Implications of Changing Employment Patterns for Pension Outcomes in Germany

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LIFE-COURSE DETERMINANTS OF ACTIVE AGEING AND WELL-BEING, FACTAGE-Conference
CEPS, Tuesday, 25 June 2019
ACTIVE AGEING AS A RESEARCH MOTIVATION

- Prolonged working lives are the new norm to secure higher life expectancies:
  1. Individuals collect retirement benefits later
  2. Active Ageing is associated with better health
  3. Compensate for interrupted working lives
     ➢ What is the relation between changes in the patterns of employment trajectories and pension outcomes?

- Looking at
  1. Welfare structure of German retirement system
  2. German labour markets in post-Fordism
  3. Data & Methods
  4. Results
HOW ARE PENSIONS GENERATED IN THE FIRST PILLAR IN GERMANY?

- A standard old-age pension would be reached by an average earner who retires at retirement age after the collection of 45 earning points (Ebert 2018).
- Earning point = Ratio of individual income to average yearly income
- In mature pension systems, pensioners would have full contribution histories (Simonovits 2003)

<table>
<thead>
<tr>
<th>Input dimension</th>
<th>Black Box</th>
<th>Output dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuous standard careers</td>
<td>Institutionalised social security system</td>
<td>Pension adequacy</td>
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Adapted from Easton 1965; Schmidt 2013, Möhring 2015
WHAT’S HAPPENING IN THE GERMAN LABOUR MARKET?

- Accumulation of individual earning points shape differently among employment periods and among cohorts

<table>
<thead>
<tr>
<th>Birth Characteristics</th>
<th>East</th>
<th>West</th>
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</thead>
<tbody>
<tr>
<td><strong>Cohort 1</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1940-1975 “Golden Age”</td>
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<td>(Hinrichs/Jessoula 2012)</td>
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<tr>
<td>• Dual Earner</td>
<td></td>
<td>• Male Breadwinner</td>
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<tr>
<td>• High degree of standardisation</td>
<td></td>
<td>• High female family-orientation</td>
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<tr>
<td>(Gornick/Meyers 2003)</td>
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<td>(Brettschneider/Klammer 2016)</td>
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<td><strong>Cohort 2</strong></td>
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<tr>
<td>1976-1990 “Post-industrial”</td>
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<tr>
<td>“Post-industrial”</td>
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<td></td>
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<tr>
<td>(Malo/Muñoz–Bullón 2003)</td>
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<tr>
<td>• No official unemployment</td>
<td></td>
<td>• Longer/frequent unemployment spells</td>
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<tr>
<td>• Discontinuous careers after reunification</td>
<td></td>
<td>• Combining work and care obligations/</td>
</tr>
<tr>
<td>(Simonson et al. 2011)</td>
<td></td>
<td>housework for women</td>
</tr>
<tr>
<td><strong>Cohort 3</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1991-2015 “Globalisation”</td>
<td></td>
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<td>(Simonson et al. 2011)</td>
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<tr>
<td>• Discontinuous careers after reunification</td>
<td></td>
<td>• Higher degree in pluralised living</td>
</tr>
<tr>
<td>(Simonson et al. 2011)</td>
<td></td>
<td>arrangements</td>
</tr>
<tr>
<td>• High levels of unemployment</td>
<td></td>
<td>• De-standardised careers for women</td>
</tr>
<tr>
<td>(Brettschneider/Klammer 2016)</td>
<td></td>
<td>(Trappe et al. 2015)</td>
</tr>
</tbody>
</table>
WHICH RESEARCH IMPLICATIONS ARE RECEIVED?

H1

Increasing complexity of employment careers results in a lowered EP accumulation.

H2

De-standardised careers lower pension outcomes structurally by cohort, region, gender and education.
TESTING THE HYPOTHESES…

• Variables
  • Dependent variable: Sum of pension earnings points (EP)
  • Main independent variable: Change of monthly employment status

• Two-step Analyses
  • SHARE-RV which links German sample of SHARE (Waves 4-6) with administrative records of German Pension Insurance
    ➢ Descriptive Method 1/2 : Multichannel sequence analysis
    ➢ Multivariate Method 2/2 : Ordinary least squares regression

3 | Data & Method
FINDINGS (1/2)

TRAJECTORIES - WEST

Employment states

- Marginal
- Emp. < 60% MEGPT
- Emp. > 60% MEGPT
- Self-Employed
- Educ./Apprentice/Military
- Care
- Unemployed
- Other
- No Information
- missing

Earning points

- 0-<10
- 10-<20
- 20-<30
- 30-<40
- >40
- missing
FINDINGS (1/2)
TRAJECTORIES - EAST

Employment states
- Marginal
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Cohort 1936-1945
Cohort 1946-1955
Cohort 1956-1965
MULTIVARIATE ANALYSIS (2/2)

- Regressions by
  - Cohorts
  - Regions
- Education
  - ISCED 1 and 2 = low education, ISCED 3 and 4 = intermediate education, ISCED 5 and 6 = high education
- Gender
  - 0 = male, 1 = female
- Interaction effect
  - Education*Gender
- Complexity indicator and relative time spent in care
- Controls
  - Number of children (0, 1, 2, 3, 4 or more)
  - SHARE wave (wave 4, 5 and 6)
  - Household’s gross financial assets as a proxy for private provisions
  - Marital status
REGRESSION FINDINGS
- SOCIODEMOGRAPHICS
(2/2)
REGRESSION FINDINGS (2/2)
EDUCATION BY GENDER (INTERACTION)
REGRESSION FINDINGS (2/2) – COMPLEXITY OF EMPLOYMENT TRAJECTORIES
Which results are received?

- **H1**: Increasing complexity of employment careers results in a lowered EP accumulation.
- **H2**: De-standardised careers lower pension outcomes structurally.

Result: Gaps in social provision emerge for certain labour participants.
MAIN RESULTS

Employment career complexity affect pension outcomes structurally and create new social risks in pension provision.

Educational Gap
• Lower-skilled individuals mainly face precarious EP accumulation in Eastern Germany.
• Oldest and the youngest cohort, those in late and early careers when system transformation took place.

Gender Gap
• Persistent but slightly decreasing in West-Germany, only observed for oldest cohort in East-Germany.
• Stronger female labor market attachment, no increase in pension outcomes.

Complexity of employment trajectories rises
• Individual differentiation substantially decreases earning point accumulation.
• For East-Germans, downward economic mobility towards earlier stages in life courses of younger cohorts.
Thank you for your attention!
3. DATA & METHODS

- **SHARE-RV**: Linked German sample of SHARE (W 4-6) with administrative records of German Pension Insurance
  - Cross-sectional information from waves 4 – 6
  - Life-course information from administrative records → monthly employment status + pension earnings points (EP)
- Employment and earnings trajectories age 20-50 (n=3651)

<table>
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<tr>
<th>Cohort</th>
<th>East German</th>
<th>West German</th>
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<tbody>
<tr>
<td>1936-1945</td>
<td>n=270, 47.04% women</td>
<td>n=844, 48.34% women</td>
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<tr>
<td>1946-1955</td>
<td>n=373, 53.89% women</td>
<td>n=1097, 53.78% women</td>
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<tr>
<td>1956-1965</td>
<td>n=278, 55.04% women</td>
<td>n=789, 59.19% women</td>
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<tr>
<td>Total</td>
<td>n=921 (25.23%), 52.23% women</td>
<td>n= 2730 (74.77%), 53.66% women</td>
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</tbody>
</table>
FINDINGS – DIFFERENTIATION MEASURE (1/2)
DE Standardisation Indicator - West

Cohort 1936-1945

Cohort 1946-1955

Cohort 1956-1965
DESTANDARDISATION-INDICATOR - EAST

Cohort 1936-1945

Cohort 1946-1955

Cohort 1956-1965
• Incentives to encourage people to retire from the work force later compensates deficits in entitlements across the life course for certain groups

• Traditional welfare structures and societies of the industrial age collide with new forms of welfare policies

• Discontinuous careers affect pension outcomes structurally and create new social risks in pension provision.