

EDWIN EDWIN

Education and Wage Inequality in Europe.

**Fifth EU Framework Programme for
Research.**

Centre des Conferences Brussels

Final Meeting 22nd Sept 2005.

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Education and Wage Inequality in Europe.

Work-package 5 Exploring the Link between Education and wage inequality in Europe and Explanations.

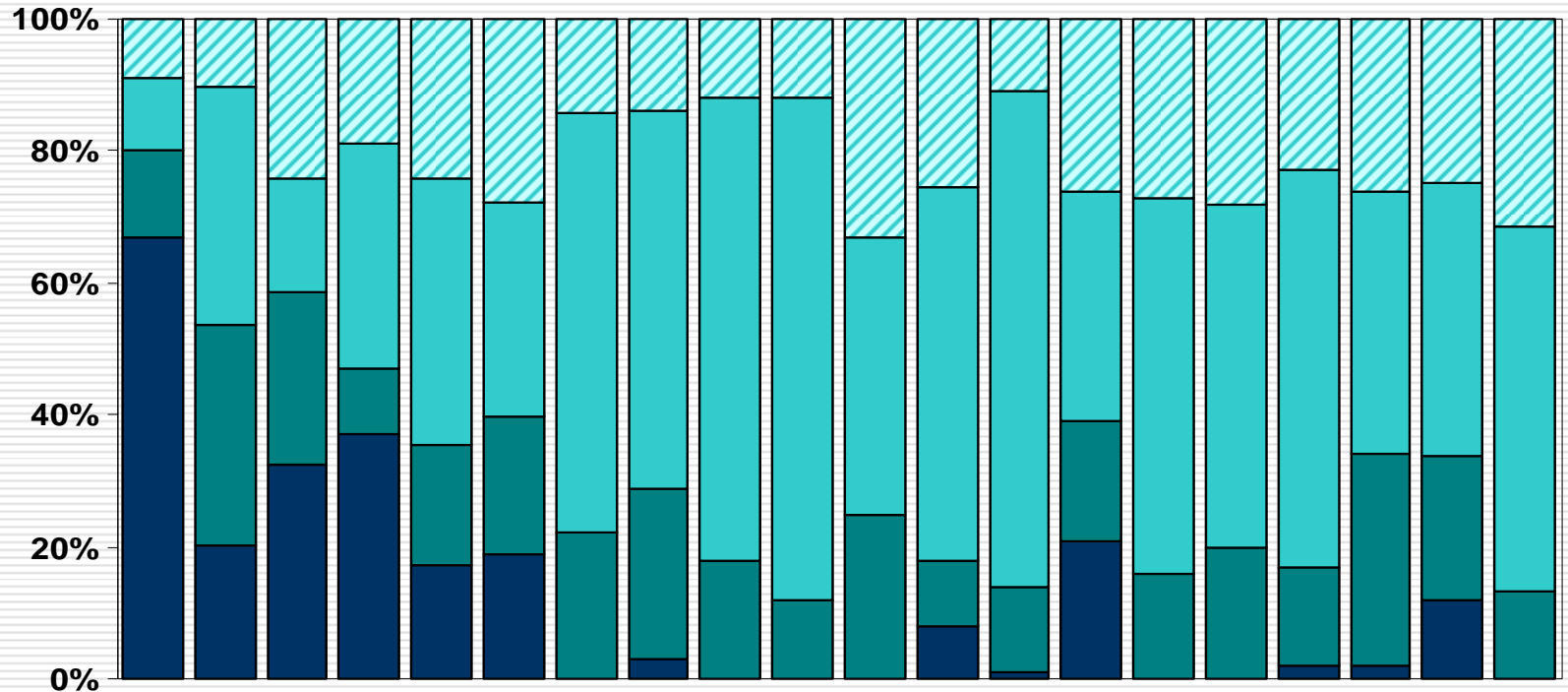
- Education Quality
- Gender Differences
- Overeducation

'Education Quality'

Andreas Ammermüller and Charlotte Lauer

**Aim of this part of EDWIN
was to examine the link
between education quality –
resources and outcomes
and their distribution.**

Measures of educational outcomes, 2002



Years of schooling 8.0 9.4 10.3 10.5 10.9 11.2 11.3 11.5 11.9 12.4 12.4 12.4 12.5 12.7 12.7 13.3 13.4 13.4 13.5 13.8

PISA scores 477 476 466 470 475 487 480 496 488 544 513 466 491 502 493 486 492 497 498

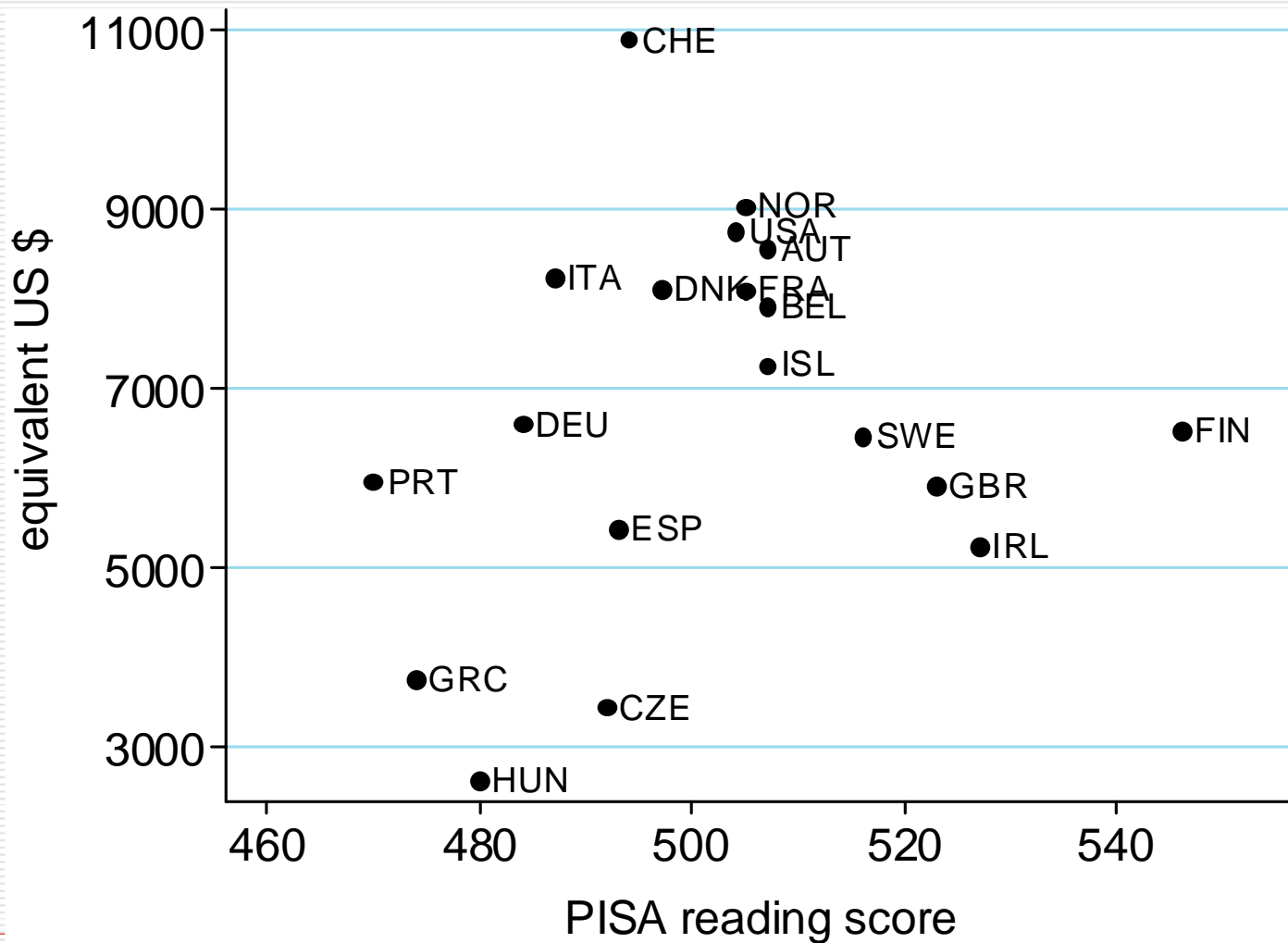
PRT ITA ESP GRC FRA BEL AU HUN POL CZE FIN SWE SLV IRL GBR DNK DEU ISL NLD NOR



Source: OECD (2004)

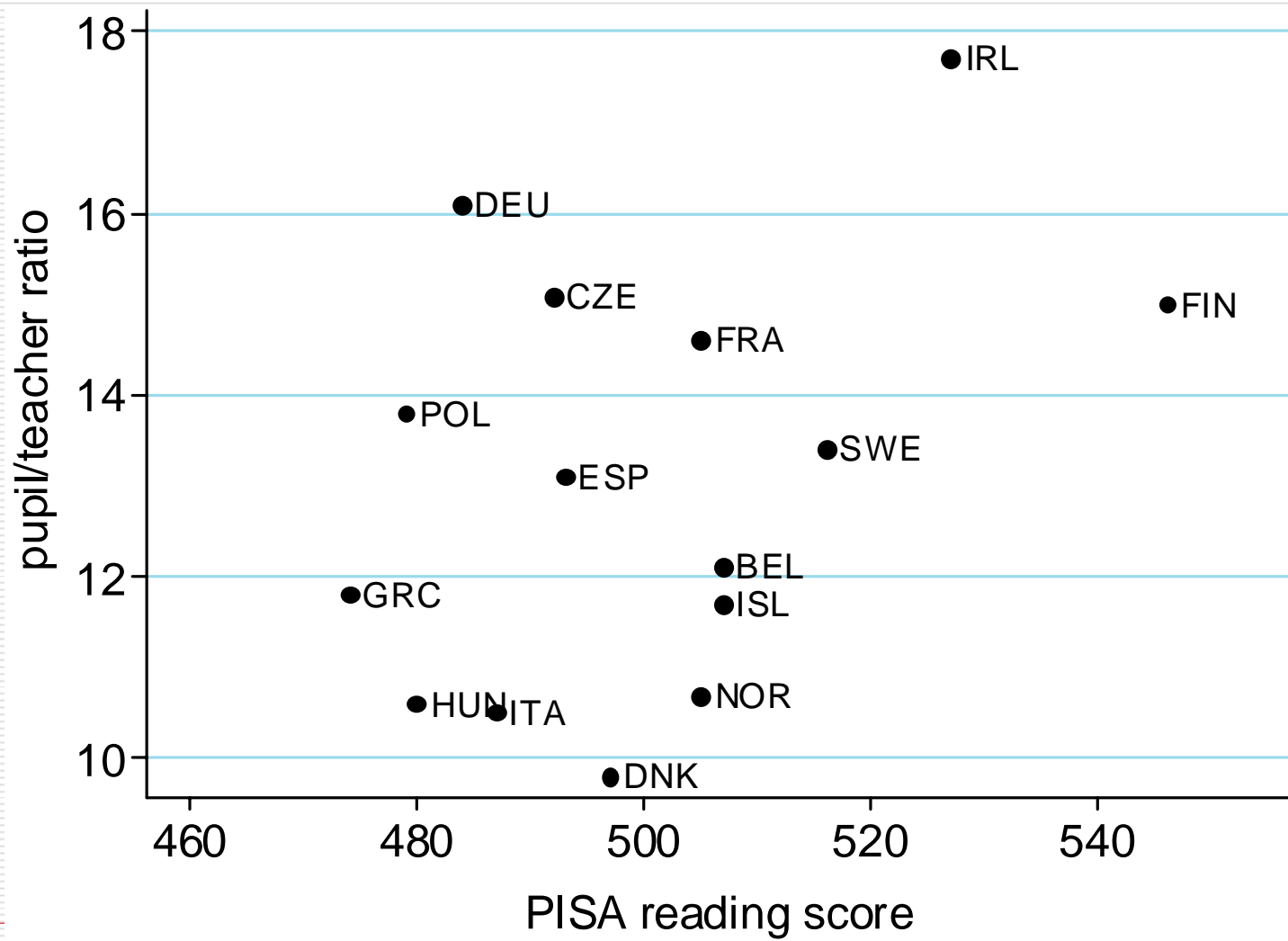
**There are large differences
in student performance and
educational opportunity
across countries.**

Annual expenditure per student versus PISA scores, 2000



Source: OECD (2004)

Ratio of pupils to teaching staff vs. PISA scores, 2000



Source: Eurydice (2002)

Findings:

- ❑ Difference in inputs resources/teachers cannot explain the difference outcomes.
 - ❑ Largest difference in performance is at the lower end of the student distribution.
 - ❑ Strong link between institutions (central exams and school autonomy) and performance.
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Policy recommendations

- Improve incentive system for students and teachers by controlling output.
 - Develop better data and education quality indicators and monitoring mechanisms and accountability.
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'Gender Dimension'

Peter Dolton, Oscar Marcenaro-Gutierrez and Ali Skalli

EDWIN Research on Gender:

- **Considerable variation in Gender pay gap across countries.**
- **Vast majority of the measurement literature focuses on disaggregation at the means:**
- **Discrimination measurement varies over:**
 - **Time by country**
 - **By Education Level**
 - **Age cohorts within countries**
 - **Different stages in the life cycle within countries**
 - **Different parts of the wage distribution**

What Did We Do?

- Used ECHP for all available countries and years.
- Examined all different methods of decompositions of the gender gap (Oaxaca-Blinder, Brown Moon & Zoloth, Neumark etc)

Examined:

- Occupational decisions (& endogeneity)
- Educational decisions (& endogeneity)
- Labour Force Participation

Main Policy Related Questions

- ❑ Has increasing educational enrolments of women had an impact on wage gap? In particular, does the latter diminish as younger and more educated cohorts enter the labour market?
- ❑ What is the impact of changing patterns of females labour market participation on the gender wage gap?
- ❑ What is the impact of occupational changes on the gender wage gap?
- ❑ Address the issue of whether younger cohorts of women face less discrimination in the labour market.

Conclusions & Findings

- **Variation across Europe in the gender wage gap. –Depends on the educational composition across the workforce.**
- **The gender wage gap seems to be narrowing over time. Less gender gap among young cohorts than among older cohorts.**
- **No clear association between employment gender gap and gender wage gap. While employment gap is narrowing with education levels – not so clear this is happening with wage gap.**
- **No clear indication about the incidence of part time work** e.g.
Portugal large wage gap and low part time incidence.
NL lower wage gap and higher incidence of part time.

Conclusions & Findings

- ❑ **Discrimination varies at different points in the wage distribution – in some countries it is worse at the bottom end of the distribution – eg UK but in others it is worse at the top end of the distribution - Spain.**
- ❑ **Discrimination varies over cohort across countries :
in Finland it is worse for those of middle aged cohort –
but in the UK it is worse for those in the oldest cohort.**
- ❑ **Differences at the mean are not sufficient to describe gender differences and inequality.**

'Overeducation'

*Peter Dolton &
Oscar Marcenaro-Gutierrez*

Two stylised facts:

- Presence of increasing proportion of graduates and evidence on overeducation.
- High rates of return to education.



How to explain *simultaneously* these facts?

Does Europe face a problem of overeducation?

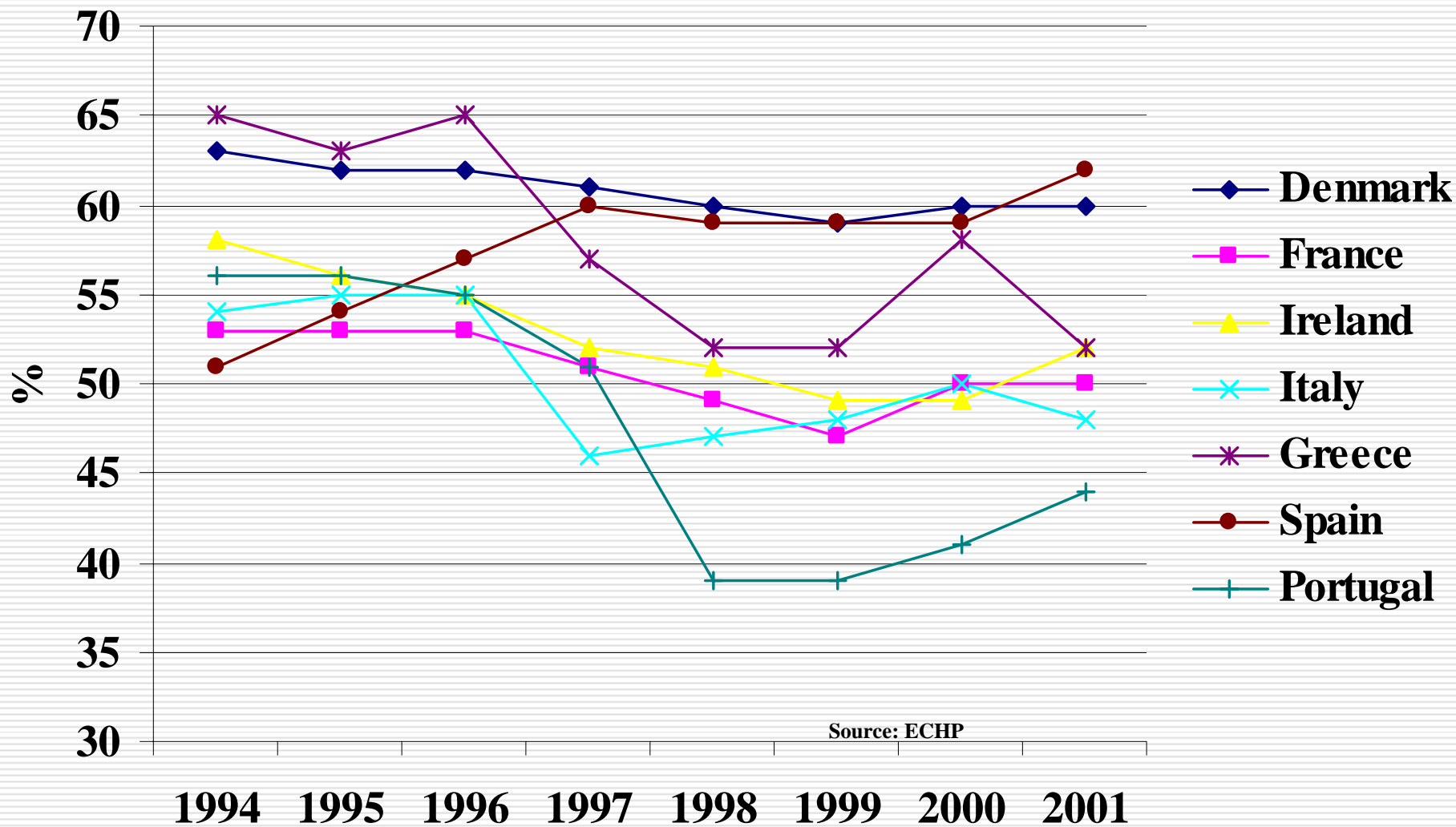
- A question does arise as to whether some individuals are ***receiving too much education*** (considered from an investment rather than a consumption perspective)?.
 - In other words, to what extent this is a real ***waste of resources?***.
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Aims

- ***Update*** the evidence at *cross-country level* of the overeducation phenomenon using the most *recent European data sets* available. (Issue of comparability)

 - Does Europe face a problem of overeducation?. What is the evidence? Does it matter?
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Trends in overeducation (1994-2001)



Data sets

- *E-living survey (UK, Italy, Germany, Norway, Bulgaria, Israel):*

 - *ECHP (Denmark, France, Ireland, Greece, Italy, Portugal, Spain):*
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E-living vs ECHP definitions

E-living:

“What qualification does someone *usually need* to be *able* to do your job?”

“What is the *highest qualification* that you *have*?”

This question provides an *indirect self-assessment* measure of overeducation by cross reference of separate qualifications & job questions.

ECHP:(simplest possible definition)

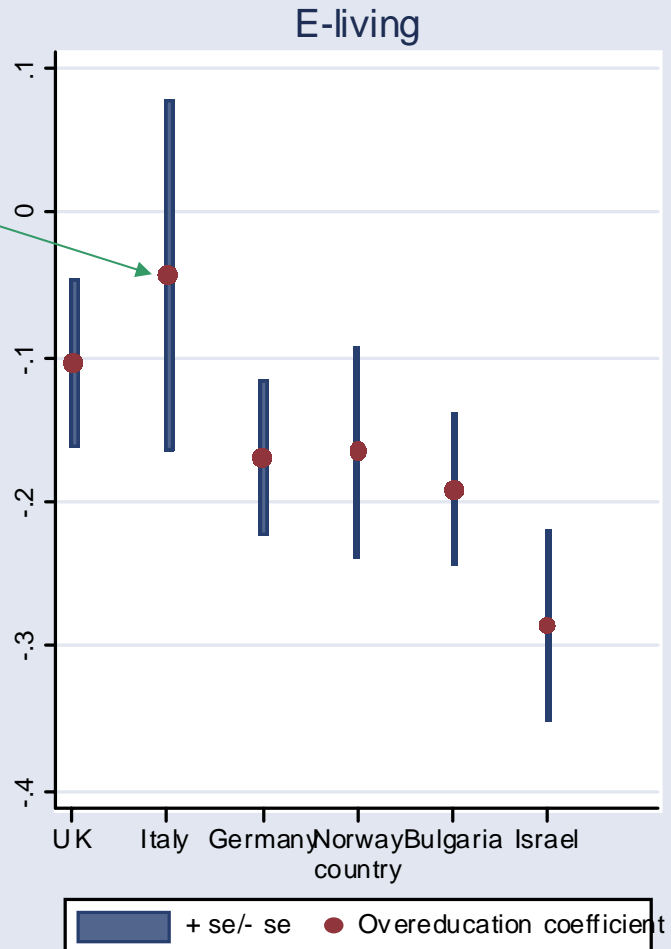
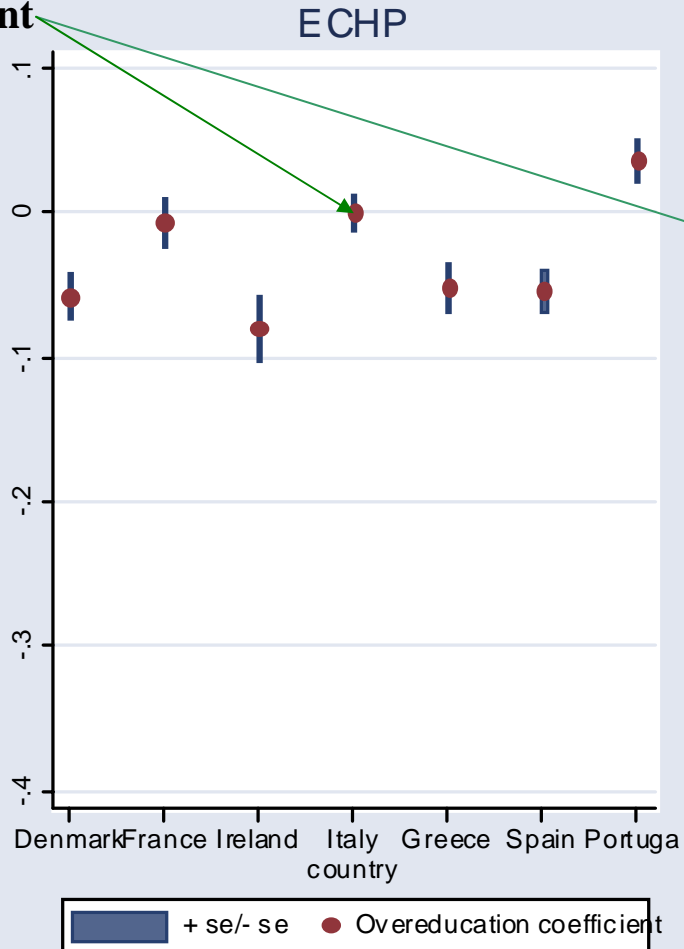
“Do you feel that you have *skills or qualifications* to do a *more demanding* job than the one you have now?”

This question provides a *direct self-assessment* measure of overeducation in terms of *job content*.

The effects of overeducation on earnings, 2001

E-living vs ECHP

Italy, not significant



Effect of Overeducation??

- Empirical evidence: **-1.9%**
to -17.6%.
 - Although the result implies that overeducated workers are at a relative disadvantage compared to their adequately educated counterparts, it ***does not implies a negative return to years of surplus educational investment.***
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Explanations??

- ✓ **Inequality of opportunity** - by education specialism and by occupation & by social class
- ✓ **Labour market flexibility:** Job themselves change as they are performed by high skilled workers (feedback).
- ✓ **Location mismatch:** Supply and demand of skilled workers misallocated.
- ✓ **Dynamic adjustment:** Due to family and job mobility (career break, move location, etc.). It is also possible that workers are initially hired

for lower jobs.