

## **Session 1: How Do Other Measures Relate to Financial Well-Being?**

### **Credit Characteristics, Credit Engagement Tools, and Financial Well-Being**

This report presents results from a joint research study between the Consumer Financial Protection Bureau (CFPB) and Credit Karma, a personal finance technology company. The purpose of the study is to examine how consumers' subjective financial well-being relates to objective measures of consumers' financial health, specifically consumers' credit report characteristics. The study also seeks to relate consumers' subjective financial well-being to consumers' engagement with financial information through educational tools. A better understanding of these relationships helps uncover the factors that work together to determine consumers' financial well-being and helps inform the CFPB's long-term strategy for improving financial capability.

Financial well-being is measured using the CFPB's Financial Well-Being (FWB) Scale. The scale was administered through a voluntary survey that resulted in close to 3,000 de-identified observations on respondents' FWB score matched with background, credit report, and website usage data. The main takeaways are as follows:

- A consumer's credit score is very strongly positively correlated with the FWB score, with a correlation coefficient of 0.44.
- There is a positive correlation between age and the FWB score, but this correlation all but disappears when controlling for credit score.
- In addition to credit score and age, the study identifies seven credit report variables and three engagement variables that correlate strongly with a consumer's FWB score.

This is the first study of its size to examine the relationship between financial well-being and credit score and other credit report variables, on the one hand, and engagement with financial information, on the other. Either way, the results are intriguing and warrant further study of these relationships as the CFPB develops its strategy for improving financial capability using the concept of financial well-being.

### **Determining the Financial Well-Being and Influencing Factors in Cancer Patients**

Upon a cancer diagnosis, patients are not only physically and emotionally burdened by the disease of cancer, but also face financial hardship. Cancer often requires substantial economic resources spent to receive care or make up for loss of income. Our study assesses financial well-being among cancer patients and survivors residing in the 22-county catchment area served by the University of Florida Health Cancer Center (UFHCC). The Bureau for Economic and Behavioral Research (BEBR) interviewed cancer patients and survivors inquiring about personal financial matters related to their disease and treatment. Two measures of interest include the Financial Well-Being score (FWB) and the Comprehensive Score for Financial Toxicity CoST). While both measures address the issue of security and choice, FWB addresses both current and future perceptions. CoST is mainly focused on current financial conditions and relationship with the disease expenses.

Our study addresses the following questions: 1) What is the relationship between financial well-being and the characteristics of cancer patients? 2) What is the relationship between financial toxicity and the characteristics of cancer patients? 3) Do the characteristics associated with FWB differ from the characteristics associated with financial toxicity? Our study uses ANOVA and multivariate ordinary least squares regression to explore the relationships of each measure including demographic characteristics and disease related characteristics. Further, we use an F-test to determine whether the coefficients for each independent variable are statistically different between the two dependent measures. As we will show, the two measures (FWB and CoST) are conceptually related but have few common determinants. There are also some key differences. Age is related to financial toxicity, but not to financial well-being. Income is significantly related to financial well-being, but not significantly related to financial toxicity. The time since last cancer treatment is only significantly related to financial toxicity. Finally, different cancer types are not consistently significantly related to both measures. Further research is suggested by this study to better understand factors influencing financial well-being and financial toxicity.

## **Session 2: How Do Employer Benefits Relate to Financial Well-Being?**

### **Employment Capital and Financial Well-Being: Can Non-Income Employer-Provided Benefits Be Leveraged for Financial Health?**

In an era of growing income and wealth inequality in the United States (*Wolff, 2017*), understanding the state of families' financial well-being and the factors that promote increased financial well-being is critical (*CFPB, 2015, 2017*). We currently see wide variation in perceptions of financial well-being (*CFPB, 2017*). Indicators of financial well-being, including ability to meet current financial obligations and enjoy life (*CFPB, 2015, 2017*), are strongly tied to income. However, several non-income sources of financial well-being exist also. Notably, financial and non-financial assets are critical to families' ability to achieve financial security and access opportunities for mobility.

This study analyzed data from the Federal Reserve Board's Survey of Household Economic Decision-making (SHED) to test a mostly overlooked potential source of financial well-being: non-income employer-provided benefits that contribute to job quality, referred to as employment capital (*Thomas, Boguslaw, Chaganti, Sullivan, & Shapiro, 2013*). In this study, employment capital refers to three key characteristics of jobs that can promote financial security and asset-building: employer-provided benefits, job flexibility, and consistent work. The objective of this study is to answer the following questions:

- (1) How is each of the elements of employment capital related to financial well-being? Is having access to two or more elements of employment capital associated with greater financial well-being?
- (2) How does controlling for financial behaviors change the relationship between employment capital and financial well-being?
- (3) Does access to employment capital vary by individual characteristics (race,

gender)? If so, how does this variation contribute to overall variation in financial well-being?

Findings from the bivariate and multivariate analyses suggest that the three elements of employment capital are positively associated with financial well-being, while financial planning behaviors are not significantly related to financial well-being. These findings suggest that employment capital may play an important role in financial well-being. Policymakers and advocates concerned with enhancing the financial well-being of vulnerable populations in the United States should attend to the potential roles that benefits, flexibility, and job security can play.

### **How Are Student Loan and Access to Workplace Retirement Savings Related to Financial Well-Being**

Over the last several years, concerns have been raised about the levels of debt taken on by student borrowers and the retirement savings gap that may leave many older adults ill prepared for retirement. Many worry that student loan burdens may delay other financial priorities such as purchasing a home or saving for retirement. Access to student lending can increase educational attainment, which is often a key component to obtaining a better job, higher pay, and better workplace benefits, including a retirement savings plan. At the same time, many workers rely on retirement plans sponsored by their employer to save for retirement. It remains unclear how student loans, retirement savings and the interaction between the two impact financial well-being, financial behavior and overall financial resiliency. This paper uses the CFPB's National Financial Well-Being Survey to provide preliminary findings exploring this relationship. Our early findings indicate that the presence of student loans are associated with decreased financial well-being, while access to an employer-sponsored retirement plan is associated with increased well-being within the sample examined. These results vary by group. Individuals with only some college or an associate's degree are no better off than individuals with less than a high school diploma, while financial well-being is significantly higher for individuals who took out loans to pursue a bachelor's or graduate degree.

### **Session 3: How Do Specific Financial Education Initiatives Relate to Financial Well-Being?**

#### **Relationship between Financial Well-Being, Life Stress, and the Uptake of Financial Coaching**

Over the past 20 years, financial coaching has grown in popularity as a strategy for helping people to improve their financial self-efficacy, achieve their financial goals and increase perceptions of financial well-being. Initial research by the CFPB has demonstrated its effectiveness in achieving positive outcomes, including reduced debt and increased savings for low-income clients. However, one persistent challenge in the field is encouraging client participation. Our research uses administrative data from the Brilliant Baby program to empirically explore the relationship between financial well-being, perceived stress and financial coaching uptake among economically vulnerable

clients. We do so using a probit regression model, with the dependent variable being coaching uptake (attending at least one coaching session within 151 days of enrolling in the program) and the independent variables being client responses to CFPB's financial well-being scale and their perceived level of stress, as well as an interaction term between the two independent variables.

Our research on coaching uptake for participants in the Oakland Promise Brilliant Baby program finds that there was **a significant negative** relationship between financial well-being of the primary parent/guardian and the uptake of financial coaching, but only for low-income families (household income of under \$20,000 annually). This indicates that when a family has low income, they are more likely to take up coaching if they are financially unwell. Further, we find that a primary parent/guardian's perceived stress has **no** relationship with their uptake of financial coaching. Finally, the interaction between perceived stress and financial well-being also has **no** relationship with financial coaching uptake. Other factors related to coaching uptake include whether or not the participant was Latino, and which partner organization enrolled the family in Brilliant Baby. These results indicate that low-income clients with low levels of financial well-being will attend coaching at high rates if a program is designed in a way that meets their needs. Similarly, program characteristics may matter more than expected in recruiting participants. This finding has implications for the field of financial coaching as programs attempt to increase their yield of those recruited who attend coaching sessions.

### **Financial Well-Being in Low-to Moderate Income Communities: The Consumer Financial Protection Bureau's Financial Well-Being Scale in a Direct Services Setting**

The Consumer Financial Protection Bureau's (CFPB) Financial Well-Being Scale (FWBS) is an important tool utilized by direct service providers to evaluate consumers' progress when participating in financial security building programs. The Financial Clinic (the Clinic), a New York City based non-profit financial coaching provider, capacity building facilitator, and software platform administrator, has collected over 2,700 FWBS responses from low- and moderate-income (LMI) consumers through its financial coaching platform, Change Machine. This study exploits a unique dataset of FWBS scores combined with individual demographic and financial information collected during coaching engagements to understand financial well-being of financial coaching recipients. We compare the financial well-being of this sample of coaching clients to the U.S. adult population overall, and perform a descriptive analysis of the relationship between their well-being and objective financial circumstances. In addition, we offer a descriptive analysis of the relationship between a consumer's FWBS score and: 1) their engagement with financial coaching and 2) achievement of six financial security outcome areas ("Assets," "Banking," "Credit," "Debt," "Taxes," and "Financial Goals") identified by The Financial Clinic's coaching curriculum as key to building financial security.

Our analysis reveals two substantive insights that contribute to a deeper understanding of the well-being of LMI coaching clients, and the relationship between their scores and

their experience of financial coaching. First, coaching clients we analyzed are objectively much less financially secure than the adult population overall and, on average, report lower financial well-being. Second, while coaching clients achieve financial security outcomes at mostly similar rates, we observed that clients with higher well-being scores achieve more personal financial goal-related outcomes than clients with lower scores. Our analysis suggests that client financial well-being at baseline is unrelated to their engagement with financial coaching. While this report offers only descriptive findings, it provides insight into the financial well-being of a unique population of coaching clients, and indicates a connection between client well-being at baseline and their achievement of personal financial goal that deserves further exploration.

### **Session 4: How Does Housing Debt Relate to the Financial Well-Being of Older Americans?**

#### **The Association Between Excessive Mortgage Debt and Financial Wellbeing in Old Age: Implication for the Financial Education Field**

Over the last few decades, the share of older homeowners (age 62 and older) with mortgage debt has doubled, while the typical amount of outstanding debt relative to home values among this group has tripled. Older homeowners still paying off mortgage debt face high rates of housing cost burdens (paying more than 30 percent of income for housing). Given that indebted homeowners have less housing equity to tap for critical needs and face the ongoing risk of foreclosure, higher housing cost burdens may create lower levels of financial well-being among these individuals. Using both descriptive and multivariate approaches, this paper explores two issues related to these trends. First, it examines the relationship between the incidence of mortgage debt and housing cost burdens with financial well-being based on the CFPB's Financial Well-Being Scale using the 2016 National Financial Well-Being Survey. Second, it assesses the association between the use of mortgage debt among older adults and measures of financial skill, knowledge, planning, and savings habits. The results indicate that both higher monthly housing costs and the presence of high levels of mortgage debt are associated with lower financial wellness scores and increased likelihood of having scores below 50, which is associated with greater likelihood of material hardship. The results also indicate that older adults with higher financial skill scores and a greater propensity to save are less likely to have higher levels of mortgage debt. The findings suggest that reductions in mortgage debt among older homeowners can improve financial wellness and that efforts to improve financial skill and encourage savings could help reduce this borrowing.

#### **Reverse Mortgage Borrowing and Financial Well-Being of Older Adults**

Understanding the financial well-being of older adults is increasingly important as concerns about insufficient retirement savings and debt burdens grow. The primary asset for many older adults is the equity in their homes—yet home equity is illiquid and can only be accessed by selling the home or borrowing through a mortgage. Most older

adults express a strong desire to remain in their homes, yet some cannot afford monthly payments associated with borrowing through a mortgage. Reverse mortgages allow older adults to access the equity in their homes without repayment until the termination of the loan. Reverse mortgages are designed to improve the financial stability of adults age 62 and older by providing a way to “supplement Social Security, meet unexpected medical expenses and make home improvements” (HUD, 2006). Despite potential benefits, reverse mortgages have been widely criticized and hold a negative public image. Reasons include the costs associated with obtaining a HECM loan, a general aversion to mortgage debt, a desire to pass the home on to heirs, and the high complexity of this financial product.

The purpose of this study is to explore the financial well-being of older adults who hold reverse mortgages. How does the financial well-being of reverse mortgage borrowers compare to the financial well-being of otherwise similar older adults without reverse mortgages? What borrower characteristics at the time of pre-reverse mortgage counseling are associated with higher and lower levels of financial well-being two to five years after originating the loan? How is the amount of the initial withdrawal from the reverse mortgage related to subsequent financial well-being?

We use several survey and administrative data sets. They include the Aging in Place survey, a national data set collected by the research team from April to July 2017. A total of 380 respondents answered the Financial Well-Being short scale items. The Aging in Place survey is merged with HUD reverse mortgage counseling data, the National Council on Aging’s Financial Interview Tool data, the borrower’s credit score, and HECM loan data from the U.S. Department of Housing and Urban Development. In addition, we use the National Financial Well-Being survey of respondents age 62 and older who own a home.

Key findings are:

- The Financial Well-Being score of reverse mortgage borrowers is about six points lower than the score of older homeowners of the general population. However, this difference is primarily due to differences in financial and socio-demographic characteristics. Holding constant these characteristics, the Financial Well-Being scores of reverse mortgage borrowers do not significantly differ from the Financial Well-Being scores of older homeowners in the general population.
- Credit score at the time of required pre-reverse mortgage counseling predicts higher Financial Well-Being scores two to five years after reverse mortgage origination in the reverse mortgage sample. Black homeowners in the reverse mortgage sample also have significantly higher financial well-being than white homeowners, despite having lower credit scores. Other financial and demographic indicators at the time of counseling, including those collected as part of the Financial Interview Tool score, are not significantly associated with higher Financial Well-Being scores in later years.

- Withdrawals of reverse mortgage proceeds at loan origination, whether used to pay-off a prior mortgage (mandatory withdrawal) or for other purposes (discretionary withdrawal), do not predict Financial Well-Being scores two to five years later. Two other indicators of reverse mortgage borrowing are associated with higher Financial Well-Being scores: a higher amount of home equity available to borrowers (the initial principal limit) and lower mortgage debt at origination.

The findings from this study inform both research and practice. This study contributes to an understanding of the longer-term financial wellbeing outcomes of reverse mortgage borrowers. Most national survey samples do not identify reverse mortgages or lack a sufficient sample of reverse mortgage borrowers for meaningful analysis—this being an advantage of the Aging in Place survey. For practice, the findings of this study indicate that credit scores at the time of pre-reverse mortgage counseling can serve as a meaningful tool to predict reverse mortgage borrowers' financial well-being in future years. These lower credit score borrowers may benefit from additional resources and support before and after closing on the reverse mortgage. This support could be provided by counseling agencies, lenders, or the Federal Housing Administration.

### **Session 5: What is the Financial Well-Being of Specific Populations?**

#### **Financial Well-Being of the Millennial Generation: An In-Depth Analysis of its Drivers and Implications**

This paper provides an in-depth empirical analysis of the factors that contribute to the financial well-being of Millennials, as measured by the Consumer Financial Protection Bureau (CFPB)'s abbreviated well-being scale. We use data from the most recent wave of the National Financial Capability Study (NFCS), which, in addition to the well-being scale, provides a rich set of information about individuals' financial capability. We study financial well-being scores in the total sample of Millennials and across demographic characteristics. We use a multivariate regression analysis to study the determinants of financial well-being using a rich set of variables that include income and health shocks, proxies for wealth, and a measure of financial literacy. We also examine financial well-being among Millennial subgroups and split the sample according to age, gender, educational attainment, and race to better understand the findings among these subgroups.

We find there are major differences in financial well-being, even when looking at a specific age group. Overall, Millennials (ages 23-37 in 2018) display lower levels of financial well-being than the older working-age population (non-retired individuals ages 38-61 in 2018). We also find that women, single individuals, those without a college degree, those with low income, and those who are unemployed display lower financial well-being. Those with low financial literacy also display low financial well-being. These findings hold true in a multivariate setting, even though some results become more nuanced and are different in subgroups of the Millennial population. Findings from this

research can help inform research and policy as well as financial education programs targeted to young adults.

## **Understanding the Pathway to Financial Well-Being for Native Americans**

Very little is known about the patterns of financial well-being (FWB) for American Indians and Alaska Natives (AI/AN) as many surveys do not contain enough individuals to separately examine this group. This study is the first to characterize FWB among AI/AN individuals in the US, examining the overall average level, the distribution, and the relationship to education.

This study uses data from the nationally representative Understanding America Survey (UAS) which contains an oversample of AI/AN individuals. Cross sectional regression results indicate that education in particular has a unique relationship with financial well-being for AI/AN individuals. Although higher levels of education are associated with higher financial well-being, the additional well-being associated with college is lower for Native individuals than for other major racial or ethnic groups. This does not appear to be related to financial capability or numeracy, and significant gaps in FWB by education between Native and non-Native individuals remain even after controlling for income. However, lower FWB for AI/AN individuals across educational groups does appear to be related to lower accumulation of assets over the life cycle. Further investigation of barriers to asset accumulation may therefore be key to raising FWB for this population

Finally, this study finds that educational policies may be particularly relevant for AI/AN. While paying on a student loan is associated with lower FWB for all groups, student loans are associated with a smaller penalty for Native individuals. State higher education policies appear particularly promising for reducing FWB gaps. State specific full tuition waiver programs for AI/AN students are associated with an increased FWB by eight points, with smaller but still sizeable effects for less generous policies. This gain in FWB is large enough to fully offset the lower college FWB return for Native individuals.

## **Session 6: How Does Financial Well-Being Change Over Time?**

### **Longitudinal Changes in Financial Well-Being, Financial Behaviors, and Life Events**

We examine how financial well-being (FWB) changes over time, which financial behaviors are associated with higher levels of and changes in FWB, and how FWB responds to numerous life events, including financial shocks. In addition, we also examine what factors reduce the impacts of negative financial shocks both directly – by reducing the impact of an experienced shock – and indirectly – by reducing the probability that the shock occurs. Thus, we have three central research questions:

- (1) How does FWB change over time?
- (2) What life events or economic shocks influence levels of and changes in FWB?
- (3) What behaviors and factors protect against negative financial shocks?

To address these questions, we leverage three waves of data from the Understanding America Study, a nationally representative online survey panel. The data span more than two years for most respondents and contain detailed information on FWB, demographic characteristics, financial characteristics, financial behaviors, and life events and financial shocks.

Using a descriptive outcome study design, we find that FWB is relatively stable in the population over our window of observation. The median change in the Financial Well-Being Scale that we observe is zero, and the vast majority of the sample experiences changes in the single digits over our time period. We find evidence that there is a small, positive gradient with age, but little systematic evidence of different trajectories based on demographic characteristics.

Leveraging regression analysis to examine which shocks and financial behaviors are most associated with (changes in) FWB, we find that receiving a raise or a significant promotion is correlated with higher FWB (both in levels and changes), while finding a new job is associated with increases in FWB over time. Also, as expected, losing one's job or experiencing a significant medical expense is negatively related to levels of, and changes in, FWB. For financial behaviors, we find that planning ahead, maintaining a manageable debt load, regularly saving in liquid accounts, and spending less than income are all strongly associated with higher current and future levels of financial well-being. However, we find no evidence indicating that these protective behaviors are related to changes in FWB over time. Thus, while individuals who engage in protective behaviors tend to have higher FWB than their counterparts who do not, this gap in FWB does not appear to be increasing over time (at least for the time horizon we can observe).

Finally, we also examine whether engaging in protective behaviors reduces the impact of negative financial shocks. We find some evidence that carrying a manageable debt load is associated with a reduced likelihood of experiencing a negative financial shock, though we find essentially no evidence that individuals who engage in protective behaviors are less impacted by these shocks (either income losses or expense increases) conditional on their occurrence. Thus, while protective behaviors are associated with higher levels of FWB, our evidence suggests that they are not actually "protective" in the sense that they lessen the impacts of negative financial events on FWB.

### **Financial Shocks and Financial Well-Being: Which Factors Help Build Financial Resiliency in Lower-Income Households?**

Households in the U.S. regularly experience unexpected negative income or expense shocks (Pew Charitable Trusts, 2015; Board of Governors of the Federal Reserve System, 2016), and low- and moderate-income households experience these shocks at disproportionately high rates (Leete and Bania, 2010; McKernan et al., 2009). While there is substantial evidence on the relationship between unplanned financial shocks and relatively objective measures of financial security and well-being—such as being

able to cover essential expenses or put enough food on the table—little is known about the impact these shocks have on households' subjective sense of financial well-being. Additionally, there is limited research on the degree to which access to different types of liquidity (e.g., liquid assets, social resources, income streams, and credit cards) can mitigate the impact of these shocks on subjective financial well-being.

To address these gaps in the literature, this paper explores the following research questions:

- (1) Which types of financial shocks have the greatest impacts on the self-assessed financial well-being of low- and moderate-income households?
- (2) To what extent do household income, social networks, liquid savings, and access to credit mitigate the negative effects of financial shocks on the financial well-being of low- and moderate-income households?

**Methods:** This paper uses data from a longitudinal two-wave survey administered to 4,318 low- and moderate-income tax filers in 2018. We conduct several difference-in-difference analyses that test how the experience of different financial shocks (e.g., income declines, expense increases, and medical emergencies) impact financial well-being. We estimate these impacts using fixed effects panel regressions, and incorporate propensity score weights to correct for observable differences between households that do and do not experience the shocks. Additionally, we conduct several subsample analyses to identify the impact of these shocks on households that have access to different types of liquidity relative to those that do not.

**Findings:** The experience of an income shock between survey waves was associated with a 2.2-point decline in financial well-being ( $p < 0.001$ ) while the experience of an expense shock was associated with a 1.4-point decline ( $p < 0.01$ ). The experience of a medical shock, however, was not associated with significant impact on financial well-being. Households with relatively low incomes and households that could not rely on friends and family in the event of an emergency experienced disproportionately large decreases in financial well-being in the event of expense shocks, but not in the event of income shocks. We also find that, while access to other forms of liquidity appears to mitigate the deleterious effects of shocks on financial well-being, households with access to credit cards experienced larger declines in financial well-being in the event of income and expense shocks.

**Implications:** The findings in this paper demonstrate a complex interaction between income and expense shocks and different types of liquidity. This points to the need for policymakers and program administrators to develop tools that can facilitate different types of liquidity to offset different financial risks for households, such as finding ways to

help households locate additional income streams in the event of financial shocks and developing programs that can help households build emergency savings.