

## ESTONIA'S PISA SCORE TRENDS: 2006 – 2018

### Estonia's PISA Performance in 2018

Estonia was the top-performing non-Asian country in all three subjects on PISA 2018.

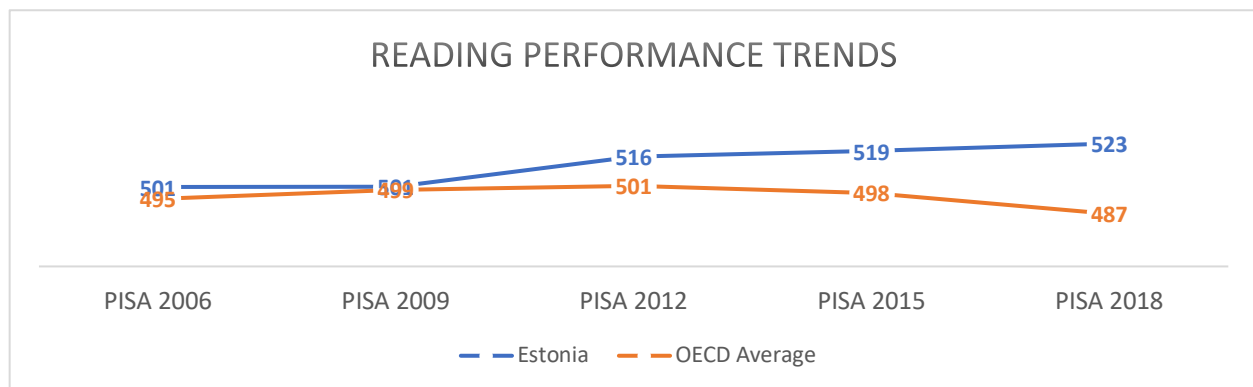
In the focus domain of reading, only China and Singapore outperformed Estonia by a statistically significant margin. Estonia's mean reading score of 523 was significantly above the OECD average of 487.

In math, only China, Singapore, Macao, Hong Kong, and Taiwan outperformed Estonia. Estonia's score of 523 was significantly above the OECD average of 489.

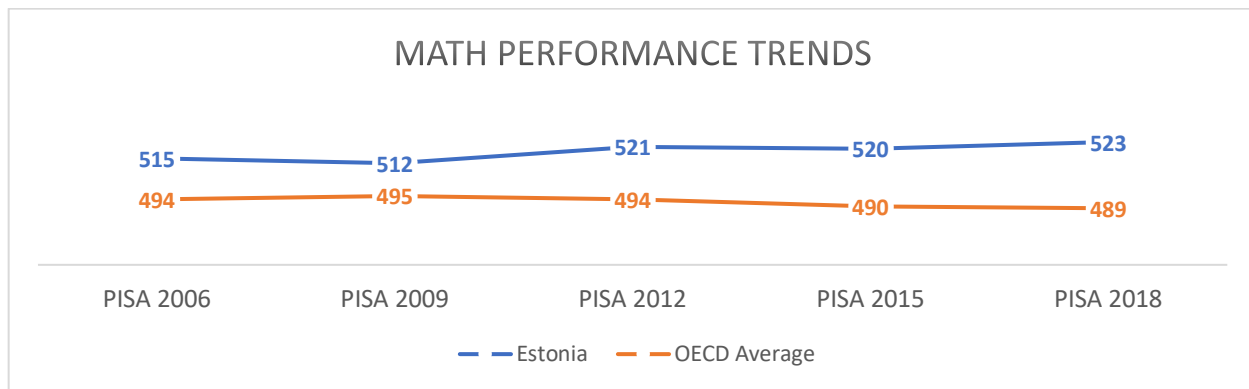
In science, only China, Singapore and Macao outperformed Estonia. Estonia's score of 530 was significantly above the OECD average of 489.

### Trends in Estonia's PISA Performance

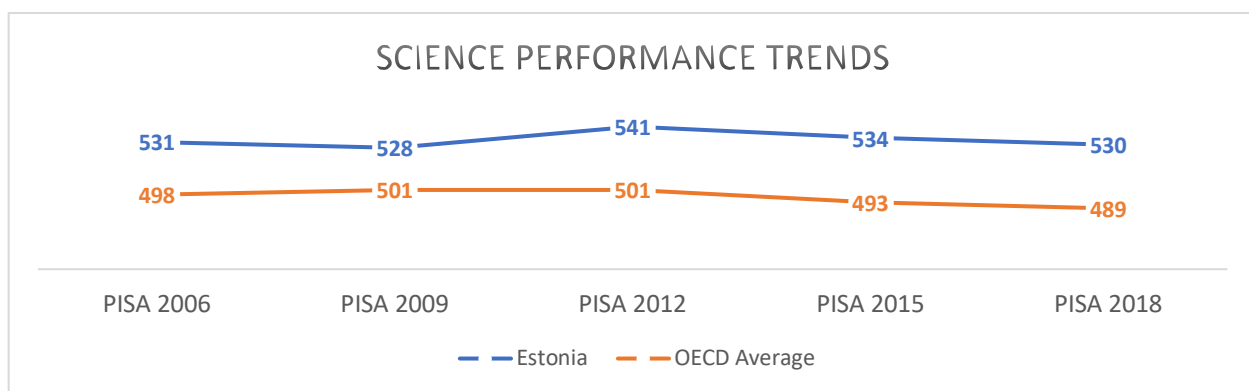
Estonia first participated in PISA in 2006. Performance was flat in 2009, but since then Estonia's reading score has improved with each administration of the exam. Estonia's reading score improvement was statistically significant from 2006 to 2018, but not from 2015 to 2018.



Estonia's scores in mathematics have also trended upward since 2006, despite a dip in 2009. However, Estonia's mathematics score improvement was not statistically significant from 2006 to 2018, or from 2015 to 2018.

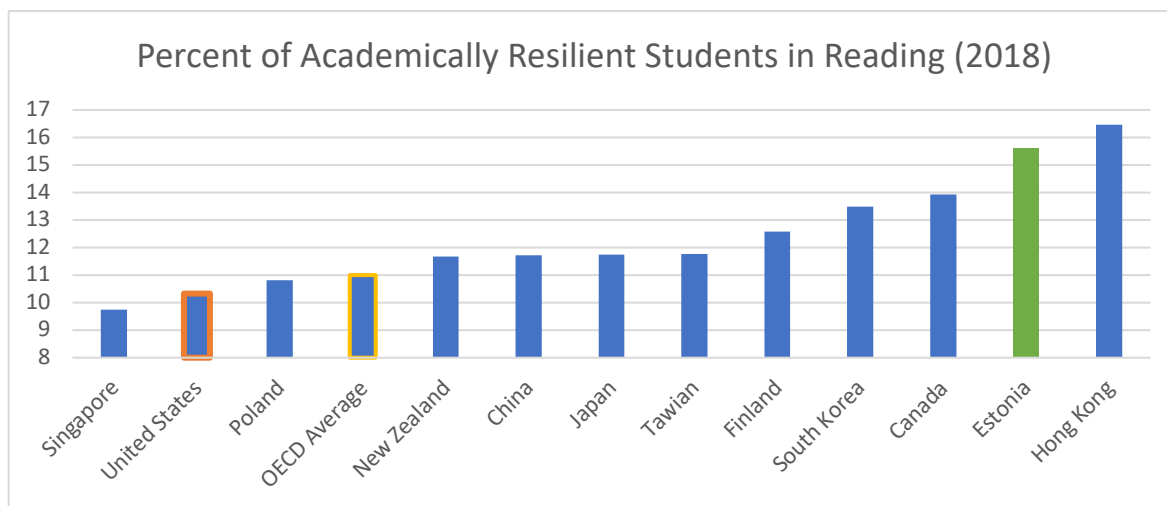
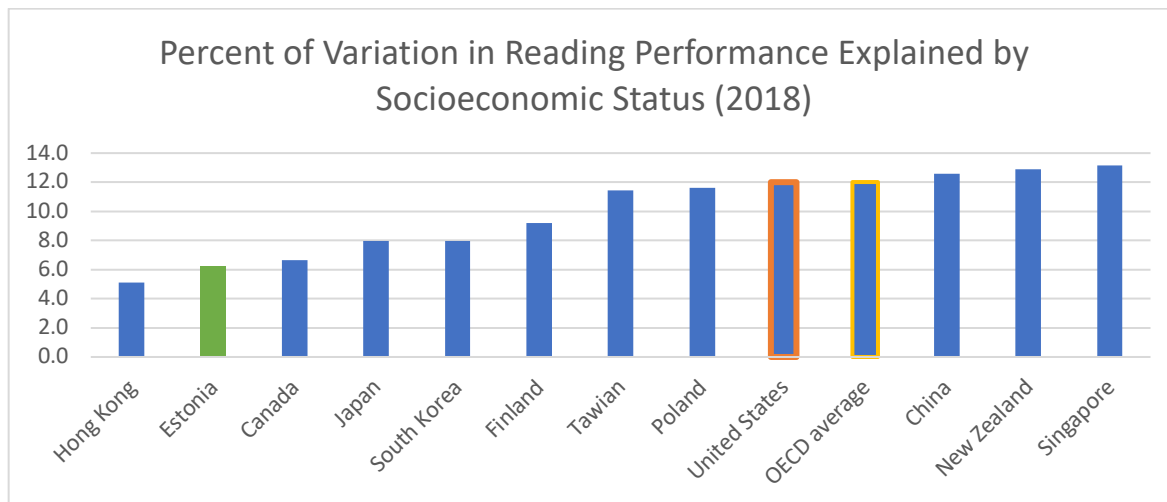


Estonia’s scores in science increased from 2009 to 2012 but have trended downward since then. There was no statistically significant difference in scores from 2006 to 2018, or from 2015 to 2018.



## PISA Equity Indicators for Estonia

Estonia’s PISA performance shows a relatively high level of equity based on socioeconomic background. The percent of variation in reading performance explained by socioeconomic status is only 6.2 percent in Estonia, significantly lower than the OECD average of 12 percent. Estonia also has a very high proportion of academically resilient students—those from the lowest quartile of socioeconomic background who nevertheless performed in the top quartile in reading among all Estonian students: 16 percent of Estonian students are academically resilient, significantly higher than the OECD average of 11 percent.



Estonia’s equity has improved. Since the 2009 PISA administration (the last time PISA focused on reading), the performance of both advantaged and disadvantaged students in Estonia improved significantly. The variation in reading performance explained by socioeconomic status decreased from 7.6 percent in 2009 to 6.2 percent in 2018. In 2009, Estonia had an academically resilient student rate of 8.5 percent, and in 2018 that number had nearly doubled to 16 percent.

Estonia performs less well on equity based on immigrant background and language spoken at home:

- About 10 percent of all students in Estonia are immigrants. After accounting for students’ and schools’ socioeconomic backgrounds, immigrant students in Estonia scored 35 points below their non-immigrant peers in reading on PISA 2018, which is a statistically significant gap and larger than the OECD average gap of 24 points. Estonia’s share of academically resilient immigrant students—students with an immigrant background who nevertheless performed in the top quartile in reading among all Estonian students—is 13.6 percent, significantly smaller than the OECD average of 16.8 percent.
- Estonian students whose first language is Russian tend to perform well below Estonian-speaking students. The gap in reading is 42 points, in mathematics is 29 points and in science is 42 points.