Family relations, children and interregional mobility, 1970-2000

Ann-Christin Jans
Statistics Sweden /Institute for Future Studies
Mobility on the labor market ...

National goal
- Well functioning labor markets with full employment and economic growth
- Geographical and occupational mobility are in demand

Regional goal
- Well functioning and sustainable local labor markets with a good level of social service in all parts of the country

(SOU 2003:37, Ökad rörlighet för sysselsättning och tillväxt)
Research questions...

- How does the arrival of children influence the propensity for migration?
- Does the number of children matter?
- Are the results consistent over time?
Mobility in the labor market?

- Geographical mobility
  - residential mobility

- Residential changes
  - municipalities
  - local labor markets
  - counties
  - countries
What do we know about mobility?

- Migration varies with business cycles
  - a connection that was broken in the 1990s

- The majority of migrants: short distances

- Migration rates went down during the late 1970s and 1980s, increased during the 1990s
Moves and unemployment, 1970-2000

- Municipalities
- Counties
- Open unemployment
Reduction in long-distance moves, 1970 – 1990?

- Increased female labor force participation
- Expansion of public sector
  (between 1965 and 1990 employment increased with ~1 000 000 individuals)
- Evening out of regional differences: wages, unemployment, vacancies
- Increased commuting both in terms of numbers and distances
- Regional investment in colleges and universities
  (number of educational seats: 200 000 => 300 000, 1990-2000)
Labor force participation rates, 1964-2002

% Women  Men

Year


Statistiska centralbyrån  Statistics Sweden
Mincer (1978) => Family migration …

\[ L^S_f \uparrow \quad \Rightarrow \quad \text{Dual-earner household} \uparrow \quad \Rightarrow \quad \text{Migration} \downarrow \]

(single-earner households ↓)

1) Family formation reduces migration
2) Family dissolution increases migration
3) Children reduce migration

=> Few empirical studies, no Swedish studies!
Which factors influence the decision to move?

- Labor market reasons (decreased !)
- Social relations (increased !)
  - Nearness to relatives and friends
  - Couples/partners moving together/apart
  - Local social service
  - Housing market
Who moves?

✓ Young
✓ Single
✓ Divorced
✓ High-educated
✓ Moved before
✓ Foreign background
Dataset: LINDA

- Longitudinal database, 1968-2002
- Representative sample, ~300,000 individuals
- Register based

Restrictions:
- Age: 20-44 => ~100,000 individuals
What characterizes local labor markets!

- **Independent regions:**
  the main part of the population works and lives within the region

- **Based on commuting statistics**
  (20 ≤ % commute to work in other communities)

- **Principle:**
  A worker should be able to accept a job offer within an LA without moving
The number of local labor markets...
Method

Cox proportional hazard functions

✓ The propensity for migration with respect to the time since the last migration

✓ Yearly residential changes, compares residential LA, in Nov. each year

✓ Individuals are followed for 10 years, may move several times, at most 5 times, (during the 1970s, the 1980s and the 1990s)

✓ Childbearing, time dependent

✓ Regressions are estimated for men and women separately
Most people stay where they are ...

<table>
<thead>
<tr>
<th>No. moves</th>
<th>1970s</th>
<th>1980s</th>
<th>1990s</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never moved</td>
<td>78.4</td>
<td>83.3</td>
<td>83.7</td>
</tr>
<tr>
<td>1 move</td>
<td>14.3</td>
<td>11.3</td>
<td>10.5</td>
</tr>
<tr>
<td>2 moves</td>
<td>5.4</td>
<td>4.0</td>
<td>4.1</td>
</tr>
<tr>
<td>3 moves</td>
<td>1.5</td>
<td>1.0</td>
<td>1.2</td>
</tr>
<tr>
<td>4+ moves</td>
<td>0.5</td>
<td>0.3</td>
<td>0.5</td>
</tr>
<tr>
<td></td>
<td>100 %</td>
<td>100 %</td>
<td>100 %</td>
</tr>
</tbody>
</table>
Survival functions for women

1970s

1990s

No children
1 child
2 children
3 or more children

Year

Survival functions for women

1970s

1990s

No children
1 child
2 children
3 or more children

Year

Survival functions for women

1970s

1990s

No children
1 child
2 children
3 or more children

Year

Survival functions for women

1970s

1990s

No children
1 child
2 children
3 or more children

Year
Survival functions for men

1970s

1990s

- No children
- 1 child
- 2 children
- 3 or more children

Year
### Propensity for migrating: women, aged 20-44

<table>
<thead>
<tr>
<th>Number of children</th>
<th>1970s</th>
<th>1980s</th>
<th>1990s</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>0.715***</td>
<td>0.644***</td>
<td>0.565***</td>
</tr>
<tr>
<td>2</td>
<td>0.666**</td>
<td>0.482***</td>
<td>0.411***</td>
</tr>
<tr>
<td>3+</td>
<td>0.782***</td>
<td>0.639***</td>
<td>0.514***</td>
</tr>
</tbody>
</table>

**Controls:** age, educational level, country of birth, marital status, housing, local unemployment
## Propensity for migrating: men, aged 20-44

<table>
<thead>
<tr>
<th>Number of children</th>
<th>1970s</th>
<th>1980s</th>
<th>1990s</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>1.015</td>
<td>0.868***</td>
<td>0.761***</td>
</tr>
<tr>
<td>2</td>
<td>0.949**</td>
<td>0.622***</td>
<td>0.559***</td>
</tr>
<tr>
<td>3+</td>
<td>1.110***</td>
<td>0.886***</td>
<td>0.674***</td>
</tr>
</tbody>
</table>

**Controls:** age, educational level, country of birth, marital status, housing, local unemployment
<table>
<thead>
<tr>
<th>Marital status</th>
<th>1970s</th>
<th>1980s</th>
<th>1990s</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unmarried</td>
<td>1.342***</td>
<td>1.204***</td>
<td>1.043</td>
</tr>
<tr>
<td>Married</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Divorced</td>
<td>2.001***</td>
<td>2.001***</td>
<td>1.727***</td>
</tr>
</tbody>
</table>

Controls: age, educational level, country of birth, number of children, housing, local unemployment
### Propensity for migrating: women, aged 20-44

<table>
<thead>
<tr>
<th>Marital status</th>
<th>1970s</th>
<th>1980s</th>
<th>1990s</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unmarried</td>
<td>1.254***</td>
<td>1.169***</td>
<td>1.034</td>
</tr>
<tr>
<td>Married</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Divorced</td>
<td>1.666***</td>
<td>1.916***</td>
<td>1.713***</td>
</tr>
</tbody>
</table>

**Controls:** age, educational level, country of birth, number of children, housing, local unemployment
Conclusions ...

- Families with children are less likely to migrate
- The propensity is lowest among those with 2 children

- Younger
- High educated
- Singles, divorced
- Born abroad
- Moved before
- Living in tenancy rights
- Increasing local unemployment

=> Migration