Digitalisation, Automation and the Future of the Social Investment Welfare State

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Introduction

• Existing research on implications of rapid technological change for the welfare state mostly focuses on labor market effects
• Very little so far on (indirect) implications for welfare state policy-making
• But public policies are crucial in shaping impact of digitalisation on inequality

• Open questions:
  • Which policy responses to rapid technological change do citizens favor?
  • Which groups (of citizens) support which kinds of policies? → emerge of new political cleavage or reinforcing old ones?
→ In this presentation: focus on the potential of the social investment approach as consensual solution to new challenges
Policy responses to rapid technological change

• Link between technological change and welfare state development: well-known and subject of large amount of research
  → Does the digital revolution trigger new expectations and demands on the welfare state? Or rather “new wine in old bottles”?

• Policy experts, pundits: investing in education and human capital provides insurance against challenges of rapid technological change → rise of the social investment model of the welfare state

• But: What do citizens think?
  • On the one hand: might support turn towards SI policies
  • On the other: rapid technological change could increase demand for traditional social compensatory policies
  → Likely to vary across different groups
  → Empirical analysis of survey data
Introducing the INVEDUC survey

Representative sample in **8 European countries** (N = 8905)
  - average response rate: 27%
  - Data quality and representativeness comparable to ESS

**CATI by professional survey institute** *(TNS Infratest Sozialforschung)* using **RDD**
  - Fieldwork: mid-April to early-June 2014

**Content: 50+ questions on SI policies (spending, governance, etc.)**
  - partly experimental designs
  - Careful translation & pretests

**Now available in the public domain:**
https://dbk.gesis.org/DBKSearch/sdesc2.asp?no=6961&db=e
Public attitudes towards different kinds of social policy reforms

“Governments and political leaders like to propose new policy reforms in order to address important social issues. Please indicate whether you would strongly agree, agree, neither agree nor disagree, disagree or strongly disagree with the following reform proposals:

1. Giving the unemployed more time and opportunities to improve their qualification before they are required to accept a job.
2. Expanding access to early childhood education and improving its quality.
3. Investing more money in university education and research at universities.
4. Forcing unemployed to accept a job quickly, even if it is not as good as their previous job.
5. Increasing old age pensions to a higher degree than wages.
6. Lowering the statutory retirement age and facilitating early retirement.”
Table 1: Rotated factor loadings and Eigenvalues after principal-component factor analysis, pooled sample.

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<tbody>
<tr>
<td>Labor market training</td>
<td>0.4179</td>
<td>0.1502</td>
<td>-0.5922</td>
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<tr>
<td>Expand early childcare</td>
<td>0.7657</td>
<td>0.0799</td>
<td>0.0796</td>
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<tr>
<td>Universities and research</td>
<td>0.7623</td>
<td>0.0094</td>
<td>-0.0662</td>
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<tr>
<td>Accept job quickly</td>
<td>0.0808</td>
<td>0.0257</td>
<td>0.8807</td>
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<tr>
<td>Pension increase</td>
<td>0.0828</td>
<td>0.7891</td>
<td>0.1015</td>
</tr>
<tr>
<td>Early retirement</td>
<td>0.0111</td>
<td>0.7660</td>
<td>-0.1424</td>
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<tr>
<td>Eigenvalues</td>
<td>1.5900</td>
<td>1.1092</td>
<td>1.0631</td>
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Figure 1: Share of respondents supporting social investment, passive transfers, and workfare policy reforms across countries.
Further dependent variable: Public support for redistribution

- Standard item in comparative research on welfare state attitudes:

“The government should reduce income differences between the rich and the poor.”

→ Thewissen/Rueda (2018, Comparative Political Studies) find strong association between automation risk and support for redistribution
Measuring automation risk and control variables

- Building on Thewissen/Rueda (2018)
  - Frey/Osborne measure: “forward-looking” perspective, based on expert assessment of automation risk for different occupations
  - Routine Task Intensity (RTI) index following Autor, Dorn, Goos, Manning et al.: measure of importance of routine tasks relative to manual and abstract tasks, based on Dictionary of Occupational Titles (DOT)

- Control variables: income, educational background, gender, household composition (children at home), age, ideological orientation (left-right, GAL-TAN)
Support for Reduction of Income Differences

Routine task intensity

Automation probability

- with controls
- without controls
Support for Reduction of Income Differences

Support for Passive Social Transfers

Routine task intensity

Effect of income

Effect of income

−0.2
0.0
0.2
−0.2
0.0
0.2
−1 0 1 2
0.00 0.25
Conclusion: So what?

• Automation risk as determinant of citizen preferences and attitudes: partly related to other factors (income, education), but also partly independent → comparison of models with and without controls
• Not (yet) a new political cleavage
• Citizens in jobs at high risk of automation tend to support more compensatory policies rather than social investment
• also: mitigation of class conflict about redistribution for higher levels of automation risk
• But:
  • survey does not cover new and/or radically different policy proposals such as universal basic income, job creation schemes etc.
  • Analyses still very preliminary