Employment dynamics in urban areas in a period of economic decline

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Outline

- Employment dynamics
- Geographic levels of analysis
- Period of analysis
- Some provisional results
- Prospects
Employment dynamics

- Job movements between the same date of two successive years (t) and (t+1)
- Annual changes in the balance-sheet of the workplace based and the residence based labour force
- Annual changes in commuter flows
Job movements: some preliminary remarks

- Job = person belonging to the labour force linked up with the business unit at the working place
- Job movements can be investigated because of a process of micro-integration i.e. record linking at the individual level of the job as defined above
- Source: Social Statistics Database: contains linked register information supplemented with data from business and household surveys
Job movements: models

- **Model 1:**
  * Stock of jobs occupied at 30.09 year (t)
    + inflow of jobs in period 30.09 years (t)/(t+1)
    - outflow of jobs in period 30.09 years (t)/(t+1)
  = Stock of jobs occupied at 30.09 year (t+1)

- **Model 2:**
  * Stock of jobs occupied at 30.09 year (t) = jobs remaining occupied in period 30.09 years (t) / (t+1) + outflow of jobs in period 30.09 years (t)/(t+1)

- **Model 3:**
  * Stock of jobs occupied at 30.09 year (t+1) = jobs remaining occupied in period 30.09 years (t)/(t+1) + inflow of jobs in period 30.09 years (t)/(t+1)
Jobs remaining occupied in period 30.09 years (t) / (t+1)

- Jobs occupied by persons in the same business unit in the period 30.09 years (t) / (t+1) in a specific area
- Jobs occupied by persons who moved into another business unit in the period 30.09 years (t) / (t+1) in the same specific area (‘job hoppers’ staying in the same area)
Inflow of Jobs in period 30.09 years (t) / (t+1)

- Jobs occupied which have been created in a specific geographic area
  * by an establishment of a new business unit in that area;
  * by a move of a business unit into that area from another geographic area

- Jobs occupied in that specific geographic area by
  * ‘job hoppers’ who came into that area from another geographic area
  * persons who had no job at all before that period
Outflow of jobs in period 30.09 years ($t$) / ($t+1$)

- Jobs being lost in a specific geographic area
  * by closing an existing business unit in that area;
  * by a move of a business unit out of that area into another geographic area
- Jobs formerly being occupied in the specific geographic area by
  * ‘job hoppers’ moving out from that specific area into another geographic area
  * persons having no job anymore at the end of the period
Labour Force Balance-sheet

- Labour force resident in a specific geographic area
- Labour force resident and working in a specific geographic area
- Labour force resident in a specific geographic area but working in another area (outbound commuters)
- Labour force working in a specific geographic area but resident in another area (inbound commuters)
- Labour force working in a specific geographic area
Indicators of relative economic strength based on the Balance-sheet

- Labour force working in a specific geographic area per 100 labour force resident in that area
- Inbound commuters per 100 labour force working in a specific geographic area in comparison to the outbound commuters per 100 labour force resident in a specific geographic area
- Inbound commuters per 100 outbound commuters
Commuter flows

- Commuting flows of all commuters
- Change in commuting flows of the ‘job hoppers’ coming into a specific geographic area from another area in period 30.09 years \((t) / (t+1)\)
- Change in commuting flows of the ‘job hoppers’ moving out from a specific geographic area into another area in period 30.09 years \((t) / (t+1)\)
Geographic levels of analysis

- Main area of analysis: Randstad (polycentric urban region)
- Levels of analysis
  * Level 1: Randstad vs. Ring Randstad, Northern, Eastern and Southern Region
Geographic Level 1

- Northern part country
- Eastern part country
- Southern part country
- Northern Ring Randstad
- Eastern Ring Randstad
- Southern Ring Randstad
- Randstad
Geographic levels of analysis

- Main area of analysis: Randstad (polycentric urban region)
- Levels of analysis
  - Level 1: Randstad vs. Ring Randstad, Northern, Eastern and Southern Region
  - Level 2: Urban Randstad Regions vs. non-urban Randstad Regions
  - Level 3: Individual urban and not-urban Randstad Regions
Geographic Level 2 and 3

- Urban Area Utrecht
- Urban Area Amsterdam
- Urban Area Haarlem
- Urban Area The Hague
- Urban Area Leiden
- Urban Area Rotterdam
- Urban Area Dordrecht
- Green Heart
- Randstad East
- South-Holland: South
- South-Holland: South-east
Geographic levels of analysis

- Main area of analysis: Randstad (polycentric urban region)
- Levels of analysis
  * Level 1: Randstad vs. Ring Randstad, Northern, Eastern and Southern region
  * Level 2: Urban Randstad regions vs. non-urban Randstad regions
  * Level 3: Individual urban Randstad regions
  * Level 4: Components of every individual urban Randstad region:
    - Central city
    - Morphological agglomeration
    - Peri-urban area
Period of analysis

- Period of analysis has been based on
  - the economic development from growth to decline and then to recovery
  - the availability of individually linked data on jobs
GDP and Employment: volume changes, 1995-2006
Period of analysis

- Period of analysis has been based on
  - the development in economic growth from a decline to a recovery (theoretical reason)
  - the availability of individually linked data on jobs (practical reason)
- Consequently, the period 1999 – 2005 has been chosen as period of analysis
  - 2002 – 2003: almost no economic growth
  - 2003 – 2004: strongest negative employment growth
Some provisional results

Geographic level of analysis 1

Jobs of employees
### Geographic Distribution  
(Netherlands = 100)

<table>
<thead>
<tr>
<th>Region</th>
<th>1999</th>
<th>2000</th>
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<td>8.6</td>
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<tr>
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Annual job changes (% of jobs in year t)
### Jobs remaining occupied in the same area (% of jobs year t)

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<td>Southern Region</td>
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</tr>
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Job hoppers within the geographic area (% of jobs in year t)
Inflow: Job hoppers coming into the geographic area (% of jobs in year t)
Outflow: Job hoppers going out from the geographic area (% of jobs in year t)
Balance of newly created jobs (inflow) and lost jobs (outflow) at the level of the business unit (% of jobs in year t)
Balance of newly created jobs (inflow) and lost jobs (outflow) within individual business units (% of jobs in year t)
Prospects: work programme

- Analysis of job movements
  * inclusive of self-employed
  * other geographic levels
  * economic activity of the various job categories
  * background variables of the occupants of the various job categories
- Analysis of the labour force balance sheet (inclusive of economic activity and background variables)
- Analysis of the commuter flows (inclusive of flows of job hoppers into and out from the geographic area; as well as economic activity and background variables)