

# **Work Interruptions and Medium-Term Labour Market Outcomes of Older Workers During the COVID-19 Pandemic**

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## Premises: the pandemic

- Countries not prepared to such shock;
- Mitigation policies based on limiting social contacts and physical distancing:
  - lockdown measures (school and workplace closure, restrictions on public transport, restrictions on movements, international travel) → reduction of most activities including work
  - converting activities to remote where possible
- Strong concern for the survival strategies and resilience of economies/industries and, relatedly, for the increase in unemployment (OECD, 2020).

## Premises

- There is an *age bias* in the process of recruitment of new employees documented by recent research, particularly relevant for women;
- Some occupations are more prone to job losses during economic downturn;
- The increase in the life expectancy → pension system reforms that to promote the lengthening of working lives;
- Possible implication: older people losing jobs may not be able to return in the labour market → potential long term unemployment and lack of social protection

## Goal and main result

- Explore the relationship between having experienced work interruptions in the first wave of the pandemic and the labour market situation in 2021:
  - Probability to retire between waves 1 and 2 of the SHARE Corona Survey;
  - Probability of experiencing unemployment
  - Probability of becoming a homemaker

### Main findings:

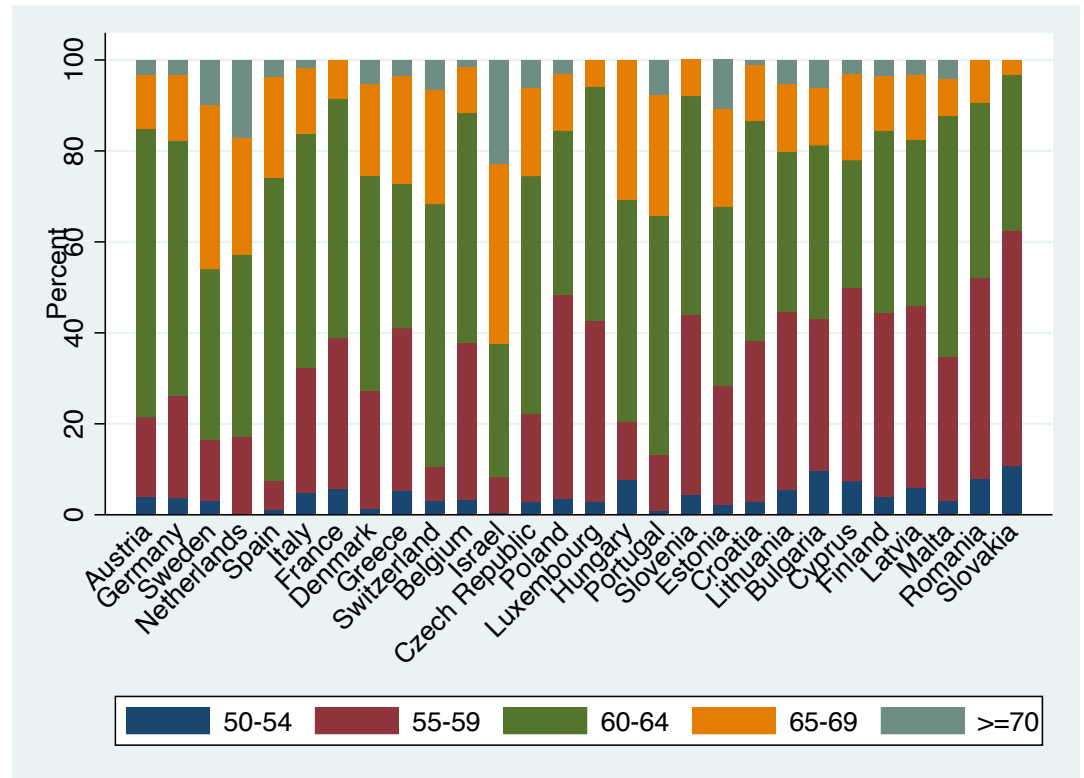
- Having undergone work interruptions is associated with significant increases in the probability of later exiting the labour market or becoming unemployed;
- Women and less educated workers represent more vulnerable categories;

## Related literature

- Literature on job opportunities at older ages: Autor and Dorn (2009), Jaimovich and Siu (2020), Carrillo-Tudela and Visschers (2013), Lindsay et al. (2013), Lazazzara et al. (2013) ecc.
- Employability of older workers: Turek & Henkens, 2020:
- Literature on *age-bias* in recruitment: Riach & Rich, 2006; 2007; Neumark, et al., 2019;
- Literature on economic implications of past pandemics: Barro et al (2020), Ceylan et al. (2020)
- Suitability to teleworking: Basso et al. (2020), Sostero et al. (2020)

## The data and sample

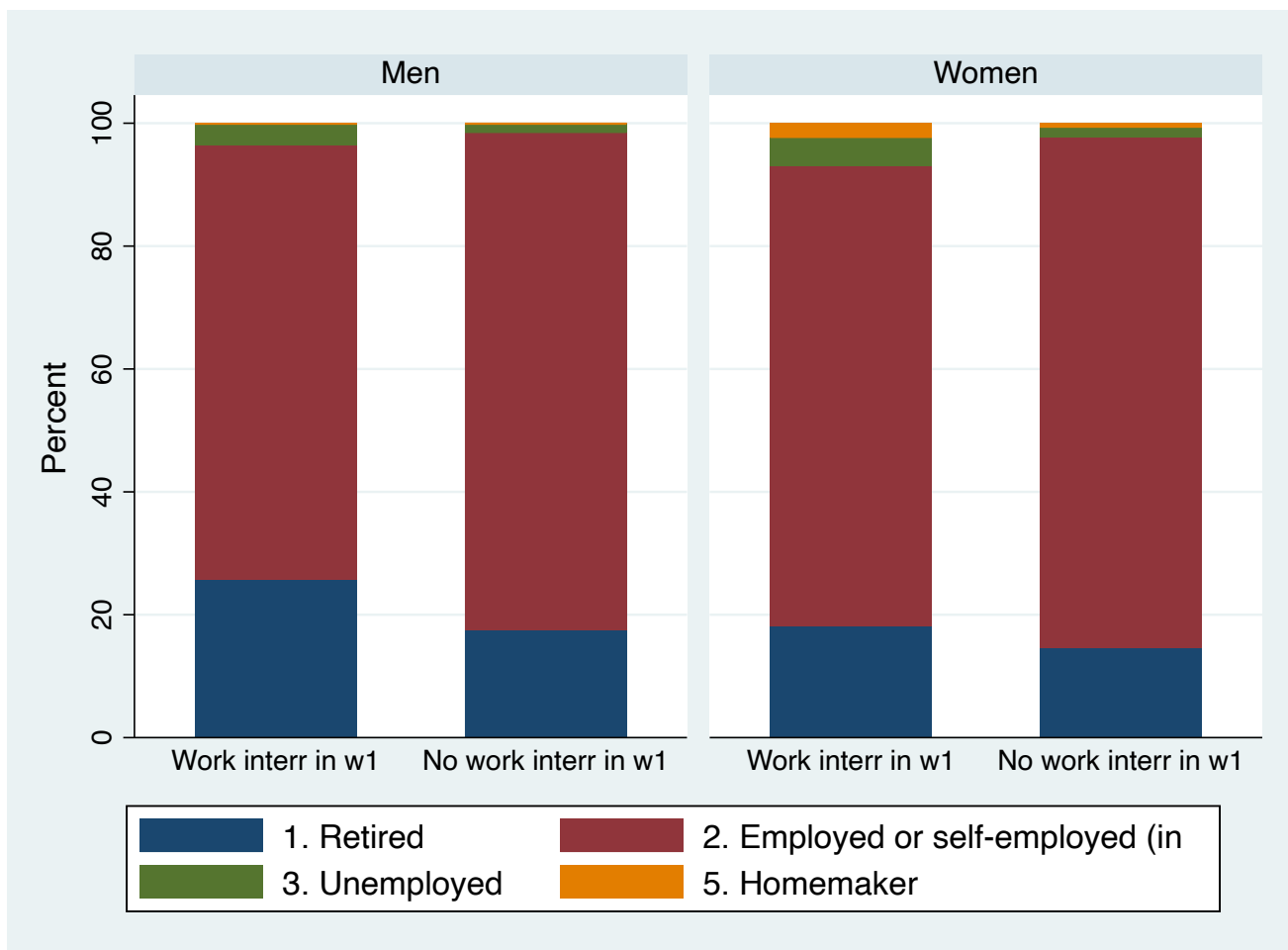
- Data collected in the first and second waves of the SHARE Corona Survey supplemented by information from SHARE regular Waves 1 to 8
- Keep respondents who participated in both waves, working at the pandemic outburst;
- 7056 individuals, 56% women



## Advantages

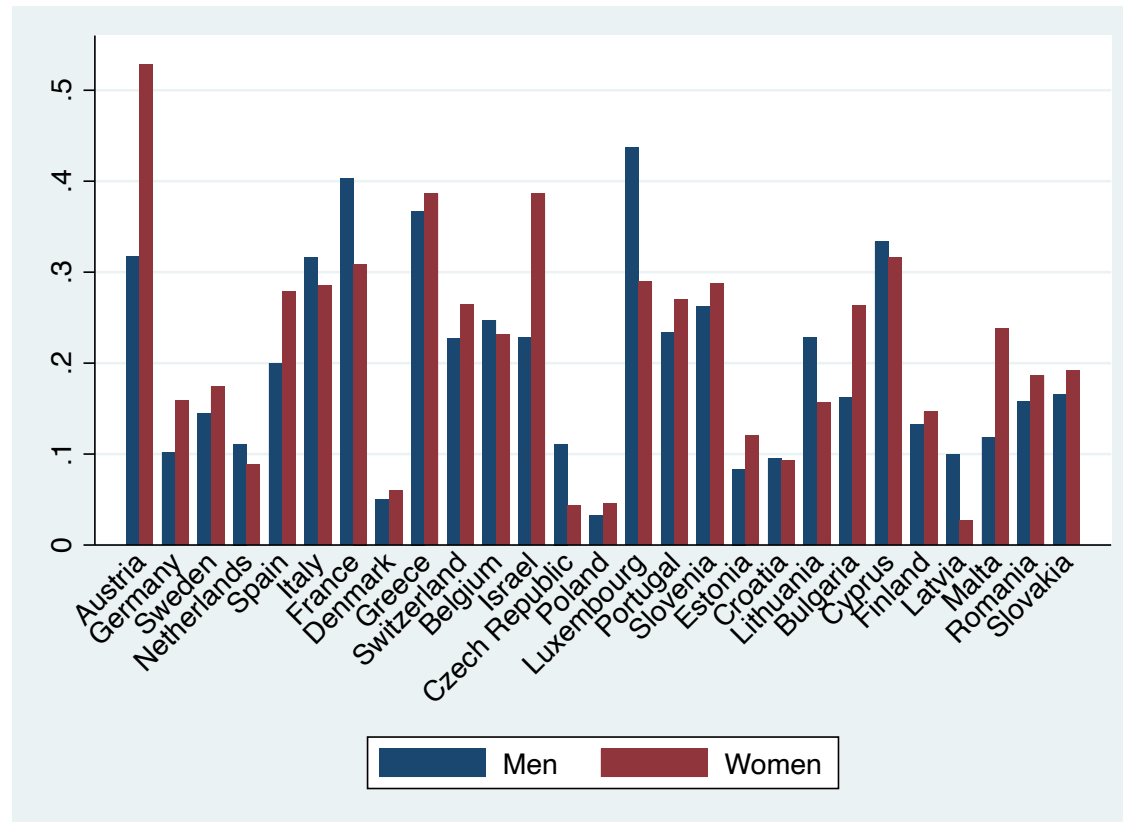
- Link information from regular waves and SHARELIFE (pre-COVID) with information regarding the employment situation during and immediately after the first wave of the pandemic and with working situation in 2021;
- Take advantage of the detailed occupation classification at ISCO-08 4-digit level available in SHARE since wave 6;
- Variability across countries (labour market arrangements/lockdown measures)

## Working situation in SHARE Corona Survey wave 2



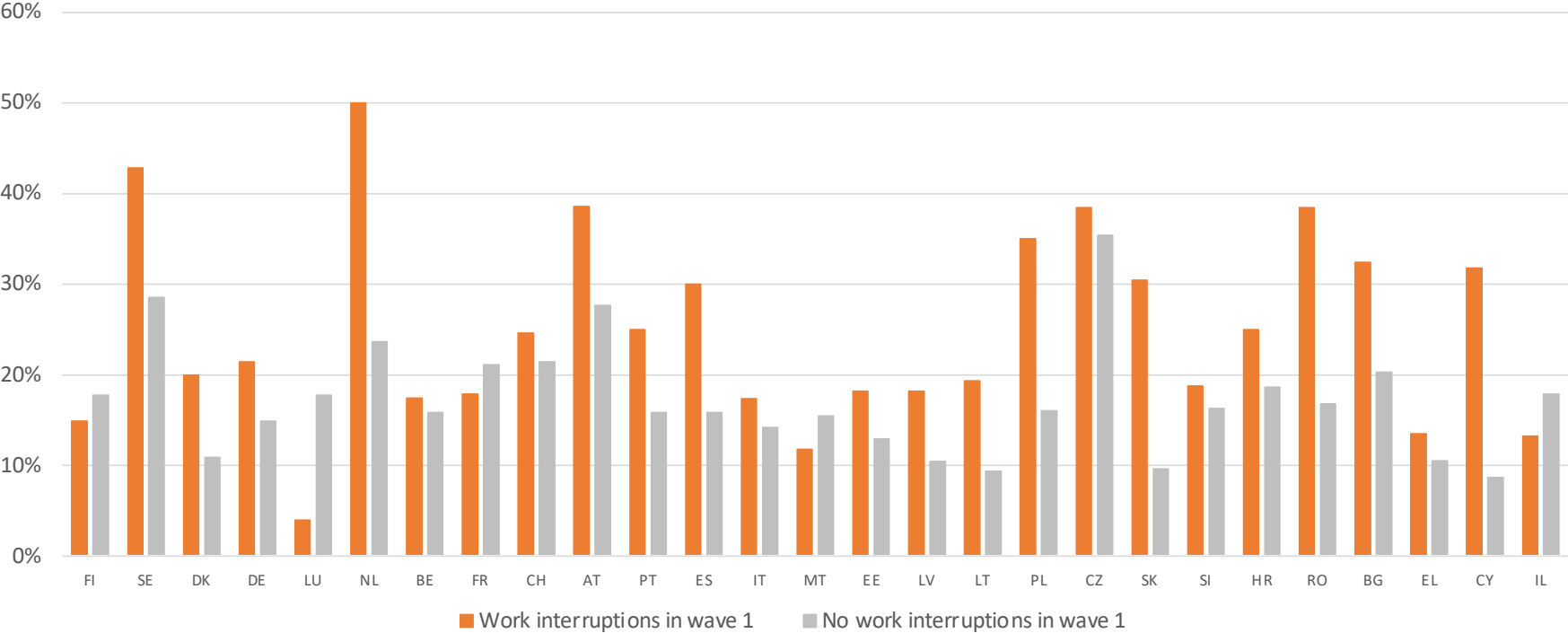


# Work interruptions during wave 1 of the Coronavirus Pandemic

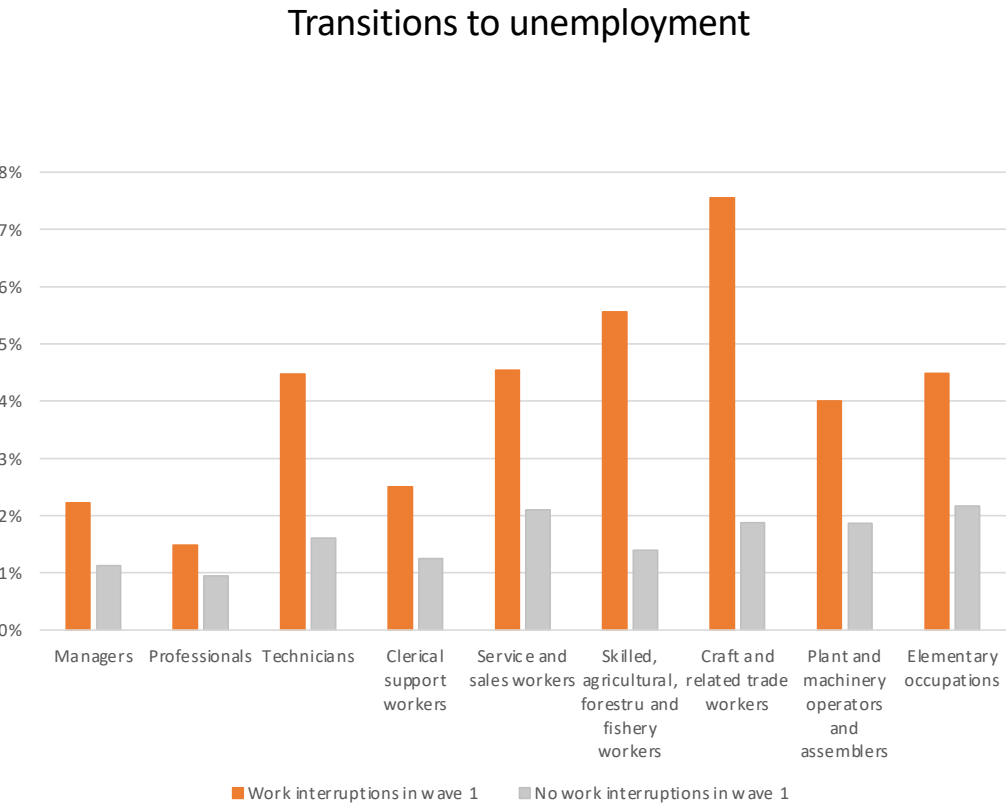
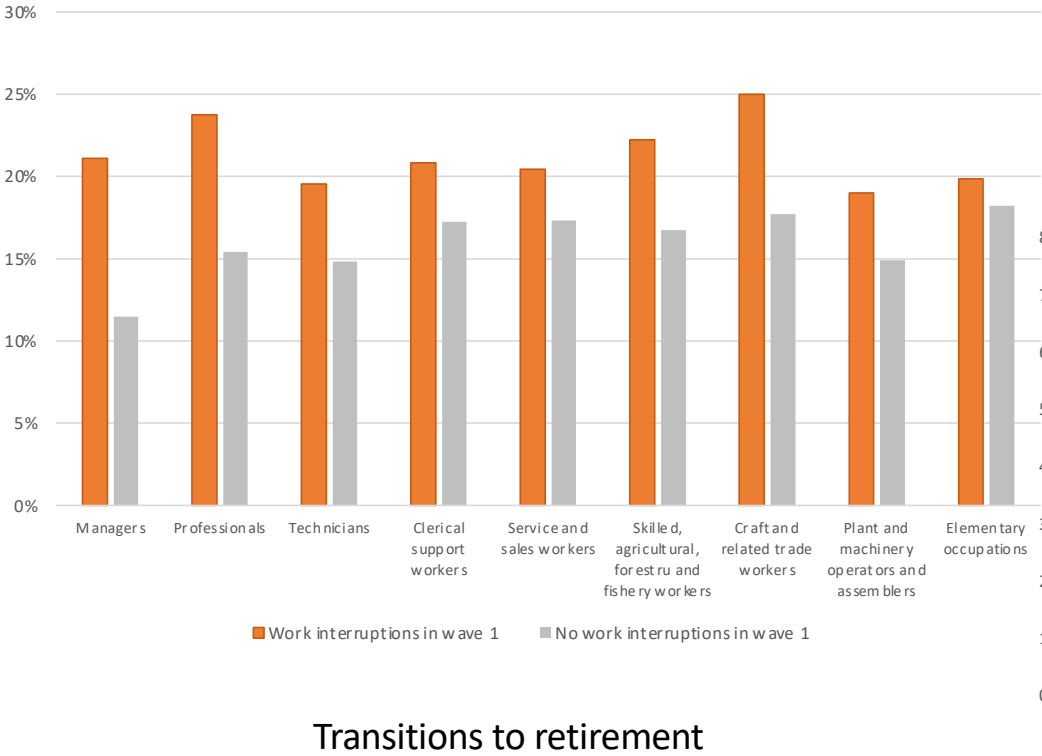


Fraction of individuals that experienced work interruption by country and gender (CAW002\_:"Due to the Corona crisis have you become unemployed, were laid off or had to close your business?")

# Transitions from work to retirement between waves 1 and 2 of the SHARE Corona Survey



# Transitions from work to retirement and unemployment between waves 1 and 2 of the SHARE Corona Survey by major



## Empirical Strategy

- Estimate a multinomial logit:
- Dependent variable,  $Y_i$ : categorical variable with four outcomes: employed, retired, unemployed, homemaker; reference group: employed
- Key explanatory variable: having experienced work interruptions in wave 1 of the pandemic
- Other controls: age, gender, education, IT-skills, whether the individual used to work as a private employee, public sector employee or was self-employed, occupation, country cluster

# First results – probability of retirement, unemployment, homemaker

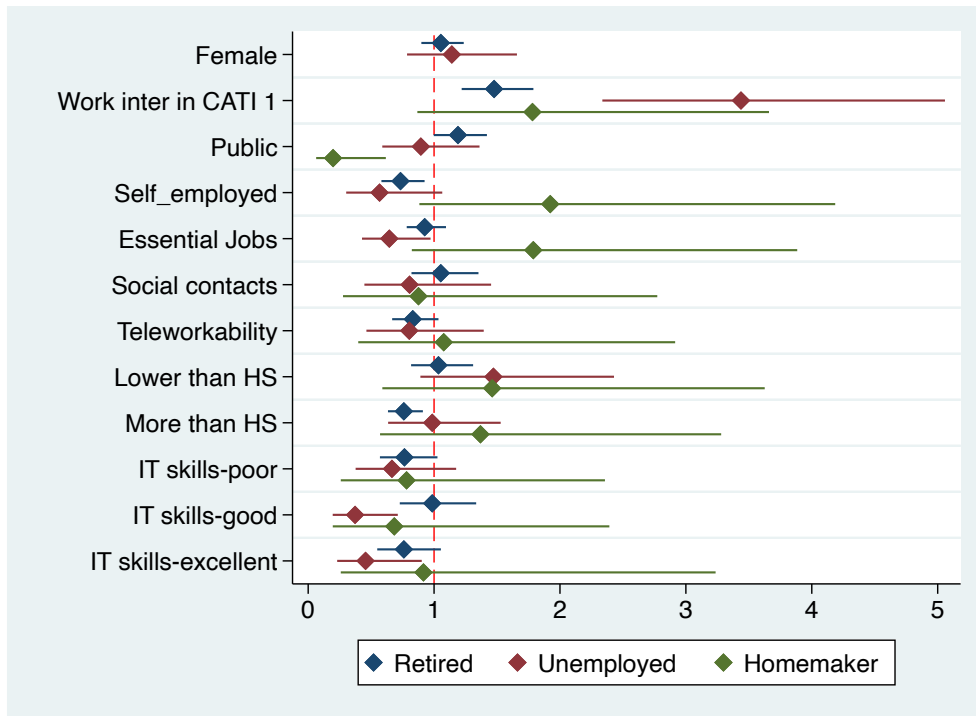
Variable	Specification 1						Specification 2					
	Retired		Unemployed		Homemaker		Retired		Unemployed		Homemaker	
	Relative risk ratios	Standard error	Relative risk ratios	Standard error	Relative risk ratios	Standard error	Relative risk ratios	Standard error	Relative Risk Ratios	Standard error	Relative risk ratios	Standard error
Work interruptions in w1	1.520***	(0.148)	3.498***	(0.694)	2.233*	(0.792)						
Weeks work interruption:												
No interruptions (0 weeks)							ref					
Between 1-8 weeks							1.214	(0.155)	2.789***	(0.689)	1.447	(0.705)
More than 8 weeks							2.137***	(0.284)	4.308***	(1.097)	3.602**	(1.486)
Female	1.014	(0.086)	1.164	(0.236)	10.529***	(5.910)	1.008	(0.086)	1.174	(0.240)	10.369***	(5.825)
IT skills:												
Never used computer	ref						ref					
Poor or fair	0.754	(0.112)	0.637	(0.185)	0.909	(0.503)	0.774	(0.116)	0.63	(0.184)	0.925	(0.514)
Good	0.983	(0.152)	0.368**	(0.121)	0.896	(0.558)	0.993	(0.154)	0.368**	(0.122)	0.903	(0.565)
Very good-excellent	0.761	(0.125)	0.445*	(0.156)	1.106	(0.708)	0.773	(0.128)	0.445*	(0.156)	1.121	(0.723)
Type of occupation:												
Private employee	ref						ref					
Public employee	1.185	(0.107)	0.914	(0.197)	0.270*	(0.142)	1.186	(0.107)	0.881	(0.191)	0.278*	(0.146)
Self-employed	0.745*	(0.091)	0.572	(0.188)	1.465	(0.607)	0.746*	(0.090)	0.573	(0.189)	1.457	(0.612)
Age groups	√		√		√		√		√		√	
ISCO08 majors (1 digit)	√		√		√		√		√		√	
Country cluster	√		√		√		√		√		√	
Constant	0.002***	(0.002)	0.013***	(0.012)	0	(0.000)	0.002***	(0.002)	0.014***	(0.013)	0	(0.000)

## The role of the job characteristics

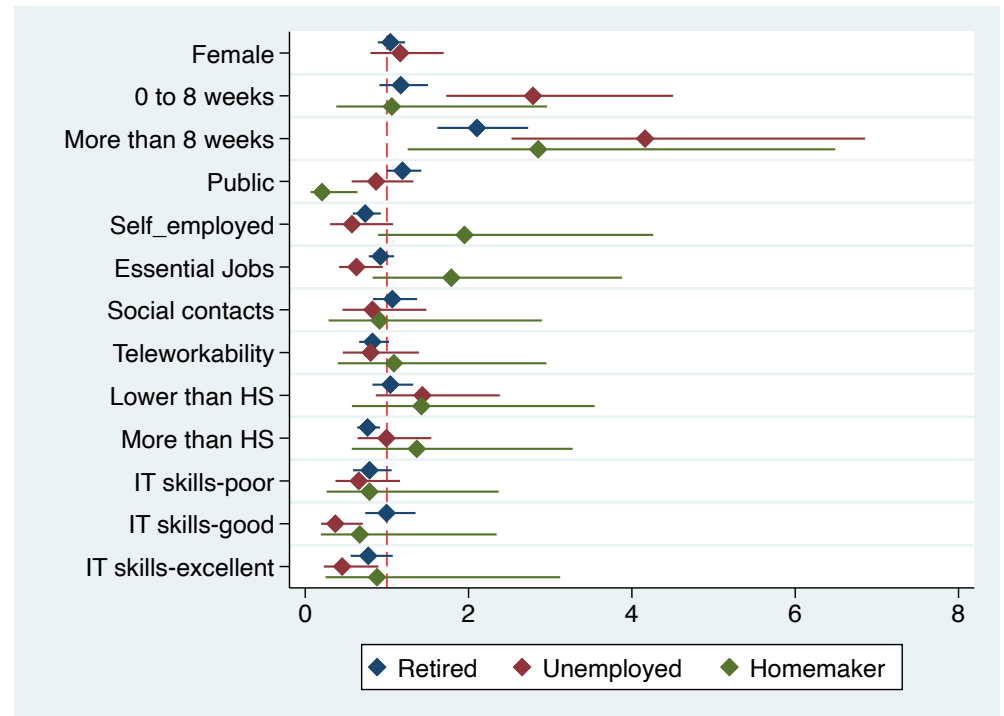
- Following Brugiavini et al. 2021, we consider 3 dimensions at ISCO-08 3-digit occupation level:
  - ***Essential nature*** of goods or services: classify occupations following Fasani and Mazza, 2020 → workers who performed crucial tasks, spanning from highly skilled professionals such as doctors to low skilled workers, like food processors
  - ***Remote working feasibility index***: measures suitability to remote work (Basso et al. 2020)
  - ***Social interaction at work*** index: (Basso et al. 2020) → increasing coefficients ranging between 0 and 1

# Retirement, unemployment, homemaker probability – a focus on occupation features

Key explanatory variable: presence of work interruptions in wave 1



Key explanatory variable: length of work interruptions in wave 1



Probability of ending up in retirement, unemployment or as homemaker: relative risk ratio with respect to being employed.  
*Note: Gender coefficient extremely large for becoming a homemaker.*

## Selection in the treatment: experiencing work interruptions

	No interruptions	With interruptions	p-value
<b>Female</b>	0.556	0.572	0.312
<b>Age2021</b>	61.433	61.765	0.032
<b>Private</b>	0.493	0.579	0.000
<b>Public</b>	0.391	0.199	0.000
<b>Self_employed</b>	0.116	0.222	0.000
<b>Essential Jobs</b>	0.389	0.331	0.000
<b>Social contacts</b>	0.276	0.253	0.018
<b>Teleworkability</b>	0.328	0.272	0.000
<b>Lower than HS</b>	0.108	0.207	0.000
<b>High school</b>	0.412	0.448	0.018
<b>More than HS</b>	0.479	0.343	0.000
<b>IT skills-none</b>	0.071	0.086	0.082
<b>IT skills-poor</b>	0.320	0.391	0.000
<b>IT skills-good</b>	0.337	0.300	0.012
<b>IT skills-excellent</b>	0.272	0.224	0.001



# Very preliminary IPWRA results

Unemployed	Coefficient	Robust std. err.	z	P>z	[95% conf. interval]
ATE w_interruption					
(1 vs 0)	0.040	0.009	4.52	0	0.0226 0.0571
Pomean w_interruption					
0	0.016	0.002	8.9	0	0.0125 0.0196

# Conclusions

- Having experienced work interruption in the first wave of the pandemic is associated with
  - An increase in the probability to retire between the two waves of the SHARE Corona Survey;
  - A significantly larger probability to be unemployed at the time of the second SHARE Corona Survey;
  - Higher likelihood of becoming a homemaker.
- The correlation is particularly significant for work interruptions of longer duration (more than 8 weeks) but for the unemployment also briefer interruptions seem to be important

# Conclusions

- Good and excellent IT skills have a mitigation effect against ending in unemployment even when controlling for education.
- Female workers aged 50 and over represent a particularly *vulnerable group* as they were more likely to end up as homemakers