

SHORT-TIME WORK OR UNEMPLOYMENT: ON THE ROLE OF INDIVIDUAL
TRAITS AND JOB-RELATED CHARACTERISTICS DURING COVID-19
8TH EU-MICRODATA USER CONFERENCE, MANNHEIM

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16 March 2023

MOTIVATION: SOCIAL INSURANCE POLICIES DURING THE PANDEMIC

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- ▶ Even though the increase in the take-up of STW policies should limit the rise in unemployment during crises, this was **not** the case during COVID-19. **Why?**

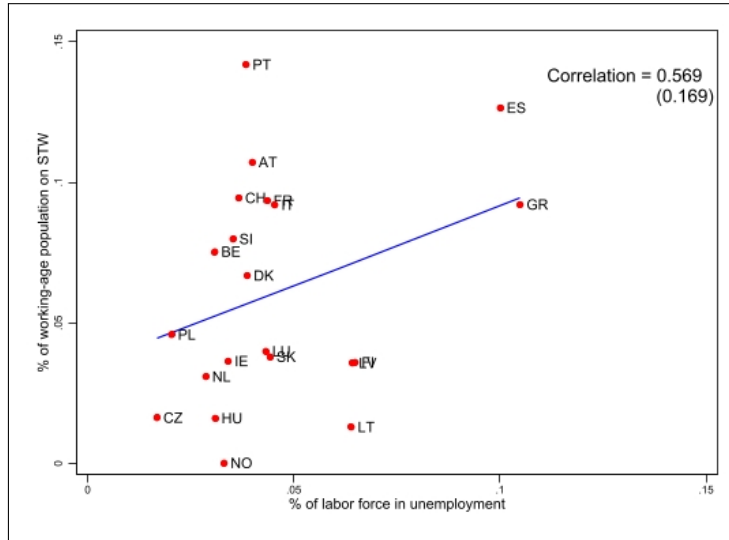
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Research Question. Can this puzzle be explained by differences between workers targeted by STW policies versus those in unemployment?

MOTIVATION

Figure. Linear correlation between the take-up of STW and Unemployment. EU-21, 2020Q2.



Notes. Linear correlation between the share of the working-age population (aged 17-64) in STW and the share of the labor force in Unemployment. Pool of 21 European countries with an STW system in place.

Source: EU-LFS.

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- ▶ In Switzerland during COVID-19, low-skilled and employees on temporary contracts more at risk of job loss because less targeted by STW - but NO differences by gender and age (**Hijzen and Salvatori (2022)**).

THIS STUDY

- ▶ **European Labor Force Survey Microdata** for the period 2008-2020.
- ▶ Focus on the **Covid-19 period** (e.g., the first year) & on 21 European countries with STW systems. **Year first implementation STW.**

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⇒ Due to slack work for technical and economic reasons.
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- ▶ Investigates the differences in **socio-demographics** of workers on STW and those who are unemployed.
- ▶ Tests whether the differences identified are consistent across the **selected countries** and were present also during the **2008-2009 financial crisis**.

DESCRIPTIVE RESULTS

Table. Weighted sample averages and their differences, **2020Q1-2020Q4**. Pool of 21 European countries.

Characteristics	STW (1)	Unemployment (2)	Difference in means (1) - (2)
Male	0.558	0.507	0.051***
17-31	0.14	0.337	-0.197***
32-56	0.653	0.531	0.122***
57+	0.206	0.131	0.075***
Primary education	0.03	0.056	-0.027***
High school diploma	0.597	0.694	-0.097***
University degree	0.372	0.248	0.124***
Has a partner	0.523	0.33	0.193***
Extent of reduction in hours	0.469	-	-
Full-time contract	0.816	-	-
Open-ended contract	0.889	-	-
Registered at PES		0.704	-
Duration of unemployment	-	11 months and half	-
Observations	22370	75598	

The populations targeted by the two instruments are distinct:

⇒ Unemployed individuals are less likely to be in the prime-age and old-age categories, in high education, and to have a partner.

ARE THE RESULTS CONSISTENT ACROSS THE SELECTED COUNTRIES?

Characteristics STW & Unemployed Characteristics

▶ STW:

- Working-time reduction $\approx 50\%$. \Rightarrow Few exceptions: Denmark, Ireland, Netherlands, and Switzerland.
- In every country, full-time contracts primary target of STW \Rightarrow Lower share in Germany and Netherlands.
- All countries adopted STW primarily for open-ended contracts ($\approx 90\%$).

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▶ Differences between the two populations Differences in means

\Rightarrow Differences by **gender** minor & not significant in most of countries.

\Rightarrow Nevertheless, precisely estimated and sizeable differences in **age**, **education** & **presence of a partner**.

HOW DO THESE RESULTS COMPARE TO THE 2008-2009 FINANCIAL CRISIS?

Table. Weighted sample averages and their differences, 2008-2009.

Characteristics	STW (1)	Unemployment (2)	Difference in means (1) - (2)
Male	0.687	0.514	0.173***
17-31	0.178	0.399	-0.219***
32-56	0.677	0.529	0.148***
57+	0.144	0.072	0.072***
Primary education	0.38	0.425	-0.045***
High school diploma	0.463	0.419	0.044***
University degree	0.157	0.156	0.001
Has a partner	0.581	0.386	0.194***
Extent of reduction in hours	0.393	-	-
Full-time contract	0.801	-	-
Open-ended contract	0.819	-	-
Registered at PES		0.692	-
Duration of unemployment	-	11 months	-
Observations	21120	241202	

⇒ The differences among employees on STW and laid-off individuals were more pronounced along the sex and age compositions, but less so for education.

CONCLUDING REMARKS

- ▶ During the first year of COVID-19, both the uptake of Short-Time Work policies and Unemployment rose.
- ▶ **Puzzle!** Rationale for STW policies and evidence from the 2008-2009 financial crisis foresee the two social policies as **complementary**.
- ▶ This study investigates whether this puzzle can be explained by **different populations of employees targeted** by STW and Unemployment.
- ▶ It relies on **EU-LFS** for **21 European countries** with a formal **STW system** in place in **2020**.
- ▶ Findings reveal that:
 1. The two populations were **distinct**.
 2. **Gender differences** are overall minor in most of selected countries. BUT differences in **age** and **education** relevant in each country.
 3. The differences in **gender** and **age** were **less sizeable** than during the 2008-2009 financial crisis.

Thank you!

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YEAR OF IMPLEMENTATION OF STW SYSTEMS IN SELECTED EU COUNTRIES

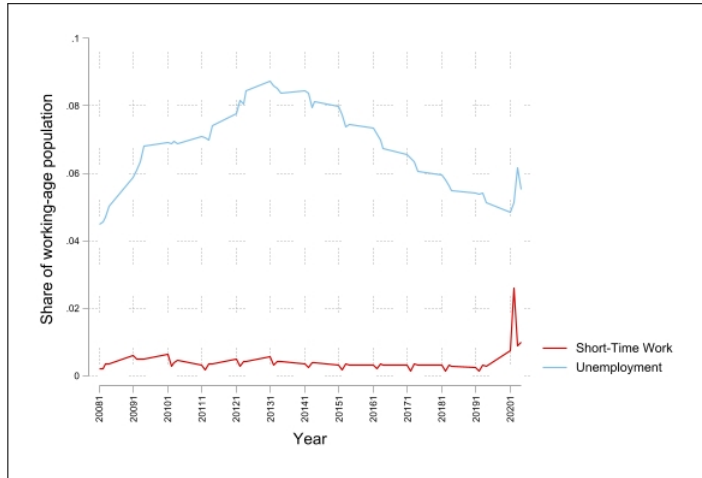
Table. Year of first implementation of STW systems in selected EU countries. [Back](#)

Country	Year of origin
Austria	1968
Belgium	1978
Czech Republic	2008
Denmark	1976
Finland	1985
France	1968
Germany	1927
Greece	2020
Hungary	2009
Ireland	1967
Italy	1954
Latvia	2020
Lithuania	2020
Luxemburg	1975
Netherlands	2008
Poland	2009
Portugal	1983
Slovenia	2020
Slovak Republic	2009
Spain	1980
Switzerland	1982

Sources: Boeri and Bruecker (2011), OECD (2020).

RELATIONSHIP TAKE-UP OF STW & UNEMPLOYMENT DURING COVID-19

Figure. Take-up of Short-Time Work vs. Unemployment, 2008-2020.



Notes. Share of the working-age population whose hours worked during the reference week was different than hours usually worked or not having worked at all through having a job (**Short-Time Work** and laid-off but available and seeking a job (**Unemployment**). ELFS for pool of 21 countries with an STW system in place. Source: EU-LFS.

ARE THESE RESULTS CONSISTENT ACROSS THE SELECTED EU COUNTRIES?

Table. Characteristics of individuals reporting uptake of STW and of individuals reporting unemployment, by country. Weighted averages, [2020Q1-2020Q4](#).




Country	Characteristics of STW uptake			Characteristics of unemployment pool	
	Hours reduction	Full-time	Open-ended	Duration unemployment	Registered at PES
Austria	0.508	0.758	0.959	10.2 months	0.74
Belgium	0.49	0.8	0.956	12 months	0.838
Czech Republic	0.4	0.926	0.907	9 months	0.52
Denmark	0.33	0.732	0.832	9 months	0.663
Finland	0.489	0.788	0.904	7.3 months	0.688
France	0.551	0.866	0.916	11.5 months	0.826
Germany	0.62	0.495	0.94	10.3 months	
Greece	0.498	0.933	0.869	17.5 months	0.824
Hungary	0.514	0.915	0.887	8.9 months	0.547
Ireland	0.326	0.751	0.877	9.5 months	0.652
Italy	0.471	0.838	0.895	13.6 months	0.449
Latvia	0.5	0.613	0.917	10.1 months	0.552
Lithuania	0.659	0.936	0.923	10.7 months	0.721
Luxemburg	0.481	0.805	0.94	10.6 months	0.426
Netherlands	0.381	0.43	0.717	7.5 months	0.442
Poland	0.417	0.914	0.786	9.6 months	0.532
Portugal	0.434	0.902	0.849	11.2 months	0.686
Slovenia	0.468	0.911	0.802	11.8 months	0.746
Slovak Republic	0.402	0.954	0.917	12.6 months	0.846
Spain	0.471	0.911	0.855	11 months	0.82
Switzerland	0.358	0.599	0.944	11.1 months	0.723

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Table. Differences in weighted sample averages by countries, 2020Q1-2020Q4.

Country	Male	17-31	32-57	57+	Has primary education	High-school diploma	Has university degree	Has a partner	Obs
Austria	-0.004	-0.148***	0.11***	0.038***	-0.022***	-0.125***	0.147***	0.144***	12441
Belgium	-0.001	-0.235***	0.193***	0.041*	-0.056***	-0.133***	0.189***	0.193***	2597
Czech Republic	-0.002	-0.124***	0.052*	0.072***	-0.023***	-0.103***	0.126***	0.095***	4024
Denmark	0.06***	-0.216***	0.172***	0.044***	-0.029***	-0.078***	0.106***	0.183***	7124
Finland	-0.008	-0.243***	0.183***	0.059	-0.011	-0.178***	0.189***	0.317***	1627
France	-0.005	-0.203***	0.135***	0.067*	-0.022*	-0.113***	0.135***	0.15***	9264
Germany	-0.004***	-0.127***	0.169***	-0.132***	-0.045*	-0.176*	0.019***	0.193***	3413
Greece	0.157***	-0.174***	0.089***	0.085***	-0.023***	-0.165***	0.189***	0.205***	12046
Hungary	0.012	-0.152***	0.123***	0.029	-0.013*	-0.033*	0.046*	0.128*	8199
Ireland	0.034	-0.282***	0.125***	0.157***	-0.019***	-0.057*	0.076***	0.256***	5839
Italy	0.085***	-0.24***	0.12***	0.12***	-0.021***	-0.072*	0.092***	0.214***	41528
Latvia	-0.267***	-0.095	0.173	-0.078	-0.019	-0.092	0.111	0.319***	741
Lithuania	-0.057	-0.161***	0.052	0.108	-0.007***	-0.054	0.062	0.206*	4589
Luxemburg	0.04	-0.241***	0.199***	0.042	-0.103***	0.092	0.011	0.045***	7303
Netherlands	-0.006	-0.221***	0.174***	0.047***	-0.036*	-0.069*	0.105***	0.192***	3733
Poland	0.001	-0.237***	0.155***	0.083***	-0.013*	-0.169*	0.181***	0.329***	26329
Portugal	0.02	-0.263***	0.191***	0.072***	0.006	-0.131***	0.124***	0.221***	9173
Slovenia	0.175***	-0.171***	0.108*	0.063*	-0.004*	-0.143*	0.147***	0.139*	3022
Slovak Republic	0.085*	-0.179***	0.127***	0.052*	-0.004*	-0.127***	0.13***	0.11*	5278
Spain	0.089***	-0.219***	0.155***	0.064***	-0.042***	-0.174***	0.216***	0.238***	13155
Switzerland	0.124	-0.221***	0.115*	0.106*	-0.037*	-0.014	0.112*	0.307***	2521

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