

# **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?

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- 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

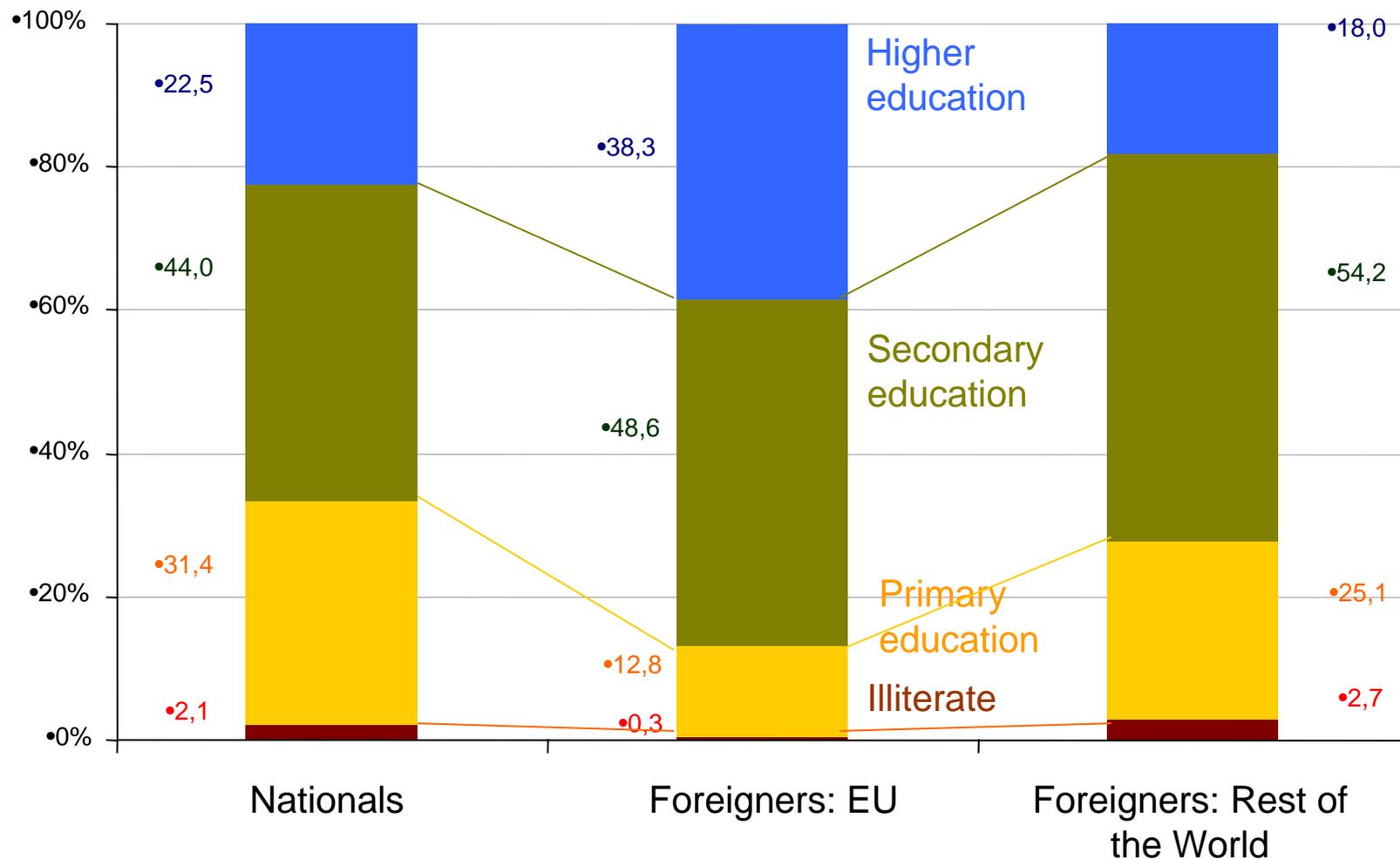
## How about global convergence? \_\_\_\_\_

- 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)

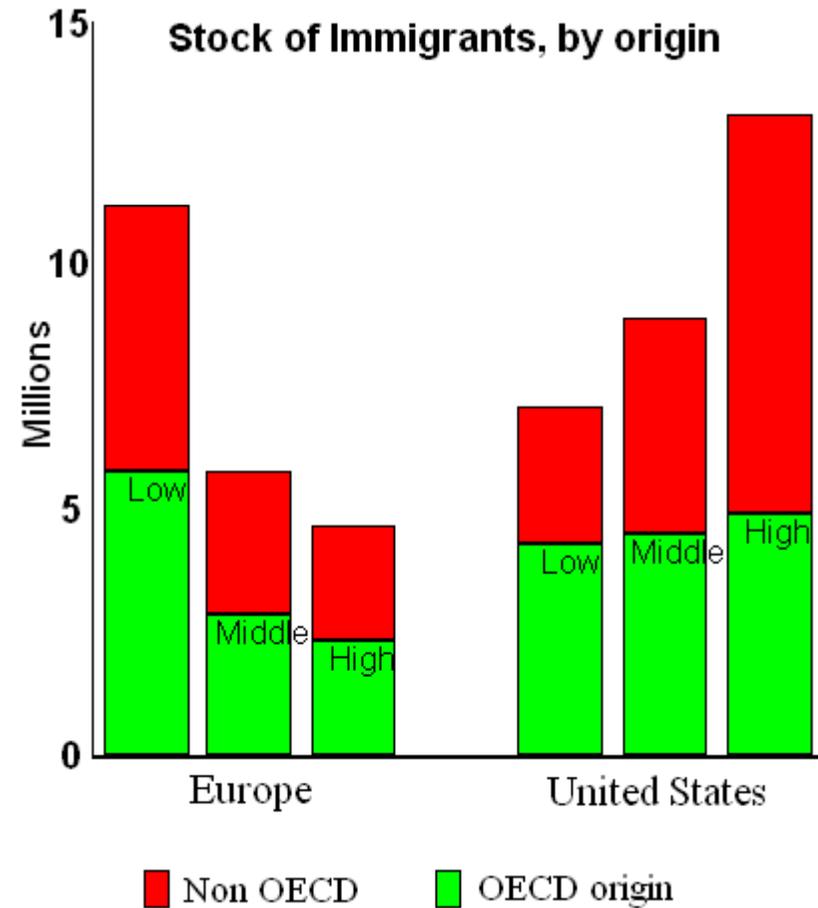
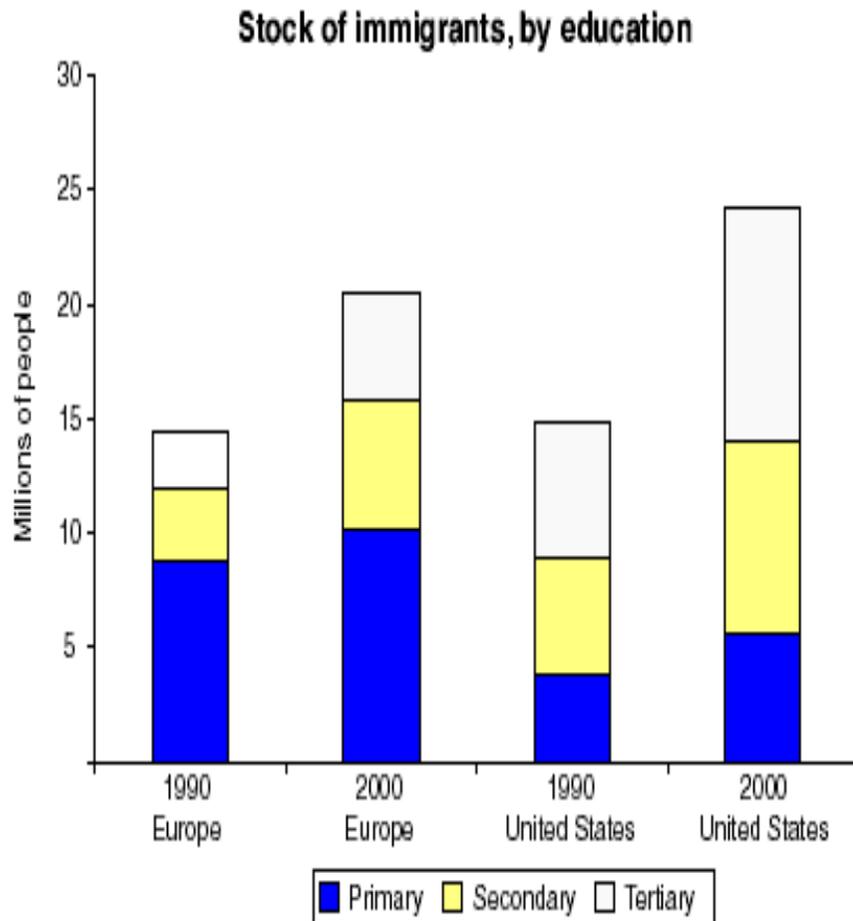
# Some evidence

- 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



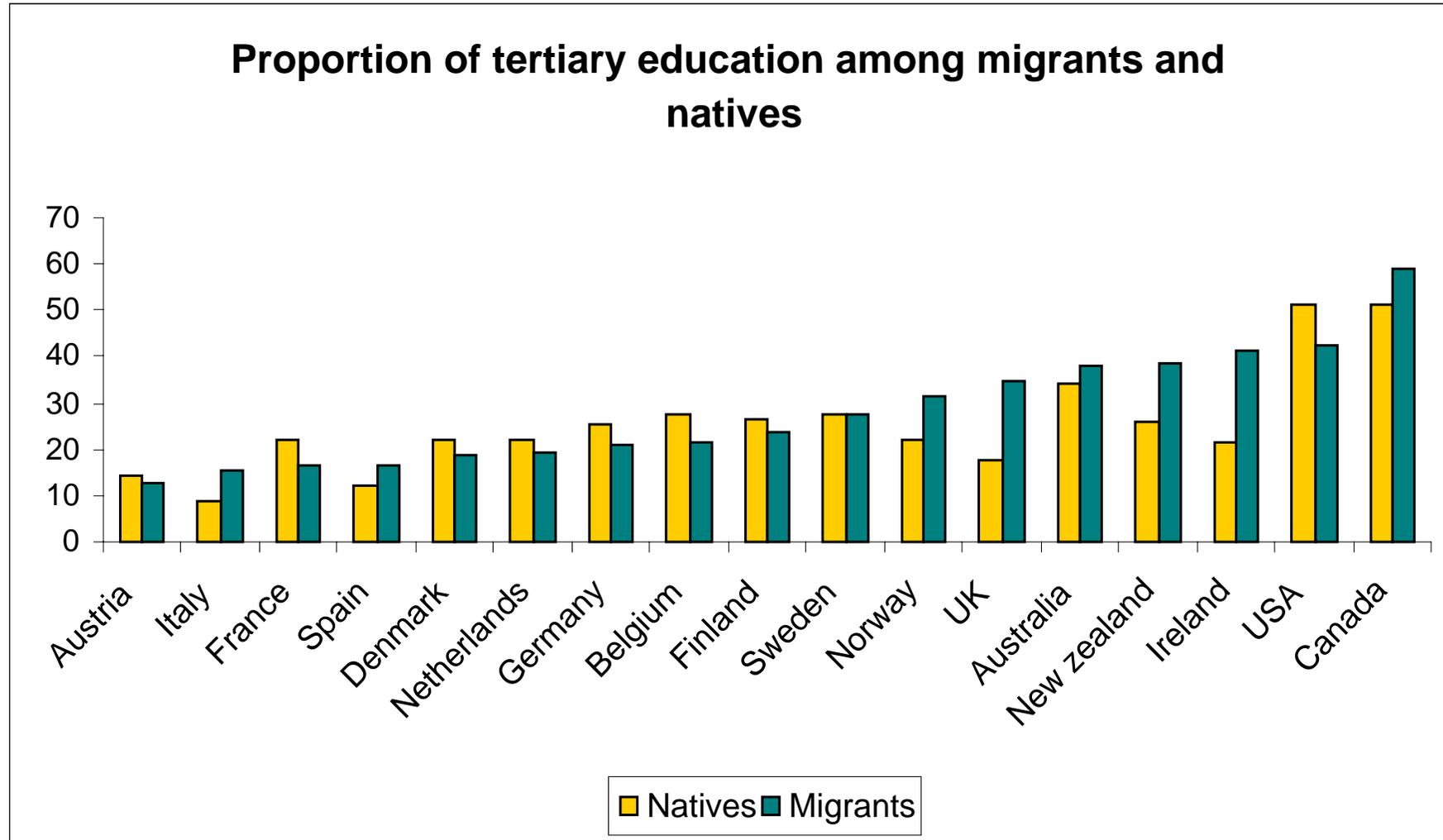
# The US is more successful in attracting skilled migrants



Source: IOM & OECD Database on Expatriates and Immigrants, 2004

# Tertiary Education

f R  
D B

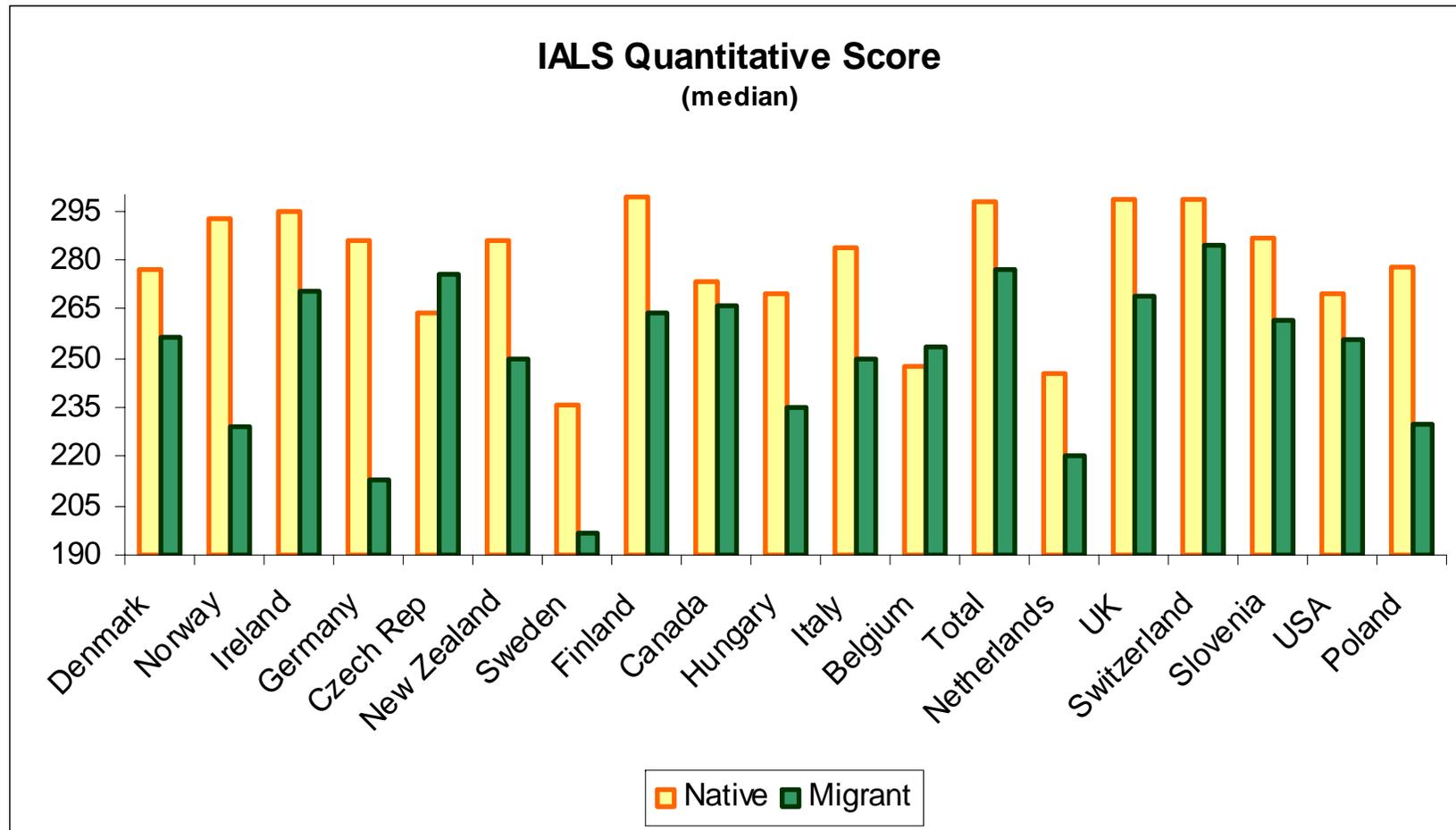


Source: International migration by education attainment  
1990-2000 (Docquier- Marfouk)

# Quality of education: IALS median score

f R  
D B

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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.

| Country of origin  | Percentage of expatriates with a Ph.D |      | Percentage of expatriates with Ph.D among newly arrived workers |           |
|--------------------|---------------------------------------|------|---|-----------|
|                    | 1990                                  | 2000 | 1980-1990   | 1990-2000 |
| Belgium            | 4,33                                  | 5,78 | 8,06  | 10,53     |
| France             | 3,1                                   | 4,9  | 8,2   | 8,6       |
| UK                 | 3,2                                   | 3,9  | 5,4   | 5,3       |
| Spain              | 2,7                                   | 4,6  | 4   | 9,4       |
| Italy              | 0,96                                  | 2    | 2,9   | 8,6       |
| Germany            | 1,72                                  | 2,39 | 4,9   | 6,8       |
| Total US workforce | 0,82                                  | 0,98 | 0,82  | 0,98      |

Source: Saint Paul (2004)

# Very High Skilled Migrants

f R  
D B

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- 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

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

Notes: years 1981-2004

Source: Zucker and Darby (2007)

# How Rapidly are we Assimilating Migrants?

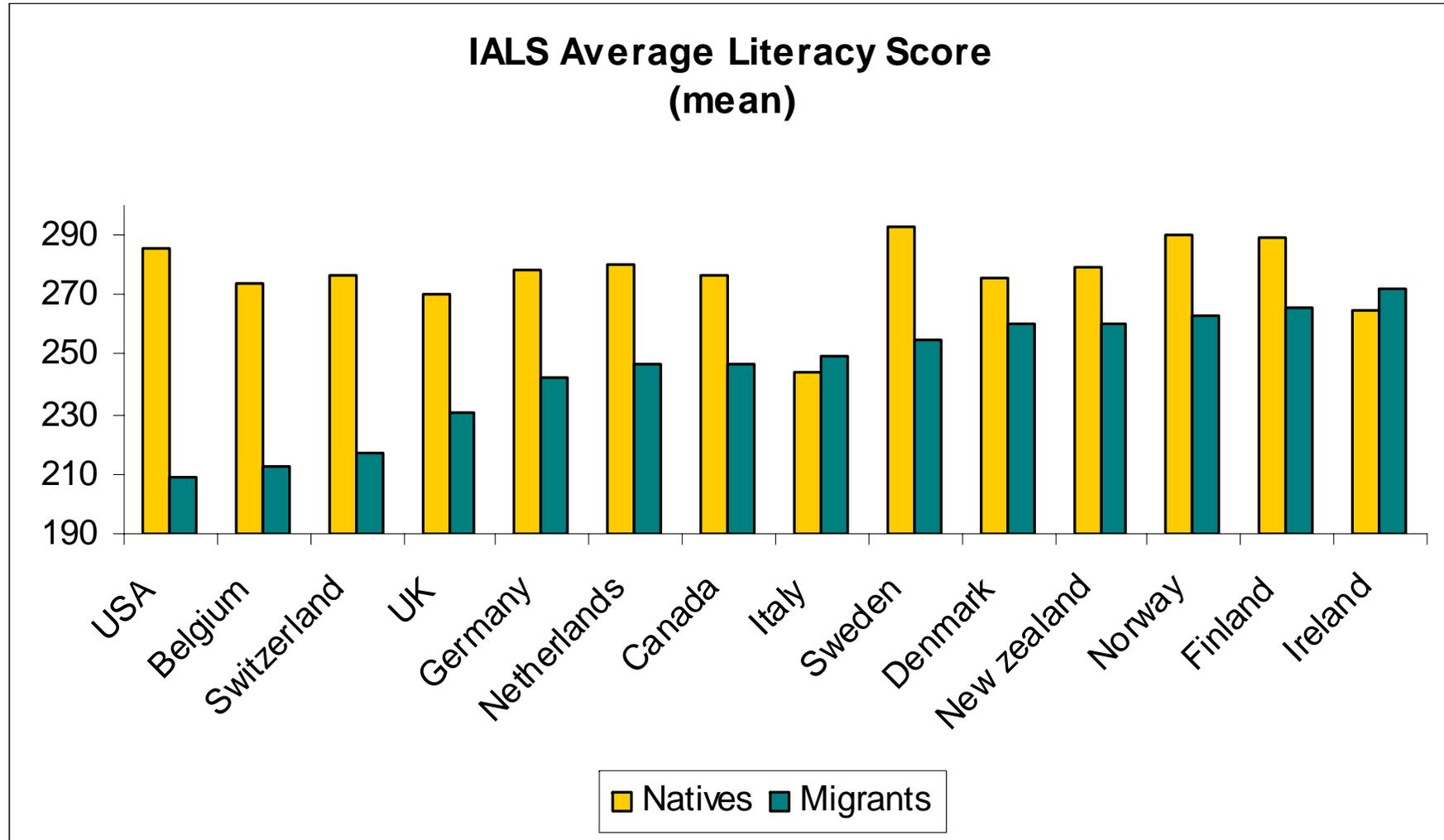
f R  
D B

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- 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

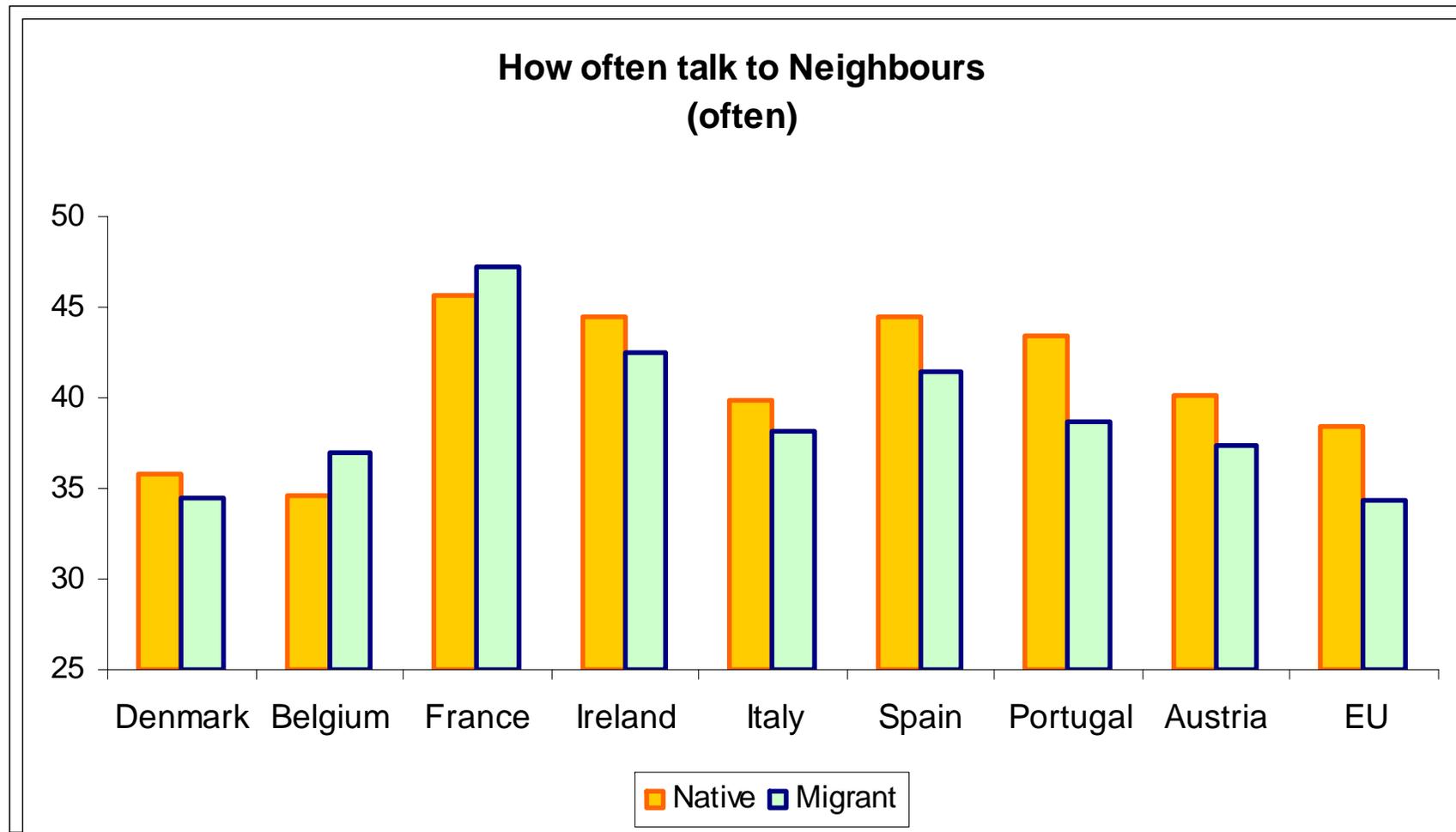
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D B



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

Source: IALS dataset

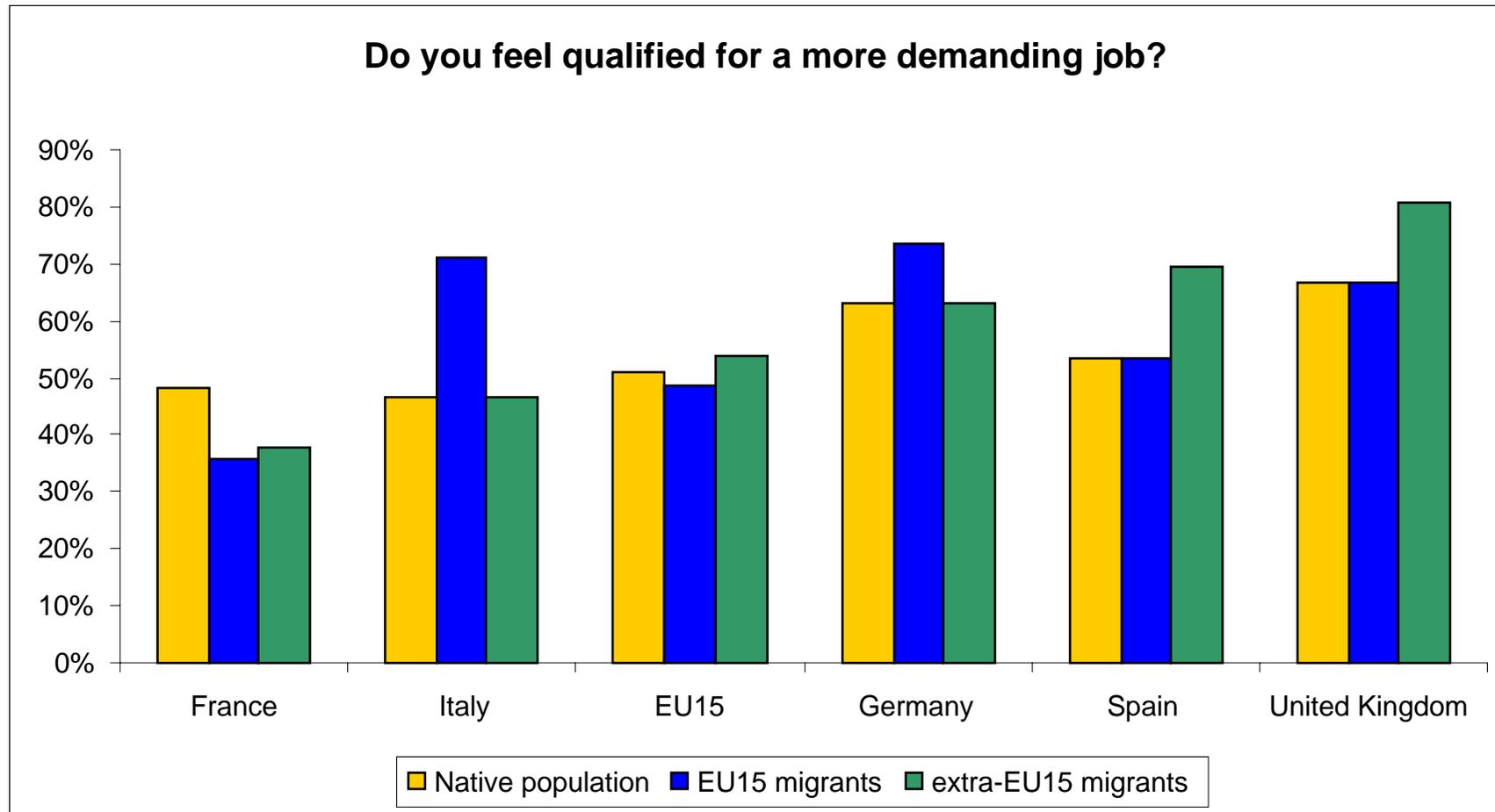
# Measures of assimilation



# “Brain Waste”

f R  
D B

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

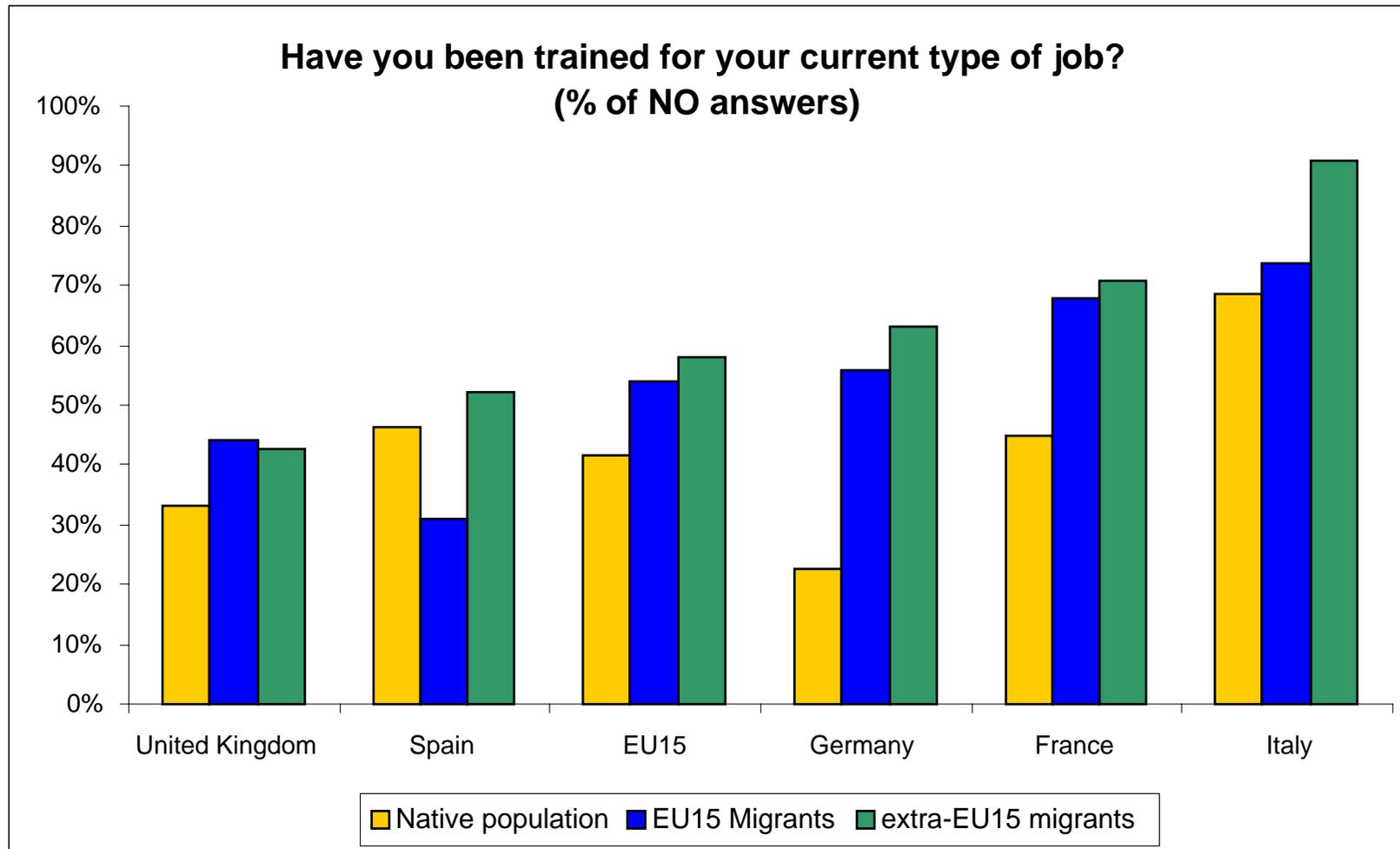


Source: ECHP 1994-2001

# Skill Mismatch

f R  
D B

*“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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# 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

|             | Existence of quota System | Admission requirements | Years to obtain permanent residence | Residence requirements | Length of first stay | Overall index |
|-------------|---------------------------|------------------------|-------------------------------------|------------------------|----------------------|---------------|
|             |                           | (1)                    | (2)                                 | (3)                    | (4)                  | (5)           |
| Austria     | yes                       | 5                      | 5                                   | 3                      | 2                    | 2.8           |
| Denmark     | no                        | 6                      | 7                                   | 4                      | 4                    | 3.2           |
| Finland     | no                        | 4                      | 4                                   | 2                      | 4                    | 2.8           |
| France      | no                        | 3                      | 5                                   | 1                      | 2                    | 1.5           |
| Germany     | no                        | 6                      | 5                                   | 4                      | 2                    | 2.6           |
| Greece      | no                        | 4                      | 10                                  | 3                      | 2                    | 2.7           |
| Ireland     | no                        | 6                      | 10                                  | 3                      | 2                    | 2.9           |
| Italy       | yes                       | 6                      | 6                                   | 3                      | 2                    | 3.1           |
| Netherlands | no                        | 5                      | 5                                   | 2                      | 4                    | 3.0           |
| Portugal    | yes                       | 6                      | 5/8                                 | 3                      | 2                    | 3.1           |
| Spain       | yes                       | 6                      | 5                                   | 2                      | 2                    | 3.2           |
| UK          | no                        | 3                      | 10/14                               | 1                      | 2                    | 2.9           |

(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](http://www.frdb.org).

**Slide 24**

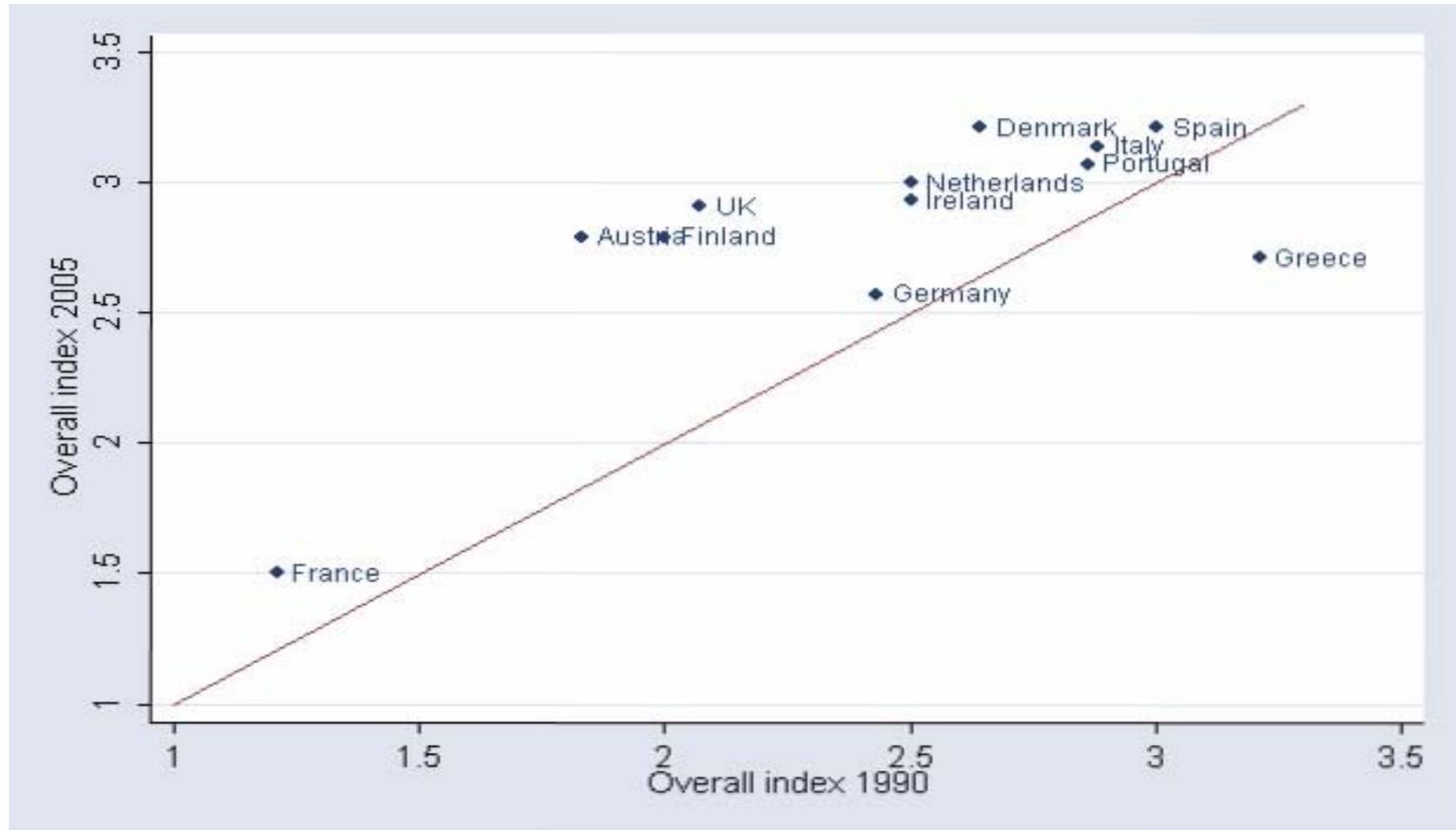
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**PB2**

**Non si vede bene l'ultima colonna**

Pietro Biroli; 02/06/2008

# Overall strictness of migration policies (frdb index)

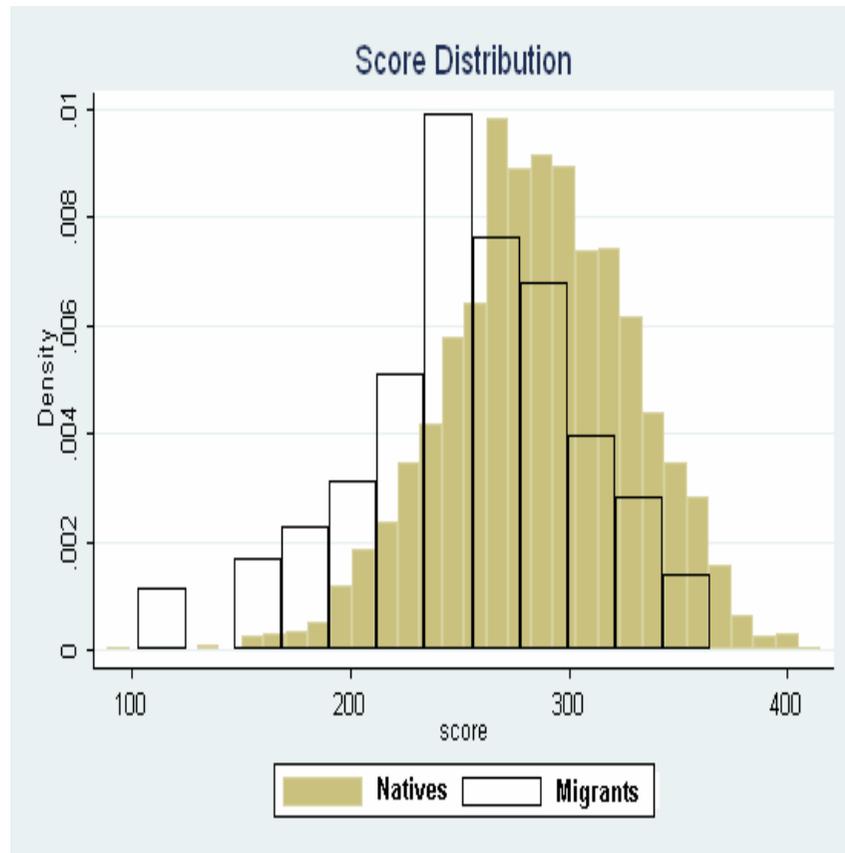


# Pros and cons Point Base System

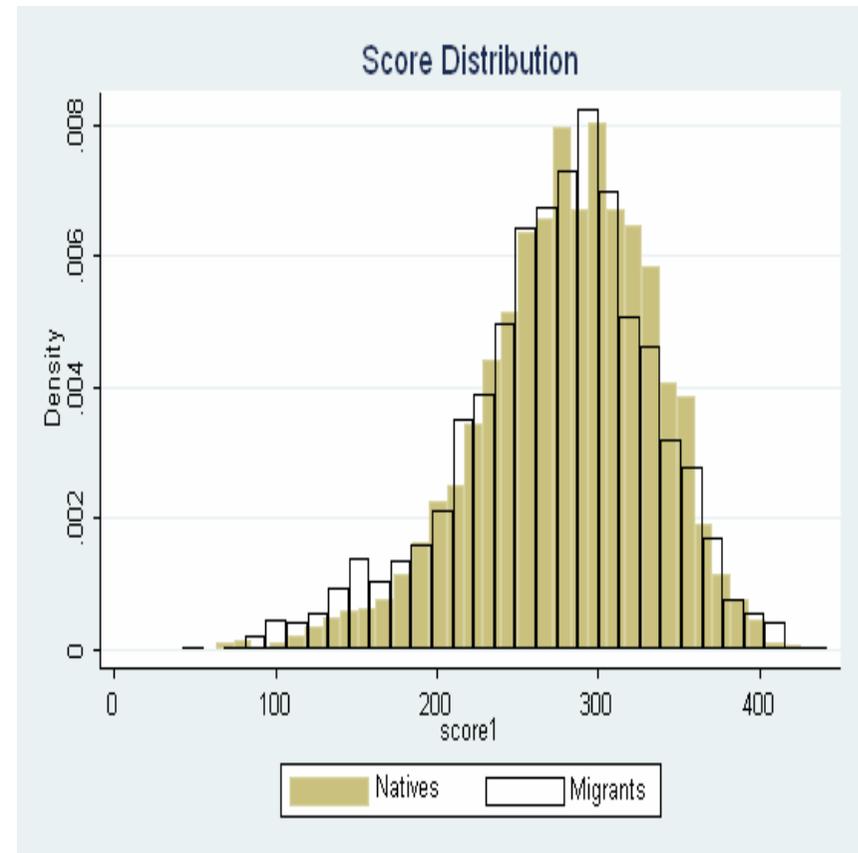
- Skilled migration is better for countries with European-type redistributive institutions; reduce inequalities in the recipient
- Pros: simplification of migration policies (including asylum)
- Cons: enforcement; risk of “brain drain”, equity considerations

# Point systems and skill composition of migration (IALS scores)

Germany



New Zealand



# How it works in New Zealand

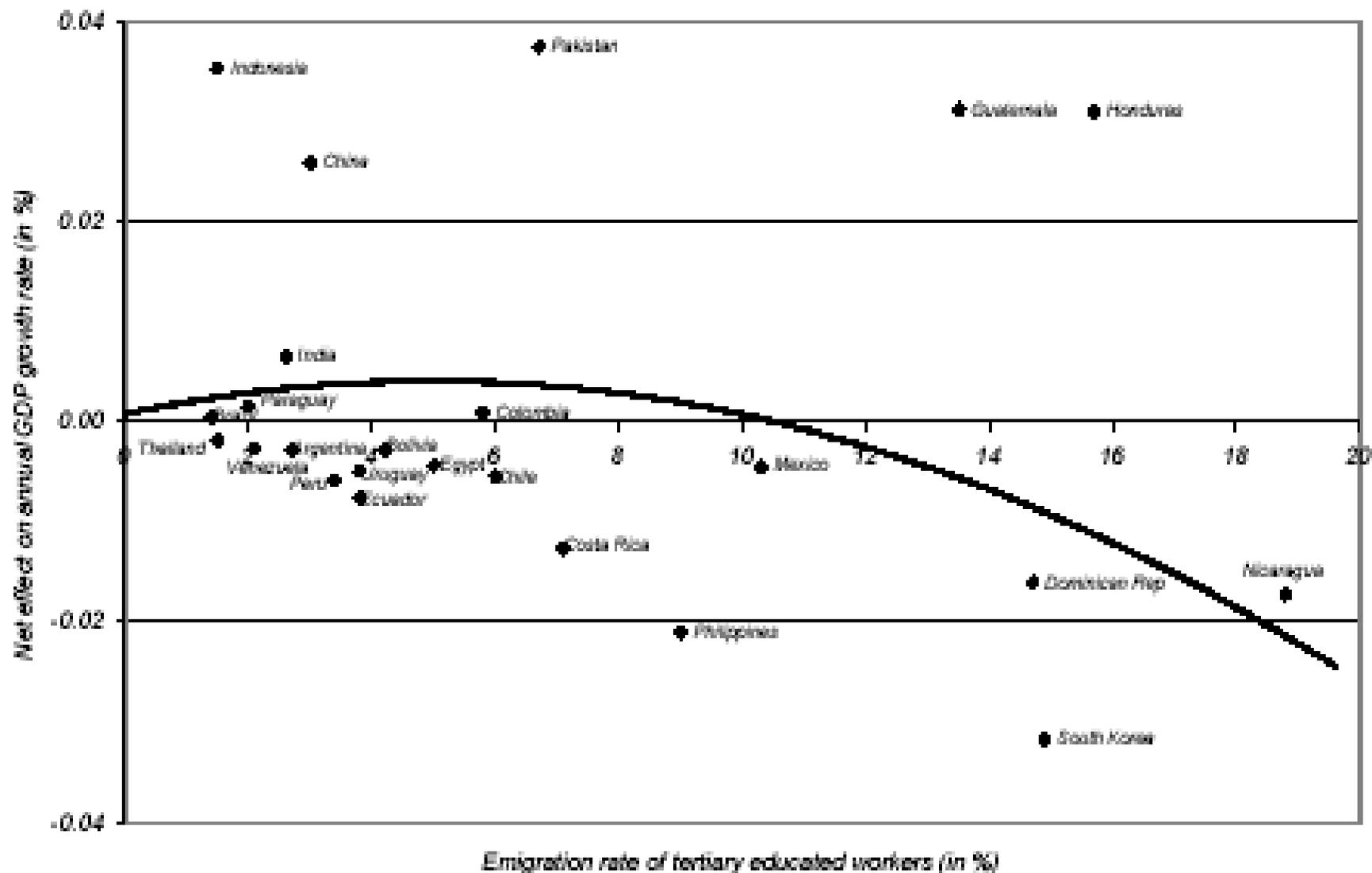
*Application:* must be made outside New Zealand

*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.

| Factors   |
|---|
| <b>1. EDUCATION</b>   |
| <b>2. JOB OFFER OF SKILLED EMPLOYMENT</b><br>Bonus points if: <ul style="list-style-type: none"><li>- in area of growth</li><li>- in an absolute skills shortage area</li><li>- within certain clusters</li><li>- for employment outside Auckland</li></ul> |
| <b>3. WORK EXPERIENCE</b><br>(at least one year in a skilled occupation)  |
| <b>4. QUALIFICATIONS</b><br>Bonus points for New Zealand qualifications awarded after at least two years' study   |
| <b>5. AGE</b>   |

# Brain drain may not be harmful to LDC growth



Source: Docquier – Rapoport (2004)

# 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

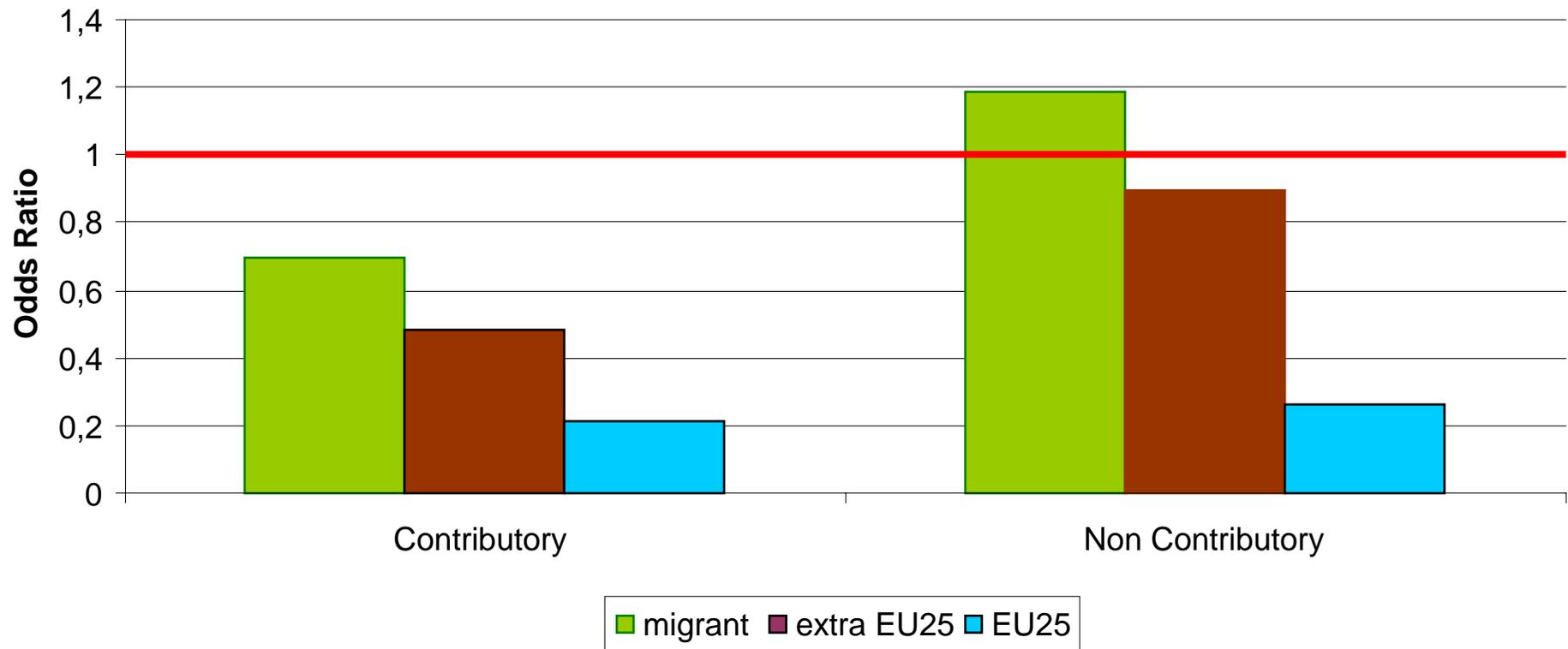
# A EU-wide PBS?

- 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

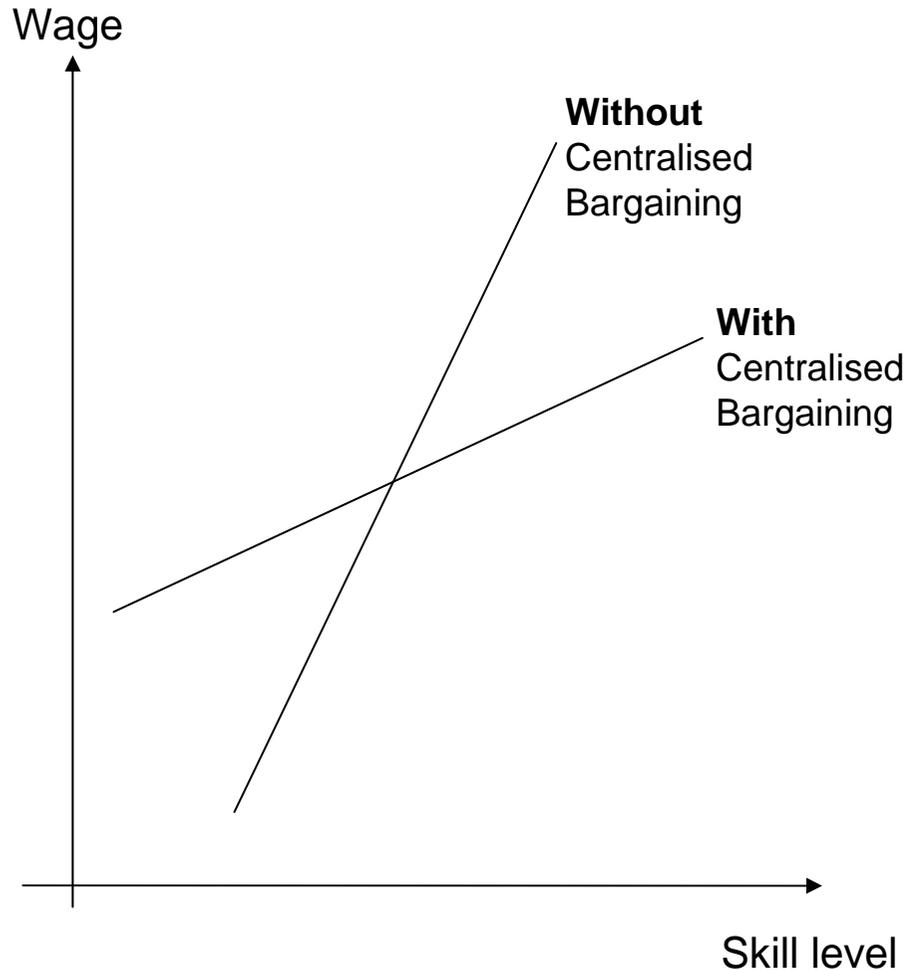
- Are we attracting low-skilled migrants because of welfare access? In most countries no evidence of an additional effect of the migrants status on welfare access.
- *Welfare magnets*: estimates (DeGiorgi and Pellizzari) that 1 std deviation increase in generosity of welfare payments (~3,000 € per year) 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



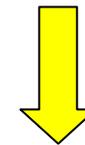
Source: EuSilc

# Why Wage Bargaining is Important



## 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