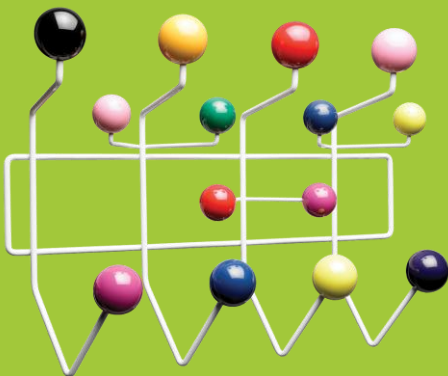




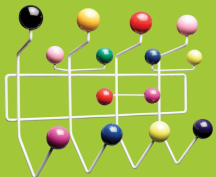
Scarring

Effects of early-career unemployment

Vicky Heylen
Joost Bollens



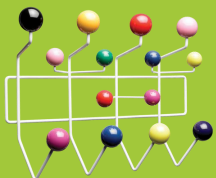
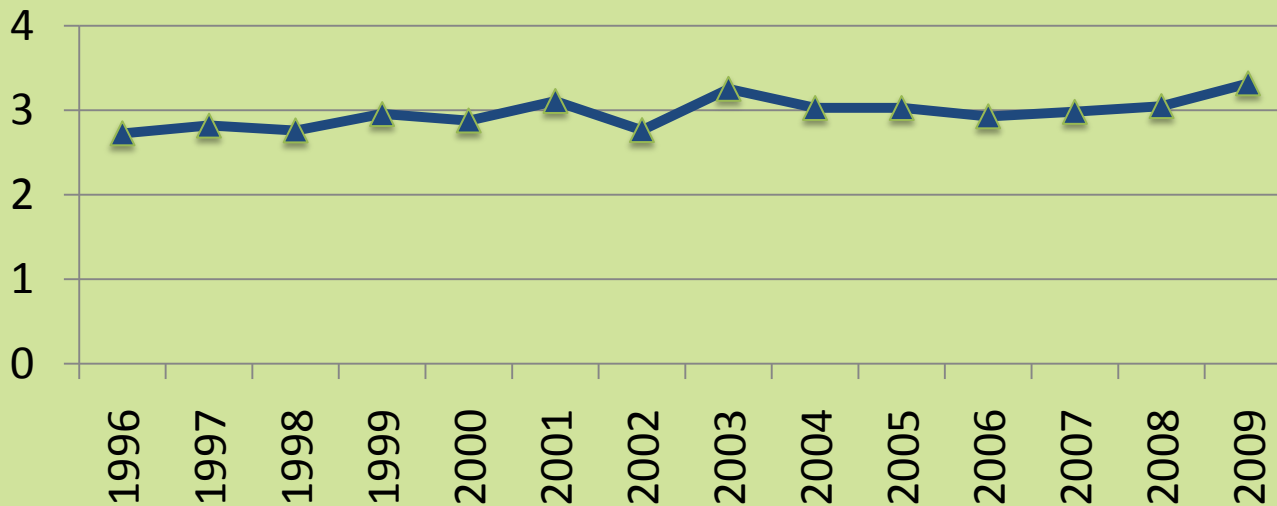
- Observations
- Theoretical background
- Research questions
- Data, variables, methodology
- Main results
- Summary



Youth unemployment

Youth unemployment is generally much higher than adult unemployment

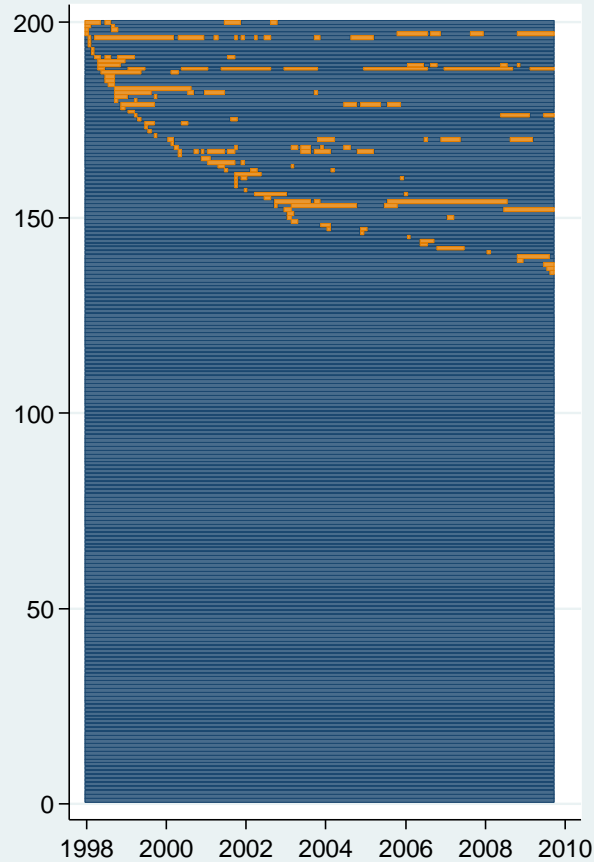
youth/adult unemployment rate ratio



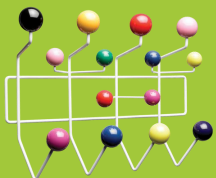
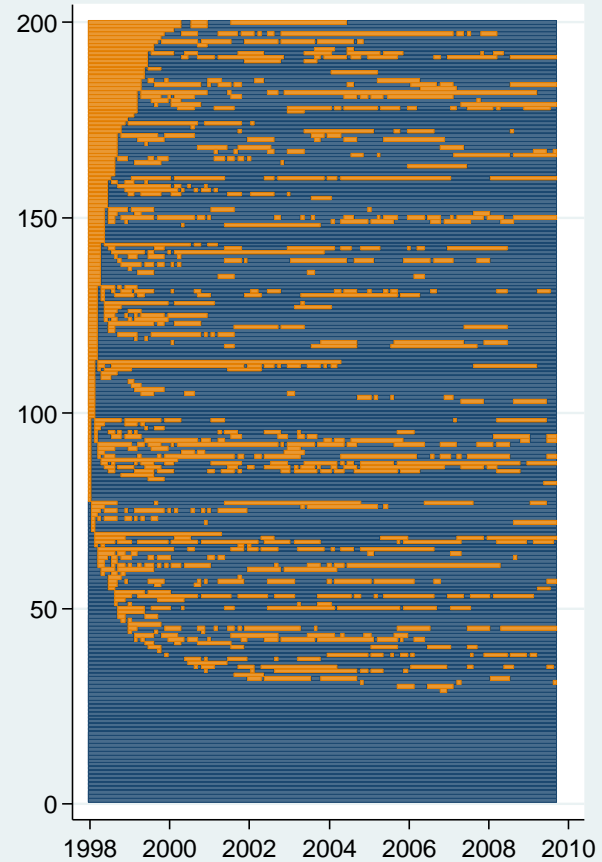
Unemployment persistence

- Observations
- Theoretical background
- Research questions
- Data, variables, methodology
- Main results
- Summary

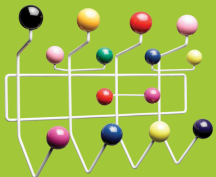
3 months or less unemployed at start



13-18 months unemployed at start



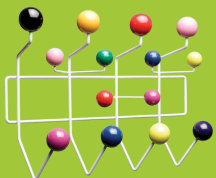
- **Unfavourable personal characteristics:**
 - certain individuals are more prone to unemployment due to their characteristics (e.g. low education, ...)
 - problem: it is often not possible to observe all relevant characteristics (unobserved heterogeneity)
- **Scarring / state dependence:**
 - the mere experience of unemployment will have a genuine behavioural effect on the individual
 - this effect can be twofold



Unemployment causes unemployment

Observations
Theoretical background
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Summary

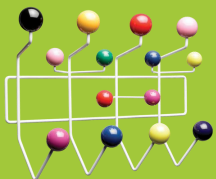
- **Human capital:**
when out-of-work individuals will not be able to accumulate human capital
- **Social capital:**
unemployment could prevent the development of social networks
- **Changing preferences or constraints**
- **Signaling:**
unemployment may convey a signal of low productivity
- **Segmented labour market:**
unemployment may lower the reservation wage, make people accept poorer quality jobs
- **Dismissal rules / practice**



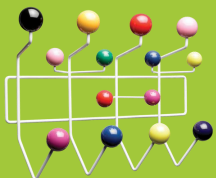
Unemployment causes employment

Observations
Theoretical background
Research questions
Data, variables, methodology
Main results
Summary

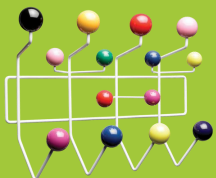
- **Human capital:**
the time out-of-work could be used to invest in education or training
- **Job search:**
better match between job and job-seeker
- **Scaring:**
negative unemployment experience will motivate individuals to find and keep a job



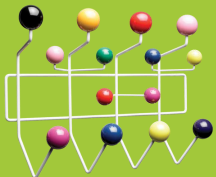
- US studies (Heckman & Borjas 1980, Ellwood 1982, Corcoran & Hill 1985)
little evidence of genuine state dependence
- EU studies (Naredranathan & Elias 1993, Arulampalam et al. 2000, Gregg 2001, Burgess et al. 2003, Flaig et al. 1993, Clark et al. 1999, Hämäläinen 2003, Nordström Skans 2004, Steijn et al. 2006, Luijkx & Wolbers, D'Addio et al. 2002, Gangji & Plasman 2009, Cockx & Picchio 2009)
evidence for negative state dependence
some studies emphasize heterogeneity in scarring



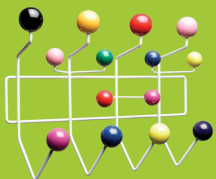
1. Does early-career unemployment affect the subsequent unemployment propensity?
2. Are these effects persistent or temporary?
3. Are certain individuals affected more than others by early-career unemployment?
4. Does the effect of early-career unemployment depend on the business cycle at the time of graduation?



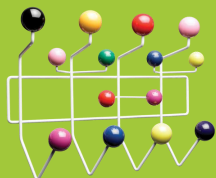
- VDAB-data: info on job-seekers from 1995-2009
- School-leavers have incentive to register as soon as they graduate
- Sample definition
 - Registered for the first time as school-leaver between June 1996 and October 1996;
 - between 18 and 25;
 - 41 819 individuals.



- **Dependent variable:**
cumulative duration in unemployment from 1998 onwards
almost half of the individuals is never registered as unemployed job-seeker with VDAB after 1998
- **Independent variables:**
 - Early unemployment
cumulative duration in unemployment during first 18 months
 - Background characteristics measured at initial registration
age, gender, nationality/descent, educational attainment, province of residence, functional urbanization of the city of residence, mobility
 - Month of registration



- To account for large proportion of zero observations
- Persistent vs temporary scars measured by estimating models with different time horizons
- Heterogeneity in scarring measured by including interaction terms

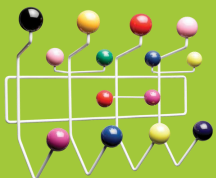


Scarring?

Estimated proportion of cumulative unemployment duration (01.1998-09.2009): reference person¹

- Scarring:
 - 3 months or less unemployed: 6.6% or 9 months
 - 4 to 6 months unemployed: 10.6% or 15 months
 - 7 to 12 months unemployed: 15.1% or 21 months
 - 13 to 18 months unemployed: 25.0% or 35 months
- Relevant background characteristics
 - gender: man -3.2%
 - descent: Turkish/Moroccan +12.1%, other non-European +5.1%
 - education: Voc.Sec. -7.1%, Tech.Sec. -10.5%, Higher prof. -16.5%, Academic -17.6%
 - mobility: driving licence -2.4%, car -1.9%
- Moment of registration
 - month: August +1.6%, September +1.9%, October +4.3%

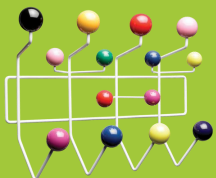
¹ Reference person: woman, Belgian descent, max. 1st stage of secondary education, residency in Vlaams Brabant, city with weak functional urbanization, no limited working ability, no driving licence, no car and registration in June.



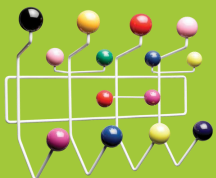
Estimated proportion of cumulative unemployment duration for different time periods: reference person¹

- | • Scarring | 01.1998-12.2002 | 01.2003-09.2009 |
|--------------------------------|-----------------|-----------------|
| • 3 months or less unemployed: | 4.1% | 0% |
| • 4 to 6 months unemployed: | 10.1% | 0% |
| • 7 to 12 months unemployed: | 17.2% | 0% |
| • 13 to 18 months unemployed: | 33.4% | 12.4% |
- Relevant background characteristics & moment of registration
no differences between the two time periods

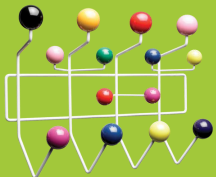
¹ Reference person: woman, Belgian descent, max. 1st stage of secondary education, residency in Vlaams Brabant, city with weak functional urbanization, no limited working ability, no driving licence, no car and registration in June.



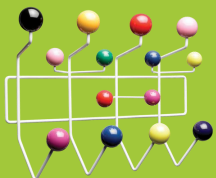
- **Gender x early unemployment**
no significant effect, men and women are affected in the same way by early unemployment
- **Descent x early unemployment**
for people from non-European descent early unemployment has larger negative career consequences in terms of cumulative later unemployment duration
- **Education x early unemployment**
for people with a degree of secondary education or higher the negative effect of early unemployment is diminished



1. Unemployment causes unemployment.
2. This negative relationship is primarily driven by the first 6 years, but for long early career unemployment spells the effect even persists beyond this point.
3. The effects are the same for men and women, but seem to be stronger for people of non-European descent and people who do not have a secondary education degree.
4. To be studied



- Scope for intervention to lower the equilibrium unemployment rate in the long-term.
- No simple general solution to youth unemployment.
- Need for decisive actions on multiple fronts:
 - Prevent early drop-out;
 - Provide sufficient information and job search skills to school-leavers entering the labour market;
 - Provide access to ALMP for school-leavers at risk of becoming long-term unemployed.



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