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Does being prepared produce better economic outcomes?

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Introduction

Many people prepare for potential adverse economic events by planning for economic shocks, saving for short-term emergencies, and enhancing their financial knowledge. Do these actions reduce the likelihood of becoming fragile and increase the chances of making sound economic choices? To address these questions, we developed an eight-question index of financial resilience that indicates how prepared households are to respond to economic shocks. We then tested whether individuals with higher scores on our index had better economic outcomes during the three years when the COVID-19 pandemic significantly affect millions of Americans.

We begin by describing the resilience index and examining the stability of individual scores between 2020 and 2022. The index is constructed using data from three Understanding America Study (UAS) surveys. The evidence indicates that individual scores on our index are relative stable throughout the pandemic years. Next, we assess whether higher scores on the resilience index are associated with a lower probability of being fragile as indicated on whether households could cover unexpected expenditures of $2,000. Statistical analysis shows that individuals with higher levels of resilience are significantly less likely to be fragile. Finally, in Section III, we find that more resilient individuals are more likely to select annuities from their retirement plans, thus ensuring a monthly retirement benefit throughout their life.

1. Measuring the degree of preparedness

To gather information on people's perceptions of their degree of preparedness during the pandemic, we developed a resilience index using information collected from 2,279 individuals included in three UAS surveys conducted in 2020, 2021, and 2022.[1] To measure financial preparedness or resilience, we concentrated on four areas that best indicate a households' capacity to respond to economic shocks: its exposure to an unexpected loss of earnings; whether it had developed retirement/spending plans and tracked spending; how it perceived the impact of current debt on spending; and its level of concern regarding finances.[2] The sample includes only respondents who answered all of the questions in each of the three years. The specific questions were:[3]

1. *Ability to respond to unexpected loss of earnings or expenses*
    - **Cope With Lost Earnings:** Does the respondent have an emergency fund that could cover expenses for at least 3 months?
2. *Developed a retirement and spending plan and track their spending*
    - **Develop Retirement Plan**: Has the respondent calculated the financial resources will needed in retirement?
    - **Track Spending**: Does the respondent track day-to-day spending?
    - **Set Budget Target**: Does the respondent create a budget and set targets with that budget?
3. *Impact of current debt on spending*
    - **Debt Level OK:** Does the respondent consider his/her current debt level to be manageable?
    - **No Medical Delays:** Has this debt delayed or prevented the respondent from receiving medical treatment (including filling prescriptions)?
4. *Level of concern over finances*
    - **Not Financially Anxious**: Is the respondent anxious about the state of his/her finances and preparedness?
    - **Money Will Not Run Out**: Is the respondent confident that his/her money will not run out in retirement?

We formed the financial resilience index by adding the positive values each respondent gave for the eight questions. On average, in 2020, respondents indicated a positive response to 4.5 of the questions; by 2022, the mean value of the index had risen to 4.8, despite their having experienced two years of pandemic disruption.

Table 1 reports the proportion of persons responding to these questions in 2020 and again in the subsequent two surveys. In 2020, most respondents were reasonably confident that they could cope with a short-term loss of earnings: 68% gave a positive response to that question. The shares also remained quite stable over time: almost three-quarters of the respondents (71%–73%) reported that their debt levels were manageable and did not prevent them from accessing medical treatment (71%–74%); 78%–80% reported tracking their spending; and over half (52%–56%) had set budgetary targets. Nevertheless, as of 2020, only about one-third (36%) of the group reported that it had planned for retirement (though the share rose to 40% by 2022). Also, over half (56%) were anxious about their finances, and three-quarters were concerned about their money running out. In sum, financial resilience remained relatively stable before and during the pandemic, perhaps because of the expansion of unemployment benefits and government stimulus checks sent to lower-income families. Nevertheless, pockets of financial concern remained.

1 The UAS is a nationally representative online panel study fielded by the University of Southern California offering detailed information on respondents' economic and demographic characteristics, and their attitudes toward and preparedness for financial shocks. The specific surveys used in our analysis were UAS226, UAS378, UAS441; see https://uasdata.usc.edu/index.php.

2 The specific questions and possible responses to each question are reported in Clark and Mitchell (2022a). We also compare results for this index to those using expanded measure derived from 20 questions associated with the financial planning activities of the household. Results are qualitatively similar.

3 These questions draw on Clark, Lusardi, and Mitchell (2021), Lusardi and Mitchell (2014), and Lusardi, Schneider, and Tufano (2011).

TABLE 1. FINANCIAL RESILIENCE INDEX AND COMPONENTS IN THE UAS, BY YEAR

	2020		2021		2022	
Variables	**Mean**	***SD***	**Mean**	***SD***	**Mean**	***SD***
Total positive responses	4.50	*1.84*	4.56	*1.76*	4.82	*1.50*
Cope lost earnings	0.68	*0.47*	0.70	*0.46*	0.69	*0.46*
Develop retirement plan	0.36	*0.48*	0.38	*0.48*	0.40	*0.49*
Track spending	0.80	*0.40*	0.78	*0.41*	0.79	*0.41*
Set budget target	0.56	*0.50*	0.52	*0.50*	0.56	*0.50*
Debt level OK	0.71	*0.45*	0.71	*0.46*	0.73	*0.45*
No medical delays	0.71	*0.45*	0.71	*0.45*	0.74	*0.44*
Not financially anxious	0.44	*0.50*	0.44	*0.50*	0.66	*0.47*
Money will not run out	0.25	*0.43*	0.32	*0.47*	0.26	*0.44*

Note: Authors' calculations using UAS data; N = 2,279 (see text).

To understand how financial resilience varied across households during the pandemic, we estimated the resilience index score of each respondent as a function of respondents' socioeconomic characteristics including race/ethnicity, education, sex, marital status, and employment status.[4] In addition, we utilized the number of correct answers on three financial literacy questions that indicate a person's knowledge of interest rates, inflation, and risk diversification. The analysis yields several important findings that provide useful policy recommendations. First, individuals with greater levels of financial literacy tend to have higher levels of resilience. People who scored one unit higher on the FinLit Index were 10% more likely to be financially resilient in 2020. The relationship also remains significantly positive albeit somewhat smaller, during the pandemic years. This finding indicates that more financially literate individuals tend to be better prepared for adverse economic events.

Second, and as expected, individuals with higher income were also more resilient and remained so during the sample period. In addition, older respondents were statistically significantly more resilient than their younger counterparts, with resilience rising by about 1% per year of age. The impact of financial literacy on the resilience index in 2021–22 remained positive and significant, if a bit lower. One surprising finding given recent research on wealth gaps by race/ethnicity is that financial resilience of Black and Hispanic respondents did not differ from that of white respondents in any of the years, controlling on other factors in the model. Most of the estimated effects on person characteristics on resilience are comparable across years; however, a few are worthy of particular note. Specifically, those not working were scored as being significantly more resilient in the two later years, a change that likely reflected the enhanced generosity of unemployment benefits during the pandemic.

2. Does preparedness make financial fragility less likely?

To better understand the importance of preparedness and being resilience, we now assess how financial fragility changed over the pandemic period, as measured by people being unable to cover unexpected expenses of $2,000. In 2020, around one-fifth (22%) of respondents said they would not or probably would not be able to adequately respond to an unexpected bill of this magnitude. Therefore, it is somewhat surprising, that after a year of facing health crises and economic turmoil, financial fragility measured by the same $2,000 question had actually *fallen* slightly*:* only 20% of the same respondents responded negatively to the $2,000 unexpected bill question. By 2022, a year later, the financially fragile percent rose back to 22%. The improvement in financial resilience between 2020 and 2021 was most likely due to stimulus and unemployment benefit checks provided during this period; by 2022, most of these stimulus programs had ended.

4 A detailed discussion of this statistical analysis is provided in Clark and Mitchell (2023).

We first examine the characteristics of individuals who were associated with financial fragility in 2020. The factors associated with being fragile effects are generally the same across the three years. Older persons were less fragile, as were the better-educated and the higher-income households. People scoring higher on the FinLit index questions were less financially fragile. Rather unexpectedly given media reports, Blacks did not report themselves to be significantly more financially fragile than their White counterparts, while Hispanics now were significantly more fragile than whites. Divorced/separated respondents were more fragile than their married counterparts, The analysis indicates that females were not significantly more fragile than men and the proportion of women who were fragile did not increase during the pandemic.

One question of policy interest is whether peoples' financial resilience at one point in time was related to their financial fragility in the future, and if so, how. To examine this, we relate peoples' reported resilience scores prepandemic (2020) to their subsequent (2021 and 2022) probability of being fragile. Statistical analysis that controls for the other factors that affect fragility indicates that household resilience scores in 2020 were negatively and significantly related to their pandemic levels of financial fragility. We find that a one-unit increase in the resilience index in 2020 was associated with a 3.4 percentage point lower chance of being financially fragile one year later, and a 3.8 percentage point lower likelihood of being fragile in 2022. Measured at the mean of the fragility index, this translates into a 17.0% smaller chance of being unable to handle a $2,000 unexpected expense in 2021, and a comparable (17.3%) reduction the following year. It is interesting that financial resilience was found to be an important factor associated with peoples' ability to weather economic shocks associated with the pandemic, and avoiding becoming financially fragile during the economic downturn.

3. Financial resilience and the choice of pension distributions

Many American workers are covered by employer-sponsored retirement plans. At retirement, participants must make one of the most important financial decisions they will ever confront, namely how they will utilize their pension assets to finance retirement consumption. Some retirees can take benefits as lifetime annuities, whereas in other cases they may take a lump-sum distribution from their plans. Moreover, the distribution options differ depending on whether the worker was covered by a defined benefit (DB) or a defined contribution (DC) plan. While the distribution option chosen depends on peoples' time preferences, other wealth, age, and marital status, it could also depend on their overall preparedness as measured by our resilience index. We also explore distribution decisions separately for people who either plan to receive or have received a distribution from a DB versus a DC plan. Additionally, in some cases, retirees may have both plan types so they could select a different payout option from each.[5]

Patterns of pension coverage

While pension distribution choices can vary with retiree preferences for annuities, they also depend on how the payout choices are framed by the plan sponsor, and what the sponsor selects as the plan payout default options—that is, how benefits will be paid if the retiree does not make an active choice. To examine patterns of pension distributions, we next report the results of multivariate regression models linking actual/anticipated payouts by our survey respondents.[6] Controls include age, race and ethnicity indicators, levels of schooling, female, currently married, income, degree of impatience, and the financial literacy index described above. Descriptive statistics show that DC participants were more likely to be Hispanic and female, less educated, and lower income. These differences in demographic and economic characteristics may explain why DC participants were less likely to request an annuity at retirement.[7]

Worker knowledge of pension plan type

Respondents in the UAS378 module were asked whether they had received or expected to receive a pension distribution. Those responding yes were then asked about the type of plan providing such a distribution. Of the 1,493 individuals expecting to receive or who have already received a pension benefit, 363 did not know whether they were covered by a DB or a DC plan. Overall, financial literacy was positively and significantly predictive of people knowing about their retirement plans. Each additional literacy question answered correctly was associated with an 11.4 percentage point smaller chance of not knowing the plan type. Measured against the mean of 26% not knowing their

5 Clark et al. (2019) showed that individuals covered by a DB plan can be encouraged to increase their level of contributions to a supplemental DC plan. Similarly, Clark, Lusardi, and Mitchell (2017) found that greater levels of financial literacy contributed to participation in and contributions to DC plans.

6 This analysis uses a sample of 1,499 respondents to UAS378 indicating that they were covered by a pension. One respondent was deleted due to the individual not answering all questions necessary to calculate his rate of impatience.

7 Also, since Social Security replacement rates are higher for those with lower incomes, these retirees may not desire additional life annuities at the margin.

plan type, therefore, the more financially literate were far more informed about their retirement plans. Additionally, we found that those who were higher paid and better educated were also more aware. People scoring higher on the financial resilience index were also significantly less likely to be unaware of what type of pension plan covered them. For example, a one-unit increase in the 2020 resilience index was associated with a lower chance of not knowing one's pension type by 3.3 percentage points, or 12.2% at the mean.

Distribution choices of pension-covered workers

Finally, we evaluate the factors associated with peoples' pension distribution choices, so we then limited attention to the 1,130 pension participants who reported that they were covered only by a DB plan, a DC plan, or both. The analysis allowed distributions to differ by plan coverage and according to whether the distribution had already been paid or was anticipated, using controls indicating only DB plan coverage, DC coverage, or both, and whether the benefit had already been received or was anticipated.

Relative to having already received a DB distribution (the reference case), workers electing a DC distribution were 45.6 percentage points less likely to have chosen an annuity, and 45.6 percentage points less likely to anticipate a future annuity. Moreover, those expecting a DB distribution were 18 percentage points more likely to anticipate an annuity, compared to DB participants who had already taken a distribution. These results indicate the substantial differences in distribution choices by plan type, holding respondent other characteristics constant, and allowing the responses to vary according to plan type. Individuals with higher financial resilience scores were also more likely to have chosen an annuity.[8]

4. Conclusions

Financial resilience indicates how prepared individuals are to respond to economic shocks that threaten their economic security. We develop a resilience index using eight questions from three UAS surveys. Analysis shows that our index is relatively stable over time and is a good predictor of future economic behavior and outcomes. Two key findings highlight the importance of being financially resilient. First, higher scores on the resilience index are associated with a lower probability of being fragile during the pandemic years. Second, resilience is shown to influence the choice of payout options from DB and DC plans. Throughout this analysis, the analysis also shows that financial literacy plans an important role in the level of resilience and the economic behavior of older Americans.

As a result, our findings imply that policies and programs that enhance financial resilience are likely to help older households withstand unexpected shocks, as experienced during the pandemic. Moreover, boosting financial literacy could increase financial preparedness, knowledge about retirement plans, and result in lower chances of being financially fragile in later life. While the links between resilience and literacy will require further examination, it's highly probable that boosting financial resilience and literacy could do much to enhance retirement well-being.

8 A detailed discussion of the pension data in UAS378 is provided by Clark and Mitchell (2022b).

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This report summarizes the working paper by Clark and Mitchell, "Financial fragility, financial resilience, and pension distributions."

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