Labour mobility and development dynamics in OECD regions

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Why a focus on interregional migration?

- Migration is an important means through which people can improve their economic wellbeing and quality of life.
- Time series of migration flows are highly informative about the performance of a region.
- Migration is a key driver of redistribution of human capital and influences ageing patterns.
- Regional policy is called to identify new responses to improve adjustments to a changing population.
Outline of presentation

1. Is the ageing of rural regions reinforced by migration towards urban areas?
2. Is there a regional productive structure that best characterizes patterns of mobility?
3. What are the main drivers of young adults mobility?
4. Are out-migration regions “fragile” regions?
5. Does out-migration lead to a downward economic spiral?

New collection of data: Annual inter-regional flows between TL3 regions in 18 OECD countries (time series 1998-2007)
1. Geography of internal migration

On average rural regions also display out-migration towards urban regions. But metropolitan regions in the US, France, South of Italy, Spain lose population in favor of other domestic regions.
Selectivity by skills and differences among metro-types

- **London** has largest in/out ratios for the most skilled.

- The five large cities in the North have significantly negative in/out ratios for the most skilled.

Source: Coombes OECD WPTI workshop December 2010
2. Regional productive structure and mobility

Once one controls for the productive structure of the region there are no significant outflows from rural regions

<table>
<thead>
<tr>
<th>variables</th>
<th>Model 1 Net inter-regional migration</th>
<th>Model 2 Net inter-regional migration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural region</td>
<td>-1.348***</td>
<td>-0.522</td>
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<tr>
<td>Population</td>
<td>-1.22e-06**</td>
<td>-2.74e-06***</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>-0.183***</td>
<td>-0.194***</td>
</tr>
<tr>
<td>Elderly dependency rate</td>
<td>-0.134***</td>
<td>-0.139***</td>
</tr>
<tr>
<td>Employ. Agriculture</td>
<td>-24.88***</td>
<td></td>
</tr>
<tr>
<td>Employ. Manufacture</td>
<td>-7.029**</td>
<td></td>
</tr>
<tr>
<td>Employ. Construction</td>
<td>46.01***</td>
<td></td>
</tr>
</tbody>
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(in red significant coefficients for the pooled regression model on net migration with year fixed effects; ***p<0.01 ; **p<0.05)
2. Regional productive structure and mobility

Remote rural regions experience significant drains in their labour force

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<th>Model 3 Net inter-regional migration</th>
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<tbody>
<tr>
<td>Rural region</td>
<td>-0.522</td>
<td>-3.56e-06***</td>
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<tr>
<td>Population</td>
<td>-2.74e-06***</td>
<td>-0.183***</td>
</tr>
<tr>
<td>Unemployment rate</td>
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<td>-0.146***</td>
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<td>Elderly dependency rate</td>
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<td>-26.98***</td>
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<td>Employ. Agriculture</td>
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<td>-7.029**</td>
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<tr>
<td>Employ. Construction</td>
<td>46.01***</td>
<td></td>
</tr>
<tr>
<td>Remote rural regions</td>
<td></td>
<td>-2.783***</td>
</tr>
<tr>
<td>Rural regions close to urban</td>
<td></td>
<td>-0.328</td>
</tr>
</tbody>
</table>

(in red significant coefficients for the pooled regression model on net migration with year fixed effects; ***p<0.01; **p<0.05)
3. Young adults mobility

- One-third of total internal flows are young adults (18-24)
- Most of metropolitan areas are net recipient of young adults
- Typology of regions and unemployment main push factors
- Significant differences in the average age of migration by countries (Italy and Spain delayed)
Are persistent net out-flows of population (ten years) coupled with economic distress?

Outmigration is localized over time. Beyond short-term adj., regions may struggle to improve productivity with a shrinking labor base.
5. Effects of outmigration on unemployment

\[ Unemp_{it} = \alpha_i + \beta \text{Inflows}_{i,t-1} + \gamma' \ X_{it} + \delta' \text{EmpStr}_{i,t} + \phi \text{Old}_{i,t} + t_i + \mu_i + \varepsilon_i \]

<table>
<thead>
<tr>
<th>variables</th>
<th>Model 1 Unemployment rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net migration (lagged)</td>
<td>-0.0273***</td>
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<tr>
<td>Elderly dependency rate</td>
<td>-0.058***</td>
</tr>
</tbody>
</table>

Results are confirmed in a panel data model (controls for structural differences across the regions such as education attainments).

Next step: test robustness with other outcome measures (employment creation, productivity) and better address the simultaneity problem.

The negative net-migration has a reinforcing effect on the unemployment rate that is higher in low income region. (Model on a sub-sample of regions with GDP per capita)
General findings

1. Persistent (over time) negative net-migration as an indicator of distress areas. Should it be used to target policies?
2. Rural/urban typology masks large differences in attractiveness of regions. New insights on key importance of peripherality of rural regions and regional production structure.
3. Selectivity of young migrants. What about the most skilled? Is there really a high fraction of unemployed among those who leave?
4. Hypothesis that outmigration brings economic convergence not verified. Need to look beyond average effects, focusing on those areas affected by large demographic changes.
Regional policy implications

No definite evidence in the economic debate

1. Policies for depopulating, fragile regions
   - Addressing *peripherality* (networked urbanization)
   - Diversification of the production structure
   - Service provision and education infrastructures

2. Policies to adjust to rapid population growth
   - Spatial planning, transportation and housing
   - Social infrastructure
Future work to improve evidence

• Stable collection of inter-regional flows of population (TL3) in the regional database

• Disaggregate statistics by more characteristics of migrants (education, employment status from census data). Comparative statistics on intensity of internal migration at country level (building on Bell, 2005)

• Extend the analysis to emerging economies, where population redistribution happens at faster rates.

• Link international and internal flows, model their impact on population change, disentangle mobility of natives and of migrants.

• Connect to ongoing work on compactness of urban development, sprawl and rural-urban linkages.

• Country studies: links with accessibility and commuting patterns; quality of local services and policies to encourage return and circulation