



Financial Well-Being in Low- and Moderate-Income Households: How Does It Compare to the General Population?

By Sicong Sun, Olga Kondratjeva, Stephen P. Roll, Mathieu Despard, and Michal Grinstein-Weiss

Introduction

Research has increasingly shed light on the precariousness of many households' financial situations. For example, a large national survey showed that 41 percent of adults lack sufficient liquidity to cover even a modest \$400 emergency without taking on debt or selling an asset;¹ a problem that is exacerbated for lower-income households.² Compounding this issue is the fact that financial shocks, such as the loss of income or a major car repair, are common; 60 percent of U.S. households reported a shock in the prior year at a median cost of \$2,000.³

We would expect that these indicators of financial insecurity would translate into feelings of discomfort and anxiety about finances. Yet the research on the degree to which Americans feel financially insecure is mixed. On the one hand, 74 percent of U.S. adults said that they lead relatively comfortable financial lives.⁴ On the other hand, financial issues are consistently the largest reported source of stress for U.S. households.⁵ These findings point to a complex interaction between objective and subjective measures of financial security and suggest a need for more comprehensive and rigorous methods to assess the financial well-being of U.S. households.

To this end, the Consumer Financial Protection Bureau recently developed a comprehensive definition of financial well-being. Through background research, in-depth interviews with consumers and financial practitioners, and discussions with experts in the field of consumer finance, the CFPB defined financial well-being in terms of the following four components: "having control over day-to-day, month-to-month finances," "having the capacity to

absorb a financial shock," "being on track to meet your financial goals," and "having the financial freedom to make the choices that allow you to enjoy life."⁶ In sum, these four elements represent "financial security and financial freedom of choice, in the present and in the future."⁷

This definition of financial well-being directly informed the development of the CFPB's Financial Well-Being Scale, which provides a reliable and valid measure of subjective financial well-being.⁸ The culmination of this scale's development was a national survey to explore the state of financial well-being in the U.S. population.⁹ This work, carried out by the CFPB toward the end of 2016, revealed large disparities in financial well-being across different subgroups of the U.S. population.

Among the key findings from the CFPB's work were:

- Subjective financial well-being was associated with and complemented observed financial conditions of households. For example, the reported rates of material hardship and financial struggles were extremely high in households that reported lower levels of financial well-being, while these financial difficulties were lower in households with higher levels of financial well-being. At the same time, higher incomes did not always correspond to higher well-being levels for all individuals.
- The largest increases in financial well-being were observed in households with higher liquid savings levels; the ability to access liquidity for emergencies was also strongly related to financial well-being.

- Some adverse credit-related situations (e.g., the use of alternative financial services or being rejected for credit) were related to lower levels of financial well-being, and greater financial confidence and management skills tended to be associated with higher financial well-being levels.

This brief by the Social Policy Institute at Washington University in St. Louis is the first in a series aiming to build on the CFPB's work and examine financial well-being specifically in a low- and moderate-income (LMI) sample by (1) describing financial well-being in LMI households; (2) applying rigorous research methods to examine the relationships between financial well-being and household circumstances in more detail; (3) providing the first analysis of how financial well-being evolves over time; and (4) understanding how financial well-being intersects with state policies.

This first brief describes levels of financial well-being across a wide array of demographic and financial characteristics in a sample of LMI households and compares financial well-being of this LMI sample to that of a general U.S. population sample. This work has important implications for practitioners and policymakers, as it helps shed light on the perceptions and experiences of financial well-being and financial distress in LMI households beyond the commonly used, more objective measures of financial capability, such as income, assets, or debt.

We find that ownership of liquid assets and access to liquidity are by far the strongest correlates of financial well-being, stressing the need to help LMI households build adequate emergency savings. Additionally, having friends and family as sources of financial support is associated with larger increases in financial well-being in LMI households than in the general population, suggesting a larger role for social networks in providing financial support for LMI households. Our findings also suggest that interventions to improve financial well-being should reflect the heterogeneity of LMI households.

Research Background and Data

Data used in this brief were obtained through the Refund to Savings (R2S) initiative, a continuing partnership between Washington University in St.

Louis, Duke University, and Intuit Inc., the makers of TurboTax. The primary purpose of this initiative is to encourage LMI tax filers to save their tax refunds by incorporating the insights of behavioral economics in the TurboTax Freedom Edition (TTFE) tax-filing software, which is free to qualifying LMI households.¹⁰ In order to be eligible for TTFE in 2017, households had to earn \$33,000 or less in adjusted gross income or qualify for the Earned Income Tax Credit, though active duty military households had looser income requirements.

As part of the R2S initiative, we administer a Household Financial Survey (HFS) to a random sample of TTFE tax filers in order to obtain comprehensive information about filers' financial situations, behaviors, and experiences beyond what is available through administrative tax data. Tax filers are invited into the HFS immediately following tax filing, and are re-contacted six months later for a follow-up survey.

This brief uses data from the first wave of the 2017 HFS. The final sample for this analysis includes data on 21,449 LMI households. To make our findings representative of the population of LMI households in the U.S., the results are weighted using the weights obtained from the Census Bureau's 2016 American Community Survey.

We apply the CFPB's Financial Well-Being Scale to quantify financial well-being. The CFPB has designed two versions of the financial well-being scale—the abbreviated (5-item) and standard (10-item) version—that are highly correlated and directly comparable to each other. The score ranges between 14 and 95 points, where higher financial well-being scores reflect a higher level of financial well-being.¹¹ For this analysis, we measure financial well-being using the abbreviated 5-item version of the scale, which consists of the following five questions:^{12,13}

- “Because of my money situation, I feel like I will never have the things I want in life”
- “I am just getting by financially”
- “I am concerned that the money I have or will save won't last”
- “I have money left over at the end of the month”
- “My finances control my life”

Results

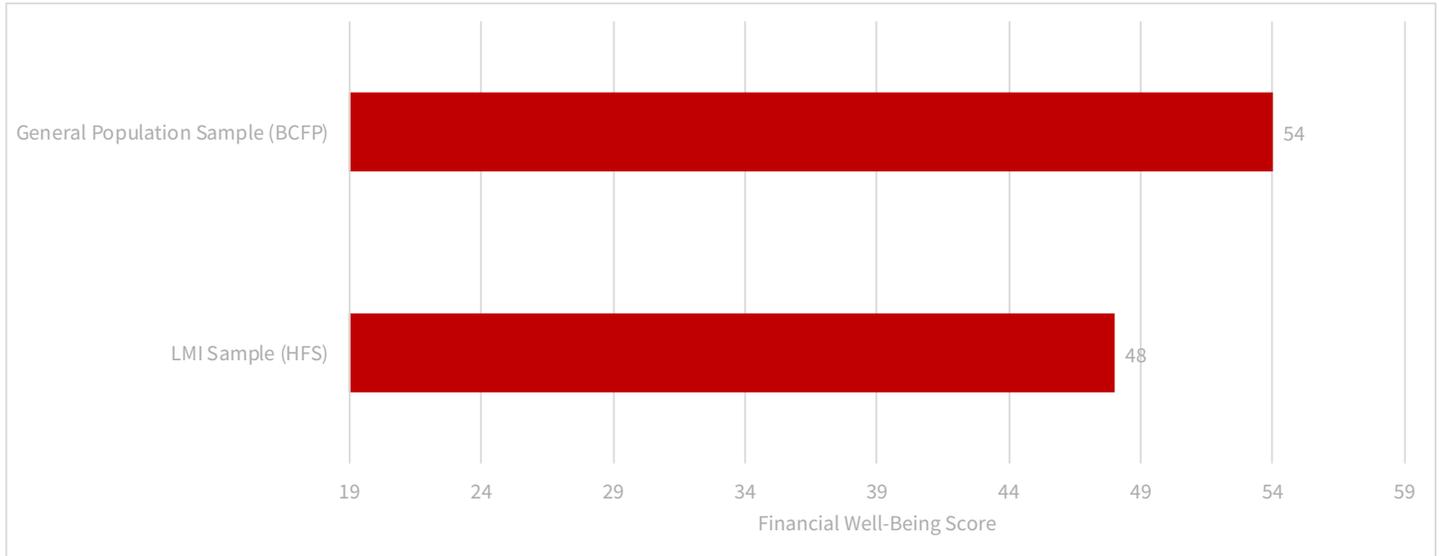
How does financial well-being in LMI households compare to the general population?

First, we examine how financial well-being in LMI households varies based on a number of key house-

hold demographic and financial characteristics and compare these results to results of the National Financial Well-Being Survey conducted by the CFPB at the end of 2016.¹⁴ Overall, as Figure 1 shows, the weighted average financial well-being score for the LMI sample was 48 points, six points lower than for

Figure 1.

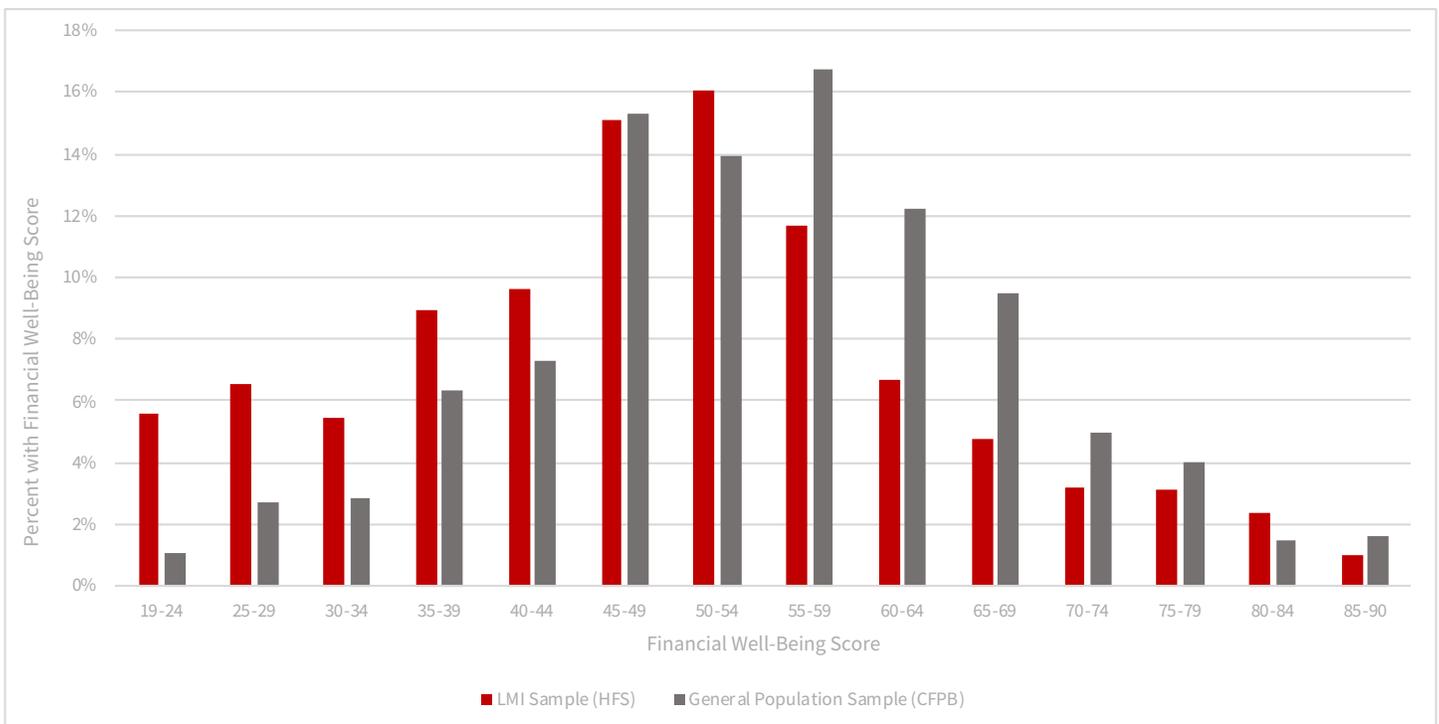
Financial Well-Being Mean Difference Between LMI Sample and General Population Sample



Notes: Weighted means. BCFP=Bureau of Consumer Financial Protection, N=6,389; HFS=Household Financial Survey, N=21,449.

Figure 2.

Financial Well-Being Score Distributions for LMI Sample and General Population Sample



Notes: Weighted means. BCFP=Bureau of Consumer Financial Protection, N=6,389; HFS=Household Financial Survey, N=21,449.

the general U.S. population sample. While this difference indicates that LMI households experience lower levels of subjective well-being than the general population, an examination of the distribution of scores in these populations is also instructive. As Figure 2 shows, the general population sample was more likely than the LMI sample to report moderately-high levels of financial well-being (scores between 55 and 74), but the LMI sample was much more likely to report extremely low levels of financial well-being (scores between 19 and 34).

What is the relationship between financial well-being and household demographic characteristics?

Table 1 examines financial well-being across key demographic and financial characteristics and compares our LMI sample to the general population sample. Consistent with the CFPB's findings for the general population sample, the average financial well-being appeared to not be statistically different for men and women in our LMI sample. The financial well-being levels across educational attainment for LMI households, however, differed from the CFPB and seemed counter-intuitive: on average, financial well-being in LMI households did not increase with education as it did in the general population sample and was actually the highest for those with the lowest educational attainment.

Financial well-being differed marginally by race and ethnicity in the LMI sample; the average financial well-being was highest for individuals of “other” ethnicity/race or who identified as multiracial (51).¹⁵ By contrast, in the general U.S. population sample, non-Hispanic Whites had the highest levels of well-being.

Compared to married adults in LMI households, the average financial well-being score was higher for widowed individuals (56) and lower for divorced or separated adults (45).

Important differences in the average financial well-being scores were observed by age. The CFPB found financial well-being to be positively associated with age. However, in our LMI sample, we found a U-shaped financial well-being across the life cycle in LMI households. On average, financial well-being

was higher for younger (18 to 24 years old) compared to mid-career or middle-aged (25 to 64 years old) adults, and highest among older adults (65 years and older).

Among employment subgroups, retirees and students had the highest average financial well-being scores (56 and 51, respectively), while individuals with a disability that prevented them from working experienced the lowest average financial well-being score (40). The results for the general population sample were somewhat similar: the highest financial well-being levels were observed among retired individuals, and the lowest were observed among unemployed adults and unemployed individuals with a disability. Finally, there were no statistically significant differences in mean financial well-being scores between self-employed and part- or full-time employees within either sample.

We also observed that LMI households with children under 18 had significantly ($p < .001$) lower levels of financial well-being (45) compared to those without children (49), while financial well-being levels for the general population sample were similar for households with and without children. Regarding housing status, average financial well-being of homeowners was higher than that of renters (51 and 45, respectively), which is in line with the CFPB results.

What is the relationship between financial well-being and household financial characteristics?

Table 2 shows how the levels of financial well-being vary by household financial characteristics. Financial well-being scores generally followed the same trends in both the LMI and general U.S. population samples. Most importantly, our findings mirror the results of the CFPB study that liquid savings and the ability to deal with financial emergencies are key predictors of financial well-being.

Interestingly, we did not observe that financial well-being increased with income in the LMI sample as it did in the general population sample,¹⁶ though our findings did show a correlation between income volatility and financial well-being in the LMI sample similar to the pattern observed in the general population sample: Households with either moderate or

Table 1.*Demographics and Financial Well-Being*

	LMI Sample (HFS)				General Population Sample (CFPB)			
	N	%	Mean FWB (S.D.)	Sig.	N	%	Mean FWB (S.D.)	Sig.
Sample	21,449	100	48 (15)		6,389	100	54 (14)	
Gender								
Female †	12,594	59	48 (15)		3,295	52	54 (14)	
Male	8,854	41	48 (15)		3,094	48	54 (14)	
Education								
Some high school †	4,833	23	50 (16)		750	12	48 (13)	
High school diploma	7,661	36	48 (15)	**	1,849	29	53 (14)	***
Some college	6,283	29	47 (15)	***	1,830	29	53 (13)	***
College degree	1,958	9	48 (14)	**	1,245	19	58 (13)	***
Grad/professional degree	713	3	49 (14)		715	11	61 (13)	***
Race/ethnicity								
Non-Hispanic White †	11,676	54	47 (16)		4,110	64	56 (14)	
Non-Hispanic Black	3,509	16	49 (15)		757	12	52 (13)	***
Other or multiracial non-Hispanic	2,297	11	51 (13)	***	514	8	53 (14)	***
Hispanic	3,967	19	47 (14)		1,008	16	51 (13)	***
Marital status								
Married/living with partner †	6,527	30	47 (14)		3,959	62	56 (14)	
Single	8,081	38	48 (15)	***	1,431	22	51 (13)	***
Divorced/separated	3,928	18	45 (15)	***	692	11	51 (13)	***
Widowed	2,910	14	56 (16)	***	307	5	55 (15)	
Age								
Ages 18 to 24 †	3,681	17	51 (14)		625	10	51 (12)	
Ages 25 to 34	3,446	16	45 (13)	***	1,354	21	51 (13)	
Ages 35 to 44	2,732	13	43 (13)	***	904	14	52 (13)	
Ages 45 to 54	2,788	13	43 (15)	***	1,215	19	54 (13)	***
Ages 55 to 64	3,614	17	44 (14)	***	1,029	16	55 (14)	***
Ages 65 to 74	2,494	12	54 (15)	*	750	12	61 (14)	***
Ages 75 and above	2,694	13	59 (15)	***	512	8	60 (14)	***
Employment status								
Self-employed †	1,253	6	46 (14)		436	7	54 (13)	
Full-/part-time employed	9,946	47	45 (14)		3,161	50	54 (13)	
Homemaker	218	1	42 (17)		433	7	54 (13)	
Student	2,458	12	51 (13)	***	302	5	51 (11)	***
Disabled	860	4	40 (14)	***	328	5	44 (14)	***
Unemployed/laid off	1,893	9	44 (14)		297	5	45 (13)	***
Retired	4,730	22	56 (16)	***	1,303	21	60 (14)	***
Children under 18								
No †	16,695	94	49 (15)		4,054	63	55 (14)	
Yes	1,083	6	45 (13)	***	2,332	37	53 (14)	
Housing status								
Own †	6,612	31	51 (16)		3,728	59	58 (13)	
Rent	9,470	44	45 (14)	***	1,873	30	49 (12)	***
Neither own nor rent	5,361	25	50 (15)		744	12	50 (13)	***

Notes: Weighted results (N, %, Mean, and S.D.). Weighted Ns of each characteristic do not necessarily sum to the total population weighted N. In their report, the CFPB did not calculate statistical significance with respect to a single reference group as we have done, so significance tests on the CFPB analysis are based on the authors' calculations. FWB=financial well-being, CFPB=Consumer Financial Protection Bureau, HFS=Household Financial Survey. Sig.= Significant differences among groups measured through t-tests. * $p<.05$; ** $p<.01$; *** $p<.001$.

†: Reference group

Table 2.*Financial Characteristics and Financial Well-Being*

	LMI Sample (HFS)				General Population Sample (CFPB)			
	N	%	Mean FWB (S.D.)	Sig.	N	%	Mean FWB (S.D.)	Sig.
Sample	21,449	100	48 (15)		6,389	100	54 (14)	
Annual gross income								
Less than \$20,000 †	14,588	68	48 (15)		852	13	46 (13)	
\$20,000-29,999	4,835	23	47 (15)		563	9	49 (13)	***
\$30,000-49,999	1,993	9	46 (14)	**	1,068	17	51 (13)	***
\$50,000 and above	33	0	54 (14)	*	3,905	61	58 (13)	***
Income volatility								
Roughly same each month †	15,058	70	50 (15)		4,427	70	56 (14)	
Some unusually high/low	4,280	20	45 (14)	***	1,416	22	53 (13)	***
Varies quite a bit	2,090	10	42 (14)	***	472	7	49 (14)	***
Liquid savings								
Less than \$250 †	7,888	37	41 (14)		1,227	24	41 (12)	
\$250- \$499	1,909	9	43 (13)	**	240	5	47 (10)	***
\$500- \$999	2,320	11	47 (12)	***	303	6	47 (10)	***
\$1,000- \$4,999	5,054	24	51 (13)	***	971	19	52 (11)	***
\$5,000- \$19,999	2,789	13	58 (14)	***	1,020	16	59 (10)	***
\$20,000- \$74,999	1,489	7	62 (13)	***	731	11	63 (11)	***
Access to \$2000 in an emergency								
Certainly could come up with \$2k †	6,298	29	58 (14)		3,398	54	62 (11)	
Probably could come up with \$2k	4,508	21	51 (12)	***	1,036	16	50 (9)	***
Probably could not come up with \$2k	4,513	21	44 (12)	***	511	8	46 (9)	***
Certainly could not come up with \$2k	6,126	29	38 (13)	***	988	16	39 (11)	***
Have friends/family safety net								
No †	11,741	55	44 (15)		1,582	25	53 (14)	
Yes	9,670	45	53 (14)	***	4,720	75	55 (14)	***
Health insurance								
No †	2,761	13	43 (14)		2,121	33	50 (13)	
Yes	18,688	87	49 (15)	***	4,268	67	56 (13)	***
Used AFS								
No †	14,808	69	51 (15)		6,075	95	55 (14)	
Yes	6,641	31	42 (14)	***	314	5	42 (13)	***
Own checking/savings account								
No †	1,606	8	45 (14)		1,146	18	48 (13)	
Yes	19,817	93	48 (15)	***	5,243	82	56 (14)	***
Have a habit of saving								
No †	9,492	49	46 (13)		3,075	48	48 (12)	
Yes	9,976	51	51 (15)	***	3,291	52	60 (13)	***

Notes: Weighted results (N, %, Mean, and S.D). Weighted Ns of each characteristic do not necessarily sum to the total population weighted N. In their report, the CFPB did not calculate statistical significance with respect to a single reference group as we have done, so significance tests on the CFPB analysis are based on the authors' calculations. FWB=financial well-being, CFPB=Consumer Financial Protection Bureau, HFS=Household Financial Survey. Sig =Significant differences among groups measured through t-tests. * $p<.05$; ** $p<.01$; *** $p<.001$.

†: Reference group

high level of income volatility had average financial well-being scores of 45 and 42, respectively. Both scores were significantly different ($p < .001$) from households that experienced no income volatility (50).

Similar to the CFPB's findings for the general population sample, we found that financial well-being generally increased with liquid savings levels. The average financial well-being for households with the lowest level of liquid savings (less than \$250) was 41, compared to 62 ($p < .001$) for households with the highest level of liquid savings (\$20,000- \$74,999). Importantly, financial well-being scores among both the LMI and general population samples were similar across most liquid savings categories, suggesting that liquid savings are a much better predictor of financial well-being than income (or many other household attributes).

The ability to access \$2,000 in an emergency was also strongly associated with financial well-being. Findings were similar for the LMI and general population samples: on average, the inability to come up with emergency funds was associated with lower financial well-being. The average financial well-being score was 58 for LMI people certain they could come up with \$2,000 in an emergency, compared with a

score of 38 for those who were certain they could not ($p < .001$).

Notably, having friends and family who can help with financial emergencies was associated with higher financial well-being among the LMI sample—a relationship that is weaker in the general U.S. population sample. LMI households that could rely on their family or friends had a mean financial well-being score of 53, compared to 44 for those without this safety net ($p < .001$). This finding indicates that friends and family may be an important resource for LMI households facing unexpected emergencies in ways they are not for the general population.

Finally, other financial characteristics—not having health insurance coverage, using alternative financial services (AFS), being unbanked, and not having a habit of saving—were associated with lower financial well-being both in the LMI sample and general U.S. population sample. The financial well-being scores for AFS users were also equivalent between LMI households and the broad U.S. population sample.

How do financial shocks and hardships relate to financial well-being?

Table 3 examines how adverse financial experi-

Table 3.
Financial Experiences and Well-Being

	LMI Sample (HFS)				General Population Sample (CFPB)			
	N	%	Mean FWB (S.D.)	Sig.	N	%	Mean FWB (S.D.)	Sig.
Sample	21,449	100	48 (15)		6,389	100	54 (14)	
Difficulty in covering expenses								
No †	7,317	34	60 (13)		3,600	57	62 (11)	
Yes	14,122	66	42 (12)	***	2,747	43	44 (10)	***
Experienced financial shocks								
No †	9,458	44	53 (15)		3,267	51	57 (13)	
Yes	11,960	56	44 (14)	***	3,122	49	52 (14)	***
Experienced material hardship								
No †	8,721	41	58 (13)		4,210	66	60 (12)	
Yes	12,693	59	41 (13)	***	2,145	34	44 (11)	***

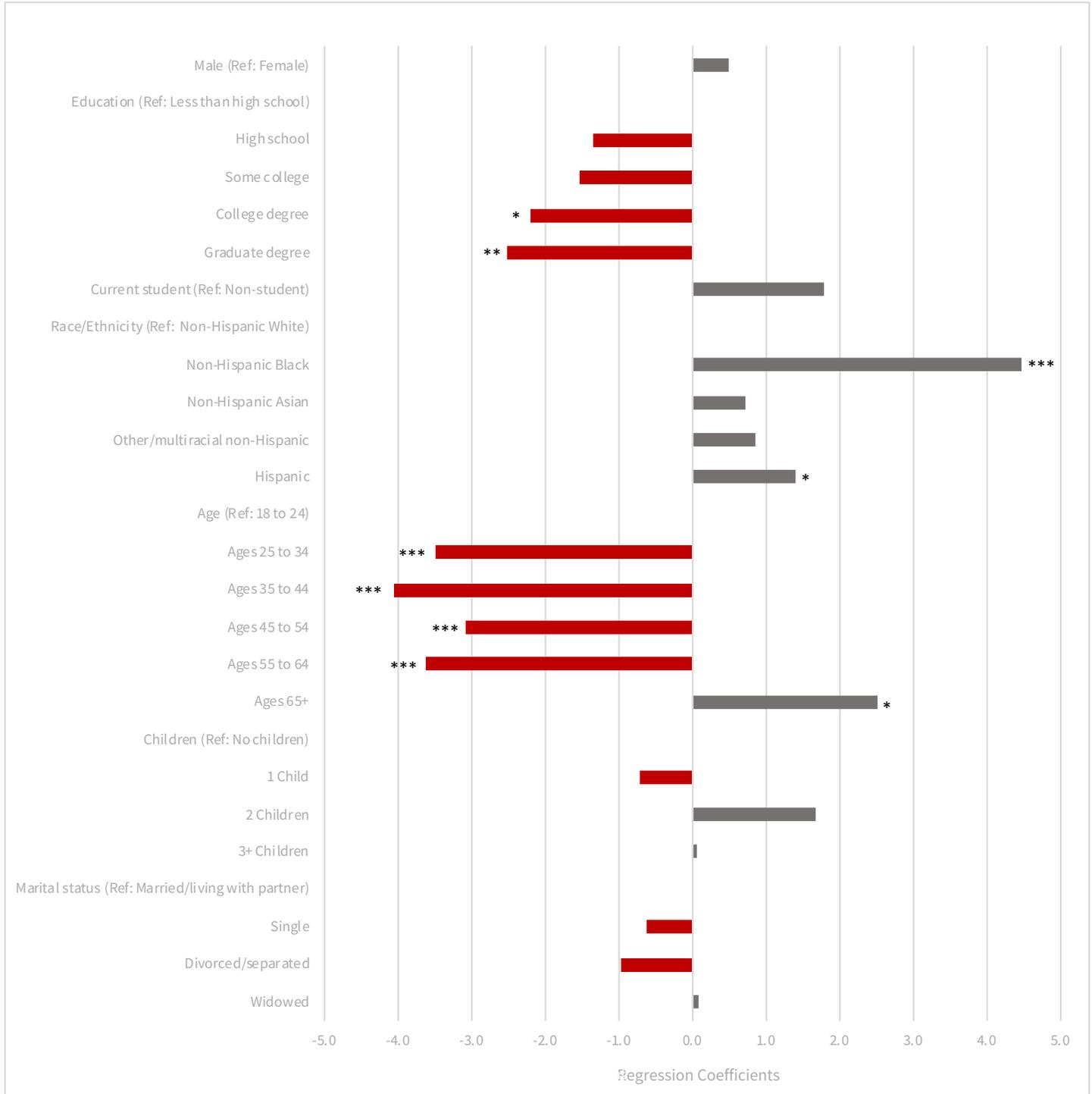
Notes: Weighted results (N, %, Mean, and S.D). Weighted Ns of each characteristic do not necessarily sum to the total population weighted N. In their report, the CFPB did not calculate statistical significance with respect to a single reference group as we have done, so significance tests on the CFPB analysis are based on the authors' calculations. FWB=financial well-being, CFPB=Consumer Financial Protection Bureau, HFS=Household Financial Survey. Sig. = Significant differences among groups measured through t-tests. * $p < .05$; ** $p < .01$; *** $p < .001$.

†: Reference group

ences—difficulty in covering expenses, shocks, and material hardships—were associated with financial well-being across both LMI households and the general population. Unsurprisingly, we see that reported financial difficulty, shocks, and material hardships were strongly associated with lower levels

of financial well-being. LMI households with no difficulty covering expenses or bills over the past six months had an average financial well-being score of 60 points, which was 18 points higher than households that had experienced such difficulties ($p < .001$). LMI households that experienced financial shocks in

Figure 3a.
Key Demographic Predictors of Financial Well-Being in LMI Households

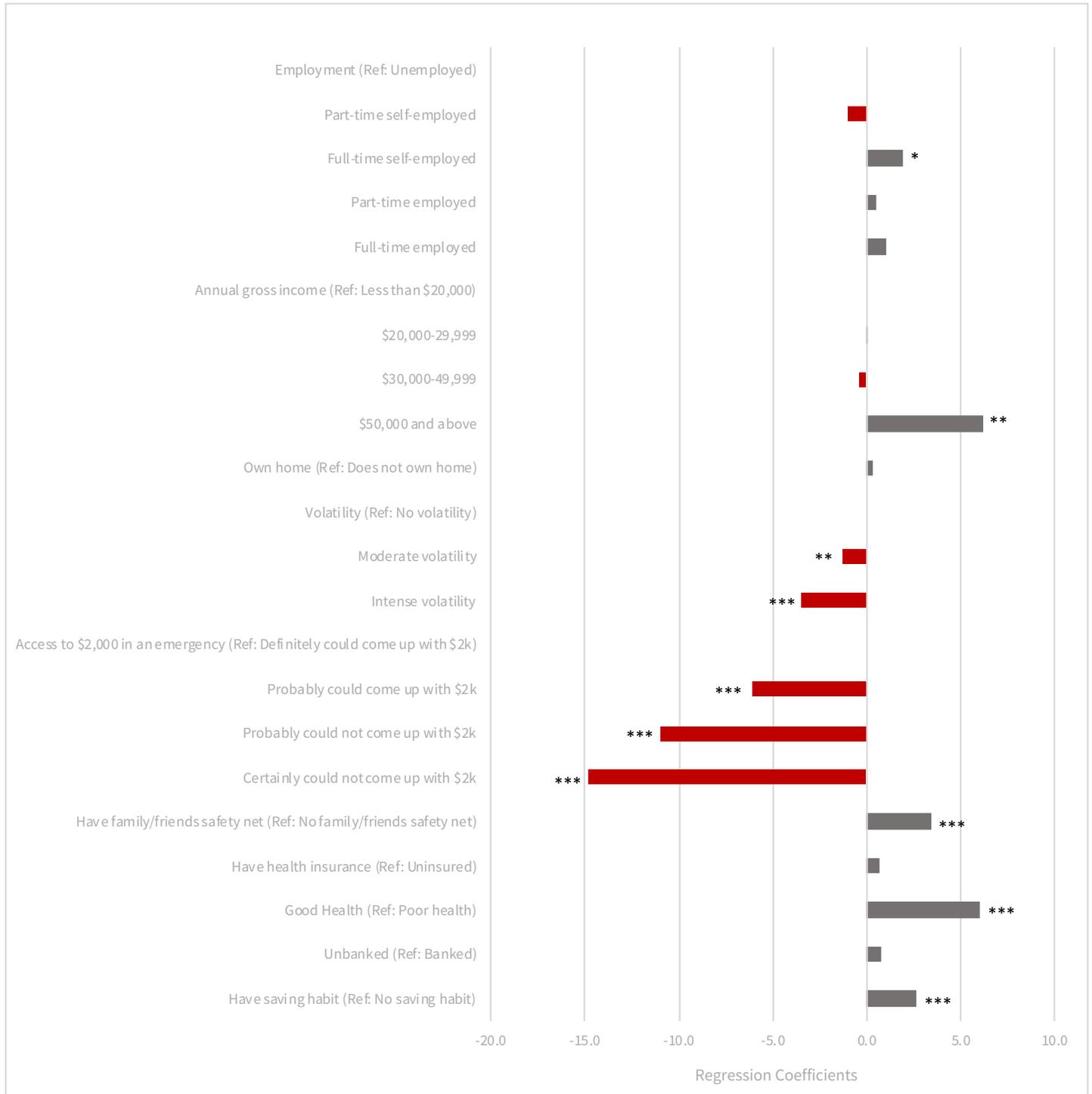


Notes: Coefficients estimated by weighted OLS regression with robust standard errors, N=16,013. Results control for an array of financial characteristics (see Figure 3b) as well as tax filing date, total tax refund, and state of residence. * $p < .05$; ** $p < .01$; *** $p < .001$.

the past six months had a mean financial well-being score of 44 points, which was 9 points lower than the score of those that did not experience financial shocks ($p < .001$). Similarly, households that experienced material hardships in the past six months had an average financial well-being of 41, compared to

the average score of 58 for those that did not experience such hardships ($p < .001$). Notably, the negative relationship between financial well-being and the experience of financial shocks was much less pronounced for the general population sample than it was for the LMI sample, suggesting a greater resilience to shocks in the general population.¹⁷

Figure 3b.
Key Financial Predictors of Financial Well-Being in LMI Households



Notes: Coefficients estimated by weighted OLS regression with robust standard errors, N=16,013. Results control for an array of demographic characteristics (see Figure 3a) as well as tax filing date, total tax refund, and state of residence. * $p < .05$; ** $p < .01$; *** $p < .001$.

What are the key predictors of financial well-being?

While the descriptive statistics above are useful in understanding the general patterns of financial well-being, it is unclear from these analyses how a given household characteristic relates to financial well-being without considering other factors. For example, we observe that financial well-being in our LMI sample varied with educational attainment, but we do not know if that relationship holds once we account for other characteristics like age, income, and assets. To explore these patterns more thoroughly, we conducted multiple regression analysis to assess how key financial characteristics and circumstances were related to financial well-being when controlling for other factors.

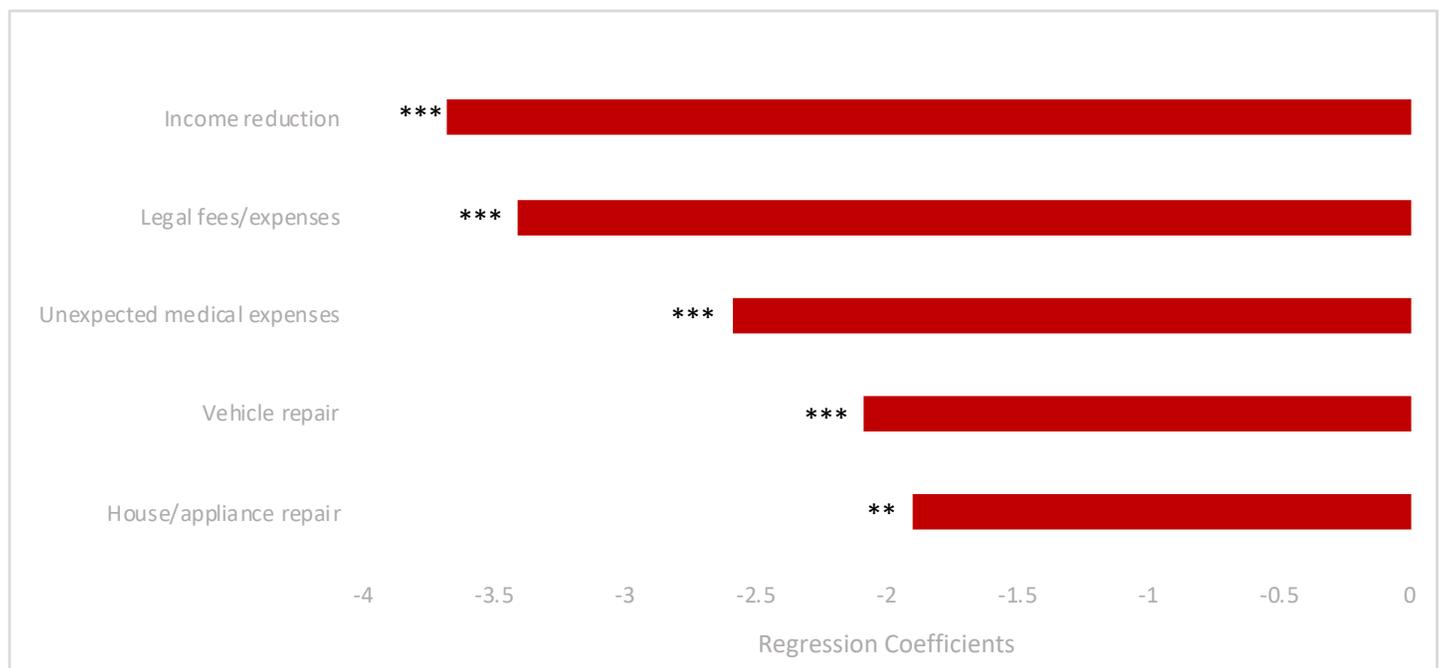
Figures 3a and 3b show the results of this analysis for several key indicators. Each point in the figure corresponds to the change in financial well-being associated with a given characteristic when controlling for an array of other demographic and financial characteristics.

Overall, the regression analysis identifies similar trends to those observed in the descriptive analysis. Holding other variables like age and income constant, higher levels of education were associated with lower levels of financial well-being. Compared to those with less than a high school degree, having a college degree or a graduate degree was associated with a decrease in financial well-being of 2.18 points ($p < .05$) and 2.50 points ($p < .01$), respectively. Non-Hispanic Black households had a financial well-being score 4.48 points higher than non-Hispanic White households ($p < .001$), and Hispanic households had a financial well-being score 1.41 points higher than non-Hispanic White households ($p < .05$), holding all the other variables constant. Regarding age, we observed the same pattern as with the earlier descriptive analyses: middle-aged LMI people had much lower levels of financial well-being compared to younger people or those of retirement age, holding all other variables constant.

Financial well-being decreased as the ability to access \$2,000 in an emergency decreased. Compared to households that could certainly come up with \$2,000 in an emergency within 30 days, financial

Figure 4.

Relationship between Financial Well-Being and the Experience of Financial Shocks



Notes: Coefficients estimated by weighted OLS regression with robust standard errors, N=15,998. Control variables include all the variables shown in Figures 3a and 3b, as well as tax filing date, total tax refund, and state of residence. * $p < .05$, ** $p < .01$, and *** $p < .001$.

well-being was associated with a decrease of 10.96 points ($p<.001$) and 14.83 points ($p<.001$) among households that probably and certainly could not come up with \$2,000 in an emergency, respectively. Compared to having steady income, having moderate or highly volatile incomes was associated with a reduction in financial well-being of 1.27 points ($p<.01$) and 3.48 points ($p<0.001$), respectively. Having family or friends to rely on for financial support was associated with an increase in financial well-being of 3.44 points ($p<.001$), compared to those who did not have this resource. Finally, having good health was associated with a 5.98 point ($p<.001$) increase in financial well-being compared to people with poor health, and having a habit of saving was associated with a 2.62 point ($p<.001$) increase in financial well-being.

To further examine the relationship between financial well-being and the experience of negative events, Figures 4 and 5 show the extent to which financial well-being was associated with different types of shocks and hardships, respectively, when controlling for other financial and demographic characteristics.

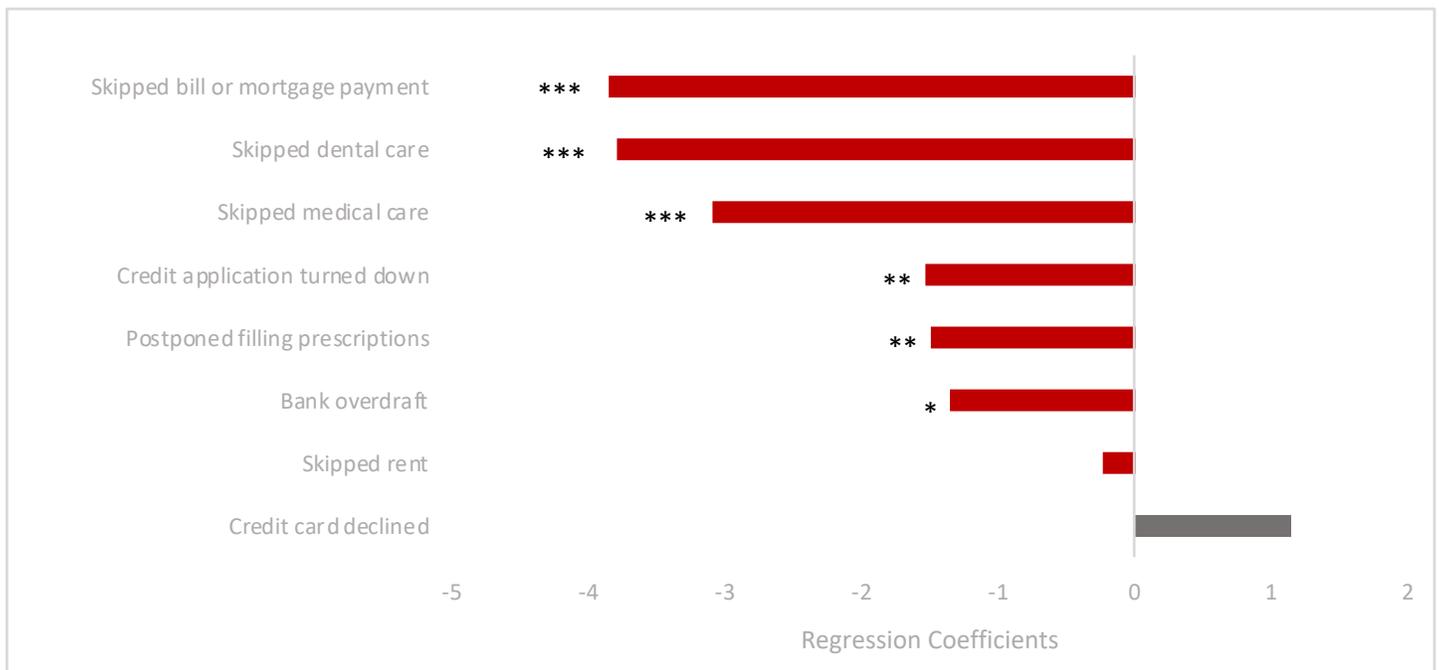
Among all of the shocks households reported experiencing in the prior six months, a reduction in income was associated with the largest decline in financial well-being (3.68 points, $p<.001$), followed by legal fees and expenses (3.41 points, $p<.001$), and unexpected medical expenses (2.59 points, $p<.001$). Regarding hardships, skipping a bill in the prior six months was related to a decrease of 3.85 points ($p<.001$) in financial well-being. Health care hardships were also associated with statistically significant declines in financial well-being: 3.8 ($p<.001$), 3.1 ($p<.001$), and 1.49 ($p<.01$) point declines were observed for skipping necessary dental care, medical care, and prescriptions, respectively.

Conclusion and Implications

In this brief, we conducted a detailed examination of financial well-being in an LMI sample and compared our findings to a similar analysis conducted by the BCFP on a sample representative of the general U.S. population. We found that LMI households had lower financial well-being, on average, than the general population sample, though this difference was less than half a standard deviation.

Figure 5.

Relationship between Financial Well-Being and the Experience of Material Hardships



Notes: Coefficients estimated by weighted OLS regression with robust standard errors, N=15,973. Control variables include all the variables shown in Figures 3a and 3b, as well as tax filing date, total tax refund, and state of residence. * $p<.05$, ** $p<.01$, and *** $p<.001$.

Our most interesting findings concern the relative importance of liquidity and social supports to household financial well-being. A household's ability to come up with \$2,000 in an emergency was the single strongest predictors of financial well-being, and was even more closely associated with financial well-being than recent experiences of unexpected income loss or medical bills. This pattern was observed in both the LMI and the general population sample. By contrast, being able to rely on friends and family as a safety net in the event of an emergency was associated with large improvements in financial well-being only in LMI households. This finding speaks to the relative importance of social and familial supports in maintaining a sense of financial security in LMI households (Kalil & Ryan, 2010).

These findings highlight the importance of resilience to financial well-being. Liquid assets and access to affordable credit products offer a buffer in the event of emergencies which supports a household's sense of stability (Despard et al., 2018). Current policy proposals such as the Strengthening Financial Security through Short-Term Savings Act (S.3218)²⁰ and the Refund to Rainy Day Savings Act (S.3220)²¹ aim to help households build emergency savings while the BCFP's final rule concerning payday and other high-cost loans may affect access to affordable credit.²²

An additional implication of the findings concerning resilience is that financial practitioners might emphasize helping households identify resources they can rely on in an emergency. These resources include payday alternative, salary advance, and other personal loans offered at better terms than what can typically be found through alternative financial service providers; public assistance programs such as the Supplemental Nutrition Assistance Program; and nonprofit resources such as eviction prevention and rent and utility assistance programs. As a preventive strategy, practitioners could help households build emergency savings, including the use of incentives and access to affordable savings accounts (Adams & West, 2015).

This research has several other implications for practice. We observed that our LMI sample was much more likely than the general population sample to report very low levels of financial well-

being. Given that the financial well-being scale captures psychological dimensions of people's financial lives, people who score very low on this scale may feel out of control and discouraged and thus need more support than those who feel more in control and more confident. Financial practitioners can thus use the scale as a screening tool, using guidance and support that enable clients with low scores to take highly feasible actions that promote a sense of agency (Collins, 2014).

Findings concerning demographic characteristics also have implications for practice. Financial well-being declined with greater educational attainment and for middle-aged persons in LMI households. By contrast, financial well-being rose with greater educational attainment and age in the general population sample. In light of this, financial practitioners who work with LMI households should adopt a life course perspective in providing services to their clients. Younger LMI clients may be more likely to experience transitory financial security while middle-aged LMI clients may be experiencing persistent financial insecurity (Bane & Ellwood, 1986).

This heterogeneity of the LMI population calls for different intervention strategies for different population segments. LMI clients with greater educational attainment may face their own unique concerns, as increased educational attainment combined with a low income may result in burdensome student loan debt obligations for which income-based repayment and other loan modification programs may be effective. These clients may also experience a sense of frustration that their earnings are not commensurate with their education and may benefit from career coaching and assistance with the job search. For younger LMI households the central concern may be economic mobility, and these households may benefit more from services to help upgrade job skills, access to affordable higher education options, assistance in starting a business, or access to affordable mortgages and down payment assistance. Older LMI households or LMI households with lower educational attainment may be focused more on a need for economic stability to manage persistently low incomes. These services could include maximizing public assistance benefits, budget counseling, and access to emergency savings and affordable credit.

End Notes

¹ Board of Governors of the Federal Reserve System (2018).

² Board of Governors of the Federal Reserve System (2016).

³ Pew Charitable Trusts (2015).

⁴ Board of Governors of the Federal Reserve System (2018).

⁵ Anderson et al. (2015).

⁶ p. 19, BCFP (2015a).

⁷ p. 7, BCFP (2015b).

⁸ BCFP (2015b).

⁹ BCFP (2017a).

¹⁰ The free tax-preparation software is offered to LMI households as part of the IRS Free File Alliance (<https://freefilealliance.org/>).

¹¹ The process of deriving financial well-being scores from the HFS response values followed the procedure identified in the CFPB's technical report, which involves applying a software-based scoring method relying on Item Response Theory (CFPB, 2017b).

¹² p. 29, BCFP (2015b).

¹³ Given statements are measured on a 5-item Likert scale. Response categories for the first three questions are "Completely, Very well, Somewhat, Very little, Not at all," and responses for the last two questions are "Always, Often, Sometimes, Rarely, Never."

¹⁴ This comparison is robust for several reasons. First, the two surveys included similar survey questions on demographic and financial characteristics, which allows us to directly compare financial well-being across equivalent subgroups. Second, the timing of the two surveys is similar: the CFPB conducted its survey in the end of 2016, and the HFS data were collected in the beginning of 2017. Third, both surveys used weights to ensure that weighted samples reflected population measures, for the LMI population in the HFS and for the general U.S. population in the CFPB study. Finally, despite the differences in scale versions (CFPB used the standard version of the scale), the two versions are highly correlated and comparable. The major difference between the two surveys is that when the CFPB refers to "individuals" and "households" we refer to "tax filers" and "tax households."

¹⁵ Much of this difference seems due to the fact that Asian households were included in the "other" category. The weighted mean financial well-being for LMI non-Hispanic Asians was 52, while the mean score for other non-Asian Other/Multiracial groups was 47 points.

¹⁶ One potential reason for this is that our measure of income is retrospective and relies on administrative tax data, while the CFPB's measure of income asks about current household

income and is self-reported. As such, our measure does not capture future expectations of income in the same way that the CFPB's measure may, and these expectations may be correlated with financial well-being. For example, if a household is currently experiencing a period of high income, they may be more likely to report higher levels of financial well-being and expect that their income will remain high in the future. However, administrative tax data by definition only measures past income, and so cannot be influenced by the real or expected changes in income that may also lead to changes in financial well-being.

¹⁷ This may also be due to the fact that the CFPB measured hardships over the prior 12 months, while the HFS asked about hardships over the prior six months.

¹⁸ Financial shocks included experiencing one or more of the following in the past six months: medical expenses, legal fees/expenses, vehicle repair, house/appliance repair, income reduction, a job loss, crime affecting finances or property, and a major life change affecting finances.

¹⁹ Material hardships included experiencing one or more of the following in the past six months: credit application turned down, credit card declined, bank overdraft, postponed filling prescription, skipped dental care, skipped medical care, skipped bill, and skipped rent or mortgage payment.

²⁰ See <https://www.congress.gov/bill/115th-congress/senate-bill/3218?r=22>.

²¹ See <https://www.congress.gov/bill/115th-congress/senate-bill/3220?r=18>.

²² See <https://www.consumerfinance.gov/policy-compliance/rulemaking/final-rules/payday-vehicle-title-and-certain-high-cost-installment-loans/>. The final rule is scheduled to take effect in August 2019, yet is being re-considered (see <https://www.americanbanker.com/news/cfpb-goes-back-to-the-drawing-board-on-payday-rule>).

References

Adams, D., & West, S. (2015). Asset building among low income adults: An exploratory study with participants in an emergency savings program. *Journal of Community Practice*, 23(3-4), 436-461.

Anderson, N. B., Belar, C. D., Breckler, S. J., Nordal, K. C., Ballard, D. W., Bufka, L. F., & Wiggins, K. (2015, February). Stress in America: Paying with our health. *American Psychological Association*.

Bane, M. J., & Ellwood, D. T. (1986). Slipping into and out of poverty: The dynamics of spells. *Journal of Human Resources*, 21(1), 1-23. doi:10.2307/145955.

Board of Governors of the Federal Reserve System (2016, May). *Report on the Economic Well-Being of U.S. Households in 2015*.

Board of Governors of the Federal Reserve System (2018, May).

Report on the Economic Well-Being of U.S. Households in 2017.

Brüggen, E. C., Hogleve, J., Holmlund, M., Kabadayi, S., & Löfgren, M. (2017). *Financial well-being: A conceptualization and research agenda*. *Journal of Business Research*, 79(C), 228-237.

Collins, M. (2014). *Financial coaching as an asset building strategy* (Asset Funders Network report). Retrieved August 29, 2018 from <https://assetfunders.org/resource/financial-coaching-asset-building-strategy/>.

Consumer Financial Protection Bureau. (2015a, January). *Financial Well-Being: The Goal of Financial Education*. Retrieved on July 27, 2018 from: https://files.consumerfinance.gov/f/201501_cfpb_report_financial-well-being.pdf.

Consumer Financial Protection Bureau. (2015b, December). *Measuring Financial Well-Being: A Guide to Using the CFPB Financial Well-Being Scale*. Retrieved on July 25, 2018 from https://files.consumerfinance.gov/f/201512_cfpb_financial-well-being-user-guide-scale.pdf.

Consumer Financial Protection Bureau. (2017a, September). *Financial Well-Being in America*. Retrieved on July 25, 2018 from: https://s3.amazonaws.com/files.consumerfinance.gov/f/documents/201709_cfpb_financial-well-being-in-America.pdf.

Consumer Financial Protection Bureau. (2017b, May). *CFPB Financial Well-Being Scale: Scale Development Technical Report*. Retrieved on July 25, 2018 from: https://s3.amazonaws.com/files.consumerfinance.gov/f/documents/201705_cfpb_financial-well-being-scale-technical-report.pdf.

Despard, M., Guo, S., Grinstein-Weiss, M., Russell, B., Oliphant, J., & de Ruyter, A. (2018). The mediating role of assets in explaining hardship risk among households experiencing financial shocks. *Social Work Research*. <https://doi.org/10.1093/swr/svy012>.

Kalil, A., & Ryan, R. M. (2010). Mothers' economic conditions and sources of support in fragile families. *The Future of Children*, 39-61.

O'Neill, B., Sorhaindo, B., Xiao, J. J., & Garman, E. T. (2005). Financially distressed consumers: Their financial practices, financial well-being, and health. *Financial Counseling and Planning*, 16(1), 73-87.

Pew Charitable Trusts. (2015, October). *The role of emergency savings in family financial security: How do families cope with financial shocks?* (Issue Brief). Washington, DC: Author.

Perantie, D. C., Roll, S. P., Oliphant, J. E., Guo, S., & Grinstein-Weiss, M. (2017, February). *Coping with a crisis: Financial resources available to low- and moderate-income households in emergencies* (CSD Research Brief No. 17-11). St. Louis, MO: Washington University, Center for Social Development.

Prawitz, A., Garman, E. T., Sorhaindo, B., O'Neill, B., Kim, J., & Drentea, P. (2006). The InCharge financial distress/financial well-being scale: Development, administration, and score interpretation. *Financial Counseling and Planning*, 17, 34-50.

Roll, S. P., Mitchell, D. S., Bufe, S., Lynne, G., & Grinstein-Weiss, M. (2017, October). *The experience of volatility in low- and moderate-income households: Results from a national survey* (Issue Brief). Washington, DC: Aspen Institute and Center for Social Development.

Roll, S. P., Taylor, S. H., & Grinstein-Weiss, M. (2016, August). *Financial anxiety in low- and moderate-income households: Findings from the Household Financial Survey* (CSD Research Brief No. 16-42). St. Louis, MO: Washington University, Center for Social Development.

Shim, S., Xiao, J. J., Barber, B. L., & Lyons, A. C. (2009). Pathways to life success: A conceptual model of financial well-being for young adults. *Journal of Applied Developmental Psychology*, 30(6), 708-723.

Acknowledgements

The Social Policy Institute at Washington University in St. Louis gratefully acknowledges the Annie E. Casey Foundation, which provided support for this brief series. We would also like to acknowledge the other funders who made the Refund to Savings Initiative possible: the Ford Foundation; Intuit, Inc.; the Intuit Financial Freedom Foundation; and JPMorgan Chase Foundation. The Refund to Savings Initiative would not exist without the commitment of Intuit and its Tax and Financial Center, including the dedication of our collaborators, David Williams, Melissa Netram, Joe Lillie, Krista Holub, and many others on the Intuit team who have worked diligently in planning and implementing the experiment. We would also like to thank Hannah Brumbaum for her excellent research assistance. Lastly, we thank the thousands of tax payers who consented to participate in the research surveys and shared their personal financial information.

Disclaimer

Statistical compilations disclosed in this document relate directly to the bona fide research of, and public policy discussions concerning, financial security of individuals and households as it relates to the tax filing process and more generally. Compilations follow Intuit's protocols to help ensure the privacy and confidentiality of customer tax data.

Authors

Sicong Sun

Graduate Research Associate, Social Policy Institute

Olga Kondratjeva

Postdoctoral Research Associate, Social Policy Institute

Stephen P. Roll

Research Assistant Professor, George Warren Brown School of Social Work

Mathieu Despard

Research Assistant Professor, George Warren Brown School of Social Work

Michal Grinstein-Weiss

Founding Director, Social Policy Institute

Suggested Citation

Sun, S., Kondratjeva, O., Roll, S. P., Despard, M., & Grinstein-Weiss, M. (2018). Financial well-being in low- and moderate-income households: How does it compare to the general population? (SPI Research Brief No. 18-03). St. Louis, MO: Washington University, Social Policy Institute.