

PROGRAMME FOR INTERNATIONAL
STUDENT ASSESSMENT (PISA)
RESULTS FROM PISA 2015 FINANCIAL LITERACY

BRAZIL

The PISA 2015 assessment of financial literacy was the second of its kind. The results show the extent to which 15-year-old students have the financial knowledge and skills needed to make a successful transition from compulsory schooling into higher education, employment or entrepreneurship. For many 15-year-olds, finance is part of everyday life, as they are already consumers of financial services, such as bank accounts, and earn money from formal or informal small jobs. As they near the end of compulsory education, students will face complex and challenging financial choices, including whether to continue with formal education and, if so, how to finance such study.

Brazil's performance in financial literacy is well below the average of the 10 OECD countries and economies that participated in the assessment [Figure IV.3.2].

In Brazil, there are more students performing below the baseline level of proficiency (Level 2) in financial literacy (53%) than performing at any other proficiency level (compared to 22% on average across the 10 participating OECD countries/economies) [Table IV.3.2]. 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 experienced personally. For instance, students performing below Level 2 in financial literacy can, at best, answer a question like INVOICE – Question 1 (available at <http://www.oecd.org/pisa/test>), which asks them to recognise the purpose of an everyday financial document, such as an invoice.

Only 3% of students in Brazil are top performers in financial literacy [Table IV.3.2], meaning that they are proficient at Level 5 (compared to 12% on average across the 10 participating OECD countries/economies). These students can analyse complex financial products, solve non-routine financial problems and show an understanding of the wider financial landscape. For instance, students performing at Level 5 are able to answer a question like BANK ERROR – Question 1 (available at <http://www.oecd.org/pisa/test>), which asks them to identify and respond appropriately to a financial scam e-mail message.

Socio-economically advantaged students score 78 points higher in financial literacy than disadvantaged students, equivalent to more than one proficiency level [Table IV.4.11].

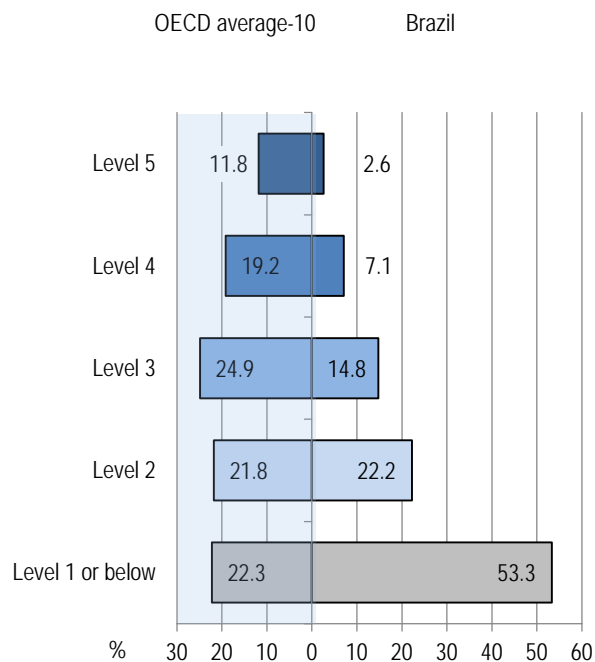
Boys and girls in Brazil score at the same level in financial literacy on average, but there are more boys than girls among low performers [Tables IV.4.5 and IV.4.7].

PISA defines financial literacy as “...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 enable participation in economic life”.

For a full explanation, see the [PISA 2015 Assessment and Analytical Framework](#).

Performance in financial literacy

Students at each level of proficiency in financial literacy



Source: OECD, PISA 2015 Database, Table IV.3.2.

- Students in Brazil score below the average of the 10 OECD countries and economies that were assessed in financial literacy in 2015 [Figure IV.3.2]. With a mean score of 393 points, Brazil ranks last among all 15 participating countries and economies [Figure IV.3.3].
- Average performance in Brazil in 2015 is not significantly different from the average performance in Peru [Figure IV.3.2].
- In Brazil, there are more students performing at or below Level 1 than performing at any other proficiency level [Table IV.3.2].

Student performance in financial literacy in comparison with performance in reading and mathematics

- In Brazil, financial literacy is relatively weakly correlated with mathematics and reading performance. Around 47% of the financial literacy score reflects skills that can be measured in the mathematics and/or reading assessments (the OECD average is 62%), while 53% of the score reflects factors that are uniquely captured by the financial literacy assessment [Table IV.3.10a].
- Students in Brazil perform worse in financial literacy than students around the world who perform similarly in mathematics and reading [Table IV.3.11]. This suggests that students could be helped in using the skills widely taught in school to attain higher levels of financial literacy.

	Mean performance in financial literacy			
	Mean score	Range of ranks	Percentage of students	
			Below Level 2	Level 5
OECD avg-10	489		22.3	11.8
B-S-J-G (China)	566	1 - 1	9.4	33.4
Belgium (Flemish)	541	2 - 3	12.0	24.0
Canadian provinces	533	2 - 3	12.7	21.8
Russia	512	4 - 5	10.9	10.5
Netherlands	509	4 - 6	19.2	17.5
Australia	504	5 - 6	19.7	15.4
United States	487	7 - 9	21.6	10.2
Poland	485	7 - 9	20.1	8.0
Italy	483	7 - 9	19.8	6.5
Spain	469	10 - 10	24.7	5.6
Lithuania	449	11 - 12	31.5	3.7
Slovak Republic	445	11 - 12	34.7	6.3
Chile	432	13 - 13	38.1	3.1
Peru	403	14 - 14	48.2	1.2
Brazil	393	15 - 15	53.3	2.6

Source: OECD, PISA 2015 Database, Figure IV.3.3 and Table IV.3.2.

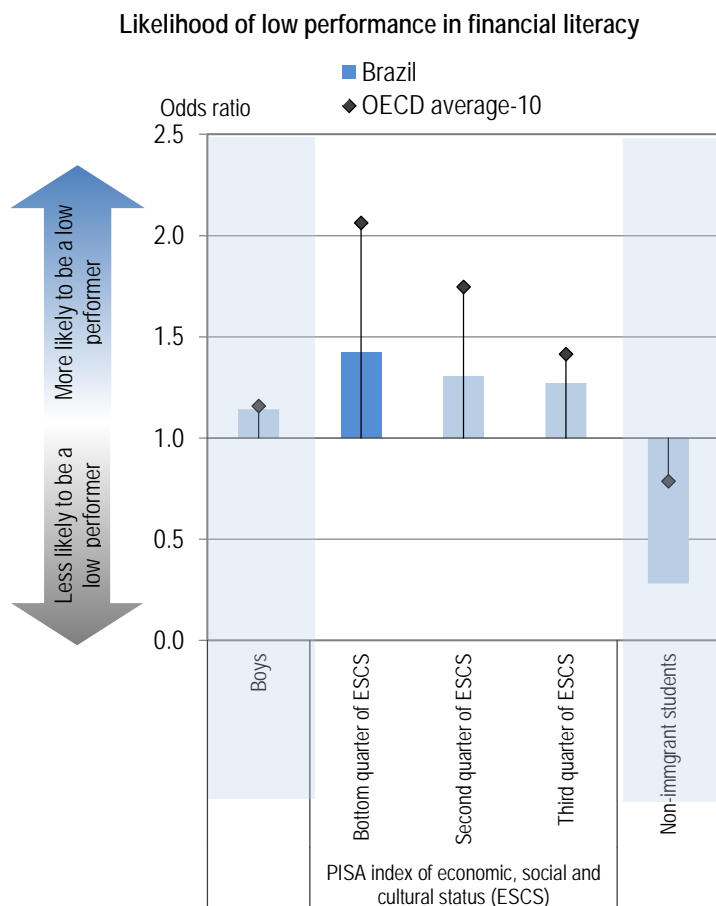
Notes: Partner countries and economies are marked in blue.

"Canadian provinces" refers to the seven provinces in Canada that participated in the PISA 2015 financial literacy assessment: British Columbia, Manitoba, New Brunswick, Newfoundland and Labrador, Nova Scotia, Ontario and Prince Edward Island.

B-S-J-G (China) refers to the four PISA-participating China provinces and municipalities: Beijing, Shanghai, Jiangsu and Guangdong.

Countries and economies are ranked in descending order of mean score.

How performance varies across student characteristics



- In Brazil, boys and girls score at the same level in financial literacy, on average [Table IV.4.5], but there are more boys than girls among low performers [Table IV.4.7].
- Socio-economically advantaged students (those in the highest 25% of socio-economic status) score 78 points higher in financial literacy than disadvantaged students (those in the lowest 25% of socio-economic status) (OECD average difference: 89 score points) [Table IV.4.11].
- Disadvantaged students are 42% more likely than advantaged students to perform below Level 2 in financial literacy, after accounting for student characteristics and performance in mathematics and reading [Table IV.4.25a].
- The 25% most advantaged students in Brazil perform worse (441 score points) than students in the bottom quartile of socio-economic status in Beijing-Shanghai-Jiangsu-Guangdong (China) (500 score points), and about at the same level as disadvantaged students in the United States (445 score points) [Table IV.4.11].

Formal financial education

- Financial education was initially introduced in Brazilian high schools through an experimental pilot programme in 2010/11 in more than 800 schools in six states. The pilot involved preparing a financial education curriculum, developed by a team of education experts, psychologists and sociologists. The content consisted of case studies that can be integrated into regular school subjects, such as mathematics, Portuguese, science, geography and history. Teacher guidelines explain how to integrate these case studies into the regular curriculum, and teachers have discretion over the order in which the cases are taught. Teachers were trained through workshops, DVDs and a guidebook. The material developed for the pilot is now available on line to all teachers across the country.
- This pilot was evaluated in 2010/11 using a randomised control trial. The results of the evaluation revealed higher average financial literacy, a greater propensity to save and a higher likelihood to engage in financial planning among students who had participated in the programme than among students who did not participate (Bruhn, M., L. de Souza Leão, A. Legovini, R. Marchetti and B. Zia (2016), "The impact of high school financial education: evidence from a large-scale evaluation in Brazil", *American Economic Journal: Applied Economics*, Vol. 8, No. 4, pp. 256-295).
- A pilot for primary schools is now being developed.

What results from the PISA 2015 financial literacy assessment imply for policy

From buying mobile phone credit to deciding how to spend pocket money, young people commonly take financial decisions. Fifteen-year-olds are starting to encounter situations where they need to set their spending priorities, be aware of ongoing costs, and be alert to potential scam. They will soon have to take decisions with long-term financial consequences.

The PISA 2015 financial literacy assessment highlights some general policy suggestions for all the countries and economies participating in PISA, including:

- Address the needs of low-performing students.
- Tackle socio-economic inequalities early on.
- Provide equal opportunities for learning to boys and girls.
- Help students make the most of available learning opportunities at school.
- Target parents at the same time as young people.
- Provide young people with safe opportunities to learn by experience outside of school.
- Evaluate the impact of initiatives in and outside of school.

What is PISA?

The Programme for International Student Assessment (PISA) is a triennial survey that assesses the readiness of 15-year-old students for life beyond compulsory education by collecting and analysing test and questionnaire data about students' knowledge, skills and the context in which they live and learn. It thus provides a comprehensive set of cross-country comparative data that policy makers and other stakeholders can use to make evidence-based decisions.

Key features of the PISA 2015 assessment of financial literacy

The PISA 2015 assessment of financial literacy was the second of its kind. Fifteen countries and economies participated in the 2015 assessment, including 10 OECD countries and economies: Australia, the Flemish Community of Belgium, seven provinces in Canada (British Columbia, Manitoba, New Brunswick, Newfoundland and Labrador, Nova Scotia, Ontario and Prince Edward Island), Chile, Italy, the Netherlands, Poland, the Slovak Republic, Spain and the United States; and five partner countries and economies: Brazil, four provinces/municipalities in China (Beijing, Shanghai, Jiangsu, Guangdong), Lithuania, Peru and the Russian Federation. Eight countries/economies participated in both the 2012 and 2015 assessments: Australia, the Flemish Community of Belgium, Italy, Poland, the Russian Federation, the Slovak Republic, Spain and the United States.

The assessment

- Financial literacy was assessed through a computer-based test. Students assessed in financial literacy also completed the assessments of mathematics, reading and science.
- Test questions were a mixture of multiple-choice questions and those requiring students to construct their own responses. The items were organised in groups based on a passage setting out a real-life situation. Sample items can be explored on line at <http://www.oecd.org/pisa/test>.
- Students who sat the assessment of financial literacy also answered questions about their experience with money, as well as the PISA student questionnaire about themselves, their homes, and their school and learning experiences. School principals completed a questionnaire that covered the school system and the learning environment.

The students

- Among the students who participated in the core PISA 2015 assessment of science, reading and mathematics, a subsample of students was randomly selected to sit the financial literacy test. In general, about 11 students were chosen at random in each participating school to sit the financial literacy assessment; the financial literacy assessment was conducted in a separate session after the core assessment. This is different from the sample design adopted in 2012, when, in sampled schools, two separate student samples sat the financial literacy test and the core PISA assessment.
- Around 48 000 students were assessed in financial literacy in 2015, representing about 12 million 15-year-olds in the schools of the 15 participating countries and economies.
- In Brazil, 23 141 students completed the PISA 2015 assessment; of these, 6 078 students were assessed in financial literacy.

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For more information on PISA and to access the full set of PISA 2015 results, visit: www.oecd.org/pisa
For more information on the OECD work on financial education, visit: www.financial-education.org