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Gendered Impacts of COVID-19 on Economic and Retirement Security

María J. Prados and Jeremy Burke

MRDRC WP 2022-447

UM22-08

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María J. Prados
University of Southern California

Jeremy Burke
University of Southern California

October 2022

Michigan Retirement and Disability Research Center, University of Michigan, P.O. Box 1248. Ann Arbor, MI 48104, mrdrc.isr.umich.edu, (734) 615-0422

Acknowledgements

The research reported herein was performed pursuant to a grant from the U.S. Social Security Administration (SSA) funded as part of the Retirement and Disability Research Consortium through the University of Michigan Retirement and Disability Research Center Award RDR18000002-04. The opinions and conclusions expressed are solely those of the author(s) and do not represent the opinions or policy of SSA or any agency of the federal government. Neither the United States government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of the contents of this report. Reference herein to any specific commercial product, process or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply endorsement, recommendation or favoring by the United States government or any agency thereof.

Gendered Impacts of COVID-19 on Economic and Retirement Security

Abstract

The COVID-19 pandemic had severe impacts on the U.S. labor market with particularly large effects on working women. We use longitudinal survey data from a nationally representative internet panel to (1) document the pandemic's gendered effects on employment and short-term financial stability and examine heterogeneity by race and ethnicity, marital status and household composition, and (2) use respondents' earnings histories and expectations about future labor market participation and retirement age to forecast the impact on Social Security retirement benefits. Overall, while we find evidence that women suffered larger employment losses than men during the pandemic, consistent with prior research, our evidence suggests that the gender gap in employment was driven, at least in part, by women from traditionally more economically advantaged groups — white women, married women, and women in households with high incomes — leaving the workforce. We find little evidence that gender disparities in short-term economic stability grew as a result of the gender differences in employment. Rather our estimates suggest that gender gaps in short-term financial stability decreased over the first year of the pandemic, in part due heterogeneous effects from the stimulus. Despite the gender differences in employment dynamics for certain groups, we find no evidence of differential impacts on our forecasts for Social Security retirement benefits. Collectively, our evidence is consistent with the possibility that gender difference in employment was driven in part by relatively financially stable women voluntarily leaving the workforce.

Citation

Prados, María J., and Jeremy Burke. 2022. "Gendered Impacts of COVID-19 on Economic and Retirement Security." Ann Arbor, MI. University of Michigan Retirement and Disability Research Center (MRDRC) Working Paper; MRDRC WP 2022-447.
https://mrdrc.isr.umich.edu/publications/papers/pdf/wp447.pdf

Authors' acknowledgements

The project described in this paper relies on data from survey(s) administered by the Understanding America Study, which is maintained by the Center for Economic and Social Research (CESR) at the University of Southern California. The content of this paper is solely the responsibility of the authors and does not necessarily represent the official views of USC or UAS. The collection of the UAS COVID-19 tracking data is supported in part by the Bill & Melinda Gates Foundation and by grant U01AG054580 from the National Institute on Aging, and many others. We thank the support of the Michigan Retirement and Disability Research Council and the Social Security Administration.

1. Introduction

The COVID-19 pandemic nearly brought the economy to a halt in early 2020. Governmental mandates to temporarily close businesses and schools and public concern regarding the health risk led to a historic high in the unemployment rate at 14.7% in April of that year. For those who remained employed, work conditions and schedules changed abruptly and continue to be altered with many still working from home for months. Additionally, the closure of schools and child care centers resulted in increased time demands at home for households with children, interrupting parents' careers.

The labor market impacts have been severe for the United States as a whole, and they have been particularly detrimental for working women. While prior recessions affected traditionally male-dominated sectors such as manufacturing, construction, or transportation, the COVID-19 crisis, and its social distancing requirements, had its biggest effect on more female-dominated sectors, namely the service industry. Additionally, women have been disproportionately responsible for increased child care demands arising due to school and day care closures, which has negatively impacted their labor market outcomes (Zamarro and Prados 2021). As a result, women's employment initially suffered at least as much as men's (Montenovo et al. 2020, Adams-Prassel et al. 2020). While labor force participation rates have increased since April 2020, women's and minorities' labor supply remain differentially affected (Lim and Zabek 2021). Additionally, with working mothers predominately being the main child care provider at the end of 2020 (Prados, Zamarro, and Camp 2022), these increased

and prolonged child care responsibilities could make it harder for women to recover from employment interruptions during the COVID-19 crisis.

The historically disproportionate effects of the crisis and associated economic recession on female employment is particularly concerning as women are more likely to present economic fragility than men. On average, women have lower financial literacy (Bucher-Koenen et al. 2017), are more likely to face difficulty in covering an unexpected emergency expense (Angrisani, Burke, and Kapteyn 2021), and are less likely to have planned for retirement (Lusardi and Mitchell 2007) than men. The pandemic had the potential to increase gender gaps in financial well-being and retirement security.

Recognizing that the pandemic may place severe strain on many American households, policy makers passed a robust stimulus program, providing checks to many individuals (subject to earnings limits) and expanding and enhancing unemployment benefits. Some evidence suggests that the stimulus may have helped blunt the pandemic's adverse effects on economic security (Cox et al. 2020; Han et al. 2020) particularly for women and individuals with lower incomes (Angrisani, Burke, and Kapteyn 2021), at least early after the pandemic's onset.

In this paper, we use rich survey data collected in the Understanding America Study (UAS) to examine how the pandemic and its associated labor market impacts have influenced gender gaps in financial stability over the pandemic's first year, and how these effects may translate into gender disparities in future retirement security. In particular, we (1) document the pandemic's gendered effects on employment and short-term financial stability and examine heterogeneity by race and ethnicity, marital status and household composition, and (2) use respondents' earnings histories and

expectations about future labor market participation and retirement age to forecast the impact on Social Security retirement benefits for affected workers.

We find that, among those employed in February 2020, women were more likely to exit the labor force than men, particularly early in the pandemic. However, after controlling for observable characteristics, the overall gender differences in employment are no longer statistically significant, though there is important heterogeneity. While we find small or null gender differences among racial and ethnic minority workers, low-income workers, and nonpartnered workers, we find significant gender gaps in employment among white, high income, and married (particularly those with young children) workers, with women in these groups differentially transitioning to nonemployment. Gender gaps in employment for these groups rose early in 2020 and generally became smaller over time. However, we observe a persistent gender gap in employment among married workers with young children, for whom the gender differences in nonemployment persist in significance and size throughout the end of our study period in mid-2021.

We also find evidence of important heterogeneity on the intensive margin – hours worked. In particular, among those employed in February 2020, white women and married women with young children in the household were more likely to reduce their hours worked, particularly early in the pandemic, than their male counterparts. We also find directional evidence that Hispanic female workers were more likely to reduce their working hours than Hispanic men early in the pandemic, though our estimates are relatively imprecise.

While white women, married women (particularly those with young children in the household), and women in households with higher incomes experienced persistently larger reductions in employment during the pandemic than their male counterparts, we find little evidence that gender gaps in financial security increased along these dimensions. If anything, our estimates suggest that gender gaps in short-term financial stability decreased both overall and for these groups in particular during the pandemic. This is likely, in part, attributable to the governmental stimulus program. We find evidence that receiving an Economic Impact Payment differentially reduced women's financial fragility relative to men's. We also find essentially no evidence that employment shocks (job loss or reduced working hours) during the pandemic were more harmful for women than men on our measures of short-term financial stability. We also find directional evidence that women have disproportionately increased their belief that they will be able to eventually retire relative to men. We also find no gender differences in forecasted Social Security benefits.

Overall, while we find evidence that women suffered larger employment losses than men during the pandemic, consistent with prior research, our evidence suggests that the gender gap in employment was driven, at least in part, by women from traditionally more economically advantaged groups — white women, married women, and women in households with high incomes — leaving the workforce. We find little evidence that gender disparities in economic stability and retirement security grew as a result of the gender differences in employment, nor do we find significant differences in forecasted Social Security benefits for men and women. Collectively, our evidence is consistent with the possibility that gender difference in employment was driven in part

by relatively financially stable women voluntarily leaving the workforce, and that the stimulus helped offset possible increased gender disparities.

The remainder of the paper proceeds as follows. Section 2 briefly describes the data used for this study and presents summary statistics. In Sections 3 and 4, we conduct two sets of complementary analyses to examine gender differences in employment and financial outcomes following the onset of the pandemic. In Section 3, we use our biweekly data from UAS-COVID to finely trace out differences in employment and labor market shocks between men and women during the pandemic. In Section 4, we leverage our annual data to examine whether and how gender differences in employment shocks during the pandemic influenced financial security, accounting for gender differences prior to the onset of the pandemic. In Section 5, we generate two earnings forecasts — one solely using work outcomes prior to the pandemic, and the other using all available information until 2021 — to examine the pandemic's possible impacts on retirement security and Social Security benefits, and examine gender differences.

2. Data and sample characteristics

We draw our data from the Understanding America Study (UAS) panel. The UAS is a nationally representative, probability-based internet panel that longitudinally tracks a U.S. representative sample of more than 9,500 adults. Panel members are recruited exclusively through Address Based Sampling and receive a tablet and broadband access (and related training) if they do not have internet access. This mitigates selection problems facing convenience panels, where respondents are recruited from existing internet users. The UAS contains a very large set of background characteristics

for all panel members, including demographic (e.g., age, gender, race, education), financial (e.g., income, financial literacy), health (e.g., self-assessed health and a list of health conditions), personality traits (the big five), and cognition measures (e.g., number series, propositional analogies, picture vocabulary). For this project, we use low- and high-frequency longitudinal data from different surveys within the UAS.

Since 2018, more than 4,000 UAS panel members have completed annual surveys tracking their financial lives in detail as part of the U.S. Financial Health Pulse project. The third and fourth waves were fielded in late April/early May 2020 and 2021, shortly after the onset of, and a little more than a year into, the pandemic. These longitudinal data contain repeated measures of subjective financial well-being (particularly financial satisfaction) and numerous indicators of economic security and financial distress. These include, but are not limited to, employment and income shocks, spending and saving behavior, debt accumulation and levels, financial fragility (defined as the inability to cover a $400 emergency expense with a cash equivalent, Federal Reserve Board 2019), retirement saving behaviors, and financial stress.

We augment these data with additional UAS modules that measure respondents' knowledge about Social Security programs and benefits, and retirement intentions. Individuals, who have not already retired, are asked about the age at which they expect to retire, and those who have not yet claimed their Social Security retirement benefits report the age at which they intend to claim. Three waves of these surveys have been completed — one in 2015/2016, one in 2017/2018, and one that began in April 2020 and was rolled out on a staggered basis through mid-2022.

Since the early days of the COVID-19 pandemic, the UAS fielded the USC Understanding America Study COVID-19 tracking survey (UAS-COVID), collecting high-frequency data on attitudes toward COVID-19, behaviors and outcomes. The UAS-COVID tracking survey was conducted every two weeks between March 2020 and February 2021, and every four weeks between February 2021 and July 2021.

Table A.1 in the Appendix presents the summary statistics from the UAS-COVID subsample of respondents with ages between 25 and 69 years old in waves 1 to 31 (from March 2020 to July 2021) who were not retired before March 2020. The physical distancing measures put in place early in the pandemic to try to contain the increase in cases greatly affected employment, especially since March 2020. Therefore, to minimize issues of selection into the workforce, for the most part we focus on respondents who were employed in February 2020.

3. High frequency

In this section, we use our high-frequency data from UAS-COVID to finely trace out changes in gender differences during the pandemic in employment — both the extensive and intensive margins — and in financial fragility. The UAS-COVID surveys were fielded biweekly from March 2020 to February 2021 and monthly subsequently until July 2021

3.1. Approach

For our subsample of respondents employed in February 2020, we present gender differences in the evolution of employment outcomes and financial fragility from

March 2020 until July 2021 as measured by the coefficients corresponding to the interaction of gender with time in a logistic regression (Equation 1).

$$(1) \qquad \text{logit}(Y_{it}) = \alpha + \gamma_t + \phi_t \text{Female}_i + \varepsilon_i$$

We estimate this model for two outcomes Y_{it} : nonemployment and financial fragility. We track gender differences in nonemployment dynamics for (1) all those respondents who were working in February 2020 and (2) for the subsample who were working in February 2020 but were not employed at some point between March and April 2020 (whether due to unemployment, layoff, or exiting the workforce), when job losses were greatest. We also present the time evolution of these coefficients by race-ethnicity and household characteristics (whether married or living with a partner, children in the household, and household income).

We also explore whether the gender differences can be explained by observables by estimating logistic regressions of these outcomes using a set of controls (Equation 2).

$$(2) \qquad \text{logit}(Y_{it}) = \alpha + \gamma_t + \phi_t \text{Female}_i + \beta_1 X_i + \varepsilon_i$$

The controls X_i include: a quadratic function of age, lagged household income categories, educational attainment categories (less than high school, high school, or college), an indicator for married or living with a partner, and an indicator for whether the individual had the ability to work from home at beginning of the pandemic.

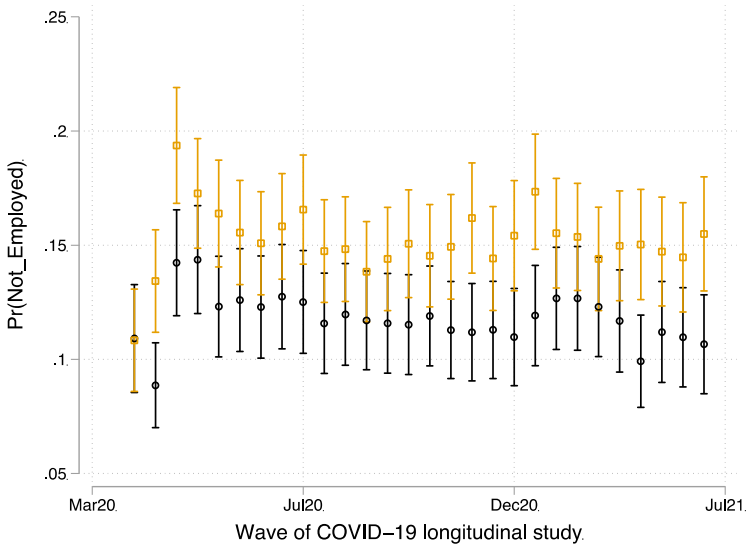
3.2 Results

We present the results by outcomes.

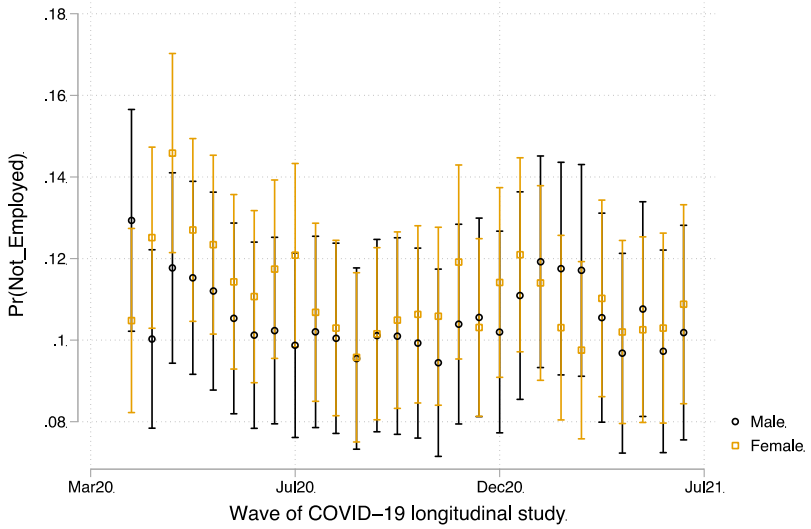
3.2.1. Nonemployment by gender

Figure 1 shows the probability of not being employed during each wave of the UAS-COVID survey by gender, with Panel A showing the unconditional probability and Panel B showing the probability controlling for covariates. The probability of not being employed was higher for female than male workers since the early April 2020 wave until July 2021. The unconditional gender gap (Panel A) is statistically significant at several points in time, including early in the pandemic (April and May 2020) as well as later (January and May 2021). These gender differences are smaller and become not statistically significant when controlling for age, marital status, household income, education, and ability to work remotely (Panel B).

Figure 1: Probability of not being employed during each wave of the UAS-COVID survey by gender



Panel A: Unconditional probability of nonemployment by gender and survey wave for respondents who were employed in February 2020.



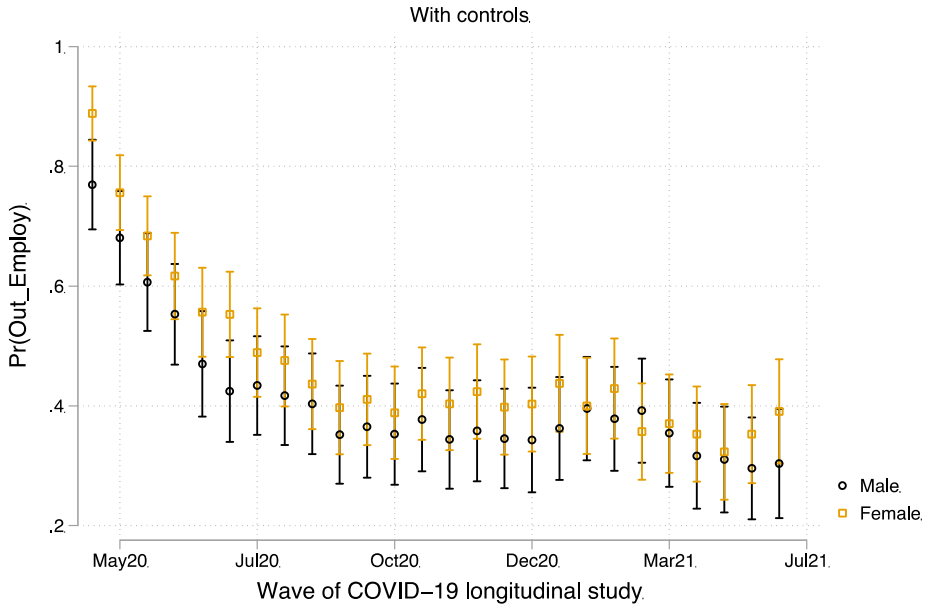
Panel B: Probability of nonemployment by gender and survey wave for respondents who were employed in February 2020, controlling for age, marital status, education, household income, work from home.

3.2.2 Gender differences in nonemployment by other characteristics

We now describe gender differences in employment dynamics for different subgroups, defined by early-pandemic employment outcomes, race and ethnicity, household income, and household composition (marital status and young children in the household).

We consider whether transitions to nonemployment may have affected genders differentially. We estimate, by gender, the evolution over time of the probability of remaining out of employment for each wave of the UAS-COVID survey, for those who were working in February 2020 but transitioned to nonemployment in March or April 2020. Figure 2 shows that, although women were directionally more likely to remain out of the workforce longer conditional on nonemployment, there are no statistically significant gender differences in the probability of nonemployment for those workers who transitioned out of employment by April 2020.

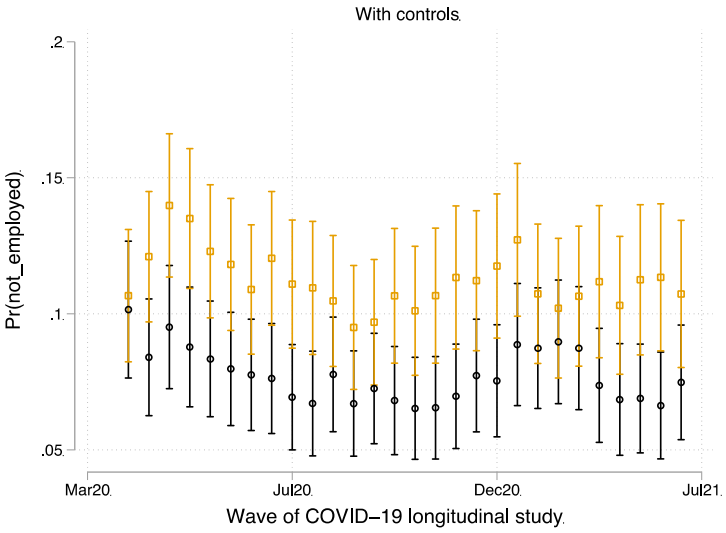
Figure 2: Probability of remaining or repeating nonemployment for those who transitioned out of employment by May 2020, during each wave of the UAS-COVID survey, by gender



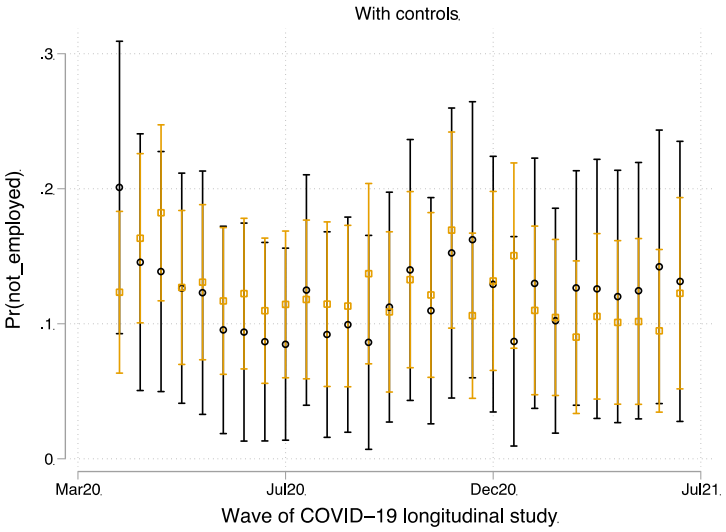
Note: Probability of nonemployment by gender and survey wave for respondents who were employed in February 2020 and transitioned out of employment in March or April 2020, controlling for age, marital status, education, household income, work from home.

Figure 3 shows the probabilities of not being employed during each wave of the UAS-COVID longitudinal survey by gender, race, and ethnicity accounting for covariates. While there are significant unconditional gender differences in nonemployment among white workers in May to June of 2020 and 2021, with white female workers being less likely to be employed than white male workers (not shown), when we control for our set of observable characteristics, the gender differences remain of similar size but are no longer statistically significant (Figure 3, Panel A). The unconditional gender differences for Black and Hispanic are small and not significant (not shown) and these results do not change qualitatively when controlling for observables (Panels B, C).

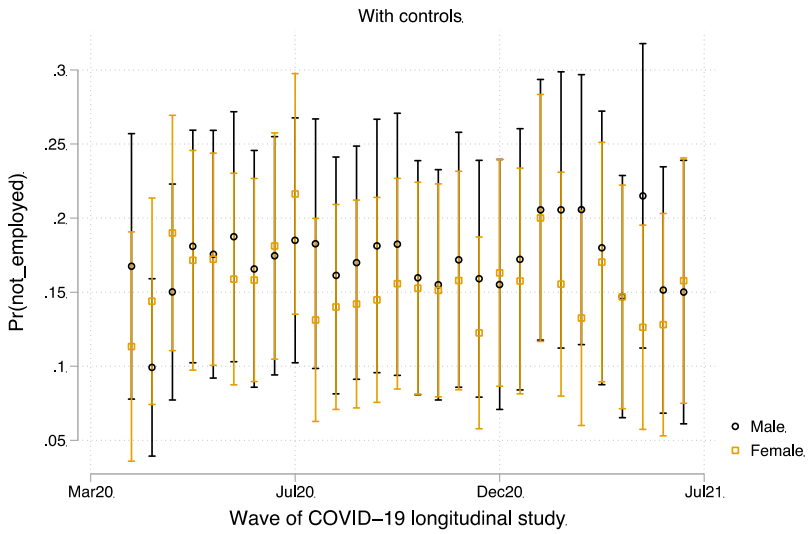
Figure 3: Probability of not being employed during each wave of the UAS-COVID survey by gender and race-ethnicity



(a) White, non-Hispanic



(b) Black, non-Hispanic

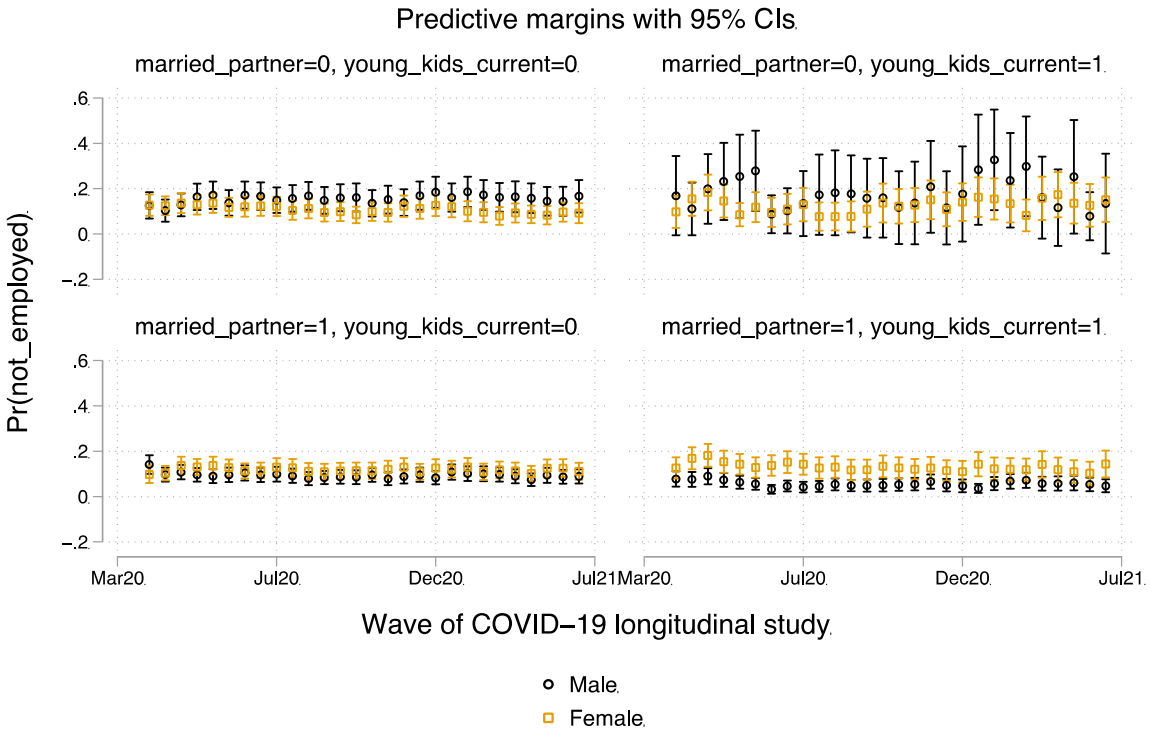


(c) Hispanic

Note: Probability of nonemployment by gender, race and ethnicity, and survey wave for respondents who were employed in February 2020, controlling for age, marital status, education, household income, work from home.

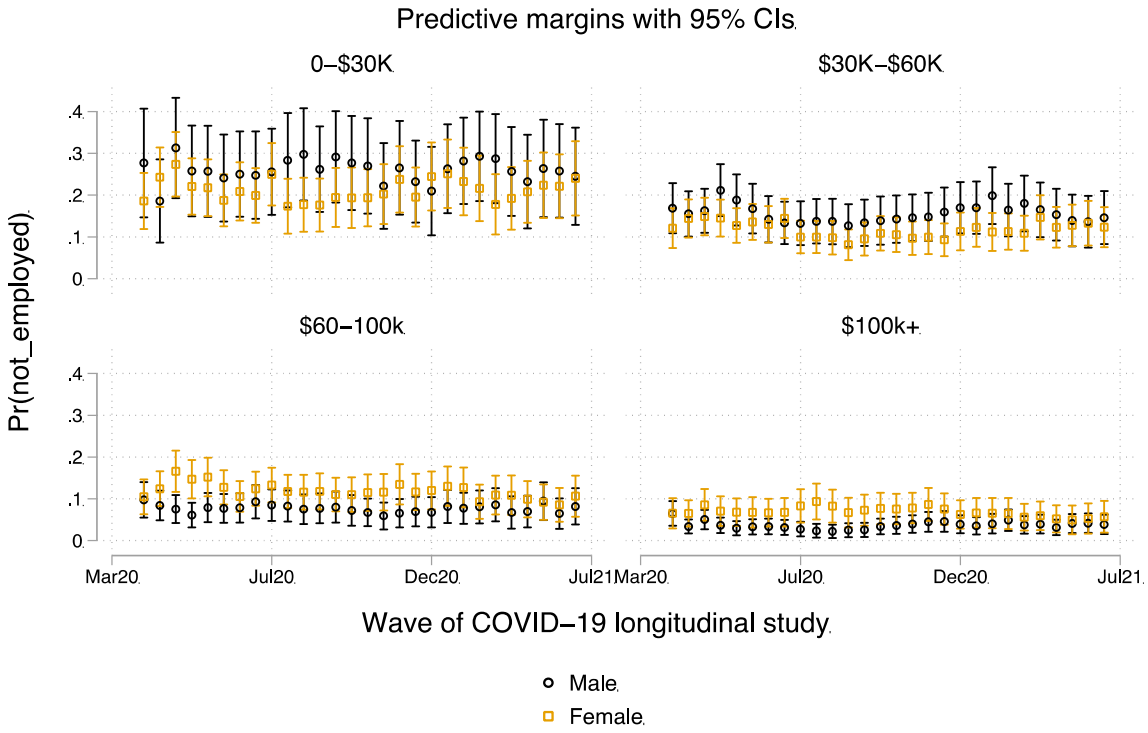
Figures 4 and 5 show, by gender, the evolution of the probability of nonemployment, conditional on controls, by marital status and presence of children ages 12 or younger in the household (Fig. 4) and by categories of household income (Fig. 5). We find that among nonmarried workers, as well as those in low-income households, the probability of nonemployment was higher for men than for women for most of the study period, though these differences are not statistically significant. However, among married workers — in particular those living with young children in the household — as well as higher-income households, female workers were significantly less likely to be employed during this time than men. These patterns are the same in specifications where covariates are absent (not shown).

Figure 4: Probability of nonemployment, conditional on controls, by marital status and young children in the household



Note: Probability of nonemployment by gender, household composition, and survey wave for respondents who were employed in February 2020, controlling for age, race and ethnicity, education, household income, work from home.

Figure 5: Probability of nonemployment, conditional on controls, by household income



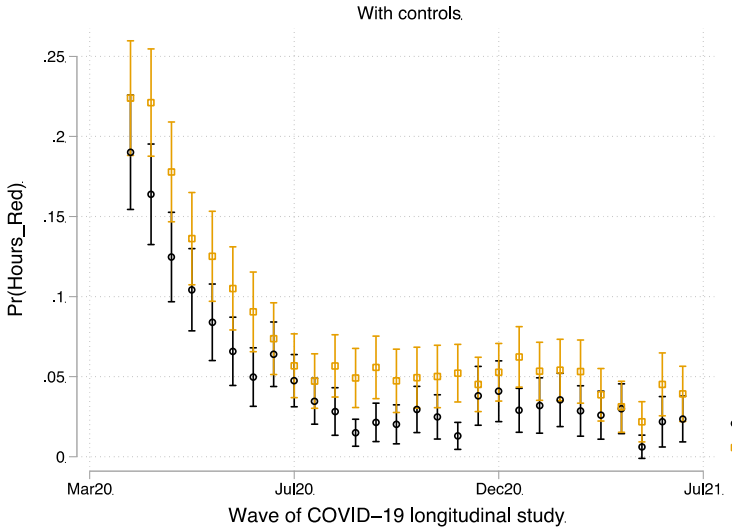
Note: Probability of nonemployment by gender, household income, and survey wave for respondents who were employed in February 2020, controlling for age, race and ethnicity, marital status, education, work from home.

Thus, gender differences in nonemployment rose early in 2020 among white workers, married workers (particularly those with young children in the household), and workers in higher-than average income households. These gender differences became smaller or not significant by 2021 for most groups, except married workers with young children, for whom the gender differences in nonemployment persist in significance and size throughout most of the study period.

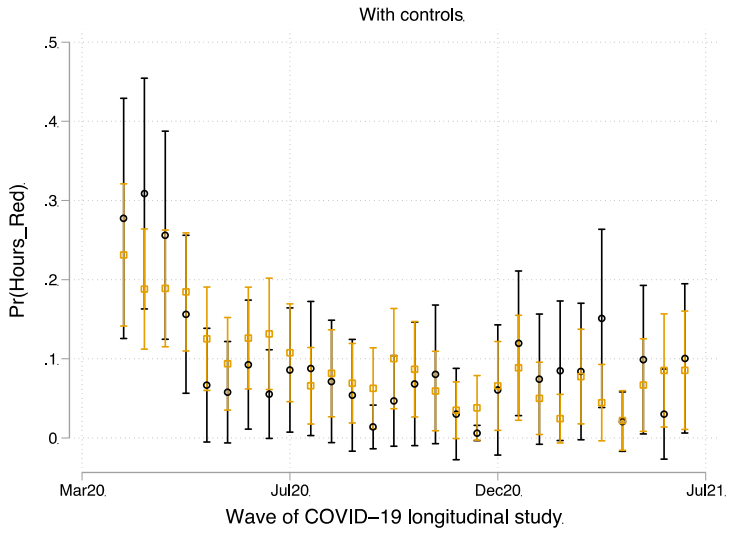
3.2.3 Changes in hours worked by gender

Figure 6 shows, by gender, the evolution over time of the probability of reducing working hours in each wave (relative to the previous wave) for the workers in our sample. For both genders, the likelihood of reducing work hours was significantly higher at the beginning of our study period than during late 2020 and 2021, with white workers seeing the sharpest decline during the first half of 2020 compared to slower declines for Blacks and Hispanics. There are marginally significant gender differences among white workers, with white female workers being more likely than their male counterparts to reduce their work hours early in 2020 and again in late 2020. We do not find significant gender differences along this margin for Black workers. Although there were almost no gender differences along the extensive margin for Hispanic workers, we see that Hispanic female workers were more likely to reduce their working hours than Hispanic men for the first six months of our data, although the differences are not statistically significant. Hispanic workers show larger gender differences in the probability of reducing working hours than among white workers, but they are less precisely estimated.

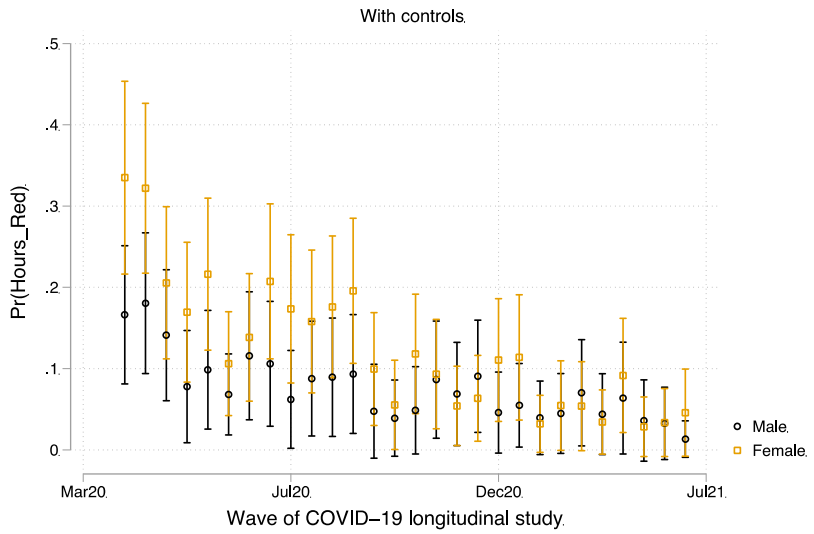
Figure 6: Probability of reducing working hours during each wave of the UAS-COVID survey by gender and race-ethnicity



(a) White, non-Hispanic



(b) Black, non-Hispanic

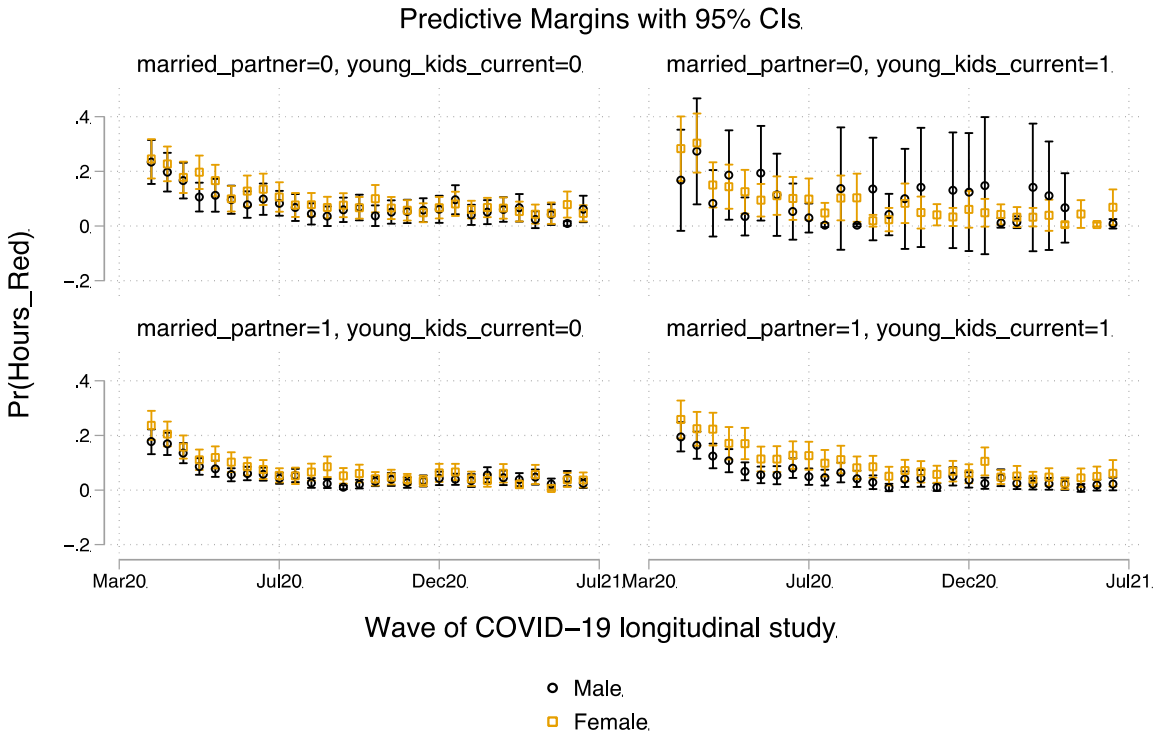


(c) Hispanic

Note: Probability of reducing work hours by gender, race and ethnicity, and survey wave for respondents who were employed in February 2020, controlling for age, marital status, education, household income, work from home.

Figure 7 shows, by gender and household composition, workers' probabilities of reducing labor supply on the intensive margin for each wave in our data. Married women are marginally significantly more likely to reduce their work hours than married men during 2020, with the gender differences being larger for two-adult households with young children. It is worth noting that married or partnered women living with young children present gender differences on both the intensive and extensive margin of their labor outcomes as this group was also more likely than their male counterparts to transition to nonemployment during the pandemic (Section 3.2.1).

Figure 7: Probability of reducing working hours during each wave of the UAS-COVID survey by gender conditional on controls, by marital status and young children in the household



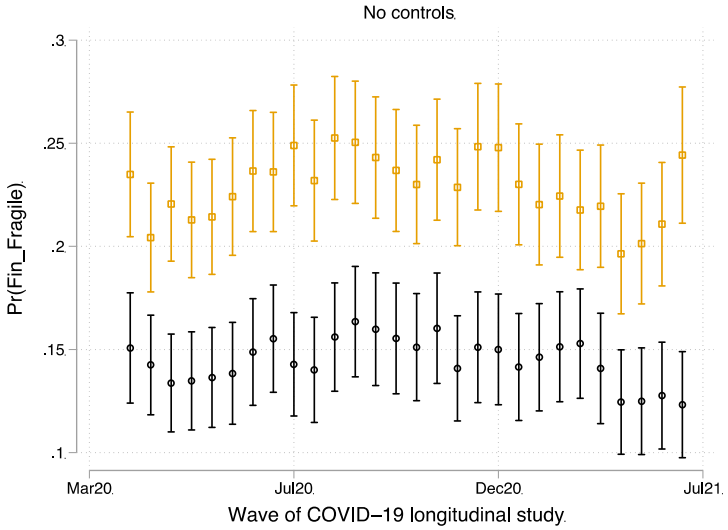
Note: Probability of reducing work hours by gender, household composition, and survey wave for respondents who were employed in February 2020, controlling for age, race and ethnicity, marital status, education, household income, work from home.

3.2.4 Financial well-being by gender

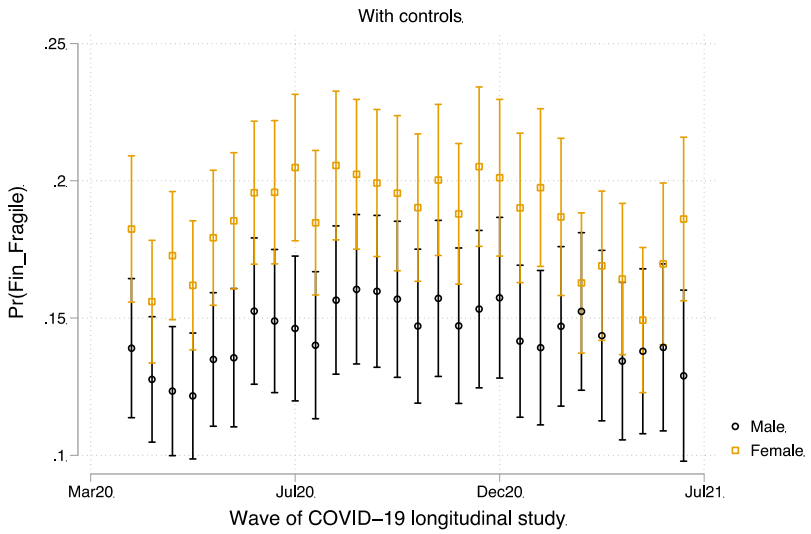
The observed gender differences in employment outcomes may have affected financial stability. Figure 8 presents the estimated gender differences in financial well-being using our measure of financial fragility as described above. In general, financial fragility decreased for both genders early in the pandemic relative to March 2020 levels and increased for both genders toward the end of 2020. Figure 8, Panel A shows there

are significant gender differences in this outcome, with women being more likely to report being financially fragile than men on several waves. However, most of these differences become not significant or only marginally significant when we control for observables in Figure 8, Panel B, and gender gaps in financial fragility appear to be declining for much of the sample period, particularly in early to mid-2021.

Figure 8: Probability of financial fragility by gender



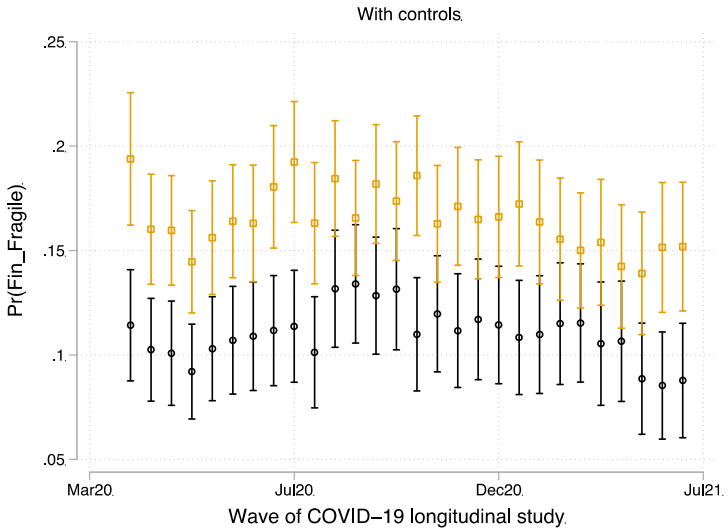
Panel A: Unconditional probability of not being able to cover a $400 emergency expense with cash or cash equivalent by gender and survey wave for respondents who were employed in February 2020.



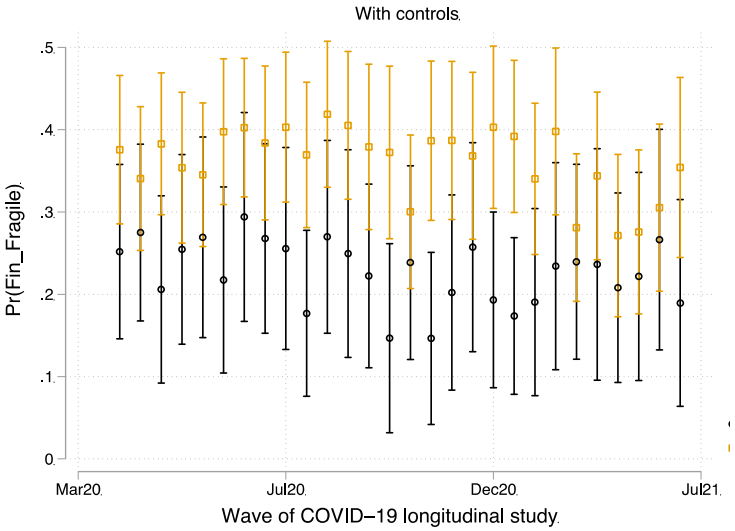
Panel B: Probability of not being able to cover a $400 emergency expense with cash or cash equivalent by gender and survey wave for respondents who were employed in February 2020, controlling for age, race and ethnicity, marital status, education, household income, work from home.

Figure 9 shows the probability of financial fragility by gender and race-ethnicity. White women are more likely to be financially fragile than white men throughout almost the entire study period, with the gender difference becoming smaller over time, particularly in 2021. Black women are more likely to be financially fragile than Black men, but for the most part these differences are not statistically significant. Gender differences among Black workers become larger and statistically significant in late 2020 and early 2021, and later decline. Among Hispanics, women are more likely to report financial fragility than men during 2020, with significant or marginally significant gender differences at several points of 2020. However, these gaps close over time and in 2021 there seem to be small or no gender differences in financial fragility for this group.

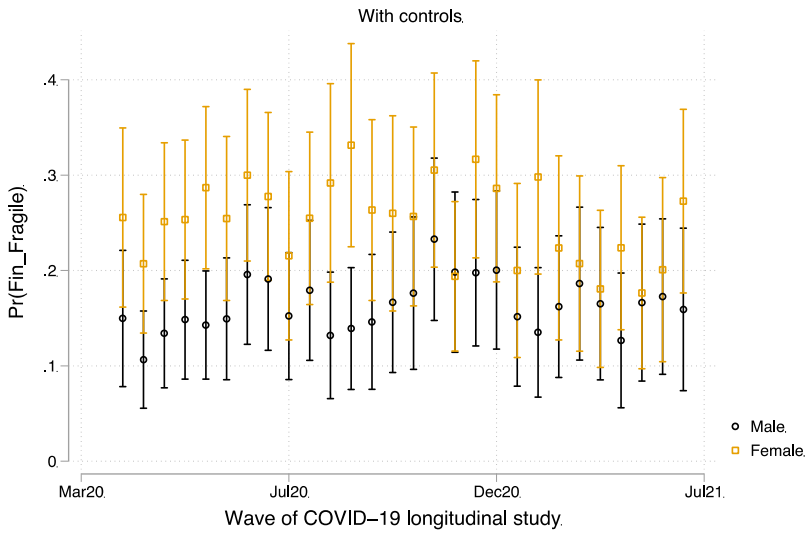
Figure 9: Probability of financial fragility during each wave of the UAS-COVID survey by gender and race-ethnicity



White, non-Hispanic



Black, non-Hispanic



Hispanic

Note: Unconditional probability of financial fragility by gender, race and ethnicity, and survey wave for respondents who were employed in February 2020.

Similarly to what happens for our employment outcomes, in most cases age, marital status, race and ethnicity, and household income also help explain gender differences. For the most part, women were more likely to be financially fragile than men during 2020, but the differences became smaller to null by 2021. This is surprising in light of the fact that before the pandemic women were more likely to report being financially fragile than men (Angrisani, Burke, and Kapteyn 2021). To understand the interaction of these phenomena, we conduct a low-frequency analysis using prepandemic survey data in the following section to account for prepandemic gender differences.

4. Low frequency

On average, women had lower financial security than men prior to the onset of the pandemic. In this section, we examine whether and how the differential labor market shocks experienced by women influenced their short-term financial well-being and future retirement and Social Security claiming intentions relative to men's.

4.1. Approach

To examine whether the pandemic has exacerbated preexisting gender differences in financial stability, we leverage data from our four annual Financial Health Pulse surveys described in Section 2, spanning April/May 2018 to April/May 2021. Particularly, from the sample analyzed in the previous section, we include respondents in our analysis sample if they completed both survey waves after the pandemic's onset and at least one survey wave prepandemic. This results in sample of 2,178 individuals who were employed in February 2020 and are observed in our annual data for at least three years. Demographic characteristics are broadly similar to those presented in Table A.1, though our analysis sample here is slightly older, whiter, and more likely to be female.[1]

We examine ordinary least squares specifications of the following form:

$$(3) \qquad Y_{it} = \alpha + \gamma_t * female_i + \gamma_t + \beta X_{it} + \varepsilon_{it}$$

where Y_{it} captures an outcome of interest for individual *i* in year *t*, γ_t denotes yearly fixed effects, $female_i$ is an indicator for gender, and X_{it} is a vector of financial and demographic characteristics. Our primary coefficients of interest are those corresponding to the period

[1] Summary statistics are available from the authors upon request.

by gender interaction — tracing out differences in financial stability between men and women pre- and post-pandemic and over time during the pandemic. We omit individual fixed effects to highlight gender differences, though estimates of the gendered impacts of the pandemic on financial stability remain qualitatively unchanged by their inclusion.

Our outcomes of interest include financial satisfaction (measured on a five-point scale from “Not at all satisfied” to “Extremely satisfied”), financial stress (a binary variable capturing whether respondents report that they are experiencing either a “moderate” or “high” amount of stress due to their financial situation), and financial fragility (an inability to cover an unexpected $400 shock solely with cash or a cash equivalent). In addition, we will examine the gendered impact of labor market interruptions by adding indicators for job loss (or reduced hours) and examining interactions with gender and period to investigate whether the increased level of unemployment experienced by women is also disproportionately more impactful for their short-term financial stability. Finally, we merge in data from additional UAS surveys to examine possible gender differences in changes to future retirement age and Social Security claiming age intentions.

4.2 Results

Table A.2 examines the pandemic’s gendered effects on financial satisfaction, financial stress, and financial fragility. On all three measures, we find that women in our sample are less financially secure than men, on average. In particular, women’s financial satisfaction is 0.09 points lower than men’s, women are 8.2 percentage points more likely to have high levels of financial stress, and women are 7.8 percentage points more likely to be financially fragile. However, women experienced disproportionately

large *improvements* in short-term financial stability after the pandemic's onset. In particular, shortly after the pandemic began in 2020, relative to men, women experienced a 0.07 point larger increase in financial satisfaction, a 5.3 percentage point larger reduction in the likelihood of having high financial stress, and a 3.3 percentage point larger reduction in the likelihood of being financially fragile (marginally significant). While women experienced improvements post-pandemic on all of these measures, we observe little difference in men's financial stability shortly after the pandemic began. Prior research has suggested that heterogeneous effects of the Economic Impact Payments contributed to the gendered impacts in financial security observed shortly after the pandemic's onset (Angrisani, Burke, and Kapteyn 2021).

We also find that women's short-term financial stability continued to improve differentially relative to men's through the pandemic's first year. While we do not observe statistically significant gender heterogeneity for financial satisfaction in 2021, women's likelihood of having high financial stress in 2021 reduced by 7.7 percentage points more than for men, and women experienced a 5.6 percentage point smaller increase in financial fragility in 2021 relative to prepandemic levels.[2]

Thus, while women experienced larger labor market shocks than men after the onset of the pandemic, and a slower recovery in employment levels, we find little evidence that, on average, gender disparities in short-term financial stability grew as a result. Instead, we find that women's short-term financial stability differentially improved relative to men's through the pandemic's first year. This may in part be attributable to

[2] Angrisani, Burke, and Kapteyn (2022) explores in depth the observed increase in financial fragility in 2021 and finds that it was driven by individuals with high prepandemic incomes and others who were less likely to have received the stimulus.

heterogeneous effects of the stimulus payments, which may have been more impactful for women and other individuals who were more likely to be economically at risk prepandemic (Angrisani, Burke, and Kapteyn 2021; Angrisani, Burke, and Kapteyn 2022).

Indeed, similar to evidence among the general population (Angrisani, Burke, and Kapteyn 2021; Angrisani, Burke, and Kapteyn 2022), we find that stimulus receipt is strongly associated with improved short-term financial stability among our sample, particularly early in the pandemic. Table A.3 shows that receipt of the first Economic Impact Payment (EIP) prior to responding to our survey in late April/early May 2020 was associated with a 0.11 point increase in financial satisfaction, a 6.7 percentage point reduction in financial stress, and a 5.8 percentage point reduction in financial fragility. We also observe that receipt of the third EIP in 2021 (shortly before our 2021 survey) was associated with a 4.6 percentage point reduction in financial fragility in that year. Additionally, we also find evidence that the receipt of the stimulus was particularly impactful for women's ability to absorb a financial shock early in the pandemic. Table A.4 documents that receipt of the first EIP was associated with a 7.3 percentage point larger reduction in financial fragility in 2020 for women than men. Our estimates of gender heterogeneity for stimulus receipt in 2021 are less precise.

4.2.1 Racial, Marital, and Income Heterogeneity

The previous section indicated that gender differences in employment outcomes during the pandemic were particularly sharp for white workers, married workers (particularly with young children in the household), and workers in higher-than average income households. To examine whether there were correspondingly large gender

differences in financial security for these groups, we augment Equation (1) by interacting our gender by year terms with these characteristics. Table A.5 examines differences in gender gaps in short-term financial stability by race. While we find directional evidence that gender gaps closed more in both 2020 and 2021 among minorities than among whites, differences are not statistically significant (though some point estimates are large). Also, despite persistently lower employment following the onset of the pandemic, our estimates suggest that white women's short-term financial security directionally improved more than white men's through the pandemic's first year.

Table A.6 examines differences in financial security by marital status. In both 2020 and 2021, unmarried women experienced larger improvements in short-term financial stability than married women, though our estimated differences are not statistically significant due to relatively low statistical precision. Moreover, though married women experienced larger employment shocks than married men during the pandemic, we do not find evidence that married women's financial stability declined after the onset of the pandemic relative to married men's. This, however, is not altogether unsurprising as financial stability is often determined at the household level.

Table A.7 restricts the sample to married individuals to examine whether married women with young kids experienced larger reductions in financial security than their counterparts without young kids. We find little evidence of differences in short-term financial stability between married women with and without young children early after the onset of the pandemic — point estimates are relatively small and not statistically significant. In 2021, married women with young kids experienced directionally smaller increases in financial security relative to prepandemic than married women without

young kids. While point estimates are relatively large, our estimates are imprecise and not statistically significant. We also see little evidence of differences in gender gaps for married individuals with young kids after the onset of the pandemic, despite the persistent reduction in employment among women in this group.

Similar to the above tables examining heterogeneity in gender gaps by race, marital status, and presence of young kids in the household, we find little evidence of increasing gender gaps among respondents in households with high incomes. Table A.8 examines heterogeneity based on whether respondents live in a household with an income of $60,000 or more per annum. Among higher earners, women's financial security directionally improved relative to men's in 2020 and 2021, though differences are small and not statistically significant. We observe considerably larger differences in improvements in short-term financial stability among women in lower income households relative to women in higher income households, though our estimates are imprecise and these relatively large point estimates are not statistically significantly different than zero.

Overall, while white women, married women (particularly those with young children in the household), and women in households with higher incomes experienced persistently larger reductions in employment during the pandemic than their male counterparts, we find little evidence that gender gaps in financial security increased along these dimensions. If anything, our estimates suggest that gender gaps in short-term financial stability decreased for these groups during the pandemic. It is worth noting that white women, married women, and women in households with higher incomes are relatively less financially fragile than minority women, unmarried women,

and women with lower incomes. This, coupled with little evidence of increased gender gaps in financial security among groups where we observe persistent impacts to women's labor supply, suggests that the employment effects may be driven, at least in part, by relatively financially stable women voluntarily leaving the workforce.

4.2.2 Heterogeneous effects of employment shocks

Next we examine whether the labor market disruptions experienced by women during the pandemic disproportionately impacted their short-term financial well-being. In particular, we examine whether women who indicated that they lost their job, had their hours cut, or worked less than expected during the pandemic experienced larger reductions in short-term financial stability than men who experienced a job shock.[3] Table A.9 presents the results. As one might expect, employment shocks are seriously detrimental to short-term financial stability. On average, losing one's job, having hours cut, or working less than expected is associated with a 0.48 point reduction in financial satisfaction, a 17 percentage point increase in likelihood of experiencing high financial stress, and a 14 percentage point increase in the likelihood of being financially fragile. However, we find little evidence that losing a job during the pandemic was more detrimental to financial stability than losing a job prior to the pandemic's onset. In fact, though most of our point estimates are not statistically significantly different than zero, all are relatively large and directionally suggest that losing a job during the pandemic was less harmful to one's short-term financial situation than prepandemic job loss, likely due to the governmental stimulus and enhanced unemployment insurance. More to the

[3] Our job shock measure is unavailable in the 2018 survey wave, slightly reducing our sample size.

point for our research question, we find little evidence that job loss during the pandemic was more harmful for women than men. None of our estimated heterogeneity is statistically significant, and all our estimates are either rather small or suggestive of lesser impacts on women than men. Thus, although our evidence suggests that women were more likely to suffer an employment shock, we do not find evidence that these shocks were differentially more harmful to their short-term financial situations than for men.

4.2.3. Retirement intentions

To examine gender differences in retirement expectations, we merge in data from three additional modules in the UAS that elicit Social Security retirement benefits claiming intentions and anticipated retirement age. These modules were fielded in 2015/2016, 2017/2018, and beginning in April 2020, after the onset of the pandemic, through June 2022. We group post-pandemic responses into two categories (1) responses in 2020, and (2) responses in 2021 or 2022. Approximately three-quarters of the post-pandemic responses were recorded in 2020.

The surveys ask respondents about the age at which they plan to "fully retire," allowing for the option of planning to never retire. The claiming intentions question elicits the age at which respondents plan to claim Social Security retirement benefits if they have not already claimed. Due to nonresponse (and prior claiming for the Social Security question), there is substantial missingness for both these questions. We winsorize intended retirement age responses at the 99th percentile (range 50 to 75) and claiming age responses at the 95th percentile (range 62 to 72, slightly above the latest possible claiming age).

Table A.10 examines gender differences in retirement and claiming intentions. Directionally, our estimates suggest that women have shifted their retirement expectations toward later retirement ages than men after the onset of the pandemic. For example, in 2021/22 women shifted their expected retirement ages 0.9 years later than men relative to prepandemic expectations. However, due to relatively small sample sizes, these differences are not statistically significant. We also find, however, some directional evidence that women have disproportionately reduced the likelihood they expect never to retire relative to men, by roughly 5 percentage points, in 2021/22 relative to before the pandemic began. Though again, this difference is not statistically significant. We find little evidence of gender heterogeneity in intended Social Security claiming ages, point estimates are relatively small and not statistically significantly different than zero.

5. Forecasted earnings and retirement security

The UAS includes information about retirement status, expected age at retirement, expected age to claim Social Security retirement benefits, and earnings history. Using the work and earnings history of UAS respondents, we follow Prados and Kapteyn (2019) and use data from the Panel Study of Income Dynamics between 1990 and 2015 to estimate earning profiles on a matched sample and forecast the expected labor earnings until retirement for a subsample of respondents who were UAS participants in 2016. For each respondent in this subsample, we forecast two series of future labor earnings (including 2022): A forecast using *prepandemic information*, i.e. only the labor market outcomes prior to 2020 and expected retirement age according to the prepandemic survey answers, and a forecast using *post-pandemic information* that

includes the realized labor market outcomes of 2020 and 2021 and the expected retirement age from our most recent survey.

Using these forecasts as input, along with the answers about expected age to claim Social Security retirement benefits, we forecast the expected amount of Social Security benefits following Prados and Kapteyn (2019). We produce two sets of forecasts: $FBenefits_{Pre}$ using the prepandemic information labor earnings forecast and claiming expectations, and another $FBenefits_{Post}$ using the information about earnings and claiming until 2021. Retirement age has been winsorized at the 99% level, while claiming age has been winsorized at the 95% level. Retirement benefits forecasted using current information could result different than benefits forecasted using prepandemic information due to changes in claiming age as well as changes in earnings flows.

We estimate the potentially differential impact of the pandemic across groups using a difference-in-differences design to compare realized versus forecasted outcomes for women with respect to men. We implement this estimation using a two-way fixed effects specification, given in Equation 4.

$$Y_{it} = \alpha_i + \beta Post_t + \gamma Male_i \times Post_t + \varepsilon_{it} \quad (4)$$

Where *i* indicates respondent, *t* ={*Pre,Post}* indicates if the information used for the forecast is prepandemic information (until 2019) or post-pandemic information (including up to 2021). *Post* is an indicator variable that takes value 0 when the forecasts correspond to prepandemic information, and that equals 1 when the forecasts correspond to post-pandemic information. We estimate this model for the forecasted average labor earnings between 2020 and 2021 and the forecasted Social Security

retirement benefits for the sample of respondents who were employed in February 2020. The coefficient of interest is γ, which reflects the differential update in forecast for men with respect to women.

Table A.11 in the Appendix shows the estimation results for earnings (Column 1) and retirement benefits (Column 3). The interaction term γ is not significant.

We further investigate if the impacts on earnings from the pandemic may be different across another dimension: those who transitioned to nonemployment early in the pandemic versus the rest of the workers. We use a similar approach (Equation 5), where NE_20_i equals 1 if worker *i* transitioned to nonemployment during 2020 and 0 if not.

$$(5) \qquad Y_{it} = \alpha_i + \beta Post_t + \gamma NE\_20_i \times Post_t + \varepsilon_{it}$$

Columns 2 and 4 of Table A.11 show the results for earnings and retirement benefits for the sample of respondents who were employed in February 2020. The estimation results indicate that the realized earnings and expected benefits *post-pandemic* would be lower for those who transitioned to nonemployment in 2020, with large and statistically significant effect on earnings but this does not translate to significant differences on expected retirement benefits.

6. Concluding discussion

We use high and low-frequency data to describe gender differences during the pandemic in employment and financial well-being. We find that gender differences in nonemployment arose early in 2020 among white workers, married workers (particularly those with young children in the household), and workers in higher-than average income households, with women in these groups more likely than men to be in

nonemployment, mainly through 2020. These gender differences became smaller or not significant by 2021 for most groups, except married workers with young children, for whom the gender differences in nonemployment persist in significance and size throughout most of the study period. We find small or null gender differences among racial and ethnic minority workers, low-income workers, or nonpartnered workers. In many cases, even when initially present, gender differences disappear when controlling for observables. There seems to be no significant gender differences in the evolution of employment for those who transitioned to nonemployment early in the pandemic. And although we do find this group fared worse in terms of earnings during 2020 and 2021, this does not impact their forecasted retirement benefits.

We find little evidence that gender disparities in short-term economic stability grew because of the gender differences in employment. Rather, our estimates suggest that gender gaps in short-term financial stability decreased over the first year of the pandemic, in part due heterogeneous effects from the stimulus. Our evidence underscores the importance of the stimulus in helping prevent widening gender gaps. Lastly, by comparing forecasted retirement benefits using prepandemic information to forecasts using current information, we find no significant gender differences in terms of changes in expected retirement benefits due to changes in earnings or in claiming age during the pandemic.

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Appendix

Table A.1: Descriptive statistics UAS-COVID, all existing survey waves

	Mean	StDev
Age	46.3	12.6
Male	48%	0.49
Married or Living with a Partner	69%	0.47
Less than high sc.	8.4%	0.27
High School	50%	0.5
Bachelor deg.	41%	0.49
Non-Hispanic white only	63%	0.48
Non-Hispanic Black only	14%	0.34
Other race (non-Hispanic)	5.5%	0.23
Hispanic	18%	0.38
Working	60%	0.48
Working in February 2020	70%	0.46
Can Work from Home (Mar'20)	40%	0.46
Young Children in HH (≤12yo)	33%	0.47
Observations per wave	6,204	

Table A.2: Gendered impacts on short-term financial stability

VARIABLES	(1) Financial Satisfaction	(2) High Financial Stress	(3) Financially Fragile
2021	0.210***	-0.102***	0.090***
	(0.024)	(0.015)	(0.015)
2021 * Female	0.051	-0.077***	-0.056***
	(0.032)	(0.020)	(0.021)
2020	0.033	-0.025*	-0.005
	(0.023)	(0.015)	(0.013)
2020 * Female	0.071**	-0.053***	-0.033*
	(0.032)	(0.021)	(0.018)
Age	0.002**	-0.004***	-0.003***
	(0.001)	(0.001)	(0.001)
Female	-0.093***	0.082***	0.078***
	(0.032)	(0.018)	(0.017)
White	0.091***	0.040**	-0.071***
	(0.035)	(0.019)	(0.019)
Married	0.141***	-0.002	-0.045***
	(0.030)	(0.016)	(0.016)
Bachelors	0.063**	0.024	-0.093***
	(0.029)	(0.016)	(0.015)
Working	0.212***	-0.092***	-0.045**
	(0.041)	(0.020)	(0.019)
Poor Health	-0.470***	0.160***	0.130***
	(0.038)	(0.020)	(0.021)
$30K-$60K	0.134***	-0.058**	-0.109***
	(0.047)	(0.024)	(0.024)
$60-100k	0.361***	-0.140***	-0.241***
	(0.049)	(0.025)	(0.025)
$100k+	0.638***	-0.206***	-0.332***
	(0.051)	(0.026)	(0.026)
Constant	2.346***	0.686***	0.784***
	(0.085)	(0.044)	(0.043)
Observations	8,240	8,239	8,225
R-squared	0.194	0.076	0.149

Notes: Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table A.3: Impacts of the stimulus on short-term financial stability

VARIABLES	(1) Financial Satisfaction	(2) High Financial Stress	(3) Financially Fragile
2021	0.205***	-0.136***	0.096***
	(0.034)	(0.020)	(0.020)
Last EIP * 2021	0.039	-0.014	-0.046**
	(0.036)	(0.022)	(0.023)
Got Last EIP	-0.154***	-0.014	0.023
	(0.038)	(0.021)	(0.018)
2020	0.005	-0.017	0.011
	(0.025)	(0.015)	(0.013)
First EIP * 2020	0.114***	-0.067***	-0.058***
	(0.030)	(0.019)	(0.017)
Got First EIP	-0.029	0.015	0.045***
	(0.031)	(0.017)	(0.016)
Constant	2.445***	0.714***	0.742***
	(0.093)	(0.048)	(0.047)
Includes Covariates	Y	Y	Y
Observations	8,095	8,094	8,091
R-squared	0.198	0.076	0.148

Notes: Got First EIP and Got Last EIP are indicator variables capturing whether a respondent received the first or third stimulus payment, respectively. Each specification also includes controls for age, gender, race, marital status, education, employment, health status, and household income. Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table A.4: Gendered impacts of the stimulus on short-term financial stability

VARIABLES	(1) Financial Satisfaction	(2) High Financial Stress	(3) Financially Fragile
2021	0.130***	-0.089***	0.120***
	(0.047)	(0.030)	(0.027)
2021 * Last EIP * Female	-0.131*	0.021	-0.004
	(0.072)	(0.045)	(0.045)
Last EIP * 2021	0.105**	-0.021	-0.041
	(0.051)	(0.033)	(0.031)
Got Last EIP	-0.145***	-0.056*	0.016
	(0.054)	(0.030)	(0.024)
2020	-0.035	0.021	0.004
	(0.035)	(0.022)	(0.018)
2020 * First EIP * Female	-0.010	0.031	-0.073**
	(0.059)	(0.038)	(0.033)
First EIP * 2020	0.118***	-0.082***	-0.017
	(0.042)	(0.028)	(0.024)
Got First EIP	-0.029	0.013	0.035
	(0.044)	(0.024)	(0.023)
Constant	2.453***	0.730***	0.741***
	(0.100)	(0.051)	(0.048)
Observations	8,095	8,094	8,091
R-squared	0.199	0.079	0.149

Notes: Got First EIP and Got Last EIP are indicator variables capturing whether a respondent received the first or third stimulus payment, respectively. Each specification also includes all double interactions for year * stimulus receipt * female as well as includes controls for age, gender, race, marital status, education, employment, health status, and household income. Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table A.5: Gendered impacts on short-term financial stability, race

VARIABLES	(1) Financial Satisfaction	(2) High Financial Stress	(3) Financially Fragile
2021	0.165**	-0.181***	0.106**
	(0.074)	(0.044)	(0.048)
2021 * Female * White	-0.036	-0.073	0.067
	(0.108)	(0.062)	(0.065)
2021 * Female	0.087	-0.016	-0.111*
	(0.098)	(0.056)	(0.060)
2021 * White	0.041	0.098**	-0.016
	(0.081)	(0.048)	(0.051)
2020	-0.087	-0.052	-0.008
	(0.080)	(0.047)	(0.043)
2020 * Female * White	-0.157	0.011	0.021
	(0.113)	(0.066)	(0.061)
2020 * Female	0.205**	-0.060	-0.051
	(0.102)	(0.060)	(0.055)
2020 * White	0.141	0.032	0.005
	(0.087)	(0.051)	(0.046)
Female * White	0.032	0.080*	-0.043
	(0.069)	(0.041)	(0.037)
Age	0.001	-0.003***	-0.002***
	(0.001)	(0.000)	(0.000)
Female	-0.115*	0.013	0.111***
	(0.063)	(0.038)	(0.034)
White	0.052	-0.033	-0.056*
	(0.053)	(0.032)	(0.029)
Married	0.141***	-0.002	-0.045***
	(0.019)	(0.011)	(0.011)
Bachelors	0.053***	0.028**	-0.091***
	(0.019)	(0.011)	(0.011)
Working	0.287***	-0.114***	-0.063***
	(0.034)	(0.018)	(0.017)
Retired	0.442***	-0.125***	-0.108***
	(0.047)	(0.026)	(0.026)
Poor Health	-0.464***	0.159***	0.129***
	(0.030)	(0.017)	(0.017)
$30K-$60K	0.128***	-0.057***	-0.106***
	(0.033)	(0.019)	(0.018)
$60-100k	0.358***	-0.141***	-0.239***
	(0.034)	(0.019)	(0.019)
$100k+	0.641***	-0.209***	-0.332***
	(0.035)	(0.019)	(0.019)
Constant	2.390***	0.745***	0.767***
	(0.073)	(0.042)	(0.039)
Observations	8,240	8,239	8,225
R-squared	0.202	0.080	0.151

Notes: Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table A.6: Gendered impacts on short-term financial stability, marital status

VARIABLES	(1) Financial Satisfaction	(2) High Financial Stress	(3) Financially Fragile
2021	0.173***	-0.093***	0.065*
	(0.058)	(0.034)	(0.036)
2021 * Married * Fem	-0.055	0.036	0.042
	(0.089)	(0.051)	(0.053)
2021 * Female	0.092	-0.099**	-0.073*
	(0.071)	(0.042)	(0.044)
2021 * Married	0.037	-0.009	0.038
	(0.068)	(0.040)	(0.041)
2020	-0.007	-0.011	0.020
	(0.060)	(0.036)	(0.035)
2020 * Married * Fem	-0.042	0.083	0.053
	(0.091)	(0.055)	(0.051)
2020 * Female	0.108	-0.102**	-0.068
	(0.074)	(0.044)	(0.043)
2020 * Married	0.053	-0.019	-0.033
	(0.070)	(0.042)	(0.039)
Married * Fem	0.005	-0.048	-0.010
	(0.055)	(0.033)	(0.030)
Age	0.000	-0.003***	-0.002***
	(0.001)	(0.000)	(0.000)
Female	-0.092**	0.109***	0.080***
	(0.045)	(0.027)	(0.025)
White	0.089***	0.040***	-0.070***
	(0.023)	(0.013)	(0.013)
Married	0.130***	0.015	-0.056**
	(0.043)	(0.026)	(0.024)
Bachelors	0.053***	0.027**	-0.090***
	(0.019)	(0.011)	(0.011)
Working	0.286***	-0.114***	-0.063***
	(0.034)	(0.018)	(0.017)
Retired	0.443***	-0.127***	-0.108***
	(0.047)	(0.026)	(0.026)
Poor Health	-0.464***	0.159***	0.130***
	(0.030)	(0.017)	(0.017)
$30K-$60K	0.128***	-0.055***	-0.106***
	(0.033)	(0.019)	(0.018)
$60-100k	0.357***	-0.138***	-0.239***
	(0.034)	(0.019)	(0.019)
$100k+	0.640***	-0.206***	-0.332***
	(0.035)	(0.019)	(0.019)
Constant	2.370***	0.671***	0.785***
	(0.065)	(0.037)	(0.035)
Observations	8,240	8,239	8,225
R-squared	0.202	0.079	0.151

Notes: Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table A.7: Gendered impacts on short-term financial stability, young children in household

VARIABLES	(1) Financial Satisfaction	(2) High Financial Stress	(3) Financially Fragile
2021	0.206***	-0.093***	0.136***
	(0.043)	(0.025)	(0.026)
2021 * Kids * Female	-0.074	-0.037	0.079
	(0.108)	(0.061)	(0.062)
2021 * Female	0.070	-0.046	-0.063
	(0.068)	(0.038)	(0.039)
2021 * Kids	0.010	-0.013	-0.073*
	(0.073)	(0.042)	(0.041)
2020	0.013	-0.017	0.015
	(0.046)	(0.028)	(0.023)
2020 * Kids * Female	0.018	0.054	0.004
	(0.109)	(0.065)	(0.057)
2020 * Female	0.054	-0.039	-0.015
	(0.070)	(0.041)	(0.037)
2020 * Kids	0.085	-0.028	-0.068*
	(0.074)	(0.045)	(0.037)
Kids * Female	0.074	-0.060	0.001
	(0.065)	(0.039)	(0.035)
Kids	-0.056	0.041	0.024
	(0.048)	(0.029)	(0.024)
Age	-0.003**	-0.003***	-0.003***
	(0.001)	(0.001)	(0.001)
Female	-0.123***	0.083***	0.068***
	(0.041)	(0.025)	(0.022)
White	0.129***	0.059***	-0.052***
	(0.032)	(0.018)	(0.018)
Bachelors	0.069***	0.024*	-0.072***
	(0.024)	(0.014)	(0.013)
Working	0.242***	-0.104***	-0.063***
	(0.045)	(0.024)	(0.023)
Retired	0.505***	-0.161***	-0.148***
	(0.059)	(0.032)	(0.031)
Poor Health	-0.457***	0.160***	0.122***
	(0.040)	(0.024)	(0.023)
$30K-$60K	0.086	-0.022	-0.092***
	(0.055)	(0.030)	(0.030)
$60-100k	0.341***	-0.152***	-0.249***
	(0.053)	(0.029)	(0.028)
$100k+	0.645***	-0.220***	-0.340***
	(0.053)	(0.029)	(0.028)
Constant	2.682***	0.651***	0.723***
	(0.099)	(0.055)	(0.054)
Observations	5,055	5,054	5,048
R-squared	0.175	0.080	0.130

Notes: Sample is restricted to married respondents. Robust standard errors in parentheses.

*** p<0.01, ** p<0.05, * p<0.1.

Table A.8: Gendered impacts on short-term financial stability, household income

VARIABLES	(1) Financial Satisfaction	(2) High Financial Stress	(3) Financially Fragile
2021	0.208***	-0.065*	0.064*
	(0.060)	(0.036)	(0.037)
2021 * > $60K * Female	-0.082	0.069	0.063
	(0.091)	(0.053)	(0.054)
2021 * Female	0.104	-0.125***	-0.088*
	(0.076)	(0.044)	(0.045)
2021 * HHI > $60K	-0.014	-0.046	0.040
	(0.069)	(0.041)	(0.042)
2020	-0.034	-0.027	0.022
	(0.062)	(0.037)	(0.036)
2020 * > $60K * Female	-0.110	0.082	0.063
	(0.093)	(0.055)	(0.052)
2020 * Female	0.153**	-0.101**	-0.075*
	(0.078)	(0.045)	(0.045)
2020 * HHI > $60K	0.088	0.004	-0.035
	(0.072)	(0.043)	(0.040)
HHI > $60K * Female	-0.044	-0.008	-0.008
	(0.055)	(0.032)	(0.030)
Age	0.000	-0.003***	-0.002***
	(0.001)	(0.000)	(0.000)
Female	-0.059	0.083***	0.079***
	(0.045)	(0.026)	(0.026)
White	0.092***	0.039***	-0.072***
	(0.023)	(0.013)	(0.013)
Married	0.143***	-0.003	-0.046***
	(0.019)	(0.011)	(0.011)
Bachelors	0.054***	0.027**	-0.091***
	(0.019)	(0.011)	(0.011)
Working	0.284***	-0.112***	-0.063***
	(0.034)	(0.018)	(0.017)
Retired	0.445***	-0.127***	-0.107***
	(0.047)	(0.026)	(0.026)
Poor Health	-0.465***	0.159***	0.129***
	(0.030)	(0.017)	(0.017)
$30K-$60K	0.131***	-0.056***	-0.108***
	(0.033)	(0.019)	(0.018)
$60-100k	0.397***	-0.147***	-0.256***
	(0.050)	(0.029)	(0.028)
$100k+	0.677***	-0.214***	-0.349***
	(0.051)	(0.029)	(0.028)
Constant	2.335***	0.688***	0.791***
	(0.065)	(0.037)	(0.036)
Observations	8,240	8,239	8,225
R-squared	0.203	0.080	0.152

Notes: Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table A.9: Gendered impacts of employment shocks during the pandemic

VARIABLES	(1) Financial Satisfaction	(2) High Financial Stress	(3) Financially Fragile
2021	0.163***	-0.074***	0.112***
	(0.030)	(0.018)	(0.017)
2021 * Female	0.085**	-0.077***	-0.072***
	(0.039)	(0.025)	(0.025)
2021 * Lose Job	0.260**	-0.075	-0.094
	(0.109)	(0.060)	(0.059)
2021 * Female * Lose Job	-0.039	0.024	0.025
	(0.141)	(0.078)	(0.076)
2020	0.064**	-0.004	0.004
	(0.030)	(0.019)	(0.017)
2020 * Female	0.091**	-0.070***	-0.044*
	(0.042)	(0.026)	(0.024)
2020 * Lose Job	0.079	-0.074	-0.078
	(0.092)	(0.056)	(0.053)
2020 * Female * Lose Job	0.089	0.046	0.015
	(0.122)	(0.072)	(0.068)
Lose Job/Hrs Cut	-0.479***	0.169***	0.138***
	(0.081)	(0.047)	(0.044)
Female * Lose Job	-0.008	0.014	-0.021
	(0.107)	(0.060)	(0.057)
Age	0.001	-0.003***	-0.002***
	(0.001)	(0.001)	(0.001)
Female	-0.092**	0.075***	0.082***
	(0.038)	(0.023)	(0.021)
White	0.091**	0.043**	-0.073***
	(0.035)	(0.019)	(0.020)
Married	0.148***	0.007	-0.042**
	(0.030)	(0.017)	(0.017)
Bachelors	0.055*	0.038**	-0.089***
	(0.030)	(0.017)	(0.016)
Working	0.190***	-0.074***	-0.041*
	(0.045)	(0.024)	(0.023)
Retired	0.414***	-0.096***	-0.101***
	(0.065)	(0.035)	(0.034)
Poor Health	-0.444***	0.146***	0.123***
	(0.040)	(0.022)	(0.022)
$30K-$60K	0.099**	-0.042*	-0.100***
	(0.049)	(0.026)	(0.027)
$60-100k	0.329***	-0.125***	-0.239***
	(0.050)	(0.026)	(0.027)
$100k+	0.588***	-0.179***	-0.320***
	(0.053)	(0.028)	(0.028)
Constant	2.500***	0.588***	0.732***
	(0.090)	(0.049)	(0.048)
Observations	6,301	6,300	6,290
R-squared	0.226	0.084	0.150

Notes: Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table A.10: Gendered differences in retirement expectations

VARIABLES	(1) Retirement age	(2) Never retire	(3) Claim Age
2020	-0.444*	-0.033**	0.239
	(0.268)	(0.016)	(0.160)
2020 * Female	0.326	-0.004	-0.033
	(0.360)	(0.021)	(0.224)
2021/22	-0.736	-0.017	0.210
	(0.546)	(0.030)	(0.314)
2021/22 * Female	0.887	-0.051	0.241
	(0.709)	(0.036)	(0.436)
Age	0.116***	-0.000	0.024***
	(0.008)	(0.000)	(0.005)
Female	-0.243	-0.028**	0.176
	(0.210)	(0.013)	(0.126)
White	0.428*	0.045***	0.489***
	(0.257)	(0.014)	(0.147)
Married	-0.220	-0.014	0.051
	(0.183)	(0.011)	(0.114)
Bachelors	-0.035	-0.002	0.803***
	(0.180)	(0.011)	(0.109)
Working	0.173	0.045***	0.492**
	(0.375)	(0.017)	(0.212)
Retired	-3.012***	-0.000	-1.099***
	(0.680)	(0.033)	(0.403)
Poor Health	0.080	0.031	-0.354
	(0.665)	(0.038)	(0.322)
$30K-$60K	-0.439	-0.032*	-0.103
	(0.314)	(0.018)	(0.200)
$60-100k	-0.741**	-0.078***	-0.037
	(0.318)	(0.018)	(0.203)
$100k+	-1.523***	-0.119***	0.319
	(0.332)	(0.019)	(0.210)
Constant	59.893***	0.187***	63.635***
	(0.603)	(0.030)	(0.337)
Observations	2,977	5,566	3,034
R-squared	0.089	0.020	0.052

Notes: Retirement age has been winsorized at the 99% level, while claiming age has been winsorized at the 95% level. Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table A.11: Estimated interaction coefficients of differential impact on earnings and expected retirement benefits by subgroups, two-way fixed effects estimation

	Earnings		SS Retirement Benefits	
	(1)	**(2)**	**(3)**	**(4)**
Male X Post	-1,163.6		-16.1	
	(6,039)		(19.26)	
Post X Nonemployment in 2020		-23,786***		-7.7
		(5,164)		(19.1)
Number of observations	2,338	2,322	4,279	4,247
R^2within	0.051	0.148	0.005	0.004

Note: Estimation results for full sample employed in February 2020. Time effects and individual fixed effects are included. *Post* =1 indicates forecast corresponds to current information. *Post*= 0 indicates forecast corresponds to prepandemic information. *Nonemployment in 2020 indicates* transitioning to nonemployment after February 2020. Robust standard errors in parenthesis. *** p<0.01, ** p<0.05, * p<0.1.