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Financial Fragility during the COVID-19 Pandemic

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Keywords
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Early in the COVID-19 pandemic, much of the US economy was closed to limit the virus' spread, and several emergency interventions were implemented. Our analysis of older (45-75) respondents fielded in April-May of 2020 indicates that about one in five respondents was financially fragile and would have difficulty facing a mid-size emergency expense. Some subgroups were at particular risk of facing financial difficulties, especially younger respondents, those with larger families, Hispanics, and the low income. Moreover, the more financially literate were better able to handle such shocks, indicating that knowledge can provide some additional protection during a pandemic.

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When the COVID-19 virus hit the United States in early 2020, it unleashed not only a grim public health crisis but also imposed massive losses on many Americans' financial lives. The shutdown seeking to slow the spread of the virus began in March 2020, after which the unemployment rate jumped from a historical low of 3.5% in February, to a high of 14.7% in April 2020. Thereafter, as some states started to reopen, unemployment fell to 13.3% in May and to 10.2% in July, but millions of Americans remained jobless into the fall. And though the US stock market rebounded, workers and retirees remain troubled by how the economy will perform without a clear way to halt the virus.

In response to these historic events, local, state, and federal governments sought to blunt the economic wreckage caused by the pandemic. The federal government passed the CARES Act on March 27, 2020, sending economic impact payments of up to $1,200 per adult (with smaller or zero payments for high earners) and $500 per minor child to American citizens and permanent residents (Congressional Research Service 2020). To further help with cash flow problems for affected people, the CARES Act temporarily increased unemployment insurance (UI) payments by $600 per week, extended the duration of UI by 13 weeks, and allowed typically ineligible individuals to apply for unemployment benefits. The CARES Act also allowed penalty-free withdrawals from retirement plans, established the Paycheck Protection Program for small businesses, expanded safety net programs, allowed affected federally-backed mortgage holders to go into a forbearance period on their loans, and suspended evictions of renters living in federally funded housing (Congressional Research Service 2020). Thus, while many Americans lost substantial income and investment wealth in the early months of the pandemic, government stimulus programs provided a buffer to temporarily soften the effect of these losses on people's finances.

Nevertheless, after a decade of economic growth and historically low unemployment, many households still faced the prospect of lengthy unemployment, earnings losses, and wealth drops. This paper explores the initial impact of the pandemic on the economic wellbeing of Americans age 45-75. To assess how this group was affected by COVID-19, we evaluate their financial fragility, by which we mean the capacity to meet an unexpected mid-size expense within a month's time. In addition, we examine the roles played by financial literacy, income and shocks to income, and other factors related to financial fragility.

I. Data

Our data are taken from a module we developed and fielded in the Understanding America Study (UAS), a nationally representative internet panel study managed by the University of Southern California.[1] Our module (UAS 226) was sent to 3,185 individuals age 45-75 who had previously completed an earlier module (UAS183) in the spring of 2019. Of those invited to participate, 2,889 completed our module, for a response rate of 90.7%. The module was in the field from April 20 to May 18, 2020, and two-thirds of the responses were returned before the end of April. Thus the respondents' economic status reflects their financial situations in the first months of the COVID-19 pandemic, a critically important time.

Our objective with the module was to collect information about how the virus had affected these older respondents' financial fragility. In particular, we sought to assess whether respondents who were more financially literate were better able to absorb financial setbacks associated with

[1] For more on the UAS see https://uasdata.usc.edu/index.php. The panel was recruited with address-based sampling and anyone willing to participate yet lacking a computer/internet access received a tablet and broadband Internet. UAS sampling weights are generated so that the weighted distributions of specific sociodemographic variables in the survey sample match their population counterparts in the Current Population Survey.

the virus. We measured financial fragility using the question designed by Lusardi, Schneider, and Tufano (2011): *How confident are you that you could come up with $2,000 if an unexpected need arose within the next month?* Possible answers to this question were*: 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; Don't know*. The question wording sought to measure peoples' capacity to manage a medium-size financial shock and, specifically, whether they could access resources in time of need. Respondents who stated that they certainly could not or probably could not come up with $2,000 were classified as financially fragile. This question has proven to be a very good indicator of respondents' financial situations, i.e., whether they have liquid assets and their level of indebtedness (Gupta, Hasler, and Lusardi 2018; Hasler and Lusardi 2019).

The dataset also included two measures of respondents' financial literacy. The first set relies on the 'Big Three' questions used in many prior studies to assess peoples' understanding of basic financial concepts, such as interest rates, how inflation works, and risk diversification. The second measure includes these three plus nine additional and new financial literacy questions specifically designed for this age group. Accordingly, the 12-question index provides a richer set of information than available in previous surveys, covering additional topics (for example, interest compounding, credit scores, annuities, and Social Security benefits), and measuring not just financial knowledge but also the capacity to apply that knowledge.[2]

II. Fragility Levels in the Older Population

In our survey, 18.9% of respondents reported themselves to be financially fragile. In other words, even with the promise of substantial government payments, about one in five older

[2] The correlation between the number of correct answers to the Big Three questions and the number of correct answers to the other nine questions in our data is 0.6. All financial literacy questions appear in our online appendix.

respondents reported they could not handle a mid-size unexpected expense (the online appendix provides additional descriptives). Interestingly, younger respondents under age 60 were more fragile than older ones, while the oldest group (age 70+) was the least financially fragile. Specifically, those older than 70 were 12 percentage points less likely to be fragile than people age 55-59. This is likely because the oldest group depends more heavily on Social Security income and hence is less susceptible to earnings and unemployment risk. Women were 10 percentage points more likely to report themselves as fragile (25.8%) compared to men (15.6%), while African Americans were 15 percentage points and Hispanics 10 percentage points more likely to be fragile than whites. In retrospect, we now know that minorities were, in fact, hardest hit by the pandemic (Fairlie et al. 2020). The low income and least educated also indicated greater financial fragility, as did the divorced, separated, and never married. Workers holding part-time jobs were also more financially fragile than their full-time counterparts (22.2% versus 13.3%), and not surprisingly, respondents who had recently suffered a drop in income were also more financially fragile. Accordingly, some groups were already disadvantaged at the outset of the pandemic.

It is also interesting to note that self-reported financial fragility was inversely related to financial literacy. Thus, the financially fragile could answer only about half (1.7) of the Big Three questions correctly, and only half (6.3) of the 12- question list. By contrast, those who were better financially protected correctly answered 2.5 of the Big Three questions, and 8.5 of the 12 questions. It would appear that financial literacy could help people better prepare for unexpected expenses.

III. Multivariate Analysis

To better identify the underlying factors associated with financial fragility in the older population, Table 1 reports marginal effects of a multivariate logistic analysis; here the dependent variable takes the value of 1 if the respondent was financially fragile, and 0 otherwise.[3] This analysis controls for many demographic and economic characteristics including our two alternative measures of financial literacy (models 1 and 2), where the first specification is comparable to prior studies (e.g. Hasler and Lusardi 2019; Lusardi, Mitchell and Oggero 2020), and the second is a richer specification.

[Table 1 here]

Regardless of which financial literacy index we use, it is clear that being more financially knowledgeable lessens the chance of being financially fragile. The marginal effect shown in Table 1 indicates that each additional correct answer to the Big Three index lowers the probability of being fragile by 2.1 percentage points. This implies that a person with three correct answers is 6.3 percentage points less likely to report being unable to cover a $2,000 unexpected expense compared to a person who answered none of the three questions correctly. This represents a 33.4% reduction in fragility relative to the mean level of fragility in the sample. Using the 12-question index, we find a similar result: each correct answer lowers the probability of being fragile by 1 percentage point. This finding implies that a person with six correct answer has a 6 percentage point lower likelihood of being fragile compared to a person with no correct answers, while a person who answers all 12 questions correctly would have a 12 percentage point lower likelihood of being fragile compared to the person with no correct answers.

In other words, having even a little financial knowledge can help people become more financially resilient, and this still holds true after controlling on sociodemographic characteristics including education and income. Indeed, education alone is insufficient to cushion older Americans, whereas having financial knowledge helps protect against financial insecurity. This

[3] For these regressions, we deleted missing values of the control variables and dropped respondents who answered "do not know" to the financial fragility question.

confirms our results among older respondents prior to the pandemic (Lusardi, Mitchell and Oggero, 2020), and it underscores the fact that that financial literacy is broadly valuable not just during a pandemic, but during normal times as well.[4]

The regression analysis also confirms several other findings from the univariate results regarding financial fragility. For example, financial fragility declines strongly with age. Controlling for key economic and demographic variables, older people are significantly less likely to be financially fragile than the youngest age group in our sample. This finding matches the quantitative magnitudes discussed above, in that respondents over age 60 are more than 10 percentage points less likely to be fragile than younger respondents. Nonmarried individuals are 5.6 to 8.9 percentage points more likely to be fragile compare married individuals and people living in larger households are more fragile with each additional member increasing the likelihood of being fragile by 1.7 percentage points. As one would expect, full-time employment status reduces the likelihood of being financially fragile.

Interestingly, while the univariate analysis suggested that women were more likely to be financially fragile than men, and African Americans more financially fragile than whites, the multivariate analysis finds no significant relationship between gender or race and fragility. This suggests that the difference in fragility rates among men and women, and African Americans and whites, is related to other characteristics, including income, age, and educational differences, rather than gender and race *per se*. In contrast, Hispanics are more financially fragile (by 8 percentage points) than whites, even after controlling on other demographic and economic characteristics.

IV. Conclusions

[4] We recognize that financial literacy can be endogenous; our prior work shows that, if so, our estimates represent a lower bound of the effects of financial literacy on financial fragility (Lusardi and Mitchell 2014).

In the early days of the COVID-19 pandemic, no one could predict what the economic fallout of the shock would be. This paper analyzes respondents age 45-75 surveyed April-May 2020, wherein we found that about one in five of these respondents was financially fragile and would have had difficulty facing a mid-size emergency expense even in a month's time. Additionally, some subgroups were at particular risk of facing financial difficulties: specifically, the multivariate analysis indicated that younger respondents, those with larger families, Hispanics, and those with low income were particularly disadvantaged, having far less capacity to deal with health and financial shocks.

On a positive note, we did learn that people who were more financially literate were better protected against such shocks. This is probably because the more financially literate made better saving and spending decisions in the past, so they could more easily withstand economic shocks and make better decisions in times of crisis. An important lesson from this analysis is that, even when the pandemic is controlled, financial education programs can still play an important role in building financial resilience. Of course, financial education cannot erase deep socioeconomic inequalities overnight, but it can equip people with the knowledge to better deal with economic shocks and plan for the future.

Our story is one of the impact of the economic collapse early in the pandemic. As long as these health and economic threats continue, so too will household challenges. The short-term results we report here may worsen, as the pandemic continues to run its course.

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Table 1: Explaining Financial Fragility (FF): Logit Marginal Effects

Controls	3-Question FF Index	12-Question FF Index
Financial Literacy		
Total Questions Correct	-0.021	-0.010
	(0.011)	(0.005)
Age *(Ref Age 45-49)*		
Age 60-64	-0.128	-0.128
	(0.031)	(0.031)
Age 65-69	-0.104	-0.105
	(0.035)	(0.035)
Age 70 and up	-0.125	-0.126
	(0.035)	(0.035)
Race/Ethnicity *(Ref white)*		
Hispanic/Latino	0.085	0.080
	(0.033)	(0.033)
Black/African American	0.047	0.040
	(0.034)	(0.034)
Marital Status *(Ref Married Unseparated)*		
Divorced	0.089	0.089
	(0.026)	(0.026)
Widowed	0.056	0.056
	(0.044)	(0.045)
Never Married	0.072	0.070
	(0.031)	(0.031)
Other Variables		
Number of Household Members	0.017	0.017
	(0.009)	(0.009)
Works full-time	-0.040	-0.043
	(0.024)	(0.024)
N. of observations	2,685	2,682
% Financially Fragile	18.85%	18.85%

Notes: Respondents who stated that they certainly could not or probably could not come up with $2,000 within one month were classified as financially fragile (see text). Robust standard errors in parentheses and results use weighted data. Those responding "Do not know" to the financial literacy questions were dropped from sample. See the Online Appendix for more detail.