Andrea Bonfatti, Greta Pesaresi, Guglielmo Weber
and Nancy Zambon

21 How the first wave of the pandemic affected household finances

Key points

– During the first wave of the COVID-19 pandemic, individuals past retirement age were less likely than working-age individuals to be in financial distress, which suggests that the European public pension systems successfully protected older individuals.
– Households who were experiencing difficulties before the pandemic were more likely to be in financial distress during the first wave of the pandemic, which highlights persistency of having difficulties making ends meet.
– The ability to make ends meet of households who suffered income losses during the pandemic worsened more than the ability to make ends meet of households who suffered income losses in the two year-period before the pandemic.

1 Introduction

The outbreak of COVID-19 was a dramatic shock that affected the lives and the health of most individuals, and the economy in general. Lockdowns and other restrictions were imposed in many countries with the aim of reducing the spread of the virus. These measures successfully controlled the spread of the virus during the first wave of the pandemic, but they also had important economic consequences that were unevenly distributed across the population.

In this chapter, we examine the impact of the first wave of the pandemic on the finances of European and Israeli households, investigating which factors increased their levels of financial hardship, and which factors had protective effects. To answer our research question, we constructed a financial distress indicator that captures income losses, difficulties making ends meet, and the postponement of payments. We then investigated the relationship of this indicator with various socio-demographic, economic, and employment indicators.

We find that the pandemic exacerbated economic inequalities in all of the analysed countries. This result is not surprising, because less educated and lower paid workers were more vulnerable to income losses and layoffs (ILO, 2020; Stiglitz, 2020), while the option of working from home was mainly available to better paid and better educated workers (Deaton, 2021). The impact of the COVID-19 pandemic also depended on country characteristics (Fana, Torrejón Pérez and Fernández-

https://doi.org/10.1515/9783111135908-021

Macías, 2020), as countries that relied on service activities, such as Mediterranean countries, were more likely to suffer. It is of critical importance to understand the economic and social costs of the COVID-19 pandemic in order to better target ad hoc policies and to prepare for future pandemics.

One of our most relevant results is that individuals past retirement age were less likely to be in financial distress or to face increased financial difficulties. This finding confirms that the European public pension systems successfully protected older individuals during the pandemic.

The next section describes the data used in the empirical analysis. The following section illustrates the empirical specification and the main results. The last section concludes.

2 Data and variables

We use data on 30,069 households who participated in the first wave of the SHARE Corona survey. The sample includes respondents who provided valid information on the variables we use in our analysis, as well as respondents who failed to report their income. For the missing income variables, we use the average of five multiple imputations. Of the households in our sample, 38.74% were single households and 61.26% were couple households. The average household size was 2.15 (standard deviation 1.07), and the majority of the respondents had a medium-low level of education.

We construct a comprehensive indicator, the Financial Distress Indicator (FDI), to measure the severity of the impact of the first wave of the pandemic on households. The FDI score ranges from zero to three, and is the sum of the following three dummy variables:

– difficulties making ends meet, which takes the value of one if the household reported being able to make ends meet with some or great difficulties;
– postponed regular payments, which takes the value of one if the household reported the need to postpone regular payments, such as rent, mortgage, loan, or utility payments (conditional on experiencing difficulties making ends meet); and
– income losses during the pandemic, which takes the value of one if the household's lowest level of monthly income was lower during the first wave of the pandemic than it was before the pandemic (by 5% or more).

Table 1 reports the descriptive statistics of the three variables that compose the FDI. In our sample, 30.40% of households reported having difficulties making ends meet, and, among those, 10.24% reported having to postpone regular payments. On average, 15% of households experienced an income loss during the first wave of the pandemic. However, the results clearly show that working-age households were more likely to have incurred income losses, as the share of households in which at least one member was younger than age 65 who experienced income losses was almost three times larger than the share of households in which both members were older than age 65.

Table 1: Descriptive statistics (%).

Variables	Mean	SD	N
Difficulties making ends meet	30.40	46.00	30,069
Postponed payments	10.24	30.32	10,272
Income loss	15.00	35.70	30,069
At least one HH member under age 65	21.93	41.38	8,858
All HH members aged 65+	8.99	28.60	21,211

Notes: The table shows household descriptive statistics (mean, standard deviation, and number of observations), weighted using calibrated cross-sectional household weights, of the economic outcomes of interest in the first wave of the SHARE Corona survey.
Source: SHARE Corona (W1), release 8.0.0.

Figure 1 presents the distribution of FDI across the 28 countries in our sample. The figure highlights different patterns. Households in the Nordic countries, and in the Czech Republic, Germany, and Luxembourg, appeared to be in less financial distress. At the other extreme, households in Hungary, Bulgaria, Greece, and Cyprus were more likely to report experiencing some or high levels of financial distress. These differences may be due to the timing of the first wave of the pandemic across countries, since the interviews were (mostly) conducted in June-August 2020, when some countries had not yet been hit by the first wave of the COVID-19 pandemic, or had not yet implemented mobility restrictions.

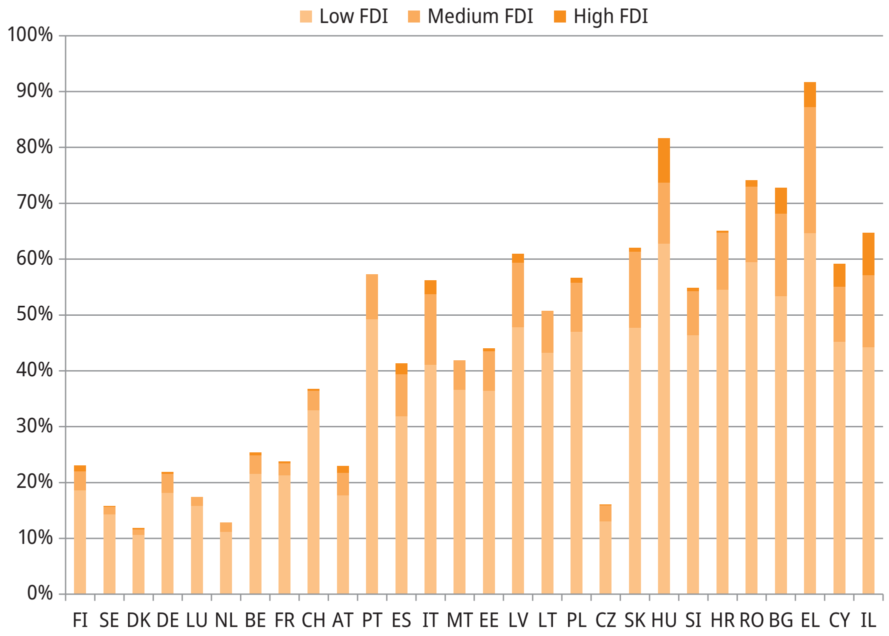

Figure 1: Financial distress indicator (FDI) by country.
Note: N = 30,069, weighted data.
Source: SHARE Corona (W1), release 8.0.0.

Figure 2 groups households according to their composition and age, and presents the respective distribution of FDI. The "couples<65 y.o." group includes couples in which at least one respondent was under age 65. The "couples≥65 y.o." group includes households in which both members were aged 65 or older. The figure highlights the protective role of age, as the households in which both members were above the pension eligibility age reported having less financial distress than the households in which at least one member was potentially in the labour market. Similar conclusions can be reached for the impact of living as a couple, as the results show that single households reported higher levels of financial distress than couple households.

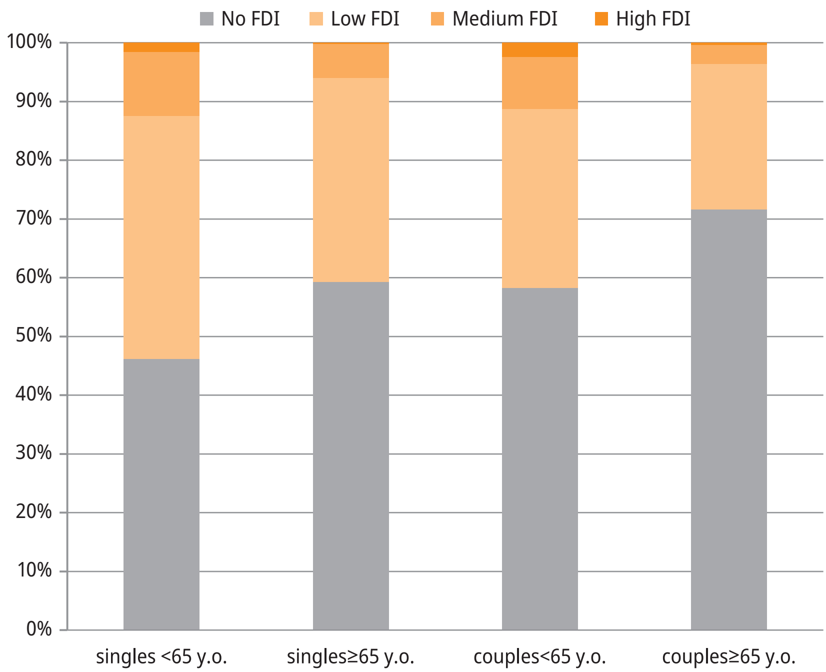

Figure 2: Financial distress indicator (FDI) by household composition and age.
Note: N = 30,069, weighted data. "y.o." stands for "years old".
Source: SHARE Corona (W1), release 8.0.0.

3 Determinants of financial distress and of a deterioration in the ability to make ends meet

To assess which factors most affected household finances during the first wave of the pandemic, we conduct an OLS regression in which the dependent variable is the FDI. We control for the following household-level variables: country dummies, age, gender, household size and type (i.e., single vs. couple household), education, employment-related variables (e.g., whether the household members experienced job interruptions or reductions in working hours), other sources of income (e.g., income from other household members and businesses), being a housing tenant/subtenant, income before the COVID-19 crisis, and the length and the intensity of restrictions derived from the OxCGRT Stringency Index. Statistically significant estimates (and their 95% confidence intervals) are presented in Figure 3.

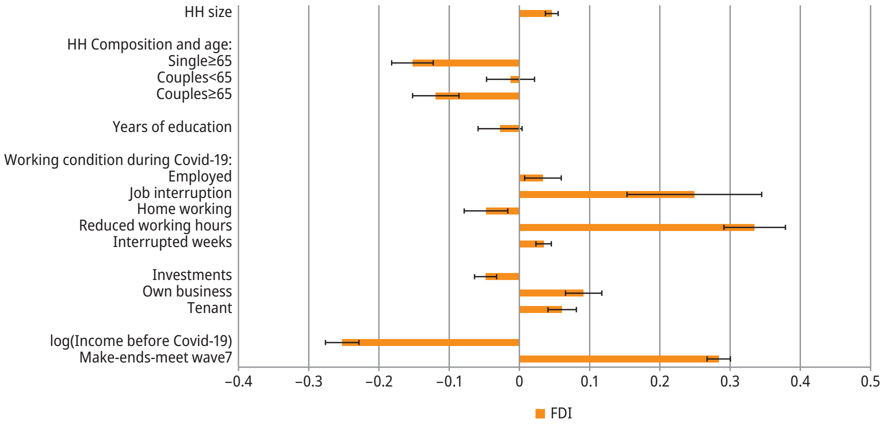

Figure 3: OLS regression results for FDI.
Note: N = 30,069; only significant results ($p < 0.05$) are displayed. Female, receiving income from other household members, ownership of a second home, the average intensity of restrictions, and the length of restrictions had no significant association with the outcome measure. The model includes country dummies; R^2 = 0.316.
Source: SHARE Corona (W1), release 8.0.0 and SHARE Waves 1-2 and 4-7, releases 8.0.0.

Figure 3 confirms the protective role of age, as “Singles≥65” and “Couples≥65” have negative coefficients. This is evidence that the pension systems successfully insured retirement-eligible households against the shock of the pandemic. By contrast, among working-age households, the pandemic hit their finances harder, as employed households whose members experienced job interruptions or reductions in working hours were more likely to experience financial distress. At the same time, households whose members had jobs that allowed them to work remotely were less likely to suffer financial hardship. Moreover, having higher education and a higher pre-pandemic income helped to counteract the negative effects of the pandemic. The results also indicated that certain households experienced persistent difficulties, as those households who reported having difficulties making ends meet in Wave 7 (collected in 2017–2018) were much more likely to report having financial difficulties during the pandemic.

In the second part of our analysis, we investigate which determinants affected the probability of the ability of households to make ends meet worsening over a two-year period (between SHARE Wave 7 and the first wave of the SHARE Corona survey). To do so, we restrict our sample to those households who did not report having financial difficulties in Wave 7. Therefore, we keep only households who did not report in Wave 7 having difficulties making ends meet, and end up with 17,417 households. We run an OLS regression in which the dependent variable is the dummy for a worsening of the ability to make ends meet, and we control for country, age, gender, household size (level and changes) and type, employment-related variables (in both Wave 7 and the SHARE Corona survey), education, dummies for income losses/gains between waves (typical income before the pandemic – typical income in Wave 7) and during the pandemic (lowest income during the pandemic – typical income before the pandemic), income before the COVID-19 crisis, other sources of income (e.g., income from other household members and businesses), being a tenant/subtenant, and the length and the intensity of the restrictions.

Figure 4 confirms the protective effects of age, education, and the pre-pandemic level of income. It also highlights that income losses during the pandemic were more important than income losses between the surveys, as the coefficient was about three times bigger. A potential explanation for these findings is that households who were hit by a pandemic–related income shock had no time to adjust their spending patterns, whereas households whose incomes had declined over the two years prior to the pandemic could smooth and adapt their consumption levels.

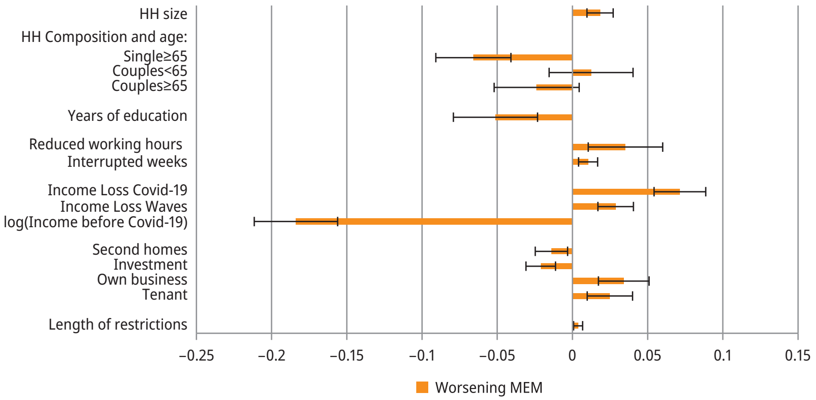

Figure 4: OLS regression results for a worsening of the ability to make ends meet.
Note: N = 17,417; only significant results ($p < 0.05$) are displayed. The variables of female, changes in household size, employment except for reduced working hours and interrupted weeks, receiving income from others, and the average intensity of the restrictions had no significant association with the outcome measure. The model includes country dummies; $R^2 = 0.197$.
Source: SHARE Corona (W1), release 8.0.0 and SHARE Waves 1-2 and 4-7, releases 8.0.0.

4 Conclusions

We investigated the effects of the COVID-19 crisis on the finances of Europeans using the first wave of the SHARE Corona survey. We constructed a financial distress indicator that captured whether households experienced income losses, had difficulties making ends meet, or needed to postpone payments. We found that the education and income levels of households before the pandemic played a protective role, as did being past retirement age, which suggests that the welfare state effectively protected older people. By contrast, for households in which the members were employed, experiencing job interruptions or reductions in their working hours increased their probability of facing economic difficulties, while having the option to work from home reduced their likelihood of experiencing financial distress. We also found that having difficulties making ends meet had a persistent effect, as those households who were having difficulties before the pandemic were more likely to be in financial distress during the first wave of the pandemic as well. In addition, we investigated how experiencing an income decline affected the ability of households to make ends meet. Our results showed that the ability of households to make ends meet worsened more if they had experienced income losses during the pandemic than if they had experienced income losses in the two-year period before the pandemic.

References

Deaton, A. (2021). COVID-19 and Global Income Inequality. National Bureau of Economic Research Working Paper Series No. 28392. https://doi.org/10.3386/w28392

Fana, M., Torrejón Pérez, S. and Fernández-Macías, E. (2020). Employment impact of Covid-19 crisis: from short term effects to long terms prospects. Journal of Industrial and Business Economics 47:391–410. doi:10.1007/s40812-020-00168-5

ILO (2020). ILO Monitor 2nd edition: COVID-19 and the world of work.

Stiglitz J. (2020). Point of View: Conquering the Great Divide. *Finance & Development* 0057: A005, accessed May 6, 2021, https://isni.org/isni/0000000404811396