Migration and growth: Is there a trade-off?

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Outline

1. Migration, growth and skills.
2. Are we getting the “right” migration for Europe? How rapidly are we assimilating migrants?
3. Policy options for the EU:
   • Adopting a EU-wide Point-base System?
   • Preventing Welfare Shopping?
   • Decentralizing Wage Bargaining?
   • Investing in Assimilation
Key messages

• Migration (or increased participation) affects growth rates insofar as it alters the skill composition of the workforce.

• Large cross-country variation in the skill content of migration explained more by migration policies and labour market institutions than by welfare shopping.

• Migration policies are becoming increasingly selective de facto if not de jure. Scope for adopting EU-level Points-Based System.

• Some “brain drain” may not be bad in terms of global income convergence
Migration and growth

- Increasing labour force by itself mainly (unless implausible scale effects) affects GDP levels, not rates of growth of GDP.
- GDP growth rates (hence income per capita) affected only insofar as the increase in the labour force involves an increase in share of skilled workers in the population.
- Human capital is the source of the externalities endogenously spurring growth.
A growth-migration tradeoff?

- If immigrants have less human capital than natives, they reduce current and steady-state growth rates in the recipient country.
- This effect is partly compensated by skill upgrading of natives.
- The faster the assimilation of migrants, the lower the negative effects on growth.
Human capital externalities

• Skilled migration like capital mobility.

• **Spillovers** of human capital. Migrants can:
  – *transfer* their human capital to natives
  – exert *negative* externalities on human capital accumulation among natives
  – acquire themselves more human capital via interactions with natives (e.g., on-the-job *training*)

• These externalities depend on the degree of *assimilation/dessimilation* of migrants
How about global convergence?

- **Symmetric** effects in the sending country. The more skilled are out-migrants vis-à-vis the population remaining at home, the more **adverse** are the effects on growth.
- Conflict of interest (battle over brains) between rich and poor nations.
- But spillovers may act also in different directions (possible also positive feedback effects on sending countries)
Some evidence

• Skill content of migration.
  – Educational attainments (Census and ELFS)
  – Quality of the education of migrants (IALS)

• Assimilation of migrants and human capital externalities on the resident population

• How serious is the brain drain?
Brain Gain in the EU is limited: mainly brain-gain brain-drain within the EU
The US is more successful in attracting skilled migrants

Source: IOM & OECD Database on Expatriates and Immigrants, 2004
Proportion of tertiary education among migrants and natives

Source: International migration by education attainment
1990-2000 (Docquier-Marfouk)
Quality of education:
IALS median score

Notes: Average scores in quantitative tests for natives and migrants
Source: IALS dataset
Overall

Immigrants are almost as skilled as natives (accounting for quality) when:

• The education of the native population is low (e.g., Belgium, Italy)
• The immigration policy relies on a points system (e.g., Canada, New Zealand and Switzerland)
• In the egalitarian Nordics, migrants are often substantially less skilled than natives
## Capturing Talents

### Expatriates to the U.S, holding a Ph.D.

<table>
<thead>
<tr>
<th>Country of origin</th>
<th>Percentage of expatriates with a Ph.D</th>
<th>Percentage of expatriates with Ph.D among newly arrived workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgium</td>
<td>4,33</td>
<td>5,78</td>
</tr>
<tr>
<td>France</td>
<td>3,1</td>
<td>4,9</td>
</tr>
<tr>
<td>UK</td>
<td>3,2</td>
<td>3,9</td>
</tr>
<tr>
<td>Spain</td>
<td>2,7</td>
<td>4,6</td>
</tr>
<tr>
<td>Italy</td>
<td>0,96</td>
<td>2</td>
</tr>
<tr>
<td>Germany</td>
<td>1,72</td>
<td>2,39</td>
</tr>
<tr>
<td>Total US workforce</td>
<td>0,82</td>
<td>0,98</td>
</tr>
</tbody>
</table>

Very High Skilled Migrants

• The fraction of migrants who have a Ph.D. has increased more rapidly among expatriates than among natives (US)

• This fact is even more evident if only migrants who arrived in the US less than 10 years before the census are considered

• Saint-Paul (2004): 40-80% of the European stars (the top 5% of Ph.Ds, i.e. the top quartile of the top quartile) would be in the US.

• The number of new products and processes invented in Europe could be twice higher absent the brain drain
Star Scientists’ Migration Rates

- About 56% of the world’s “star” scientists and engineers reside in the US

<table>
<thead>
<tr>
<th>Country</th>
<th>Net Migration (1)</th>
<th>Unique persons (2)</th>
<th>Ratio (1)/(2) (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgium</td>
<td>-5</td>
<td>54</td>
<td>-9,26%</td>
</tr>
<tr>
<td>France</td>
<td>2</td>
<td>265</td>
<td>0,75%</td>
</tr>
<tr>
<td>UK</td>
<td>-27</td>
<td>581</td>
<td>-4,65%</td>
</tr>
<tr>
<td>Spain</td>
<td>7</td>
<td>49</td>
<td>14,29%</td>
</tr>
<tr>
<td>Italy</td>
<td>2</td>
<td>120</td>
<td>1,67%</td>
</tr>
<tr>
<td>Germany</td>
<td>-11</td>
<td>362</td>
<td>-3,04%</td>
</tr>
<tr>
<td>US</td>
<td>-23</td>
<td>3670</td>
<td>-0,63%</td>
</tr>
<tr>
<td>top 25 S&amp;T</td>
<td>-51</td>
<td>6599</td>
<td>-0,77%</td>
</tr>
</tbody>
</table>

Notes: years 1981-2004  
Source: Zucker and Darby (2007)
How Rapidly are we Assimilating Migrants?

• Acquisition of language proficiency is very important for assimilation: almost half of wage growth after arrival attributable to gains from becoming bilingual

• Reduce ethnic segregation in the country of destination then

• Greasing the wheels effects in low-mobility countries also speak in favour of “spreading out” migrants.
Language proficiency

**Notes:** Average scores in Prose Literacy tests (1 to 5)

**Source:** IALS dataset
Measures of assimilation

How often talk to Neighbours
(often)

Source: “The social Assimilation of Migrants”; Faini, de Paolo, Venturini (2005)
“Brain Waste”

“Do you feel that you have **skills** or **qualifications** to do a **more demanding** job that the one you have now?”

Source: ECHP 1994-2001
“Have you had formal training or education that has given you skills needed for your present type of work?”

Source: ECHP 1994-2001
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   - Reducing Welfare Magnets
   - Decentralizing Wage Bargaining
   - Investing in Assimilation
Evolution of migration policies

• Tightening of migration policies towards the unskilled: index of strictness from 1990 to 2004 in EU countries increasing

• While race to attract highly skilled migrants

• Explicit point systems in an increasing number of countries (Canada since 67, Australia since 84, New Zealand since 91, Switzerland since 96)
### Table 9.1  Strictness of Migration Policies in the Countries of the EU with the Largest Immigration

<table>
<thead>
<tr>
<th>Existence of quota System</th>
<th>Admission requirements</th>
<th>Years to obtain permanent residence</th>
<th>Residence requirements</th>
<th>Length of first stay</th>
<th>Overall index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>yes</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Denmark</td>
<td>no</td>
<td>6</td>
<td>7</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Finland</td>
<td>no</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>France</td>
<td>no</td>
<td>3</td>
<td>5</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Germany</td>
<td>no</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Greece</td>
<td>no</td>
<td>4</td>
<td>10</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Ireland</td>
<td>no</td>
<td>6</td>
<td>10</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Italy</td>
<td>yes</td>
<td>6</td>
<td>6</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Netherlands</td>
<td>no</td>
<td>5</td>
<td>5</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Portugal</td>
<td>yes</td>
<td>6</td>
<td>5/8</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Spain</td>
<td>yes</td>
<td>6</td>
<td>5</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>UK</td>
<td>no</td>
<td>3</td>
<td>10/14</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

(1) The number of certificates and procedures needed to be admitted as a foreigner, whatever the motivations may be.

(2) The number of years required to obtain a permanent residence permit.

(3) The number of certifications or procedures required to legally reside in the territory. This differs from the requirements for entering the country because holding a valid document is typically not sufficient.

(4) The number of years of stay required to obtain a first residence permit.

(5) For details as to how the overall index is computed, see www.frdb.org.
Non si vede bene l’ultima colonna
Pietro Biroli; 02/06/2008
Overall strictness of migration policies (frdb index)
Pros and cons
Point Base System

• Skilled migration is better for countries with European-type redistributive institutions; reduce inequalities in the recipient

• Pros: simplification of migration policies (including asylum)

• Cons: enforcement; risk of “brain drain”, equity considerations
Point systems and skill composition of migration (IALS scores)

Germany

New Zealand

Score Distribution

Score Distribution

Natives Migrants

Natives Migrants
How it works in New Zealand

Application: must be made outside New Zealand

Three stages procedure:

1. **Expression of interest**: at least 100 points, details on health, character, age, English proficiency

2. **Invitation to apply**: “Expressions of interests” ranked by points. Applicants with highest points officially invited to apply for residence. Documents supporting application must be sent.

3. **Decision-making**: applications are fully verified. Approval letter with conditions (Residence Visa or Work Permit) applying to applicants and their family.

<table>
<thead>
<tr>
<th>Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. EDUCATION</td>
</tr>
<tr>
<td>2. JOB OFFER OF SKILLED EMPLOYMENT</td>
</tr>
<tr>
<td>Bonus points if:</td>
</tr>
<tr>
<td>- in area of growth</td>
</tr>
<tr>
<td>- in an absolute skills shortage area</td>
</tr>
<tr>
<td>- within certain clusters</td>
</tr>
<tr>
<td>- for employment outside Auckland</td>
</tr>
<tr>
<td>3. WORK EXPERIENCE</td>
</tr>
<tr>
<td>(at least one year in a skilled occupation)</td>
</tr>
<tr>
<td>4. QUALIFICATIONS</td>
</tr>
<tr>
<td>Bonus points for New Zealand qualifications awarded after at least two years' study</td>
</tr>
<tr>
<td>5. AGE</td>
</tr>
</tbody>
</table>
Brain drain may not be harmful to LDC growth

Is it because of externalities?

- Increase in the expected returns from schooling may induce more investment in human capital in the country of origin
- Feedback effects. Migrants can transfer back home human capital together with their remittances or contribute to local business/trade networks
- Return migration involves mainly “success stories rather than failures” (Borjas).
- Thus, human capital externalities can also play in favour of (conditional) income convergence
A EU-wide PBS?

• Growing **need** for coherent EU-migration policy for third country nationals:
  – Stronger effect in attracting high-skilled migrants. Larger market for them.
  – Less diversion of migration flows

• **Problems:**
  – MS have heterogenous preferences about “desirable migration” levels and composition. Allowing for different rules-points?
  – Enforcement and coordination
Welfare magnets

- Are we attracting low-skilled migrants because of welfare access? In most countries no evidence of an additional effect of the migrants status on welfare access.

- *Welfare magnets*: estimates (DeGiorgi and Pellizzari) that 1 std deviation increase in generosity of welfare payments (~3,000 € per year) increases probability to move by 3%, but no effect of welfare on skill composition of migrants
Migrant to natives odds ratios of the receipt of various types of cash transfers in the EU

Source: EuSilc
Why Wage Bargaining is Important

Without Centralised Bargaining

With Centralised Bargaining

Collective Bargaining

- Compressed wage setting: low remuneration of talent
- More reward for seniority rather than productivity

Less attractive for skilled workers
Investing in Assimilation

- Problem in language proficiency
- Prevent ethnic segregation
- Define track to citizenship rights
- School attendance of second generation migrants very important. Important criterion in the evaluation of school performance
Summarising

• Increased labour force increases growth *rates* insofar as it increases skill content of the labour force.

• In order to attract more skilled migrants, need for EU-wide PBS (already de facto) and adjustment of labour market institutions, e.g., collective bargaining systems, linking more strictly productivity and pay and improving matching.

• Invest in assimilation-education reducing brain waste and investing in the human capital of the second generation of migrants.