Gender segregation in education, training and the labour market:

Emerging findings from the Beijing Platform for Action report

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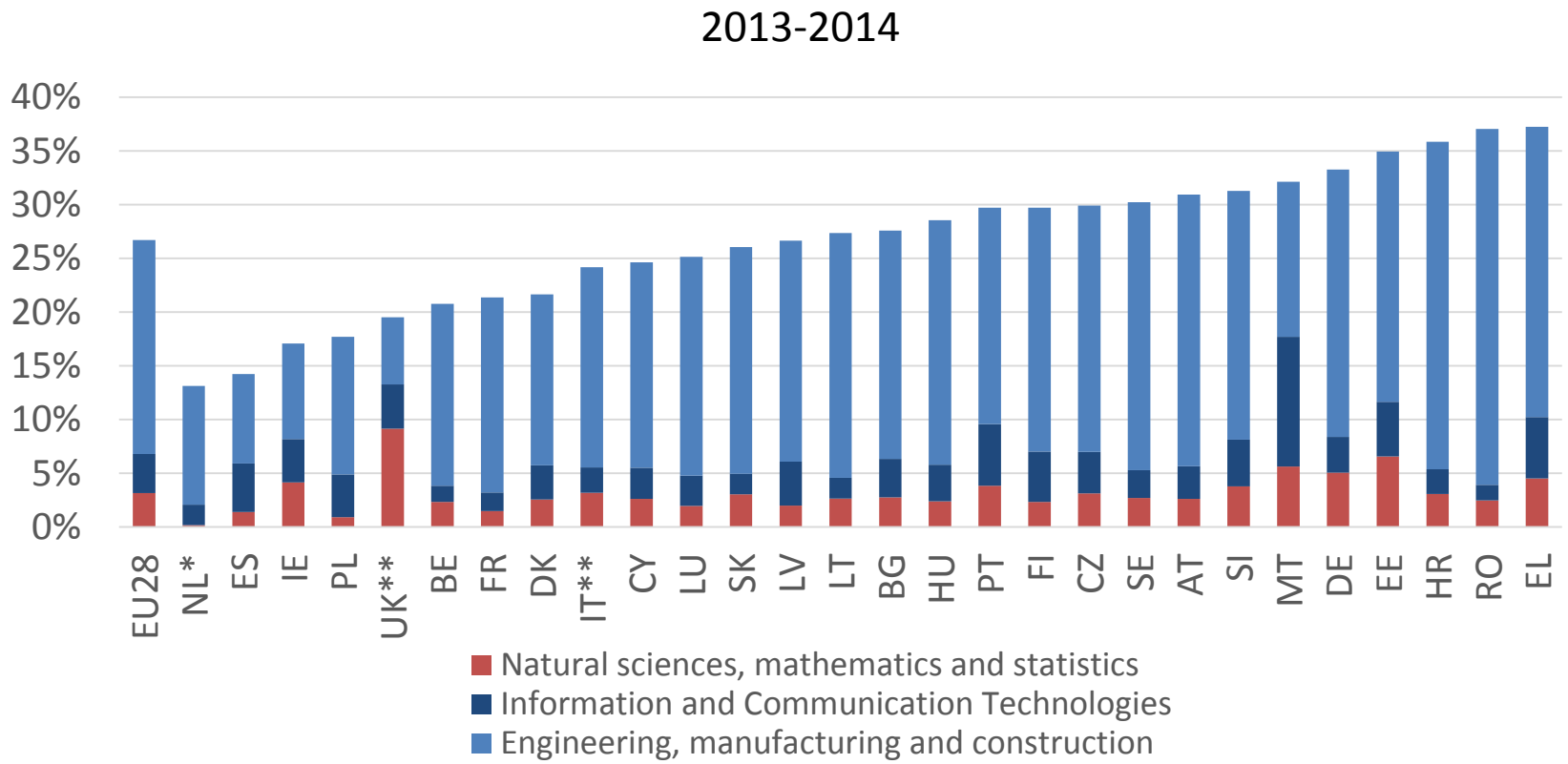
QUICK BACKGROUND

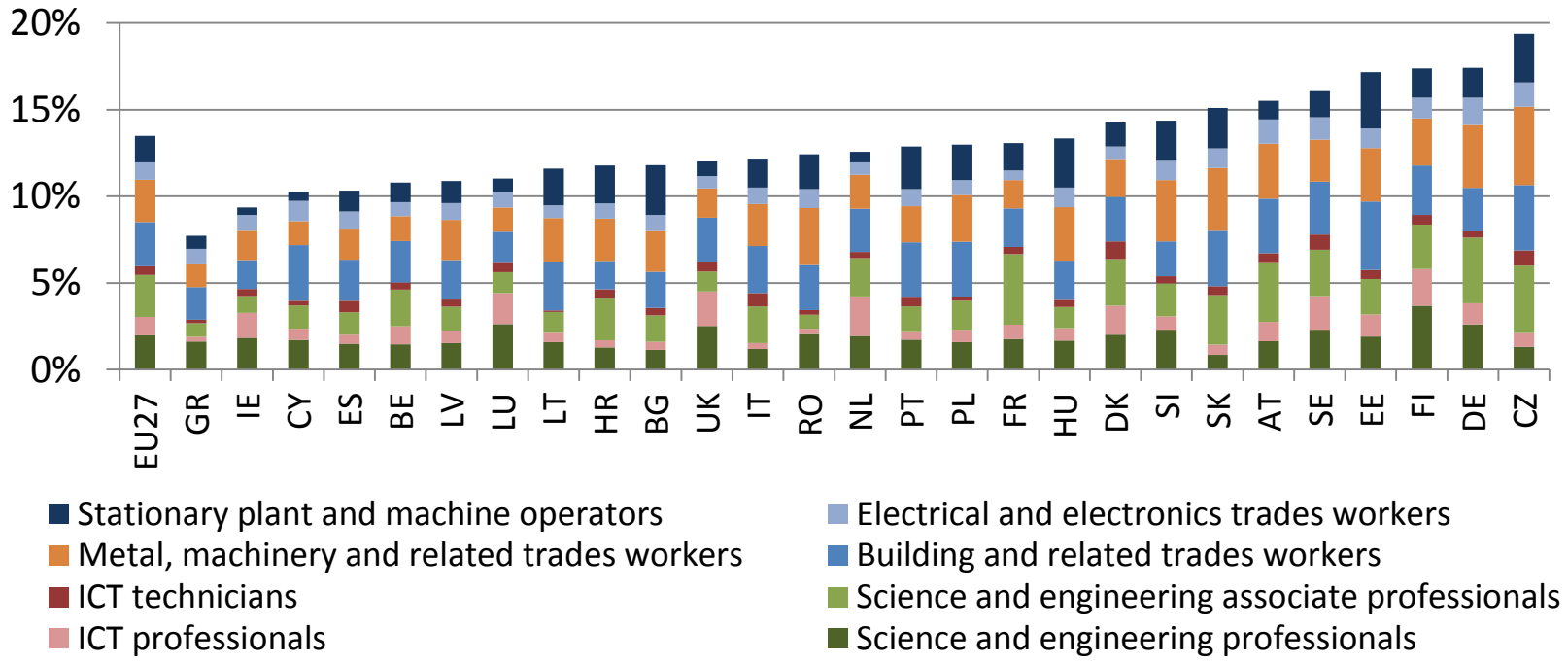
STEM: share of graduates



- Engineering, manufacturing and construction with 20% of all graduates is the largest study field of STEM disciplines.

Main STEM occupations

- Science and engineering (associate) professionals refer to the largest STEM occupation type - in 23 EU countries, from 22% to 45% of all STEM employees



- In RO and HU – metal, machinery and related trades workers is the largest occupation; in Bulgaria – stationary plant and machine workers; in Cyprus – building and related workers.

Rising demand, major shortages

- Demand for STEM professionals and associate professionals is expected to grow by around 8% by 2025, much higher than the average 3% growth forecast for all occupations (Cedefop)

- Major skills shortages of STEM and ICT professionals are already observed across all EU countries and expected to exacerbate with future demographic developments (i.e. large retiring foreseen)

- In spite of a series of measures, **women participation in STEM studies, in particular in engineering, remains low in most Member States**

- An insufficient supply of STEM skills and a low participation rate of women in STEM studies are perceived as barriers, which could impede a job rich recovery and growth of economy

EIGE's report

MONITORING BEIJING PLATFORM FOR ACTION (BPFA)

Beijing Platform for Action

- To support better informed policy-making at EU and Member State levels, EIGE provides support to the Presidencies of the Council of the EU.
- EIGE's reports assess progress in gender equality in the critical areas of concern of the BPfA chosen by the Presidencies.
- Gender segregation in education, training and the labour market – the topic chosen by the forthcoming Estonian Presidency of the Council.

BPfA areas of concern

	Current BPfA Indicators
B. Education and Training of Women	• Proportion of female graduates and male graduates of all graduates in mathematics, the sciences and technical disciplines (tertiary education); • Proportion of female/male ISCED 5a-graduates of all ISCED 5a-graduates and proportion of female/male PhD graduates of all PhD graduates by broad field of study and total
F. Women and the economy	Proportion of women and men among tertiary graduates of all graduates (ISCED levels 5 and 6) in natural sciences and technologies at the EU and Member State level
K. Women and the environment	Gender segregation: gender pay gap
L. The girl child	• Proportion of girl students in tertiary education in the field of science, mathematics and computing and in the field of teacher training and education science • 15-year-old girls and boys: performance in mathematics & science

Rationale

- Gender segregation in education and training → labour market stratification → results in:

  →supporting gender stereotypes; narrowing life-choices and employment options; gender pay gap, etc.

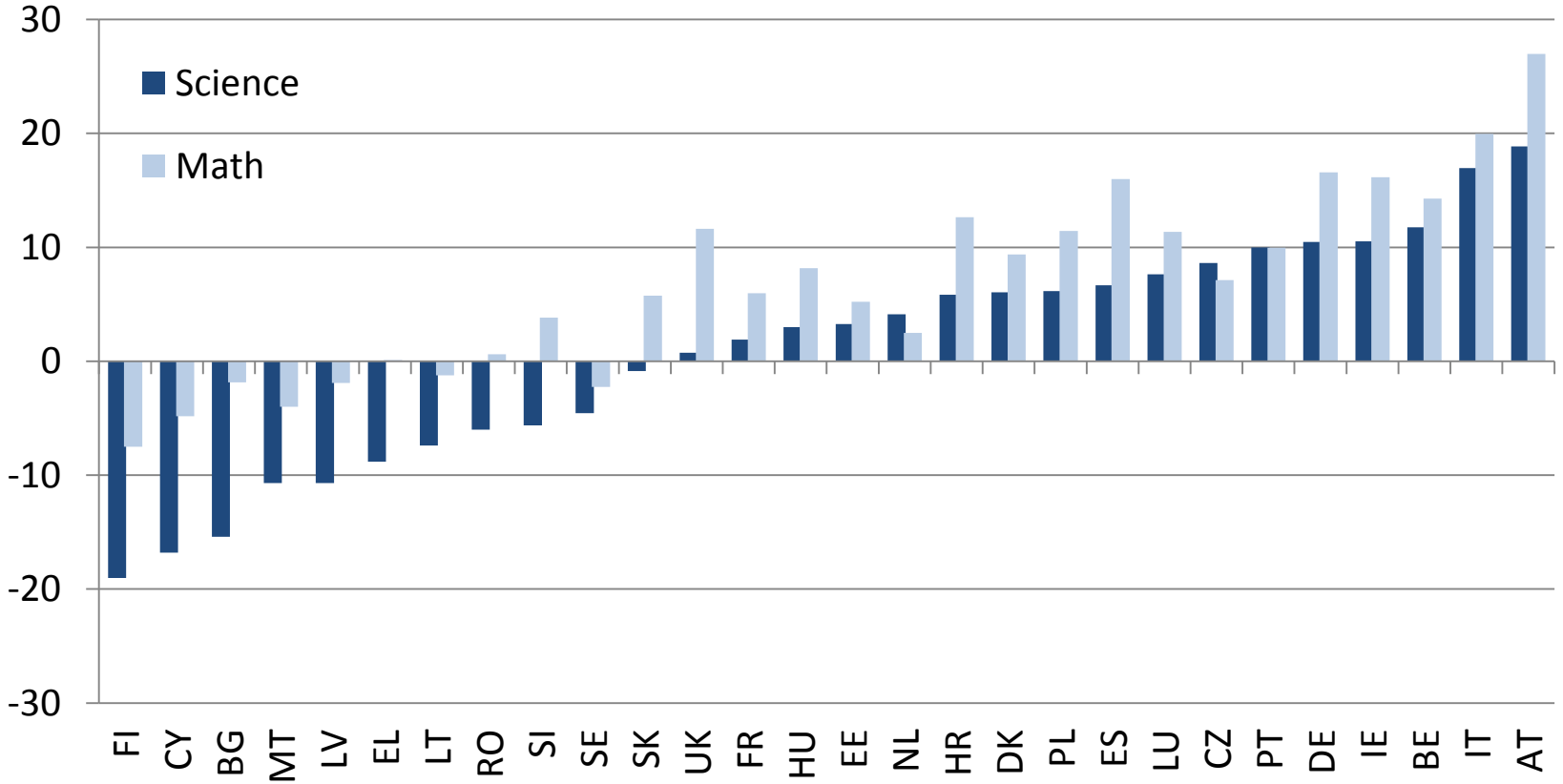
  →A causal link.

- Addressing: participation of women in STEM; participation of men in education, health and welfare (EWH).
- Policy context: a need of active intervention guided by evidence.

EMERGING FINDINGS: STEM

Achievements: science and mathematics

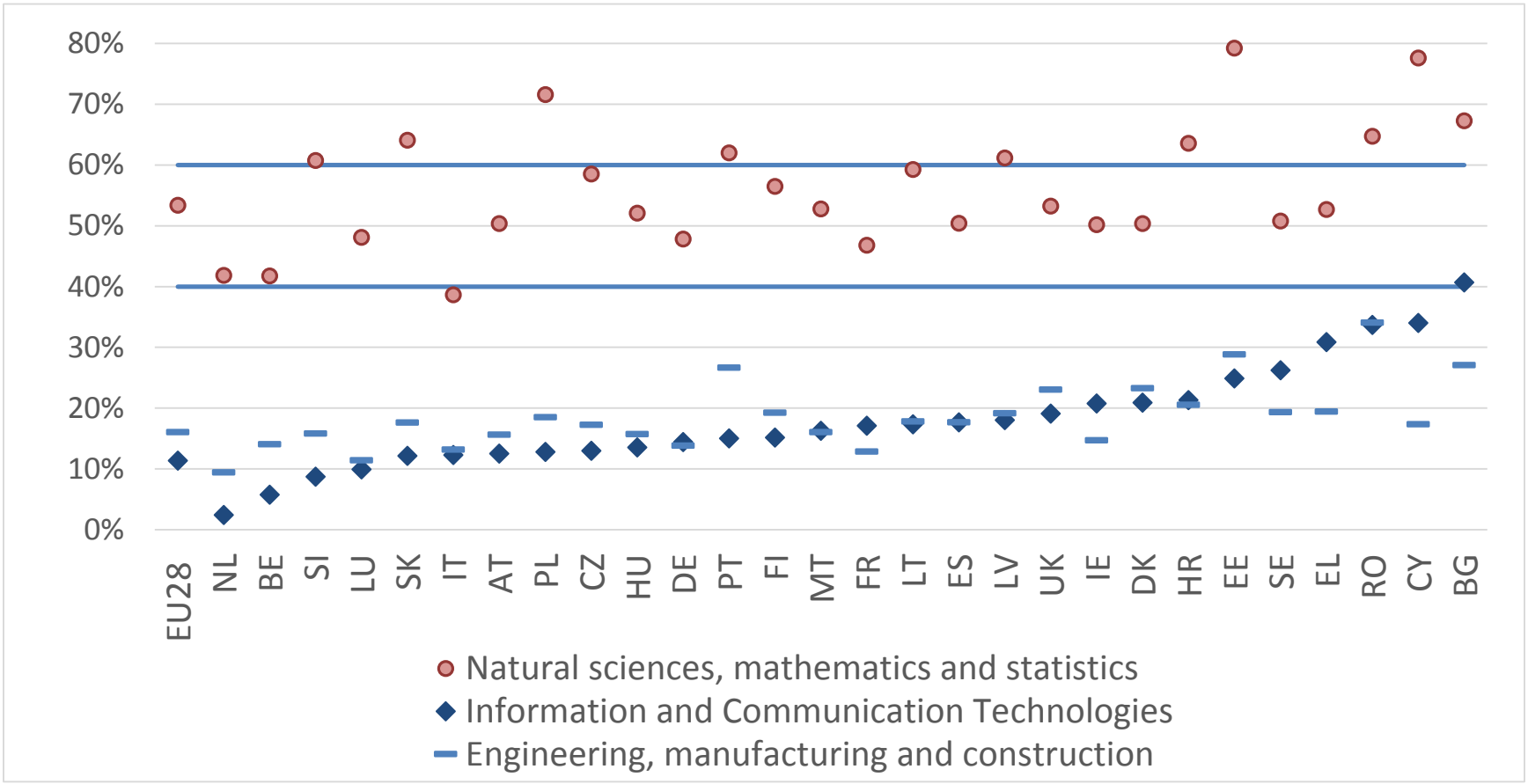
- Gender difference in 15 year olds' mean achievement in science and mathematics: 2015



Source: OECD PISA http://www.oecd.org/pisa/data/

Women's share in STEM

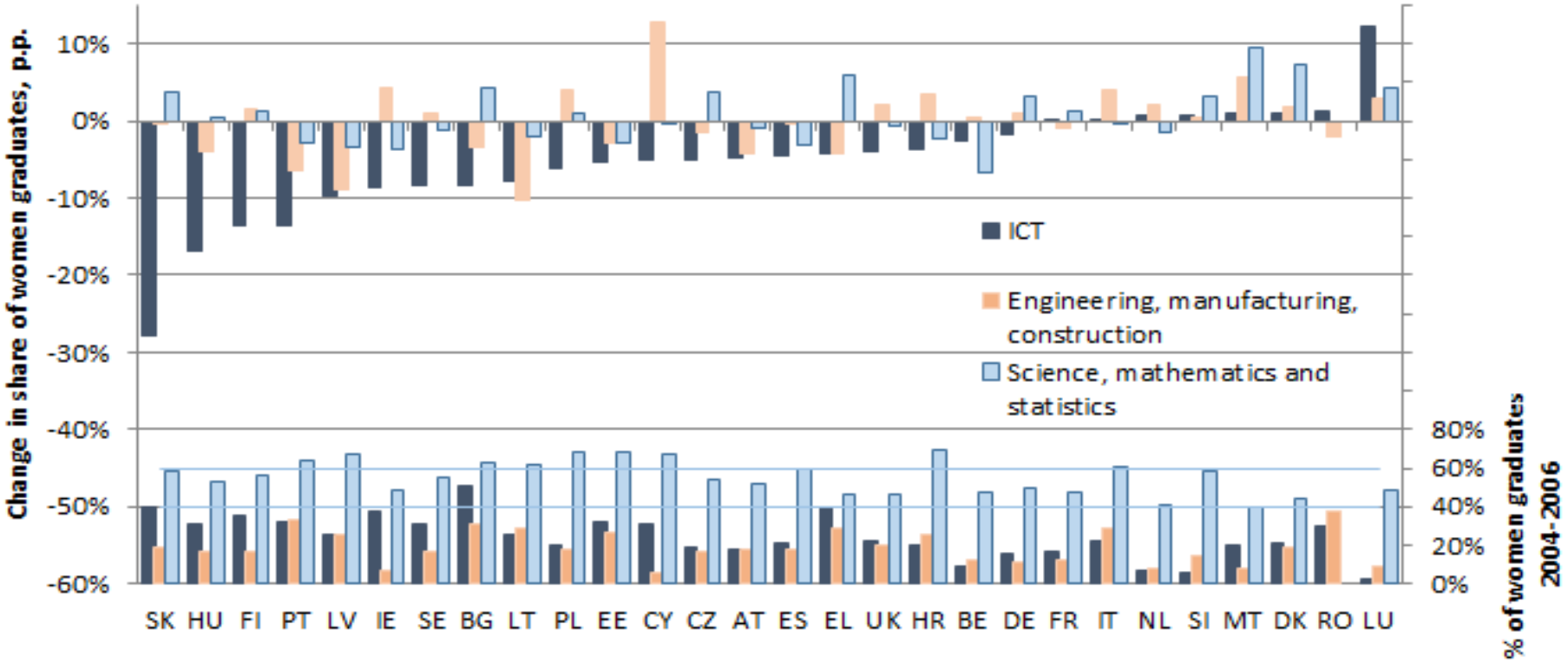
2013-2015



Source: Eurostat, UOE data collection on education: educ_uoe_grad02

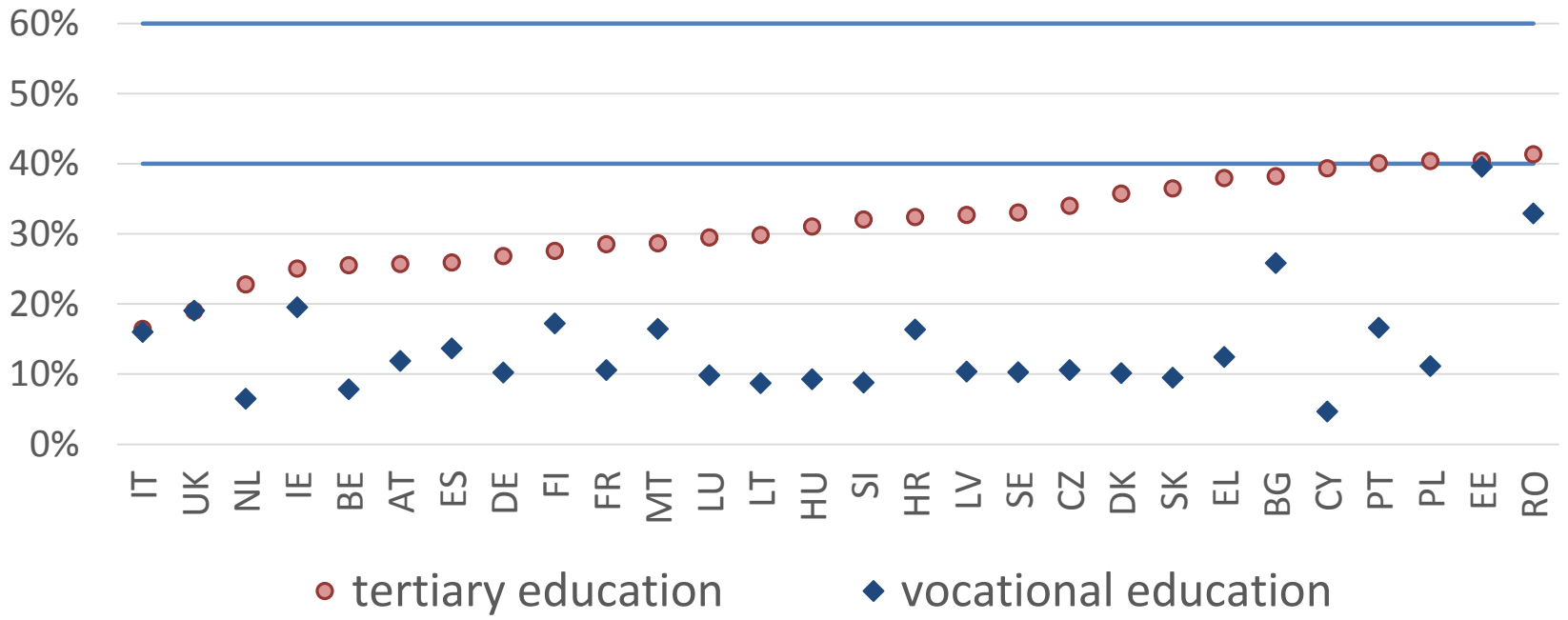
Changes over time

- Progress stalled or eroding: 2004 to 2014



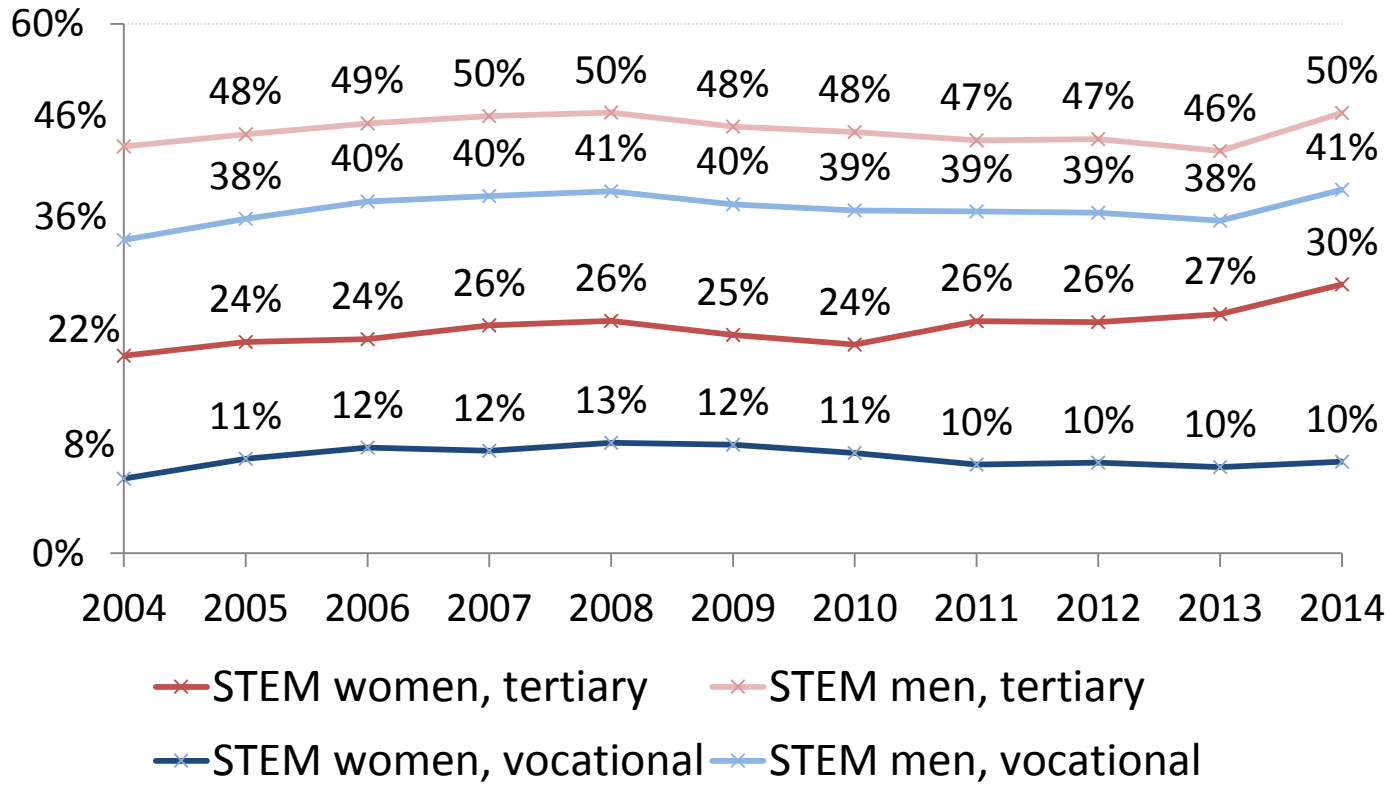
Segregation by education level

- Gender segregation in STEM is much worse within vocational education than within tertiary education level (2013-2015);
- About 55% of all students are enrolled in vocational education programmes.



Graduates working in STEM field

- No smooth transition to the labour market, especially for women with vocational education level

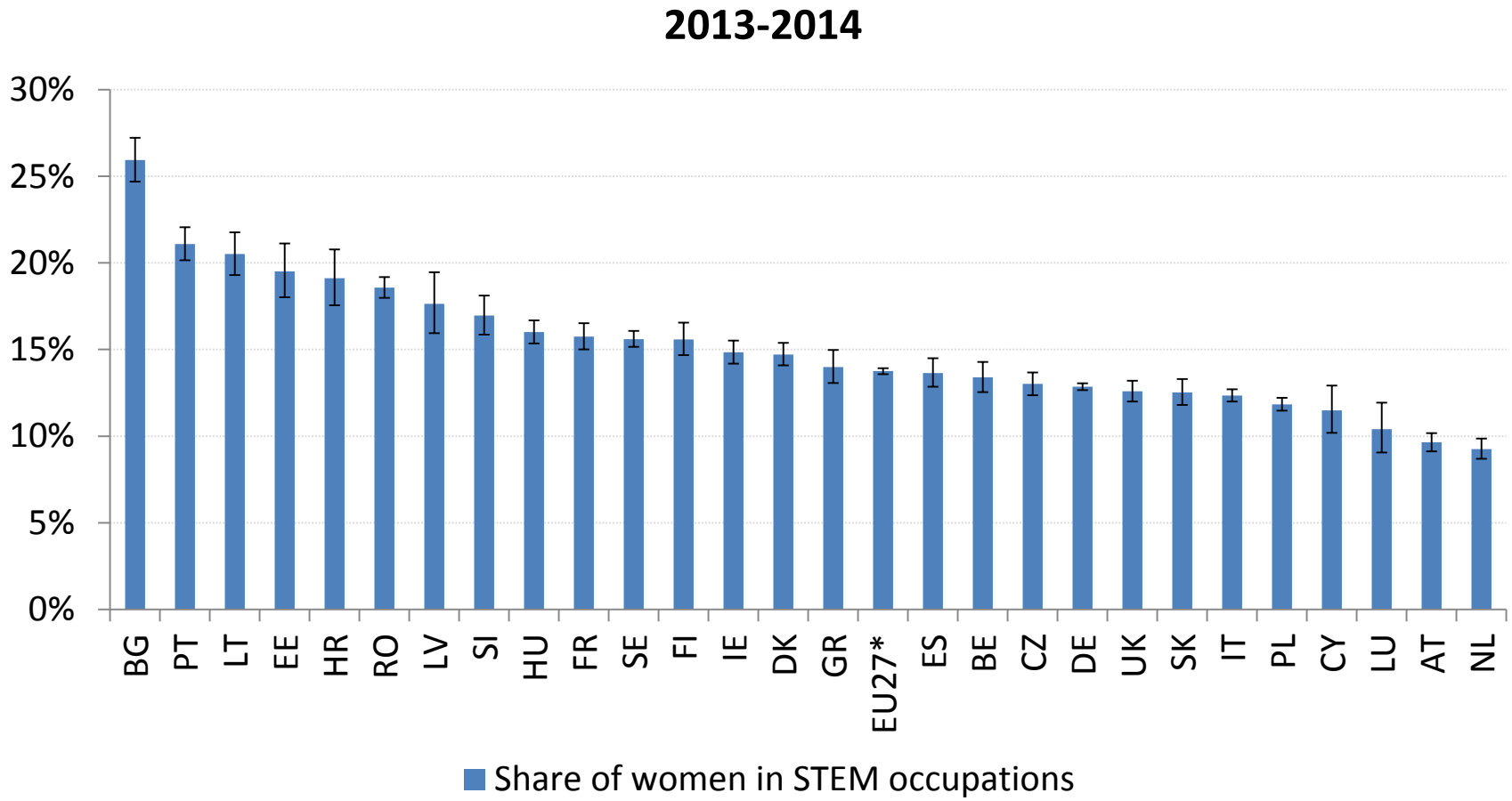


If leaving STEM: occupations of STEM graduates

EU, 2014

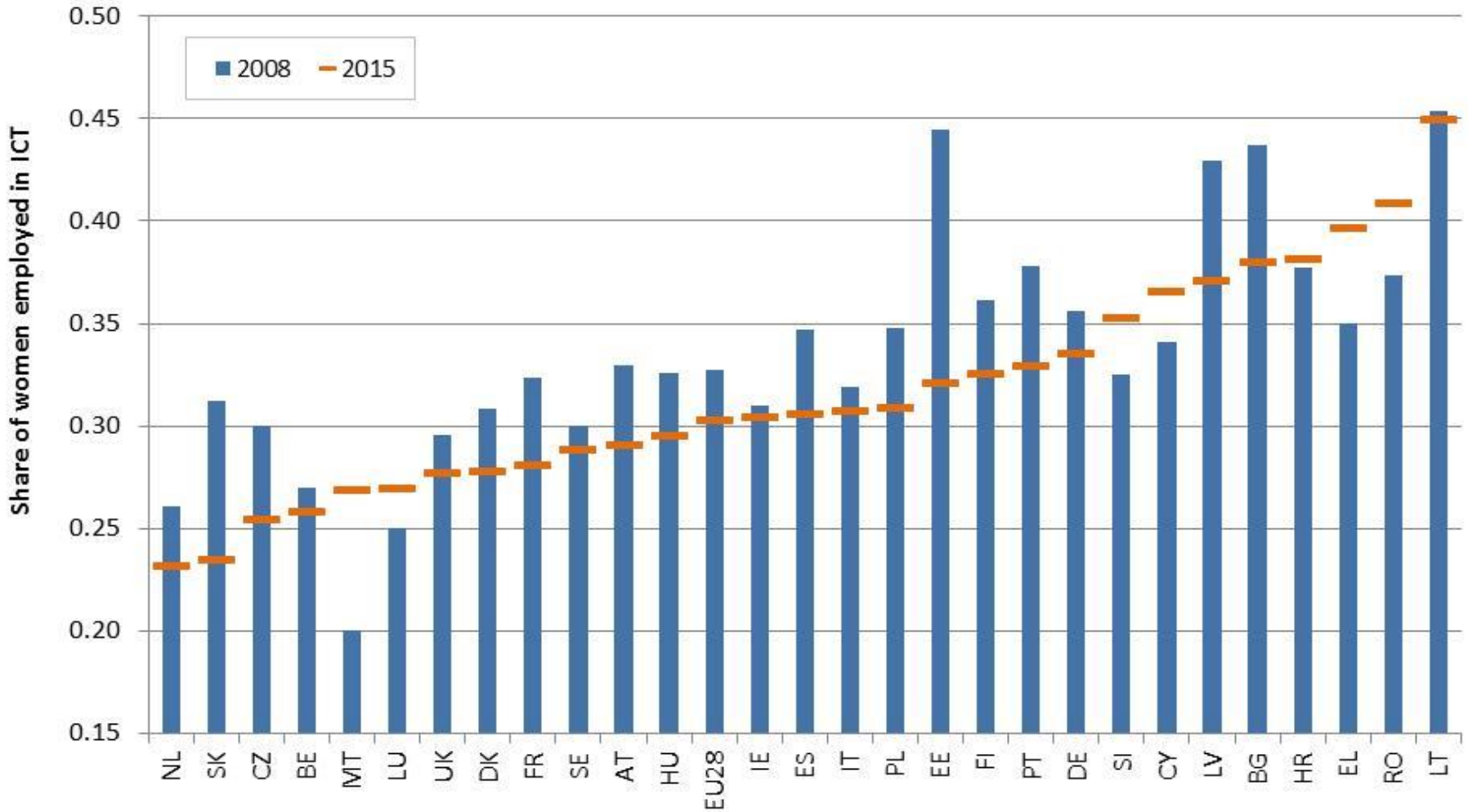
	Tertiary		Vocational	
	women	men	women	men
Teaching professionals	21%	12%		
Business and administration professionals	11%	11%		
Business and administration associate professionals	10%	10%	4%	4%
Production and specialized services managers	5%	13%		
Sales workers	7%	4%	20%	7%
Food Processing, Woodworking, Garment and Other Craft and Related Trades Workers			11%	10%
Personal Services Workers			10%	
Drivers and Mobile Plant Operators		3%		15%
Labourers in Mining, Construction, Manufacturing and Transport			4%	10%

Share of women in STEM occupations



Essentially progress recorded since 2004 with 1 p.p. at the EU level.

Share of women employed in ICT, 2008-2015

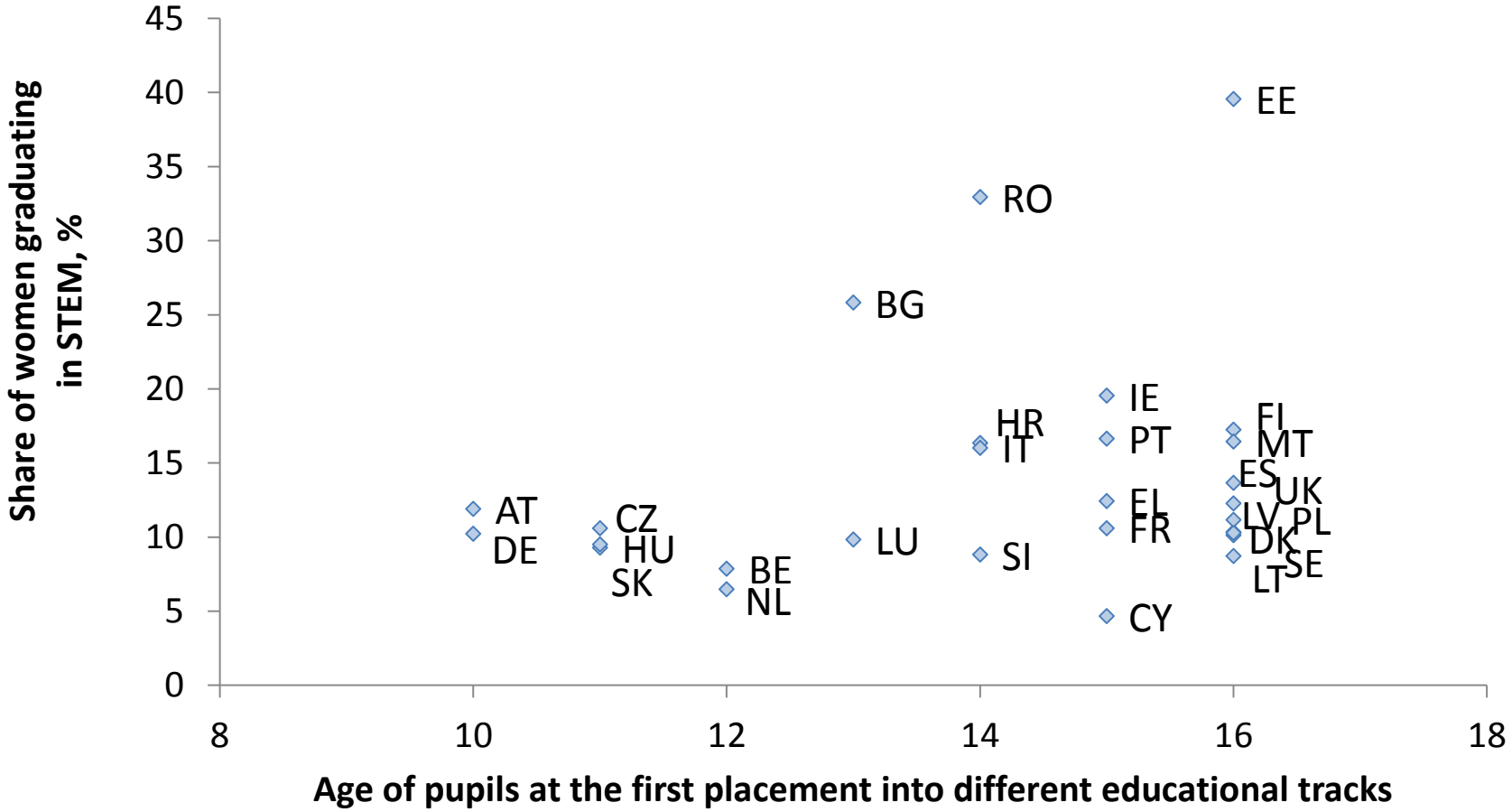


SELECTED INFLUENCES

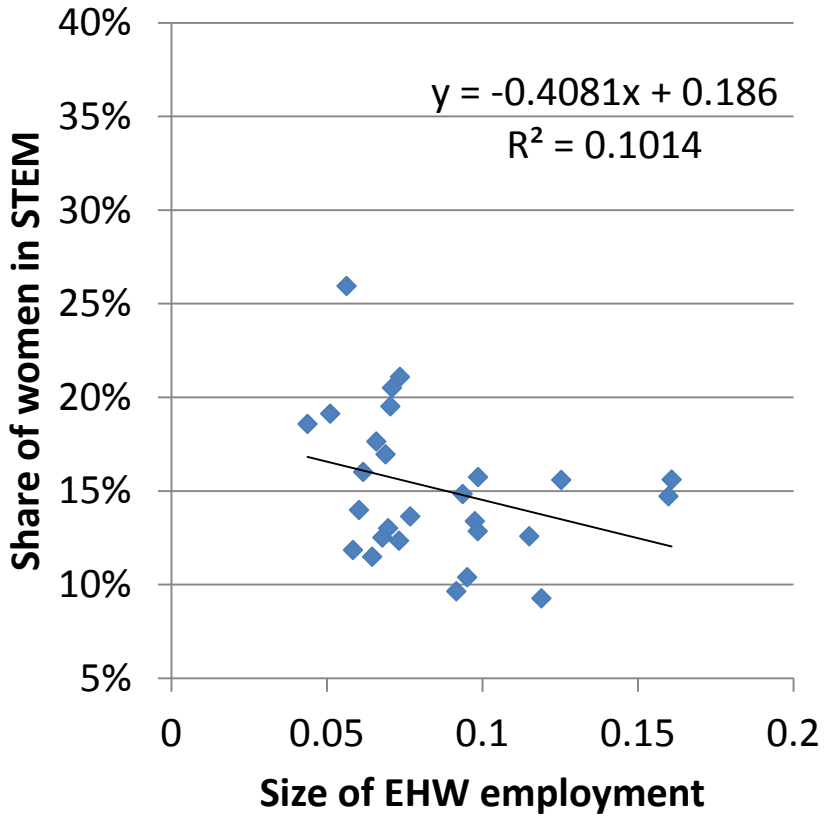
Barriers to the participation of women in STEM

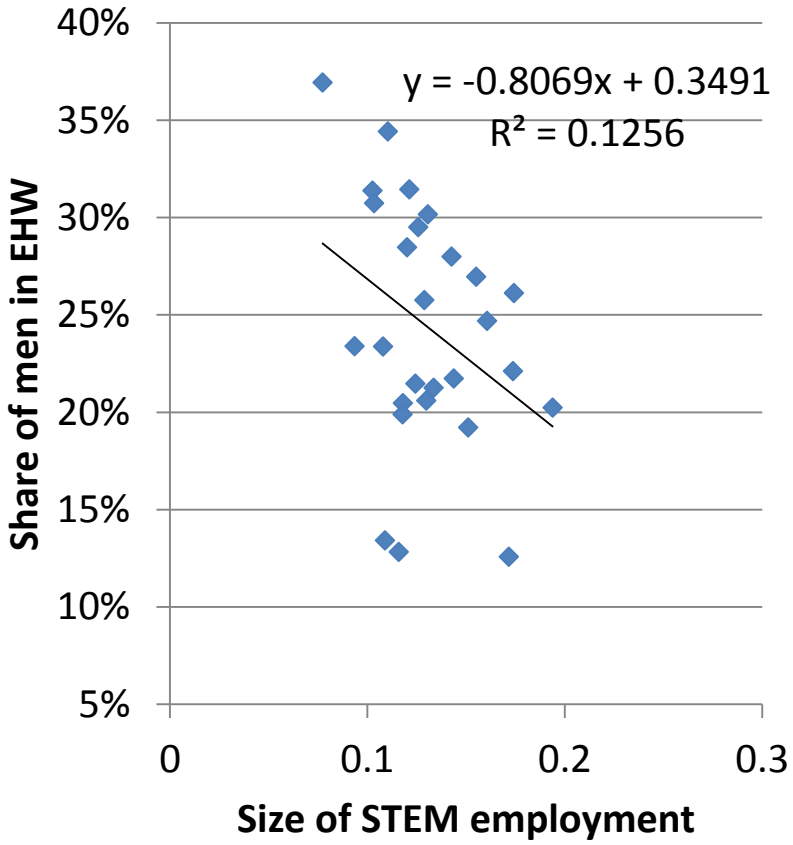
- Stereotypes, social norms and cultural practices
- Negative image of STEM
- Welfare policies
- STEM fields not considered as family-friendly
- Family background and the absence of women role models
- Male dominated culture
- Biased recruitment, appraisal and promotion procedures
- Limited access to networks, information, funding or institutional support, biased research evaluation procedures, low recognition in the field

Design of education systems matters

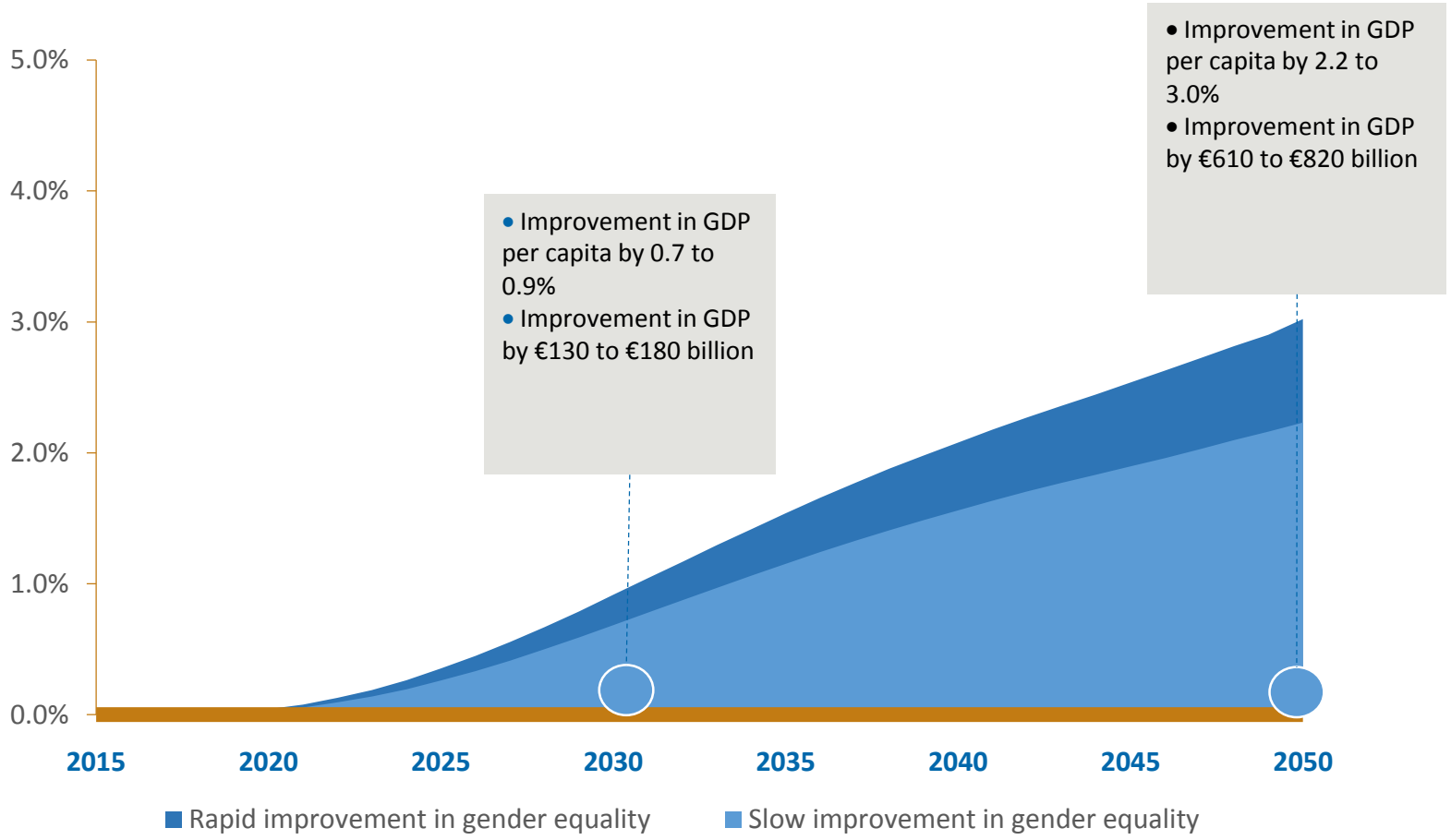


Structure and size of labour markets

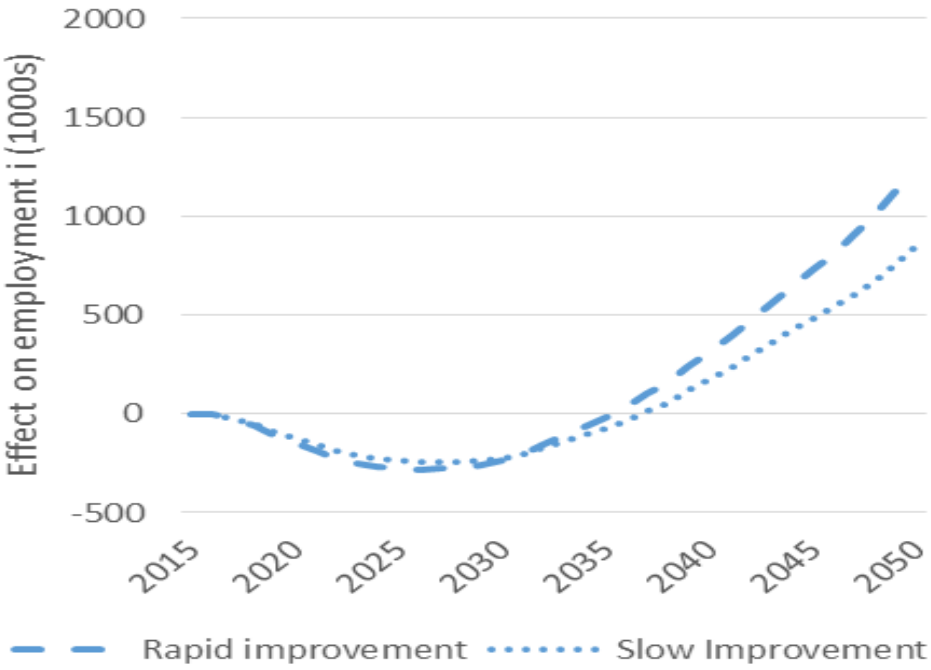




Effect of narrowing the gender gap in STEM on GDP per capita



Effect of narrowing the gender gap in STEM on employment



1.2 million jobs

Conclusions

Gender segregation in education and the labour market is associated with **creating and perpetuating gender inequalities** in and beyond the labour market

Segregation **narrows employment choices** and **reinforces gender stereotypes**

The objective of gender equality policy should not necessarily be a homogenisation of the labour market by gender, although **gendered roles shall be equally valued and remunerated**

Conclusions

Gender inequalities are **dragging down** women's economic opportunities and affecting the **entire EU economy**

Leading to **shortfall** in terms of achieving inclusive and sustainable growth

To **reach** the goal of **smart, sustainable and inclusive economic growth**, the **EU must** improve existing and introduce further **gender equality measures**

Thank you!

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