

education data education evidence education policy education analysis education statistics education data education evidence education policy

# Do 15-year-olds know how to manage money?

- On average across the 13 OECD countries and economies that participated in the PISA financial literacy assessment, 10% of students can analyse complex financial products and solve non-routine financial problems, while 15% can, at best, make simple decisions about everyday spending, and recognise the purpose of everyday financial documents, such as an invoice.
- In 17 out of the 18 participating countries and economies, boys and girls show similar skills in financial literacy. However, among students with comparable performance in mathematics and reading, boys perform better than girls in financial literacy in 11 out of 18 countries and economies.

Financial products and services are becoming increasingly complex, and young people today will probably have to make more financial decisions in their lives than their parents. Students nearing the end of compulsory education are already consumers of financial products: many have bank accounts, use online payment services and or have a pre-paid mobile phone. Many are also about to decide, with their parents, whether to continue on to higher education and, if so, how to pay for it. But are 15-year-olds acquiring the financial knowledge and skills needed for their adult lives?

PISA 2012 included an assessment of students' financial literacy – the first international survey of its kind. Some 29 000 students in 18 OECD and partner countries and economies – representing around nine million 15-year-olds – participated.

1



## Proficiency in financial literacy is strikingly varied, both among and within countries/economies.

Students in Shanghai-China score the highest in financial literacy, on average, with a mean score of 603 points, 103 points above the OECD average. On average, students in Australia, the Flemish Community of Belgium, the Czech Republic, Estonia, New Zealand and Poland also score higher than the OECD average. Among OECD countries, 75 score points - the equivalent of an entire proficiency level separate the highest- and lowest-performing countries/economies, while among all participating countries and economies, the difference between the highest and lowest performers is more than 225 points. Yet only a small proportion (16%) of the differences in countries' mean financial literacy scores is explained by a country's wealth.

Across the 13 participating OECD countries and economies, only one in ten students scores at the highest financial literacy proficiency level - Level 5 - in PISA 2012. These students can solve non-routine financial problems, such as calculating the balance on a bank statement, taking into account such factors as transfer fees, and can demonstrate an understanding of the wider financial landscape, including the implications of income-tax brackets. At the other end of the proficiency spectrum, 15% of students, on average, score below the baseline level of performance, Level 2. At best, these students can recognise the difference between needs and wants, make simple decisions about everyday spending, recognise the purpose of everyday financial documents, such as an invoice, and apply single and basic numerical operations (addition, subtraction or multiplication) in contexts that they are likely to have personally encountered.

On average, 247 score points separate the highest-performing 10% of students and the lowest-performing 10% of students; in Australia and the Flemish Community of Belgium, the difference exceeds 250 score points, while in New Zealand it exceeds 305 points.

#### Performance in financial literacy among participating countries and regions

	Mean score	Range of ranks All countries/ economies	
		Upper rank	Lower rank
Shanghai-China	603	1	1
Flemish Community (Belgium)	541	2	2
Estonia	529	3	4
Australia	526	3	5
New Zealand	520	4	6
Czech Republic	513	5	7
Poland	510	6	7
Veneto (Italy)	501		
Friuli Venezia Giulia (Italy)	501		
Latvia	501	8	9
OECD average-13	500		
Bolzano (Italy)	500		
Trento (Italy)	498		
United States	492	8	12
Lombardia (Italy)	491		İ
Russian Federation	486	9	14
France	486	9	14
Slovenia	485	9	14
Spain	484	10	15
Emilia Romagna (Italy)	481		
Piemonte (Italy)	481		
Croatia	480	11	16
Israel	476	11	17
Valle d'Aosta (Italy)	476		
Marche (Italy)	474		
Umbria (Italy)	474		
Toscana (Italy)	471		
Slovak Republic	470	15	17
Liguria (Italy)	468		
Italy	466	16	17
Puglia (Italy)	462		
Lazio (Italy)	460		
Molise (Italy)	453		
Abruzzo (Italy)	449		
Basilicata (Italy)	446		
Sardegna (Italy)	446		
Campania (Italy)	439		
Sicilia (Italy)	429		
Manizales (Colombia)	417		
Calabria (Italy)	415		
Medellin (Colombia)	414		
Bogota (Colombia)	397		
Cali (Colombia)	389		
Colombia	379	18	18
Rest of the country (Colombia)	372		

Notes: OECD countries and subnational entities that are not included in national results are shown in bold black. Partner countries and subnational entities that are not included in national results are shown in bold blue. Regions are shown in black italics (OECD countries) or blue italics (partner countries).

Countries, economies and subnational entities are ranked in descending order of the mean score in financial literacy.

Source: OECD, PISA 2012 Database

StatLink and http://dx.doi.org/10.1787/888933094887

PISA defines **financial literacy** 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 enable participation in economic life".

### Financial literacy is a skill distinct from those in mathematics and reading.

While skills in mathematics and reading are closely related to financial literacy, high proficiency in one of these core subjects does not necessarily signal high performance in financial literacy. Students in some countries that perform well in financial literacy, such as Australia, the Czech Republic, Estonia, the Flemish Community of Belgium and New Zealand, score higher in financial literacy, on average, than their performance in mathematics and reading would predict, while students in France, Italy and Slovenia perform worse than expected in financial literacy, based on their performance in mathematics and reading.

PISA also finds that, on average across participating OECD countries and economies, a more socio-economically advantaged student scores 41 points higher in financial literacy – the equivalent of more than half a proficiency level – than a less-advantaged student. In Shanghai-China, family wealth – one of the components of socio-economic status – is more strongly associated with financial literacy than with mathematics performance; in Israel, New Zealand, Shanghai-China and Spain, family wealth is more strongly related to financial literacy than to reading performance. While PISA has consistently shown a gender gap in mathematics and reading performance, in 17 out of the 18 countries and economies that participated in the financial literacy assessment, no such difference is observed between boys' and girls' average scores in financial literacy. However, among students with comparable performance in mathematics and reading, boys perform better than girls in 11 out of 18 countries and economies.

IN FC

Countries approach the goal of preparing students for an ever-more complex financial world very differently. Some countries have begun to introduce financial education in their school curricula; others focus squarely on strengthening students' conceptual understanding in key areas, such as mathematics, and then expect that their students will be able to apply that understanding in different contexts, including financial ones. The fact that the latter group includes top performer Shanghai, whose students show higher proficiency in financial literacy than those in any other country, even though they are rarely exposed to problems set in financial contexts in school, shows that the question of how to develop financial literacy is still very much open to debate.



#### Relative performance in financial literacy

Note: Significant differences are shown in darker tones

Countries and economies are ranked in descending order of the score-point difference between actual and expected performance.

Source: OECD, PISA 2012 Database, Table VI.2.4.

StatLink and http://dx.doi.org/10.1787/888933094887

3





#### Variation in financial literacy performance within countries and economies

Countries and economies are ranked in descending order of median performance (50th percentile) in financial literacy. Source: OECD, PISA 2012 Database, Table VI.2.4.

StatLink and http://dx.doi.org/10.1787/888933094887

The bottom line: The better an individual understands financial concepts and products, the more informed he or she will be when making financial decisions. These decisions affect not only individual households, but ultimately the economic health of the wider society.

#### For more information

Contact Flore-Anne Messy (Flore-Anne.Messy@oecd.org) or Pablo Zoido (Pablo.Zoido@oecd.org) See OECD (2014), PISA 2012 Results: Students and Money: Financial Literacy Skills for the 21st Century (Volume VI), PISA, OECD Publishing, Paris.

#### Visit

www.pisa.oecd.org www.oecd.org/pisa/infocus Education Indicators in Focus Teaching in Focus

#### Coming next month

When is competition between schools beneficial?

 $\textbf{Photo credit: } @ khoa vu/Flickr/Getty Images @ Shutterstock/Kzenon @ Simon Jarratt/Corbis \\ \\$ 

This paper is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of OECD member countries. This document and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and

boundaries and to the name of any territory, city or area. The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.