Introduction

The National Financial Capability Study (NFCS) is an ongoing survey first conducted in 2009. It is commissioned and supported by the FINRA Investor Education Foundation, in consultation with the U.S. Department of the Treasury, the President's Advisory Council on Financial Literacy, and other federal agencies. It aims to benchmark key indicators of financial capability and evaluate how these indicators vary with underlying demographic, behavioral, attitudinal and financial literacy characteristics. In each wave, the study deepened the exploration of topics that are highly relevant today. The NFCS has proved extremely valuable to gauge the financial situation of U.S. households in the years following the Great Recession (FINRA, 2009, 2012, 2015).1

While providing a wide range of financial capability indicators, the NFCS lacks information about important determinants of financial outcomes, such as individuals’ health and cognition, and does not offer a precise, quantitative assessment of critical variables, such as household income, the value of financial and real estate assets and the level of debt exposure. In 2012, the FINRA Investor Education Foundation funded the administration of the NFCS survey to a representative sample of 2,000 individuals selected from within the RAND American Life Panel (ALP), an online panel providing detailed information on American's personal finances not available in the NFCS. This allowed us to obtain a richer set of socioeconomic variables for each respondent and, therefore, to more comprehensively document financial capability across U.S. households and its heterogeneity. This Brief describes the insights afforded by this unique data set. The NFCS assesses financial capability by looking at four key components: making ends meet, planning ahead, managing financial products and financial knowledge. We examine each of these components exploiting the wealth of household- and individual-level information available in the ALP.

Making Ends Meet

Making ends meet can be measured by households’ difficulty in keeping up with monthly expenses and by the frequency with which outlays exceed disposable income. The ALP data indicate clear evidence of financial strain among American adults. The fraction of households that struggle with paying their bills is 54%, and 12% find it very difficult to do so. About 38% of the sample spend all their disposable income and 25% regularly spend beyond that.

---

Not surprisingly, difficulties to make ends meet are more pronounced among low socioeconomic status (SES) households. Yet, the data also reveal striking differences by cognitive ability within education and income groups (Figure 1).

We measure cognitive ability using a composite index including scores on a series of standardized tests. We classify individuals as having “low” cognitive ability if their cognition index is below the first tertile of the sample distribution and as having “normal/high” cognitive ability otherwise. Among respondents with high school or less and college education or more, those with low cognitive ability are about 20 percentage points more likely to report difficulty covering expenses than those with normal/high cognitive ability. Similarly, among those reporting household income less than $35,000 or more than $75,000, respondents with low cognition are 16 percentage points more likely to face difficulty covering expenses than those with normal/high cognition. Low cognitive ability is also associated with a higher tendency to spend more than disposable income, especially among high SES households. This suggests that, above and beyond education and availability of resources, cognitive ability also influences financial behavior.

**Planning Ahead**

Financial planning is critical to secure economic wellbeing over the life cycle. As noted above, a large proportion of Americans tend to live from paycheck to paycheck with very little or nothing left for savings. Absence of savings are consequential in everyday life, and often cause of great distress when unexpected expenses arise. The NFCS questionnaire asks respondents whether they have set aside a “rainy day” fund that could cover expenses for 3 months in case of job sickness, job loss or other adverse circumstances. Only 41% answer this question affirmatively. Also, only 44% report being absolutely certain they could come up with $2,000 if an unexpected need arose within the next month.

The data at our disposal allow us to link information on emergency savings to measures of vulnerability to economic shocks. An important source of financial strain for households is represented by out-of-pocket medical expenses, either related to preventive care or to treatment following a health shock. The likelihood of incurring large out-of-pocket medical expenses depends on individuals’ health as well as on their health insurance status. We use self-assessed overall health status and classify individuals as being in “good” health if they report their health to be “good,” “very good” or “excellent” and as being in “poor” health if they report their health to be “fair” or “poor.” We also consider individuals to be at high risk of facing health shocks if they smoke, have a BMI greater than 30, or have been diagnosed with high blood pressure. Finally, we assign respondents to two groups based of whether they have health insurance. As shown in Figure 2, the likelihood of having money for an emergency is from 15 to 30 percentage points lower among respondents in worse health, facing a higher risk of health shocks, and without health insurance, all factors that should increase the
chances of incurring large medical costs. Given that low-educated and low-income households tend to be in worse health and are more likely to be uninsured, this indicates that low SES households are more vulnerable to, yet less prepared to deal with economic shocks.

An important aspect of planning ahead is to set medium- and long-term financial goals in order to prepare for future, predictable events. One that concerns most people is retirement and, in the current pension landscape, achieving financial security in retirement requires commitment and careful planning. The NFCS asks respondents whether they have tried to figure out their saving needs. The data reveal a lack of planning attitude, as only 40% have ever thought about their retirement savings. This proportion remains low even at an older age; it is 47%, among middle-age (40-59) and older workers (60+). It is only 31% among those age 18-39. ALP respondents are asked their subjective probability of working past age 65. We take working individuals who are at least 60 years old and separate them into two groups, according to whether their subjective probability of working past age 65 is below or above 50%. We assume that the former group consists of workers who consider it relatively likely to exit the labor force by 65. As a result, we would expect them to have put more thought into their retirement savings. Indeed, the proportions of planners are 66% and 56% among 60-year-olds who report a probability of working past age 65 below and above 50%, respectively.

Yet, it is striking that more than half of older workers on the verge of (expected) retirement have not done any retirement planning. We also observe striking differences between non-planners and planners in the amount of available financial resources outside employer-sponsored pension plans. Among workers over the age of 60, median (mean) financial wealth is only $1,500 ($65,000) for individuals who have not planned and $160,000 ($310,000) for planners.

Developing an adequate retirement plan is a complicated and challenging task. It requires taking into account a variety of future, uncertain variables, including earnings, contributions rates, amount of expected Social Security and pension benefits (if applicable), investment returns and tax rules, and using this information to gauge the resources needed to sustain a certain lifestyle in retirement. The cognitive effort inherent in these computations is substantial and might discourage individuals who are not equipped with the necessary skills to successfully perform them. Figure 3 shows a strong, positive association between cognitive ability and propensity to plan for retirement within mid- and high-SES groups. The gap between individuals with low and normal/high cognitive ability is rather modest at the bottom of the income distribution. This pattern suggests that, while poor cognitive skills represent a big barrier for retirement planning, resource scarcity may also be a hurdle to overcome towards setting mid- and long-term saving goals.
Borrowing and Debt

In order to comprehensively assess Americans' financial capability, it is essential to understand how they borrow and manage their debt. A large fraction of Americans (40%) feel they have too much debt; that is, they agree or strongly agree with the statement “I have too much debt right now.” This proportion decreases significantly with age, but is virtually constant across different education and income groups. It reaches its peak at 67% among student loan holders. Excluding mortgages and home equity lines of credit, median and mean household debt for those who strongly disagree with the statement “I have too much debt right now” are $0 and $3,350; for those who neither agree or disagree they are $0 and $6,250; and for those who strongly agree they are $7,100 and $17,750, respectively.

The most common form of unsecured debt is credit card debt. Three-quarters of American households have a credit card and one-third report having 4 or more credit cards. Less than half of credit card holders have always paid their balance in full in the past 12 months and about 60% have engaged in at least one behavior that results in interest charges or fees. The most prevalent of these activities is carrying unpaid balances from one pay cycle to the next. Approximately 53% of respondents report such behavior, which appears to be equally widespread among individuals with different education and income levels. About 35% have sometimes paid only the minimum. A minority of households also incur fees for exceeding their credit line or ask for cash advance. Fees for late payments are more frequent and do not appear to be distinctive of specific segments of the population. However, further checks reveal that the proportion of those who are occasionally late with their payment is substantially larger at the bottom of the cognitive ability distribution. Similarly, the fraction of those who have used their credit card for cash advance ranges from 12%, among individuals with low cognition, to 2%, among those with normal/high cognition.

Financial Literacy

NFCS respondents are administered a brief quiz covering fundamental concepts of economic and finance. The quiz includes three multiple choice questions concerning simple calculations of interest in a savings account and inflation, and the relationship between interest rate and bond prices. An additional two true/false questions test individuals’ knowledge of the relationship between the length of a mortgage and the overall interest paid over the life of the loan, and the concept of risk diversification. Only 18% of the sample answer all 5 questions correctly and 31% answer 4 questions correctly. A non-negligible proportion (6%) provide incorrect answers to all questions and 10% answer only 1 question correctly. Figure 4 reveals substantial differences in financial literacy across population groups as the number of correct answers increases sharply with education attainment, income level and cognitive ability.

A very important question is whether financial knowledge is associated with behaviors that are indicative of financial capability. Figure 5 shows that higher scores in the financial literacy quiz are strongly correlated with having a rainy day fund and planning for retirement. More knowledgeable individuals are also more likely to spend within their means and to pay

---

2 The exact wording of these questions can be found in the ALP-NFCS codebook/questionnaire available at https://alpdata.rand.org/index.php?page=data&p=showsurvey&syid=284
their credit card balance in full, although the correlation of these two outcomes with the performance in the financial literacy quiz is weaker.

**Concluding Remarks**

The overall assessment of Americans’ financial capability emerging from our empirical investigation is somewhat discouraging and calls for a deeper understanding of behavior and the barriers individuals face towards making sound financial choices. Within different SES groups, cognitive ability and financial literacy are associated with better financial outcomes, but they fall short of adequately explaining observed behaviors, especially as far as spending and responsible use of credit cards are concerned. The challenge for future research is to combine qualitative financial capability indicators, such as those elicited by the NFCS, with accurate measures of household income, wealth, expenditure, health, cognition and preferences in order to gain further insight on these issues and devise interventions that can effectively improve individual financial decision making.

This research was funded by the FINRA Investor Education Foundation.

---

**About CESR**

Directed by Arie Kapteyn, the Center for Economic and Social Research (CESR) at the University of Southern California is dedicated to discovering how people around the globe live, think, interact, age, invest, and make important, life-changing decisions. CESR’s in-depth research and analysis are deepening the understanding of human behavior in a wide range of economic and social contexts. The center’s ultimate goal is to improve social welfare by informing and influencing decision-making in the public and private sectors. Along the way, CESR is leading a creative revolution in how scientists conduct social science and economic research through innovative data collection and use of new technology.

For more information, please visit CESR website at [https://cesr.usc.edu/](https://cesr.usc.edu/)

**About GFLEC**

Founded in 2011 at the George Washington University School of Business, the Global Financial Literacy Excellence Center (GFLEC) has positioned itself to be the world’s leading center for financial literacy research and policy. Through rigorous scholarship and research, wide-reaching education, and global policy and services, the Center works with partners in Washington, DC, throughout the United States, and across the globe to raise the level of financial knowledge. The Center builds on more than fifteen years of academic research on financial literacy by Director Annamaria Lusardi, an early contributor to financial literacy as a field of study. GW’s unparalleled location at the heart of the US capital, where both national and global policy decisions are made, elevates the Center’s influence.

For more information, please visit GFLEC website at [www.gflec.org](http://www.gflec.org)