Development trends of higher education

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HEGESCO Advisory Board Meeting
Ljubljana, 7 February 2008
Main Trends and Issues

• Increasing pressure on higher educational institutions to take in more students
• Students choose differently from older generations
• Is there a scope for further expansion of higher education?
• Equality and Quality of education – A challenge for the whole educational system
Quantity challenges

Education systems continue to expand at a rapid pace; more and more of the population are educated to upper secondary level and have ambitions for higher education. For some countries demographic changes give some relief.
On average, across OECD countries, 68% of the adult population has completed an upper-secondary education. Korea has seen a particular rapid expansion over all age cohorts. Turkey and Poland have seen a substantial increase among 25-35 year olds.

1. Excluding ISCED 3C short programmes
2. Year of reference 2004
3. Including some ISCED 3C short programmes
Percentage of 15-year-olds expecting to complete higher education (2003)

1. Response rate too low to ensure comparability.
In most European countries the age group 15-24 will decrease substantially by 2020 particularly in East and Central Europe (Index 100 in 2000)
Meeting demands for higher education

More and more of the population are educated to the tertiary level with substantially different preferences than previous generations.
Growth in university-level qualifications
Approximated by the percentage of persons with ISCED 5A/6 qualification born in the age groups shown below (2005)

Tertiary attainment has increased in Slovenia, Hungary, Turkey ... but not enough to catch up with the OECD average... Poland is an exception with significant increases in recent years.
Young individuals choose differently

Ratio of 25-to-34-year-olds with ISCED 5A and 6 levels of education to 55-to-64-year-olds, by fields of education (2004)

Ratios larger than 1 mean that there are more younger than older graduates

Is there a risk of over-supply of higher educated individuals?

Across OECD countries, the increasing supply of well-educated labor has been matched by the creation of high-paying jobs.
The effects of the expansion of higher education: A high calibre workforce or the overqualified crowding out the lesser qualified?

Lower secondary unemployment rate as a ratio of upper secondary unemployment rate

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<tr>
<th>Year</th>
<th>Top group</th>
<th>Middle group</th>
<th>Bottom group</th>
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<tr>
<td>1995</td>
<td>1.7</td>
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In those countries that did not expand higher education (the bottom group), failure to complete high school is now associated with an 80% greater probability of being unemployed, compared to less than 50% in the top group.

“Middle group”
The eight countries with modest increases in higher education (2.4% on average)

“Top group”
The nine countries that expanded higher education fastest in the 1990s (5.9% on average)

The nine countries with no or very modest increases in higher education (0.1% on average) (includes US)
Changes in higher education and changes in unemployment for lower secondary educated adults: late 1990s and early 2000s

Countries in red had low or no growth in tertiary attainment but substantial growth in unemployment among the lower educated.

Countries in green had the fastest growth in tertiary attainment and close to zero or negative growth in unemployment.

Poland
Slovak Republic
Czech Republic

Change in tertiary attainment levels between 1990-1994 and 1995-1999
The earnings benefits from holding a university degree are positive and strong among OECD countries. In all but three of the 20 countries with available data, the earnings benefit increased between 1997 and 2003, in Germany, Italy and Hungary by between 20% and 40%.
Equity and Quality

There is a lack of international comparable information, but some light has been shed on these issues by Pisa and future surveys will add to our knowledge.
Average performance of 15-year-olds in science - extrapolate and apply

High science performance

- Finland
- Hong Kong-China
- Chinese Taipei
- Estonia
- Liechtenstein
- United Kingdom
- Czech Republic
- Macao-China
- Ireland
- Iceland
- United States
- Austria
- Belgium
- Korea
- Slovenia
- Germany
- Switzerland
- Hungary
- Sweden
- Poland
- Denmark
- Croatia
- Slovak Republic
- Spain
- Lithuania
- Luxembourg
- Russian Federation
- Italy
- Greece
- Portugal
- Israel

Low science performance

- New Zealand
- French Polynesia
- Marshall Islands
- Cook Islands
- Hawaii
- American Samoa
- Guam
- Palau
- Micronesia

18 countries perform below this line
Quality - Top performers matter
Excellence in education and countries’ research intensity

$y = 1.695x^{0.604}$
$R^2 = 0.70$

Number of researchers per thousand employed, full-time equivalent

Percentage of students at Levels 5 or 6 in the PISA assessment
Variation of performance within schools

Variation of performance between schools

Equity - Variation in student performance

PISA 2006: Science Competencies for Tomorrow’s World, Figure 4.1a.
Inequalities between schools links with intake of students from disadvantaged background to higher education
OECD surveys on education

- **PISA** (Programme for International Student Assessment)
  - Since 2000; 250-300,000, 15-year-old students in 55 countries are assessed every third year

- **PIAAC** (Program for the International Assessment of Adult Competencies)
  - PIAAC launched in January this year; 22 OECD countries signed up; 5,000 adults being assessed in each country; Survey starts 2011; Results in 2012

- **PISA for higher education**
  - Assessment of students in higher education; Feasibility study under way and expert groups formed
Thank you for listening!

- www.oecd.org/edu/eag2007
- www.pisa.oecd.org
  • All national and international publications
  • The complete micro-level database
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