

Seminar on Education and Reform in a Global Age, University of  
Tokyo, 11 – 12 December, 2004



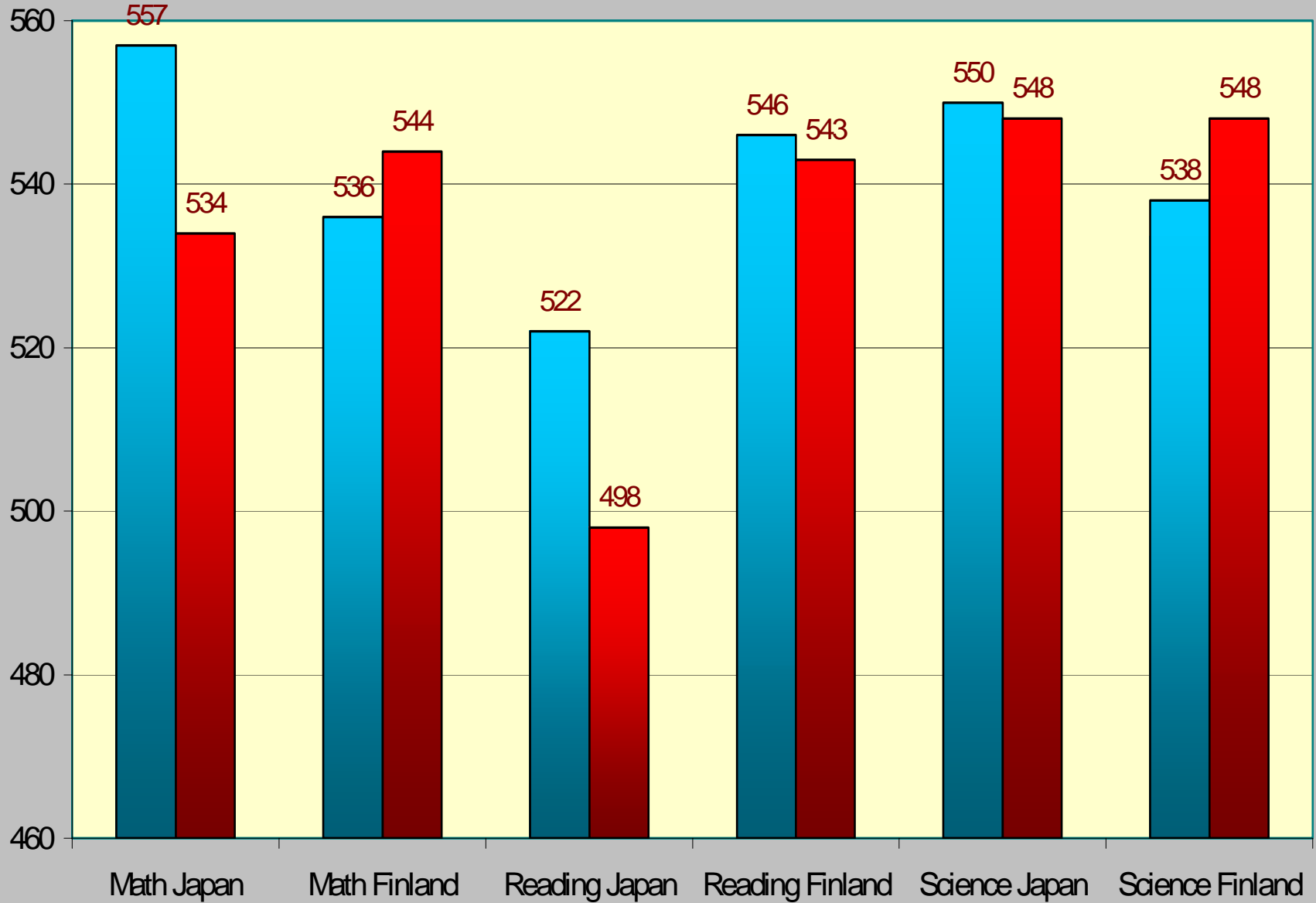
Jouni Välijärvi, professor  
University of Jyväskylä, Institute for Educational Research  
Finland

# Assuring a quality education for all:

How the Finnish education system responds to the challenge of equity.

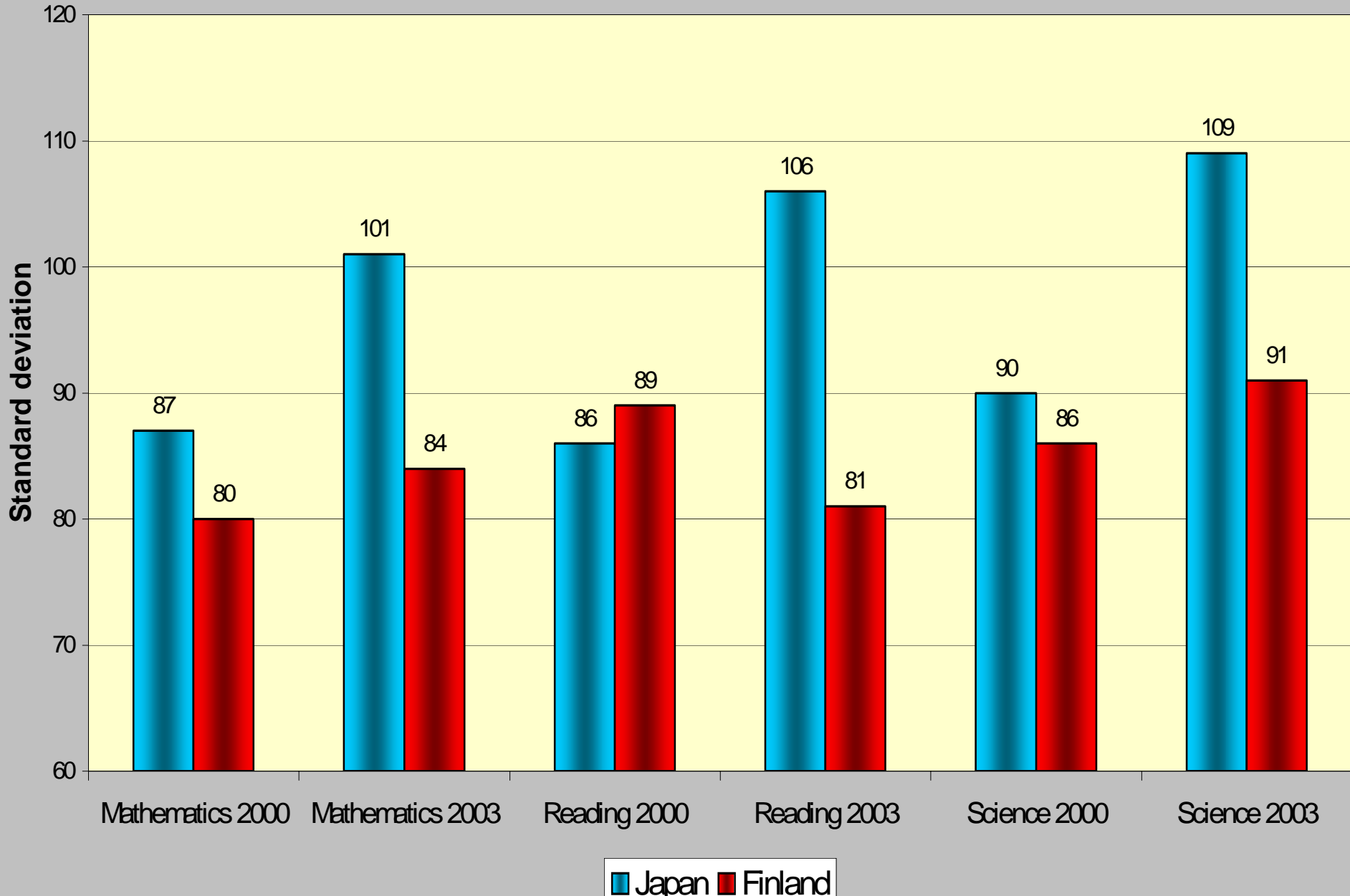


# Mean scores in PISA 2000 and 2003

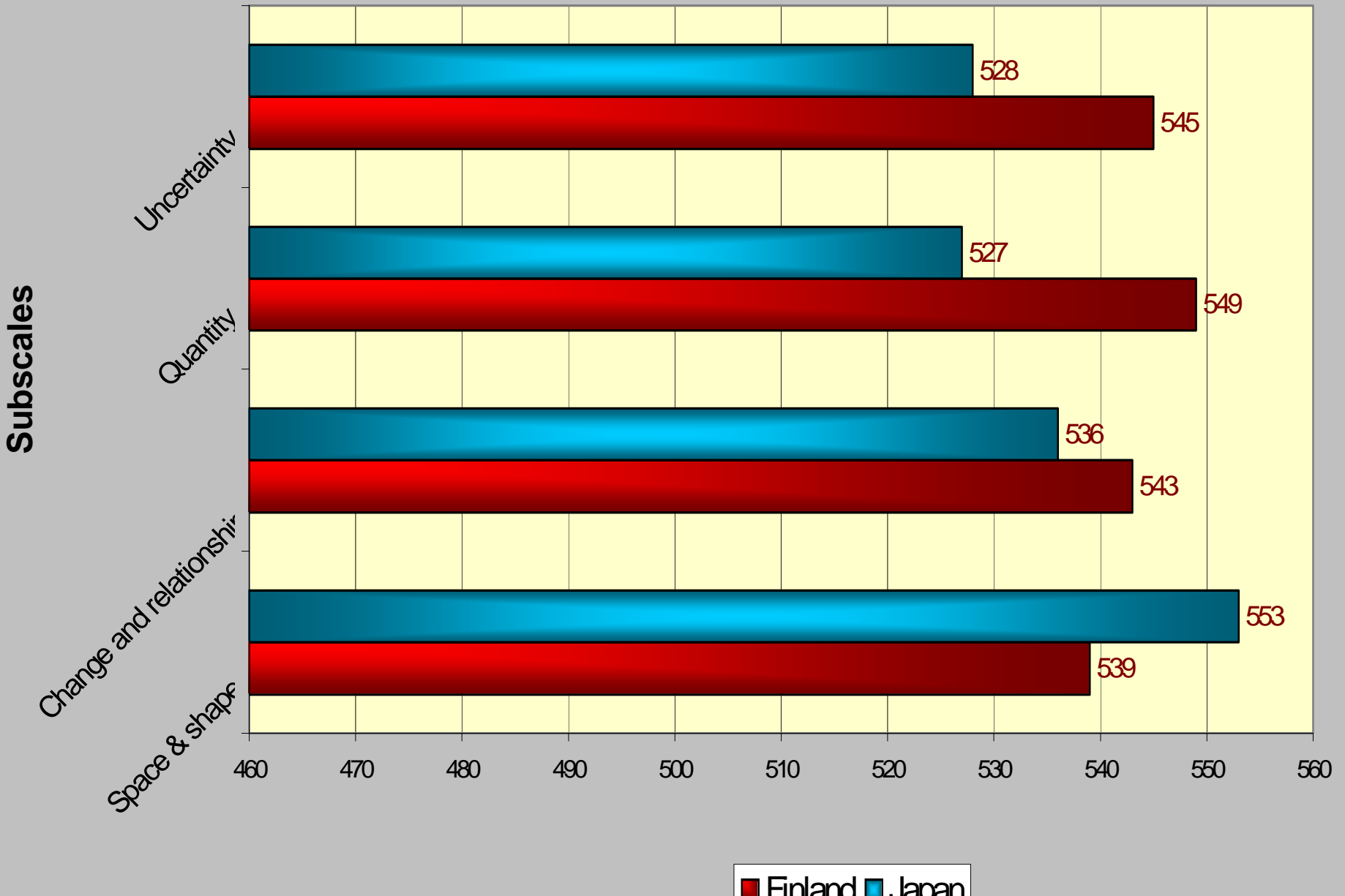


■ PISA 2000 ■ PISA 2003

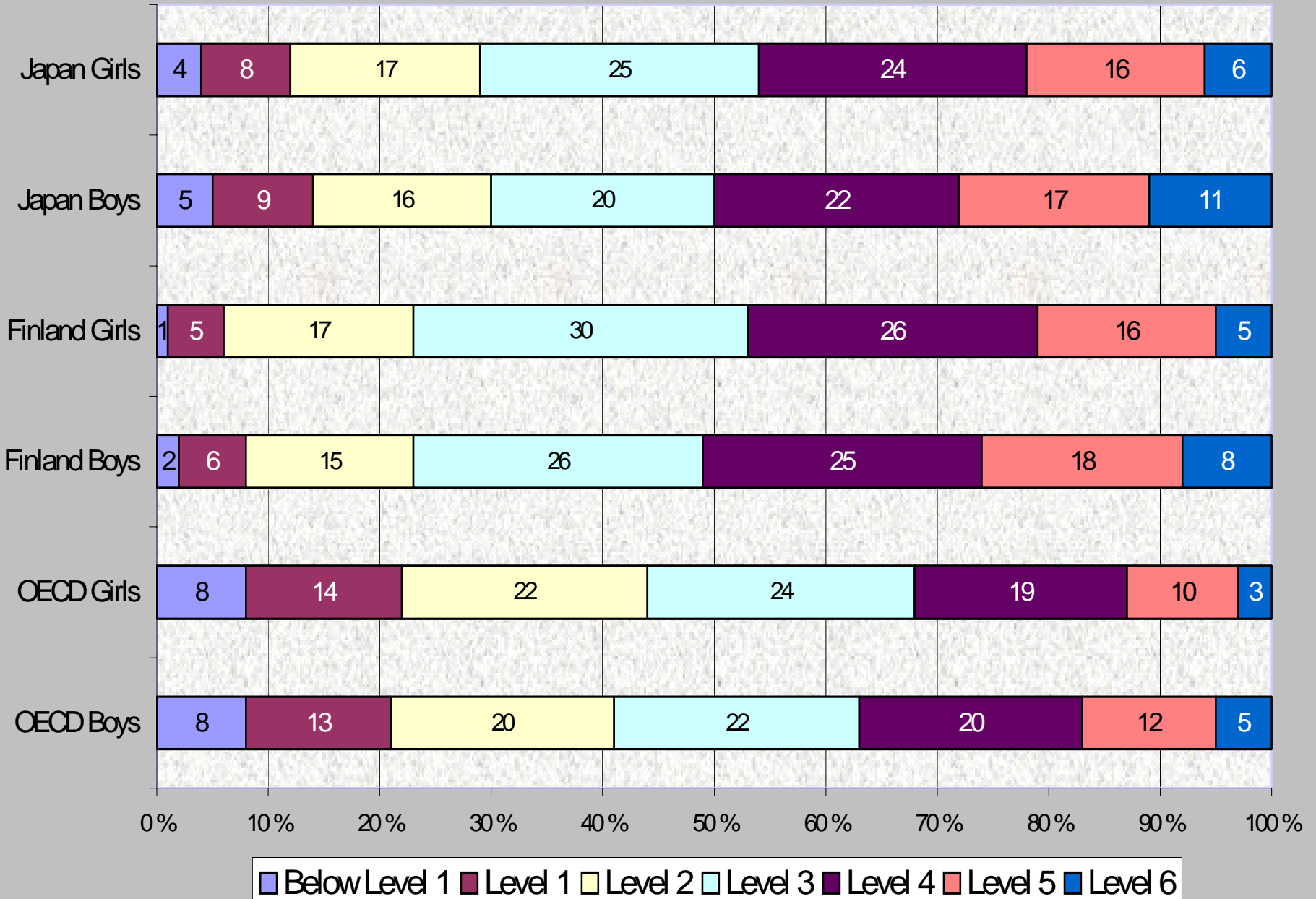
# Variation in performances in 2000 and 2003



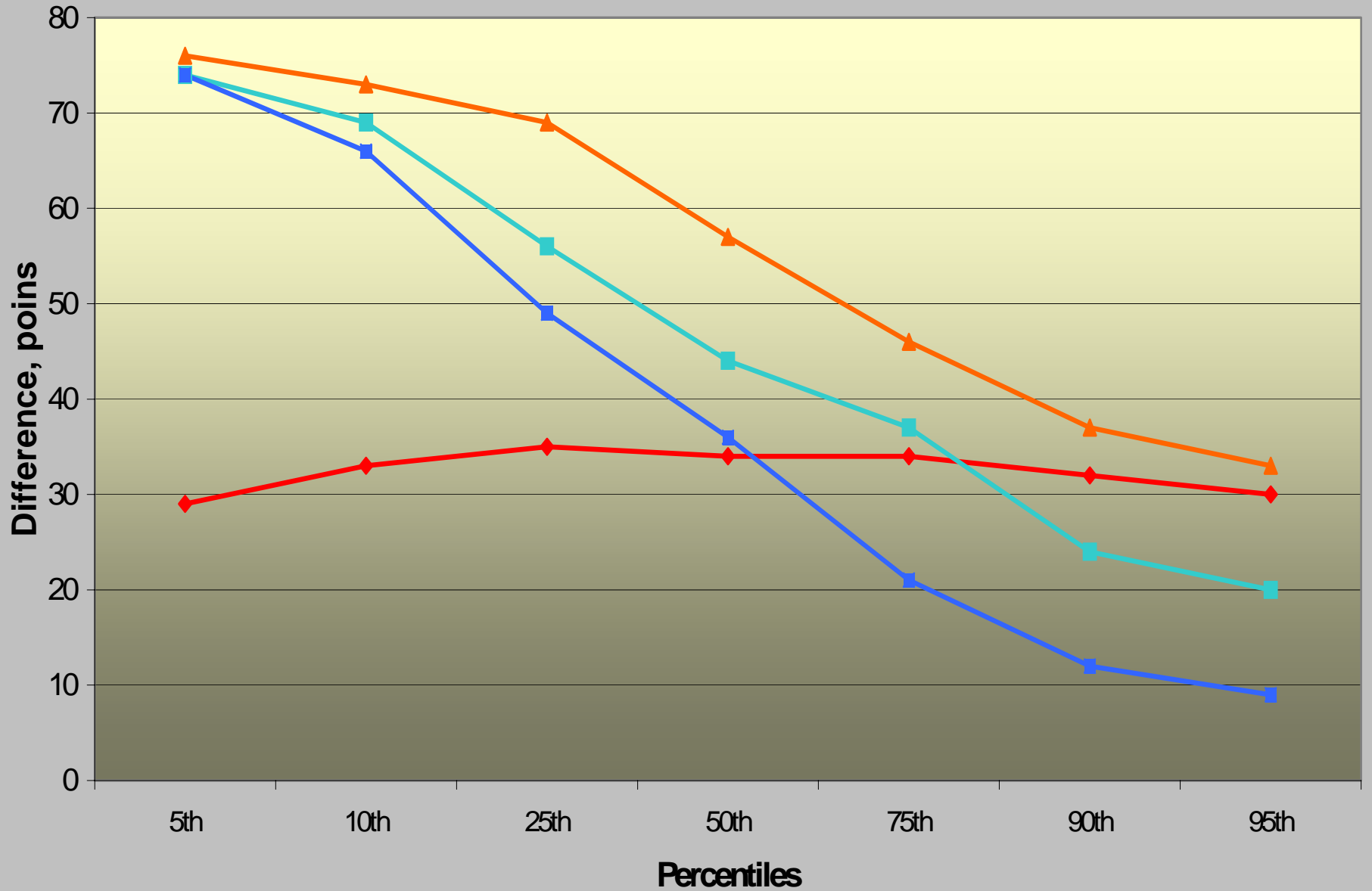
# Mean scores on the subscales in mathematics



# Boys and girls on differen levels of the mathematics scale

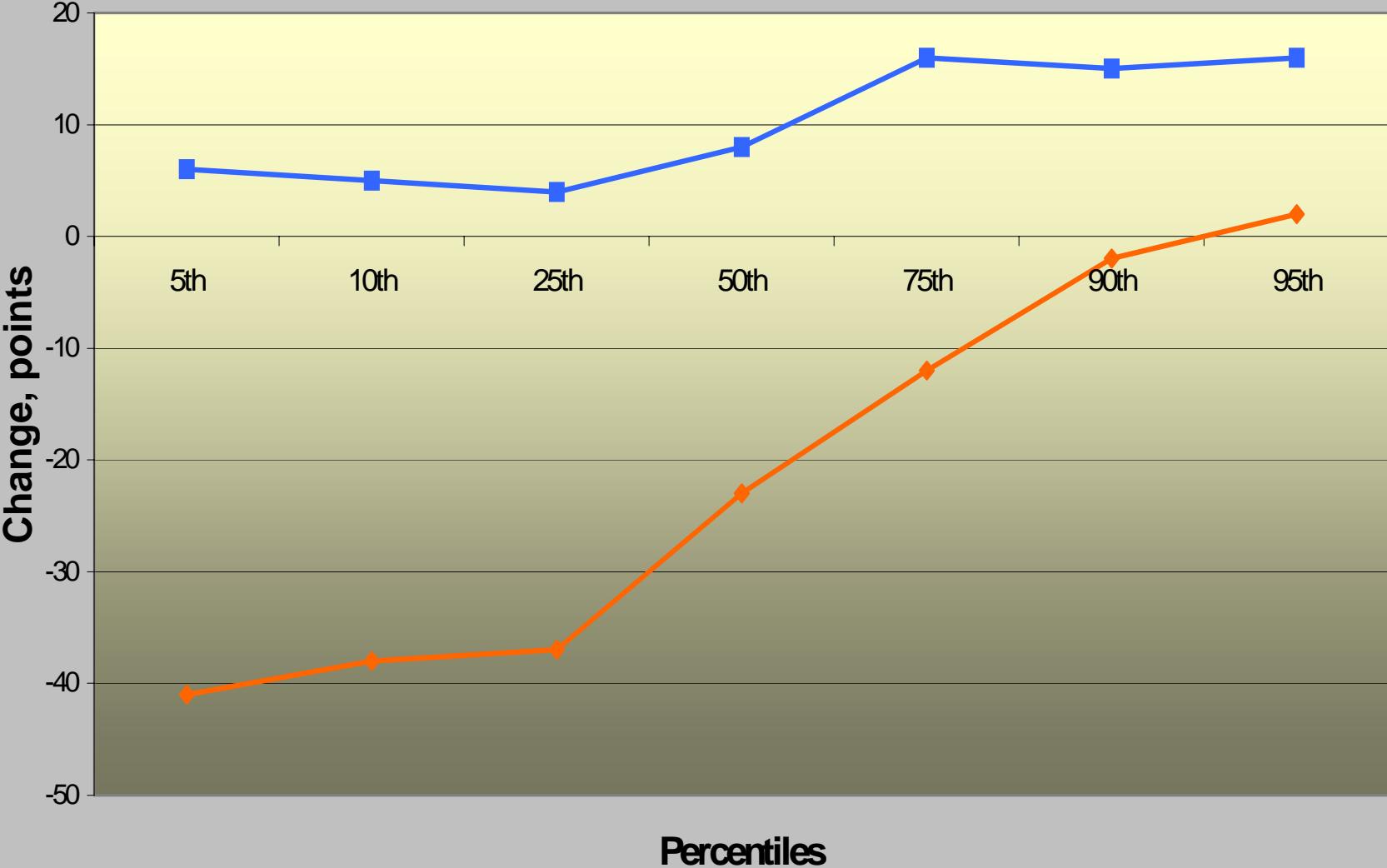


# Country percentiles compared to OECD percentiles on mathematics scale in PISA 2000 and 2003



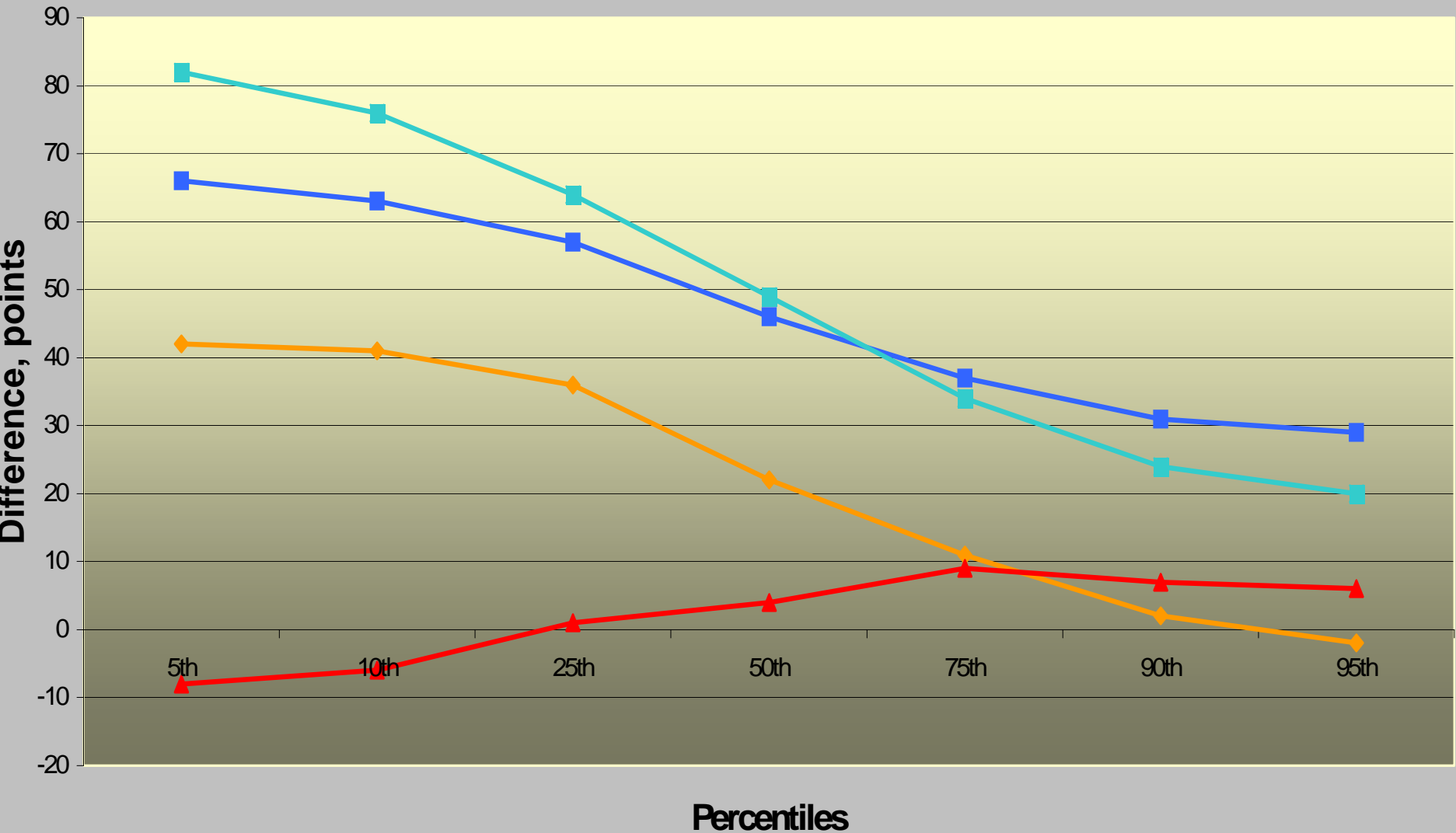
Legend: Japan 2003 (red line with diamonds), Finland 2003 (cyan line with squares), Japan 2000 (orange line with triangles), Finland 2000 (blue line with squares)

# Change of the percentiles in mathematics from 2000 to 2003



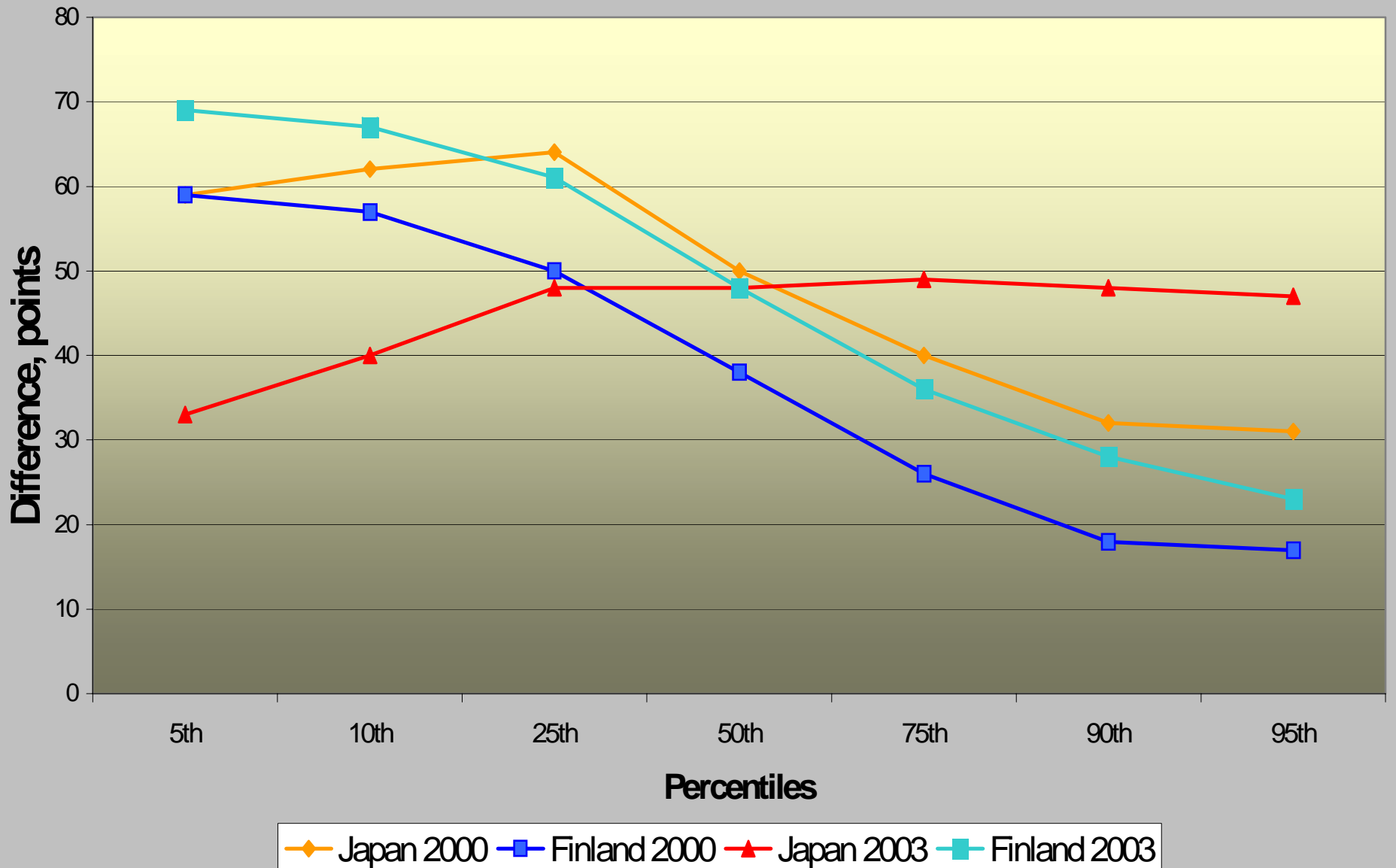
—◆— Japan —■— Finland

# Country percentiles of the reading literacy scale compared to the OECD percentiles in PISA 2000 and 2003

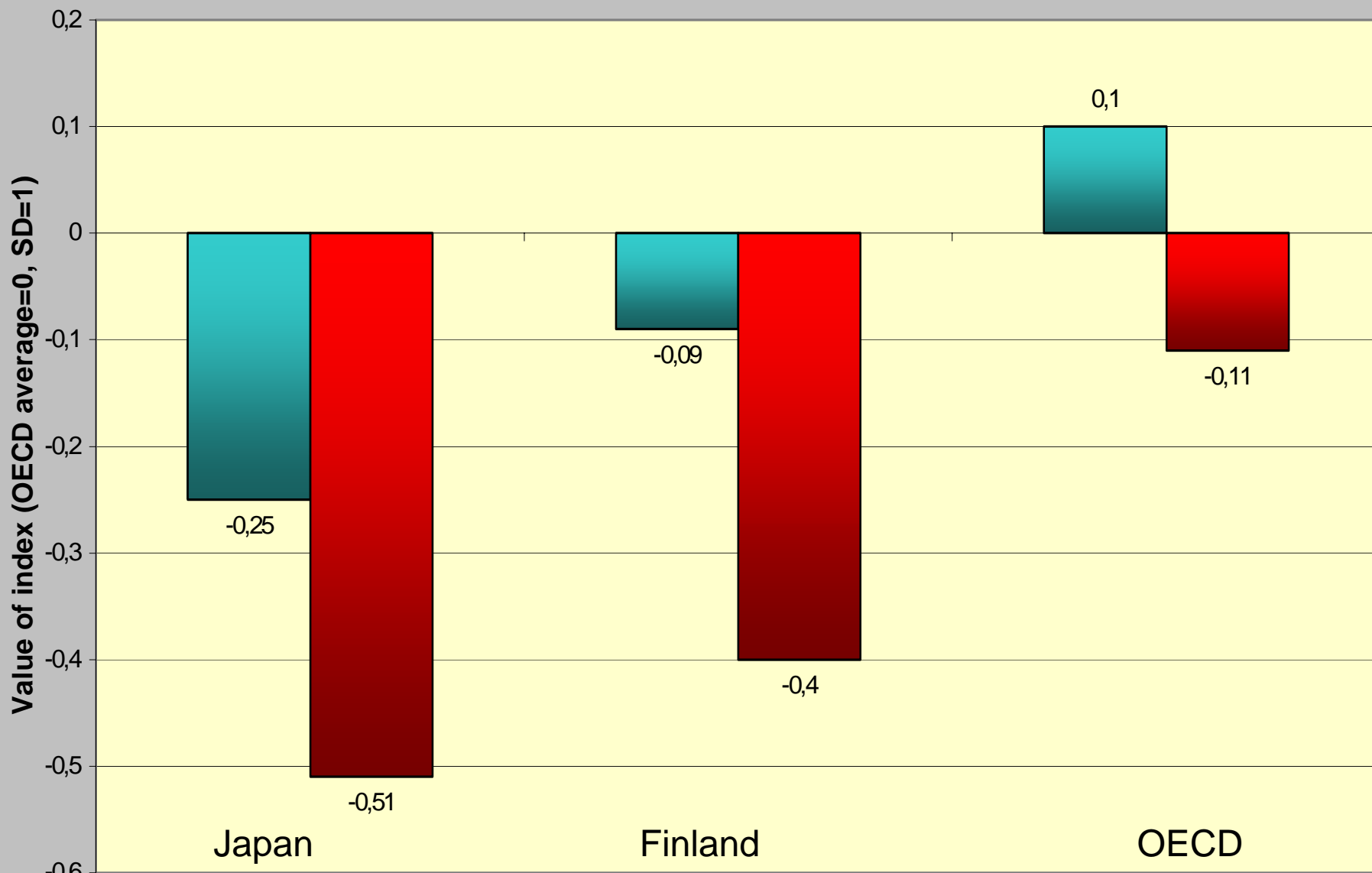


Legend: Japan 2000 (orange diamond), Finland 2000 (blue square), Japan 2003 (red triangle), Finland 2003 (cyan square)

# Country percentiles of the science scale compared to the OECD percentiles in PISA 2000 and 2003

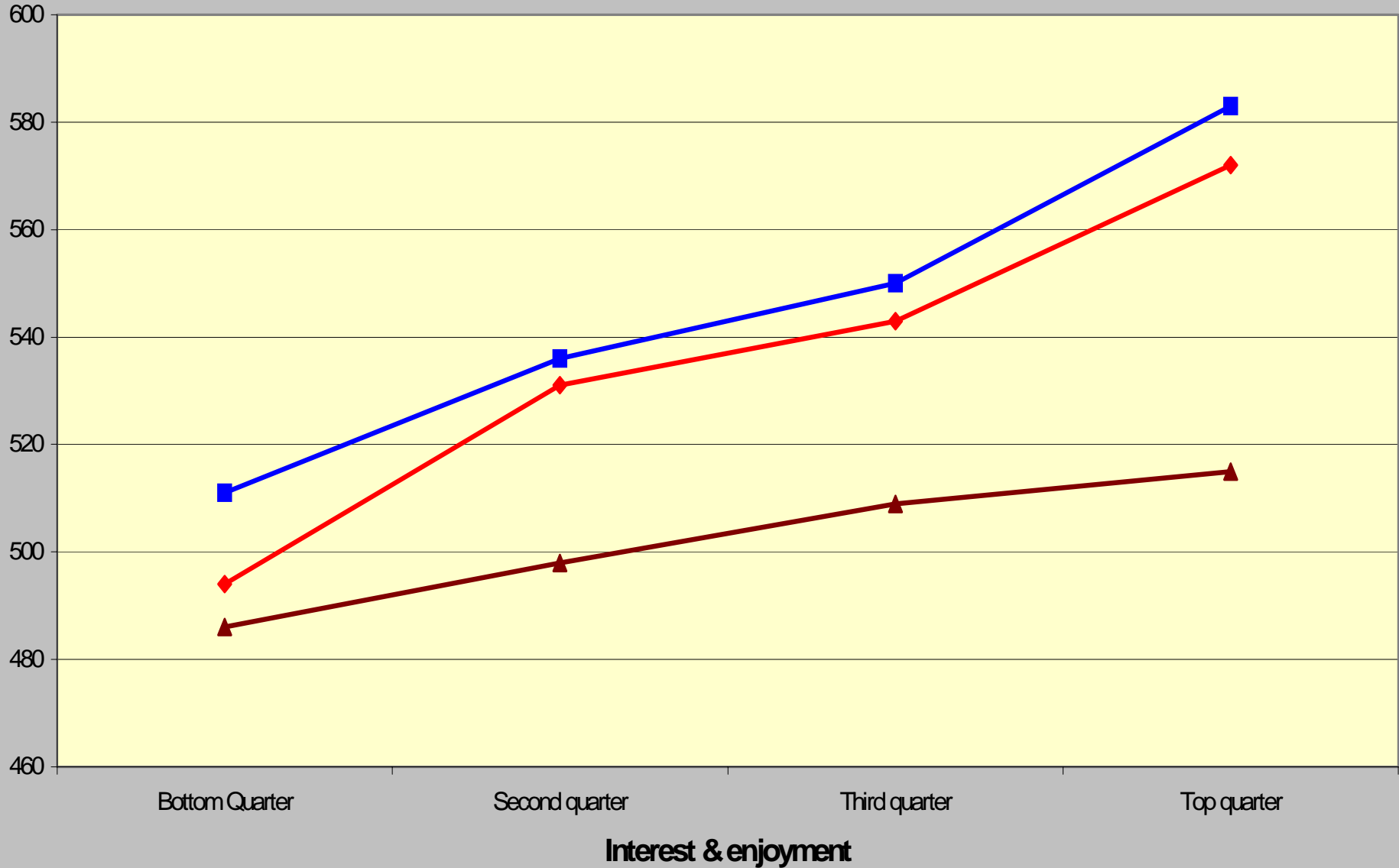


# Interest and enjoyment in mathematics



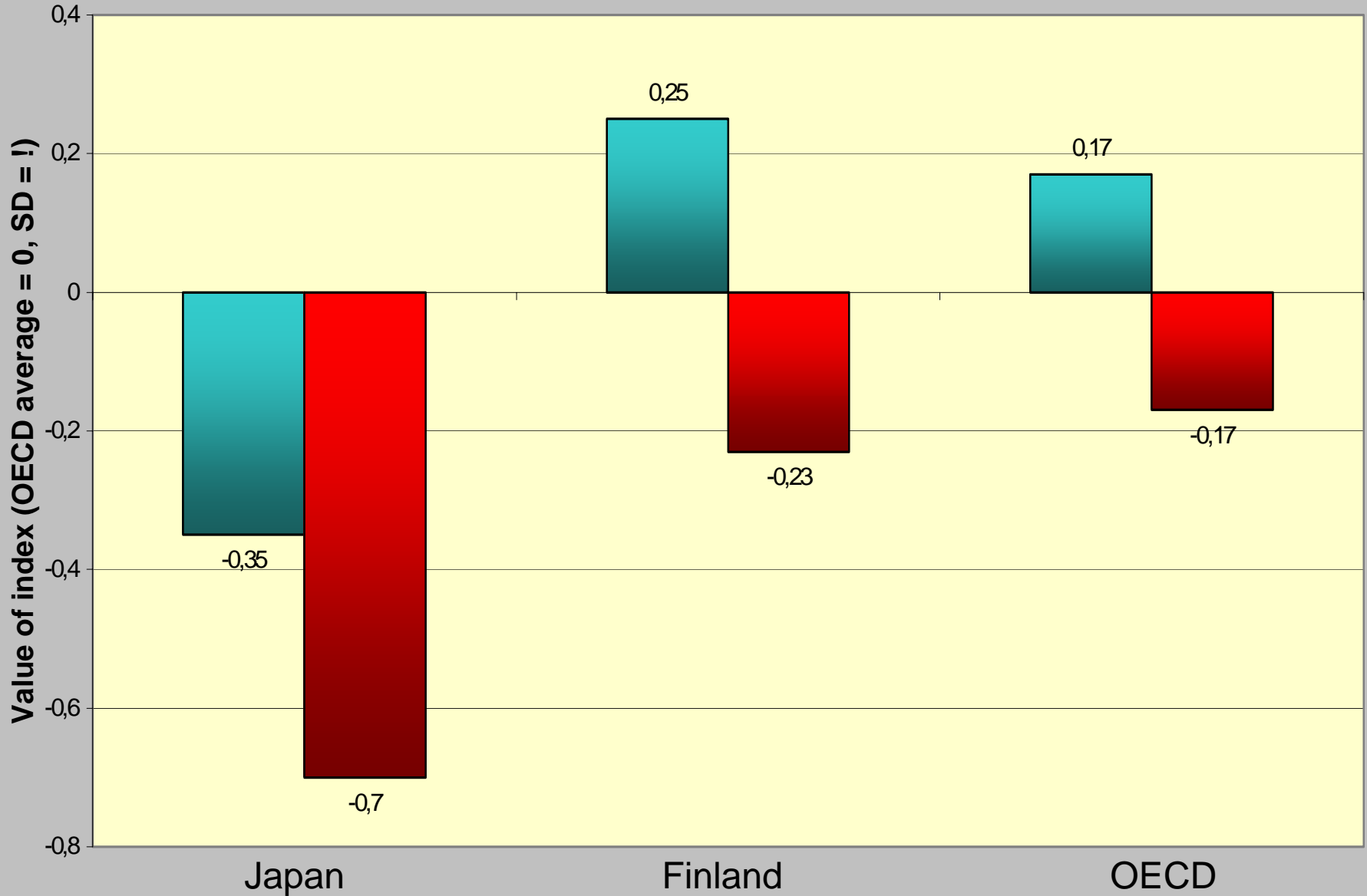
Boys Girls

# Interest, enjoyment and achievement in mathematics



◆ Japan    ■ Finland    ▲ OECD

# Self-concept in mathematics



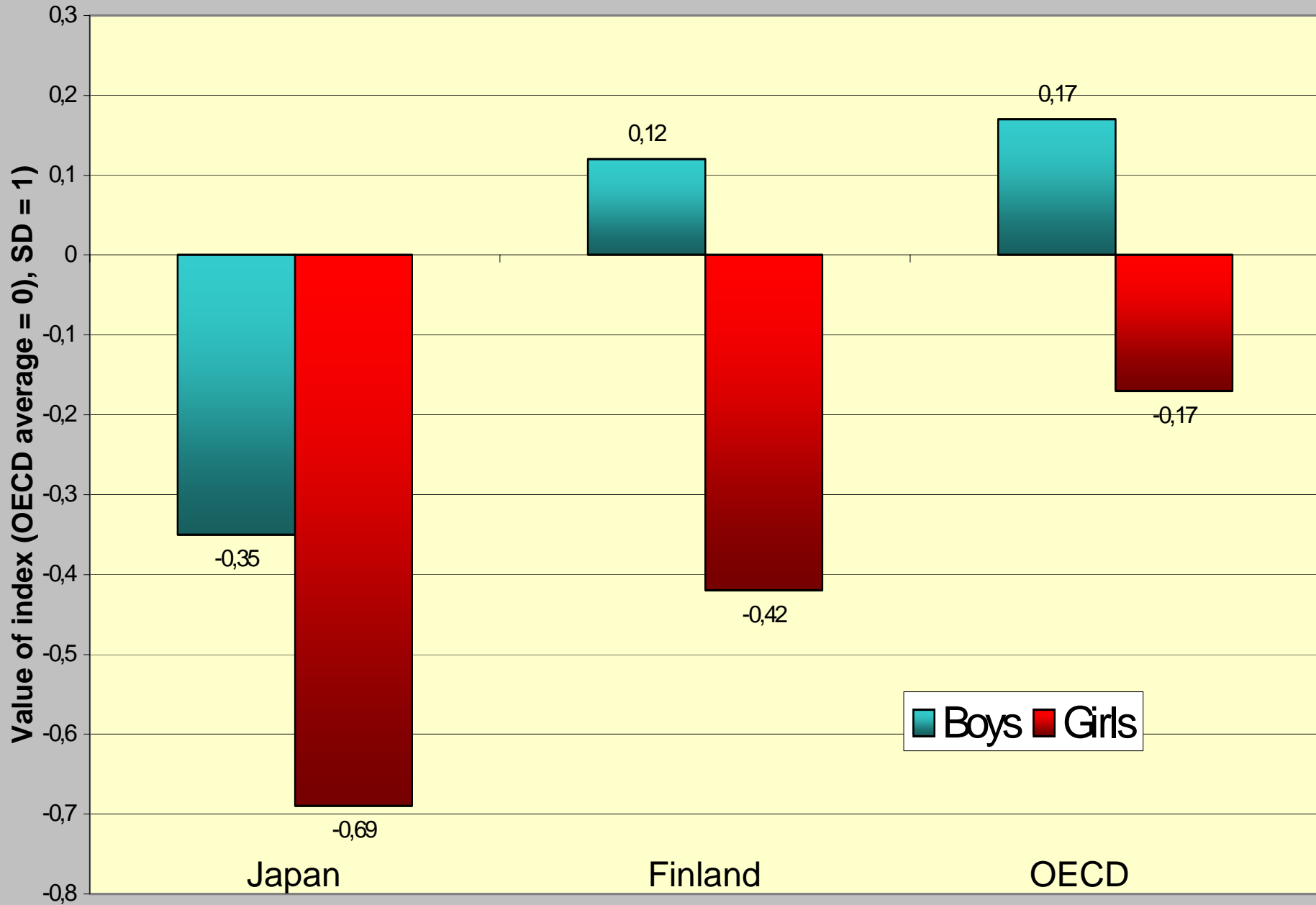
Boys Girls

# Self concept and achivement in mathematics

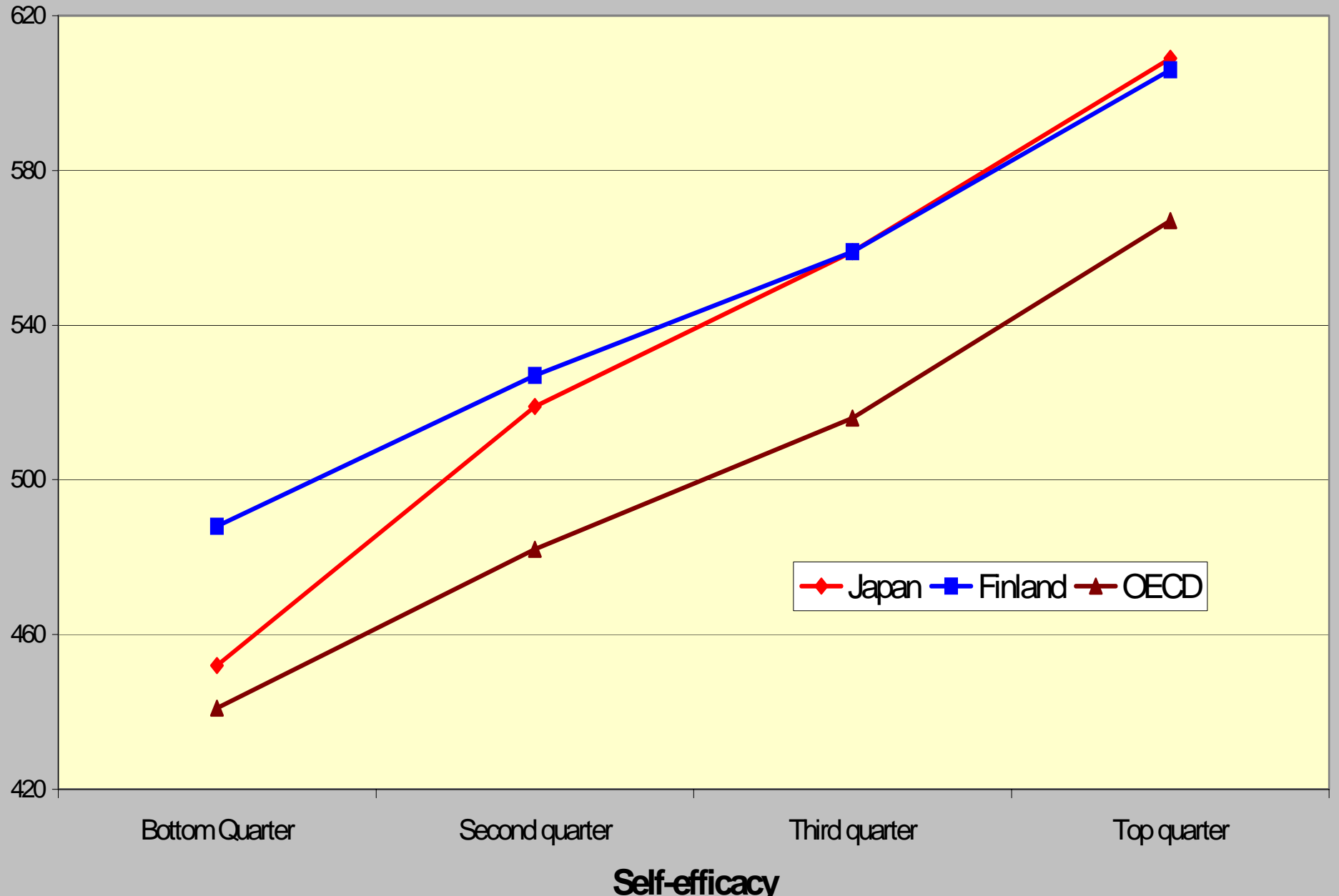


◆ Japan ■ Finland ▲ OECD

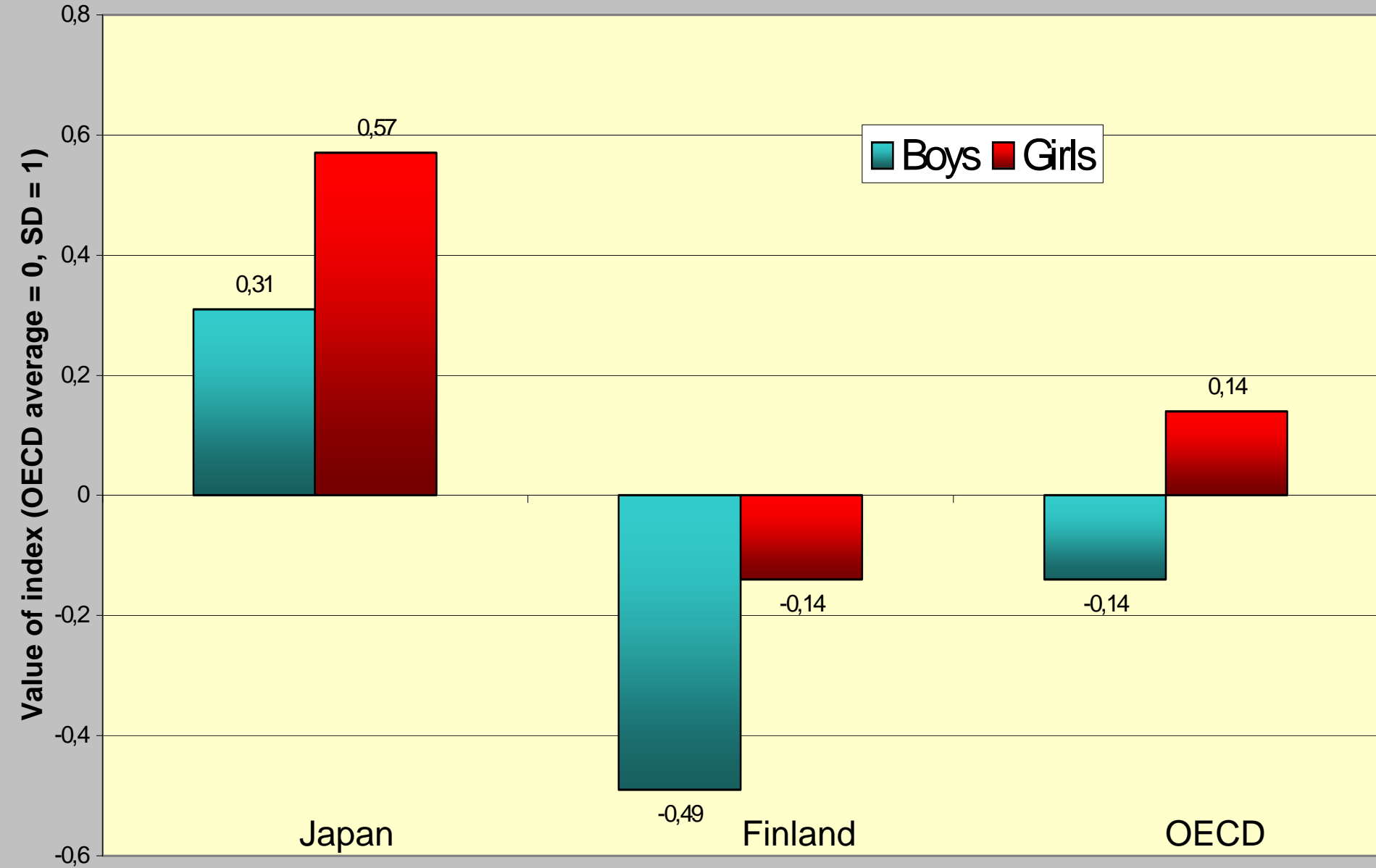
# Self-efficacy in mathematics



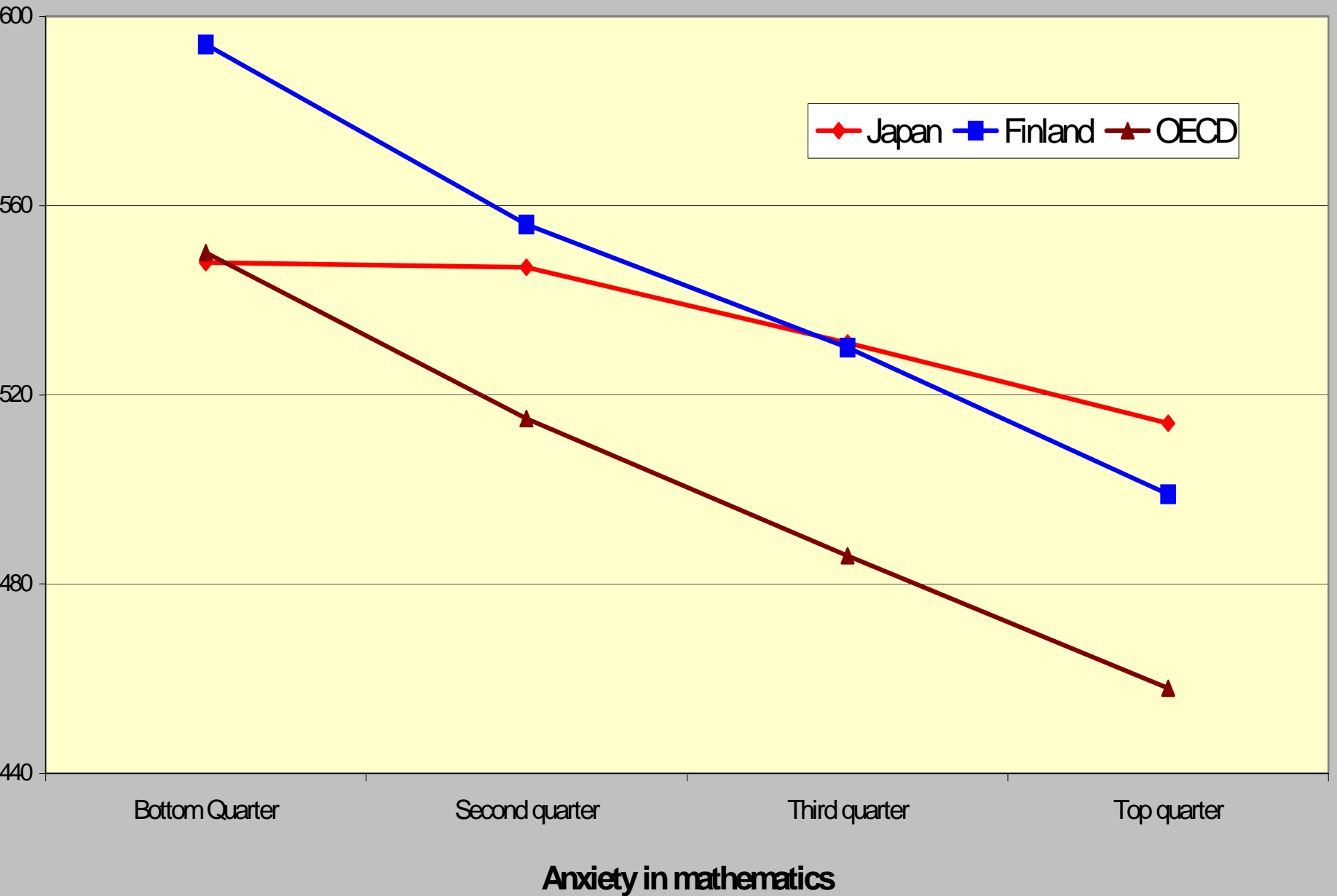
# Self-efficacy and achievement in mathematics



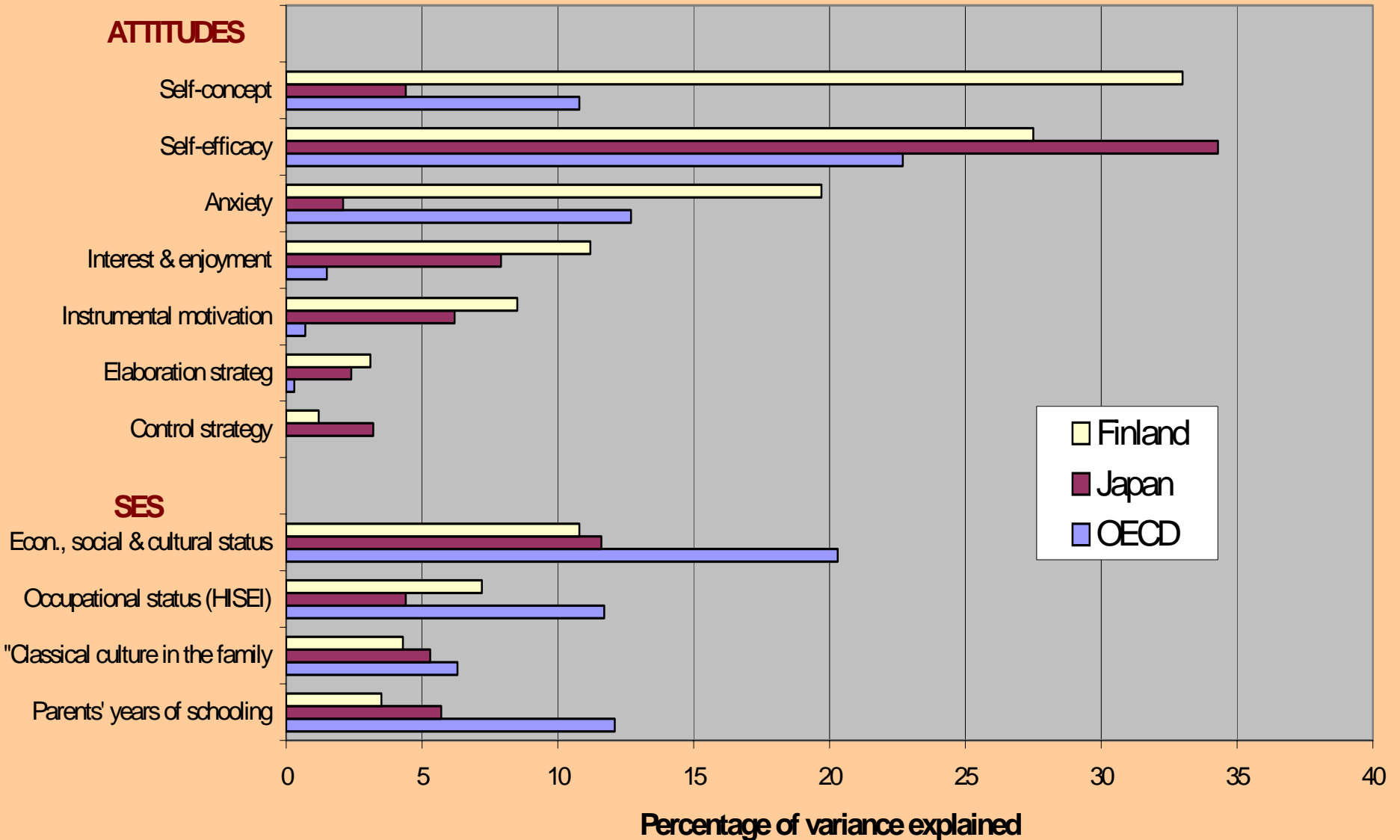
# Anxiety in mathematics



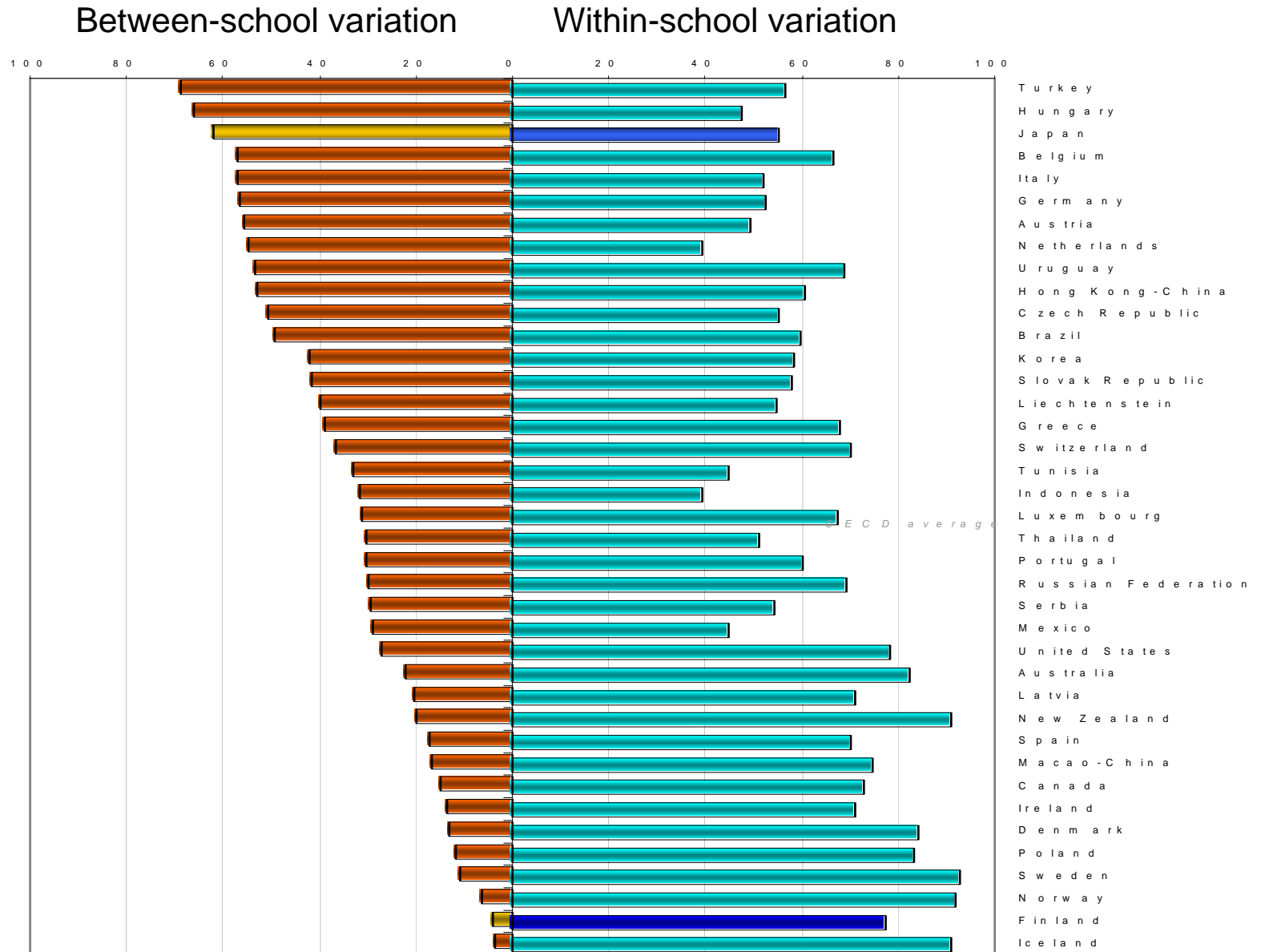
# Anxiety and achievement in mathematics



# Students' learning attitudes and socio-economic background (SES) explaining the achievement in mathematics

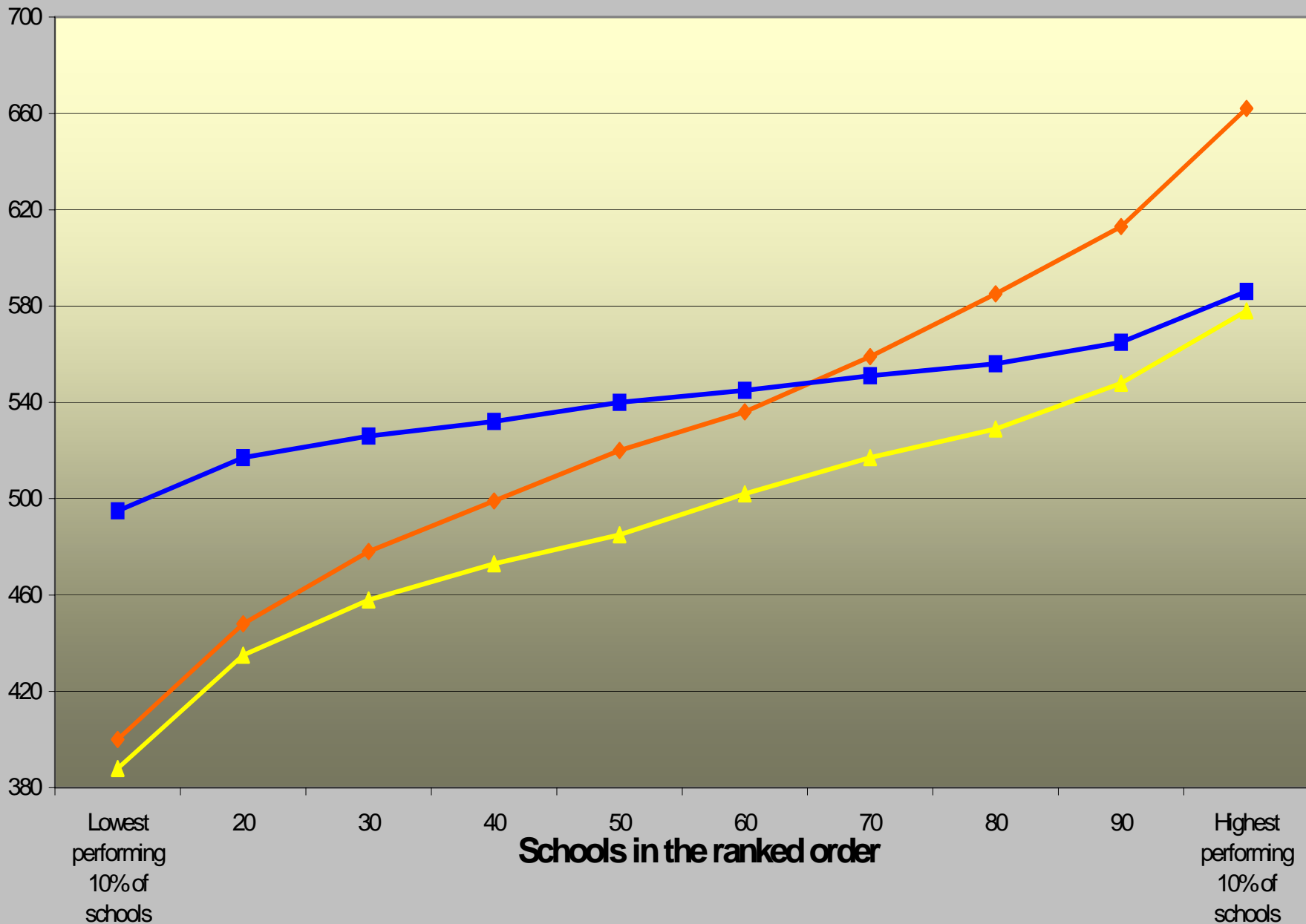


# Between school and within school variation on the mathematics scale



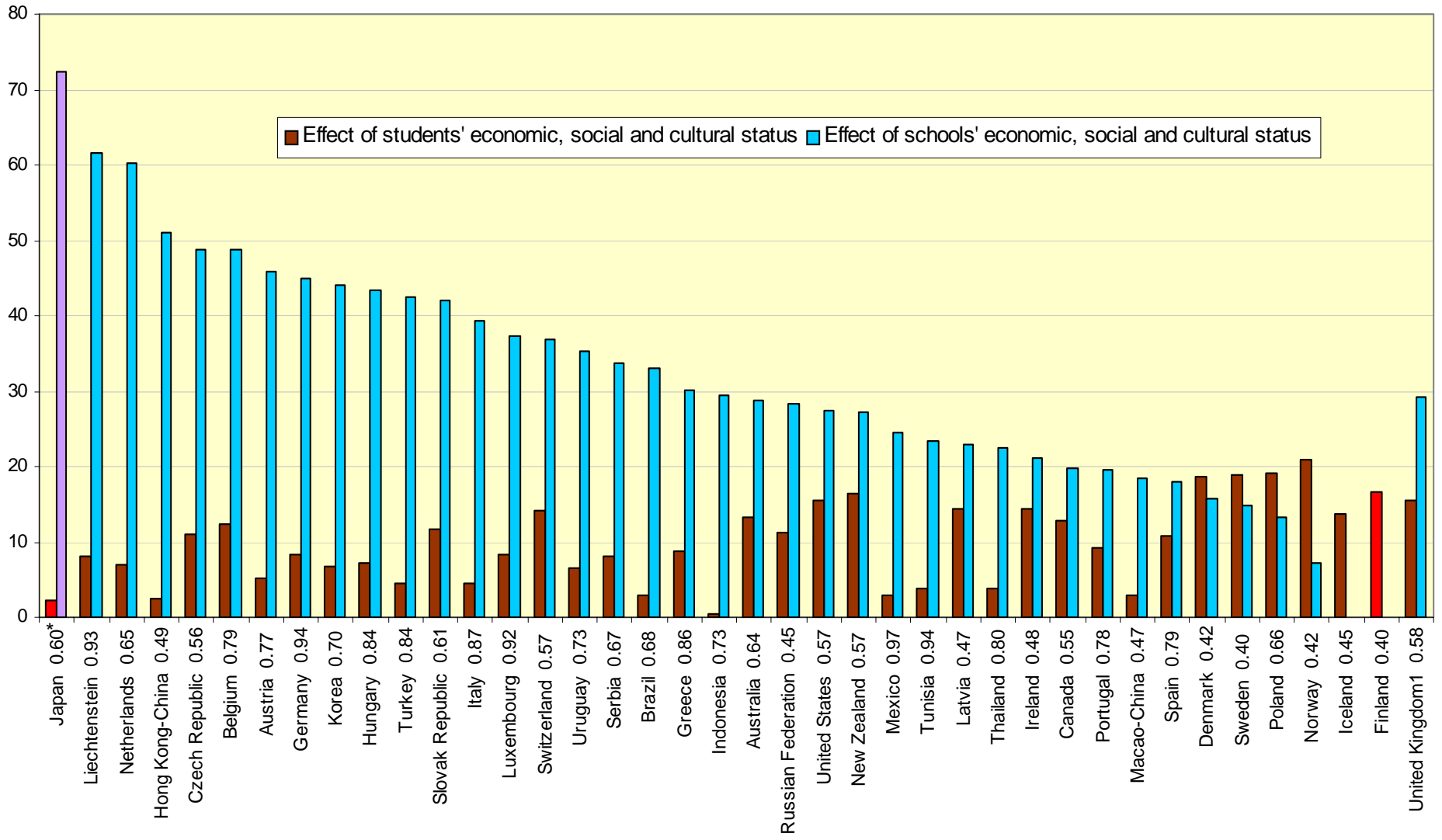
Source: OECD PISA 2003 database, Table 4.1a.

# Mean scores of the schools on the mathematic scale



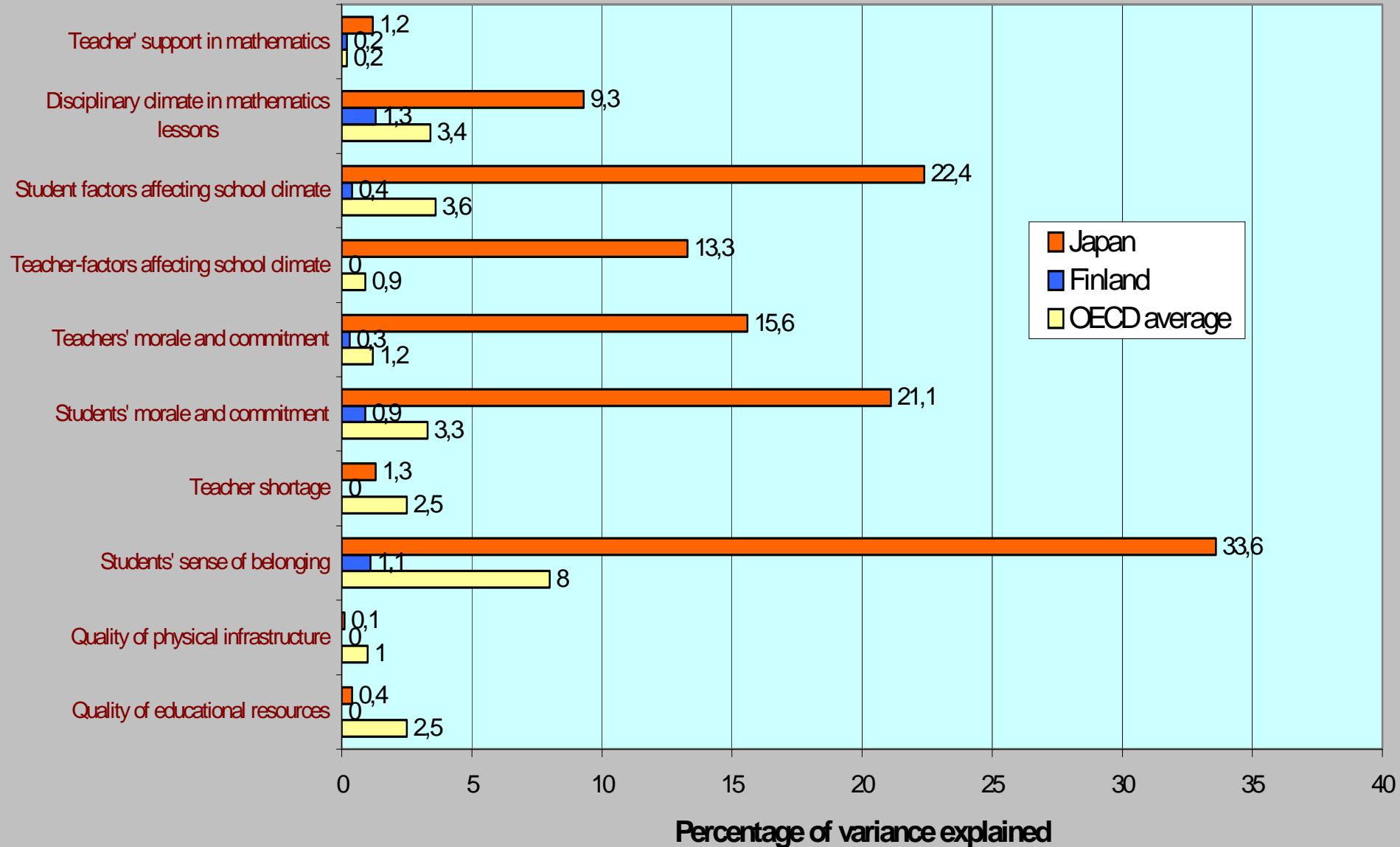
◆ Japan ■ Finland ▲ OECD

# Effects of students' and schools SES-background on student performance on the mathematics scale

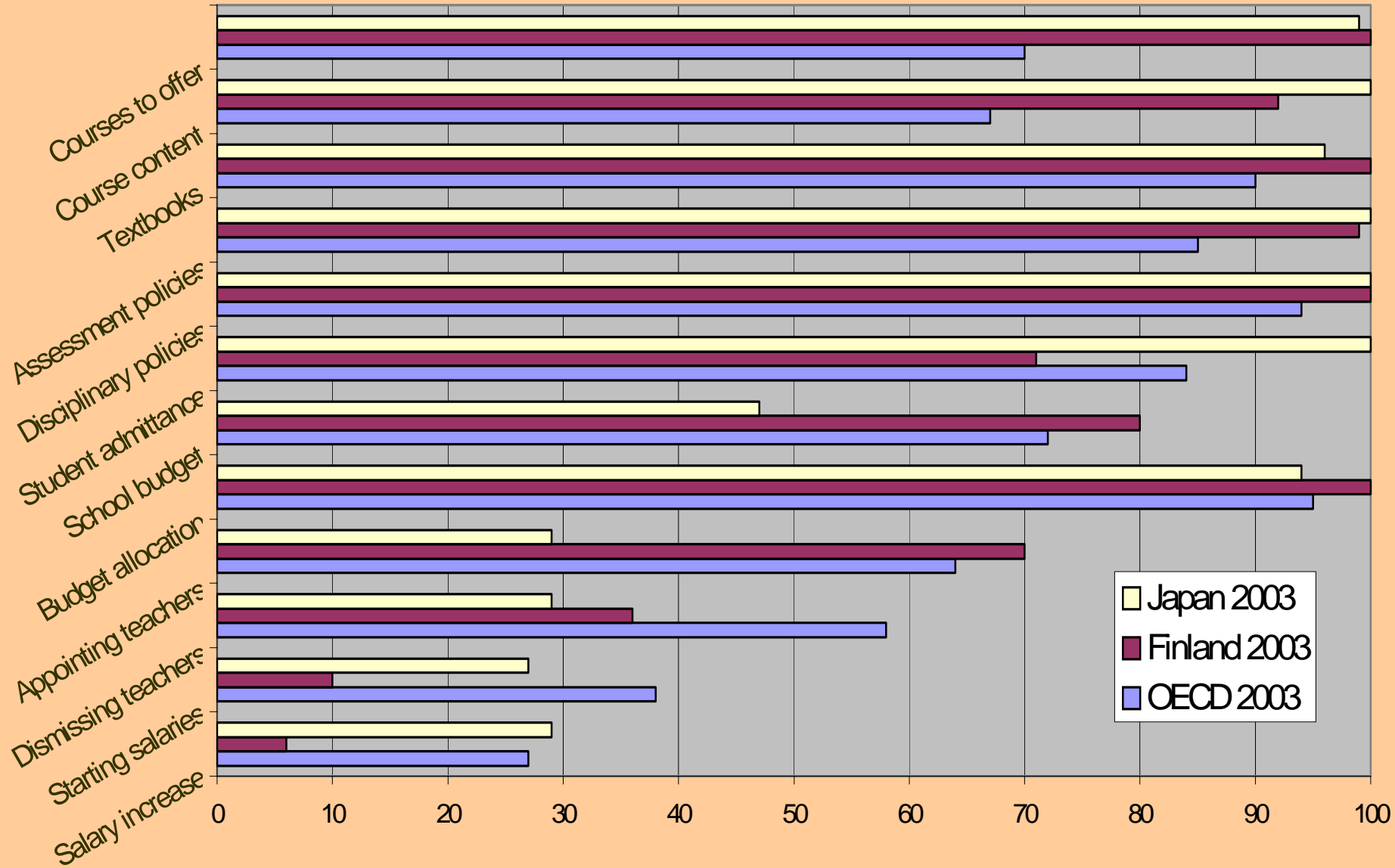


Source: OECD PISA 2003 database, Table 4.5.

# School level factors explaining achievement in mathematics

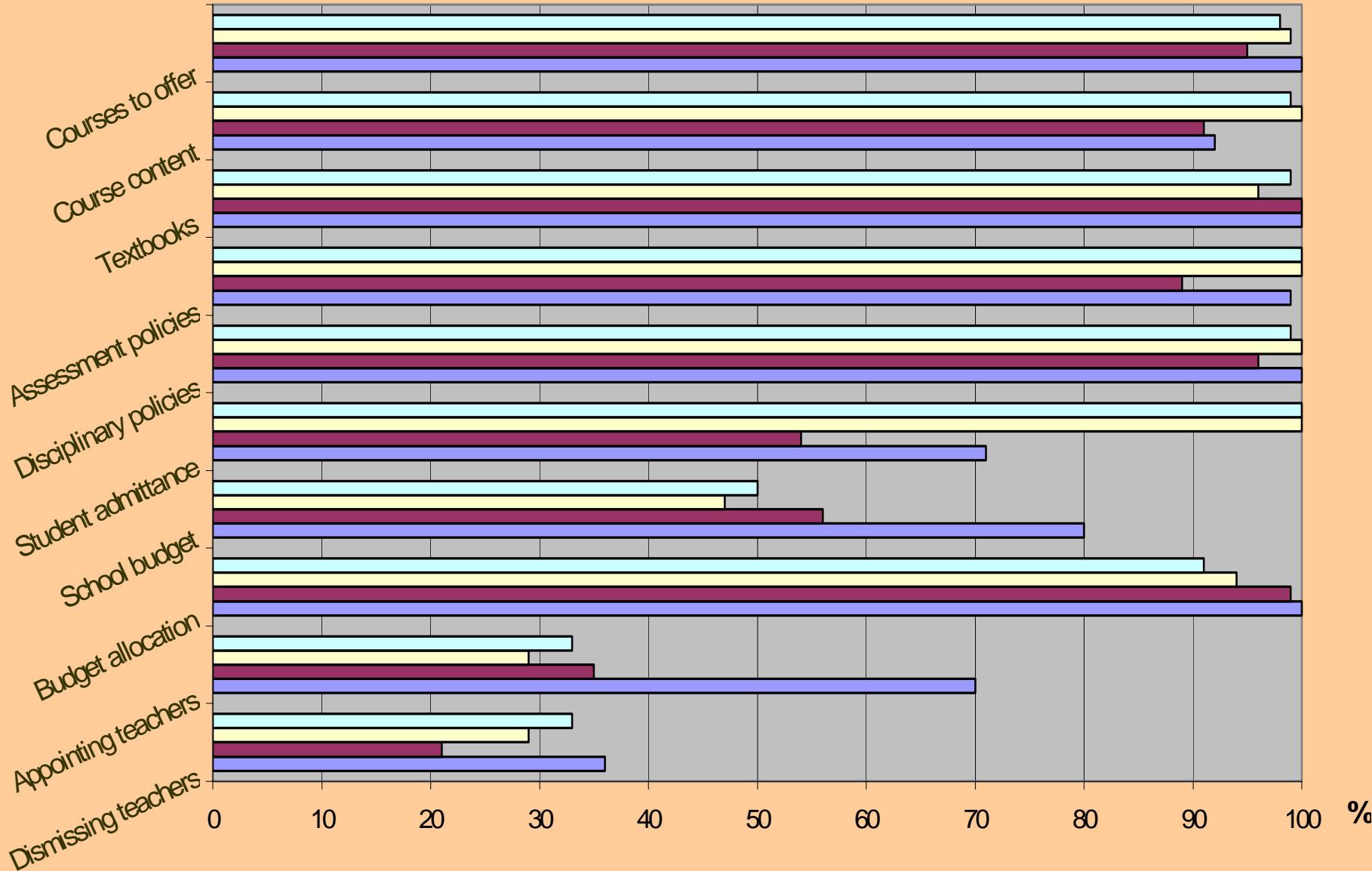


# Schools have responsibility



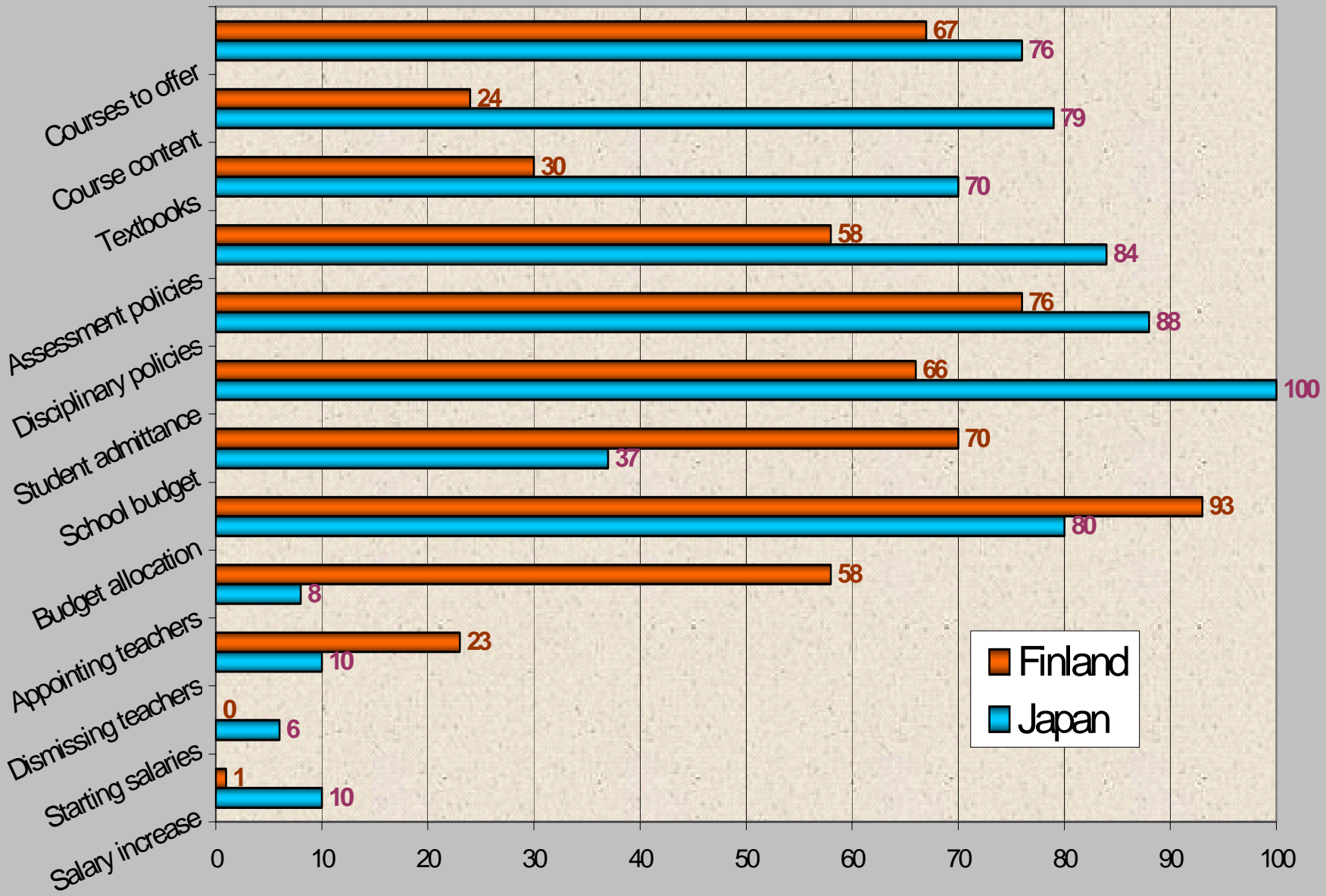
Percentage of students

# Schools have responsibility



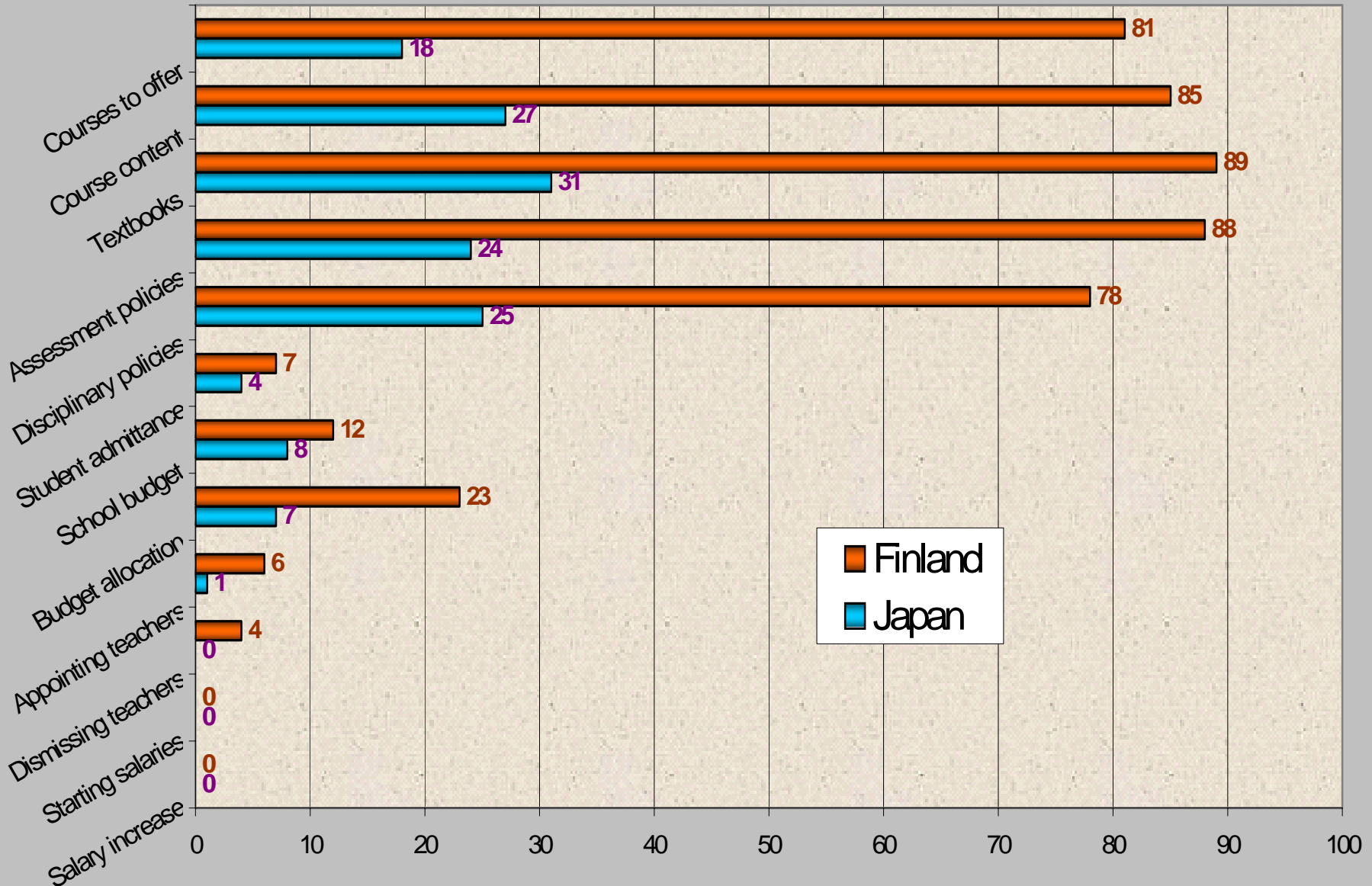
■ Finland 2003 
 ■ Finland 2000 
 ■ Japan 2003 
 ■ Japan 2000

# Principal has responsibility



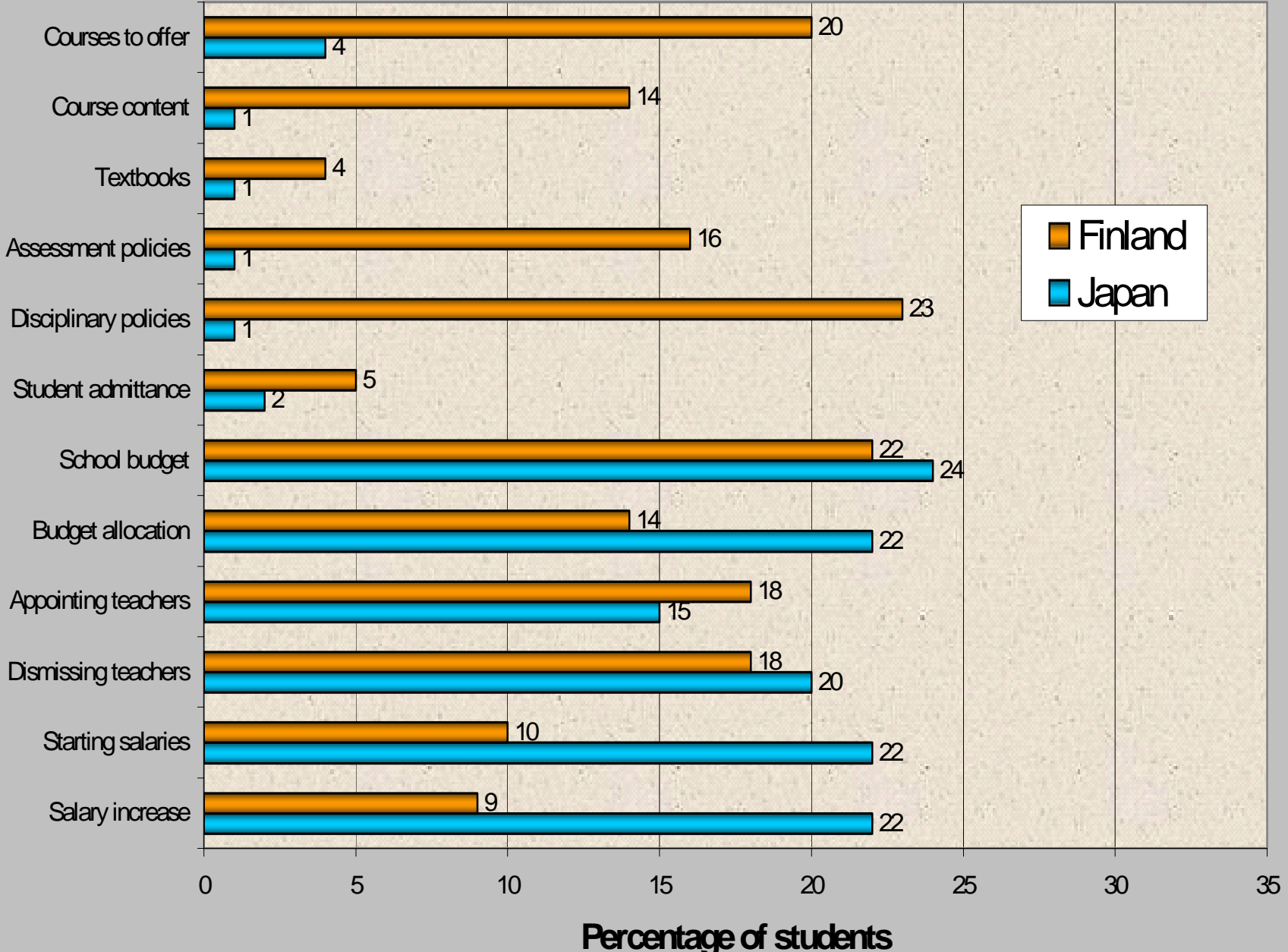
Percentage of students

# Teachers have responsibility

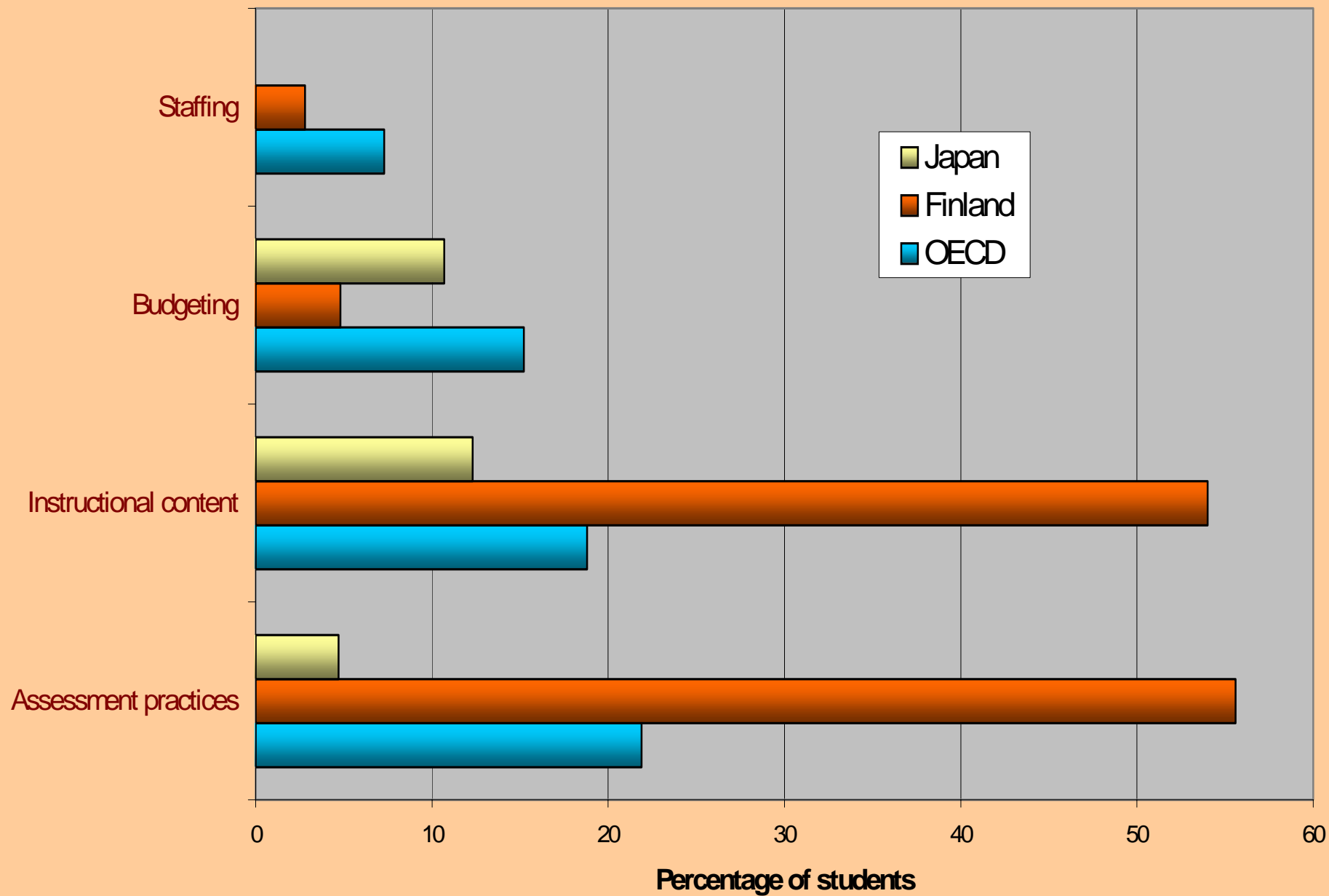


Percentage of students

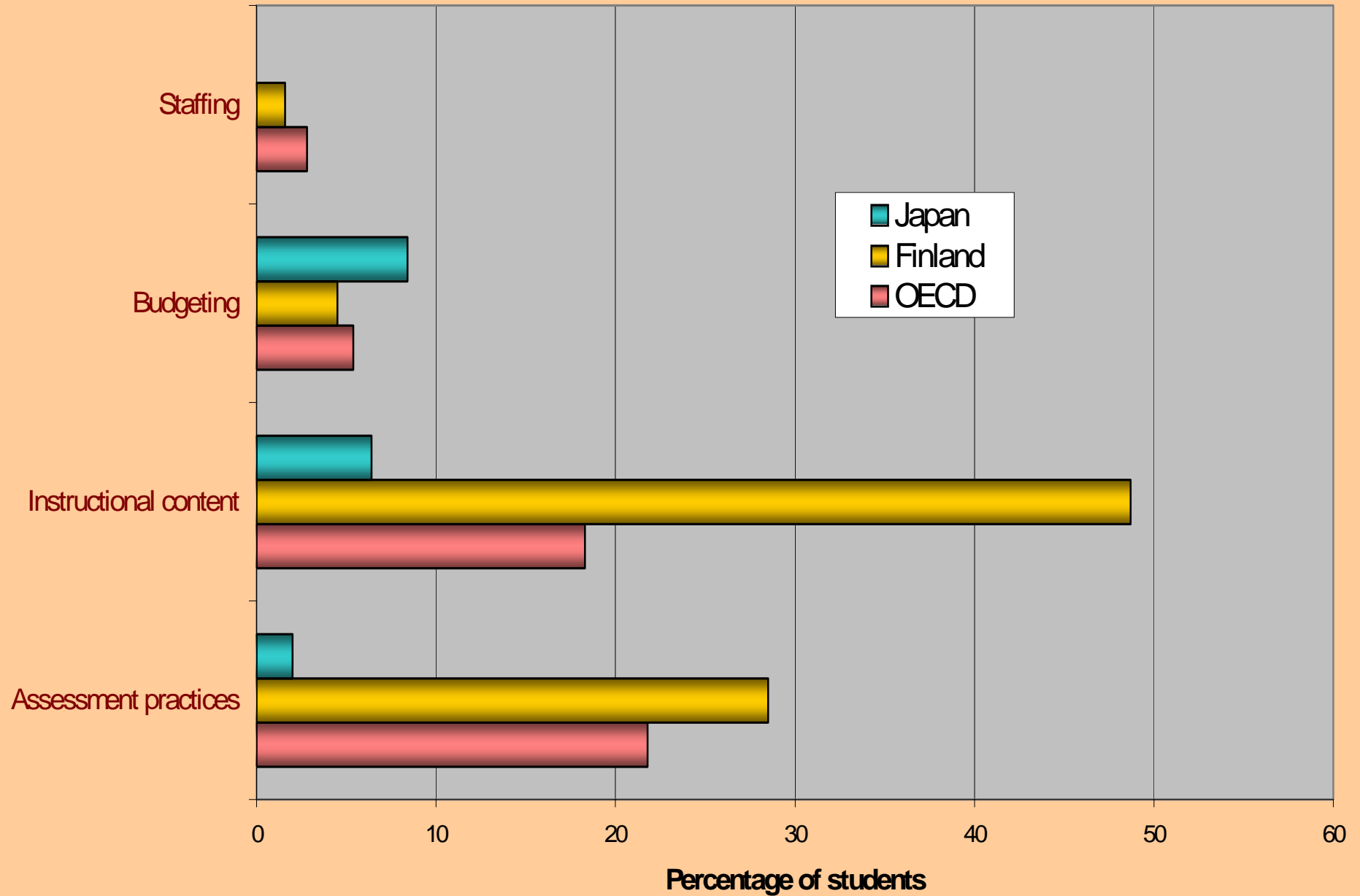
# School board has responsibility



# Parental groups have direct influence on

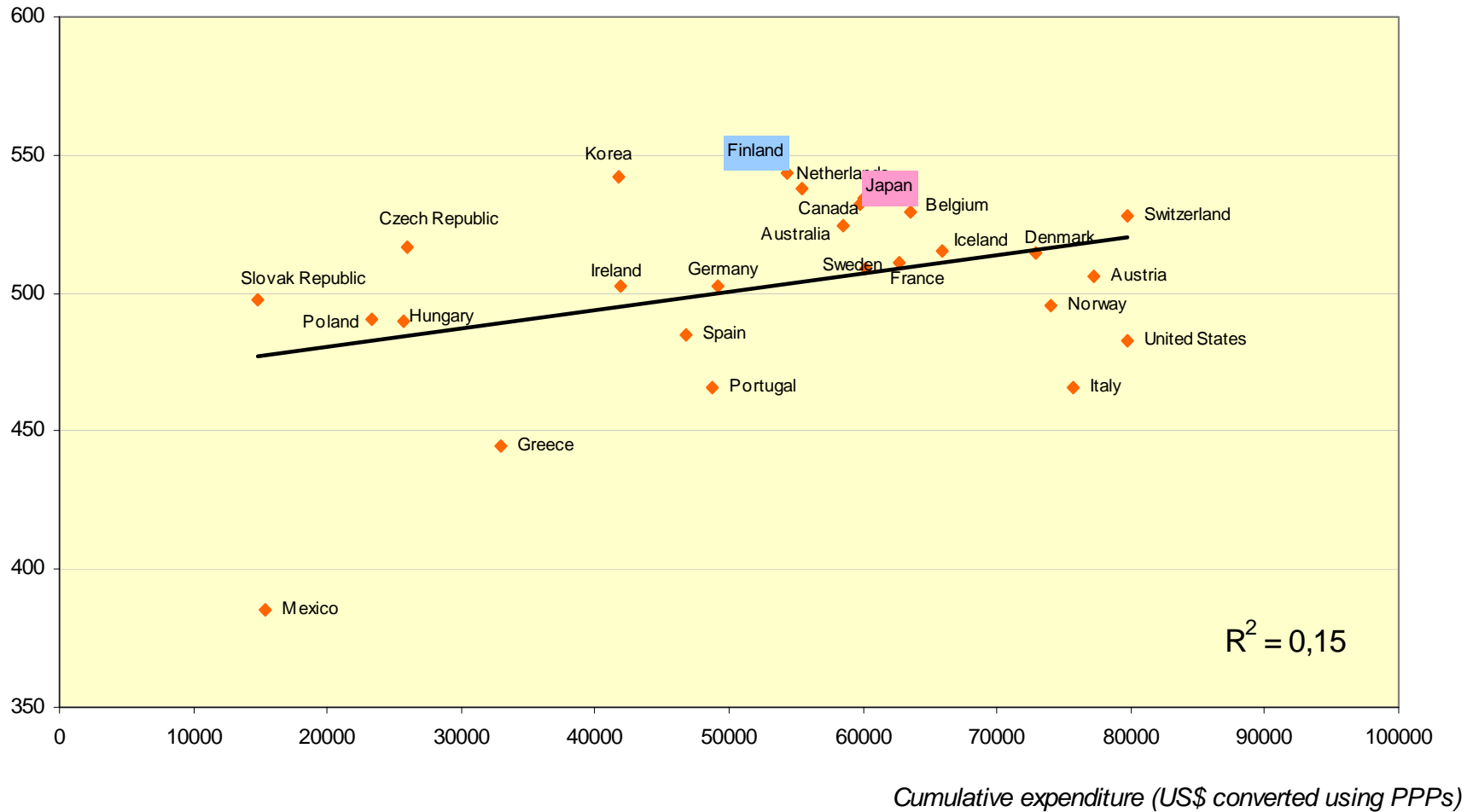


# Students groups have direct influence on



# Student performance and spending per student

Performance in mathematics



# Student performance and national income

Performance in  
mathematics

