PISA 2022 RESULTS

Presentation based on International and National reports on PISA 2022

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BETTER POLICIES FOR BETTER LIVES

Participation in PISA 2022

- PISA data collections have been completed in **2000, 2003, 2006, 2009, 2012, 2015, 2018** and **2022**; the PISA 2025 cycle is under way.

- Uzbekistan participated in the PISA assessment for the first time in 2022 and conducted by National Centre for International Studies in Uzbekistan. (Resolution of the Cabinet of Ministers of the Republic of Uzbekistan, No. 997, December 8, 2018)

- In Uzbekistan during 2022, more than 7 000 15-year-old students in 7th grade or above across the country took a two-hour test in **reading**, **mathematics** and **science** and **creative thinking**.

- In Uzbekistan, the PISA test was administrated between the 21st of April and the 6th of May of 2022.

Results and international ranking

- PISA 2022 National report has been developed by A. Avloni national research institute with close support of the Ministry of preschool and school education and OECD’s technical support.

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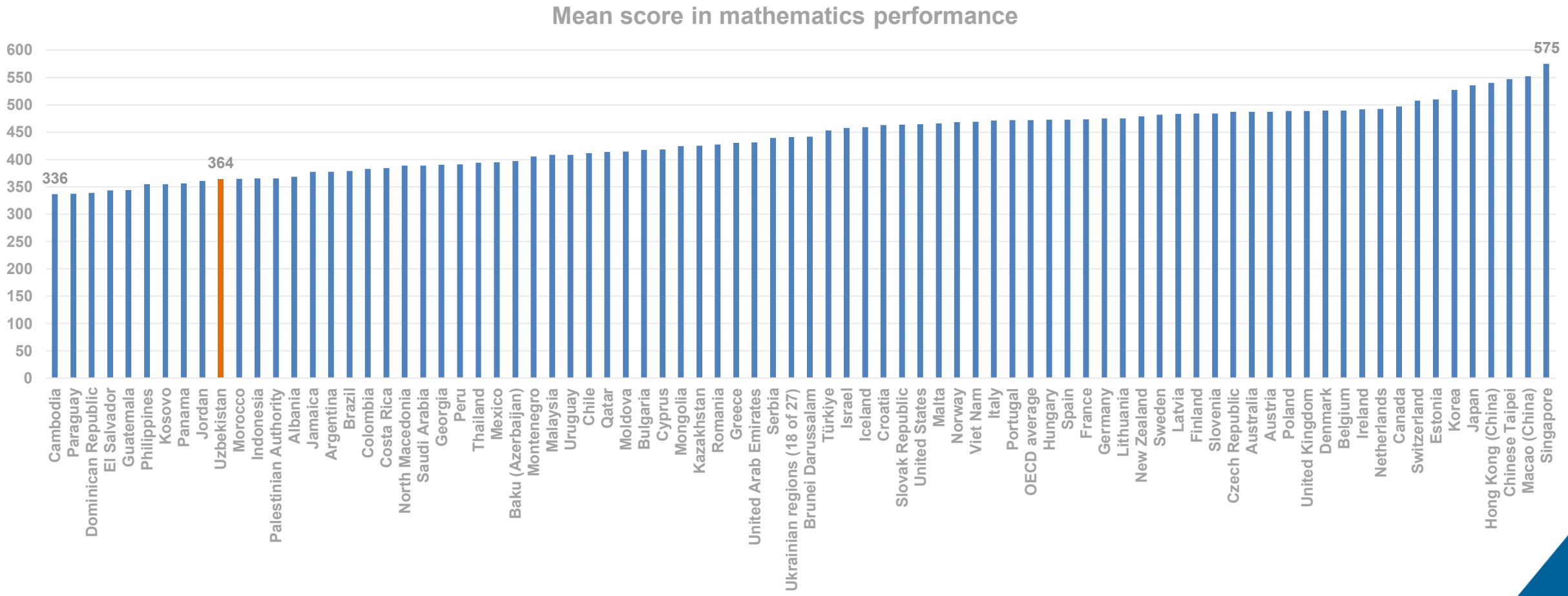
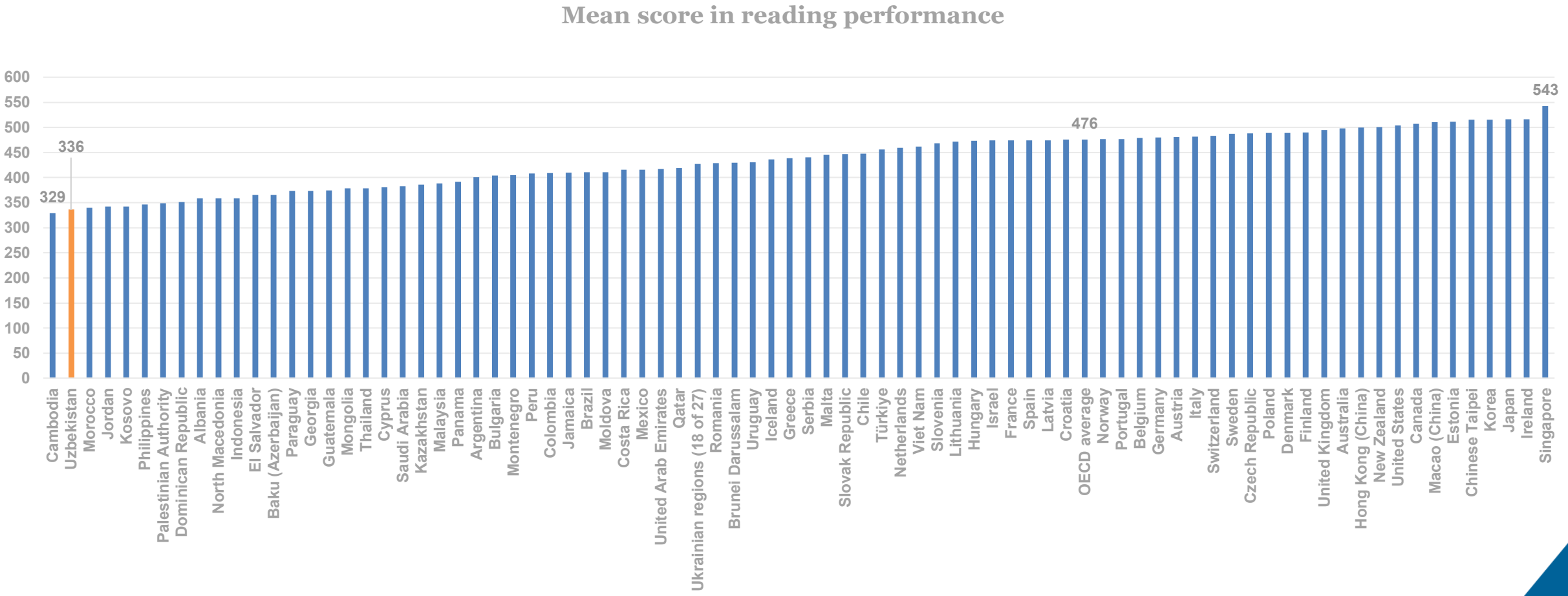
Performance in mathematics



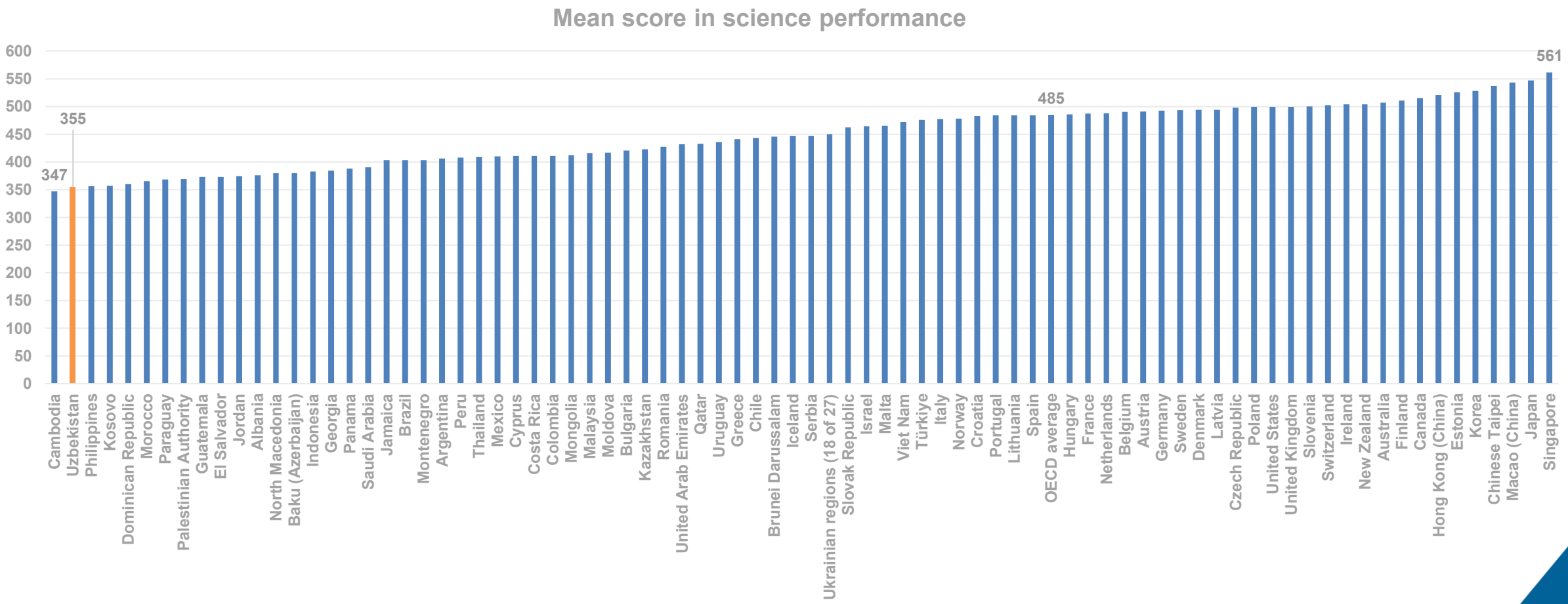
Uzbekistan is 72nd in **mathematics** (364 points average score) among 81 participants.

Performance in reading



Uzbekistan is 80th in **reading** (336 points average score) among 81 participants.

Performance in science



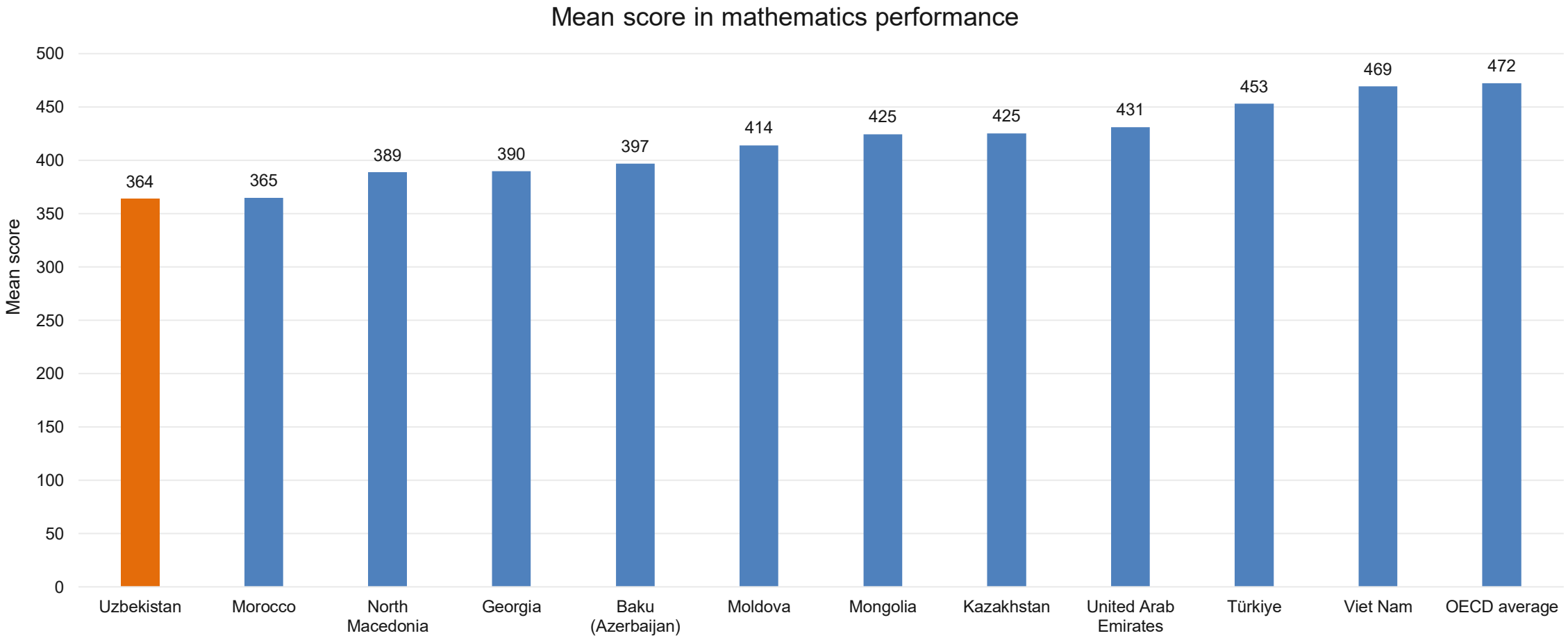
Uzbekistan is 80th in **science** (355 points average score) among 81 participants.

Comparison with benchmarking countries

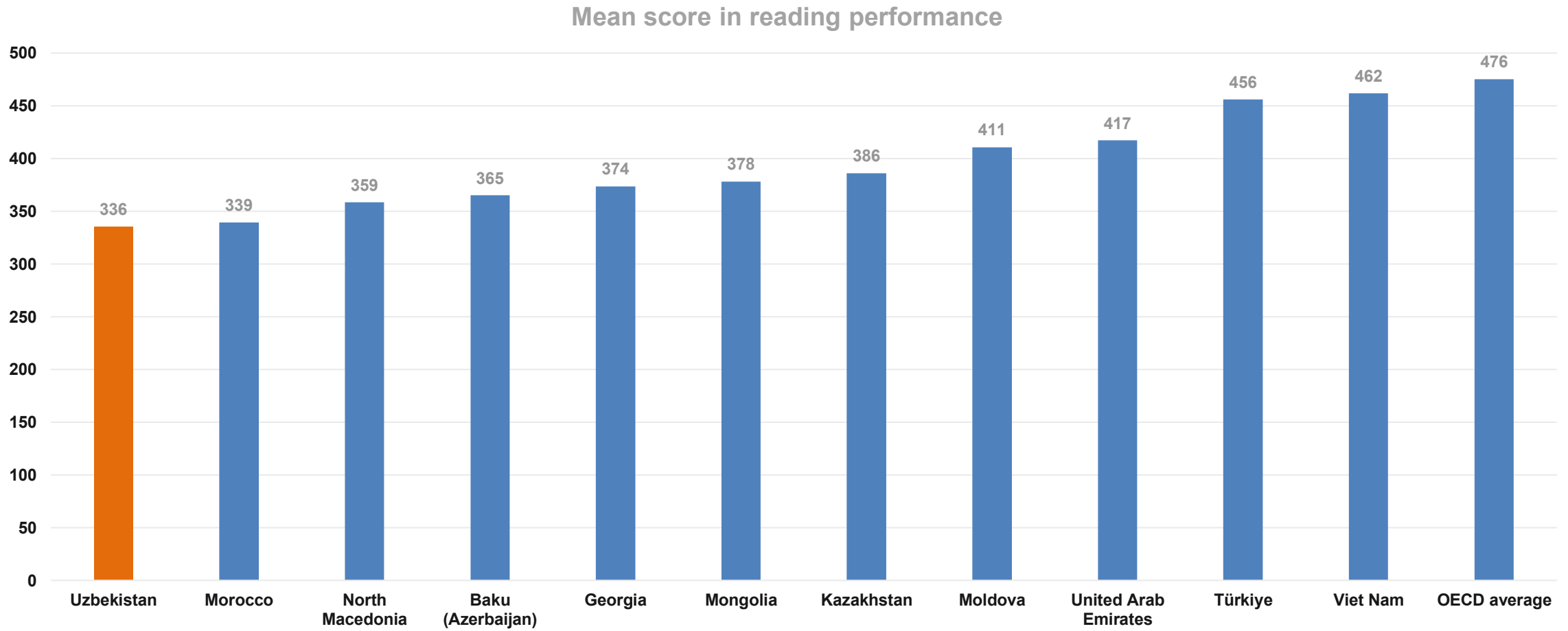
- Comparison economies/countries in the national report: **Baku (Azerbaijan), Georgia, Kazakhstan, Republic of Moldova, Mongolia, Morocco, North Macedonia, Türkiye, United Arab Emirates and Viet Nam**.

- Benchmarking countries have been selected based on geographical proximity, similar socio-cultural and historical background, similar characteristics/history of the educational system, similar level of GDP/per capita parameters.

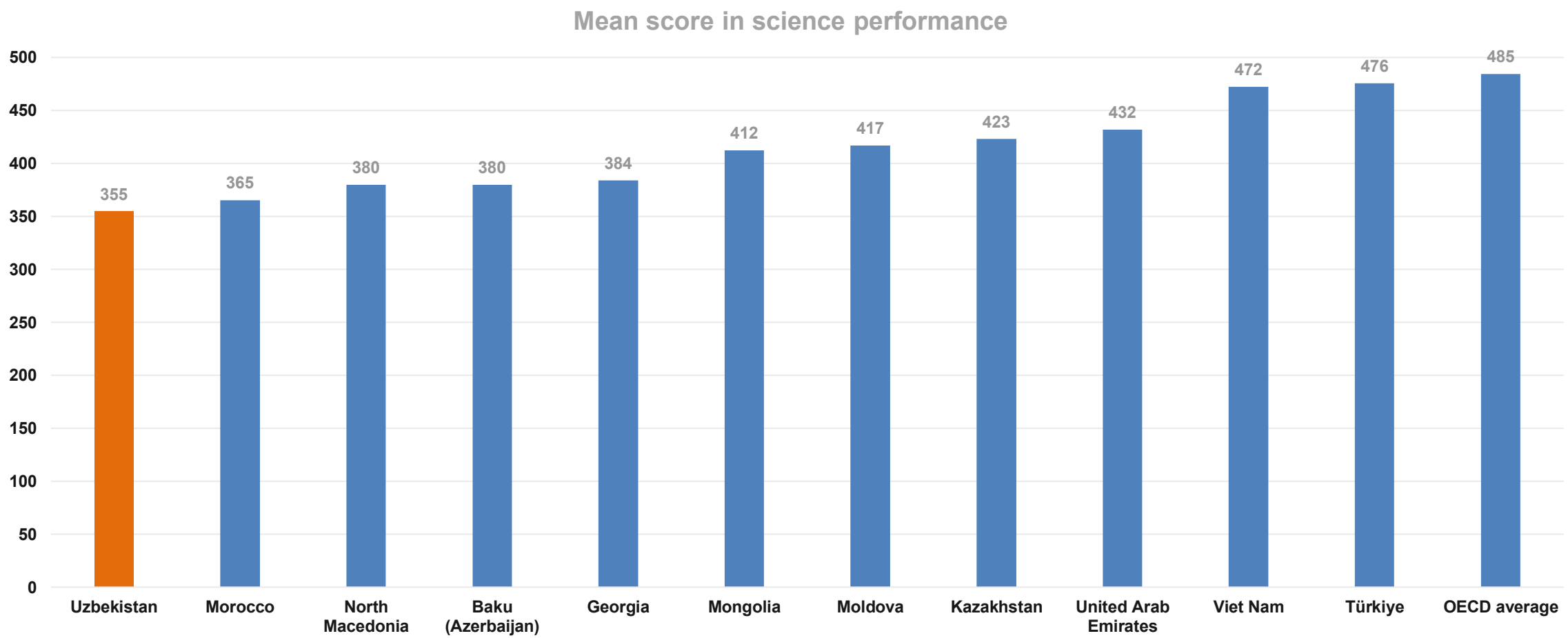
Performance in mathematics
(with comparison countries)



Performance in reading
(with comparison countries)



Performance in science
(with comparison countries)



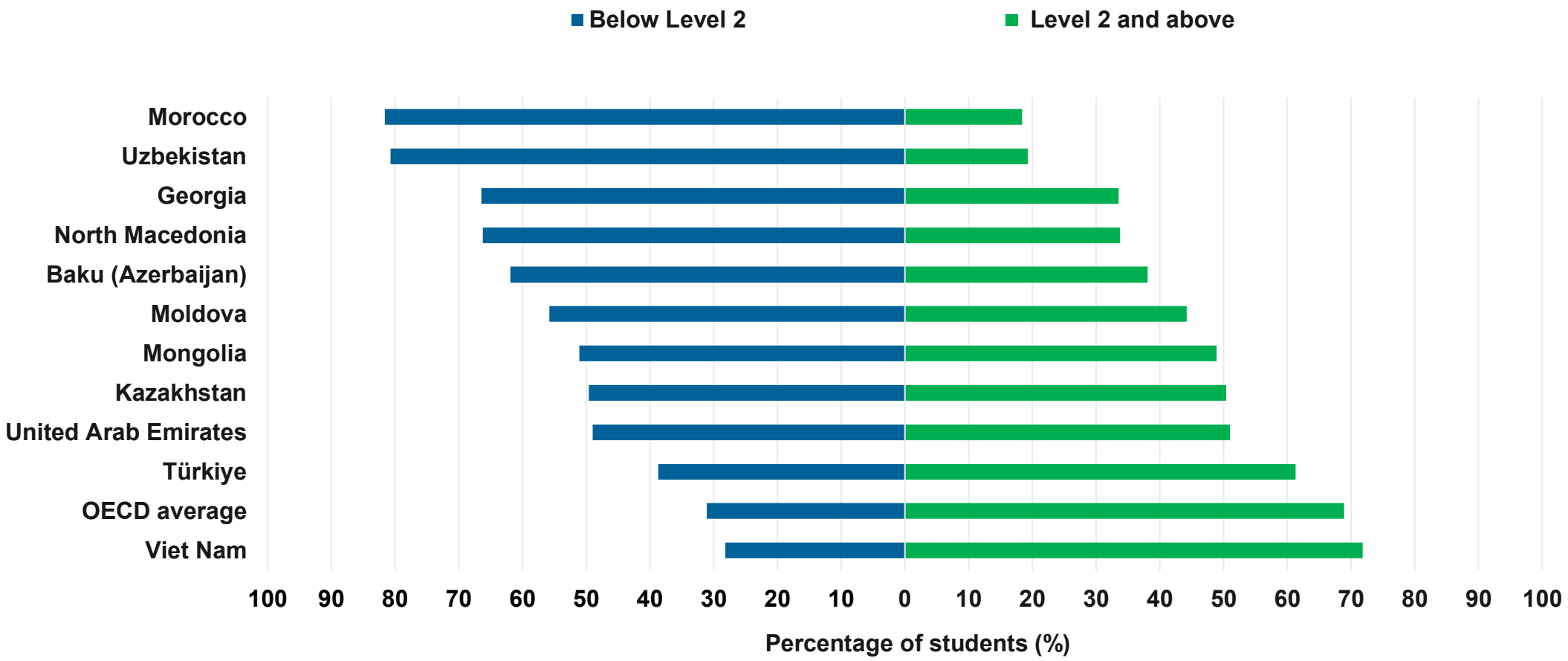
Students' proficiency in mathematics, reading and science

- PISA scales are divided into proficiency levels. For each proficiency level, descriptions illustrate the kinds of knowledge and skills needed to complete those tasks successfully.

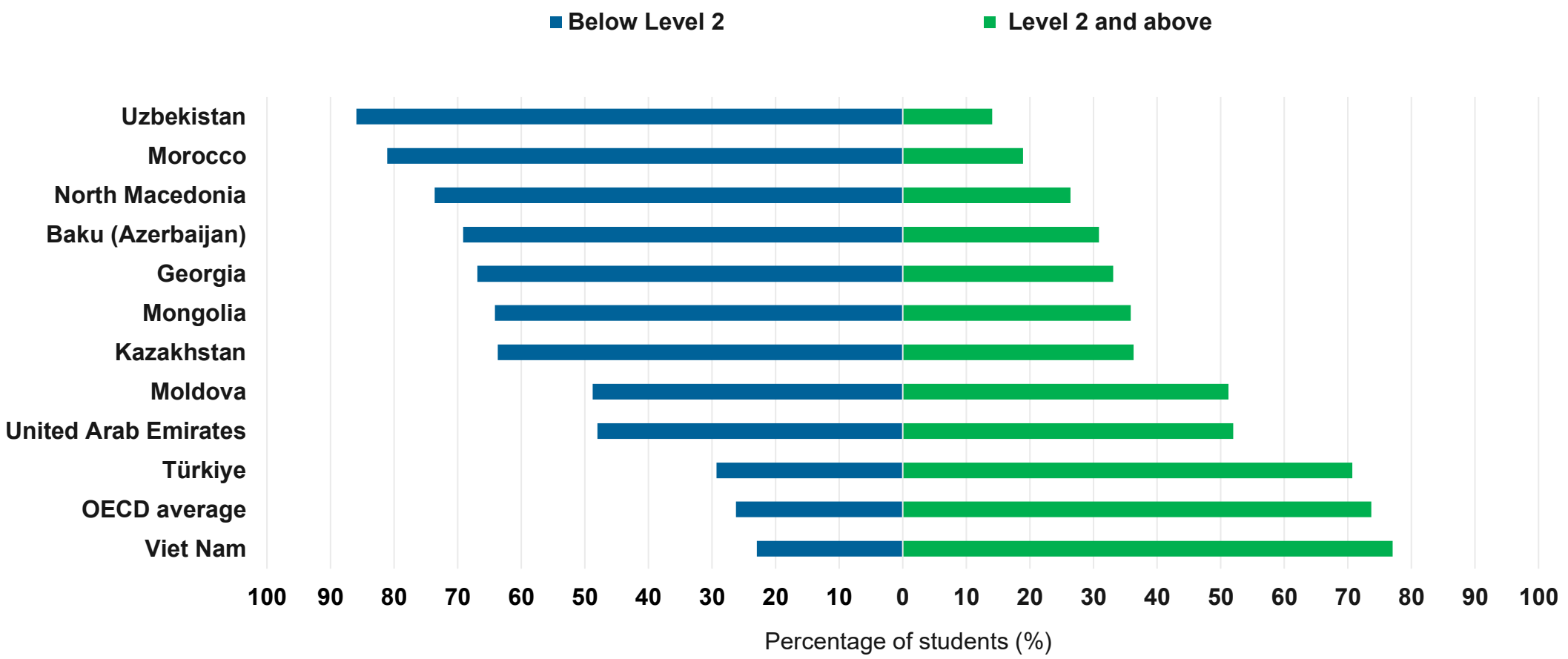
- **Level 2** is the baseline level of performance for each of the three domains.

- This level is also regarded as the minimum level of proficiency in reading and mathematics expected at the end of lower secondary school, as measured for Education SDG monitoring against Target 4.1 (https://www.undp.org)

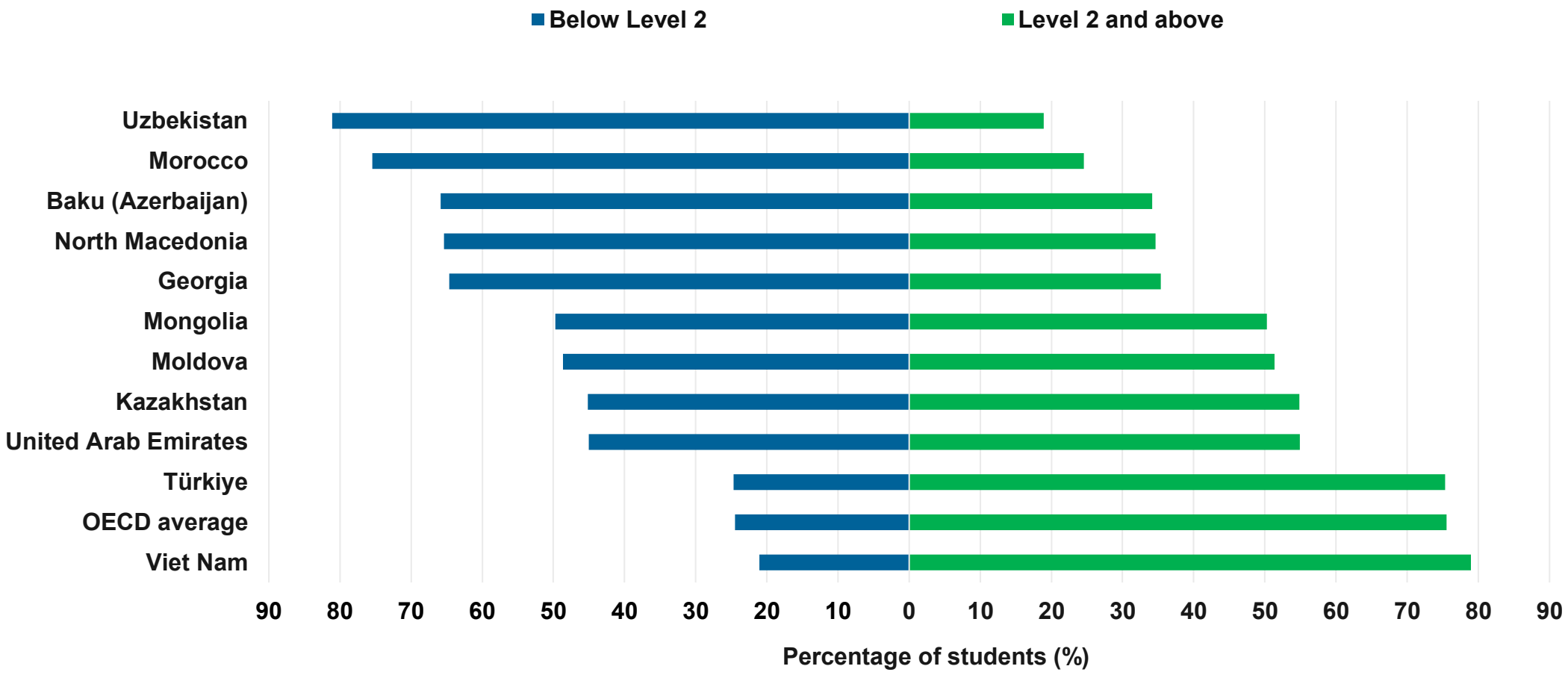
Students' proficiency in mathematics
(with comparison countries)



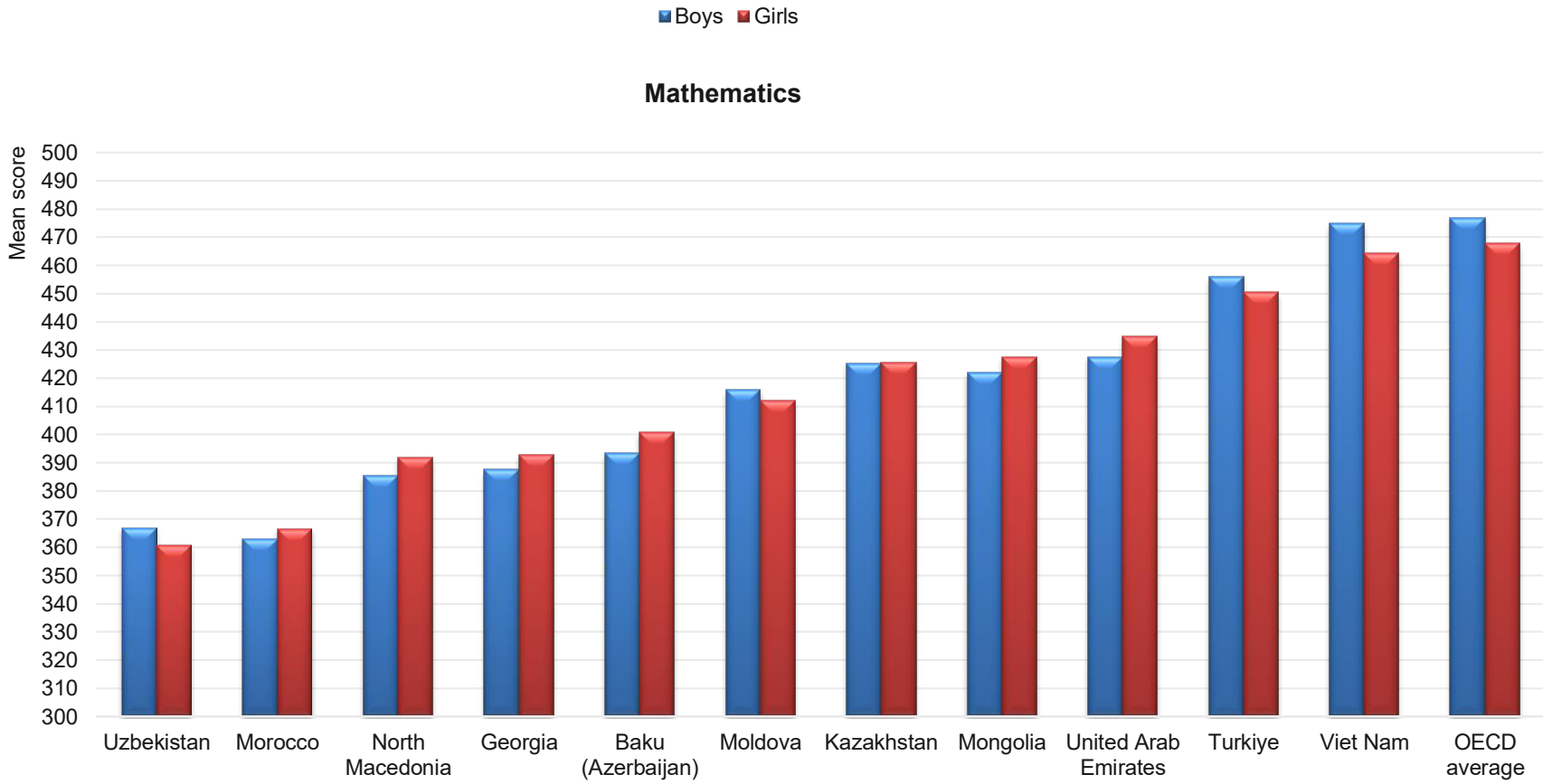
Students' proficiency in reading
(with comparison countries)



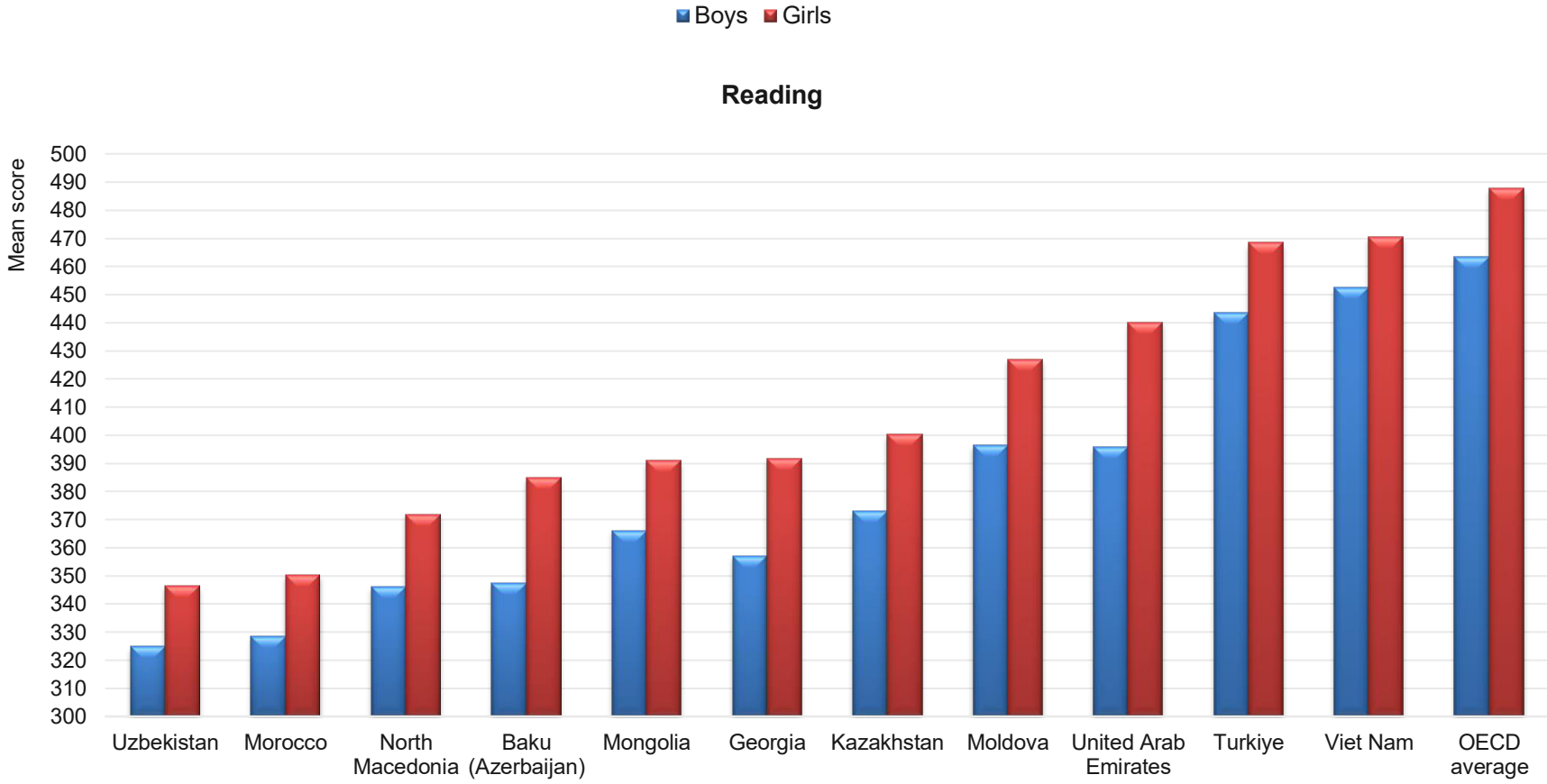
Students' proficiency in science
(with comparison countries)



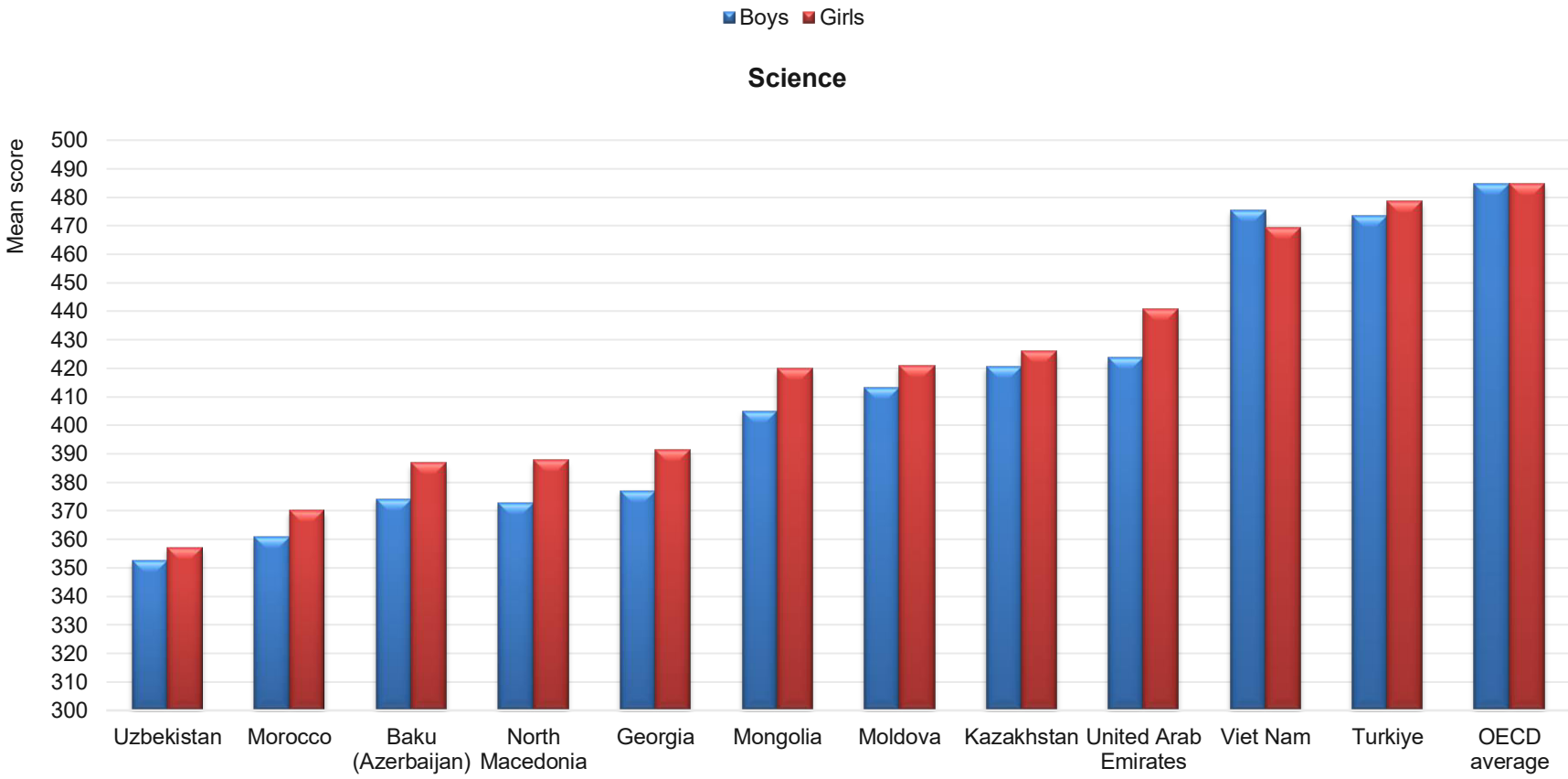
Mean scores in mathematics by gender



Mean scores in reading by gender



Mean scores in science by gender



Definition of socio-economic status in PISA

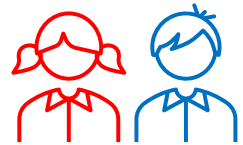
- PISA estimates a student's socio-economic status by using the PISA index of **economic, social and cultural status (ESCS)**, which is derived from several variables related to students' family background: parents' education parents' occupations, a number of home possessions that indicate the household's material wealth, and the number of books and other educational resources available in the home.

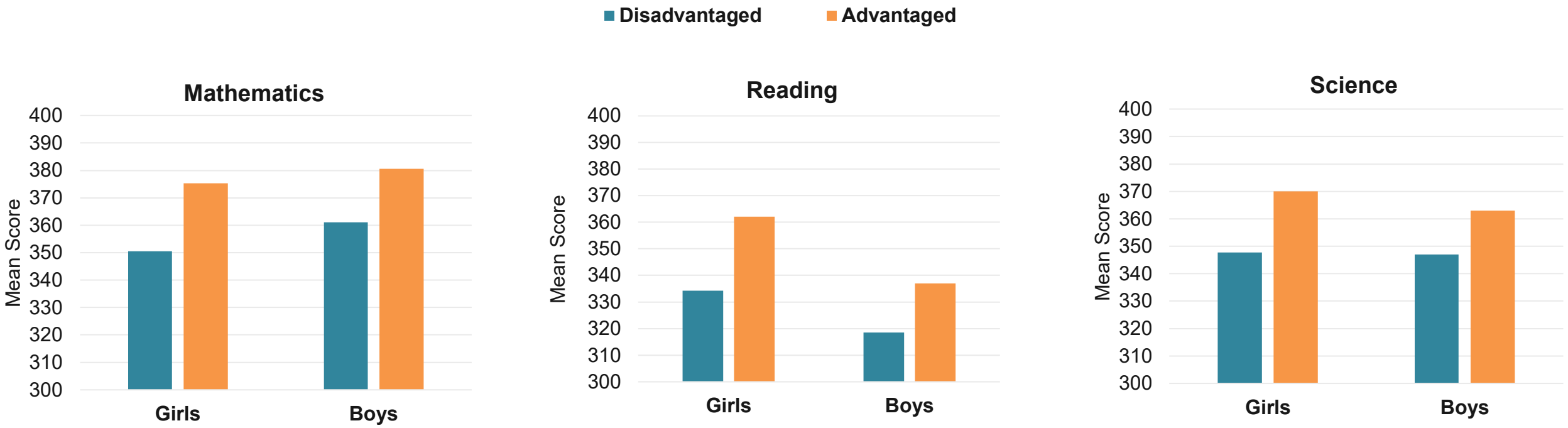
- The **ESCS index** makes it possible to identify advantaged and disadvantaged **students and schools** within each country;

- Students are considered **socio-economically advantaged** if they are among the 25% of students with the highest values on the ESCS index in their country or economy; students are classified as **socio-economically disadvantaged** if their values on the ESCS index are among the bottom 25% of their country or economy;

- Following the same logic, schools are classified as socio-economically advantaged, disadvantaged or average within each country or economy based on their students' mean values on the ESCS index

Mean scores in mathematics, reading and science comparing advantage and disadvantaged students by gender





Students' socio-economic status and mathematics performance across Uzbekistan and OECD countries

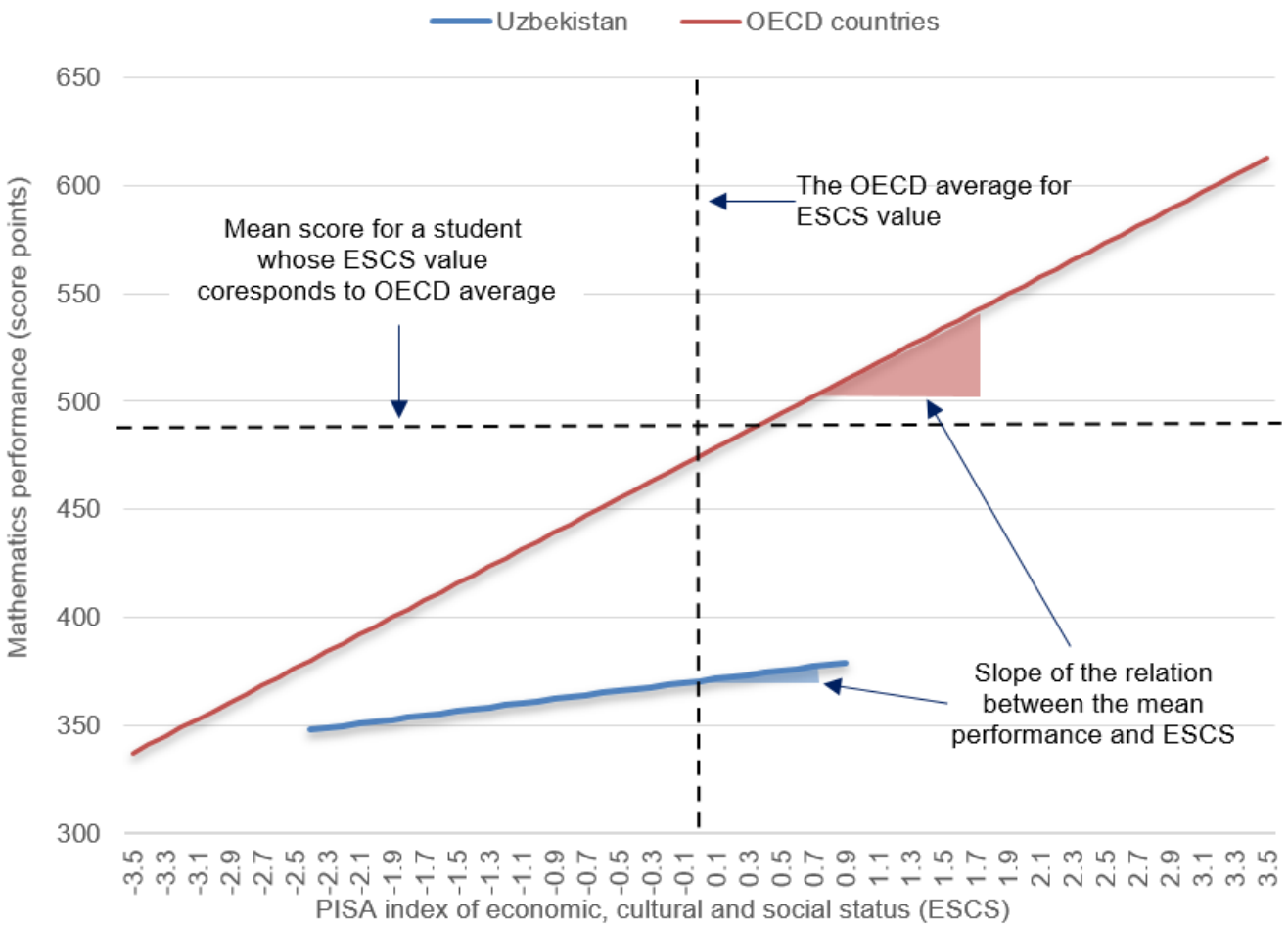


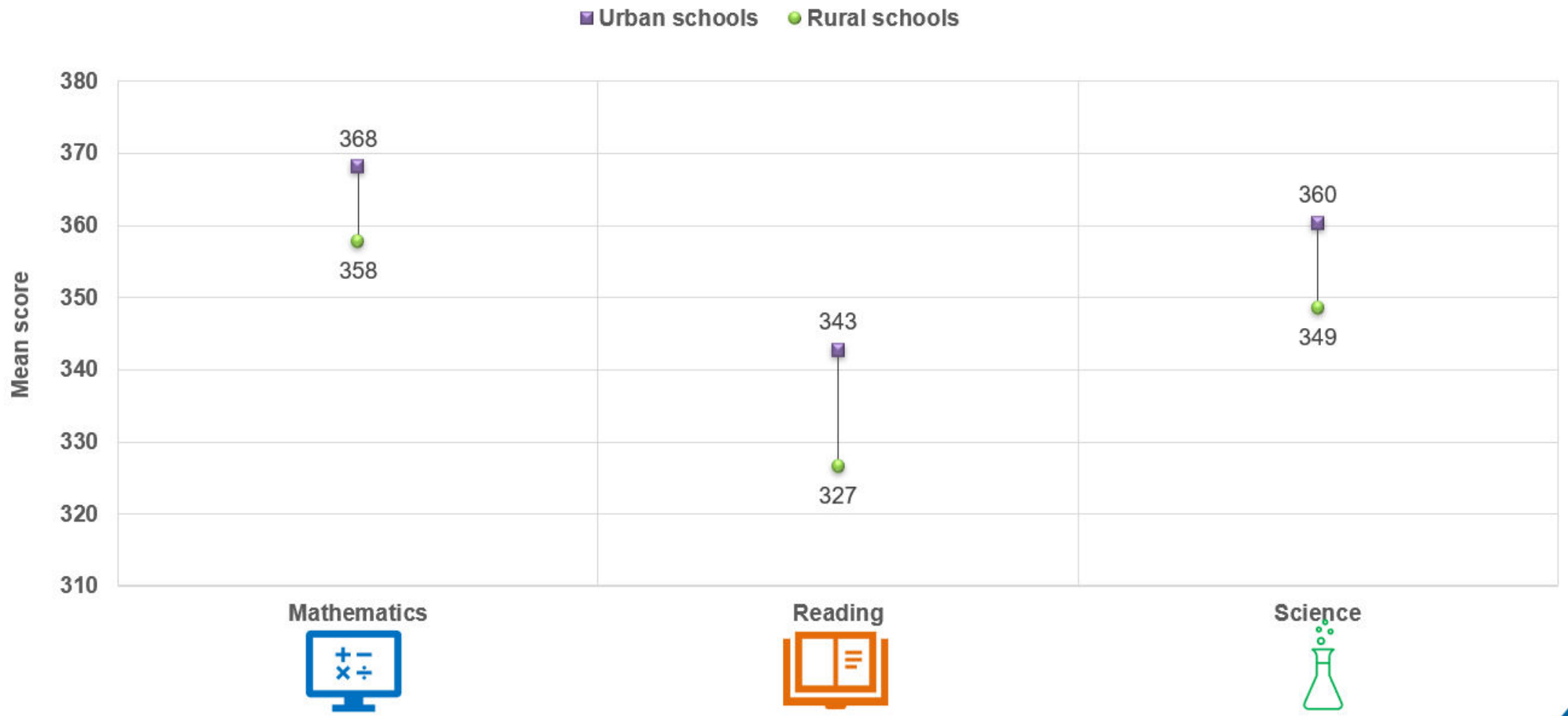
Figure shows the mean mathematics performance of students at different levels of the PISA index of economic, social and cultural status (ESCS)

How PISA defines urban and rural schools

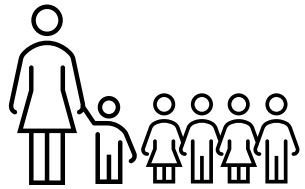
- PISA collected information on students' urbanicity in two ways. First, all countries participating in PISA included this among the stratification variables for drawing school samples. This ensures that school samples are representative not only of the country as a whole, but also separately of schools in rural and urban areas of the country.

- **Rural schools** are those where the principal answered, "a village, hamlet or rural area", whereas **urban schools** are those where the principal answered either "a city", "a large city" or "a megacity".

Performance of students by school location



Pre-primary education attendance

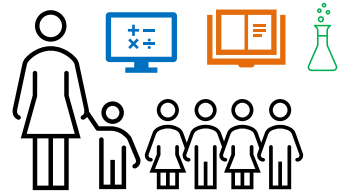


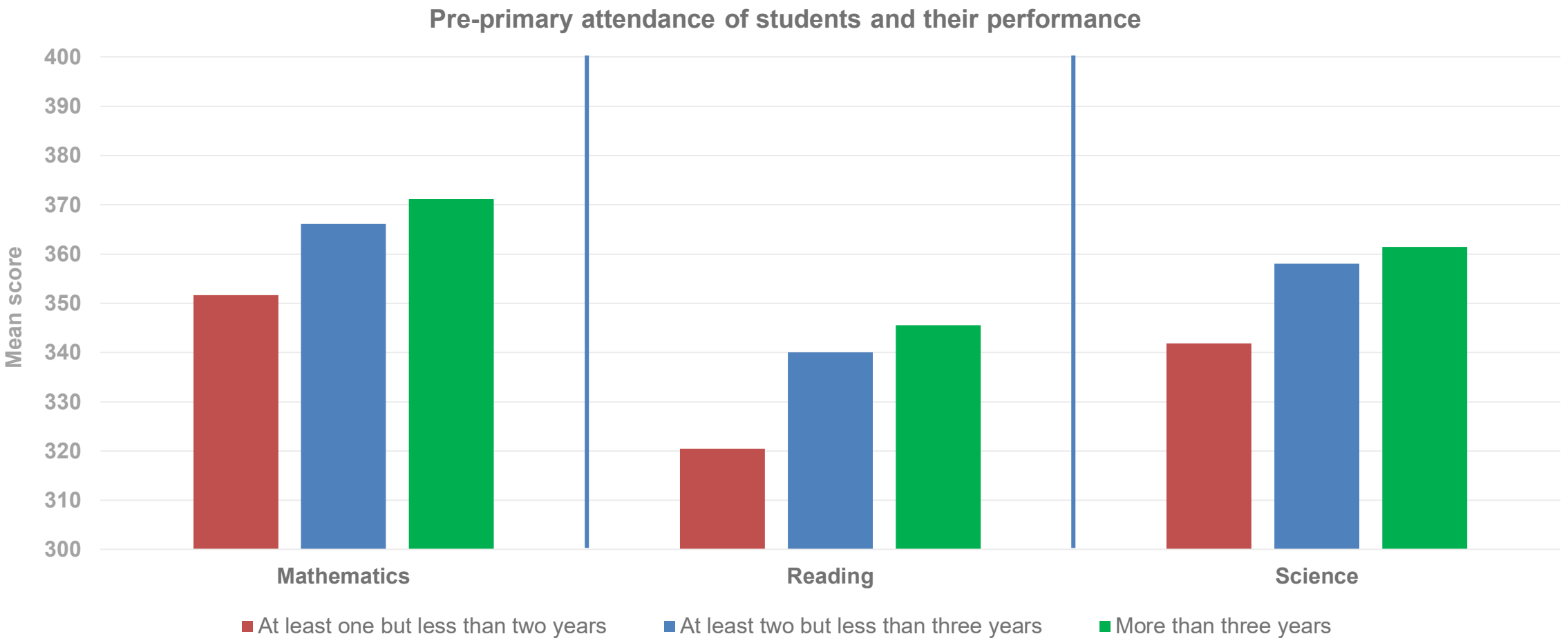
- ✓ Evidence is growing about the importance of high-quality pre-primary education (OECD, 2018[16]; Heckman, 2006[17]). In parallel, over the past few decades, enrolment in pre-primary education has become more prevalent across countries around the world (UNESCO Institute for Statistics, 2012[18] OECD, 2018[19]).

- ✓ Research suggests that a variety of outcomes can be boosted by high-quality pre-primary education, including children's cognitive development and well-being, later academic achievement and even adult earnings (Duncan et al., 2007[20]; Nordic Council of Ministers, 2012[21]).

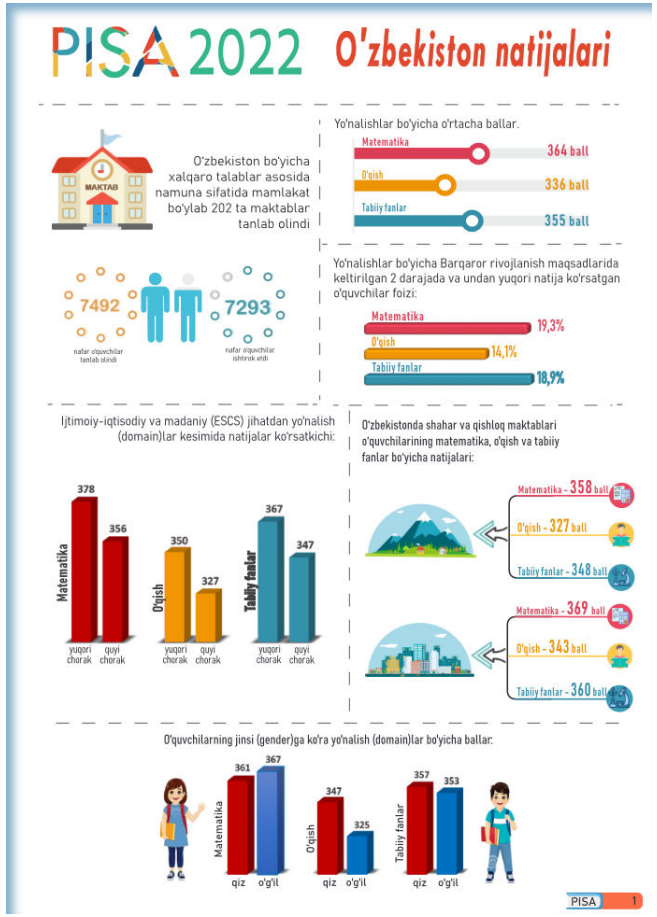
- ✓ Attendance at pre-primary school has been shown to improve students' behaviour, attention, effort, and class participation in primary school (Berlinski, Galiani and Gertler, 2009[22]). In addition, early education programmes are cost-effective interventions with substantial economic returns to investment (Heckman et al., 2010[23]).

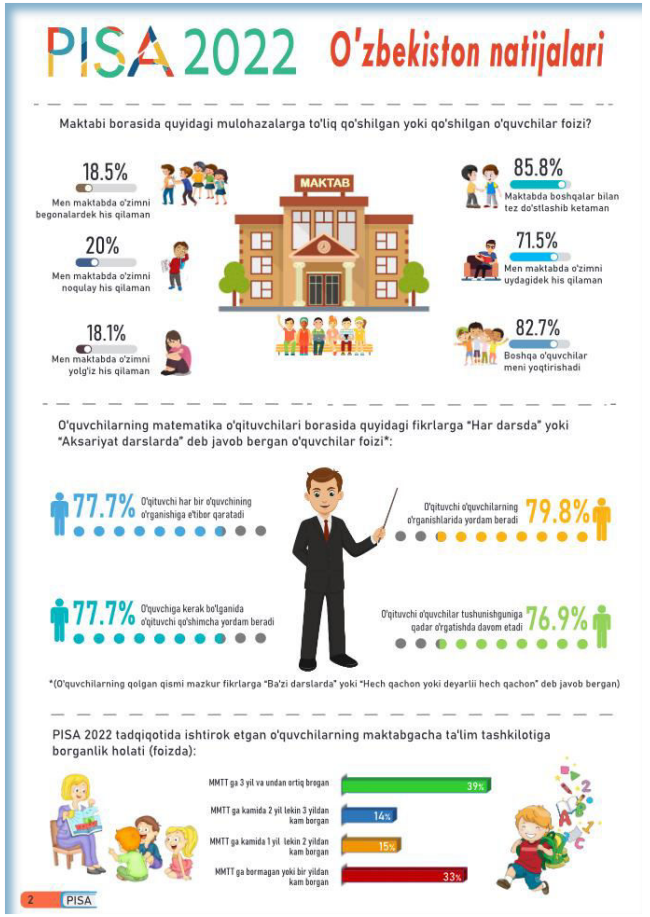
Pre-primary attendance and performance of students in mathematics, reading and science



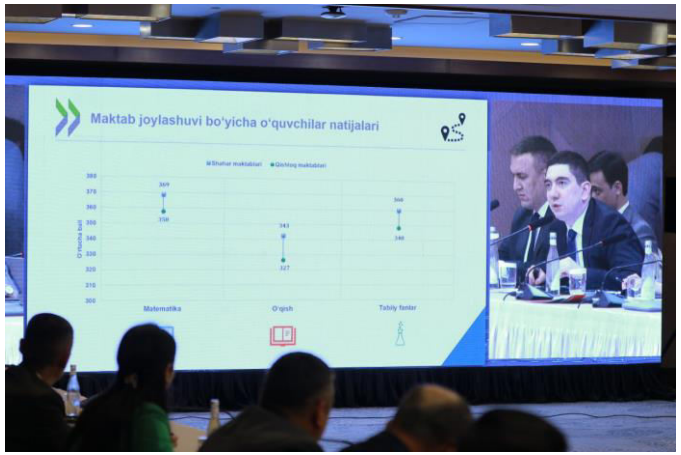


PISA 2022 National report and related materials





PISA 2022 Launch Event in Uzbekistan



Thank you for your attention!

Good luck in PISA 2025!