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U.S. DEPARTMENT OF EDUCATION

# U.S. PISA 2018 Results: Highlights of U.S. Financial Literacy Performance Compared Internationally

A Publication of the National Center for Education Statistics at IES

The Program for International Student Assessment (PISA) is a study of 15-year-old students' performance in reading, mathematics, and science literacy conducted every 3 years. The PISA 2018 results provide us with a global view of U.S. students' performance compared to their peers in nearly 80 countries and education systems.

In PISA 2018, the major domain was reading literacy, although mathematics and science literacy were also assessed. The United States, along with 20 other countries and education systems, also participated in the optional financial literacy assessment in 2018, with the results available as of May 7, 2020.



**Financial literacy** is offered as an *optional domain*<sup>1</sup> in PISA. For 2018, the PISA financial literacy assessment component administered to students included new interactive items, as well as trend items used in prior cycles of PISA, including the 2012 and 2015 cycles.

In PISA 2018, *financial literacy is* defined as the knowledge and understanding of financial concepts and risks, and the skills, motivation, and confidence to apply such knowledge and understanding in order to make effective decisions across a range of financial contexts, to improve the financial well-being of individuals and society, and to participate in economic life.

The PISA 2018 Financial Literacy results will be available at <a href="mailto:nces.ed.gov/surveys/pisa/pisa2018/default.asp#/finance/intlcompare">nces.ed.gov/surveys/pisa/pisa2018/default.asp#/finance/intlcompare</a> as of May 7, 2020.

<sup>&</sup>lt;sup>1</sup> As an optional domain, education systems can choose to participate in this assessment in addition to the three core subject areas. In each participating school, a sample of students received financial literacy items in addition to the core subjects of reading, mathematics, and science.

### **Average Score International Comparison**

Compared to the 19 other education systems in PISA 2018, the U.S. average financial literacy score was lower than the average in 4 education systems, higher than the average in 11 education systems, and not measurably different from the average in 4 education systems.

- The U.S. average score (506) was not measurably different from the OECD average score (505).
- Compared to the 12 other OECD members, the U.S. average in financial literacy was lower than the average in 4 education systems, higher than the average in 4 education systems, and not measurably different from the average in 4 education systems.
- On a scale of 0 to 1,000, average scores in financial literacy across the education systems ranged from 547 in Estonia to 388 in Indonesia.

Education system	Average sco	re Education system	Average score
OECD average	505	Spain	492
Estonia	547	Slovak Republic	481
Finland	537	O Italy	476
Canada	532	Chile	451
Poland	520	Serbia Serbia	444
Australia	511	Bulgaria <sup>1</sup>	432
United States	506	Brazil <sup>1</sup>	420
Portugal	505	Peru <sup>1</sup>	411
Latvia	501	Georgia	403
Lithuania	498	Indonesia	388
Russian Federation	495	<u> </u>	

Average score is higher than U.S. average score at the .05 level of statistical significance.

NOTE: Education systems are ordered by 2018 average score. Scores are reported on a scale from 0 to 1,000. Italics indicate non-OECD countries and education systems. Education systems are marked as OECD countries if they were OECD members in 2018. The OECD average is the average of the national averages of the OECD member countries, with each country weighted equally. The Netherlands participated in the PISA 2018 financial literacy assessment. However, due to issues with the selection of students for the financial literacy assessment, its results were deemed not comparable with those from other participating countries. As a result, its financial literacy data are not shown and not included in the OECD average.

SOURCE: Organization for Economic Cooperation and Development (OECD), Program for International Student Assessment (PISA), 2018.

<sup>•</sup> Average score is lower than U.S. average score at the .05 level of statistical significance.

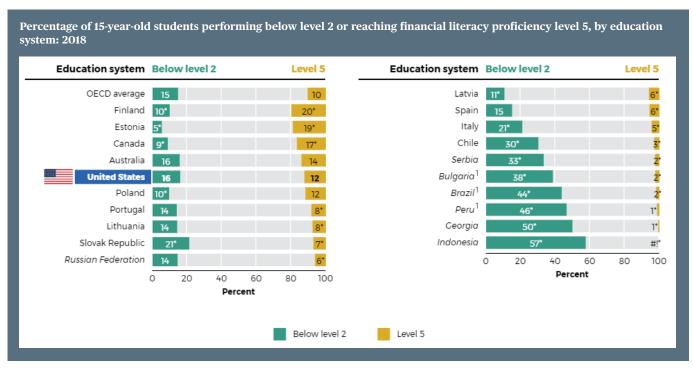
<sup>&</sup>lt;sup>1</sup> At least 50 percent but less than 75 percent of the 15-year-old population is covered by the PISA sample.

## **Proficiency Level International Comparison**

In addition to scale scores, PISA describes student performance in financial literacy in terms of levels of proficiency, from the lowest level (Level 1) to the highest (Level 5). Students are classified into proficiency levels based on their scores. Descriptions of the skills and knowledge of students at each proficiency level can be found on the PISA Financial Literacy Results page as of May 7, 2020.

In the United States, 12 percent of 15-year-old students in 2018 were top performers in financial literacy, scoring at proficiency level 5; 16 percent were low performers, scoring below proficiency level 2.

- The percentage of top performers in financial literacy in the United States was not measurably different from the OECD average. The U.S. percentage was larger than the percentage in 14 education systems, smaller than the percentage in 3 education systems, and not measurably different from the percentage in 2 education systems. The percentages of top-performing 15-year-old students in financial literacy ranged from nearly 0 percent in Indonesia to 20 percent in Finland.
- The percentage of low performers in financial literacy in the United States was not measurably different from the OECD average. The U.S. percentage was smaller than the percentage in 9 education systems, larger than the percentage in 5 education systems, and not measurably different from the percentage in 5 education systems. The percentages of low-performing 15-year-old students in financial literacy ranged from 5 percent in Estonia to 57 percent in Indonesia.



<sup>#</sup> Rounds to zero

NOTE: Education systems are ordered by 2018 percentages of 15-year-olds reaching level 5. To reach a particular proficiency level, a student must correctly answer a majority of items at that level. Students were classified into financial literacy proficiency levels according to their scores. Exact cut scores are as follows: Below level 2 is a score less than 400.33; Level 5 is a score greater than or equal to 624.63. See descriptions of each proficiency level here. Scores are reported on a scale from 0 to 1,000. Italics indicate non-OECD countries and education systems. Education systems are marked as OECD countries if they were OECD members in 2018. The OECD average is the average of the national percentages of the OECD member countries, with each country weighted equally. The Netherlands participated in the PISA 2018 financial literacy assessment. However, due to issues with the selection of students for the financial literacy assessment, its results were deemed not comparable with those from other participating countries. As a result, its financial literacy data are not shown and not included in the OECD average.

SOURCE: Organization for Economic Cooperation and Development (OECD), Program for International Student Assessment (PISA), 2018.

<sup>!</sup> Interpret data with caution. Estimate is unstable due to high coefficient of variation (>30 percent and ≤50 percent).

<sup>\*</sup> p < .05. Significantly different from the U.S. percentage at the .05 level of statistical significance.

<sup>&</sup>lt;sup>1</sup> At least 50 percent but less than 75 percent of the 15-year-old population is covered by the PISA sample.

## **Short-Term Trend International Comparison**

Compared to the most recent comparable PISA score in 2015 (487), there was no measurable difference with the average financial literacy score of U.S. 15-year-olds in 2018 (506).

- Among the 11 other education systems that participated in both 2015 and 2018, there were 5 education systems that reported higher average financial literacy scores for 15-year-olds in 2018 than in 2015. Score increases ranged from 24 points in Spain to 50 points in Lithuania.
- None of the education systems reported a decline in average financial literacy scores between 2015 and 2018.

Education system	2015 score	2018 score	Score differen	
Lithuania	449	498	50	(
Slovak Republic	445	481	36	(
Poland	485	520	34	(
Brazil <sup>1</sup>	393	420	27!	•
Spain	469	492	24!	(
Chile	432	451	19!!	
United States	487	506	18!!	
Peru <sup>1</sup>	403	411	8!!	
Australia	504	511	7!!	
Canada <sup>2</sup>	533	532	-1!!	
Italy	483	476	-7!!	
Russian Federation	512	495	-17!!	

<sup>2018</sup> score is higher than 2015 score at the .05 level of statistical significance.

SOURCE: Organization for Economic Cooperation and Development (OECD), Program for International Student Assessment (PISA), 2015 and 2018.

<sup>!</sup> Interpret data with caution. Estimate is unstable due to high coefficient of variation (>30 percent and  $\leq$ 50 percent).

<sup>!!</sup> Interpret data with caution. Estimate is unstable because the standard error represents more than 50 percent of the estimate.

<sup>&</sup>lt;sup>1</sup> At least 50 percent but less than 75 percent of the 15-year-old population is covered by the PISA sample.

<sup>&</sup>lt;sup>2</sup> All ten Canadian provinces participated in the PISA 2018 financial literacy assessment. However, seven of ten provinces in Canada participated in the PISA 2015 financial literacy assessment: British Columbia, Manitoba, New Brunswick, Newfoundland and Labrador, Nova Scotia, Ontario, and Prince Edward Island. NOTE: Education systems are ordered by 2018-2015 difference in average score. Scores are reported on a scale from 0 to 1,000. Italics indicate non-OECD countries and education systems. Education systems are marked as OECD countries if they were OECD members in 2018.

## **Long-Term Trend International Comparison**

PISA 2018 literacy scores can be compared to scores from previous cycles. For financial literacy, the earliest cycle to which 2018 scores can be compared is 2012. Compared to the earliest comparable PISA score in 2012 (492), there was no measurable difference with the average financial literacy score of U.S. 15-year-olds in 2018 (506).

- Among the 8 other education systems that participated in both 2012 and 2018, Estonia reported a higher average financial literacy score in 2018 than in 2012, with a score increase of 18 points.
- In Australia, the average financial literacy score for 15-year-olds was lower in 2018 than in 2012, with a score decrease of 15 points.

2012 score	2018 score	Score differ	enc
529	547	18!	C
492	506	14!!	
470	481	11!!	
466	476	10!!	
510	520	9!!	
486	495	9!!	
484	492	8!!	
501	501	1!!	
	529 492 470 466 510 486 484	529 547   492 506   470 481   466 476   510 520   486 495   484 492	529 547 18!   492 506 14!!   470 481 11!!   466 476 10!!   510 520 9!!   486 495 9!!   484 492 8!!

<sup>2018</sup> score is higher than 2012 score at the .05 level of statistical significance

NOTE: Education systems are ordered by 2018-2012 difference in average score. Scores are reported on a scale from 0 to 1,000. Italics indicate non-OECD countries and education systems. Education systems are marked as OECD countries if they were OECD members in 2018.

SOURCE: Organization for Economic Cooperation and Development (OECD), Program for International Student Assessment (PISA), 2012 and 2018.

<sup>2018</sup> score is lower than 2012 score at the .05 level of statistical significance

<sup>!</sup> Interpret data with caution. Estimate is unstable due to high coefficient of variation (>30 percent and <50 percent).

<sup>!!</sup> Interpret data with caution. Estimate is unstable because the standard error represents more than 50 percent of the estimate.