

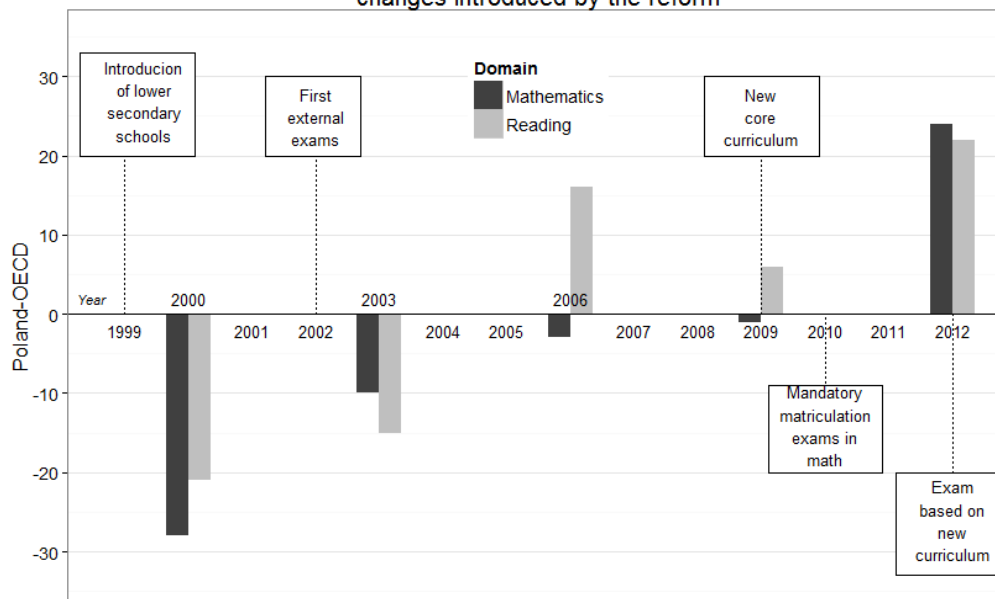
Alicja Zawistowska (zawistowska.alicja@gmail.com), University of Białystok, Poland

Background

In the first PISA report published in 2000, fifteen years old Polish students were ranked significantly below the OECD average. In the next four rounds of the assessment, they results gradually improved.

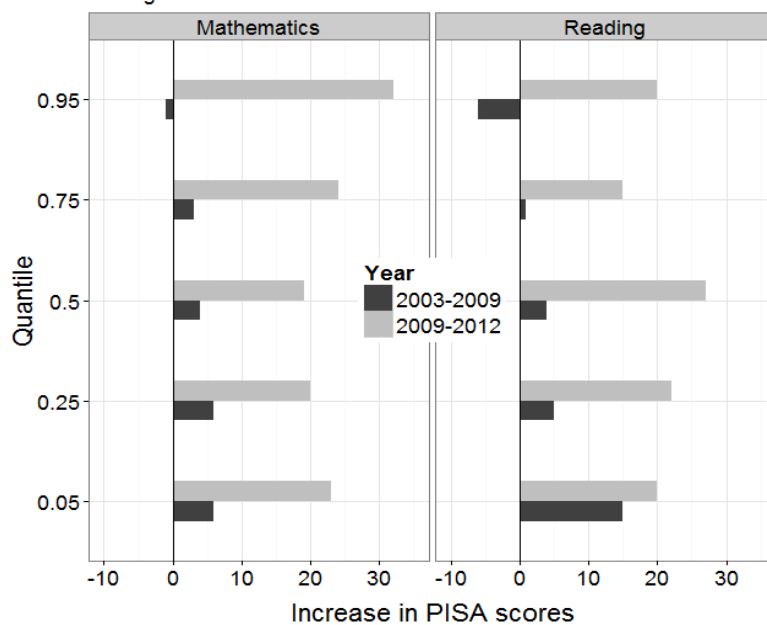
While subsequent PISA rounds were conducted, Poland's educational system was being fundamentally transformed. The reform that began in 1999 was the first deep intervention in the educational system since the moment of its reconstruction at the beginning of the 1990s.

Figure 1. Poland-OECD difference in average scores in PISA study (bars) and significant changes introduced by the reform



Improvement at the tails of a score distribution

Figure 2. Increase in PISA scores in 2003-2009 and 2009-2012



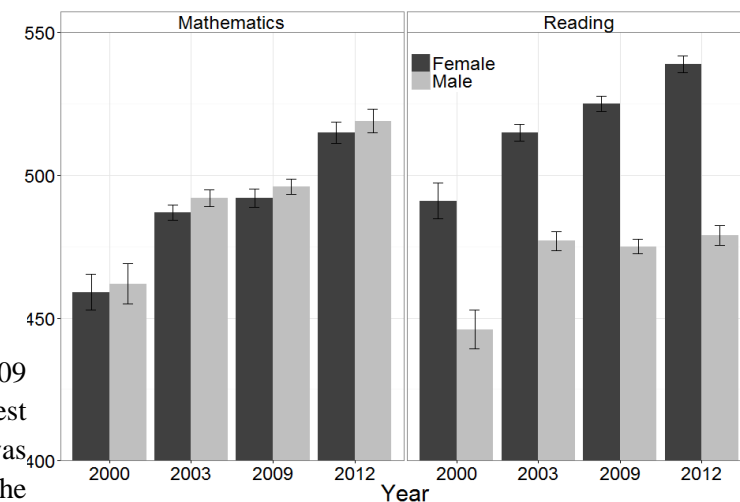
Research questions

- (1) Considering the process of educational reform in Poland, what might explain increasing trend in PISA scores?
- (2) Has the size of the gender gap changed between PISA 2000 and PISA 2012?
- (3) Were there any significant changes in the performance of students with different levels of abilities?

Gender differences within domains

Even though the educational reform hadn't been directly intended to reduce gender gap, it might have some effects on it.

In *mathematics* difference in average scores for both genders was statistically insignificant (boys had small but stable advantage). In *reading* gender gap goes significantly in favor of women.



In PISA 2000-2009 the biggest improvement was observed at the lower part of the distribution.

In 2009-2012 the biggest improvement was observed at the higher part of the distribution for mathematics and in the middle in reading.

Summary

- (1) It's plausible that, among other changes, adaptation of the new core curriculum and implementation of external exams (both in 2009) affected Polish success in PISA 2012 most significantly.
- (2) While in the period of 2000-2009 worst performing students improved their scores more than others, in the time of success (2009-2012) it was the top 5% students that improved their scores the most. Only women improved their scores in reading steadily.