

## Appendix: Supplemental tables

**Appendix Table A1:** Selection into final analysis sample

Variables	Final sample
Average age	0.004*** (0.000)
Male (%)	0.001 (0.010)
Married (%)	0.011 (0.011)
Average number of children in the household	-0.000 (0.006)
Retired (%)	0.007 (0.018)
Currently working (%)	0.005 (0.013)
<b>Race and ethnicity (omitted: White non-Hispanic) (%)</b>	
Black, including Hispanic	-0.075*** (0.018)
Hispanic	-0.063*** (0.015)
Other, non-White	-0.050*** (0.017)
<b>Education (omitted: high school degree or less) (%)</b>	
Associate's degree	0.017 (0.016)
Bachelor's degree or more	0.011 (0.012)
First generation immigrant (%)	-0.023 (0.017)
Low-income household (< \$50,000) (%)	-0.014 (0.012)
Constant	0.404*** (0.027)
Observations	9,299
R-squared	0.035

Notes: This table presents results from an ordinary least squares (OLS) regression where the dependent variable is an indicator variable that equals 1 if the study participant is in the final analysis sample and is equal to 0 otherwise. The results show that the initial random sample and the final analysis sample differ by age and race/ethnicity. The number of observations does not total 9,348 due to some missing demographic characteristics. Robust standard errors are in parentheses.

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.10$

**Appendix Table A2:** Characteristics for the full study sample and final analysis samples

	<b>Full study sample</b>	<b>Final analysis sample</b>
Average age	51.0	53.2
Age (%)		
18-29	10.2	7.4
30-39	18.2	15.8
40-49	19.6	19.1
50-61	22.1	23.6
62-69	14.5	16.3
70 or older	15.4	17.9
Male (%)	40.1	41.1
Married (%)	54.2	56.1
Average number of children in the household	0.4	0.4
Retired (%)	22.7	26.5
Currently working (%)	59.9	57.5
Race and ethnicity (%)		
White (non-Hispanic)	64.6	68.7
Black (includes Hispanic)	9.3	8.2
Hispanic	14.5	12.4
Other non-White	11.6	10.6
Educational attainment (%)		
High school degree or less	42.1	41.2
Associate's degree	13.4	13.7
Bachelor's degree or more	44.5	45.1
First generation immigrant (%)	11.3	10.3
Household income below \$50,000 (%)	37.9	36.8
Observations	9,348	5,768

Notes: Demographic characteristics are presented descriptively. Tests for differences between samples are presented in Appendix Table A1.

**Appendix Table A3:** Effect of taking the abbreviated 5-item versus standard-length 10-item FWB scale on our *primary FWB outcomes*, full set of regression coefficients

	<b>5-item FWB score</b>	<b>Low 5-item FWB score</b>	<b>Self-rated FWB</b>	<b>Low self- rated FWB</b>
5-item scale ( <i>omitted: 10-item scale</i> )	-0.900** (0.332)	0.050*** (0.011)	-0.068* (0.038)	0.024* (0.011)
Budget before scale ( <i>omitted: budget after scale</i> )	0.043 (0.332)	-0.001 (0.011)	0.015 (0.038)	-0.004 (0.011)
<i>Age (omitted: 70 or older)</i>				
18-29	-8.538*** (0.889)	0.137*** (0.030)	-0.411*** (0.107)	0.115*** (0.032)
30-39	-9.102*** (0.810)	0.172*** (0.026)	-0.522*** (0.094)	0.101*** (0.027)
40-49	-9.651*** (0.784)	0.192*** (0.024)	-0.543*** (0.090)	0.102*** (0.026)
50-61	-8.060*** (0.704)	0.147*** (0.021)	-0.417*** (0.081)	0.097*** (0.023)
62-69	-2.716*** (0.634)	0.035** (0.017)	-0.199*** (0.069)	0.031 (0.020)
Male	1.411*** (0.347)	-0.034*** (0.011)	0.253*** (0.039)	-0.071*** (0.012)
Married	2.346*** (0.391)	-0.077*** (0.013)	0.227*** (0.044)	-0.056*** (0.013)
Number of children in the household	-0.731*** (0.215)	0.020** (0.008)	-0.032 (0.025)	0.006 (0.008)
Retired	5.253*** (0.665)	-0.142*** (0.021)	0.603*** (0.076)	-0.166*** (0.022)
Currently working	2.478*** (0.468)	-0.101*** (0.016)	0.377*** (0.054)	-0.102*** (0.017)
<i>Race and ethnicity (omitted: White non-Hispanic)</i>				
Black (includes Hispanic)	2.486*** (0.620)	-0.060*** (0.023)	-0.115 (0.076)	0.012 (0.024)
Hispanic	-0.271 (0.574)	0.003 (0.020)	-0.192*** (0.065)	0.038* (0.020)
Other non-White	-0.312 (0.595)	-0.020 (0.021)	-0.073 (0.069)	0.025 (0.021)
<i>Education (omitted: high school degree or less)</i>				
Associate's degree	0.378 (0.530)	-0.017 (0.018)	0.134** (0.060)	-0.032* (0.019)
Bachelor's degree or more	2.748*** (0.398)	-0.063*** (0.013)	0.563*** (0.044)	-0.130*** (0.014)
First generation immigrant	-0.878 (0.604)	0.034 (0.021)	-0.098 (0.071)	0.028 (0.022)
Household income below \$50,000	-8.214*** (0.425)	0.199*** (0.014)	-1.047*** (0.047)	0.278*** (0.015)
Constant	60.100*** (0.891)	0.264*** (0.027)	3.846*** (0.101)	0.412*** (0.029)
Observations	5,768	5,768	5,768	5,768
R-squared	0.257	0.148	0.264	0.201

Notes: Results obtained using OLS regression models. Robust standard errors are in parentheses. The levels of statistical significance on the treatment variable (5-item scale) are adjusted for multiple outcomes using the Romano and Wolf step-down procedure.

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.10$

**Appendix Table A4: 5-item FWB score categories for participants assigned to complete the 5-item and 10-item FWB scales, all participants and by income**

	All	Assigned to 5-item scale	Assigned to 10-item scale	Difference (5- vs. 10-item)
<b>All participants</b>				
<i>Level of FWB</i>				
Very-low	4.59	5.65	3.59	2.07
Low	4.98	5.26	4.70	0.56
Medium-low	20.06	21.09	19.08	2.01
Medium-high	26.39	24.75	27.94	-3.19
High	23.53	22.16	24.83	-2.68
Very-high	20.46	21.09	19.86	1.23
<b>Lower-Income participants</b>				
<i>Level of FWB</i>				
Very-low	9.13	11.24	7.11	4.13
Low	8.57	9.61	7.57	2.03
Medium-low	27.78	28.53	27.05	1.48
Medium-high	27.12	24.69	29.46	-4.77
High	17.56	15.85	19.21	-3.36
Very-high	9.84	10.09	9.60	0.48
<b>Higher-Income participants</b>				
<i>Level of FWB</i>				
Very-low	1.95	2.37	1.55	0.82
Low	2.88	2.71	3.04	-0.33
Medium-low	15.56	16.71	14.47	2.24
Medium-high	25.96	24.79	27.07	-2.28
High	27.00	25.86	28.08	-2.22
Very-high	26.65	27.56	25.79	1.77
Observations	5,768	2,812	2,956	N/A

**Appendix Table A5:** Effect of taking the abbreviated 5-item versus standard-length 10-item FWB scale on actual and 5-item FWB score outcomes, all participants and by income

	<b>Actual FWB score</b>	<b>5-item FWB score</b>	<b>Low actual FWB score</b>	<b>Low 5-item FWB score</b>
<i>Estimated effects, full sample</i>				
5-item FWB scale	-1.967*** (0.337)	-0.900** (0.332)	0.054*** (0.011)	0.050*** (0.011)
<i>Estimated effects, by income</i>				
5-item FWB scale*lower-income	-2.323*** (0.574)	-2.278*** (0.565)	0.060** (0.021)	0.081*** (0.021)
5-item FWB scale*higher-income	-1.760*** (0.415)	-0.096 (0.410)	0.051*** (0.013)	0.031* (0.013)
Mean of dependent variable for those assigned to 10-item scale				
All	57.59	56.53	0.270	0.274
Low-income	51.10	51.08	0.440	0.417
High-income	61.34	59.68	0.171	0.191

Notes: Results obtained using OLS regression models. The dependent variables in columns 1 and 3 (actual FWB) are based on the 10-item score when participants completed the 10-item scale and the 5-item score when participants completed the 5-item scale. The dependent variables in columns 2 and 4 are based on the 5-item FWB score regardless of which scale participants completed (two of our primary outcomes). Robust standard errors are in parentheses. The levels of statistical significance are adjusted for multiple outcomes using the Romano and Wolf step-down procedure.

\*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.10

**Appendix Table A6:** Effect of taking the abbreviated 5-item versus standard-length 10-item FWB scale for lower- and higher-income participants on our *primary FWB outcomes*, full set of regression coefficients

	<b>5-item FWB score</b>	<b>Low 5-item FWB score</b>	<b>Self-rated FWB</b>	<b>Low self- rated FWB</b>
5-item scale*lower-income	-2.278*** (0.565)	0.081*** (0.021)	-0.122* (0.064)	0.054** (0.020)
5-item scale*higher-income	-0.096 (0.410)	0.031* (0.013)	-0.037 (0.046)	0.006 (0.014)
Budget before scale ( <i>omitted: budget after scale</i> )	0.051 (0.331)	-0.001 (0.011)	0.016 (0.038)	-0.004 (0.011)
<i>Age (omitted: 70 or older)</i>				
18-29	-8.555*** (0.888)	0.137*** (0.030)	-0.411*** (0.107)	0.115*** (0.032)
30-39	-9.084*** (0.809)	0.172*** (0.026)	-0.521*** (0.093)	0.101*** (0.027)
40-49	-9.640*** (0.783)	0.192*** (0.024)	-0.543*** (0.090)	0.101*** (0.026)
50-61	-8.072*** (0.702)	0.147*** (0.021)	-0.417*** (0.081)	0.097*** (0.023)
62-69	-2.728*** (0.632)	0.035** (0.017)	-0.199*** (0.069)	0.031 (0.020)
Male	1.421*** (0.346)	-0.034*** (0.011)	0.254*** (0.039)	-0.071*** (0.012)
Married	2.351*** (0.391)	-0.077*** (0.013)	0.227*** (0.044)	-0.056*** (0.013)
Number of children in the household	-0.731*** (0.215)	0.020** (0.008)	-0.032 (0.025)	0.006 (0.008)
Retired	5.252*** (0.664)	-0.142*** (0.021)	0.603*** (0.076)	-0.166*** (0.022)
Currently working	2.475*** (0.468)	-0.101*** (0.016)	0.377*** (0.054)	-0.102*** (0.017)
<i>Race and Ethnicity (omitted: White non-Hispanic)</i>				
Black (includes Hispanic)	2.445*** (0.618)	-0.059*** (0.023)	-0.116 (0.076)	0.013 (0.024)
Hispanic	-0.291 (0.572)	0.003 (0.020)	-0.193*** (0.065)	0.038* (0.020)
Other non-White	-0.316 (0.597)	-0.020 (0.021)	-0.074 (0.069)	0.025 (0.021)
<i>Education (omitted: high school degree or less)</i>				
Associate's degree	0.393 (0.530)	-0.017 (0.018)	0.134** (0.060)	-0.032* (0.019)
Bachelor's degree or more	2.763*** (0.398)	-0.063*** (0.013)	0.564*** (0.044)	-0.131*** (0.014)
First generation immigrant	-0.866 (0.603)	0.034 (0.021)	-0.097 (0.071)	0.028 (0.022)
Household income below \$50,000	-7.134*** (0.520)	0.174*** (0.018)	-1.005*** (0.062)	0.254*** (0.019)
Constant	59.693*** (0.898)	0.273*** (0.027)	3.830*** (0.102)	0.421*** (0.030)

	<b>5-item FWB score</b>	<b>Low 5-item FWB score</b>	<b>Self-rated FWB</b>	<b>Low self- rated FWB</b>
Observations	5,768	5,768	5,768	5,768
R-squared	0.259	0.149	0.264	0.201

Notes: Results obtained using OLS regression models. See equation 2 in the “Analytic Approach” section for details. To directly show the effect of taking the 5-item scale on the primary outcomes for lower-income and higher-income participants, we include the interaction of the 5-item scale with a low-income indicator (“5-item scale\*lower-income”), the interaction of the 5-item scale with a higher-income indicator (“5-item scale\*higher-income”), and a “lower-income” indicator variable. Robust standard errors are in parentheses. The levels of statistical significance on the treatment variable (5-item scale\*lower-income, 5-item scale\*higher-income) are adjusted for multiple outcomes using the Romano and Wolf step-down procedure.

\*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.10

**Appendix Table A7:** Effect of taking the abbreviated 5-item versus standard-length 10-item FWB scale on our primary FWB outcomes, by income for different lower-income cut-off amounts

Lower-income cut-off amount	5-item FWB score	Low 5-item FWB score	Self-rated FWB	Low self- rated FWB
<b><i>Lower-income: less than \$35,000</i></b>				
5-item FWB scale*low-income	-1.876** (0.672)	0.083*** (0.025)	-0.090 (0.078)	0.046* (0.024)
5-item FWB scale*high-income	-0.646 (0.386)	0.040*** (0.012)	-0.071 (0.044)	0.019 (0.013)
<i>Treatment effects differ by income</i>				
<b><i>Lower-income: less than \$50,000</i></b>				
5-item FWB scale*low-income	-2.278*** (0.565)	0.081*** (0.021)	-0.122* (0.064)	0.054** (0.020)
5-item FWB scale*high-income	-0.096 (0.410)	0.031* (0.013)	-0.037 (0.046)	0.006 (0.014)
<i>Treatment effects differ by income</i>				
	***	**		*
<b><i>Lower-income: less than \$60,000</i></b>				
5-item FWB scale*low-income	-1.903*** (0.512)	0.076*** (0.018)	-0.102* (0.058)	0.044** (0.019)
5-item FWB scale*high-income	0.014 (0.433)	0.026 (0.013)	-0.027 (0.049)	0.004 (0.014)
<i>Treatment effects differ by income</i>				
	***	**		*
<b><i>Lower-income: less than \$75,000</i></b>				
5-item FWB scale*low-income	-1.579*** (0.463)	0.068*** (0.016)	-0.094* (0.052)	0.039** (0.017)
5-item FWB scale*high-income	-0.105 (0.472)	0.028 (0.014)	-0.042 (0.053)	0.006 (0.015)
<i>Treatment effects differ by income</i>				
	**	*		

Notes: Results obtained using OLS regression models. For each outcome, the results presented in each column are from separate regression models. The share of study participants with household income below \$35,000, \$50,000, \$60,000, and \$75,000 are 24.7 percent, 36.8 percent, 44.6 percent, and 55.1 percent, respectively. For each model, the row labeled “*treatment effects differ by income*” reports the level of significance for a test of whether the coefficient on “5-item FWB scale\*low-income” differs from the coefficient on “5-item FWB scale\*high-income.” Robust standard errors are in parentheses. The levels of statistical significance are adjusted for multiple outcomes using the Romano and Wolf step-down procedure.

\*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.10

### **Appendix: Survey budget tool and questions**

This appendix presents the budget tool and survey questions study participants were asked to complete. For this experiment, study participants were assigned to complete: (1) the 10-item or 5-item FWB scale and (2) the monthly budget worksheet before or after completing the FWB scale. Participants assigned to complete the monthly budget worksheet before completing the FWB scale first completed the monthly budget worksheet page (**Appendix Figure 1**), then the FWB scale questions (5- or 10-item depending on scale assignment; **Appendix Table A8** top panel), and then the remaining survey items related to their financial experiences, beliefs, and behaviors (**Appendix Table A8**, bottom panel). Conversely, participants assigned to complete the monthly budget worksheet after completing the FWB scale completed the FWB scale questions (5- or 10-item depending on scale assignment) followed by the monthly budget worksheet, and then completed the remaining survey items.

## Appendix Figure 1: Screenshot of Budget Task

Please take a few minutes to complete the budgeting tool below. Remember, **you do not need to look anything up, do math, or use a calculator**; your **best guess** on the amounts is fine.

We ask that you:

1. List your income
2. List your expenses
3. Enter "0" for categories where you have no income or expenses

Your total income, total expenses, and their difference will be automatically calculated to show whether you are spending more than your income in a typical month.

**In a typical month:**

Type of income	Amount gained	Type of expense	Amount spent
Job	\$ <input type="text"/>	Housing (rent or mortgage)	\$ <input type="text"/>
Government benefits (social security, disability, etc...)	\$ <input type="text"/>	Utilities (gas, water, electricity, sewage, etc...)	\$ <input type="text"/>
Financial support (child support, family assistance, alimony, etc...)	\$ <input type="text"/>	Groceries	\$ <input type="text"/>
Other income	\$ <input type="text"/>	Other household shopping (supplies, pet needs, clothing, etc...)	\$ <input type="text"/>
<b>Total income in a typical month</b>	\$ 0	Health expenses	\$ <input type="text"/>
		Transportation (e.g., car payment, gas, bus fare)	\$ <input type="text"/>
		Education + childcare	\$ <input type="text"/>
		Digital services (cell phone, internet, cable, streaming, etc...)	\$ <input type="text"/>
		Restaurants and entertainment	\$ <input type="text"/>
		Debt payments	\$ <input type="text"/>
		Other spending	\$ <input type="text"/>
		<b>Total expenses in a typical month</b>	\$ 0

**See your monthly budget: are you spending more or less than your income in a typical month?**

\$ 0 - \$ 0 = \$ 0

Total income in a typical month

Total expenses in a typical month

Total (Note: If this is positive, then your income is greater than your expenses. If it is negative, then your income is less than your expenses.)

**Appendix Table A8:** Survey questions included in experiment

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

### Financial experiences, beliefs, and behaviors

After you complete the budget tool, please confirm which of the following applies to you.

My income is more than my expenses (the amount in the “total” box is positive)  
My expenses are more than my income (the amount in the “total” box is negative)  
My income and my expenses are equal (the amount in the “total” box is zero)

My budget in a typical month indicates:

Please rate the extent to which completing the budgeting tool made you feel:

Not at all  
A little bit  
Moderately  
A great deal

Stressed

Anxious

Confident

Empowered

Better about your financial situation

Worse about your financial situation

How effortful was it to complete the budgeting tool?

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

Very low financial well-being  
Low financial well-being  
Medium-low financial well-being  
Medium financial well-being  
Medium-high financial well-being  
High financial well-being  
Very high financial well-being

Based on this definition, how would you rate the financial well-being of each of the following :

Yourself

The average American

The average American of your age and sex

The average American of your age and sex who lives in your city, town, or municipality

How much experience do you have setting and/or using a monthly budget for yourself or your household?

No experience  
A little bit of experience  
Moderate experience  
A great deal of experience

To what extent do you agree or disagree with the statement: “I actively consider the steps I need to take to stick to my budget”

Strongly disagree  
Disagree  
Neither disagree nor agree  
Agree  
Strongly agree

Which of the following statements best describes how involved you are in handling the finances (such as paying bills and budgeting) for yourself or your household?

I handle all or most of the finances  
Someone else and I handle the finances about the same  
Someone else handles all or most the finances

Did you set a new financial goal or budget at the start of 2022?

Yes  
No

If you were to set a financial goal for yourself today, how confident are you in your ability to achieve it?

Not at all confident  
Not very confident  
Somewhat confident  
Very confident

How confident are you that you could come up with \$2,000 in 30 days if an unexpected need arose within the next month?

I am certain I could come up with the full \$2,000  
I could probably come up with \$2,000  
I could probably not come up with \$2,000  
I am certain I could not come up with \$2,000

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**Financial experiences, beliefs, and behaviors**

Did the budgeting tool that you completed today lead you to consider changing your income, spending, or saving behavior? (Select all that apply)	Yes, I considered how to change my income Yes, I considered how to change my spending behavior Yes, I considered how to change my saving behavior No
How likely are you to use a budgeting tool in the future?	Not at all likely Not very likely Moderately likely Very likely
Please think about the important characteristics that make you the person you are now - your personality, temperament, major likes and dislikes, beliefs, values, ambitions, life goals, and ideals - and please rate the degree of connectedness between the person you expect to be in 5 years compared to the person you are now, where 0 means "I will be completely different in the future" and 100 means "I will be exactly the same in the future."	Response values range from 0 to 100
When you were completing the budgeting tool, did you make changes to any of your entries after you saw the total amount that was calculated?	No, I did not change any entries after I saw the total amount Yes, I changed one or more entries because I remembered extra income or spending Yes, I changed one or more entries because I noticed an incorrect entry or typo Yes, I changed one or more entries because the total amount didn't feel accurate
Would you like to receive a link to additional tools and materials to help you better manage your finances?	Yes, when the interview is complete, please send me a one-time email containing a link to additional tools and materials No, please do not send me any additional tools and materials

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