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# The economic impact of the first wave of the pandemic on 50+ Europeans

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Working Paper Series 74-2021

DOI: 10.17617/2.3346667

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The publisher (SHARE ERIC) checks working papers in this series for formal issues such as proper acknowledgements to the funders of SHARE. The publisher takes no responsibility for the scientific content of the paper.

# **Acknowledgements**

Research in this article is a part of the EU Horizon 2020 SHARE-COVID19 project (Grant agreement ID: 101015924).

This paper uses data from SHARE Waves 1, 2, 4, 5, 6, 7 and 8 (DOIs: 10.6103/SHARE.w1.710, 10.6103/SHARE.w2.710, 10.6103/SHARE.w4.710, 10.6103/SHARE.w5.710, 10.6103/SHARE.w6.710, 10.6103/SHARE.w7.711, 10.6103/SHARE.w8cabeta.001), see Börsch-Supan et al. (2013) for methodological details. The SHARE data collection has been funded by the European Commission, DG RTD through FP5 (QLK6-CT-2001-00360), FP6 (SHARE-I3: RII-CT-2006-062193, COMPARE: CIT5-CT-2005-028857, SHARELIFE: CIT4-CT-2006-028812), FP7 (SHARE-PREP: GA N°211909, SHARE-LEAP: GA N°227822, SHARE M4: GA N°261982, DASISH: GA N°283646) and Horizon 2020 (SHARE-DEV3: GA N°676536, SHARE-COHESION: GA N°870628, SERISS: GA N°654221, SSHOC: GA N°823782) and by DG Employment, Social Affairs & Inclusion through VS 2015/0195, VS 2016/0135, VS 2018/0285, VS 2019/0332, and VS 2020/0313. Additional funding from the German Ministry of Education and Research, the Max Planck Society for the Advancement of Science, the U.S. National Institute on Aging (U01 AG09740-13S2, P01 AG005842, P01 AG08291, P30 AG12815, R21 AG025169, Y1-AG-4553-01, IAG BSR06-11, OGHA 04-064, HHSN271201300071C, RAG052527A) and from various national funding sources is gratefully acknowledged (see www.share-project.org).

# The economic impact of the first wave of the pandemic on 50+ Europeans

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#### **Abstract**

We analyse the effects of the Covid-19 crisis on the economic situation of 50+ Europeans. We construct a financial distress indicator that captures experiencing an income loss, difficulties to make ends meet and the need to postpone payments. We find that education and income before the pandemic have a protective role, and so does being past retirement age. For households under retirement age, instead, the pandemic has exacerbated inequalities. We also investigate whether households report worse difficulties in making ends meet compared to the pre-COVID period. We show that their ability to make ends meet worsens more with income losses during the pandemic compared to losses experienced in the two-year period before the pandemic.

Keywords: COVID-19, SHARE, Financial distress, Household economic conditions

Journal of Economic Literature subject codes: D31, I32

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**Acknowledgment.** We are grateful for comments by participants to the SHARE Covid-19 milestone 3 meeting, and in particular to Axel Börsch-Supan for suggestions.

October 9th 2021

#### 1. Introduction

In this paper, we investigate the impact of the (first wave of the) Covid-19 pandemic on individuals aged 50 or more who live in 27 European countries or Israel by analyzing changes in household income and various indicators of financial distress. We use recent SHARE data to identify the groups that have faced the most severe economic consequences, with potentially long-term implications, including the increased risk of poverty and social exclusion.

The COVID-19 pandemic has had a major impact on the lives and health of most individuals, and on the economy in general, and the labour market in particular. One of the first policy reactions in many countries facing the outbreak of COVID-19 was to impose lockdown restrictions. The aim of those interventions was to reverse epidemic growth, reduce significantly severe case numbers, and stop the epidemic spread. Lockdown policies were successful in controlling the spread of the virus during the first wave of the pandemic, but also generated important economic consequences, unevenly distributed among different individuals.

Negative economic consequences are typical traits of recessions. However, recessions due to financial crises, such as the Great Recession, have different effects compared to pandemic recessions. Firstly, in the Great Recession, all age groups, education levels, and income quintiles experienced income declines (De Nardi et al., 2012). Secondly, many households were adversely affected by the Great Recession even if their income did not change, as the value of their homes or retirement savings plummeted (Meyer and Sullivan, 2013). On the other hand, lessons from the Great Recession that are relevant to the pandemic are that job losses have persistent effects on employment and income for older workers who are less likely to find a job similar to their previous one and may be forced to opt for early retirement (Bui, Button and Picciotti, 2020; Li and Mutchler, 2020).

We show that the pandemic is leading to increased economic inequality in the 28 countries we consider. This is not surprising, because less educated and less well-paid workers are more vulnerable to income losses and layoffs (ILO, 2020; Stiglitz, 2020), while working from home is more easily available to the better paid, better educated workers (Deaton, 2021). The impact of the COVID-19 pandemic also depends on country characteristics (Fana, Torrejón Pérez and Fernández-Macías, 2020): countries that rely on service activities, such as Mediterranean countries, are more likely to suffer.

Understanding the full extent of the economic and social costs of the pandemic, ranging from job losses to shuttered businesses, is of critical importance to develop effective and sustainable policies, to evaluate the current epidemic governmental responses, to make plans to emerge from the pandemic, and to prepare for future pandemics as well.

We investigate the relation between economic effects of the Covid-19 crisis and various socio-demographic, economic, and employment indicators. We contribute to the literature in several dimensions. First, we exploit the longitudinal and international dimension of SHARE data. Second, we investigate and document the effects of household type (singles versus couples), age, education, income, employment, and policy interventions on financial distress. Third, we propose a new comprehensive measure of household financial distress.

The econometric analysis of our financial distress indicator highlights the protective role of education and income before the onset of the pandemic. We also find that those who did not report difficulties in making ends meet in the past were less likely to be in financial distress during the pandemic. We find that employment related events (such as job loss or reduced working hours) are an important channel through which the pandemic negatively affected household economic conditions. The possibility to work from home instead reduced financial distress. Taken together, these results confirm that the pandemic had a milder effect on the better off, thus exacerbating economic inequality (at least among working age individuals).

We also investigate variations in the ability to make ends meet between the wave 7 of SHARE (run in 2017-18) and the SHARE Corona survey (run in June-July 2020). We show that while age has again a protective role, the ability to make ends meet worsens with either an income loss due to the Covid-19 crisis or more generally an income loss across waves. The increase in the probability of a worsening due to losses during the pandemic is almost four times larger than the increase induced by losses across waves. The level of income before the outbreak of Corona, instead, retains its protective role. We find that employment conditions and their variations (before and during the pandemic) do not affect the probability of a make ends meet deterioration. The only notable exception is a reduction of working hours that followed the crisis outbreak - that increases the probability of a worsening. Among other sources of income, real and financial investments reduce the probability of a worsening, while owning a business increases it. On the contrary, being tenant and the length of governmental restrictions increase the probability of financial distress. The same variables affect improvements in ability to make ends meet but in the opposite direction. We observe that, in the latter case, being in a couple has a negative effect by reducing the probability of improvement.

An important finding of our analysis is that individuals past retirement age are less likely to be in financial distress or to face increased difficulties in making ends meet, and this confirms that the European public pension (social security) systems have been successful in protecting older individuals. Income support measures for younger individuals do not seem to have worked as well, instead.

The paper is organized as follows. Section 2 presents the data; Section 3 shows descriptive statistics while Section 4 reports regression results. Section 5 concludes.

#### 2. The data

We use data drawn from the Survey of Health, Ageing and Retirement in Europe (SHARE), a longitudinal, multi-disciplinary, retrospective, and cross-national European dataset. The dataset includes current and retrospective information on health, socio-economic status and social and family networks of individuals aged fifty or older in (currently) twenty-seven European countries (plus Israel). We use data from waves 1-2 and 4-8 as well as the first SHARE Corona Survey in wave 8 (Scherpenzeel et al., 2020, Börsch-Supan, 2020. See also Börsch-Supan et al. 2013). Data Resource Profile: The Survey of Health, Ageing and Retirement in Europe (SHARE). International Journal of Epidemiology. DOI: 10.1093/ije/dyt088). This allows us to account for different detailed characteristics, at the individual or household level, and highlights heterogeneous economic consequences of the epidemic related to prior conditions.

We only partially use data from wave 8 as data collection was suspended in March 2020 due to the Corona outbreak. Shortly after the Corona outbreak, in June 2020, a new telephone administered survey, the SHARE Corona survey, was introduced with the aim to collect data on health and socio-economic impacts of COVID-19 among SHARE respondents.

Our sample includes individuals aged 50 or more (and their spouses or partners) living in twenty-five European countries, namely Belgium, France, Germany, Luxembourg, Switzerland, Sweden, Denmark, Finland, Spain, Italy, Greece, Portugal, Cyprus, Malta, Estonia, Latvia, Lithuania, Poland, Czech Republic, Slovakia, Hungary, Bulgaria, Romania, Slovenia, and Croatia, plus Israel.<sup>1</sup>

In the SHARE Corona survey participants were asked to report, among other things, the economic and working conditions before and during the pandemic. Since we are interested in investigating the impact of the first wave of the pandemic on household economic inequality, we focus on a subset of this information.

<sup>1</sup> We do not consider Austria and the Netherlands. For the former country, SHARE Corona data are not yet available, while for the latter not all needed data are available in wave 7.

For the economic aspects we use information about the ability to make ends meet (both in wave 7 and in SHARE Corona survey), the lowest household income, the need to postpone payments or dip into savings during the pandemic, but also on the household typical monthly income before the pandemic.<sup>2</sup> The ability to make ends meet is a widely used indicator of the general financial conditions (e.g., Saunders et al., 1994), in which individuals evaluate their conditions with respect to their household needs. In SHARE, this subjective measure is evaluated on an ordered scale with four response options: with great difficulty, with some difficulty, fairly easily, and easily. We define a binary indicator for households with some or great difficulties. For households reporting difficulties, there are two follow-up questions regarding (1) the need to postpone regular payments such as rent, mortgage and loan payments, and/or utility bills and (2) the need to dip into savings to cover necessary day-to-day expenses.

As regards the working conditions we use information on the employment situation before the pandemic (reported both in wave 7 and in SHARE Corona survey), and employment conditions since its outbreak: place of work (home and/or usual workplace); potential job interruptions due to unemployment, lay off or business closure; and reduction of working hours.<sup>3</sup>

Questions on household income and the ability to make ends meet were asked also in previous regular waves. This allows us to take a longitudinal perspective, which is a peculiar characteristic of SHARE.

The data allows us not only to have a broad perspective on the economic impact of the first wave of the pandemic on European working-age (between 50 and 64) and retirement-age (over 64) households, but also to investigate and highlight differential effects among countries.

We restrict our sample to respondents answering the SHARE Corona survey and taking part to the last publicly available wave (wave 7). In our final sample, there are 45,444 individuals participating to the SHARE Corona survey and observed in wave 7 (for whom we have a longitudinal perspective), plus 6,866 individuals participating only in the COVID survey. Our economic outcomes of interest are defined at the household level: in our sample, we observe 35,578 households. However, we restrict our sample to the 19,277 households (28,652 respondents) who provided all information needed for our analyses.

Tab. 1 reports the weighted summary statistics for our outcomes of interest. Household income is in Euros per month. The average value in the sample is about €2,200 (standard deviation 1,562). The mean value of the lowest overall monthly income, after taxes and contributions, that households report is, instead, about €2,126 (standard deviation 1,541). This suggests that, on average, the drop in income has been moderate (3.4%), but this is in line with the fact that a large fraction of sample respondents are pensioners who rely on public social security pensions or other social protection benefits for older persons. If we split the sample between 'working-age' and 'retirement-age' households, where the former households have at least one member under 65 in the couple, we can see that the average income drop among the former is 4.7% compared to 1.7% among the latter. This is prima facie evidence that social security systems have effectively protected older individuals. Moreover, Tab. 1 reports the percentage of households that experienced an income loss of at least 5% during the pandemic (i.e., the lowest household income during the pandemic is at least 5% lower than the typical household income before the outbreak of the pandemic.). In line with the similar amounts of typical and lowest overall monthly incomes in Tab. 1, only 11% of households experienced

<sup>3</sup> The questions on the employment situation before the pandemic ask the respondent his situation at the time of the interview (wave 7) or at the time when Corona broke out (SHARE Corona survey). Employed respondents include employees or self-employed, and those working in a family business.

<sup>&</sup>lt;sup>2</sup> For both the lowest household income during the pandemic and the household typical income before the pandemic, respondents were asked to provide the amount of the overall monthly income, after taxes and contributions, for the entire household. For the former income, the lowest during the pandemic, respondents were requested to include any financial support they may have received since the outbreak of the pandemic.

an income loss. It is worth noting that the lowest monthly income includes financial support households may have received (from government, employer, relatives, friends, or others) and, thus, the limited income loss may reflect the efficacy of government policies in contrasting the negative economic consequences of the pandemic on household incomes.

Households experienced an average income loss also between wave 7 and the SHARE Corona survey. Typical income decreased by 5.42%, but it was much larger for 'retirement-age' households, 9.65%, than for 'working-age' households, 1.70%.

Tab. 1 Summary statistics (SHARE Corona) - household economic and employment outcomes

Outcomes	Mean	St. dev.	Obs.
Typical overall monthly income SHARE Corona	2,199.92	1,562.34	19,277
At least one HH member under 65	2,587.09	1,722.24	5,504
All HH members 65+	1,856.15	1,312.87	13,773
Lowest overall monthly income	2,126.17	1,541.06	19,277
At least one HH member under 65	2,465.88	1,709.02	5,504
All HH members 65+	1,824.54	1,302.71	13,773
Typical overall monthly income Wave 7	2,326.05	1,938.37	19,277
At least one HH member under 65	2,631.88	1,894.74	5,504
All HH members 65+	2,054.49	1,936.36	13,773
Income loss	0.11	0.31	19,277
At least one HH member under 65	0.18	0.38	5,504
All HH members 65+	0.05	0.21	13,773
Difficulties in Making ends meet	0.30	0.46	19,277
Postpone payments	0.10	0.30	6,628
Dip into savings	0.24	0.42	6,628
Employment	0.35	0.48	19,277
Job interruption	0.21	0.40	4,098
Number of weeks of job interruption	7.10	4.37	568
Work from home	0.40	0.49	4,098
Reduction in working hours	0.22	0.41	3,754

Tab. 1 The table shows household descriptive statistics (mean, standard deviation, and number of observations), weighted using calibrated cross-sectional household weights, of economic and employment outcomes in the SHARE Corona survey and in wave 7 (only typical income). Incomes, typical and lowest, are in Euros and represent, respectively, the typical household income in 2017 (wave 7) and before Corona broke out (SHARE Corona), and the lowest household income during the first wave of the pandemic. For each income variable, the table also shows summary statistics for households with at least one member younger than 65, and for households with all members 65 or more. Income loss is a binary variable that takes value one if the household reports an income loss during the first wave of the pandemic. We consider an income loss when the lowest household income during the pandemic is at least 5% lower than the typical household income before the outbreak of the pandemic. Difficulties in making ends meet is a binary indicator, taking value one if the household reports having had some or great difficulties in making ends meet since the outbreak of Corona. Postpone payments and deep into savings variables report information on households with difficulties in making ends meet who postponed payments (such as rent, mortgage and loan payments, and/or utility bills) and/or dipped into savings to cover day-today expenses. Employment is a binary variable that equals one if there was at least one employed household respondent at the time when Corona broke out. Job interruption and work from home are employed households with at least one respondent who, respectively, experienced job interruption and worked from home (both work from home only, as well as work from home and at the usual workplace) during the pandemic. Number of weeks of job interruption is a follow up question in case someone in the household reports a job interruption and equals the maximum among household respondents. Reduction in working hours is a variable reflecting reduced working hours for households with at least one employed respondent who did not experience job interruptions during the

Source: Authors' elaboration using SHARE Corona data.

Tab. 1 highlights that in our sample the fraction of households reporting (some or great) difficulties in making ends meet is about 30%. Among those, 10% had to postpone payments and 24% used their savings to cover necessary day-to-day expenses. It is worth noting that among the possible answers to the dip-into-savings

question, there is not the option "had no savings". Therefore, among households who report failing to dip into savings there will be some who chose not to use them and others who could not use them because they did not have any.

Policy interventions introduced in many countries aimed at containing the spread of the virus affected asymmetrically individuals and households depending on their pre-determined characteristics. A key role was played by the employment status. Incomes from pensions were generally unaffected; labour income and incomes from other sources could experience a sharp drop since the outbreak of Corona, depending, among other factors, on the occurrence of job interruption, the possibility to work remotely and/or on the reduction of the working hours. We can see from Tab. 1 that 35% of the households were employed at the time Corona broke out. Among them, 21% experienced at least one job interruption due to unemployment, lay off or business closure, with an average number of interruption weeks of 7.10, and 40% worked, at least partly, from home. In the subsample of households with at least one employed partner who did not experienced job interruptions, 22% reduced their working hours during the pandemic.

Tab. 2 Summary statistics (SHARE Corona) – socio-demographic characteristics

Characteristic	Mean	St. dev.	Obs.
Maximum Age	69.38	9.64	19,277
Minimum Age	67.12	10.21	19,277
Gender – female	87.28%		19,277
Marital status – couple	62.09%		19,277
Household composition			19,277
Single younger than 65	11.63%		
Single 65 or older	26.28%		
Couple with at least one member under 65	35.40%		
Couple with all members 65+	26.69%		
Household size	2.08	0.98	19,277
Education			19,277
Primary	12.37%		
Lower secondary	14.45%		
Upper secondary	39.03%		
Post-secondary non-tertiary	4.52%		
Tertiary	29.63%		

**Tab. 2** The table shows descriptive statistics (mean, standard deviation, and number of observations), weighted using calibrated cross-sectional household weights, of SHARE Corona survey respondents' socio-demographic characteristics. Age, and education refer to, respectively, maximum/minimum age and maximum educational attainment between household respondents. Gender is a binary indicator, taking value one if there is at least one female between the respondents. Marital status is a binary indicator that equals one if household respondents are in a couple, and zero in case of a single household respondent. Household composition classifies households in singles or couples and, among them, according to age. Household size takes values between 1 and 11. Source: Authors' elaboration using SHARE Corona and SHARE waves 1-2 and 4-8 data.

Tab. 2 describes our sample in terms of socio-demographic characteristics: age, gender, marital status, household size and education (expressed according to the International Standard Classification of Education – ISCED).

We can see from Tab. 2 that the average maximum and minimum age (within household respondents) are, respectively, 69.38 (standard deviation 9.64) and 67.12 (standard deviation 10.21). The sample is composed by 87.28% households with at least one female between the respondents; 11.63% are single under-65 respondents, 26.28% are single over-64 respondents, 35.40% are couples with at least one member younger than 65, and 26.69% are couples with all members older than 64. The average household size is 2.08 with a

standard deviation of 0.98. The majority (70.37%) of households have a medium-low level of education (primary to post- secondary).

Finally, we complement the analysis exploiting data from the Oxford COVID-19 Government Response Tracker (OxCGRT). The OxCGRT collects information on several common policy interventions that governments implemented to respond to the pandemic. Especially, we will use information about the strictness and length of 'lockdown style' closures and containment policies (the so-called "stringency index")<sup>4</sup>. Our aim is to capture the intensity of, and the period covered by policy interventions and their potential economic consequences for different individuals.

#### 3. Variables of interest: descriptive statistics

This section presents a descriptive analysis of economic outcomes during the first wave of the pandemic for different subsamples of the population of interest. The aim is to highlight the most relevant household characteristics associated to severe economic consequences due to the pandemic.

#### 3.1 Country heterogeneity

Since the outbreak of the pandemic, governments have introduced interventions aimed to reduce the negative health and economic impacts of COVID-19. Whereas these policies are similar across countries, not only severity and speed at which countries responded to the pandemic vary, but also country characteristics differ substantially<sup>5</sup>. All these aspects have generated a great variability in terms of economic impact among the surveyed countries that we describe in this subsection.

From Tab. 1, we noticed that, in the whole sample, 30% of households report some or great difficulties in making ends meet during the first wave of the pandemic. However, when comparing the percentage of households having difficulties in making ends meet among countries in Tab. 3 column 1, we can see how this percentage ranges from 6% to 91%. Difficulty in making ends meet shows great variability among countries with just nine of them reporting percentages below the average value (30%). With respect to wave 7, ability to make ends meet shows great persistence.

To cope with economic difficulties, households may decide to defer payments and/or use their savings. Tab. 3 shows that, among households with difficulties in making ends meet during the pandemic, 10% postponed regular payments while 24% dipped into savings. The need to postpone payments shows limited variation among countries, with a minimum of 1% and a maximum of 27%. The need to dip into savings to cover the necessary day-to-day expenses shows, instead, a greater variability: it goes from 4% to 54%. Little use of savings in some countries may result from the absence or small amount of savings in financially distressed households.<sup>6</sup>

<sup>&</sup>lt;sup>4</sup> The stringency index measures, using a score between 0 and 100, the strictness of 'lockdown style' closures and containment policies adopted by governments.

<sup>&</sup>lt;sup>5</sup> We refer the reader to the appendix (section A.3) for more details on the relation between restrictions severity (derived from the OxCGRT "stringency index") and ability to make ends meet.

<sup>&</sup>lt;sup>6</sup> According to Eurofound (2020), in July 2020, 54% of EU27 households were not able to maintain their standard of living for more than three months without income. Household ability to get by on savings is lower than the EU27 average in thirteen countries (Latvia, Poland, Croatia, Bulgaria, Romania, Greece, Hungary, Lithuania, France, Estonia, Slovenia, Finland, and Portugal). These countries often correspond to those we find making little use of savings.

Tab. 3 Summary statistics (SHARE Corona and wave 7) – economic outcomes

Country		ties in Mak : (SHARE Co			ties in Mak 1eet (wave	•		Postpone Payments			Dip into Savings	
Country	Mean	SD	Obs	Mean	SD	Obs	Mean	SD	Obs	Mean	SD	Obs
Germany	0.13	0.33	1,266	0.16	0.37	1,266	0.06	0.24	130	0.29	0.45	130
Sweden	0.08	0.27	685	0.09	0.29	685	0.06	0.24	78	0.31	0.47	78
Spain	0.33	0.47	465	0.41	0.49	465	0.09	0.29	143	0.32	0.47	143
Italy	0.46	0.50	1,245	0.54	0.50	1,245	0.16	0.36	567	0.28	0.45	567
France	0.17	0.37	901	0.22	0.42	901	0.08	0.27	156	0.30	0.46	156
Denmark	0.06	0.23	971	0.08	0.28	971	0.01	0.11	64	0.42	0.50	64
Greece	0.91	0.29	838	0.88	0.32	838	0.17	0.38	756	0.15	0.35	756
Switzerland	0.15	0.36	662	0.15	0.36	662	0.09	0.29	90	0.30	0.46	90
Belgium	0.15	0.35	1,899	0.24	0.43	1,899	0.11	0.31	331	0.32	0.47	331
Israel	0.54	0.50	300	0.49	0.50	300	0.06	0.24	129	0.09	0.28	129
Czech Rep.	0.12	0.32	1,107	0.25	0.43	1,107	0.04	0.19	104	0.54	0.50	104
Poland	0.53	0.50	836	0.55	0.50	836	0.06	0.24	408	0.14	0.35	408
Luxembourg	0.07	0.26	222	0.14	0.34	222	0.03	0.17	23	0.14	0.35	23
Hungary	0.81	0.39	271	0.75	0.43	271	0.18	0.39	198	0.28	0.45	198
Portugal	0.51	0.50	360	0.58	0.49	360	0.04	0.18	192	0.15	0.36	192
Slovenia	0.49	0.50	1,301	0.54	0.50	1,301	0.04	0.20	646	0.04	0.20	646
Estonia	0.33	0.47	2,236	0.51	0.50	2,236	0.02	0.16	719	0.08	0.27	719
Croatia	0.62	0.49	703	0.68	0.47	703	0.06	0.25	433	0.12	0.32	433
Lithuania	0.43	0.50	601	0.63	0.48	601	0.03	0.18	266	0.15	0.36	266
Bulgaria	0.67	0.47	360	0.81	0.39	360	0.14	0.35	246	0.25	0.43	246
Cyprus	0.48	0.50	86	0.56	0.50	86	0.14	0.35	43	0.33	0.47	43
Finland	0.16	0.37	495	0.24	0.43	495	0.27	0.45	74	0.34	0.48	74
Latvia	0.56	0.50	299	0.68	0.47	299	0.09	0.28	172	0.08	0.27	172
Malta	0.32	0.47	239	0.50	0.50	239	0.02	0.14	80	0.19	0.40	80
Romania	0.70	0.46	535	0.72	0.45	535	0.07	0.26	372	0.12	0.33	372
Slovakia	0.55	0.50	394	0.49	0.50	394	0.05	0.22	208	0.12	0.33	208
Total	0.30	0.46	19,277	0.35	0.48	19,277	0.10	0.30	6,628	0.24	0.42	6,628

**Tab.3** The table shows for each country household descriptive statistics (mean, standard deviation, and number of observations), weighted using calibrated cross-sectional household weights, of economic variables in the SHARE Corona survey and in wave 7. Difficulties in making ends meet is a binary indicator, taking value one if the household reports having had some or great difficulties in making ends meet. Postpone payments and deep into savings variables report information on households, with difficulties in making ends meet (in the SHARE Corona survey), who postponed payments (such as rent, mortgage and loan payments, and/or utility bills) and/or dipped into savings to cover day-to-day expenses during the first wave of the pandemic.

Source: Authors' elaboration using SHARE Corona and SHARE waves 7 data.

# 3.2 Employment and economic outcomes

Participation in the labour market by working age individuals is obviously important in many respects, not least for their contribution to the overall household income. In this section, we assess the role of Covid-related job interruptions (due to unemployment, lay off or business closure) and reduction of working hours on household economic conditions.

Focusing on employed households, we define households with job interruption as households in which at least one respondent, who was employed before the pandemic, experienced one or more job interruptions during the pandemic.<sup>7</sup>

Tab. 4 describes our sub-sample (4,098 employed households) according to occurrence of job interruption. Tab. 4 shows that 21% of households experienced a job interruption. However, job interruption shows great variability among countries with just seven of them reporting percentages above the average value.

Tab. 4 Summary statistics (SHARE Corona) – job interruptions

Country	Mean	SD	Obs.	Country	Mean	SD	Obs.	Country	Mean	SD	Obs.
Germany	0.16	0.37	393	Israel	0.10	0.30	67	Lithuania	0.14	0.35	182
Sweden	0.10	0.30	157	Czech Rep.	0.16	0.36	172	Bulgaria	0.19	0.40	104
Spain	0.26	0.45	51	Poland	0.04	0.20	175	Cyprus	0.42	0.52	12
Italy	0.22	0.42	167	Luxembourg	0.21	0.41	24	Finland	0.19	0.39	160
France	0.43	0.50	127	Hungary	0.04	0.20	31	Latvia	0.03	0.16	75
Denmark	0.05	0.23	366	Portugal	0.24	0.43	68	Malta	0.08	0.28	34
Greece	0.22	0.42	90	Slovenia	0.30	0.46	91	Romania	0.13	0.34	71
Switzerland	0.33	0.47	160	Estonia	0.08	0.27	664	Slovakia	0.14	0.34	127
Belgium	0.18	0.38	402	Croatia	0.09	0.29	128	Total	0.21	0.4	4,098

**Tab. 4** The table shows descriptive statistics, weighted using calibrated cross-sectional household weights, of job interruptions during the first wave of the pandemic due to unemployment, lay off or business closure. For each country, the table shows the number of employed households at the time pandemic broke out (Obs.), which are households with at least one employed respondent, and the fraction of them that experienced at least one job interruption during the pandemic (Mean), that is households with at least one employed respondent that experienced one or more job interruptions.

Source: Authors' elaboration using SHARE Corona data.

Job interruptions may be a channel through which the pandemic negatively affected household economic conditions. Indeed, job interruptions may cause an income loss and, consequently, may lead to financial distress. In the whole sub-sample of employed households with an income loss, 38.62% also experienced at least one job interruption. However, income loss cannot be explained by the occurrence of job interruptions in 61.38% of the sub-sample. Focusing on employed households without job interruptions but with income losses, reduction of working hours explains an average fraction of 59.03%. Alternative possible explanations for income losses lie in the reduction of other sources of income.<sup>8</sup>

#### 3.3 The role of education and age

The pandemic and the consequent government interventions had a heterogeneous economic impact on individuals and households depending on their pre-determined characteristics, and, among them, a key role was played by socio-demographic types. Literature has widely investigated, in particular, the role of education, age, and marital status on economic outcomes. In this section, we investigate the link between household education, age, and type (single vs. couple), and the economic impact of the pandemic, to shed light on their role in mitigating negative economic outcomes.

Fig. 1 shows, for household educational level, the percentage of households reporting no, low, some, and high financial distress during the first wave of the pandemic. We measure financial distress using a categorical Financial Distress Indicator (FDI). The Financial Distress Indicator is a comprehensive indicator that reflects the negative financial effect of the pandemic on households. The indicator is the sum of three dummy

<sup>&</sup>lt;sup>7</sup> We label as 'employed' those households with at least one employed household respondent at the time Corona broke out.

<sup>&</sup>lt;sup>8</sup> We refer the reader to appendix A.1 for more details on employment and income losses.

variables: income loss (during the pandemic), difficulties in making ends meet (during the pandemic), and (conditional on experiencing difficulties) postponed payments. The Financial Distress Indicator measures, using a score between 0 and 3, the severity of the economic difficulties suffered by households during the pandemic.

From Fig. 1 we learn that households reporting distress are asymmetrically distributed among educational levels. Households with low education (primary and lower secondary) were more affected by distress compared to household characterized by medium-high education (secondary and, especially, tertiary). These results suggest a protective role of education on financial distress (and on the worsening of the ability to make ends meet, see appendix A.1) during the first wave of the pandemic.

100 - 80 - 60 - 40 - 20 - Primary Lower Secondary Upper Secondary Post-Secondary Tertiary

No Financial Distress Low Financial Distress

Fig. 1 Household level of financial distress by education, %

**Fig. 1** The figure shows the percentage of households that report no, low, some, and high financial distress during the first wave of the pandemic (SHARE Corona survey) by household level of education (i.e., the level of education of either the respondent -single household- or the most educated couple respondent), using calibrated cross-sectional household weights. Each level of education is split according to the level of financial distress. Financial distress is measured using a score between 0 and 3. It reflects the severity of the economic difficulties suffered by households during the pandemic.

High Financial Distress

Source: Authors' elaboration using SHARE Corona and SHARE waves 1-2 and 4-8 data (graphics program: STATA).

Some Financial Distress

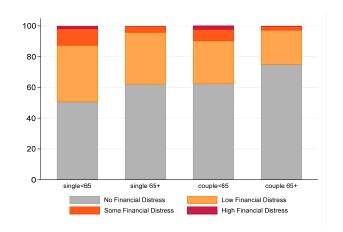


Fig. 2 Household financial distress and age, %

**Fig. 2** The figure shows the percentage of households that report no, low, some, and high financial distress during the first wave of the pandemic (SHARE Corona survey) by household composition defined according to type and age (i.e., single vs. couple, under 65 vs. 65 or over), using calibrated cross-sectional household weights. Couple<65 consists of couples in which at least one member is younger than 65, while couple 65+ comprises couples with both members older than 64. Each household type is split according to the level of financial distress. Financial distress is measured using a score between 0 and 3. It reflects the severity of the economic difficulties suffered by households during the pandemic.

Source: Authors' elaboration using SHARE Corona data (graphics program: STATA).

We now investigate the role of age and household type on economic outcomes. Fig. 2 shows a protective role of both age and being in a couple on financial distress during the pandemic. Households who are 65 older report less distress compared to their younger counterparts (single and couples under 65). We can draw similar conclusions for being in a couple. Single households report more financial distress than couples.

Fig. 3, instead, shows the role of "second homes" in reporting a worsening in making ends meet between wave 7 and the first wave of the pandemic (SHARE Corona survey). Here we consider a subsample of households who can report a worsening in making ends meet, thus we restrict our attention on households with no difficulties in wave7. We can see from Fig. 3 that owners of second homes report less often a worsening in ability to make ends meet. Possible drivers of this result could be a general higher overall wealth of homeowners, and the additional income flow from second homes. Moreover, results in Fig. 3 confirm those of Fig. 2, as the percentage of households who report increased difficulties is (slightly) lower among those who are 65+. Thus, in this respect too, age plays a protective role.

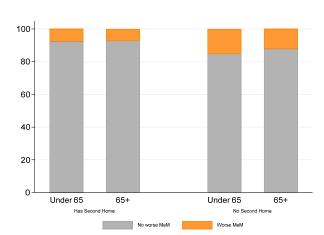


Fig. 3 Percentage of households with a worse economic situation by owning second homes and age

**Fig. 3** The figure shows the percentage of households that worsened the economic condition, measured by a worsening in making ends meet ability between wave 7 (2017) and the first wave of the pandemic (SHARE Corona survey), by second home ownership and age, using calibrated cross-sectional household weights. This graph refers to a subsample of households that did not report some or great difficulties in making ends meet in 2017. Bars are split according to the percentage of households reporting a worsening in ability to make ends meet.

Source: Authors' elaboration using SHARE Corona and SHARE waves 1-2 and 4-8 data (graphics program: STATA).

# 4. Estimation results

In this section, we present our estimation results when the dependent variable is a measure of household economic conditions during the first wave of the pandemic. Our dependent variables are a binary indicator for self-reported difficulties to make ends meet and a categorical Financial Distress Indicator (FDI).<sup>9</sup>

In Tab. 5 we report the ordinary least squares (OLS) estimates of key parameters of the models that explain the ability to make ends meet during the pandemic ("MeM\_Corona") and the "FDI" as a function of socio-demographic, economic and employment household characteristics, plus contextual information on COVID-related policy interventions introduced by governments.

<sup>&</sup>lt;sup>9</sup> See section 3.3 for more details on the Financial Distress Indicator.

Tab. 5 OLS regressions – Dependent variables: difficulties in making ends meet (SHARE Corona) and FDI

	M-M-C	EDI
	MeM_Corona	FDI
Female	0.001	-0.015
	(0.008)	(0.011)
Household size	0.029***	0.052***
	(0.004)	(0.006)
HH composition and age:	0.0654444	0.400 to to to
single ≥ 65	-0.065***	-0.132***
1	(0.012)	(0.018)
couple<65	0.046***	-0.011
	(0.013)	(0.020)
couple≥65	-0.010	-0.103***
	(0.013)	(0.020)
Years of education	-0.002*	-0.002**
	(0.001)	(0.001)
Employed	0.000	0.035**
	(0.011)	(0.015)
Job interruption	-0.060*	0.189***
	(0.032)	(0.062)
Home working	-0.002	-0.047**
	(0.011)	(0.019)
Reduced working hours	0.032**	0.306***
	(0.015)	(0.028)
Interrupted weeks	0.018***	0.042***
	(0.004)	(0.007)
Income from others	0.013*	0.026**
	(0.007)	(0.010)
Second homes	-0.015**	-0.014
	(0.006)	(0.009)
Investments	-0.033***	-0.042***
	(0.007)	(0.009)
Own business	0.038***	0.081***
	(0.013)	(0.022)
Tenant	0.050***	0.080***
	(0.009)	(0.012)
Log(Income before Covid)	-0.268***	-0.259***
	(0.010)	(0.013)
Length of restrictions	0.005***	-0.001
	(0.002)	(0.002)
Avg. restriction intensity	0.002	0.008
	(0.005)	(0.007)
Make-ends-meet wave7	0.258***	0.291***
	(0.008)	(0.010)
Observations	19,277	19,277
$\mathbb{R}^2$	0.398	0.330
columns 1 is a hinary indicator fo	(	

**Tab. 5** Dependent variable in columns 1 is a binary indicator for (some or great) difficulties in making ends meet during the pandemic, while dependent variable in column 2 is the Financial Distress Indicator. The latter variable reflects, using a score between 0 and 3, the negative financial effect of the pandemic on households. Robust standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1 Source: Authors' elaboration using SHARE Corona and SHARE waves 1-2 and 4-8 data.

We use the following household-level controls: country dummies, age, gender, household size and type (i.e., single vs. couple), education, employment related variables (e.g., occurrence of job interruptions, reduction

of working hours), other sources of income (e.g., income from other household members, and businesses), being tenant/subtenant, income before Covid-19 crisis, length and intensity of restrictions<sup>10</sup>.

Estimation results with different dependent variables (income loss, postponed payments, and dip into savings) are presented in appendix A.2. Note that results when the dependent variable is the FDI are, in general, in line with the results we obtain using, in turn, difficulties in making ends meet, income loss, and postponed payments as dependent variables.

Results in Tab. 5 column 2 show that older age plays a protective role on FDI, as both coefficients for "single≥65" and "couple≥65" are negative and significant. Education and the income level before the outbreak of the pandemic also play a protective role. This suggests that the pension systems successfully insured the retired against the shock, while specific government policies for younger households did not fully offset the negative effects of the pandemic. Among working age households, the shock hit harder already vulnerable households, with low education and economic resources. Estimated coefficients for employment related variables ("Employed", "Job interruption", "Reduced working hours", "Interruption weeks") show greater financial distress for households with employed individuals, and, in particular, for those who experienced job interruptions or reductions in working hours, and could not work from home. Thus, less educated and less well-paid workers were not only more exposed to income losses and layoffs (ILO, 2020; Stiglitz, 2020), but are also more likely to experience financial distress.

It is also worth stressing that the coefficient on "Make-ends-meet wave 7" is positive and significant, indicating that difficulties show persistency. This suggests that ad-hoc governmental measures were unable to protect the worse off.

Longitudinal data in our dataset allow us to study how household economic distress changed through time. Respondents provided information on their ability to make ends meet and on their income both in wave 7 and in the SHARE Corona survey. We can thus investigate which factors affect the probability to report a worsening ("MeM worsening") or an improvement ("MeM improvement") in make ends meet ability.

Tab. 6 shows the estimates of two OLS regressions when the dependent variable is either "MeM worsening" or "MeM improvement". For the former, we consider the subsample of households who could report a worsening in the SHARE Corona survey (thus, households without difficulties in making ends meet in wave 7); for the latter, we focus on the subsample of households who could experience an improvement (households with difficulties in wave 7).

<sup>&</sup>lt;sup>10</sup> Reference country for country dummies: Germany. "Female" is a dummy variable that equals one if either there is at least one female between the family respondents, or, in case of a single household, the respondent is a female. "Household size" takes values from 1 to 11, while for "HH composition and age" the reference category is single under 65. "Years of education" equals 5, 8, 13, 15, and 17 for, respectively, primary, lower secondary, upper secondary, postsecondary, and tertiary maximum level of education among household respondents. "Employed", "Job interruption", "Home working", and "Reduced working hours" are dummy variables that take value 1 if at least one household respondent, respectively, was employed at the time Corona broke out, experienced at least one job interruption, worked (at least partly) from home, and reduced working hours (but did not have any job interruption) during the pandemic. "Interrupted weeks" is a continuous variable reflecting the number of weeks of job interruption. "Income from others", "Second homes", "Investments", "Own business", and "Tenant" are dummy variables that equal one if the household receives income from other household members (different from the respondents), owns housing stock that is not used as main residence, owns financial investments, owns businesses, and occupies the dwelling they live in as tenant or subtenant. "Log(Income before Covid)" is the inverse hyperbolic sine of the income. "Length of restrictions" and "Avg. restriction intensity" are the average length and intensity of restrictions derived from the OxCGRT "stringency index". "Make-ends-meet wave 7" is a dummy variable that equals 1 if the household reported some or great difficulties in wave 7, and 0 otherwise.

We control for country, age, gender, household size (level and changes) and type, employment related variables (both in wave 7 and the SHARE Corona survey), education, dummies for income loss/gain between waves (typical income before pandemic outbreak – typical income in wave 7) and during the pandemic (lowest income during the pandemic – typical income before pandemic outbreak), income before Covid-19 crisis, other sources of income (e.g., income from other household members, and businesses), being tenant/subtenant, length and intensity of restrictions<sup>11</sup>.

Results in Tab. 6 column 1 confirm a protective role of older age, and income prior to the pandemic. The coefficients on income loss variables, both between surveys – "IncLoss\_waves" - and during the pandemic – "IncLoss\_Corona" - are positive and significant, implying a higher probability of experiencing worse difficulties in making ends meet. Income losses during the pandemic were much more important than losses between waves, with coefficients that equal, respectively, 0.120 and 0.031.

Given the prominent role of income variables, we investigate which other factors affect the variation in ability to make ends meet for households with and without income losses/gains (see Appendix A.2). We find that, for households who experienced at least an income loss, "IncLoss\_Corona" significantly increases the probability of a worsening, while the coefficient for "IncLoss\_waves" is not significant. These results confirm that household worsening to make ends meet reacts more to income losses during the pandemic than to losses between waves. Employment and economic household variations between waves cover a long-time span but have little or no impact on the probability of a worsening. Covid-related variations, instead, affect the probability of a worsening despite referring to a more recent but shorter time window.

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<sup>&</sup>lt;sup>11</sup> For details on country dummies, "Female", "Household size", "HH composition and age", "Years of education", "Job interruption", "Home working", "Interrupted weeks", "Log(Income before Covid)", "Income from others", "Second homes", "Investments", "Own business", "Tenant", "Length of restrictions", and "Avg. restriction intensity" see footnote 9 (parameter values at the time of the SHARE Corona survey). "plusDeltaSize" and "minDeltaSize" are dummy indicators for positive and negative variation in household size between waves. For "Employment variation" the reference category is always not employed. "IncLoss\_Corona" and "IncLoss\_waves" are dummy variables that take a value equal to one if the household experienced an income loss of at least 5%, respectively, during the pandemic, or between wave 7 and the SHARE Corona survey. "IncGain\_Corona" and "IncGain\_waves" are the correspondent dummy indicators for income gains. We remind the reader that we record as income losses/gains only income variations of at least 5%.

Tab. 6 OLS- Dependent variables: worsening and improvement in making ends meet

	MeM worsening	MeM improvement
Female	-0.011	-0.030*
	(0.009)	(0.016)
Household size	0.024***	-0.032***
	(0.006)	(0.006)
plusDeltaSize	0.047	0.047
	(0.031)	(0.034)
minDeltaSize	0.018	0.017
	(0.012)	(0.018)
HH composition and age:		
single≥65	-0.051***	0.061***
	(0.015)	(0.019)
couple<65	0.025	-0.065***
	(0.017)	(0.021)
couple≥65	-0.004	0.002
	(0.017)	(0.021)
Years of education	-0.002	0.002
	(0.001)	(0.001)
Employment variation:	, ,	, ,
Always employed	0.003	-0.004
• • •	(0.013)	(0.021)
Employed-Not empl.	0.015	-0.017
1 3	(0.012)	(0.022)
Not empl - Employed	-0.017	-0.024
	(0.018)	(0.032)
Job interruption	-0.046	0.104*
t de miterrapiion	(0.034)	(0.062)
Home working	-0.004	0.049*
Treme werming	(0.011)	(0.029)
Reduced working hours	0.017	-0.005
reduced working nours	(0.016)	(0.033)
Interrupted weeks	0.010**	-0.027***
interrupted weeks	(0.004)	(0.006)
IncLoss CT	0.120***	(0.000)
meBess_e1	(0.015)	
IncLoss waves	0.031***	
mcLoss_waves	(0.007)	
IncGain CT	(0.007)	0.006
inedam_e1		(0.022)
IncGain waves		0.018
medam_waves		(0.011)
Log(Income before Covid)	-0.206***	0.322***
Log(meonic octore covid)	(0.014)	(0.013)
Income from others	-0.002	-0.026**
meome from others	(0.008)	(0.013)
Second homes	-0.020***	0.014
Second nomes	(0.007)	(0.013)
Investments	-0.020***	0.118***
mvestments	(0.006)	(0.022)
Own business	0.043***	0.033
Own Justices	(0.013)	(0.034)
Tenant	0.013)	-0.079***
Tenant	(0.010)	(0.015)
Length of restrictions	0.010)	-0.003
Length of restrictions		
Ava restriction intensity	(0.002)	(0.003) 0.001
Avg. restriction intensity	0.002	
Observations	(0.006)	(0.010)
Observations R <sup>2</sup>	11,168	8,109 0,230
	0.198	0.230

**Tab. 6** dependent variable in column 1 is a binary indicator for worsening in making ends meet from wave 7 to SHARE Corona, for the subsample of households that did not report some or great difficulties in making ends meet in wave7. Dependent variable in Column 2, instead, is a binary indicator for improvement in making ends meet from wave 7 to SHARE Corona, for the subsample of households who had some or great difficulties in wave7. Robust standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1 Source: Authors' elaboration using SHARE Corona and SHARE waves 1-2 and 4-8 data.

#### 5. Conclusions

In this paper, we have investigated the economic effects of the Covid-19 crisis on households, using several indicators of financial distress. Our rich dataset on 50+ Europeans, which includes longitudinal data and data from the first SHARE Corona survey (run in June-July 2020), allows us to identify the groups that have faced the most severe economic consequences.

We find heterogeneous economic consequences faced by households that depend on demographic characteristics, age, and household type, as well as on income and employment conditions before and during the pandemic. Using a new comprehensive Financial Distress Indicator (FDI), we show that 65+ households were less often in financial distress, indicating an efficient protection of individuals past retirement age by social security systems.

Lockdown measures negatively affected employment conditions for many working individuals. We find that those employed at the outbreak of the crisis who faced job interruptions and/or reduction of working hours during the pandemic increased the risk of financial distress. Interestingly, working from home had, instead, a protective effect. Education and high levels of income reduced financial distress, and this implies that the pandemic has worsened economic inequalities, because financial distress hit harder households who reported difficulties in the past.

We find a similar set of results when we look at the probability of a worsening in the ability to make ends meet between the wave 7 of SHARE (run in 2017-18) and the SHARE Corona survey (run in June-July 2020). We observe a prominent protective role played by age, and a detrimental effect of income losses during the pandemic and between waves. Interestingly, income losses during the pandemic had a larger impact (with a coefficient that is almost four times that for losses between waves).

This paper provides a new insight on the economic effects of the first wave of the pandemic on 50+ Europeans. It shows that the welfare state effectively protected individuals past retirement age but failed to do the same to younger 50+ Europeans. Indeed, in this second group the pandemic hit harder already vulnerable households. Our findings could help governments get prepared for future crises and devise more effective policy responses. However, to gain a better understanding of the economic consequences of the pandemic, more data are needed to study not only short-term but also long-term effects.

# References

Börsch-Supan, A. (2020). Survey of Health, Ageing and Retirement in Europe (SHARE) Wave 1. Release version: 7.1.0. SHARE-ERIC. Data set. DOI: 10.6103/SHARE.w1.710

Börsch-Supan, A. (2020). Survey of Health, Ageing and Retirement in Europe (SHARE) Wave 2. Release version: 7.1.0. SHARE-ERIC. Data set. DOI: 10.6103/SHARE.w2.710

Börsch-Supan, A. (2020). Survey of Health, Ageing and Retirement in Europe (SHARE) Wave 4. Release version: 7.1.0. SHARE-ERIC. Data set. DOI: 10.6103/SHARE.w4.710

Börsch-Supan, A. (2020). Survey of Health, Ageing and Retirement in Europe (SHARE) Wave 5. Release version: 7.1.0. SHARE-ERIC. Data set. DOI: 10.6103/SHARE.w5.710

Börsch-Supan, A. (2020). Survey of Health, Ageing and Retirement in Europe (SHARE) Wave 6. Release version: 7.1.0. SHARE-ERIC. Data set. DOI: 10.6103/SHARE.w6.710

Börsch-Supan, A. (2020). Survey of Health, Ageing and Retirement in Europe (SHARE) Wave 7. Release

version: 7.1.1. SHARE-ERIC. Data set. DOI: 10.6103/SHARE.w7.711

Börsch-Supan, A. (2020). Survey of Health, Ageing and Retirement in Europe (SHARE) Wave 8. COVID-19 Survey 1. Release version: 0.0.1. beta. SHARE-ERIC. Data set. DOI: 10.6103/SHARE.w8cabeta.001

Börsch-Supan, A., M. Brandt, C. Hunkler, T. Kneip, J. Korbmacher, F. Malter, B. Schaan, S. Stuck, S. Zuber (2013). Data Resource Profile: The Survey of Health, Ageing and Retirement in Europe (SHARE). International Journal of Epidemiology. DOI: 10.1093/ije/dyt088

Bui TTM, Button P, Picciotti EG (2020) Early Evidence on the Impact of Coronavirus Disease 2019 (COVID-19) and the Recession on Older Workers. Public Policy & Aging Report 30:154–159. https://doi.org/10.1093/ppar/praa029

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

De Nardi M, French E, Benson D (2012) Consumption and the Great Recession. Federal Reserve Bank of Chicago Economic Perspectives 36:1–16.

Eurofound (2020) Living, working and COVID-19. COVID-19 series, Publications Office of the European Union Luxembourg, page 17.

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

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

Li Y, Mutchler JE (2020) Older Adults and the Economic Impact of the COVID-19 Pandemic. Journal of Aging and Social Policy 32:477–487. https://doi.org/10.1080/08959420.2020.1773191

Meyer BD, Sullivan JX (2013) Consumption and Income Inequality and the Great Recession. American Economic Review 103:178–183. http://dx.doi.org/10.1257/aer.103.3.178

Saunders P, Halleröd B, Matheson (1994) Making Ends Meet in Australia and Sweden: A Comparative Analysis Using the Subjective Poverty Line Methodology. Acta Sociologica 37:3–22. https://doi.org/10.1177/000169939403700101

Scherpenzeel A, Axt K, Bergmann M, Douhou S, Oepen A, Sand G, Schuller K, Stuck S, Wagner M, Börsch-Supan A (2020) Collecting survey data among the 50+ population during the COVID-19 outbreak: The survey of health, ageing and retirement in Europe (SHARE). Survey Research Methods 14:217–221. https://doi.org/10.18148/srm/2020.v14i2.7738

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

# **Appendix**

#### **A.1**

In this subsection, we present descriptive analyses of economic outcomes (income losses, and variation in ability to make ends meet) during the first wave of the pandemic for different subsamples of the population of interest. We first investigate the relation between employment and income losses, then we move to education and ability to make ends meet.

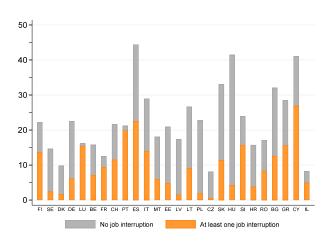
#### **Employment and economic outcomes**

Fig. 4 shows the incidence of job interruptions among employed households with an income loss. We consider an income loss when the lowest household income during the pandemic is at least 5% lower than the typical household income before Corona broke out. We choose the 5% threshold to account for possible errors and/or rounding in reporting the amounts.

As expected, Fig. 4 shows a substantial link between job interruptions and income loss. In the whole subsample of employed households with an income loss, 38.62% also experienced at least one job interruption. This is true for more than 50% of households in ten countries (Spain, France, Greece, Switzerland, Israel, Luxembourg, Portugal, Slovenia, Cyprus, and Finland).

Fig. 4 shows that, among employed households, income loss cannot be explained by the occurrence of job interruptions in 61.38% of the sub-sample. Fig. 5 focuses on employed households who experienced an income loss but no job interruption.<sup>12</sup> It displays how many of these households reduced their working hours during the first wave of the pandemic, i.e., if at least one household member who was employed when Corona broke out reduced working hours during the pandemic.

Fig. 4 Percentage of job interruptions for households that experienced an income loss, by country



**Fig. 4** The figure shows job interruption occurrence for households that experienced an income loss during the first wave of the pandemic (SHARE Corona survey), using calibrated cross-sectional household weights. We consider an income loss when the lowest household income during the pandemic is at least 5% lower than the typical household income before Corona broke out. For each country, the figure shows the percentage of employed households that reported an income loss (height of the bars). Each country bar is then split according to job interruption occurrence (i.e., if at least one household respondent who was employed at the outbreak of the pandemic had one or more job interruptions during the pandemic).

Source: Authors' elaboration using SHARE Corona data (graphics program: STATA).

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<sup>&</sup>lt;sup>12</sup> Fig. 3 excludes all employed households with an income loss and at least one job interruption. Thus, it also does not include households where one partner experienced a job interruption and the other reduced working hours without any job interruption.

Among employed households with income loss and no job interruption, reduction of working hours explains an average fraction of 59.03%, but with marked country differences. Alternative possible explanations for income loss (in case of no job interruption and no reduction of working hours) lie in the reduction of other sources of income, such as income from household members other than the respondents (such as co-resident grown children), "second homes" (that is housing stock that is not used as main residence), financial investments, and businesses.

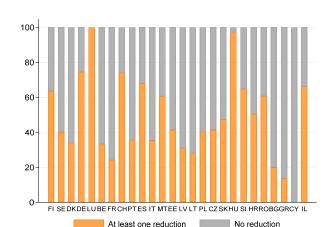


Fig. 5 Percentage reduction in working hours for households with an income loss, by country

**Fig. 5** The figure shows working hours reduction for employed households that experienced an income loss but did not incur in job interruptions during the first wave of the pandemic (SHARE Corona survey), using calibrated cross-sectional household weights. We consider an income loss when the lowest household income during the pandemic is at least 5% lower than the typical household income before Corona broke out. Each country bar is split according to working hours reduction occurrence (i.e., if at least one household respondent who was employed at the outbreak of the pandemic reduced working hours during the pandemic). Source: Authors' elaboration using SHARE Corona data (graphics program: STATA).

Tab. 7 shows the distribution of these other sources of income in our sample. More than half of the sample (50.21% of households) has at least another source of income in addition to employment and/or pension incomes of members included in the interview. More in detail, 18.98% of households can count on income flows from other household members, 20.20% own "second homes", 21.48% hold financial assets, and 6.70% are business owners (either entirely or partially). We can also see from Tab. 7 that 16.78% of respondents are tenants or subtenants of the dwelling they live in, while the remaining 83.22% are homeowners, rentfree, or members of a cooperative.

Tab. 7 Summary statistics (wave 1-wave 8) – other sources of income and home-ownership

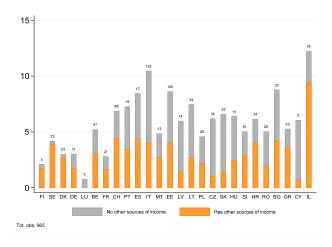
Outcomes (Household level)	Mean	St. dev.	Obs.
Other sources of income (at least one)	50.21%	50.00%	19,277
Income from other household members	18.98%	39.21%	19,277
Second homeowners	20.20%	40.15%	19,277
Financial assets (stocks, bonds, mutual funds)	21.48%	41.07%	19,277
Business owners	6.70%	24.99%	19,277
Tenant/Subtenant	16.78%	37.37%	19,277

**Tab. 7** The table shows descriptive statistics, weighted using calibrated cross-sectional household weights, of other sources of income and home ownership (most recent information collected in waves 1, 2, 4, 5, 6, 7, and 8). Other sources of income is a dummy indicator that takes value 1 if the household reports having at least one of the following income sources: Income from other household members not included in the interview, second homes, investments in financial assets, and businesses. Tenant is a dummy variable that equals 1 if the household occupies the dwelling they live as tenant or subtenant.

Source: Authors' elaboration using SHARE Corona and SHARE waves 1-2 and 4-8 data.

Information in Tab. 7 can help explain the drivers of income losses households experienced during the pandemic. Thus, we move here our focus from employed households, as in Fig. 1 and Fig. 2, to all households. We can see from Fig. 6 how these additional sources of income could explain a large fraction of income loss in households without both hour reduction and job interruption. Note that households without hour reduction and job interruption represent the great majority of the sample (18,065 households – 93.7%), and, among them, only 6% reported an income loss (965 households). Pooling all countries together, we observe that most households have other sources of income (average percentage: 49.97%). At the country level, instead, we observe large percentages for Nordic countries and low percentages for Eastern countries.

Fig. 6 Other income sources for households with an income loss but no job interruption/hour reduction, percentage by country



**Fig. 6** The figure shows the percentage of households that experienced an income loss but neither job interruption nor hour reduction with respect to other sources of income, during the first wave of the pandemic (SHARE Corona survey), using calibrated cross-sectional household weights. We consider an income loss when the lowest household income during the pandemic is at least 5% lower than the typical household income before Corona broke out. For each country, the figure shows the percentage of households who reported an income loss (height of the bars). Each country bar is then split according to receiving other sources of income.

Source: Authors' elaboration using SHARE Corona and SHARE waves 1-2 and 4-8 data (graphics program: STATA).

# The role of education and age

Fig. 7 suggests a protective role of education on the variation in ability to make ends meet between SHARE w7 and the SHARE Corona survey. Fig. 7 shows that the fraction of households who reported any variation in ability to make ends meet decreases as education increases. Similarly, the percentage of households who worsened their economic condition, moving from no difficulties to some or great difficulties, decreases (from around 20% to 10%) with education.

Fig. 8 is like Fig. 2 but households are split according to type and age groups. The youngest group (u60) includes households who have at least one respondent below age 60. The oldest group (65+) includes households where all respondents are 65 or more years of age. The middle group includes households where at least one respondent is between 60 and 64. Fig. 8 shows that households past pension eligibility age are much less often in financial distress than households where at least one member is potentially in the labor market. Given the similarity between the u60 and the 60-64 groups, in our econometric analysis we aggregate them.

Fig. 7 Percentage change in ability to make ends meet between wave 7 and SHARE Corona by education

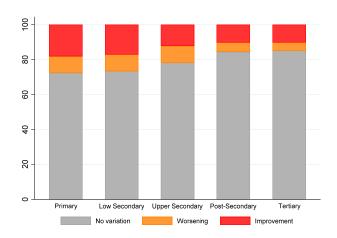
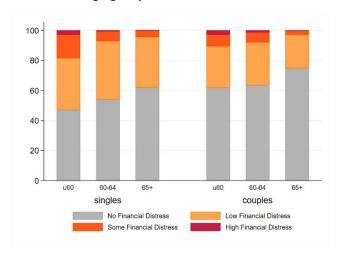


Fig. 7 The figure shows household variation in ability to make ends meet between wave 7 (2017) and the SHARE Corona survey (first wave of the pandemic - 2020) by household level of education (i.e., the level of education of either the respondent -single household-or the most educated couple respondent), using calibrated cross-sectional household weights. For each level of education, the figure shows the percentage of households that had some or great difficulties in making ends meet in wave 7 but that did not have those difficulties during the first wave of the pandemic (Improvement, red bar), the percentage of households that have experienced a worsening of their ability to make ends meet (from no difficulties to some or great difficulties — Worsening, orange bar), and the percentage of households that did not experience any variation between the two surveys (either they did not have or they had difficulties in making ends meet in both surveys — No variation, grey bar).

Source: Authors' elaboration using SHARE Corona and SHARE waves 1-2 and 4-8 data (graphics program: STATA).

Fig. 8 Household financial distress and age group, %



**Fig. 8** The figure shows the percentage of households that report no, low, some, and high financial distress during the first wave of the pandemic (SHARE-CT survey) by household composition defined according to type (singles vs couples) and age group, using calibrated cross-sectional household weights. The youngest group (u60) includes households who have at least one respondent below age 60. The oldest group (65+) includes households where all respondents are 65 or more years of age. The middle group includes households where at least one respondent is between 60 and 64. Each household type is split according to the level of financial distress. Financial distress is measured using a score between 0 and 3. It reflects the severity of the economic difficulties suffered by households during the pandemic.

Source: Authors' elaboration using SHARE-CT data (graphics program: STATA).

#### **A.2**

In this subsection, we present our estimation results when the dependent variable is a measure of COVID-19 impact on household economic conditions. Tab. 8 reports the OLS estimates for the models that explain difficulty in making ends meet, postponed payments, dip into savings, and income loss.

Columns 1, and 4 present estimates over the full sample, while columns 2 and 3 show results for the subsample of households who reported difficulties in making ends meet. In all specifications, we use the following controls at the household level: country dummies, gender, household size, household type (i.e. single vs. couple) by age (young olds vs. old olds), years of education, employment status, occurrence of job interruptions, working from home, reduction of working hours, number of weeks of job interruption, other sources of income (i.e. income from other household member, second homes, investments, and businesses), being tenant/subtenant, income before Covid-19 crisis, length and intensity of restrictions, ability to make ends meet reported in wave 7. See footnote 9 for more details.

Results in columns 1 shows only few differences with respect to column 2 of Tab. 5 that are worth underlying. First, age plays a protective role only for singles (negative and significant coefficient for "single ≥65"), while being in a couple under 65 increases the probability to report difficulties in making ends meet (positive and significant coefficient for "couple<65"). Second, among employment variables, only "Reduced working hours" and "Interrupted weeks" are relevant, with positive and significant coefficients. Third, owning "Second homes" reduces the probability of reporting make ends meet difficulties. Lastly, "Length of restrictions" shows a positive (although small) and significant coefficient.

Columns 2 and 3 show the OLS estimates using as dependent variable a dummy for either postponed payments or dip into savings. In both regressions, age plays a protective role for couples with a negative and significant coefficient for "couple≥65". Coefficients for "single≥65" are also negative, but significant only in column 2. "Reduced working hours" increases the probability to postpone payments and dip into savings, while "Job interruption" shows a positive and significant coefficient only in column 3. Owning "Second homes" and "Own businesses" has a significant and negative effect (positive coefficients) only for the probability to dip into savings, while being "Tenant" increases the probability to postpone payments. "Log(Income before Covid)" is negative but significant only in the postpone payment regression (column 2). As regard government policies, results confirm that only the "Length of restrictions" is relevant, with a negative sign, but statistically significant only in column 2. While "Years of education" are not relevant for postpone payments, its coefficient is significant and positive for dip into savings, indicating that education increases the probability to resort to accumulated savings in case of need. Note, however, that results in column 3 may be misleading as the non-use of savings includes two different kinds of reasons: no need to use savings (and, consequently, no severe difficulties), and absence of savings (and, thus, great economic difficulties). Consequently, results for education may reflect more the availability than the need to use savings. "Make-ends-meet wave 7" is positive and significant only for postpone payments, confirming how the pandemic has exacerbated economic inequalities.

We can see in column 4 how our regressors affect the probability to suffer from an income loss during the first wave of the pandemic. Income loss is defined as a dummy variable that equals one when the lowest household income during the pandemic is at least 5% lower than the typical household income before the outbreak. "Household composition and age" plays an important role, with all coefficients that are negative and significant. Thus, being 65 or more and/or being in a couple reduces the probability to suffer from an income loss. All employment variables ("Employed", "Job interruption", "Home working", "Reduced working hours", and "Interruption weeks"), but "Home working", have a negative and significant effect (positive coefficients). Coefficient for "Home working", instead, is negative and significant. "Log(Income before Covid)" increases the probability of an income loss (positive and significant coefficient). Among the other possible

sources of income, "Income from others" and "Own business" coefficients, coherently with the effects of income deciles, are positive and significant, while "Investments" shows a significant but negative coefficient. "Tenant" and "Make-ends-meet wave 7" negatively affect the probability with coefficients that are positive and significant. Lastly the "Length of restrictions" reduces the probability of an income loss.

Tab. 8 OLS regressions – dependent variables: difficulties in make ends meet, postpone payments, dip into savings, and income loss

	MeM Corona	Postpay	DipSav	IncLoss Corona
Female	0.001	-0.014	-0.012	-0.012**
	(0.008)	(0.010)	(0.015)	(0.006)
Household size	0.029***	0.019***	0.007	0.012***
	(0.004)	(0.004)	(0.005)	(0.003)
HH composition and age:	()	(* * * * )	()	(* * * * * )
single ≥ 65	-0.065***	-0.062***	-0.028	-0.035***
8 -	(0.012)	(0.014)	(0.018)	(0.009)
couple<65	0.046***	-0.020	-0.011	-0.048***
1	(0.013)	(0.016)	(0.021)	(0.011)
couple≥65	-0.010	-0.051***	-0.060***	-0.069***
1	(0.013)	(0.016)	(0.020)	(0.010)
Years of education	-0.002*	-0.000	0.006***	-0.001
	(0.001)	(0.001)	(0.001)	(0.001)
Employed	0.000	-0.005	-0.017	0.037***
1 5	(0.011)	(0.014)	(0.018)	(0.008)
Job interruption	-0.060*	0.046	0.187**	0.255***
	(0.032)	(0.056)	(0.074)	(0.039)
Home working	-0.002	0.022	-0.001	-0.046***
	(0.011)	(0.024)	(0.032)	(0.012)
Reduced working hours	0.032**	0.074***	0.107***	0.252***
8	(0.015)	(0.028)	(0.037)	(0.019)
Interrupted weeks	0.018***	0.008	0.008	0.018***
1	(0.004)	(0.006)	(0.008)	(0.004)
Income from others	0.013*	-0.002	0.008	0.013**
	(0.007)	(0.009)	(0.011)	(0.005)
Second homes	-0.015**	0.003	0.023*	-0.000
	(0.006)	(0.009)	(0.012)	(0.005)
Investments	-0.033***	0.005	0.030	-0.010*
	(0.007)	(0.014)	(0.025)	(0.005)
Own business	0.038***	0.034	0.098***	0.032**
	(0.013)	(0.024)	(0.035)	(0.013)
Tenant	0.050***	0.039***	-0.018	0.013**
	(0.009)	(0.012)	(0.016)	(0.006)
Log(Income before	-0.268***	-0.058***	-0.012	0.046***
Covid)				
	(0.010)	(0.010)	(0.013)	(0.006)
Length of restrictions	0.005***	-0.005**	-0.001	-0.004***
	(0.002)	(0.002)	(0.003)	(0.001)
Avg. restriction intensity	0.002	0.005	0.009	0.003
	(0.005)	(0.006)	(0.010)	(0.003)
Make-ends-meet wave7	0.258***	0.023***	0.014	0.013***
	(0.008)	(0.006)	(0.011)	(0.004)
Observations	19,277	6,628	6,628	19,277
$\mathbb{R}^2$	0.398	0.062	0.090	0.150

**Tab. 8** Dependent variables are binary indicators for: (some or great) difficulties in making ends meet during the pandemic (column 1), postpone payment (column 2), dip into savings (column 3), and income losses during the pandemic (column 4). Robust standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Source: Authors' elaboration using SHARE Corona and SHARE waves 1-2 and 4-8 data.

Tab. 9 OLS regressions – Dependent variables: income loss during the pandemic, percentage income variation during the pandemic

	In	come loss (C	orona)	Percentage income loss (Coro		
_	(full sample)	JI or RWH	No JI and No RWH	JI or RWH	No JI and No RWH	
Female	-0.012**	-0.024	-0.011**	0.347	0.300	
	(0.006)	(0.050)	(0.005)	(2.536)	(0.313)	
Household size	0.012***	0.015	0.013***	-0.479	-0.183	
	(0.003)	(0.019)	(0.003)	(0.837)	(0.183)	
HH composition and age:						
single≥65	-0.035***	-0.024	-0.032***	4.315*	1.225***	
	(0.009)	(0.060)	(0.009)	(2.453)	(0.458)	
couple<65	-0.048***	-0.128***	-0.038***	6.146***	3.086***	
	(0.011)	(0.049)	(0.010)	(2.304)	(0.586)	
couple≥65	-0.069***	-0.127**	-0.064***	6.927**	3.653***	
	(0.010)	(0.062)	(0.010)	(2.929)	(0.537)	
Years of education	-0.001	-0.011**	-0.000	0.443*	0.017	
	(0.001)	(0.005)	(0.000)	(0.254)	(0.032)	
Employed	0.037***	, í	0.024***	, , ,	0.354	
	(0.008)		(0.008)		(0.407)	
Job interruption	0.255***		` ,		` ′	
•	(0.039)					
Home working	-0.046***	-0.072**	-0.015	2.210	1.317***	
$\mathcal{E}$	(0.012)	(0.031)	(0.012)	(1.381)	(0.504)	
Reduced working hours	0.252***	,		,	,	
E	(0.019)					
Interrupted weeks	0.018***	0.020***		-0.952***		
1	(0.004)	(0.003)		(0.126)		
Income from others	0.013**	0.002	0.014***	-0.886	-0.065	
	(0.005)	(0.037)	(0.005)	(1.712)	(0.337)	
Second homes	-0.000	0.025	-0.002	-0.302	0.010	
	(0.005)	(0.032)	(0.004)	(1.347)	(0.246)	
Investments	-0.010*	-0.049	-0.006	-1.061	-0.108	
	(0.005)	(0.037)	(0.005)	(1.673)	(0.256)	
Own business	0.032**	0.060	0.031***	-3.432*	-1.147*	
	(0.013)	(0.040)	(0.012)	(1.877)	(0.601)	
Tenant	0.013**	0.125***	0.005	-5.023**	0.163	
	(0.006)	(0.046)	(0.005)	(2.076)	(0.316)	
Log(Income before Covid)	0.046***	0.120***	0.039***	-3.776*	-4.439***	
Zog(moeme octore covia)	(0.006)	(0.040)	(0.006)	(2.004)	(0.464)	
Length of restrictions	-0.004***	-0.008	-0.004***	0.292	0.045	
8	(0.001)	(0.009)	(0.001)	(0.333)	(0.066)	
Avg. restriction intensity	0.003	-0.006	0.004	0.803	-0.009	
2	(0.003)	(0.027)	(0.003)	(1.060)	(0.163)	
Make-ends-meet wave7	0.013***	0.054	0.010**	-1.871	-0.354	
	(0.004)	(0.034)	(0.004)	(1.372)	(0.274)	
Observations	19,277	1,212	18,065	1,212	18,065	
R <sup>2</sup>	0.150	0.121	0.034	0.137	0.060	

**Tab. 9** Dependent variables in columns 1-3 are binary indicators for income losses during the pandemic. Column 1 refers to the entire sample. Column 2 focuses on the subsample of households that reported either a "Job interruption" (JI) or "Reduced Working Hours" (RWH). Column 3 refers to the subsample of households that did not have "Job interruption" (JI) or "Reduced Working Hours" (RWH). Columns 4 and 5 focus on the same subsamples of columns 2 and 3 but use as dependent variables income variations, in percentage terms, during the pandemic (they span from negative to positive values). Robust standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Source: Authors' elaboration using SHARE Corona and SHARE waves 1-2 and 4-8 data.

Tab. 9 investigates which factors affect the probability to experience an income loss during the pandemic, distinguishing between all households (column 1), households with a job interruption or a reduction of

working hours (column 2), and households without interruptions and reductions (column 3). Note that column (1) is the same regression as in column 4 of Tab. 8. The two subsamples on which we focus in columns 2 and 3 are justified by the prominent role that job interruption and hour reduction show in column 1. Results in column 3 are in line with column 1 and suggest that these households (that represent 93.7% of the sample) drive the results for the full sample. Columns 4 and 5 focus on the same subsamples of columns 2 and 3 but use as dependent variables income variations, in percentage terms, during the pandemic (they span from negative to positive values).

Finally, Tab. 10 reports the OLS estimates for the models that explain make ends meet worsening (columns 1-3) and improvement (columns 4-6). See footnote 10 for details on regression variables. Results in columns 1 and 4 were presented also in Tab. 6. As previously discussed, column 1 shows a protective role of age and income, and a detrimental role of income losses. Among employment variables, instead, only "Reduced working hours" significantly increases the probability of a worsening. Moving to other sources of income, "Second homes" and "Investments" reduce the probability of a deterioration in ability to make ends meet, while the coefficient for "Own business" is positive and significant. Lastly, being "Tenant" and the "Length of restrictions" negatively affect make ends meet variation. Estimation results for "make ends meet" improvements, column 4, mirror, in general, the results in column 1.

We add here four additional regressions that make use of specific subsamples. Columns 2 and 3 show results for a worsening in ability to make ends meet between wave 7 and the SHARE Corona, for the subsample of households that did not report some or great difficulties in making ends meet in wave7. Columns 5 and 6, instead, present specular information: improvements in making ends meet for households who had some or great difficulties in wave7. Columns 2 and 5 focus, respectively, on the subsample of households with an income loss or an income gain (either between waves or during the pandemic), while columns 3 and 6 concentrates, respectively, on the subsamples of households without any income loss or income gain.

Results in columns 2 and 3 are like those in column 1 but with some relevant differences. For households who experienced at least an income loss (column 2), education plays a protective role (negative and significant coefficient), while the greater the number of "Interrupted weeks" the greater the probability of a make ends meet worsening. Coefficients for income losses are positive but significant only for pandemic variations ("IncLoss Corona").

On the other hand, from column 3 we learn that for households who do not experience any large income loss (of at least 5%), the coefficient for "Reduced working hours" is positive and significant.

Moving to ability improvements in columns 4-6, we can see that many of the results are in line with columns 1-3, although specular. We can however underline two notable differences. First, not only the coefficient for "single≥65" is positive and significant (in columns 4-6) but also the coefficient for "couple<65" is negative and significant in columns 4 and 5, meaning that being in a couple reduces the probability of an improvement. Second, "Income from others" reduces the probability of an ability improvement (negative and significant coefficient in columns 4 and 5). Finally, coefficients for income gains are not significant.

Tab. 10 OLS- Dependent variables: worsening and improvement in making ends meet

		MeM worsening			MeM improven	nent
	-	(Income Loss) (No Income Loss)			(Income Gain)	(No Income gain)
						_
Female	-0.011	-0.015	-0.007	-0.030*	-0.032	-0.031
	(0.009)	(0.015)	(0.010)	(0.016)	(0.023)	(0.023)
Household size	0.024***	0.010	0.032***	-0.032***	-0.046***	-0.025***
	(0.006)	(0.009)	(0.008)	(0.006)	(0.009)	(0.008)
plusDeltaSize	0.047	0.084	0.014	0.047	0.062	0.036

			(4.4.4.5)	/ 1		/a a ==>
. =	(0.031)	(0.051)	(0.036)	(0.034)	(0.046)	(0.053)
minDeltaSize	0.018	0.007	0.013	0.017	0.017	0.014
	(0.012)	(0.017)	(0.016)	(0.018)	(0.031)	(0.023)
HH composition and age:						
single≥65	-0.051***	-0.063***	-0.033*	0.061***	0.049*	0.082***
	(0.015)	(0.024)	(0.019)	(0.019)	(0.025)	(0.027)
couple<65	0.025	0.023	0.026	-0.065***	-0.100***	-0.006
	(0.017)	(0.026)	(0.020)	(0.021)	(0.029)	(0.031)
couple≥65	-0.004	-0.013	0.008	0.002	-0.026	0.042
	(0.017)	(0.026)	(0.021)	(0.021)	(0.029)	(0.031)
Years of education	-0.002	-0.004**	-0.000	0.002	0.003	-0.001
	(0.001)	(0.002)	(0.001)	(0.001)	(0.002)	(0.002)
Employment variation:						
Always employed	0.003	-0.015	0.020	-0.004	-0.004	-0.022
	(0.013)	(0.022)	(0.016)	(0.021)	(0.027)	(0.033)
Employed-Not empl.	0.015	0.012	0.013	-0.017	-0.023	-0.026
	(0.012)	(0.016)	(0.017)	(0.022)	(0.035)	(0.028)
Not empl - Employed	-0.017	-0.019	-0.015	-0.024	-0.007	-0.060
	(0.018)	(0.031)	(0.020)	(0.032)	(0.037)	(0.061)
Job interruption	-0.046	-0.036	-0.044	0.104*	0.053	0.192**
-	(0.034)	(0.051)	(0.037)	(0.062)	(0.089)	(0.088)
Home working	-0.004	-0.003	-0.009	0.049*	0.034	0.067
8	(0.011)	(0.019)	(0.013)	(0.029)	(0.037)	(0.045)
Reduced working hours	0.017	0.004	0.045**	-0.005	0.032	-0.030
S	(0.016)	(0.023)	(0.021)	(0.033)	(0.044)	(0.049)
Interrupted weeks	0.010**	0.012**	0.006	-0.027***	-0.027***	-0.024***
1	(0.004)	(0.006)	(0.005)	(0.006)	(0.010)	(0.008)
IncLoss Corona	0.120***	0.130***	,			-0.024
_	(0.015)	(0.026)				(0.031)
IncLoss_waves	0.031***	0.038				0.024
_	(0.007)	(0.031)				(0.015)
IncGain Corona	,	,	0.044	0.006	0.032	
_			(0.033)	(0.022)	(0.032)	
IncGain_waves			-0.004	0.018	0.025	
_			(0.008)	(0.011)	(0.038)	
Log(Income before Covid)	-0.206***	-0.221***	-0.190***	0.322***	0.357***	0.297***
,	(0.014)	(0.026)	(0.013)	(0.013)	(0.018)	(0.020)
Income from others	-0.002	-0.010	0.004	-0.026**	-0.031*	-0.022
	(0.008)	(0.014)	(0.009)	(0.013)	(0.017)	(0.019)
Second homes	-0.020***	-0.021*	-0.015*	0.014	0.010	0.016
	(0.007)	(0.012)	(0.008)	(0.013)	(0.018)	(0.019)
Investments	-0.020***	-0.036***	-0.010	0.118***	0.099***	0.137***
	(0.006)	(0.011)	(0.007)	(0.022)	(0.030)	(0.034)
Own business	0.043***	0.072***	0.016	0.033	0.052	0.015
	(0.013)	(0.020)	(0.014)	(0.034)	(0.051)	(0.046)
Tenant	0.028***	0.045***	0.015	-0.079***	-0.107***	-0.039*
	(0.010)	(0.017)	(0.011)	(0.015)	(0.021)	(0.023)
Length of restrictions	0.006***	0.008**	0.004*	-0.003	0.001	-0.008*
.8	(0.002)	(0.003)	(0.002)	(0.003)	(0.005)	(0.004)
Avg. restriction intensity	0.002	0.007	-0.004	0.001	0.008	-0.007
11. g. resurement intensity	(0.006)	(0.009)	(0.007)	(0.010)	(0.014)	(0.015)
Observations	11,168	4,716	6,452	8,109	4,735	3,374
R <sup>2</sup>	0.198	0.217	0.161	0.230	0.216	0.232
11	0.170	V.41/	0.101	0.230	0.210	0.232

**Tab. 10** Dependent variables in columns 1, 2 and 3 are binary indicators for worsening in making ends meet from wave 7 to SHARE Corona, for the subsample of households that did not report some or great difficulties in making ends meet in wave7. Dependent variables in Columns 4, 5 and 6, instead, are binary indicators for improvement in making ends meet from wave 7 to SHARE Corona, for the subsample of households who had some or great difficulties in wave7. Columns 1 and 4 refer to the full (respective) subsamples. Columns 2 and 5 focus, respectively, on the subsample of households with an income loss or an income gain (either between waves or during the pandemic), while columns 3 and 6 focuses, respectively, on the subsample of households without any income loss or income gain. Robust standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Source: Authors' elaboration using SHARE Corona and SHARE waves 1-2 and 4-8 data.

From Tab. 10 we learn that income losses are important drivers of make ends meet variations, at least in case of a worsening. We cannot state the same for the effect of income gains on ability improvement. Tab. 11 and 12 report summary statistics for income losses and gains. The tables differ for the sample in use. While Tab. 11 reports statistics over the full sample, Tab. 12 restricts to the subsample of households in which the same respondent provided income information both in wave 7 and in the SHARE Corona. Results in the tables show that income variations (losses and gains) are more frequent between waves that during the pandemic. Income gains are more common than income losses between waves, but that the opposite holds for pandemic variations. Differently from income gains (between waves and during the pandemic) and income losses between waves, income losses during the pandemic affected households differently according to their age profile. We can see in Tab. 11 that 18% of households with at least one respondent younger than 65 reported an income loss, compared to 5% for households with all 65+ respondents. We learn from Tab. 11 and Tab. 12 that the significant role played by income losses compared to the non-significance of income gains, on the probability of making ends meet improvement/worsening (see Tab. 10), is not explained by the number of households who reported income variations. It results, instead, (at least for the variations during the pandemic) from the age characteristics of the households who experienced the variations.

Tab. 11 Summary statistics (wave 7 and SHARE Corona) – income losses/gains

Outcomes	Mean	St. dev.	Obs.
Income loss Corona	10.97	31.26	19,277
At least one under 65	17.91	38.35	5,504
All 65+	4.82	21.41	13,773
Income loss between waves	36.95	48.27	19,277
At least one under 65	37.23	48.27	5,504
All 65+	36.70	48.35	13,773
Income gain Corona	1.84	13.45	19,277
At least one under 65	2.28	14.94	5,504
All 65+	1.45	11.96	13,773
Income gain between waves	44.32	49.68	19,277
At least one under 65	45.81	49.83	5,504
All 65+	43.00	49.51	13,773

**Tab. 11** The table shows household descriptive statistics (mean, standard deviation, and number of observations), weighted using calibrated cross-sectional household weights, of income losses and gains between wave 7 and the SHARE Corona survey, and during the first wave of the pandemic. We consider an income loss/gain when the income variation is 5% or greater. Income loss Corona and Income gain Corona result from the difference between the lowest household income during the pandemic and the typical household income before Corona broke out. Income loss waves and Income gain waves, instead, are the indicators for losses and gains resulting from the comparison of the typical household income before Corona broke out and the typical household income in wave 7. Source: Authors' elaboration using SHARE Corona and SHARE waves 7 data.

Tab. 12 Summary statistics (wave 7 and SHARE Corona) – income losses/gains, same respondent

Outcomes	Mean	St. dev.	Obs.
Income loss Corona	9.62	29.49	12,166
At least one under 65	16.70	37.30	3,156
All 65+	4.30	20.28	9,010
Income loss between waves	36.61	48.17	12,166
At least one under 65	36.97	48.28	3,156
All 65+	36.33	48.10	9,010
Income gain Corona	1.80	13.30	12,166
At least one under 65	2.24	14.80	3,156
All 65+	1.47	12.05	9,010
Income gain between waves	44.68	49.72	12,166
At least one under 65	45.60	49.72	3,156
All 65+	43.99	49.64	9,010

**Tab. 12** The table shows household descriptive statistics (mean, standard deviation, and number of observations), weighted using calibrated cross-sectional household weights, of income losses and gains between wave 7 and the SHARE Corona survey, and during the first wave of the pandemic. The table reports summary statistics of income losses and gains, for households in which the same respondent provided income information both in wave 7 and in the SHARE Corona. We consider an income loss/gain when the income variation is 5% or greater. Income loss Corona and Income gain Corona result from the difference between the lowest household income during the pandemic and the typical household income before Corona broke out. Income loss waves and Income gain waves, instead, are the indicators for losses and gains resulting from the comparison of the typical household income before Corona broke out and the typical household income in wave 7.

Source: Authors' elaboration using SHARE Corona and SHARE waves 7 data.

#### **A.3**

In this section we extend our investigation on the determinants of different measures of financial distress that we discussed in section 4 and Appendix A.2. In Tab. 13, Tab. 14, and Tab. 15 we present OLS estimation results when including additional employment characteristics: last job industry (the kind of business, industry, or services of the last job) and last job type (private-sector employee, public sector employee, or self-employed)<sup>13</sup>. We refer the reader to footnotes 9 and 10 for more details about the controls.

Results in all three tables show that our previous findings are robust to the inclusion of information on last job industry and type. The only relevant variations, with respect to previous results, pertain "Years of education", "Employed", and "Own business" in Tab. 13 (correspondent regressions in Tab. 5 and Tab. 8). "Employed" and "Own business" slightly lose significance (respectively in columns 4, and 5 - and in columns 1, 3, 4 and 5), but this is a result we can expect given the inclusion of the variables "Private employee", "Public employee", and "Self-employed". This last variable shows positive and significant coefficients in columns 4 and 5.

Moving our attention to the last job type we can see in Tab. 13 that the coefficient for "Private employee" is positive and significant for Dip into savings, while being "Self-employed" significantly increases financial distress and the probability to suffer from income losses during the pandemic.

<sup>&</sup>lt;sup>13</sup> Household last job industry and type correspond to the (SHARE Corona) first respondent last job industry and type. "Private employee", "Public employee", and "Self-employed" are dummy variables that take value 1 if the household respondent's last job was, respectively, in the private sector, in the public sector, or if he was self-employed. "Industries" is a set of thirteen dummy variables that equal 1 if the household respondent's last job was in "Mining and quarrying", "Manufacturing, "Electricity, gas and water", "Construction", "Wholesale and retail trade", "Hotels and restaurants", "Transport, storage, communic.", "Financial intermediation", "Real estate, renting, businesses", "Public admin. and defence", "Education", "Health and social work", or "Other community" industry. The reference industry category is "Agriculture, hunting, forestry, fishing".

From Tab. 15, instead, we learn that working in "Manufacturing" and "Other community" decrease the probability of a make ends meet improvement, while working in "Hotels and restaurants" increases the probability of a make ends meet ability deterioration.

Tab. 13 OLS regressions – dependent variables: difficulties in make ends meet, postpone payments, dip into savings, income loss, and financial distress indicator

	MeM_Corona	Postpay	DipSav	IncLoss_Corona	FDI
Female	-0.000	-0.011	-0.015	-0.011*	-0.015
Temale	(0.008)	(0.011)	(0.015)	(0.006)	(0.013)
Household size	0.028***	0.020***	0.007	0.011***	0.051***
Household Size	(0.004)	(0.005)	(0.006)	(0.003)	(0.006)
HH composition and age:	(0.004)	(0.003)	(0.000)	(0.003)	(0.000)
single \ge 65	-0.067***	-0.051***	-0.037**	-0.036***	-0.130***
single_05	(0.012)	(0.014)	(0.019)	(0.009)	(0.018)
couple<65	0.050***	-0.022	-0.017	-0.050***	-0.009
coupie 405	(0.014)	(0.017)	(0.022)	(0.011)	(0.021)
couple≥65	-0.008	-0.054***	-0.068***	-0.071***	-0.103***
couple_05	(0.014)	(0.016)	(0.022)	(0.010)	(0.021)
Years of education	-0.001	0.000	0.005***	-0.001	-0.001
1 cars of caacation	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Employed	0.007	-0.007	-0.086**	0.026	0.035
Employed	(0.019)	(0.030)	(0.038)	(0.018)	(0.029)
Private employee	-0.009	0.016	0.067**	0.020	0.011
Tivate employee	(0.015)	(0.026)	(0.032)	(0.015)	(0.024)
Public employee	-0.012	-0.018	0.026	-0.020	-0.039
Tublic employee	(0.012)	(0.025)	(0.032)	(0.015)	(0.024)
Self employed	0.027	0.036	0.070	0.059***	0.097***
Self employed	(0.019)	(0.036)	(0.045)	(0.021)	(0.034)
Industries:	(0.01)	(0.030)	(0.043)	(0.021)	(0.054)
Mining and quarrying	0.013	0.020	-0.046	0.011	0.031
winning and quarrying	(0.024)	(0.027)	(0.030)	(0.015)	(0.033)
Manufacturing	0.027**	0.001	-0.004	0.008	0.035**
Wandacturing	(0.012)	(0.011)	(0.015)	(0.007)	(0.015)
Electricity, gas and water	0.028	0.009	0.013)	0.019	0.052**
Electricity, gas and water	(0.020)	(0.023)	(0.031)	(0.014)	(0.026)
Construction	0.036**	0.015	0.013	0.004	0.048***
Construction	(0.014)	(0.015)	(0.020)	(0.009)	(0.019)
Wholesale and retail trade	0.026*	0.004	0.037*	0.014	0.041**
Wholesale and letail flade	(0.014)	(0.015)	(0.021)	(0.009)	(0.018)
Hotels and restaurants	0.053**	-0.014	-0.015	0.038***	0.087***
Trotois and restaurants	(0.022)	(0.018)	(0.026)	(0.014)	(0.030)
Transport, storage, communic.	0.016	0.006	0.011	-0.004	0.014
Transport, Storage, communic.	(0.015)	(0.016)	(0.022)	(0.009)	(0.019)
Financial intermediation	0.043**	0.040	0.044	-0.005	0.047*
	(0.019)	(0.034)	(0.049)	(0.013)	(0.026)
Real estate, renting, businesses	0.045*	0.067	0.034	0.004	0.065*
rear estate, remains, custinesses	(0.025)	(0.047)	(0.056)	(0.020)	(0.036)
Public admin. and defence	0.002	-0.005	-0.030	-0.007	-0.004
1 40110 40111111 4114 40101100	(0.013)	(0.016)	(0.022)	(0.008)	(0.017)
Education	0.011	-0.030**	0.008	-0.008	-0.000
	(0.014)	(0.014)	(0.023)	(0.009)	(0.018)
Health and social work	0.024*	-0.000	0.024	0.013	0.039**
	(0.014)	(0.016)	(0.025)	(0.009)	(0.019)
Other community	0.031**	0.013	0.029	0.018**	0.058***
,	(0.013)	(0.014)	(0.018)	(0.008)	(0.017)
Job interruption	-0.060*	0.040	0.186**	0.243***	0.175***
1	(0.032)	(0.056)	(0.074)	(0.039)	(0.061)
Home working	-0.003	0.025	-0.001	-0.044***	-0.046**
0					

	(0.011)	(0.024)	(0.033)	(0.012)	(0.019)
Reduced working hours	0.032**	0.068**	0.108***	0.249***	0.302***
Trouble working he will	(0.015)	(0.028)	(0.036)	(0.019)	(0.028)
Interrupted weeks	0.017***	0.009	0.008	0.018***	0.041***
•	(0.004)	(0.006)	(0.008)	(0.004)	(0.008)
Income from others	0.012	-0.001	0.005	0.011**	0.024**
	(0.007)	(0.009)	(0.012)	(0.005)	(0.010)
Second homes	-0.013**	-0.001	0.020	-0.001	-0.014
	(0.006)	(0.009)	(0.013)	(0.005)	(0.009)
Investments	-0.033***	0.004	0.022	-0.009*	-0.041***
	(0.007)	(0.014)	(0.025)	(0.005)	(0.009)
Own business	0.025*	0.018	0.083**	0.015	0.046**
	(0.014)	(0.025)	(0.037)	(0.013)	(0.023)
Tenant	0.049***	0.036***	-0.025	0.013**	0.077***
	(0.009)	(0.013)	(0.017)	(0.006)	(0.012)
Log(Income before Covid)	-0.269***	-0.056***	-0.006	0.050***	-0.254***
	(0.010)	(0.011)	(0.013)	(0.006)	(0.013)
Length of restrictions	0.005***	-0.005**	-0.000	-0.003***	0.000
	(0.002)	(0.002)	(0.003)	(0.001)	(0.002)
Avg. restriction intensity	0.003	0.003	0.008	0.004	0.009
	(0.005)	(0.006)	(0.011)	(0.003)	(0.007)
Make-ends-meet wave7	0.256***	0.024***	0.012	0.013***	0.289***
	(0.008)	(0.006)	(0.011)	(0.004)	(0.010)
Observations	18,533	6,159	6,159	18,533	18,533
$\mathbb{R}^2$	0.387	0.065	0.097	0.155	0.323

**Tab. 13** Dependent variables are binary indicators for: (some or great) difficulties in making ends meet during the pandemic (column 1), postpone payment (column 2), dip into savings (column 3), income losses during the pandemic (column 4), and Financial Distress Indicator. Robust standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Source: Authors' elaboration using SHARE Corona and SHARE waves 1-2 and 4-8 data.

Tab. 14 OLS regressions – Dependent variables: Income loss during the pandemic, percentage income variation during the pandemic

	Income loss (Corona)			Percentage income loss (Corona)		
	(full sample)	JI or RWH	No JI and No RWH	JI or RWH	No JI and No RWH	
Female	-0.011*	-0.018	-0.011**	0.526	0.329	
	(0.006)	(0.051)	(0.006)	(2.547)	(0.325)	
Household size	0.011***	0.019	0.012***	-0.536	-0.178	
	(0.003)	(0.019)	(0.003)	(0.834)	(0.181)	
HH composition and age:						
single≥65	-0.036***	-0.036	-0.033***	5.539**	1.146**	
	(0.009)	(0.060)	(0.009)	(2.476)	(0.473)	
couple<65	-0.050***	-0.156***	-0.038***	6.653***	3.261***	
•	(0.011)	(0.051)	(0.011)	(2.429)	(0.631)	
couple≥65	-0.071***	-0.168***	-0.063***	8.428***	3.695***	
•	(0.010)	(0.064)	(0.010)	(3.066)	(0.567)	
Years of education	-0.001	-0.006	-0.000	0.329	0.014	
	(0.001)	(0.006)	(0.001)	(0.249)	(0.033)	
Employed	0.026	, ,	0.004	` /	1.508**	
1 7	(0.018)		(0.018)		(0.735)	
Private employee	0.020	0.022	0.023	-1.271	-1.149*	
1 2	(0.015)	(0.039)	(0.015)	(1.877)	(0.609)	
Public employee	-0.020	-0.043	-0.001	1.556	-0.520	
1 5	(0.015)	(0.038)	(0.015)	(1.552)	(0.585)	
Self employed	0.059***	0.084*	0.050**	-5.706**	-2.204**	
1 3	(0.021)	(0.046)	(0.022)	(2.388)	(1.012)	
Industries:	, ,		,	( )		
Mining and quarrying	0.011	0.153	0.004	-0.751	-0.170	
8 1 7 8						

	(0.015)	(0.145)	(0.014)	(5.617)	(0.871)
Manufacturing	0.008	0.017	0.006	0.773	-0.195
	(0.007)	(0.079)	(0.007)	(3.313)	(0.401)
Electricity, gas and water	0.019	0.049	0.016	-0.033	-1.206
	(0.014)	(0.118)	(0.013)	(5.900)	(0.770)
Construction	0.004	0.086	-0.002	-2.121	-0.097
	(0.009)	(0.088)	(0.008)	(3.926)	(0.479)
Wholesale and retail trade	0.014	0.053	0.008	-1.919	-0.370
	(0.009)	(0.087)	(0.008)	(3.630)	(0.457)
Hotels and restaurants	0.038***	0.139	0.025*	-2.878	-1.056
	(0.014)	(0.101)	(0.014)	(5.286)	(0.872)
Transport, storage, communic.	-0.004	0.093	-0.011	-3.916	0.807
	(0.009)	(0.087)	(0.008)	(3.774)	(0.499)
Financial intermediation	-0.005	0.021	-0.008	-2.998	0.205
	(0.013)	(0.116)	(0.012)	(4.908)	(0.662)
Real estate, renting, business act.	0.004	-0.087	0.016	-2.021	-1.200
,	(0.020)	(0.117)	(0.019)	(5.727)	(1.051)
Public admin, and defence	-0.007	-0.083	-0.004	2.575	0.189
	(0.008)	(0.088)	(0.008)	(3.631)	(0.457)
Education	-0.008	-0.112	-0.003	2.154	0.958**
	(0.009)	(0.086)	(0.008)	(3.921)	(0.427)
Health and social work	0.013	0.058	0.010	-4.528	-0.548
11-01-01 01-01 01-01-01-01-01-01-01-01-01-01-01-01-01-0	(0.009)	(0.090)	(0.009)	(3.982)	(0.558)
Other community	0.018**	0.065	0.013	-3.161	-0.033
other community	(0.008)	(0.080)	(0.008)	(3.643)	(0.439)
Job interruption	0.243***	(0.000)	(0.000)	(3.043)	(0.437)
300 merupuon	(0.039)				
Home working	-0.044***	-0.062*	-0.013	2.309*	1.099**
Trome working	(0.012)	(0.032)	(0.012)	(1.372)	(0.497)
Reduced working hours	0.249***	(0.032)	(0.012)	(1.572)	(0.427)
reduced working nours	(0.019)				
Interrupted weeks	0.018***	0.018***		-0.868***	
interrupted weeks	(0.004)	(0.003)		(0.124)	
Income from others	0.011**	0.002	0.012**	-0.975	-0.093
medic from others	(0.005)	(0.037)	(0.005)	(1.689)	(0.326)
Second homes	-0.001	0.020	-0.003	0.049	-0.017
Second nomes	(0.005)	(0.032)	(0.004)	(1.332)	(0.245)
Investments	-0.009*	-0.051	-0.006	-0.816	-0.126
mvestments	(0.005)	(0.037)	(0.005)	(1.655)	(0.258)
Own business	0.005)	0.009	0.021*	-0.566	-0.722
Own business	(0.013)	(0.043)	(0.012)	(2.190)	(0.617)
Tanant	0.013)	0.109**	0.005	-3.974*	0.225
Tenant					
Lag(Inagma hafara Cavid)	(0.006) 0.050***	(0.045) 0.136***	(0.005) 0.041***	(2.072) -4.485**	(0.319)
Log(Income before Covid)			(0.006)		-4.336*** (0.478)
T	(0.006)	(0.040)	\ /	(2.044)	(0.478)
Length of restrictions	-0.003***	-0.010	-0.003***	0.376	0.018
Ava magnistics into it.	(0.001)	(0.009)	(0.001)	(0.329)	(0.066)
Avg. restriction intensity	0.004	-0.006	0.004	0.740	-0.050
M.L 1	(0.003)	(0.027)	(0.003)	(1.056)	(0.164)
Make-ends-meet wave7	0.013***	0.049	0.010**	-1.665	-0.377
01	(0.004)	(0.034)	(0.004)	(1.368)	(0.275)
Observations P <sup>2</sup>	18,533	1,203	17,330	1,203	17,330
$\mathbb{R}^2$	0.155	0.150	0.036	0.163	0.057

**Tab. 14** Dependent variables in columns 1-3 are binary indicators for income losses during the pandemic. Column 1 refers to the entire sample. Column 2 focuses on the subsample of households that reported either a "Job interruption" (JI) or "Reduced Working Hours" (RWH). Column 3 refers to the subsample of households that did not have "Job interruption" (JI) or "Reduced Working Hours" (RWH). Columns 4 and 5 focus on the same subsamples of columns 2 and 3 but use as dependent variables income variations, in percentage terms, during the pandemic (they span from negative to positive values). Robust standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Source: Authors' elaboration using SHARE Corona and SHARE waves 1-2 and 4-8 data.

Tab. 15 OLS regressions – Dependent variables: worsening and improvement in making ends meet

	MeM worsening			MeM improvement			
		(Income Loss)	(No Income Loss)		(Income Gain)	(No Income Gain)	
Female	0.014	0.016	0.010	0.026**	0.027	0.052**	
remaie	-0.014 (0.009)	-0.016 (0.016)	-0.010 (0.010)	-0.036** (0.017)	-0.027 (0.024)	-0.052** (0.024)	
Household size	0.022***	0.008	0.032***	-0.032***	-0.046***	-0.026***	
Household size	(0.022)	(0.008)	(0.008)	(0.006)	(0.010)	(0.009)	
plusDeltaSize	0.054*	0.096*	0.018	0.046	0.010)	0.038	
piusDeitaSize	(0.034)	(0.052)	(0.037)	(0.037)	(0.048)	(0.059)	
minDeltaSize	0.016	0.005	0.009	0.018	0.033	0.007	
IIIIIDeltaSize	(0.012)	(0.017)	(0.016)	(0.019)	(0.032)	(0.023)	
HH composition and age:	(0.012)	(0.017)	(0.010)	(0.019)	(0.032)	(0.023)	
single \ge 65	-0.050***	-0.057**	-0.038*	0.064***	0.052*	0.080***	
single_03	(0.016)	(0.024)	(0.019)	(0.020)	(0.027)	(0.029)	
couple<65	0.030*	0.031	0.025	-0.064***	-0.100***	-0.004	
couple <03	(0.017)	(0.028)	(0.021)	(0.023)	(0.031)	(0.034)	
counts>65	-0.002	-0.007	0.003	0.005	-0.025	0.045	
couple≥65	(0.017)	(0.027)	(0.021)	(0.023)	(0.023)	(0.034)	
Years of education	-0.001	-0.004**	0.021)	0.023)	0.003	-0.004*	
i ears of education		(0.002)	(0.001)		(0.003)		
E	(0.001)	(0.002)	(0.001)	(0.002)	(0.002)	(0.002)	
Employment variation:	0.012	0.000	0.025	0.012	0.021	0.020	
Always employed	0.013	0.000	0.025	-0.013	-0.021	-0.029	
F 1 1M / 1	(0.021)	(0.033)	(0.026)	(0.039)	(0.051)	(0.061)	
Employed-Not empl.	0.014	0.008	0.010	-0.019	-0.027	-0.029	
N. 1 F. 1	(0.012)	(0.016)	(0.017)	(0.022)	(0.036)	(0.028)	
Not empl - Employed	-0.010	-0.012	-0.011	-0.022	-0.016	-0.046	
	(0.023)	(0.039)	(0.026)	(0.044)	(0.054)	(0.080)	
Private employee	-0.008	-0.002	-0.010	0.014	0.018	0.020	
	(0.015)	(0.025)	(0.018)	(0.031)	(0.039)	(0.050)	
Public employee	-0.016	-0.029	-0.008	0.001	0.014	-0.020	
	(0.015)	(0.024)	(0.017)	(0.030)	(0.038)	(0.048)	
Self employed	0.009	-0.005	0.021	-0.033	-0.074	0.034	
	(0.020)	(0.031)	(0.023)	(0.044)	(0.059)	(0.065)	
Industries:							
Mining and quarrying	-0.016	0.008	-0.036	-0.040	-0.078	0.007	
	(0.029)	(0.049)	(0.033)	(0.041)	(0.054)	(0.063)	
Manufacturing	0.013	0.032	-0.002	-0.041**	-0.057**	-0.017	
	(0.015)	(0.026)	(0.019)	(0.018)	(0.024)	(0.029)	
Electricity, gas and water	0.009	0.028	-0.011	-0.034	0.021	-0.127**	
	(0.023)	(0.038)	(0.027)	(0.037)	(0.049)	(0.054)	
Construction	0.033*	0.089***	-0.007	-0.039*	-0.057*	-0.015	
	(0.018)	(0.030)	(0.021)	(0.022)	(0.030)	(0.033)	
Wholesale and retail trade	0.028	0.058**	0.005	-0.020	-0.022	-0.019	
	(0.017)	(0.028)	(0.021)	(0.022)	(0.030)	(0.033)	
Hotels and restaurants	0.059**	0.096**	0.015	-0.038	-0.048	-0.020	
	(0.029)	(0.047)	(0.034)	(0.032)	(0.043)	(0.049)	
Transport, storage,	0.008	0.055*	-0.024	-0.024	-0.019	-0.034	
communic.							
	(0.018)	(0.030)	(0.022)	(0.024)	(0.032)	(0.037)	
Financial intermediation	0.040*	0.053	0.031	-0.031	-0.065	0.021	
	(0.020)	(0.034)	(0.025)	(0.046)	(0.059)	(0.075)	
Real estate, renting,	0.028	0.062	0.004	-0.076	0.006	-0.176**	
business act.		, , , , _				. , ,	
	(0.026)	(0.040)	(0.032)	(0.063)	(0.089)	(0.082)	
Public admin. and defence	-0.003	0.017	-0.021	-0.004	0.000	-0.004	
	(0.016)	(0.027)	(0.019)	(0.025)	(0.033)	(0.039)	
Education	0.010	0.041	-0.016	0.009	-0.037	0.076*	
2 dayanon	(0.016)	(0.027)	(0.019)	(0.026)	(0.033)	(0.041)	
	(0.010)	(0.027)	(0.01)	(0.020)	(0.055)	(0.041)	

TT 1.1 1 1 1 1	0.025	0.054*	0.002	0.001	0.020	0.052
Health and social work	0.025	0.054*	0.003	-0.001	-0.039	0.052
	(0.017)	(0.028)	(0.021)	(0.027)	(0.035)	(0.041)
Other community	0.014	0.057**	-0.017	-0.041**	-0.033	-0.056*
	(0.016)	(0.027)	(0.019)	(0.020)	(0.027)	(0.030)
Job interruption	-0.043	-0.030	-0.049	0.104*	0.041	0.214**
	(0.034)	(0.051)	(0.037)	(0.063)	(0.091)	(0.089)
Home working	-0.004	-0.000	-0.011	0.049*	0.037	0.059
	(0.012)	(0.019)	(0.013)	(0.029)	(0.037)	(0.047)
Reduced working hours	0.017	0.003	0.046**	-0.007	0.034	-0.033
	(0.016)	(0.023)	(0.021)	(0.033)	(0.044)	(0.050)
Interrupted weeks	0.010**	0.011*	0.007	-0.025***	-0.025**	-0.024***
	(0.004)	(0.006)	(0.005)	(0.007)	(0.010)	(0.009)
IncLoss Corona	0.116***	0.122***				-0.030
_	(0.015)	(0.026)				(0.032)
IncLoss waves	0.030***	0.033				0.030*
_	(0.007)	(0.031)				(0.017)
IncGain Corona	` ′	` ′	0.042	0.005	0.026	` ′
_			(0.033)	(0.023)	(0.033)	
IncGain_waves			-0.003	0.016	0.025	
_			(0.008)	(0.012)	(0.039)	
Log(Income before Covid)	-0.203***	-0.219***	-0.185***	0.335***	0.363***	0.321***
,	(0.015)	(0.027)	(0.013)	(0.014)	(0.019)	(0.021)
Income from others	-0.002	-0.007	0.002	-0.024*	-0.029*	-0.021
	(0.008)	(0.014)	(0.009)	(0.013)	(0.017)	(0.020)
Second homes	-0.019***	-0.019	-0.014*	0.009	0.005	0.015
	(0.007)	(0.012)	(0.008)	(0.014)	(0.019)	(0.020)
Investments	-0.021***	-0.034***	-0.012*	0.116***	0.094***	0.142***
	(0.006)	(0.011)	(0.007)	(0.023)	(0.030)	(0.035)
Own business	0.035**	0.067***	0.006	0.045	0.071	0.023
5 WH 6 <b>4</b> 5111 <b>-</b> 555	(0.014)	(0.022)	(0.016)	(0.035)	(0.052)	(0.049)
Tenant	0.029***	0.045***	0.018	-0.076***	-0.108***	-0.023
Tenant	(0.010)	(0.017)	(0.011)	(0.016)	(0.022)	(0.024)
Length of restrictions	0.006***	0.009***	0.003	-0.004	0.001	-0.008*
Longin of restrictions	(0.002)	(0.003)	(0.002)	(0.003)	(0.005)	(0.005)
Avg. restriction intensity	0.002)	0.009	-0.004	-0.001	0.009	-0.015
11vg. resulted intensity	(0.005)	(0.009)	(0.007)	(0.011)	(0.015)	(0.016)
Observations	10,941	4,622	6,319	7,592	4,510	3,082
R <sup>2</sup>	0.199	0.220	0.164	0.223	0.212	0.233
IX	0.177	0.220	0.104	0.223	0.212	0.233

**Tab. 15** Dependent variables in columns 1, 2 and 3 are binary indicators for worsening in making ends meet from wave 7 to SHARE Corona, for the subsample of households that did not report some or great difficulties in making ends meet in wave7. Dependent variables in Columns 4, 5 and 6, instead, are binary indicators for improvement in making ends meet from wave 7 to SHARE Corona, for the subsample of households who had some or great difficulties in wave7. Columns 1 and 4 refer to the full (respective) subsamples. Columns 2 and 5 focus, respectively, on the subsample of households with an income loss or an income gain (either between waves or during the pandemic), while columns 3 and 6 focuses, respectively, on the subsample of households without any income loss or income gain. Robust standard errors in parentheses. \*\*\* p<0.01, \*\*\* p<0.05, \* p<0.1.

Source: Authors' elaboration using SHARE Corona and SHARE waves 1-2 and 4-8 data.

# A.4 Country-specific policy reactions to the pandemic and economic outcomes

To contain the spread of Covid-19, governments adopted a series of measures ranging from mild mobility restrictions to strict lockdown of economic activities, following the evolution of the pandemic. Such restrictions in many cases exacerbated (sometimes pre-existing) household economic difficulties.

Fig. 9 shows, for each country, the percentage of households reporting a worsening of their ability to make ends meet (from no difficulties to some or great difficulties) against the OxCGRT "stringency index".

Fig. 9 Worsening of ability to make ends meet and intensity of restrictions

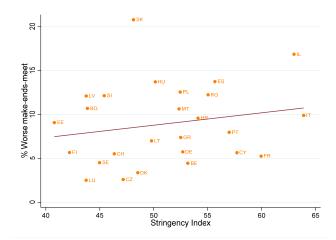


Fig. 9 The figure shows, for each country, the percentage of households that worsened the economic condition, measured by a worsening in making ends meet (y-axis), and the restriction severity (x-axis), using calibrated cross-sectional household weights. Worsening in making ends meet is defined as the transition from no difficulties in making ends meet (SHARE w7) to some or great difficulties (SHARE Corona survey). We compute restriction severity in two steps. We first compute, for each household, the average stringency index for the time window starting from the first week in which restrictions were introduced to the week of the household interview. Then, we average, at the country level, household intensity of restrictions.

Source: Authors' elaboration using SHARE Corona and SHARE waves 7 data (graphics program: STATA).

Restriction severity ranges from a minimum of 40.78% for Estonia to a maximum of 63.89% for Italy, with an average value of 54.77%.<sup>14</sup> The intensity of government restrictive measures is especially high (above the average) in most of the Mediterranean countries (Spain, Italy, France, Portugal, and Cyprus) together with Israel.

Across countries, the average percentage of households that are worse off (in terms of making ends meet) is about 8%. Countries that report great worsening are in South and East Europe (Spain, Italy, Poland, Hungary, Slovenia, Estonia, Croatia, Bulgaria, Latvia, Malta, Romania, and Slovakia plus Israel).

Fig. 9 shows a positive, although weak, correlation between household economic distress and severity of restrictions. We can see that twelve countries lie above the regression line (Estonia, Latvia, Bulgaria, Slovenia, Slovakia, Hungary, Malta, Poland, Romania, Spain, Israel, and Croatia), indicating a marked worsening in making ends meet with respect to what we can predict from the stringency index, while the remaining fourteen countries are below the line.

we average, at the country level, household intensity of restrictions.

<sup>&</sup>lt;sup>14</sup> To measure restriction severity, we first compute, for each household, the average stringency index for the time window starting from the first week in which restrictions were introduced to the week of the household interview. Then,