

**IPRA/CEPAR Webinar**  
29 April 2021



**SHARE ERIC**  
SURVEY OF HEALTH, AGEING  
AND RETIREMENT IN EUROPE

## The Multifaceted Effects of the Pandemic and the Lockdown Measures on EU Citizens


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- National Bureau of Economic Research (NBER), Cambridge, Massachusetts.



Recovered from Covid-19, Source: John Hopkins


**SHARE Covid19 Project: Aims**



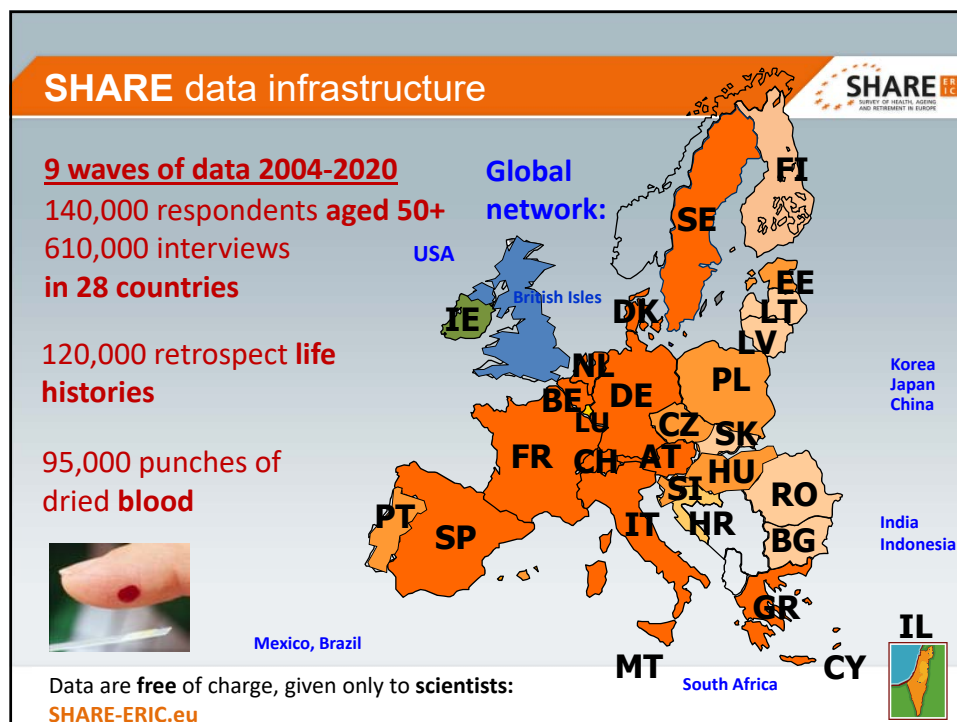
**SHARE ERIC**  
SURVEY OF HEALTH, AGEING  
AND RETIREMENT IN EUROPE

**Use the SHARE data infrastructure to understand effects of pandemic and related epidemiological control decisions on European citizens**

1. Analyze **labor market implications** of the lockdown and remedial policies
2. Assess the impacts of pandemic and lockdown on **income inequality**
3. Understand the lockdown effects on **health behaviours**
4. Identify **healthcare inequalities** before, during and after the pandemic
5. Mitigate the effects of epidemic control decisions on **social relationships**
6. **Optimise future epidemic control measures** by taking the geographical patterns of the disease and their relationship with social patterns into account




Internationally comparative perspective; interdisciplinary; first descriptive results




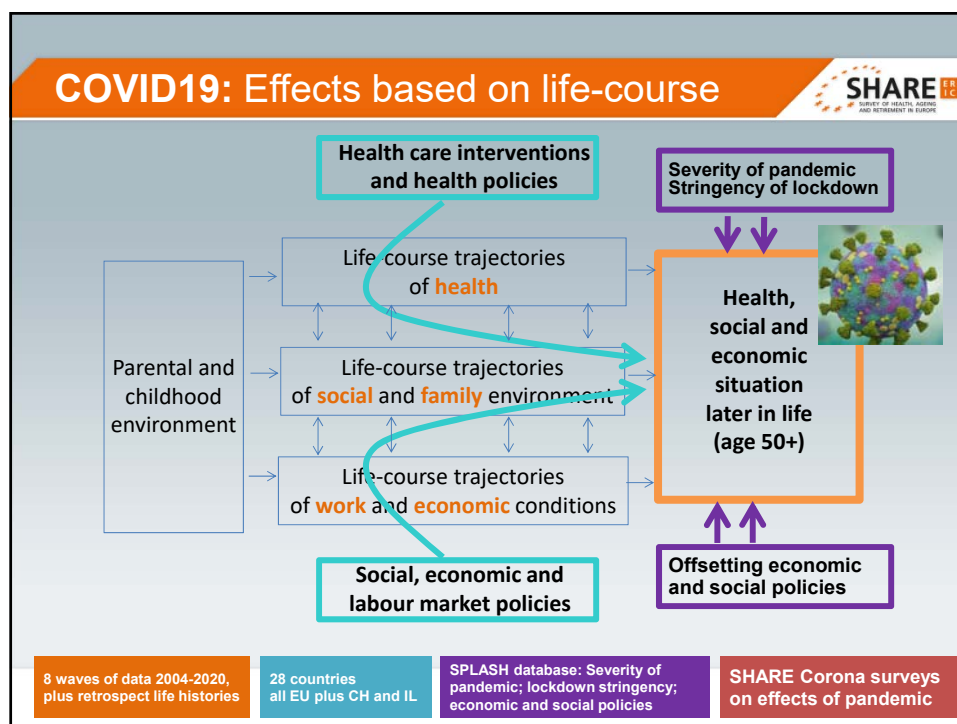
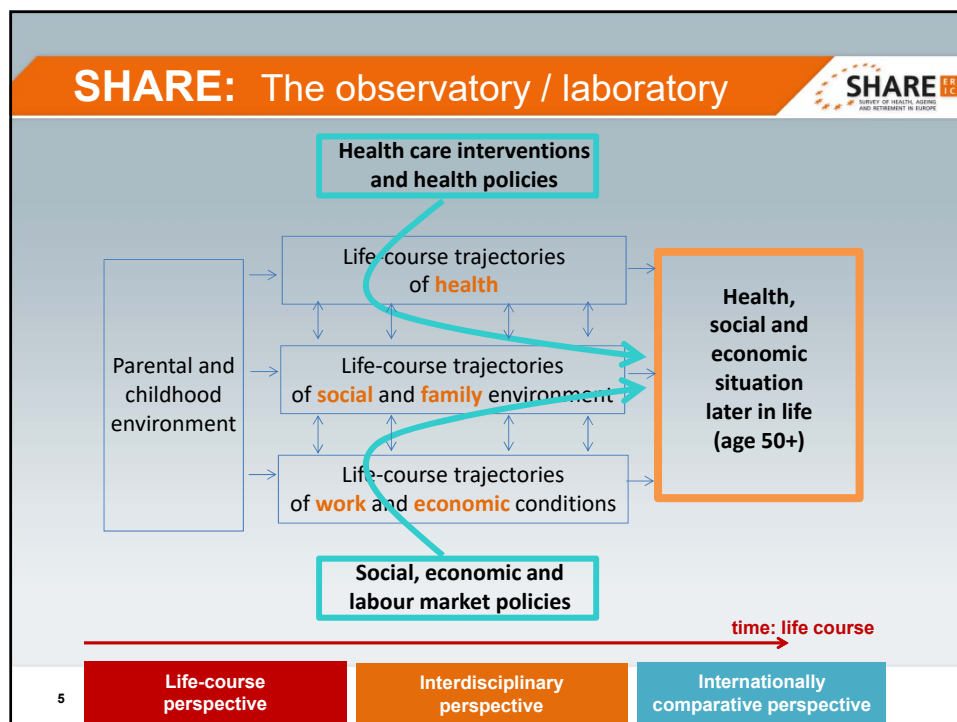
## A transdisciplinary picture of human life

- ▶ **Face-to-face interviews** by trained interviewers
- ▶ Broad range of **questions, measurements and tests**:
  - ▶ **Socio-economic status**: labor force participation, retirement, income (amount and sources), wealth, housing, consumption, pension claims, expectations, well-being
  - ▶ **Health**: subjective-objective (self-report, ADL/IADL, conditions, physical performance tests, biomarkers: HbA1c, CRP, Lipids, Cytokines), physical-mental (cognition, MMSE, CES-D, Euro-D), health behaviors, health utilization and insurance coverage
  - ▶ **Social participation**: activities (volunteering), family and social networks (size and intensity), help (time, money)



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## Longitudinal Survey Strategy



### 1. Life course background

SHARE waves 2004 – 2018

Retrospective life histories including parental and childhood conditions

### 2. Immediate pre-Corona status

Face-to-face interviews in Wave 8, stopped in March 2020 after about 70% of sample

### 3. First SHARE Corona Telephone Survey in June/July 2020

Health, work, economic and social conditions during the first wave of the pandemic

### 4. Second SHARE Corona Telephone Survey in June/July 2021

Health, work, economic and social conditions during the “third wave” of the pandemic

### 5. Immediate post-Corona status

Face-to-face interviews in Wave 9, planned for November 2021

## SHARE Corona Survey



### Health behavior

**Activities:** Going shopping? Going out for a walk? Visiting other family members? Wear **face mask**? Use sanitizer?

### Health status

Been **tested**? Was it positive? Somebody close **died of COVID-19**? **Depression**?

### Quality of healthcare

Had an earlier **medical appointments** but postponed?

Asked for an appointment now but **did not get one**?

**Satisfaction:** Waiting lines, overcrowding, unhygienic?

### Work

**Unemployed**, laid off, **reduced hours**, **close business**?

Increased work load?

### Economic situation

**Income loss**? Received **financial support** (employer, government, relatives,...)? **Short-time employment aid**?

Make **ends meet**? Need to **postpone regular payments** (rent, mortgage and loan payments, utility bills)?

### Social networks

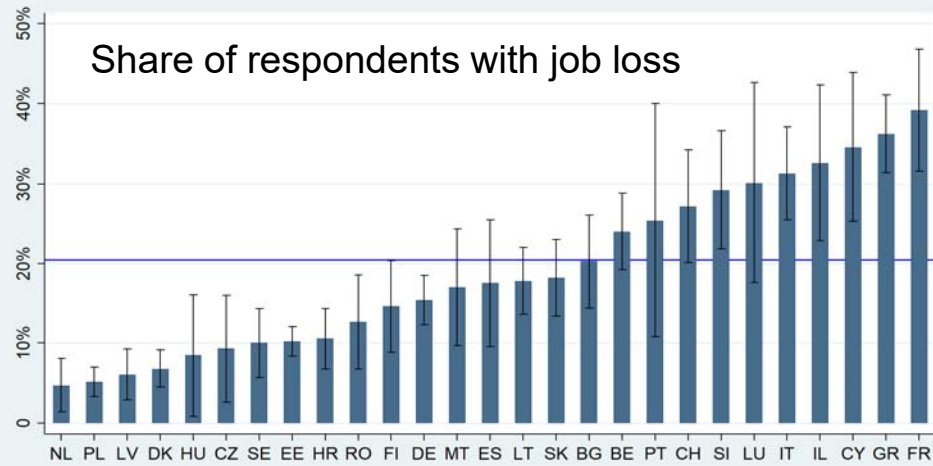
How often **personal contact** (face to face/telephone/electronic)? With whom?

**Gave help** to others outside home (to obtain necessities, food, medications, household repairs)? For whom?

**Get help** from others outside home (to obtain necessities...)? From whom?

**Home care:** How often? Left? Satisfied? Protection?

## 1a. Unemployment/early retirement



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Source: Alexander Schumacher  
Arne Bethmann, MEA

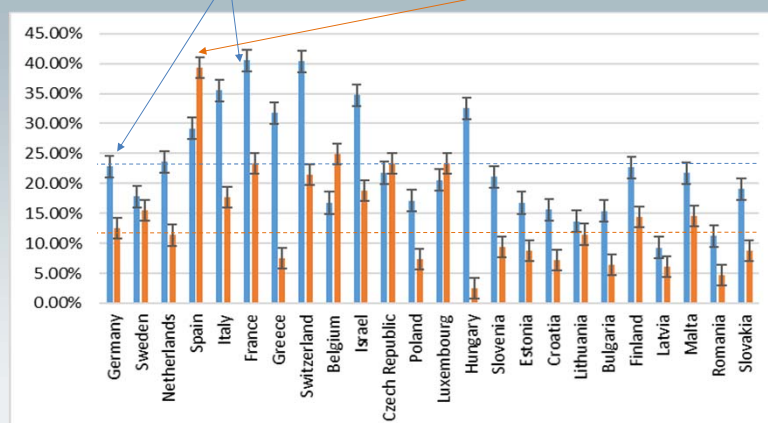
SHARE COVID CATI preliminary (rel0), weighted data

## 1b. Effects on labor volume



### Work

- About 23% faced **shorter** work hours but 12% worked **longer**, especially in Spain



Source: Axel Börsch-Supan,  
Vesile Kutlu-Koc  
Diana Lopez-Falcon, MEA

SHARE COVID CATI preliminary results (release 0)

## 1b. Remedial policies



**Job Retention (JR) schemes** seek to preserve jobs at firms experiencing a temporary reduction in business activity by alleviating firms' labor costs while supporting the incomes of workers whose hours are reduced.

**Key: Employees keep their contracts with the employer even if their work is suspended.**

- **Short-time work (STW) schemes** directly subsidise hours not worked but do not change the cost of hours worked. Examples: German *Kurzarbeit* or the French *Activité partielle*.
- **Wage subsidy (WS) schemes** subsidise hours worked but can also be used to top up the earnings of workers on reduced hours, such as the Dutch Emergency Bridging Measure (*Noodmaatregel Overbrugging Werkgelegenheid*, NOW).

## 1b. Remedial policies



Table 1. Countries have adjusted existing job retention schemes or adopted new ones

	Pre-existing short-time work scheme	Increased access and coverage	Increased benefit generosity	Increased access for workers in non-standard jobs	New short-time work scheme	New wage subsidy scheme
Austria	•	•	•			
Belgium	•	•	•			
Czech Republic	•	•	•			
Denmark	•	•			•	
Estonia						•
Finland	•	•	•	•		
France	•	•	•	•		
Germany	•	•	•	•		
Greece					•	
Hungary					•	
Ireland*	•					•
Italy	•	•		•		
Latvia					•	
Lithuania					•	
Luxembourg	•	•	•			
Netherlands*	•					•
Poland						•
Portugal	•	•		•		
Slovak Republic	•	•	•			
Slovenia					•	
Spain	•	•	•	•		
Sweden	•	•	•	•		
Switzerland	•	•				
United Kingdom					•	
United States	•	•	•			

## 1c. Who had to reduce work hours?



	(1) OLS	(2) Country FE	(3) OLS
Age	0.139*** (0.034)	0.136*** (0.035)	0.130*** (0.038)
Age <sup>2</sup>	-0.001*** (0.000)	-0.001*** (0.000)	-0.001*** (0.000)
Ever unemployed	-0.005 (0.019)	-0.017 (0.020)	-0.008 (0.020)
First income tercile	-0.016 (0.018)	-0.017 (0.018)	-0.019 (0.019)
Third income tercile	-0.016 (0.017)	-0.015 (0.017)	-0.012 (0.018)
Missing income	-0.046** (0.019)	-0.059*** (0.020)	-0.059*** (0.020)
Self employed	0.244*** (0.022)	0.229*** (0.022)	0.235*** (0.023)
Public sector workers	0.003 (0.018)	0.000 (0.018)	0.017 (0.019)
Female	0.029** (0.015)	0.025* (0.015)	0.023 (0.016)
Cumulative deaths per 100,000			-0.000 (0.000)
Stringency Index			0.004** (0.001)
Amount of Short time Allowance (% of the original pay)			0.061 (0.062)
Duration of Short time Allowance			0.003 (0.002)
Constant	-4.117*** (1.012)	Country dummies are included	-4.116*** (1.117)
Sector dummies included	Yes	Yes	Yes
N	3620	3620	3236
R <sup>2</sup>	0.163	0.200	0.114

Source: Axel Börsch-Supan,  
Vesile Kuttu-Koc  
Diana Lopez-Falcon, MEA

## 1d. Who received aid (STW, WS)?



	(1) OLS	(2) Country FE	(3) OLS
Age	0.076 (0.072)	-0.037 (0.069)	0.051 (0.076)
Age <sup>2</sup>	-0.001 (0.001)	0.000 (0.001)	-0.000 (0.001)
First income tercile	-0.077** (0.035)	-0.046 (0.034)	-0.092* (0.036)
Third income tercile	0.054 (0.035)	0.091*** (0.033)	0.063* (0.035)
Missing income	-0.091** (0.043)	-0.114*** (0.044)	-0.110** (0.044)
Self employed	0.380*** (0.054)	0.277*** (0.054)	0.334*** (0.056)
Public sector workers	0.058 (0.039)	0.041 (0.037)	0.034 (0.039)
Female	0.076** (0.031)	0.068** (0.030)	0.083*** (0.032)
Cumulative deaths per 100,000			0.002** (0.001)
Stringency Index			0.006* (0.003)
Amount of Short time Allowance (% of the original pay)			0.327*** (0.090)
Duration of Short time Allowance			-0.020*** (0.004)
Constant	-2.481 (2.174)	Country dummies are included	-2.079 (2.293)
Sector dummies are included	Yes	Yes	Yes
N	645	645	590
R <sup>2</sup>	0.377	0.593	0.441

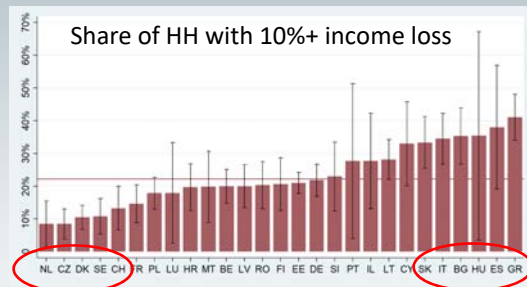
Source: Axel Börsch-Supan,  
Vesile Kuttu-Koc  
Diana Lopez-Falcon, MEA

## 2a. Effects on household income



### Financial distress

- Strong and independent effects of education and income before pandemic; pensioners protected

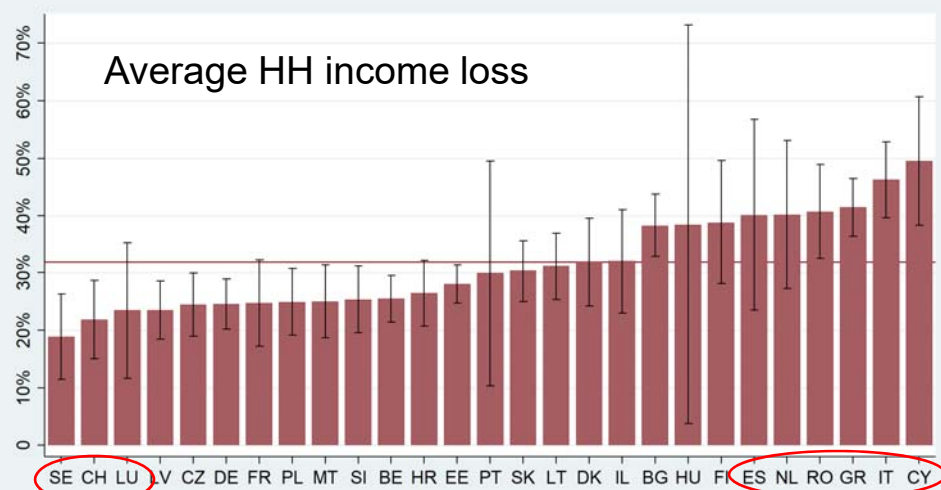


Stress_Indicator	Coef.	Std. Err.	P> t	[95% Conf. Interval]		
HH size	.0006126	.0002208	28.10	.000	.0010466	.0001806
Couple	.0242451	.0113640	2.13	0.033	-.0026695	.0465215
Job interruption	.0005062	.0129005	15.17	0.000	.033522	.0640289
At least 1 employ.	.0022227	.0104805	3.47	0.001	.0227344	.0017131
HH_level of educ.	-.0111877	.0130005	-0.79	0.434	-.0403995	.0181281
Low sec.	-.0046282	.0130823	-2.92	0.003	-.0278582	-.0133982
Upper sec.	-.0043812	.0129722	-3.29	0.001	-.0203664	-.0293983
Post-sec.	-.0002576	.0140339	-0.42	0.670	-.0293167	.0188152
Tertiary	-.0421461	.0187822	-2.24	0.025	-.0793942	-.0053121
Working from home	-.0435629	.0067804	-6.41	0.000	-.0548893	-.0302383
change in HH income	.0002344	.0000049	5.22	0.000	.0001664	.0003024
sec. Ref. Covid						
2	-.1372395	.0157821	-8.74	0.000	-.1680079	-.1064832
3	-.2208489	.0164469	-13.47	0.000	-.2620773	-.1796202
4	-.2923664	.0162819	-17.90	0.000	-.3322882	-.254526
5	-.3423415	.0160181	-21.37	0.000	-.3748847	-.3099984
6	-.3785742	.0179510	-21.10	0.000	-.4244895	-.3446588
7	-.4461989	.0176867	-25.24	0.000	-.4800661	-.4123317
8	-.5125098	.0183844	-27.84	0.000	-.5485454	-.4764342
9	-.5591429	.0184316	-30.32	0.000	-.5980398	-.5218779
10	-.6008157	.0111104	-53.78	0.000	-.6476438	-.5540077

Source: Alexander Schumacher  
Arne Bethmann, MEA

SHARE COVID CATI preliminary (rel0), weighted data

## 2a. Effects on household income



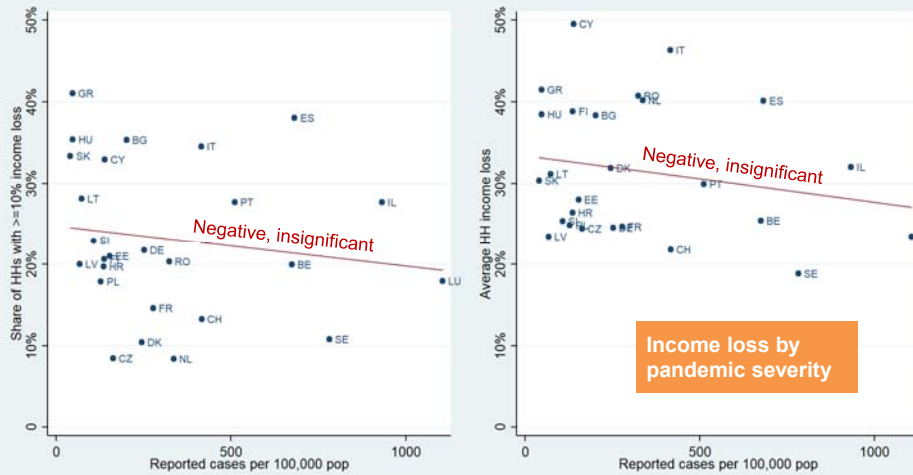
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Source: Alexander Schumacher  
Arne Bethmann, MEA

SHARE COVID CATI preliminary (rel0), weighted data



## 2b. Impact of cumulative COVID cases

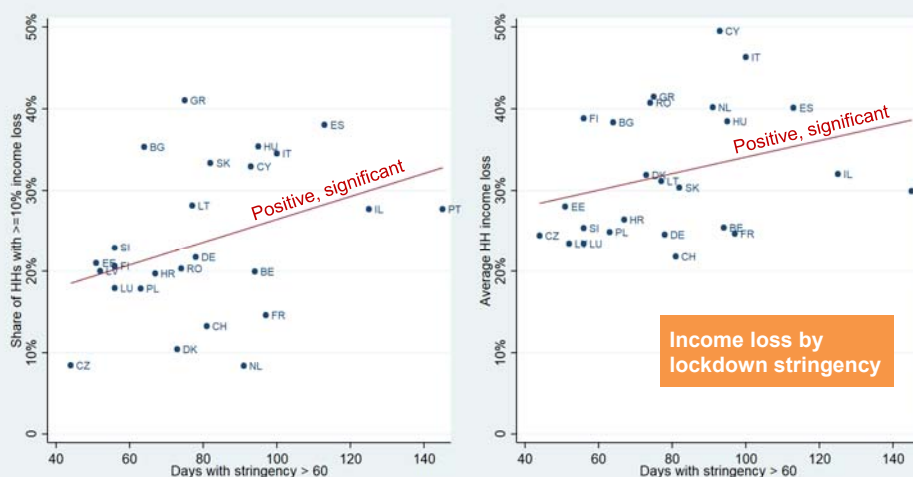


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Source: Alexander Schumacher  
Arne Bethmann, MEA

SHARE COVID CATI preliminary (rel0), weighted data

## 2c. Impact of government stringency

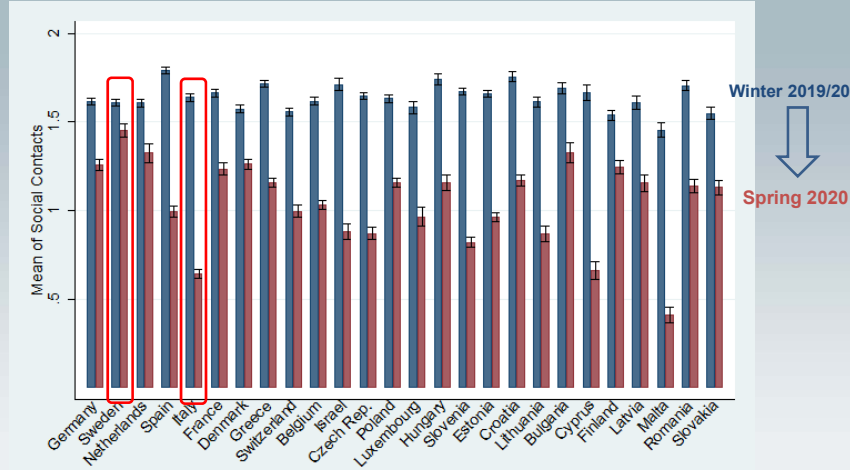


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Source: Alexander Schumacher  
Arne Bethmann, MEA

SHARE COVID CATI preliminary (rel0), weighted data

### 3a. Health behaviors: Social Contacts



19 Source: Stefan Gruber,  
Josefine Atzendorf, MEA

Preliminary SHARE Wave 8 Release 0 Data

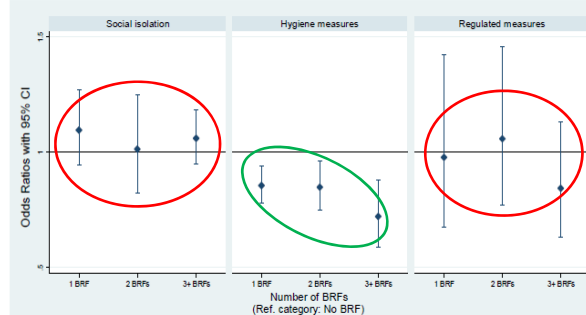
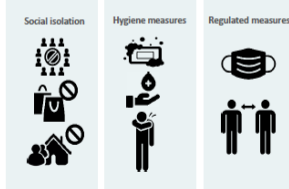
### 3b. Health behaviors by risk factors



BRFs (SHARE Wave 8)



Preventive measures (SHARE COVID-19)



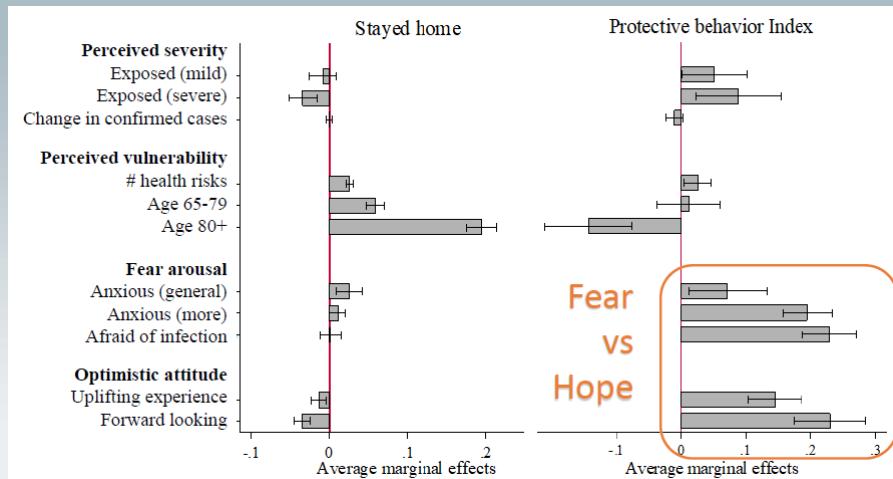
Estimates based on mixed-effects logistic regressions, controlling for socio-demographic and health variables collected before the start of the pandemic (N=17,588). Data: Wave 8 Release 0.0.1 beta

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Source: Maria-Jose Mendoza  
Tessa-Virginia Hannemann  
Josefine Atzendorf, MEA

SHARE COVID CATI preliminary (rel0), weighted data

### 3c. Health behaviors by motivational factors

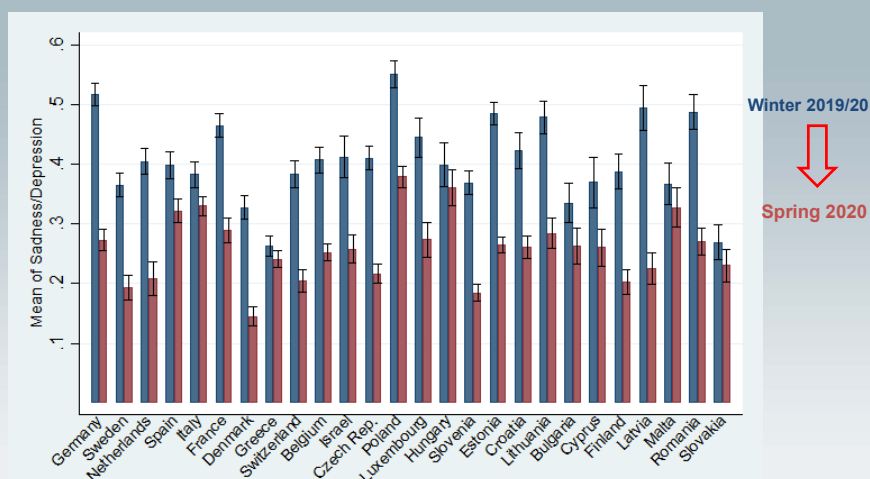


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Source: Gregor Sand,  
Johanna Bristle, MEA

SHARE COVID CATI preliminary (rel0), weighted data

### 4a. Mental health



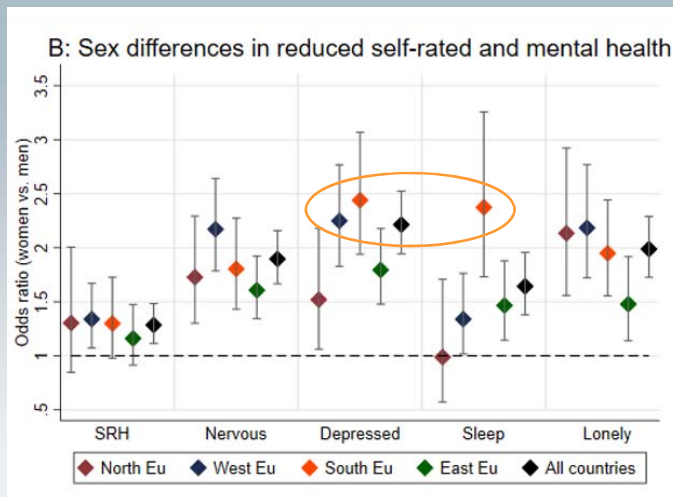
Same for loneliness!

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Source: Stefan Gruber,  
Josefine Atzendorf, MEA

Preliminary SHARE Wave 8 Release 0 Data

## 4a. Mental health



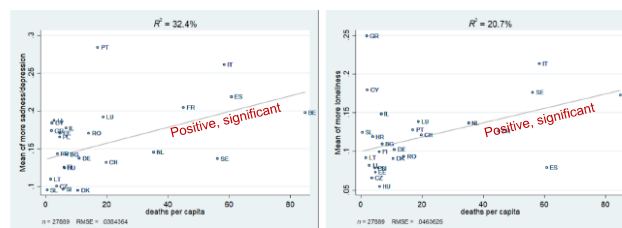
Source: Lasse Scheel-Hincke,  
Karen Andersen-Ranberg,  
SDU Odense

SHARE COVID CATI preliminary results (release 0)

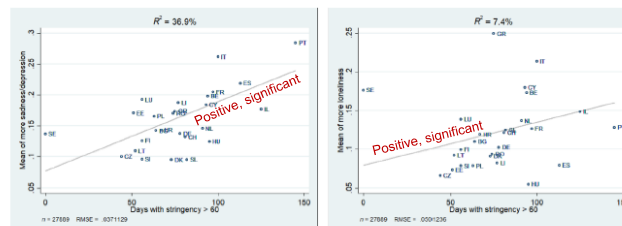
## 4a. Mental health



**Figure 2: Association between country differences in the prevalence of more sadness/depression and loneliness with deaths per capita; Data: Preliminary SHARE Wave 8 Release 0 (n = 27,889)**



**Figure 3: Association between country differences in the prevalence of more sadness/depression and loneliness with deaths per capita; Data: Preliminary SHARE Wave 8 Release 0 (n = 27,889)**



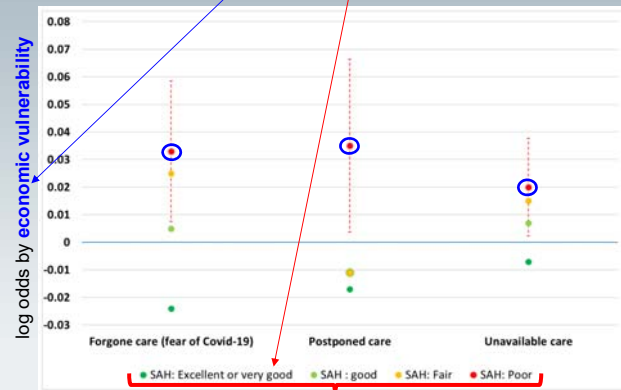
Source: Stefan Gruber,  
Josefine Atzendorf, MEA

SHARE COVID CATI preliminary results (release 0)

## 4b. Healthcare crowd out



- Has led to an increase in social inequalities in access to healthcare
- Interaction effect: **economic** and **health** vulnerability



Source: Louis ARNAULT, Florence JUSOT, Thomas RENAUD, Université Paris Dauphine

SHARE COVID CATI preliminary results (release 0)

## 4c. Health and housing/location



holding income and education constant

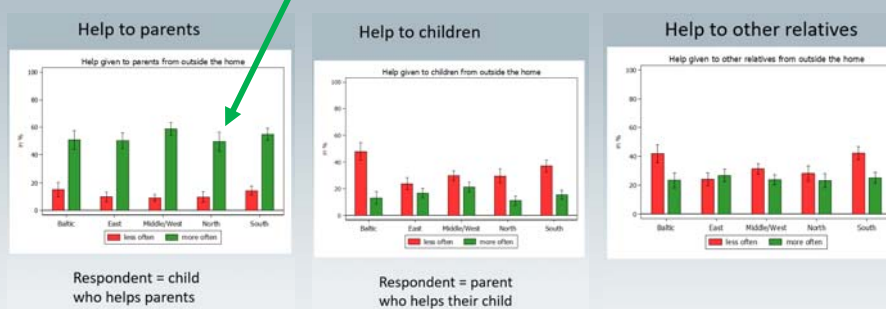
Source: Anne Laferrère (Université Paris-Dauphine), Pedro Mira (CEMFI, Madrid), María Inés Berniell (Universidad Nacional de La Plata)

SHARE COVID CATI preliminary results (release 0)

## 5. Care and help



- Larger adjustment of social activities in countries with more infections (cases + deaths); focus on family nucleus



Source: Michael Bergmann,  
Melanie Wagner, MEA

SHARE COVID CATI preliminary results (release 0)

## 6. Enhanced epidemiological models



Enhanced Glover et al. 2020 model:

**Susceptible, Asymptomatic, Feverish, Emergency, Recovered**

**2 sectors:** A: physical presence required and essential  
B: home office possible but less efficient

**2 groups:** workers  
retired

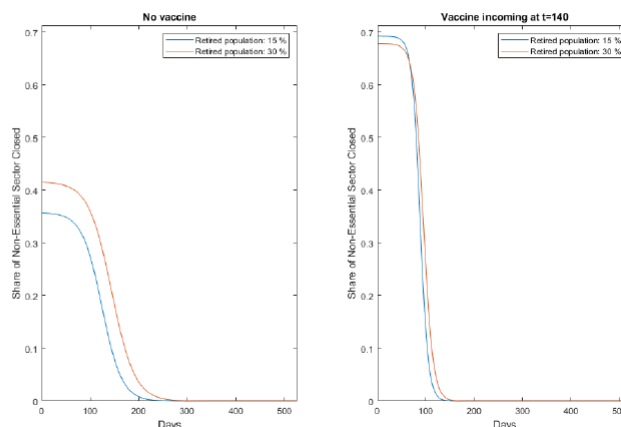
**Aim:** **optimal path of mitigation** (closed/home office)  
e.g., as a function of age structure and  
availability of vaccine

Source: Ivo Bakota, MEA

## 6. Enhanced epidemiological models



### Optimal mitigation paths



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Source: Ivo Bakota, MEA

## Conclusions



### During first wave, across the EU:

- About 20% **lost job**
- 22% faced **income loss** > 10%
  - Of those: 33% loss on average
- 23% worked **fewer hours**
  - 18% of those received short-term employment aid
  - Regressive; self-employed
- **Healthcare crowd-out**: social gradient, interaction with health status
- Mental **health** improved for older folks, worsened for younger
  - Both mental & physical health worse in cities/denser housing areas
- **Social relationships** focused on nuclear family
- **Large variation by country**, typically north-south gradient
- Impact of lockdown clear, while direct effect of pandemic less clear
- Need second survey to assess **long-term effects** (health, unemployment)

Recovered from Covid-19, Source: John Hopkins