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

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# Financial Well-Being

- Growing recognition that it is important to measure not just savings balances and credit outcomes, but overall financial well-being (FWB)

- Prior research has documented associations between FWB and financial knowledge, behavior, and personal traits

- Yet little research has explored how FWB changes over time and in response to life events
  - Cannot fully insure against all risks

# Research Questions

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

# Data

- 3 waves from the Understanding America Study
  - A nationally representative probability-based Internet panel

| Survey Wave | FWB1 | SF1 | SF2 |
|---|---|---|---|
| Completion date | Panel Entry | May 2018 | May 2019 |
| Research Question 1 | X | X | X |
| Research Question 2 | | X | X |
| Research Question 3 | | X | X |

- Median distance FWB1 to SF1 (SF2) is 1.5 (2.5) years

# Data

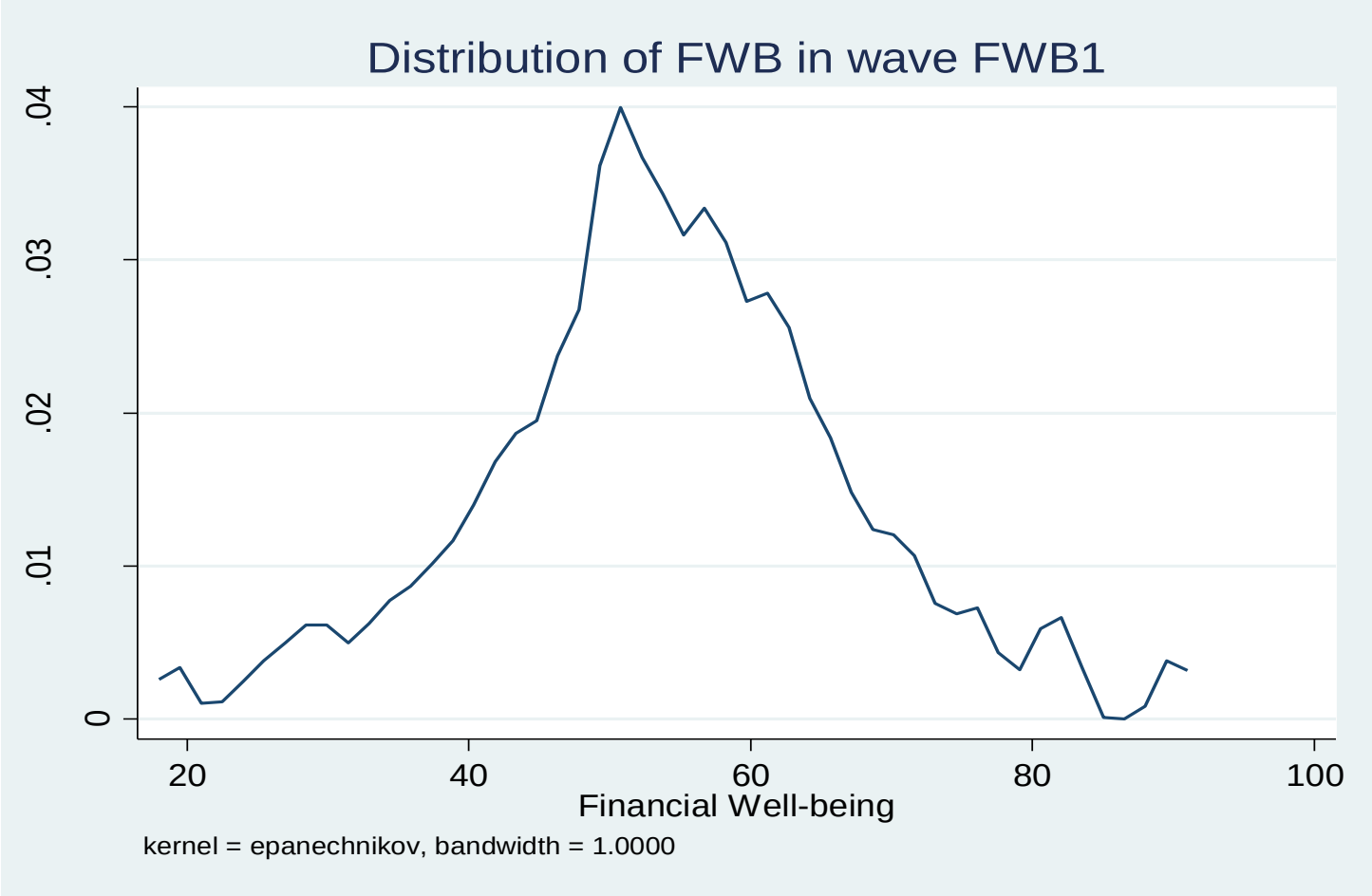
- Financial Behaviors
  - Plan ahead
  - Have a manageable debt load
  - Spending less than income
  - Saving for retirement
  - Saving in liquid accounts

| Life Shock (SF2) | Incidence |
|---|---|
| Got married | 3.3% |
| Got divorced | 3.3% |
| Death of a family member | 19.8% |
| Had a baby | 4.9% |
| Became caregiver of an adult | 4.4% |
| New job | 18.8% |
| Significant raise/promotion | 10.6% |
| Lost job/hours cut | 13.6% |
| Major medical expense | 15.5% |

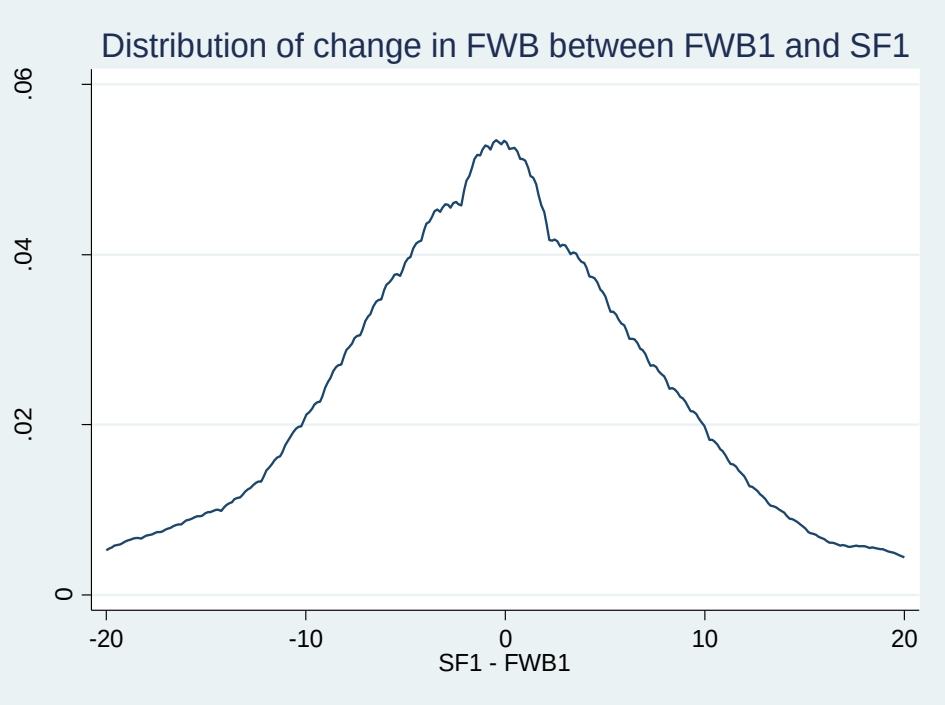
# Sample

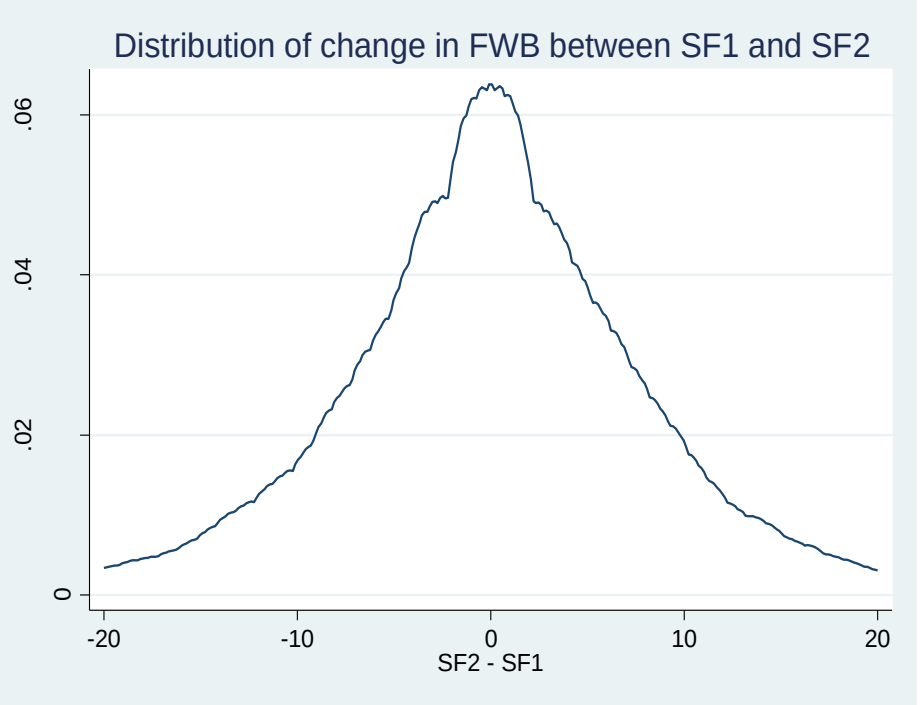
| | Respondents to FWB1 | Respondents to SF1 & SF2 | Respondents to all 3 waves |
|---|---|---|---|
| Age | 47.62 | 49.63 | 49.40 |
| Female | 0.57 | 0.57 | 0.57 |
| Married | 0.56 | 0.57 | 0.57 |
| White | 0.79 | 0.81 | 0.82 |
| Bachelors or More | 0.37 | 0.37 | 0.37 |
| Household Income > $50k | 0.55 | 0.55 | 0.55 |
| *N* | 7349 | 4350 | 4322 |

# Distribution of FWB



# Distribution of Changes in FWB



# Changes in FWB on Shocks

| VARIABLES | (1)<br>FWB SF2 | (2)<br>ΔFWB<br>SF1 to SF2 |
|---|---|---|
| New job | -0.684 | 1.160*** |
| | (0.547) | (0.385) |
| Raise | 3.712*** | 1.809*** |
| | (0.647) | (0.456) |
| Lose job | -6.108*** | -1.993*** |
| | (0.623) | (0.439) |
| Medical expense | -5.070*** | -1.881*** |
| | (0.548) | (0.386) |
| Constant | 41.681*** | -0.970* |
| | (0.801) | (0.565) |
| Includes Demographics? | Y | Y |
| Observations | 4,264 | 4,264 |
| R-squared | 0.170 | 0.020 |

# Changes in FWB on Protective Behaviors

| VARIABLES | (1) FWB SF1 | (2) FWB SF2 | (3) ΔFWB SF1 to SF2 |
|---|---|---|---|
| Plan ahead | 5.115*** | 4.850*** | -0.264 |
| | (0.369) | (0.389) | (0.322) |
| Debt manageable | 8.724*** | 8.342*** | -0.382 |
| | (0.387) | (0.407) | (0.338) |
| Saving - retirement | -0.186 | -0.010 | 0.175 |
| | (0.354) | (0.373) | (0.309) |
| Saving – liquid | 4.518*** | 4.060*** | -0.458 |
| | (0.367) | (0.387) | (0.321) |
| Spend < Income | 5.245*** | 4.720*** | -0.524* |
| | (0.346) | (0.365) | (0.302) |
| Constant | 33.019*** | 32.658*** | -0.361 |
| | (0.637) | (0.672) | (0.556) |
| Includes Demographics? | Y | Y | Y |
| Observations | 4,292 | 4,292 | 4,292 |
| R-squared | 0.434 | 0.389 | 0.006 |

# Behaviors and Shock Occurrence

| VARIABLES | (1) Any negative shock | (2) Marriage | (3) Divorce | (4) Death | (5) Baby | (6) Care adult |
|---|---|---|---|---|---|---|
| Plan ahead | -0.015 | -0.001 | -0.004 | 0.012 | 0.003 | -0.010 |
| | (0.018) | (0.006) | (0.006) | (0.014) | (0.007) | (0.007) |
| Debt manageable | -0.117*** | 0.001 | -0.016** | -0.028* | -0.006 | -0.015** |
| | (0.019) | (0.006) | (0.006) | (0.015) | (0.008) | (0.007) |
| Saving – retirement | 0.026 | -0.016*** | -0.002 | 0.006 | -0.007 | -0.005 |
| | (0.017) | (0.006) | (0.006) | (0.014) | (0.007) | (0.007) |
| Saving – liquid | 0.006 | -0.000 | 0.004 | 0.009 | 0.005 | -0.001 |
| | (0.018) | (0.006) | (0.006) | (0.014) | (0.007) | (0.007) |
| Spend < Income | -0.013 | 0.009 | 0.005 | 0.002 | -0.000 | 0.006 |
| | (0.017) | (0.006) | (0.006) | (0.013) | (0.007) | (0.007) |
| Constant | 0.532*** | 0.098*** | 0.090*** | 0.239*** | 0.143*** | 0.035*** |
| | (0.031) | (0.011) | (0.011) | (0.025) | (0.013) | (0.012) |
| Includes Demographics? | Y | Y | Y | Y | Y | Y |
| Observations | 4,267 | 4,284 | 4,282 | 4,284 | 4,283 | 4,279 |
| R-squared | 0.019 | 0.012 | 0.012 | 0.005 | 0.021 | 0.008 |

# Behaviors and Shock Occurrence

| VARIABLES | (1) Any negative shock | (7) New job | (8) Raise | (9) Lose job | (10) Medical expense |
|---|---|---|---|---|---|
| Plan ahead | -0.015 | 0.032** | 0.000 | -0.024** | 0.000 |
| | (0.018) | (0.013) | (0.011) | (0.012) | (0.013) |
| Debt manageable | -0.117*** | -0.059*** | -0.006 | -0.069*** | -0.087*** |
| | (0.019) | (0.014) | (0.011) | (0.012) | (0.014) |
| Saving – retirement | 0.026 | -0.005 | 0.063*** | 0.001 | 0.017 |
| | (0.017) | (0.013) | (0.010) | (0.011) | (0.012) |
| Saving – liquid | 0.006 | -0.004 | 0.016 | -0.007 | 0.011 |
| | (0.018) | (0.013) | (0.011) | (0.012) | (0.013) |
| Spend < Income | -0.013 | -0.007 | 0.015 | 0.003 | -0.041*** |
| | (0.017) | (0.013) | (0.010) | (0.011) | (0.012) |
| Constant | 0.532*** | 0.396*** | 0.217*** | 0.268*** | 0.160*** |
| | (0.031) | (0.023) | (0.019) | (0.020) | (0.022) |
| Includes Demographics? | Y | Y | Y | Y | Y |
| Observations | 4,267 | 4,278 | 4,285 | 4,284 | 4,285 |
| R-squared | 0.019 | 0.041 | 0.059 | 0.021 | 0.022 |

# Behaviors and Effects of Shock

| VARIABLES | (1) ΔFWB SF1 to SF2 | (2) ΔFWB SF1 to SF2 | (3) ΔFWB SF1 to SF2 |
|---|---|---|---|
| Lose job | -1.526*** | -1.709*** | -1.500** |
| | (0.413) | (0.416) | (0.751) |
| Medical expense | -1.778*** | -1.916*** | -1.761** |
| | (0.380) | (0.382) | (0.730) |
| Plan ahead | | -0.154 | -0.151 |
| | | (0.314) | (0.357) |
| Debt manageable | | -0.628* | -0.647* |
| | | (0.334) | (0.383) |
| Saving - retirement | | -0.010 | -0.000 |
| | | (0.296) | (0.333) |
| Saving – liquid | | -0.418 | -0.309 |
| | | (0.318) | (0.357) |
| Spend < Income | | -0.560* | -0.518 |
| | | (0.300) | (0.338) |
| Constant | 0.525*** | 1.578*** | 1.518*** |
| | (0.151) | (0.300) | (0.332) |
| Observations | 4,340 | 4,326 | 4,326 |
| R-squared | 0.010 | 0.014 | 0.015 |

# Behaviors and Effects of Shock

| VARIABLES | (1) ΔFWB SF1 to SF2 | (2) ΔFWB SF1 to SF2 | (3) ΔFWB SF1 to SF2 |
|---|---|---|---|
| Lose Job X Plan Ahead | | | -0.462 |
| | | | (0.937) |
| Lose Job X Debt Manage | | | 0.315 |
| | | | (0.981) |
| Lose Job X Saving - Ret | | | 0.310 |
| | | | (0.968) |
| Lose Job X Saving - Liq | | | -0.846 |
| | | | (1.059) |
| Lose Job X Spend < Inc | | | 0.065 |
| | | | (0.945) |
| Medical X Plan Ahead | | | 0.361 |
| | | | (0.876) |
| Medical X Debt Manage | | | -0.071 |
| | | | (0.904) |
| Medical X Saving - Ret | | | -0.235 |
| | | | (0.844) |
| Medical X Saving - Liq | | | -0.169 |
| | | | (0.906) |
| Medical X Spend < Inc | | | -0.375 |
| | | | (0.865) |
| Constant | 0.525*** | 1.578*** | 1.518*** |
| | (0.151) | (0.300) | (0.332) |
| Observations | 4,340 | 4,326 | 4,326 |
| R-squared | 0.010 | 0.014 | 0.015 |

# Discussion

- We find that FWB is relatively stable over our 2.5 year window of observation
  - Median change we observe is 0
- FWB responds to life events
  - Promotion (+), new job (+), lose job (-), medical expense (-)
- Protective financial behaviors associated with higher levels of FWB
  - Some evidence associated with lower shock incidence
  - Little evidence related to changes in FWB over our period
  - No evidence they lessen the impact of negative shocks

# Thanks!

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# Analysis

- Descriptive analysis of changes over time

- Cross-sectional influence of shocks and behaviors on FWB

$$(1)\ FWB_i = \alpha + \beta X_i + \delta Y_i + \varepsilon_i$$

- Shocks and behaviors on *changes* in FWB

$$(2)\ \Delta FWB_i = \alpha + \beta X_i + \delta Y_i + \varphi(X_i * Y_i) + \varepsilon_i$$

- Are protective behaviors associated with fewer shocks?

$$(3)\ Y_{i,2} = \alpha + \beta X_{i,1} + \varepsilon_{i,2}$$

# FWB over the Life Course (Cross-section)

| | All | 18 - 30 | 31 - 45 | 46 - 60 | 61+ |
|---|---|---|---|---|---|
| All | 53.77 | 51.12 | 51.97 | 52.25 | 60.20 |
| Male | 55.43 | 51.96 | 53.50 | 53.45 | 61.29 |
| Female | 52.49 | 50.75 | 50.95 | 51.31 | 59.00 |
| College grad | 57.82 | 54.40 | 55.39 | 56.24 | 64.57 |
| Less than college | 51.39 | 49.80 | 49.50 | 50.26 | 57.12 |
| *N* | 7349 | 1180 | 2159 | 2202 | 1533 |

# Changes in FWB on Demographics

| VARIABLES | (1)<br>ΔFWB<br>FWB1 to SF1 | (2)<br>ΔFWB<br>SF1 to SF2 |
|---|---|---|
| Age | -0.010 | 0.024** |
| | (0.010) | (0.009) |
| Female | -0.889*** | 0.231 |
| | (0.311) | (0.279) |
| College grad | -0.719** | 0.072 |
| | (0.333) | (0.299) |
| Married | 0.293 | 0.114 |
| | (0.329) | (0.295) |
| Hispanic | -0.151 | -0.175 |
| | (0.397) | (0.355) |
| White | 0.601 | -0.406 |
| | (0.515) | (0.454) |
| Income > $50k | 0.734** | -0.690** |
| | (0.342) | (0.307) |
| Time between elicitations | 0.003*** | -0.003 |
| | (0.001) | (0.008) |
| Constant | -1.416* | 0.171 |
| | (0.732) | (2.841) |
| Observations | 4,304 | 4,304 |
| R-squared | 0.011 | 0.003 |