



Priorities for Education, Training and Intellectual Assets in the Knowledge Economy

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Intellectual Assets

- Technology and knowledge creation
- Investment in human resources
- Organizational capital and systems management

Key Messages

- Focus first and foremost on basic education
- Develop highly skilled people, especially in science and technology
- Foster mobility of the highly skilled

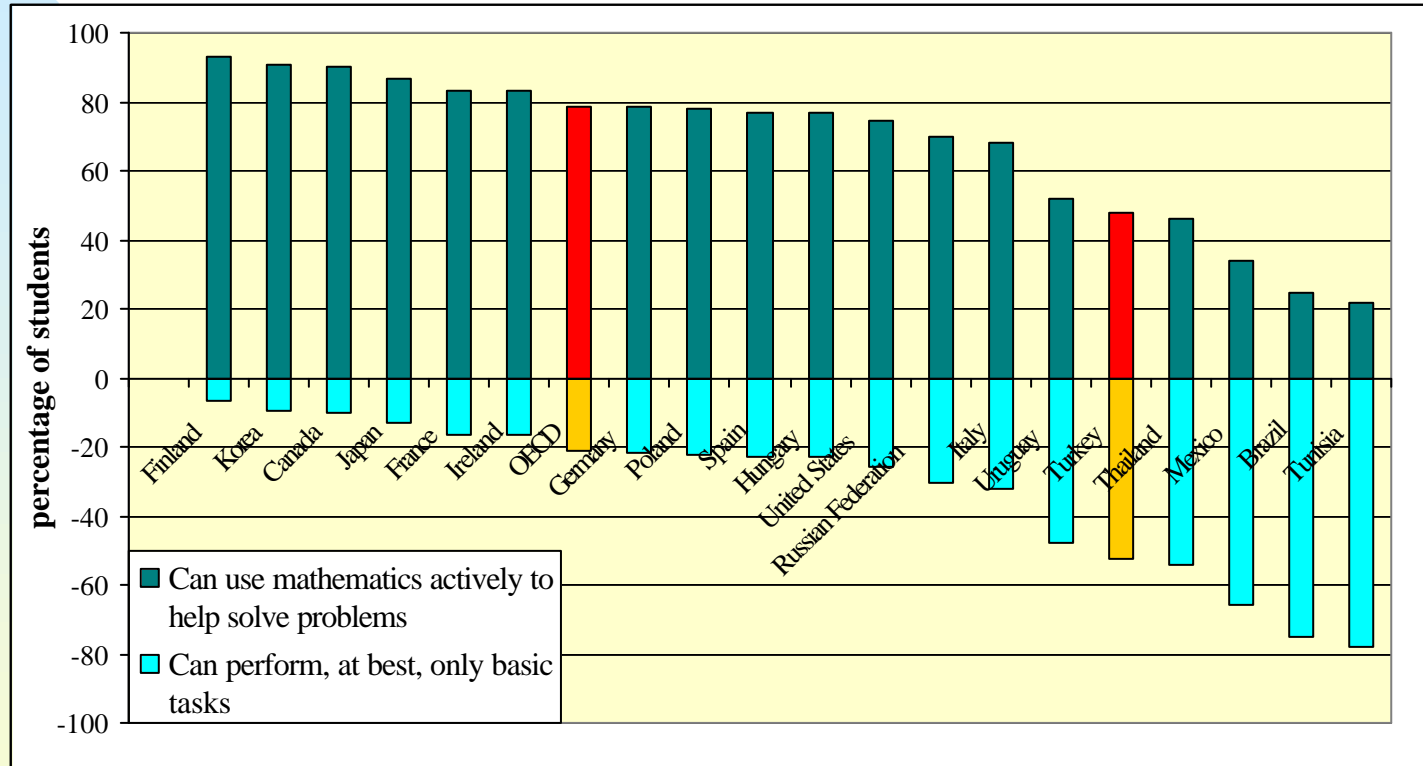
I. Focus on Basic Education

- Literacy and numeracy of the population at large are the foundation of the Knowledge Economy.
- Investment here has been vital to major economic success stories (e.g Korea, Ireland)

PISA: OECD survey of 15 year-olds' skills and knowledge

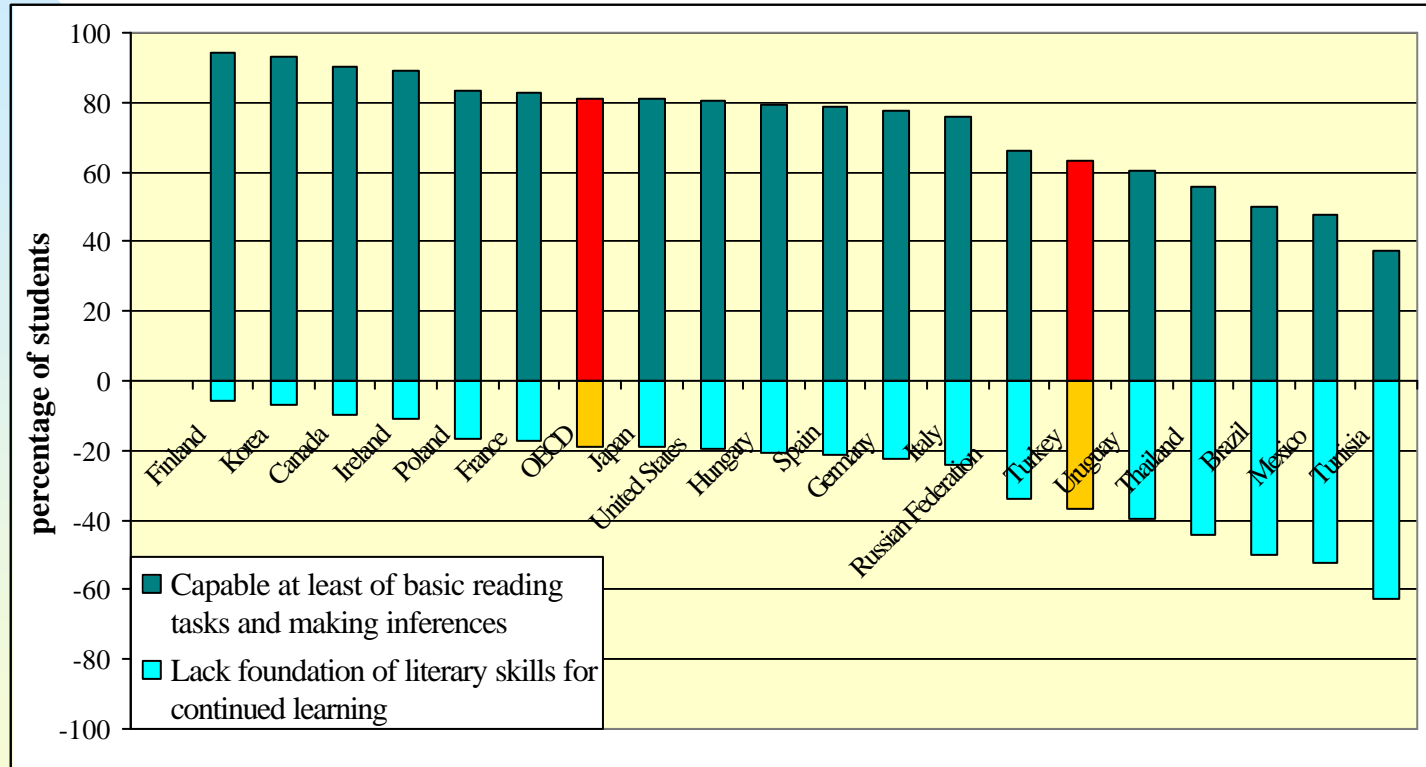
- 250 000 students in 41 countries
- Math, reading, science, problem solving
- Overall picture: Turkey has work to do to catch up with the EU

PISA : Student proficiency in mathematics (15 year-olds)



Source: OECD, PISA 2003 database

PISA : Student proficiency in reading (15 year-olds)



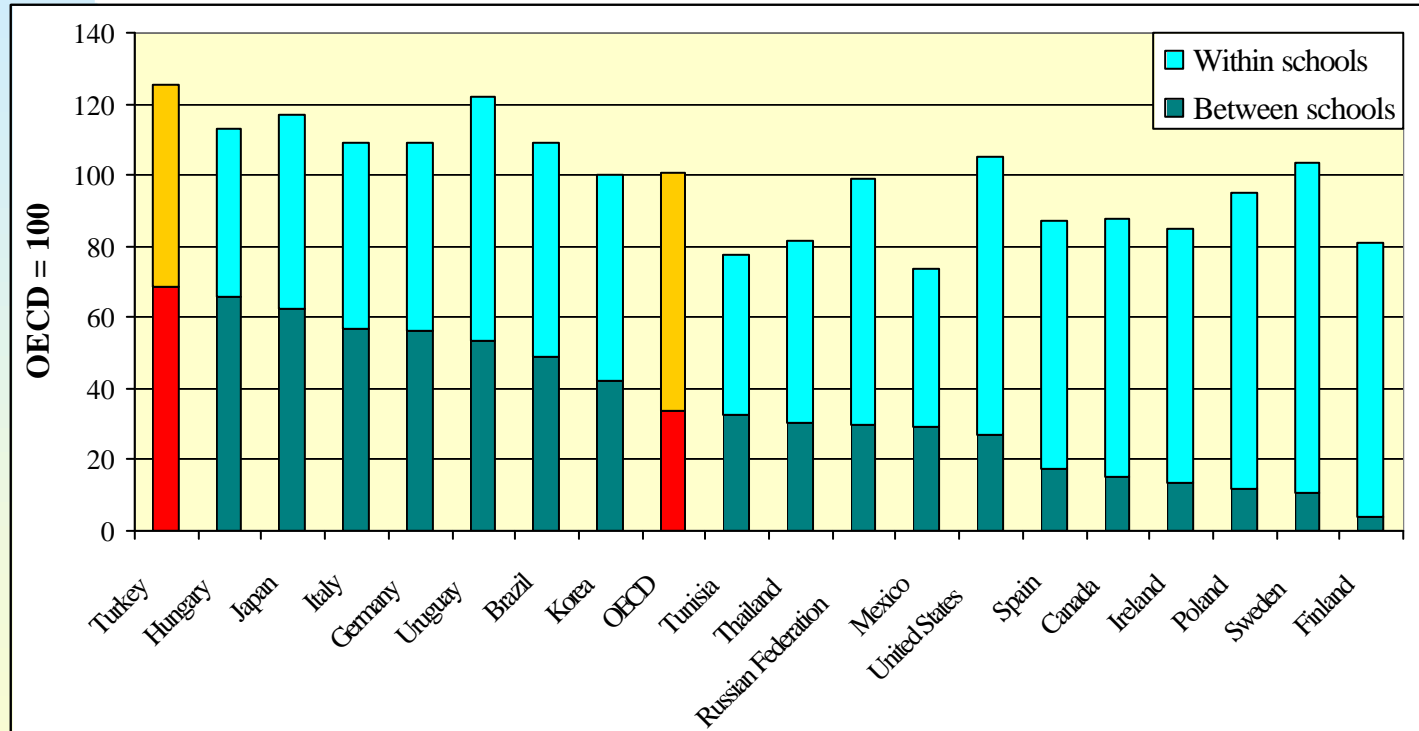
Source: OECD, PISA 2003 database

Turkey as an outlier: highly varied performance

- Dispersion of performance high as **between** schools
- Dispersion of performance **within** schools relatively low

PISA : Dispersion of student performance in mathematics

(variance of individual results relative to the OECD average)



Source: OECD, PISA 2003 database

How to Respond?

- Target low-performing schools, not students
- Ensure an adequate teacher supply
- Early childhood education pays high returns

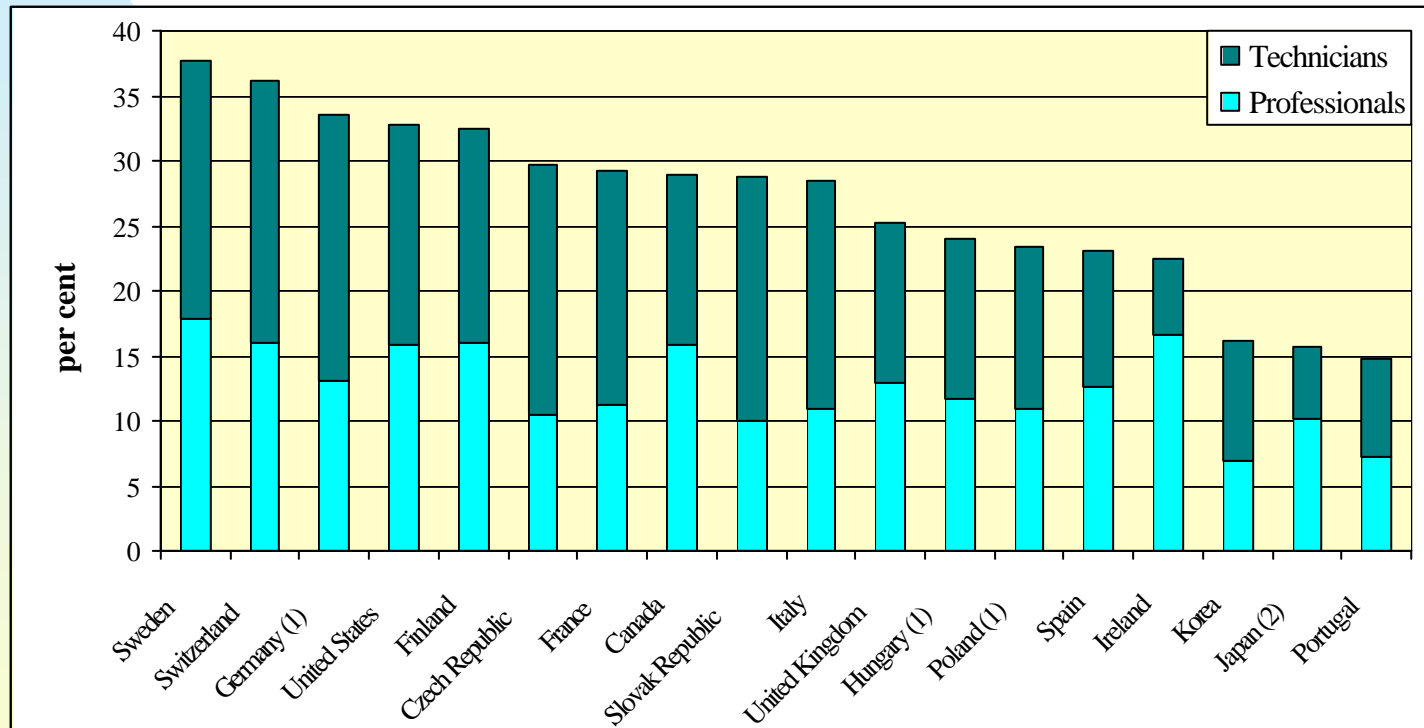


II. Develop the Highly Skilled

- They contribute disproportionately to the Knowledge Economy
- They drive productivity advance
- Science and technology are not everything but are often at root of innovation

Employment in science and technology related occupations, 2002

(per cent of total employment)

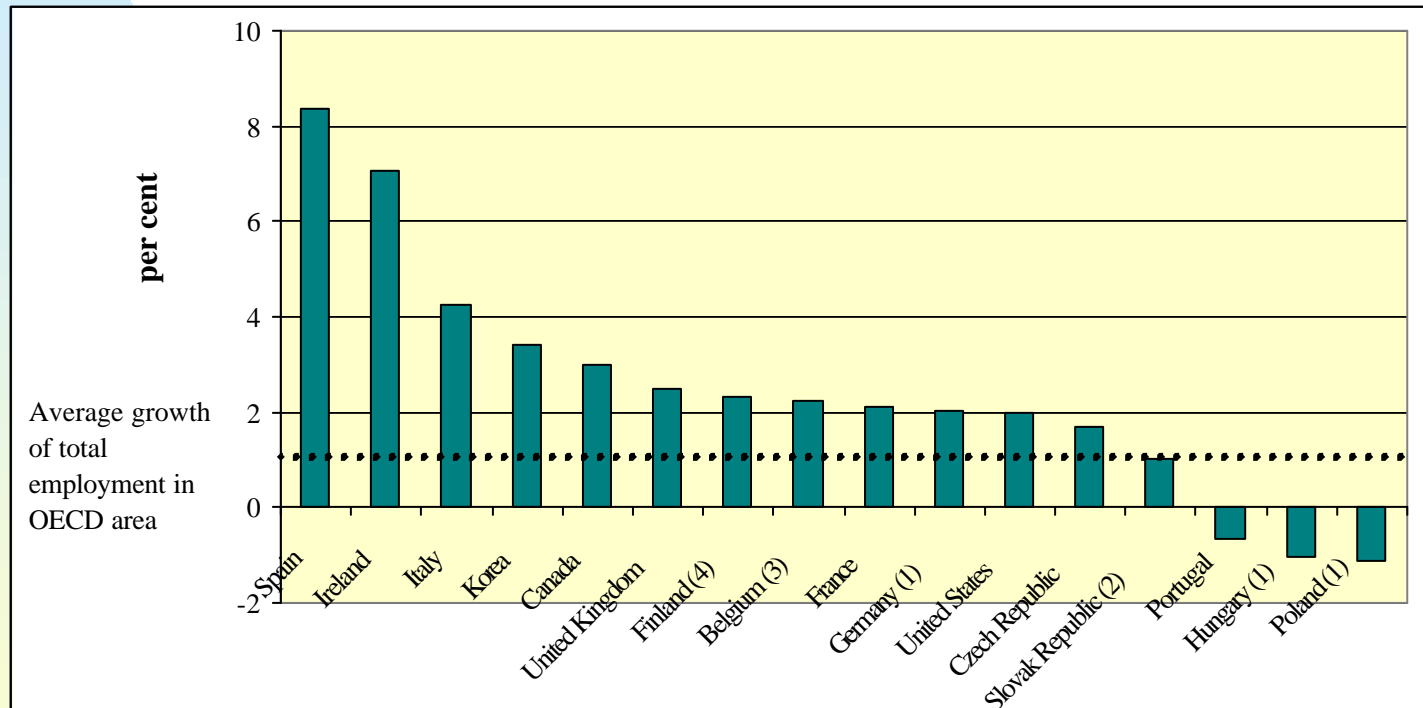


(1) 2001 (2) Data for Japan are national estimates

Source: OECD Science, Technology and Industry Scoreboard, 2003

Growth of employment in science and technology, 1995-2002

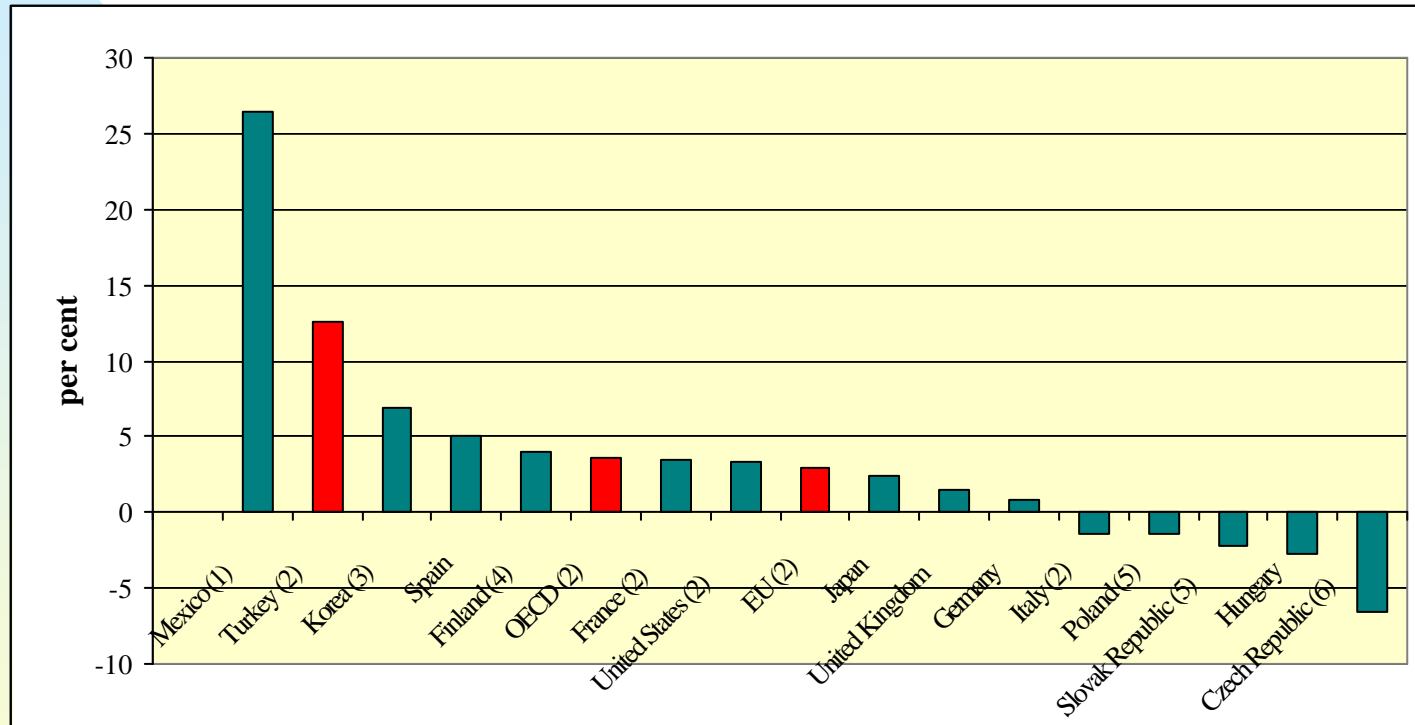
(average annual growth rate)



(1) 1999-01 (2) 1999-02 (3) 1995-01 (4) 1997-01

Source: OECD Science, Technology and Industry Scoreboard, 2003 ; OECD Economic Outlook, N° 76

Growth of researchers in the business sector, 1991-2001 (annual average)

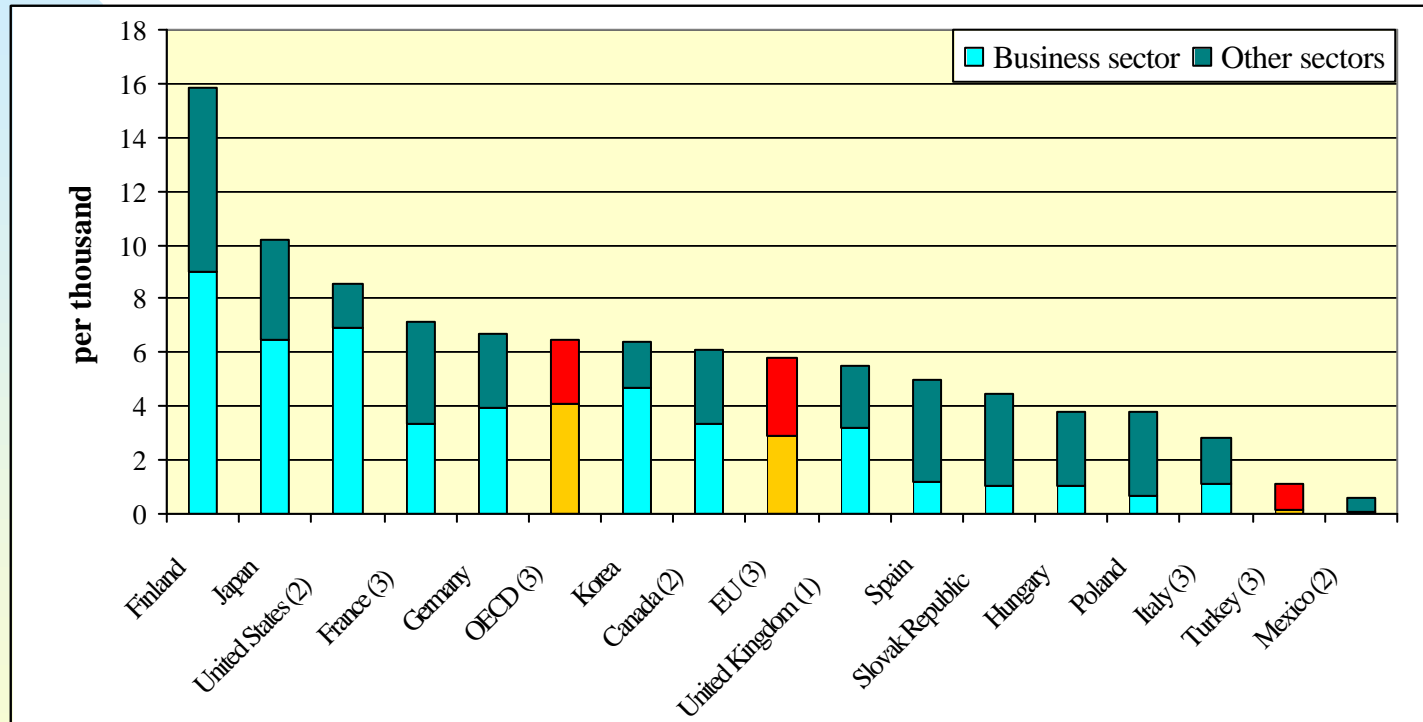


(1) 1993-99 (2) 1991-01 (3) 1995-01 (4) 1997-01 (5) 1994-01 (6) 1992-01

Source: OECD Science, Technology and Industry Scoreboard, 2003

Researchers in workforce, 2001

(share of total employment)



(1) 1998 (2) 1999 (3) 2000

Source: OECD Science, Technology and Industry Scoreboard, 2003

Maintain and attract a good flow through entire pipeline

- Basic education to professional level
- Make science and technology attractive to students at **all** levels
- Industry can leverage competences and resources

How to Respond?

- Ensure high quality teaching to enhance student performance and enjoyment
- Adapt university curricula to modern needs
- Mobilize women, who are under-represented in scientific fields
- Greater support for Doctorates and Post-doctorates

III. Foster Mobility of the Highly Skilled

- Contributes to diffusion of knowledge and innovation
- Part of the education and training process
- Movement is desirable across sectors and internationally

Brain gain / brain drain is not the issue

- Cross-fertilization of ideas
- Meet specific skill requirements efficiently
- Aim to attract return migration by earlier skilled emigrants
- Emulate Asian success in this regard

How to respond?

- Ensure a flexible labor market
- Provide attractive environment for research, innovation and entrepreneurship
- Career opportunities are essential
- Align with EU efforts to harmonize degree qualifications to Ph.D level