

# U.S. findings from a new financial well-being score

In recent years, financial well-being—a topic brought into focus due to the pandemic—has gained importance. We took this opportunity to develop a financial well-being score that is comprehensive, theory-based, and consists of both objective and subjective measures of financial well-being. This report describes the score and summarizes key findings from our empirical analysis of financial well-being among U.S. adults.

# Financial well-being score

We define financial well-being as being and feeling financially secure in the short and long term and having the financial freedom to make choices that allow one to enjoy life. Building upon this definition, the new score is based on five building blocks of financial well-being: (1) making ends meet, (2) coping with shocks, (3) managing debt, (4) planning for the long term, and (5) having access to a financial support network. The assumption is that individuals are financially well if they have the means to make ends meet, are able to cover financial emergencies, have a manageable amount of debt, are set up for long-term financial security, and have an informal financial support network.

Each building block is measured by two questions: one measures objective well-being and one measures subjective well-being. The exact wording of each question is shown in Table 1. To compute the financial well-being score, an item response theory (IRT)-based technique is used, which has the advantage of considering characteristics of the individual questions when calculating the score. Once calculated, our financial well-being score is transformed into a score ranging from zero to 100 for more convenient interpretation purposes.

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Table 1. Financial well-being questions

Building blocks of	Financial well-being questions		
financial well-being	Objective	Subjective	
Making ends meet	In a typical month, I am able to make ends meet. [1 strongly agree; 2 somewhat agree; 3 neither agree nor disagree; 4 somewhat disagree; 5 strongly disagree]	I'm satisfied with the way I handle my day-to-day finances. [1 strongly agree; 2 somewhat agree; 3 neither agree nor disagree; 4 somewhat disagree; 5 strongly disagree]	
Coping with shocks	How confident are you that you could come up with an amount roughly equivalent to your monthly paycheck if an unexpected need arose within the next 30 days?  [1 not at all confident; 2 slightly confident; 3 somewhat confident; 4 moderately confident; 5 very confident]	In thinking about my current household's finances, I feel financially secure. [1 strongly agree; 2 somewhat agree; 3 neither agree nor disagree; 4 somewhat disagree; 5 strongly disagree]	
Managing debt	My household's current debt and debt payments prevent me and others in my household from addressing other financial priorities. [1 strongly agree; 2 somewhat agree; 3 neither agree nor disagree; 4 somewhat disagree; 5 strongly disagree]	I'm comfortable with the amount of debt my household has. [1 strongly agree; 2 somewhat agree; 3 neither agree nor disagree; 4 somewhat disagree; 5 strongly disagree]	
Planning for the long term	I am set up for long-term financial security. [1 strongly agree; 2 somewhat agree; 3 neither agree nor disagree; 4 somewhat disagree; 5 strongly disagree]	I feel financially secure for the future. [1 strongly agree; 2 somewhat agree; 3 neither agree nor disagree; 4 somewhat disagree; 5 strongly disagree]	
Having access to a financial support network	How confident are you that you could rely on a network of family and friends for support in the event of financial distress?  [1 not at all confident; 2 slightly confident; 3 somewhat confident; 4 moderately confident; 5 very confident]	[introduction question] Q1. How important is it for you to have a network of family and friends for financial support?  [1 very important; 2 moderately important; 3 not important]  Q1a. [Asked only if answered very important or moderately important to Q1] Because I know that I could rely on my network of family and friends for financial support, I feel much more financially secure.  [1 strongly agree; 2 somewhat agree; 3 neither agree nor disagree; 4 somewhat disagree; 5 strongly disagree]  Q1b. [Asked only if answered not important to Q1] I feel financially secure because I know that I can cope on my own with unexpected expenses.  [1 strongly agree; 2 somewhat agree; 3 neither agree nor disagree; 4 somewhat disagree; 5 strongly disagree]	

Note. The financial well-being questions were developed by the authors. In the fielded surveys, the well-being questions related to debt were asked last to prevent debt worries from negatively influencing responses to the subsequent questions.

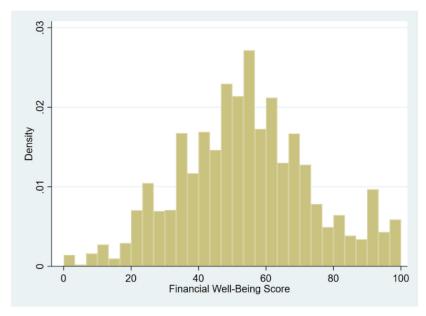
## Data

The development of the financial well-being score questions was informed by the microeconomic theory of the utility function, an extensive analysis of existing scores, and in-depth interviews with experts in this field. These questions were first tested with a pilot survey (500 observations), further adjusted, and then comprehensively assessed with a large survey (2,000 observations). For both surveys, data was collected using the nationally representative YouGov panel.<sup>1</sup>

# Empirical findings<sup>2</sup>

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

Figure 1. Distribution of the financial well-being score



Source: Authors' calculations using the full sample.

Note. The financial well-being score is based on 10 questions and calculated using IRT methodology. Statistics are weighted.

<sup>1</sup> YouGov is a market research and data analytics firm providing a platform that enables accurate and timely data collection and reaches over 9 million people in North America, Europe, the Middle East, and the Asia-Pacific region. Further information on YouGov is available at yougov.com. All statistics presented in this paper use sampling weights provided by YouGov, which makes our results nationally representative of the U.S. population.

<sup>2</sup> The full paper, "Development and testing of a comprehensive financial well-being measure," by Andrea Sticha, Annamaria Lusardi, and Alessia Sconti, provides an extensive discussion of the empirical results for each well-being question. In this nontechnical report, we focus on the analysis of the score.

## Financial well-being across demographic groups

Table 2 shows the well-being score for demographic subgroups and reports four main takeaways:

- 1. Older cohorts have a significantly higher well-being score than their younger peers. When looking at the individual financial well-being questions, younger respondents seem to struggle the most with making ends meet, coping with emergency expenses, not being debt-constrained, and having long-term financial security. This is in line with our expectations, as younger cohorts likely carry student debt and are still too early in their careers to have a substantial amount of savings for the short- or long-term. At the same time, a much higher percentage of 18- to 39-year-olds can rely on family and friends in case of financial distress, confirming that many young adults might still be in college or just starting off their careers and likely benefit from parental financial support.
- 2. Those with at least a bachelor's degree seem to have higher average well-being scores compared to those without a college degree. However, once we control for various demographic characteristics (including income) in a regression analysis, the relationship between education and the financial well-being score is not significant.
- 3. Marital status matters; singles and those divorced, separated, or widowed have a significantly lower financial well-being score compared to their married peers.
- 4. Income and employment status have a strong relationship to financial well-being, as expected. Financial well-being scores increase with income and those with employment or those in retirement score significantly higher on the financial well-being scale than those without a job (those unemployed and those not in the labor force).

Table 2. Financial well-being score across sociodemographic characteristics

Total sample  AGE 18-39 40-55 56-70 70+ GENDER Male Female RACE/ETHNICITY White Black Hispanic Asian and other	54 52 51 55 64 56 53 55 54 53 47			
18-39 40-55 56-70 70+ GENDER Male Female RACE/ETHNICITY White Black Hispanic	51 55 64 56 53 55 54 53			
40-55 56-70 70+  GENDER  Male Female  RACE/ETHNICITY  White  Black Hispanic	51 55 64 56 53 55 54 53			
56-70 70+  GENDER  Male Female  RACE/ETHNICITY  White  Black  Hispanic	55 64 56 53 55 54 53			
70+  GENDER  Male Female  RACE/ETHNICITY  White  Black  Hispanic	56 53 55 54 53			
GENDER Male Female RACE/ETHNICITY White Black Hispanic	56 53 55 54 53			
Male Female  RACE/ETHNICITY  White Black Hispanic	53 55 54 53			
Female  RACE/ETHNICITY  White  Black  Hispanic	53 55 54 53			
RACE/ETHNICITY White Black Hispanic	55 54 53			
White Black Hispanic	54 53			
Black Hispanic	54 53			
Hispanic	53			
·				
Asian and other	47			
HIGHEST DEGREE OBTAINED				
High school or less	51			
Some college	52			
Bachelor's degree or higher	59			
MARITAL STATUS				
Married	58			
Single	47			
Divorced/separated/widowed	52			
FINANCIALLY DEPENDENT CHILDREN				
No children	55			
1 or 2 children	53			
3 or more children	55			
HOUSEHOLD INCOME				
Less than \$30K	44			
\$30-49K	51			
\$50-79K	57			
\$80-99K	62			
\$100K+	65			
WORK STATUS				
Employed	57			
Unemployed	38			
Not in labor force	46			
Retired	62			
Total Observations	1,723			

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

Note. The financial well-being score is based on 10 questions and calculated using IRT methodology. Statistics are weighted. Respondents who chose "White" were coded as White; respondents who chose "Black" were coded as Black; respondents who chose "Hispanic" were coded as Hispanic; and respondents who chose "Asian" or "Two or more races" were coded as Asian and other. The education variable Highest degree obtained includes the categories High school or less, indicating that the highest degree received is a high school diploma; Some college, indicating that respondents have attended a postsecondary institution and earned, at most, a two-year degree (i.e., an associate degree); and Bachelor's degree or higher, indicating that respondents have earned a four-year degree or postgraduate degree. The variable Financially dependent children is based on the question: "How many children do you have who are financially dependent on you or your spouse/partner? Please include children not living at home, and step-children as well." An individual's Work status is defined by four categories: Employed for those who have a full- or part-time occupation or are self-employed; Unemployed for those with no occupation at the time of the survey; Not in labor force for those who are full-time students, full-time homemakers, or permanently sick, disabled, or unable to work (other); and Retired for those who classify themselves as being retired.

#### The relationship to financial distress

In this section, we discuss the relationship between our financial well-being score and financial distress indicators. The aim is to further shed light on respondents' financial well-being and simultaneously assess the validity of the score.

The financial well-being score seems to depict financial distress well (Table 3): Among the 41% of respondents who stated they probably or certainly could not come up with

\$2,000 within a month if an unexpected need arose (the financially fragile), the average well-being score is 39 points. This is significantly lower than the average score of 65 points for the 59% of respondents who could cope with such a mid-sized financial shock (the not financially fragile). Figure 2 shows a clear difference in the well-being score distributions for those who are classified as financially fragile compared to those who are not; with the not-fragile distribution shifted to the right on the well-being scale.

Table 3. Financial well-being score and financial distress indicators

	Total population	Financial well-being score
Financially fragile YES	41%	39 <sup>s</sup>
Financially fragile NO	59%	65
Feeling anxious YES	51%	46 <sup>s</sup>
Feeling anxious NO	23%	72
Spend more than 5 hours per week thinking	23%	44s
Spend fewer than 5 hours per week thinking	77%	57

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

Note. The financial well-being score is based on 10 questions and calculated using IRT methodology. Statistics are weighted. Financially fragile YES is a dummy variable that equals 1 if the respondent answered "I could probably not come up with \$2,000" or "I am certain I could not come up with \$2,000" to the question: "How confident are you that you could come up with \$2,000 if an unexpected need arose within the next month?" and zero otherwise. Financially fragile NO is a dummy variable that equals 1 if the respondent answered "I am certain I could come up with the full \$2,000" or "I could probably come up with \$2,000" to the previous question, and zero otherwise. Feeling anxious YES is a dummy variable that equals 1 if the respondent answered "Strongly agree" or "Somewhat agree" to the statement: "Thinking about my personal finances can make me feel anxious," and zero otherwise. Feeling anxious NO is a dummy variable that equals 1 if the respondent answered "Strongly disagree" or "Somewhat disagree" to the previous statement, and zero otherwise. Spend more than 5 hours per week thinking is a dummy variable that equals 1 if the respondent answered five hours or more to the statement: "How much time do you typically spend thinking about and dealing with issues and problems related to your personal finances? Please report approximate hours per week," and zero otherwise. Spend fewer than 5 hours per week thinking is a dummy variable that equals 1 if the respondent answered four hours or fewer to the previous statement, and zero otherwise. The superscript s indicates the means are statistically different at the 5% level from the paired behaviors.

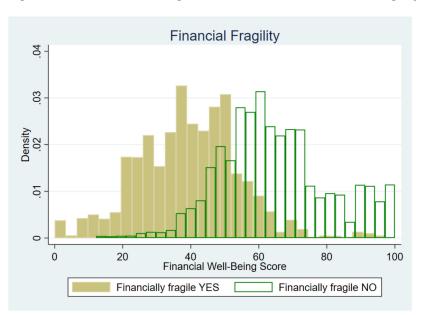


Figure 2. Financial well-being score distribution and financial fragility

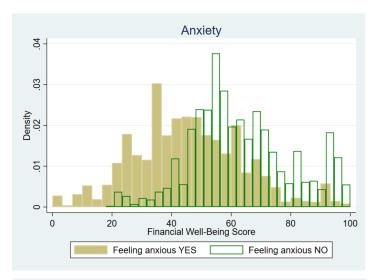
Source: Authors' calculations using the full sample collected using the YouGov panel.

Note. The financial well-being score is based on 10 questions and calculated using IRT methodology. Statistics are weighted.

Financial distress can also cause individuals to feel financially anxious, an indicator we expect to correlate with our score because half of our financial well-being questions assess respondents' perceived financial well-being. This assumption is confirmed, as shown in Table 3: On average, those who feel anxious when thinking about their personal finances score significantly lower on the financial well-being scale (46 points) compared to those who do not feel anxious (72 points). Additionally, being distressed might also lead to those individuals spending many hours thinking about and dealing with issues and problems related to their personal finances

each week. On average, the 23% of the population who spend more than five hours per week doing so scored significantly lower on the financial well-being scale (44 points) compared to the 77% of the population who spend fewer than five hours per week doing so (57 points). The relationships between the well-being score and both indicators—anxiety and hours spent—are shown in Figure 3. It is obvious that the score is able to differentiate between financial situations that can cause anxiety and many hours spent worrying about and dealing with personal finance issues.

Figure 3. Financial well-being score distribution and anxiety/financial well-being score distribution and hours spent





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

Note: The financial well-being score is based on 10 questions and calculated using IRT methodology. Statistics are weighted.

# The relationship to financial literacy

Lastly, we want to compare the financial well-being score with the widely-used Big 3 financial literacy questions, which assess respondents' basic understanding of interest rate, inflation, and risk diversification. In line with previous research, Table 4 shows that financial literacy strongly correlates with our financial well-being score. The financially

literate, i.e., those able to answer the Big 3 questions correctly, averaged 62 points on the well-being scale. In contrast, those who could not correctly answer all Big 3 questions averaged a 51-point score. Figure 4 graphically indicates this by showing the distribution of the well-being score for those who can correctly answer the Big 3 financial literacy questions compared to those who cannot.

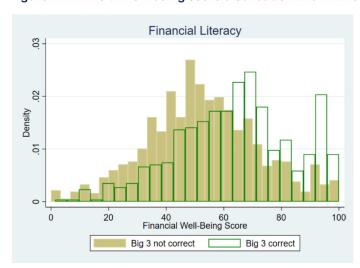
Table 4. Financial well-being score and financial literacy and education

	Total population	Financial well-being score
Not financially literate (Big 3 not correct)	70%	51 <sup>s</sup>
Financially literate (Big 3 correct)	30%	62
Did not participate in financial education	24%	52 <sup>s</sup>
Participated in financial education	76%	59

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

Note. The financial well-being score is based on 10 questions and calculated using IRT methodology. Statistics are weighted. Not financially literate (Big 3 not correct) is a dummy variable that equals 1 if the respondent answered at least one of the three basic financial literacy questions (Big 3) on interest rate, inflation, and risk diversification incorrectly. Financially literate (Big 3 correct) is a dummy variable that equals 1 if the respondent answered all the Big 3 questions mentioned above correctly, and zero otherwise. The two financial education variables Did not participate in financial education and Participated in financial education are based on the question "Was any kind of financial education offered by a school or college you attended, or a workplace where you were employed?" The superscript s indicates the means are statistically different at the 5% level from the paired behaviors.

Figure 4. Financial well-being score distribution and financial literacy



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

Note. The financial well-being score is based on 10 questions and calculated using IRT methodology. Statistics are weighted.

Additionally, those who were exposed to financial education—meaning they participated in financial education that was offered by a school or college they attended, or a workplace where they were employed—scored significantly higher on the well-being scale than those who did not participate in financial education that was offered to them (Table 4). This is an indication that financial education works, equipping individuals with the knowledge to manage their money in a way that ultimately leads to financial well-being.

# Conclusion

Overall, our empirical analysis shows that the new financial well-being score works well, as it is able to differentiate across the full spectrum of financial well-being, successfully

depicts financial distress along multiple measures, and shows demographic patterns that highly align with what we have learned through the extensive research the Global Financial Literacy Excellence Center (GFLEC) has conducted over the past 11 years on topics such as financial fragility, debt, and retirement planning. These findings also match what we learned from our experts during the in-depth interviews. Obviously, the analysis provided in this project is just the start. Much more will be done in the future to evaluate the score and shed light on U.S. individuals' financial well-being. Nevertheless, we take these findings as an indication that our newly designed score is robust and working as expected in terms of measuring financial well-being.

## About the authors

Andrea Sticha is an Assistant Research Professor in Financial Literacy at GFLEC. She leads the team of researchers working on financial literacy and capability, and develops analyses for educational and policy initiatives. Sticha has recently worked on projects focused on financial literacy levels of the young, women, entrepreneurs, investors, and historically underrepresented communities in the United States and around the world. She holds a PhD in finance as well as an MSc and BA in business and economics from the University of Basel. During her doctorate, she spent two years at the New York University Stern School of Business conducting research on household saving and financial decision making. She has been a lecturer at the University of Basel for the past seven years. Her professional experience includes the development of an online advanced studies course in financial market theory and work as an analyst conducting global equity market research.

Annamaria Lusardi is a University Professor of Economics and Accountancy at the George Washington University, and the founder and academic director of GFLEC. She has published extensively and in many leading economics journals and is the recipient of several prestigious awards. Lusardi also directs the Financial Education Committee in Italy and is in charge of implementing a national strategy for financial literacy. In addition, she chairs the Organisation for Economic Co-operation and Development's (OECD's) International Network for Financial Education Research Committee. She previously taught at Dartmouth College, Princeton University, the University of Chicago Harris School of Public Policy and Booth School of Business, and Columbia Business School. She was also a visiting scholar at Harvard Business School. She earned her BA from Bocconi University in Milan and her PhD from Princeton University. Lusardi is a TIAA Institute Fellow.

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