,000 to \$12,499 \$12,500 to \$14,999 \$15,000 to \$19,999 \$20,000 to \$24,999 \$25,000 to \$29,999 \$30,000 to \$34,999 \$35,000 to \$39,999 \$40,000 to \$49,999 \$50,000 to \$59,999 \$50,000 to \$74,999 \$575,000 to \$84,999 \$85,000 to \$99,999 \$100,000 to \$124,999 \$125,000 to \$149,999 \$175,000 to \$174,999 \$175,000 to \$174,999 \$175,000 to \$174,999 \$200,000 to \$199,999 \$200,000 to \$249,999 \$2200,000 or more	Recoded as a 6-category variable: Less than \$20K \$20 to 29.9K \$30 to \$49.9K \$50 to \$74.9K \$75 to \$99.9K \$100K plus Recoded as a 2-category variable: Less than \$50,000 \$50,000 or More
Federal Poverty Status	Federal poverty status constructed by GfK using panel data <100% Federal Poverty Level (FPL) 100% - 199% FPL 200%+ FPL 	No recoding
Income Volatility	Which of the following best describes how your household's income changes from month to month, if at all? Roughly the same each month Roughly the same most months, but some unusually high or low months during the year Often varies quite a bit from one month to the next	Recoded as: Income is stable month-to-month Income varies month-to-month

Characteristic	Survey Question and Response Options	Recoding for Analysis
Receiving Social Security Retirement Benefits	Asked of respondents age 62 and older: Have you started receiving Social Security retirement benefits? Yes No	No recoding respondents age 62 and older. Imputed values of "no" for respondents under age 62.
Military Service (Servicemember or Dependent)	Are you a current or former member of the United States Armed Forces, or the spouse or dependent of a service member or veteran? I am a service member or veteran I am a dependent or spouse of a service member or veteran Both Neither	Recoded as: Military service by respondent or respondent is spouse or dependent of service member No military service
Veteran Status	Asked of military servicemembers: What is your [military] status? (Check all that apply) Active Reserve National Guard Retired Veteran Response options: Yes No	Recoded as: Veteran or retired military servicemember Not a veteran nor retired military servicemember In cases where respondents selected "veteran" or "retired" plus another status, age was used to classify the respondent. Those age 60 or older were classified as "veteran or retired military servicemember," and those under age 60 were classified as "not a veteran nor retired military servicemember." Imputed values of as "not a veteran nor retired military servicemember" for respondents who are not military service members.
Employer-Provided Benefits	For each of the following benefits that employers might offer, please indicate whether you have access to the benefit through your or your spouse's/partner's/other's current or former employer? Health Insurance 401(k) or Other Employer-Sponsored Retirement Savings Account Defined-Benefit Pension Tuition Reimbursement and/or Student Debt Repayment Work/Life Benefits (such as family leave, emergency dependent care, vacation, etc.) Response options: Yes No	Recoded as: Employer-Provided Health Benefits: Yes No Employer-Provided Retirement Savings Benefits: Yes No Employer-Provided Pension Benefits: Yes No Other Employer-Provided Benefits (e.g., tuition reimbursement, work/life policies): Yes

Characteristic	Survey Question and Response Options	Recoding for Analysis
		■ No

EXHIBIT B6: SAVINGS AND SAFETY NETS

Characteristic	Survey Question and Response Options	Recoding for Analysis
Liquid Savings	How much money do you have in savings today (in cash, checking, and savings account balances)? • \$0 • \$1-49 • \$50-99 • \$100-249 • \$250-499 • \$500-999 • \$1,000-1,999 • \$2,000-4,999 • \$5,000-9,999 • \$10,000-19,999 • \$20,000-49,999 • \$75,000 or more	Recoded as:
Able to Absorb Unexpected Expense	How confident are you that you could come up with \$2,000 in 30 days if an unexpected need arose within the next month? I am certain I could come up with the full \$2,000 I could probably come up with \$2,000 I could probably not come up with \$2,000 I am certain I could not come up with \$2,000 I don't know	No recoding
Have Non-Retirement Investments	Which of the following financial products and services do you currently have? Non-Retirement Investments (such as stocks, bonds or mutual funds) Response options: Yes No	No recoding
Have Health Insurance	Which of the following financial products and services do you currently have? Health Insurance Response options:	Recoded as: Insured Not insured

Characteristic	Survey Question and Response Options	Recoding for Analysis
Have Friends/Family Safety Net for Emergency Needs	 Yes No If you found yourself needing extra money to make ends meet, would the following statements be true for you? My friends or family would lend me the money and expect me to repay them My friends or family would give me the money with no expectation of repayment 	Recoded as: Yes to one or both questions about borrowing from family or friends No to both questions
	Response options: Yes No	

EXHIBIT B7: FINANCIAL EXPERIENCES

Characteristic	Survey Question and Response Options	Recoding for Analysis
Turned Down for Credit	In the past 12 months, has either of the following happened to you? I applied for credit and was turned down. Response options: Yes No	No recoding
Contacted by Debt Collector	In the past 12 months, have you been contacted by a person or company trying to collect a past-due debt from you? Include instances when you were contacted about debts that you believed you did not owe. Do not include instances when the person or company was trying to reach someone else. Yes No Not sure	Recoded as: Yes, contacted by debt collector in past 12 months No or not sure
Have Checking or Savings Account	Which of the following financial products and services do you currently have? Checking or Savings Account at a bank or credit union Response options: Yes No	No recoding
Use Non-Bank, Short-Term Credit	Which of the following, if any, have you used in the past 12 months? 1. Payday Loan or Cash Advance Loan	Recoded from these two questions as: Yes, used one or more of these forms of non-bank short-term credit: payday loan, cash advance, pawn

Characteristic	Survey Question and Response Options	Recoding for Analysis
	 Pawn Loan or Auto Title Loan (An auto title loan is a small loan for a short period of time (usually 30 days) where you give the lender your auto title) 	loan, auto title loan No, used none of these products
Use Non-Bank Transaction	Response options: Yes No Which of the following, if any, have you used in the past 12	Recoded from these three questions as:
Products	 A reloadable card that is not linked with a checking or savings account. (May have logos such as MasterCard, VISA, Discover or American Express. You can keep adding money onto this card and use it to make purchases and pay bills anywhere credit cards are accepted or withdraw the cash from an ATM. This does not include phone cards, gift cards for a particular store or service or cards that you cannot add more funds onto.) A place other than a bank or credit union to give or send money to relatives or friends outside the U.S A place other than a bank or credit union to cash a check or purchase a money order 	Yes, used one or more of these non-bank transaction products: re-loadable card, remittance, check cashing No, used none of these products Yes, used one or more of these non-bank transaction products: re-loadable card, remittance, check cashing No, used none of these products
	Response options: Yes No	
Housing Cost Burden	About how much do you pay for your home each month? Less than \$300 \$300-499 \$500-749 \$5500-749 \$1,000-1,499 \$1,500-1,999 \$2,000-2,999 \$3,000-4,999 \$5,000 or more Self-reported annual household income from GfK panel data: Less than \$5,000 \$5,000 to \$7,499 \$7,500 to \$9,999 \$10,000 to \$12,499 \$12,500 to \$14,999	 Recoded from these two questions as: Low (annual housing costs 30% or less of annual income) Medium (annual housing costs from 31% to 50% of annual income) High (annual housing costs more than 50% of annual income) In recoding, we (1) calculated the midpoint (median) of each housing cost and income range, (2) multiplied the monthly housing cost by 12 to achieve the annual housing cost, (3) divided the annual housing cost by annual income to obtain the proportion, and (4) multiplied by 100 to convert to percentage.

Characteristic	Survey Question and Response Options	Recoding for Analysis
	 \$15,000 to \$19,999 \$20,000 to \$24,999 \$25,000 to \$29,999 \$30,000 to \$34,999 \$35,000 to \$39,999 \$40,000 to \$49,999 \$50,000 to \$59,999 \$60,000 to \$74,999 \$75,000 to \$84,999 \$85,000 to \$99,999 \$100,000 to \$124,999 \$125,000 to \$149,999 \$150,000 to \$174,999 \$150,000 to \$174,999 \$150,000 to \$199,999 \$200,000 to \$249,999 \$250,000 or more 	
Negative Financial Services Experiences	How often have you had experiences with financial services where you did not feel respected or where you felt mistreated? Often Sometimes Rarely Never	Recoded as negative financial services experience: Often or sometimes Rarely or never
Experienced Any Negative Financial Shocks	In the past 12 months, did you or any members of your household experience any of the following? Lost a job Had work hours and/or pay reduced or a business I or someone in my household owned had financial difficulty Received a foreclosure notice Had a major car or home repair Had a health emergency Got a divorce or separation Added a child to the household Experienced the death of primary breadwinner Received a large sum of money beyond normal income (such as inheritance, bonus or other windfall) Had a child start daycare or college Provided unexpected financial support to a family member or friend	Recoded as negative financial shocks (excludes receipt of large sum of money beyond normal income): One or more negative financial shocks No negative financial shocks
	Response options: Yes	

Characteristic	Survey Question and Response Options	Recoding for Analysis
	■ No	
Have a Student Loan	Which of the following financial products and services do you currently have?	No recoding
	8. Student/Education Loan (for yourself or someone else)	
	Response options: Yes No	
Financial Socialization	While growing up at home, did your family do any of the	Recoded as:
	following? 1. Discussed family financial matters with me. 2. Spoke to me about the importance of saving. 3. Discussed how to establish a good credit rating. 4. Taught me how to be a smart shopper. 5. Taught me that my actions determine my success in life. 6. Provided me with a regular allowance. 7. Provided me with a savings account. Response options: Yes	 Greater than the median number of financial socialization activities when growing up Median number or fewer In recoding, we (1) created a sum scale score equal to the sum of all seven items for respondents who responded to all seven, (2) calculated the weighted median (midpoint) of the sum scale score for the sample as a whole, (3) categorized respondents as having sum scale scores either above the weighted median value or at/below the weighted median.
Responsibility for Own Finances	No Besides regular spending decisions, which of the following options best describes who takes care of the money matters in your household (for example, making investments, paying bills, making decisions)?	No recoding
	 Someone else takes care of all or most money matters in my household. Someone else and I take care of money matters in my household about the same. I take care of all or most money matters in my household. 	

EXHIBIT B8: BEHAVIORS, SKILLS, AND ATTITUDES

Characteristic	Survey Question and Response Options	Recoding for Analysis
Confidence in Ability to	If you were to set a financial goal for yourself today, how	Recoded as:
Achieve a Financial Goal	confident are you in your ability to achieve it?	 Low confidence ("Not at all" to "somewhat
	 Very confident 	confident")
	 Somewhat confident 	High confidence ("Very confident")
	 Not very confident 	

Characteristic	Survey Question and Response Options	Recoding for Analysis
	Not at all confident	
Have a Habit of Saving	Putting money into savings is a habit for me. Strongly agree Agree Agree slightly Disagree slightly Disagree	 Recoded as: Have a habit of savings ("agree" or strongly agree") No evidence of a savings habit ("strongly disagree" to "agree slightly" or did not respond)
Effective Day-to-Day Money Management Behaviors	 Strongly disagree Please indicate how often you have engaged in the following activities in the past six months: Paid all your bills on time. Stayed within your budget or spending plan. Paid off credit card balance in full each month. Checked your statements, bills and receipts to make sure there were no errors. Response options: Always 	Recoded as: Greater than the median level of positive money management behavior Median or lower level of positive money management behavior In recoding, we (1) created a mean scale score representing the average of all four items for respondents who responded to at least 50 percent of items (two of the four), (2) calculated the weighted
Planning Horizon of 5 or More Years	 Often Sometimes Seldom Never Not applicable In planning your and/or your family's saving and spending, which of the time periods is most important? The next few months The next few years The next few years 	median (midpoint) of the mean scale score for the sample as a whole, (3) categorized respondents as having mean scale scores either above the weighted median value or at/below the weighted median. Recoded as: Plans for the next 5 years or longer Plans for less than the next 5 years ("next few months" to "next few years")
Propensity to Plan for Finances	 The next 5 to 10 years Longer than 10 years We are trying to understand how people differ in how much they plan for money. Don't feel compelled to say that you engage in a lot of planning. We are just as interested in when you do not engage in much planning as when you do engage in a lot of planning. To what extent do you agree or disagree with each of the following statements? I consult my budget to see how much money I have left. I actively consider the steps I need to take to stick to my budget. I set financial goals for what I want to achieve with my money. I prepare a clear plan of action with detailed steps to 	Recoded as: Greater than the median level of propensity to plan Median or lower level of propensity to plan In recoding, we (1) created a mean scale score representing the average of all four items for respondents who responded to at least 50 percent of items (two of the four), (2) calculated the weighted median (midpoint) of the mean scale score for the sample as a whole, (3) categorized respondents as having mean scale scores either above the weighted median value or at/below the weighted median.

Characteristic	Survey Question and Response Options	Recoding for Analysis
	achieve my financial goals.	
	Response options: Strongly agree Agree Neither agree nor disagree Disagree Strongly disagree	
Financial Knowledge*	(1) Considering a long time period (for example 10 or 20 years), which asset described below normally gives the highest return? Savings accounts Bonds Stocks (2) Normally, which asset described below displays the highest fluctuations over time? Savings accounts Bonds Stocks (3) When an investor spreads his or her money among different assets, does the risk of losing a lot of money increase, decrease or stay the same? Increase Decrease Stay the same (4) Do you think the following statement is true or false? "If you were to invest \$1,000 in a stock mutual fund, it would be possible to have less than \$1,000 when you withdraw your money." True False (5) Do you think the following statement is true or false? "Whole life' insurance has a savings feature while 'term' insurance does not." True False (6) Do you think the following statement is true or false? "Housing prices in the US can never go down." True False (7) Suppose you owe \$3,000 on your credit card. You pay a	Recoded as: Greater than the median level of financial knowledge Median or lower level of financial knowledge In recoding, we (1) used look-up tables to convert raw scores (total number correct) on the 10-item Financial Knowledge scale to IRT-based EAP scores, (2) calculated the weighted median (midpoint) of the scale score for the sample as a whole, (3) categorized respondents as having scale scores either above the weighted median value or at/below the weighted median.

Characteristic	Survey Question and Response Options	Recoding for Analysis
	minimum payment of \$30 each month. At an Annual Percentage Rate of 12% (or 1% per month), how many years would it take to eliminate your credit card debt if you made no additional new charges? Less than 5 years Between 5 and 10 years Between 10 and 15 years Never, you will continue to be in debt	
	 (8) If interest rates rise, what will typically happen to bond prices? They will rise They will fall They will stay the same There is no relationship between bond prices and the interest rate 	
	(9) Do you think the following statement is true or false? "A 15-year mortgage typically requires higher monthly payments than a 30-year mortgage, but the total interest paid over the life of the loan will be less."	
	TrueFalse	
	(10) Imagine that the interest rate on your savings account was	
	1% per year and inflation was 2% per year. After 1 year, how	
	 much would you be able to buy with the money in this account? More than today Exactly the same Less than today 	
Financial Skill	Please select the response that best indicates how well, in general, each of the following statements describes you or your situation.	Recoded from these 10 items as: Greater than the median level of financial skill Median or lower level of financial skill
	 I know how to get myself to follow through on my financial intentions. I know where to find the advice I need to make decisions involving money. I know how to make complex financial decisions. I am able to make good financial decisions that are new to me. I am able to recognize a good financial investment. I know how to keep myself from spending too much. I know how to make myself save. 	In recoding, we (1) used item response theory (IRT) methods to produce the financial skill scale scores from these 10 items, (2) calculated the weighted median (midpoint) of the scale score for the sample as a whole, (3) categorized respondents as having scale scores either above the weighted median value or at/below the weighted median.

Characteristic	Survey Question and Response Options	Recoding for Analysis
	This statement describes me Completely Very well Somewhat Very little Not at all	
	For this next set of statements, we are interested in learning how often this statement applies to you or your situation.	
	How often would you say?	
	 I know when I do not have enough information to make a good decision involving my money. I know when I need advice about my money. I struggle to understand financial information. 	a
	Response options: Always Often Sometimes Rarely Never	

^{*} Knoll, M.A. Z. & Houts, C.R., 2012. The financial knowledge scale: An application of item response theory to the assessment of financial literacy. Journal of Consumer Affairs, 46(3), pp.381-410.

Survey methodology technical appendix

This appendix provides an overview of the survey methodology used to gather and prepare data for this report. In the sections that follow, we describe sampling, data collection, weighting, design effects, and margins of error.⁶¹

Stages of sampling

The survey sample was drawn from the GfK KnowledgePanel, a recruited panel designed to be nationally representative of U.S. households, and designed to mirror the noninstitutionalized adult (age 18 and older) population in the 50 U.S. states and Washington, D.C. as closely as possible.

Panel description

The GfK panel is the largest U.S. probability-based non-volunteer Internet panel, with a total of about 55,000 panel members. The large size of the panel provides a sufficient base to allow for stratification of the sample with oversampling of key populations (e.g., aged 62 or older). GfK's probability-based recruitment procedures were based on random digit dialing (RDD) using a dual-frame landline and cell phone design through 2009 before switching to address-based sampling (ABS) in 2010 to maintain the representativeness of the panel. Recruitment to the GfK

⁶¹ Additional detail on the survey methodology can be found in the Public Use File User's Guide, available at consumerfinance.gov/data-research/financial-well-being-survey-data/

panel is done in English and Spanish to ensure that different levels of language proficiency and acculturation are represented. GfK provides non-Internet households with a web-enabled computer and free Internet service so that they can participate as online panel members.

In addition to the standard GfK panel, the survey drew upon GfK's KnowledgePanel LatinoSM to ensure adequate representation of the Latino population. The Latino panel is designed to represent the U.S. Hispanic population, including English-dominant, bilingual, and Spanish-dominant groups. The weighted GfK panel matches the U.S. adult (age 18 and above) Hispanic population on gender, age, marital status, housing ownership, education, region, Internet access, household size, language proficiency, and place of birth.⁶² It differs to some degree with respect to income and employment status.

Sample design

The sample design for the National Financial Well-Being Survey from the KnowledgePanel called for 5,000 completed surveys of adults in proportion to the U.S. population with respect to age, race/ethnicity, and the percentage below 200 percent of the federal poverty level (FPL) plus an additional oversample of 1,000 completed surveys of adults age 62 and above. In the case of the age 62 and above oversample the targets for ages 62—74 and 75 and older were in proportion to their representation in the U.S. population.

As we describe below, it was necessary to add additional sample due to lower than expected response rates for key populations: Hispanics; black, non-Hispanics; and those with income below 200 percent of the federal poverty level.

GfK was responsible for implementing a design to yield these targets. GfK based sample selection on age groups, with each age group selected to be representative of the U.S. population in the corresponding age range. Due to known response rate differences for each age group and

⁶² GfK. 2012. "Research Note: KnowledgePanel LatinoSM." GfK, Palo Alto, CA. Accessed November 11, 2015 at: http://www.knowledgenetworks.com/resources/docs/KnowledgePanel-LatinoSM-Demographic-Profile-Feb-2012.pdf

ethnicity, GfK oversampled for Hispanic and black, non-Hispanic panel members in anticipation of lower response rates in these groups.

Overall, 14,402 were selected: 11,513 initially for the general population sample, 1,647 for the age 62 and above oversample, and another 1,242 focused on people below 200 percent of the federal poverty level, black, non-Hispanic, and Hispanic. Of the 14,402 panelists, 8,008 panelists were not included in the final dataset. Of these, 6,858 were complete non-respondents; 302 did not consent; 466 started but did not complete the survey; 294 accessed the first page of the survey but answered no questions; 72 elicited response quality concerns; and 16 failed to complete the survey after a technical error erroneously terminated their survey session at the COVERCOSTS item.

Sample achieved

Overall, 6,394 surveys were completed: 5,395 from the general population sample (5,000 from the general population sample originally drawn and 395 from the additional sample added focusing on panel members below 200 percent of federal poverty level or who were black, non-Hispanic or Hispanic) and 999 from the age 62 and above oversample. The counts of completed surveys exclude cases that were removed for reasons of response quality. The tables below show sample targets, achieved numbers of completed surveys, amounts of sample drawn, and completion rates for the general population sample and for the age 62 and above oversample.

EXHIBIT C1: TARGET AND ACHIEVED COMPLETED INTERVIEWS AND SAMPLE DRAWN IN THE GENERAL POPULATION SAMPLE, RACE/ETHNICITY

Race/Ethnicity	Target	Total	Initial Sample Achieved	Additional Sample Achieved	Initial Sample Drawn	Additional Sample Drawn	Total Completion Rate
Black, non-	590	634	434	200	1,470	585	30.9%
Hispanic	330	004	404	200	1,470	303	30.970
Hispanic	790	820	625	195	2,296	657	26.8%
White non-Hispanic	N/A	3,666	3,666	0	7,136	0	51.4%
Other non-Hispanic	N/A	152	152	0	332	0	45.8%
2+ races non-	N/A	123	123	0	279	0	44.40/
Hispanic	IN/A	123	123	U	219	U	44.1%

EXHIBIT C2: TARGET AND ACHIEVED COMPLETED INTERVIEWS AND SAMPLE DRAWN IN THE GENERAL POPULATION SAMPLE, POVERTY

	Target	Total	Initial Sample Achieved	Additional Sample Achieved	Initial Sample Drawn	Additional Sample Drawn	Total Completion Rate
Less than 200% of FPL	1,432	1,336	1,163	173	3,833	691	29.5%
200%+ of FPL	N/A	4,059	3,837	222	7,680	551	49.3%

EXHIBIT C3: TARGET AND ACHIEVED COMPLETED INTERVIEWS AND SAMPLE DRAWN IN THE GENERAL POPULATION SAMPLE, AGE

Age Group	Target	Total	Initial Sample Achieved	Additional Sample Achieved	Initial Sample Drawn	Additional Sample Drawn	Total Completion Rate
18-34	1,495	1,530	1,436	94	4,454	388	31.6%
35-54	1,690	1,903	1,754	149	4,056	491	41.9%
55-61	615	708	632	76	1,118	192	54.0%
62-74	800	851	780	71	1,241	160	60.7%
75+	400	403	398	5	644	11	61.5%

EXHIBIT C4: TARGET AND ACHIEVED COMPLETED INTERVIEWS AND SAMPLE DRAWN IN THE AGE 62 AND ABOVE OVERSAMPLE

Age Group	Target	Achieved	Drawn	Completion Rate	
62-74	666	666	1,087	61.3%	
75+	334	333	560	59.5%	

The count of completed surveys excludes 72 panel members who completed the survey but were removed due to response quality concerns (70 from the original general population sample, 2 from the oversample of people aged 62 years or older, and none from the additional sample added later in the field period).

Final disposition and outcomes rates

Because the National Financial Well-Being Survey is drawn from an online panel, outcome rates are reported in a different fashion from other surveys due to the several levels of response that must be taken into account. Specifically, we report both the recruitment rate into the panel and

the response rate to this specific survey. The response rate for panel recruitment is measured by the recruitment rate (RECR), 12.9 percent for this particular survey (the recruitment rate includes the GfK Knowledge Panel sample and GfK Knowledge Panel for Latino sample). Because panelists must complete a profile before becoming members of the KnowledgePanel, the percentage of successfully recruited panelists who complete the profile is measured by the profile rate (PROR), 62.6 percent for this particular survey. Finally, the completion rate (COMR) is the number of panelists invited to take Financial Well-Being National Survey who completed the survey, 44.4 percent in this case (6,394 out of 14,402 panelists invited to participate). 63 The final cumulative response rate (CUMRR = RECR × PROR × COMR) is 3.6 percent. These outcome rates follow reporting guidelines from the American Association for Public Opinion Research (AAPOR) and Callegaro and DiSogra. 64

Data collection protocol

A pretest of the survey took place between October 4 and 7, 2016. A total of 126 surveys were completed. The main study was fielded between October 27 and December 5, 2016.

Once assigned to a survey, members receive a notification email from GfK letting them know there is a new survey available for them to take. This email notification contains a link that sends them to the survey questionnaire. No login name or password is required. After three days, automatic email reminders are sent to all nonresponding panel members in the sample. To assist panel members with their survey taking, each individual has a personalized "home page" that lists all the surveys that were assigned to that member and have yet to be completed.

⁶³ Respondents who were cleaned from the file based on speeding and straight-lining are not included in the count of completed surveys used here, neither are those with partial responses, break-offs, nor panel members who did not consent.

⁶⁴ American Association for Public Opinion Research. 2016. "Standard Definitions: Final Dispositions of Case Codes and Outcome Rates for Surveys." 9th ed. American Association for Public Opinion Research, Oakbrook Terrace, IL. Callegaro, Mario and Charles DiSogra. 2008. "Computing Response Metrics for Online Panels." *Public Opinion Quarterly* 72:1008-32. The AAPOR CUMRR is Callegaro and DiSogra's (2008) CUMRR1. Callegaro and DiSogra's CUMRR2 adds retention rate (RETR): CUMRR = RECR × PROR × RETR × COMR. The retention rate for this particular survey was 29.7 percent.

Median survey length was 26 minutes.

Weighting process

Weighting took place in three steps, which are described below.

First, GfK weighted the pool of active panel members to the geo-demographic benchmarks from the 2016 March supplement of the Current Population Survey (CPS) along several dimensions. Using the resulting weights as a measure of size, in the next step a PPS (probability proportional to size) procedure was used to select study-specific samples. Second, GfK raked the sample of completed surveys to benchmarks drawn from the March 2016 CPS. Third, a final set of raking adjustments were made by Abt Associates. These adjustments were designed to ensure that the sample was representative with respect to key demographics:

- Age (18-39, 40-61, 62-74, 75 and above);
- Sex (female, male);
- Education (less than high school, high school graduate/GED, some college, bachelor's degree, and post-baccalaureate degree);
- Urbanicity operationalized as residence in a Metropolitan Statistical Area (MSA), or not (resident in MSA, not resident in MSA);
- Race/ethnicity (white, non-Hispanic; black, non-Hispanic; Hispanic; other non-Hispanic);
- Poverty (less than 100 percent of federal poverty level, 100 to 199 percent of federal poverty level, 200 percent or more of federal poverty level).

Sex, education, urbanicity, race/ethnicity, and poverty were all interacted with age to ensure that the weighted data would be representative of these demographics when the whole sample was analyzed and where analysis was limited to respondents aged 62 or older. The final round of raking converged with variation of less than 0.1 percentage points from targets.

Design effects and margin of error

The overall design effect (DEFF) for a survey is commonly approximated as $1 + CV^2$, where CV is the coefficient of variation of the weights. For this survey, this apparent design effect is 1.343. The margin of error (half-width of the 95 percent confidence interval) incorporating the design effect for full-sample cross-sectional estimates at 50 percent is \pm 1.4 percentage points. It is important to remember that random sampling error is only one possible source of the total error in a survey estimate. Other sources, such as question wording and reporting inaccuracy, may

contribute additional nonsampling error. For the age 62 and above population, sample size achieved was 2,253, DEFF was 1.294, and the margin of error was 2.3 percent. Sample sizes, design effects, and margins of error for these and other populations of interest are shown in the table below.

EXHIBT C5: SAMPLE SIZE, DESIGN EFFECT, AND MARGIN OF ERROR FOR SELECTED POPULATIONS

Population	Nominal Sample Size	Design Effect	Effective Sample Size	Margin of Error
All	6,394	1.343	4,762	1.4%
Age 62+	2,253	1.294	1,741	2.3%
Age 18-34	1,530	1.367	1,119	2.9%
Age 35-44	828	1.118	697	3.7%
Age 45-54	1,075	1.152	933	3.2%
Age 55-61	708	1.187	596	4.0%
Age 62-74	1,517	1.186	1,279	2.7%
Age 75+	736	1.500	491	4.4%
White non-Hispanic	4,498	1.278	3,519	1.7%
Black, non-Hispanic	685	1.325	517	4.3%
Hispanic	875	1.352	647	3.9%
Less than 200% of federal poverty level	1,520	1.253	1,213	2.8%
Less than 100% of federal poverty level	661	1.302	508	4.3%
100%-199% of federal poverty level	859	1.217	706	3.7%
200% or more of federal poverty level	4,874	1.363	3,576	1.6%

APPENDIX D:

Significance testing methods

Tests of differences among subgroups

For all findings described in this report, the research team used analysis of variance (ANOVA) methods and pairwise t-tests to examine whether the observed differences between subgroups in mean financial well-being scores are statistically significant. The results of significance testing are presented in Appendix A. In the report narrative, we only discuss differences in means that are significant at the p < .05 level. This is commonly interpreted as being 95 percent certain that the differences observed result from true differences in the underlying population.

ANOVA provides an omnibus test of whether a significant difference in financial well-being exists between any of the subgroups for a given characteristic. For example, for the characteristic "generation," we tested whether the four component subgroups (Millennials, Generation X, Baby Boomers, and the Silent Generation) differ in their average financial well-being, and for the characteristic "sex," we tested whether the two component subgroups (men and women) differ. For characteristics with only two subgroups (e.g., sex), it reveals whether the subgroups' means are significantly different. However, for a characteristic that has three or more subgroups (e.g., generation), ANOVA does not indicate which subgroups differ from each other. Thus, when an ANOVA revealed a significant difference in financial well-being for characteristics with three or more subgroups, 65 we followed up with a series of pairwise post-hoc comparisons (t-tests) to pinpoint which subgroups are, in fact, significantly different from each other. In the post-hoc tests, we compared every possible pairing of subgroups for a characteristic (e.g., whether Baby Boomers' average financial well-being differs significantly from Millennials,

⁶⁵ We set our significance threshold at the p < .05 level.

whether Millennials' average financial well-being differs significantly from Generation X, and so on). 66

In Appendix A, significant differences are denoted using a lettering system. Within a given characteristic, each subgroup is assigned a letter, which appears in the second column under the heading "Group Label." In the sixth column under the heading "Significantly Different From," the letters indicate the subgroups within the same characteristic with significantly different mean financial well-being (at the p < .05 level). For example, in the display of "generation" in Appendix A, each subgroup is assigned a different letter as follows: Millennials are "a," Generation X is "b," Baby Boomers are "c," and Silent Generation is "d." For Millennials, the collection of letters in the sixth column (b, c, and d) indicates that their average financial wellbeing is significantly different from the other three generations. In other words, Millennials, with an average financial well-being score of 51, have significantly lower financial well-being than Generation X (average of 53), Baby Boomers (average of 56), and the Silent Generation (average of 60). By contrast, in the display of "sex," there are no letters displayed under the heading "Significantly Different From," indicating that on average men and women do not differ significantly in their financial well-being.

Tests of differences from the national average

The research team used pairwise t-tests to examine whether observed differences between a given subgroup's mean financial well-being score and the national average are statistically significant. The results of significance testing are presented in Appendix A, where subgroup means that differ significantly from the national average are marked by asterisks.

⁶⁶ Due to the number of comparisons, we applied Tukey's HSD adjustment to these post-hoc tests.