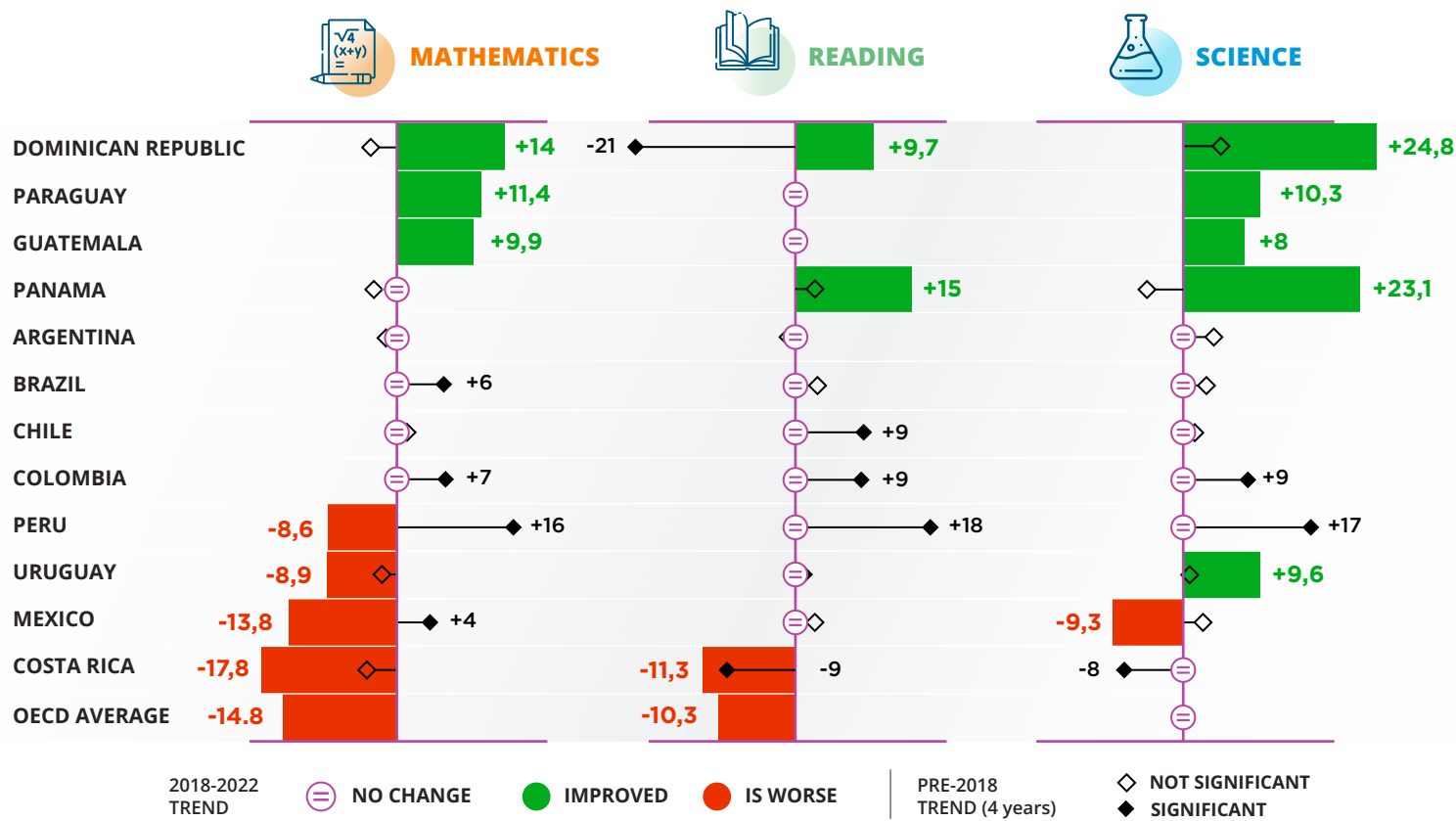


HOW MUCH DID THE REGION IMPROVE?

By Elena Arias Ortiz, María Soledad Bos, Cecilia Giambruno, and Pablo Zoido

PISA 2022 records an unprecedented drop in OECD performance in mathematics and reading. The region shows disparate trends. Most countries have shown a slight long-term improvement, but this trend slowed or reversed between 2018 and 2022.

PISA average score variation between 2018–2022 and previous trends



Source: OECD (2023), PISA 2022, Vol. I., Fig. I.5.3 & Table I.B1.5.4. Note: No pre-2018 trend data for Paraguay and Guatemala

The countries in the region show disparate trends

- For some countries, the changes in performance observed between 2018 and 2022 deviate significantly from the trend of previous rounds; for others, the trend is confirmed or reinforced.
- Colombia, Brazil, Chile, Argentina, and Panama maintain their performance in mathematics compared to 2018.
- In mathematics, Peru and Mexico had a positive pre-2018 trend. But this was reversed by 2022. In Costa Rica and Uruguay, the pre 2018 trend remained stable, but their performance dropped in 2022.
- The Dominican Republic, Paraguay, and Guatemala are the only countries in the region to improve their mathematics scores.

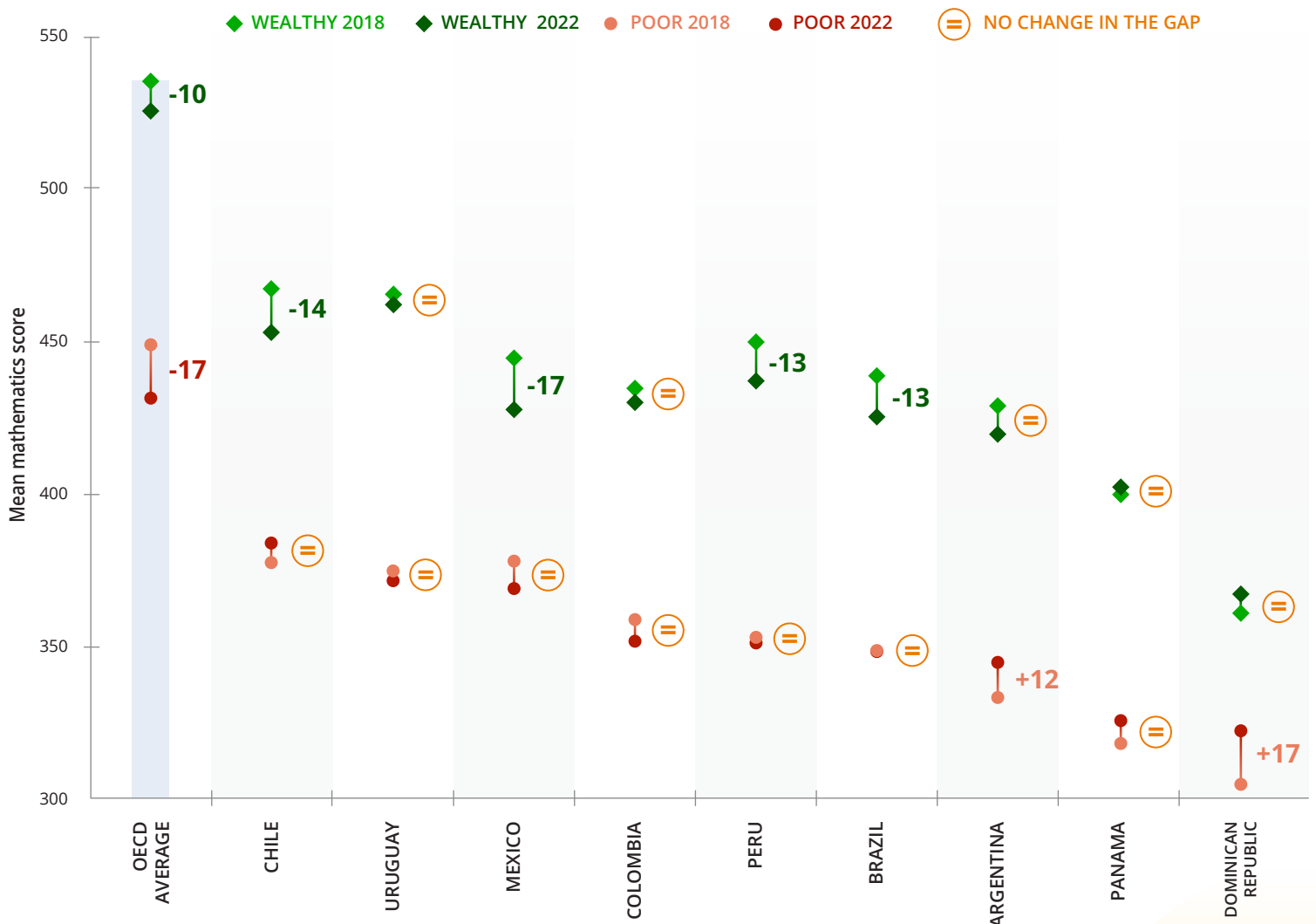
PISA 2022 records an unprecedented drop in OECD performance in mathematics and reading

- Compared to PISA 2018, the OECD average performance in reading dropped 10 points, and almost 15 points in mathematics, 3 times higher than any previous consecutive change.
- Some high-performing countries, such as the **Netherlands, Finland, Belgium, and Poland**, had lower scores in all three subjects.
- Wealthier and poorer students from OECD countries have a lower performance.

Two countries in the region reduce the learning gaps in mathematics between rich and poor students

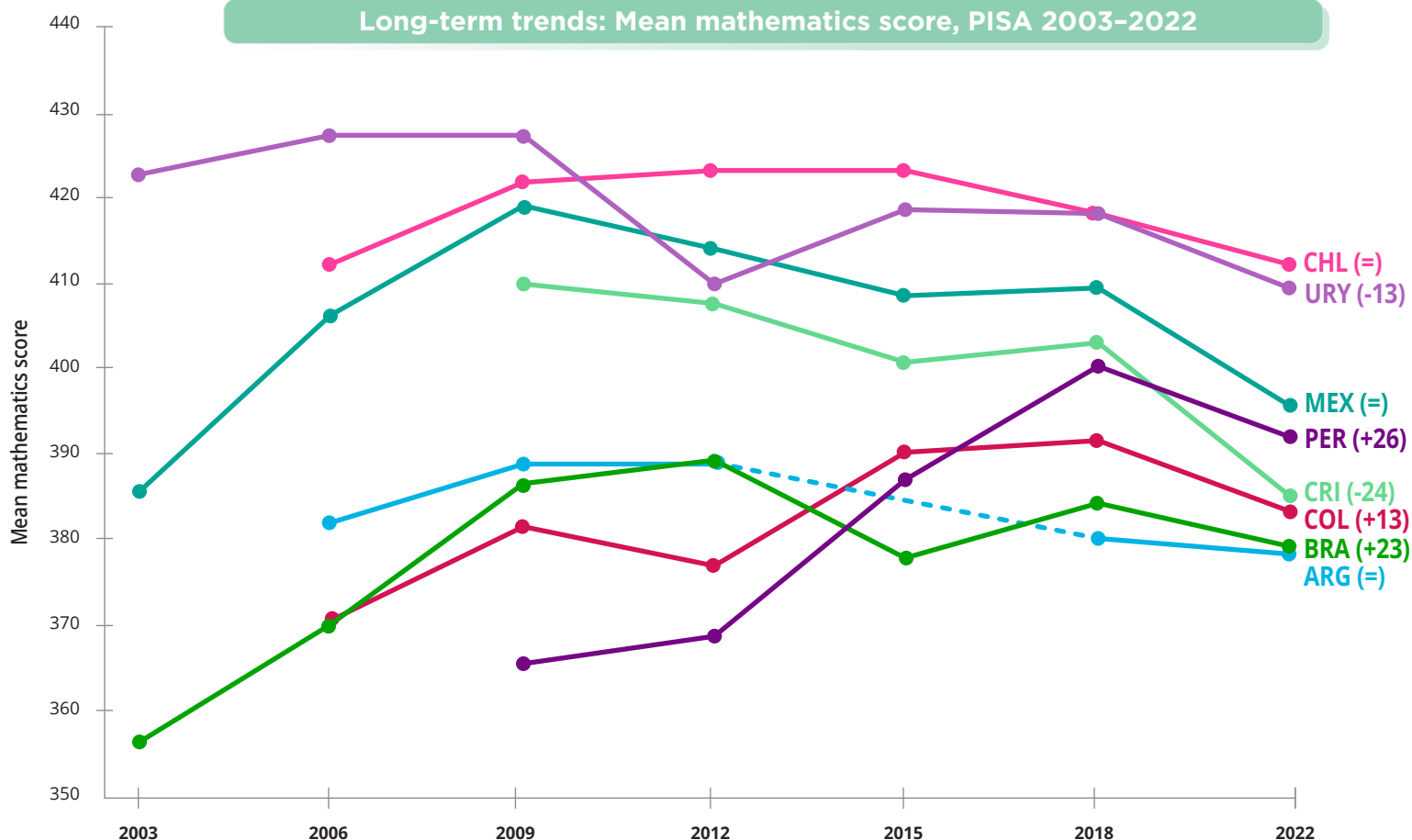
- In **Argentina and the Dominican Republic**, the poorest students perform better in mathematics than in PISA 2018.
- The wealthiest students perform worse in **Chile, Mexico, Brazil and Peru**.
- In **Argentina**, the gap is reduced due to the improved performance of poor students, while in **Chile**, affluent students get a worse score in 2022.

Trends in gaps in mathematics by socioeconomic status, PISA 2018–2022



Source: OECD (2023), PISA 2022, Vol. I., Table I.B1.5.19.

Long-term trends: Mean mathematics score, PISA 2003–2022



Source: OECD (2023), PISA 2022, Vol. I, Table I.B1.5.4

Only three countries in the region show positive long-term trends in mathematics performance

- Peru, Brazil, and Colombia have improved their mathematics scores since their first participation in PISA.
- Uruguay and Costa Rica have a lower performance in mathematics.
- The other countries in the region do not show significant changes in their long-term trend.
- The gap in mathematics between the best and worst performers in the region has narrowed considerably.

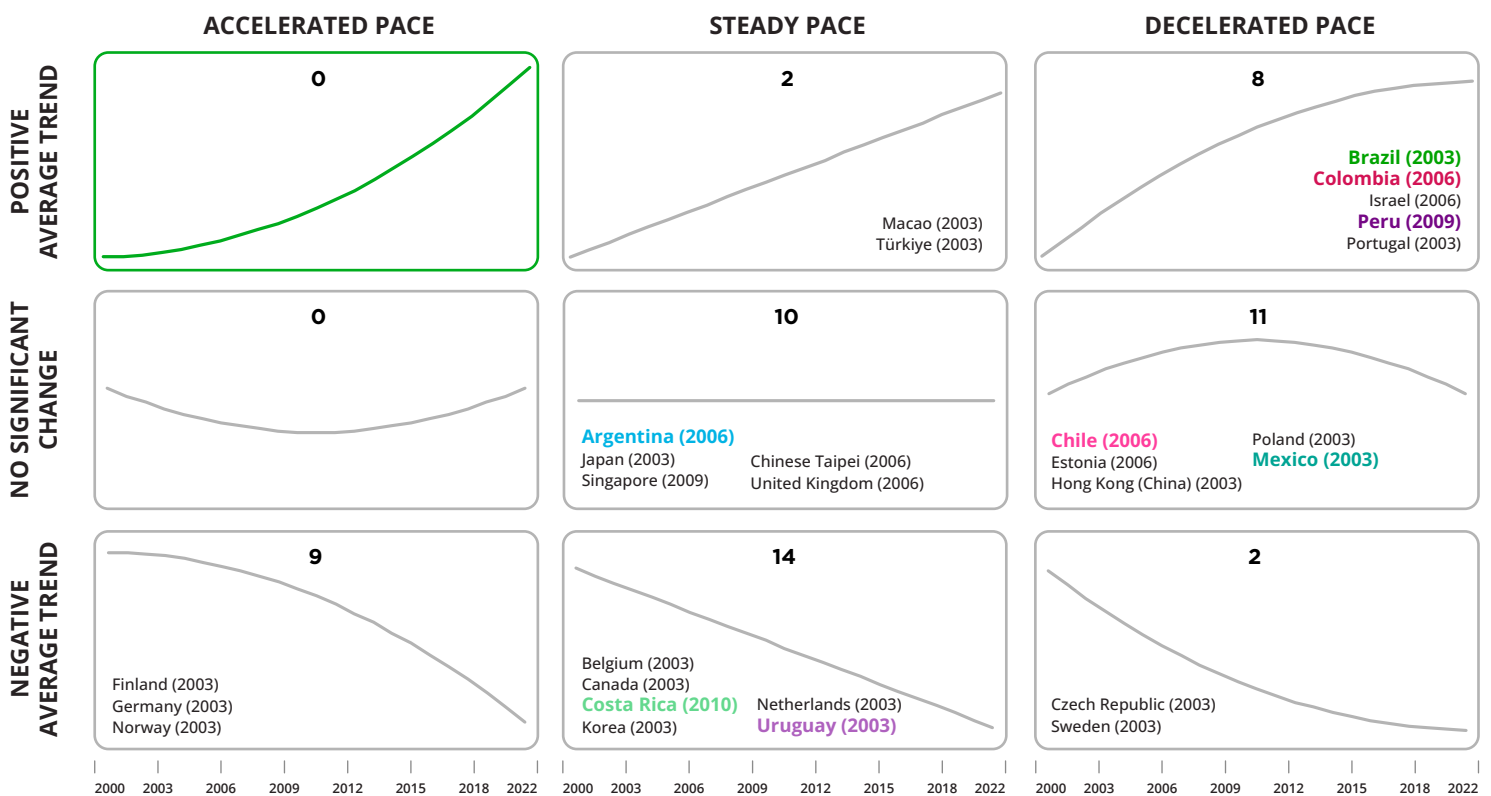
Almost every country in the region shows positive long-term trends in reading or science

- In reading, Peru, Chile, Colombia and Brazil show positive long-term trends.
- Argentina and Costa Rica have decreased their performance since their first participation in PISA.
- In science, all countries except Costa Rica maintained or improved their level of learning.
- In all three subjects, Peru stands out as the country in the region with the most significant improvements since its first participation in PISA.

The region has slowed down its rate of improvement in mathematics

- Brazil, Colombia, and Peru show a positive trend in mathematics, but the rate of improvement has slowed in recent years.
- Argentina, Chile, and Mexico show a stable trend, but Chile and Mexico have had a more negative trajectory in recent years.
- Since PISA 2000, no country has accelerated its rate of improvement.
- Costa Rica and Uruguay have a constant negative trend.
- No participating country shows a positive and accelerating trend in mathematics or any other subject.
- In contrast, many countries globally show negative trends in at least one subject.

Long-term trends: Rate of improvement in mathematics, PISA 2000–2022



Footnote: Only 56 countries are included with data from at least five participations for the region and some illustrative examples from outside the region (initial round).

Source: OECD (2023), PISA 2022, Vol. I, Table I.B1.5.4

Learn more about PISA in LAC [here](#)

Contact: education@iadb.org

References: OECD (2023), PISA 2022 Assessment and Analytical Framework, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/dfe0bf9c-en>.

Copyright © 2023 Inter-American Development Bank ("IDB"). This work is subject to a Creative Commons license CC BY 3.0 IGO (<https://creativecommons.org/licenses/by/3.0/igo/legalcode>). The terms and conditions indicated in the URL link must be met and the respective recognition must be granted to the IDB. Further to section 8 of the above license, any mediation relating to disputes arising under such license shall be conducted in accordance with the WIPO Mediation Rules. Any dispute related to the use of the works of the IDB that cannot be settled amicably shall be submitted to arbitration pursuant to the United Nations Commission on International Trade Law (UNCITRAL) rules. The use of the IDB's name for any purpose other than for attribution, and the use of IDB's logo shall be subject to a separate written license agreement between the IDB and the user and is not authorized as part of this license.

Note that the URL link includes terms and conditions that are an integral part of this license. The opinions expressed in this work are those of the authors and do not necessarily reflect the views of the Inter-American Development Bank, its Board of Directors, or the countries they represent

