

PROGRAMME FOR INTERNATIONAL STUDENT ASSESSMENT (PISA) RESULTS FROM PISA 2018

The Programme for International Student Assessment (PISA) is a triennial survey of 15-year-old students that assesses the extent to which they have acquired the key knowledge and skills essential for full participation in society. In 2018, PISA measured financial literacy for the third time. Results from this assessment provide not just insights into the level of money-related skills and knowledge that students possess, but also into their attitudes, behaviours and experience with financial matters, and the environments in which they learn about financial matters. These results can be used to improve their readiness to take responsible financial decisions and financial resilience once they leave school and enter further education or employment.

United States of America

What 15-year-old students in the United States know and can do in financial literacy

- Students in the United States scored, on average, 506 points, which was not statistically different from the OECD average in financial literacy (505 points). Overall, their scores were most similar to those of students in Australia, Latvia, Lithuania and Portugal.
- Some 16% of students in the United States did not reach the baseline level of proficiency (Level 2) in financial literacy, compared to 15% on average across OECD countries and economies. At best, these students can identify common financial products and terms, recognise the difference between needs and wants, and make simple decisions on everyday spending in contexts that they are likely to have encountered personally. Over 90% of students in the Canadian provinces, Estonia, Finland and Poland displayed at least Level 2 proficiency.
- Some 12% of students in the United States were top performers (Level 5) in financial literacy, compared to 10% on average across OECD countries and economies. These students can analyse complex financial products, solve non-routine financial problems and show an understanding of the wider financial landscape. Over 15% of students in the Canadian provinces, Estonia and Finland were also top performers.
- Mean financial literacy performance in the United States in PISA 2018 was similar to that observed in PISA 2012, and similar to that observed in PISA 2015.
- Students in the United States scored, on average, 5 points higher in financial literacy than what would have been expected based on their performance in mathematics and reading.

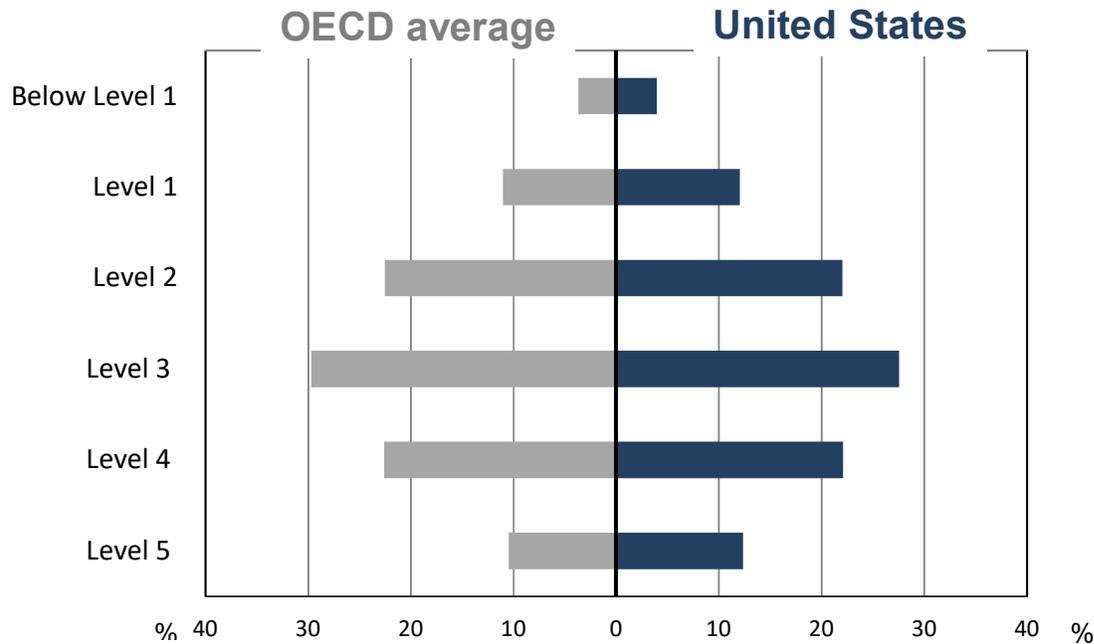
Table 1. Performance in financial literacy across participating countries and economies

| Country/Economy | Mean score | Percentage of students | |
|--------------------|------------|-------------------------------|--------------------------|
| | | Below Level 2 (low achievers) | Level 5 (top performers) |
| Estonia | 547 | 5.3 | 19.0 |
| Finland | 537 | 9.9 | 19.9 |
| Canadian provinces | 532 | 8.8 | 16.7 |

| | | | |
|--------------------|-----|------|------|
| Poland | 520 | 9.5 | 11.8 |
| Australia | 511 | 15.6 | 14.1 |
| United States | 506 | 16.0 | 12.4 |
| Portugal | 505 | 14.0 | 8.3 |
| OECD average | 505 | 14.7 | 10.5 |
| Latvia | 501 | 10.6 | 6.1 |
| Lithuania | 498 | 14.2 | 7.7 |
| Russian Federation | 495 | 14.4 | 6.3 |
| Spain | 492 | 15.0 | 5.7 |
| Slovak Republic | 481 | 21.2 | 7.2 |
| Italy | 476 | 20.9 | 4.5 |
| Chile | 451 | 30.2 | 3.0 |
| Serbia | 444 | 33.2 | 2.5 |
| Bulgaria | 432 | 38.5 | 2.4 |
| Brazil | 420 | 43.6 | 1.9 |
| Peru | 411 | 46.4 | 1.4 |
| Georgia | 403 | 49.8 | 0.7 |
| Indonesia | 388 | 57.4 | 0.3 |

Countries and economies are ranked in descending order of their mean score.
 Source: OECD PISA 2018 Database, Tables IV.B1.2.1 and IV.B1.2.4.

Figure 1. Percentage of students at each level of proficiency in financial literacy



Source: OECD, PISA 2018 Database, Table IV.B1.2.4.

Equity in financial literacy performance

- On average across participating OECD countries and economies, boys outperformed girls by just two score points. In the United States, the gender gap in financial literacy in PISA 2018 was not significant. The gender gap in PISA 2018 was not significantly different from what it was in PISA 2012 and 2015, when it was also not significant.

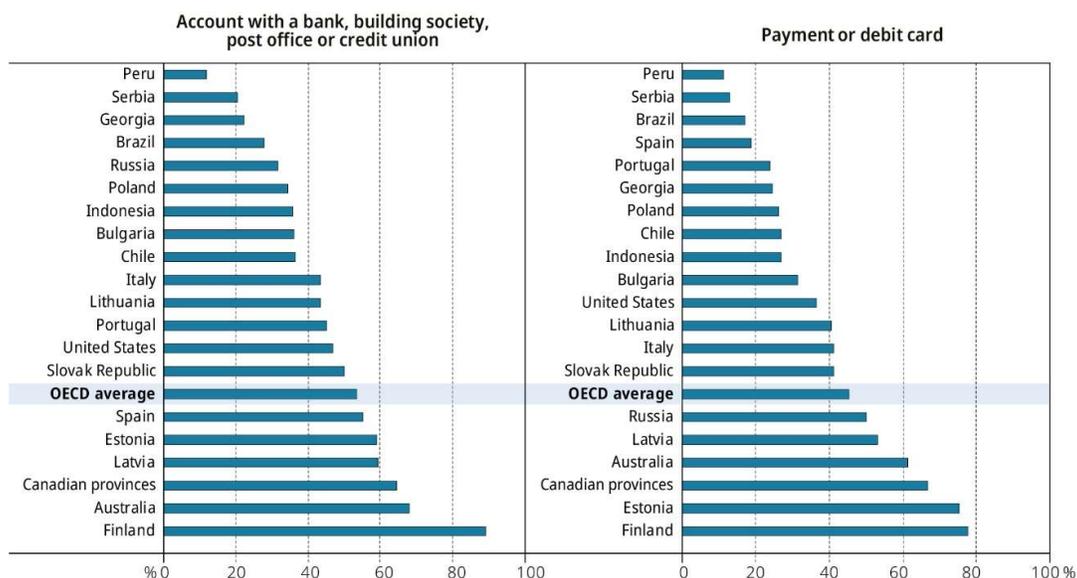
- After accounting for performance in mathematics and reading, the average difference in performance was now 6 score points in favour of boys. This difference is related to the elements of the assessment that are unique to financial literacy.
- In the United States, advantaged students scored 555 points in the PISA 2018 financial literacy assessment, on average, while disadvantaged students scored 457 points. Advantaged students scored 98 points higher than disadvantaged students, which was wider than the average performance gap of 78 score points across OECD countries/economies.
- Socio-economic status was a strong predictor of performance in financial literacy in all participating countries and economies. In the United States, it explained 14% of the variation in financial literacy performance in PISA 2018, which was greater than the 10% of the variation that it explained on average across OECD countries/economies.
- In 2018, some 24% of students in the United States had an immigrant background. The average difference in financial literacy performance between immigrant and non-immigrant students in the United States was 13 score points in favour of non-immigrant students. After accounting for performance in mathematics and reading, the average difference in performance was now 9 score points in favour of non-immigrant students.

How experienced are students in the United States with money matters?

- In the United States, 47% of students who sat the PISA 2018 financial literacy assessment reported holding an account with a bank, building society, post office or credit union (hereafter referred to as a bank account). This was not significantly different from the percentage of students who so reported in PISA 2012 (51%) but less than the percentage of students who so reported in PISA 2015 (53%). On average across OECD countries/economies in 2018, 54% of students reported holding a bank account.
- Likewise, in the United States, 36% of students who sat the PISA 2018 assessment reported holding a payment card or debit card. This was significantly more than the percentage of students who so reported in PISA 2012 (14%) and PISA 2015 (22%). On average across OECD countries/economies in 2018, 45% of students reported holding such a card.
- Socio-economic advantage was positively associated with the likelihood of holding both a bank account and a payment/debit card in all countries/economies that participated in PISA 2018.
- Holding a bank account was associated with a 42-point increase in financial literacy performance, while holding a payment/debit card was associated with an 11-point increase in financial literacy performance in the United States in PISA 2018.

Figure 2. Students holding basic financial products

Percentage of students who reported holding one of these financial products



Note: Countries and economies are ranked in ascending order of the percentage of students who reported holding each financial product.

Source: OECD, PISA 2018 Database, Table IV.B1.6.1.

- Some 78% of students in the United States reported that they had bought something on line (either alone or with a family member) during the 12 months prior to sitting the PISA 2018 financial literacy assessment, compared to an average across OECD countries/economies of 73%. In the United States, buying something on line was associated with a 43-point increase in financial literacy performance.
- Making a payment using a mobile phone was less common. Some 45% of students in the United States reported that they had made such a payment during the 12 months prior to sitting the PISA 2018 financial literacy assessment; the average across OECD countries/economies was 39%. In the United States, making a payment using a mobile phone was associated with a 13-point decrease in financial literacy performance.

What attitudes and behaviours towards money matters do students in the United States display?

- In the United States, 69% of students reported that they feel confident or very confident in paying with a debit card instead of using cash, compared to 67% of students on average across OECD countries/economies. Such students scored 24 points higher in financial literacy than students who reported otherwise.
- Likewise, some 71% of students in the United States reported that they feel confident or very confident in keeping track of their balance digitally, compared to 65% of students on average across OECD countries/economies. Such students scored 28 points higher in financial literacy than students who reported otherwise.
- Positive associations between both confidence in paying with a debit card instead of using cash and confidence in keeping track of one's balance digitally, on the one hand, and performance, on the other, were observed in 18 of the 19 participating countries/economies.
- In the United States, 53% of students agreed or strongly agreed that they enjoy talking about money matters. This disposition was associated with no significant difference in financial literacy performance.

- Most 15-year-old students in all participating countries/economies already display responsible financial behaviours. Just under nine in ten students, on average across OECD countries/economies, reported that they had checked how much money they have at some point during the 12 months prior to sitting the PISA financial literacy assessment (88% in the United States), and a similar proportion reported that they had checked that they were given the right change when they had bought something over the same period (81% in the United States).
- In the United States, students who reported that they had checked how much money they have scored 53 points higher in financial literacy than students who did not so report; and students who reported that they had checked that they were given the right change after buying something scored 26 points higher in financial literacy than students who did not so report.
- Most 15-year-old students in almost all participating countries/economies also already use responsible spending strategies. In the United States, 76% of students reported sometimes or always comparing prices in different shops, compared to 76% on average across OECD countries/economies. Such students scored 38 points higher in financial literacy in PISA 2018 than students who did not so report.
- Some 74% of students in the United States reported sometimes or always comparing prices between a physical shop and an online shop, compared to 69% on average across OECD countries/economies. These students scored 40 points higher in financial literacy in PISA 2018 than students who did not so report.

Do students in the United States learn about financial matters at home?

- Some 96% of students in the United States reported obtaining information about money matters from their parents, guardians or other adult relations; this was consistent with a high average of 94% of students reporting so, on average across OECD countries/economies.
- The Internet was another common source of information about money matters, with 66% of students in the United States reporting that they obtain such information through this medium.
- In the United States, students who reported obtaining information about money matters from their parents, guardians or other adult relations scored 39 points higher on the PISA 2018 financial literacy assessment than students who did not so report.
- Most students in the United States reported that they were given a certain level of autonomy in handling money: some 86% agreed or strongly agreed that they could decide independently what to spend their money on, and some 83% agreed or strongly agreed that they were responsible for their own money matters (e.g. for preventing theft). Being able to decide independently what to spend one's money on was associated with an 18 score-point improvement in financial literacy performance, while being responsible for one's own money matters was associated with no significant change in financial literacy performance.

Do students in the United States learn about financial matters at school?

- There was no significant difference between advantaged and disadvantaged students in the extent to which they reported encountering money-related tasks and activities in school lessons in the United States.
- Some 55% of students in the United States reported encountering certain types of problems about money matters in their mathematics classes. Reporting that they encountered such problems in their mathematics classes was associated with a 22-point improvement in financial literacy performance in PISA 2018.
- A smaller percentage of students, 27%, in the United States reported encountering these types of problems about money matters in another class; however, reporting that they encountered such

problems in these other classes was associated with no significant difference in financial literacy performance in PISA 2018.

Key features of PISA 2018

The content

- The PISA 2018 survey focused on reading, with mathematics, science and global competence as minor areas of assessment; the United States did not participate in the assessment of global competence. PISA 2018 also included an assessment of young people's financial literacy, which was optional for countries and economies. Results for reading, mathematics and science were released on 3 December 2019; results for financial literacy on 7 May 2020; and results for global competence will be released later in 2020.

The students

- Some 600 000 students completed the main assessment in 2018, representing about 32 million 15-year-olds in the schools of the 79 participating countries and economies. The financial literacy sample in PISA 2018 was comprised of around 117 000 students, representing about 13.5 million 15-year-old students in the schools of 20 participating countries and economies. In the United States, 3 738 students, in 163 schools, completed the financial literacy assessment, representing 3 559 045 15-year-old students (86% of the total population of 15-year-olds).

The assessment

- Computer-based tests were used in most countries, with assessments lasting a total of two hours. All countries/economies that participated in financial literacy delivered the assessment on the computer. In reading, a multi-stage adaptive approach was applied in computer-based tests whereby students were assigned a block of test items based on their performance in preceding blocks.
- Test items were a mixture of multiple-choice questions and questions requiring students to construct their own responses. The items were organised into groups based on a passage of text describing a real-life situation.
- Students also answered a background questionnaire, which took about 35 minutes to complete. The questionnaire sought information about the students themselves, their attitudes, dispositions and beliefs, their homes, and their school and learning experiences. This questionnaire also included questions about students' relationship with financial matters, including where they obtained information about financial matters, and their attitudes, behaviours and experiences with financial matters.
- Some countries/economies also distributed additional questionnaires to elicit more information. These included a questionnaire for teachers asking about themselves and their teaching practices; a questionnaire for parents asking them to provide information about their perceptions of and involvement in their child's school and learning; a questionnaire about students' familiarity with computers; a questionnaire about students' expectations for further education; and a questionnaire, developed for PISA 2018, about students' well-being.

References

OECD (2019), *PISA 2018 Results (Volume IV): Are Students Smart About Money?*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/48ebd1ba-en>

Map of PISA countries and economies


OECD member countries

Australia
 Austria
 Belgium
 Canada
 Chile
 Colombia
 Czech Republic
 Denmark
 Estonia
 Finland
 France
 Germany
 Greece
 Hungary
 Iceland
 Ireland
 Israel
 Italy
 Japan
 Korea
 Latvia
 Lithuania
 Luxembourg
 Mexico
 Netherlands
 New Zealand
 Norway
 Poland
 Portugal
 Slovak Republic
 Slovenia
 Spain
 Sweden
 Switzerland
 Turkey
 United Kingdom
 United States*

Partner countries and economies in PISA 2018

Albania
 Argentina
 Baku (Azerbaijan)
 Belarus
 Bosnia and Herzegovina
 Brazil
 Brunei Darussalam
 B-S-J-Z (China)**
 Bulgaria
 Costa Rica
 Croatia
 Cyprus
 Dominican Republic
 Georgia
 Hong Kong (China)
 Indonesia
 Jordan
 Kazakhstan
 Kosovo
 Lebanon
 Macao (China)
 Malaysia
 Malta
 Republic of Moldova
 Montenegro
 Morocco
 Republic of North Macedonia
 Panama
 Peru
 Philippines
 Qatar
 Romania
 Russian Federation
 Saudi Arabia
 Serbia
 Singapore
 Chinese Taipei
 Thailand
 Ukraine
 United Arab Emirates
 Uruguay
 Viet Nam

Partner countries and economies in previous cycles

Algeria
 Azerbaijan
 Guangdong (China)
 Himachal Pradesh (India)
 Kyrgyzstan
 Liechtenstein
 Mauritius
 Miranda (Venezuela)
 Tamil Nadu (India)
 Trinidad and Tobago
 Tunisia

* Puerto Rico participated in the PISA 2015 assessment (as an unincorporated territory of the United States).

** B-S-J-Z (China) refers to four PISA 2018 participating Chinese provinces/municipalities: Beijing, Shanghai, Jiangsu and Zhejiang. In PISA 2015, the four PISA participating Chinese provinces/municipalities were: Beijing, Shanghai, Jiangsu and Guangdong.

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For more information about PISA 2018 visit <http://www.oecd.org/pisa/>

Data can also be found on line by following the *StatLinks*  under the tables and charts in the publication.

Explore, compare and visualise more data and analysis using: <http://gpseducation.oecd.org/>.

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