

# Study-to-work-transition of Higher Education Graduates in Germany

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Kolja Briedis, Gesche Brandt

# Structure

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1. Theoretical Background
2. Characteristics of the German labour market
3. State of Research
4. Used Data: Graduate Survey
5. Method
6. Results
7. Conclusion

# Research Question

- Is there a typical transition from academic studies to work?
- Are there differences between career pathways of university graduates according to subjects they studied?
- Are there differences in the patterns of men and women?

# 1. Theoretical Background

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- Levy (1977): Life course is a sequence of status-and-role-configurations
- Kohli (1985, 1988, 2003): Standardization of life courses (at least for men)
- Sørensen (1990): Gaps in employment history are more likely for women
- Sackmann & Wingens (2003): Sociological life course research (sequences connect the macro- and the micro-level)
- Scherer (2004): “Stepping stone” and “entrapment”

## 2. Characteristics of the German Labour Market

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- High importance of certificates
- Low rate of higher education graduates (31% in 2012)
- Traditionally low unemployment rate for higher education graduates (max. 5% since 1970, 2.5 % in 2013)
- Broad sector of industry
- Export-oriented economy

### 3. State of Research

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- Blossfeld (1985): First placement determines further career
- Brzinsky-Fay (2007): School-to-work-transitions consist not just of one single event
- Andres/Adamuti-Trache (2008): Different patterns of life courses are highly influenced by gender and class

## 4. Data

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### **DZHW Graduate Survey**

- Panel and cohort design:
  - seven cohorts of higher education graduates included starting from 1989, then following every 4<sup>th</sup> cohort (1993, 1997, ...)
  - up to three panel waves that cover an observation window of approximately ten years after graduation
  - possibility to do intra- and inter-cohort analyses
  
- Target population
  - all German and non-German higher education graduates who successfully completed their first degree course (2009, 2013 incl. master courses)
  - entire range of subjects
  - nearly all types of higher education institutions (HEI with special features are excluded; they only comprise a small proportion of the population)

## 4. Data

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- Modes of data collection:
  - postal questionnaires
  - supplemented by short online surveys on particular topics (e.g., doctoral studies)
- Survey programme:
  - educational strategies, experiences, and outcomes, e.g., course of studies, academic achievement, further academic qualifications
  - occupational careers, experiences, and prospects, e.g., job history (using an event-history design), job search strategies, characteristics of the jobs
  - sociobiographical data and educational background prior to study



## 4. Data

### Sample sizes

	1 <sup>st</sup> wave	2 <sup>nd</sup> wave	3 <sup>rd</sup> wave
<b>Cohort 1989</b>	12,164	8,163	no 3 <sup>rd</sup> wave
<b>Cohort 1993</b>	11,167	6,734	no 3 <sup>rd</sup> wave
<b>Cohort 1997</b>	9,586	6,220	5,477
<b>Cohort 2001</b>	8,130	5,426	4,734
<b>Cohort 2005</b>	11,786	6,459	–
<b>Cohort 2009</b>	10,173	currently running	–
<b>Cohort 2013</b>	currently running	–	–

For the following analyses we used the 3<sup>rd</sup> wave of the 2001 cohort

## 5. Method

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### Sequence analysis

Start of sequences: month of graduation

End of sequences: 10 years after graduation (120 month)

Set of 10 states

Substitution costs = unique costs

Calculation of distances by applying the Optimal Matching Algorithm

Cluster analysis (pair-wise distances) = 11 Cluster

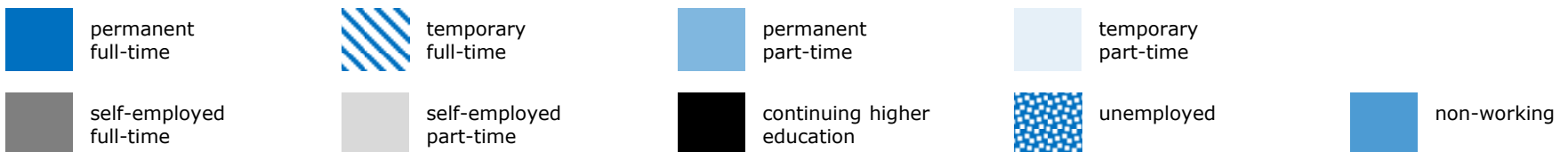
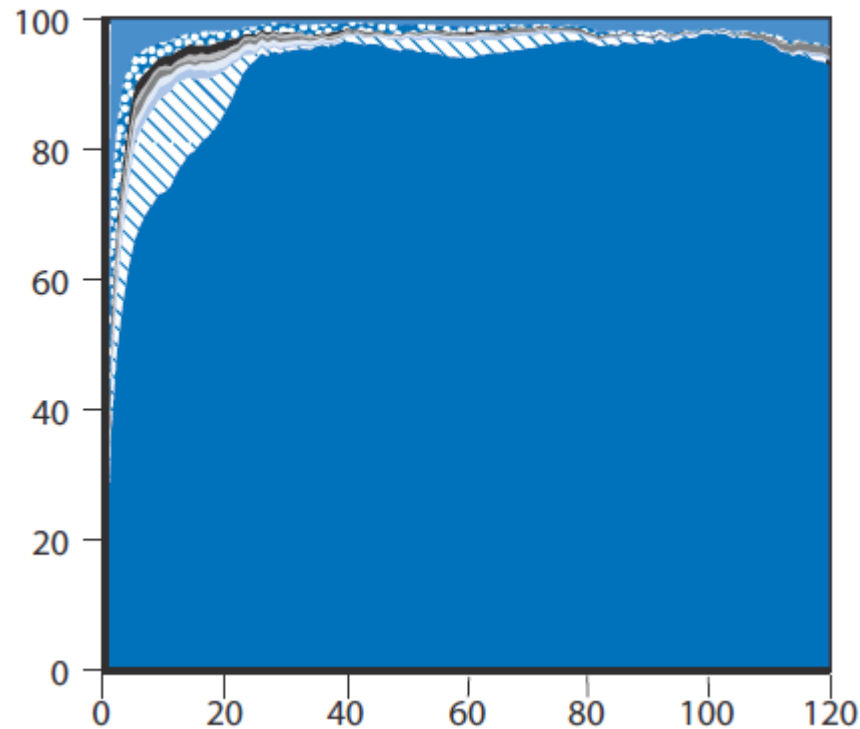
## 5. Set of states

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1. Permanent/full-time
2. Temporary/full-time (fixed-term contracts)
3. Permanent/part-time (
4. Temporary/part-time (fixed-term contracts)
5. Self-employed/full-time
6. Self-employed/part-time
7. Continuing higher education (e.g. doctoral degree)
8. Unemployed
9. Non-working (e.g. homemaker, parental leave)
10. (No information)

## 6. Results

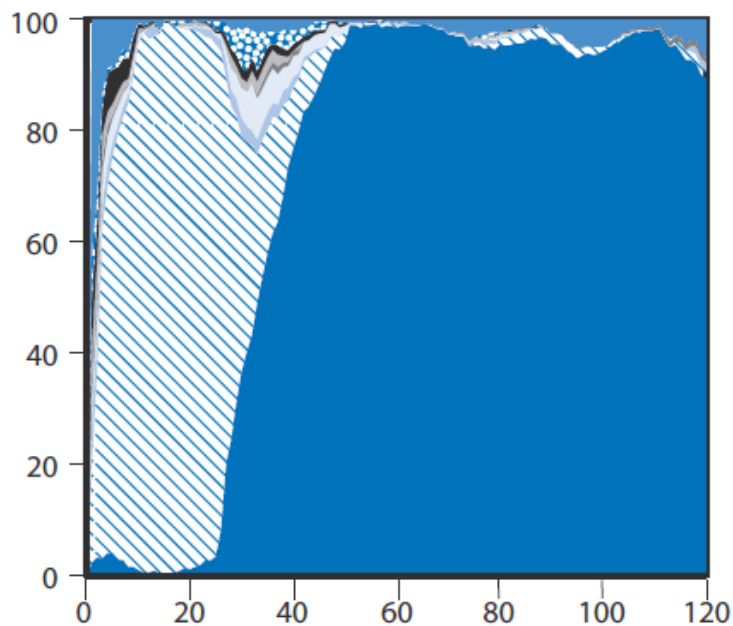
### Cluster 1: Straight transition to permanent full-time employment (33 %)



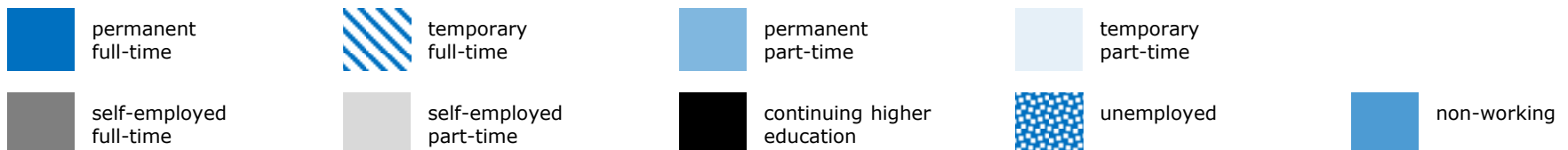
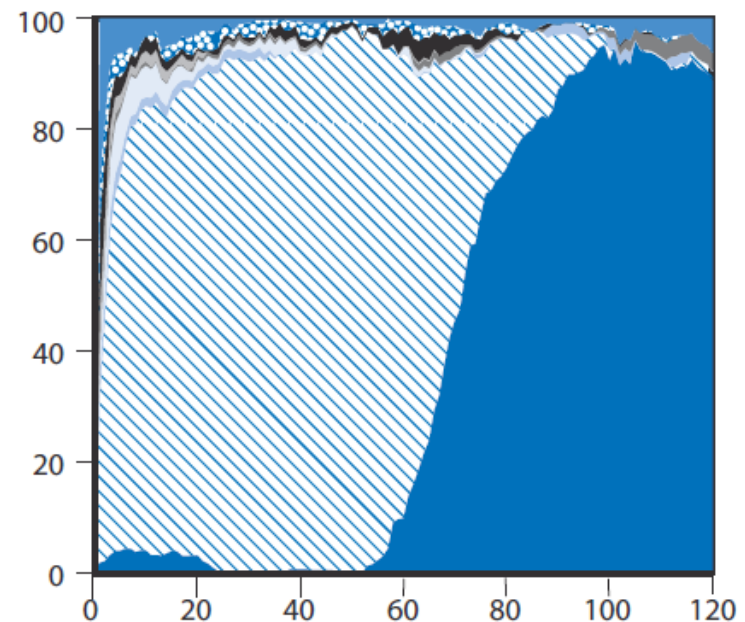
## 6. Results

Cluster 2 and 3: Early/late transition from temporary to permanent full-time employment (7 % each)

Cluster 2

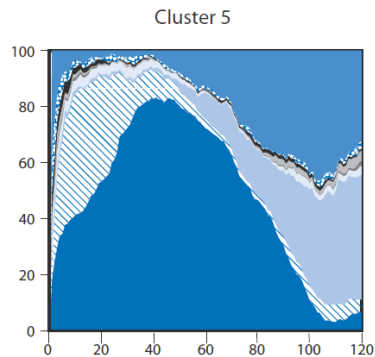


Cluster 3

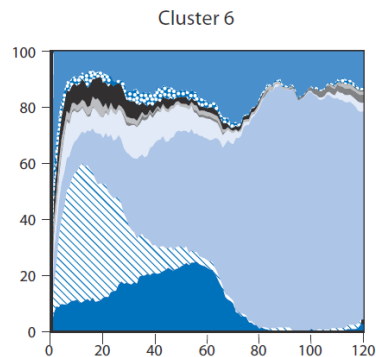


## 6. Results

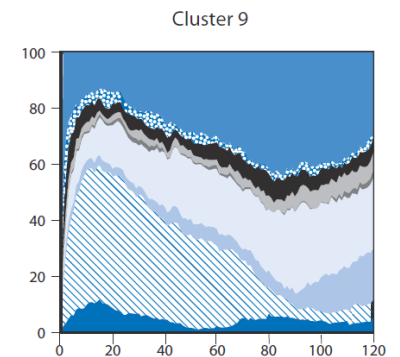
Cluster 5:  
Transition from  
permanent fulltime  
employment to  
permanent part-time  
employment (11 %)



Cluster 6:  
Early transition to  
permanent part-time  
employment (6 %)



Cluster 9:  
Temporary  
employment and  
non-working  
episodes (7 %)



permanent  
full-time



temporary  
full-time



permanent  
part-time



temporary  
part-time

self-employed  
full-time



self-employed  
part-time



continuing higher  
education



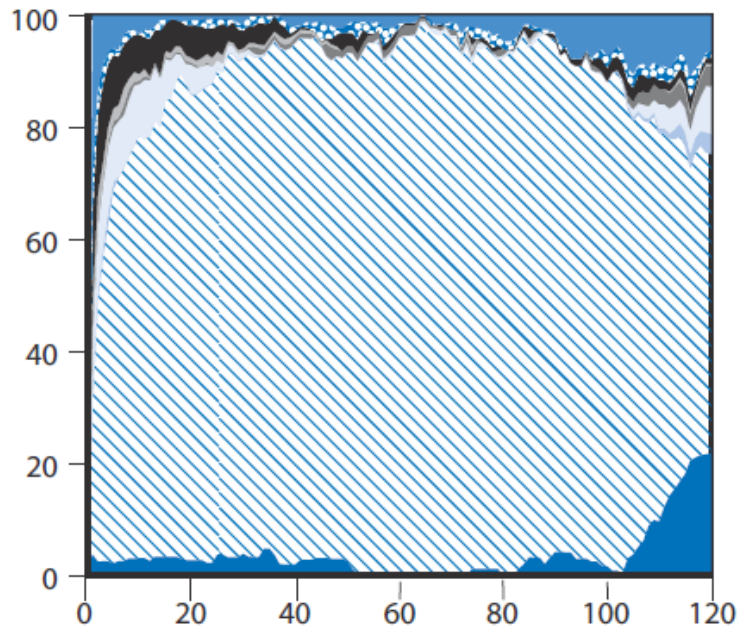
unemployed



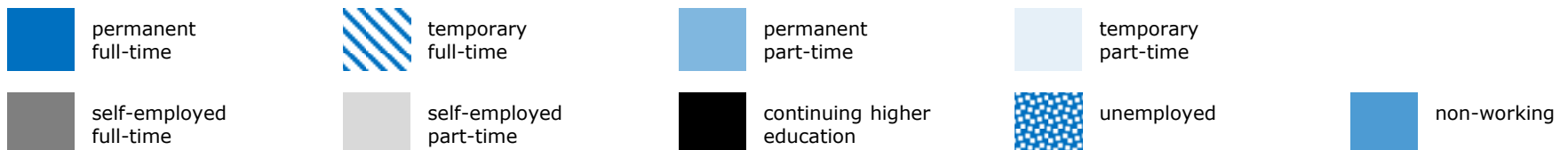
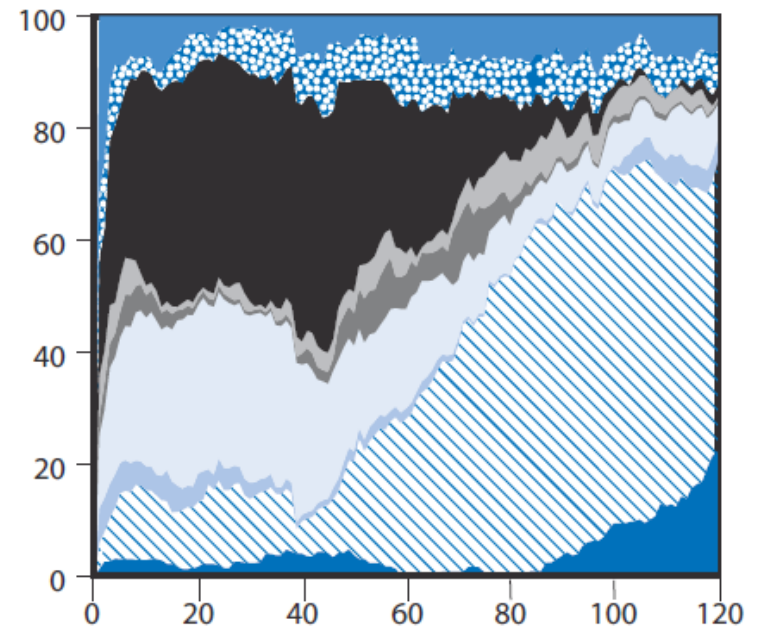
non-working

## 6. Results

Cluster 10: Temporary full-time  
Employment (4 %)



Cluster 11: Continuing higher  
education and temporary full-  
time employment (4 %)



## 7. Conclusion

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- Is there a typical transition from academic studies to work?  
→ Yes, but no standard profile
- Are there differences between career pathways of university graduates according to their subjects they studied?  
→ Yes, direct transition to permanent full-time employment mainly for engineers and economists  
→ Yes, special patterns for medical scientists (specialist training) and graduates in subjects where a doctoral degree is common like natural sciences
- Are there differences between men and women?  
→ Yes, differences are amongst others linked to study subjects and the impact of parenthood.



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# Thank you!

German Centre for Research  
on Higher Education and Science Studies (DZHW)

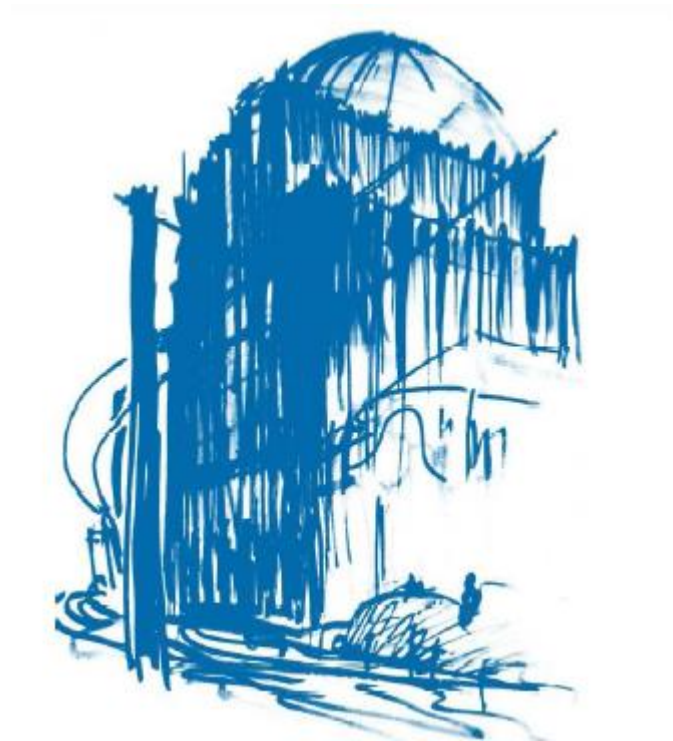
Kolja Briedis

Tel.: +49 (0)511 1220-232  
briedis@dzhw.eu

Gesche Brandt

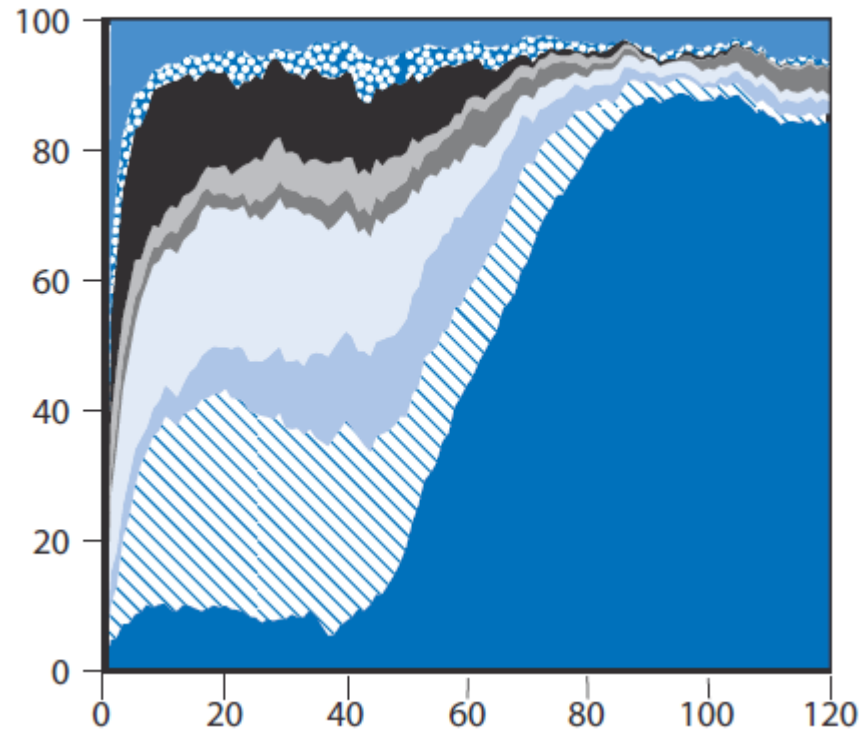
Tel.: +49 (0)511 1220-409  
g.brandt@dzhw.eu

Further information:  
[www.dzhw.eu](http://www.dzhw.eu)



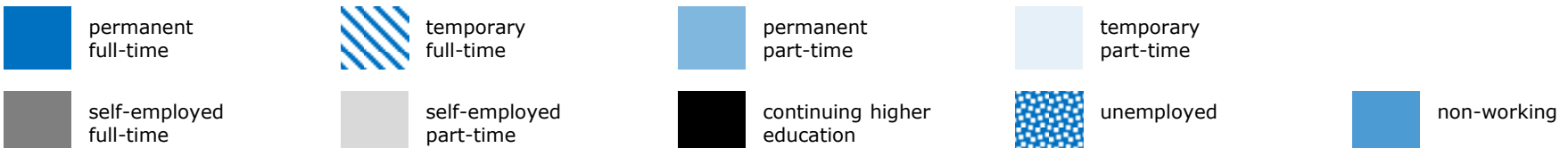
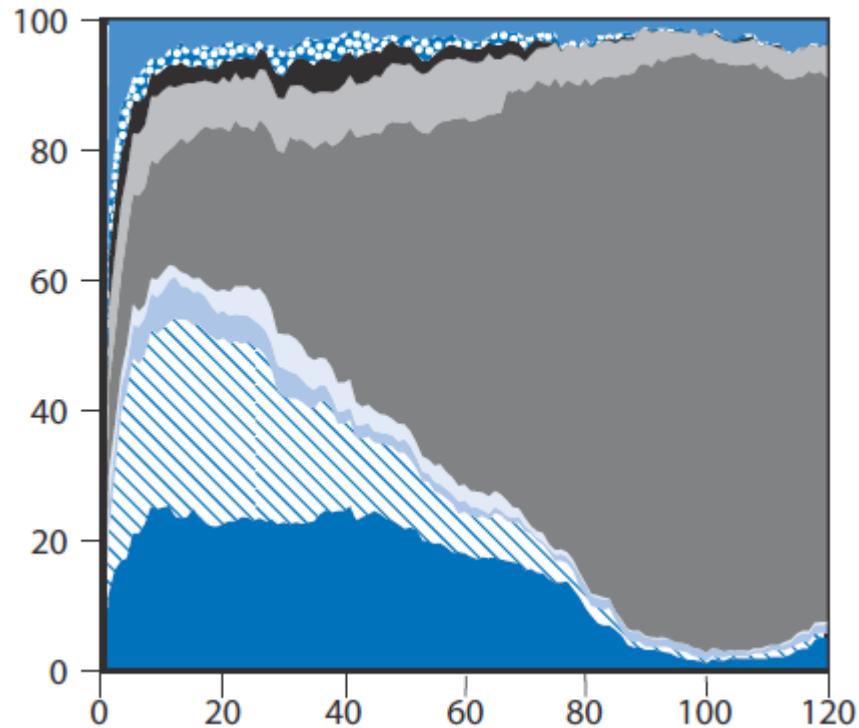
## 6. Results

### Cluster 4 – Late transition from different activities to permanent full-time employment (10 %)



## 6. Results

### Cluster 7 – Transition to full-time self-employment (9 %)



## 6. Results

### Cluster 8 – Transition to part-time self-employment (3 %)

