Should We Insure Workers or Jobs During Recessions?

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Note: Europe is weighted average of Germany, France, Italy and the UK, weighted by their working age population.
Short-Time Work vs Unemployment Insurance

**Unemployment insurance (UI)**

- When hit by a shock, employment relationship is **severed**
- If eligible, worker can claim unemployment benefits → **worker is insured** against cost of job loss

**Short-time-work (STW)**

- When hit by a shock, firm can temporarily reduce labor demand and decrease number of hours worked by its employees
- Firm pays for the hours worked, while STW subsidizes hours not worked
- Employment relationship is **preserved** → **job match is insured**

→ **Should we insure workers or jobs?**
Outline

1. Conceptual Framework

2. Empirical Evidence
Outline

1. Conceptual Framework

2. Empirical Evidence
Welfare Trade-offs of STW vs UI

- Standard public finance framework: optimal generosity of social insurance transfer balances its insurance value against its fiscal externality
  - Insurance value: social benefit of transferring $1 from good to bad state
  - Fiscal externality: cost of transferring $1 due to behavioral responses

- Extend this framework to assess the relative optimal generosity of social insurance

- Imagine to increase generosity of social insurance by $1. Should we increase STW or UI?
Optimal STW/UI mix

Relative value of STW/UI transfer  =  Relative fiscal externality

- Value of transfer:  $E_{STW}[u'(c)] - E_{UI}[u'(c)] \geq 0$
- Fiscal externality:  $FE_{STW} - FE_{UI} \geq 0$
Optimal STW/UI mix

Relative value of STW/UI transfer  =  Relative fiscal externality
+  Relative correction of LM externalities

• Value of transfer:  $E_{STW}[u'(c)] - E_{UI}[u'(c)] \gtrless 0$

• Fiscal externality:  $FE_{STW} - FE_{UI} \gtrless 0$

• Correction of labor market inefficiencies: social insurance can amplify or hamper pre-existing distortions
  • Inefficient separations, e.g. due to liquidity constraints
  • Search inefficiencies, e.g. rat-races for jobs during recessions
  • Inefficient reallocation, e.g. cleansing effects
1. Conceptual Framework

2. Empirical Evidence
Relative Insurance Value

- Value of insurance depends on:
  - How workers value insurance, i.e. their level of risk aversion
  - Whether they have other means of consumption smoothing
  - The size of the shock

- Little empirical attention to value of social insurance

- Value of UI (++) , strongly heterogeneous

- Little evidence on the insurance value of STW specifically and how it compares to UI, but they tend to insure:
  - Different populations (risk aversion, consumption smoothing)
  - Different shocks

- Likely $E_{STW}[u'(c)] - E_{UI}[u'(c)] << 0$
### Evidence from the IAB-HOPP survey data

<table>
<thead>
<tr>
<th></th>
<th>Employed (not in STW)</th>
<th>STW</th>
<th>Unemployed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>0.513</td>
<td>0.428</td>
<td>0.432</td>
</tr>
<tr>
<td>Age 18-34</td>
<td>0.230</td>
<td>0.216</td>
<td>0.253</td>
</tr>
<tr>
<td>Age 35-54</td>
<td>0.513</td>
<td>0.522</td>
<td>0.353</td>
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<tr>
<td>Age 55+</td>
<td>0.257</td>
<td>0.262</td>
<td>0.394</td>
</tr>
<tr>
<td>University degree</td>
<td>0.453</td>
<td>0.320</td>
<td>0.301</td>
</tr>
<tr>
<td>Has partner</td>
<td>0.712</td>
<td>0.684</td>
<td>0.491</td>
</tr>
<tr>
<td>Partner not working</td>
<td>0.119</td>
<td>0.113</td>
<td>0.167</td>
</tr>
<tr>
<td>Monthly household income</td>
<td>4,248</td>
<td>3,638</td>
<td>2,083</td>
</tr>
<tr>
<td>MPC</td>
<td>0.323</td>
<td>0.335</td>
<td>0.393</td>
</tr>
<tr>
<td>Life satisfaction (1-10)</td>
<td>8.035</td>
<td>7.579</td>
<td>6.408</td>
</tr>
<tr>
<td>Obs</td>
<td>21,338</td>
<td>2,303</td>
<td>1,110</td>
</tr>
</tbody>
</table>
Evidence from the Great Recession in Italy
Evolution of earnings and transfers around STW/job-loss events

Source: Giupponi and Landais (2021)
Relative fiscal externality

- Extensive literature on moral hazard effects of UI
  - Consensus that **fiscal externality of UI is relatively large**: cost of $1 of UI ranges from $1.5 to $2.5

- Limited evidence on moral hazard effects of STW
  - STW made conditional on well-defined shock prevents MH
  - Evidence from Great Recession (Kopp and Siegenthaler [2019]; Giupponi and Landais [2020]) points to **limited moral hazard**, e.g. in Italy, additional $1 of STW cost $1.07
  - But massive **extension** of STW schemes can fuel MH

- Likely $\text{FE}_{STW} - \text{FE}_{UI} < 0$
Inefficient Separations

Does STW save jobs?

• Robust cross-country evidence from the current crisis
• Consistent with evidence from the Great Recession: Kopp and Siegenthaler [2019]; Cahuc, Kramarz and Nevoux [2021], Giupponi and Landais [2021]

Is this efficient? Would separations be inefficiently high absent STW?

• Liquidity constraints (Giupponi and Landais [2021])
• Bargaining frictions
• Generous and imperfectly experience-rated UI
Does STW save jobs?

\[ \beta_{\text{STW}} = -0.333 \pm 0.073 \]
Search Inefficiencies

- Recessions are usually characterized by slackness (i.e. low tightness) in the labor market: many workers are searching for jobs and firms post few vacancies

- It can be socially inefficient: if jobs are rationed, search can become a rat race (Michaillat [2009], Landais, Michaillat and Saez, [2018a])

- Social insurance affects equilibrium tightness by affecting workers’ search effort and firms’ labor demand

- Welfare consequences depend on
  1. Direction and magnitude in which STW/UI affect tightness
  2. How inefficiently tight or slack labor market is to begin with
How does tightness respond to STW/UI?

Vacancy-filling probability $q(\theta)$ and STW/UI take-up

- Both STW and UI usage correlated with decline in the job-filling probability, i.e. with increase in tightness ($\theta = \nu / u \cdot e$)

- Stronger correlation with UI: more effective way of alleviating search externalities?
Is labor market tightness too low or too high in recessions?

- Labor market tightness typically low during downturns
- We document sustained level of tightness in current recession in the US and Europe (generous UI/STW?)
Reallocation Inefficiencies

- Recessions usually trigger significant reallocation - across firms / sectors - enhancing aggregate efficiency (e.g. see Barrero et al. [2020])

- UI and STW differ in the type of reallocation they hinder
  - **UI** is a brake to *aggregate reallocation*: ↓ aggregate search effort
  - **STW** is a brake to *sectoral/firm reallocation*: prevents workers in firms/sectors hit by productivity shocks to reallocate

- How serious are these reallocation effects in practice?
  - Little knowledge on reallocation effects of UI
  - For STW, evidence from the Great Recession in Italy suggests that – when shock is permanent – negative selection of firms into program can have negative reallocation effects
  - Magnitude of those effects small, but now massive extension of STW
What do we know about key elements of welfare trade-off?

<table>
<thead>
<tr>
<th></th>
<th>Value of Transfer</th>
<th>Moral Hazard / Fiscal Externality</th>
<th>Other Externalities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Layoff</td>
<td>Search</td>
</tr>
<tr>
<td>STW</td>
<td>?</td>
<td>+/-</td>
<td>- -</td>
</tr>
<tr>
<td>UI</td>
<td>++</td>
<td>++</td>
<td>?</td>
</tr>
</tbody>
</table>

Note: The symbols refer to the magnitude of each feature/estimated effect: (+ +) Large positive, (+) Positive, (+/-) Both positive and negative, (-) Negative, (- -) Large negative, (?) No evidence.
Conclusion

- We provide general framework to think about welfare trade-offs between STW and UI
  - UI has greater insurance value, but STW likely entails lower fiscal externality
  - STW useful tool to prevent inefficient layoffs, with limited reallocation effects
  - UI probably more effective at reducing search externalities

- In countries with generous UI and/or strict EPL, strong cyclical programs like STW can be valuable complement of UI to respond to recessions

- We document that labor market is uniquely tight in current crisis. Research on drivers of high tightness needed to determine optimal path out of the crisis.

[Links to Tightness US/FR and Search/Vacancies FR]
Evolution of tightness in France and in the US

Source: authors’ computation from Giupponi et al. [2021] and Michaillat and Saez [2021]
Search and Vacancy Posting in France during COVID-19
Evolution of job search and vacancy postings by sector between 2019 and 2021

Sources: ACEMO data for vacancies and Google trends for job search

- Pandemic hit the different sectors differently
- Frictions to reallocation: $\Delta$ job search effort $\neq \Delta$ vacancy postings
- Lower matching efficiency, increase in labor market tightness.