

Education and Training in a Period of Economic Crisis

EUNEC Seminar

Limassol, Cyprus, 31 May – 1 June 2010

Education, Training and Equity

Anders Joest Hingel (Studies and Analyses)

**Dg Education and Culture
European Commission**



Treaty – Education

Art. 165 (ex. 149)

- 1. The Community shall contribute to the development of quality education by encouraging cooperation between Member States and, if necessary, by supporting and supplementing their action, while fully respecting the responsibility of the Member States for the content of teaching and the organisation of education systems and their cultural and linguistic diversity.***
- 2. Community action shall be aimed at:***
 - developing the European dimension in education, particularly through the teaching and dissemination of the languages of the Member States,***
 - encouraging mobility of students and teachers, by encouraging inter alia, the academic recognition of diplomas and periods of study,***
 - promoting cooperation between educational establishments,***
 - developing exchanges of information and experience on issues common to the education systems of the Member States,***
 - encouraging the development of youth exchanges and of exchanges of socioeducational instructors,***
 - encouraging the development of distance education.***

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Quality of learning systems

- Learning systems with roots in national/local realities
- National / local quality strategies and policies
- Role of Europe : support cooperation between member states

The educational system should “supply the right skills which effectively meet the changing needs and requirements” (UKCES, 2010)

- Need of increasing skills levels in high, intermediate and generic skills

- Main sectors

...for the labour market
BUT also... for society as a whole.

Competitiveness, productivity, innovation,
creativity, active citizenship, well being,
leisure, happiness, health...

- Customer services, engineering, processing, ... (the “skilled trades”)
Retailing, after-service, maintenance

- BUT also lower skills are needed: “significant employment will remain in sectors requiring low skills (but with need of up-skilling over time)”

Occupations decreasing more than 50% since 2000 in the UK (number of jobs)

(UKCES, 2010)

Assemblers (electrical, metal and vehical)	-65%
Typists	-59%
Bookbinders, print finishers	-58%
Metal making operatives	-57%
Telephonists	-55%
Precision instrument makers and repairers	-54%
Sewing machinists	-52%
Tool makers and tool fitters	-52%

Occupations increasing more than 90% since 2000 in the UK (number of jobs)

(UKCES, 2010)

Environmental protection officers	+124%
Paramedics	+114%
Legal professionals	+109%
Refuse and salvage occupations	+104%
Leisure and theme park attendants	+102%
Town planners	+94%
Educational assistants	+ 91%
Driving instructors	+ 91%

Educational attainment in the EU (2000-2008)



Formal education
(diplomas)

**Change in share of population
15-64 years old (2000 - 2008)**

Low educ. att.	- 5.7 %
Medium educ. att.	+ 1.5 %
High educ. att.	+ 4.2 %

Educational attainment and employment (EU)

Employment rates 15-64 years old (2008)

Low educ. att.	48.1 %
Medium educ. att.	70.6 %
High educ. att.	83.9 %
Overall employment rate	65.9 %

Educational attainment and employment (EU)

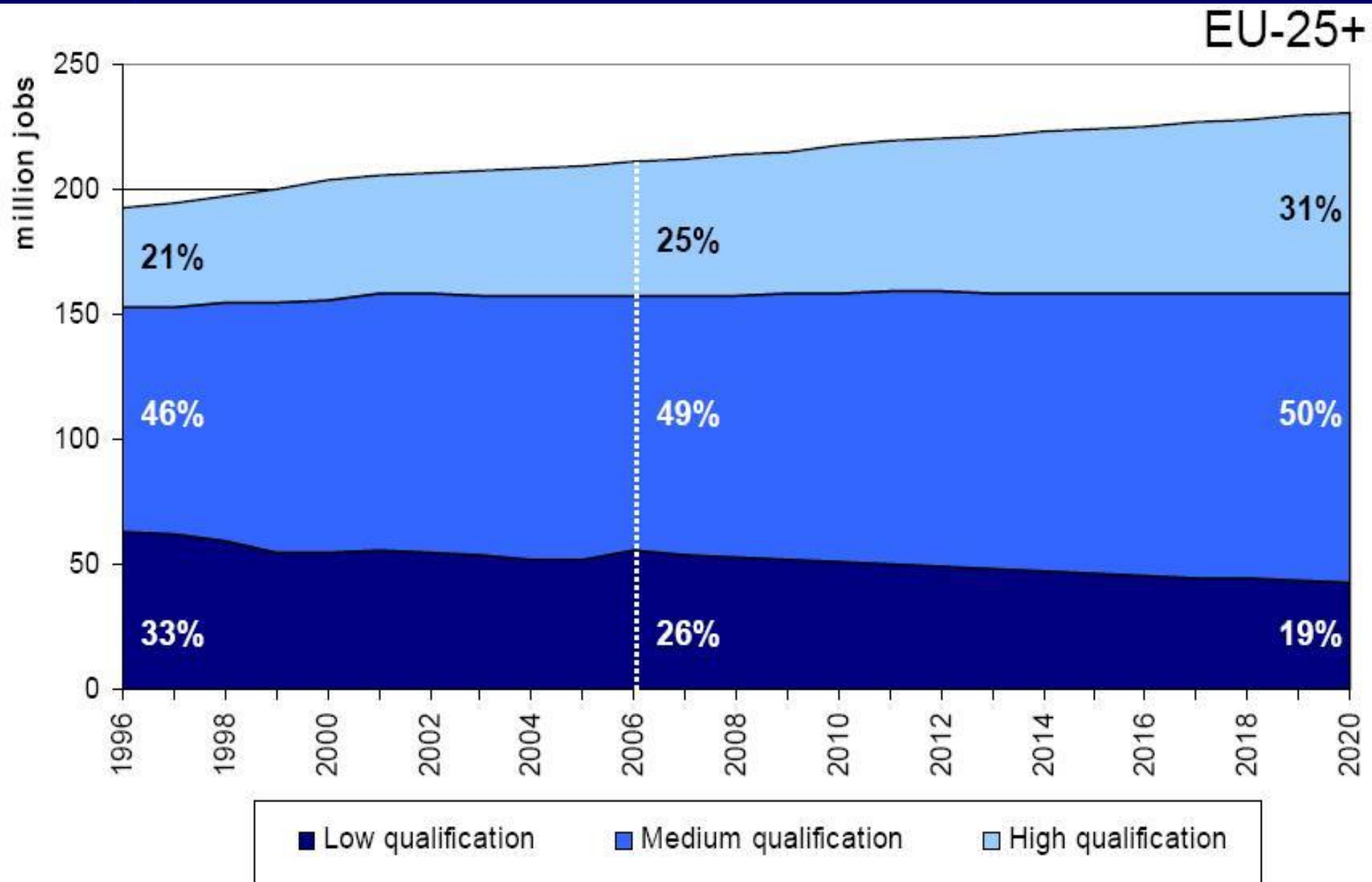
**Change in Employment rates
15-64 years old (2000 - 2008)**

Low educ. att. - 0.7 %

Medium educ. att. + 2.3 %

High educ. att. + 1.5 %

Future composition of the labour force (1996-2020):

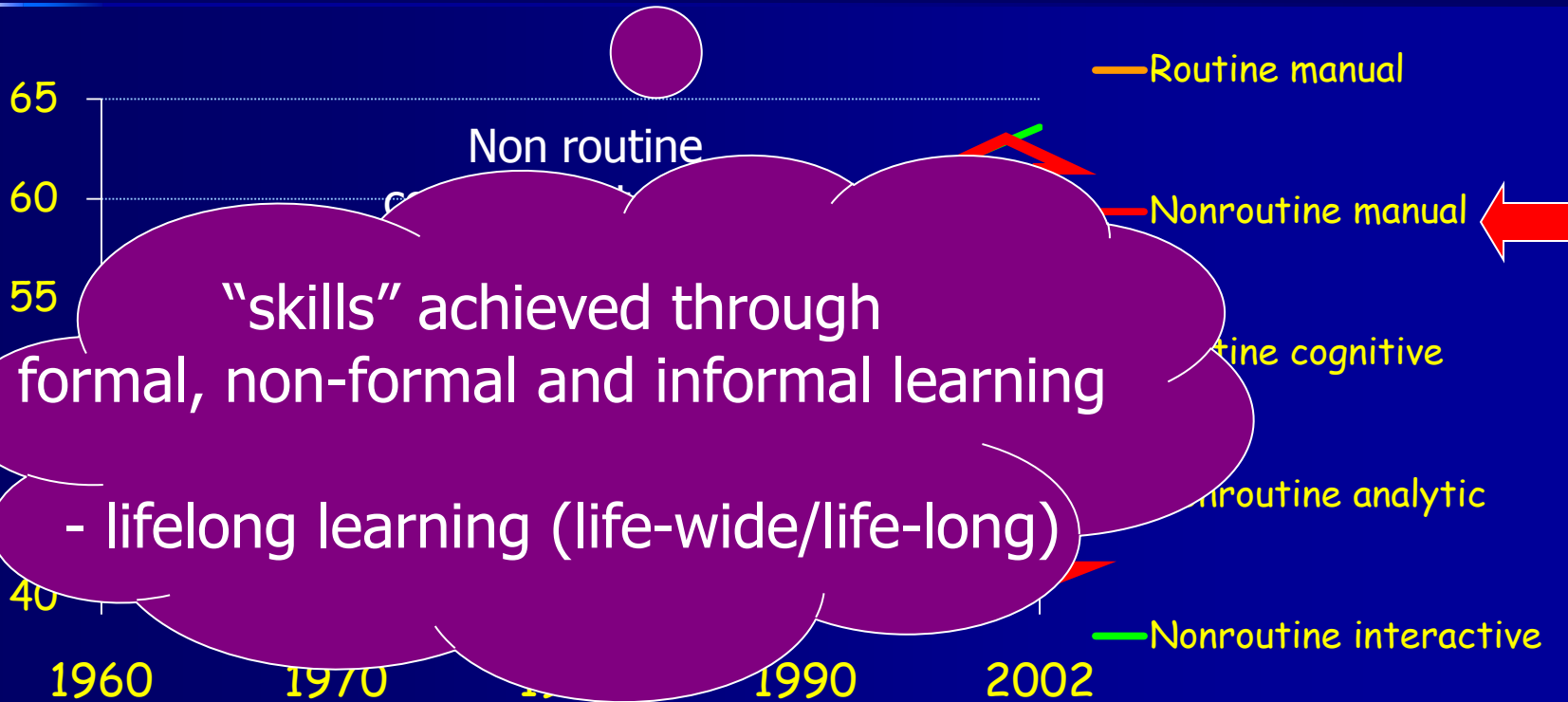


Source: CEDEFOP, 2008

How the demand for skills has changed

Economy-wide measures of routine and non-routine task input - 1960-2002. (US)

Mean task input as percentiles of the 1960 task distribution



(Levy and Murnane)

Useful qualities to find a good job (15-30 years old) (Eurobarometer, 2007)

- IT, computer, communication technology skills

- Italy	30%
- EU	18%
- Denmark	15%
- France	14%

- Foreign Languages

- Italy	25%
- EU	18%
- Germany	10%
- Denmark	7 %

- Communication and team work

- Italy	17%
- EU	27%
- Denmark	38%
- UK	31%

- Good appearance

- Italy	3 %
- EU	5 %
- Sweden	22%

Diversity in Europe.
Labour market differences
but also cultural diversity

...

Ask the question on
"satisfaction" with private life
and we observe great
cultural diversity in Europe

Indicators on Employability and education/training

I. Preparation for employment

- 1. Index on : The share of young people having participated in the VET stream of upper secondary level compared to the share of young people not in education and training with educational attainment levels ISCED 3 or below.**

II. Transition from education to work

- 2. Percentage of young people who graduated in t-2/t-3 and are unemployed/employed (in t)**
- 3. Percentage of young people (25-29, 25-34) by level of educational attainment employed at a relevant skills level**

III. Education for maintaining employability

- 4. Participation rate in LLL of older workers (55-64)**
- 5. Participation rate in LLL of low skilled workers (ISCED 0-2)**
- 6. Graduates (ISCED 5-6) aged 35 years and over as % of total graduates**

**Key competences for being
integrated in society and in the
labour market**

-

**To be achieved in initial
education and training, but
updated and maintained
throughout life**

**Are the European educational
systems answering such
challenges of society**

Reference framework of 8 key competencies

EU Recommendation of the EP and the Council (Dec. 2006)

Communication in the mother tongue

Communication in foreign languages

Math, science and technology competence

Digital competence

Learning to learn competences

Social and civic competences

Sense of initiative and entrepreneurship

Cultural awareness and expression

Monitoring and Analysing Progress

FIVE EUROPEAN BENCHMARKS FOR 2010

- 10% Early school leavers (young people)**
- 20 % Less low performers in reading literacy**
- 15% More new Math, Science and Technology graduates**
- 85 % Upper secondary graduates (young people)**
- 12.5% Lifelong learning participation (adults)**

Council conclusion 2003

Council Conclusions 2006

SIXTEEN CORE INDICATORS

- | | |
|---|---|
| 1. Participation in pre-school education | 9. Upper secondary completion rates of young people |
| 2. Special needs education | 10. Professional development of teachers |
| 3. Early school leavers | 11. Higher education graduates |
| 4. Literacy in reading, maths and science | 12. Cross-national mobility of students |
| 5. Language skills | 13. Participation of adults in lifelong learning |
| 6. ICT skills | 14. Adults' skills |
| 7. Civic skills | 15. Educational attainment of the population |
| 8. Learning to learn skills | 16. Investment in education and training |

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LEARNING TO LEARN

The learning to learn framework

The **affective dimension** is comprised of 3 sub-dimensions;

- Learning motivation, learning strategies and orientation towards change
- Academic self-concept and self-esteem
- Learning environment

The **cognitive dimension** is based on the 4 sub-dimensions;

- Identifying a proposition
- Using rules
- Testing rules and propositions
- Using mental tools

Meta-cognition which comprises 3 subdimensions;

- the problem solving (metacognitive) monitoring tasks,
- metacognitive accuracy
- metacognitive confidence

CREATIVITY

Creativity at individual level

- **Enables people to purposefully produce new, original ideas, adequate to the situation they are being applied to**
- **essential dimensions of creativity: analogical and divergent thinking and risk taking (the risk to be wrong!)**
- **It can be developed, nurtured and taught !**

**autonomy
flexibility
preference for complexity
openness to experience
sensitivity
playfulness**

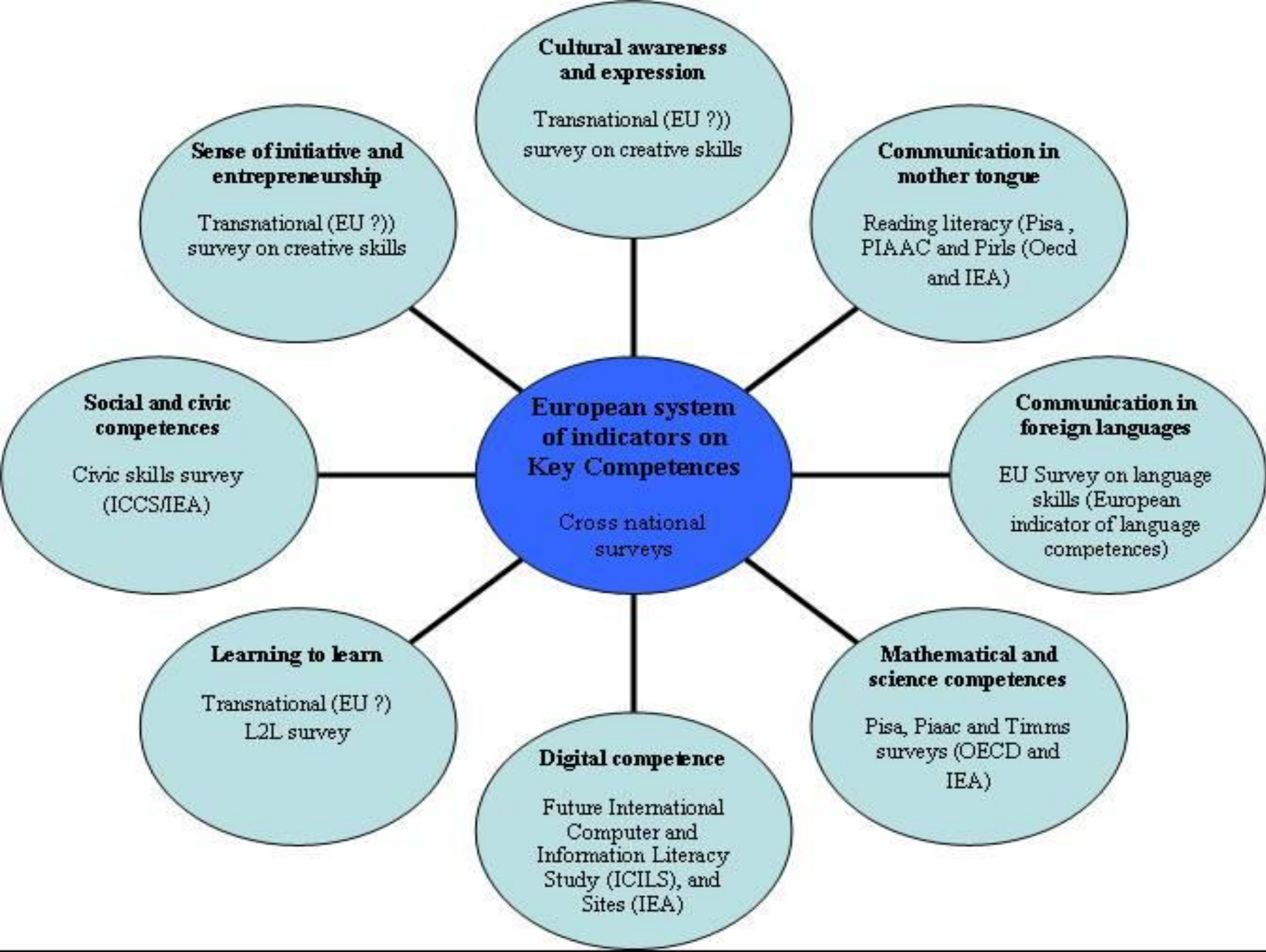
**tolerance of ambiguity
risk taking
risk tolerance
intrinsic motivation
self-efficacy
wide interest and curiosity**

Creativity at individual level

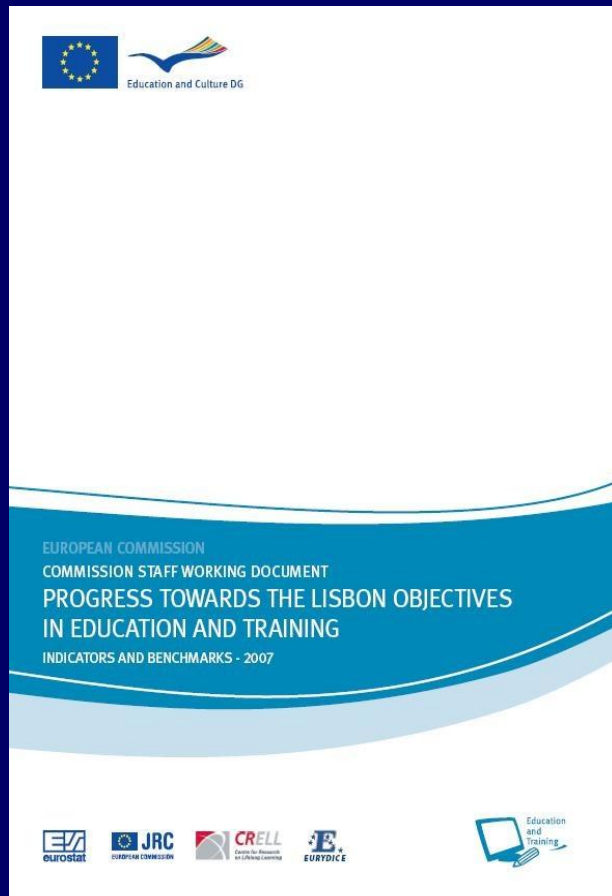
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Annual Progress Report on education and training



Prepared by

DG Education and Culture
in coopertion with:

CRELL/JRC
EUROSTAT
EURYDICE
CEDEFOP

http://ec.europa.eu/education/policies/2010/progressreport_en.html

5 EU benchmarks for 2010 and 5+ benchmarks for 2020

2010

10% early school leavers
20% less low performers
12.5% participate in LLL
85% upper secondary att.
15% more MST grad.

2020

10% early school leavers
15% low achievers
12.5% participate in LLL

95% participation in early
childhood education

**40% higher education
graduation (30-40)**

+

Learning Mobility (2010)

Employability and educ. (2010)

Foreign language (2012)

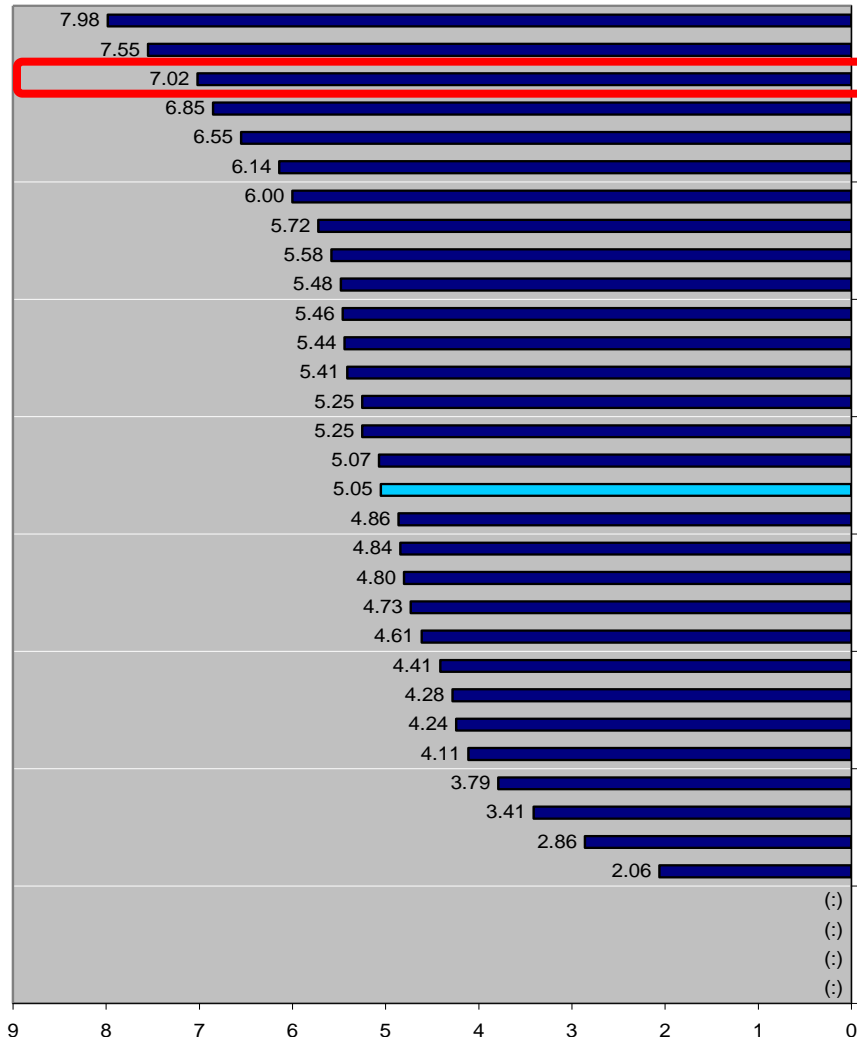
Education and training systems are improving 2000-2008 - EU(27)

Core indicators for monitoring progress of Lisbon process in the field of education and training	Evolution 2000 - 2008 %
Share of 30-34 year olds with tertiary attainment	+39.5
Graduates in Mathematics, Science, Technology	+33.6 ²
High education attainment of the adult population aged 25-64	+24.9
Adult Lifelong Learning participation, 25-64	+12.3
Average number of foreign languages learned per pupil at general lower secondary education	+15 ²
Early leavers from education and training, 18-24	-15.2
Participation in early childhood education	+ 6.0 ²
Public investment in education	+ 0.5 ¹
Population aged 20-24 having completed at least upper-secondary education	+ 2.5
Pupils with special education needs in segregated settings	0. 0
Participation patterns in initial Vocational education and training	- 6.5 ²
Low-achievers in reading, 15 year olds	+13.1 ¹

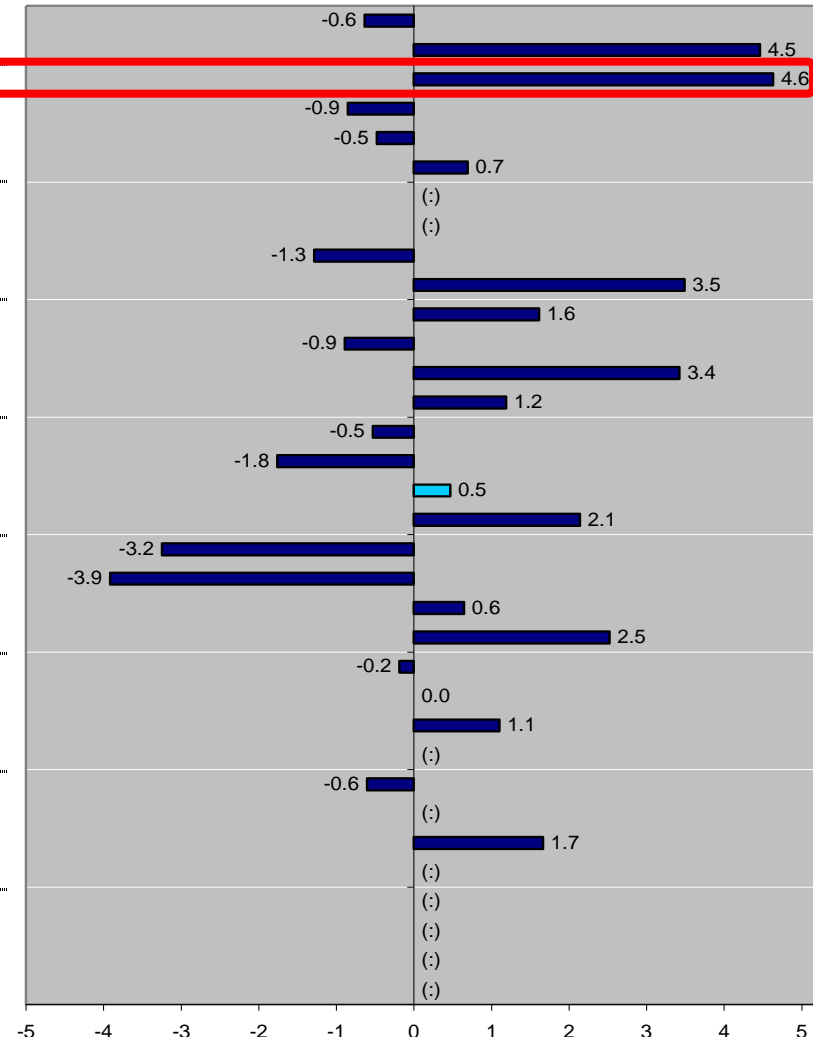
1= 2006; 2=2007

Public investment on education as a percentage of GDP in European countries (2006p)

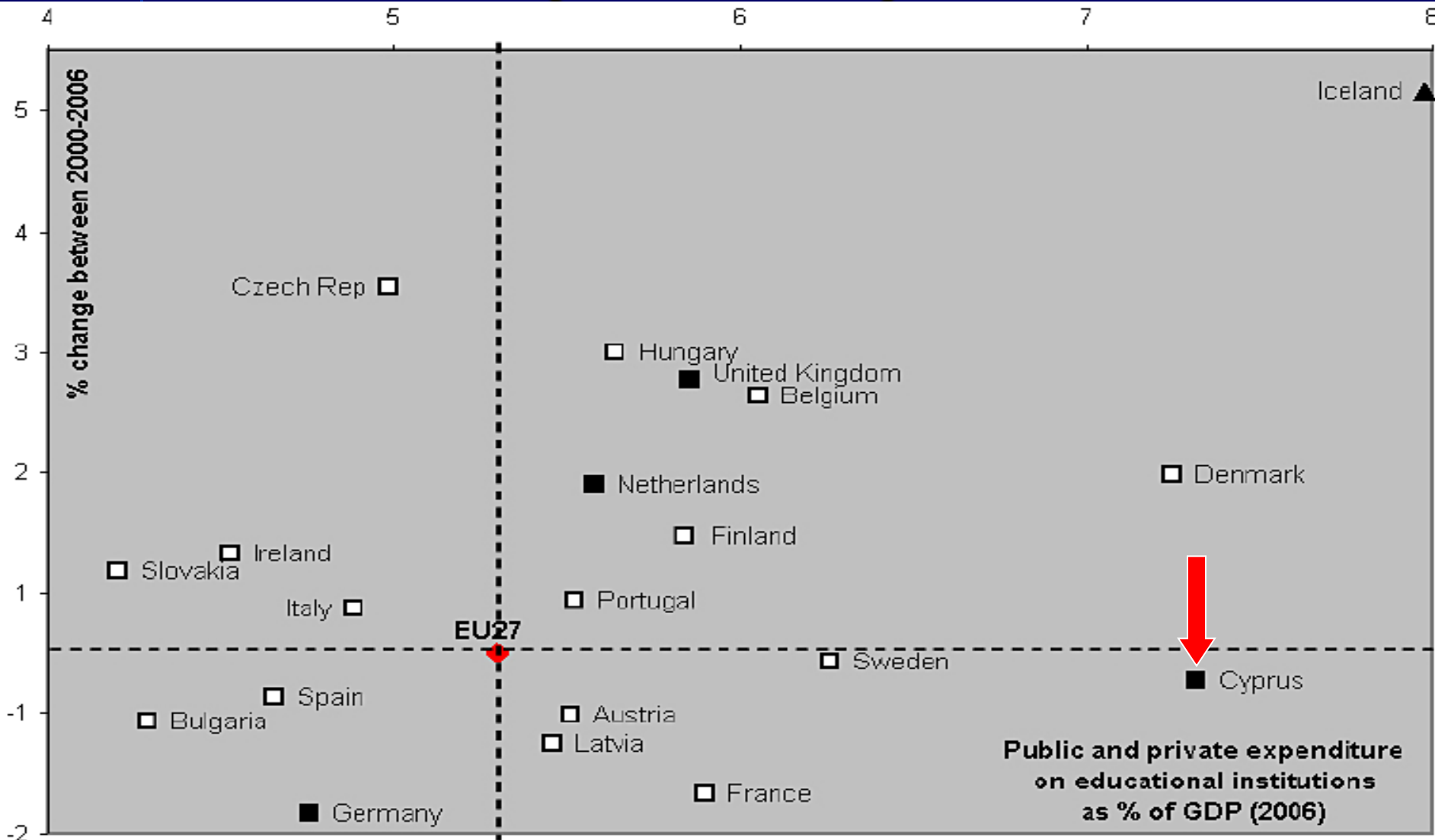
Public expenditure on all levels of education as a % of GDP



Average Annual percentage change

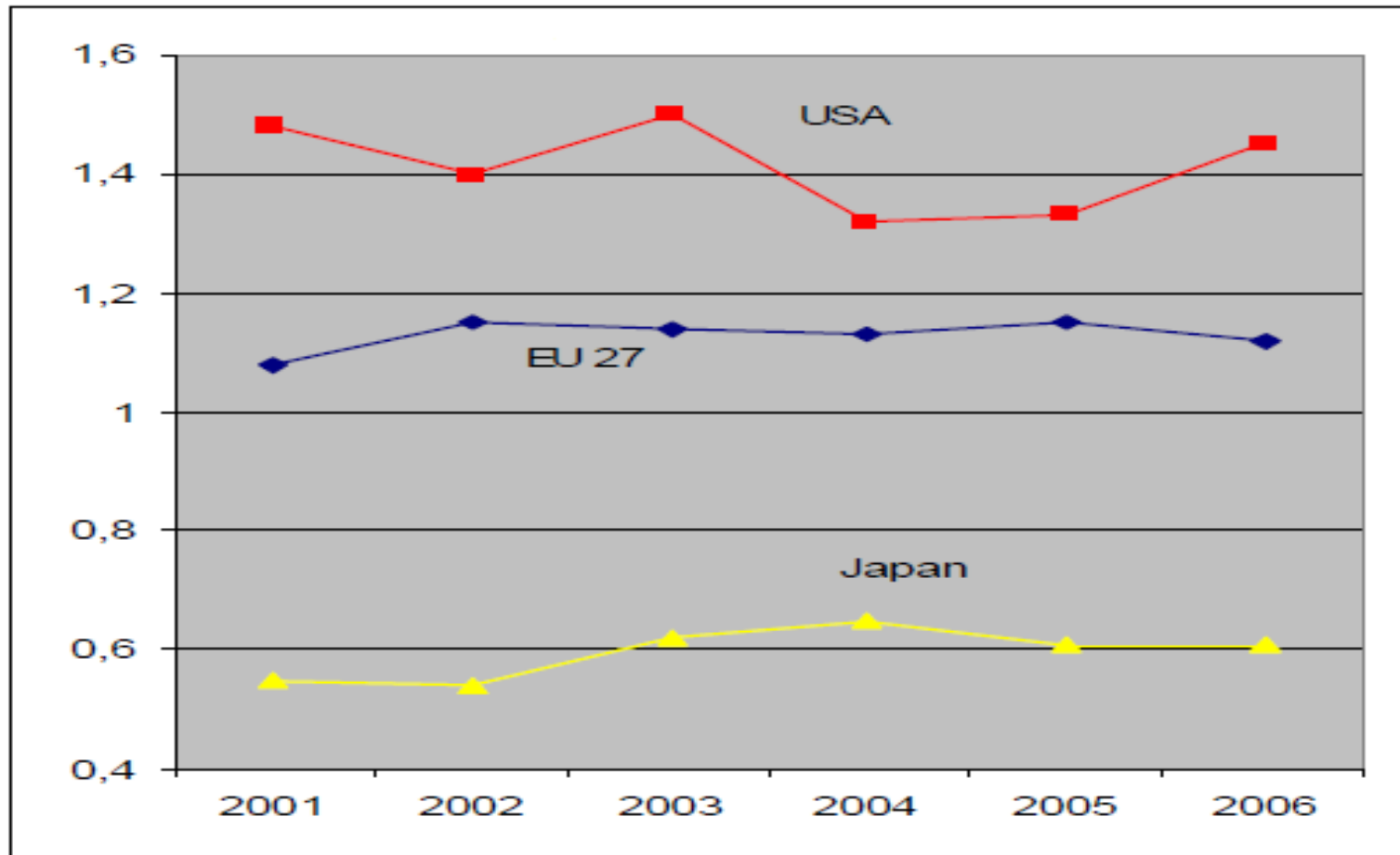


Performance and progress of public and private investments in education (% of GDP) (2000-2006)



Source: CRELL; Data source: Eurostat (UOE) – Graphical display is based on October 2009 data

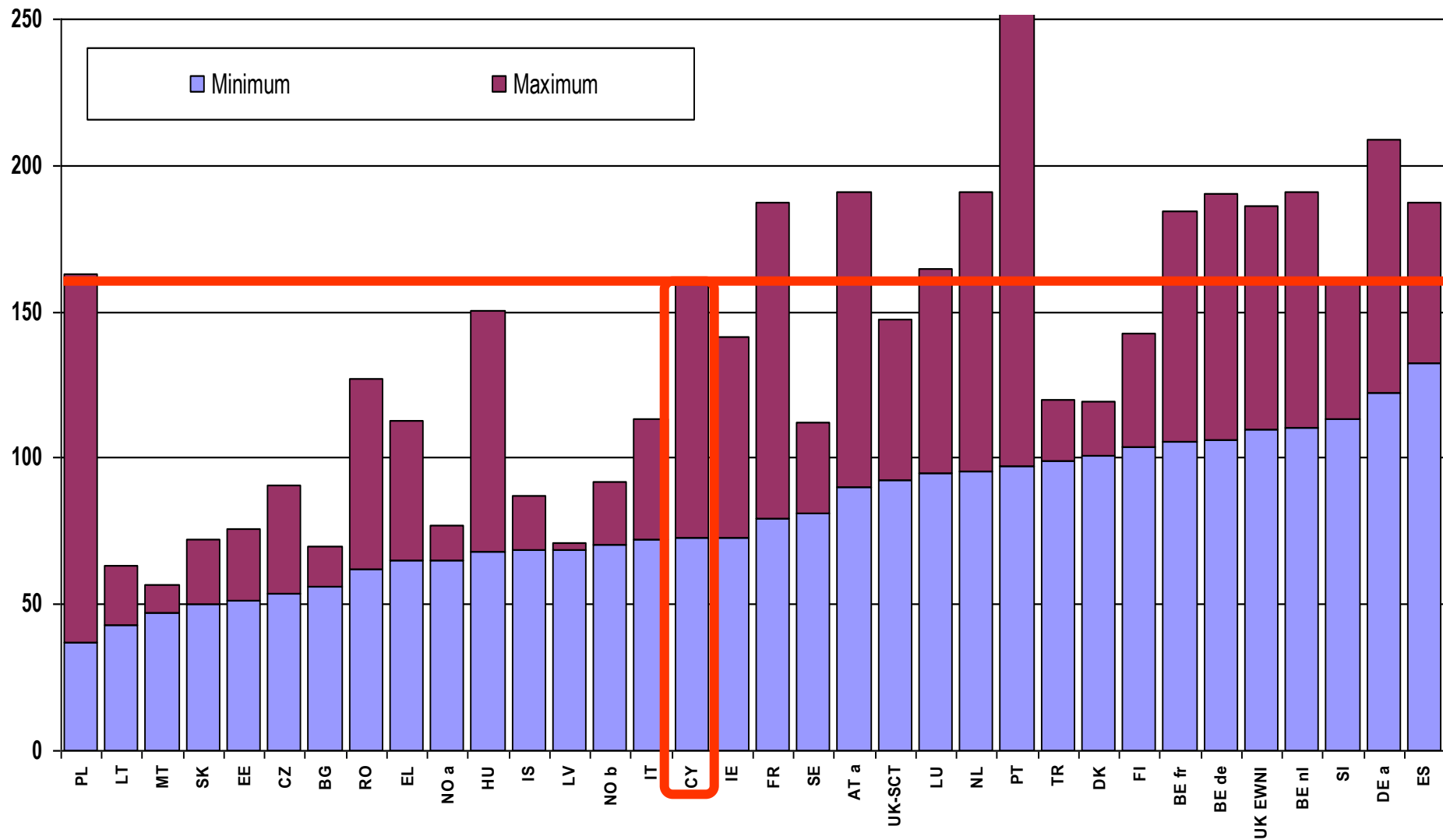
Public investment on tertiary education as a percentage of GDP



Data source: Eurostat (UOE) – Graphical display is based on September 2009 data

Teacher Salaries as proportion of per capita GDP

ISCED 1-3, 2006/7



International research tells us that:

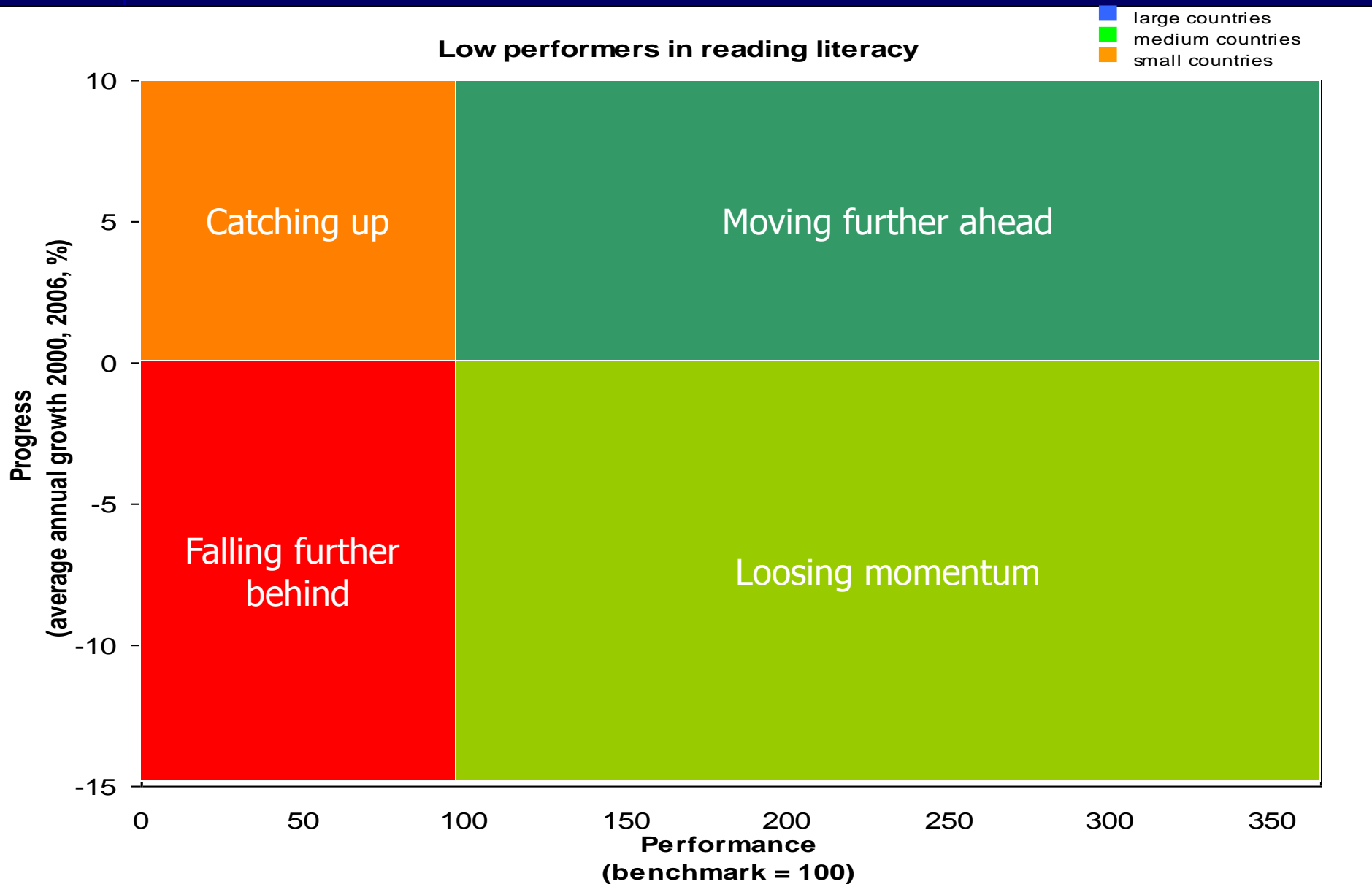
Around 14% of achievements in school education can presently be explained by school factors

- School resources matter little
- Teachers matter
- School principals matter

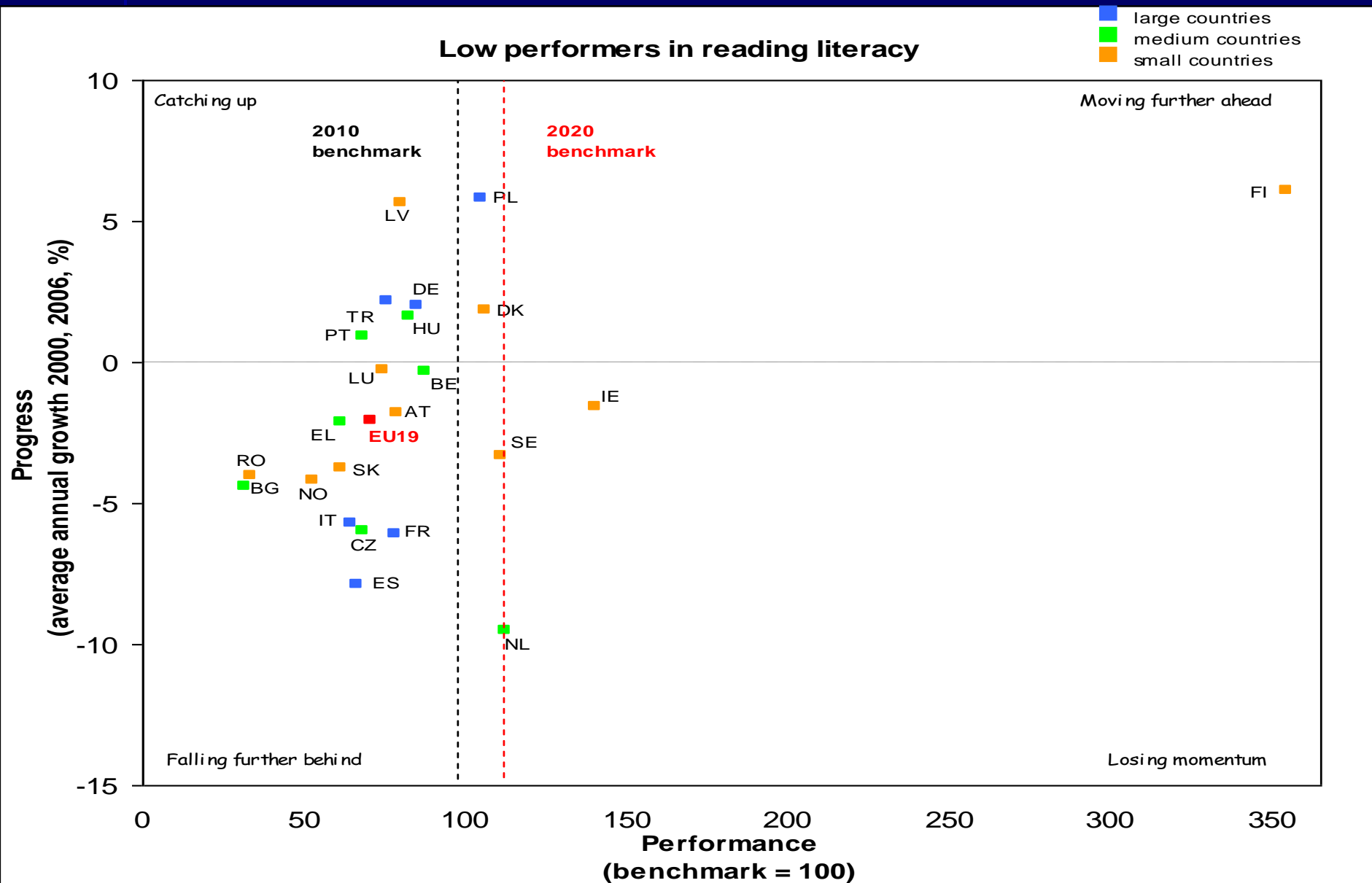
The rest of achievement levels must be explained by other factors:

- Family background matters
- Communities matter

Low Performers in reading literacy (2000-2006)

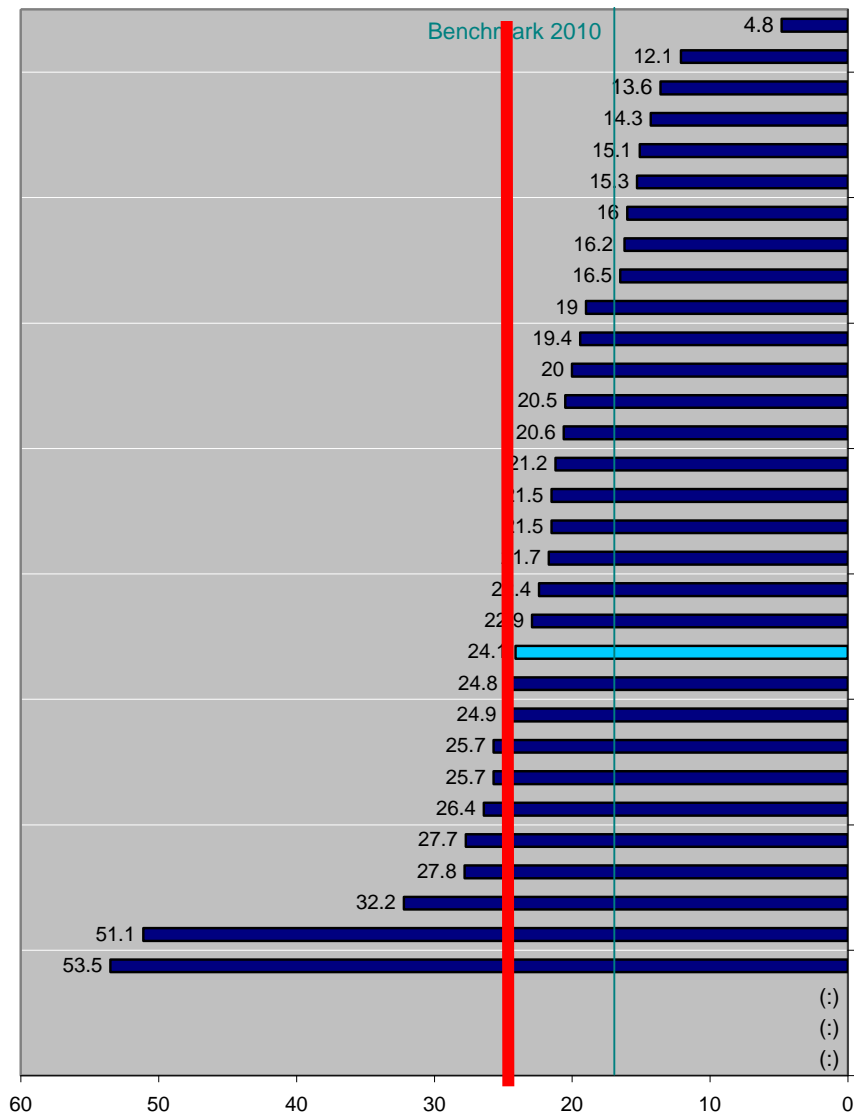


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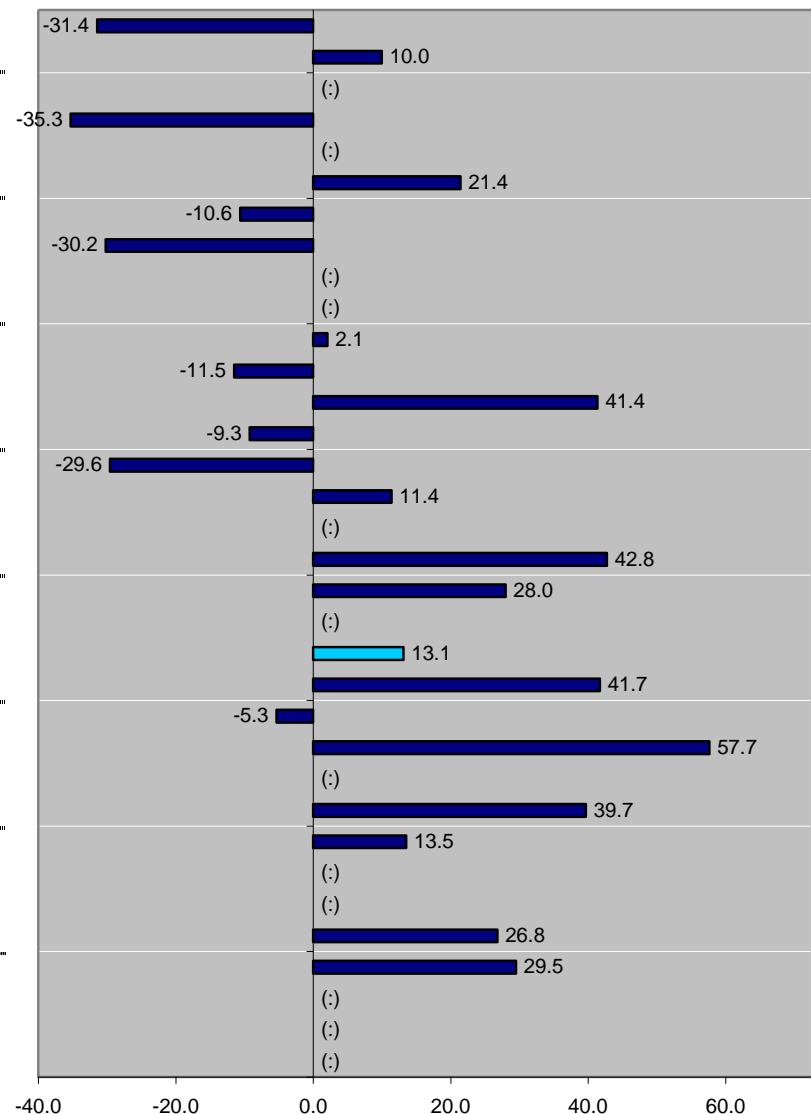


Low achievers in reading, 2000-2006

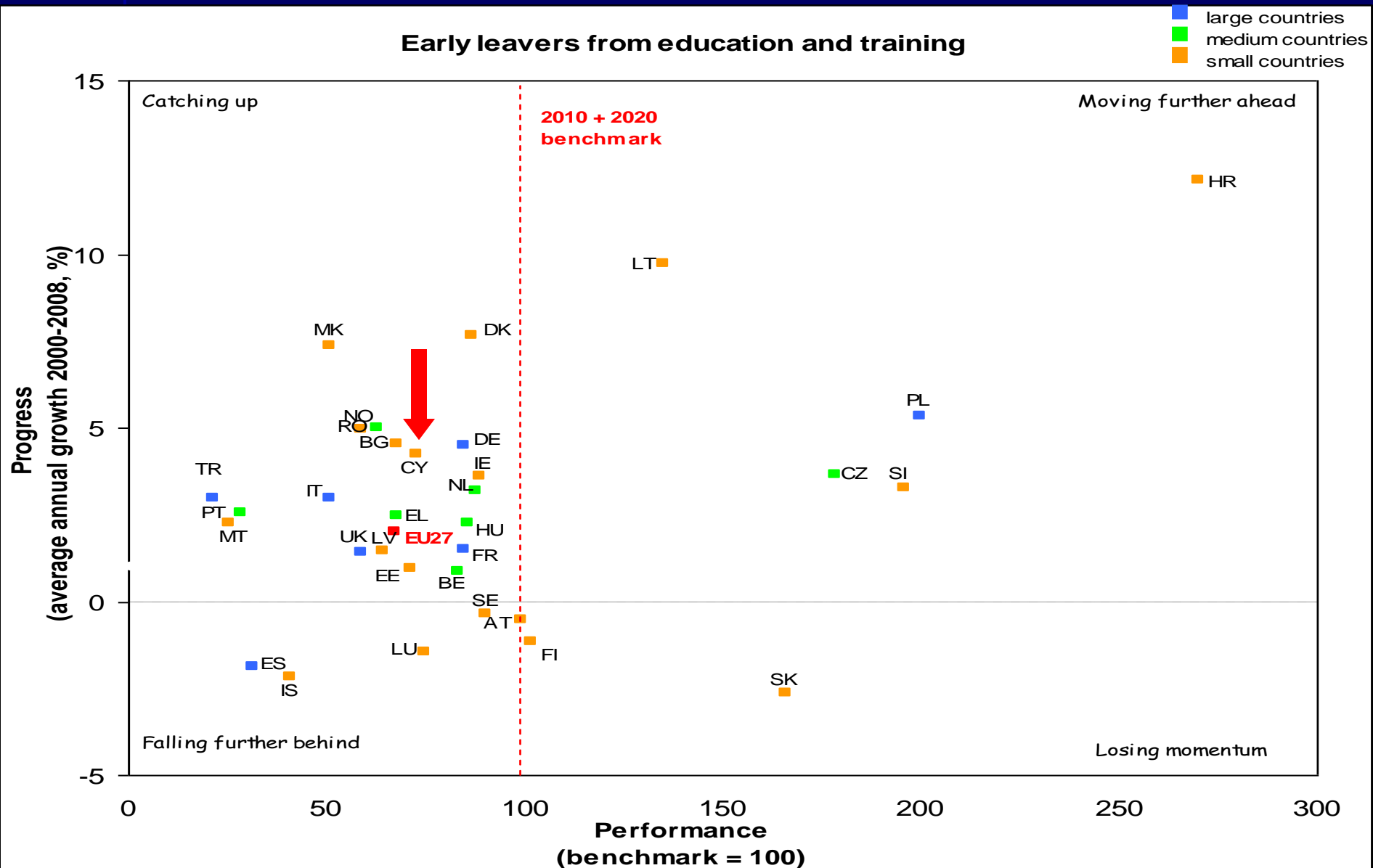
Percentage of pupils with reading literacy proficiency level 1 and lower on the PISA reading literacy scale, 2006



Evolution 2000-2006 (% relative change)

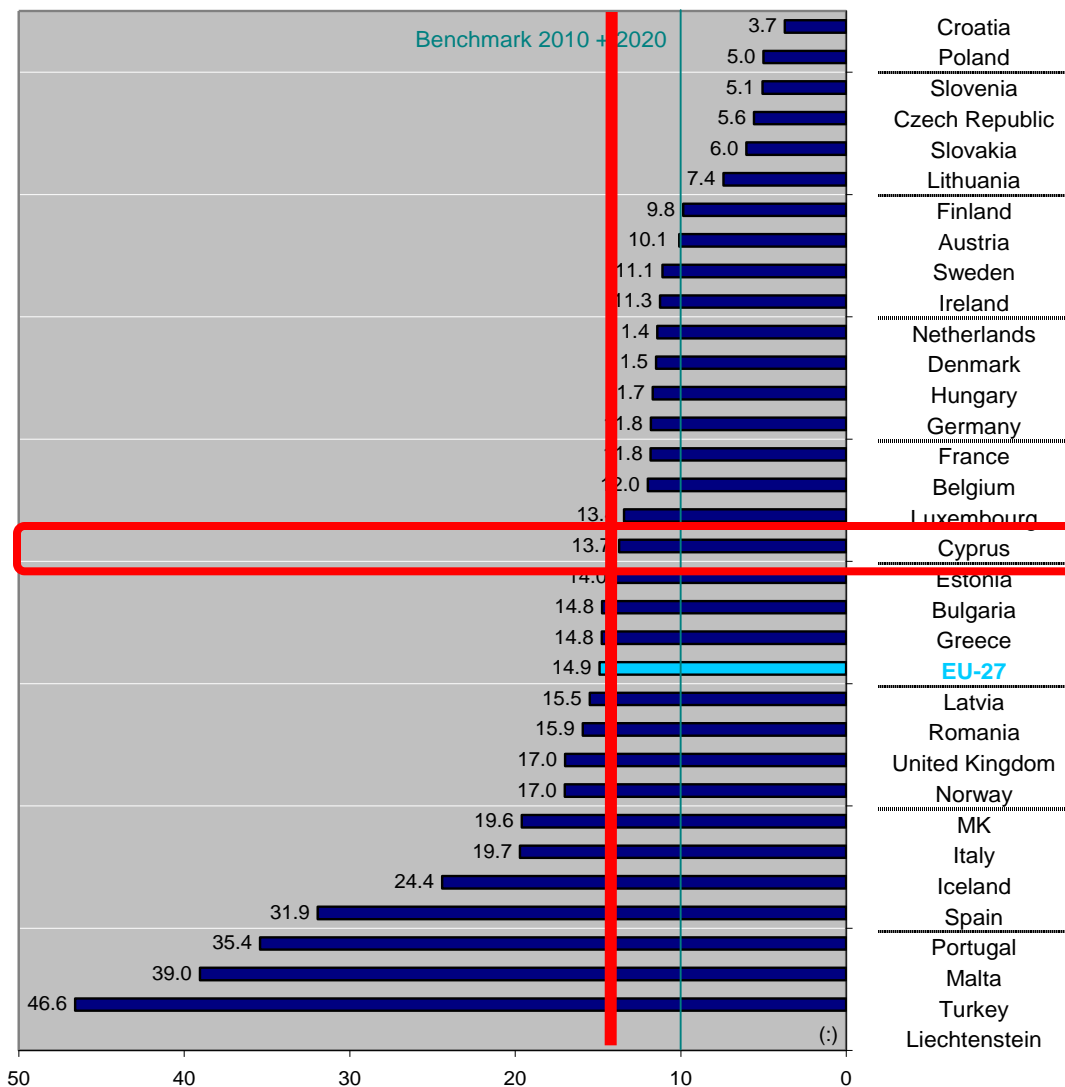


Early leavers from education and training (2000-2008)

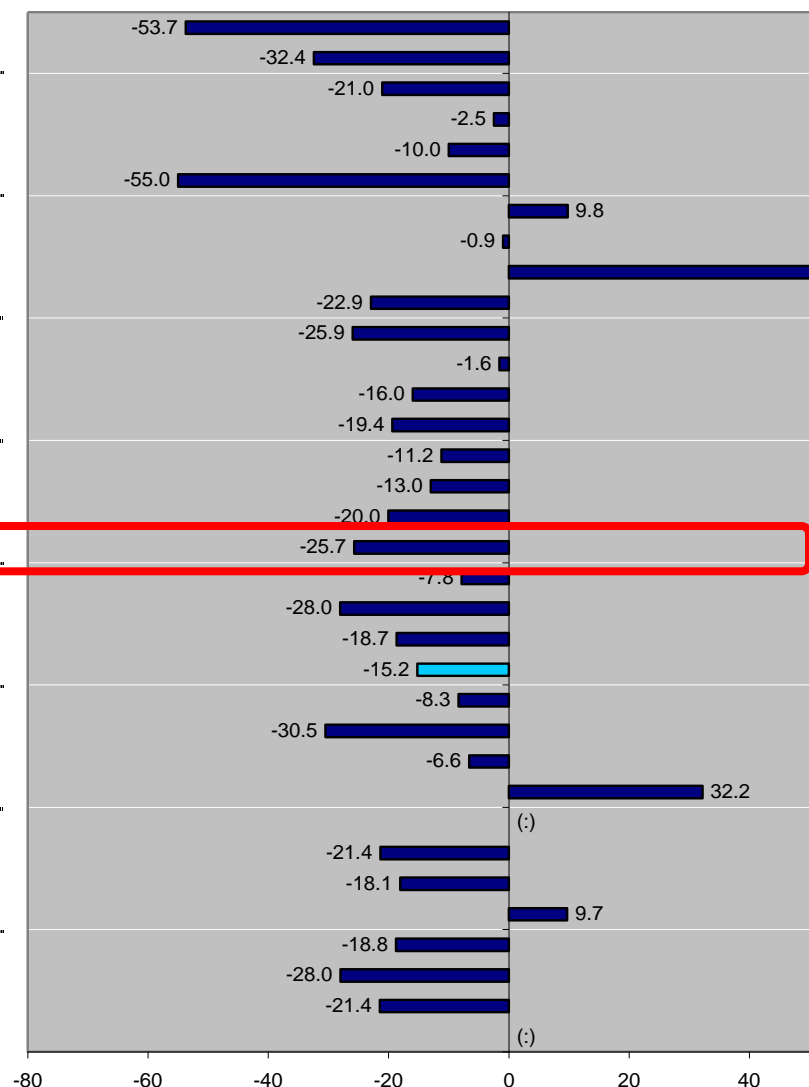


Early leavers from education and training

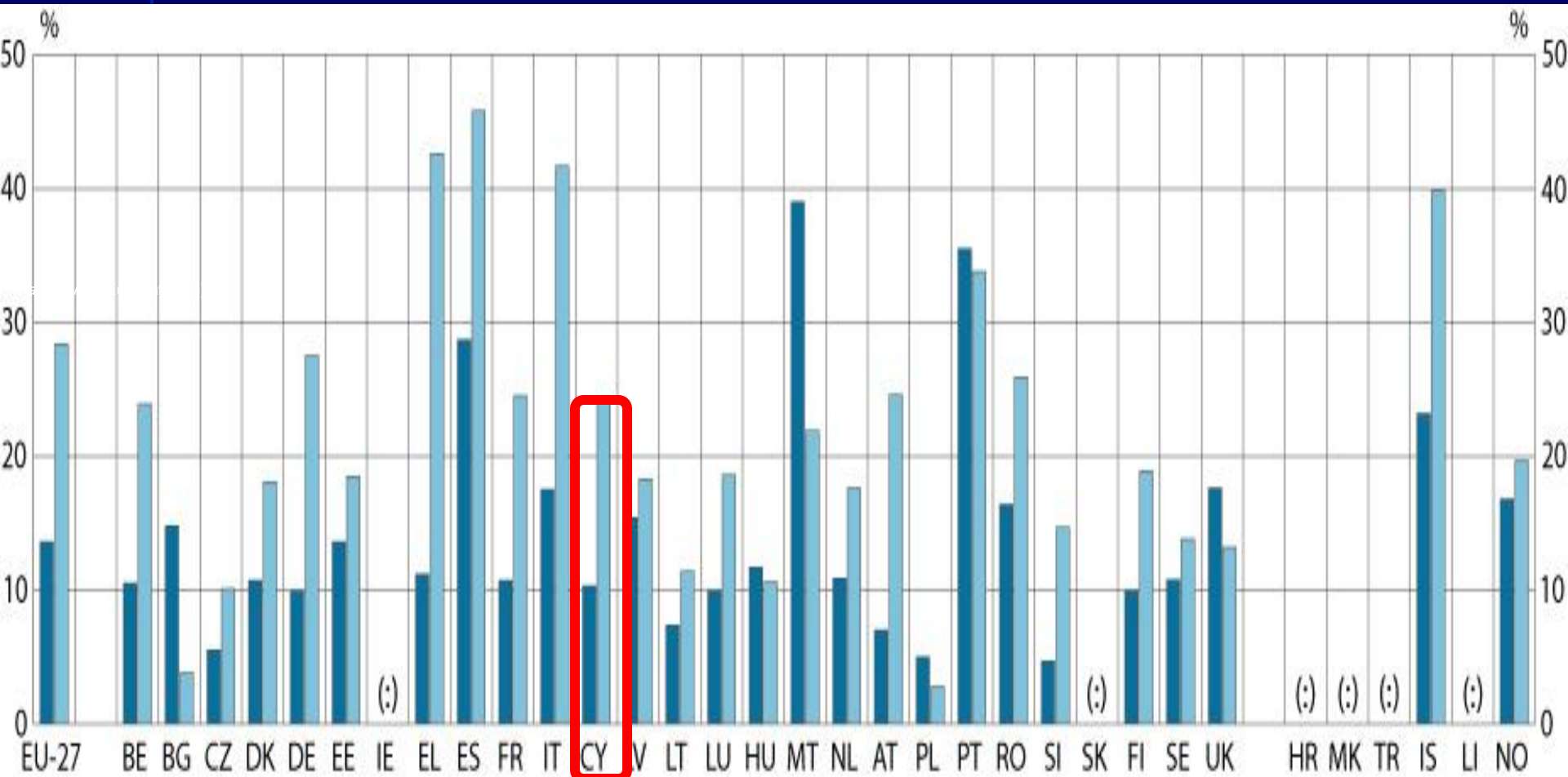
Percentage of 18-24 years old with less than upper secondary education and not in education or training, 2008



Evolution 2000-2008 (% relative change)



Early leavers from education and training by migrant/natives status, 2008 (rates)



Data source: Eurostat (LFS)



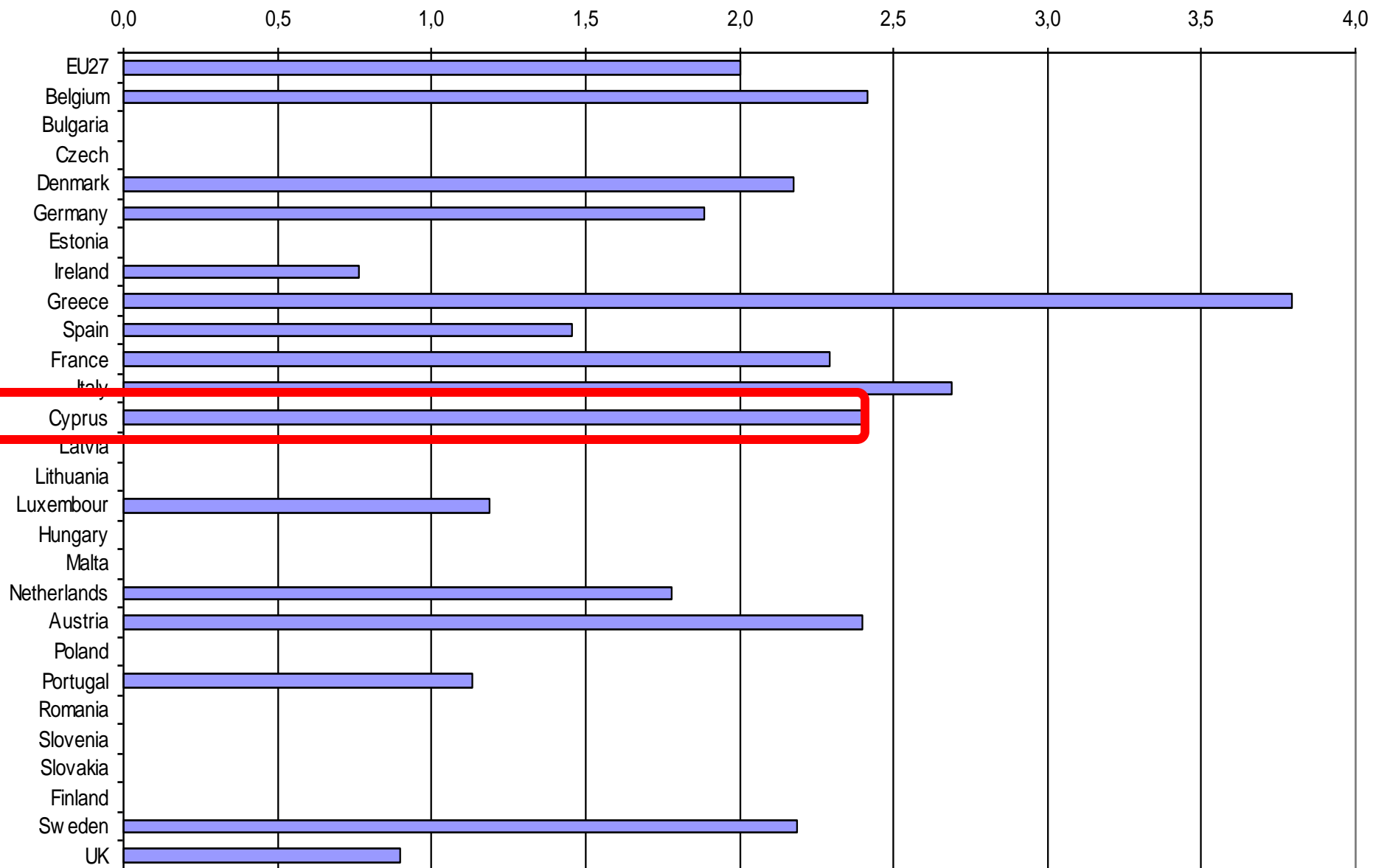
Natives



Migrants

Low educated young people, 2008

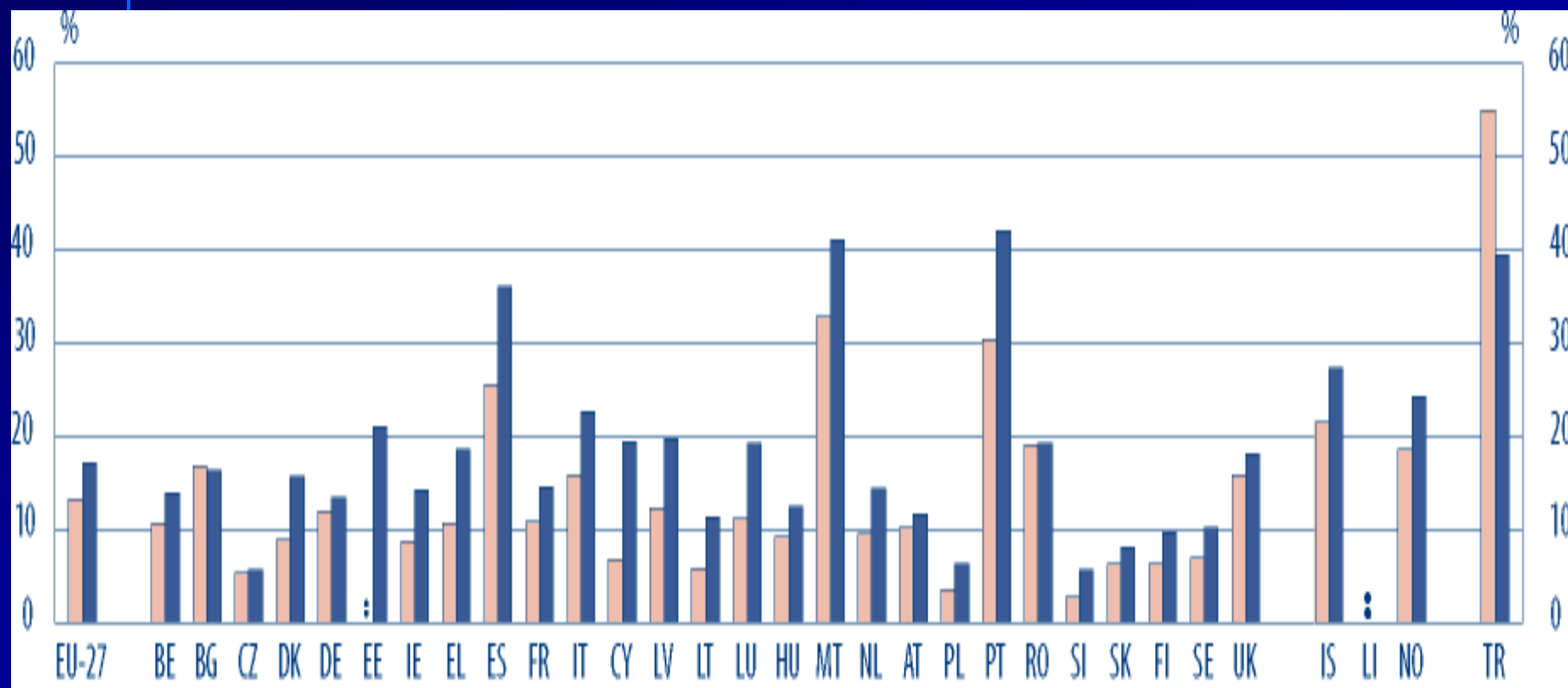
(ratio non-natives/natives)



Early school leaver

Percentage of 18-24 year-olds who have lower secondary education at most and are not in further education or training, 2007

■ Females ■ Males

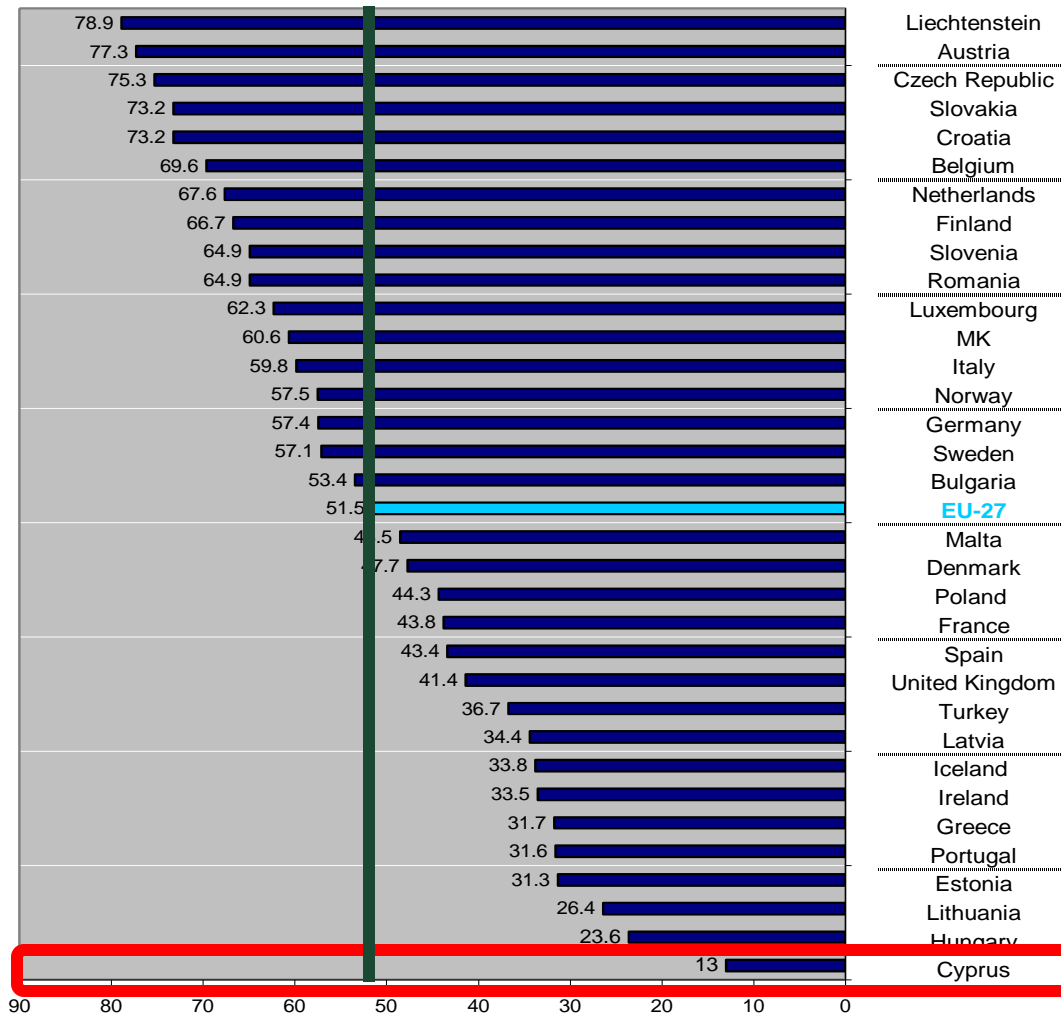


Source: Eurostat

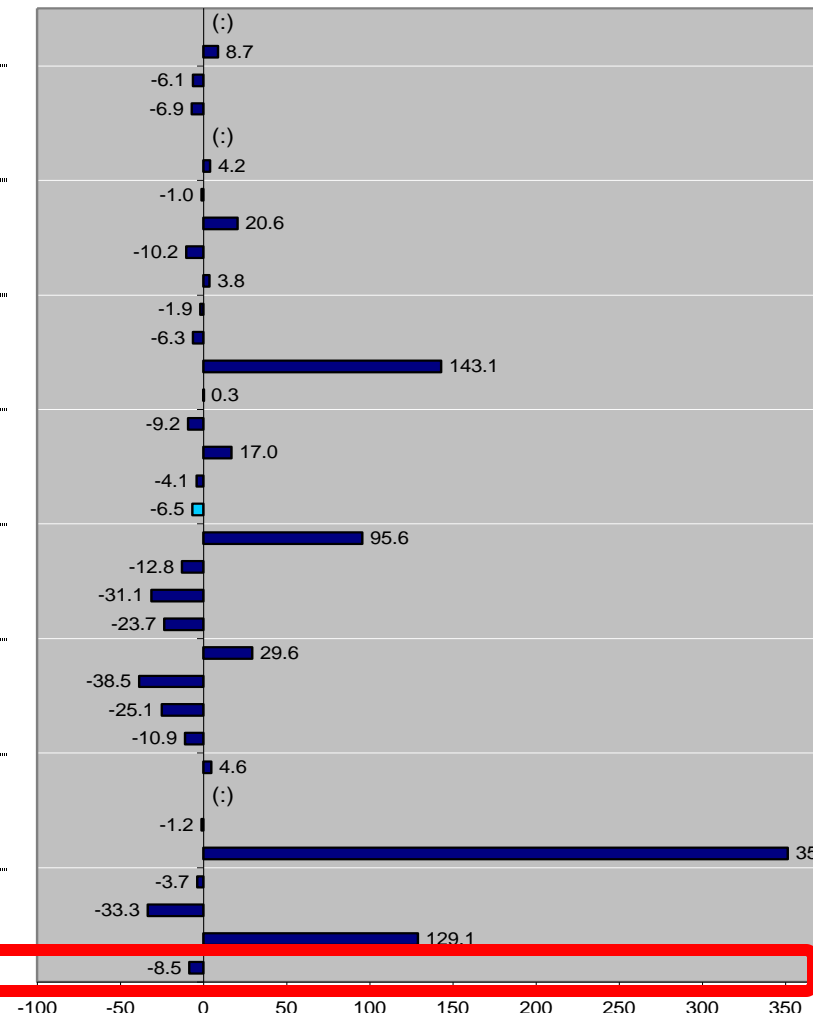
Participation patterns in initial VET in EU countries

Students in vocational programmes at ISCED level 3 as percentage of all ISCED 3 students

Percentage of all ISCED 3 students (2007)



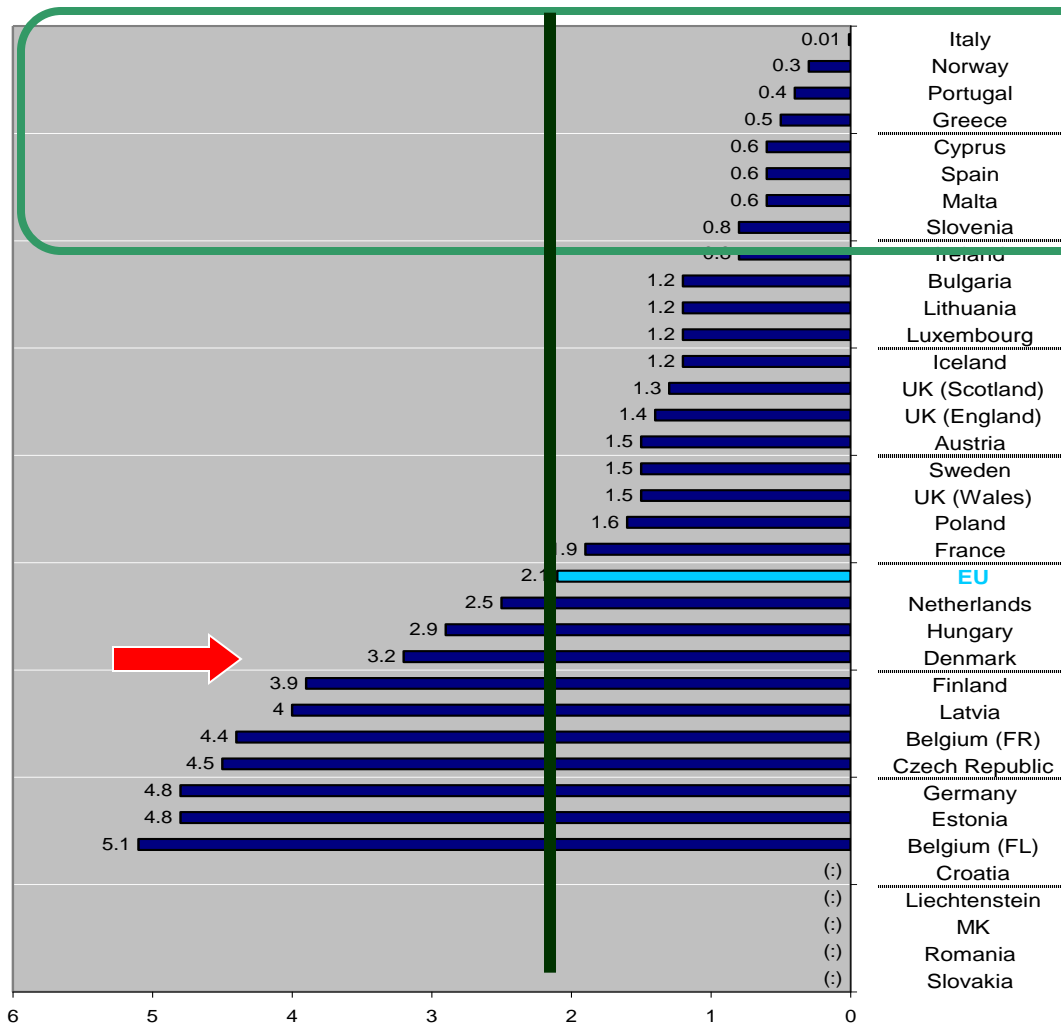
Evolution 2000-2007 (% relative change)



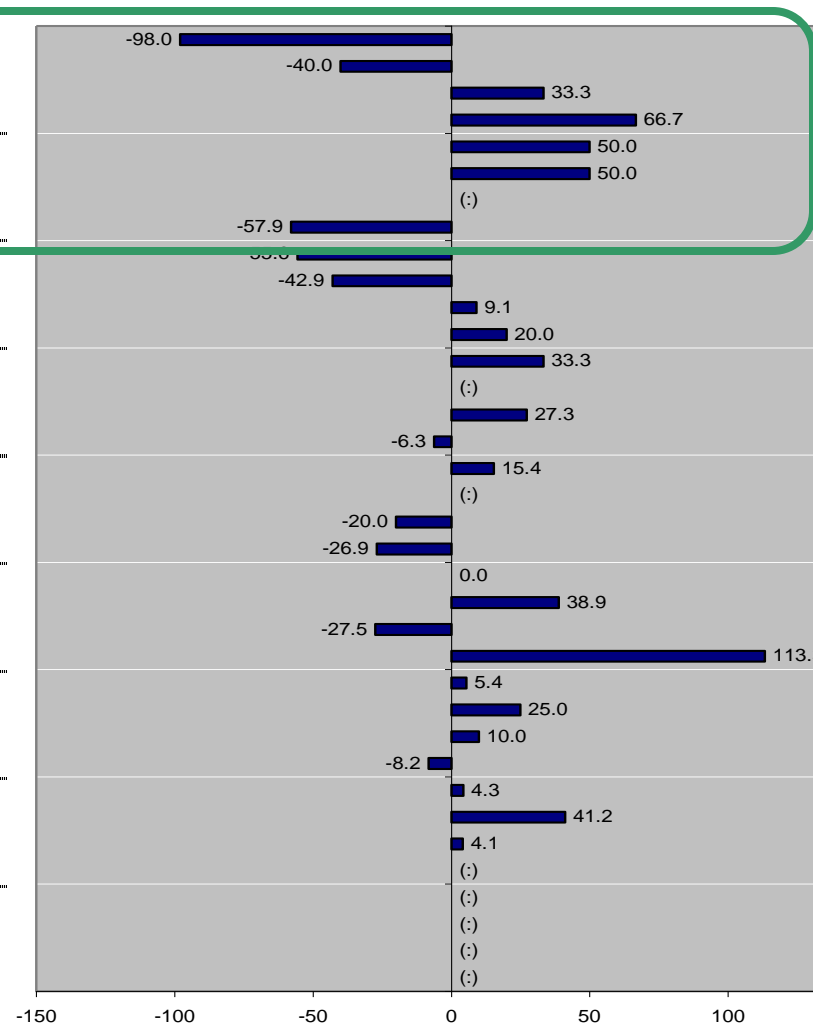
Pupils with special education needs in segregated settings, 1999-2008

(Percentage of total pupils in compulsory education)

Percentage of pupils with SEN in segregated settings, 2008^a

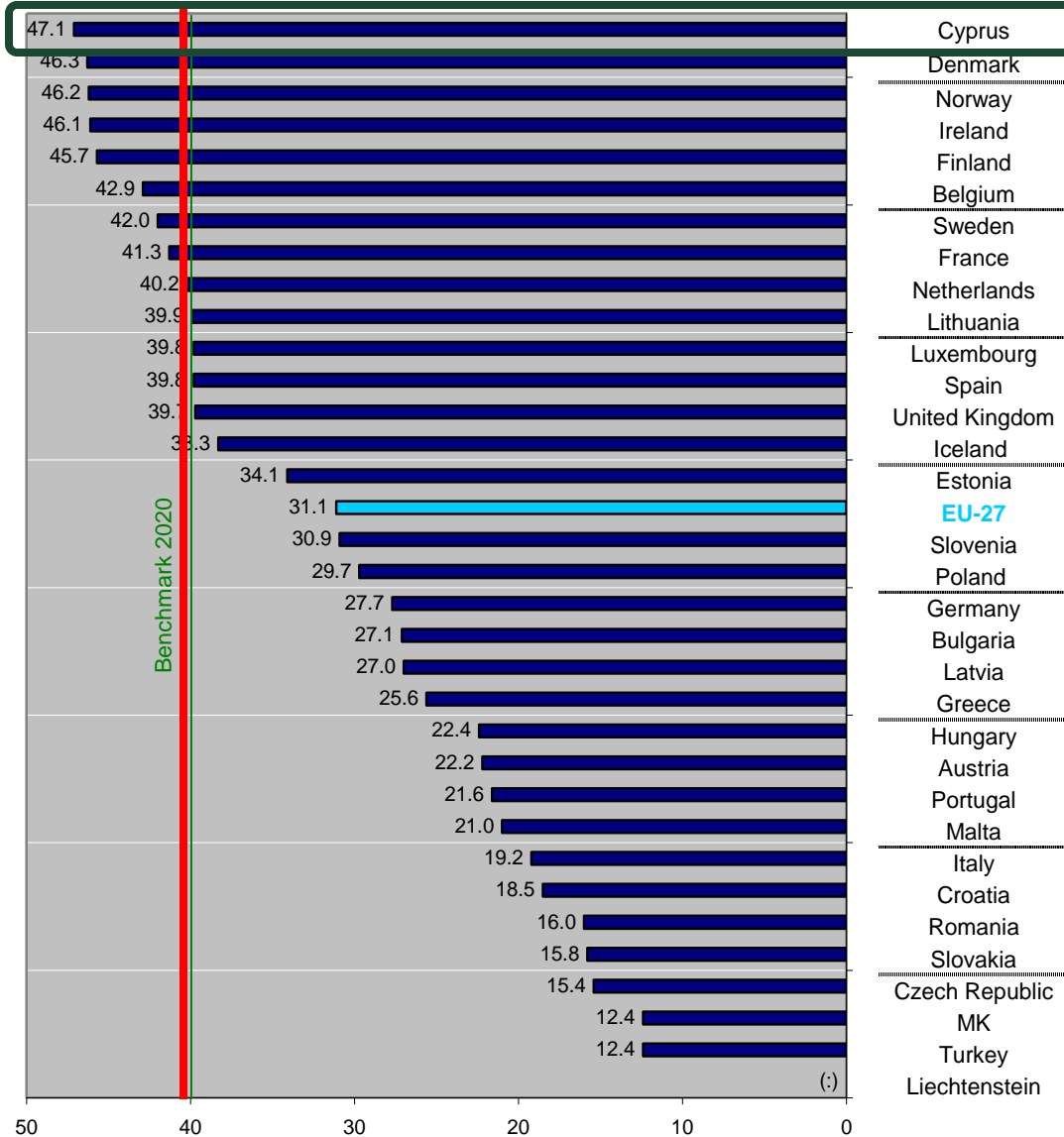


Evolution 1999-2008^a (% relative change)

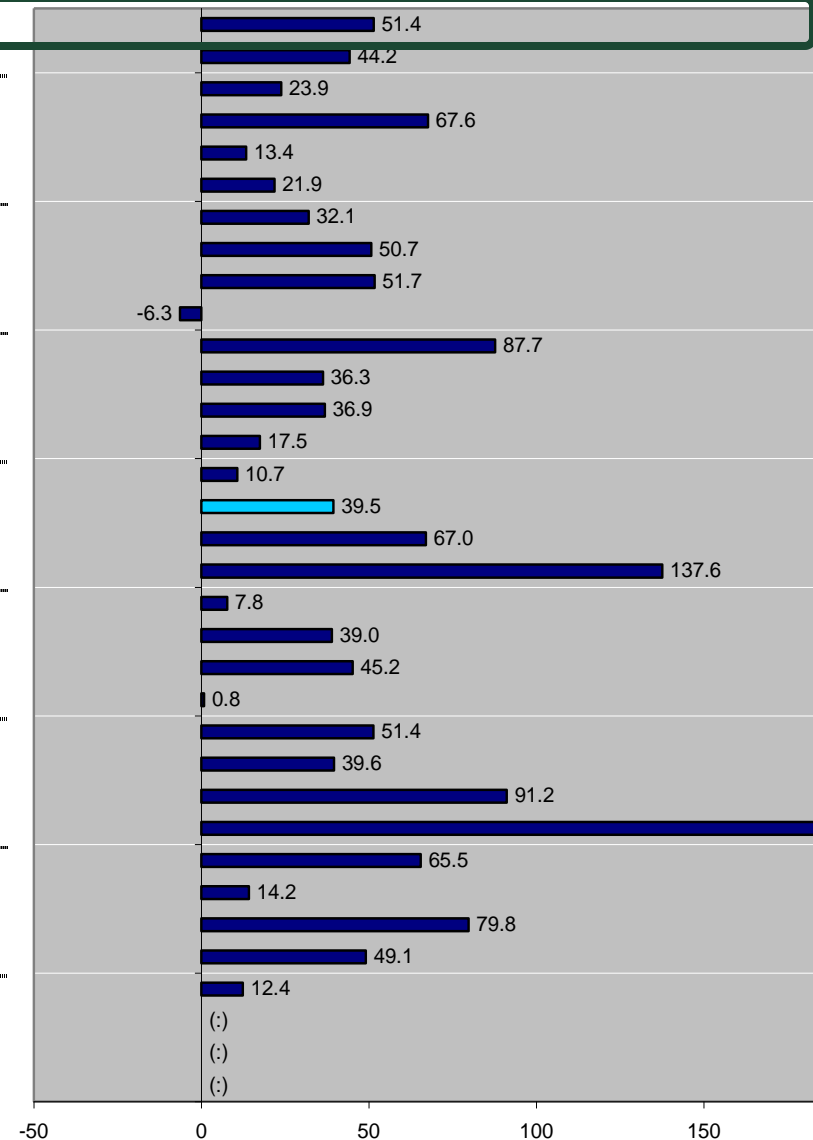


Share with tertiary attainment, 30-34 year olds

Share of 30-34 year olds with tertiary attainment, 2008
(%)

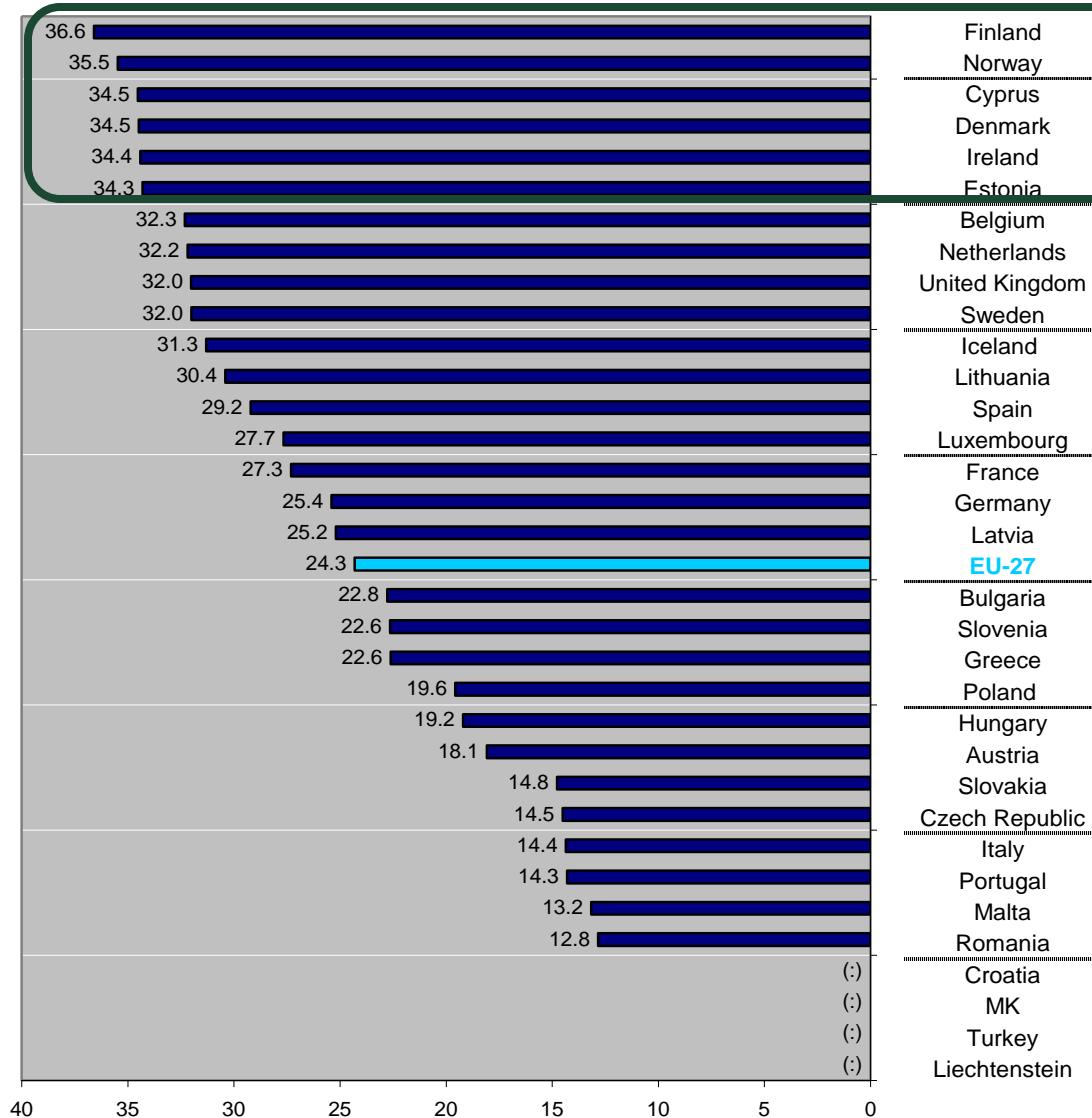


Evolution 2000-2008 (% relative change)

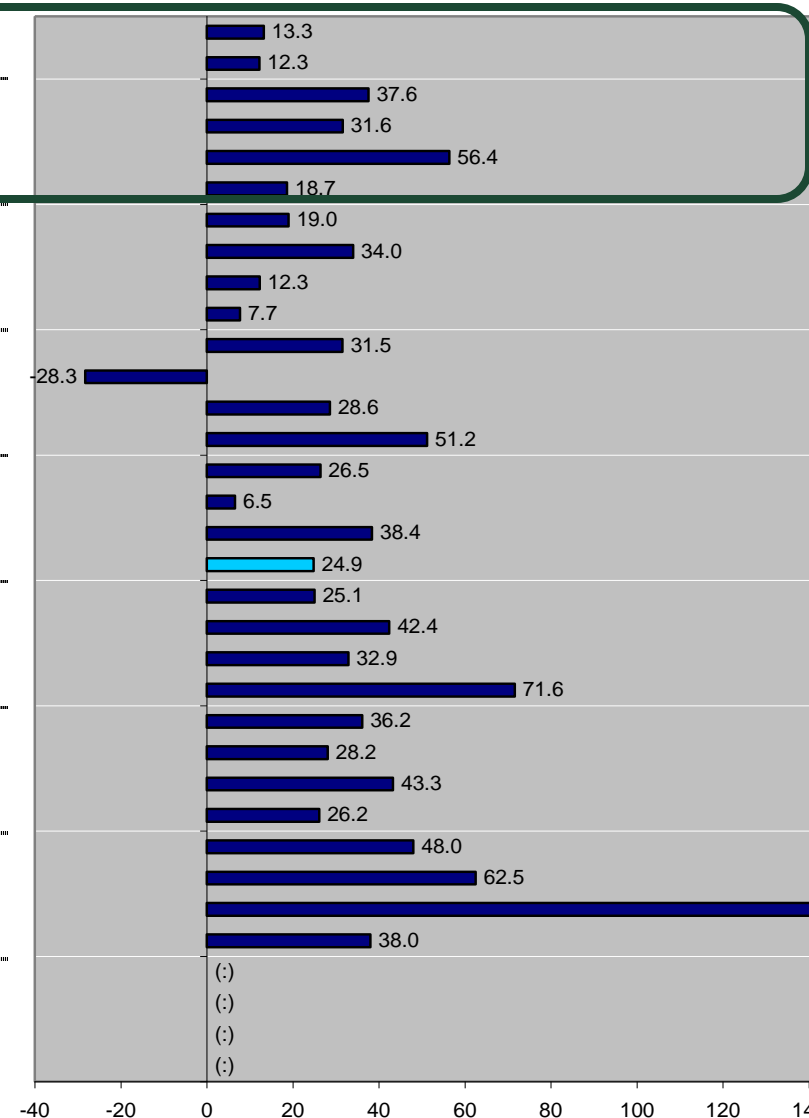


High education attainment of the adult population (25-64 years old)

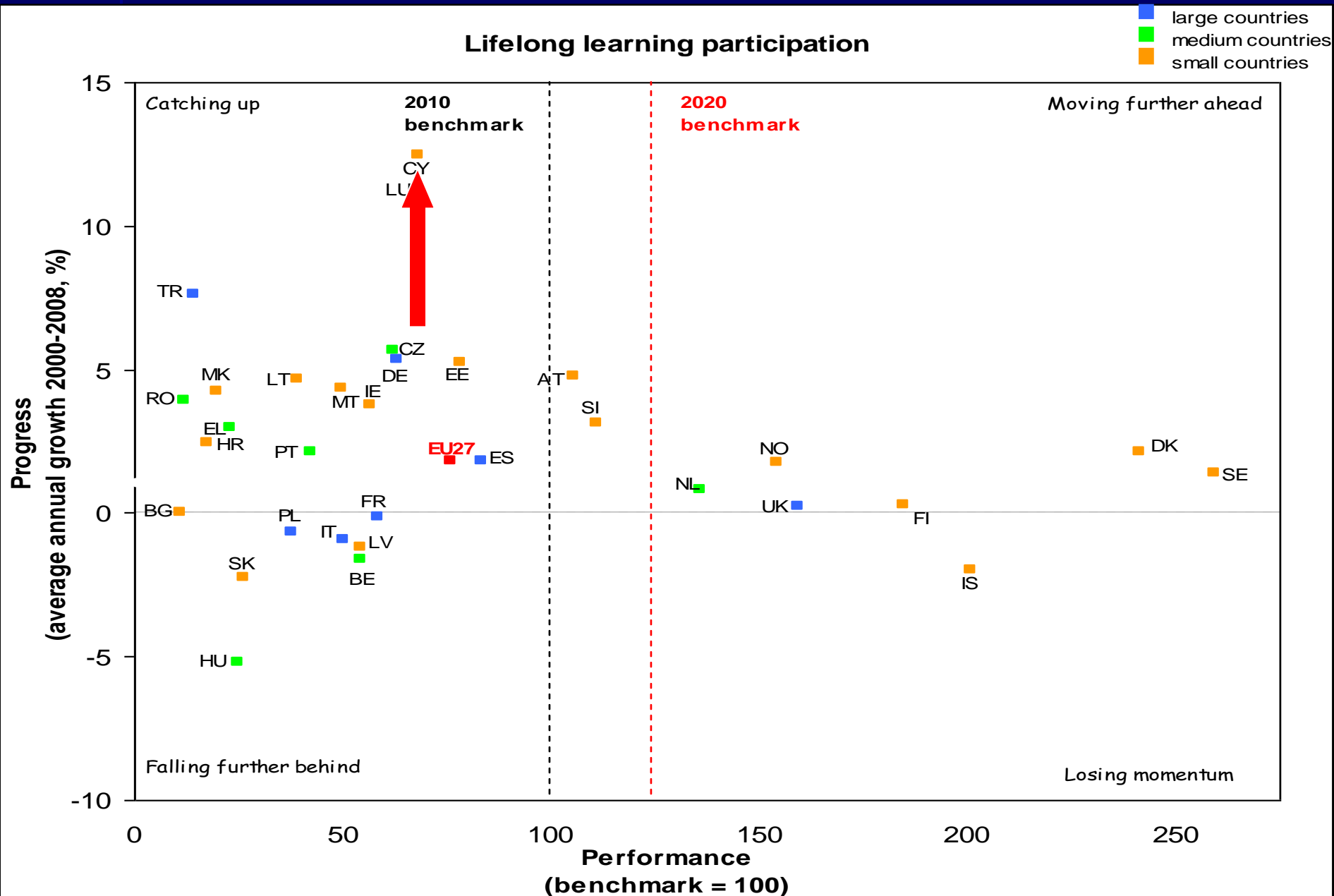
High education attainment of population aged 25-64 (%)



Evolution 2000-2008 (% relative change)

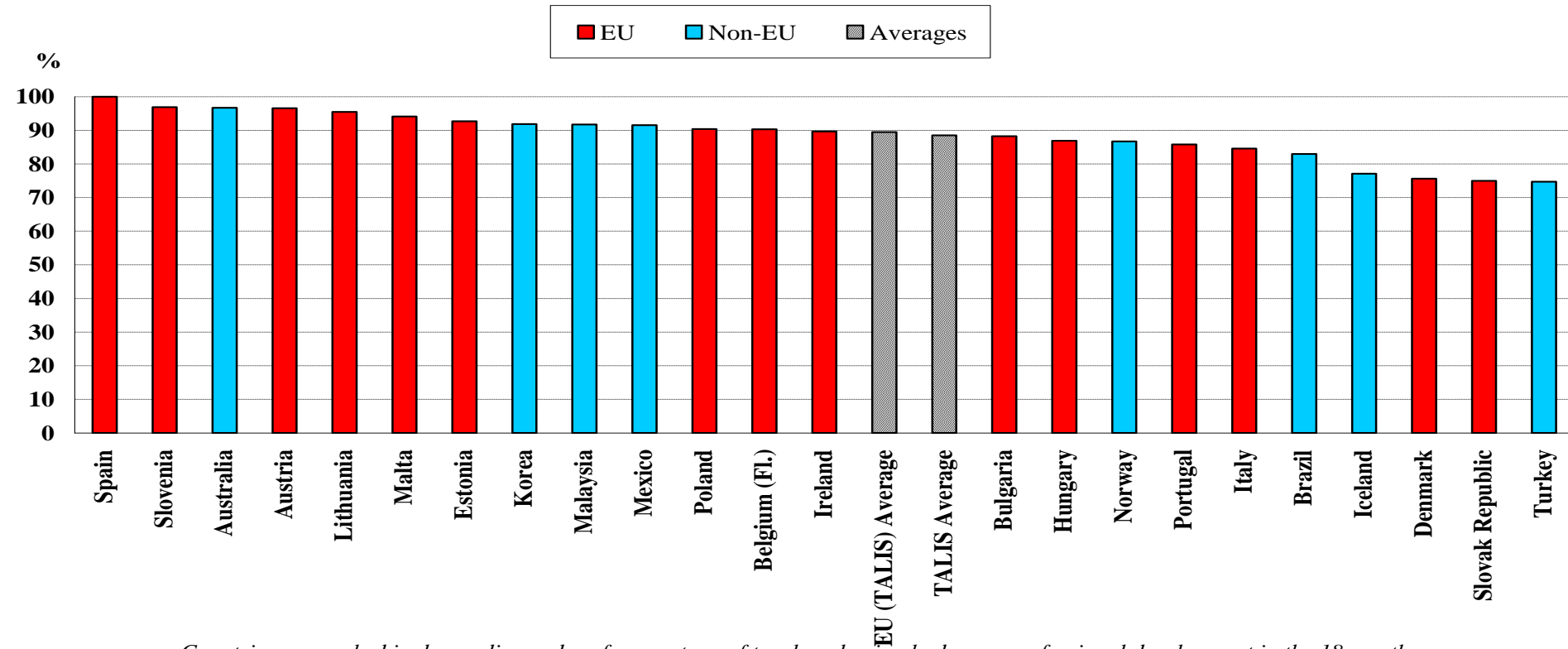


Adult Lifelong Learning participation



TALIS I results : participation in Professional Development

Percentage of teachers who undertook some professional development
in the previous 18 months (2007-08)



Countries are ranked in descending order of percentage of teachers having had some professional development in the 18 months prior to the survey

Proportion participating: in DK, SK and TU, **25%** had no PD of any kind.

intensity: Average 15.3 days (EU 14.6). IE, SK, MT < 8 days. BG, IT PL, ES > 27

equity: Under-representation: males, young and old teachers, lower qualified. Variation greatest in IT, PO, ES

Europe 2020 Strategy

Three priorities for sustainable growth and jobs

- **Growth based on knowledge and innovation**
 - Innovation
 - Education
 - Digital society
- **An inclusive high-employment society**
 - Employment
 - Skills
 - Fighting poverty
- **Green growth: a competitive and sustainable economy**
 - Combating climate change
 - Clean and efficient energy
 - Competitiveness

Smart growth - Sustainable growth - Inclusive growth

Five 'headline targets'

- Raising the **employment rate** of the population aged 20-64 "from the current 69% to at least **75%** in 2020".
- Increasing **R&D investment** "from the current 1.9% of EU GDP to 3%" with an alternative target combining R&D and "innovation performance".
- Reducing **CO2 emissions** by 20% by 2020 and increasing the share of renewable energies to 20% by the same date while lowering energy consumption by 20%.
- Increasing the share of the population aged 30-34 to have completed **tertiary education** from the current 31% to "at least **40%** in 2020, and less than 10% early school leavers.
- Reducing by 25% the rate of **poverty** (**20 million less** people at risk of poverty).

**EU Objectives and
benchmarks**

Benchmarks

Decreasing the proportion
of young people not in
education and training

**Defining
progress
(indicators)**

"Improve mastery of
basic skills"

Strategic objectives

Develop cooperation
on
new skills for new jobs

Areas of actions

2003, 2009....

2002, 2006....

2004, 2009

1995, 2003....

Benchmarks

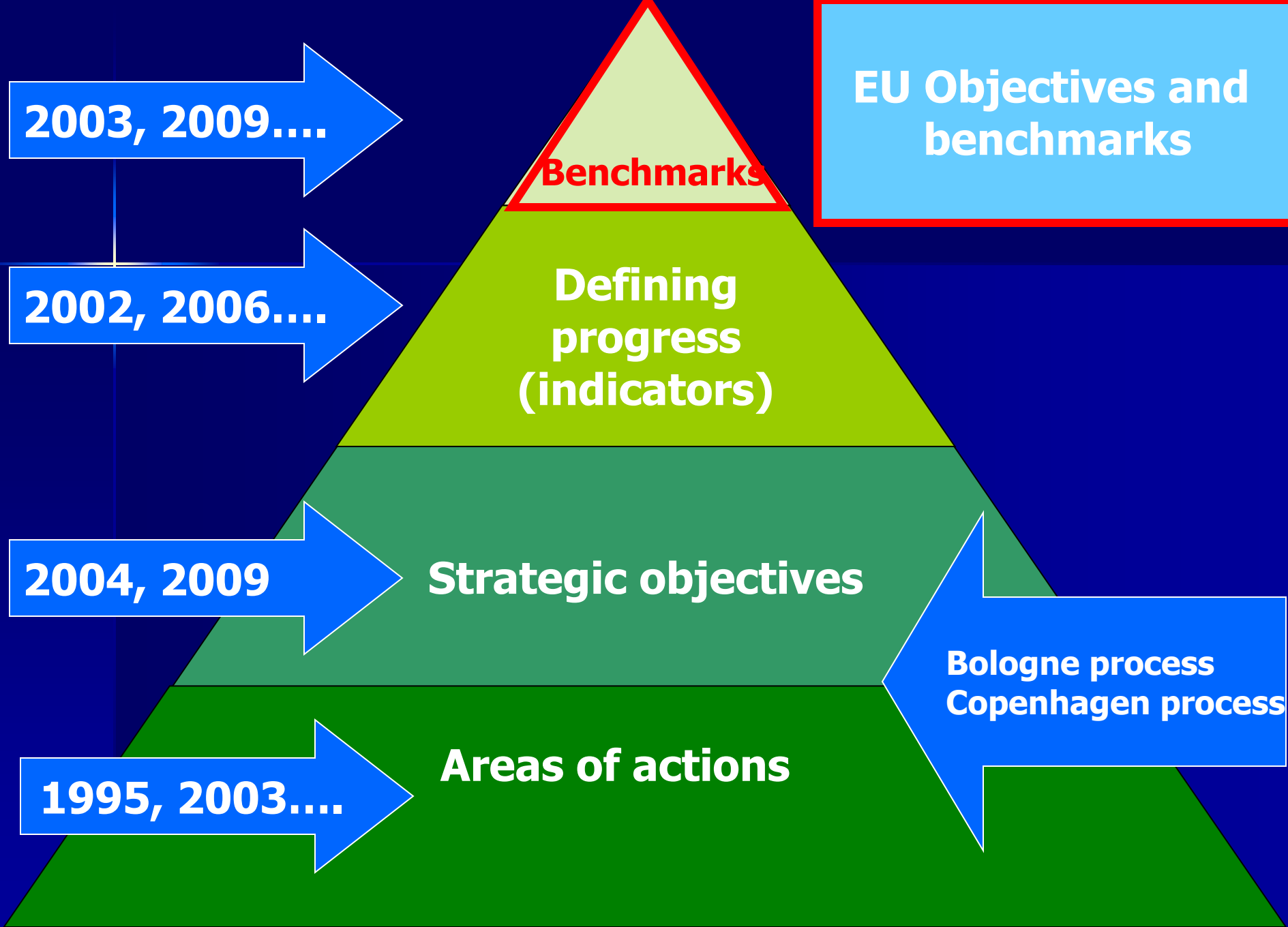
**Defining
progress
(indicators)**

Strategic objectives

Areas of actions

**EU Objectives and
benchmarks**

**Bologne process
Copenhagen process**



5 benchmark 2010
5+ benchmarks 2020

☐ **Benchmarks and Benchmarking**

EU benchmarks

Common EU wide National targets

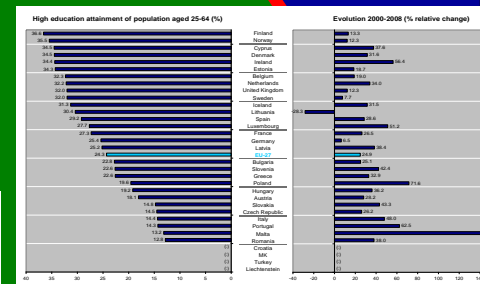
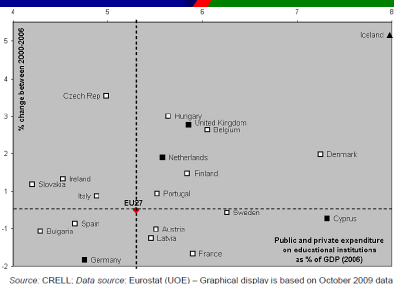
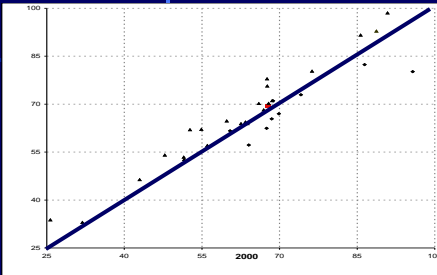
National benchmarks and targets

Europe 2020

(E&T 2020)

Benchmarking performance and progress

Coherent framework of indicators



Thank you for your attention !

anders.hingel@ec.europa.eu