WHAT LIFE COURSE RESEARCH CAN TELL US ABOUT THE PUZZLE OF FLEXIBILIZATION

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TREE Conference Bern Nov 11/12 2021
structure of the talk

1. from the life course cube to the life course observatory: data types and research designs

2. historical changes of life courses and macro-social change: the relationships

3. long term changes in working lives. (Mayer, Becker & Fasang forthcoming)
life course cube

- David Catell’s cube of developmental psychology
life course cube

- time series census

(1V, nT, nP)
Modernisation, labour market situation, academic high schools, and universities in (West) Germany, 1918-2010

![Graph showing historical trends in tertiary institutions, academic high schools, level of modernity, and labour market situation.]

- No. of tertiary institutions (in 100)
- No. of academic high schools (in 1,000)
- Level of modernity (factor scores)
- Labour market situation (factor scores)
Life course cube

- Cross-section survey

\[(nP, mV, 1T)\]
1. life course cube

- repeated cross-section surveys

\[(nP, mV, nT)\]
1. life course cube

- biographies  
  *(1 or few P, many V, nT)*
life course observatory

- rapidly increasing availability of population wide, individual level longitudinal cohort studies
- much longer to complete stretches of life time, i.e. long trajectories
- yearly birth cohorts
- across multiple life domains
- many countries
life course observatory

- Population Life Courses (nP, nV, nT)
Lexis-Diagram: Age, Period and Cohort
Figure 3: Zoomed detail of Figure 2, showing event histories starting around 1970.
life course observatory
life courses and social change

- historical changes in life course patterns
- life course evidence for macro-social change
- changes in life course patterns as macro-social change
historical changes in life course regimes (Mayer 2005)

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Unit</td>
<td>Family farm/ Firm</td>
<td>Wage earner</td>
<td>Male breadwinner, Nuclear family</td>
<td>Individual</td>
</tr>
<tr>
<td>Temporal Organization</td>
<td>Unstable, Unpredictable, Discontinuity</td>
<td>Life cycle of poverty, Discontinuity</td>
<td>Standardized, Stabilized, Continuity, Progression</td>
<td>De-standardized discontinuity</td>
</tr>
</tbody>
</table>
(recent) historical changes in life course regimes ((Kohli 1985, 1988, 2007)

- institutionalization (work, Kohli 1985; welfare state, Mayer/Müller 1986)
- standardization
- age-grading/temporalization

- de-institutionalization
- individualization
- pluralization
- de-standardization
life course evidence for macro-social change

- heuristics of societal change:
  - system change, ruptures, breakdown, transformation (WWI, black Friday, 1933, WWII, 1945, 1949, 1989/90, Great Recession and aftermath, 2020 pandemic)
  - periods: (e.g. WWII; post-war reconstruction, economic miracle and „Golden Age“, oil shock, stagflation, IT - boom, recession, neoliberalism and Agenda 2010)
  - trends: industrialization – post-industrial society, decline and re-consolidation of the welfare state, Kuznets- decrease of inequalities and Piketty reversal, globalisation
  - cohorts: „Children of the Great Depression“, baby boomers, Corona generation
life course evidence for macro-social change

- Lutz Raphael
- Arbeitsbiografien u. Strukturwandel „nach dem Boom“
- Lebensläufe und Berufserfahrungen britischer, französischer und westdeutscher Industriearbeiter und -arbeiterinnen von 1970 bis 2000
- Geschichte und Gesellschaft 2017
life course impacts of macro-social change
changes in life course patterns as macro-social change

- The Standard View
  (Lipset/ Rokkan 1967)
changes in life course patterns as macro-social change

- The Social Democratic view
changes in life course patterns as macro-social change

- Varieties of Welfare State Capitalisms (Esping-Andersen, Hall/Soscice)
changes in life course patterns as macro-social change

- “New Structuralism” (Mayer /Hillmert 2004)
changes in life course patterns as macro-social change

- ”Individualization and pluralisation of lives are the causes of party fragmentation (in Germany)”

(Paul Nolte, historian – Free University Berlin. on the 2021 Federal Election)
long term changes in working lives

evidence from quantitative life course research
current debate on the future of work

- digitalization and the loss of jobs

- the rise of the home office and its impacts
current debate on the future of work

- digitalization and the loss of jobs

- the rise of the home office and its impacts
digitalization and the loss of jobs

- Which jobs can be digitalized?

  Autor et.al. (2003, 2011, 2013, 2015) polarization and the dualism of the low skilled
digitalization and the loss of jobs

- Which proportion of jobs is at risk of becoming automated?

  Frey & Osborne 2017:

  47% of US jobs in the next 10-20 years
which proportion of jobs is at risk of becoming automated?

Georgieff/Milanez, OECD 2021: period 2012 – 2019:

- so far no net loss of employment among 21 OECD countries;
- potential high risk of automation 14% of OECD and 10% for US;
- low skilled and older workers much more vulnerable;
- 0.8% shorter job tenure per 1% risk of automation –
- U.S and Germany below average.
Figure 2.4. Occupations at higher risk of automation saw lower employment growth

Average percentage change in employment level by occupation (2012 to 2019) and average risk of automation by occupation (2012)

Note: Occupations are classified using two-digit ISCO-08. Not all occupations have marker labels due to space constraints. The averages presented are unweighted averages across countries.

Figure 3.1. Automation risk is relatively low in Nordic and Anglophone countries and relatively high in Eastern and Southern European countries

Average % of jobs at high risk of automation across occupations by country

Note: The percentages represent the share of jobs at high risk of automation, i.e. with more than a 70% automation probability. The averages presented are unweighted.

Source: Nedelkoska and Quintini (2018[2]).
Figure 2.5. Most countries have experienced declines age-adjusted job tenure

Cross-occupation average percentage change in mean adjusted log tenure across occupations by country, 2012 to 2019

Note: Countries are ordered by largest change in average adjusted log tenure (on the left) to smallest. The averages presented are unweighted. Adjusted log tenure is obtained by taking the residual of country-specific OLS regressions of log tenure over age.
Source: EU-LFS, US-CPS and Nedelkoska and Quintini (2018[2]).
the rise of the home office

- impact of COVID 19: 30-50% home office for Germany
  (Adams-Prassl 2020; Grabka/ Schröder 2021)

- socio-economic inequalities: more women and more higher qualified and more middle class

- blurring of working time boundaries; reversal of secular trends in the separation of work and family

- costs and worker preferences vs control
long term changes in working lives - agenda

- are there long term trends or period shifts in the de-standardization of work?

- what are the claims of the “grand narrative”?

- what is the empirical evidence (for Germany)?
long term changes in working lives – agenda

- findings for Germany 1940-2010 on occupational changes, job shifts, firm shifts, status trajectories, work complexity, precarious work

- from trends to periods to cohorts

- is Germany an outlier and if so why?

- the downfall of the “grand narrative”?
“That lives have become less predictable, less collectively determined, less stable, less orderly, more flexible, and more individualized has become one of the most commonly accepted perceptions of advanced societies. Working lives are said to have become more unstable, including increased firm and occupational mobility.”

(Brückner and Mayer 2005: 28).

*core tenet of the self-understanding of contemporary societies*
long term changes in working lives

George W. Bush – Republican Convention 2004:

- “The workers of our parents’ generation typically had one job, one skill, one career, often with one company.... Today, workers change jobs, even careers, many times during their lives.”

(The New Yorker, January 16, 2006)
long term changes in working lives- „contingent life courses“

“Pathways have become destandardized and employment careers discontinuous, and the ensuing ‘contingent work life course’ ... transforms the relationship between social institutions and life domains of education, work and family”. (Heinz 2003).
Richard Sennett 1999: „flexible capitalism“

“The most tangible sign of [...] change might be the motto ‘No long term.’ In work, the traditional career progressing step by step through the corridors of one or two institutions is withering; so is the deployment of a single set of skills through the course of a working life. Today, a young American with at least two years of college can expect to change jobs at least eleven times in the course of working, and change his or her skill base at least three times during those forty years of labor.” (Sennett 1999: 22).
“Brazilianization” relates to the idea that the labor markets of the advanced societies resemble more and more the fragmented and precarious economy of Latin America: a minority of workers in permanent work contracts: “the impact of the precarious, discontinuous, fluffy and informal into Western work” (Beck 1999: 8).

Multiple many forms: the shrinking of wage labor, precarious and informal job arrangements, the increase of marginal self-employed and temporary workers, workers with fixed-term contracts, people working in the “shadow economy”, unemployment and underemployment, high-tech nomads.
Arne L. Kalleberg (2008), Precarious work, insecure workers: employment relations in transition ASR 74(1) 1-22

In his 2008 presidential address to the American Sociological Association Kalleberg boldly states that

“Precarious work is the dominant feature of the social relations between employers and workers in the contemporary world.” (Kalleberg 2009:17)

Noteworthy is the historical perspective where (for the U.S.) a long period of market dominance and uncertainty is tied to the rise of industrial society from 1800 to 1935, a very short period of social contracts and relative stability from 1935 to 1970 and a reversal to market dominance and uncertainty from 1970 to the present.
The impact of globalisation (Blossfeld, et.al. 2006a,b)

For countries with more open employment relationships Blossfeld and co-authors expect a decrease in economic security, more unemployment and labor flexibility, and a higher rate of job mobility.

For countries with more closed employment relationships they expect an increase in precarious work (fixed-term contracts and part-time work), difficult transitions to the labor market and a comparatively lower rate of job mobility (Blossfeld et al. 2006b: 7–8)
“Growing insecurity is becoming a general condition for working people. Many occupations require considerable skill ..... But the people in the precariat have no occupational standards. Firms are likely to dismiss them before they acquire the experience that entitles them to job upgrading.” (Crouch 2019: 8)

“The various forms of “precariousness” affect only a minority of workers, but it is a minority that is growing in size, and ... particularly affects young people.” (Crouch 2019: 74)
long term changes in working lives – hypotheses

- clear trends or period shift 70ies 80ies onward
- less occupational continuity and stability
- more job shifts
- more firm shifts
- more non-standard employment
long term changes in working lives – the data

- German Life History Study 1981 - 2005

- National Educational Panel NEPS/ALWA – adult cohorts born between 1944 and 1986

- Socio-Economic Panel (SOEP) covering the period 1984 to 2021

- Survey of Health and Retirement in Europe (SHARE) covering the period between 1934 and 2016
long term changes in working lives

occupational mobility

Mayer/Grunow/Nitsche 2010
Expected Survivor Curves

months

share

12 24 36 48 60 72 84 96

0.50 0.60 0.70 0.80 0.90 1.00

KOH = 1940
KOH = 1950
KOH = 1955
KOH = 1960
KOH = 1964
KOH = 1971
Men – duration in first occupation

Data: GLHS-West
Women – duration in first occupation

Data: GLHS-West
Occupational mobility in West Germany – cohorts born between 1929 and 1971 (Mayer, Grunow and Nitsche 2010)

*German Life History Study  GLHS*
long term changes in working lives

shifts between firms

Giesecke & Heisig 2010
yearly job shifts within firms and employer changes between 1984 and 2008 (Giesecke and Heisig 2010)
Socio-Economic Panel SOEP
long term changes in working lives

status mobility

Stawarz 2018, Becker & Blossfeld 2017; Manzoni/Härkönen & Mayer 2010; Härkönen & Bihagen 2017
upward, downward and lateral mobility during first 20 years of employment – labor market entry cohorts 1932–89 (Stawarz 2018) 
*GLHS and NEPS*
Mobility patterns across birth cohorts for West German men for periods since 1945 (%) – German Life History Study and NEPS/ALWA (Becker/ Blossfeld 2017)
long term changes in working lives

from trends to periods
Modernisation & labour market conditions:
Factor loadings (pattern matrix) and unique variances

<table>
<thead>
<tr>
<th>Variables</th>
<th>Factor 1: Level of modernisation</th>
<th>Factor 2: Labour market situation</th>
<th>Uniqueness</th>
<th>KMO score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social protection (at current prices)</td>
<td>0.9882</td>
<td>0.0782</td>
<td>0.0174</td>
<td>0.8967</td>
</tr>
<tr>
<td>Public educational spending (in Deutsche Mark)</td>
<td>0.9835</td>
<td>0.1446</td>
<td>0.0117</td>
<td>0.8985</td>
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<tr>
<td>Public consumption (at current prices)</td>
<td>0.9847</td>
<td>0.1509</td>
<td>0.0077</td>
<td>0.8758</td>
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<tr>
<td>Monthly income of blue-collar workers (2000 = 100%)</td>
<td>0.9617</td>
<td>0.2462</td>
<td>0.0145</td>
<td>0.9880</td>
</tr>
<tr>
<td>Per capita private wealth (at current prices)</td>
<td>0.9540</td>
<td>0.2495</td>
<td>0.0277</td>
<td>0.8744</td>
</tr>
<tr>
<td>Private consumption of education (2010 = 100%)</td>
<td>0.9505</td>
<td>0.2848</td>
<td>0.0154</td>
<td>0.8873</td>
</tr>
<tr>
<td>Private consumption (at current prices)</td>
<td>0.9846</td>
<td>0.1474</td>
<td>0.0088</td>
<td>0.9345</td>
</tr>
<tr>
<td>Absolute number of medical doctors</td>
<td>0.9327</td>
<td>0.3440</td>
<td>0.0118</td>
<td>0.9161</td>
</tr>
<tr>
<td>Absolute number of automobiles</td>
<td>0.9070</td>
<td>0.3798</td>
<td>0.0331</td>
<td>0.8660</td>
</tr>
<tr>
<td>Share of employees in tertiary sector (in %)</td>
<td>0.9380</td>
<td>0.3376</td>
<td>0.0061</td>
<td>0.9102</td>
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<tr>
<td>National income (at current prices)</td>
<td>0.9129</td>
<td>0.4003</td>
<td>0.0063</td>
<td>0.8887</td>
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<tr>
<td>Per capita national income (2010 = 100%)</td>
<td>0.8526</td>
<td>0.4995</td>
<td>0.0236</td>
<td>0.8486</td>
</tr>
<tr>
<td>Gross domestic product (at current prices)</td>
<td>0.9833</td>
<td>0.1585</td>
<td>0.0080</td>
<td>0.9098</td>
</tr>
<tr>
<td>Per capita gross domestic product (at current prices)</td>
<td>0.8969</td>
<td>0.4245</td>
<td>0.0153</td>
<td>0.9714</td>
</tr>
<tr>
<td>Investments (at current prices)</td>
<td>0.9673</td>
<td>0.2061</td>
<td>0.0218</td>
<td>0.9418</td>
</tr>
<tr>
<td>Productivity (1950 = 100%)</td>
<td>0.9522</td>
<td>0.2890</td>
<td>0.0097</td>
<td>0.8575</td>
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<tr>
<td>Unemployment rate</td>
<td>0.2785</td>
<td>0.6008</td>
<td>0.5615</td>
<td>0.2060</td>
</tr>
<tr>
<td>Number of firms</td>
<td>-0.3860</td>
<td>-0.7594</td>
<td>0.2742</td>
<td>0.7565</td>
</tr>
<tr>
<td>Average firm size</td>
<td>0.3928</td>
<td>0.8998</td>
<td>0.0360</td>
<td>0.7481</td>
</tr>
<tr>
<td>Overall</td>
<td></td>
<td></td>
<td></td>
<td>0.8897</td>
</tr>
<tr>
<td>Eigenvalue</td>
<td>16.30241</td>
<td>1.58663</td>
<td></td>
<td></td>
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<tr>
<td>Variance</td>
<td>0.7859</td>
<td>0.1674</td>
<td></td>
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</tr>
</tbody>
</table>
The Development of key indicators in Germany, 1918–2015

Educational spending (in Bill. Deutschmarks)
No. teacher in "Gymnasium" (in 1000)
No. of "Gymnasium" (in 1.000)
No. of professors (in 1000: interpolated: 1915-1979)
No. of universities (interpolated: 1918-1950)
Unemployment quota
Share of employees in tertiary sector
No. of firms (in 1,000)
No. of medical doctors (in 10,000)
Automobiles (per 1,000 citizens)
National income (2010=Euro)/10
Per capita national income (2010=Euro)/100
GDP/10
Private consumption/10
State consumption
Investments
modernization trend and labor market cycles, (West-) Germany 1915 - 2015

Fig. 4: Modernization trend and development of labor market situation (1918-2015)
Modernisation, labour market situation, academic high schools, and universities in (West) Germany, 1918-2010

![Graph showing the historical period from 1915 to 2015 with lines representing the number of tertiary institutions, academic high schools, level of modernity, and labour market situation factor scores.](image-url)
Occupational mobility in West Germany between 1958 and 1999 (Mayer, Grunow and Nitsche 2010)
Yearly job shifts within firms and employer changes between 1984 and 2008 (Giesecke and Heisig 2010)

*Socio-Economic Panel SOEP*
Mobility patterns across birth cohorts for West German men for periods since 1945 (%) – German Life History Study and NEPS/ALWA (Becker/ Blossfeld 2017)
long term changes in working lives

from trends and periods to cohorts

GLHS and NEPS
the demise of the grand narrative?

- overall we are observing an astonishing degree of stability in the patterns of (West-)German working lives
the demise of the grand narrative?

- Is Germany an outlier?
- VET and occupational labor market
- careers are largely fixed at entry by qualification level
- high thresholds against dismissals
- early period: 50-70% apprenticeships with wide variety of later trajectories
- later period: educational elevator
- most recent cohorts: fixed term contracts, double training, interruptions
the demise of the grand narrative? 4 major objections

- only one country

- so far we looked at single events of labor market transitions, but the grand narrative talks about whole working lives

- main observations on too short, early to midlife part of working lives

- “flexibilization”, but not precarious work conditions
the demise of the grand narrative?

complexity and precariousness in working lives

VanWinkle & Fasang 2017, 2019; Bachmann, Felder & Tamm 2018)
the demise of the grand narrative?

Van Winkle and Fasang (2017)

- SHARE retrospective data on 14 European countries
- fixed sequences age 15 to 45
- birth cohorts 1918 – 1963
- states: education, fulltime/ part time employment, job spells, unemployment, non-employment
- varieties of Capitalism: employment protection, unemployment compensation
the demise of the grand narrative?

Van Winkle and Fasang (2017)

Figure 5. Mean employment complexity by country and cohort calculated from model 1 in table 3
Fig. 3 Empirical Bayes estimates of country-specific deviations from mean birth cohort complexity. Random intercepts are displayed. Black markers denote significant deviations ($p < .05$).
Fig. 3 Empirical Bayes estimates of country-specific deviations from mean birth cohort complexity. Random intercepts are displayed. Black markers denote significant deviations ($p < .05$).
empirical Bayes estimates of employment Complexity by Cohort and Country (VanWinkle/Fasang 2019)
30 countries; ages 18 – 50; birth cohorts 1916 - 1966
Bachmann, Felder & Tamm 2018 Labour Market Participation and Atypical Employment Over the Life Cycle

- National Educational Panel – adult cohort
- cohorts - West Germany
  1944-53
  1954-63
  1964-73
  1974-86
- cohorts – East Germany
  1974-86
atypical employment

- fixed-term employment
- part-time employment
- marginal employment ("Mini-Jobs")
- temporary agency work
- freelance work

- regular employment: infinite contract, more than 31 h per week, social security contributions
Figure 3: Share of regular and atypical employees as a proportion of all employed persons by age, birth cohorts and sex

Source: NEPS-SC6-ADIA8, own calculations.
Note: Due to a small number of cases, some details are anonymised. The data series are interrupted at these points.
Bachmann et. al. 2018: average duration of employment states

Figure 6: Average duration of employment state by employment type (age range 16-30)

Source: NEPS-SC6-ADIA, own calculations.
Bchmann et.al. 2018: % employment type by cohort

Figure 8: Share of employment types by cohort and sex (age range 16-30)

<table>
<thead>
<tr>
<th>Cohort</th>
<th>Type A1</th>
<th>Type A2</th>
<th>Type A3</th>
<th>Type A4</th>
<th>Type A5</th>
<th>Type A6</th>
<th>Type A7</th>
<th>Type A8</th>
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<tbody>
<tr>
<td>Men '44-'53 West</td>
<td>42</td>
<td>18</td>
<td>14</td>
<td>12</td>
<td>4</td>
<td>12</td>
<td>6</td>
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<tr>
<td>Men '54-'63 West</td>
<td>33</td>
<td>18</td>
<td>21</td>
<td>14</td>
<td>4</td>
<td>12</td>
<td>7</td>
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<tr>
<td>Men '64-'73 West</td>
<td>26</td>
<td>19</td>
<td>24</td>
<td>16</td>
<td>5</td>
<td>12</td>
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<tr>
<td>Men '74-'86 West</td>
<td>8</td>
<td>14</td>
<td>21</td>
<td>36</td>
<td>9</td>
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<tr>
<td>Men '74-'86 East</td>
<td>8</td>
<td>19</td>
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<td>13</td>
<td>7</td>
<td>3</td>
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<tr>
<td>Women '44-'53 West</td>
<td>26</td>
<td>15</td>
<td>3</td>
<td>8</td>
<td>36</td>
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<td>27</td>
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<td>34</td>
<td>16</td>
<td>7</td>
<td>4</td>
<td>3</td>
</tr>
</tbody>
</table>

Source: NEPS-SC6-ADIAB, own calculations.
why do we observe less change than can quite plausibly be expected?

The impact of economic macroforces on working lives can happen in two different way:

- cohort replacement: older workers leave the labor force and are replaced by new younger workers in different occupational categories. Changes have occurred but not in so much in the structure of working lives as discussed here, but e.g. in more difficult transition to first jobs, unemployment, longer periods in the transition system, and more fixed term jobs.

- changes during the working life, which then would result in job shifts, firm shifts and occupational shifts. If due to market regulation employers cannot easily dismiss workers or change contractual conditions, adaptation is brought about by changing the conditions of new labor market entrants.
why do we observe less change than can quite plausibly be expected?

A second explanation might be that changes in working lives only apply to certain segments of the labor force.

- For instance, in Germany globalization led to a restructuration of the manufacturing sector, but not to a major loss of industrial jobs (Dauth, Findeisen and Suedekum 2018; Reichelt, Malik and Suesse 2020).

- Also there is evidence that technological change led in Germany not to wage polarization, but rather to skill upgrading (Oesch and Piccitto 2019; Spitz-Oener 2006).
outlook

- Although we found in general little support for the great narrative of more flexible, disorderly and de-standardized working, we should not assume an inbuilt inertia for such relative stability to continue.

- The disruption of the start of qualification, employment and occupational trajectories by the Covid-pandemic and the massive ongoing restructuring (of German) manufacturing industry are just two major developments, which point to change rather than stability.
outlook

- more basic problem of theory building

- stubborn discrepancy between empirical research findings and public debate (individualization, recent trends in inequalities, chances of upward mobility)

- who is off the track: science or the public debate?