



# Labour mobility and development dynamics in OECD regions

Monica Brezzi and Mario Piacentini  
(OECD/GOV)

19<sup>th</sup> WPTI meeting  
7 June 2010

# Motivations

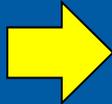
- Ageing and shrinking population will affect regional competitiveness
- Regional policy is called upon the improvement of regional labour markets and upgrading of skills
- Regional policy will provide and sustain infrastructure and services to retain population and to smooth adjustments to a changing 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 17 OECD countries (time series 1998-2007)**

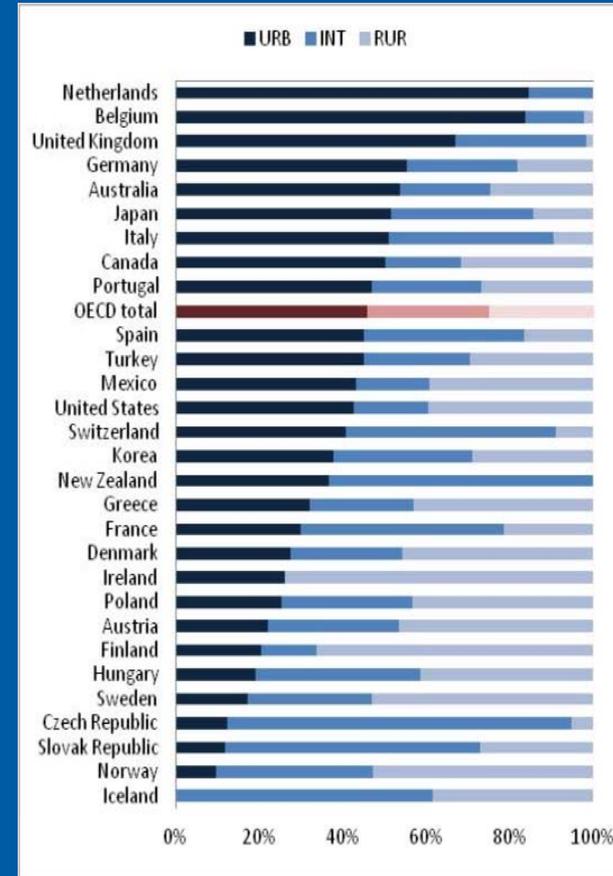
# 1. Geography of internal migration



Rural regions are more likely to face the challenge of ageing due to higher elderly dependency rates and lower concentration of the elderly (economy of scale in providing services)



In 24 countries, the elderly dependency rate is higher in rural regions than in urban ones.

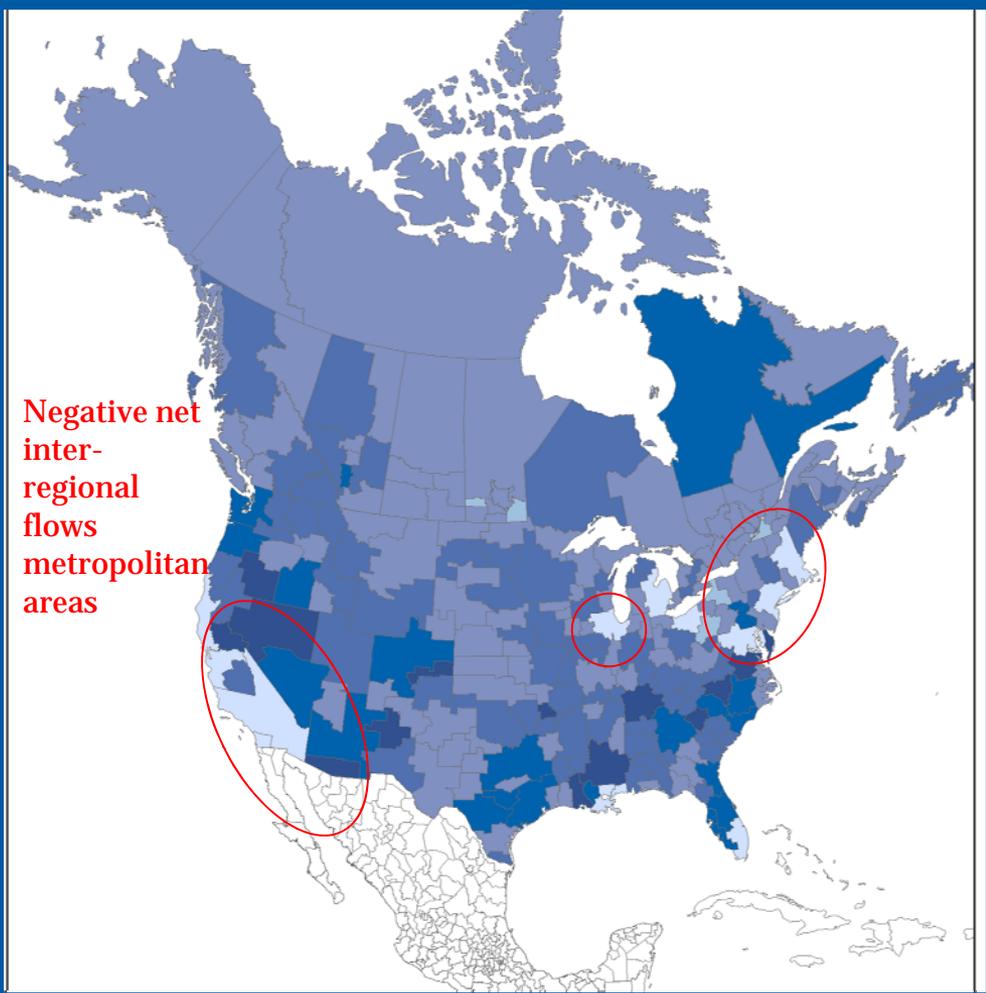
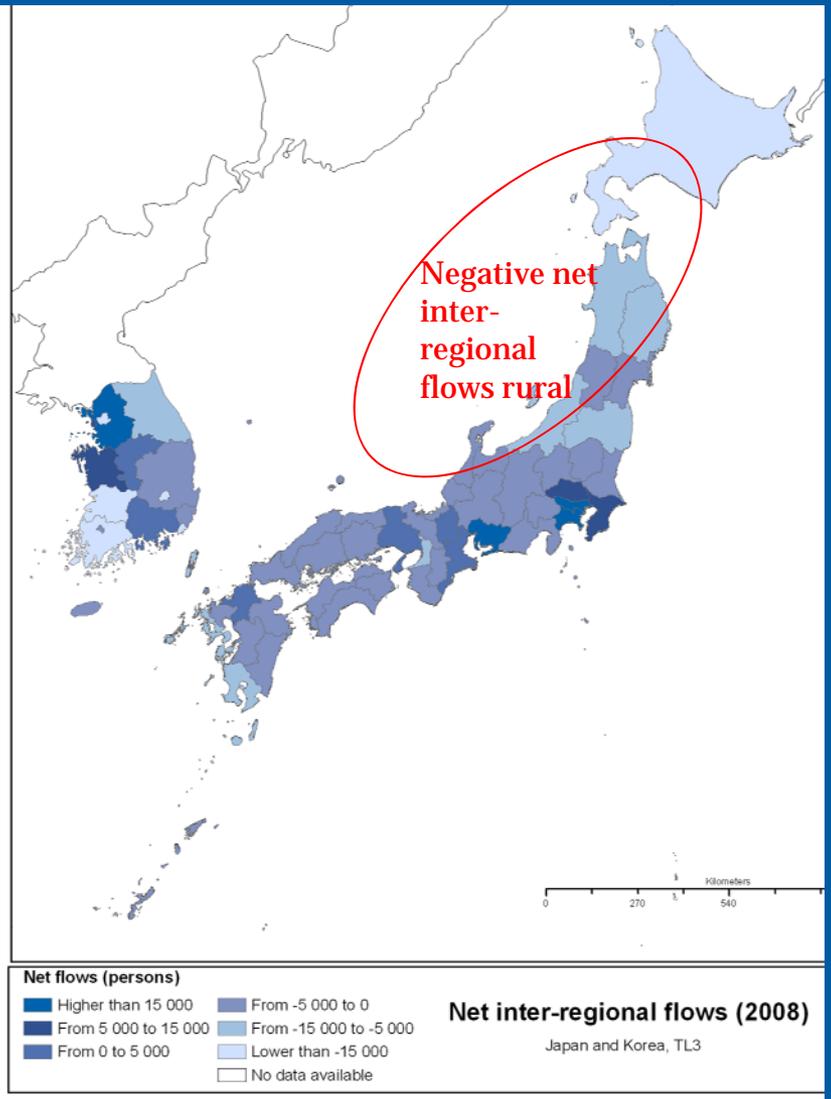


Only one-fourth of the elderly population live in rural regions

# 1. Geography of internal migration

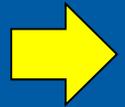
On average rural regions also display out-migration towards urban regions

But metropolitan regions in the US, France, South of Italy, Spain lose population in favor of other domestic regions





# 2. Regional productive structure and mobility



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

variables	Model 1 Net inter-regional migration	Model 2 Net inter-regional migration
Rural region	-1.348***	-0.522
Population	-1.22e-06**	-2.74e-06***
Unemployment rate	-0.183***	-0.194***
Elderly dependency rate	-0.134***	-0.139***
Employ. Agriculture		-24.88***
Employ. Manufacture		-7.029**
Employ. Construction		46.01***

(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

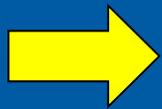
➔ Remote rural regions experience significant drains in their labour force

variables	Model 2 Net inter-regional migration	Model 3 Net inter-regional migration
Rural region	-0.522	
Population	-2.74e-06***	-3.56e-06***
Unemployment rate	-0.194***	-0.183***
Elderly dependency rate	-0.139***	-0.146***
Employ. Agriculture	-24.88***	-26.98***
Employ. Manufacture	-7.029**	-14.41***
Employ. Construction	46.01***	47.11***
Remote rural regions		-2.783***
Rural regions close to urban		-0.328

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

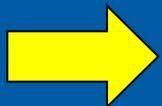
## 3. Young adults mobility

- 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



Selectivity of out-migration of young adults

- Significant differences in the average age of migration by countries (Italy and Spain delayed)



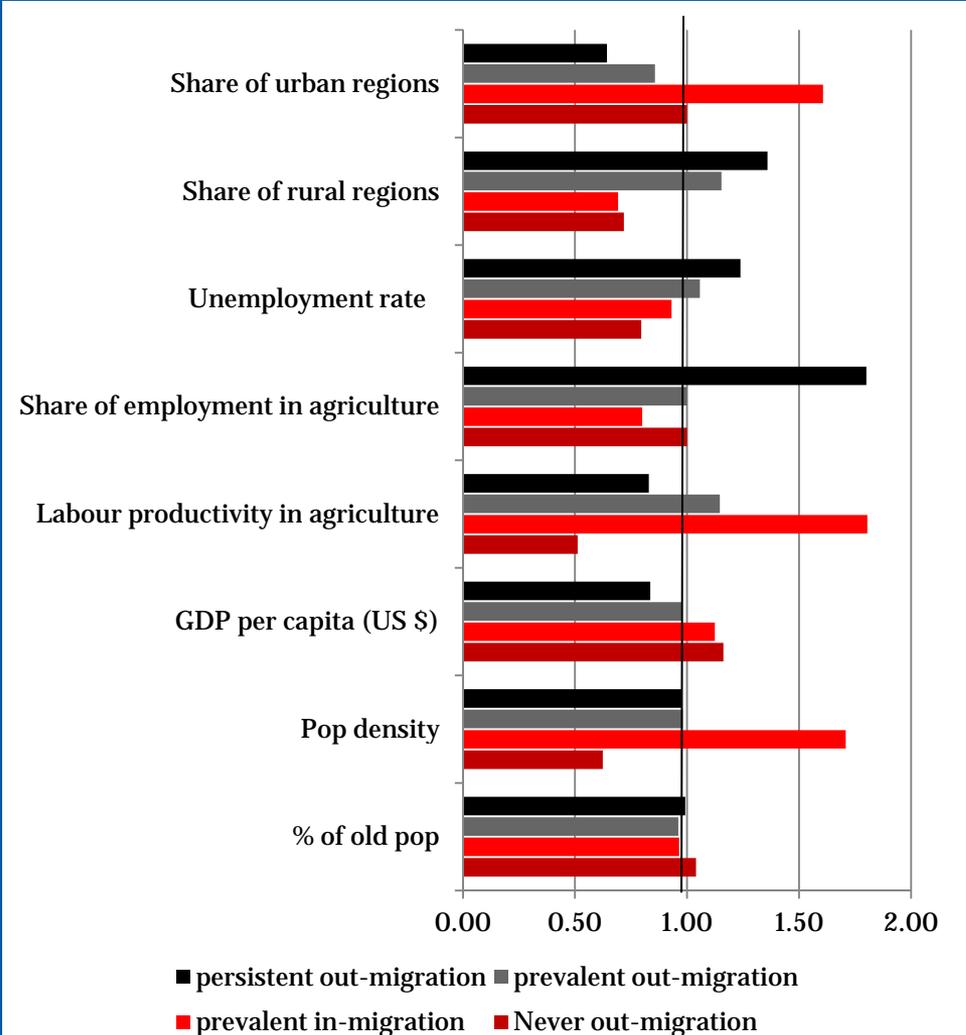
Indication to policies for attraction/retention of skilled



# 4. Persistency of out-migration and fragility of regions

Regional characteristics by degree of persistence in out-migration (total regions =1)

Are persistent net out-flows of population (ten years) twinned with economic distress?



Outmigration is localized over time. Beyond short-term adj., regions may struggle to improve productivity with a shrinking labor base

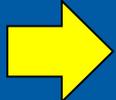
# 5. Effects of outmigration on unemployment

$$Unemp_{it} = \alpha_i + \beta Inflows_{t-1} + \gamma' X_{it} + \delta' EmpStr_{it} + \phi Old_{it} + t_t + \mu_i + \varepsilon_i$$

variables	Model 1 Unemployment rate
Net migration (lagged)	-0.0273***
Elderly dependency rate	-0.058***

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)

# Summary of 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 (all OECD countries)
- More characteristics of migrants (education, employment status)
- 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.
- Policy implications: improving accessibility; rural-urban linkages; quality of local services and encouraging return and circulation