

Organisation for Economic Co-Operation and Development

# 2002 Edition of Education at a Glance

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# Education at a Glance 2002

1. *Where we are today*
  - UK in the international comparison
2. *Where we can be*
  - Examples of the best performing countries
3. *How we might get there*

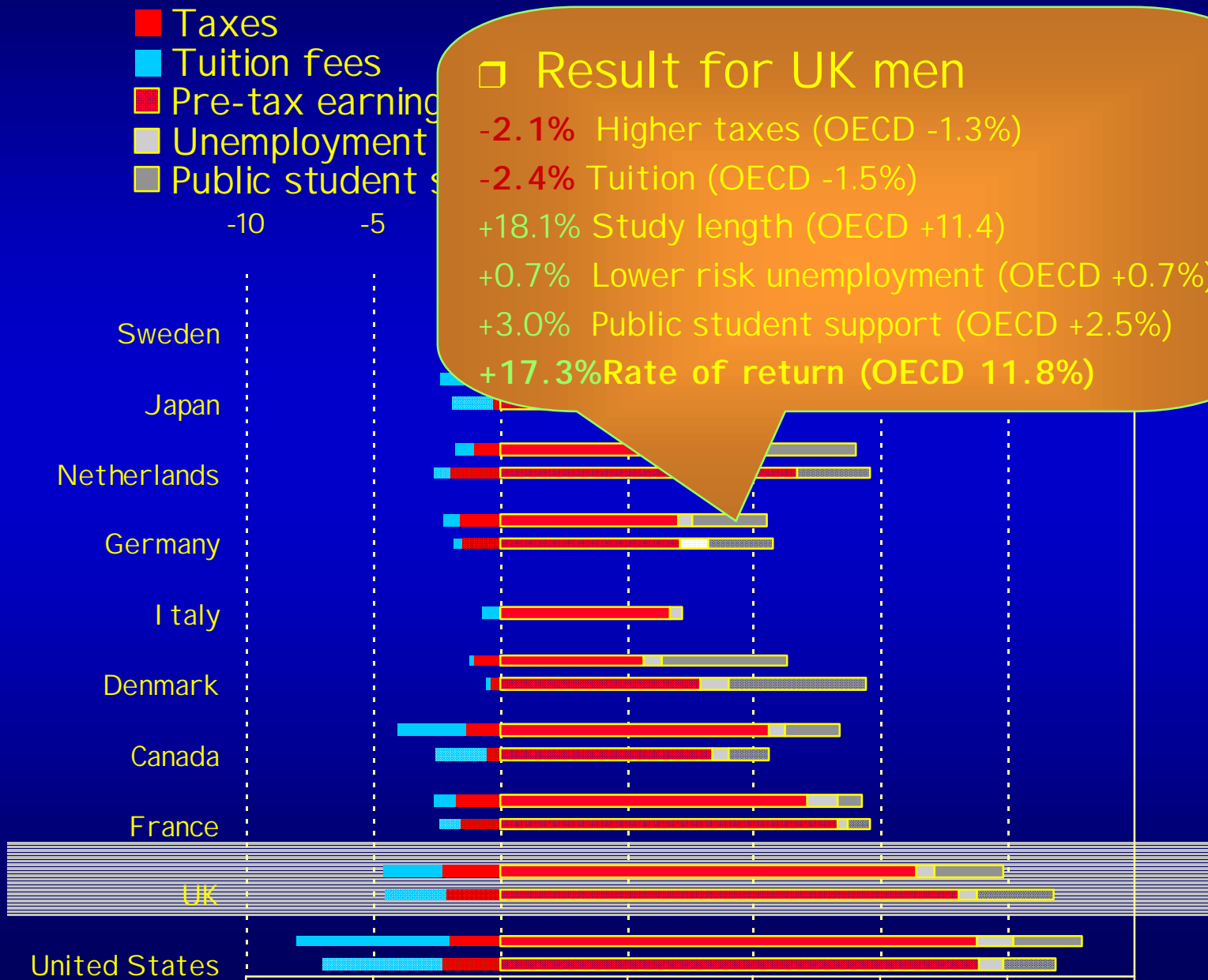
# 2002 Edition of Education at a Glance

	<b>Outputs and Outcomes</b> Impact of Learning	<b>Policy Levers</b> That shape Outcomes	<b>Antecedents</b> that contextualise or constrain policy
<b>Country or system</b>	Overall outcomes of education	System-wide structures, resources and policies	National educational, social and economic context
<b>Schools and other institutions</b>	Output of institutions and institutional performance	The learning environment at school	Community and school characteristics
<b>Instructional settings</b>	Quality of instructional delivery	Teaching and learning practices and classroom climate	Student learning conditions and teacher working conditions
<b>Individual learner</b>	Quality and distribution of knowledge and skills	Individual attitudes, engagement and behaviour	Background of the learners

## Compelling incentives for tertiary education

- University graduates in the UK
  - Markedly higher labour force participation
  - Markedly higher earnings
  - Markedly lower unemployment
  - Differentials in UK significantly larger than at OECD average

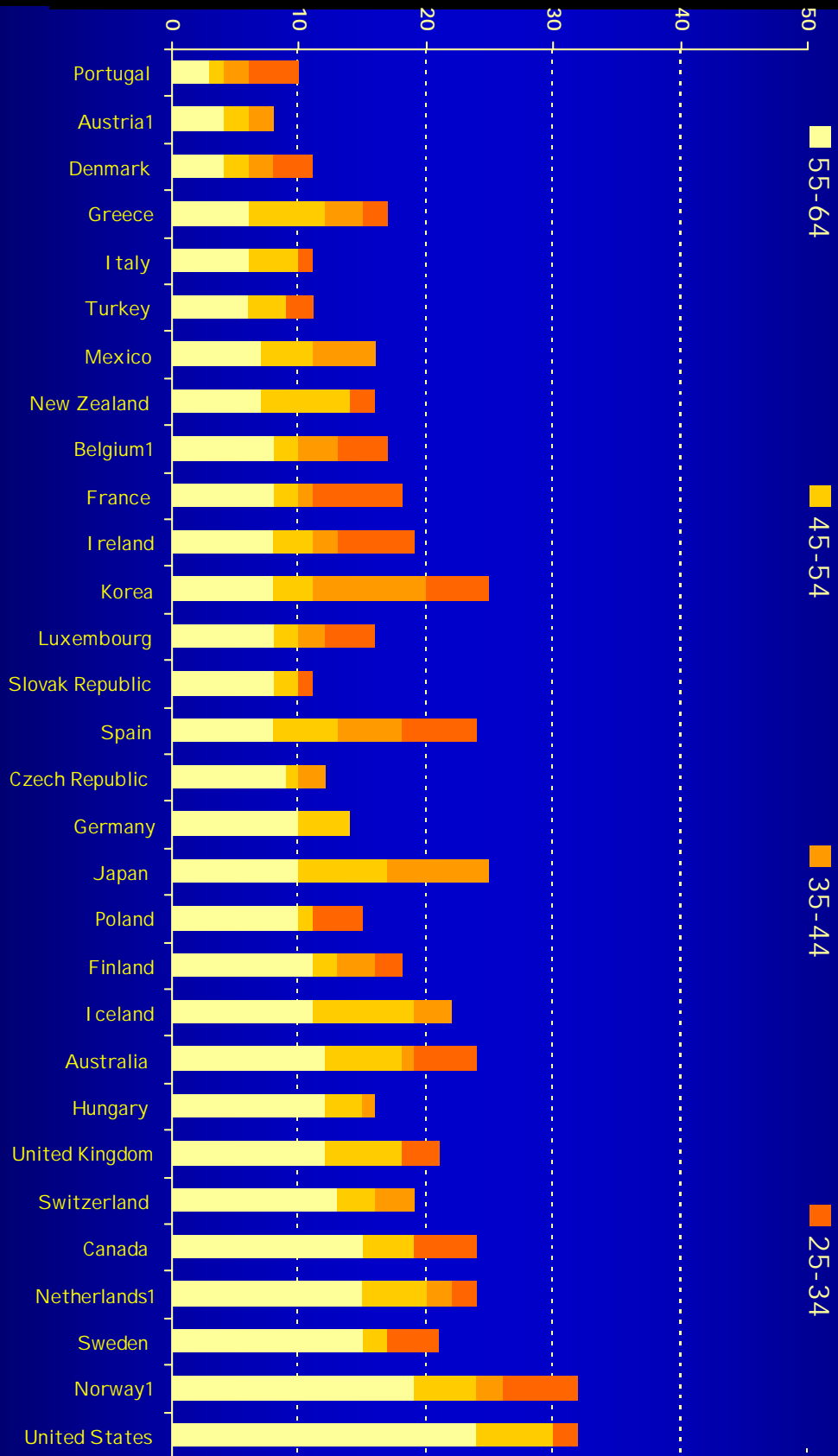
# Private rate of return to tertiary education



# Expansion of education systems

- Education systems have responded with a significant increase in the output of tertiary institutions
  - Graduation rates
  - Enrolment rates
  - Entry rates
  - “Survival rates”

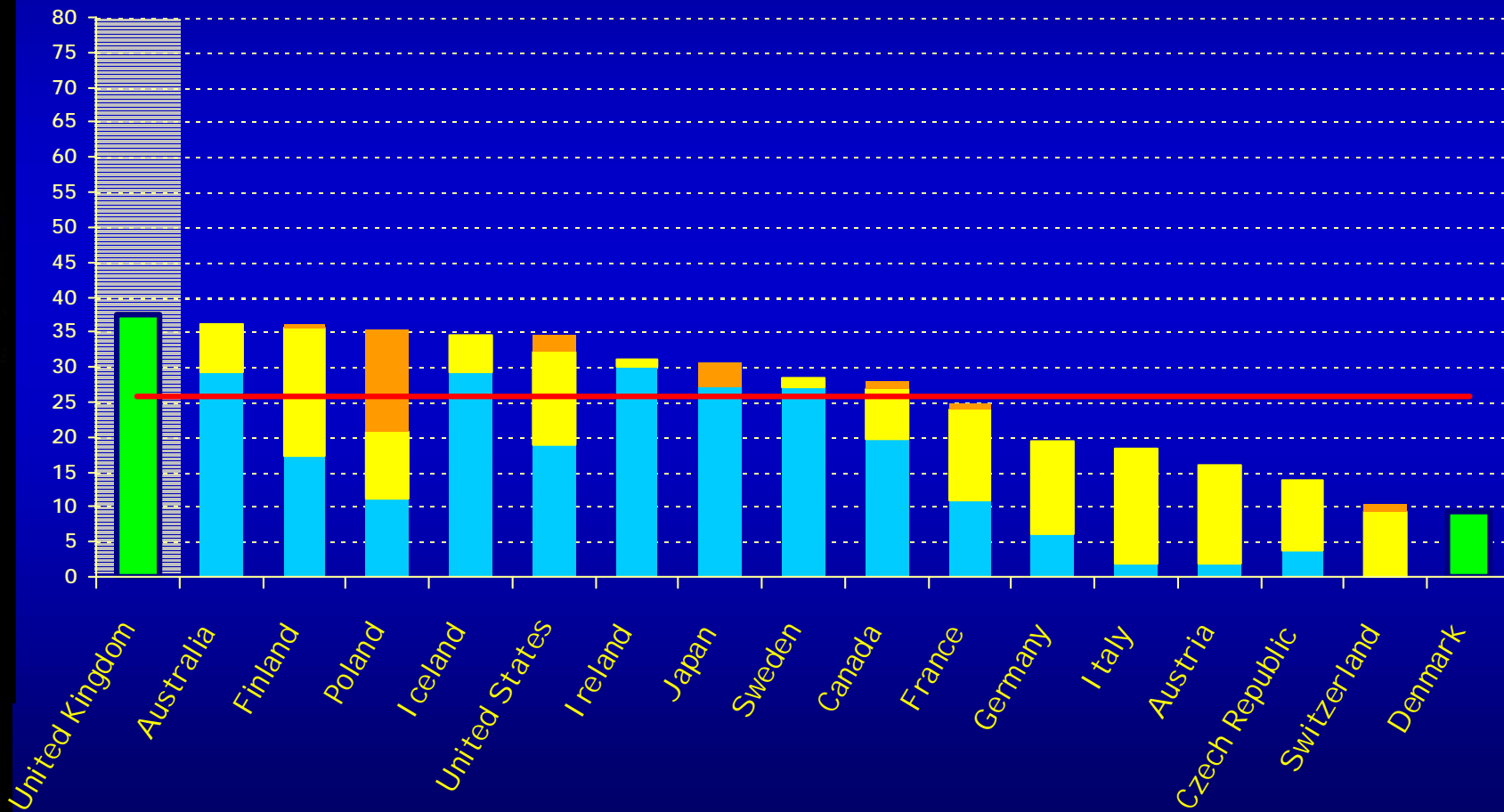
Tertiary-type A educational attainment by age group



# Graduation rates in tertiary-type A education by duration of program

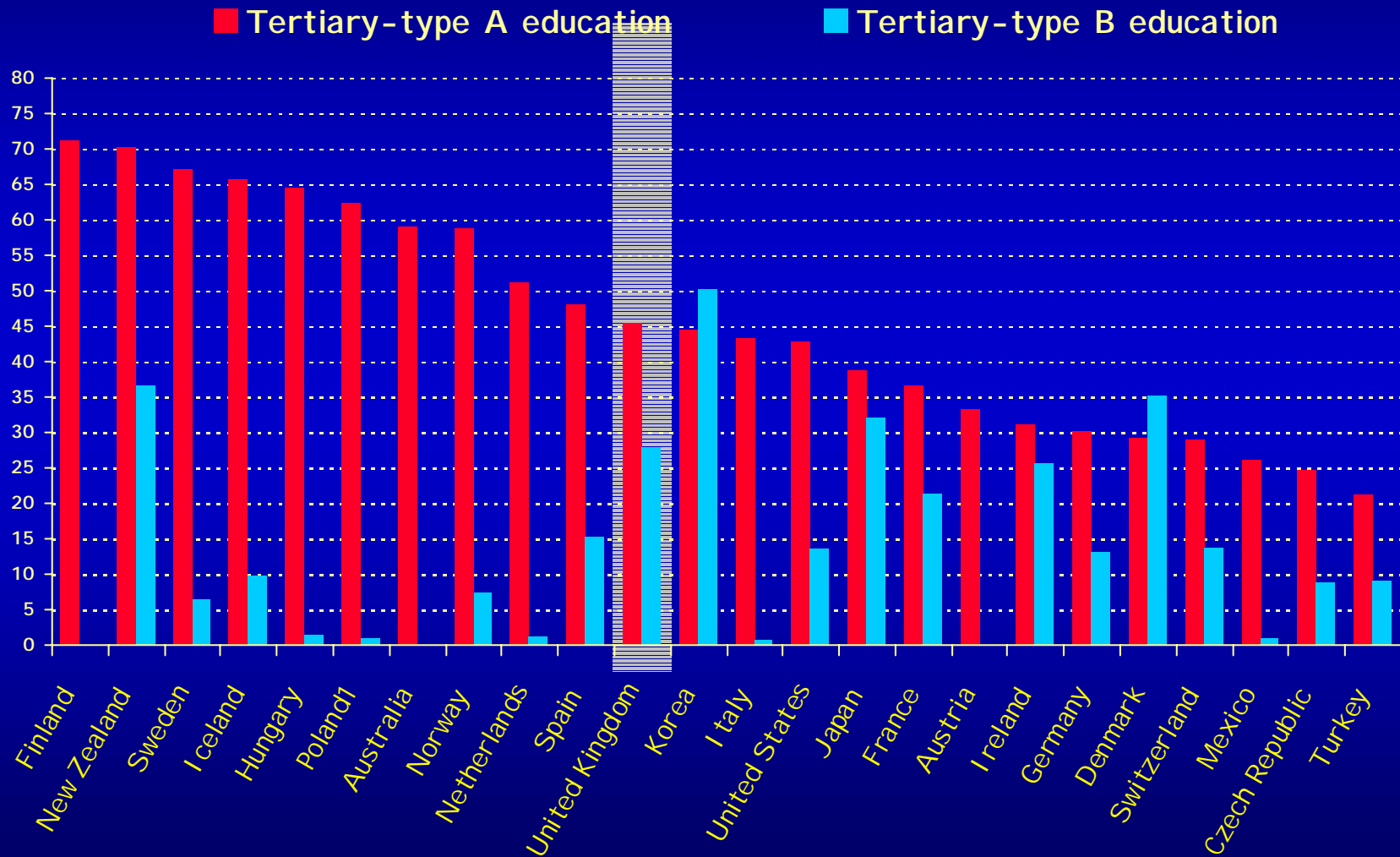
Ratio of number of graduates to the population at the typical age of graduation

■ All programmes    
 ■ 3 to less than 5 years    
 ■ 5 years    
 ■ 6 years or more



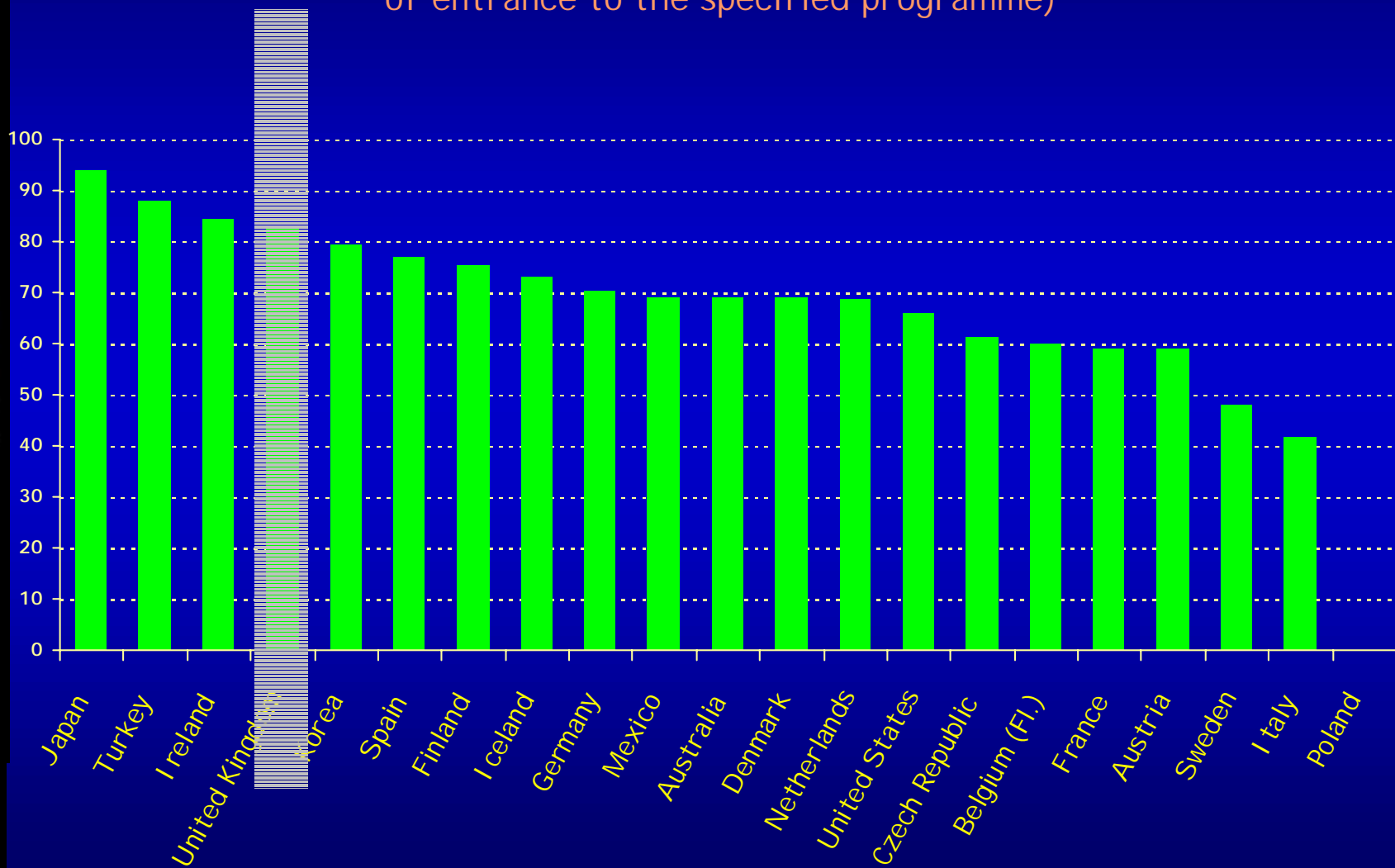
# Entry rates to tertiary education

Sum of net entry rates over single years of age in tertiary-type A and tertiary-type B education

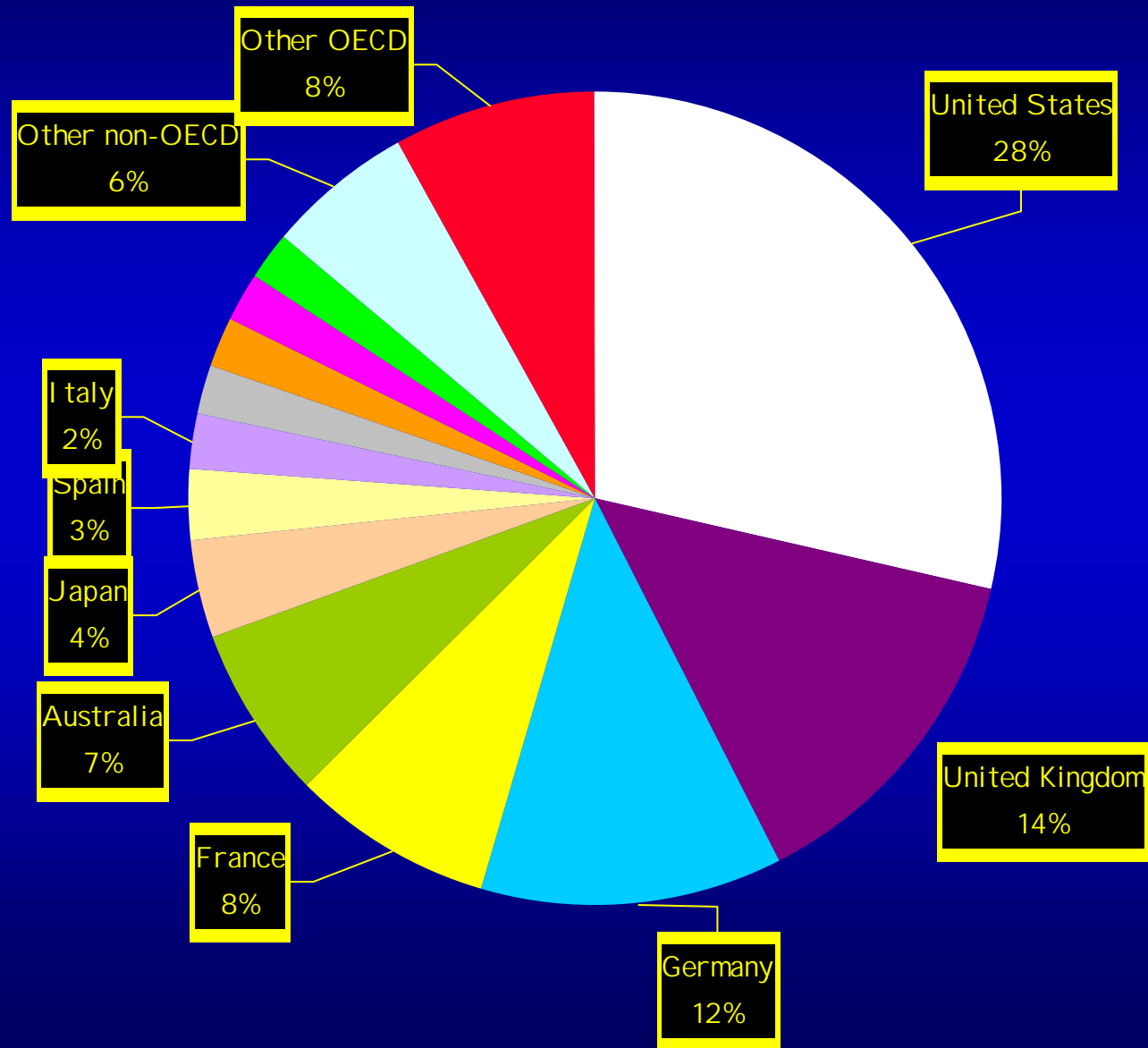


# "Survival rates" in tertiary-type A education by duration of programme

Number of graduates divided by the number of new entrants in the typical year  
of entrance to the specified programme)



# Distribution of students who are not citizens of the country of study, by host country (2000)

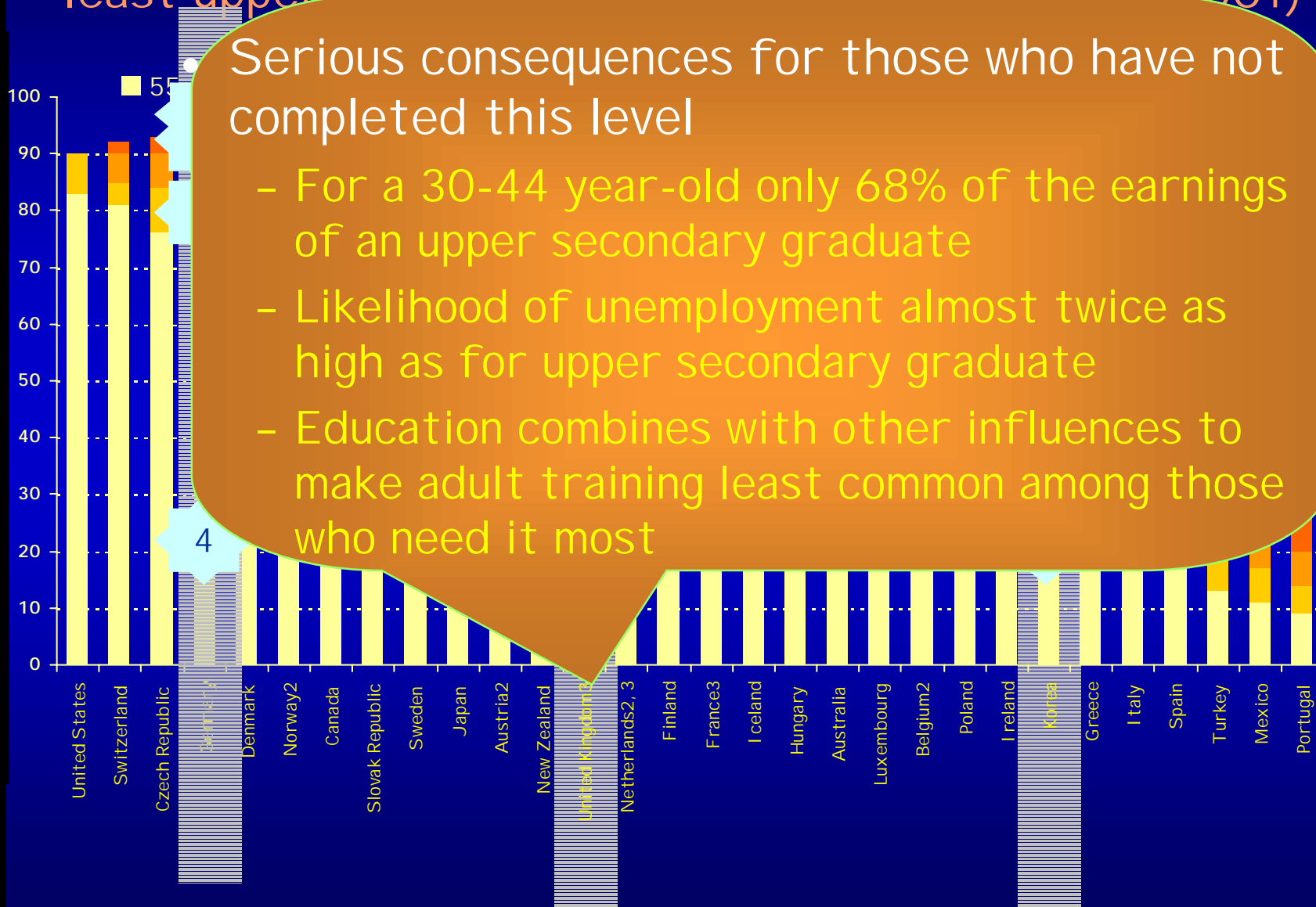


# Expansion of education systems

- In the UK, progress has been more limited at the upper secondary level\*

\* equivalent to 5 or more GCSEs at grades A to C  
or NVQ Level 2 or higher

## Percentage of the population that has attained at least upper secondary education, by age group (2001)



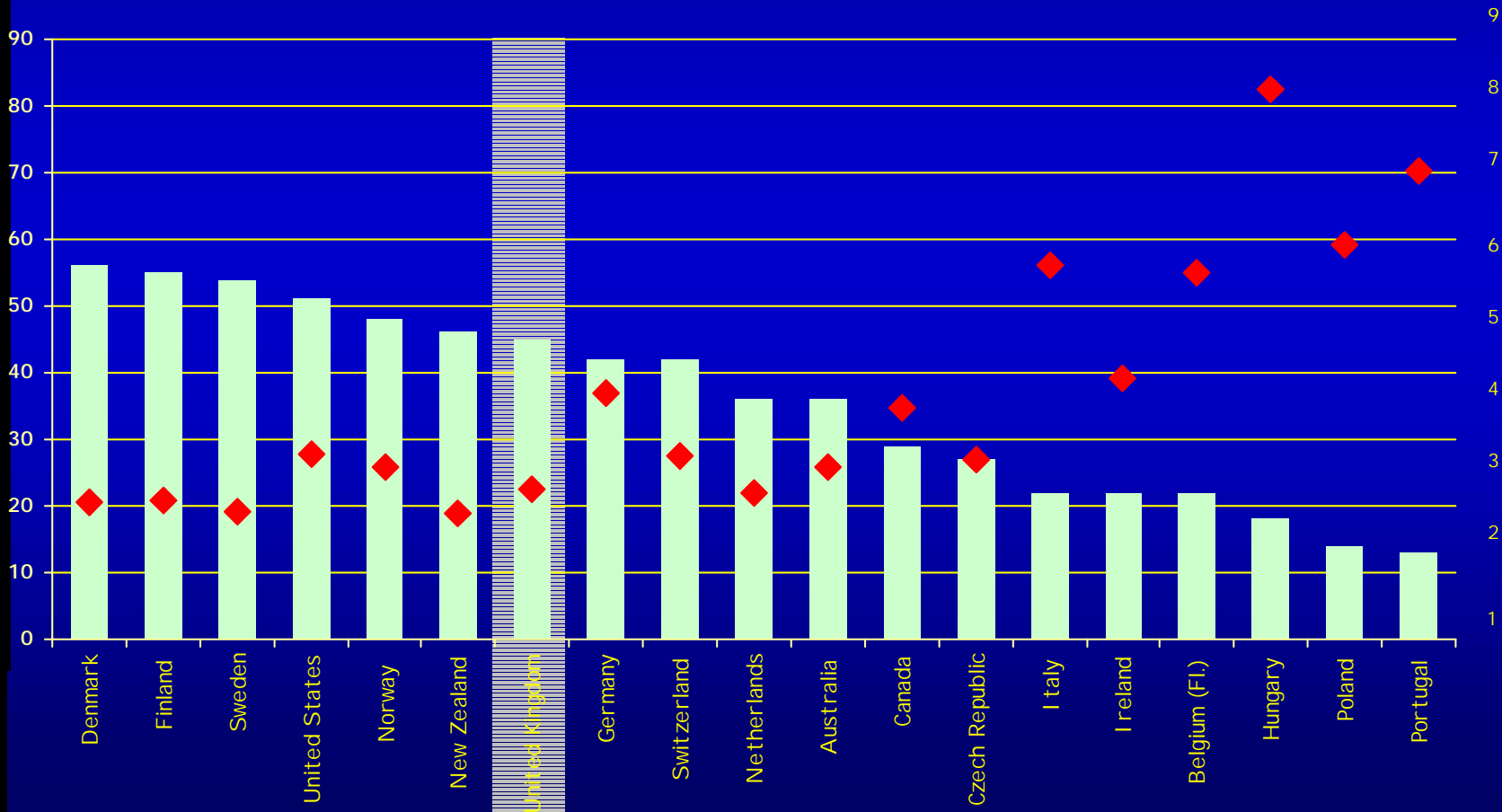
Serious consequences for those who have not completed this level

- For a 30-44 year-old only 68% of the earnings of an upper secondary graduate
- Likelihood of unemployment almost twice as high as for upper secondary graduate
- Education combines with other influences to make adult training least common among those who need it most

# Participation rate in continuing education and training and ratio of participation based on educational attainment for 25 to 64-year-olds (2001)

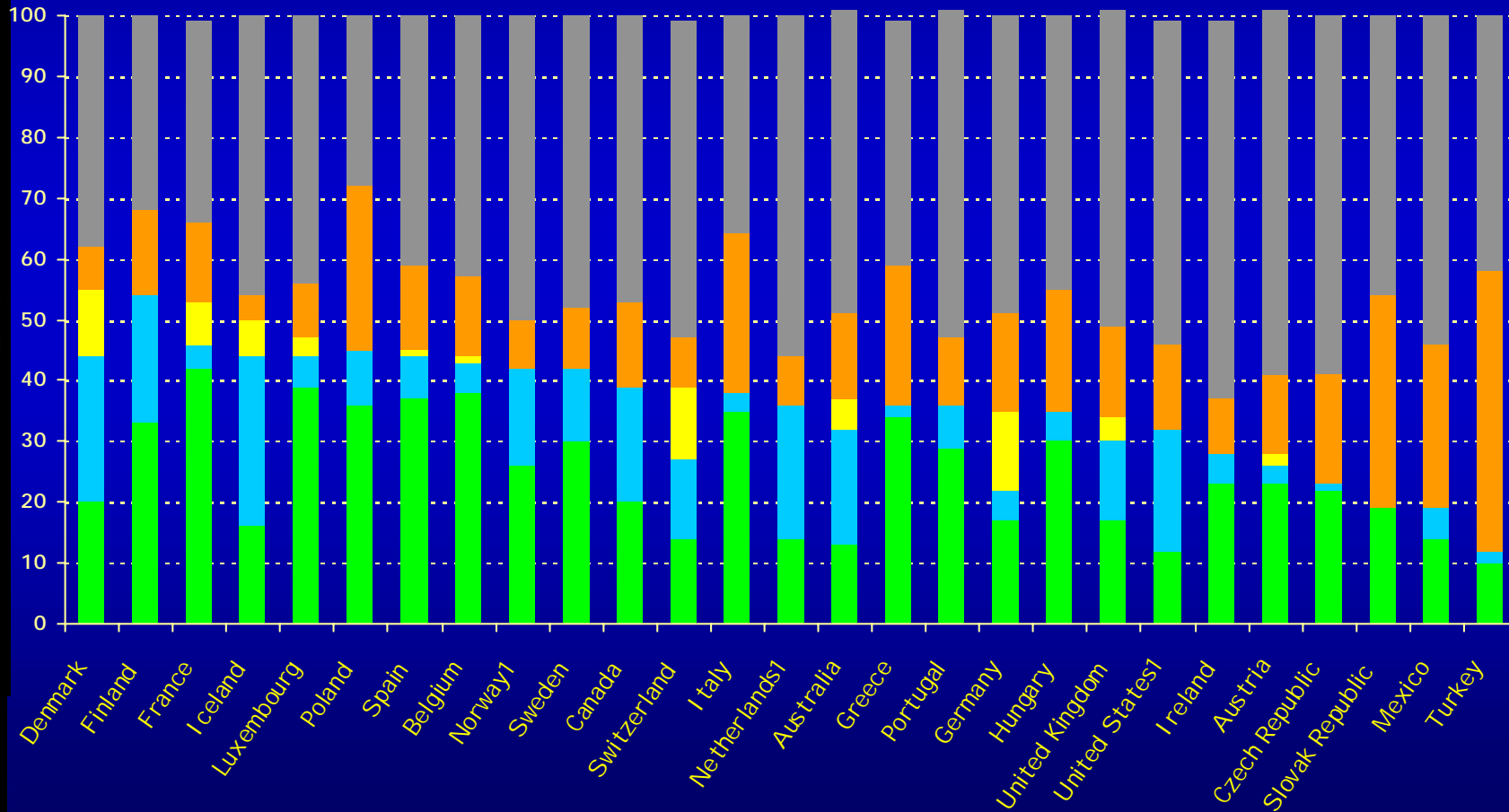
■ Total participation in continuing education and training

◆ Ratio of participation in continuing education and training for individuals with tertiary education relative to individuals who have not completed lower secondary education



# Percentage of 20 to 24-year-olds in education and not in education, by work status (2001)

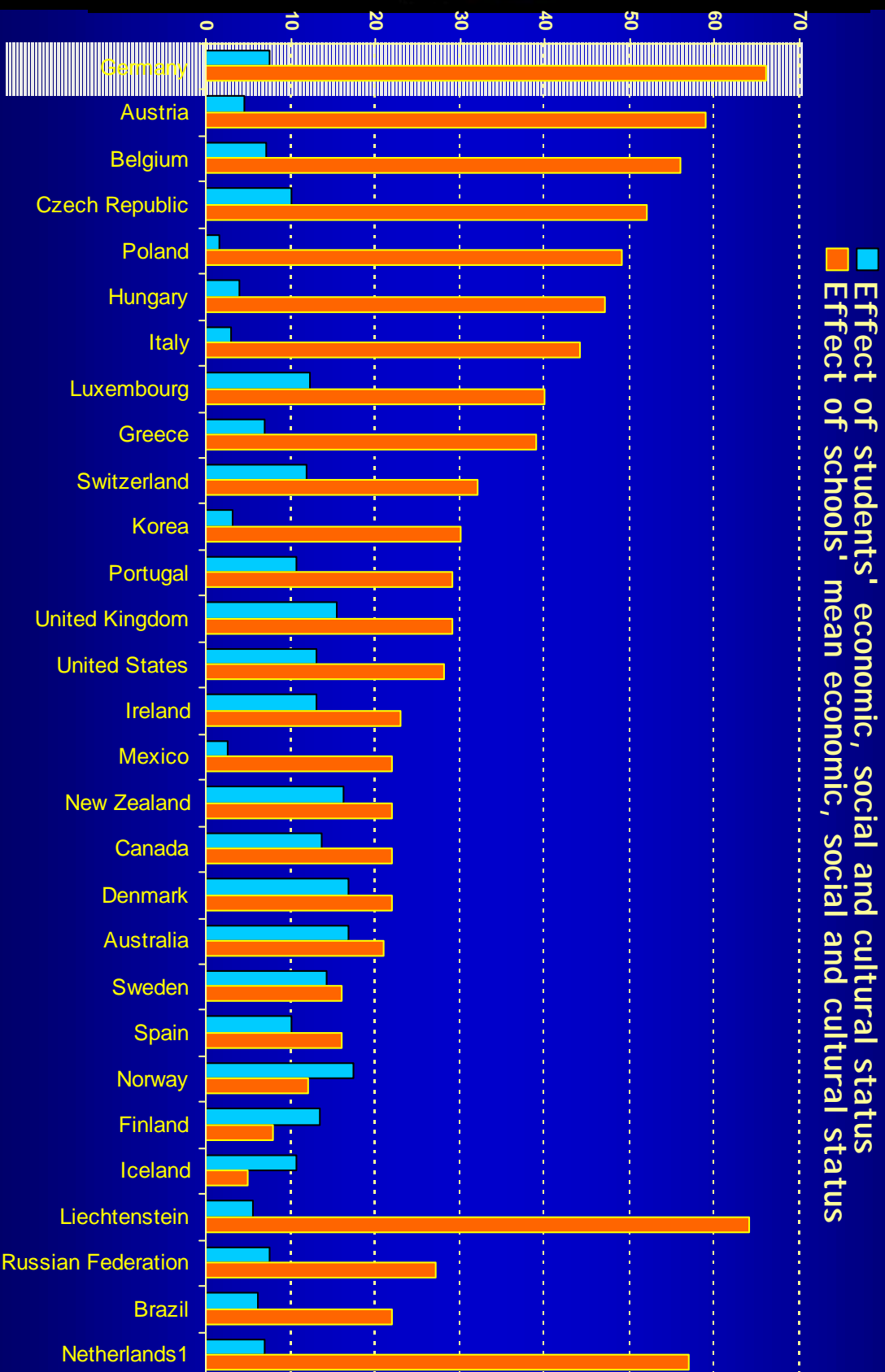
- Non-employed, in education
- Employed, in education
- Students in work-study programmes
- Non-employed, not in education
- Employed, not in education



# Quality and Equity

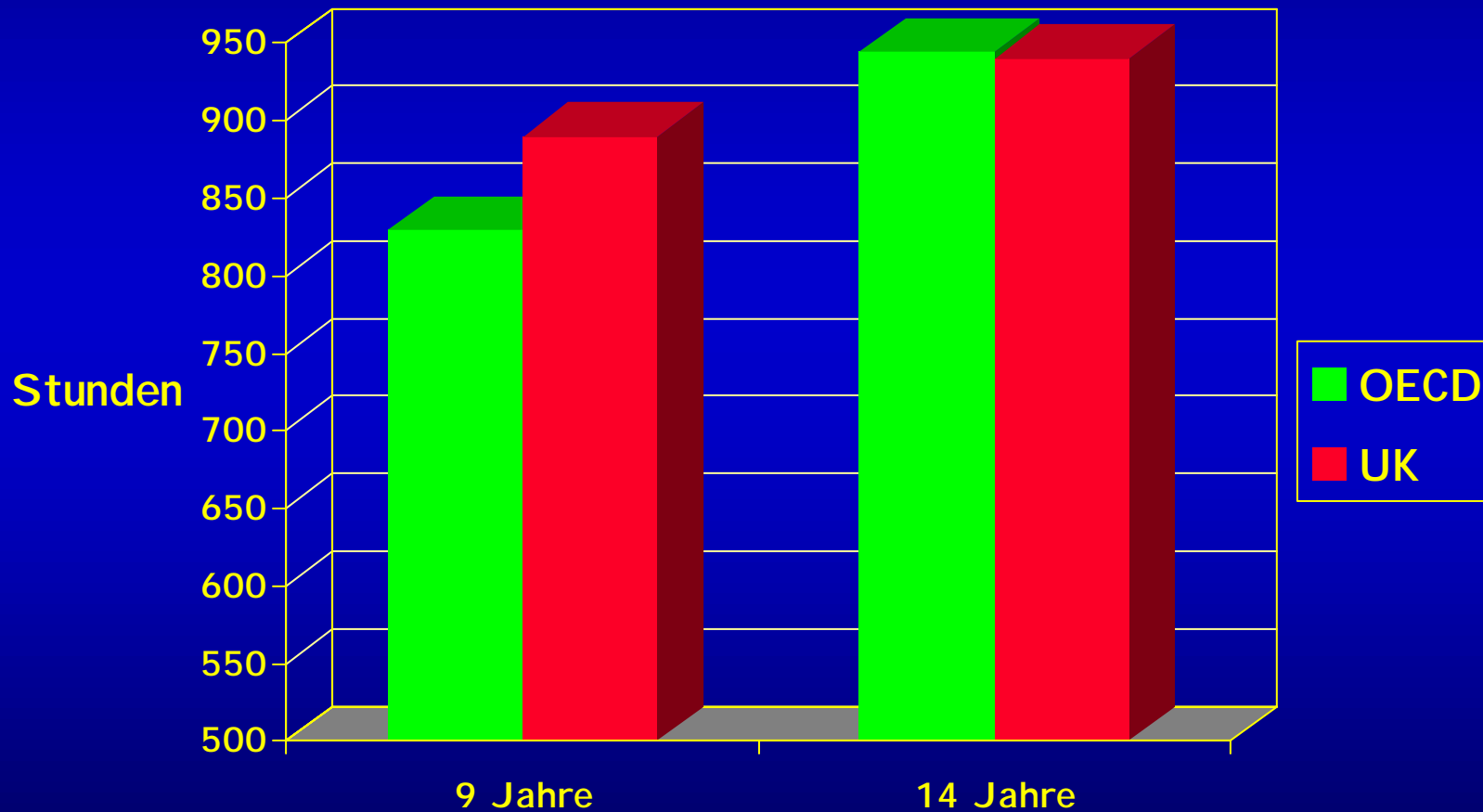


# Effects of students' and schools' socio-economic background on student performance



# The learning environment

## Intended instruction hours in England



# The learning environment

Inst

- Percentage of 15-year-olds who
    - shows interest in school (OECD 56%)
    - gives students their own opinions: 76%
    - helps students with their homework
    - continues teaching until the students understand: 75% (OECD 60%)
    - does a lot to help students: 75% (OECD 60%)
    - checks students' homework regularly: 69% (OECD 54%)
    - Significant relationship with performance
- Also fairly positive picture concerning broader engagement with school
  - Absolute and relative perspective
  - Students and school principal's perspective

# The learning environment

## Disciplinary climate

- Percentage of 15-year-olds who report that:
  - students cannot work well: 17% (OECD 19%)
  - students don't listen to what the teacher says: 20% (OECD 24%)
  - there is noise and disorder: 27% (OECD 30%)
  - at the start of class, more than 5 minutes are spent doing nothing: 41% (OECD 39%)
  - Significant relationship with performance

# The learning environment

## Homework policy

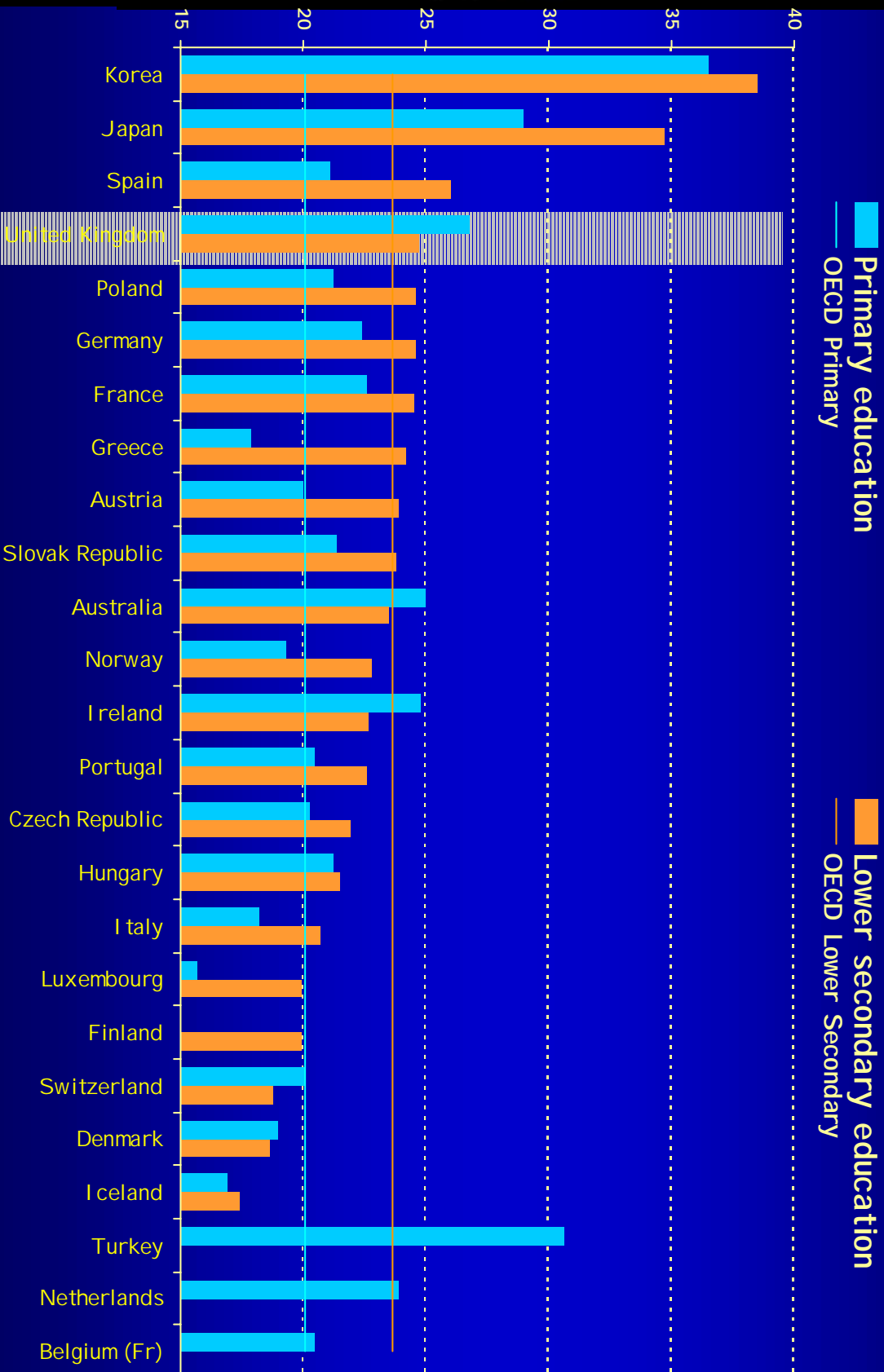
- Percentage of 15-year-olds who report that most of the time or always:
  - My teacher grades my homework: 74% (OECD 39%)
  - My teacher makes useful comments on my homework: 50% (OECD 24%)
  - I am given interesting homework: 14% (OECD 14%)
  - My homework counted as part of my marks: 22% (OECD 50%)

# The learning environment

## Achievement press

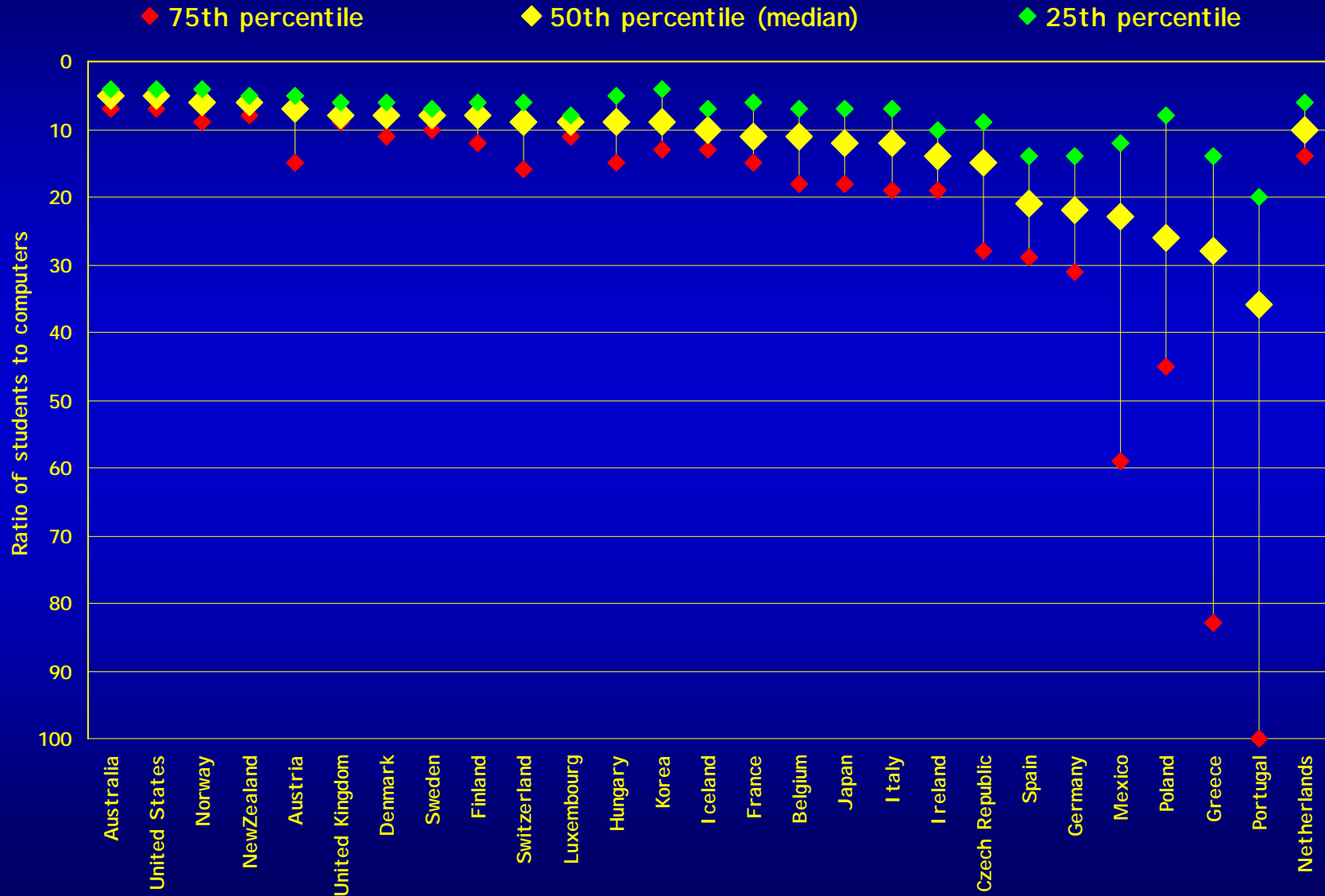
- Percentage of 15-year-olds who report that most of the lessons:
  - Teacher wants students to work hard: 91% (OECD 68%)
  - Teachers tells that students can do better: 49% (OECD 48%)
  - Teacher does not like it when students deliver careless work: 55% (OECD 49%)
  - Students have to learn a lot: 63% (OECD 57%)
  - Significant relationship with performance

# Average class size in public and private institutions, by level of education



# Ratio of students to computers (2000)

Total number of students enrolled in the school divided by the total number of computers for the school in which 15-year-olds are enrolled, weighted by student enrolment, by quartile

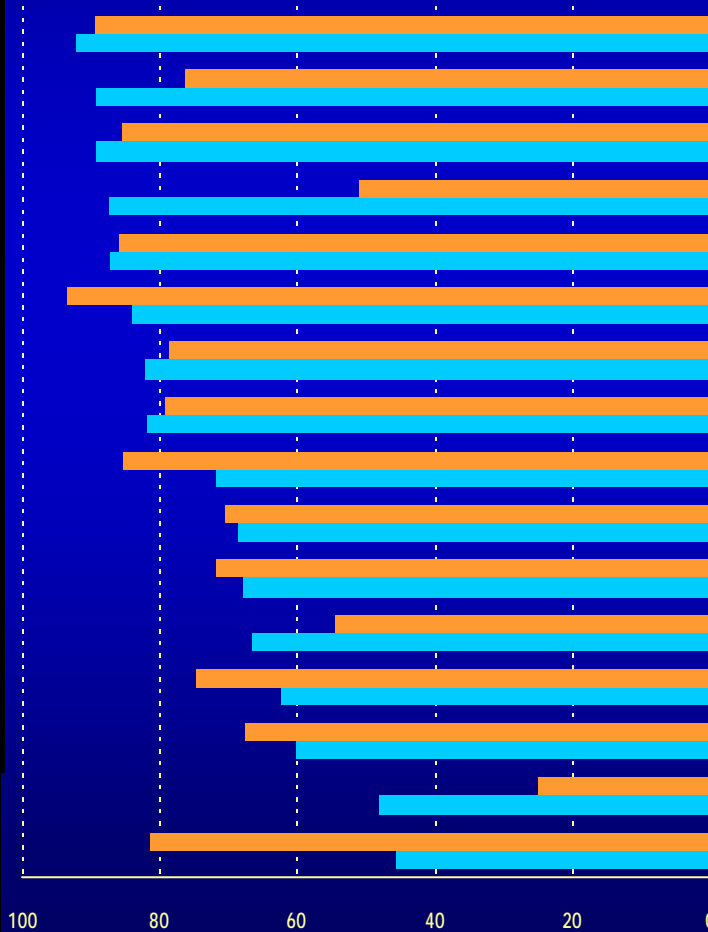


# Availability and frequency of the use of computers for 15-year-olds at home and at school (2000)

Distribution of mean percentages of 15-year-olds who reported having a computer available to use and those who reported using computers at home and at school

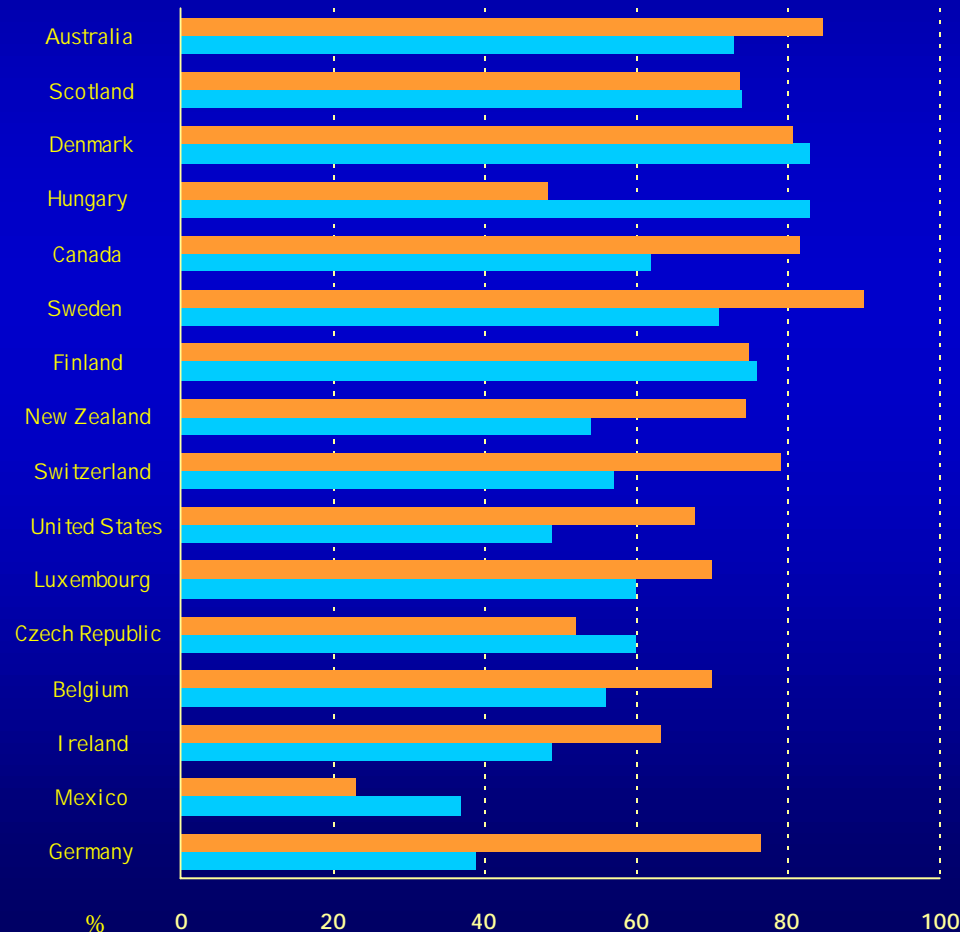
**Availability** of a computer to use almost every day, a few times each week or at least between once a week and once a month

School



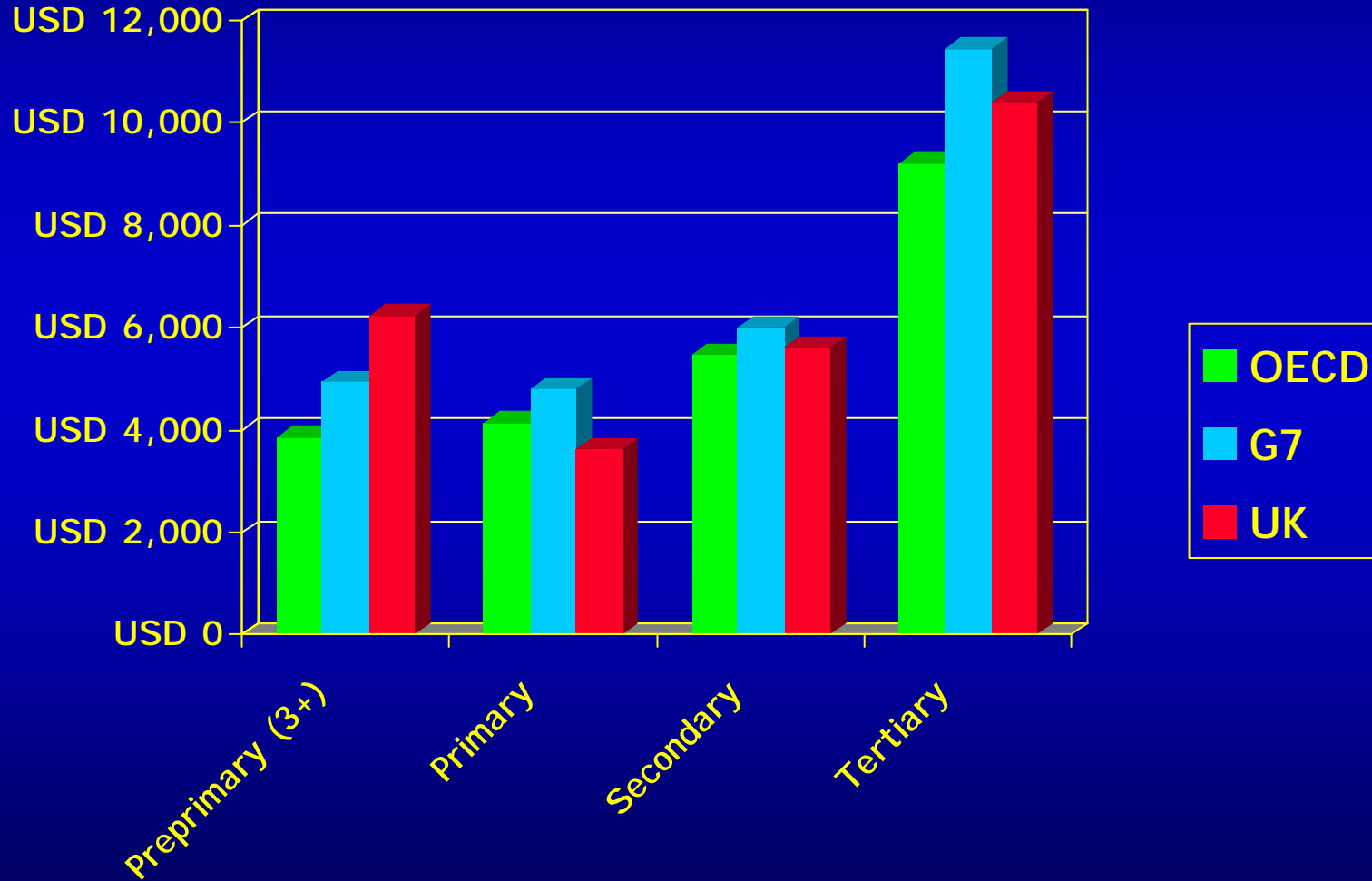
**Frequency** of computer use almost every day, a few times each week or at least between once a week and once a month

Home



# Spending per student

## United Kingdom

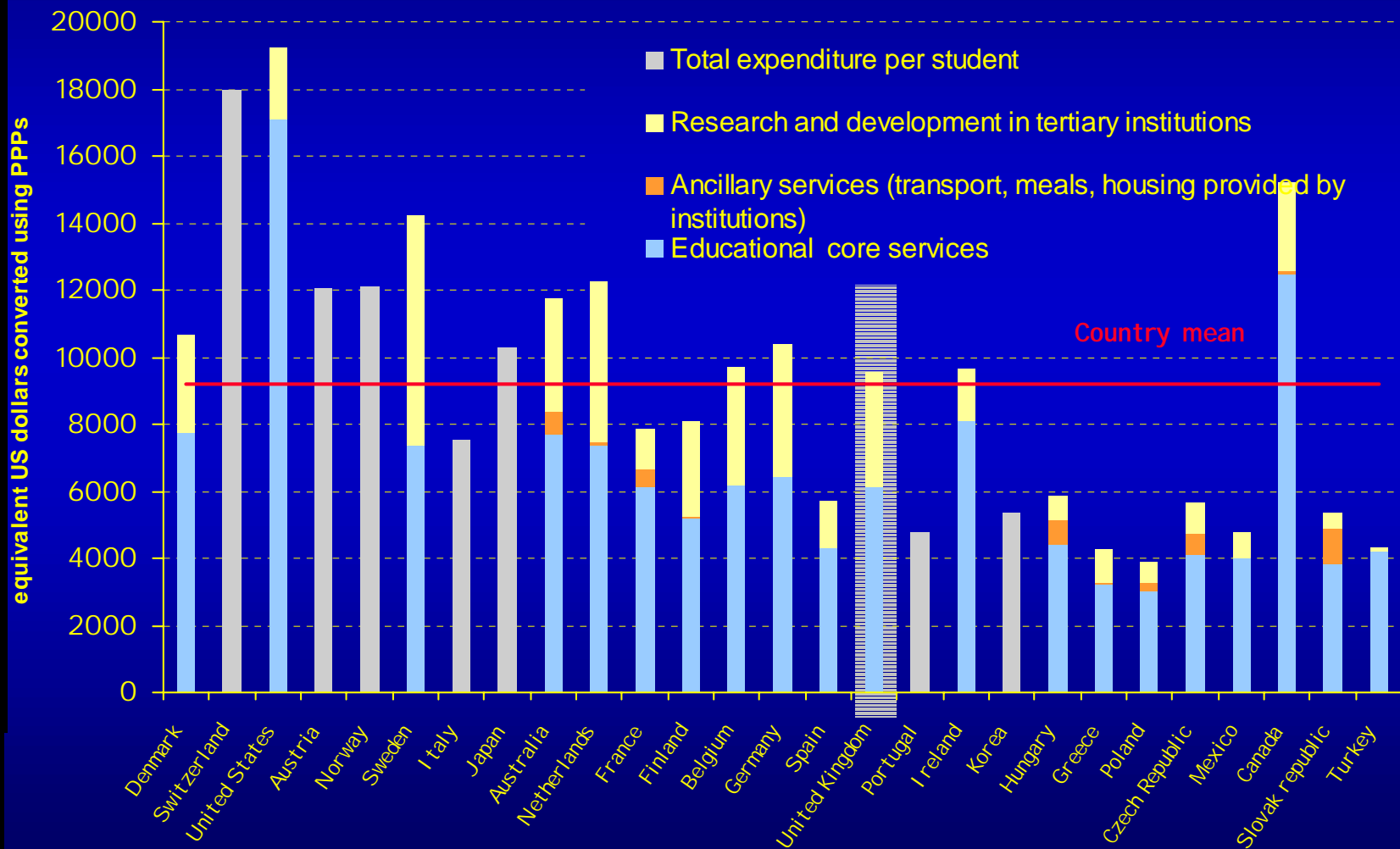


# Expenditure on educational institutions per student

Annual expenditure on educational institutions per student in US dollars converted using PPPs, by level of education, based on full-time equivalents

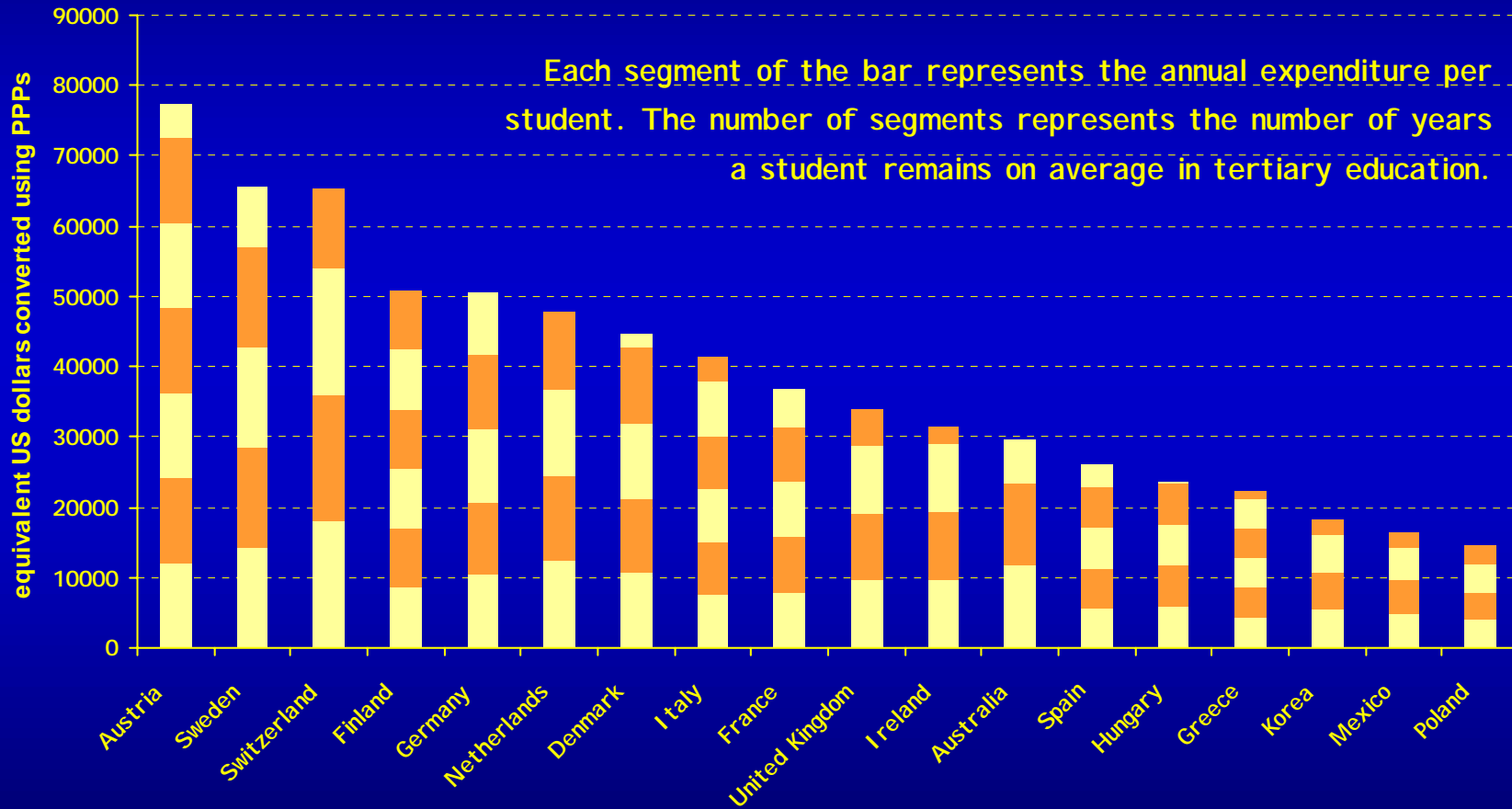
27

## Tertiary education

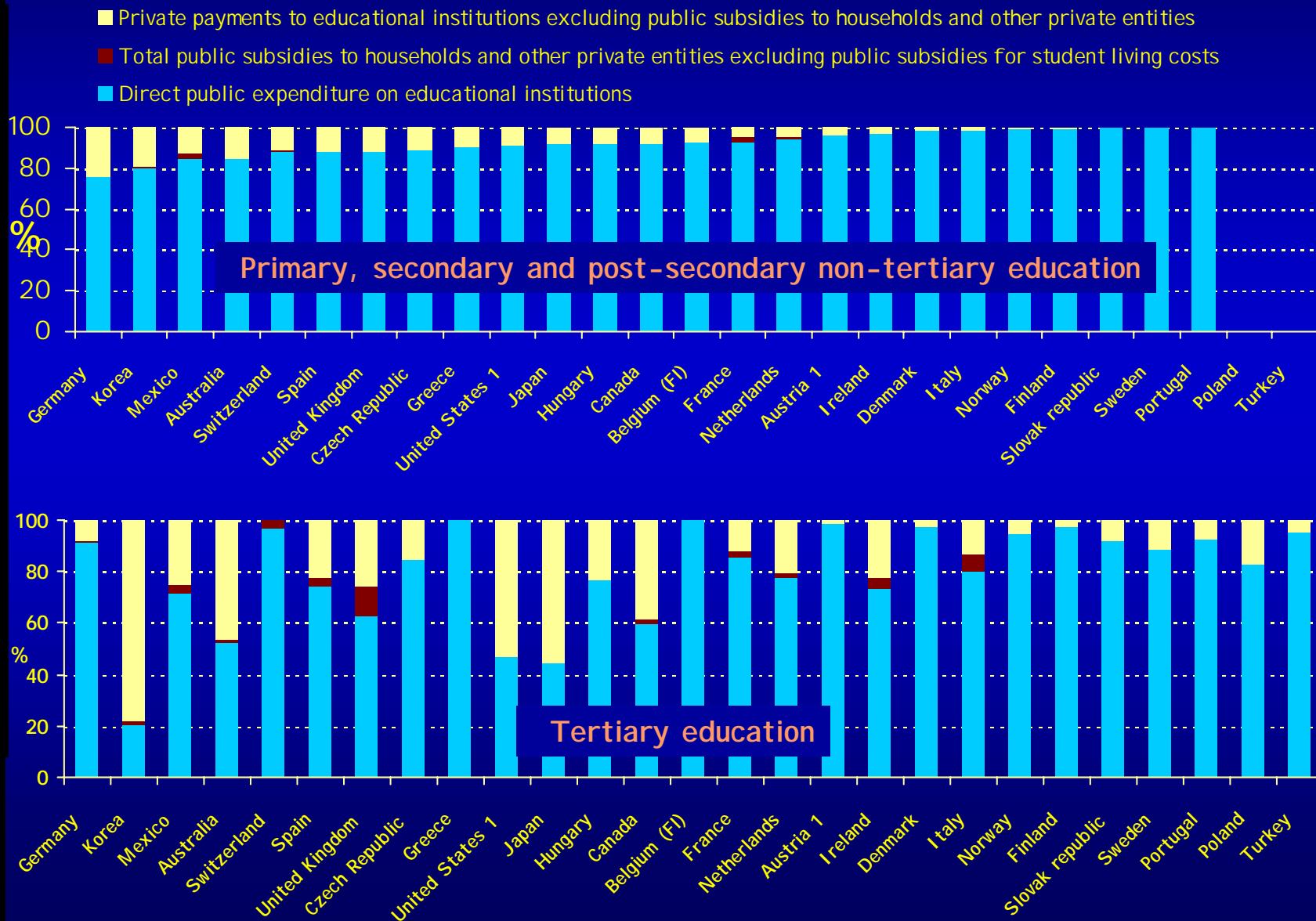


# Cumulative expenditure on educational institutions per student over average duration of tertiary studies

Annual expenditure on educational institutions per student multiplied by average duration of studies, in US dollars converted using PPPs



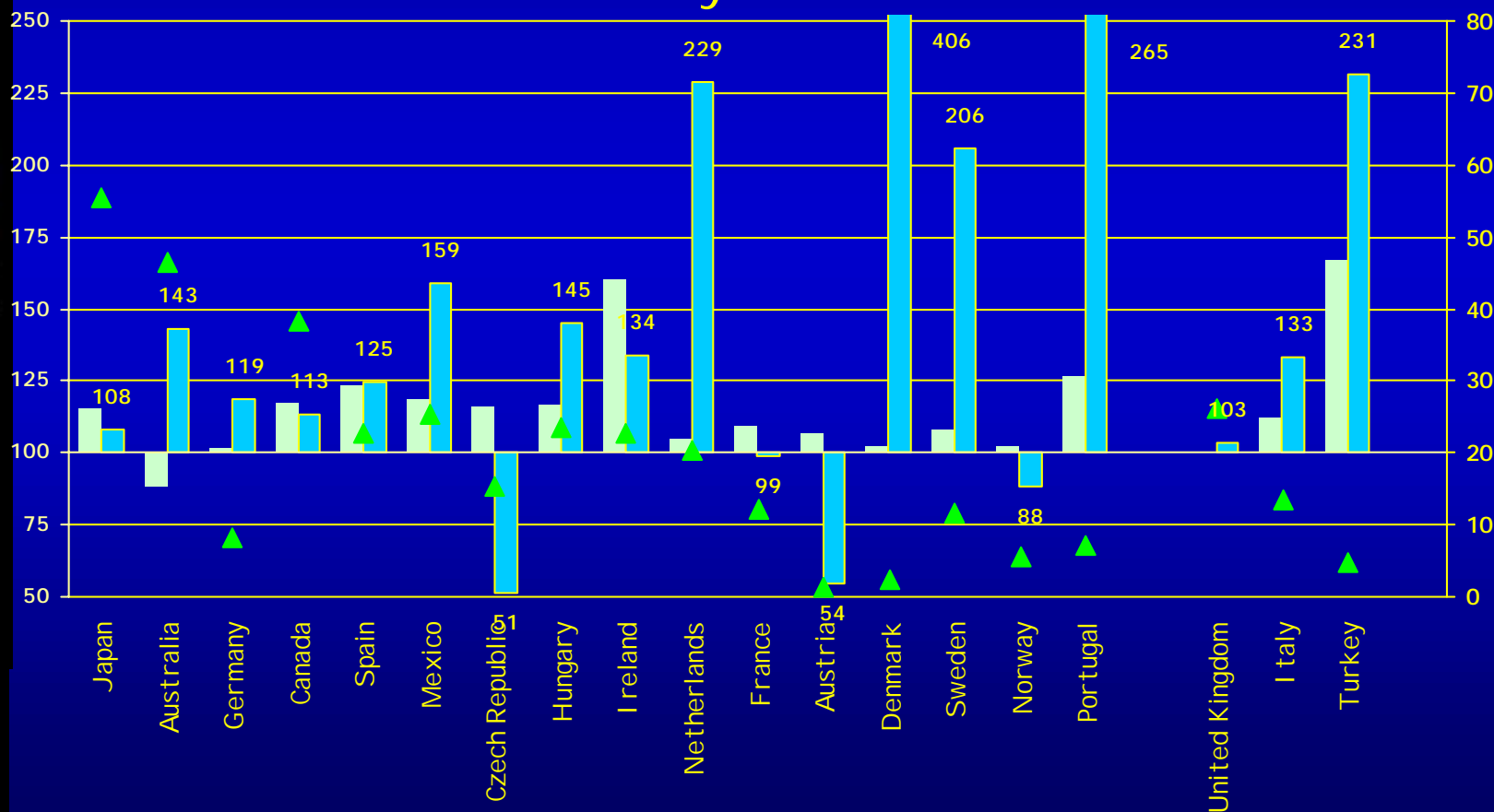
# Distribution of public and private expenditure on educational institutions, by level of education (1999)



# Index of change in public and private expenditure on educational institutions between 1995 and 1999 (1995=100)

- Public expenditure (left scale)
- Private expenditure (left scale)
- ▲ Share of private expenditure (right scale)

## Tertiary education



# Further information

- [www.oecd.org](http://www.oecd.org)
- [www.pisa.oecd.org](http://www.pisa.oecd.org)
- email: [pisa@oecd.org](mailto:pisa@oecd.org)
  
- [Andreas.Schleicher@OECD.org](mailto:Andreas.Schleicher@OECD.org)

... and remember:

Without data, you are just another person with an opinion





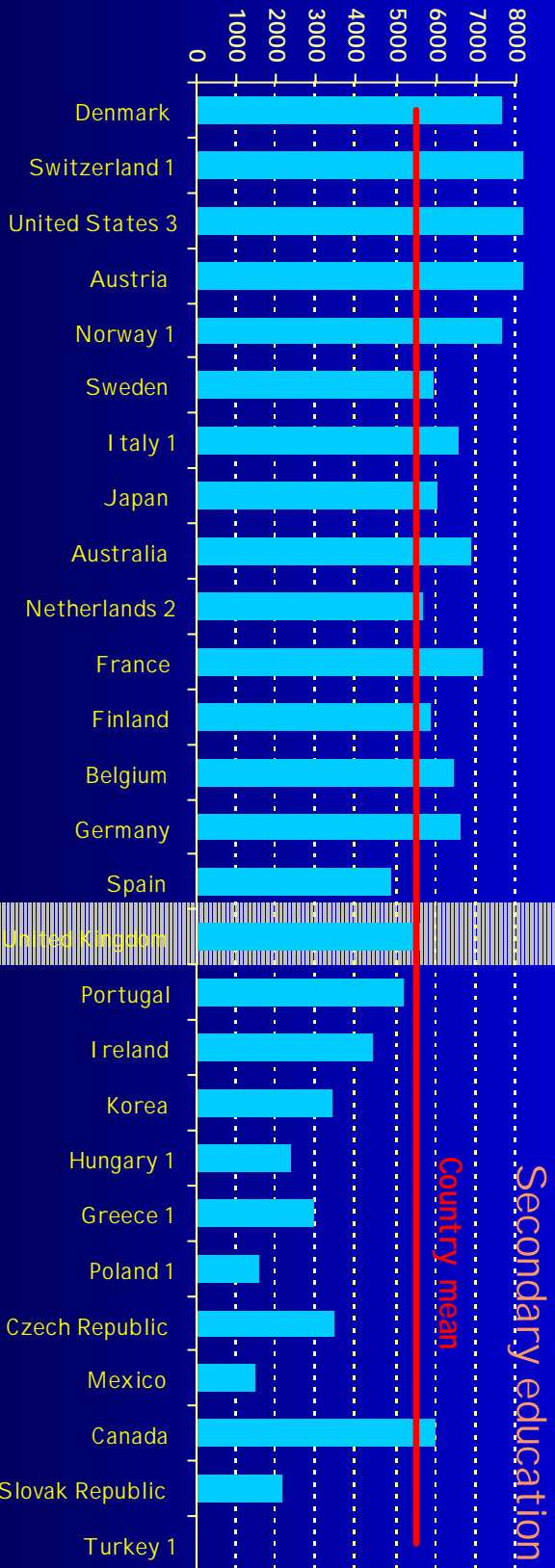


# Investment in education

- Across countries, public expenditure on education tended to grow faster than total government spending
  - but not as fast as GDP



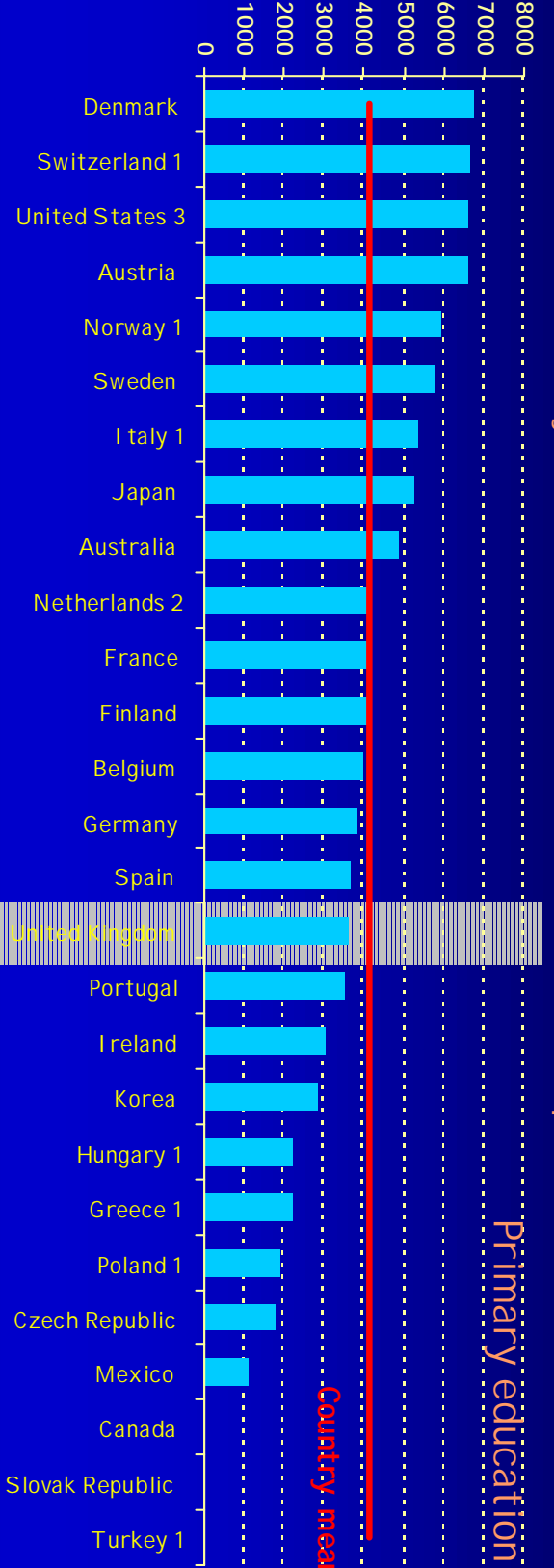
equivalent US dollars converted using PPPs



Secondary education

Country mean

equivalent US dollars converted using PPPs



Primary education

Country mean

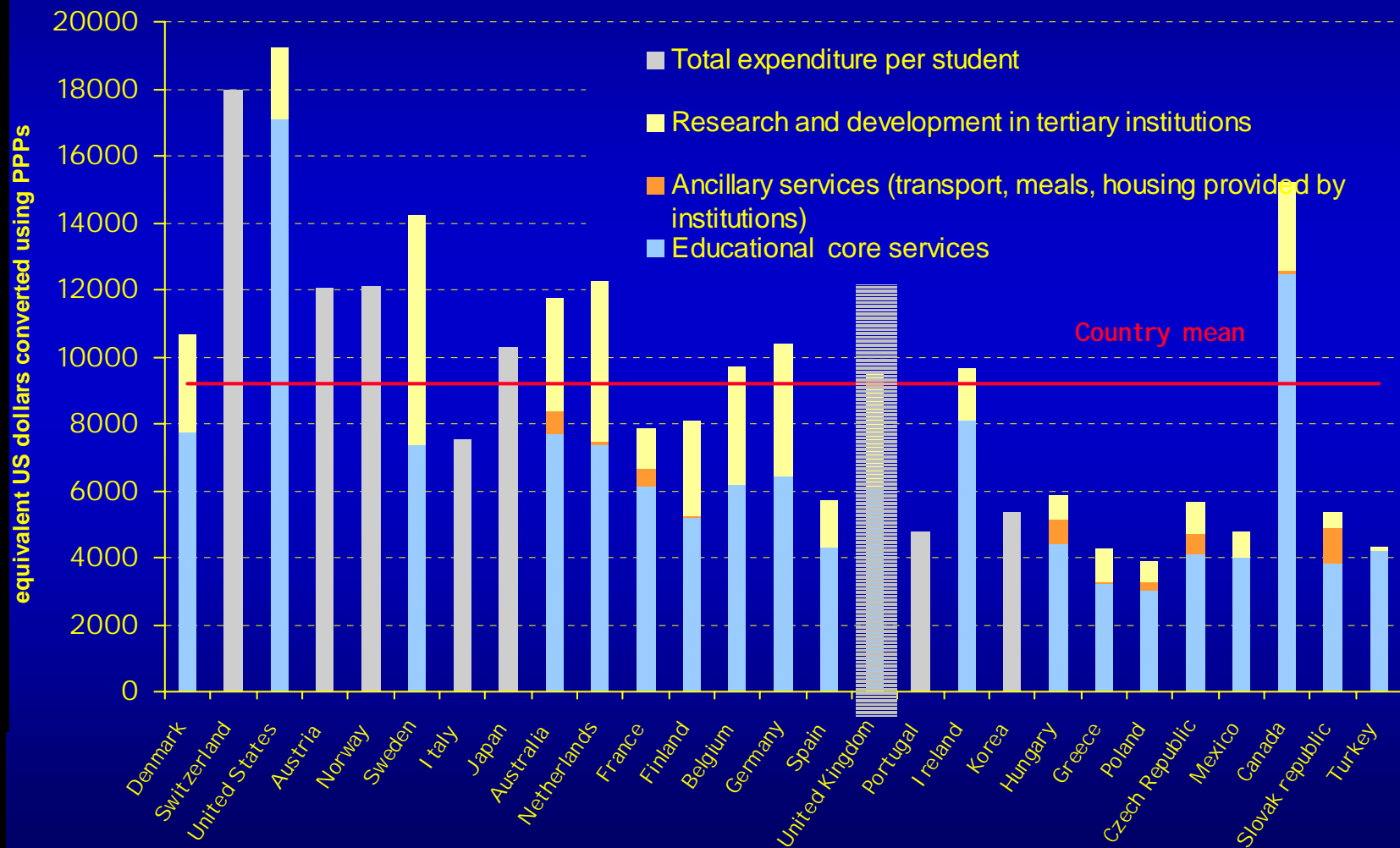
**Expenditure on educational institutions per student**  
 Annual expenditure on educational institutions per student in US dollars converted using PPPs, by level of education, based on full-time equivalents

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Annual expenditure on educational institutions per student in US dollars converted using PPPs, by level of education, based on full-time equivalents

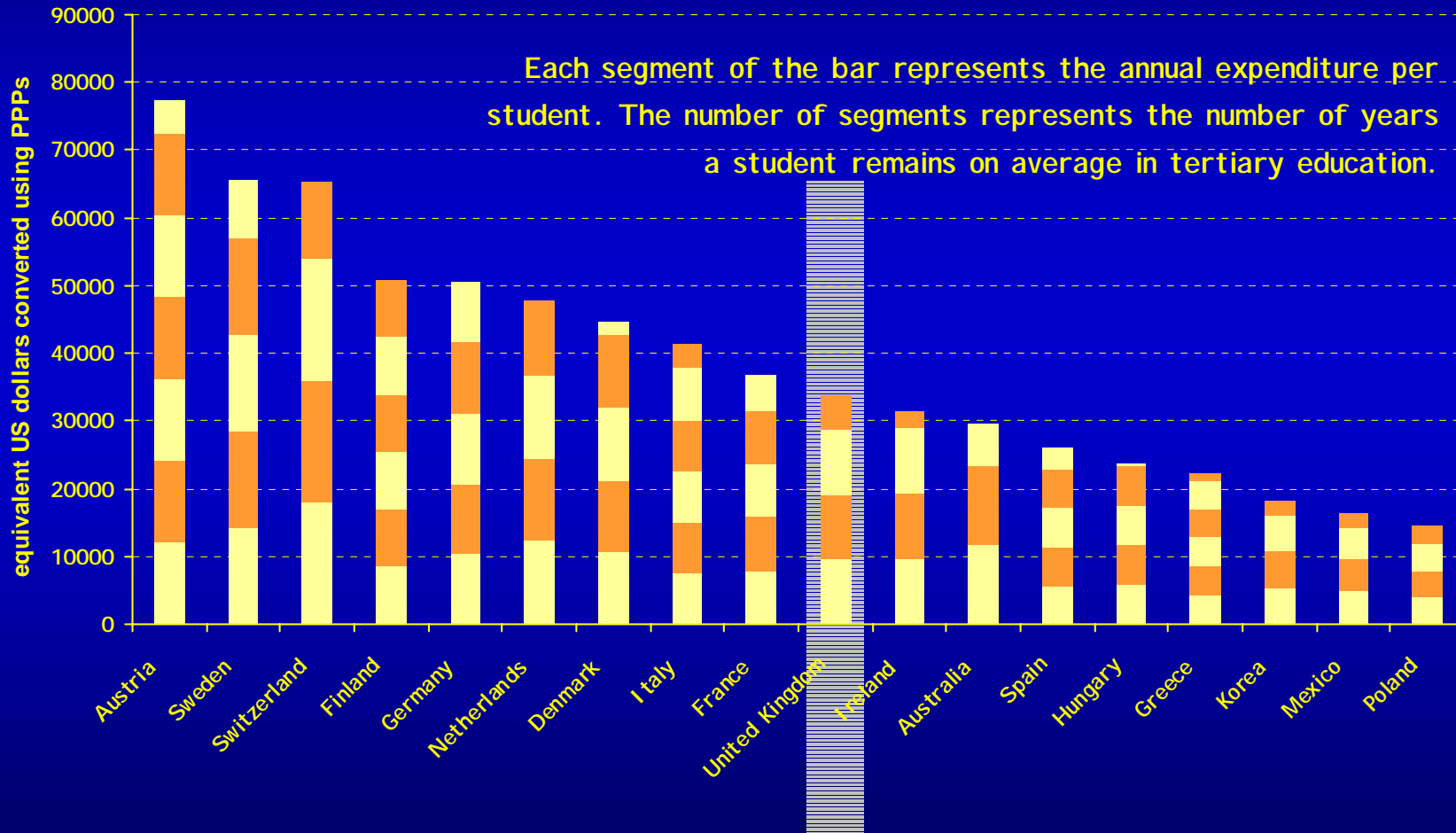
37

## Tertiary education



# Cumulative expenditure on educational institutions per student over average duration of tertiary studies

Annual expenditure on educational institutions per student multiplied by average duration of studies, in US dollars converted using PPPs

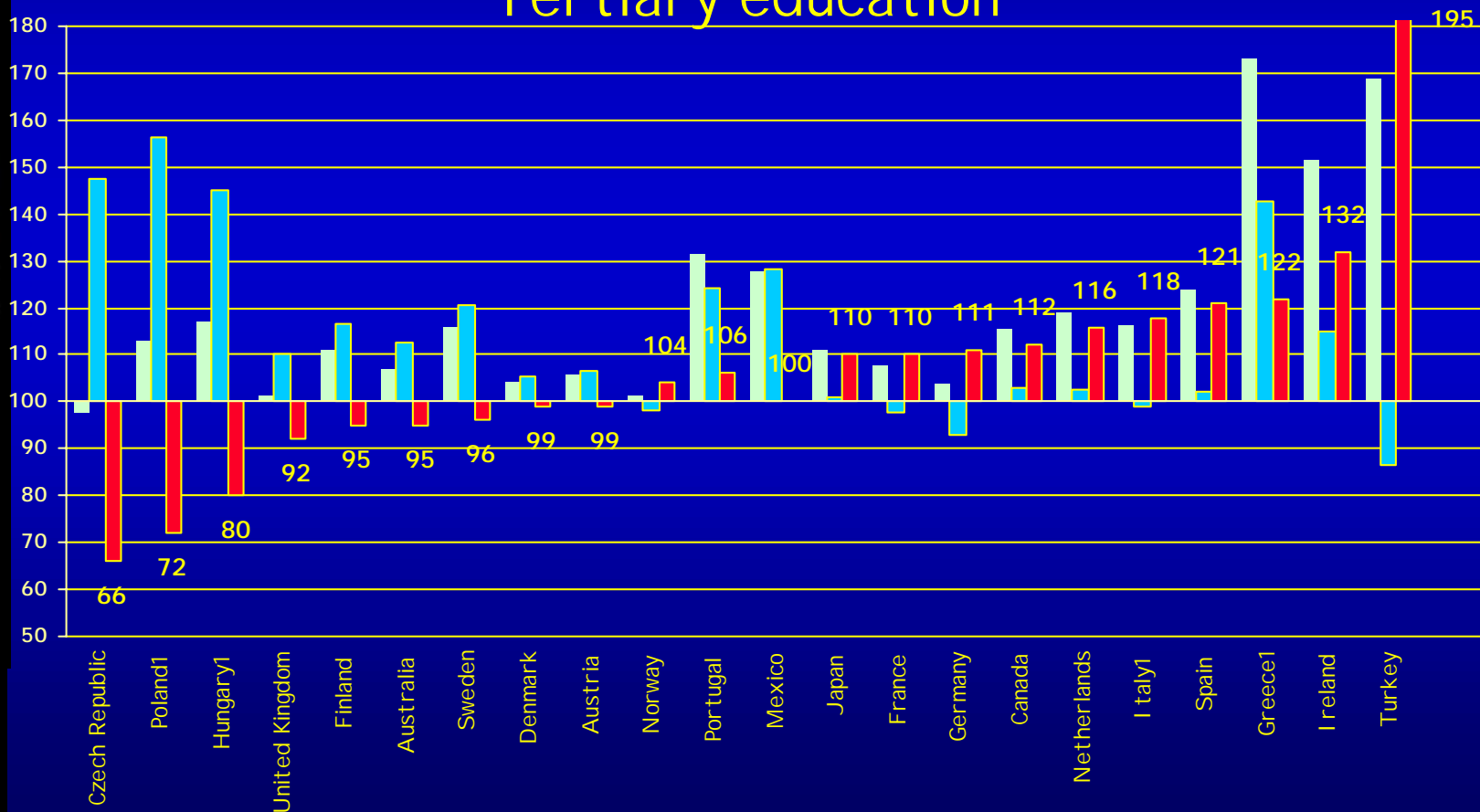


# Change in expenditure on education per student in comparison to underlying factors (1995, 1999)

Indices of change in expenditure on educational institutions, enrolment and expenditure per student between 1995 and 1999 (1995=100)

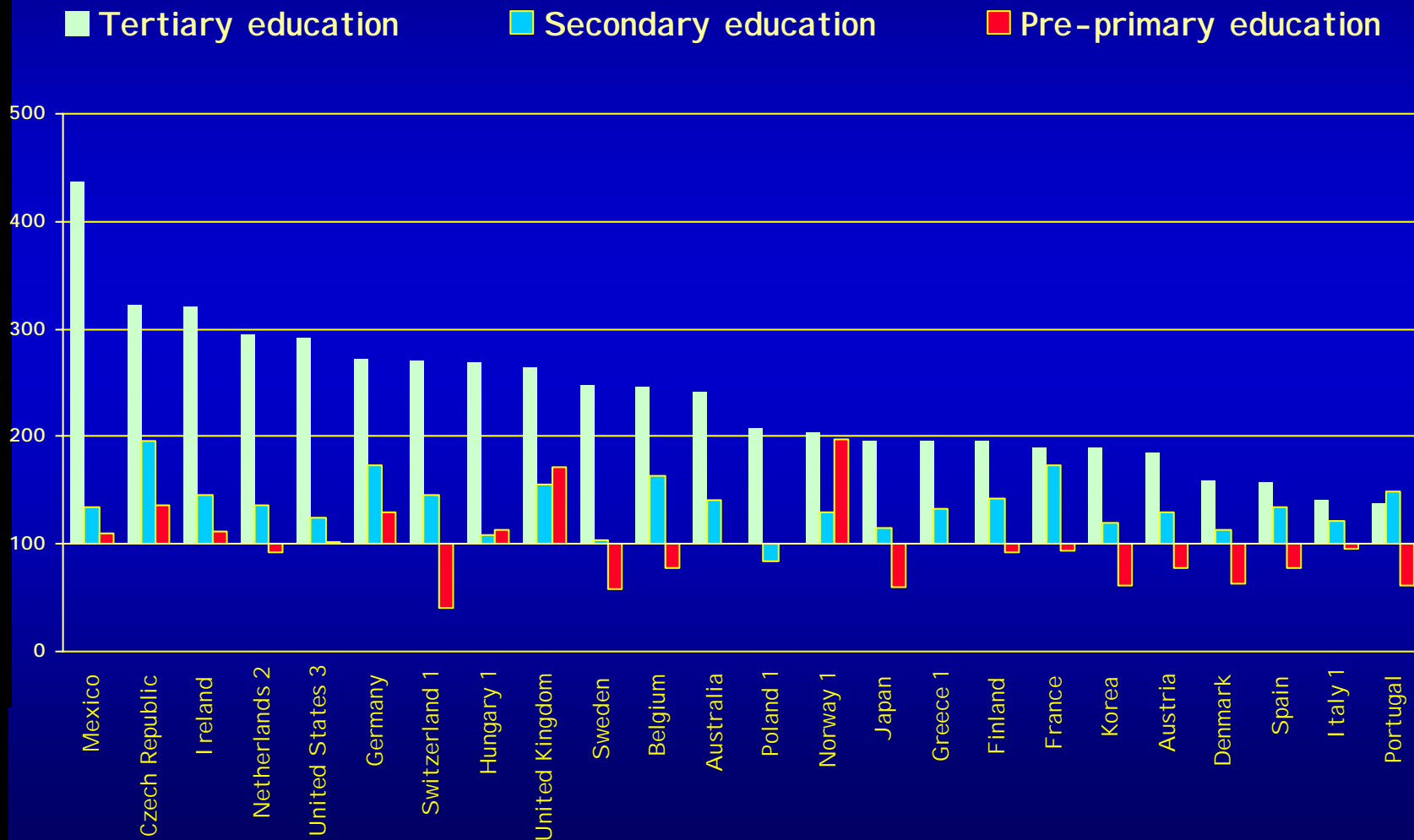
- Change in expenditure
- Change in the number of students
- Change in expenditure per student

## Tertiary education



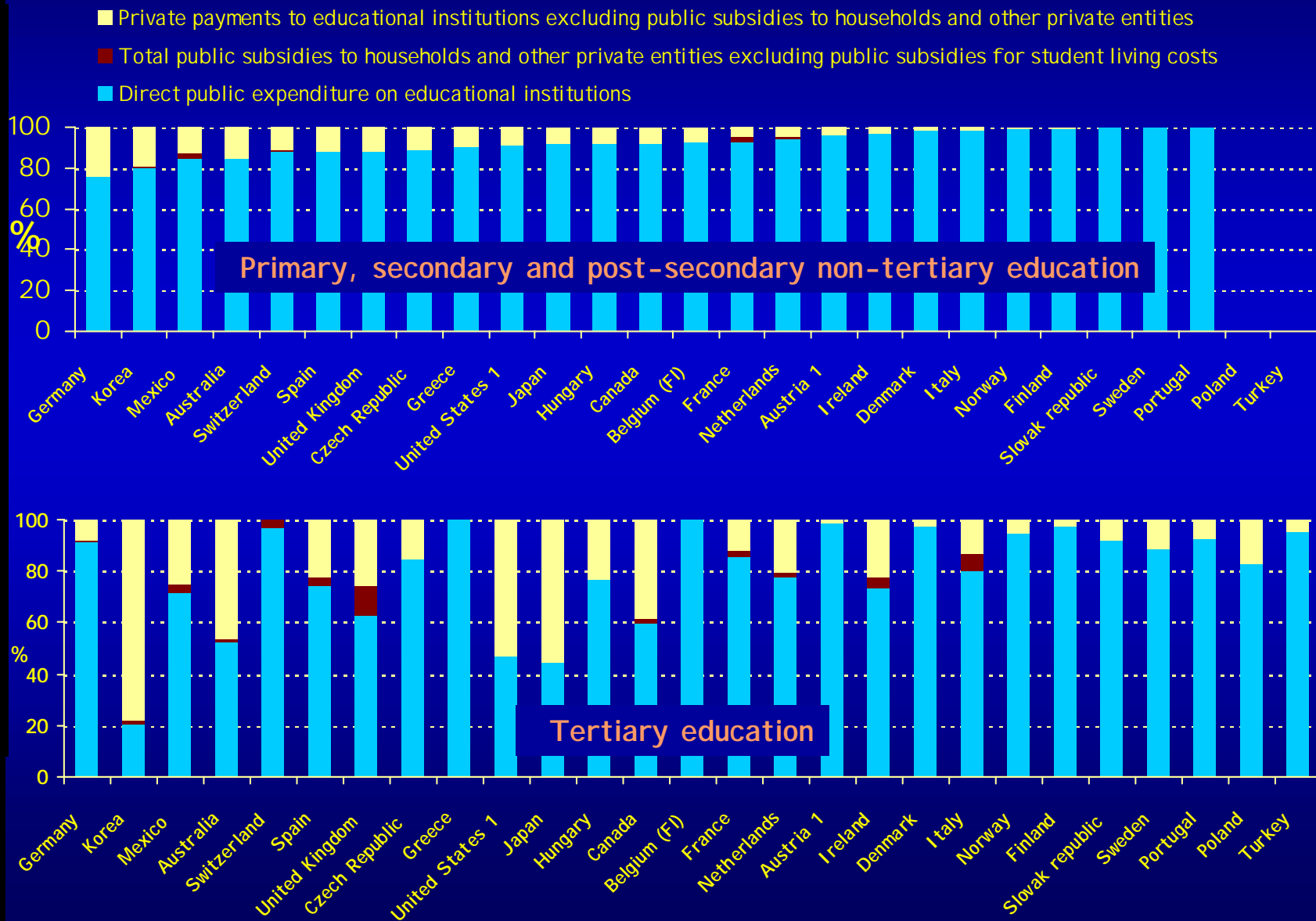
# Differences in expenditure on educational institutions per student relative to primary education

Ratio of expenditure on educational institutions per student at various levels of education to educational expenditure per student in primary education, multiplied by 100



# Distribution of public and private expenditure on educational institutions, by level of education (1999)

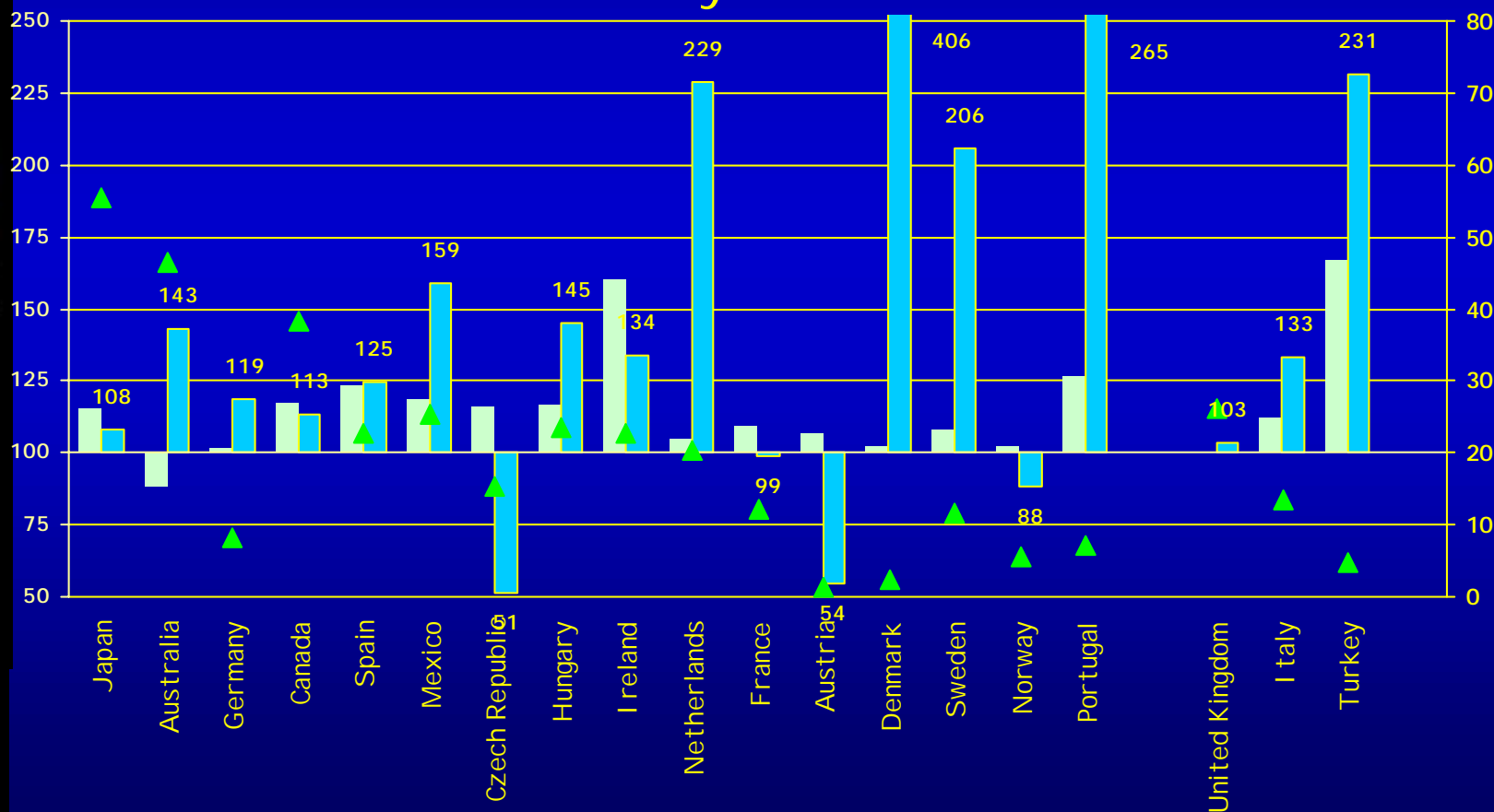
41



# Index of change in public and private expenditure on educational institutions between 1995 and 1999 (1995=100)

- Public expenditure (left scale)
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- ▲ Share of private expenditure (right scale)

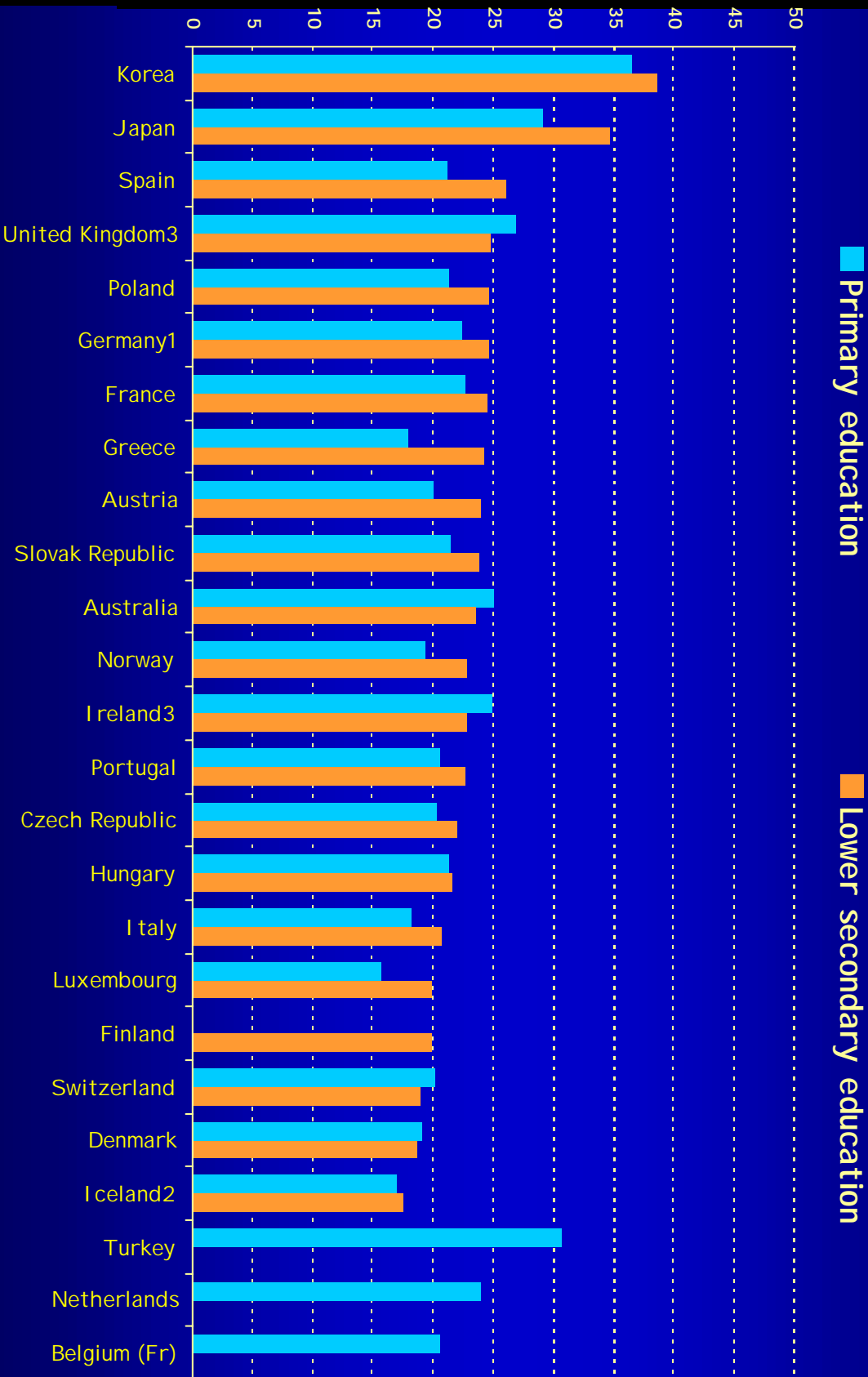
## Tertiary education



# The Learning Environment

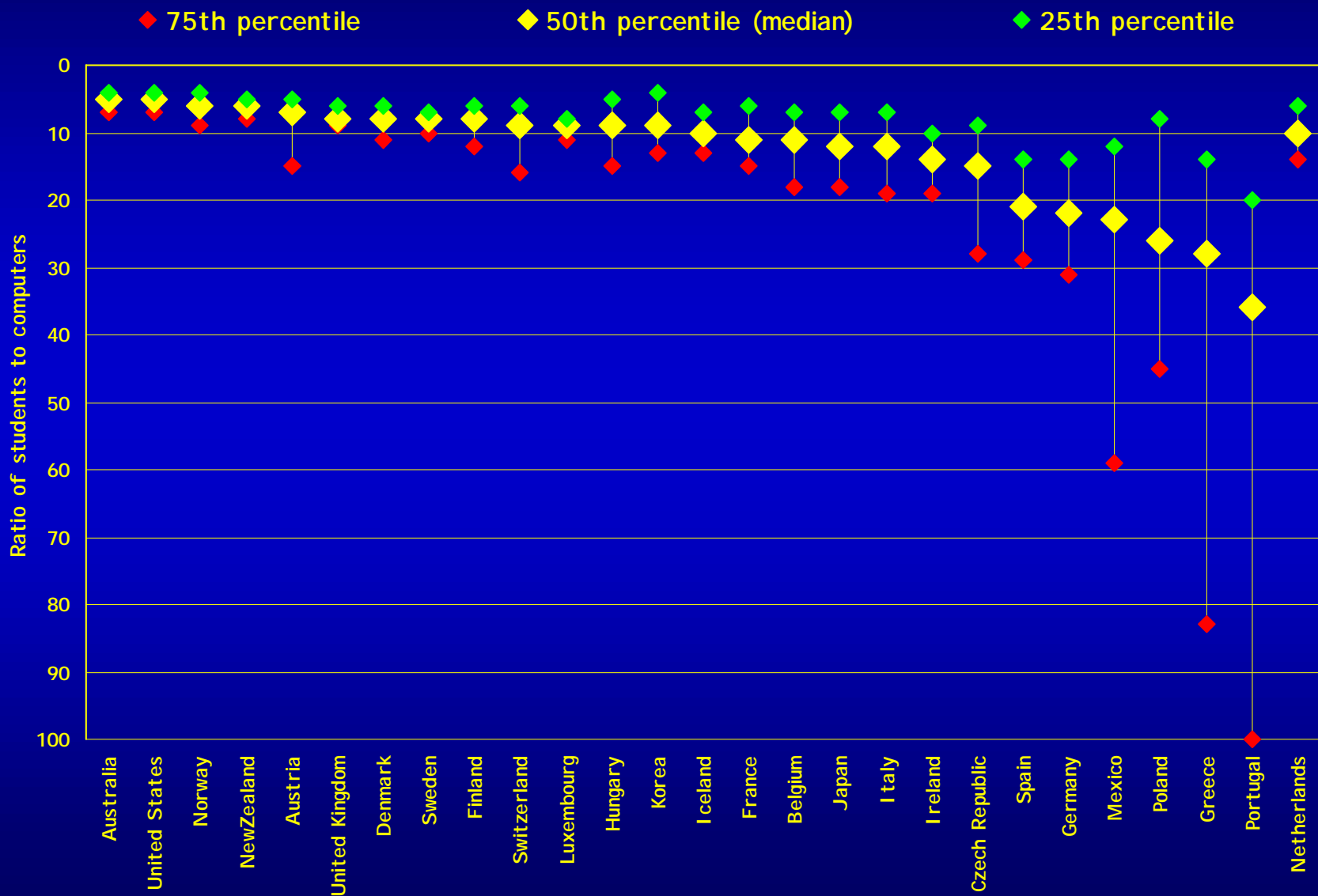
- Countries also differ significantly in terms of student learning conditions,...

Average class size in public and private institutions,  
by level of education (2000)



# Ratio of students to computers (2000)

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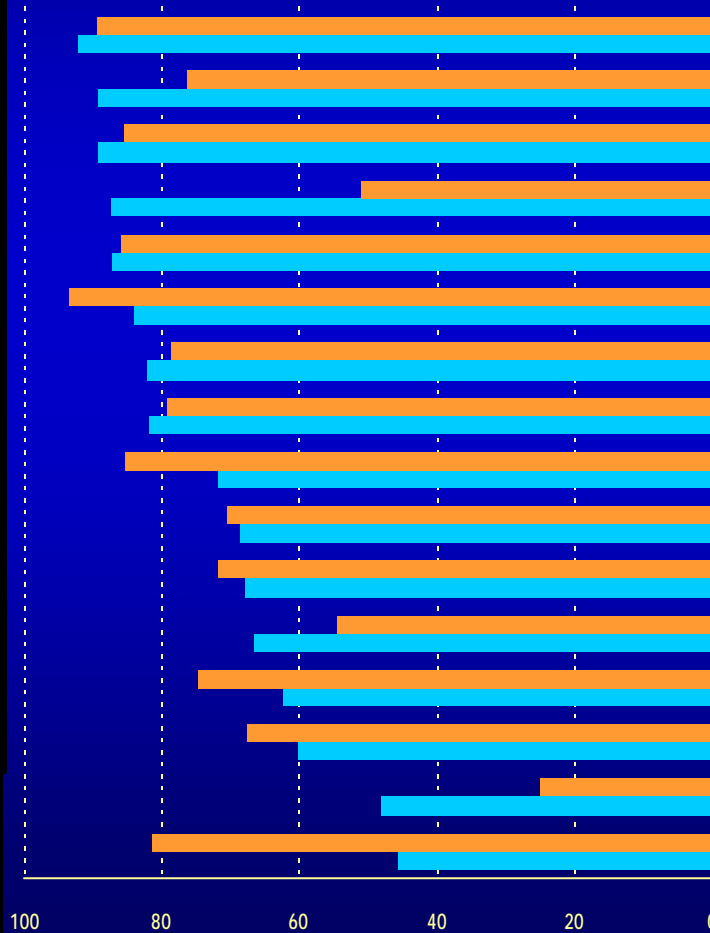


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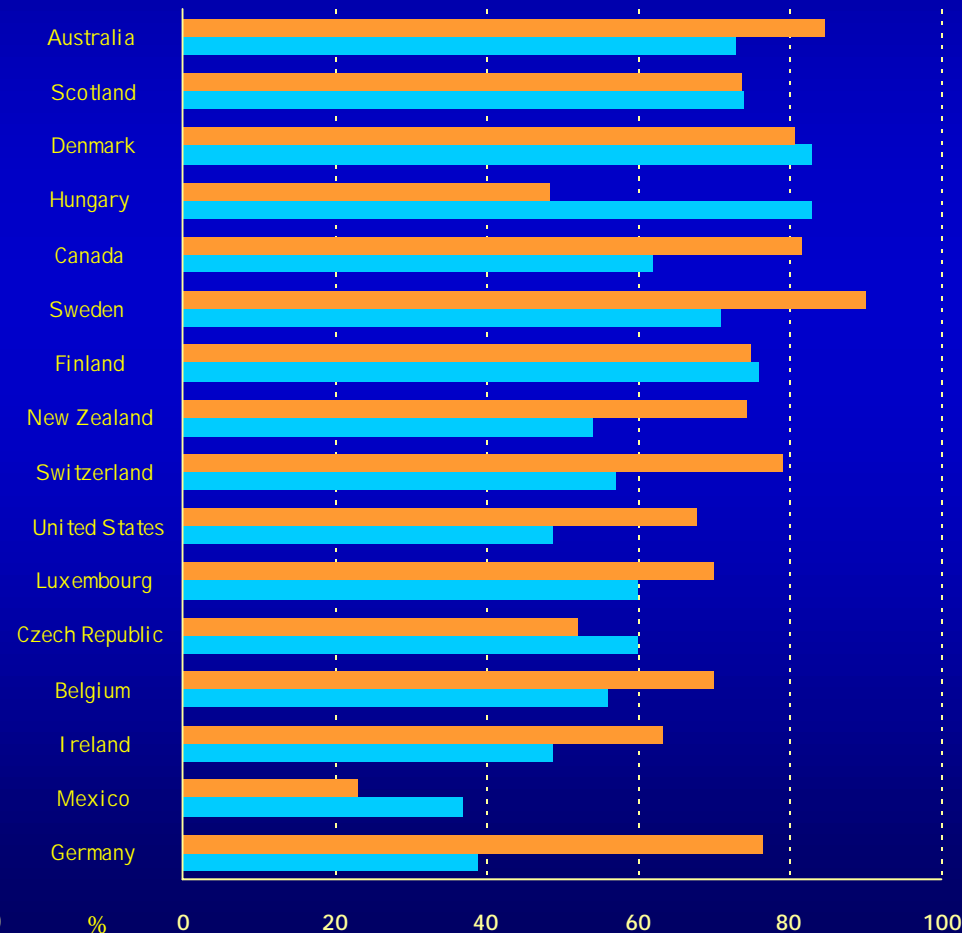
**Availability** of a computer to use almost every day, a few times each week or at least between once a week and once a month

School



**Frequency** of computer use almost every day, a few times each week or at least between once a week and once a month

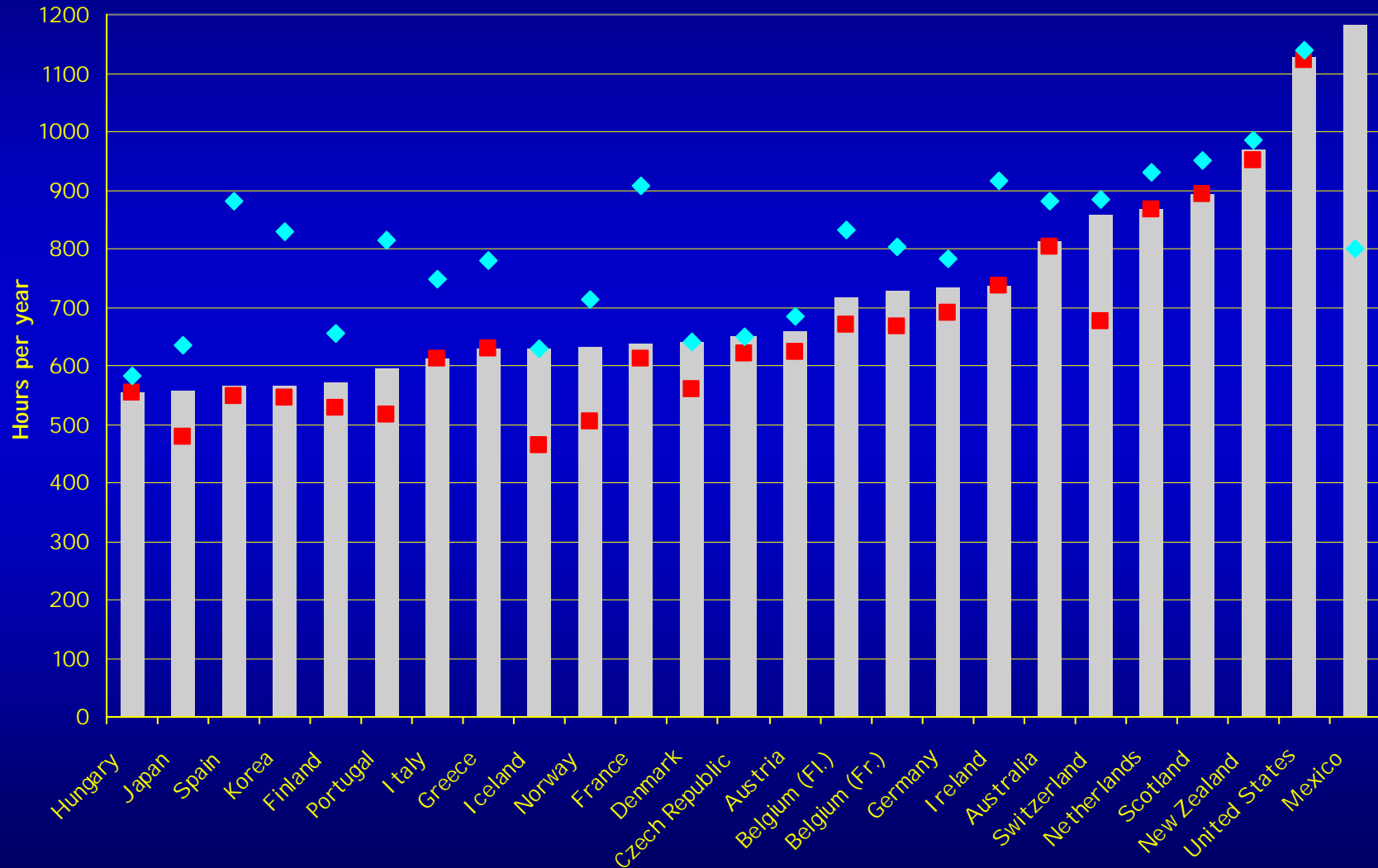
Home



# Number of teaching hours per year (2000)

Net contact time in hours per year in public institutions, by level of education

■ Lower secondary education ■ Upper secondary education, general programmes ◆ Primary education



# Further information

- [www.oecd.org](http://www.oecd.org)
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- email: [pisa@oecd.org](mailto:pisa@oecd.org)
  
- [Andreas.Schleicher@OECD.org](mailto:Andreas.Schleicher@OECD.org)

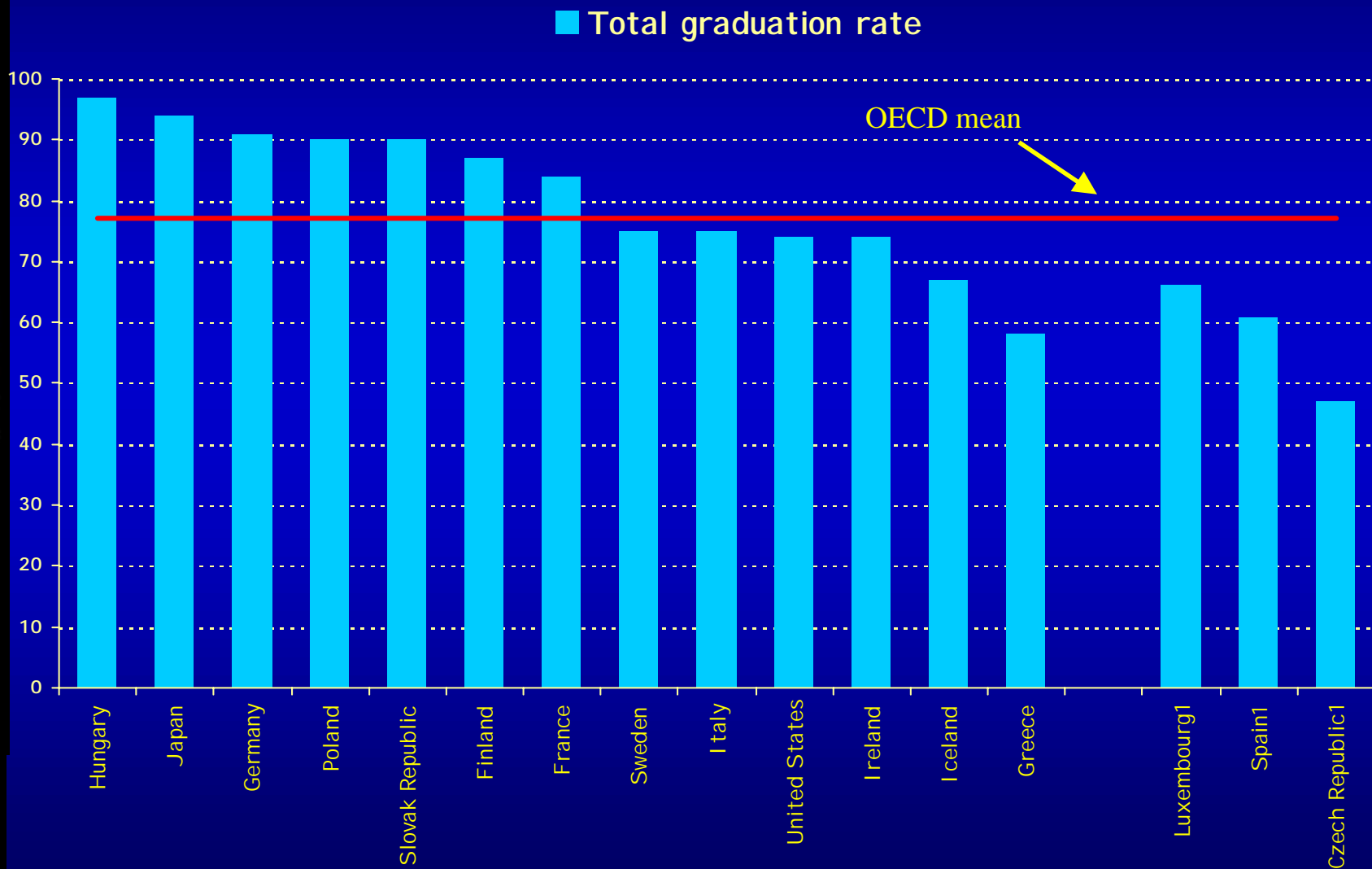
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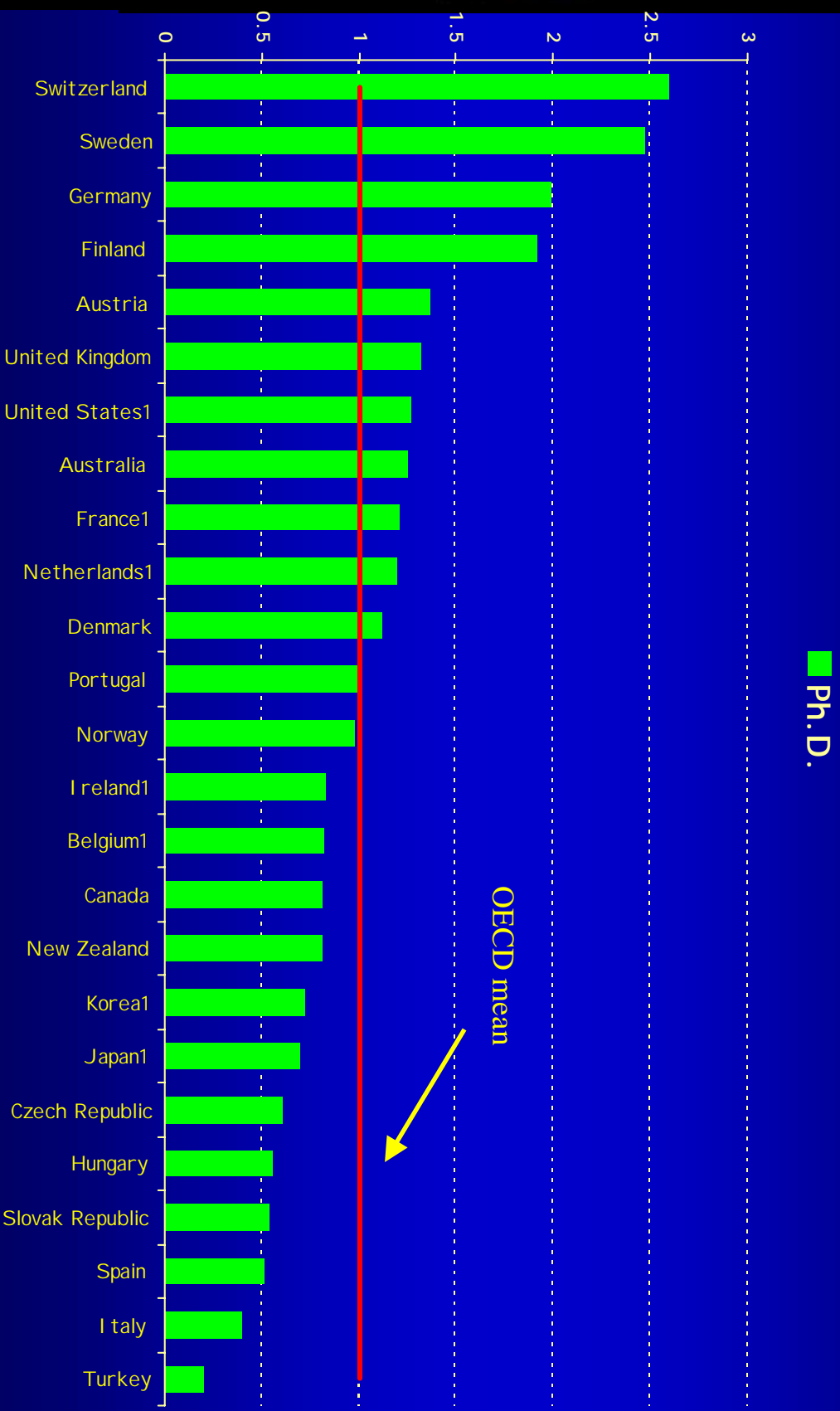


# Upper secondary graduation rates (2000)

Ratio of unduplicated count of all upper secondary graduates to population at typical age of graduation



Graduation rates for advanced research programmes  
(2000)  
Sum of graduation rates over single years of age  
(multiplied by 100)



### ❑ Advantages

- Flexibility

### ❑ Disadvantages

- Limited collective control by Member countries
  - Implicit setting of priorities through availability of ad-hoc funds
- Diversion of voluntary contributions to production work