PISA 2015 Results

STUDENTS' FINANCIAL LITERACY

VOLUME IV

Programme for International Student Assessment

OECD

PISA

PISA 2015 Results (Volume IV)

STUDENTS' FINANCIAL LITERACY

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BETTER POLICIES FOR BETTER LIVES

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Foreword

Basic financial literacy is an essential life skill. Individuals make financial decisions for themselves at all ages: from children deciding how to spend their pocket money to teenagers entering the world of work, from young adults purchasing their first home to older adults managing their retirement savings. Financial literacy helps individuals to navigate these decisions and strengthens their financial well-being. In this spirit, it also promotes inclusive growth and more resilient financial systems and economies.

For the second time, the latest edition of the OECD's Programme for International Student Assessment (PISA) – which serves as the world's premier yardstick for evaluating the quality, equity and efficiency of school systems – assessed the financial literacy of 15-year-old students. In particular, it examined their capacity to apply their financial knowledge and skills to real-life situations involving financial issues and decisions.

The results call for greater investments in financial literacy from a young age. Students performing at the highest levels of proficiency in financial literacy are more likely than lower-performing students to be oriented towards saving, to expect to complete a university education, and to work in a high-skilled occupation. This suggests that financially literate students may be better able to recognise the value of investing in their human and financial capital.

But PISA 2015 data show that far too many students around the world are failing to attain a baseline level of proficiency. Even in countries and economies that perform at or above the OECD average – including Australia, Italy, the Netherlands, Poland and the United States – at least one fifth of students perform below the baseline level of proficiency. This means that these students cannot even recognise the value of a simple budget or understand the relationship between how much a vehicle is used and the costs incurred.

There is thus an urgent need for all countries, regardless of their economic and financial development, to improve the financial literacy of their students. While we don't yet have all the answers, the *PISA 2015 Financial Literacy Assessment* shines the spotlight on a number of important policy considerations.

- First, parents have traditionally had – and will continue to have – a major role in transmitting financial values, habits and skills to their children. PISA 2015 data show that students who have the chance to talk to their parents about money and saving also tend to have higher financial literacy. But at the same time, the fact that students' financial literacy skills are strongly related to their socio-economic status (or whether they – or their parents – are foreign-born) means that not all students have the same opportunities to acquire financial literacy if they rely solely on what they can learn from their family.
- Second, having a solid foundation in mathematics and reading is crucial for navigating the financial environment, from computing percentages to reading a bank statement, but it is not all that matters. PISA 2015 data highlight many features unique to financial literacy, such as being aware that some deals really are too good to be true, understanding the role of income tax, or being vigilant for fraudulent e-mails. Students in top-performing countries and economies, such as the Flemish Community of Belgium, Beijing-Shanghai-Jiangsu-Guangdong (China), the participating Canadian provinces (British Columbia, Manitoba, New Brunswick, Newfoundland and Labrador, Nova Scotia, Ontario and Prince Edward Island) and the Russian Federation, perform better in financial literacy than predicted by mathematics and reading.

- Third, while access to financial services at a young age provides students with great opportunities to learn by experience, it also creates new challenges. As recognised by G20 members, digital technologies can make financial services accessible to previously excluded segments of the population and young people, but can also give rise to new types of fraud, can expose customers to data insecurity, and can facilitate access to short-term credit and questionable digital offers. It is vital that young people have not only the knowledge and skills to start experimenting with the financial marketplace and begin to know its risks and traps, but also that financial products and services – especially those targeted to minors – are safe and regulated.

The policy agenda to tackle low performance in financial literacy is complex and encompasses a range of stakeholders, including parents, teachers, public authorities in education and finance, as well as the financial industry and civil society. The OECD stands ready to guide and support these efforts.

Angel Gurría
OECD Secretary-General

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Executive summary

Financial literacy is now globally recognised as an essential life skill. Globalisation and digital technologies have made financial services and products more widely accessible and at the same time more challenging. Many young people face financial decisions and are already consumers of financial services, from bank accounts to prepaid debit cards. Financial education is acknowledged as a complement to financial consumer protection, inclusion and regulation, as a way to improve individual decision making and well-being, and to support financial stability and inclusive growth.

The PISA financial literacy assessment provides a picture of 15-year-olds' ability to apply their accumulated financial knowledge and skills to real-life situations involving financial issues and decisions. Beijing-Shanghai-Jiangsu-Guangdong (China), the Flemish Community of Belgium, the participating Canadian provinces (British Columbia, Manitoba, New Brunswick, Newfoundland and Labrador, Nova Scotia, Ontario and Prince Edward Island), the Russian Federation, the Netherlands and Australia, in descending order of mean performance, have mean scores above the OECD average.

On average across the 10 participating OECD countries and economies, 22% of students – or more than 1.2 million 15-year-old students – score below the baseline level of proficiency in financial literacy (Level 2). Students performing at this level can, at best, recognise the difference between needs and wants, can make simple decisions on everyday spending, and can recognise the purpose of everyday financial documents, such as an invoice. Some 12% of students score at Level 5 – the highest level of proficiency. These students make complex financial decisions that will be relevant to them in the future. They can describe the potential outcomes of financial decisions and show an understanding of the wider financial landscape, such as income tax.

Students who do well in financial literacy are likely to perform well in the PISA reading and mathematics assessment too, and students who have poor financial literacy skills are likely to do poorly in the other core PISA subjects. But on average across the 10 participating OECD countries and economies, around 38% of the financial literacy score reflects factors that are not captured by the PISA reading and mathematics assessments, and are thus unique to financial skills.

PRACTICAL EXPERIENCE WITH MONEY

Most 15-year-olds have had some experience with money. Over 80% of students in 9 out of 13 countries and economies with available data receive money in the form of gifts. Some 64% of students, on average across OECD countries and economies, earn money from some formal or informal work activity, such as working outside school hours, working in a family business, or doing occasional informal jobs. About 59% of students receive money from an allowance or pocket money, on average across OECD countries and economies.

Data from PISA 2015 reveal that, on average across OECD countries and economies, 56% of students hold a bank account. This average masks significant differences across countries, however, as in Australia, the Flemish Community of Belgium, the participating Canadian provinces and the Netherlands, over 70% of 15-year-old students hold a bank account, but in Chile, Italy, Lithuania, Poland and the Russian Federation, less than 40% of students do. Less than 5% of students in each country/economy reported that they do not know what a bank account is.

Experience with basic financial products is related to students' performance in financial literacy. In Australia, the Flemish Community of Belgium, the participating Canadian provinces, Italy, the Netherlands, Spain and the United States, students who hold a bank account score more than 20 points higher in financial literacy than students of similar socio-economic status who do not have a bank account. The difference in financial literacy scores associated with holding a bank account, after accounting for socio-economic status, is largest (72 score points) in the Netherlands. But PISA results also show that, on average across OECD countries and economies, almost two out of three of the students who hold a bank account do not have the skills to manage such an account and cannot interpret a bank statement (they score below Level 4).

Parents help their children acquire and develop the values, attitudes, habits, knowledge and behaviours that contribute to their independent financial viability and well-being. PISA 2015 finds that, in 10 out of 13 countries and economies with available data, discussing money matters with parents at least sometimes is associated with higher financial literacy than never discussing the subject, after accounting for students' socio-economic status. And financial literacy, in turn, is associated with students' self-reported saving behaviour and with their aspirations for their future. For example, on average across OECD countries and economies, students who score at Level 4 or 5 in financial literacy were more than three times as likely as students of similar mathematics and reading ability but who perform at or below Level 1 in financial literacy to report that they would save to buy an item for which they did not have enough money rather than to report that they would buy the item anyway. Top-performing students in financial literacy were about twice as likely as low-performing students of similar mathematics and reading ability to report that they expect to complete university education.

PISA results also show that:

- Gender differences in financial literacy are mixed, unlike in mathematics and reading. Only in Italy do boys perform better than girls, while girls perform better than boys in Australia, Lithuania, Poland, the Slovak Republic and Spain; there are no gender-related differences in performance in the remaining countries and economies.
- Advantaged students score the equivalent of more than one PISA proficiency level higher in financial literacy than disadvantaged students.
- Immigrant students score 26 points lower in financial literacy, on average, than native-born students of similar socio-economic status.

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.

Reader's guide

Data underlying the figures

The data referred to in this volume are presented in Annex B and, in greater detail, including some additional tables, on the PISA website (www.pisa.oecd.org).

Four symbols are used to denote missing data:

c There are too few observations or no observation to provide reliable estimates (i.e. there are fewer than 30 students or fewer than 5 schools with valid data).

m Data are not available. These data were not submitted by the country or were collected but subsequently removed from the publication for technical reasons.

w Data have been withdrawn or have not been collected at the request of the country concerned.

n The response rate is too low to provide reliable estimates. See Annex A1 for further information.

Country coverage

This publication features data on 10 OECD countries and economies (Australia, the Flemish Community of Belgium, seven provinces in Canada, Chile, Italy, the Netherlands, Poland, the Slovak Republic, Spain and the United States) and 5 partner countries and economies (Brazil, Beijing-Shanghai-Jiangsu-Guangdong [China], Lithuania, Peru and the Russian Federation).

Canadian provinces refer to the seven provinces in Canada that participated in the PISA 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: Beijing, Shanghai, Jiangsu and Guangdong.

International averages

The OECD average corresponds to the arithmetic mean of the respective country estimates. It was calculated for most indicators presented in this report.

In analyses involving data from multiple years, the OECD average is reported on consistent sets of OECD countries, and several averages may be reported in the same table.

A number in the label used in figures and tables indicates the number of countries included in the average:

OECD average-10: Arithmetic mean across all the ten OECD countries and economies (Australia, the Flemish Community of Belgium, the Canadian provinces, Chile, Italy, the Netherlands, Poland, the Slovak Republic, Spain and the United States) that participated in the 2015 PISA financial literacy assessment.

OECD average-7: Arithmetic mean across the seven OECD countries and economies (Australia, the Flemish Community of Belgium, Italy, Poland, the Slovak Republic, Spain and the United States) that participated in both the 2012 and 2015 financial literacy assessments. The OECD average-7 is used in trend analyses in Chapters 3, 4 and 5.

Rounding figures

Because of rounding, some figures in tables may not add up exactly to the totals. Totals, differences and averages are always calculated on the basis of exact numbers and are rounded only after calculation.

All standard errors in this publication have been rounded to one or two decimal places. Where the value 0.0 or 0.00 is shown, this does not imply that the standard error is zero, but that it is smaller than 0.05 or 0.005, respectively.

Reporting student data

The report uses "15-year-olds" as shorthand for the PISA target population. PISA covers students who are aged between 15 years 3 months and 16 years 2 months at the time of assessment and who are enrolled in school and have completed at least 6 years of formal schooling, regardless of the type of institution in which they are enrolled, and whether they are in full-time or part-time education, whether they attend academic or vocational programmes, and whether they attend public or private schools or foreign schools within the country.

Reporting school data

The principals of the schools in which students were assessed provided information on their schools' characteristics by completing a school questionnaire. Where responses from school principals are presented in this publication, they are weighted so that they are proportionate to the number of 15-year-olds enrolled in the school.

Focusing on statistically significant differences

This volume discusses only statistically significant differences or changes. These are denoted in darker colours in figures and in bold font in tables. See Annex A3 for further information.

Changes in the PISA methodology

Several changes were made to the PISA methodology in 2015:

- **Change in assessment mode** from paper-based to computer. Over the past 20 years, digital technologies have fundamentally transformed the ways in which we read and manage information. To better reflect how students and societies access, use and communicate information, starting with the 2015 round, the assessment was delivered mainly on computers, although countries had the option to use a paper-based version. For more information, see Annex A5.
- **Changes in scaling procedures** include:
  - Change from a one-parameter model to a hybrid model that applies both a one- and two-parameter model, as appropriate. The one-parameter (Rasch) model is retained for all items where the model is statistically appropriate; a more general 2-parameter model is used instead if the fit of the one-parameter model could not be established. This approach improves the fit of the model to the observed student responses and reduces model and measurement errors.
  - Change in treatment of non-reached items to ensure that the treatment is consistent between the estimation of item parameters and the estimation of the population model to generate proficiency estimates in the form of plausible values. Implementing this consistency avoids the introduction of systematic errors that result in the generation of plausible values otherwise.
  - Change from cycle-specific scaling to multiple-cycle scaling in order to combine data, and retain and aggregate information about trend items used in previous cycles. This change results in consistent item parameters across cycles, which strengthen and support the inferences made about proficiencies on each scale.
  - Change from including only a subsample for item calibration to including the total sample with weights, in order to fully use the available data and reduce the error in item-parameter estimates by increasing the sample size. This eliminates the variability of item-parameter estimation that is due to the random selection of small calibration samples.
  - Change from assigning internationally fixed item parameters and dropping a few dodgy items per country, to assigning a few nationally unique item parameters for those items that show significant deviation from the international parameters. This retains a maximum set of internationally equivalent items without dropping data and, as a result, reduces overall measurement errors.

The overall impact of these changes on trend comparisons is quantified by the link errors. As in previous cycles, a major part of the linking error is due to re-estimated item parameters. While these have been the same from the 2000 through the 2015 rounds, link errors will be reduced in future assessment rounds. For more information on the calculation of this quantity and how to use it in analyses, see Annex A5 and the *PISA 2015 Technical Report* (OECD, forthcoming).

- **Changes in population coverage and response rates.** Even though PISA has consistently used the same standardised methods to collect comparable and representative samples, and population coverage and response rates were carefully reviewed during the adjudication process, slight changes in population coverage and response rates can affect point estimates of proficiency. The uncertainty around the point estimates due to sampling is quantified in sampling errors, which are the major part of standard errors reported for country mean estimates. For more information, see Annexes A2 and A4.
- **Changes in test administration.** As in PISA 2000 (but different from other cycles up to 2012), students who sat the mathematics, reading and science tests in 2015 had to take their break before starting to work on test clusters 3 and 4, and could not work for more than one hour on clusters 1 and 2. This reduces cluster-position effects. This change does not affect the financial literacy assessment, as it includes only two clusters.
- **Scheduling of the financial literacy assessment.** This change was specific to financial literacy and did not affect the assessments in the other domains. Sampling design and the scheduling of test administration changed between the 2012 and 2015 assessments. Students assessed in financial literacy in 2015 sat the test after having been tested in mathematics, reading and science, while students assessed in financial literacy in 2012 were tested in financial literacy – as well as in mathematics and reading – at the same time as other students were taking the core assessment.

In sum, changes to the assessment design and the mode of delivery were carefully examined in order to ensure that the 2015 results can be presented as trend measures at the international level. The data show no consistent association between students' familiarity with ICT and with performance shifts between 2012 and 2015 across countries. Changes in scaling procedures are part of the link error, as they were in the past, where the link error quantified the changes introduced by re-estimating item parameters on a subset of countries and students who participated in each cycle. Changes due to sampling variability are quantified in the sampling error. Changes in test design and administration are not fully reflected in estimates of the uncertainty of trend comparisons. These changes are a common feature of past PISA rounds as well, and are most likely of secondary importance when analysing trends. The scheduling change in the financial literacy assessment, however, means that genuine financial literacy trends may be confounded with changes in the scheduling of the assessment.

The factors below are examples of potential effects that are relevant for the changes seen from one PISA round to the next. While these can be quantified and related to, for example, census data if available, these are outside of the control of the assessment programme:

- **Change in coverage of PISA target population.** PISA's target population is 15-year-old students enrolled in grade 7 or above. Some education systems saw a rapid expansion of 15-year-olds' access to school because of a reduction in dropout rates or in grade repetition. This is explained in detail, and countries' performance adjusted for this change is presented in Volume I.
- **Change in demographic characteristics.** In some countries, there might be changes in the composition of the population of 15-year-old students. For example, there might be more students with an immigrant background. Chapters 3 and 4 in this volume present performance (country mean and distribution) adjusted for changes in the composition of the student population, including students' immigrant background, gender and age.
- **Change in student competency.** The average proficiency of 15-year-old students in 2015 might be higher or lower than that in 2012 or earlier rounds.

Abbreviations used in this report

ESCS	PISA index of economic, social and cultural status	PPP	Purchasing power parity
GDP	Gross domestic product	S.D.	Standard deviation
ISCED	International Standard Classification of Education	S.E.	Standard error
ISCO	International Standard Classification of Occupations	Score dif.	Score-point difference
% dif.	Percentage-point difference		

Further documentation

For further information on the PISA assessment instruments and the methods used in PISA, see the *PISA 2015 Technical Report* (OECD, forthcoming).

This report uses the OECD StatLinks service. Below each table and chart is a URL leading to a corresponding Excel™ workbook containing the underlying data. These URLs are stable and will remain unchanged over time. In addition, readers of the e-books will be able to click directly on these links and the workbook will open in a separate window, if their internet browser is open and running.

What is PISA?

"What is important for citizens to know and be able to do?" In response to that question and to the need for internationally comparable evidence on student performance, the Organisation for Economic Co-operation and Development (OECD) launched the triennial survey of 15-year-old students around the world known as the Programme for International Students Assessment, or PISA. PISA assesses the extent to which 15-year-old students, near the end of their compulsory education, have acquired key knowledge and skills that are essential for full participation in modern societies. The assessment focuses on the core school subjects of science, reading and mathematics. Students' proficiency in an innovative domain is also assessed (in 2015, this domain is collaborative problem solving). The assessment does not just ascertain whether students can reproduce knowledge; it also examines how well students can extrapolate from what they have learned and can apply that knowledge in unfamiliar settings, both in and outside of school. This approach reflects the fact that modern economies reward individuals not for what they know, but for what they can do with what they know.

PISA is an ongoing programme that offers insights for education policy and practice, and that helps monitor trends in students' acquisition of knowledge and skills across countries and in different demographic subgroups within each country. PISA results reveal what is possible in education by showing what students in the highest-performing and most rapidly improving education systems can do. The findings allow policy makers around the world to gauge the knowledge and skills of students in their own countries in comparison with those in other countries, set policy targets against measurable goals achieved by other education systems, and learn from policies and practices applied elsewhere. While PISA cannot identify cause-and-effect relationships between policies/practices and student outcomes, it can show educators, policy makers and the interested public how education systems are similar and different – and what that means for students.

WHAT IS UNIQUE ABOUT PISA?

PISA is different from other international assessments in its:

- **policy orientation**, which links data on student learning outcomes with data on students' backgrounds and attitudes towards learning, and on key factors that shape their learning, in and outside of school, in order to highlight differences in performance and identify the characteristics of students, schools and education systems that perform well
- **innovative concept of "literacy"**, which refers to students' capacity to apply knowledge and skills in key subjects, and to analyse, reason and communicate effectively as they identify, interpret and solve problems in a variety of situations
- **relevance to lifelong learning**, as PISA asks students to report on their motivation to learn, their beliefs about themselves, and their learning strategies
- **regularity**, which enables countries to monitor their progress in meeting key learning objectives
- **breadth of coverage**, which, in PISA 2015, encompasses the 35 OECD countries and 37 partner countries and economies.

Box A. **PISA's contributions to the Sustainable Development Goals**

The Sustainable Development Goals (SDGs) were adopted by the United Nations in September 2015. Goal 4 of the SDGs seeks to ensure "inclusive and equitable quality education and promote lifelong learning opportunities for all". More specific targets and indicators spell out what countries need to deliver by 2030. Goal 4 differs from the Millennium Development Goals (MDGs) on education, which were in place between 2000 and 2015, in the following two ways:

- Goal 4 is truly global. The SDGs establish a universal agenda; they do not differentiate between rich and poor countries. Every single country is challenged to achieve the SDGs.
- Goal 4 puts the quality of education and learning outcomes front and centre. Access, participation and enrolment, which were the main focus of the MDG agenda, are still important, and the world is still far from providing equitable access to high-quality education for all. But participation in education is not an end in itself; what matters for people and economies are the skills acquired through education. It is the competence and character qualities that are developed through schooling, rather than the qualifications and credentials gained, that make people successful and resilient in their professional and personal lives. They are also key in determining individual well-being and the prosperity of societies.

In sum, Goal 4 requires education systems to monitor the actual learning outcomes of their young people. PISA, which already provides measurement tools to this end, is committed to improving, expanding and enriching its assessment tools. For example, PISA 2015 assesses the performance in science, reading and mathematics of 15-year-old students in more than 70 high- and middle-income countries. PISA offers a comparable and robust measure of progress so that all countries, regardless of their starting point, can clearly see where they are on the path towards the internationally agreed targets of quality and equity in education.

Through participation in PISA, countries can also build their capacity to develop relevant data. While most countries that have participated in PISA already have adequate systems in place, that isn't true for many low-income countries. To this end, the OECD PISA for Development initiative not only aims to expand the coverage of the international assessment to include more middle- and low-income countries, but it also offers these countries assistance in building their national assessment and data-collection systems. PISA is also expanding its assessment domains to include other skills relevant to Goal 4. In 2015, for example, PISA assesses 15-year-old students' ability to solve problem collaboratively.

Other OECD data, such as those derived from the Survey of Adult Skills (a product of the OECD Programme for the International Assessment of Adult Competencies [PIAAC]) and the OECD Teaching and Learning International Survey (TALIS), provide a solid evidence base for monitoring education systems. OECD analyses promote peer learning as countries can compare their experiences in implementing policies. Together, OECD indicators, statistics and analyses can be seen as a model of how progress towards the SDG education goal can be measured and reported.

Source: OECD (2016), *Education at a Glance 2016: OECD Indicators*, OECD Publishing, Paris, http://dx.doi.org/10.1787/eag-2016-en.

WHICH COUNTRIES AND ECONOMIES PARTICIPATE IN PISA?

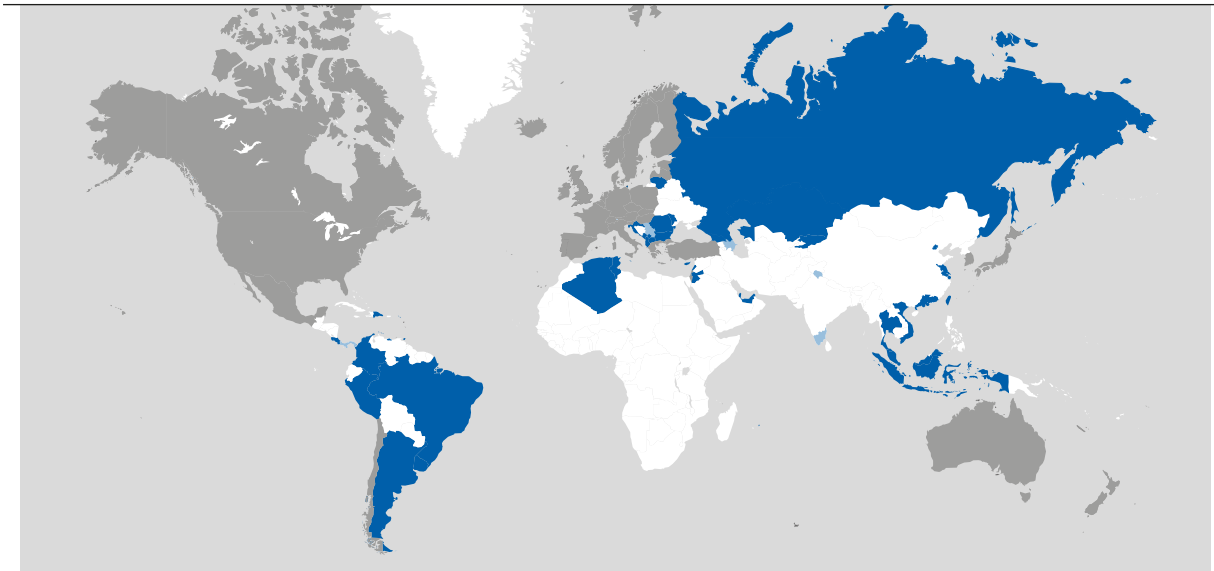
PISA is now used as an assessment tool in many regions around the world. It was implemented in 43 countries and economies in the first assessment (32 in 2000 and 11 in 2002), 41 in the second assessment (2003), 57 in the third assessment (2006), 75 in the fourth assessment (65 in 2009 and 10 in 2010), and 65 in the fifth assessment. So far, 72 countries and economies have participated in PISA 2015.

In addition to all OECD countries, the survey has been or is being conducted in:

- **East, South and Southeast Asia**: Beijing, Shanghai, Jiangsu and Guangdong (China), Hong Kong (China), Indonesia, Macao (China), Malaysia, Singapore, Chinese Taipei, Thailand and Viet Nam
- **Central, Mediterranean and Eastern Europe, and Central Asia**: Albania, Bulgaria, Croatia, Georgia, Kazakhstan, Kosovo, Lebanon, Lithuania, the Former Yugoslav Republic of Macedonia, Malta, Moldova, Montenegro, Romania and the Russian Federation

- **The Middle East**: Jordan, Qatar and the United Arab Emirates
- **Central and South America**: Argentina, Brazil, Colombia, Costa Rica, Dominican Republic, Peru, Trinidad and Tobago, Uruguay
- **Africa**: Algeria and Tunisia.

Map of PISA countries and economies



OECD countries

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

Partner countries and economies in PISA 2015

Albania, Algeria, Argentina, Brazil, B-S-J-G (China)*, Bulgaria, Colombia, Costa Rica, Croatia, Cyprus[1], Dominican Republic, Former Yugoslav Republic of Macedonia, Georgia, Hong Kong (China), Indonesia, Jordan, Kazakhstan, Kosovo, Lebanon, Lithuania, Macao (China), Malaysia, Malta, Moldova, Montenegro, Peru, Qatar, Romania, Russian Federation, Singapore, Chinese Taipei, Thailand, Trinidad and Tobago, Tunisia, United Arab Emirates, Uruguay, Viet Nam

Partner countries and economies in previous cycles

Azerbaijan, Himachal Pradesh-India, Kyrgyzstan, Liechtenstein, Mauritius, Miranda-Venezuela, Panama, Serbia, Tamil Nadu-India

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

1. Note by Turkey: The information in this document with reference to « Cyprus » relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Turkey shall preserve its position concerning the "Cyprus issue".

Note by all the European Union Member States of the OECD and the European Union: The Republic of Cyprus is recognised by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.

WHAT DOES THE TEST MEASURE?

In each round of PISA, one of the core domains is tested in detail, taking up nearly half of the total testing time. The major domain in 2015 was science, as it was in 2006. Reading was the major domain in 2000 and 2009, and mathematics was the major domain in 2003 and 2012. With this alternating schedule of major domains, a thorough analysis of achievement in each of the three core areas is presented every nine years; an analysis of trends is offered every three years.

The *PISA 2015 Assessment and Analytical Framework* (OECD, 2016a) presents definitions and more detailed descriptions of the domains assessed in PISA 2015:

- **Science literacy** is defined as the ability to engage with science-related issues, and with the ideas of science, as a reflective citizen. A scientifically literate person is willing to engage in reasoned discourse about science and technology, which requires the competencies to explain phenomena scientifically, evaluate and design scientific enquiry, and interpret data and evidence scientifically.
- **Reading literacy** is defined as students' ability to understand, use, reflect on and engage with written texts in order to achieve one's goals, develop one's knowledge and potential, and participate in society.
- **Mathematical literacy** is defined as students' capacity to formulate, employ and interpret mathematics in a variety of contexts. It includes reasoning mathematically and using mathematical concepts, procedures, facts and tools to describe, explain and predict phenomena. It assists individuals in recognising the role that mathematics plays in the world and to make the well-founded judgements and decisions needed by constructive, engaged and reflective citizens.
- **Financial literacy** is defined 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.

Box B. **Key features of PISA 2015**

The content

- The PISA 2015 survey focused on science, with reading, mathematics and collaborative problem solving as minor areas of assessment. PISA 2015 also included an assessment of young people's financial literacy, which was optional for countries and economies.

The students

- Approximately 540 000 students completed the assessment in 2015, representing about 29 million 15-year-olds in the schools of the 72 participating countries and economies.

The assessment

- Computer-based tests were used, with assessments lasting a total of two hours for each student.
- Test items were a mixture of multiple-choice questions and questions requiring students to construct their own responses. The items were organised in groups based on a passage setting out a real-life situation. About 810 minutes of test items for science, reading, mathematics and collaborative problem solving were covered, with different students taking different combinations of test items.
- Students also answered a background questionnaire, which took 35 minutes to complete. The questionnaire sought information about the students themselves, their homes, and their school and learning experiences. School principals completed a questionnaire that covered the school system and the learning environment. For additional information, some countries/economies decided to distribute a questionnaire to teachers. It was the first time that this optional teacher questionnaire was offered to PISA-participating countries/economies. In some countries/economies, optional questionnaires were distributed to parents, who were asked to provide information on their perceptions of and involvement in their child's school, their support for learning in the home, and their child's career expectations, particularly in science. Countries could choose two other optional questionnaires for students: one asked students about their familiarity with and use of information and communication technologies (ICT); and the second sought information about students' education to date, including any interruptions in their schooling, and whether and how they are preparing for a future career.

HOW IS THE ASSESSMENT CONDUCTED?

For the first time, PISA 2015 delivered the assessment of all subjects via computer. Paper-based assessments were provided for countries that chose not to test their students by computer, but the paper-based assessment was limited to questions that could measure trends in science, reading and mathematics performance.[1] New questions were developed for the computer-based assessment only. A field trial was used to study the effect of the change in how the assessment was delivered. Data were collected and analysed to establish equivalence between the computer- and paper-based assessments.

The 2015 computer-based assessment was designed as a two-hour test. Each test form allocated to students comprised four 30-minute clusters of test material. This test design included six clusters from each of the domains of science, reading and mathematics to measure trends. For the major subject of science, an additional six clusters of items were developed to reflect the new features of the 2015 framework. In addition, three clusters of collaborative problem-solving items were developed for the countries that decided to participate in that assessment.[2] There were 66 different test forms. Students spent one hour on the science assessment (one cluster each of trends and new science items) plus one hour on one or two other subjects – reading, mathematics or collaborative problem solving. For the countries/economies that chose not to participate in the collaborative problem-solving assessment, 36 test forms were prepared.

Countries that chose paper-based delivery for the main survey measured student performance with 30 pencil-and-paper forms containing trend items from two of the three core PISA domains.

Each test form was completed by a sufficient number of students, allowing for estimations of proficiency on all items by students in each country/economy and in relevant subgroups within a country/economy (such as boys and girls, and students from different social and economic backgrounds).

The assessment of financial literacy was offered as an option in PISA 2015 based on the same framework as the one developed for PISA 2012.[3] The financial literacy assessment lasted one hour and comprised two clusters distributed to a subsample of students in combination with the science, mathematics and reading assessments.

To gather contextual information, PISA 2015 asked students and the principal of their school to respond to questionnaires. The student questionnaire took about 35 minutes to complete; the questionnaire for principals took about 45 minutes to complete. The responses to the questionnaires were analysed with the assessment results to provide both a broader and more nuanced picture of student, school and system performance. The *PISA 2015 Assessment and Analytical Framework* (OECD, 2016a) presents the questionnaire framework in detail. The questionnaires from all assessments since PISA's inception are available on the PISA website: www.pisa.oecd.org.

The questionnaires seek information about:

- students and their family backgrounds, including their economic, social and cultural capital
- aspects of students' lives, such as their attitudes towards learning, their habits and life in and outside of school, and their family environment
- aspects of schools, such as the quality of the schools' human and material resources, public and private management and funding, decision-making processes, staffing practices, and the school's curricular emphasis and extracurricular activities offered
- context of instruction, including institutional structures and types, class size, classroom and school climate, and science activities in class
- aspects of learning, including students' interest, motivation and engagement.

Four additional questionnaires were offered as options:

- **a computer familiarity questionnaire**, focusing on the availability and use of information and communications technology (ICT) and on students' ability to carry out computer tasks and their attitudes towards computer use
- **an educational career questionnaire**, which collects additional information on interruptions in schooling, on preparation for students' future career, and on support with science learning
- **a parent questionnaire**, focusing on parents' perceptions of and involvement in their child's school, their support for learning at home, school choice, their child's career expectations, and their background (immigrant/non-immigrant)
- **a teacher questionnaire**, which is new to PISA, will help establish the context for students' test results. In PISA 2015, science teachers were asked to describe their teaching practices through a parallel questionnaire that also focuses on teacher-directed teaching and learning activities in science lessons, and a selected set of enquiry-based activities. The teacher questionnaire asked about the content of the school's science curriculum and how it is communicated to parents too.

The contextual information collected through the student, school and optional questionnaires are complimented by system-level data. Indicators describing the general structure of the education systems, such as expenditure on education, stratification, assessments and examinations, appraisals of teachers and school leaders, instruction time, teachers' salaries, actual teaching time and teacher training are routinely developed and applied by the OECD (e.g. in the annual OECD publication, *Education at a Glance*). These data are extracted from *Education at a Glance 2016* (OECD, 2016b), *Education at a Glance 2015* (OECD, 2015) and *Education at a Glance 2014* (OECD, 2014) for the countries that participate in the annual OECD data collection that is administered through the OECD Indicators of Education Systems (INES) Network. For other countries and economies, a special system-level data collection was conducted in collaboration with PISA Governing Board members and National Project Managers.

WHO ARE THE PISA STUDENTS?

Differences between countries in the nature and extent of pre-primary education and care, in the age at entry into formal schooling, in the structure of the education system, and in the prevalence of grade repetition mean that school grade levels are often not good indicators of where students are in their cognitive development. To better compare student performance internationally, PISA targets students of a specific age. PISA students are aged between 15 years 3 months and 16 years 2 months at the time of the assessment, and have completed at least 6 years of formal schooling. They can be enrolled in any type of institution, participate in full-time or part-time education, in academic or vocational programmes, and attend public or private schools or foreign schools within the country. (For an operational definition of this target population, see Annex A2.) Using this age across countries and over time allows PISA to compare consistently the knowledge and skills of individuals born in the same year who are still in school at age 15, despite the diversity of their education histories in and outside of school.

The population of PISA-participating students is defined by strict technical standards, as are the students who are excluded from participating (see Annex A2). The overall exclusion rate within a country was required to be below 5% to ensure that, under reasonable assumptions, any distortions in national mean scores would remain within plus or minus 5 score points, i.e. typically within the order of magnitude of 2 standard errors of sampling. Exclusion could take place either through the schools that participated or the students who participated within schools (see Annex A2, Tables A2.1 and A2.2).

There are several reasons why a school or a student could be excluded from PISA. Schools might be excluded because they are situated in remote regions and are inaccessible, because they are very small, or because of organisational or operational factors that precluded participation. Students might be excluded because of intellectual disability or limited proficiency in the language of the assessment.

In 30 out of the 72 countries and economies that participated in PISA 2015, the percentage of school-level exclusions amounted to less than 1%; it was 4.1% or less in all countries and economies. When the exclusion of students who met the internationally established exclusion criteria is also taken into account, the exclusion rates increase slightly. However, the overall exclusion rate remains below 2% in 29 participating countries and economies, below 5% in 60 participating countries, and below 7% in all countries except the United Kingdom, Luxembourg (both 8.2%) and Canada (7.5%). In 13 out of the 35 OECD countries, the percentage of school-level exclusions amounted to less than 1% and was less than 3% in 30 OECD countries. When student exclusions within schools are also taken into account, there were 7 OECD countries below 2% and 25 OECD countries below 5%. For more detailed information about school and student exclusion from PISA 2015, see Annex A2.

WHAT KINDS OF RESULTS DOES PISA PROVIDE?

Combined with the information gathered through the tests and the various questionnaires, the PISA assessment provides three main types of outcomes:

- basic indicators that provide a baseline profile of the knowledge and skills of students
- indicators derived from the questionnaires that show how such skills relate to various demographic, social, economic and education variables
- indicators on trends that show changes in outcomes and distributions, and in relationships between student-level, school-level, and system-level background variables and outcomes.

WHERE CAN YOU FIND THE RESULTS?

This is the fourth of five volumes that present the results from PISA 2015. It begins by examining the importance of financial literacy for students in their current lives and as they move into adulthood. It describes students' exposure to financial education at school and provides a description of how financial literacy is defined and assessed in the 2015 financial literacy assessment. Chapter 3 compares students' performance in the 2015 PISA financial literacy assessment across countries and economies by looking at what students know about financial literacy and how well they can apply what they know. It also compares performance in 2015 with 2012 in the countries and economies that participated in both assessments and examines how student performance in financial literacy compares with performance in the core PISA subjects. Chapter 4 examines how financial literacy performance varies within countries and economies and how it is associated with the demographic and socio-economic characteristics of students and their families such as students' gender, socio-economic status, immigrant background, language spoken at home and attitudes towards learning. Chapter 5 describes students' experience with money: how frequently they discuss money matters with parents and friends, whether they hold basic financial products and whether they receive or earn money from various sources, including family and work. Chapter 6 discusses how students would behave in hypothetical spending and saving situations, similar to those that they may encounter in their current lives or in the near future. It also looks at the relationship between performance in financial literacy and students' expectations for their studies and careers. Results from the PISA 2015 financial literacy assessment show that many students, in countries and economies at all levels of economic and financial development need to improve their financial literacy. Chapter 7 analyses which students show weaknesses in financial literacy and what these disparities imply for policy and practice.

The other four volumes cover the following issues:

- *Volume I: Excellence and Equity in Education* provides a detailed examination of student performance in science and describes how performance has changed over previous PISA assessments. It also explores students' engagement with and attitudes towards science, including their expectations of working in a science-related career later on. An overview of student performance in reading and mathematics in 2015 is also provided, along with a description of how performance in those subjects has evolved over previous PISA assessments. The volume defines and discusses equity in education, focusing particularly on how socio-economic status and an immigrant background are related to students' performance in PISA and to their attitudes towards science.
- *Volume II: Policies and Practices for Successful Schools* examines how student performance is associated with various characteristics of individual schools and concerned school systems. The volume first focuses on science, describing the school resources devoted to science and how science is taught in schools. It discusses how both of these are related to student performance in science, students' epistemic beliefs, and students' expectations of pursuing a career in science. Then, the volume analyses schools and school systems and their relationship with education outcomes more generally, covering the learning environment in school, school governance, selecting and grouping students, and the human, financial, educational and time resources allocated to education. Trends in these indicators between 2006 and 2015 are examined when comparable data are available.
- *Volume III: Students' Well-Being* describes how well adolescent students are learning and living. This volume analyses a broad set of indicators that, collectively, paint a picture of 15-year-old students' home and school environments, the way students communicate with family and friends, how and how often they use the Internet, their physical activities and eating habits, their aspirations for future education, their motivation for school work, and their overall satisfaction with life.
- *Volume V: Collaborative Problem Solving* examines students' ability to work with two or more people to try to solve a problem. The volume provides the rationale for assessing this particular skill and describes performance within and across countries. In addition, the volume highlights the relative strengths and weaknesses of each school system and examines how they are related to individual student characteristics, such as gender, immigrant background and socio-economic status. The volume also explores the role of education in building young people's skills in solving problems collaboratively.

Volumes I and II were published in December 2016. Volume III was published in April 2017 and Volume V will be published in November 2017.

The frameworks for assessing mathematics, reading, science and financial literacy in 2015 are described in the *PISA 2015 Assessment and Analytical Framework* (OECD, 2016a).

Technical annexes at the end of this volume describe how questionnaire indices were constructed, and discuss sampling issues, quality-assurance procedures, the reliability of coding, and the process followed for developing the assessment instruments. Many of the issues covered in the technical annexes are elaborated in greater detail in the *PISA 2015 Technical Report* (OECD, forthcoming).

All data tables referred to in the analyses are included at the end of the respective volume in Annex B1, and a set of additional data tables is available on line (www.pisa.oecd.org). A Reader's Guide is also provided in each volume to aid in interpreting the tables and figures that accompany the report. Data from regions within the participating countries are included in Annex B2.

Notes

1. The paper-based form was used in 15 countries/economies including Albania, Algeria, Argentina, Georgia, Indonesia, Jordan, Kazakhstan, Kosovo, Lebanon, Macedonia, Malta, Moldova, Romania, Trinidad and Tobago, and Viet Nam, as well as in Puerto Rico, an unincorporated territory of the United States.

2. The collaborative problem solving assessment was not conducted in the countries/economies that delivered the PISA 2015 assessment on paper, nor was it conducted in the Dominican Republic, Ireland, Poland, Qatar or Switzerland.

3. The financial literacy assessment was conducted in Australia, Belgium (Flemish Community only), B-S-J-G (China), Brazil, seven Canadian provinces, Chile, Italy, Lithuania, the Netherlands, Peru, Poland, the Russian Federation, the Slovak Republic, Spain and the United States.

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1

Overview: Students' financial literacy

Financial literacy is now globally recognised as an essential life skill. The PISA financial literacy assessment provides a picture of 15-year-olds' ability to apply their financial knowledge and skills to real-life situations involving financial issues and decisions. This report looks at how students' financial literacy varies across and within the 15 participating countries and economies, and how it is associated with student characteristics such as gender, socio-economic status and immigrant background. It also examines the association between students' financial literacy and their experience with money matters and their expectations for the future.

Over the past decades, financial literacy has been increasingly recognised globally as an essential life skill, particularly among young people. This initially stemmed from concern about the potential impact of shrinking public and private welfare systems, shifting demographics, including the ageing of the population in many countries, and the increased sophistication and expansion of financial services. As many young people face financial decisions and are consumers of financial services in this evolving context, developed and emerging countries and economies have become increasingly concerned about the level of financial literacy of their citizens.

Financial education is acknowledged as a complement to financial consumer protection, inclusion and regulation, as a way to improve individual decision making and well-being, and to support financial stability and development. Indeed, 7 out of the 15 countries and economies that participated in the PISA 2015 assessment of financial literacy – Australia, Brazil, Canada, the Netherlands, the Russian Federation (hereafter "Russia"), Spain and the United States – have developed a national strategy for financial education specifically addressing young people among their target audiences. Most of the participating countries and economies – Australia, the Flemish Community of Belgium, Brazil, Canada, China, Italy, Lithuania, the Netherlands, Peru, Russia, the Slovak Republic, Spain and the United States – started introducing financial topics in the curriculum or have developed financial education pilot programmes in school.

The OECD countries and economies of Australia, the Flemish Community of Belgium, the participating Canadian provinces and the Netherlands, as well as the partner countries and economies of Beijing-Shanghai-Jiangsu-Guangdong (China) and the Russian Federation perform above the OECD average in financial literacy.

The PISA financial literacy assessment provides an overall picture of 15-year-olds' ability to apply their accumulated knowledge and skills to real-life situations involving financial issues and decisions. Among the ten participating OECD countries and economies, the Flemish Community of Belgium and the participating provinces of Canada (British Columbia, Manitoba, New Brunswick, Newfoundland and Labrador, Nova Scotia, Ontario and Prince Edward Island) rank between first and second. They also rank between second and third among all countries and economies, following Beijing-Shanghai-Jiangsu-Guangdong (China) (hereafter "B-S-J-G [China]"), which ranks first overall. Two other OECD countries, namely Australia and the Netherlands, perform above the OECD average.

Across the participating OECD countries and economies, 22% of students are low performers while only 12% are high performers.

The single continuous scale of financial literacy is divided into five levels. Questions at Level 1 are considered to be the easiest. At best, students performing at Level 1 can recognise the difference between needs and wants, can make simple decisions on everyday spending, and can recognise the purpose of everyday financial documents, such as an invoice. Level 2 is considered the baseline level of proficiency in financial literacy that is required to participate in society.

Across the 10 participating OECD countries and economies, 22% of students score below the baseline level of proficiency in financial literacy, on average. Even in some high- and middle-performing OECD countries and economies, the percentage of students performing below the baseline level of proficiency is not negligible. In the United States, about 22% of students score below the baseline level, as do about 20% of students in Australia, Italy and Poland, and 19% of students in the Netherlands. By contrast, among high-performing OECD countries and economies, only slightly more than one in ten students in the Flemish Community of Belgium (12%) and the participating Canadian provinces (13%) perform at or below Level 1.

In some low-performing OECD countries, more than 30% of students score below the baseline level: Chile (38%) and the Slovak Republic (35%). Among partner countries and economies, more than 40% of students in Brazil (53%) and Peru (48%) score below the baseline level, while in Russia, 11% of students perform at this level. Some 9% of students in B-S-J-G (China) and 32% of students in Lithuania perform at Level 1 or below. In Brazil, Chile, Lithuania, Peru and the Slovak Republic, there are more students who score at Level 1 than at any other proficiency level (Table IV.3.2).

Level 5 questions are considered to be the most challenging for 15-year-old students at the end of compulsory education. Students performing at Level 5 can look ahead to solve financial problems or make the kinds of financial decisions that will be only relevant to them in the future. They can take into account features of financial documents that are significant but unstated or not immediately evident, such as transaction costs, and they can describe the potential outcomes of financial decisions, showing an understanding of the wider financial landscape, such as income tax.

Across the 10 participating OECD countries and economies, slightly more than one in ten (12%) students are proficient at Level 5, on average. About one in four students in the Flemish Community of Belgium (24%) performs at Level 5 as does about one in three students in B-S-J-G (China) (33%). Among OECD countries and economies, between 10% and

25% of students perform at Level 5 in Australia (15%), the participating Canadian provinces (22%), the Netherlands (18%) and the United States (10%). Less than 10% of students in Chile (3%), Italy (6%), Poland (8%), the Slovak Republic (6%) and Spain (6%) perform at this level. Among the remaining partner countries and economies, about 11% of students in Russia and less than 5% of students in Brazil, Lithuania and Peru perform at this highest level.

Figure IV.1.1 ▪ **Snapshot of performance in financial literacy**

Countries/economies with performance **above** the OECD average
Countries/economies with variation in financial literacy performance associated with mathematics and reading **above** the OECD average

Countries/economies with values not statistically different from the OECD average

Countries/economies with performance **below** the OECD average
Countries/economies with variation in financial literacy performance associated with mathematics and reading **below** the OECD average

	Performance in financial literacy			Student performance in financial literacy compared to performance in mathematics and reading		
	Mean score in PISA 2015	Share of low performers (Level 1 or below)	Share of top performers (Level 5)	Relative performance[1] in financial literacy, compared with students with similar performance in mathematics and reading	Percentage of students who perform above their expected score[2]	Variation in financial literacy performance associated with mathematics and reading performance[3]
	Mean	%	%	Score dif.	%	%
OECD average	489	22	12	**-11**	**44.2**	62
B-S-J-G (China)	566	9	33	**40**	**72.6**	69
Belgium (Flemish)	541	12	24	**14**	**59.6**	70
Canadian provinces	533	13	22	**8**	**55.1**	53
Russia	512	11	11	**9**	**55.4**	45
Netherlands	509	19	17	**-8**	**45.6**	71
Australia	504	20	15	**-3**	49.1	71
United States	487	22	10	-3	48.3	70
Poland	485	20	8	**-29**	**32.8**	62
Italy	483	20	6	**-14**	**41.8**	52
Spain	469	25	6	**-30**	**32.4**	58
Lithuania	449	32	4	**-36**	**29.6**	58
Slovak Republic	445	35	6	**-29**	**36.6**	48
Chile	432	38	3	**-16**	**40.9**	62
Peru	403	48	1	1	51.6	68
Brazil	393	53	3	**-8**	**46.9**	47

1. The relative performance is the difference between actual performance and the fitted value from a regression of financial literacy performance on mathematics and reading performance.
2. This column reports the percentage of students for whom the difference between actual performance and the fitted value from a regression is positive. Values that are indicated in bold are significantly larger or smaller than 50%.
3. This column reports the R-squared coefficient from a regression of financial literacy performance on mathematics and reading performance.
Note: Values that are statistically significant are indicated in bold (see Annex A3).
Countries and economies are ranked in descending order of the mean financial literacy score in PISA 2015.
Source: OECD, PISA 2015 Database, Tables IV.3.1, IV.3.2, IV.3.10a and IV.3.11.
StatLink http://dx.doi.org/10.1787/888933484991

Between 2012 and 2015, performance in financial literacy changed in different ways across countries and economies.

Financial literacy was assessed in both PISA 2012 and PISA 2015. Eight countries and economies participated in both assessments, including seven OECD countries and economies: Australia, the Flemish Community of Belgium, Italy, Poland, the Slovak Republic, Spain and the United States; and one partner country: Russia. However, changes in financial literacy performance over time should be interpreted with caution due to changes in how the financial literacy assessment was conducted.

Two countries improved significantly in average financial literacy: Italy (where the mean score increased by 17 points between 2012 and 2015) and Russia (where it improved by 26 points) (Figure IV.3.7). By contrast, four countries show a significant deterioration in average performance during the period: Australia (a drop of 22 score points), Poland (25 score points), the Slovak Republic (25 score points) and Spain (16 score points). The Flemish Community of Belgium and the United States show no significant change in mean performance between 2012 and 2015 (Table IV.3.1).

The two countries where mean performance improved also saw an increase in the share of students performing at Level 5: Italy (an increase of 4 percentage points) and Russia (an increase of 6 percentage points). Russia achieved a higher mean score by both reducing the proportion of low performers (by 6 percentage points) and increasing the proportion of students performing at the highest level of proficiency (Table IV.3.6).

Between 2012 and 2015, the four countries/economies where mean performance deteriorated also saw an increase in the share of students who score below Level 2: Australia (where this share grew by 9 percentage points), Poland (by 10 percentage points), the Slovak Republic (by 12 percentage points) and Spain (by 8 percentage points). The share of students who score below Level 2 also increased slightly during the period (by 3 percentage points) in the Flemish Community of Belgium.

Student performance in financial literacy is correlated with performance in mathematics and reading, but around 38% of the score reflects factors that are unique to financial literacy.

Students who do well in financial literacy are likely to perform well in other areas too, and students who have poor financial literacy skills are likely to do poorly in other subjects. On average across the 10 participating OECD countries and economies, among the top performers in financial literacy (students who attain Level 5), 45% are also top performers in mathematics, 37% are also top performers in reading and 38% are also top performers in science (Table IV.3.3). Similarly, among the low performers in financial literacy (students who score below Level 2), 65% are also low performers in mathematics, 60% are also low performers in reading and 64% are also low performers in science (Table IV.3.4).

However, on average across the 10 participating OECD countries and economies, around 38% of the financial literacy score reflects factors that are uniquely captured by the financial literacy assessment; the remaining 62% of the score reflects skills that can be measured in mathematics and/or reading assessments (Figure IV.3.11). There is, however, substantial variation across countries and economies in the percentage of the variation in financial literacy performance explained by performance in other core PISA subjects. In Brazil, Russia and the Slovak Republic, for example, performance in mathematics and reading explains less than 50% of the variation in financial literacy performance, while in Australia, the Flemish Community of Belgium and the Netherlands, performance in mathematics and reading explains more than 70% of the variation in financial literacy performance.

In addition, there are wide variations in financial literacy performance for any given level of performance in mathematics and reading. This means that the skills measured by the financial literacy assessment may go beyond or fall short of the ability to use the knowledge that students have acquired from subjects taught in compulsory education. In the Flemish Community of Belgium, B-S-J-G (China), the participating Canadian provinces and Russia, students perform better in financial literacy than students around the world who perform similarly in mathematics and reading. By contrast, students in Australia, Brazil, Chile, Italy, Lithuania, the Netherlands, Poland, the Slovak Republic and Spain perform worse than expected in financial literacy, compared with students around the world who score similarly in mathematics and reading (Table IV.3.11).

The variation in performance observed within a country/economy is much wider than the variation observed between countries/economies.

The variation in performance observed between students from the same country/economy is, in general, much wider than the variation observed between countries/economies who perform at the mean. This might be because students' gender, socio-economic status, immigrant background and experience with money might be related to the quantity and quality of opportunities available to improve their financial literacy. The difference in score points between the 10th and the 90th percentiles of performance shows the disparity in proficiency between the lowest and the highest achievers. On average across the 10 participating OECD countries and economies, the within-country performance gaps between students scoring at the 90th percentile and those at the 10th percentile in financial literacy is 285 score points, which is larger than three proficiency levels (225 score points). The largest gaps are observed in B-S-J-G (China) and in the Netherlands, at about 312 score points. By contrast, performance gaps are less than 250 score points in Italy (249 score points) and Russia (232 score points) (Table IV.4.1).

Gender differences in financial literacy exist but there is no common pattern across participating countries and economies.

Only in Italy do boys perform better than girls – by 11 score points – in financial literacy. By contrast, in Australia, Lithuania, Poland, the Slovak Republic and Spain, girls perform better than boys. In Lithuania and the Slovak Republic, the gender difference in financial literacy performance is larger than 20 score points in favour of girls. Among the countries where girls perform better than boys, in Lithuania, the Slovak Republic and Spain, average performance is below the OECD average (Table IV.4.1). In the Flemish Community of Belgium, Brazil, B-S-J-G (China), the participating Canadian provinces, Chile, the Netherlands, Peru, Russia and the United States, the difference in performance between boys and girls is not statistically significant.

Gender differences in financial literacy are observed even when comparing students who perform similarly in mathematics and reading. In B-S-J-G (China), Italy and the United States, boys score higher than girls who perform similarly in mathematics and reading. By contrast, in Lithuania, Poland and the Slovak Republic, girls score higher than boys after accounting for students' performance in mathematics and reading (but the difference is smaller than that observed before accounting for performance in the other two subjects) (Figure IV.4.4).

On average across the 10 participating OECD countries and economies, there are slightly more boys than girls among students performing at Level 1 or below (24% of boys and 21% of girls) and at Level 5 (12% of boys and 11% of girls); while there are slightly more girls than boys among students performing at Level 3 (24% of boys and 26% of girls) and at Level 4 (19% of boys and 20% of girls). In Australia, Brazil, the participating Canadian provinces, Lithuania, the Netherlands, Poland, Russia, the Slovak Republic and Spain, more boys than girls score at Level 1 or below. In Italy and the United States, more boys than girls perform at Level 5 (Table IV.4.7).

Advantaged students score the equivalent of more than one PISA proficiency level higher in financial literacy than disadvantaged students.

On average across the 10 OECD countries and economies that participated in the assessment of financial literacy, 10% of the variation in student performance within each country/economy is associated with socio-economic status. The participating Canadian provinces and Russia combine above-average performance and below-average strength of the association between performance and socio-economic status. In Brazil, Italy, Lithuania and the Slovak Republic, the percentage of variation in financial literacy performance explained by socio-economic status is also below the OECD average. By contrast, in Australia, the Flemish Community of Belgium, B-S-J-G (China), Chile and Peru, the relationship between student performance and socio-economic status is stronger than average. This relationship is strongest in Peru, where 17% of the variation in financial literacy performance is explained by socio-economic status (Figure IV.4.7).

Another way of exploring the relationship between financial literacy and socio-economic status is to consider the performance difference between relatively advantaged students (those in the top quarter of the PISA index of economic, social and cultural status) and more disadvantaged students (those in the bottom quarter of that index). This difference amounts to 89 score points, on average across OECD countries and economies – equivalent to more than one PISA proficiency level. The score-point difference between advantaged and disadvantaged students is below the OECD average in Italy, Lithuania, Poland and Russia, and above the OECD average in Australia, the Flemish Community of Belgium, B-S-J-G (China), Chile and Peru (Figure IV.4.7).

Immigrant students score 26 points lower in financial literacy, on average, than native-born students of similar socio-economic status.

About 13% of students across the OECD countries and economies that participated in the 2015 financial literacy assessment are foreign-born or have foreign-born parents. In Australia, the participating Canadian provinces and the United States, more than one in five students who participated in the assessment have an immigrant background, while in Brazil, B-S-J-G (China), Chile, Lithuania, Peru, Poland and the Slovak Republic, fewer than one in 20 students has an immigrant background (Table IV.4.17).

Being financially literate can help immigrants integrate more easily into their new country of residence. With this skill, immigrants are more likely to be aware of and use formal financial products and services, including remittances, and participate fully in their communities. Financially literate immigrant students might also help their families integrate and navigate the financial landscape in the host country.

On average across OECD countries and economies, students without an immigrant background perform better in financial literacy, by 26 score points, than immigrant students of similar socio-economic status. Among countries and economies where at least 5% of students have an immigrant background, the difference in financial literacy performance related to immigrant background is larger than 15 score points in the Flemish Community of Belgium, Italy, the Netherlands and Spain, after taking into account students' socio-economic status (Figure IV.4.10).

Discussing money matters with parents is associated with higher financial literacy.

Parents can help their children acquire and develop the values, attitudes, standards, norms, knowledge and behaviours that contribute to their independent financial viability and well-being. PISA 2015 provides evidence about how frequently students discuss money matters, such as spending, saving, banking and investment, with their parents or guardians.

Figure IV.1.2 ▪ **Snapshot of the relationship between performance in financial literacy and student characteristics**

Countries/economies with **higher** performance or **greater** equity than the OECD average
Countries/economies with values not statistically different from the OECD average
Countries/economies with **lower** performance or **less** equity than the OECD average

	Mean financial literacy score in PISA 2015	Gender differences in financial literacy performance (boys – girls)		Performance in financial literacy and socio-economic status			Performance in financial literacy and immigrant background	
		Before accounting for performance in other subjects	After accounting for performance in mathematics and reading	Score-point difference in financial literacy associated with a one-unit increase on the PISA index of economic, social and cultural status[1]	Percentage of variation in financial literacy performance associated with students' socio-economic status[2]	Difference in financial literacy performance between socio-economically advantaged and disadvantaged students[3]	Percentage of immigrant students	Difference in financial literacy performance between non-immigrant and immigrant students, after accounting for socio-economic status[4]
	Mean	Score dif.	Score dif.	Score dif.	%	Score dif.	%	Score dif.
OECD average	489	**-5**	0	38	9.9	89	12.9	**26**
B-S-J-G (China)	566	5	**11**	45	16.8	132	0.3	**170**
Belgium (Flemish)	541	0	-1	50	16.0	110	14.0	**75**
Canadian provinces	533	-5	7	38	6.9	77	33.6	-3
Russia	512	-3	5	22	3.4	46	6.9	5
Netherlands	509	-5	7	51	10.5	104	10.7	**32**
Australia	504	**-12**	2	51	12.0	107	25.0	**-11**
United States	487	2	**7**	36	11.1	97	23.1	1
Poland	485	**-15**	**-8**	34	7.8	73	0.3	c
Italy	483	**11**	**10**	24	5.5	60	8.0	**18**
Spain	469	**-10**	-7	26	9.1	79	11.0	**19**
Lithuania	449	**-27**	**-7**	31	6.7	71	1.8	19
Slovak Republic	445	**-25**	**-14**	32	6.5	80	1.2	**67**
Chile	432	4	1	35	13.3	103	2.1	**36**
Peru	403	-5	-3	36	17.2	117	0.5	**65**
Brazil	393	-8	-3	26	6.5	78	0.8	**122**

1. Also referred to as ESCS. All score-point differences in financial literacy performance associated with a one-unit increase on the PISA index of economic, social and cultural status are statistically significant.
2. This column reports the R-squared coefficient from a regression of financial literacy performance on the PISA index of economic, social and cultural status.
3. Students are considered socio-economically advantaged if they are among the 25% of students with the highest values on the ESCS index in their country or economy; students are classified as socio-economically disadvantaged if their values on the ESCS index are among the bottom 25% within their country or economy. All score-point differences in financial literacy performance between socio-economically advantaged and disadvantaged students are statistically significant.
4. A positive score difference indicate a performance difference in favour of non-immigrant students; a negative score difference indicate a performance difference in favour of immigrant students.
Note: Values that are statistically significant are indicated in bold (see Annex A3).
Countries and economies are ranked in descending order of the mean financial literacy score in PISA 2015.
Source: OECD, PISA 2015 Database, Tables IV.3.1, IV.4.8, IV.4.11, IV.4.12, IV.4.17 and IV.4.18.
StatLink http://dx.doi.org/10.1787/888933485001

On average across the participating OECD countries and economies, 16% of students reported that they never or hardly ever discuss money matters with their parents, 66% reported that they discuss money matters with their parents weekly or monthly, and 17% reported that they discuss such matters almost every day (Table IV.5.1). When asked how frequently they discuss money matters with their friends, 59% of students, on average across OECD countries and economies, reported that they discuss money matters with their friends at least sometimes (Table IV.5.2). But 54% of students discuss money matters more often with their parents than with their friends (Table IV.5.7).

In 10 out of 13 countries and economies with available data, discussing money matters with parents at least sometimes is associated with higher financial literacy than never discussing the subject, after taking into account students' socio-economic status (Table IV.5.5). Moreover, in 12 out of 13 countries and economies with available data, students who discuss money matters more often with parents than with friends score higher in financial literacy than students who discuss money matters more often with friends than with parents, after accounting for their socio-economic status (Table IV.5.7). This suggests that students can learn financial literacy skills better from their parents than from their peers. But it is also possible that more financially literate students recognise that their parents can give them more informed perspectives and advice than their friends.

Many 15-year-old students already hold a bank account.

Data from PISA 2015 reveal that, on average across OECD countries and economies, 56% of students hold a bank account. This average masks significant differences across countries, however, as in Australia, the Flemish Community of Belgium, the Canadian provinces and the Netherlands, over 70% of 15-year-old students hold a bank account, but in Chile, Italy,

Lithuania, Poland and Russia, less than 40% of students do. Less than 5% of students in each country/economy reported that they do not know what a bank account is (Table IV.5.8). Holding a prepaid debit card is somewhat less common in all countries/economies with available data, ranging from fewer than 10% of students in B-S-J-G (China), Chile and Spain, to over 30% of students in Australia, Italy and Russia (Table IV.5.9).

In Australia, the Flemish Community of Belgium, B-S-J-G (China), Chile, Lithuania, Poland, Spain and the United States, socio-economically advantaged students are at least twice as likely as disadvantaged students to hold a bank account. In Australia, the Flemish Community of Belgium, the participating Canadian provinces and the Netherlands, students without an immigrant background are more likely than immigrant students to hold a bank account (Table IV.5.11).

Experience with basic financial products is related to students' performance in financial literacy. In Australia, the Flemish Community of Belgium, the Canadian provinces, Italy, the Netherlands, Spain and the United States, students who hold a bank account perform better in financial literacy by over 20 score points than students of similar socio-economic status who do not have a bank account. The difference in financial literacy scores associated with holding a bank account, after accounting for socio-economic status, is largest in the Netherlands (72 score points) (Table IV.5.13).

On average across OECD countries and economies, 64% of students earn money from some formal or informal work activity.

Over 80% of students in Australia, the Flemish Community of Belgium, the participating Canadian provinces, Italy, Lithuania, the Netherlands, Poland, Russia and the United States receive money in the form of gifts. Receiving an allowance or pocket money is less common: between 31% (Italy) and 50% (the Flemish Community of Belgium) of students reported receiving money from an allowance or pocket money for regularly doing chores at home; between 29% (the United States) and 70% (the Flemish Community of Belgium and the Netherlands) of students reported receiving money from an allowance or pocket money without having to do any chores (Table IV.5.15).

On average across OECD countries and economies, 64% of students earn money from some formal or informal work activity, such as working outside school hours, working in a family business, or doing occasional informal jobs. More than 40% of students in Australia, the Flemish Community of Belgium, the participating Canadian provinces, Lithuania, the Netherlands, Poland, Russia and the Slovak Republic reported that they earn money from working outside school hours (e.g. a holiday job, part-time work) and more than 40% of students in Australia, the Flemish Community of Belgium, the Canadian provinces, Lithuania, the Netherlands, the Slovak Republic and the United States earn money from occasional informal jobs, such as babysitting or gardening. Less than 30% of students in all countries and economies with available data reported that they earn money from working in a family business. Earning money from selling things, such as at local markets or on line, varies from 20% of students in Italy to 48% of students in Lithuania (Figure IV.5.6).

Boys are more likely than girls to receive pocket money for doing chores, to earn money from working outside of school hours or in a family business, and from selling things they own, on average across OECD countries and economies; girls are slightly more likely than boys to receive money from occasional informal jobs and from gifts (Figure IV.5.8). Overall, these results suggest that boys are more likely than girls to be involved in regular work activities, and to receive money in exchange for work inside and outside the household, while girls in some countries and economies are more likely than boys to receive money without working, in the form of allowances or gifts. These results might indicate that boys begin to seek ways of becoming more financially independent at an earlier age than girls.

On average across OECD countries and economies, socio-economically advantaged students are more likely to receive money from occasional informal jobs, such as babysitting or gardening, and from gifts than disadvantaged students. By contrast, on average, disadvantaged students are more likely to earn money by working outside of school hours than advantaged students.

Students' financial literacy is associated with understanding the value of saving money.

PISA 2015 asked students who sat the financial literacy test how they would behave in hypothetical spending and saving situations, similar to those that they might encounter in their daily lives or in the near future. Students were asked: "If you don't have enough money to buy something you really want (e.g. an item of clothing, sports equipment) what are you most likely to do?", allowing them to choose among various hypothetical strategies, including buying the item anyway with money that should be used for something else; trying to borrow money from a family member; trying to borrow money from a friend; saving money; or not buying the item. On average across OECD countries and economies, most students (63%) reported that they would save if they want to buy something for which they do not have enough money.

Figure IV.1.3 ▪ **Snapshot of students' experience with money**

Countries/economies with performance **above** the OECD average
Countries/economies with a share of students holding a product or receiving money from a given source **above** the OECD average
Countries/economies with values not statistically different from the OECD average
Countries/economies with performance **below** the OECD average
Countries/economies with a share of students holding a product or receiving money from a given source **below** the OECD average

		Holding basic financial products			Percentage of students who receive money from:		
	Mean financial literacy score in PISA 2015	Percentage of students holding a bank account	Percentage of students holding a bank account and/or a prepaid debit card	Difference in financial literacy performance between students who hold a bank account and students who do not, after accounting for socio-economic status	Gifts of money from friends or relatives	Any allowance or pocket money (for regularly doing chores at home and/or without having to do any chores)	Any work activity (working outside school hours and/or working in a family business and/or occasional informal jobs)
	Mean	%	%	Score dif.	%	%	%
OECD average	489	56.4	60.2	**23**	83.8	59.1	64.0
Netherlands	509	95.0	95.5	**72**	89.3	73.7	82.2
Australia	504	79.0	80.7	**26**	87.6	71.2	59.0
Canadian provinces	533	77.6	79.7	**31**	90.2	72.3	55.7
Belgium (Flemish)	541	74.7	75.4	**24**	89.6	70.2	82.8
United States	487	52.8	56.1	**22**	90.6	69.3	55.6
Spain	469	52.4	54.2	**28**	79.0	37.7	55.2
B-S-J-G (China)	566	46.1	47.9	4	68.3	41.4	73.9
Slovak Republic	445	42.3	44.8	**-14**	75.7	66.4	68.6
Lithuania	449	39.0	39.1	-4	86.7	73.1	70.9
Italy	483	35.3	56.6	**23**	83.4	35.3	53.1
Russia	512	28.1	46.6	-5	87.6	62.2	70.0
Poland	485	27.8	29.6	2	82.4	56.7	71.3
Chile	432	27.2	29.7	12	69.7	38.1	56.5
Peru	403	n	n	n	n	n	n
Brazil	393	n	n	n	n	n	n

Note: Values that are statistically significant are indicated in bold (see Annex A3).
Countries and economies are ranked in descending order of the percentage of students holding a bank account.
Source: OECD, PISA 2015 Database, Tables IV.3.1, IV.5.8, IV.5.10, IV.5.13 and IV.5.15.
StatLink http://dx.doi.org/10.1787/888933485011

Some 16% reported that they would try to borrow money from family and 13% reported that they would not buy the item, on average. Few reported that they would borrow money from friends (3%) or buy the item anyway with money that should be used for something else (5%) (Figure IV.6.1).

Saving money and refraining from buying the item can be considered as safer choices than buying the item anyway, which may indicate a lack of ability to distinguish between needs and wants, or a lack of understanding that money spent on one item cannot be spent again on something else. On average across OECD countries and economies, students who perform at Level 4 or 5 in financial literacy were more than three times as likely as students who perform at or below Level 1 to report that they would save rather than to report that they would buy the item anyway, after taking into account student characteristics, such as gender, socio-economic status, motivation to achieve, frequency of discussing money matters with their parents, and performance in mathematics and reading (Table IV.6.3).

PISA 2015 also asked students who sat the financial literacy assessment to choose which one among a series of statements about saving money best applies to them. On average across OECD countries and economies, 19% of students reported that they save the same amount each week or month, 29% reported that they save some money each week or month, but the amount varies, 20% save only when they have money to spare, and 22% save only when they want to buy something (Figure IV.6.3). Few students responded that they do not save any money (6%) or that they do not save because they do not have any money (4%).

Financially literate students are more likely to expect to earn a university degree and work in a high-skilled occupation later on.

Earning a university degree represents a significant investment in the future of a young person, both in human capital and in economic terms; and there are large earnings advantages for those who complete tertiary education. In some countries and economies, students' financial literacy is associated with their ability to see the value of completing higher education and of working in highly skilled occupations (even when comparing students of similar ability in the core PISA subjects, mathematics and reading).

On average across OECD countries and economies, top-performing students in financial literacy were about twice as likely as low-performing students to report that they expect to complete university education, after taking into account student characteristics, such as their gender, socio-economic status, motivation to achieve and performance in mathematics and reading (Figure IV.6.5). In Australia, Chile, Italy, Lithuania, Peru and Spain, students performing at Level 4 or above in financial literacy were at least 70% more likely than students with similar characteristics, but who score at or below Level 1 to report that they expect to complete university education.

In some countries and economies, students' career expectations are also associated with their financial literacy, after accounting for other factors that might influence career expectations, such as students' gender, socio-economic status, motivation to achieve and performance in mathematics and reading. On average across OECD countries and economies, top performers in financial literacy were 47% more likely than low performers to report that they expect to have a high-skilled occupation when they are 30 years old, after taking into account student characteristics and ability (Table IV.6.11).

WHAT PISA RESULTS IMPLY FOR POLICY

Results from the PISA 2015 financial literacy assessment show that many students, in countries and economies at all levels of economic and financial development, need to improve their financial literacy. Policy should thus:

Address the needs of low-performing students, particularly disadvantaged students

On average across OECD countries and economies, as many as 22% of students perform below Level 2, which can be considered the baseline level of proficiency in financial literacy that is required to participate in society. Perhaps unsurprisingly, students performing at or below Level 1 are over-represented among socio-economically disadvantaged groups. Financial literacy is relevant not just for those who have large sums of money to invest; everyone needs to be financially literate, especially those who live on tight budgets and have little leeway in case they make financial mistakes. In addition, the development of digital financial services means that these services are becoming increasingly accessible to everyone, particularly to segments of the population, including young people, who had been previously excluded.

While disadvantaged students are among the least financially literate, they probably need some financial knowledge and skills the most. Large disparities in skills among 15-year-olds signal that not all students are offered an equal opportunity to develop their financial literacy. If socio-economic disparities are not addressed early, they are likely to lead to even larger gaps in financial literacy as students become adults. Low-performing disadvantaged students need to be supported to ensure that they can safely navigate the (increasingly digital) financial system as they become more independent.

Provide equal opportunities for learning to boys and girls

In addition to mean differences, boys and girls show different weaknesses at different points of the performance distribution. In 9 out of 15 countries and economies, more boys than girls perform at or below Level 1, while in 2 countries, more boys than girls perform at the top (Level 5). Gender differences are likely to be related to different factors, including boys' and girls' different performance in mathematics and reading, and different levels of exposure to money matters. Not only should boys be helped to reach a minimum level of financial skills and girls be helped to reach the top, but both girls and boys should have access to relevant opportunities to develop their financial skills.

Help students make the most of learning opportunities in and outside of school

Financial literacy performance is strongly correlated with performance in mathematics and reading, even though a significant part of the skills tested in this assessment are unique to financial literacy.

Students should be helped to make the most of what they learn in subjects taught in compulsory education, and to foster transversal competencies, such as problem solving and critical thinking, in order to acquire knowledge and develop skills that can be applied to financial situations and decisions.

One way of helping students improve their financial literacy could be to complement what they learn through core subjects in school with more specific financial literacy content. Several countries have started integrating some financial literacy topics into existing subjects, such as mathematics or social sciences. As dedicated financial literacy approaches are relatively new (where they exist), the PISA financial literacy assessment cannot yet provide conclusive evidence on what strategies yield superior outcomes in financial literacy. More evidence is needed to show the extent to which infusing financial literacy elements in existing subjects is effective as compared to other approaches in raising students' levels of financial literacy.

Fostering the development of financial literacy skills in school could also be a way to offer students learning opportunities beyond those provided by parents and peers, to help overcome socio-economic inequalities, and to expose students to more balanced messages than those they may receive through media and advertising.

Evidence that there is a positive relationship between performance in financial literacy and holding a bank account or receiving gifts of money might suggest that some kind of experience with money or financial products could provide students with an opportunity to reinforce financial literacy, or that students who are more financially literate are more motivated to use financial products – and perhaps more confident in doing so. Parents are very likely to be involved in these experiences, as they may have given their children money through allowances or gifts, opened a bank account for them and taught them how to use it.

Even under the supervision of parents, it is important that young people can access financial products and services that are safe and regulated, that they begin to know their rights and responsibilities as consumers, and that they start to have an understanding of the risks associated with the different products and services, so that they can safely approach the financial system even before they acquire full legal rights to enter into financial contracts by themselves. Again, socio-economically disadvantaged students should be supported even more, as they have lower financial literacy, are less likely to have first-hand experience with holding a bank account, and are less likely to receive gifts of money than advantaged students.

Young people can be further supported to learn by doing through after-school initiatives. In some countries, governments and not-for-profits are offering young people videos, competitions, interactive tools and serious games – via digital and/or traditional platforms. These initiatives are used not so much to disseminate information but to provide young people with applied knowledge and allow them to safely experience financial situations and decisions before they encounter them in real life.

Target parents at the same time as young people

Parents have a role to play in developing their children's financial literacy both through the resources that they make available to them and through direct engagement. In all countries and economies with available data, more than one in two students reported that they discuss money matters with their parents on a weekly or monthly basis. In 10 countries and economies, discussing money matters with parents is associated with higher financial literacy than never discussing the subject, even after taking into account students' socio-economic status.

While developing policies and initiatives aimed at directly improving the financial literacy of young people, countries should continue to strengthen their initiatives targeting adults, particularly disadvantaged adults, through national strategies for financial education. Engaging parents and families is a way of targeting one of the most important sources of learning for young people, and it can complement what young people can learn from other sources.

Evaluate the impact of initiatives in and outside of school

More and more financial education initiatives are being developed in and outside of school, making it even more important to determine which approaches work best. Governments and other not-for-profit and private stakeholders involved should prioritise rigorously evaluating the impact of their initiatives and disseminating the findings to advance knowledge in the field. The OECD and its International Network on Financial Education (INFE) can build on these findings and act as a clearinghouse, with the aim of identifying more effective approaches to improve students' financial literacy.

2

Assessing financial literacy in PISA 2015

The PISA 2015 assessment of financial literacy among 15-year-old students was the second of its kind. It assesses the extent to which students in 15 participating countries and economies have the knowledge and skills, acquired both in and outside of school, that are essential for making financial decisions and plans for their future. This chapter highlights the importance of financial literacy for students in their current lives and as they move into adulthood. It then describes students' exposure to financial education at school. The chapter concludes with a description of how financial literacy is defined and assessed in the 2015 financial literacy assessment, and presents sample test questions.

Over the past decades, developed and emerging countries and economies have become increasingly concerned about the level of financial literacy of their citizens, particularly among young people (OECD, 2014a). This initially stemmed from concern about the potential impact of shrinking public and private welfare systems, shifting demographics, including the ageing of the population in many countries, and the increased sophistication and expansion of financial services. Many young people face financial decisions and are consumers of financial services in this evolving context. They are likely to face growing complexity and risks in the financial marketplace as they move into adulthood.

These challenges have led to the recognition that better knowledge and understanding of financial concepts and risks could help improve financial decision making among adults and young people, in both their current and future lives. As a result, financial literacy is now globally recognised as an essential life skill. Financial education is acknowledged as a complement to financial consumer protection, inclusion and regulation, as a way to improve individual decision making and well-being, and to support financial stability and development. This recognition is reflected in the 2012 G20 leaders' endorsement of the OECD/International Network on Financial Education (INFE) High-level Principles on National Strategies for Financial Education (G20, 2012; OECD/INFE, 2012) and in the 2013 call for a Policy Handbook on the Implementation of National Strategies for Financial Education, complementing the Principles by supporting their implementation in interested countries (OECD/INFE, 2015).

This chapter begins by providing a rationale for the financial literacy assessment in PISA 2015, highlighting that many students in the participating countries and economies already have a bank account, hold prepaid debit cards and earn money from work. The chapter asserts that students will need to have financial knowledge and skills to be able to conduct financial operations at work and in everyday life in their future, as shown in the OECD Survey of Adult Skills (OECD, 2016a). Students' exposure to financial education at school is also discussed. The chapter then describes how financial literacy is defined and assessed in the PISA 2015 financial literacy assessment, and presents some test questions.

What the data tell us

- People engage in basic financial activities from a young age. PISA data reveal that, on average across 10 participating OECD countries and economies, about six in ten students have a bank account and/or a prepaid debit card or earn money from some type of work activity. PIAAC data reveal that more than one in three 16-24 year-olds in Australia, the Netherlands and the United States reported that they read bills, invoices, bank statements or other financial statements at least once a week in their everyday life.
- Seven out of the 15 participating countries and economies – Australia, Brazil, Canada, the Netherlands, the Russian Federation, Spain and the United States – developed a national strategy for financial education specifically addressing young people among their target audiences.
- Most of the participating countries and economies – Australia, the Flemish Community of Belgium, Brazil, Canada, China, Italy, Lithuania, the Netherlands, Peru, the Russian Federation, the Slovak Republic, Spain and the United States – started introducing financial topics in the curriculum or have developed financial education pilot programmes in school.

THE IMPORTANCE OF FINANCIAL LITERACY FOR YOUNG PEOPLE

Policy makers are increasingly recognising the importance of developing financial literacy skills among young people. Many young people already face financial decisions and are consumers of financial services, such as choosing among mobile phone plans or using a savings account. As they approach the end of compulsory education, young people in school also have to decide, with their parents, whether to continue with post-compulsory education and how to finance such education (Box IV.2.1). As they become young adults, they will soon have to perform more financial operations and engage in financial activities, both as part of their work and in everyday life.

PISA data indicate the extent to which 15-year-old students are already using money and are involved in financial decisions. Figure IV.2.1 shows that, on average across 10 participating OECD countries and economies, about six in ten students have a bank account and/or a prepaid debit card. More than half of students in Australia, the Flemish Community of Belgium, the participating Canadian provinces (British Columbia, Manitoba, New Brunswick, Newfoundland and Labrador, Nova Scotia, Ontario and Prince Edward Island), Italy, the Netherlands, Spain and the United States have a bank account and/or a prepaid debit card (Table IV.5.10). Moreover, students also earn some money from small jobs outside of school hours, from occasional jobs, such as babysitting or gardening, or from helping in family businesses.

Box IV.2.1 **Financial literacy needs for choosing student loans**

Students nearing the end of compulsory education will soon be taking decisions that will have significant consequences for their adult lives, such as deciding whether to continue their studies or whether to enter the labour market. In some countries, this decision also includes how to finance tertiary education and whether to take a student loan. Tuition fees in tertiary education vary considerably across countries, making loans more or less relevant. Among the countries participating in the PISA 2015 financial literacy assessment, average annual fees for a bachelor's degree are over USD 4 000 in Australia and Canada, and over USD 8 000 in the United States (OECD, 2016b).

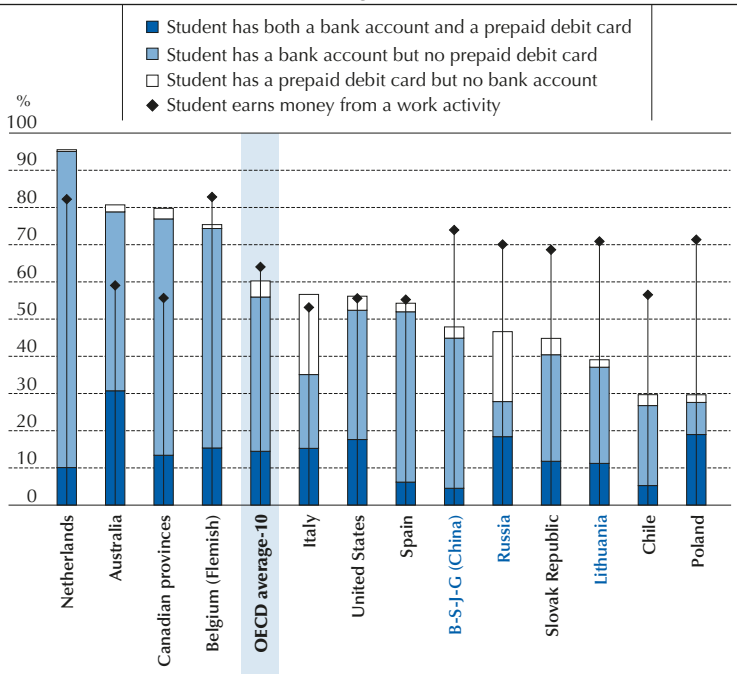
Countries differ significantly in the extent to which student loans are offered and used, and in how they work. Depending on national student loans characteristics, students intending to take a loan may have to choose between public and private loans and between different repayment methods (based on fixed instalments or contingent on earnings). Students and their families should also be aware of any special conditions on public or state-guaranteed loans, such as reduced interest rates, favourable repayment system or remission/forgiveness mechanisms. Depending on the combination of these features, students and their families would need to be proficient in financial literacy to make a choice.

Among the countries participating in the PISA 2015 financial literacy assessment, almost eight in ten students in Australia at bachelor's, master's or doctoral levels had a public student loan in 2013/14; in the United States, 62% of bachelor's-degree students and 67% of master's-degree students had a public student loan in the same period (OECD, 2016b).

As a result of taking loans, most students are in debt at graduation. In the Netherlands, students graduate with an average debt of about USD 18 000, and in Canada, students graduate with an average debt of about USD 12 000 (OECD, 2016b). The extent to which this can be a problem mostly depends on the amount of debt, the uncertainty of graduates' earnings and employment prospects, and the conditions for repayment of the loans.

Figure IV.2.1 ▪ **Students who use a basic financial product and/or earn money from work**

Percentage of students



Note: Work activities include working outside school hours, working in a family business and occasional informal jobs.
Countries and economies are ranked in descending order of the percentage of students who have a bank account and/or a prepaid debit card.
Source: OECD, PISA 2015 Database, Tables IV.5.10 and IV.5.15.

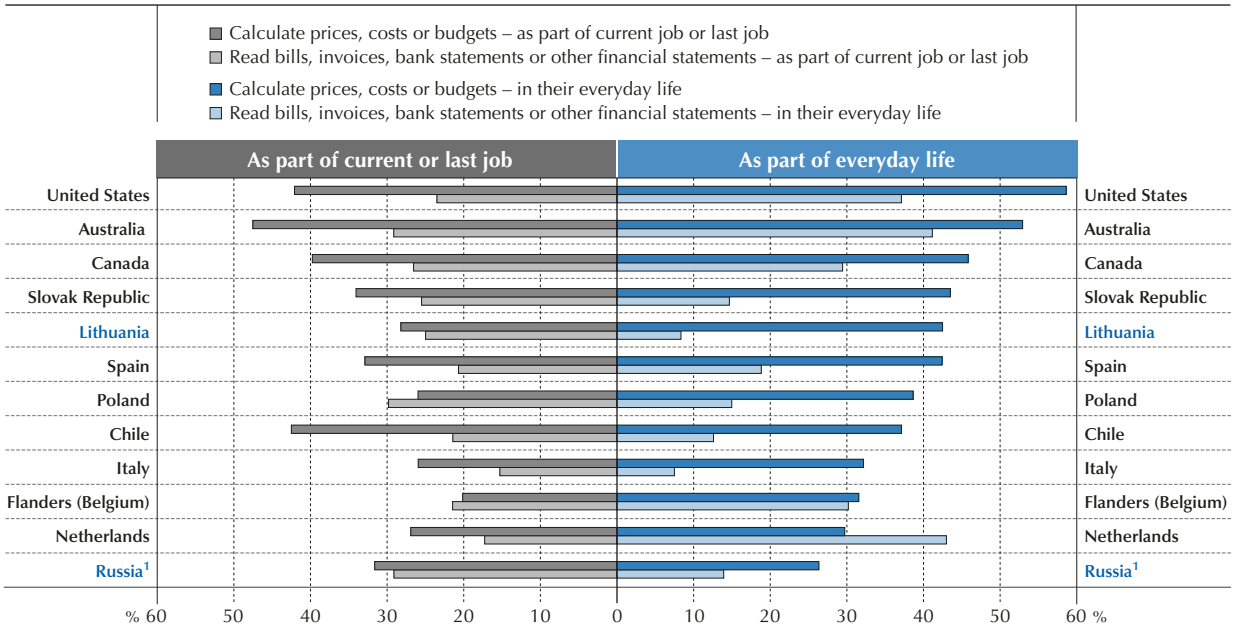
StatLink http://dx.doi.org/10.1787/888933485025

Earning money from work may include formal (part-time) jobs as well as occasional and informal jobs, especially in countries where young people cannot work legally at the age of 15. Figure IV.2.1 also shows that, on average across 10 participating OECD countries and economies, about six in ten students earn money from some type of work activity (64%). More than seven in ten students in the Flemish Community of Belgium, Beijing-Shanghai-Jiangsu-Guangdong (China) (hereafter "B-S-J-G [China]"), Lithuania, the Netherlands, Poland and the Russian Federation (hereafter "Russia") earn money from work (Table IV.5.15).

Furthermore, data from the OECD Survey of Adult Skills (PIAAC) show the extent to which young people and adults engage in basic financial activities (OECD, 2016a). The results reported in this paragraph focus on those countries and economies that participated in both the OECD Survey of Adult Skills in 2008-13 and the 2015 PISA financial literacy assessment. Figure IV.2.2 shows that more than one in three 16-24 year-olds in Australia, the Netherlands and the United States reported that they read bills, invoices, bank statements or other financial statements at least once a week in their everyday life; and more than one in four 16-24 year-olds in Australia, Canada, Poland, Russia and the Slovak Republic indicated that they read such financial statements at least once a week as part of their current or last job. More than 50% of 16-24 year-olds in Australia and the United States reported that they calculate prices, costs or budgets at least once a week in their everyday life; and over 40% of all 16-24 year-olds in Australia, Chile and the United States do/did these kinds of financial calculations at least once a week as part of their current or last job. In many of these countries, adults (16-65 year-olds) reported that they calculate prices, costs or budgets to a similar extent as young adults; and in most countries, more adults than young people reported that they read bills, invoices, bank statements or other financial statements (Table IV.2.1).

Figure IV.2.2 ▪ **Young people engaged in basic financial activities**

Percentage of 16-24 year-olds who reported that they do the following activities at least once a week



1. The sample for Russia does not include the population of the Moscow municipal area.

Countries and economies are ranked in descending order of the percentage of 16-24 year-olds who reported that they calculate prices, costs or budgets at least once a week in their everyday life.

Source: OECD, Survey of Adult Skills (PIAAC) (2012, 2015), Table IV.2.1.

StatLink http://dx.doi.org/10.1787/888933485034

Current trends are likely to make the need for financial literacy skills even more important in the future. First, future generations are likely to face more challenging financial choices if the current trend of growing financial complexity continues. Financial education will therefore have a role, in conjunction with financial consumer protection and regulation policies, in equipping people with the financial literacy needed to understand more complex products and services, choose those most appropriate for them, and protect themselves from financial scams. The spread of digital financial services may open up new opportunities for poor and financially excluded people to access the formal financial system,

but it can also expose consumers to new security threats and risks of fraud that are compounded when low financial literacy is combined with poor digital skills and low cyber security awareness (OECD, 2017). The increasing availability of online credit – especially unlicensed instruments that often target young and/or inexperienced consumers – will pose further challenges for financial consumer protection and education (CCC, 2015; OECD, 2017).

Second, future generations in some countries will probably bear more financial risks during their lives than the current generation. Depending on national circumstances, factors that may contribute to growing financial risks include increased life expectancy, less welfare protection, more "individualised" pensions, and more uncertain economic and job prospects due to digitalisation, technological change, globalisation and changes in work organisation (OECD, 2016c).

Third, growing income and wealth inequality will mean that socio-economically disadvantaged groups will need greater financial literacy to avoid being left behind. Adults' financial literacy has been shown to be strongly correlated with their education, income and wealth (Lusardi and Mitchell, 2014; OECD, 2016d), and wealth inequality is likely to be correlated with inequality in financial knowledge (Lusardi, Michaud and Mitchell, 2012). Providing youth with financial education may help bridge disparities in financial literacy due to differences in students' socio-economic status. Parents with lower levels of education, income or wealth are probably less well-equipped than other parents to transmit financial knowledge to their children (Lusardi, Mitchell and Curto, 2010). Relying on parents alone to provide their children with a financial education may maintain inequalities not just in levels of financial literacy, but also in factors closely correlated with it, especially household wealth.

Taking all of these factors into account, the OECD is developing a conceptual learning framework to identify the knowledge, skills, attitudes and values that young people will need to thrive in society (Box IV.2.2).

Box IV.2.2 **The Future of Education and Skills: OECD Education 2030 Framework**

As societies change, new concepts and bodies of knowledge emerge that are considered to be of key importance for students to learn in school. Today, these include global competence/global citizenship, financial literacy, foresight, innovation and computational thinking.

The OECD is developing a conceptual learning framework, known as *The Future of Education and Skills: Education 2030*, to outline the relevant knowledge, skills, attitudes and values that young people need to acquire in order to understand, participate in and shape a fast-changing world. Together with a working group composed of representatives of interested countries, organisations and experts, the OECD will establish a common grammar and language, first to underpin curricula design and then to build measurement and assessment tools and develop specific interventions. The project will initially focus on secondary school curricula with the expectation that ultimately all stages of learning, from early education to lifelong learning activities, will be involved.

The project currently explores key curriculum issues, including curriculum overload, time lag between today's curriculum and future needs, quality of curriculum content, equality and equity in the curriculum, and implementation challenges. On the issue of curriculum overload, many schools, teachers and students are receiving demands for new topics, such as global competence/global citizenship, financial literacy, foresight, innovation, well-being and computational thinking. Curriculum designers have raised concerns about curriculum overload if these concepts are added as new subjects. To respond to these concerns, the working group conducted an exercise to decompose such complex concepts into aspects of knowledge, skills, attitudes and values to explore whether they are transferable across relevant subjects in existing curricula.

Source: OECD (2016e), Education 2030, OECD Directorate for Education and Skills website, www.oecd.org/edu/school/education-2030.htm.

PROVIDING FINANCIAL EDUCATION FOR YOUNG PEOPLE

Recognising the importance of developing financial literacy skills among young people and adults, a growing number of countries have developed and implemented nationally co-ordinated approaches to financial education, usually referred to as national strategies. Box IV.2.3 describes what is meant by a national strategy for financial education.

Box IV.2.3 **Improving financial literacy within a country through national strategies for financial education**

A growing number of countries is developing and implementing national strategies for financial education. A national strategy for financial education is defined as "a nationally co-ordinated approach to financial education that consists of an adapted framework or programme that:

- recognises the importance of financial education – including possibly through legislation – and defines its meaning and scope at the national level in relation to identified national needs and gaps
- involves the co-operation of different stakeholders as well as the identification of a national leader or co-ordinating body/council
- establishes a roadmap to achieve specific and predetermined objectives within a set period of time, and
- provides guidance to be applied by individual programmes in order to efficiently and appropriately contribute to the national strategy" (OECD/INFE, 2012).

As of 2015, more than 50 countries at different income levels reported developing or implementing a national strategy, with a few more reporting that they are planning to develop such a strategy (OECD/INFE, 2015). National strategies for financial education are usually co-ordinated by one or more public authorities in finance (such as the central bank, ministry of finance or other financial regulator) and education (typically the ministry of education). Most of these strategies target both young people in and out of school, and adults (targeting, for instance, low-income people, people who do not have access to the financial system, rural residents and migrants).

National strategies often include a focus on young people (OECD/INFE, 2015). Below are descriptions of the national strategies for financial education, with a focus on provisions for young people, in countries that participated in the 2015 PISA financial literacy assessment. Chile, China, Peru and Poland are in the process of designing a national strategy for financial education; other countries are already implementing one.

The Australian National Financial Literacy Strategy was first developed in 2011 and then revised in 2014. It is led by the Australian Securities and Investments Commission (ASIC). One of the key strategic priorities for the period 2014-17 is to "Educate the next generation, particularly through the formal education system". This is implemented by promoting a curriculum-based approach to teaching financial literacy in primary and secondary schools, building teachers' capabilities, developing resources for teachers and students linked to the Australian Curriculum, extending opportunities to engage students in the post-compulsory years of education, with a particular emphasis on students in the VET sector, and engaging parents and families to help amplify the core messages students and young people learn through formal education (ASIC, 2014).

In Brazil, the National Strategy for Financial Education was established in 2010 and is led by a committee composed of eight government agencies (including the central bank, the ministry of finance and the ministry of education) and four financial industry associations. The national strategy includes a financial education programme in school, which was initially developed for high schools in 2010-11 and is now being extended to primary schools.

In 2014, the government of Canada appointed a Financial Literacy Leader (working within the Financial Consumer Agency of Canada) to collaborate and co-ordinate activities with stakeholders from the public, private and non-profit sectors. The national strategy aims to strengthen the financial literacy of all Canadians and to empower them to manage money and debt wisely; plan and save for the future; and prevent and protect against fraud and financial abuse (FCAC, 2014).

The National Strategy for Financial Education in the Netherlands was launched in June 2008 as the Money Wise Action Plan, and then revised to span the period 2014-18. The Steering Group that leads the national strategy is chaired by the ministry of finance and includes other public authorities and not-for-profit organisations. The national strategy focuses on key life events and the related target groups. One target group that is given special attention is children/young people (Money Wise, 2014).

Russia developed a comprehensive nationwide programme on financial literacy and began its implementation in 2011. The process was then formalised into a national strategy, led by the ministry of finance. Students in schools and universities are among the main target groups.

Spain developed its first Financial Education Plan in 2008, which was then revised for the period 2013-17. One of the key components of the plan is the implementation of financial education in schools (CNMV and Banco de España, 2013).

In the United States, the Financial Literacy and Education Commission (chaired by the Secretary of Treasury, and comprising 23 federal government entities) released the National Strategy for Financial Literacy in 2011, with an update in 2016 (FLEC, 2016). The 2016 national strategy update incorporates the Financial Literacy and Education Commission's focus on "Starting Early for Financial Success", an approach to attain the goals of the national strategy based on the understanding that young people who develop the fundamentals of financial literacy are more likely to become financially secure adults. In 2013, the President of the United States created the President's Advisory Council on Financial Capability for Young Americans, with the aim of advising the President and the Secretary of the Treasury on how to promote financial capability among young Americans in schools, families, communities and the workplace, and through the use of technology.

Introducing financial literacy in school

Many of the existing national strategies for financial education specifically identify young people and students among their main target groups and support the introduction of financial education in schools. The 2005 Recommendation of the OECD Council on Principles and Good Practices in Financial Education and Awareness advised that "financial education should start at school. People should be educated about financial matters as early as possible in their lives" (OECD, 2005). The Recommendation recognised the importance of teaching young people key life skills before they start to become active financial consumers, and the relative efficiency of providing financial education in schools rather than attempting remedial actions in adulthood.

A growing number of countries teach financial education in schools, even though provision remains limited. In many cases, this is done by introducing financial topics in the curriculum, mostly following a cross-curricular approach. To minimise curriculum overload, countries typically integrate financial literacy into other subjects and existing courses, rather than introducing an additional subject into already crowded curricula. Some countries have developed financial education pilot programmes in a selected number of schools, before formally introducing financial education elements into the national curriculum. Students may improve their financial skills by acquiring transversal competencies, such as problem solving and critical thinking, in other subjects; at the same time, financial literacy examples can be used as a real-life context for teaching mathematics and other subjects (Koh and Low, 2010).

More countries are teaching financial education in school, either through the curriculum or through pilot programmes, than were doing so when the 2012 PISA financial literacy assessment was conducted. Below are details on the approach followed to introduce financial education in schools by countries and economies participating in the PISA 2015 financial literacy assessment.

Integrating financial education topics into existing subjects

Some countries and economies have integrated financial education topics into existing subjects during recent curricula revisions.[1]

The teaching of financial education in Australian schools was guided by a nationally endorsed education learning framework, the National Consumer and Financial Literacy Framework (MCEECDYA, 2011) which informed the development of the Australian curriculum. States and territories began a phased approach to implementing the Australian curriculum in 2012. Financial literacy has been included in the Australian curriculum in primary and secondary education predominantly in the learning areas of mathematics, humanities and social sciences, and the general capability of numeracy. Financial literacy is also taught through other aspects of the curriculum. Although financial education is part of the national curriculum, Australian states and territories manage schools and determine the curriculum within their jurisdiction based on the national curriculum. In 2012, the Australian Securities and Investments Commission (ASIC) introduced the MoneySmart Teaching programme. The programme contains specific professional development modules in financial literacy for teachers, aligned with the Australian Professional Standards for Teachers, as well as resources to support teachers in the classroom, aligned with the Australian Curriculum. This programme is freely available nationally and delivered either face to face or online through ASIC's MoneySmart website.[2]

In the Flemish Community of Belgium, learning outcomes for secondary schools that came into effect in 2010-11 cover typical financial education topics, such as budgeting and consumer rights, alongside economics topics, such as labour, goods and services, welfare and poverty. They are mandatory in all lower and upper secondary schools, but schools and

teachers can decide how and in which subjects these cross-curricular competencies should be integrated. In addition, vocational upper secondary schools can offer several general subjects following a thematic and project-based approach; these integrated subjects can also include financial education. The Financial Services and Markets Authority (FSMA) develops teaching material and offers teacher training through its wikifin.be portal.

In Lithuania, financial education is part of the curriculum within the "economy and entrepreneurship" subject. Economy and entrepreneurship is taught as a compulsory subject in lower secondary education, and as an optional course in upper secondary education.

In the Netherlands, basic financial education elements are included in primary education (calculations with money) and in secondary education (household economics). After 2000, an increasing number of organisations started providing additional financial education materials to schools. Since 2008, a co-ordinated effort has been made, within the national strategy for financial education, to collect tested teaching material through the MoneyWise website. Teachers and schools use this material on a voluntary basis.

In Peru, economic and financial education topics were incorporated into the national curriculum in 2016. In secondary schools, they are taught as part of history, economics and social science. The minister of education and the Peruvian Superintendence of Banking, Insurance and Private Pension Funds developed pedagogical support for teachers and training programmes.

In the Slovak Republic, financial literacy became part of the national curriculum in 2014/15, as part of different subjects in primary and secondary education. The teaching of financial literacy is guided by the national financial literacy standards, approved by the ministry of education in 2014. The ministry of education also published guidelines for teaching financial literacy, outlining possible methods, forms and activities to integrate financial literacy in the school curriculum. In secondary education, financial education is incorporated in various subjects, including mathematics, civic education and ethics.

In other countries, there is significant heterogeneity at the state/regional level in the extent to which financial literacy is part of the curriculum.

In Canada, financial literacy components are included in different subjects and to a different extent in the various Canadian provinces. In most of the provinces that participated in the PISA 2015 financial literacy assessment, financial literacy is part of the high school curriculum within mathematics, career exploration/development, business or social studies.

In China, some personal money-management topics have been included in the national curriculum in primary and secondary education in subjects related to ethics, society and history since the 1990s as part of the popularisation of knowledge about the market economy. Since 2001, some flexibility is granted at the school and regional levels to develop curricula tailored to the local context. For instance, the local government of the Pudong New Area in Shanghai has been promoting regular training on finance in primary and lower secondary schools since 2011 (Gao, 2014).

In the United States, decisions about providing financial education in high school vary at the state and district levels. In some states, schools have to offer an optional course in personal finance that is implemented, or not, on a district-by-district basis. In other states, specific personal finance or economics education content is taught within another course (personal finance is typically incorporated in economics, mathematics or social sciences). More substantial mandates require all schools within a state to teach personal finance as a standalone course, and students have to complete a certain number of credits in the subject for high school graduation. Standalone courses in personal finance are mandatory in five states (Council for Economic Education, 2016; Pelletier, 2015; Urban and Schmeiser, 2015).

Even in countries that introduced financial education into the curriculum, the degree to which students are actually exposed to elements of financial literacy may differ from what the curriculum provides. The school curriculum defines the intended objectives of the education system in the content covered and time allocated to each subject. But what matters for students' learning is the implemented curriculum, or the content actually delivered by the teachers. This is especially true for a new topic like financial education. Even when provisions are made in the curriculum, exposure to financial education may be limited, for a variety of reasons. Education authorities at the local level may have autonomy in implementing the national curriculum, and schools may have autonomy in the extent to which, and modalities through which, they have to implement the curriculum. In addition, teachers may not cover all the elements of financial education included in the curriculum if they do not feel sufficiently engaged or prepared to teach the new content, or if little teaching

material and professional development is available. Students might not be much exposed to financial education topics if financial education is integrated into optional courses or if those topics are expected to be taught only for a limited number of hours within the main subject. Even among the countries that offer financial education, almost none of them specifically assesses financial literacy skills.

Developing financial education pilot programmes

Some countries, including Brazil, Italy, Russia and Spain, have developed or are developing pilot programmes for financial education in school before formally introducing financial education into the curriculum. In these countries, the number of schools and students that are exposed to financial education elements is limited due to the experimental nature of the programme. However, pilot programmes are useful for evaluating the impact of the programme content and teaching methods on students' financial literacy (Box IV.2.4).

Box IV.2.4 **Evaluating financial education in school**

A growing number of studies assess the impact of programmes offering financial education in schools, as part of the curriculum or as pilot projects. In particular, some experimental studies on secondary school students have assessed the extent to which financial literacy can be improved through formal financial education by focusing on random assignments to financial education in school. A number of recent meta-analyses have shown substantial heterogeneity in the ability of different programmes to improve financial knowledge and skills (Fernandes et al., 2014; Kaiser and Menkhoff, 2016; Miller et al., 2015). Despite the growing number of evaluation studies, however, the evidence base of rigorously evaluated financial education programmes targeting specifically students in school is not large yet, making it difficult to draw general conclusions on which programme features, teaching materials or teaching methods are the most effective, and calling for further evidence to know which approaches work best. Below are examples of evaluation studies in secondary education, including some experimental assessments.

The largest impact assessment of teaching financial education in schools was conducted in **Brazil** in 2010/11 using a randomised control trial. The financial education curriculum was developed by a team of education experts, psychologists and sociologists. The content includes innovative material designed to capture the interest of young adults and to be relevant to their lives. Teacher guidelines explain how to integrate these case studies into the regular curriculum. The results of the evaluation revealed higher average financial literacy, higher saving propensity and a greater likelihood to engage in financial planning among students who participated in the programme than among students who did not participate (Bruhn et al., 2016).

Most other evaluated programmes were conducted on smaller-scale projects. The Bank of **Italy** has been implementing a financial education programme in schools since 2007. A before-and-after evaluation conducted in 2008/09 showed that the programme was successful in increasing the financial knowledge of students who had attended the programme (Romagnoli and Trifilidis, 2013). Another financial education programme offered to high school students in Italy included a randomised evaluation. Results show improved financial knowledge among the students who attended the programme compared with the control group (Becchetti and Pisani, 2011).

Spanish authorities developed a pilot programme, starting in 2010/11, for introducing financial education in compulsory secondary schooling across the country. The pilot was evaluated in 2015 in the Madrid region, and the results showed that the programme increased participating 15-year-old students' financial knowledge by between one-fourth and one-third of a standard deviation (Hospido, Villanueva and Zamarro, 2015).

Lührmann et al. (2015) report the results of a field experiment evaluating the impact of a short financial education session delivered by a non-profit organisation to high schools students in **Germany**. After the training, teenagers showed a significant increase in some dimensions of financial knowledge, e.g. their ability to assess risks correctly, a decrease in the prevalence of impulse purchases, and an increase in intended savings in a hypothetical task. Walstad et al. (2010) use a quasi-experimental design to study the effect of a DVD-based curriculum for high school students in the **United States**. The results showed that exposure to the financial education videos made a positive contribution to students' knowledge of personal finance after controlling for other explanatory factors.

Financial education was initially introduced in Brazilian high schools through a pilot in 2010-11 over 800 schools in six states (Bruhn et al., 2016). The pilot involved preparing a financial education curriculum, developed by a team of education experts, psychologists and sociologists. The content included innovative material designed to capture the interest of young adults and to be relevant to their lives. It 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.[3] Teachers have full autonomy whether to use this material and integrate elements of financial education into their courses. A pilot for primary schools is being developed.

In Italy, financial education is not part of the national school curriculum, but the central bank and the ministry of education have been implementing a financial education programme in interested schools since 2007. Financial education is taught by classroom teachers, trained by Bank of Italy staff. This programme reached over 60 000 high school students in 2015/16.

Some financial literacy topics are taught in Russian schools as part of social science in lower secondary education, and in social studies and/or economics in upper secondary schools. The ministry of finance has been running a pilot programme since 2011 in order to deepen and expand students' exposure to financial literacy. The pilot programme involves defining a learning framework on core financial competencies, developing teaching material, training teachers, and setting up specific initiatives in selected schools. In 2016, textbooks and teaching materials were evaluated in five regions, with a view to scaling up the whole programme nationwide.

In Spain, financial education topics were included in 2014 in the primary education curriculum as part of social sciences, and in the first year of upper secondary education (fourth year of the Educación Secundaria Obligatoria - ESO) as part of economics. Economics is offered only to students choosing a general/academic path and is optional for students within this path. Given the decentralisation of competencies in the Spanish education system, each education administration can configure its own course offering and can develop, expand or qualify the minimum content included in national legislation. In practice, all education administrations have included the subject of economics in their offerings, and almost all have integrated all the content described in the national legislation. Since 2010/11, in parallel with the revision of the curriculum, the Bank of Spain and the Securities and Exchange Commission have been implementing a financial education programme in schools within the scope of the national strategy for financial education. Schools participate on a voluntary basis and teachers can use resources available on the national strategy website. Since 2010, the financial authorities also launched a financial education website (www.finanzasparatodos.es). The website, which has received almost two million visits, is addressed to all members of the education community (students, teachers, families, etc.) and contains teaching and learning resources (available through the portal gepeese.es).

Offering young people financial education through extracurricular and after-school initiatives

Young people can learn about financial matters from a variety of sources, including their parents, friends, schools, extracurricular activities, and through personal experiences, such as making purchases, using a mobile phone, opening a bank account, or taking a student loan. Governments, together with not-for-profit organisations and financial institutions, also try to teach young people basic financial literacy skills outside of normal school hours, whether through extracurricular activities or after-school initiatives. Extracurricular activities may include participation in events dedicated to money or saving, school visits from staff of a financial institution, stock market games, visits to a money museum, or events where students can create their own small business. After-school initiatives include games, comics, videos, websites, mobile apps, and radio programmes. Below are a few (non-exhaustive) examples of different delivery methods and channels in the countries and economies participating in the PISA 2015 financial literacy assessment.

Most countries and economies participating in the PISA 2015 financial literacy assessment organise events to raise awareness about personal finance issues, as part of internationally co-ordinated events (such as the Global Money Week), and/or as independent events (such as the Financial Literacy Month in Canada and the United States). For instance, the ministry of finance in the Netherlands organises an annual National Money Week, in collaboration with other public authorities, non-profit organisations and the financial industry. During the week, stakeholders organise numerous activities to teach school children how to manage money through workshops, guest lessons, school competitions, TV programmes and quizzes. Activities should not have commercial objectives and have to be approved by teachers.

The Catholic University of Leuven in Belgium organises one-day workshops for secondary students on several interdisciplinary topics, including financial education. In Canada, the Ontario Teachers' Federation developed online resources – including video and interactive tools – to teach young people how to spend less than they have, how to

finance post-secondary education, and what to do if they cannot repay a student loan. The museum of the National Bank of Belgium organises both interactive activities for students and classes for teachers on financial and economic topics. Museums that offer exhibitions or programmes about money or savings are present in China and Italy.

The Consumer Financial Protection Bureau in the United States co-ordinates the Youth Employment Success Initiative (YES), which provides technical assistance to over 20 municipalities across the country, helping them integrate financial knowledge and skills-building into existing youth employment and training programmes. The goals of the YES initiative include increasing the number of young people who can open safe accounts, have access to age-appropriate financial education, and can feel empowered to plan for their financial future.

Several public and not-for-profit organisations have developed serious games with financial education content in order to make money-related topics more engaging for young people. The website of the Spanish national strategy for financial education contains a "games bank" for children and young people. The Doorways to Dreams Fund in the United States also designed several free online and mobile games that aim to improve personal financial skills, knowledge and self-confidence.

The Queensland Government in Australia organises an annual Buy Smart Competition in which students have to research a consumer issue – such as scams, consumer rights and responsibilities, product safety, mobile phones, spending wisely, buying and running a car, or credit – and present it creatively to a target audience of their choice. In Chile, both the central bank and the Superintendency of Banks and Financial Institutions organise competitions for students in schools about economic and financial themes.

THE FINANCIAL LITERACY ASSESSMENT IN PISA 2015

The PISA 2015 assessment of financial literacy among 15-year-old students was the second of its kind. Results of the first assessment, which was conducted in 18 countries and economies, are available in the volume, *PISA 2012 Results: Students and Money (Volume VI)* (OECD, 2014b). The second assessment covers 15 countries and economies, 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 – referred to as "the Canadian provinces" in the text), Chile, Italy, the Netherlands, Poland, the Slovak Republic, Spain and the United States. Five partner countries and economies also participated in the second assessment: Brazil, four provinces in China (Beijing, Shanghai, Jiangsu and Guangdong, in the text referred to as a single entity, "B-S-J-G [China]"), Lithuania, Peru and Russia. Eight countries/economies participated in both the 2012 and 2015 assessments: Australia, the Flemish Community of Belgium, Italy, Poland, Russia, the Slovak Republic, Spain and the United States.

PISA assesses the readiness of 15-year-old students for life beyond compulsory education by collecting and analysing test and questionnaire data about 15-year-olds' knowledge, skills and the context in which they live and learn. It thus provides a rich set of cross-country comparative data that policy makers and other stakeholders can use to make evidence-based decisions. International comparative data on financial literacy can answer questions such as "How well-prepared are 15-year-old students to participate in the new financial systems that are becoming more global and more complex?" and "What student characteristics are related to better knowledge and understanding of financial concepts and greater ability to take informed decisions?"

The financial literacy assessment focuses primarily on measuring the proficiency of 15-year-old students in applying the knowledge and skills that they have learned in and outside of school. Like other PISA domains, financial literacy is assessed using an instrument designed to provide data that are valid, reliable and interpretable. The PISA 2015 Assessment and Analytical Framework (OECD, 2016f) presents the comprehensive structure that supports the assessment of 15-year-old students' financial literacy. The framework includes a common language with which to discuss financial literacy and the basis on which a proficiency scale was built to interpret the results of the assessment.

Defining financial literacy

The definition of financial literacy for 15-year-olds that underpins the assessment builds on the OECD definitions of financial education and adult financial literacy. The OECD defines financial education as "the process by which financial consumers/investors improve their understanding of financial products, concepts and risks and, through information, instruction and/or objective advice, develop the skills and confidence to become more aware of financial risks and opportunities, to make informed choices, to know where to go for help, and to take other effective actions to improve their financial well-being" (OECD, 2005).[4] This definition was endorsed by G20 leaders in 2012 (OECD/INFE, 2012) and is used in a majority of countries (OECD/INFE, 2015). "Understanding", "confidence", "skills" and the notion of applying understanding and skills ("effective actions") are key elements of this definition.

For the purpose of measuring financial literacy among adults, the OECD/INFE developed the following working definition: "Financial literacy is a combination of awareness, knowledge, skill, attitude and behaviour necessary to make sound financial decisions and ultimately achieve individual financial well-being" (Atkinson and Messy, 2012; OECD, 2016d). This definition is now globally acknowledged and was also endorsed by G20 leaders in 2012 (G20, 2012).

The definition of financial literacy in the PISA Financial Literacy Assessment Framework refines the definition used for adults to make it relevant for 15-year-old students. The definition also incorporates students' ability to use financial knowledge and skills to meet challenges in the future.

> "Financial literacy is 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."

This definition, like other definitions of PISA domains, has two parts. The first refers to the kinds of thinking and behaviour that characterise the domain. The second part refers to the importance of developing the particular literacy. In PISA, "literacy" refers not only to the capacity of 15-year-old students to apply knowledge and skills in key subject areas, but also to students' ability to analyse, reason and communicate effectively as they pose, solve and interpret problems in a variety of situations.

The framework for assessing financial literacy

The *PISA 2015 Assessment and Analytical Framework* maintains the same definition and operationalisation of financial literacy as the PISA 2012 assessment framework (OECD, 2013, 2016f).

When the 2012 framework was developed, it constituted the first step in constructing a financial literacy assessment of international scope. It provided an articulated plan for developing items, designing the instrument and providing a common language for discussion of financial literacy. In addition to providing a working definition of financial literacy, the framework organises the domain around the content, processes and contexts that are relevant for the assessment of 15-year-old students. This conceptualisation was taken as a reference for further developing an international core-competencies framework on financial literacy for 15-18 year-olds (Box IV.2.5).

Content

The content categories comprise the areas of knowledge and understanding that are essential for financial literacy. The four content areas are: money and transactions; planning and managing finances; risk and reward; and the financial landscape.

The content category "money and transactions" is the first core content category of financial literacy. It includes awareness of the different forms and purposes of money, and handling simple monetary transactions, such as everyday payments, spending, value for money, bank cards, cheques, bank accounts and currencies.

The content category "planning and managing finances" covers skills such as planning and managing income and wealth over both the short term and long term, particularly the knowledge and ability to monitor income and expenses, and to make use of income and other available resources to enhance financial well-being.

The content category "risk and reward" incorporates the ability to identify ways of managing, balancing and covering risks (including through insurance and saving products) and an understanding of the potential for financial gains or losses across a range of financial contexts and products, such as a credit agreement with a variable interest rate, and investment products.

The content category "financial landscape" relates to the features of the financial world. It covers the rights and responsibilities of consumers in the financial marketplace and within the general financial environment, and the main implications of financial contracts. It also incorporates an understanding of the consequences of change in economic conditions and public policies, such as changes in interest rates, inflation, taxation or welfare benefits.

Processes

The process categories relate to cognitive processes. They describe students' ability to recognise and apply concepts relevant to the domain, and to understand, analyse, reason about, evaluate and suggest solutions. In PISA financial literacy, four process categories have been defined in no particular hierarchical order: identify financial information; analyse information in a financial context; evaluate financial issues; and apply financial knowledge and understanding.

The process category "identify financial information" is applicable when the individual searches and accesses sources of financial information and identifies or recognises their relevance. The process category "analyse information in a financial

context" covers a wide range of cognitive activities undertaken in financial contexts, including interpreting, comparing and contrasting, synthesising, and extrapolating from information that is provided. The process category "evaluate financial issues" focuses on recognising or constructing financial justifications and explanations, drawing on financial knowledge and understanding applied in specified contexts. It also involves cognitive activities, such as explaining, assessing and generalising. The process category "apply financial knowledge and understanding" focuses on taking effective action in a financial setting by using knowledge of financial products and contexts, and by understanding financial concepts.

Context

The context categories refer to the situations in which the financial knowledge, skills and understandings are applied, ranging from the personal to the global. In PISA, assessment tasks are framed in general life situations. The focus may be on the individual, family or peer group, the community, or even on a global scale. The contexts identified for the PISA financial literacy assessment include: education and work; home and family; individual; and societal.

The context category "education and work" highlights that many students will continue in education or training at post-compulsory education, while some of them may soon move into the labour market or may already be engaged in casual employment outside of school hours. The context category "home and family" includes financial issues relating to the costs involved in running a household, including the kind of shared accommodation that young people often use shortly after leaving the family home. The "individual" context category covers most of students' financial decisions, including using products such as mobile phones or laptops, and choosing personal products and services, as well as contractual issues, such as getting a loan. The "societal" context category recognises that individuals' financial decisions and behaviours can influence and be influenced by the rest of society. It includes matters such as being informed, understanding the rights and responsibilities of financial consumers, and understanding the purpose of taxes and local government charges.

Box IV.2.5 **OECD/INFE Core Competencies Framework on Financial Literacy for Youth**

In 2015, the OECD/INFE developed the Core Competencies Framework on Financial Literacy for Youth (OECD, 2015), based on existing financial education learning frameworks (OECD, 2014a) and on the conceptualisation of financial literacy developed in the PISA assessment framework (OECD, 2013, 2016f).

This framework describes the basic level of financial literacy – in terms of knowledge, attitudes and skills – that is likely to be needed by young people between the ages of 15 and 18 to fully and safely participate in economic and financial life. The competencies are outcome-based and can be adapted to national circumstances and used in a flexible manner, taking into account differences in culture and context at the national or local level. Some competencies may be more relevant than others, depending on national social and cultural circumstances.

The 2015 financial literacy assessment in practice

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.

Among the students that participated in the core PISA 2015 assessment of science, reading and mathematics, a subsample of students was randomly selected to take the financial literacy test. 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. 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.

The financial literacy assessment consisted of a one-hour, computer-based test composed of 43 question items. Most test items were the same as in the 2012 assessment. A small number of items was developed to replace those released in the report of the 2012 results (OECD, 2014b). As in other domains, financial literacy items were grouped in units, where one or more items shared a common stimulus. The selection included financially focused stimulus material in diverse formats, including prose, diagrams, tables, charts and illustrations.

Students who sat the assessment of financial literacy also answered the PISA student questionnaire about themselves, their homes, their school and learning experiences, and attitudes. They also answered questions about their experiences with money matters, which were included at the end of the financial literacy test booklets. School principals received a questionnaire that asked questions about school policies and the learning environment, with no particular emphasis on financial education.

As in other domains, the items comprise two types of question: constructed-response items and selected-response items. Constructed-response items require students to generate their own answers. The format of the answer may be a single word or figure, or may be longer: a few sentences or a worked calculation. Selected-response items require students to choose one or more alternatives from a given set of options. The common types in this category are the simple multiple-choice item, which usually requires the selection of one from a set of four options, and complex multiple choice, in which students respond to a series of Yes/No-type questions. All except the most simple of constructed-response items are coded by expert judges who must be trained and monitored. Selected-response and very short "closed" constructed-response items do not require expert coding (see the *PISA 2015 Assessment and Analytical Framework* [OECD, 2016f] for more information).

Examples of financial literacy items representing different framework categories

The PISA 2015 financial literacy assessment includes items in the four content categories, the four processes and the four contexts described above. About 15 out of 43 items cover the content area "planning and managing finances" and the remaining items are equally spread across the other content areas. Some 28 out of 43 items require students to "analyse information in a financial context" or "evaluate financial issues". Some 32 out of 43 items are framed in "home and family" or "individual" contexts. About half of the items are multiple-choice questions and the other half are open-response questions.

Figure IV.2.3 summarises how several sample items are categorised. The following examples provide a description of the sample items. Sample items are presented in the section "Examples of PISA financial literacy assessment questions" at the end of the chapter.

Items in the units AT THE MARKET, BANK ERROR, MOTORBIKE INSURANCE, NEW OFFER and PAY SLIP are drawn from the PISA 2012 field trial and are included to illustrate different framework categories (OECD, 2013). These particular items are similar to those used in the main surveys, but were not used in the assessment instrument in either 2012 or 2015. Items in the unit INVOICE were used in the 2012 assessment and published in the 2012 results report (OECD, 2014b); they were therefore not used in the 2015 assessment. Only secure, unpublished items are used for any assessment, as way to protect the integrity of the data that is collected to measure student proficiency.

Figure IV.2.3 ■ **Classification of sample items**

By content, process, context categories and response type

Questions	Content category	Process category	Context category	Response type
AT THE MARKET Question 2	Money and transactions	Analyse information in a financial context	Home and family	Constructed response (expert)
AT THE MARKET Question 3	Money and transactions	Evaluate financial issues	Home and family	Constructed response (expert)
BANK ERROR Question 1	Financial landscape	Evaluate financial issues	Societal	Complex multiple choice
INVOICE Question 1	Money and transactions	Identify financial information	Individual	Simple multiple choice
INVOICE Question 2	Money and transactions	Identify financial information	Individual	Constructed response (manual)
INVOICE Question 3 (Full credit)	Money and transactions	Apply financial knowledge and understanding	Individual	Constructed response (manual)
INVOICE Question 3 (Partial credit)	Money and transactions	Apply financial knowledge and understanding	Individual	Constructed response (manual)
MOTORBIKE INSURANCE Question 1	Risk and reward	Analyse information in a financial context	Individual	Complex multiple choice
NEW OFFER Question 2	Planning and managing finances	Evaluate financial issues	Individual	Constructed response (expert)
PAY SLIP Question 1	Money and transactions	Identify financial information	Education and work	Simple multiple choice

Example 1: AT THE MARKET

The unit AT THE MARKET presents two constructed-response questions about money and transactions in a family context. The stimulus presents a situation where a person can buy tomatoes at different prices by the kilogram or by the box.

Question 2 requires students to apply the concept of value for money in a context familiar to 15-year-old students. Students are asked to make a logical comparison between boxed and loose tomatoes and to explain which option provides the best value for money. In order to support their argument, students can provide their answer in words or explain their idea with quantitative information by using the price ("Zed") and weight (kilogram).

Question 3 asks students to evaluate financial information for decision making in shopping, which is a situation familiar to 15-year-old students. The question examines whether students can recognise that buying things in bulk may be wasteful if a large amount is not needed, and it may be unaffordable to bear the higher absolute cost of buying in bulk in the short term. Students are required to evaluate a financial issue in the situation presented and describe their conclusion in this

constructed-response question. Students can provide their answers either by using words, without quantitative information, or by using numbers, with quantitative information of the price and weight. Full credit will be given if students can explain that buying more tomatoes at a cheaper price may not always be a good decision for some people.

Example 2: BANK ERROR

The question asks students to evaluate a financial issue (potential fraud) in the context of Internet banking, which is part of the broader financial landscape in which students are likely to participate, either now or in the near future. In this environment they may be exposed to financial fraud. BANK ERROR investigates whether they know how to take appropriate precautions. In this question, students are asked to respond appropriately to a financial scam e-mail message. They must evaluate the presented options and recognise which piece of advice can be considered as good advice.

Example 3: INVOICE

The unit INVOICE consists of three questions in the content category "money and transactions" and framed in an individual context. The stimulus presents an invoice received by post.

Question 1 is a multiple-choice question that asks students to interpret a financial document, an invoice, identifying its purpose in the context of the individual. Students are required to identify financial information by demonstrating a basic understanding of what an invoice is. Calculations are not required.

Question 2 is a short, constructed-response question that asks students to identify a delivery cost in an invoice for clothing. It asks a specific question, and the relevant information is explicitly stated. To answer this question correctly, students need to identify the relevant information, understanding that postage refers to the cost of delivery. This is an example of the types of interpretation that they may need to make frequently in adult life.

Question 3 assesses the process of applying financial knowledge and understanding. It asks students to find the correct total amount on an invoice that has been incorrectly prepared, taking into account the sales tax as a percentage of purchase and the delivery charge. In this task, full credit is given for the responses that take into account the tax change and postage, and partial credit is given to responses that only consider one of those factors. To get full credit, students need to interpret and use financial and numeric information in an unfamiliar context and solve a financial problem by using multiple numerical operations (i.e. addition, subtraction and calculation of percentages). To get partial credit, students need to interpret and use financial and numeric information and apply basic numerical operations (i.e. subtraction).

Example 4: MOTORBIKE INSURANCE

The question relies on students understanding that the higher their exposure to risk, based on measurable criteria, the more it will cost them to buy appropriate insurance. This question falls under the content area "risk and reward" because insurance is a product designed specifically to protect individuals against risks and financial losses that they would not otherwise be able to bear. Students need to be able to identify factors likely to affect the cost of motorbike insurance under given circumstances.

Example 5: NEW OFFER

NEW OFFER illustrates a challenging item with an individual context. This question asks students to evaluate two complex financial products (two different personal loans) with competing information to explain a negative financial consequence of changing to a larger loan. Personal loans fall into the individual context since there are benefits, disadvantages and legal consequences for the person taking out the loan. Students need to interpret financial and numeric information, and reason about the effect that different financial actions and variables have on financial well-being. In order to get full credit, students are required to describe a negative consequence of changing loans, such as the time taken to repay the money or the additional interest paid. The item also tests students' understanding of the relevant financial concepts, such as repayment and penalty fees in relation to a loan and their implications. No numerical operations are required.

Example 6: PAY SLIP

PAY SLIP is an example of an item in the content category "money and transactions". This multiple-choice question asks students to identify financial information on a pay slip. While a pay slip is a common financial document, it may be unfamiliar to 15-year-old students. Students need to understand the difference between gross and net pay, that is, the difference between pay before and after any deductions have been made (such as deductions for health care or tax). Numeracy skills are not required to perform this task.

EXAMPLES OF PISA FINANCIAL LITERACY ASSESSMENT QUESTIONS

This section presents examples of the questions used in the PISA assessment of financial literacy. Assessment items used in the 2015 assessment are similar to the ones represented here, in terms of content, but were presented to students on a computer-based platform and a slightly different layout than these paper-based examples.

Items in the units AT THE MARKET, BANK ERROR, MOTORBIKE INSURANCE, NEW OFFER and PAY SLIP are drawn from the PISA 2012 field trial and were not used in the assessment instrument in either 2012 or 2015. Items in the unit INVOICE were used in the 2012 assessment and published in the 2012 results report (OECD, 2014b); they were therefore not used in the 2015 assessment.

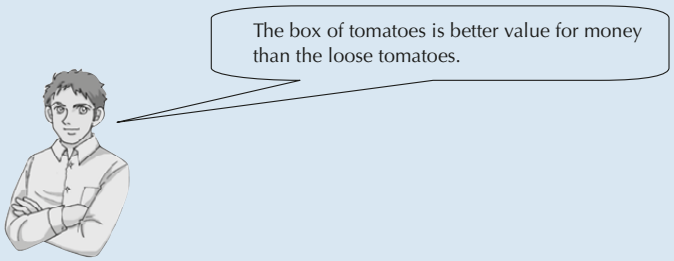
AT THE MARKET

You can buy tomatoes by the kilogram or by the box.

2.75 zeds per kg

22 zeds for a 10 kg box

AT THE MARKET – *QUESTION 2*



Give a reason to support this statement.

.....

.....

Question type: *Constructed response*
Description: *Recognise value by comparing prices per unit*
Content: *Money and transactions*
Process: *Analyse information in a financial context*
Context: *Home and family*
Difficulty: *459 (Level 2)*

Scoring

Full Credit

Explicitly or implicitly recognises that the price per kilogram of boxed tomatoes is less than the price per kilogram for loose tomatoes.

- It is 2.75 zeds per kg for the loose tomatoes but only 2.20 zeds per kg for the boxed tomatoes.
- It is only 2.20 per kg for the box.
- Because 10kg of loose tomatoes would cost 27.50 zeds.
- There are more kilograms for every 1 zed you pay.
- Loose tomatoes cost 2.75 per kg but tomatoes in the box cost 2.2 per kg.
- It is cheaper per kilogram. *[Accept generalisation.]*
- It is cheaper per tomato. *[Accept assumption that tomatoes are the same size.]*
- You get more tomato per zed. *[Accept generalisation.]*

No Credit

Other responses.

- The box is always better value. *[No explanation.]*
- You get more for less. *[Vague.]*
- Bulk buying is better.
- The price per kilogram is different. *[Does not indicate that the box price is lower.*

Missing.

Comment

This question requires students to apply the concept of value for money in a context familiar to 15-year-old students. Students are asked to make a logical comparison between boxed and loose tomatoes and to explain which option provides the best value for money. In order to support their argument, students can provide their answer in words or explain their idea with quantitative information by using the price ("Zed") and weight (kilogram).

In this question, the unit of currency is the imaginary Zed. PISA questions often refer to situations that take place in the fictional country of Zedland, where the Zed is the unit of currency. This artificial currency has been introduced to enhance comparability across countries and is explained to the students before the test begins.

Using the context of shopping for groceries, which is a familiar, everyday context to 15-year-old students, this item assesses whether students can interpret and use financial and numeric information and explain their judgment based on proportional reasoning and single basic numerical operations (multiplication and division). Questions about the buying of goods are generally categorised as being in the content area of money and transactions. To gain credit for this item, students have to demonstrate that they have compared the two ways of buying tomatoes using a common point of comparison. The question is located at Level 2.

AT THE MARKET – *QUESTION 3*

Buying a box of tomatoes may be a bad financial decision for some people.
Explain why.

.....

Question type: *Open-constructed response*
Description: *Recognise value by comparing prices per unit*
Content: *Money and transactions*
Process: *Evaluate financial issues*
Context: *Home and family*
Difficulty: *398 (Level 1)*

Scoring

Full credit

Refers to wastage if a larger amount of tomatoes is not needed.

- The tomatoes might rot before you use them all.
- Because you may not need 10 kg of tomatoes.
- The ones at the bottom of the box might be bad so you are wasting money.

OR

Refers to the idea that some people cannot afford the higher absolute cost of buying in bulk.

- You may not be able to afford a whole box.
- You have to spend 22 zeds (rather than 2.75 or 5.50 for 1 or 2 kg) and you might not have that amount to spend.
- You might have to go without something else that you need to pay for the box of tomatoes.

No credit

Other responses.

- It is a bad idea.
- Some people don't like tomatoes *[La réponse n'est pas pertinente.]*

Missing.

Comment

This question asks students to evaluate financial information for decision making in shopping, which is a situation familiar to 15-year-old students. The question examines whether students can recognise that buying things in bulk may be wasteful if a large amount is not needed, and it may be unaffordable to bear the higher absolute cost of buying in bulk in the short term. Students are required to evaluate a financial issue in the situation presented and describe their quantitative information, or by using numbers, with quantitative information of the price and weight. Full credit will be given if students can explain that buying more tomatoes at a cheaper price may not always be a good decision for some people. The question is located at Level 1.

BANK ERROR

David banks with ZedBank. He receives this e-mail message.

Dear ZedBank member,

There has been an error on the ZedBank server and your Internet login details have been lost.

As a result, you have no access to Internet banking.

Most importantly your account is no longer secure.

Please click on the link below and follow the instructions to restore access. You will be asked to provide your Internet banking details.

https://ZedBank.com/

ZedBank

BANK ERROR – *QUESTION 1*

Which of these statements would be good advice for David?

Circle "Yes" or "No" for each statement.

Statement	Is this statement good advice for David?
Reply to the e-mail message and provide his Internet banking details.	Yes / No
Contact his bank to inquire about the e-mail message.	Yes / No
If the link is the same as his bank's website address, click on the link and follow the instructions.	Yes / No

Question type: *Complex multiple choice*
Description: *Respond appropriately to a financial scam e-mail message*
Content: *Financial landscape*
Process: *Evaluate financial issues*
Context: *Societal*
Difficulty: *797 (Level 5)*

Scoring

Full credit

Three correct responses: No, Yes, No in that order.

No credit

Fewer than three correct responses.

Missing.

Comment

This question asks students to evaluate a potential financial fraud in the context of Internet banking, which is part of the broader financial landscape in which students are likely to participate, either now or in the near future. The question investigates whether they know how to take appropriate precautions. Students are asked to respond appropriately to a financial scam e-mail message. They must evaluate the presented options and recognise which piece of advice can be considered as good advice. No numerical operations are required. The question is located at Level 5.

INVOICE

Sarah receives this invoice in the mail.

BC

Breezy Clothing

Invoice
Invoice Number: 2034
Date issued: 28 February

Sarah Johanson
29 Worthhill Rd
Kensington
Zedland 3122

Breezy Clothing
498 Marple Land
Brightwell
Zedland 2090

Product code	Description	Quantity	Unit cost	Total (excluding tax)
T011	T-shirt	3	20	60 zeds
J023	Jeans	1	60	60 zeds
S002	Scarf	1	10	10 zeds

Total Excluding Tax:	130 zeds
Tax 10%:	13 zeds
Postage:	10 zeds
Total Including Taxes:	153 zeds
Already Paid:	0 zeds
Total due:	153 zeds
Date due:	31 March

INVOICE – *QUESTION 1*

Why was this invoice sent to Sarah?

A. Because Sarah needs to pay the money to Breezy Clothing.

B. Because Breezy Clothing needs to pay the money to Sarah.

C. Because Sarah has paid the money to Breezy Clothing.

D. Because Breezy Clothing has paid the money to Sarah.

Question type: *Multiple choice*
Description: *Recognise the purpose of an invoice*
Content: *Money and transactions*
Process: *Identify financial information*
Context: *Individual*
Difficulty: *360 (Level 1)*

Scoring

Full credit

A. Because Sarah needs to pay the money to Breezy Clothing.

No credit

Other responses.

Missing.

Comment

This multiple-choice question asks students to interpret a financial document, an invoice, identifying its purpose in the context of the individual. Questions about interpreting financial documents are generally categorised as being in the content area of money and transactions. Students are required to identify financial information by demonstrating a basic understanding of what an invoice is. Calculations are not required. The question is located at Level 1.

INVOICE – *QUESTION 2*

How much has Breezy Clothing charged for delivering the clothes?

Delivery charge in zeds: ……..……..……..

Question type: *Constructed response*
Description: *Identify the cost of postage on an invoice*
Content: *Money and transactions*
Process: *Identify financial information*
Context: *Individual*
Difficulty: *461 (Level 2)*

Scoring

Full credit

10
Ten
Tene [Unambiguous mis-spelling of correct numerical value.]

No credit

Other responses.
Missing.

Comment

This short, constructed response question asks students to identify a delivery cost in an invoice for clothing. It asks a specific question, and the relevant information is explicitly stated. To answer this question correctly, students need to identify the relevant information, understanding that postage refers to the delivery charge. This is an example of the types of interpretation that they may need to make frequently in adult life. This item is situated at Level 2.

INVOICE – *QUESTION 3*

Sarah notices that Breezy Clothing made a mistake on the invoice.

Sarah ordered and received two T-shirts, not three.

The postage fee is a fixed charge.

What will be the total on the new invoice?

Total in zeds: ……..……..……..

Question type: *Constructed response*
Description: *Find a new total on an invoice, taking into account several factors (or demonstrate process required)*
Content: *Money and transactions*
Process: *Apply financial knowledge and understanding*
Context: *Individual*
Difficulty: *Full credit : 660 (Level 5);); Partial credit: 547 (Level 3)*

Scoring

Full credit

131
One hundred and thirty-one
One hudred and thirty-one [Unambiguous mis-spelling of 131]

Partial credit

133 [Leaves tax at 13 zeds] OR 121 [Omits postage]

One hundred and thirty-three

One hudred and therty-thre [unambiguous mis-spelling of 133]

One hundred and twenty-one

No credit

Other responses.

123 [Leaves tax at 13 zeds and omits postage.]

Missing.

Comment

This question asks students to interpret a financial document in a complicated situation that is likely to take place in real life. Students are required to calculate the correct amount due, given that the quantity described on the invoice is incorrect. In this task, full credit is given for the responses taking into account the tax change and postage, and partial credit is given to responses that only consider one of those factors. The partial-credit score is located at Level 3 while the full-credit score is located at Level 5. To get full credit, students need to interpret and use financial and numeric information in an unfamiliar context and solve a financial problem by using multiple numerical operations (i.e. addition, subtraction and calculation of percentages). To get partial credit, students need to interpret and use financial and numeric information and apply basic numerical operations (i.e. subtraction).

MOTORBIKE INSURANCE

Last year, Steve's motorbike was insured with the PINSURA insurance company.

The insurance policy covered damage to the motorbike from accidents and theft of the motorbike.

MOTORBIKE INSURANCE – *QUESTION 1*

Steve plans to renew his insurance with PINSURA this year, but a number of factors in Steve's life have changed since last year.

How is each of the factors in the table likely to affect the cost of Steve's motorbike insurance this year?

Circle "Increases cost", "Reduces cost" or "Has no effect on cost" for each factor.

Factor	How is the factor likely to affect the cost of Steve's insurance?
Steve replaced his old motorbike with a much more powerful motorbike.	Increases cost / Reduces cost / Has no effect on cost
Steve has painted his motorbike a different colour.	Increases cost / Reduces cost / Has no effect on cost
Steve was responsible for two road accidents last year.	Increases cost / Reduces cost / Has no effect on cost

Question type: *Complex multiple choice*
Description: *Recognise factors affecting motorbike insurance premiums*
Content: *Risk and reward*
Process: *Analyse information in a financial context*
Context: *Individual*
Difficulty: *574 (Level 4); third part of the question: 494 (Level 3)*

Scoring

Full credit

Three correct responses: Increases cost, Has no effect on cost, Increases cost, in that order.

No credit

Fewer than three correct responses.
Missing.

Comment

The question relies on students understanding that the higher their exposure to risk, based on measurable criteria, the more it will cost them to buy appropriate insurance. This question falls under the content area "risk and reward" because insurance is a product designed specifically to protect individuals against risks and financial losses that they would not otherwise be able to bear. To gain full credit on this question (situated at Level 4), students need to be able to identify which factors are likely to affect the cost of motorbike insurance under given circumstances. To answer correctly the third part of the question (situated at Level 3), students need to understand that being responsible for road accidents in the past will increase the cost of insurance in the future.

NEW OFFER

Mrs Jones has a loan of 8 000 zeds with FirstZed Finance. The annual interest rate on the loan is 15%. Her repayments each month are 150 zeds.

After one year Mrs Jones still owes 7 400 zeds.

Another finance company called Zedbest will give Mrs Jones a loan of 10 000 zeds with an annual interest rate of 13%. Her repayments each month would also be 150 zeds.

NEW OFFER – *QUESTION 2*

What is one possible negative financial consequence for Mrs Jones if she agrees to the Zedbest loan?

.....

Question type: *Constructed response*
Description: *Recognise a negative consequence of having a large loan*
Content: *Planning and managing finances*
Process: *Evaluate financial issues*
Context: *Individual*
Difficulty: *582 (Level 4)*

Scoring

Full credit

Refers to Mrs Jones having more debt.

- She will owe more money.
- She will be unable to control her spending.
- She is going deeper into debt.

Refers to paying more interest in total.

- 13% of 10 000 is greater than 15% of 8 000.

Refers to taking longer to pay the loan off.

- It might take longer to repay because the loan is bigger and the payments are the same.

Refers to the possibility of paying a cancellation fee with FirstZed.

- She may have a penalty fee for paying the FirstZed loan early.

No credit

Other responses.
Missing.

Commentaire

This question asks students to evaluate two complex financial products (two different personal loans) with competing information to explain a negative financial consequence of changing to a larger loan. Students need to interpret financial and numeric information, and reason about the effect that different financial actions and variables have on financial well-being. In order to get full credit, students are required to describe a negative consequence of changing loans, such as the time taken to repay the money or the additional interest paid. No numerical operations are required. The question is located at Level 4

PAY SLIP

Each month, Jane's employer pays money into Jane's bank account.
This is Jane's pay slip for July.

EMPLOYEE PAY SLIP: Jane Citizen

Position: Manager	1 July to 31 July
Gross salary	2 800 zeds
Deductions	300 zeds
Net salary	2 500 zeds
Gross salary to date this year	19 600 zeds

PAY SLIP – *QUESTION 1*

How much money did Jane's employer pay into Jane's bank account on 31 July?

A. 300 zeds

B. 2 500 zeds

C. 2 800 zeds

D. 19 600 zeds

Question type: *Multiple choice*
Description: *Identify the net salary on a pay slip*
Content: *Money and transactions*
Process: *Identify financial information*
Context: *Education and work*
Difficulty: *551 (Level 4)*

Scoring

Full credit

B. 2 500 zeds

No credit

Other responses.

Missing.

Commentaire

This multiple-choice question asks students to identify financial information on a pay slip. While a pay slip is a common financial document, it may provide an unfamiliar financial context to 15-year-old students. Students need to understand the difference between gross and net pay, that is, the difference between pay before and after any deductions have been made (such as deductions for health care or tax). Numeric operations are not required. The question is located at Level 4.

Notes

1. Information on the introduction of financial education in the school curriculum was collected from national authorities of the participating countries and economies in October-December 2016.

2. www.moneysmart.gov.au/teaching.

3. www.edufinanceiranaescola.gov.br.

4. The OECD International Network on Financial Education (OECD/INFE) is investigating the concept of financial well-being and its relationship with financial literacy, building on existing work done by public authorities and academia. For instance, the US Consumer Financial Protection Bureau (CFPB) defines financial well-being as "a state of being wherein a person can fully meet current and ongoing financial obligations, can feel secure in their financial future, and is able to make choices that allow enjoyment of life" (CFPB, 2015).

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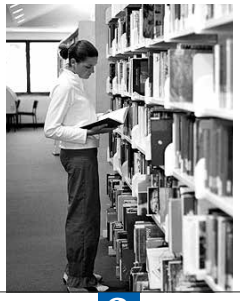


3

Student performance in financial literacy

This chapter compares students' performance in the 2015 PISA financial literacy assessment across countries and economies. It discusses what students know about financial literacy and how well they can apply what they know. It also describes how performance in 2015 compares to performance in 2012 in the countries and economies that participated in both assessments. The chapter then examines how student performance in financial literacy compares with performance in the core PISA subjects – mathematics, reading and science. The analysis is complemented with economic and financial information about participating countries and its association with students' performance in financial literacy.

Financial literacy is now recognised by policy makers as an essential life skill. Compared with their parents' generation, young people today are likely to face more complex financial decisions and more financial risk. Given this evolving landscape, a number of countries have been developing and adopting national strategies for financial education as a complement to financial consumer protection and regulation. Most of these strategies target young people, including by integrating financial education topics in school curricula or by developing financial education pilot programmes in schools.

In this context, are 15-year-old students competent and well-prepared to make financial decisions in their adult lives? Can they apply their knowledge and skills to make suitable financial plans? This chapter describes students' performance in the PISA 2015 assessment of financial literacy in 15 participating countries and economies: 10 OECD countries and economies and 5 partner countries and economies.

The chapter describes the tasks associated with each level of proficiency in financial literacy, as measured by PISA, compares results across participating countries and economies, and describes how average performance has changed over time in the countries and economies that participated in both the 2012 and 2015 assessments. It then analyses financial literacy performance in comparison with mathematics, reading and science performance. These analyses are complemented with contextual information about participating countries and economies.

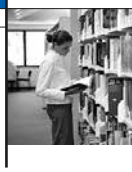
What the data tell us

- Beijing-Shanghai-Jiangsu-Guangdong (China) outperforms all other participating countries/economies in financial literacy. The Flemish Community of Belgium, the participating Canadian provinces, the Russian Federation, the Netherlands and Australia, in descending order of mean performance, have mean scores above the OECD average.
- Some 12% of students across OECD countries and economies are top performers in financial literacy, meaning that they are proficient at Level 5. These students can analyse complex financial products and solve non-routine financial problems. They show an understanding of the wider financial landscape, such as the implication of income-tax brackets and can explain the financial advantages of different types of investments.
- On average across OECD countries and economies, 22% of students perform at or below Level 1. The percentage of students performing at or below Level 1 is larger than 20% in Brazil, Chile, Lithuania, Peru, Poland, the Slovak Republic, Spain and the United States. These students can, at best, recognise the difference between needs and wants, make simple decisions about everyday spending, and recognise the purpose of everyday financial documents, such as an invoice.
- On average across the 10 participating OECD countries and economies, around 38% of the variation in financial literacy scores reflects factors that are uniquely captured by the financial literacy assessment, while the remaining 62% of variation in financial literacy reflects skills that can be measured in the mathematics and/or reading assessments.
- In the Flemish Community of Belgium, Beijing-Shanghai-Jiangsu-Guangdong (China), the participating Canadian provinces and the Russian Federation, students perform better in financial literacy than students around the world who perform similarly in mathematics and reading. In contrast, students in Australia, Brazil, Chile, Italy, Lithuania, the Netherlands, Poland, the Slovak Republic and Spain perform worse than expected in financial literacy, based on the performance of students around the world in mathematics and reading.

HOW THE PISA 2015 FINANCIAL LITERACY RESULTS ARE REPORTED

The PISA test design makes it possible to construct a single scale of proficiency, drawing on all the questions in the financial literacy assessment. Each question is associated with a particular point on the scale that indicates its difficulty, and each student's performance is associated with a particular point on the same scale that indicates his or her estimated financial literacy proficiency. A description of the modelling technique used to construct this scale can be found in the *PISA 2015 Technical Report* (OECD, forthcoming).

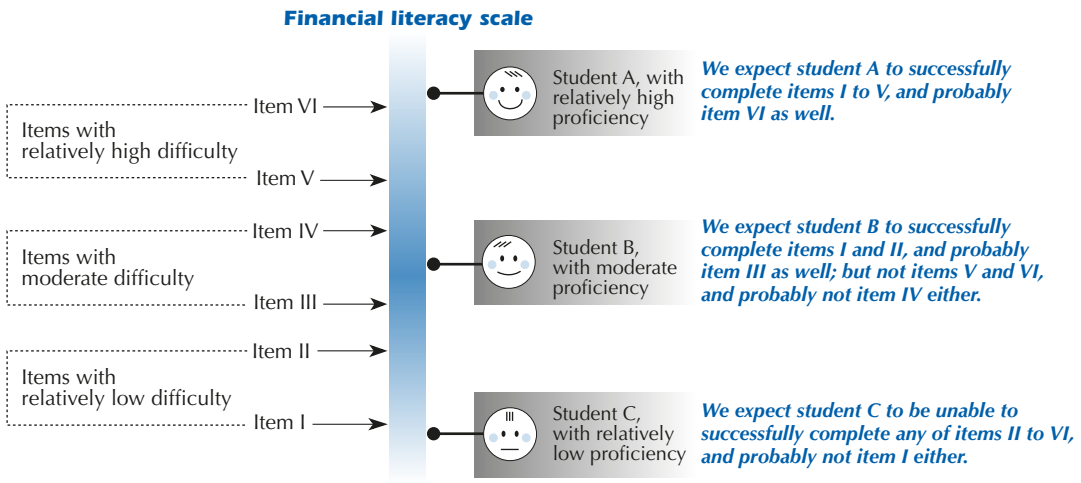
The relative difficulty of questions in a test is estimated by considering the proportion of students who answer each question correctly. Relatively easy questions are answered correctly by a larger proportion of students than more difficult questions. The relative proficiency of students can be estimated by considering the proportion of questions that they answer correctly. A highly proficient student will answer more questions correctly than his or her less-proficient peers. The difficulty of questions and the proficiency of students are presented on a single continuous scale.



The scale shows the kinds of questions that can be answered by more or less proficient students. The higher an individual's proficiency level is located above a given test question, the more likely he or she is to successfully complete the question (and other questions of similar difficulty); the further the individual's proficiency is located below a given question, the less likely is he or she to be able to successfully complete the question and other questions of similar difficulty. Figure IV.3.1 illustrates this probabilistic model.

The location on this scale of different levels of proficiency in financial literacy is set in relation to the particular group of questions used in the assessment. The individual test questions used to measure financial literacy were designed to represent the definition of financial literacy, just as the sample of students who sat the PISA test in 2015 was drawn to represent all 15-year-old students in the participating countries and economies. Estimates of student proficiency reflect the kinds of tasks students would be expected to perform successfully. This means that students are likely to be able to successfully complete questions located at or below the difficulty level associated with their own position on the scale. Conversely, they are unlikely to be able to successfully complete questions above the difficulty level associated with their position on the scale.

Figure IV.3.1 ▪ **Relationship between questions and student performance on a scale**



AVERAGE PERFORMANCE IN FINANCIAL LITERACY

The PISA financial literacy assessment provides an overall picture of 15-year-olds' ability to apply their accumulated knowledge and skills to real-life situations involving financial issues and decisions. Results of this assessment are presented below, covering the average financial literacy performance in each country and economy. PISA outcomes are reported in a variety of ways. This section describes the country/economy results and shows the location of assessment tasks on the overall PISA financial literacy scale. The next section shows how the different levels of proficiency in financial literacy can be characterised, and how these proficiency levels are represented by the questions used in the survey.

When interpreting mean performance, only those differences that are statistically significant are taken into account (Box IV.3.1). Figure IV.3.2 shows the mean score for each country or economy, and allows readers to identify countries/economies with statistically similar means. The first column lists each participating country and economy in descending order of its mean financial literacy score (reported in the second column). Reading across each row, a list is provided of countries and economies with scores that are not significantly different from the value in the second column. The values range from a high of 566 points for Beijing-Shanghai-Jiangsu-Guangdong (China) (hereafter "B-S-J-G [China]") to a low of 393 points for Brazil. Box IV.3.2 discusses issues to bear in mind when interpreting these comparisons.

Figure IV.3.2 shows how participating countries and economies have been further divided into three broad groups as compared to the OECD average (where the OECD average corresponds to the arithmetic mean of the respective country estimates):

- those whose mean scores are close to the OECD average in the assessment of financial literacy (highlighted in dark blue)
- those whose mean scores are above the OECD average (highlighted in pale blue)
- those whose mean scores are below the OECD average (highlighted in medium blue).

Figure IV.3.2 ▪ **Comparing countries' and economies' mean performance in financial literacy**

Statistically significantly **above** the OECD average-10
Not statistically significantly different from the OECD average-10
Statistically significantly **below** the OECD average-10

Mean score	Comparison country/ economy	Countries and economies whose mean score is not statistically significantly different from the comparison country's/economy's score
566	B-S-J-G (China)	
541	Belgium (Flemish)	Canadian provinces
533	Canadian provinces	Belgium (Flemish)
512	Russia	Netherlands
509	Netherlands	Australia, Russia
504	Australia	Netherlands
487	United States	Poland, Italy
485	Poland	United States, Italy
483	Italy	Poland, United States
469	Spain	
449	Lithuania	Slovak Republic
445	Slovak Republic	Lithuania
432	Chile	
403	Peru	Brazil
393	Brazil	Peru

Source: OECD, PISA 2015 Database, Table IV.3.1.

Figure IV.3.3 shows how participating countries and economies compare in financial literacy performance, after taking into account the statistical uncertainty around the mean scores, since the reported values are derived from samples. It is possible to say, for example, that the rank of the Netherlands is between fourth and sixth and that of Australia is between fifth and sixth. However, we cannot say which country performed better because the mean scores of the Netherlands (509) and Australia (504) are not statistically significantly different from each other. The main difference between counting the number of countries whose performance is significantly higher (Figure IV.3.2) and the upper rank estimated in Figure IV.3.3 is that the former is based on pairwise comparisons of countries/economies, while the latter takes into account the multiple comparisons involved in computing a rank. Since the rank estimates for each country and economy provide a more nuanced interpretation of the rank positions than comparisons across countries, the results presented in Figure IV.3.3 should preferably be used when examining countries' and economies' rankings.

Among the 10 participating OECD countries and economies, the Flemish Community of Belgium and the participating Canadian provinces (British Columbia, Manitoba, New Brunswick, Newfoundland and Labrador, Nova Scotia, Ontario and Prince Edward Island) rank between first and second. They also rank between second and third among all countries and economies, following B-S-J-G (China), which ranks first overall. Two other OECD countries, namely Australia and the Netherlands, are high-performing countries in that their mean scores are statistically significantly higher than the OECD average. Both Australia and the Netherlands rank between third and fourth across OECD participating countries and economies; the Netherlands ranks between fourth and sixth among all participating countries and economies; Australia ranks fifth or sixth overall. The average scores of Poland and the United States are not statistically significantly different from the OECD average, both ranking between fifth and seventh across OECD countries and economies, and between seventh and ninth overall. The mean scores of four OECD countries, namely Chile, Italy, the Slovak Republic and Spain, are statistically significantly lower than the OECD average. The ranks of these countries among OECD participating countries and economies are as follows: Italy (between fifth and seventh), Spain (eighth), the Slovak Republic (ninth) and Chile (tenth). The ranks of these countries among all participating countries and economies are as follows: Italy (between seventh and ninth), Spain (tenth), the Slovak Republic (eleventh or twelfth) and Chile (thirteenth).

For subnational entities, whose results are also reported in Chapter 4 and Annex B2, a rank order was not estimated; but the mean score allows for a comparison of performance with that of countries and economies. For example, the Canadian province of British Columbia shows a score between those of top-performers B-S-J-G (China) and the Flemish Community of Belgium.

When partner countries and economies are also taken into consideration, B-S-J-G (China), which represents a specific subset of the national population, ranks first in financial literacy performance. The mean score of the Russian Federation (hereafter "Russia") is higher than the OECD average, with Russia ranking between fourth and fifth across all participating countries and economies. The mean scores of Brazil, Lithuania and Peru are lower than the OECD average. Lithuania ranks between eleventh and twelfth, Peru ranks fourteenth and Brazil ranks the lowest among all participating countries and economies. Box IV.3.2 offers a comparison with data on adults' financial knowledge.

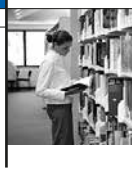


Figure IV.3.3 ▪ **Financial literacy performance among participating countries/economies**

	Financial literacy scale					
			Range of ranks			
			OECD countries/economies		All countries/economies	
	Mean score	S.E.	Upper rank	Lower rank	Upper rank	Lower rank
B-S-J-G (China)	566	(6.0)			1	1
British Columbia (Canadian provinces)	551	(7.1)				
Belgium (Flemish)	541	(3.0)	1	2	2	3
Canadian provinces	533	(4.6)	1	2	2	3
Ontario (Canadian provinces)	533	(6.1)				
Nova Scotia (Canadian provinces)	526	(6.7)				
Massachusetts (United States)	523	(6.7)				
Bolzano (Italy)	523	(6.2)				
Prince Edward Island (Canadian provinces)	522	(10.4)				
Newfoundland and Labrador (Canadian provinces)	519	(7.6)				
Russia	512	(3.3)			4	5
New Brunswick (Canadian provinces)	511	(7.4)				
Trento (Italy)	510	(3.1)				
Netherlands	509	(3.3)	3	4	4	6
Lombardia (Italy)	505	(5.7)				
Australia	504	(1.9)	3	4	5	6
Manitoba (Canadian provinces)	503	(7.1)				
North Carolina (United States)	496	(5.5)				
United States	487	(3.8)	5	7	7	9
Poland	485	(3.0)	5	7	7	9
Italy	483	(2.8)	5	7	7	9
Spain	469	(3.2)	8	8	10	10
Basque Country (Spain)	459	(5.3)				
Campania (Italy)	452	(7.1)				
Lithuania	449	(3.1)			11	12
Slovak Republic	445	(4.5)	9	9	11	12
Chile	432	(3.7)	10	10	13	13
Peru	403	(3.4)			14	14
Brazil	393	(3.8)			15	15

Note: OECD countries and economies are shown in bold black. Partner countries and economies are shown in bold blue. Regions are shown in italics.
Source: OECD, PISA 2015 Database.
StatLink http://dx.doi.org/10.1787/888933485042

Box IV.3.1 **When is a difference statistically significant? Three sources of statistical uncertainty**

A difference is called statistically significant if it is unlikely that such a difference could be observed in the estimates based on samples, when in fact no true difference exists in the populations from which the samples are drawn.

The results of the PISA assessments for countries and economies are estimates because they are obtained from samples of students, rather than from a census of all students, and because they are obtained using a limited set of assessment tasks, not the universe of all possible assessment tasks. When students are sampled and assessment tasks are selected with scientific rigour, it is possible to determine the magnitude of the uncertainty associated with the estimate. This uncertainty needs to be taken into account when making comparisons so that differences that could reasonably arise simply due to the sampling of students and items are not interpreted as differences that actually hold for the populations. The design of the PISA test and sample are determined with respect to the objective of reducing, as much as possible, the statistical error associated with country-level statistics. Two sources of uncertainty are taken into account:

- *Sampling error*: The aim of a system-level assessment such as PISA is to generalise the results based on samples to the larger target population. The sampling methods used in PISA ensure not only that the samples are representative and provide a valid estimate of the population mean score and distribution, but also that the

…

error due to sampling is reduced to a minimum. The sampling error decreases with the number of schools and (to a lesser extent) of students included in the assessment. The sampling error associated with a country's mean performance estimate is, for most countries, around two to three PISA score points. For the OECD average in core domains (which is based on 35 independent national samples) the sampling error is reduced to about 0.4 PISA score point; for the OECD average in financial literacy (which is based on only 10 independent samples) the sampling error is about 1 PISA score point.

- *Measurement error* (also called imputation error): No test is perfect and can fully measure broad concepts such as mathematics, reading, science or financial literacy. The use of a limited number of items to assess broad domains, for instance, introduces some measurement uncertainty: would the use of a different set of items have resulted in different performance? This uncertainty is quantified in PISA. Among other things, it decreases with the number of items in a domain that underlie a proficiency estimate. It is therefore somewhat larger for minor domains than for major domains, and it is larger for individual students (who only see a fraction of all test items) than for country means (which are based on all test items). It also decreases with the amount of background information available. For country mean estimates, the imputation error is smaller than the sampling error (around 0.5 PISA score point).

When comparing results across different PISA cycles, an additional source of uncertainty must be taken into account. Indeed, even if different PISA assessments use the same metric for measuring performance (for financial literacy, this metric was defined in PISA 2012, when financial literacy was assessed for the first time), the test instruments and items used in the assessment change in each cycle, as do the calibration samples and sometimes the statistical models used for scaling results. To make the results directly comparable over time, scales have to be equated. This means that results are transformed so that they can be expressed on the same metric. The *link error* quantifies the uncertainty around the equating of scales. The procedures used for equating PISA 2015 results to prior scales are described in Annex A5; further details on the link error and the equating procedures are provided in the *PISA 2015 Technical Report* (OECD, forthcoming). Box IV.3.3 discusses further issues related to the comparison of financial literacy performance between the PISA 2012 and 2015 assessments.

The link error affects all scaled values equally and is therefore independent of the size of the student sample. As a result, it is the same for estimates based on individual countries, on subpopulations, and on the OECD average. For comparisons between financial literacy results in PISA 2015 and financial literacy results in PISA 2012, the link error corresponds to about 5.3 score points, making it by far the most significant source of uncertainty in trend comparisons.

Box IV.3.2 **OECD/INFE International Survey of Adult Financial Literacy Competencies**

Addressing a call by G20 Leaders to develop practical tools for financial literacy measurement, the OECD International Network on Financial Education (OECD/INFE) conducted an international data collection exercise to measure financial literacy and financial inclusion. Over 50 000 adults aged 18 to 79 from 30 countries and economies around the world participated in the survey. The results provide insights into aspects of financial knowledge, attitude, behaviour and inclusion (OECD, 2016a).

The OECD/INFE International Survey of Adult Financial Literacy Competencies asked a series of questions aimed at measuring financial knowledge, such as about the time-value of money, interest, inflation, risk and diversification. Results of the survey show that, on average across the 17 participating OECD countries, 62% of adults could answer correctly at least five out of seven financial knowledge questions. Among the countries that also participated in the PISA 2015 financial literacy assessment, fewer than 50% of adults in Brazil and Russia could answer correctly at least five out of seven questions, while 64% of adults in the Netherlands could do so. Comparisons with PISA findings should be made with caution, as the evidence is drawn from different measurement tools and on different sets of countries; but the different country rankings across adults and young people might suggest a considerable generational divide in some countries. For instance, students in Russia perform relatively well at the international level, while adults in that country perform relatively poorly compared to adults in other countries.

STUDENTS AT THE DIFFERENT LEVELS OF PROFICIENCY IN FINANCIAL LITERACY

The single continuous scale of financial literacy constructed for the PISA 2012 assessment was divided into five levels, according to robust statistical principles. The division into five proficiency levels remains valid for the 2015 assessment (see the *PISA 2015 Technical Report* [OECD, forthcoming]).

The descriptions of the proficiency levels were generated on the basis of the tasks located within each level, in order to encapsulate the kinds of knowledge and skills needed to successfully complete those tasks. The set of descriptions is presented as a proficiency scale. Level 5 is the highest described level, and Level 1 is the lowest. Level 5 questions are those found to be the most challenging for 15-year-old students at the end of compulsory education. At each level, students are also expected to be proficient at the preceding level. For example, students performing at Level 4 are expected to possess the competencies described at Levels 4, 3, 2 and 1, while students at Level 1 are likely to be able to complete Level 1 tasks successfully, but are unlikely to be able to complete tasks at Level 2 and higher. Box IV.3.3 provides further explanations on the link between the continuous scale and proficiency levels.

The PISA assessment of financial literacy uses the same method for constructing proficiency scales as other PISA domains. Based on students' performance on the questions in the test, their score points are generated and located on a specific part of the scale that, in turn, is associated with a proficiency level.

A student at a particular proficiency level would be expected to correctly answer most of a random selection of questions located within the same level. Thus, for example, in a hypothetical assessment composed of tasks spread uniformly across Level 3, students with a score located within Level 3 would be expected to complete at least half of the questions successfully. Because a level covers a range of difficulty and proficiency, the success rates for students vary. Students at the bottom of the level are likely to be able to correctly answer 50% of questions spread uniformly across the level, while students at the top of the level are likely to correctly answer 70% of the same questions.

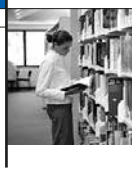
Figure IV.3.4 provides details about the financial literacy skills, knowledge and understanding required at each level of proficiency described in this volume.

Figure IV.3.4 ▪ **Summary description of the five levels of proficiency in financial literacy**

Level	Score range	What students can typically do
5	Equal to or higher than 625 points	Students can apply their understanding of a wide range of financial terms and concepts to contexts that may only become relevant to their lives in the long term. They can analyse complex financial products and can take into account features of financial documents that are significant but unstated or not immediately evident, such as transaction costs. They can work with a high level of accuracy and solve non-routine financial problems, and they can describe the potential outcomes of financial decisions, showing an understanding of the wider financial landscape, such as income tax.
4	550 to less than 625 points	Students can apply their understanding of less common financial concepts and terms to contexts that will be relevant to them as they move towards adulthood, such as bank account management and compound interest in saving products. They can interpret and evaluate a range of detailed financial documents, such as bank statements, and explain the functions of less commonly used financial products. They can make financial decisions taking into account longer-term consequences, such as understanding the overall cost implication of paying back a loan over a longer period, and they can solve routine problems in less common financial contexts.
3	475 to less than 550 points	Students can apply their understanding of commonly used financial concepts, terms and products to situations that are relevant to them. They begin to consider the consequences of financial decisions and they can make simple financial plans in familiar contexts. They can make straightforward interpretations of a range of financial documents and can apply a range of basic numerical operations, including calculating percentages. They can choose the numerical operations needed to solve routine problems in relatively common financial literacy contexts, such as budget calculations.
2 Baseline	400 to less than 475 points	Students begin to apply their knowledge of common financial products and commonly used financial terms and concepts. They can use given information to make financial decisions in contexts that are immediately relevant to them. They can recognise the value of a simple budget and can interpret prominent features of everyday financial documents. They can apply single basic numerical operations, including division, to answer financial questions. They show an understanding of the relationships between different financial elements, such as the amount of use and the costs incurred.
1	326 to less than 400 points	Students can identify common financial products and terms and interpret information relating to basic financial concepts. They can recognise the difference between needs and wants and can make simple decisions on everyday spending. They can recognise the purpose of everyday financial documents such as an invoice and apply single and basic numerical operations (addition, subtraction or multiplication) in financial contexts that they are likely to have experienced personally.

Figure IV.3.5 ▪ **Map of selected financial literacy questions in PISA 2015**

Level	Score range	Questions	Position on PISA scale	Nature of the question
5	Equal to or higher than 625 points	BANK ERROR Question 1	797	Evaluate financial issues about the financial landscape by focusing on potential fraud. Students should demonstrate that they know how to take appropriate precautions by recognising what can be considered good advice in case they receive a financial scam e-mail message. Numeric operations are not required.
		INVOICE Question 3 Full credit	660	Interpret a financial document in a complicated situation that is likely to take place in real life. Students are required to calculate the correct amount due, given that the quantity described on the invoice is incorrect. Full credit is given for the responses taking into account the tax change and postage. To get full credit, students need to interpret and use financial and numeric information in an unfamiliar context and solve a financial problem by using multiple numerical operations (i.e. addition, subtraction and calculation of percentages).
4	550 to less than 625 points	NEW OFFER Question 2	582	Evaluate two complex financial products (two different personal loans) with competing information to explain a negative financial consequence of changing to a larger loan. Students need to interpret financial and numeric information, and reason about the effect that different financial actions and variables have on financial well-being. In order to get full credit, students are required to describe a negative consequence of changing loans, such as the time taken to repay the money or the additional interest paid. No numerical operations are required.
		PAY SLIP Question 1	551	Identify financial information on a pay slip. Students need to understand the difference between gross and net pay, that is, the difference between pay before and after any deductions have been made (such as deductions for health care or tax). Numeric operations are not required.
3	475 to less than 550 points	INVOICE Question 3 Partial credit	547	Interpret a financial document in a complicated situation that is likely to take place in real life. Students are required to calculate the correct amount due, given that the quantity described on the invoice is incorrect. Partial credit is given for the responses taking into account either the tax change or postage. To get partial credit, students need to interpret and use financial and numeric information and apply basic numerical operations (i.e. subtraction).
		MOTORBIKE INSURANCE Question 1 Part 3	494	Understand that the higher their risk exposure is with regards to measurable criteria, the more it will cost them to buy appropriate insurance. This question falls under the content area of risk and reward. Students need to be able to identify factors likely to affect the cost of motorbike insurance under given circumstances. No numerical operations are required.
2 Baseline	400 to less than 475 points	INVOICE Question 2	461	Identify a delivery cost in an invoice for clothing. It asks a specific question, and the relevant information is explicitly stated. To answer this question correctly, students need to identify the relevant information, understanding that postage refers to the delivery charge. While calculations are not required, students are required to identify numerical information: the cost of postage.
		AT THE MARKET Question 2	459	Apply the concept of value for money. Students are asked to make a logical comparison between boxed and loose tomatoes and to explain which option provides the best value for money. In order to support their argument, students can provide their answer in words or explain their idea with quantitative information by using the price ("Zed") and weight (kilogram). Using the context of shopping for groceries, this item assesses whether students can interpret and use financial and numeric information and explain their judgment based on proportional reasoning and single basic numerical operations (multiplication and division). To gain credit for this item, students have to demonstrate that they have compared the two ways of buying tomatoes using a common point of comparison.
1	326 to less than 400 points	AT THE MARKET Question 3	398	Evaluate financial information for decision making in shopping. The question examines whether students can recognise that buying things in bulk may be wasteful if a large amount is not needed, and it may be unaffordable to bear the higher absolute cost of buying in bulk in the short term. Students are required to evaluate a financial issue in the situation presented and describe their conclusion in this constructed response question. Students can provide their answers either by using words, without quantitative information, or by using numbers, with quantitative information of the price and weight. Full credit will be given if students can explain that buying more tomatoes at a cheaper price may not always be a good decision for some people.
		INVOICE Question 1	360	Interpret a financial document, an invoice, identifying its purpose in the context of the individual. Students are required to identify financial information by demonstrating a basic understanding of what an invoice is. Calculations are not required.

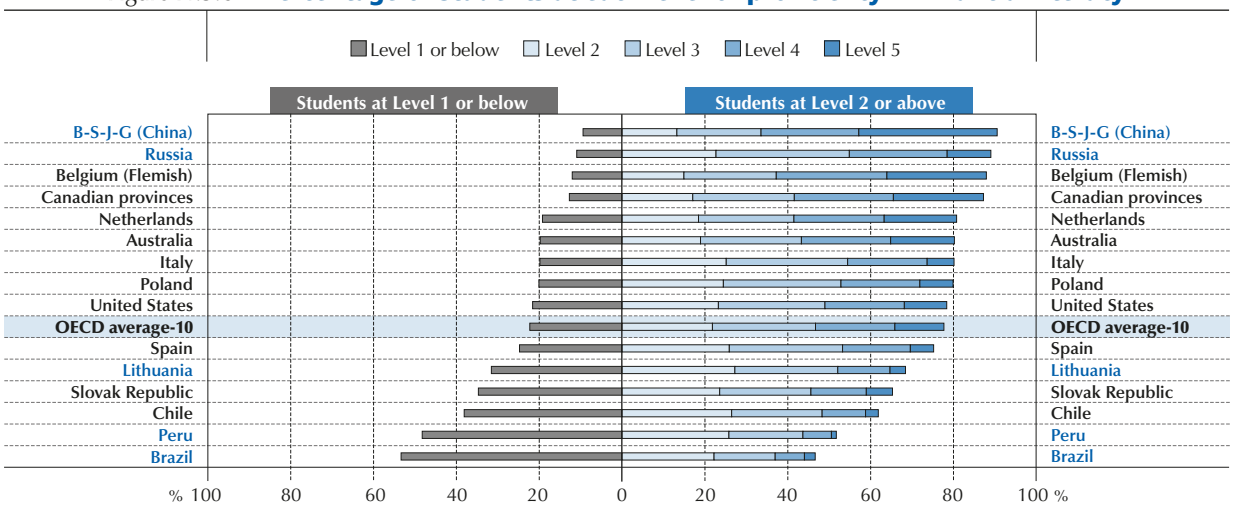


Some questions used in the PISA assessment of financial literacy are presented in Chapter 2 with the aim of showing how student performance was measured (see "Examples of PISA financial literacy assessment questions"). Not all questions can be made public as most will be used again in future assessments in order to establish reliable trends in performance.

Figure IV.3.5 maps the questions presented in Chapter 2 to their corresponding position on the described proficiency scale. Each question can be associated with a particular point on the scale that indicates its relative difficulty. The first column shows the proficiency level within which the question is located. The second column indicates the score range for a question that would allow it to be regarded as falling within that level. The third and fourth columns show the name of the unit and the question difficulty. Questions within the same unit can represent a range of difficulties. The unit INVOICE, for example, is composed of questions or parts of questions at Levels 1, 2, 3 and 5. Thus, a single unit may cover a wide range of difficulty on the PISA financial literacy scale.

The distribution of student performance across the proficiency levels is shown in Figure IV.3.6. Results are presented in terms of the percentage of 15-year-olds within each country and economy performing at the five proficiency levels described in Figure IV.3.4.

Figure IV.3.6 ▪ **Percentage of students at each level of proficiency in financial literacy**



Countries and economies are ranked in descending order of the percentage of students who perform at or above Level 2.
Source: OECD, PISA 2015 Database, Table IV.3.2.
StatLink http://dx.doi.org/10.1787/888933485058

Box IV.3.3 **Interpreting cross-country comparisons of financial literacy performance**

In PISA 2015, student performance in financial literacy is described across five levels of proficiency, each of which represents 75 score points. This means that there are 75 points between the top of one level and the top of the next. Thus, a difference in performance of one proficiency level represents a significant gap in performance. To illustrate this gap using the descriptions of levels, students proficient at Level 2 on the financial literacy scale are only starting to apply their knowledge to make financial decisions. They use given information to make financial decisions in contexts that are immediately relevant to them. At Level 3, students have the proficiency expected at Level 2 and below, and also begin to consider the consequences of financial decisions and make simple financial plans in familiar contexts.

By design, approximately two-thirds of the student population in OECD countries and economies score within 100 points of the OECD mean, set at 500 score points in the 2012 financial literacy assessment. The difference in average performance between the highest- and lowest-performing countries and economies among all participants is 173 score points (equivalent to more than two levels of proficiency). Considering only participating OECD countries and economies, the difference between the average performance of the highest- and lowest-performing countries/economies is 109 score points (equivalent to more than one level of proficiency).

Proficiency at Level 1 (scores higher than 326 points but lower than or equal to 400 points)

Students proficient at Level 1 display basic financial literacy skills. They can identify common financial products and terms, and interpret information relating to basic financial concepts, such as recognising the purpose of an invoice. They can recognise the difference between needs and wants and they make simple decisions on everyday spending, such as recognising value by comparing prices per unit. Students at this level can also apply single and basic numerical operations, such as addition, subtraction or multiplication, in financial contexts that they are likely to have personally encountered.

"AT THE MARKET – Question 3" requires Level 1 proficiency. This question asks students to evaluate financial information to make a shopping decision – a situation familiar to many 15-year-old students. It examines whether students can recognise that buying things in bulk may be wasteful if a large amount is not needed, and it may be unaffordable to bear the higher absolute cost of buying in bulk in the short term. Students are required to evaluate this situation from a financial perspective and describe their conclusion in this constructed-response question. Students can provide their answers either without quantitative information or with quantitative information about the price and weight. Full credit is given if students can explain why buying more tomatoes at a cheaper price may not always be a good decision for some people. Tasks at Level 1 require students to identify and recognise basic financial concepts and knowledge. These tasks are prerequisites for applying knowledge to real-life situations, which is required for the tasks at Level 2 and higher.

Students performing at or below Level 1 (that is, below Level 2, which is considered the baseline level of proficiency), are not yet able to apply their knowledge to real-life situations involving financial issues and decisions.

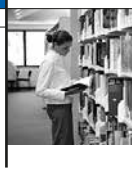
Across the 10 participating OECD countries and economies, 22% of students, on average, perform below the baseline level. A large variation is observed across countries and economies. Even in some high- and middle-performing OECD countries and economies, the percentage of students performing below the baseline level of proficiency is not negligible. In the United States, about 22% of students perform below the baseline level, as do about 20% of students in Australia, Italy and Poland, and 19% of students in the Netherlands. In contrast, among high-performing OECD countries and economies, only slightly more than one in ten students in the Flemish Community of Belgium (12%) and the participating Canadian provinces (13%) perform at or below Level 1. In some low-performing OECD countries, more than 30% of students perform below the baseline level: Chile (38%) and the Slovak Republic (35%). Among partner countries and economies, more than 40% of students in Brazil (53%) and Peru (48%) score below the baseline level, while in Russia, 11% of students perform at this level. Some 9% of students in B-S-J-G (China) and 32% of students in Lithuania perform at Level 1 or below. In Brazil, Chile, Lithuania, Peru and the Slovak Republic, there are more students performing at or below Level 1 than performing at any other proficiency level (Table IV.3.2).

Proficiency at Level 2 (scores higher than 400 points but lower than or equal to 475 points) – Level 2 is the baseline

Level 2 can be considered the baseline level of proficiency in financial literacy that is required to participate in society. At this level, in addition to exhibiting Level 1 proficiency, students are expected to begin to apply their knowledge to make financial decisions in contexts that are immediately relevant to them. They can recognise the value of a simple budget, and undertake a simple assessment of value-for-money, choosing between buying tomatoes by the kilogram or by the box, for example. Students at this level can also apply single, basic numerical operations to answer financial questions, and can show an understanding of the relationships between different financial elements, such as the amount of use and the costs incurred. These skills are essential for full participation in society as an independent and responsible citizen. Beyond their direct relevance and relationship with basic skills in other subjects, like mathematics and reading, these financial literacy skills may also be related to other competencies that are becoming increasingly important, such as critical thinking and problem solving.

"INVOICE – Question 2" is located within proficiency Level 2. This short, constructed-response question asks students to identify a delivery cost in an invoice for clothing. It asks a specific question and the relevant information is explicitly stated. To answer this question correctly, students need to identify the relevant information, understanding that postage refers to the delivery charge. This is an example of the type of interpretation that students may need to make frequently in adult life.

Across the 10 participating OECD countries and economies, on average, 22% of students perform at Level 2. In some countries, Level 2 corresponds to a median level of performance, meaning that the median score, i.e. the score that divides the population into two equal halves – one scoring above the median, one below – falls within Level 2. Level 2 corresponds to the median proficiency of students in Chile, Lithuania, Peru, the Slovak Republic and Spain (Tables IV.3.2 and IV.4.1).



On average across OECD countries and economies, 78% of students are proficient at Level 2 or above. In other words, about eight in ten students can apply their knowledge to commonly used financial products, terms and concepts. In five OECD countries and economies, at least 80% of students perform at or above Level 2: Australia (80%), the Flemish Community of Belgium (88%), the Canadian provinces (87%), Italy (80%) and the Netherlands (81%). Among partner countries and economies, 91% of students in B-S-J-G (China) and 89% of students in Russia perform at or above Level 2, while only 47% of students in Brazil do.

Proficiency at Level 3 (scores higher than 475 points but lower than or equal to 550 points)

Students proficient at Level 3 can apply their knowledge to commonly used financial concepts, terms and products to situations that are relevant to them. In addition to demonstrating proficiency at and below Level 2, students at this level are beginning to consider the consequences of financial decisions, and they make simple financial plans in common contexts, such as starting to compare some of the financial benefits of borrowing money with different interest rates and repayments. They are able to make straightforward interpretations of a range of financial documents, such as an invoice and a pay slip, and apply a range of basic numerical operations, such as making budget calculations. Students at this level can also choose the numerical operations needed to solve routine problems in relatively common financial literacy contexts. Therefore, they show not only a capacity to use mathematical tools but also to choose the tools that best apply to the financial tasks at hand.

The third part of the question "MOTORBIKE INSURANCE" requires Level 3 proficiency. The overall question asks students to identify factors likely to affect the cost of motorbike insurance under given circumstances. While buying insurance may be an unfamiliar situation to 15-year-old students, many students will need to know in their near future whether they have a legal obligation to buy insurance to protect against specific adverse events. They will have to decide whether they want to insure items that they have bought, and they will need to understand what factors are likely to affect the cost of insurance.

The part of the question that is located at Level 3 asks students to indicate whether having been responsible for two road accidents in the previous year is likely to increase the cost of insurance, reduce it or if it is likely to have no effect on cost. While no numerical operations are required, students need to analyse information in a financial context to have an understanding of the financial consequences of their actions. This question falls under the content area of risk and reward because insurance is a product designed specifically to protect individuals against risks and financial losses that they would not otherwise be able to bear.

Across OECD countries, on average, 25% of students score at Level 3, the largest share among the five proficiency levels described in PISA. Similarly, in eight countries and economies (Australia, the Canadian provinces, Italy, the Netherlands, Poland, Russia, Spain and the United States), the largest share of students performs at Level 3 (Table IV.3.2). Level 3 also corresponds to the median level of performance in seven participating countries and economies: Australia, the Canadian provinces, Italy, the Netherlands, Poland, Russia and the United States, (Table IV.4.1).

Across the 10 participating OECD countries and economies, on average, more than half (56%) of students are proficient at Level 3 or above. In four OECD countries and economies, the percentage of students performing at Level 3 or above is higher than 60%: Australia (61%), the Flemish Community of Belgium (73%), the Canadian provinces (70%) and the Netherlands (62%). By contrast, less than 50% of students perform at Level 3 or above in the OECD countries Chile (35%), the Slovak Republic (42%) and Spain (49%). Among partner countries and economies, the percentage of students who perform at or above Level 3 ranges from 24% in Brazil to 77% in B-S-J-G (China).

Proficiency at Level 4 (scores higher than 550 points but lower than or equal to 625 points)

Students proficient at Level 4 on the financial literacy scale can, in addition to demonstrating proficiency at and below Level 3, apply their knowledge of less-common financial concepts and terms to contexts that will be relevant to them as they move towards adulthood. Students at this level can interpret and evaluate a range of detailed financial documents and explain the functions of less-commonly used financial products. They can also make financial decisions taking into account longer-term consequences and can solve routine problems in perhaps unfamiliar financial contexts.

Tasks at Level 4 require an understanding of financial concepts and terms that are likely to be less commonly known among students, such as bank account management and compound interest. Compound interest refers to the process of earning (or paying) interest on interest. Students need to show that they understand that the simple interest rate should be

applied to both the original amount saved or borrowed and any interest that has been added to an account. The tasks at this level also include contexts that are not necessarily familiar to 15-year-old students but that will be relevant to them in their near future, such as a pay slip. Tasks also require an ability to identify the possible consequences of financial decisions, and to choose financial products based on those consequences, such as deciding between two loan offers with different terms and conditions.

"PAY SLIP – Question 1" requires Level 4 proficiency. This multiple-choice question asks students to identify and interpret financial information on a pay slip. While a pay slip is a common financial document, it may be unfamiliar to 15-year-old students. In this question, students need to understand the difference between gross and net pay, that is, the difference between pay before and after any deductions have been made (such as deductions for health care or income tax).

Across the 10 participating OECD countries and economies, on average, 19% of students perform at Level 4. Level 4 corresponds to the median level of performance in the high-performing economies of the Flemish Community of Belgium and B-S-J-G (China) (Tables IV.3.2 and IV.4.1). In the Flemish Community of Belgium, the share of students performing at Level 4 is the largest among the five proficiency levels, meaning that there are more students performing at Level 4 than at any other proficiency level. On average across OECD countries and economies, nearly one in three (31%) students is proficient at Level 4 or above. More than 40% students perform at Level 4 or above in the Flemish Community of Belgium (51%), B-S-J-G (China) (57%) and the Canadian provinces (46%). Less than 20% of students in Brazil (10%), Chile (14%), Lithuania (16%), Peru (8%), and the Slovak Republic (nearly 20%) score at this level or above.

Proficiency at Level 5 (scores higher than 625 points)

Students at Level 5 on the PISA financial literacy scale can successfully complete the most difficult items in this domain. In addition to exhibiting proficiency at or below Level 4, they can apply their understanding of a wide range of financial terms and concepts to contexts that may only become relevant to their lives later on, such as borrowing money from loan providers. Students at this level can analyse complex financial products and take into account features of financial documents that are significant but unstated or not immediately evident, such as transaction costs. They can work with a high level of accuracy and solve non-routine financial problems, such as calculating the bank balance in a given bank statement taking into account multiple factors, such as transfer fees. The tasks at this level are related to students' ability to look ahead and plan for the future to solve financial problems or make the kinds of financial decisions that will be relevant to many of them in the future, regardless of country contexts. Students at Level 5 can also describe the potential outcomes of financial decisions, showing an understanding of the wider financial landscape, such as income tax. These tasks relate to higher-order uses of knowledge and skills and can thus reinforce other competencies, such as the use of basic mathematical knowledge and the ability to look ahead and plan for the future.

The full credit response for "INVOICE – Question 3" requires Level 5 proficiency. This question asks students to interpret a financial document in a rather complex situation that is not uncommon in real life. Students are required to calculate the correct amount due, given that the quantity described on the invoice is incorrect, taking into account the sales tax as a percentage of purchase and the delivery charge. While the situation provided by this task might be unfamiliar to 15-year-olds, students are likely to face this kind of situation in real life as they become independent from their parents. In this task, full credit is given for the responses taking into account the tax change and postage, and partial credit is given to responses that only consider one of those factors. The full-credit score is located at Level 5, illustrating the fact that calculating a new total on an invoice, taking into account several factors, constitutes a significant challenge. To get full credit, students need to interpret and use financial and numeric information in an unfamiliar context and solve a financial problem by using multiple numerical operations, that is, addition, subtraction and calculation of percentages.

Level 5 is the highest described proficiency level in financial literacy; its upper score limit is not defined. Across the 10 participating OECD countries and economies, slightly more than one in ten (12%) students, on average, are proficient at Level 5. About one in four students in the Flemish Community of Belgium (24%) performs at Level 5 as does about one in three students in B-S-J-G (China) (33%). Among OECD countries and economies, between 10% and 25% of students perform at Level 5 in Australia (15%), the Canadian provinces (22%), the Netherlands (18%) and the United States (10%). Less than 10% of students in Chile (3%), Italy (6%), Poland (8%), the Slovak Republic (6%) and Spain (6%) perform at this level. Among the remaining partner countries and economies, about 11% of students in Russia and less than 5% of students in Brazil, Lithuania and Peru perform at this highest level.

TRENDS IN STUDENT PERFORMANCE IN FINANCIAL LITERACY

Financial literacy was assessed in both PISA 2012 and PISA 2015. Eight countries and economies participated in both assessments, including seven OECD countries and economies: Australia, the Flemish Community of Belgium, Italy, Poland,

the Slovak Republic, Spain and the United States; and one partner country: Russia. As not all countries participated in both assessments, when computing the OECD average trends in financial literacy performance, only those countries with valid data to compare the two assessments are included in the average. Comparisons of the OECD average between 2012 and 2015 are therefore based on the seven OECD countries and economies that participated in both assessments. Box IV.3.4 provides further details on the comparability of results between the two assessments.

Box IV.3.4 **Comparing PISA 2012 and 2015 results in financial literacy**

In order to ensure the comparability of PISA results over time, successive assessments must include a sufficient number of common assessment items so that results can be reported on a common scale. Some 39 financial literacy items were used in both the 2012 and 2015 financial literacy assessments (out of a total of 43 items used in 2015). Moreover, the financial literacy assessment framework remained unchanged between the two assessments, and the common items adequately cover the different aspects of the framework.

With each cycle, PISA aims to measure the knowledge and skills that are required to participate fully in society and the economy. This includes making sure the assessment instruments are aligned with new developments in assessment techniques and with the latest understanding of the cognitive processes underlying proficiency in each domain. A major difference between the 2012 and 2015 assessments of all domains, including financial literacy, was the use of computers in 2015, rather than pencils and paper, to deliver the test questions. Most of the countries/economies participating in the PISA 2015 test, including all OECD countries and all countries and economies participating in the financial literacy assessment, assessed their students on computers (see "What is PISA?" at the beginning of this volume).

In order to compare the results of this test to those obtained by earlier cohorts of students on past PISA paper-based tests, the PISA 2015 field trial examined the equivalence of mathematics, reading and science items between computer-based tests and paper-based tests. Items that passed the test of equivalence were used to link across modes and assessment cycles. Given the small number of countries/economies participating in the optional financial literacy assessment in the two cycles, a different procedure was used to link the 2012 and 2015 financial literacy assessments. The PISA 2015 field trial included a mode-effect study comparing the performance of students who were randomly assigned to take the tests in paper-based or in computer-based form. The linking of the financial literacy scales between 2012 and 2015 was performed by using all the available data (the 2012 main study, the 2015 field trial and the 2015 main study), exploiting the equivalence of the two samples in the 2015 field trial. This method provides a consistent and robust linking approach, but it does not provide information on which items are directly comparable across modes. The *PISA 2015 Technical Report* (OECD, forthcoming) provides more details about the scaling of financial literacy and the mode-effect study conducted in the context of the PISA 2015 field trial.

Another major change between the 2012 and 2015 assessments was specific to financial literacy and did not affect the assessment of the other domains. Sampling design and the scheduling of the test changed between the two assessments. Students assessed in financial literacy in 2012 were tested in financial literacy – as well as in mathematics and reading – at the same time as other students were taking the core assessment; students assessed in financial literacy in 2015 took the test in a separate session after having been tested in mathematics reading and science. In most participating countries and economies, the financial literacy testing session took place on the afternoon of the same day in a large majority of sampled schools. However, in Brazil, students in about one in three schools sat the financial literacy test on a different day than the day when they sat the mathematics, reading and science tests; students in about eight out of ten schools in Italy and Russia sat the financial literacy test on a different day than the main test. Genuine financial literacy trends may be confounded by the change in the scheduling of the assessment, especially in countries and economies where most students sat the financial literacy assessment in the afternoon, as those students might have been tired after a long day of testing.

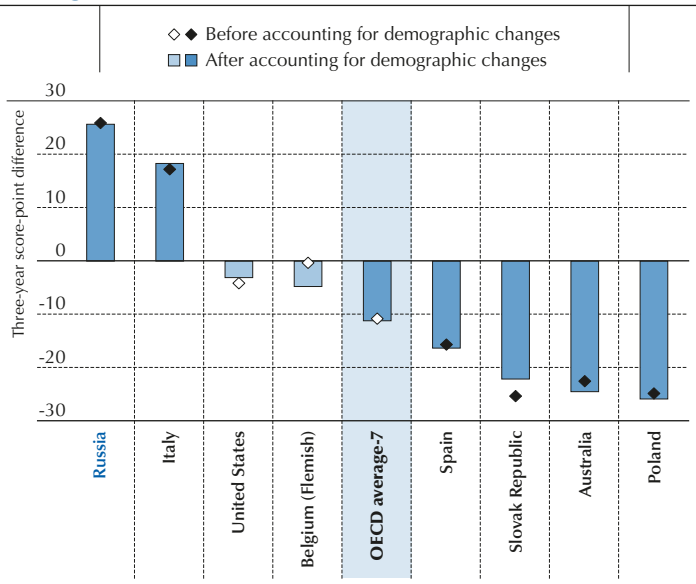
Trends in average performance

On average across OECD countries with comparable data in PISA 2012 and PISA 2015, performance remained stable (the observed decline of 11 points over 3 years is not statistically significant [Figure IV.3.7]). But the stability of the average masks significant changes observed in some countries and economies.

Figure IV.3.7 shows that two countries had a significant improvement in average financial literacy: Italy (where the mean score in financial literacy increased by 17 points between 2012 and 2015) and Russia (where it improved by 26 points). By contrast, four countries show a significant deterioration in average performance: Australia (a drop of 22 score points), Poland (25 score points), the Slovak Republic (25 score points) and Spain (16 score points). The Flemish Community of Belgium and the United States show no significant change in mean performance (Table IV.3.1).

In most countries and economies, changes in average financial literacy performance between 2012 and 2015 are qualitatively consistent with changes in mathematics, reading and science performance over the same period (Table IV.3.8). Russia improved its performance not only in financial literacy but also in reading and mathematics (with no significant change in science). In Australia and Poland, performance deteriorated in science, mathematics and financial literacy, with no change in reading. In the Flemish Community of Belgium, performance remained unchanged in mathematics, reading, science and financial literacy. In the United States, performance remained unchanged in financial literacy, science and reading but declined in mathematics. In the remaining countries and economies, trends in financial literacy are not in line with trends in the other PISA subjects. In Italy, for example, financial literacy performance improved while performance in mathematics and reading remained unchanged and performance in science declined. In the Slovak Republic and Spain, performance in financial literacy deteriorated while performance in the other three subjects remained unchanged.

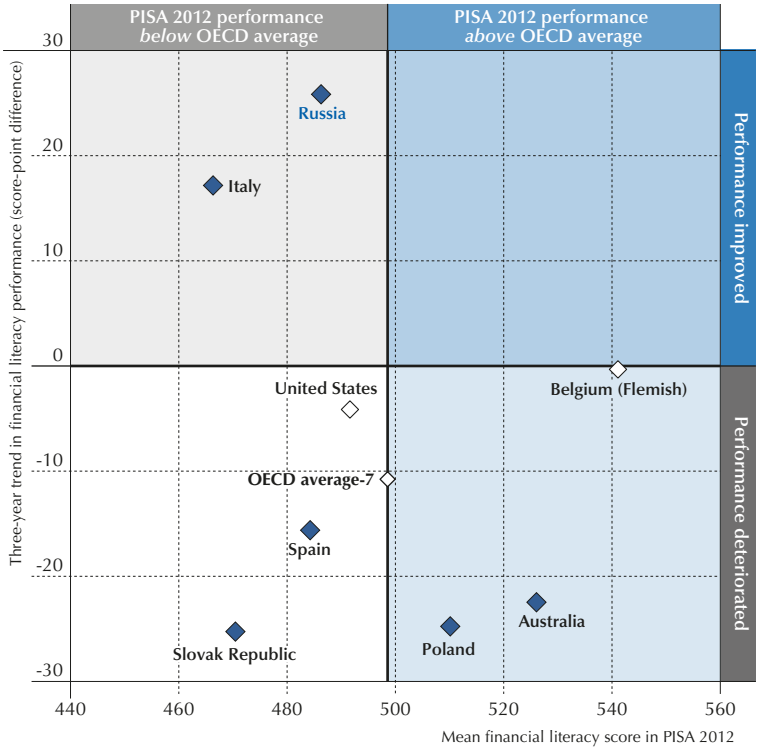
Figure IV.3.7 ■ **Change between 2012 and 2015 in mean financial literacy performance**



Notes: Statistically significant differences are shown in a darker tone (see Annex A3).
Only countries/economies that participated in both the PISA 2012 and PISA 2015 assessments are shown.
The three-year trend after accounting for demographic changes shows how the performance of a population with the same demographic profile as the PISA 2015 population has changed over time. Demographic characteristics considered are: students' age (in three-month increments), gender, and immigrant background.
Countries and economies are ranked in descending order of the three-year trend in financial literacy performance, after accounting for demographic changes.
Source: OECD, PISA 2015 Database, Tables IV.3.1 and IV.3.5.
StatLink http://dx.doi.org/10.1787/888933485064

Figure IV.3.8 shows the relationship between each country's or economy's average financial literacy performance in 2012 and the difference in mean performance between 2012 and 2015. The Flemish Community of Belgium scored above the OECD average in 2012 and did so in 2015, with no statistically significant change. Both Italy and Russia performed below the OECD average in 2012 and have both improved. Italy was among the lowest-performing countries in 2012, but in 2015 it performed only slightly below the average. Russia scored above average in 2015. The mean performance of Australia declined over the period, but the country still performed above the OECD average in 2015. Poland was above average in 2012 and performed at the average three years later. The Slovak Republic and Spain were already performing below the OECD average in 2012 and their mean scores declined further in 2015.

Figure IV.3.8 ▪ **Trends in financial literacy performance**
Compared to the 2012 OECD average



Notes: Three-year trends in financial literacy that are statistically significant are indicated in a darker tone (see Annex A3).
Only countries/economies that participated in both the PISA 2012 and PISA 2015 assessments are shown.
Source: OECD, PISA 2015 Database, Table IV.3.1.
StatLink http://dx.doi.org/10.1787/888933485077

Trends in average performance adjusted for demographics

Changes in a country's or economy's performance can have many sources. For instance, changes can result from demographic shifts in the country's population. By following strict sampling and methodological standards, PISA ensures that all countries and economies measure the proficiency of their 15-year-old students in grades 7 and above. But because of changes in enrolment rates, migration or other demographic and social trends, the characteristics of this reference population may change.

Trends adjusted for demographic changes neutralise some of the changes observed in the composition and coverage of the PISA sample so that it becomes possible to identify some of the sources of the trends observed. Trends adjusted for demographic changes account for adjustments in the age (measured in quarters), gender and immigrant background of the student population. Annex A5 provides details on how these adjusted trends were calculated.

It is possible to analyse the impact of changes in the immigrant background, age and gender of the student population in each country and economy by contrasting the (unadjusted) changes in mean performance, reported above, with those that would have been observed had the overall profile of the student population been the same, throughout the period, as that observed in 2015. Adjusted trends in this section provide an estimate of what the performance trend would have been if the 2012 PISA sample had the same proportion of immigrant students (first- and second-generation) and the same composition by gender and age as the target population in 2015.

Figure IV.3.7 shows that, in all the countries and economies with available data, the demographic shifts in the sample slightly influence the observed trends, but in no country or economy are the direction and significance of the trend affected by these shifts.[1] On average across OECD countries with comparable data in PISA 2012 and PISA 2015, after adjusting for demographic changes, performance declined by 11 score points (a statistically significant decline).

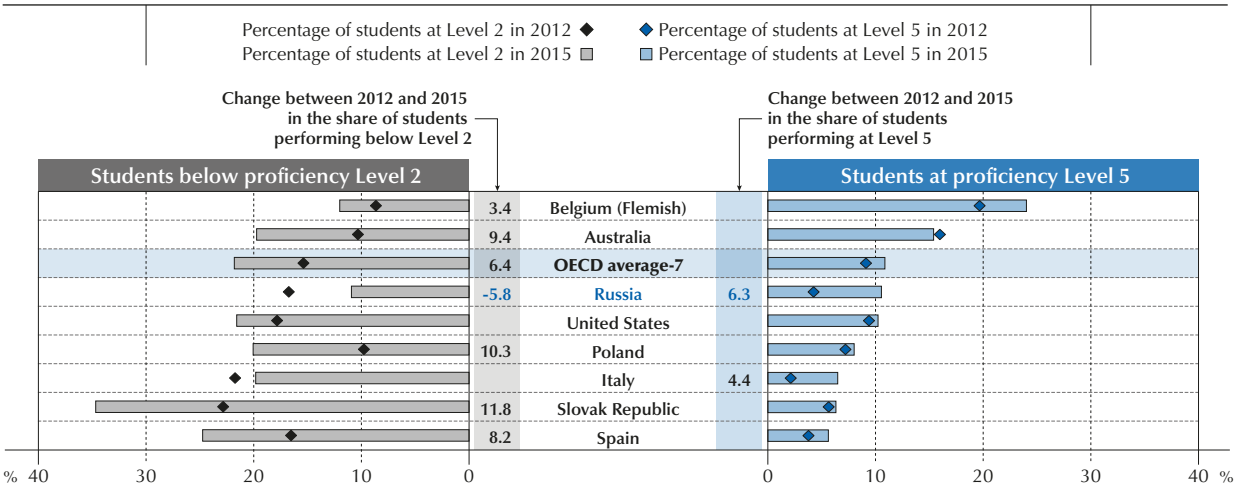
Trends in performance among low- and high-performing students

Changes in a country's or economy's average performance can result from changes at different levels of the performance distribution. For example, for some countries and economies, the average score may increase when the share of students scoring at the lowest levels of the financial literacy scale shrinks because of improved performance among these students. In other countries and economies, improvements in mean scores may be largely the result of improvements in performance among the highest-achieving students and an increase in the share of students who perform at the highest levels.

Figure IV.3.9 shows that across the seven OECD countries with available data, on average, the proportion of students scoring below Level 2 in financial literacy increased by about 6 percentage points between 2012 and 2015 (a significant increase), whereas the proportion of students scoring at Level 5 increased by about 2 percentage points (a non-significant increase). The two countries where mean performance improved also saw an increase in the share of students performing at Level 5: Italy (an increase of 4 percentage points) and Russia (an increase of 6 percentage points). Russia achieved a higher mean score by both reducing the proportion of low performers (by 6 percentage points) and increasing the proportion of students performing at the highest proficiency level (Table IV.3.6).

Between 2012 and 2015, the four countries/economies where mean performance deteriorated also saw an increase in the share of students who perform below Level 2: Australia (where this share grew by 9 percentage points), Poland (by 10 percentage points), the Slovak Republic (by 12 percentage points) and Spain (by 8 percentage points). The share of students who perform below Level 2 also increased slightly (by 3 percentage points) in the Flemish Community of Belgium.

Figure IV.3.9 ▪ **Percentage of low and top performers in financial literacy in 2012 and 2015**



Notes: Only countries/economies that participated in both the PISA 2012 and PISA 2015 assessments are shown.

The change between PISA 2012 and PISA 2015 in the share of students performing below Level 2 in financial literacy is shown to the left of the country/economy name. The change between PISA 2012 and PISA 2015 in the share of students performing at Level 5 in financial literacy is shown to the right of the country/economy name. Only statistically significant changes are shown (see Annex A3).

Countries and economies are ranked in descending order of the percentage of students performing at Level 5 in 2015.

Source: OECD, PISA 2015 Database, Table IV.3.6.

StatLink http://dx.doi.org/10.1787/888933485081

STUDENT PERFORMANCE IN FINANCIAL LITERACY COMPARED TO PERFORMANCE IN CORE PISA SUBJECTS

What levels of basic competencies are necessary for a student to become financially literate? For instance, some mathematics skills are necessary to perform simple calculations, such as percentages, that may be required to take financial decisions; some reading competencies are needed to read financial documents and identify financial terms. Science literacy and financial literacy have in common the need to analyse, evaluate and solve problems (in different domains), but science competencies are not strictly necessary to be proficient in financial literacy and there are no links across the two assessment frameworks. Interest in financial matters and financial literacy competencies can also support the development of other skills, such as those in mathematics and reading, and provide a potentially engaging, real-life context to a variety of school subjects (Koh and Low, 2010; OECD, 2016b, 2013).

To what extent is the variation in financial literacy performance correlated with performance in other domains, such as mathematics, reading and science? Students who do well in financial literacy are likely to perform well in other areas too, and students who have poor financial literacy skills are likely to do poorly in other subjects. On average across the 10 participating OECD countries and economies, among the top performers in financial literacy (students who attain Level 5), 45% are also top performers in mathematics, 37% are also top performers in reading and 38% are also top performers in science (Table IV.3.3). Similarly, among the low performers in financial literacy (students who perform below Level 2), 65% are also low performers in mathematics, 60% are also low performers in reading and 64% are also low performers in science (Table IV.3.4).

Figure IV.3.10 shows the correlation between student performance in financial literacy and the three other subjects PISA assesses, namely mathematics, reading and science. The correlation across the three core subjects is also reported for comparison. On average across the 10 participating OECD countries and economies, the correlation between financial literacy and mathematics performance is 0.74, the correlation between financial literacy and reading performance is 0.75, and the correlation between financial literacy and science performance is 0.78. Financial literacy is strongly correlated with the other domains, but less so than the three core subjects are correlated among themselves. The correlation between mathematics and reading performance is 0.80, the correlation between mathematics and science performance is 0.89 and the correlation between reading and science performance is 0.87.

There is also some variation across countries and economies in the correlation between student performance in financial literacy and performance in the three core domains (Table IV.3.9). The correlation between financial literacy and performance in the three other domains is relatively weak in Brazil, Russia and the Slovak Republic, where they are about 0.70 or lower. The correlations between financial literacy and the three core subjects are relatively strong (around 0.80 or higher) in Australia, the Flemish Community of Belgium, B-S-J-G (China), the Netherlands and the United States.

Figure IV.3.10 ■ **Correlation between financial literacy and performance in the core PISA subjects**

OECD average correlation, where 0.00 signifies no relationship and 1.00 signifies the strongest positive relationship

OECD average-10			
Correlation between performance in…			
Mathematics	Reading	Science	… and performance in:
0.74	0.75	0.78	Financial literacy
	0.80	0.89	Mathematics
		0.87	Reading

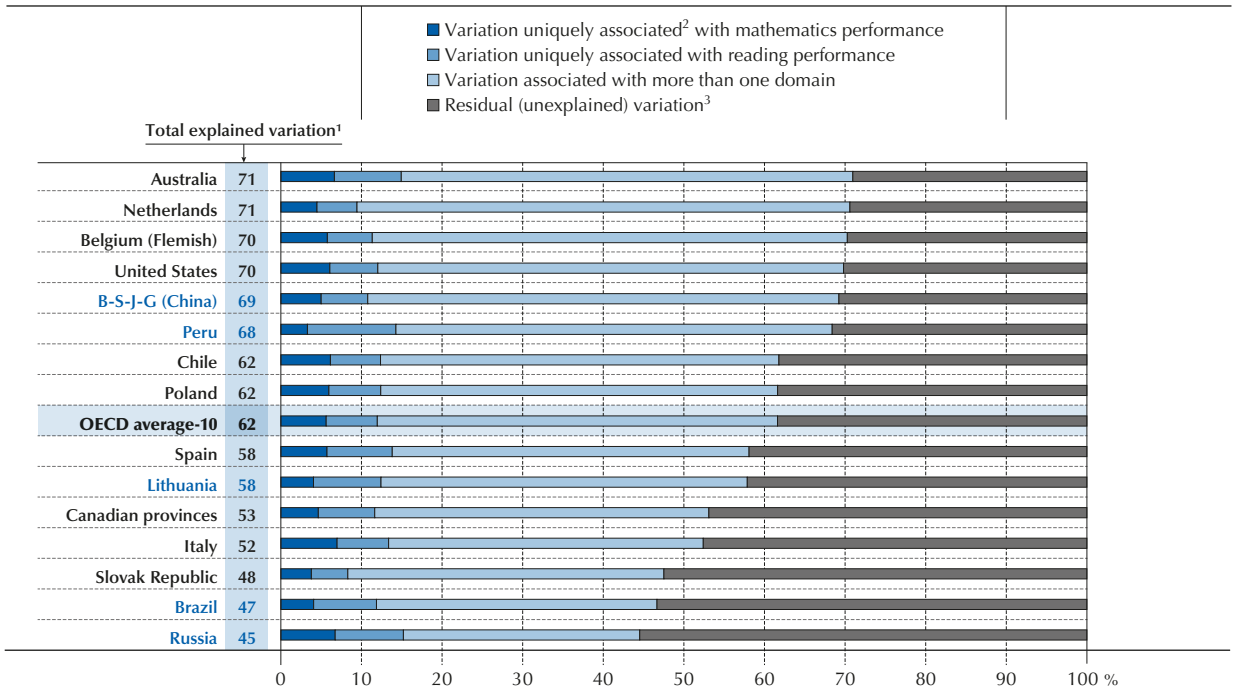
Source: OECD, PISA 2015 Database, Table IV.3.9.

Another way of looking at the relationship between financial literacy and the core PISA subjects is to examine the extent to which the variation in financial literacy performance can be explained by performance in the subjects that form the foundation on which financial literacy skills are built, such as mathematics and reading. Figure IV.3.11 shows that, on average across the 10 participating OECD countries and economies, around 38% of the financial literacy score reflects factors that are uniquely captured by the financial literacy assessment (the residual variation in Figure IV.3.11); the remaining 62% of the financial literacy score reflects skills that can be measured in mathematics and/or reading assessments. Of this 62%, almost all the variation is shared with mathematics and reading together (about 50% of the total variation); about 6% is uniquely shared between financial literacy and mathematics, and about 6% is uniquely shared between financial literacy and reading.

Figure IV.3.11 also shows how the association of skills in financial literacy with those in mathematics and reading varies across countries and economies.[2] In Brazil, Russia and the Slovak Republic, performance in mathematics and reading explains less than 50% of the variation in financial literacy performance. These are also countries where the correlations between financial literacy and the two core domains are relatively weak (as shown in Table IV.3.9).[3] In contrast, performance in mathematics and reading explains more than 70% of the variation in financial literacy performance in Australia, the Flemish Community of Belgium and the Netherlands, meaning that a large part of the variation in financial literacy scores reflects proficiency in other domains. In these countries and economies, the correlation between financial literacy and the two core subjects is also relatively strong.

Figure IV.3.11 ▪ **Variation in financial literacy performance associated with mathematics and reading performance**

Percentage of variation in financial literacy performance explained



1. Total explained variation is the R-squared coefficient from a regression of financial literacy performance on mathematics and reading performance.
2. Variation uniquely associated with mathematics (reading) is measured as the difference between the R-squared of the full regression (a regression of financial literacy on mathematics and reading performance) and the R-squared of a regression of financial literacy on reading (mathematics) only.
3. The residual variation is computed as: 100 - total explained variation.

Countries and economies are ranked in descending order of the percentage of variation in financial literacy performance explained by performance in mathematics and reading.

Source: OECD, PISA 2015 Database, Table IV.3.10a.

StatLink http://dx.doi.org/10.1787/888933485094

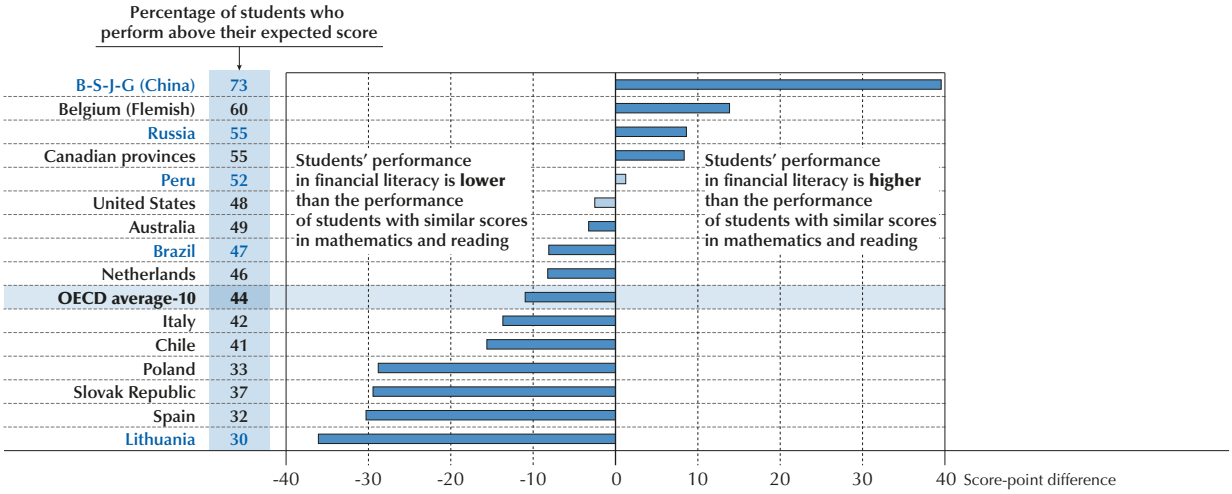
The positive correlations across domains indicate that, in general, students who perform at higher levels in mathematics and reading also perform well in financial literacy. There are, however, wide variations in financial literacy performance for any given level of performance in mathematics and reading, meaning that the skills measured by the financial literacy assessment may go beyond or fall short of the ability to use the knowledge that students acquired from subjects taught in compulsory education. Figure IV.3.12 shows a ranking of countries in relative performance, where relative performance compares students' actual financial literacy performance to the performance that would be expected based on their performance in mathematics and reading.

In the Flemish Community of Belgium, B-S-J-G (China), the Canadian provinces and Russia, students perform better in financial literacy than students in other countries with similar performance in mathematics and reading. In B-S-J-G (China), the difference between students' scores in financial literacy and their expected performance, given their performance in the core domains, is 39 score points. In the Flemish Community of Belgium, B-S-J-G (China), the Canadian provinces and Russia, which are among the highest-performing countries and economies in PISA 2015, more than 50% of students perform better in financial literacy than expected, given their scores in the other two subjects (Table IV.3.11).

In contrast, students in Australia, Brazil, Chile, Italy, Lithuania, the Netherlands, Poland the Slovak Republic and Spain perform worse in financial literacy than students in other countries with similar performance in mathematics and reading. In Lithuania, Poland, the Slovak Republic and Spain, the difference between expected and actual performance exceeds 25 score points. Three of these countries – Lithuania, the Slovak Republic and Spain – also perform below the OECD average. In Poland, the Slovak Republic and Spain, mean performance deteriorated between 2012 and 2015. This suggests that students could be helped in using the skills widely taught in school to attain higher levels of financial literacy.

Figure IV.3.12 ▪ **Relative performance in financial literacy**

Difference between the actual financial literacy score and the score predicted by students' performance in mathematics and reading



Note: Statistically significant differences are shown in a darker tone (see Annex A3).
Countries and economies are ranked in descending order of the score-point difference between actual and expected performance.
Source: OECD, PISA 2015 Database, Table IV.3.11.
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A CONTEXT FOR COMPARING COUNTRIES'/ECONOMIES' PERFORMANCE IN FINANCIAL LITERACY

This section provides a brief overview of the context of 12 countries that participated in the PISA 2015 assessment of financial literacy: Australia, Brazil, Chile, Italy, Lithuania, the Netherlands, Peru, Poland, Russia, the Slovak Republic, Spain and the United States. These countries cover a relatively wide geographical area, including North and South America, Western, Central and Eastern Europe, and Oceania, representing about 37% of the world's GDP.

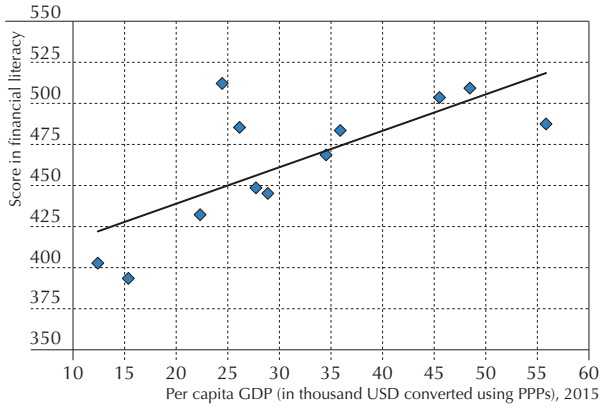
Three participating economies, i.e., the Flemish Community of Belgium, B-S-J-G (China) and the participating Canadian provinces, are not covered in this section as they represent subnational entities of their respective countries. The Flemish Community of Belgium covers about 55% of the 15-year-old population in the whole country; the provinces and municipalities of B-S-J-G (China) represent about 15% of the population aged 0-14 in China; and the seven provinces of Canada that participated in the financial literacy assessment cover 64% of the country's total population of 15-year-olds.

The section particularly highlights countries' characteristics that may inform the analysis of students' proficiency in financial literacy, such as national income, income distribution, the development of financial markets, expenditure on education and financial knowledge among adults (Table IV.3.12).

There are significant differences in the size of these countries' national economies and national income. GDP (in 2011 US dollars) varies from USD 77 billion in Lithuania to USD 16 890 billion in the United States. The per capita GDP (in equivalent USD converted using purchasing power parity) ranges from USD 12 402 in Peru and USD 15 359 in Brazil to USD 48 459 in the Netherlands and USD 55 837 in the United States. Eleven out of the 12 countries have levels of per capita GDP higher than USD 15 000.

Figure IV.3.13 shows the relationship between per capita GDP and students' average performance in financial literacy. The figure offers a best-fit line to give an indication of the direction of the relationship between per capita GDP and students' mean score in financial literacy, but does not display statistics about the strength of this association because they are based on a small number of country points. The scatter plot shows that, overall, per capita national income is positively associated with average performance in financial literacy, but some countries with lower per capita GDP perform better in financial literacy than wealthier countries. For instance, Lithuania, Poland and the Slovak Republic have similar per capita GDP (between USD 25 000 and 30 000), but students in Poland score 40 points higher, on average, than students in the Slovak Republic.

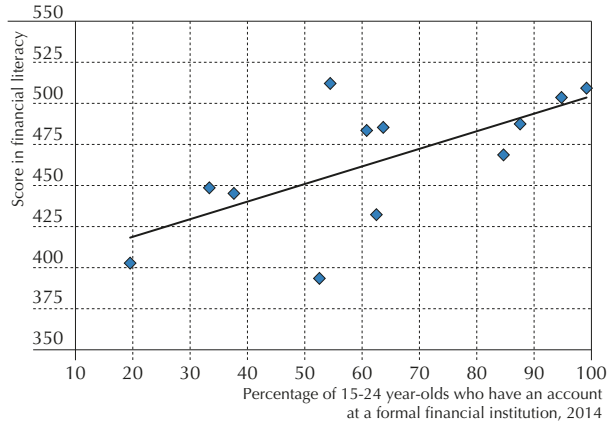
Figure IV.3.13 ▪ **Financial literacy performance and per capita GDP**



Source: OECD, PISA 2015 Database, Table IV.3.12 and World Bank (2017), World Development Indicators, http://data.worldbank.org/products/wdi.

StatLink http://dx.doi.org/10.1787/888933485114

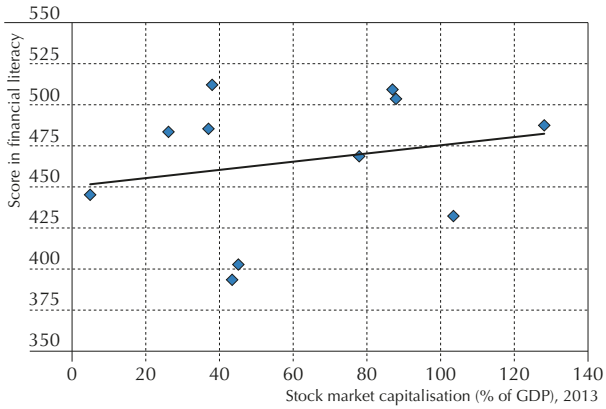
Figure IV.3.14 ▪ **Financial literacy and access to basic financial products**



Source: OECD, PISA 2015 Database, Table IV.3.12 and Demirguc-Kunt, A, et al. (2015), "The Global Findex Database 2014: Measuring financial inclusion around the world", World Bank, www.worldbank.org/en/programs/globalfindex.

StatLink http://dx.doi.org/10.1787/888933485125

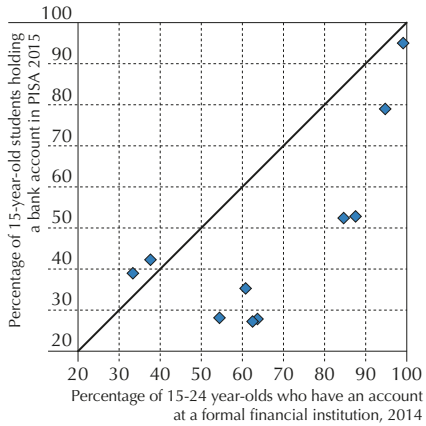
Figure IV.3.15 ▪ **Financial literacy and financial market development**



Source: OECD, PISA 2015 Database, Table IV.3.12 and World Bank (2015), Global Financial Development Database, http://data.worldbank.org/data-catalog/global-financial-development.

StatLink http://dx.doi.org/10.1787/888933485138

Figure IV.3.16 ▪ **Access to basic financial products**



Source: OECD, PISA 2015 Database, Table IV.3.12 and Demirguc-Kunt, A, et al. (2015), "The Global Findex Database 2014: Measuring financial inclusion around the world", World Bank, www.worldbank.org/en/programs/globalfindex.

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Likewise, the distribution of income within these 12 countries is relatively diverse. The Gini coefficient measures the extent to which the income distribution among individuals or households within an economy deviates from a perfectly equal distribution. A Gini coefficient of zero represents perfect equality (each person earns the same income), while 1.0 implies perfect inequality (all income goes to one person and the rest earn nothing). The degree of income equality varies from 0.26 (the most equal) in the Slovak Republic to 0.5 and over in Chile and Brazil, the most unequal.

To have an idea of the development of financial markets, it is useful to look at both the degree to which individuals can and do use financial services (financial access), as well as the size of financial institutions and markets (financial depth). The degree of access to financial products also varies among these 12 countries. The percentage of 15-24 year-olds who have an account at a formal financial institution ranges from less than 20% in Peru to over 90% in Australia and the Netherlands. Among 25-64 year-olds, more than 90% of adults in Australia, Italy, Lithuania, the Netherlands, the Slovak Republic, Spain and the United States have an account at a formal financial institution, while in Peru, only 33% of adults do.

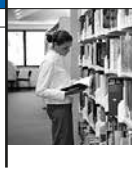

Figure IV.3.14 shows the percentage of 15-24 year-olds who have an account at a formal financial institution compared with students' mean score in financial literacy. The scatterplots indicate that there is a positive relationship between the percentage of young people and adults holding financial products and students' mean score in financial literacy. However, access to financial products does not categorically determine average performance in financial literacy. Brazil and Russia have very similar percentages of young people who have an account at a formal financial institution (slightly above 50%), but students in Russia score more than 110 points higher in financial literacy, on average, than students in Brazil. The financial literacy mean scores in Poland and the United States are not statistically significantly different from each other, but the percentage of young people with an account is around 24 percentage points higher in the United States than in Poland.

The size of stock market capitalisation as a percentage of GDP provides an indication of the depth of a country's financial market. Stock market capitalisation varies from 5% of GDP in the Slovak Republic to over 100% of GDP in Chile and the United States. Figure IV.3.15 shows the association between stock market capitalisation as a percentage of GDP and students' mean score in financial literacy. The scatterplot shows that the points are dispersed and that there is only a weak, positive relationship.

The data on the percentage of 15-24 year-olds who have an account at a formal financial institution (collected by the World Bank) can also be compared to the percentage of 15-year-old students who have a bank account, as reported by students participating in the PISA assessment. Data from the two sources are broadly consistent and, in most countries, with the exception of Lithuania and the Slovak Republic, the percentage of 15-year-old students who have a bank account is lower than the percentage of 15-24 year-olds who have an account at a formal financial institution. This difference is to be expected, given the different age range and the slightly different definition of an account. The relatively small discrepancies in Lithuania and the Slovak Republic can be due to a larger number of young people opening accounts in 2015 or to measurement error.

Countries also vary by the financial resources invested in education. Even though financial education is only beginning to be introduced in school in many countries, education expenditure per student gives an indication of the overall resources devoted to schools. The cumulative expenditure in education per student from the age of 6 up to the age of 15 ranges from less than USD 50 000 in Brazil, Chile, Lithuania and Peru, to over USD 90 000 in Australia, the Netherlands and the United States.

The average level of financial knowledge among the adult population offers another indication of the opportunities students may have to improve their financial literacy by discussing and learning from adults. The OECD/INFE International Survey of Adult Financial Literacy Competencies (Box IV.3.2) shows that, among the few countries that participated in both the OECD/INFE financial literacy survey and the PISA 2015 financial literacy assessment, the percentage of adults who can answer correctly at least five out of seven financial knowledge questions ranges from 45% in Russia to 64% in the Netherlands.

Notes

1. The significance of the difference between observed and adjusted trends is not formally tested. Because both trends share a common link error and a perfectly correlated sampling and measurement error (they are estimated on the same samples and data), while each of the estimates is subject to statistical uncertainty, the difference between the two estimates is not subject to these sources of uncertainty.

2. The relationship between financial literacy and science performance is not discussed in the text and figures because science competencies are not strictly necessary to be proficient in financial literacy and there are no links across the two assessment frameworks. The relationship between performance in financial literacy and performance in science, in addition to mathematics and reading, is nevertheless presented in the tables.

3. Correlation and explained variance are strictly related concepts. For instance, a correlation of around 0.74 between financial literacy and mathematics, on average across OECD countries and economies, implies that about half of the variation in financial literacy performance ($0.74 \times 0.74 = 0.55$) is common across the two domains of mathematics and financial literacy.

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4

How performance in financial literacy varies within countries and across student characteristics

This chapter examines how financial literacy performance varies within countries and economies and how it is associated with the demographic and socio-economic characteristics of students and their families. In particular, the chapter looks at performance differences related to students' gender, socio-economic status, immigrant background, language spoken at home and attitudes towards learning.

The PISA financial literacy assessment provides an overall picture of 15-year-olds' ability to apply their accumulated knowledge and skills to real-life situations involving financial issues and decisions. The previous chapter discussed how average performance varies across countries and economies. This chapter looks at how performance varies within countries and economies. What is the difference in performance between higher- and lower-performing students within a country or economy? How much of the variation in performance in financial literacy is related to students' demographic and socio-economic differences? To what extent are differences in students' attitudes towards learning related to differences in financial literacy performance? This chapter analyses the variation in financial literacy performance within countries and economies related to students' gender, socio-economic status, immigrant background and attitudes towards learning.

What the data tell us

- Variation within each country/economy is wider than the variation observed between countries/economies at the mean. On average across OECD countries and economies, the gap between students scoring at the 90th percentile and those at the 10th percentile in financial literacy is 285 score points. The largest gaps are observed in Beijing-Shanghai-Jiangsu-Guangdong (China) and in the Netherlands at about 312 score points, while performance gaps are smallest in Italy and the Russian Federation.
- There is heterogeneity in gender differences in financial literacy. Only in Italy do boys perform better than girls, by 11 score points. In contrast, in Australia, Lithuania, Poland, the Slovak Republic and Spain, girls perform better than boys, and in the remaining countries and economies the difference in performance between boys and girls is not statistically significant. More boys than girls are low performers in 9 out of 15 countries and economies.
- Socio-economically advantaged students score 89 points higher than disadvantaged students, on average across OECD countries and economies, equivalent to more than one PISA proficiency level.
- In 10 countries and economies with available data, socio-economically disadvantaged students are more likely than advantaged students to be low performers, after accounting for student performance and other characteristics.
- Among countries and economies where at least 5% of students have an immigrant background, the difference in financial literacy performance related to immigrant background is larger than 15 score points in the Flemish Community of Belgium, Italy, the Netherlands and Spain, after taking into account students' socio-economic status.

VARIATIONS IN PERFORMANCE WITHIN COUNTRIES AND ECONOMIES

When looking at how performance is distributed within each country/economy, it becomes apparent that the variation observed between students from the same country/economy is, in general, much wider than the variation observed between countries/economies. This variation points to differences within countries/economies in the opportunities that students may have to acquire financial literacy.

The score-point difference across percentiles of the performance distribution provides a useful way to examine differences in the distribution of financial literacy within countries and economies. The difference in score points between the 10th percentile and the 90th percentile shows the disparity in proficiency between the lowest and the highest achievers; the difference between the median, representing the 50th percentile of students, and the 10th percentile is a measure of the achievement gap at the bottom end of the distribution; and the gap between the median and the 90th percentile, which is the score exceeded by only one in ten students, is a measure of the achievement gap at the top.

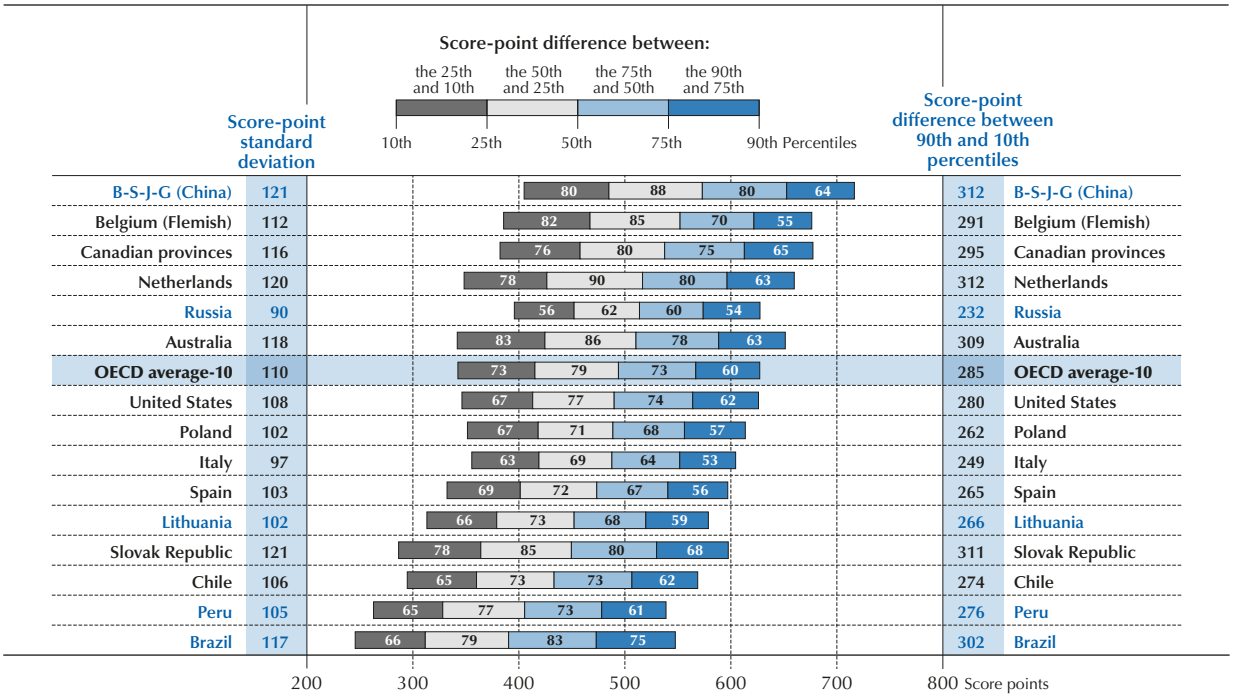
Figure IV.4.1 shows how the average scores at different percentiles vary by country and economy. As a reference, a difference of 75 score points represents one proficiency level on the PISA financial literacy scale (Box IV.3.2). For example, students performing at Level 2 are only using given information to make financial decisions in contexts that are immediately relevant to them (e.g. providing explanations regarding which option is better value for money: buying boxed or loose tomatoes) while those at Level 3 are beginning to consider the consequences of financial decisions and can make simple

financial plans in familiar contexts (e.g. comparing the financial risks of borrowing money with different interest rates and repayments). It is also useful to remember that the difference in mean performance between the highest- and the lowest-performing country/economy in PISA 2015 is equivalent to 173 score points (Table IV.3.1).

On average across the 10 participating OECD countries and economies, the within-country/-economy performance gaps between students scoring at the 90th percentile and those at the 10th percentile in financial literacy is 285 score points, which is larger than three proficiency levels (225 score points). The largest gaps are observed in Beijing-Shanghai-Jiangsu-Guangdong (China) (hereafter "B-S-J-G [China]") and in the Netherlands at about 312 score points. By contrast, performance gaps are less than 250 score points in Italy (249 score points) and the Russian Federation (hereafter "Russia") (232 score points), which is larger than the difference in mean performance between the highest- and the lowest-performing country/economy. Performance gaps are also reflected in the standard deviation, a measure of dispersion around the mean, which is equal to 120 score points or higher in B-S-J-G (China), the Netherlands and the Slovak Republic. By contrast, the standard deviation is less than 100 score points in Italy and Russia (Table IV.4.1).

Figure IV.4.1 ▪ **Variation in financial literacy performance within countries and economies**

Standard deviation and percentiles on the financial literacy scale



Countries and economies are ranked in descending order of the median financial literacy performance.

Source: OECD, PISA 2015 Database, Table IV.4.1.

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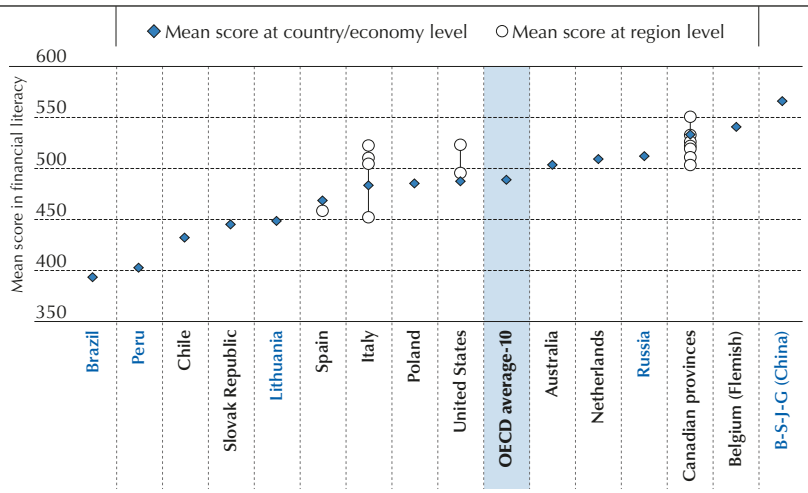
Focusing on the bottom end of the distribution, the performance gap between students scoring at the median and those at the 10th percentile in financial literacy is 151 score points, on average across the 10 OECD participating countries and economies (Table IV.4.1). The gap is larger than 150 score points, the equivalent of two proficiency levels, in Australia, the Flemish Community of Belgium, B-S-J-G (China), the participating Canadian provinces (British Columbia, Manitoba, New Brunswick, Newfoundland and Labrador, Nova Scotia, Ontario and Prince Edward Island), the Netherlands and the Slovak Republic. The gap is smallest in Russia (118 score points). At the top end of the distribution, the performance gap between students scoring at the median and those at the 90th percentile in financial literacy is 133 score points, on average across the 10 participating OECD countries and economies. The performance gap at the top is largest in Australia, Brazil, B-S-J-G (China), the Netherlands and the Slovak Republic (more than 140 score points), while it is smallest in Italy and Russia (less than 120 score points).

In 14 out of the 15 participating countries and economies, all except Brazil, there is greater variation in student performance at the bottom (the difference between the median and the 10th percentile) than at the top (the difference between the 90th percentile and the median). This suggests that in most cases, there is relatively little variation among higher achievers – either because the median score is relatively high or because the highest achievers are not being stretched to their full potential. Meanwhile, the lowest achievers score well below the median. Figure IV.4.1 also highlights large differences between the gaps at the top and bottom ends of the distribution for some countries and economies. Australia, the Flemish Community of Belgium, B-S-J-G (China) and the Netherlands, including the two highest-performing economies, have large gaps at the bottom end of the performance distribution, both in absolute terms and relative to the gaps at the top end.

Regional differences may constitute another important source of within-country/economy variation (Montanaro and Romagnoli, 2016). Canada, Italy, Spain and the United States collected enough data at the subnational level to allow for a detailed analysis of how student performance varies across different regions and geographical locations. Figure IV.4.2 shows the range of mean performance across regions compared with mean performance across countries and economies. The United States collected subnational-level data in financial literacy for two subnational entities: the performance difference between Massachusetts and North Carolina is 28 score points, with Massachusetts scoring above the national average by 36 score points (Table IV.4.4).

Figure IV.4.2 ▪ **Mean financial literacy performance in countries/economies and regions**



Countries and economies are ranked in ascending order of mean financial literacy performance at the country/economy level.
Source: OECD, PISA 2015 Database, Tables IV.4.1 and IV.4.4.
StatLink http://dx.doi.org/10.1787/888933485167

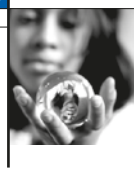
In Canada, only seven provinces out of ten took part in the financial literacy assessment. Across these seven provinces, only British Columbia scores above the national average (by 17 points), while New Brunswick and Manitoba score below average. The gap between the lowest-achieving (Manitoba) and the highest-achieving province (British Columbia) is 47 score points.

The dispersion across subnational entities is even wider in Italy, which oversampled students in two regions (Lombardia and Campania) and two provinces (Trento and Bolzano). Campania scores 31 points below the national average, while Lombardia, Trento and Bolzano score above average (by over 20 points). The difference between the southern region of Campania and the northern province of Bolzano is 70 score points, equivalent to almost one proficiency level.

Spain collected subnational-level data in financial literacy for only one region (Basque Country), whose mean score is not statistically different from the national average. More data and results for regions within the participating countries and economies are included in Annex B2.

Trends in variation in performance

Variations in performance within countries and economies changed to some extent in some of the eight countries and economies that participated in both assessments, including seven OECD countries and economies: Australia, the Flemish Community of Belgium, Italy, Poland, the Slovak Republic, Spain and the United States; and one partner country, Russia.



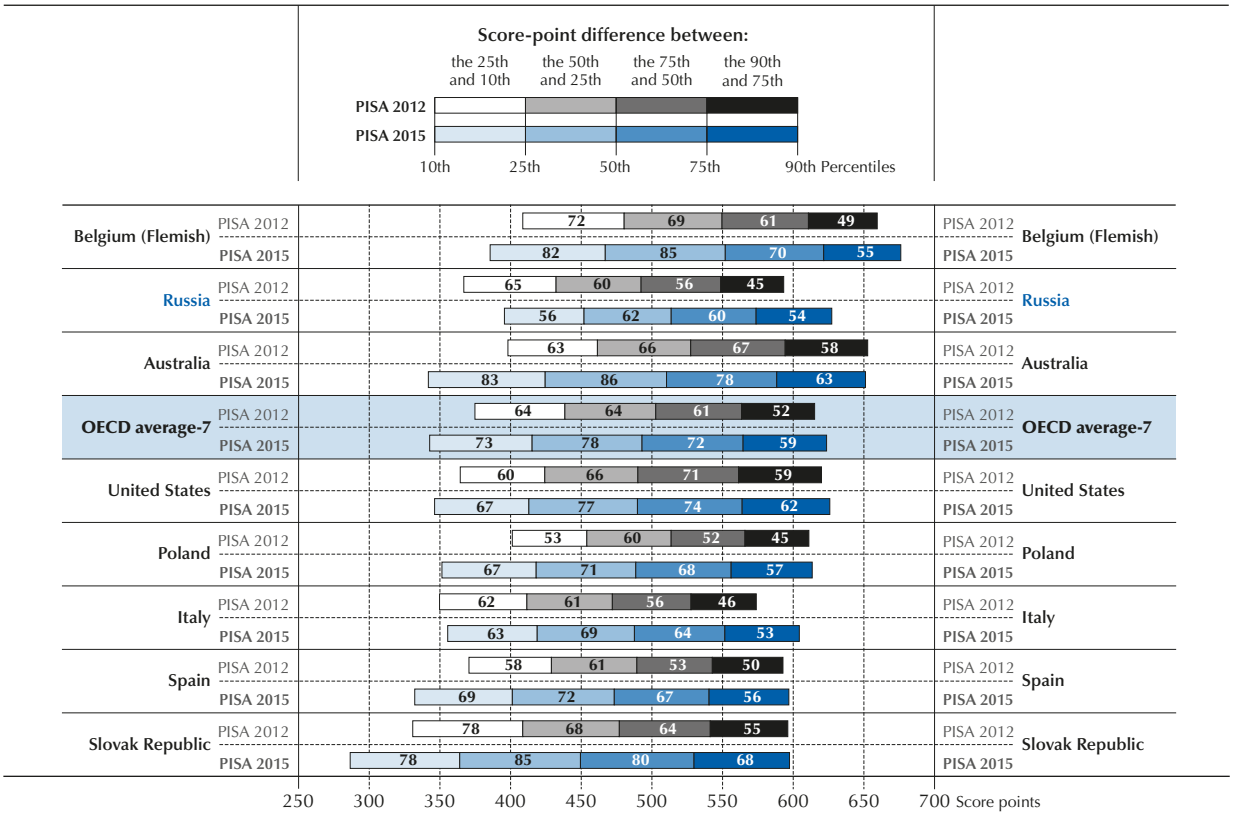
Changes in a country's/economy's average performance, described in Chapter 3, can result from changes at different levels of the performance distribution. For example, for some countries and economies, the average score may increase when high-performing students perform better. In other countries and economies, improvements in mean scores may be largely the result of improvements in performance among the lowest-achieving students, or as a result of improvements across the entire distribution.

Figure IV.4.3 shows students' scores at different percentiles across the PISA 2012 and the PISA 2015 assessments. In Russia, which improved its average performance between 2012 and 2015, the performance distribution shifted upward at all percentiles, suggesting that the average improvement is due to an improvement in performance across 15-year-old students at all levels of proficiency in financial literacy. In Italy, which also improved between 2012 and 2015, the performance distribution shifted upward in the upper part of the distribution (at the median and above), suggesting that the average improvement is due to better performance among high-performing students. By contrast, in Australia, Poland, Spain and the Slovak Republic, performance declined between 2012 and 2015 not only at the mean (Chapter 3), but also in the lower part of the distribution (at the median and below). This suggests that, in these countries, the decline in average performance is mainly related to poorer performance among low-performing students. In the Flemish Community of Belgium and the United States, the performance of 15-year-old students at different points in the distribution remained substantially unchanged between 2012 and 2015, as did average performance at the country/economy level.

Trends in the variation in performance adjusted for demographic changes (changes in the immigrant background, age and gender of the student population in each country and economy) show almost identical patterns as the unadjusted trends (Table IV.4.3). Annex A5 provides details on how these adjusted trends were calculated.

Figure IV.4.3 ▪ **Change between 2012 and 2015 in the variation in financial literacy performance within countries and economies**

Percentiles on the financial literacy scale



Countries and economies are ranked in descending order of the median financial literacy performance in 2015.

Source: OECD, PISA 2015 Database, Table IV.4.2.

StatLink http://dx.doi.org/10.1787/888933485179

GENDER DIFFERENCES IN FINANCIAL LITERACY PERFORMANCE

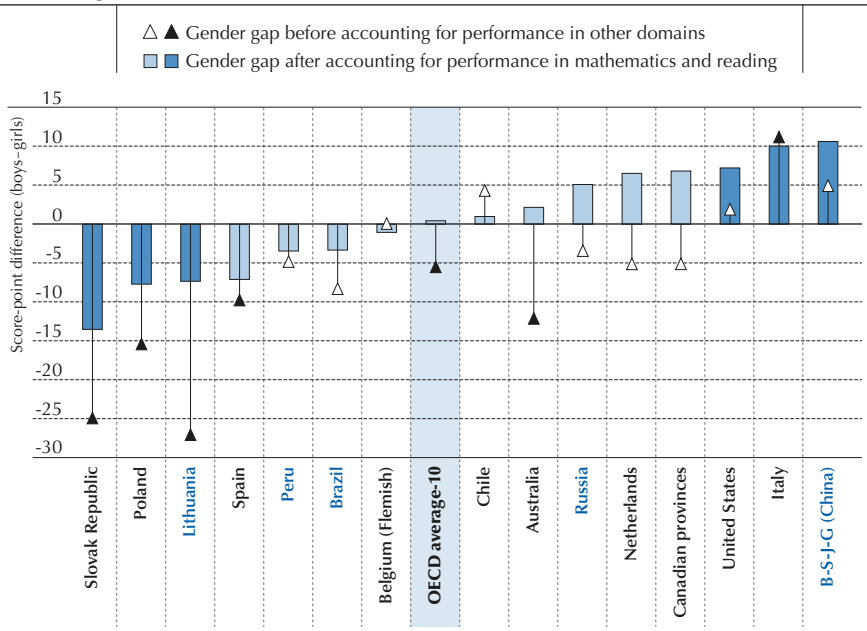
Are the gender-related differences in performance found in the core domains assessed in PISA – see *PISA 2015 Results, Volume I* (OECD, 2016a) – also observed in financial literacy performance? Are the gender differences in performance in financial literacy observed among adults also seen among 15-year-old students? Have gender differences in financial literacy changed over time?

Figure IV.4.4 shows gender differences in financial literacy among the countries and economies participating in the PISA 2015 financial literacy assessment. Only in Italy do boys perform better than girls, by 11 score points. In contrast, in Australia, Lithuania, Poland, the Slovak Republic and Spain, girls perform better than boys. In Lithuania and the Slovak Republic, the gender difference in financial literacy performance is larger than 20 score points in favour of girls. Among the countries where girls perform better than boys, in Lithuania, the Slovak Republic and Spain, average performance is below the OECD average (Table IV.4.1). In the Flemish Community of Belgium, Brazil, B-S-J-G (China), the Canadian provinces, Chile, the Netherlands, Peru, Russia and the United States, the difference in performance between boys and girls is not statistically significant.

Comparing gender differences in financial literacy performance with gender differences in performance in the core PISA subjects shows that girls perform better than boys in reading in all 15 countries and economies that participated in the financial literacy assessment, and boys perform better than girls in mathematics in 9 of those countries/economies (the Flemish Community of Belgium, Brazil, the Canadian provinces, Chile, Italy, Peru, Poland, Spain and the United States). Boys perform better than girls in science in the Flemish Community of Belgium, Brazil, B-S-J-G (China), Chile, Italy, Peru, Poland, Spain and the United States, while girls score higher in science than boys in Lithuania (Table IV.4.6).

Figure IV.4.4 also shows that there are gender differences in financial literacy even when comparing students with similar performance in mathematics and reading.[1] In B-S-J-G (China), Italy and the United States, boys perform better than girls who perform similarly in mathematics and reading. In contrast, in Lithuania, Poland and the Slovak Republic, girls perform better than boys after accounting for students' performance in mathematics and reading (but the difference is smaller than that observed before accounting for performance in the other two subjects).

Figure IV.4.4 ▪ **Gender differences in financial literacy performance**



Note: Statistically significant differences are marked in a darker tone (see Annex A3).

Countries and economies are ranked in ascending order of the gender gap in financial literacy performance, after accounting for performance in mathematics and reading.

Source: OECD, PISA 2015 Database, Table IV.4.8.

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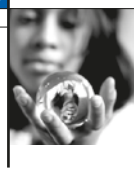
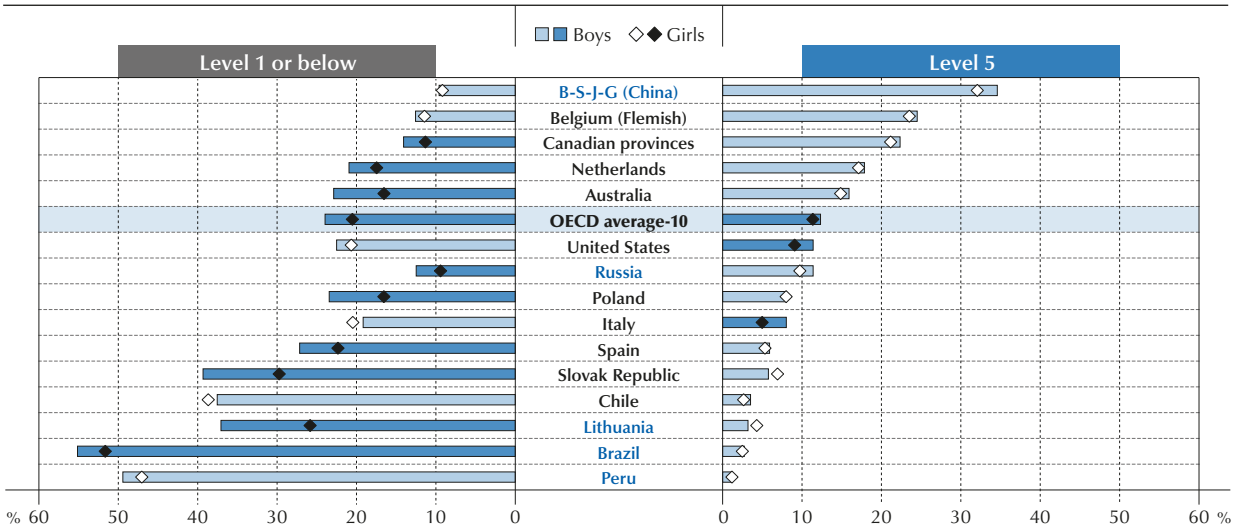


PISA shows that in some countries and economies boys perform better than girls in financial literacy, in others girls perform better than boys, and in others there are no gender differences. Several studies consistently report gender differences in financial knowledge among adults in favour of men; in some countries, no gender differences have been found. But in no country is there evidence of women performing better than men in financial knowledge (Box IV.4.1). Gender differences in financial literacy may be related to a combination of factors, including different opportunities for learning, different contexts and different socio-economic backgrounds in which men and women grow up and live (Bottazzi and Lusardi, 2016; OECD, 2013), and to a possible variation of these factors across generations. The heterogeneity in gender differences found in PISA 2015 may suggest that boys and girls are exposed to different opportunities for learning and becoming interested in financial matters. Box IV.5.2 (in Chapter 5) explores this hypothesis further.

When looking at the performance distribution, girls and boys are not equally represented among high- and low-performing students. The distribution of financial literacy is more dispersed among boys than among girls, as indicated by a higher standard deviation of financial literacy performance for boys than for girls in 10 out of 15 countries and economies (Table IV.4.5). As shown in Figure IV.4.5, the gender difference in the distribution comes mostly from the fact that more boys than girls are low performers and to a limited extent from the fact that more boys than girls are top performers. On average across the 10 participating OECD countries and economies, there are slightly more boys than girls among students performing at Level 1 or below (24% of boys and 21% of girls) and at Level 5 (12% of boys and 11% of girls); while there are slightly more girls than boys among students performing at Level 3 (24% of boys and 26% of girls) and at Level 4 (19% of boys and 20% of girls). In Australia, Brazil, the Canadian provinces, Lithuania, the Netherlands, Poland, Russia, the Slovak Republic and Spain, more boys than girls perform at Level 1 or below. In Italy and the United States, more boys than girls perform at Level 5 (Table IV.4.7). In most countries and economies, boys also show greater variation in performance than girls in mathematics, reading and science (Table IV.4.6).

Figure IV.4.5 ▪ **Proficiency in financial literacy, by gender**

Percentage of boys and girls at each level of proficiency



Note: Percentages of students performing at Level 1 or below/Level 5 are marked in a darker tone when gender differences are statistically significant (see Annex A3).

Countries and economies are ranked in descending order of the percentage of top-performing boys (performing at Level 5).

Source: OECD, PISA 2015 Database, Table IV.4.7.

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Gender differences across proficiency levels are reflected in gender differences at different points in the performance distribution (Table IV.4.5). In Italy, the higher average performance of boys compared to girls mainly reflects the better performance of boys among students scoring at the higher parts of the distribution. In the United States, too, high-performing boys perform better than high-performing girls, while there are hardly any gender differences among low performers. In Australia, Brazil, the Canadian provinces, Poland and Spain, girls perform better than boys, especially among low-performing students, while there are hardly any gender differences among high performers. In Lithuania and the Slovak Republic, where the mean difference in favour of girls is the largest, girls perform better than boys at all

(or almost all) points in the distribution, with a particularly large performance difference in favour of girls among low-performing students. Overall, these results suggest that when targeting students with poor financial literacy, it is important to keep in mind that among low-performing students, boys are likely to have a larger skills gap than girls, while girls may need targeted help to develop the skills needed to reach the highest levels of proficiency in financial literacy.

Box IV.4.1 **Gender differences in financial literacy among adults**

Results of the OECD/INFE International Survey of Adult Financial Literacy Competencies reveal that in 19 of the 30 participating countries and economies, men are significantly more likely than women to answer correctly 5 out of 7 financial knowledge questions about interest, inflation, diversification, risk and return, and the time value of money (OECD, 2016b). This result is consistent with a large body of literature showing than men tend to have greater financial knowledge than women (OECD, 2013).

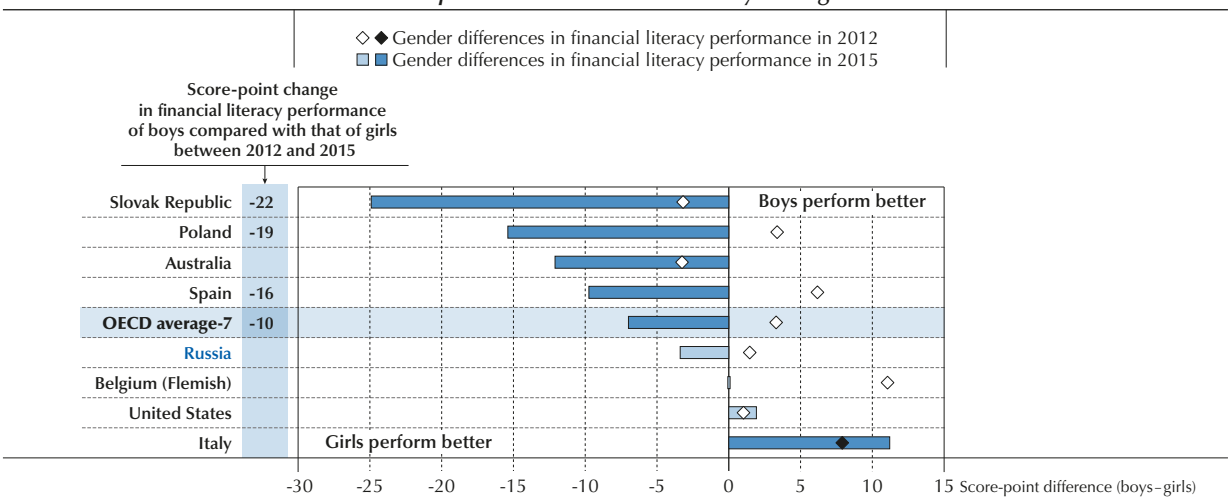
Some of the countries and economies that participated in the OECD/INFE international survey of financial literacy among adults also participated in the PISA 2015 financial literacy assessment. The findings of the two surveys need to be interpreted carefully, as the evidence is drawn from different measurement tools. The OECD/INFE survey of adults showed that men in Brazil, Lithuania and the Netherlands have greater financial knowledge than women, and it showed no statistically significant gender differences in financial knowledge in Poland and Russia.

Trends in gender differences in financial literacy performance

Mean gender differences among 15-year-old students have remained stable in some countries and economies while they changed over time in some others, as shown in Figure IV.4.6. The PISA 2012 financial literacy assessment showed that Italy was the only country where boys performed better than girls; this result is confirmed in the 2015 assessment. In the Flemish Community of Belgium, Russia and the United States, PISA 2015 financial literacy assessment confirmed the results of the previous assessment in showing no gender differences in financial literacy, on average. In Australia, Poland, the Slovak Republic and Spain, there was no gender difference observed in the 2012 assessment, while girls performed better than boys in the 2015 assessment. In Poland, this change is related to a greater deterioration of performance among boys than among girls between 2012 and 2015; in the Slovak Republic and Spain, this change is due to a deterioration of performance only among boys but not among girls between 2012 and 2015 (Table IV.4.9). In most countries and economies with comparable data in PISA 2012 and PISA 2015, the proportion of low- and top-performing boys changed in a similar way as the proportion of low- and top-performing girls (Table IV.4.10).

Figure IV.4.6 ▪ **Change between 2012 and 2015 in gender differences in financial literacy performance**

Score-point difference between boys and girls



Note: Gender differences that are statistically significant are marked in a darker tone. Statistically significant changes in the score-point difference between boys and girls in financial literacy performance between 2012 and 2015 are shown next to the country/economy name (see Annex A3).

Countries and economies are ranked in ascending order of the score-point difference between boys and girls in 2015.

Source: OECD, PISA 2015 Database, Table IV.4.9.

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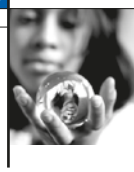

THE RELATIONSHIP BETWEEN STUDENTS' SOCIO-ECONOMIC STATUS AND FINANCIAL LITERACY PERFORMANCE

Research has shown that several aspects of students' family and home background can predict their financial literacy competencies and skills. Financial literacy among young people is associated with demographic and socio-economic factors, including parents' educational attainment and household income (Lusardi, Mitchell and Curto, 2010; Mottola, 2014; Riitsalu and Poder, 2016).

To what extent is students' performance in financial literacy related to their socio-economic status? Is the relationship between financial literacy and students' socio-economic status different from the relationship between socio-economic status and performance in the PISA core domains of mathematics and reading? The association between performance and socio-economic status provides an indication of the extent to which countries and economies are providing equitable learning opportunities, and of the level of equity in society, as a whole.

Socio-economic status is a broad concept that summarises many different aspects of a student, school or school system. In PISA, a student's socio-economic status is estimated by the PISA index of economic, social and cultural status (ESCS), which is derived from several variables related to students' family background: parents' education, parents' occupations, a number of home possessions that can be taken as proxies for material wealth, and the number of books and other educational resources available in the home. The PISA index of economic, social and cultural status is a composite score derived from these indicators via Principal Component Analysis (PCA). It is constructed to be internationally comparable. For the first time, in PISA 2015, the PCA was run across equally weighted countries, including OECD and partner countries/economies. Thus, all countries and economies contribute equally to ESCS scores. However, for the purpose of reporting, the values of the ESCS scale are standardised to have a mean of zero and a standard deviation of one for the population of students in OECD countries, with each country given equal weight.

Figure IV.4.7 ▪ **Comparing countries' and economies' performance in financial literacy and socio-economic status**

Countries/economies with **higher** performance or **greater** equity than the OECD average
Countries/economies with values not statistically different from the OECD average
Countries/economies with **lower** performance or **less** equity than the OECD average

	Mean performance in financial literacy	Performance difference related to socio-economic status	Strength of the relationship between financial literacy performance and socio-economic status	Performance difference across socio-economic groups
	Mean score	Score-point difference in financial literacy associated with a one-unit increase in the PISA index of economic, social and cultural status	Percentage of variance in financial literacy performance explained by socio-economic status	Score-point difference in financial literacy performance between socio-economically advantaged and disadvantaged students
OECD average-10	**489**	**38**	**9.9**	**89**
B-S-J-G (China)	566	45	16.8	132
Belgium (Flemish)	541	50	16.0	110
Canadian provinces	533	38	6.9	77
Russia	512	22	3.4	46
Netherlands	509	51	10.5	104
Australia	504	51	12.0	107
United States	487	36	11.1	97
Poland	485	34	7.8	73
Italy	483	24	5.5	60
Spain	469	26	9.1	79
Lithuania	449	31	6.7	71
Slovak Republic	445	32	6.5	80
Chile	432	35	13.3	103
Peru	403	36	17.2	117
Brazil	393	26	6.5	78

Note: Countries/economies with greater equity than the OECD average are countries/economies where the strength of the relationship between financial literacy performance and socio-economic status is below the OECD average, or where performance differences across the socio-economic spectrum are below the OECD average. Countries/economies with less equity than the OECD average are countries/economies where the strength of the relationship between financial literacy performance and socio-economic status is above the OECD average, or where performance differences across the socio-economic spectrum are above the OECD average.

Countries and economies are ranked in descending order of the mean performance in financial literacy.

Source: OECD, PISA 2015 Database, Tables IV.4.1, IV.4.11 and IV.4.12.

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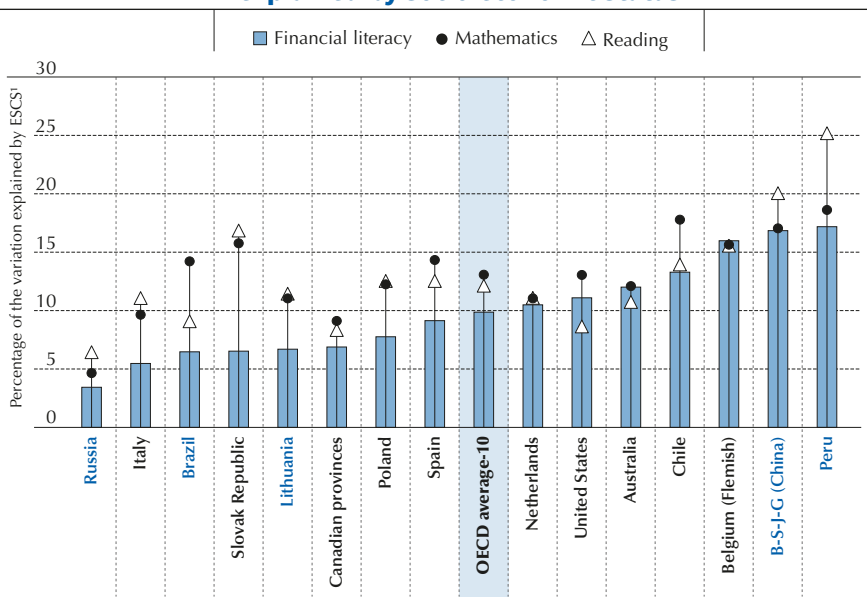
The ESCS index makes it possible to draw comparisons between students with different socio-economic profiles. In this report, students are considered socio-economically advantaged if they are among the 25% of students with the highest values on the ESCS index in their country or economy; students are classified as socio-economically disadvantaged if their values on the ESCS index are among the bottom 25% within their country or economy.

Figure IV.4.7 shows the relationship between financial literacy and socio-economic status. On average across the 10 participating OECD countries and economies, 10% of the variation in student performance in financial literacy within each country and economy is associated with socio-economic status. The Canadian provinces and Russia combine above-average performance and below-average strength of the association between performance and socio-economic status. In Brazil, Italy, Lithuania and the Slovak Republic, the percentage of variation in financial literacy performance explained by socio-economic status is also below the OECD average. In contrast, in Australia, the Flemish Community of Belgium, B-S-J-G (China), Chile and Peru, the relationship between student performance and socio-economic status is stronger than average. The strength of the relationship between financial literacy performance and socio-economic status is greatest in Peru, where 17% of the variation in financial literacy performance is explained by socio-economic status.

Another way of exploring the relationship between financial literacy and socio-economic status is to consider the performance difference between relatively advantaged students (those in the top quarter of the PISA index of economic, social and cultural status) and more disadvantaged students (those in the bottom quarter of that index). Figure IV.4.7 shows that this difference amounts to 89 score points, on average across OECD countries and economies, equivalent to more than one PISA proficiency level. The difference between advantaged and disadvantaged students is below the OECD average in Italy, Lithuania, Poland and Russia, and above the OECD average in Australia, the Flemish Community of Belgium, B-S-J-G (China), Chile and Peru.

On average across OECD countries and economies, financial literacy performance improves by 38 score points with a one-unit increase in the ESCS index. As Figure IV.4.7 shows, performance differences across socio-economic groups are smaller than the OECD average (the slope of the socio-economic gradient is relatively flat) in Brazil, Italy, Lithuania, Russia and Spain. In contrast, performance differences across socio-economic groups are larger than the OECD average (the slope of the socio-economic gradient is relatively steep) in Australia, the Flemish Community of Belgium and the Netherlands. The slope is flattest in Russia, at 22 score points.[2]

Figure IV.4.8 ■ **Percentage of the variation in performance explained by socio-economic status**



1. ESCS refers to the PISA index of economic, social and cultural status.

Countries and economies are ranked in ascending order of the percentage of the variation in students' performance in financial literacy explained by socio-economic status.

Source: OECD, PISA 2015 Database, Table IV.4.13.

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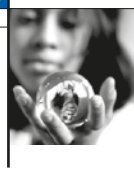


Is socio-economic status more strongly related to financial literacy than it is related to performance in mathematics and reading? Figure IV.4.8 shows that, on average across the 10 participating OECD countries and economies, socio-economic status explains variations in financial literacy performance to a lesser extent (10%) than it explains variations in mathematics (13%) and reading (12%). This is also the case across many countries and economies. The association between socio-economic status and financial literacy is significantly weaker than the association between socio-economic status and mathematics performance in eight countries and economies; in nine countries/economies, the association between socio-economic status and financial literacy is weaker than the association between socio-economic status and reading performance. Only in Australia and the United States does socio-economic status explain a larger percentage of the variation in financial literacy than that of the variation in reading performance (Table IV.4.13).

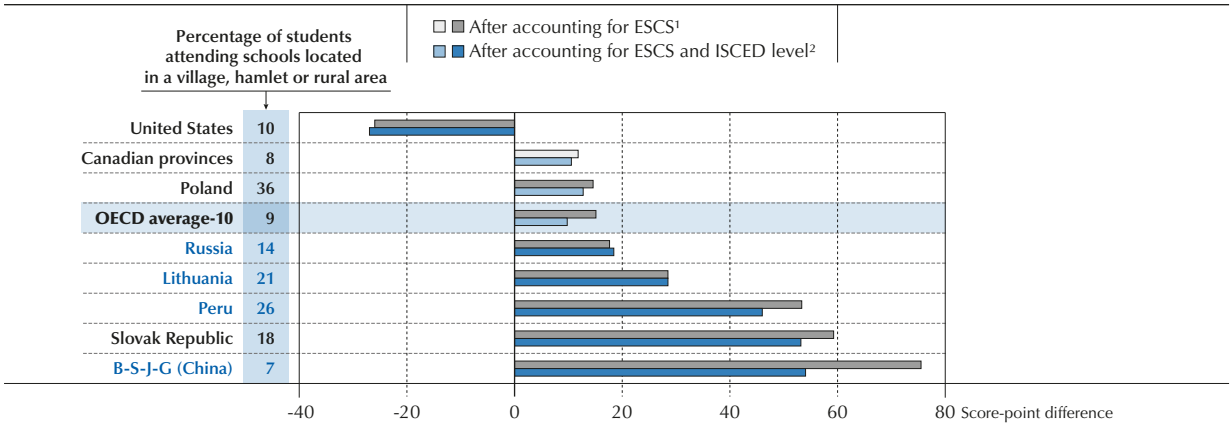
Differences in financial literacy performance associated with school location

Socio-economic status and opportunities to acquire financial skills are also related to the location of schools, which gives an approximate indication of where students live. Differences in the size and population density of communities may result in different opportunities for learning, since both school systems and opportunities for learning outside school can vary by location. Larger communities might provide students with a wider range of opportunities to be exposed to all kinds of financial products and services than smaller communities. This would give students in large communities more chances to engage directly in basic financial decisions and to shop around for products, e.g. to choose a savings account or a mobile phone plan. More familiarity with ordinary financial life and experience with a more complex financial environment can help students develop better knowledge and skills in financial literacy either directly or by boosting their motivation to learn. However, much of the difference in learning opportunities related to the size of a community may be expected to decrease progressively in a digital age (OECD, 2017a).

Figure IV.4.9 shows that, after accounting for socio-economic status, attending schools in cities (more than 100 000 people) is associated with higher scores in financial literacy than attending schools in rural areas (fewer than 3 000 people). On average across the 10 participating OECD countries and economies, even after accounting for differences in socio-economic status, students in city schools outperform students in rural schools by 15 score points. Among countries and economies where at least 5% of students attend schools in rural areas, in B-S-J-G (China), Lithuania, Peru, Poland, Russia and the Slovak Republic, students who attend schools in cities perform better in financial literacy than students of similar socio-economic status who attend schools in rural areas. This gap is largest in B-S-J-G (China), Peru and the Slovak Republic, at over 50 score points. By contrast, students in the United States who attend schools in rural areas perform better in financial literacy than students of similar socio-economic status who attend schools in cities.

Figure IV.4.9 ▪ **Differences in financial literacy performance, by school location**

Score-point difference between students attending schools located in a city and students attending schools in a village, hamlet or rural area



1. ESCS refers to the PISA index of economic, social and cultural status.
2. Accounting for whether students attend lower secondary school (ISCED level 2) or upper secondary school (ISCED level 3).

Notes: Only countries where the percentage of students attending schools located in a village, hamlet or rural area is higher than 5% are shown.
Statistically significant differences are shown in a darker tone (see Annex A3).
Countries and economies are ranked in ascending order of the difference between students attending schools located in a city and students attending schools in a village, hamlet or rural area, after accounting for socio-economic status.

Source: OECD, PISA 2015 Database, Tables IV.4.14 and IV.4.15.

StatLink http://dx.doi.org/10.1787/888933485234

Figure IV.4.9 also shows the difference in financial literacy performance associated with school location after taking into account students' level of education. In some countries, upper secondary schools may be more likely to be located in cities than in small towns and villages. Looking at countries and economies with a relatively large proportion of students attending schools in rural areas, in B-S-J-G (China), Lithuania, Peru, Russia and the Slovak Republic, students who attend schools in cities perform better in financial literacy than students of similar socio-economic status and at the same level of education who attend schools in rural areas. After accounting for the education level, the performance gap narrows in B-S-J-G (China), Peru and the Slovak Republic.

To what extent does attending schools in larger communities offer students more opportunities to improve their financial literacy beyond the opportunity to improve their skills in mathematics and reading? Only in B-S-J-G (China) do students who attend schools in cities perform better in financial literacy than students who attend schools in rural areas and who have similar proficiency in mathematics and reading (Table IV.4.16).

DIFFERENCES IN FINANCIAL LITERACY PERFORMANCE ASSOCIATED WITH AN IMMIGRANT BACKGROUND

How well do students with an immigrant background perform in financial literacy? To what extent are performance gaps in financial literacy between immigrant and non-immigrant students related to other factors, such as socio-economic status, language spoken at home, and performance in mathematics and reading? How do immigrant students who do not speak the language of assessment at home perform in financial literacy?

PISA classifies students into several categories according to their immigrant background and that of their parents. Non-immigrant students are students whose mother or father (or both) was/were born in the country or economy where they sat the PISA test, regardless of whether the student himself or herself was born in that country or economy. In this chapter, these students are also referred to as "students without an immigrant background". Immigrant students are students whose mother and father were both born in a country/economy other than that where the student sat the PISA test. In this chapter, they are also referred to as "students with an immigrant background". Among immigrant students, a distinction is made between those born in the country/economy of assessment and those born abroad. First-generation immigrant students are foreign-born students whose parents are also both foreign-born. Second-generation immigrant students are students born in the country/economy where they sat the PISA test but whose parents are both foreign-born.

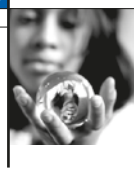
Being financially literate can help immigrants integrate more easily into their new country of residence. With this skill, immigrants are more likely to be aware of and use formal financial products and services, including remittances, and participate fully in their communities. Financially literate immigrant students might also help their families integrate and navigate the financial landscape (OECD/INFE, 2015).

About 13% of students across the OECD countries and economies that participated in the 2015 financial literacy assessment are foreign-born or have foreign-born parents. In Australia, the Canadian provinces and the United States, more than one in five students who participated in the assessment have an immigrant background, while in Brazil, B-S-J-G (China), Chile, Lithuania, Peru, Poland and the Slovak Republic, fewer than one in 20 students has an immigrant background (Table IV.4.17).

Figure IV.4.10 shows that, on average across OECD countries and economies, students without an immigrant background perform better in financial literacy, by 26 score points, than immigrant students of similar socio-economic status. Among countries and economies where at least 5% of students have an immigrant background, the difference in financial literacy performance related to immigrant background is larger than 15 score points in the Flemish Community of Belgium, Italy, the Netherlands and Spain, after taking into account students' socio-economic status.

On average across OECD countries and economies, the difference in financial literacy performance related to immigrant background is similar to the difference in mathematics and reading performance related to immigrant background (Table IV.4.19). In 9 countries/economies, the gap in financial literacy performance related to immigrant background is similar to the gap in mathematics performance related to immigrant background; in 9 countries/economies, the gap related to immigrant background is similar to that in reading performance.

Immigrant students' ability to acquire financial literacy competencies may also depend on their skills in the core domains of mathematics and reading. On average across OECD countries and economies, after taking into account students' skills in mathematics and reading, the difference in financial literacy performance related to students' immigrant background is equivalent to seven score points (Table IV.4.20). Among countries and economies with relatively large immigrant student populations, non-immigrant students perform better in financial literacy than immigrant students, after taking

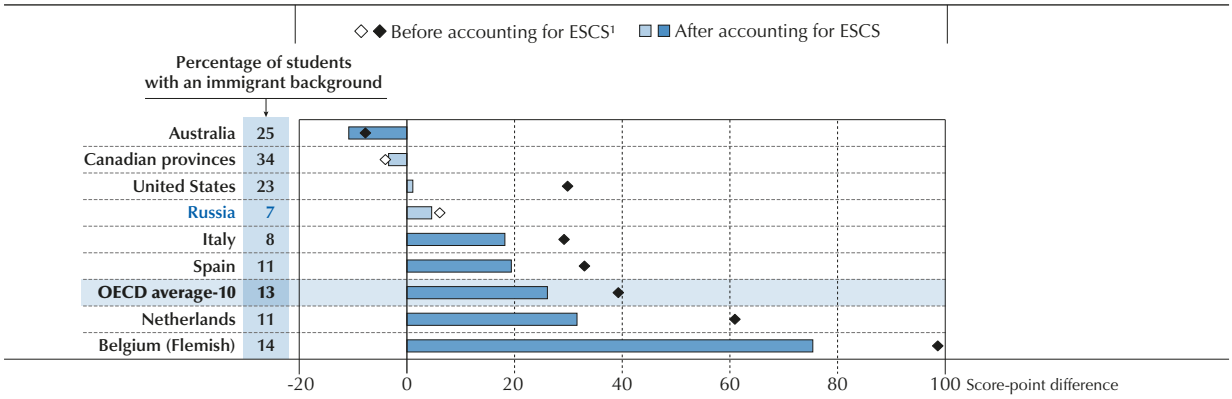


into account performance in mathematics and reading, only in the Flemish Community of Belgium (with a difference of 27 score points) and in the Canadian provinces (a difference of 11 score points).

Students who speak a different language at home from the one in which they were assessed are likely to face more difficulties in interacting with the financial landscape – including making sense of financial documents, such as bank statements or contracts written in the language of the host country – than those who speak the same language at school and at home. On average across participating OECD countries and economies, about 12% of students speak a language at home that is different from the language they use at school. Among immigrant students, about 47% speak a language at home that is different from the language of assessment, on average across OECD countries and economies (Table IV.4.21).

Figure IV.4.10 ▪ **Differences in financial literacy performance, by immigrant background**

Score-point difference between non-immigrant and immigrant students



1. ESCS refers to the PISA index of economic, social and cultural status.

Note: Only countries where the percentage of immigrant students is higher than 5% are shown.

Statistically significant differences are marked in a darker tone (see Annex A3).

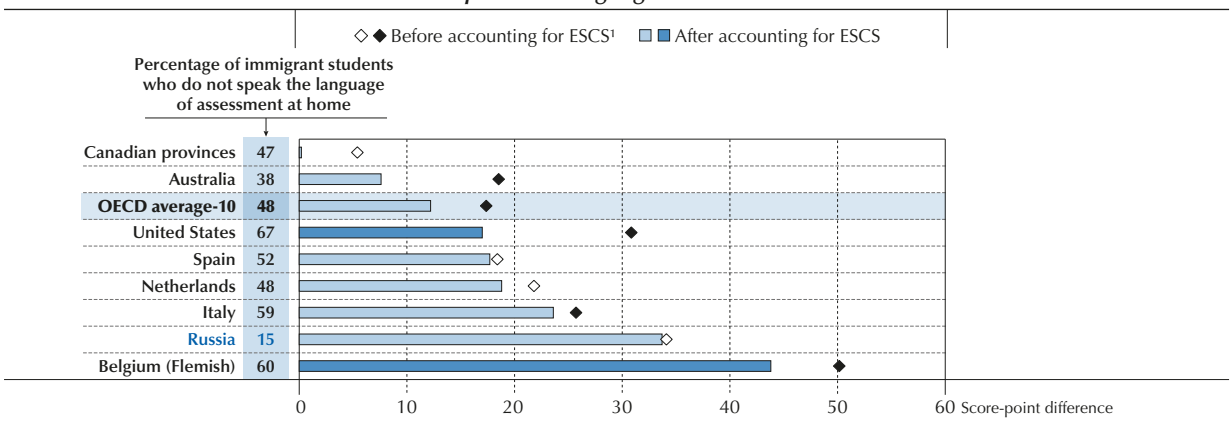
Countries and economies are ranked in ascending order of the difference in financial literacy performance between non-immigrant and immigrant students, after accounting for socio-economic status.

Source: OECD, PISA 2015 Database, Tables IV.4.17 and IV.4.18.

StatLink http://dx.doi.org/10.1787/888933485241

Figure IV.4.11 ▪ **Differences in financial literacy performance, by language spoken at home**

Score-point difference between immigrant students who speak and those who do not speak the language of assessment at home



1. ESCS refers to the PISA index of economic, social and cultural status.

Note: Only countries where the percentage of immigrant students is higher than 5% are shown.

Statistically significant differences are marked in a darker tone (see Annex A3).

Countries and economies are ranked in ascending order of the difference in financial literacy performance between immigrant students who speak and those who do not speak the language of assessment at home, after accounting for socio-economic status.

Source: OECD, PISA 2015 Database, Tables IV.4.17, IV.4.21 and IV.4.22.

StatLink http://dx.doi.org/10.1787/888933485259

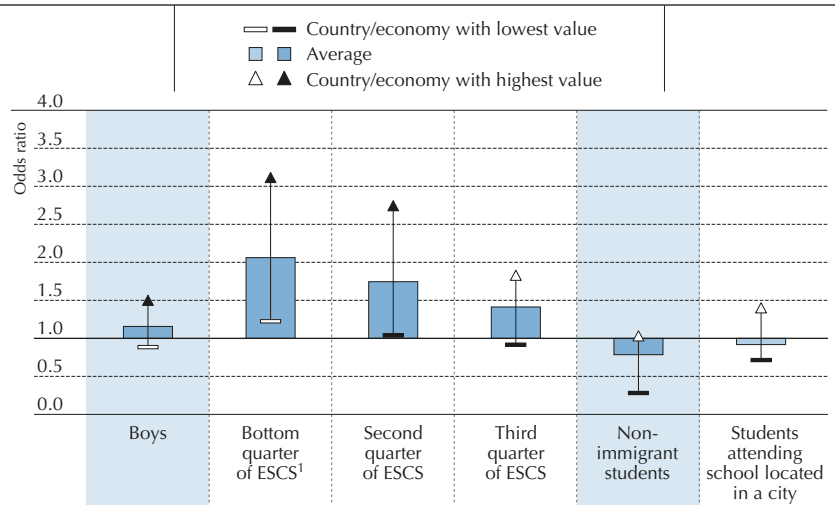
As shown in Figure IV.4.11, after accounting for their socio-economic status, immigrant students in the Flemish Community of Belgium and the United States who do not speak the assessment language at home score lower in financial literacy than immigrant students who speak the assessment language at home – by 44 points in the Flemish Community of Belgium and by 17 points in the United States.

Box IV.4.2 **Socio-demographic characteristics of low performers in financial literacy**

On average across OECD countries and economies, as many as 22% of students are considered low performers, as they perform below Level 2 on the PISA scale. Who are the low-performing students in financial literacy?

Figure IV.4.12 shows how students' demographic and socio-economic characteristics are related to the probability of performing at or below Level 1, after taking into account student performance in mathematics and reading. On average across OECD countries and economies, boys are 16% more likely than girls to perform at or below Level 1 in financial literacy. Socio-economically disadvantaged students are about twice as likely as advantaged students to be low performers, on average across OECD countries and economies. In 10 countries and economies with available data, disadvantaged students are more likely than advantaged students to be low performers (Table IV.4.25a). After taking into account socio-economic status and performance in core PISA subjects, in most countries and economies with available data, immigrant students and students who go to school in rural areas are about as likely as non-immigrants and students attending school in cities to be low performers.

Figure IV.4.12 ▪ **Likelihood of low performance in financial literacy, by student characteristics**
OECD average, after taking into account mathematics and reading performance



1. ESCS refers to the PISA index of economic, social and cultural status.
Note: Odds ratios that are statistically significant are marked in a darker tone (see Annex A3).
Source: OECD, PISA 2015 Database, Table IV.4.25a.
StatLink http://dx.doi.org/10.1787/888933485262

DIFFERENCES IN FINANCIAL LITERACY PERFORMANCE ASSOCIATED WITH STUDENTS' ATTITUDES TOWARDS LEARNING

Do attitudes towards learning influence students' ability to apply their knowledge and skills to real-life situations? As discussed in Chapter 2, the PISA definition of financial literacy identifies motivation and the confidence to apply knowledge and understanding as key elements of effective financial decision making. In general, non-cognitive personality traits, in addition to cognitive skills, are strong predictors of economic and social outcomes (Borghans et al., 2008).

The PISA 2012 financial literacy assessment showed that students' financial literacy is associated with their perseverance and openness to problem solving (OECD, 2014). Perseverance may be important to students when confronted with certain financial situations, such as saving for long-term goals or shopping around for better financial conditions. Likewise,

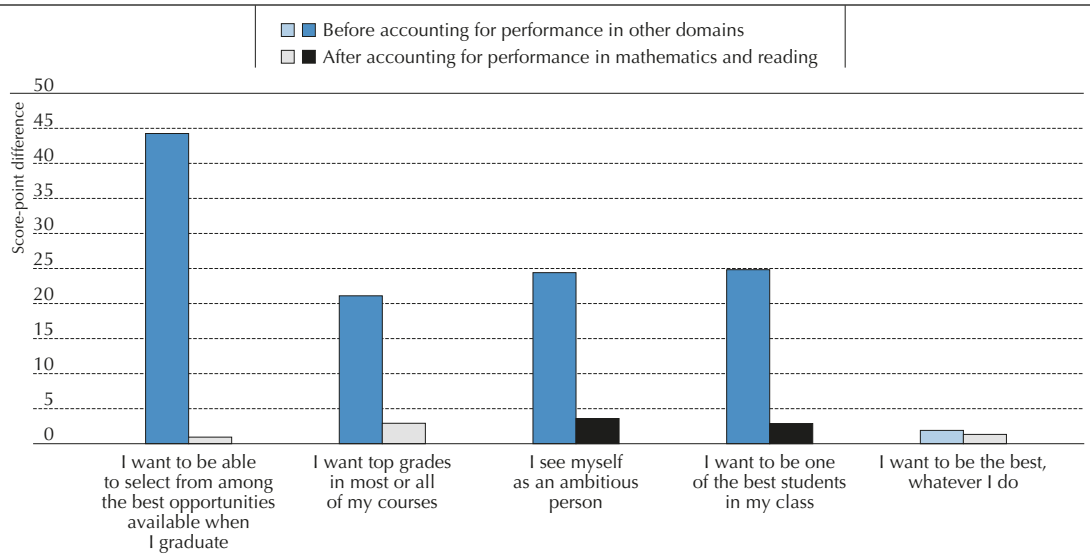
students' openness to solve complex problems may influence their use of knowledge in making financial decisions as they grow up, when they are likely to face relatively complex financial problems, such as deciding when they can afford to leave home, or choosing a mortgage or a pension plan.

The PISA 2015 student questionnaire measures students' motivation to achieve by asking them if they want to attain top grades, if they want to be able to select from the best opportunities after their graduation, and if they see themselves as ambitious (see also *PISA 2015 Results, Volume III: Students' Well-Being* [OECD, 2017b]). Motivation and ambition may be useful for encouraging students to learn (Mandell and Schmid Klein, 2007) and to help them apply what they know to financial situations that require a certain determination, like saving for a particular purchase or for the long term, shopping around for financial products, asking for advice or applying their rights as financial consumers. In interpreting the following results, however, it is important to keep in mind that PISA 2015 measures achievement motivation in the school context, rather than as a more general measure of determination.

Figure IV.4.13 shows that, on average across OECD countries and economies, students who want to be able to select from among the best opportunities available when they graduate, who want to have top grades in their courses, who see themselves as ambitious, and who want to be among the best students in their class also tend to score higher in financial literacy than less-motivated students. The relationship between motivation and financial literacy becomes weaker once performance in mathematics and reading is accounted for, and is similar to that between motivation and performance in mathematics and reading (Table IV.4.24). Nevertheless, students in Australia, Peru and the Slovak Republic who want to be among the best students in their class perform slightly better in financial literacy than students who do not have such a high level of motivation, even after taking into account their performance in mathematics and reading (Table IV.4.23).

Figure IV.4.13 ▪ **Differences in financial literacy performance, by students' motivation**

Score-point difference between students who agree and those who disagree with the following statements (OECD average)



Note: Statistically significant differences are marked in a darker tone (see Annex A3).
Source: OECD, PISA 2015 Database, Table IV.4.23.
StatLink http://dx.doi.org/10.1787/888933485273

Notes

1. The relationship between financial literacy and science performance is not discussed in the text and figures because science competencies are not strictly necessary to be proficient in financial literacy and there are no links across the two assessment frameworks. The relationship between performance in financial literacy and performance in science, in addition to mathematics and reading, is nevertheless presented in the tables.

2. In some OECD partner countries and economies where the number of students who no longer attend school by the time they are 15 is large, the results presented in Figure IV.4.7 cannot necessarily be interpreted as providing evidence of an equitable distribution of education opportunities and outcomes. Volume I discusses PISA performance and inclusion in education (OECD, 2016a).

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5

Students' experience with money and their performance in financial literacy

This chapter describes students' experience with money, and in particular how frequently they discuss money matters with parents and friends, whether they hold basic financial products and whether they receive or earn money from various sources, including family and work. The chapter identifies which students are more likely to have had these kinds of experiences, and investigates the relationship between having a practical understanding of money and financial literacy.

Are direct experiences with money and financial products associated with 15-year-old students' knowledge and skills in financial literacy? Do parents transmit financial skills to their children by giving them pocket money and talking to them about how to manage money? Studies on students' access to money and to financial products, and on their financial behaviour, show that they develop financial and economic understanding, skills and habits not only through talking to parents and observing their behaviour, but also via personal experiences and learning by doing (CFPB, 2016; Furnham, 1999; Otto, 2013; Schug and Birkey, 1985; Shim et al., 2010; Whitebread and Bingham, 2013).

Chapter 2 shows that in some countries and economies, many 15-year-old students are already engaged in money matters through their use of basic financial products, such as a bank account and a prepaid debit card, and by earning money through part-time and occasional jobs. This chapter describes in greater detail students' relationship with money in three main areas: discussing money matters with parents, holding basic financial products, and receiving money from various sources, including family and work. The chapter also identifies which students are more likely to have had these kinds of experiences and the relationship between a practical knowledge of money and financial literacy. In interpreting the relationship between experiences and financial literacy it is important to keep in mind that such associations do not necessarily reflect a causal relationship. In some cases, cause and effect may go both ways, or the relationship may be mediated by other important factors. More robust causal links could be identified by comparing the same students over time, but this is not possible given the repeated cross-sectional nature of PISA data.

Information about students' experience with money is based on their responses to a short questionnaire appearing at the end of the PISA 2015 financial literacy assessment. In some countries and economies, a significant proportion of students who sat the financial literacy assessment did not reply to one or more of the questions about money experiences. Results in this chapter are only reported for countries and economies with a sufficiently high response rate across these questions, including Australia, the Flemish Community of Belgium, Beijing-Shanghai-Jiangsu-Guangdong (China) (hereafter "B-S-J-G [China]), the participating Canadian provinces (British Columbia, Manitoba, New Brunswick, Newfoundland and Labrador, Nova Scotia, Ontario and Prince Edward Island), Chile, Italy, Lithuania, the Netherlands, Poland, the Russian Federation (hereafter "Russia"), the Slovak Republic, Spain and the United States. OECD averages in this chapter are based on ten countries and economies, as in other chapters. Annex A1 contains more details and analysis on response rates per country/economy.

What the data tell us

- In 10 out of 13 countries and economies with available data, discussing money matters with parents at least sometimes is associated with higher financial literacy than never discussing the subject, after taking into account students' socio-economic status.
- There is large heterogeneity in the proportion of 15-year-old students who report that they hold a bank account. On average across OECD countries and economies, 56% of students hold a bank account. In Australia, the Flemish Community of Belgium, the participating Canadian provinces and the Netherlands, more than seven in ten students hold a bank account, while in Chile, Italy, Lithuania, Poland and the Russian Federation, fewer than 40% of students do.
- In Australia, the Flemish Community of Belgium, the participating Canadian provinces, Italy, the Netherlands, Spain and the United States, students who hold a bank account perform better in financial literacy by over 20 score points than students of similar socio-economic status who do not have a bank account.
- Gifts of money are the most frequent source of money for 15-year-old students. Over 80% of students in 9 countries and economies out of 13 with available data receive money in the form of gifts. More than one in three students, on average in each country/economy, reported that they receive money from an allowance or pocket money for regularly doing chores at home. On average across OECD countries and economies, 64% of students earn money from some formal or informal work activity, such as working outside school hours, working in a family business, or doing occasional informal jobs.
- On average across OECD countries and economies, students who receive gifts of money score 13 points higher in financial literacy than students who do not, after taking into account performance in mathematics and reading, and various student characteristics, including socio-economic status.

DISCUSSING MONEY MATTERS WITH PARENTS AND FRIENDS

Students who discuss money matters with parents and friends

Parents can help their children acquire and develop the values, attitudes, standards, norms, knowledge and behaviours that contribute to their independent financial viability and well-being – that is in the process of financial socialisation (Danes, 1994). Parents can transmit such skills, knowledge and attitudes through their example as role models as well as through direct teaching (Gudmondson and Danes, 2011; Otto, 2013). Surveys about the financial behaviour of young people in Canada, the United Kingdom and the United States show that teenagers indicate parents are the most important source of learning about how to manage money (Charles Schwab and Co., 2011; BCSC, 2011; MAS, 2013). Parents are more than just sources of advice, as parents' attitudes and behaviour, including discussing financial matters with their children, have an impact on their children's habits and behaviour with money, both while they are young and as adults (Bucciol and Veronesi, 2014; CFPB, 2016; Kim and Chatterjee, 2013; Webley and Nyhus, 2006, 2013; Gristein-Weiss et al., 2012; Tang, 2016).

PISA 2015 provides evidence about how frequently students discuss money matters, such as spending, saving, banking and investment, with their parents or guardians. On average across the participating OECD countries and economies, 16% of students reported that they never or hardly ever discuss money matters with their parents, 66% reported that they discuss money matters with their parents weekly or monthly, and 17% reported that they discuss such matters almost every day (Table IV.5.1).

Studies of young people's financial behaviour show that they consider friends and peers to be a much less important source of advice and information about money management than parents and family (Australian Government Financial Literacy Foundation, 2007; BCSC, 2011; Bradley, 2012; Charles Schwab and Co., 2011; MAS, 2013).

PISA 2015 provides evidence about how frequently students discuss money matters with their friends. On average across OECD countries and economies, 59% of students reported that they discuss money matters with their friends at least sometimes (Table IV.5.2). Nevertheless, parents appear to be a more important source of information, as 54% of students discuss money matters more often with their parents than with their friends (Table IV.5.7).

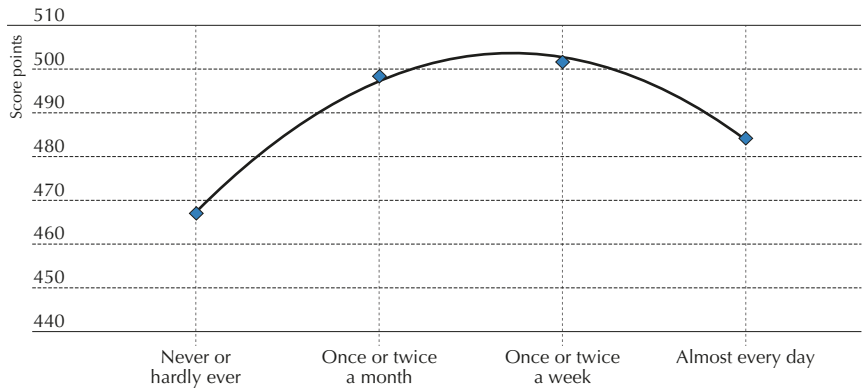
In some countries and economies, girls appear to discuss money matters with parents more often than boys, and socio-economically advantaged students appear to discuss money matters with parents more often than disadvantaged students (Table IV.5.3). Girls in Australia, the Flemish Community of Belgium and Russia are more likely than boys to discuss money matters with their parents weekly or monthly than never to discuss such issues; and girls in Australia, Lithuania, the Netherlands, Russia and Spain and are more likely than boys to discuss money matters with their parents almost every day. By contrast, boys seem more likely to discuss money matters frequently with friends (Table IV.5.4). On average across OECD countries and economies, boys are about twice as likely as girls to discuss money with their friends almost every day as opposed to never discussing the subject; in 8 out of 13 countries and economies, boys are more likely than girls to discuss money matters with their friends almost daily. In Australia, B-S-J-G (China), Poland, the Slovak Republic and the United States, socio-economically advantaged students are more likely than disadvantaged students to discuss money with their parents on a weekly or monthly basis as opposed to never discussing the issue.

Discussing money matters and financial literacy

The relationship between performance in financial literacy and discussing money matters with parents is not linear. Figure IV.5.1 shows that, on average across OECD countries and economies, talking about money almost every day or never is associated with poorer performance in financial literacy than discussing the subject once or twice a week or once or twice a month. In 10 out of 13 countries and economies with available data, discussing money matters with parents at least sometimes is associated with higher financial literacy than never discussing the subject, after taking into account students' socio-economic status (Table IV.5.5). At the same time, students in Australia, B-S-J-G (China), the Netherlands and the United States, who discuss money matters with their parents almost every day score lower in financial literacy than students of the same socio-economic status who discuss these issues once or twice a week or once or twice a month.

As PISA data do not allow for determining causality, the fact that discussing money matters with parents more often is associated with higher scores in financial literacy (up to a given level) may suggest that students acquire financial skills by discussing the subject with their parents, or that more financially literate students ask questions and seek advice from their family more often than less financially literate students do. At the same time, it appears that, at least in some countries and economies, discussing money matters very often is associated with poorer performance. This may be related to different reasons, such as because low-performing students lack confidence and seek advice often, or because weekly or monthly discussions are of a different nature than daily discussions (e.g. asking for money or being worried about money).

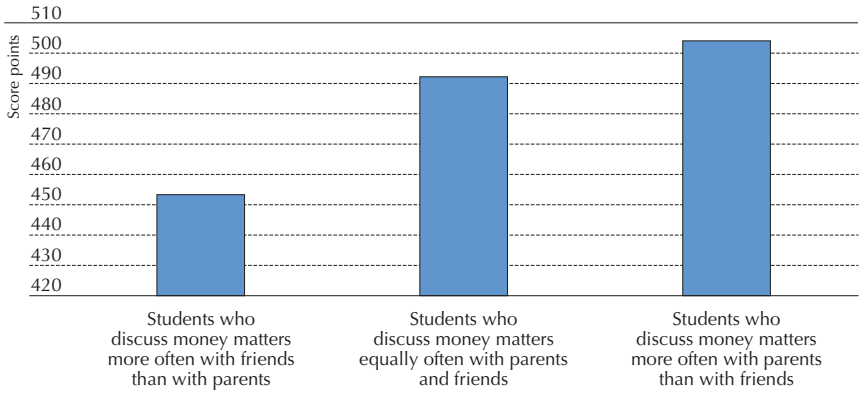
Figure IV.5.1 ▪ **Financial literacy performance, by frequency of discussing money matters with parents**
OECD average



Source: OECD, PISA 2015 Database, Table IV.5.5.
StatLink http://dx.doi.org/10.1787/888933485285

Not only do students tend to discuss money matters more often with parents than with friends, but discussing with parents is related to better financial literacy performance than discussing with friends, as shown in Figure IV.5.2. In 12 out of 13 countries and economies with available data, students who discuss money matters more often with parents than with friends score higher in financial literacy than students who discuss money matters more often with friends than with parents, after accounting for their socio-economic status (Table IV.5.7). This suggests that students can learn financial literacy skills better from their parents than from their peers; but it is also possible that more financially literate students recognise that their parents can give them more informed perspectives and advice than their friends.

Figure IV.5.2 ▪ **Financial literacy performance, by frequency of discussing money matters with parents and/or friends**
OECD average



Source: OECD, PISA 2015 Database, Table IV.5.7.
StatLink http://dx.doi.org/10.1787/888933485293

STUDENTS' EXPERIENCE WITH BASIC FINANCIAL PRODUCTS

Students holding basic financial products

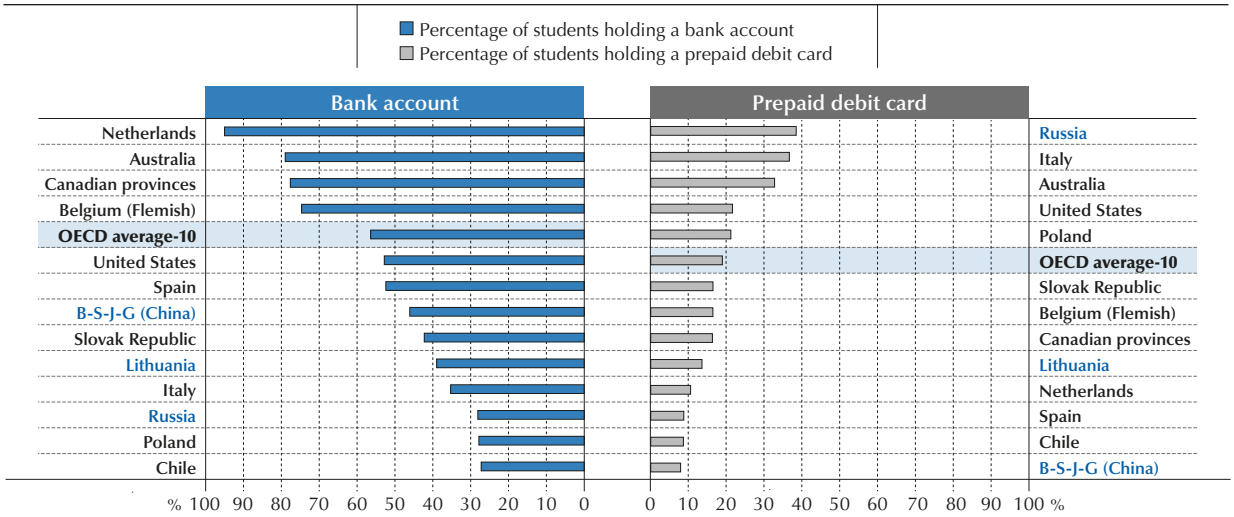
Do 15-year-olds hold basic financial products, such as bank accounts and prepaid debit cards? Which students are more likely to hold such products? Is experience with these products related to students' performance in financial literacy? The PISA financial literacy assessment framework identifies money and transactions as one of the main content areas of

the assessment (OECD, 2013, 2016). Skills in this area include awareness of the different forms of money, handling simple monetary transactions, such as making everyday payments, and handling simple products like bank cards, cheques and bank accounts. Being included in formal financial systems – by conducting transactions or borrowing through formal and regulated intermediaries – is important for participating in society. Holding a basic account from a young age can be a way of becoming familiar with financial products and remaining in the formal financial system in the transition to adulthood (Friedline and Elliott, 2013).

Figure IV.5.3 shows that there is large variation in the proportion of 15-year-old students with bank accounts across the participating countries and economies with available data. This variation depends not only on students' and their families' willingness to hold these products but also on the legal framework regulating minors' access to basic financial products and services (Box IV.5.1). Data from PISA 2015 reveal that, on average across OECD countries and economies, 56% of students hold a bank account. This average masks substantial heterogeneity, as in Australia, the Flemish Community of Belgium, the Canadian provinces and the Netherlands, over 70% of 15-year-old students hold a bank account, but in Chile, Italy, Lithuania, Poland and Russia, fewer than 40% of students do. Less than 5% of students in each country/economy reported that they don't know what a bank account is (Table IV.5.8). Holding a prepaid debit card is somewhat less common in all countries/economies with available data, ranging from fewer than 10% of students in B-S-J-G (China), Chile and Spain, to over 30% of students in Australia, Italy and Russia (Table IV.5.9).

Out of the students who hold at least one of the two products, on average across OECD countries and economies, 26% of students hold both a bank account and a prepaid debit card, 65% hold a bank account but have no prepaid debit card and 8% hold a prepaid debit card but do not have a bank account (Table IV.5.10). In Poland, of the students who hold at least one product, almost two-thirds hold both a bank account and prepaid debit card (64%). Out of the students who hold at least one of the two products, over 60% of students in the Flemish Community of Belgium, B-S-J-G (China), the Canadian provinces, Chile, Lithuania, the Netherlands, the Slovak Republic, Spain and the United States only have a bank account. Out of the students who hold at least one of the two products, over 30% of students in Italy and Russia only have a prepaid debit card.

Figure IV.5.3 ■ **Percentage of students holding a bank account or a prepaid debit card**



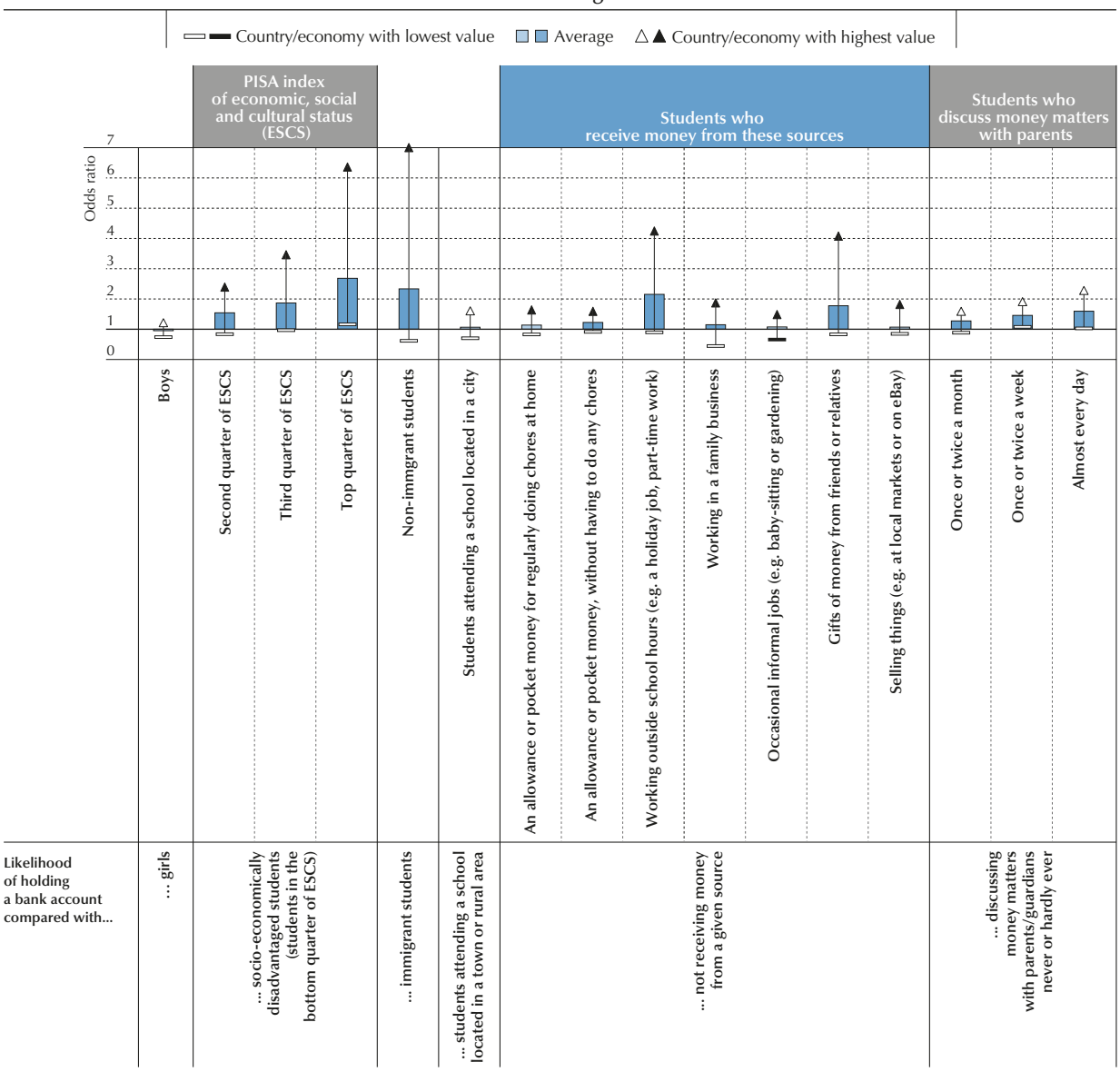
Countries and economies are ranked in descending order of the percentage of students holding a bank account and a prepaid debit card, respectively.
Source: OECD, PISA 2015 Database, Tables IV.5.8 and IV.5.9.
StatLink http://dx.doi.org/10.1787/888933485307

The percentage of 15-year-old students who reported that they hold a bank account increased considerably between 2012 and 2015 in Poland (from 16% to 28%) and in the Slovak Republic (from 25% to 42%). The proportion of students holding a prepaid debit card also increased during the same period in Australia, Italy, Poland and the United States. In contrast, in Spain, the proportion of students who hold a bank account shrank by 7 percentage points and the proportion of students who hold a prepaid debit card decreased by 4 percentage points (Tables IV.5.8 and IV.5.9).

Who holds a bank account and/or a prepaid debit card among young people? Which student characteristics are associated with a higher likelihood of holding a bank account and/or a prepaid debit card? Figure IV.5.4 shows that, on average across OECD countries and economies, the likelihood of holding a bank account is related to students' socio-economic status, their immigrant background, whether they receive money from work or family, and whether they discuss money matters with their parents, taking into account all of these factors at the same time. By contrast, there are hardly any differences in whether or not students hold a bank account related to gender or school location.

Figure IV.5.4 ▪ **Likelihood of holding a bank account, by student characteristics**

OECD average-10



Note: Odds ratios that are statistically significant are marked in a darker tone (see Annex A3).
Source: OECD, PISA 2015 Database, Table IV.5.11.

StatLink http://dx.doi.org/10.1787/888933485314

Socio-economic status is strongly associated with holding a bank account. In Australia, the Flemish Community of Belgium, B-S-J-G (China), Chile, Lithuania, Poland, Spain and the United States, socio-economically advantaged students (those in the top quarter of the PISA index of economic, social and cultural status) are at least twice as likely as disadvantaged students (those in the bottom quarter of the index) to hold a bank account. In Australia, the Flemish Community of

Belgium, the Canadian provinces and the Netherlands, students without an immigrant background are more likely than immigrant students to have a bank account (Table IV.5.11).

On average across OECD countries and economies, holding a bank account is positively associated with earning money from working outside of school hours (such as in a holiday job or part-time work), with receiving gifts of money from friends and relatives and, to a lesser extent, with receiving pocket money without having to do chores and with working in a family business. Students in Australia, the Flemish Community of Belgium, the Canadian provinces, the Netherlands and the United States who earn money from working outside of school hours are at least twice as likely to hold a bank account as students with similar characteristics who do not earn money from work. Students in Australia, the Canadian provinces, Italy, the Netherlands, Spain and the United States who reported that they receive money as gifts from friends and relatives are at least 30% more likely to have a bank account than students with similar characteristics who do not receive money as gifts. This suggests that in some countries and economies, working at small, part-time jobs and receiving money as a gift may be the first occasions to use basic financial services. Opening a bank account may be required when taking a small job, and making regular deposits may be a requirement for holding an account. Gifts of money may be relatively large and may not be spent immediately, making it worthwhile to deposit them in an account, while the amounts of money gained from allowances and selling things may be smaller and spent more quickly.

Discussing money matters with parents is also related to having a bank account. Students in Australia, B-S-J-G (China), the Canadian provinces, Chile and Spain who discuss money issues with their parents weekly, monthly or almost every day are more likely to have a bank account than students with similar characteristics who never talk about money matters with their parents (Table IV.5.11).

Similarly, some students are more likely than others to hold a prepaid debit card (Table IV.5.12). Boys in the Canadian provinces, Italy and the Netherlands are more likely than girls to have a prepaid debit card. Socio-economically advantaged students in the Flemish Community of Belgium, Chile, Italy, Lithuania, Poland, the Slovak Republic, Spain and the United States are at least twice as likely as disadvantaged students to have a prepaid debit card. Students in Lithuania, Poland, the Slovak Republic and Spain who attend schools in cities or large cities are more likely to have a prepaid debit card than students who go to school in towns or rural areas.

On average across OECD countries and economies, having a prepaid debit card is also associated with receiving money from an allowance or pocket money without having to do any chores, with earning money from working outside school hours, from working in a family business, from occasional informal jobs, and with earning money from selling things at local markets or on line. In Australia, B-S-J-G (China), Italy, Poland and Russia, students who discuss money matters with their parents weekly, monthly or almost every day are more likely to have a prepaid debit card than students who never discuss money matters with their parents.

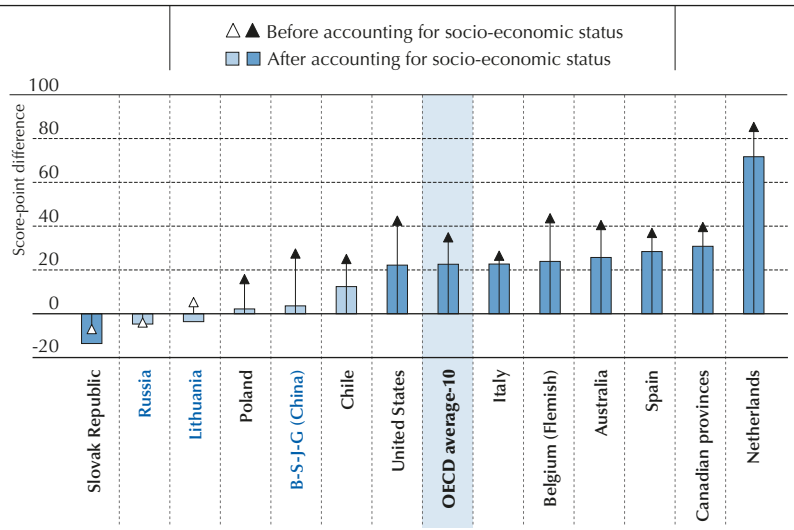
Experience with basic financial products and financial literacy

Figure IV.5.5 shows that having a bank account is associated with a higher score in financial literacy in some countries and economies. In 10 out of 13 countries and economies with available data, holding a bank account is associated with higher performance in financial literacy. Students in Australia, the Flemish Community of Belgium, the Netherlands and the United States who hold a bank account perform better in financial literacy by over 40 score points than students who do not have a bank account. The association between performance in financial literacy and holding a bank account is strongly related to socio-economic status. In Australia, the Flemish Community of Belgium, the Canadian provinces, Italy, the Netherlands, Spain and the United States, students who hold a bank account perform better in financial literacy by over 20 score points than students of similar socio-economic status who do not have a bank account. The difference in financial literacy scores associated with holding a bank account, after accounting for socio-economic status, is largest in the Netherlands (72 score points).

Having a prepaid debit card is only weakly associated with financial literacy (Table IV.5.14). Only in Australia, Chile, Italy, Lithuania and Poland is holding a prepaid debit card associated with higher performance in financial literacy; in the Slovak Republic, it is associated with lower financial literacy. After taking into account students' socio-economic status, only students in Italy who hold a prepaid debit card perform better in financial literacy than students of similar socio-economic status who do not. Students in the Netherlands, the Slovak Republic and Spain who hold a prepaid debit card perform worse in financial literacy than students of similar socio-economic status who do not.

Figure IV.5.5 ■ **Performance in financial literacy, by whether students hold a bank account**

Score-point difference between students who hold a bank account and those who do not



Note: Score-point differences that are statistically significant are marked in a darker tone (see Annex A3).

Countries and economies are ranked in ascending order of the score-point difference between students who hold a bank account and students who do not, after accounting for socio-economic status.

Source: OECD, PISA 2015 Database, Table IV.5.13.

StatLink http://dx.doi.org/10.1787/888933485325

Box IV.5.1 **Legal framework for young people's access to financial products**

The legal framework in relation to the use of basic financial products by 15-year-olds, and by minors (under the age of 18) more generally, varies across countries.[1] The cross-country differences found in PISA and discussed above are consistent with different legislation across countries concerning 15-year-olds' rights to have a bank account and a payment card in their own name.

Most countries require parents' consent for 15-year-olds to open and operate savings and current accounts. In some cases, the account has to be opened and/or operated by parents on behalf of their children. Minors in Belgium can open a current account and withdraw funds only with parental permission; minors from the age of 16 can open savings accounts in their own name, but in the absence of their parents' authorisation they can only withdraw limited amounts from their savings account. In Brazil, Italy, Lithuania, the Netherlands, the Russian Federation and Spain, minors may open and operate an account only under the consent of parents or caregivers. In Chile, minors may operate savings accounts, but the account must be opened by an adult; minors cannot hold current accounts. In Peru, parental consent is typically required; however, minors from the age of 16 may open current and saving accounts under specific circumstances (such as being married or being legally entitled to exercise a profession). In the Slovak Republic, some service providers allow 15-year-olds to hold a savings or current account without legal requirements about parents' consent.

In some cases, financial institutions may impose requirements about holding savings and current accounts beyond what is required by law. For instance, in all Australian states and territories, minors can enter into contracts with financial institutions, but banking institutions may apply additional requirements (which may vary, depending on the age of the young person), such as joint account ownership with a parent or guardian. In Canada, the ability of minors to access savings and current accounts varies by financial institution and by province. In the United States, financial institutions (banks and credit unions) generally offer checking and savings accounts only with the consent or co-ownership of the parent/guardian; but, depending on state laws, some institutions allow minors to own their own account.

Most countries also require parents' consent to allow 15-year-olds to open and operate cash withdrawal/ATM cards, prepaid cards and debit cards. This is the case, for instance, in Brazil, Lithuania, the Netherlands and Peru.

...

In some countries, in addition to parents' permission, there are limitations to the operations that can be carried out by the minors with these cards. In Belgium, banks apply limits for the use of debit cards by minors, usually in consultation with parents. In Spain, minors over 14 years may be supplementary cardholders, but the main cardholder must be a parent/legal representative. In Italy, teens can hold an ATM, prepaid or debit card under parents'/guardians' consent and can use it only under predetermined circumstances and within fixed spending limits. Prepaid cards in Italy, such as those issued by the Italian Post (*Poste Italiane*), may only be loaded by an adult. In the United States, minors who hold an account that is managed by a custodian on their behalf cannot withdraw funds without the custodian's approval. In contrast, in Australia and the Slovak Republic, minors may hold prepaid and debit cards without other legal requirements.

Access to credit cards is generally more restrictive than access to debit cards for people under 18. Credit cards are not issued to minors in Australia, Belgium, Brazil, Italy, Lithuania, the Netherlands, Peru, the Russian Federation and the Slovak Republic. In the United States, consumers under the age of 21 seeking to obtain a credit card need to prove that they are independently able to make the required minimum payments unless they have a co-signer or similar party who is at least 21 years old.

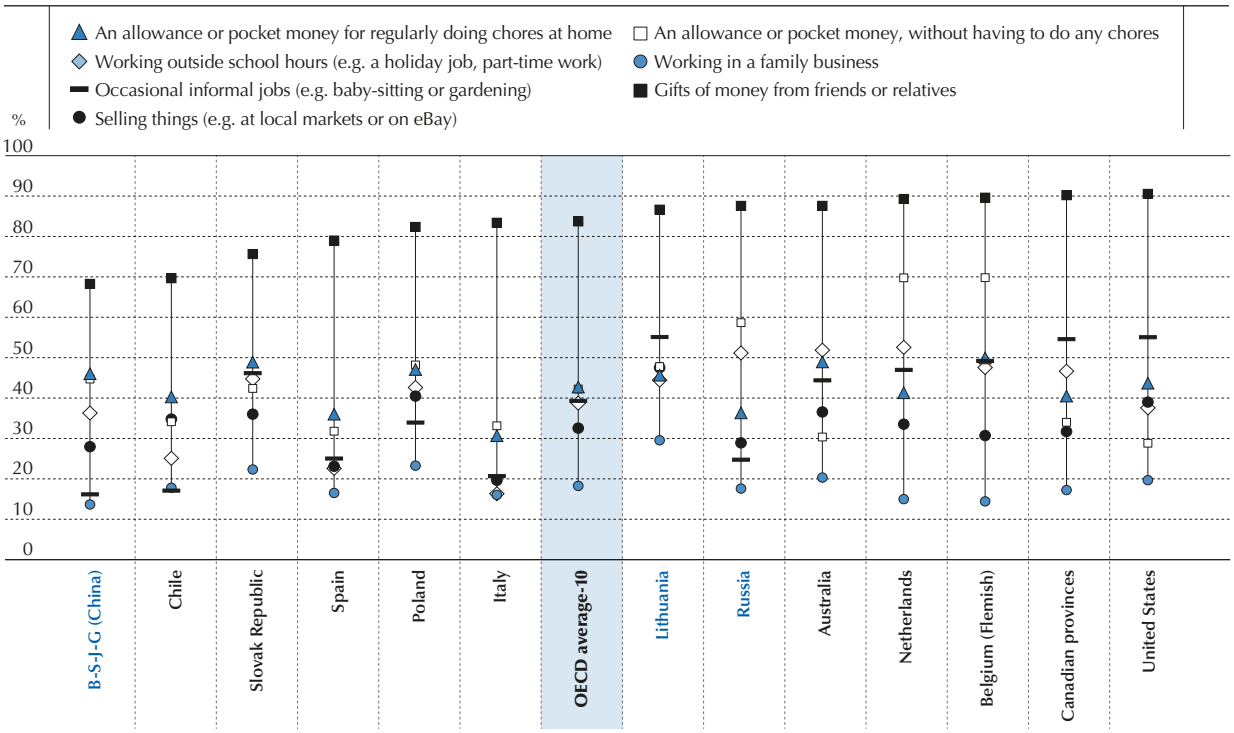
STUDENTS' SOURCES OF MONEY

Students receiving money from different sources

Whether students are using financial products, such as a bank account, also depends on whether they have access to money. The content area "Planning and managing finances" in the PISA financial literacy assessment framework refers to the ability to monitor income and expenses in the short and long term, including being able to identify various types and measures of income (OECD, 2013, 2016). Research on young people's experiences with money shows that some teenagers get their money not only from allowances and gifts given by parents and family, but also from some form of work activity (Centiq, 2008; Charles Schwab and Co., 2011; IEFP, 2006; MAS, 2013).

Figure IV.5.6 ▪ **Percentage of students receiving money from various sources**

Results based on students' self-reports



Countries and economies are ranked in ascending order of the percentage of students who receive gifts of money from friends and relatives.

Source: OECD, PISA 2015 Database, Table IV.5.15.

StatLink http://dx.doi.org/10.1787/888933485337

Figure IV.5.6 shows the extent to which students in each country and economy with available data receive money from a number of different sources. The most frequently observed source of money in all countries and economies is gifts from friends or relatives. Over 80% of students in Australia, the Flemish Community of Belgium, the Canadian provinces, Italy, Lithuania, the Netherlands, Poland, Russia and the United States receive money in the form of gifts. The receipt of allowances and pocket money is more heterogeneous: between 31% (Italy) and 50% (the Flemish Community of Belgium) of students reported receiving money from an allowance or pocket money for regularly doing chores at home; between 29% (the United States) and 70% (the Flemish Community of Belgium and the Netherlands) of students reported receiving money from an allowance or pocket money without having to do any chores. More than 40% of students in Australia, the Flemish Community of Belgium, the Canadian provinces, Lithuania, the Netherlands, Poland, Russia and the Slovak Republic reported that they earn money from working outside school hours (e.g. a holiday job, part-time work) and more than 40% of students in Australia, the Flemish Community of Belgium, the Canadian provinces, Lithuania, the Netherlands, the Slovak Republic and the United States earn money from occasional informal jobs, such as babysitting or gardening. Less than 30% of students in all countries and economies with available data reported that they earn money from working in a family business. Earning money from selling things, such as at local markets or on line, varies from 20% in Italy to 48% in Lithuania.

Which students are more likely to receive money from parents, families, work or other sources? Are different money sources complements or substitutes? Are parents combining the disbursement of money with teaching how to use it?

Figure IV.5.7 ▪ **Associations among students' sources of money**

OECD average

Increased likelihood of receiving money from one source among students who receive money from another source

- Above 2
- Between 1.5 and 2
- Above 1 and below 1.5
- Not statistically significantly different from 1
- Below 1

Increased likelihood of receiving money from *(dependent variable)*:	… among students who receive money from (*independent variable*): An allowance or pocket money for regularly doing chores at home	An allowance or pocket money, without having to do any chores	Working outside school hours (e.g. a holiday job, part-time work)	Working in a family business	Occasional informal jobs (e.g. baby-sitting or gardening)	Gifts of money from friends or relatives	Selling things (e.g. at local markets or on eBay)
	Odds ratio	Odds ratio	Odds ratio	Odds ratio	Odds ratio	Odds ratio	Odds ratio
An allowance or pocket money for regularly doing chores at home …		1.39	1.09	1.79	1.89	0.97	1.49
An allowance or pocket money, without having to do any chores …	1.39		0.58	1.36	0.98	1.58	1.16
Working outside school hours (e.g. a holiday job, part-time work) …	1.09	0.58		2.93	3.32	0.90	1.67
Working in a family business …	1.77	1.34	2.93		1.34	0.79	1.46
Occasional informal jobs (e.g. baby-sitting or gardening) …	1.90	0.98	3.32	1.35		1.12	1.66
Gifts of money from friends or relatives …	0.96	1.60	0.89	0.78	1.13		1.41
Selling things (e.g. at local markets or on eBay) …	1.48	1.16	1.66	1.48	1.67	1.39	

How to read this graph

An odds ratio of 0.58 in the likelihood of students who work outside school hours (e.g. a holiday job, part-time work) to receive an allowance or pocket money, without having to do any chores, means that students who work outside school hours are 42% (1 minus 0.58) less likely to receive this allowance than students who do not work outside school hours.

An odds ratio of 2.93 in the likelihood of students who work outside school hours (e.g. a holiday job, part-time work) to work in a family business, means that students who work outside school hours are almost three times as likely as students who do not work outside school hours to also work in a family business.

Source: OECD, PISA 2015 Database, Tables IV.5.16a-g.

StatLink http://dx.doi.org/10.1787/888933485343

Figure IV.5.7 shows how receiving money from one source is correlated with receiving money from another one, after taking into account various student characteristics. On average across OECD countries and economies, there is a positive and relatively strong association across sources of money related to some kind of work activity, such as working outside of school hours, having occasional informal jobs and working in a family business. On average across OECD countries and economies, students who work outside school hours in part-time or holiday jobs are more than twice as likely as similar students who do not work outside school hours to be also earning money from working in a family business or doing occasional informal jobs. It is likely that some students engage in multiple forms of work activities and that they constitute complementary sources of money.

Receiving an allowance for doing chores at home is also associated with earning money from occasional informal jobs and working in a family business. On average across OECD countries and economies, students who receive an allowance for doing chores are about 80% more likely to earn money from working in a family business and about 90% more likely to earn money from occasional informal jobs, such as babysitting or gardening, than similar students who do not receive allowances for doing chores. By contrast, receiving an allowance or pocket money without having to do any chores at home is not related to earning money from occasional informal jobs and is negatively related to earning money from working outside school hours (e.g. a holiday job or part-time work). On average across OECD countries and economies, students who receive pocket money without having to do chores are 42% less likely than similar students who do not receive pocket money to earn money from working outside of school hours. This suggests that students may try to earn some money if they don't receive an allowance from their parents, or that parents give their children an allowance to enable them to use their after-school time to focus on learning and reduce the time they spend working (Holford, 2016).

Receiving money as a gift is positively related to receiving allowances without having to do any chores and is negatively associated with earning money from working in a family business. Earning money from selling things is positively associated with all other sources of money, especially working outside of school hours and doing occasional informal jobs. This suggests that students who want to earn some money may put in place multiple strategies at the same time.

Figure IV.5.8 shows how students' sources of money vary by gender, socio-economic status and immigrant background, after taking into account other student characteristics. The left panel of Figure IV.5.8 focuses on gender differences. On average across OECD countries and economies, boys are more likely than girls to receive pocket money for doing chores, to earn money from working outside of school hours or in a family business, and from selling things they own; on average, girls are slightly more likely than boys to receive money from occasional informal jobs and from gifts. Overall, these results suggest that boys are more likely than girls to be involved in regular work activities, and to receive money in exchange for work inside and outside the household, while girls in some countries and economies are more likely than boys to receive money without working, in the form of allowances or gifts. These results might indicate that boys begin to seek ways of becoming more financially independent at an earlier age than girls.

The middle panel of Figure IV.5.8 shows how students' sources of money vary by socio-economic status. On average across OECD countries and economies, socio-economically advantaged students (those in the top quartile of the PISA index of economic, social and cultural status) are more likely to receive money from occasional informal jobs, such as babysitting or gardening, and from gifts than disadvantaged students (those in the bottom quartile of the index). By contrast, on average, disadvantaged students are more likely to earn money by working outside of school hours than advantaged students. On average, students across different levels of socio-economic status are equally likely to receive an allowance or pocket money (with or without having to do chores at home), to earn money by working in a family business and by selling things.

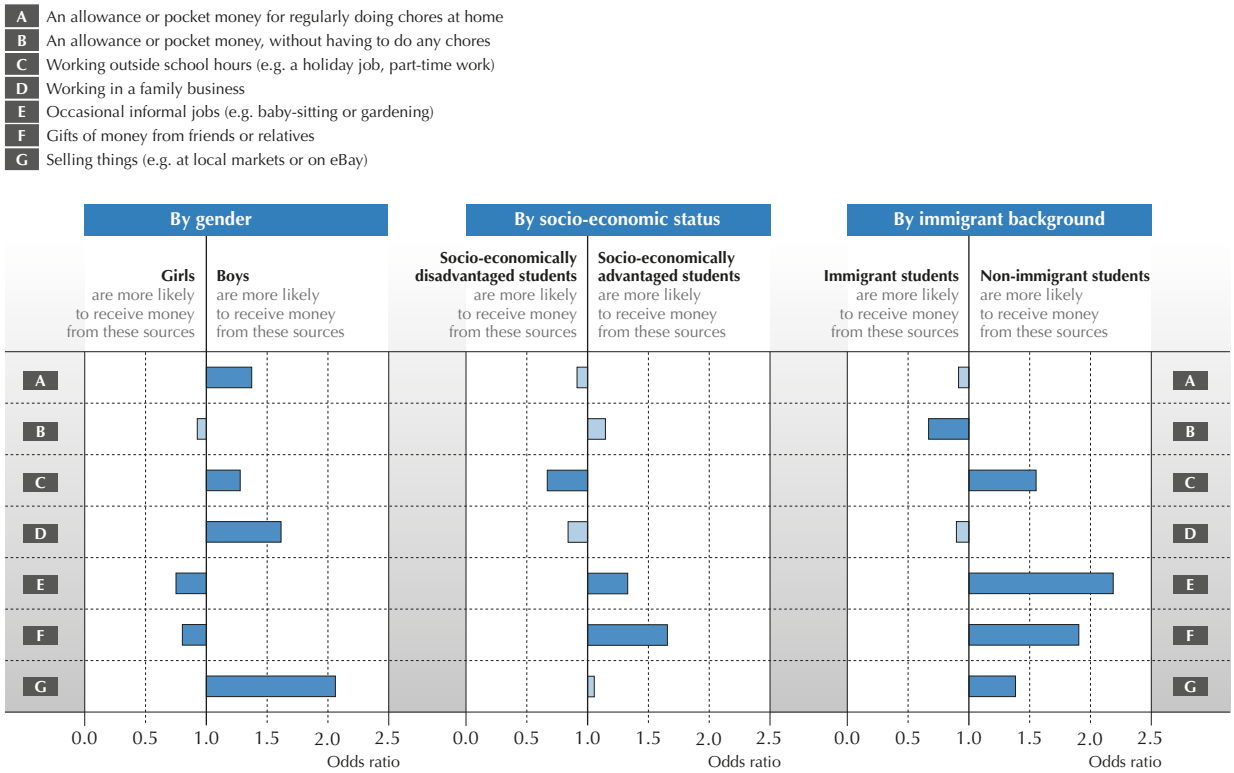
The right panel of Figure IV.5.8 shows how students' sources of money vary by immigrant background, after accounting for students' socio-economic status and other characteristics. On average across OECD countries and economies, non-immigrant students are more likely than immigrant students to earn money by working outside school hours (in a holiday or part-time job) or in occasional jobs (such as babysitting or gardening), by receiving gifts of money, or by selling things. This result may suggest that immigrant students have less access than non-immigrant students to small jobs. In contrast, students with an immigrant background are more likely to get pocket money, without having to do chores at home, than students without an immigrant background. On average, students with and without an immigrant background are equally likely to receive pocket money for chores and to earn money in a family business.

On average across OECD countries and economies, students attending schools in urban areas are as likely as students attending schools in rural areas to earn money from work activities and from most other sources. Only in Australia,

Poland and Russia are students who attend schools in a town, village or rural area more likely than students who attend school in a city to earn money from work, including working outside school hours, in a family business or in occasional informal jobs (Tables IV.5.16a to IV.5.16g).

Figure IV.5.8 ■ **Likelihood of receiving money from various sources, by gender, socio-economic status and immigrant background**

OECD average



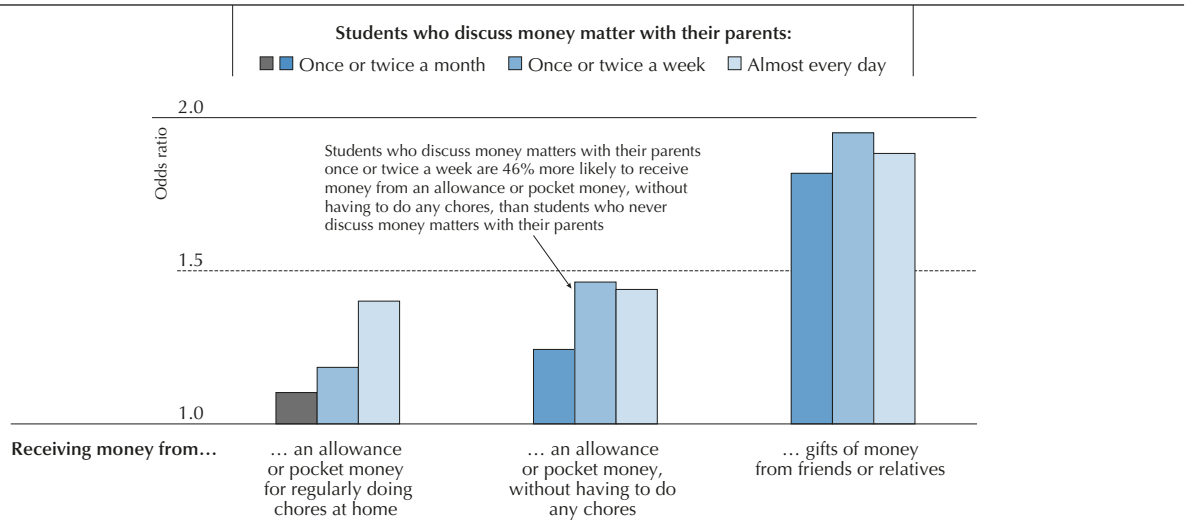
Note: Odds ratios that are statistically significant are marked in a darker tone (see Annex A3).
Source: OECD, PISA 2015 Database, Tables IV.5.16a-g.
StatLink http://dx.doi.org/10.1787/888933485359

The probability of receiving money in the form of pocket money or gifts – which is likely to come from parents and other family members – is also related to the extent to which students talk about money matters with their parents. Figure IV.5.9 shows that, on average across OECD countries and economies, the likelihood of receiving money from an allowance (with or without having to do chores at home) and of receiving gifts of money increases the more frequently students discuss money issues with their parents, after accounting for student characteristics, including gender and socio-economic status. On average, students who talk to their parents about money almost every day are about 40% more likely to receive pocket money (with or without having to do chores at home) and about 90% more likely to receive gifts of money than students with similar characteristics who never talk about money with their parents. This suggests that students may be more likely to get money from their parents if they ask for it, if they show an interest in learning more about how to manage money, or if parents who want to teach their children about money use gifts and pocket money as an opportunity for educating them about money.

Work-related money sources could be expected to be associated with the time students spend learning in school and after school, as engaging in work activities may take time away from studying and homework. However, receiving money from working outside of school hours (e.g. in a holiday job or part-time work), from working in a family business and from occasional informal jobs (e.g. babysitting or gardening) are only weakly correlated with the total time students spend per week in regular lessons or studying after school, including homework, additional instruction and private study (Tables IV.5.16c to IV.5.16e).

Figure IV.5.9 ■ **Likelihood of receiving money from various sources, by frequency of discussing money matters with parents**

OECD average



Note: Odds ratios that are statistically significant are marked in shades of blue (see Annex A3).
Source: OECD, PISA 2015 Database, Tables IV.5.16a, IV.5.16b and IV.5.16f.
StatLink http://dx.doi.org/10.1787/888933485362

Students' sources of money and financial literacy

PISA data can be used to investigate the extent to which experience with different sources of money is associated with performance in financial literacy. The relationship between performance in general (and financial literacy performance in particular) and earning money from small jobs is not clear *a priori*. As discussed in previous chapters, students' performance in financial literacy may be related to students' overall ability, to the extent to which they are exposed to formal financial education in school, to the effort that they put into learning, and to any other opportunity for informal learning, such as discussions with parents and personal experience. Earning money from doing household chores or small jobs may be considered one such experience, as it allows young people to become familiar with the idea of work, wages and money management (Shim et al., 2010). At the same time, these activities may take time away from learning during after-school hours (Oettinger, 1999; Payne, 2003). Even though financial education is taught in schools to a limited extent, time that is not spent learning may limit students' opportunity to improve in the core subjects of mathematics and reading, which are fundamental to building financial literacy skills. Research has not found conclusive results about the relationship between earning money from small jobs and performance in financial literacy (Grohmann, Kouwenberg and Menkhoff, 2015; Shim et al., 2010).

Figure IV.5.10 shows how performance in financial literacy, mathematics and reading varies, on average across OECD countries and economies, between students who receive money from various sources and those who do not receive money from those sources, after taking into account student characteristics, including gender, socio-economic status, immigrant background, school location, whether they discuss money matters with their parents, and the time they spend learning at and after school. Students who receive gifts of money score higher in financial literacy (by 37% of a standard deviation) than similar students who do not receive such gifts. Gifts may be related to higher financial literacy if they provide an occasion for students to think about their saving and spending decisions, but also if high-performing students receive money as a reward for school performance.

By contrast, students who receive pocket money for doing chores at home, those who earn money from part-time jobs or in a family business, and those who obtain money from selling things score lower in financial literacy than students with similar characteristics who do not receive money from these sources. On average, earning money from occasional informal jobs is not associated with performance in financial literacy. PISA data do not provide information on the amounts received, but future research could aim to determine whether a positive association between gifts of money and financial literacy is related to the amount of money received from different sources.

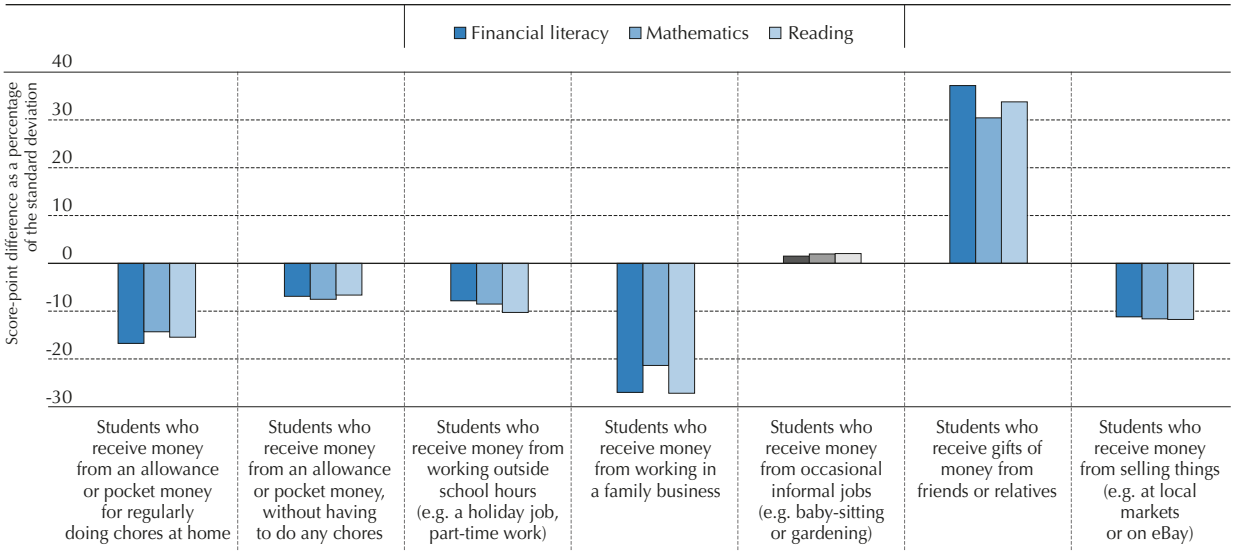
Differences in performance in mathematics and reading associated with receiving money from various sources are similar to those in financial literacy.[2] Nevertheless, on average across OECD countries and economies, the difference in financial literacy performance associated with receiving gifts of money (37% of a standard deviation) is slightly larger than the difference in mathematics performance (30% of a standard deviation). In Australia and Lithuania, receiving gifts of money is associated with a greater (standardised) difference in financial literacy than in both mathematics and reading (Table IV.5.17b). This suggests that, in some countries and economies, managing some money may provide a greater opportunity to acquire financial skills than skills in other domains, such as doing calculations.

Moreover, on average across OECD countries and economies, even after accounting for student characteristics and performance in mathematics and reading, students who receive money as a gift perform better in financial literacy by 13 score points. In Australia, the Flemish Community of Belgium, Lithuania, Poland, the Slovak Republic and the United States, students who receive money as a gift score higher in financial literacy than students of similar characteristics and ability who do not receive gifts of money (Table IV.5.18). These results suggest that having some money to manage could provide an opportunity to acquire financial skills regardless of students' socio-economic status and ability.

The results of Figure IV.5.10 also show that earning money from work (either doing chores or working outside the home) is associated with lower performance in financial literacy, mathematics and reading, even after accounting for student characteristics, such as socio-economic status and time spent learning. These results should be interpreted with caution, however, as the data do not say how much money students get from these money sources, how much time they spend working, and when they perform any work activities (e.g. during term time or during school holidays). Overall, these results are consistent with research suggesting that the quality of the interactions between parents and children about money may have more of an impact on children's financial socialisation than receiving allowances per se. Without substantial parental guidance about finances, just receiving money may not be sufficient for children to develop a real understanding of how to use it (Beutler and Dickinson, 2008; Xiao, Ford and Kim, 2011).

Figure IV.5.10 ■ **Association between students' performance and sources of money, after accounting for student characteristics**

OECD average



Note: Score-point differences as a percentage of the standard deviation that are statistically significant are marked in shades of blue (see Annex A3).
Source: OECD, PISA 2015 Database, Table IV.5.17b.

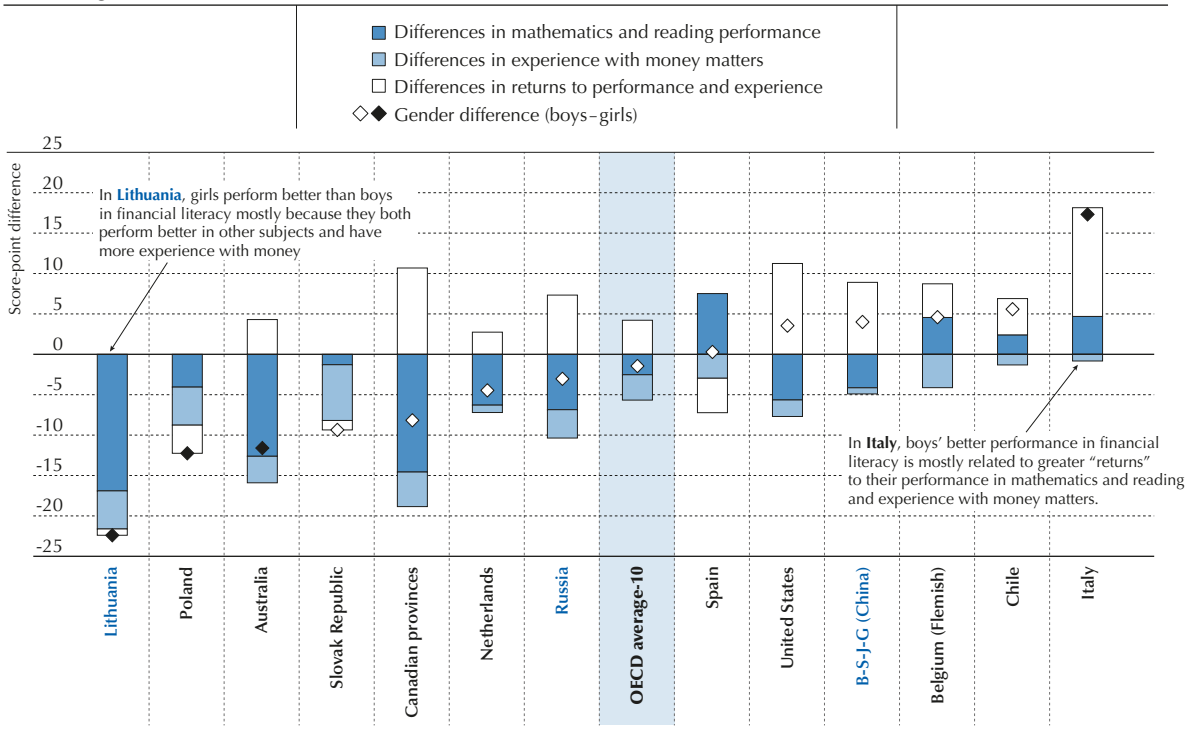
StatLink http://dx.doi.org/10.1787/888933485373

Box IV.5.2 The role of money experience and performance in core PISA subjects in explaining gender differences in financial literacy

The heterogeneity in gender differences in financial literacy found in PISA 2015 (Chapter 4) suggests that boys and girls may have different opportunities for being exposed to financial matters, such as the possibility to access and use basic financial products, receive money from various sources and discuss money matters with parents and friends. In addition, PISA results have consistently shown gender differences in mathematics and reading performance, which, in turn, are closely correlated with financial literacy.

Figure IV.5.11 shows the results of a decomposition of the gender differences in financial literacy into three components (in the figure, the sum of the values represented by the three bars corresponds to the value represented by the diamonds) (Blinder, 1973; Oaxaca, 1973). The dark blue bars represent the gender difference in financial literacy performance related to differences in mathematics and reading performance across boys and girls. The medium blue bars represent the gender difference in financial literacy related to differences in experience with money (a combination of discussing money matters with parents and friends, experience with basic financial products, and with sources of money). The light blue bars represent the extent to which the different "endowments" (reading and mathematics skills, and experience with money matters) of boys and girls are associated with financial literacy, that is the extent to which boys and girls have different "returns" to their characteristics (for example, not only do boys and girls perform differently in mathematics, but the association between mathematics and financial literacy might also be different for boys and girls).

Figure IV.5.11 ▪ **Understanding gender differences in financial literacy performance**



Notes: Experience with money matters includes: holding a bank account, holding a prepaid debit card, receiving money from various sources, discussing money matters with parents, and discussing money matters with friends.

Differences in returns to student characteristics refer to the fact that a characteristic may have a different association with financial literacy performance for boys and girls. For instance, boys and girls may have different levels of performance in mathematics (different characteristics) and the association between performance in mathematics and performance in financial literacy may be different for boys and girls (different returns to performance in mathematics).

Gender differences represented by the diamonds that are statistically significant are indicated in a darker tone (see Annex A3). The statistical significance of the values represented by the bars is not shown in the figure; please refer to Table IV.5.19 for values' statistical significance.

Gender differences in financial literacy performance may differ slightly from those in Table IV.4.5 because results in this table are calculated considering only students for whom data on all the variables in the model are available.

Countries and economies are ranked in ascending order of the score-point difference in financial literacy performance between boys and girls.

Source: OECD, PISA 2015 Database, Table IV.5.19.

StatLink http://dx.doi.org/10.1787/888933485387

...

Figure IV.5.11 shows that, in some countries and economies, differences in experience and/or performance in mathematics and reading contribute to explaining significant fractions of the gender difference in financial literacy. In Australia, Lithuania and Poland, girls perform better in financial literacy than boys mostly because they have more favourable characteristics, that is girls both perform better in mathematics and reading (combined) and have more opportunities to experience with money overall. In B-S-J-G (China), the Canadian provinces, the Netherlands, Russia and the United States, student characteristics in terms of experience with money and performance would favour girls, but boys seem to offset their lower "endowments" with greater "returns", e.g. because they are more able to apply experience with money, and reading and mathematics skills, to financial contexts, leading to differences that are not statistically significant. In the Flemish Community of Belgium, Chile and Spain, the similar financial literacy performance of boys and girls is related to the balancing of better performance among boys and greater experience among girls. In Italy, boys' better performance in financial literacy is mostly related to greater "returns" to their characteristics and, to some extent, to their better performance in mathematics and reading combined.

Notes

1. Information on the legal requirements regulating the access of minors to bank accounts and cards was collected from national authorities of the participating countries and economies in October-December 2016.

2. The relationship between financial literacy and science performance is not discussed in the text and figures because science competencies are not strictly necessary to be proficient in financial literacy and there are no links across the two assessment frameworks. The relationship between performance in financial literacy and performance in science, in addition to mathematics and reading, is nevertheless presented in the tables.

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6

Students' financial literacy, behaviour and expectations

This chapter discusses how students would behave in hypothetical spending and saving situations, similar to those that they may encounter in their current lives or in the near future. It then discusses how such behaviour is related to their financial literacy. The chapter then looks at the relationship between performance in financial literacy and students' expectations for their studies and careers, to see whether financially literate students are more willing to invest in their future, after taking into account their socio-economic status and performance in other subjects assessed by PISA.

Students nearing the end of compulsory education will soon be taking decisions that will have significant consequences for their adult lives, such as deciding whether to continue their studies or whether to enter the labour market. Whatever choice they make will have financial implications too. Continuing with education will require students to discuss and decide with their families how to finance their studies, whether to accumulate some savings to contribute to education costs, and whether to take a student loan. Whether students continue their studies or go to work, the end of compulsory education for many is associated with living more autonomously and learning how to budget. More generally, soon after the end of compulsory education, young people become legally able to enter into financial contracts, including various forms of credit agreements, further expanding the range of financial choices they can make.

The PISA definition of financial literacy stresses that financial knowledge and understanding can be used "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". Students performing at the highest proficiency levels on the PISA financial literacy scale are already able to take decisions that have an impact on their lives over the longer term. Students performing at Level 4 can apply their understanding of less common financial concepts and terms to contexts that will be relevant to them as they move towards adulthood, and to make financial decisions taking into account longer-term consequences. In addition, students performing at Level 5 can apply their understanding of a wide range of financial terms and concepts to contexts that may only become relevant to their lives later on and can describe the potential outcomes of financial decisions, showing an understanding of the wider financial landscape (see Chapter 3). Financially literate students can be expected to be forward-looking and to take decisions after considering not only their immediate preferences but also their future needs, such as recognising the importance of saving and of investing in their higher education.

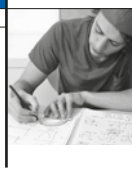
This chapter discusses the relationship between financial literacy and student outcomes that are relevant to their immediate and near future, such as how they would face decisions about saving and spending, and what their expectations are for their studies and careers, after accounting for their socio-economic status and performance in other subjects.

What the data tell us

- At least 50% of students on average in each of the 13 countries and economies with available data reported that they would save if they want to buy something for which they do not have enough money.
- On average across OECD countries and economies, 49% of students reported that they save each week or month, 20% save only when they have money to spare, and 22% save only when they want to buy something. Few students (6%) responded that they do not save any money.
- On average across OECD countries and economies, when asked what they would do if they want to buy something for which they do not have enough money, students who perform at Level 4 or 5 in financial literacy are about three times as likely as students performing at or below Level 1 with similar characteristics and performance in core PISA subjects to report that they would save, rather than reporting that they would buy the item anyway with money that should be used for something else.
- In Australia, Chile, Italy, Lithuania, Peru and Spain, students performing at Level 4 or above in financial literacy were at least 70% more likely than similar students performing at or below Level 1 to report that they expect to complete university education, after taking into account socio-economic status, performance in mathematics and reading, and other student characteristics.

EXPECTED STUDENT BEHAVIOUR IN THE IMMEDIATE FUTURE: SAVING AND SPENDING DECISIONS

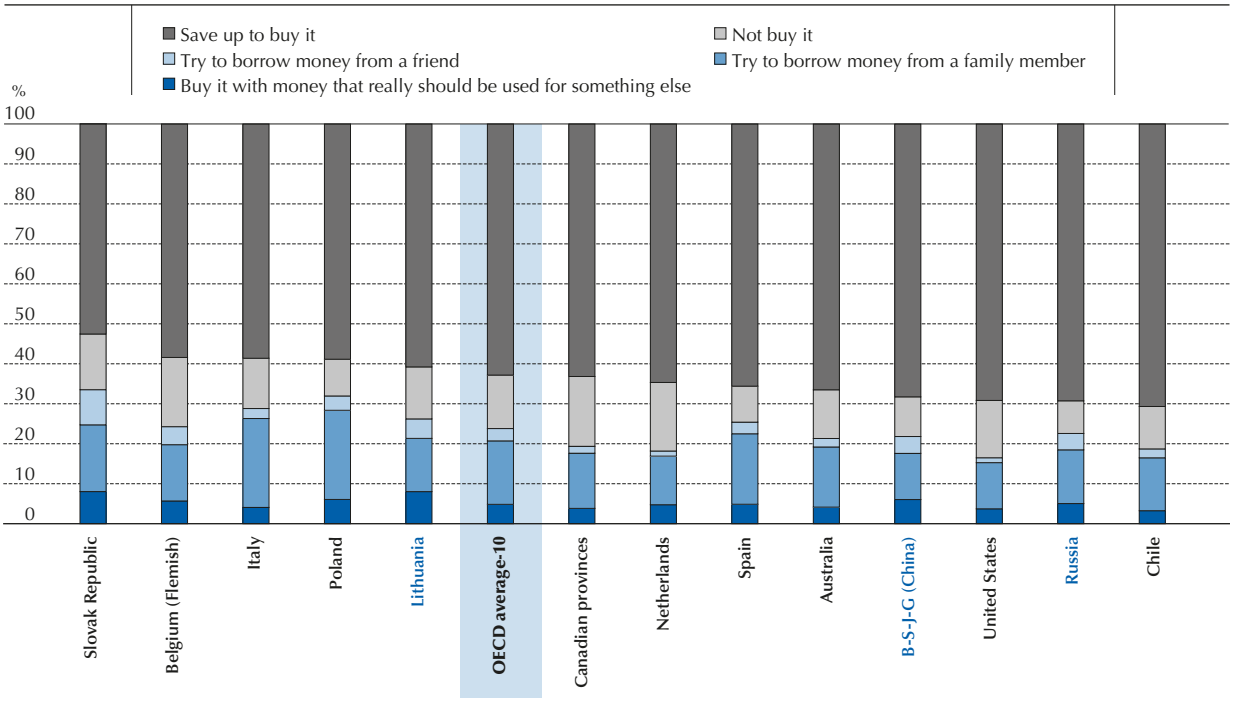
PISA 2015 asked students sitting the financial literacy test how they would behave in hypothetical spending and saving situations, similar to those that they may encounter immediately or in the near future.[1] Young people's saving behaviour can be seen as a first step to greater financial independence, as saving is a way for them to become more autonomous in their spending choices (Coleman and Hendry, 1999; Otto, 2013). Moreover, financial habits are formed early on (CFPB, 2016; Whitebread and Bingham, 2013) and saving behaviour at a young age is correlated with saving behaviour in young adulthood and later (Ashby, Schoon and Webley, 2011; Friedline, Elliott and Nam, 2011).



More precisely, PISA 2015 asked students who sat the financial literacy assessment the following question: "If you don't have enough money to buy something you really want (e.g. an item of clothing, sports equipment) what are you most likely to do?", allowing them to choose among various hypothetical strategies, including buying the item anyway with money that should be used for something else; trying to borrow money from a family member; trying to borrow money from a friend; saving money; or not buying the item. Figure IV.6.1 shows that on average across OECD countries and economies, most students (63%) reported that they would save if they want to buy something for which they do not have enough money. Some 16% reported that they would try to borrow money from family and 13% reported that they would not buy the item, on average. Few reported that they would borrow money from friends (3%) or buy the item anyway with money that should be used for something else (5%).

Figure IV.6.1 ▪ **Students' expected spending behaviour**

Results based on students' response to the question "If you don't have enough money to buy something you really want (e.g. an item of clothing, sports equipment) what are you most likely to do?"



Countries and economies are ranked in ascending order of the percentage of students who would "save up to buy it".

Source: OECD, PISA 2015 Database, Table IV.6.1.

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In some countries and economies, spending behaviour also varies by student characteristics (Table IV.6.2). In most countries and economies, hypothetical spending behaviour is not associated with gender. Spending behaviour is also weakly correlated with socio-economic status. Only in Australia, Lithuania and the Slovak Republic were advantaged students more likely than disadvantaged students to report that they would save rather than buy the item anyway; and only in Australia and Spain were advantaged students more likely than their disadvantaged peers to report that they would try to borrow money from their family rather than buying the item anyway.

The choice of some spending options is correlated with discussing money matters with parents. Students in Australia, the Flemish Community of Belgium, Beijing-Shanghai-Jiangsu-Guangdong (China) (hereafter "B-S-J-G [China]"), Chile, Italy and Poland who discuss money issues with parents at least sometimes were more likely than students who never discuss these issues with their parents to report that they would try to borrow money from a family member. Students in Australia, the Flemish Community of Belgium, B-S-J-G (China), Chile, Italy, Lithuania, the Netherlands and the Russian Federation (hereafter "Russia") who discuss money issues with their parents at least sometimes are two to four times more likely than students who never discuss these issues with their parents to report that they would save money. This suggests that parents may have a role in shaping their children's spending behaviour.

To what extent is financial literacy associated with the choice students would make in this spending situation? Figure IV.6.2 shows how likely students at different proficiency levels in financial literacy are to report that they would save, borrow or not buy the item compared with reporting that they would buy the item anyway. Saving money and refraining from buying the item can be considered as safer choices than buying the item anyway, which may indicate a lack of ability to distinguish between needs and wants, or a lack of understanding that money spent on one item cannot be spent again on something else.

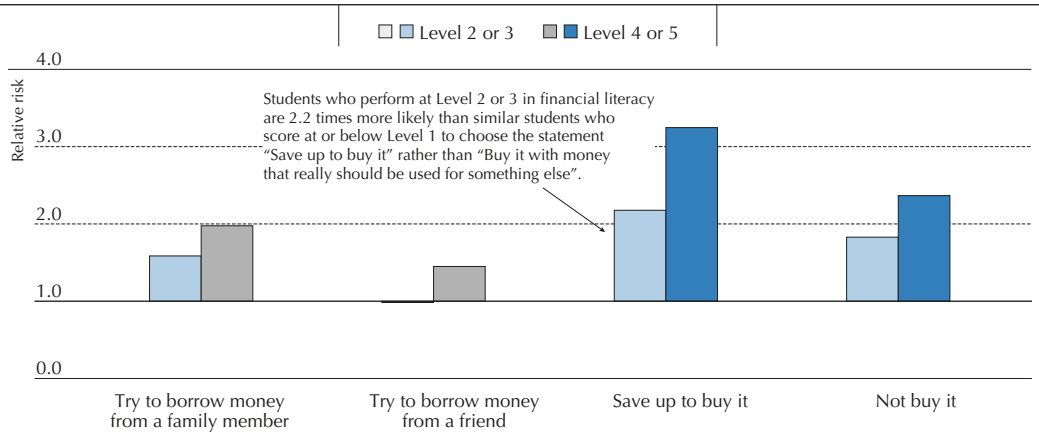
On average across OECD countries and economies, students who perform at Level 2 or 3 were about twice as likely as students who perform at or below Level 1 to report that they would save rather than to report that they would buy the item anyway, after taking into account student characteristics, such as gender, socio-economic status, motivation to achieve (an index summarising whether students agree with five statements, such as "I see myself as an ambitious person" and "I want to be the best, whatever I do"), frequency of discussing money matters with their parents and performance in mathematics and reading. Similarly, students who perform at Level 4 or 5 were more than three times as likely as similar students who perform at or below Level 1 to report that they would save rather than to report that they would buy the item anyway, on average across the participating OECD countries and economies. In 4 countries and economies out of 13, students who perform at Level 2 or above were more likely than students with similar characteristics who perform at or below Level 1 to report that they would save rather than to report that they would buy the item anyway (Table IV.6.3). On average across OECD countries and economies, students who score above the baseline level of proficiency in financial literacy (that is, at or above Level 2) were also more likely than students who perform below the baseline level to report that they would not buy the item rather than buy the item anyway.

These results suggest that, at least in some countries and economies, financially literate students may be more likely than less financially literate students to prefer saving to overspending, even when both groups of students share similar socio-economic status, motivation, frequency of discussing money issues with their parents and performance in core PISA subjects. However, as PISA data do not allow for determining causality, the association between financial literacy and propensity to save may also be related to the fact that students with a preference for saving or who are better able to delay gratification may become more financially literate through their experience in managing money.

PISA 2015 also asked students who sat the financial literacy assessment to choose which one among a series of statements about saving money best applies to them. Students could indicate that they save the same amount of money each week or month; they save some money each week or month, but the amount varies; they save money only when they have money to spare; they save money only when they want to buy something; they do not save any money; or that they have no money so they do not save.

Figure IV.6.2 ▪ **Students' expected spending behaviour, by performance in financial literacy**

Likelihood of students' response to the question "If you don't have enough money to buy something you really want (e.g. an item of clothing, sports equipment) what are you most likely to do?", after accounting for student characteristics (OECD average)



Notes: Relative risks that are statistically significant are marked in shades of blue (see Annex A3).

Student characteristics include gender, socio-economic status, achievement motivation, discussing money matters with parents at least sometimes, and performance in mathematics and reading.

Source: OECD, PISA 2015 Database, Table IV.6.3.

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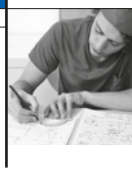


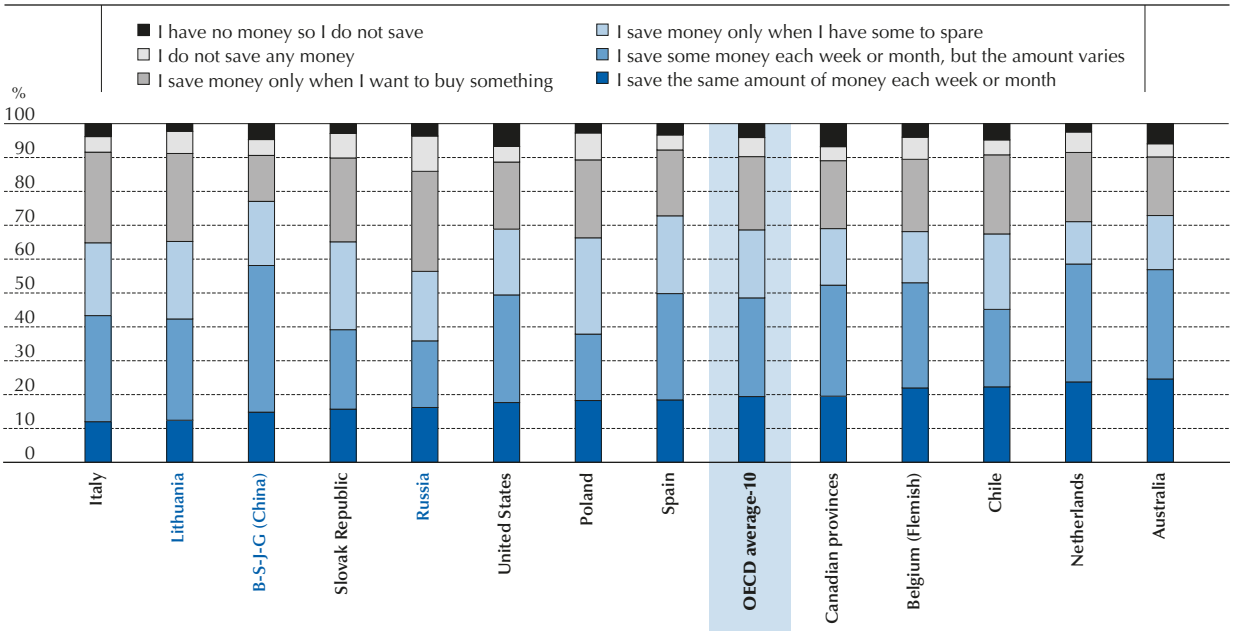
Figure IV.6.3 shows that on average across OECD countries and economies, 19% of students reported that they save the same amount each week or month, 29% reported that they save some money each week or month, but the amount varies, 20% save only when they have money to spare, and 22% save only when they want to buy something. Few students responded that they do not save any money (6%) or that they do not save because they do not have any money (4%).

In some countries and economies, saving behaviour also varies by student characteristics, such as gender, socio-economic status, motivation to achieve and frequency of discussing money matters with parents (Table IV.6.5). Some saving options are associated with gender. In Australia, the Flemish Community of Belgium, the participating Canadian provinces (British Columbia, Manitoba, New Brunswick, Newfoundland and Labrador, Nova Scotia, Ontario and Prince Edward Island), Lithuania, Poland, Russia and the United States, boys were more likely than girls to report that they save the same amount regularly than not to save; and boys in Australia, the Canadian provinces and the United States were more likely than girls to report that they save only when they want to buy something than not to save at all.

Some saving options are associated with socio-economic status. Advantaged students in Australia, the Canadian provinces, Lithuania, the Netherlands and Poland were more likely than disadvantaged students to report that they save each week or month (regular and/or varying amounts).

Figure IV.6.3 ▪ **Students' saving behaviour**

Percentage of students who reported that this statement about saving money best applies to them



Countries and economies are ranked in ascending order of the percentage of students who reported "I save the same amount of money each week or month".

Source: OECD, PISA 2015 Database, Table IV.6.4.

StatLink http://dx.doi.org/10.1787/888933485416

Achievement motivation is positively correlated to saving. In Australia, Chile and Poland, students with higher values on the PISA index of achievement motivation were more likely to save the same amount of money each week or month than not to save; in Australia, Chile, the Slovak Republic and the United States, more motivated students were more likely to report that they save a variable amount each week or month than not to save; and in Australia, Chile, Russia and the Slovak Republic, more motivated students were more likely to report that they save money when they have some to spare than not to save.

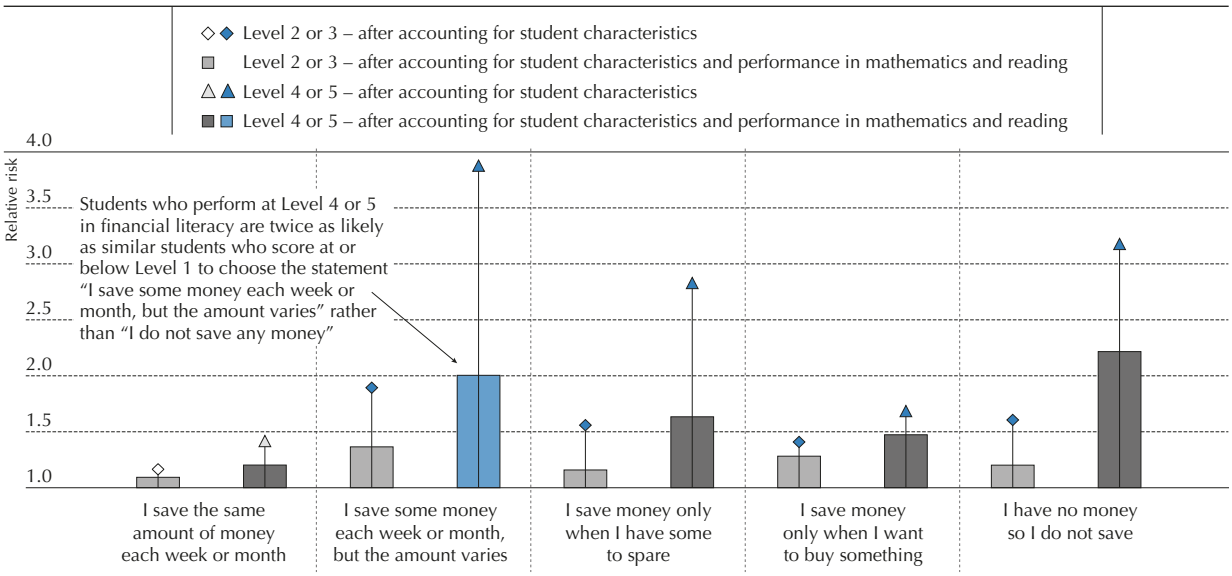
Discussing money matters with parents is also related to saving. In Australia, the Flemish Community of Belgium, B-S-J-G (China), the Canadian provinces, Italy, the Netherlands and the Slovak Republic, students who discuss money matters with their parents at least sometimes were more likely to report that they save at regular intervals (the same or varying amounts of money) than students who never discuss such issues with their parents.

Are financially literate students more able than less financially literate students to recognise the value of saving? To what extent is financial literacy associated with students' self-reported saving choices? Figure IV.6.4 shows how likely students at different proficiency levels in financial literacy are to report that they save (or have no money to save) compared with not saving, after taking into account student characteristics, such as gender, socio-economic status, motivation to achieve, frequency of discussing money matters with their parents and performance in mathematics and reading.

On average across OECD countries and economies, after taking into account students' gender, socio-economic status, motivation to achieve and discussion with parents, students who perform above the baseline level of proficiency were more likely than students with similar characteristics who perform at or below Level 1 to report that they save a variable amount regularly, that they save when they have money to spare, and that they save when they want to buy something rather than to report that they do not save (as represented by the triangles and diamonds in Figure IV.6.4). However, such associations become weaker or not statistically significant in most countries and economies once performance in mathematics and reading are also accounted for (as represented by the bars in Figure IV.6.4). This result is consistent with the possibility that higher-performing students are more aware that certain responses about saving behaviour may be more socially desirable.

Figure IV.6.4 ▪ **Students' saving behaviour, by performance in financial literacy**

Likelihood of students' self-reports on which statement about saving money best applies to them, after accounting for student characteristics, OECD average



Notes: Relative risks that are statistically significant are marked in shades of blue (see Annex A3). No value referring to students who perform at Level 2 or 3, after accounting for student characteristics and performance in mathematics and reading is statistically significant.

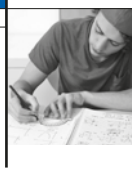
Student characteristics include gender, socio-economic status, achievement motivation, and discussing money matters with parents at least sometimes.

Source: OECD, PISA 2015 Database, Table IV.6.6.

StatLink http://dx.doi.org/10.1787/888933485426

FINANCIAL LITERACY AND STUDENTS' EXPECTATIONS ABOUT THEIR FUTURE STUDIES AND CAREERS

Earning a university degree represents a significant investment in the future of a young person, both in human capital and in economic terms. In OECD countries, earnings differentials between adults with tertiary education and those with upper secondary education are generally more pronounced than the difference between the earnings of those with upper secondary education and those who have not attained that level of education. This suggests that there are large earnings advantages for those who attain tertiary education. On average across OECD countries, adults with a master's, doctoral or equivalent degree earn almost twice as much as those with only upper secondary education, and those with a bachelor's or equivalent degree earn 48% more (OECD, 2016a). Educational attainment is also positively related to health and life satisfaction (OECD, 2016b; Boarini et al., 2012).



Are more financially literate students better able to see the value of completing higher education and of working in highly skilled occupations? The relationship between expectations and performance in school subjects like mathematics and reading is likely to be complex. High-performing students may expect to pursue their studies in higher education and then to work in highly skilled occupations as a reflection of their success at school. At the same time, students with high motivation and expectations are likely to put more effort in their studies and to perform better in school subjects than less-motivated students.

Students' performance in financial literacy may be associated with their expectations for their future directly or indirectly through its correlation with mathematics and reading performance. Students with higher financial literacy may attribute more value to investing in their human capital (Pesando, 2017); but it may also be the case that students with higher expectations perform better in financial literacy, as a result of the correlation of performance in financial literacy with that in mathematics and reading. PISA data do not allow for establishing causal relationships, but they can be used to describe the association between performance in financial literacy and students' expectations for their future, after taking into account performance in mathematics and reading and other student characteristics.

PISA 2015 asked students which education level they expected to complete (see also *PISA 2015 Results, Volume III: Students' Well-Being* [OECD, 2017]). Among the countries and economies that participated in the financial literacy assessment, the proportion of students expecting to complete university-level education (ISCED levels 5A or 6) ranges from less than 20% in Russia and the Netherlands to over 60% in the Canadian provinces, Chile, Peru and the United States (Table IV.6.8). Within countries and economies, education expectations are strongly correlated with socio-economic status, which, in turn, depends on parents' level of education, among other factors. On average across OECD countries and economies, the percentage of students who expect to complete tertiary education is 40 percentage points larger among socio-economically advantaged students than among disadvantaged students. This difference is positive and statistically significant in all countries and economies with available data (Table IV.6.8). Comparing averages across countries that participated in the PISA financial literacy assessment, in most of these countries, the proportion of 15-year-olds who expect to complete tertiary education is larger than the proportion of young adults and adults in the country – the generations of older siblings and parents of current PISA students – who actually attained tertiary education (Table IV.6.7).

Figure IV.6.5 shows that, on average across OECD countries and economies, students who perform at Level 5 were about twice as likely as students performing at or below Level 1 to report that they expect to complete university education, after taking into account student characteristics, such as their gender, socio-economic status, motivation to achieve and performance in mathematics and reading.[2] In Australia, Chile, Italy, Lithuania, Peru and Spain, students performing at Level 4 or above were at least 70% more likely than similar students performing at or below Level 1 to report that they expect to complete university education. This suggests that, even after comparing students with similar socio-economic status, motivation and performance in other subjects, financially literate students may be more willing to invest in their human capital, or that forward-looking students may become more financially literate.

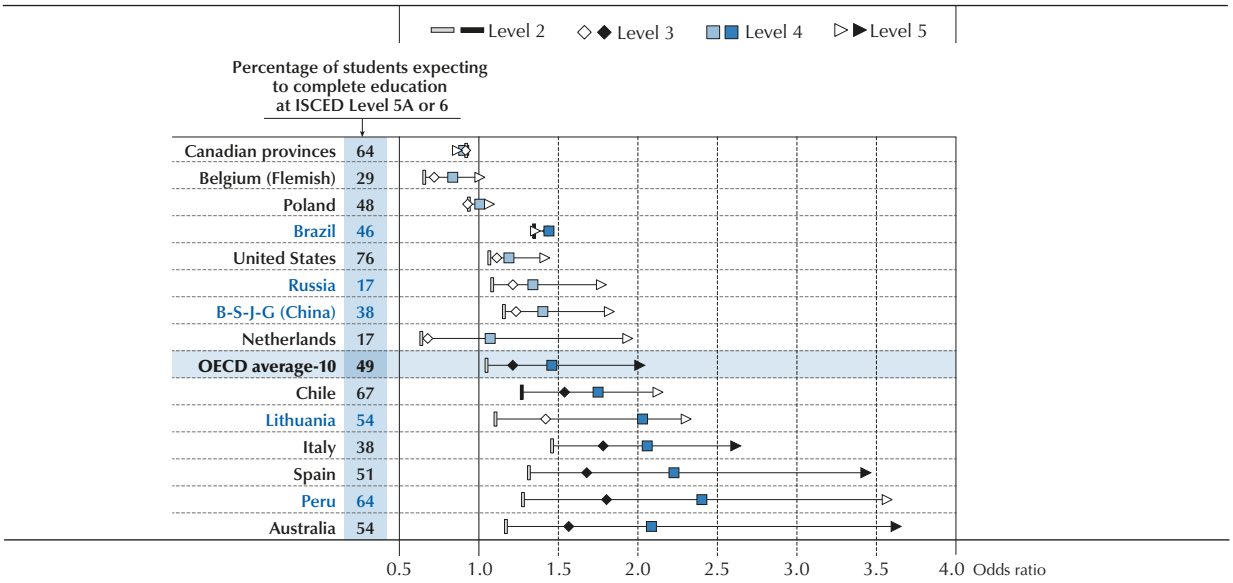
PISA also asked students what kind of job they expect to have when they are about 30 years old. Students expecting to work in some managerial positions, as professionals or as high-level armed forces officers are considered as expecting to work in highly skilled occupations (ILO, 2012).[3] Working in skilled occupations and more frequent use of skills at work are typically associated with higher wages and greater job satisfaction (OECD, 2016c).

Among the countries and economies that participated in the financial literacy assessment, the percentage of students expecting to work in highly skilled occupations ranges from less than 50% in B-S-J-G (China), the Netherlands, Poland and the Slovak Republic to over 70% in Brazil, the Canadian provinces and Peru. Within countries and economies, career expectations are strongly associated with students' socio-economic status. On average across the participating OECD countries and economies, the percentage of students who expect to work in highly skilled occupations is 26 percentage points larger among advantaged students than among disadvantaged students. This difference is positive and statistically significant in all countries and economies with available data (Table IV.6.10).

Figure IV.6.6 shows that, in some countries and economies, students' career expectations are also associated with their financial literacy, after accounting for other factors that might influence career expectations, such as students' gender, socio-economic status, motivation to achieve and performance in mathematics and reading. On average across OECD countries and economies, students who perform at Level 5 were 47% more likely than students performing at or below Level 1 to report that they expect to have a high-skilled occupation when they are 30 years old, after taking into account student characteristics and ability. In Australia, Italy and the Netherlands, students performing at Level 5 were at least 60% more likely than similar students performing at or below Level 1 to report that they expect to have a high-skilled occupation (Table IV.6.11). This suggests that, even after comparing students with similar socio-economic status, motivation and performance in other subjects, financially literate students may be more willing to invest in their future in order to work in a more skilled occupation, or that forward-looking students may become more financially literate.

Figure IV.6.5 ■ **Students' education expectations, by performance in financial literacy**

Likelihood to expect to complete education at ISCED Level 5A or 6, after accounting for student characteristics



Notes: Statistically significant values are shown in a darker tone (see Annex A3).

Odds ratios in this figure are computed taking into account student characteristics, including gender, socio-economic status, achievement motivation, as well as performance in mathematics and reading.

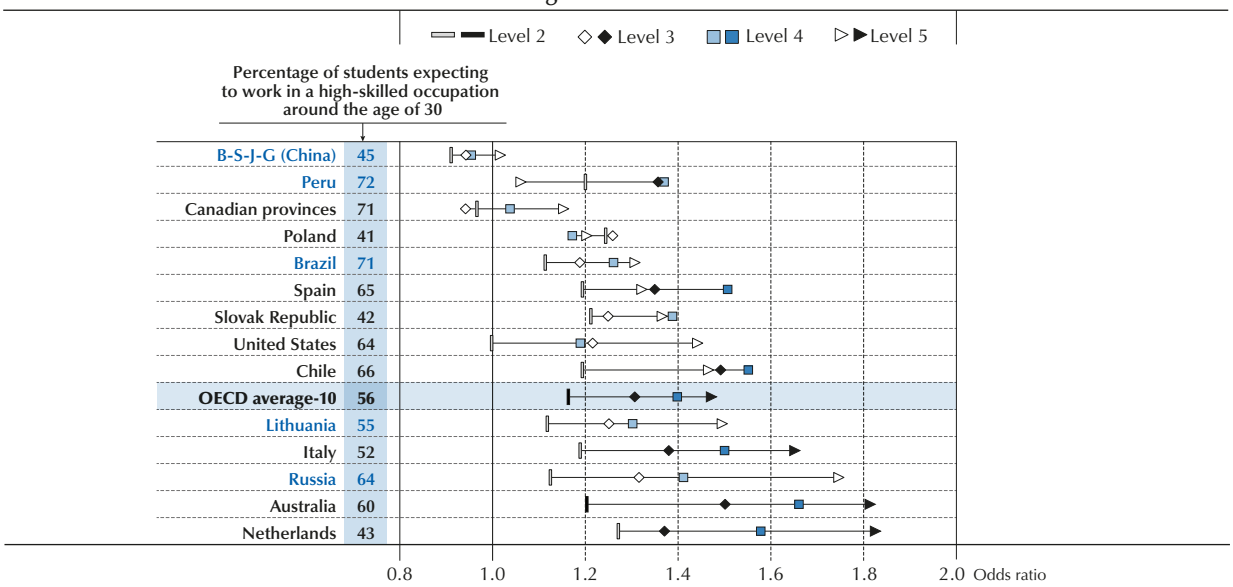
Countries and economies are ranked in ascending order of the odds ratio of students performing at Level 5 to expect to complete education at ISCED Level 5A or 6.

Source: OECD, PISA 2015 Database, Tables IV.6.8 and IV.6.9.

StatLink http://dx.doi.org/10.1787/888933485430

Figure IV.6.6 ■ **Students' career expectations, by performance in financial literacy**

Likelihood to expect to work in a high-skilled occupation around the age of 30, after accounting for student characteristics



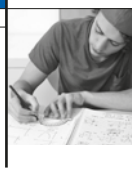
Notes: Statistically significant values are shown in a darker tone (see Annex A3).

Odds ratios in this figure are computed taking into account student characteristics, including gender, socio-economic status, achievement motivation, as well as performance in mathematics and reading.

Countries and economies are ranked in ascending order of the odds ratio of students performing at Level 5 expecting to work in a high-skilled occupation around the age of 30.

Source: OECD, PISA 2015 Database, Tables IV.6.10 and IV.6.11.

StatLink http://dx.doi.org/10.1787/888933485446



Notes

1. Information about students' saving and spending decisions is based on their responses to a short questionnaire appearing at the end of the cognitive PISA 2015 financial literacy assessment. As in Chapter 5, results about saving and spending decisions in this chapter are only reported for countries and economies with a sufficiently high response rate across the questions on money experiences, including Australia, the Flemish Community of Belgium, B-S-J-G (China), the Canadian provinces, Chile, Italy, Lithuania, the Netherlands, Poland, Russia, the Slovak Republic, Spain and the United States; OECD averages in this chapter are therefore based on ten countries and economies as in other chapters. Annex A1 contains more details and analysis on response rates per country/economy.

2. The relationship between financial literacy and science performance is not discussed in the text and figures because science competencies are not strictly necessary to be proficient in financial literacy and there are no links across the two assessment frameworks. The relationship between performance in financial literacy and performance in science, in addition to mathematics and reading, is nevertheless presented in the tables.

3. Occupations classified at ISCO Skills Level 4 are occupations within ISCO major group 1 (managers), with the exception of sub-major group 14 (hospitality, retail, and other services managers); occupations within ISCO major group 2 (professionals); and occupations within ISCO sub-major group 01 (commissioned armed forces officers) (ILO, 2012).

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7

What PISA 2015 financial literacy results imply for policy

Young people are already using money and financial services and will soon have to take decisions with long-term financial consequences. Results from the PISA 2015 financial literacy assessment show that many students, in countries and economies at all levels of economic and financial development, need to improve their financial literacy. This chapter analyses which students show weaknesses in financial literacy and what these disparities imply for policy and practice.

Globalisation and digital technologies have made financial services and products both more complex and more widely accessible, at the same time as responsibility for many crucial financial decisions, such as investing in additional education or planning for retirement, is increasingly assumed by individuals.

From buying mobile phone credit to deciding how to spend pocket money, financial decisions are common in the lives of young people. Young people are likely to encounter situations where they need to set their spending priorities, be aware that some items that they want to buy will incur ongoing costs, and be alert that some purchasing offers are simply too good to be true. PISA 2015 data show that many 15-year-old students hold a bank account, and that in all participating countries and economies, more than one in two students reported that they earn money from some kind of formal or informal work activity on the side of school hours.

Students' level of financial literacy today is also relevant for their choices in the immediate future. In some countries, students performing at the highest levels of proficiency in financial literacy are more likely than lower-performing students to report that they expect to complete university education, after taking into account their socio-economic status, performance in mathematics and reading, and other student characteristics. Students' level of financial literacy is also correlated with their self-reported behaviour in hypothetical spending situations, suggesting that financially literate students may be more forward-looking and more likely to recognise the value of saving and investing in their human and financial capital.

The PISA 2015 assessment included a test of 15-year-olds' financial literacy – their understanding of financial concepts and risks, and the skills to make effective decisions and participate in economic life – while also assessing their proficiency in core PISA subjects. The main results of the 2015 assessment are broadly consistent with the results of the 2012 assessment, which covered a partially different set of countries. The 2015 assessment results highlight some policy suggestions and reinforce the strong messages of the previous assessment.

ADDRESS THE NEEDS OF LOW-PERFORMING STUDENTS

Results from the PISA 2015 financial literacy assessment show that many students, in countries and economies at all levels of economic and financial development, need to improve their financial literacy.

On average across OECD countries and economies, as many as 22% of students perform below Level 2, which can be considered the baseline level of proficiency in financial literacy that is required to participate in society. Students who perform below the baseline display only basic financial literacy skills, such as identifying common financial products and terms, and interpreting information related to basic financial concepts. They can recognise the difference between needs and wants and they make simple decisions on everyday spending; but they are not yet able to apply their knowledge to make financial decisions in contexts that are immediately relevant to them, such as recognising the value of a simple budget, or undertake a simple assessment of value-for-money. The percentage of students performing at or below Level 1 is at least 20% in Brazil (53%), Chile (38%), Lithuania (32%), Peru (48%), Poland (20%), the Slovak Republic (35%), Spain (25%) and the United States (22%).

At the other end of the performance spectrum, only 12% of students are top performers in financial literacy. In only about half of the countries and economies that participated in the PISA 2015 financial literacy assessment (Australia, the Flemish Community of Belgium, Beijing-Shanghai-Jiangsu-Guangdong [China] [hereafter "B-S-J-G (China)"], the participating Canadian provinces [British Columbia, Manitoba, New Brunswick, Newfoundland and Labrador, Nova Scotia, Ontario and Prince Edward Island], the Netherlands, the Russian Federation [hereafter "Russia"] and the United States) can more than 10% of students solve some of the most challenging financial literacy tasks in PISA, understand the risks inherent in certain financial products, and demonstrate a basic knowledge of financial consumer rights and responsibilities.

Low-performing students need to be supported to improve their abilities to fully participate in economic life. They need to acquire the knowledge and skills that will allow them to plan for the short and long term, take into account the implications of financial decisions for individuals as well as for society, and understand the wider financial landscape, such as knowing the purpose of income tax or insurance.

TACKLE SOCIO-ECONOMIC INEQUALITIES EARLY ON

Perhaps unsurprisingly, students performing at or below Level 1 are over-represented among socio-economically disadvantaged groups. Disadvantaged students in Australia, the Flemish Community of Belgium, Chile, the Netherlands, Peru and the United States are at least twice as likely as advantaged students to be low performers, even after taking into account their mathematics and reading performance.

Financial literacy is not relevant just for those who have large sums of money to invest. Everyone needs to be financially literate, especially those who live on tight budgets and have little leeway in case they make financial mistakes. Moreover, the development of digital financial services means that financial services are becoming increasingly accessible for everyone, particularly for previously excluded segments of the population and youth (OECD, 2017). While disadvantaged students are among the least financially literate, they probably need some financial knowledge and skills the most. In most participating countries and economies, disadvantaged students are more likely than advantaged students to earn money from working outside school hours, such as in holiday jobs or part-time work.

Large disparities in skills among 15-year-olds signal that not all students are offered an equal opportunity to develop their financial literacy. If socio-economic disparities are not addressed early, they are likely to lead to even larger gaps in financial literacy as students become adults. Low-performing disadvantaged students need to be supported to ensure that they can safely navigate the (increasingly digital) financial system as they become more independent.

PROVIDE EQUAL OPPORTUNITIES FOR LEARNING TO BOYS AND GIRLS

The countries and economies participating in the PISA 2015 financial literacy assessment vary in the extent of gender-related differences in financial literacy performance. In the majority of participating countries and economies there are no gender differences, but in some countries and economies boys perform better than girls while in others girls perform better than boys. This heterogeneity contrasts with gender differences among adults, which are predominantly in favour of men (OECD, 2013, 2016). Even though evidence is drawn from different measurement tools and should be compared with caution, differences in gender gaps across adults and young people suggest that men and women in different generations may have had different opportunities and incentives to develop their financial skills.

In addition to mean differences, boys and girls show different weaknesses at different points of the performance distribution. In 9 out of 15 countries and economies, more boys than girls perform at or below Level 1, while in 2 countries, more boys than girls perform at the top (Level 5).

Gender differences are likely to be related to different factors, including boys' and girls' different performance in mathematics and reading, and different levels of exposure to money matters. Not only should boys be helped to reach a minimum level of financial skills and girls be helped to reach the top, but both girls and boys should have access to relevant opportunities to develop their financial skills.

HELP STUDENTS TO MAKE THE MOST OF AVAILABLE LEARNING OPPORTUNITIES AT SCHOOL

Financial literacy performance is strongly correlated with performance in core PISA subjects, like mathematics and reading, which can be seen as forming the underpinning for developing further financial knowledge and skills. More than 60% of the variation in financial literacy scores in Australia, the Flemish Community of Belgium, B-S-J-G (China), Chile, the Netherlands, Peru, Poland and the United States is related to student performance in mathematics and reading. Students should be helped to make the most of what they learn in subjects taught in compulsory education, and to foster transversal competencies, such as problem solving and critical thinking, in order to acquire knowledge and develop skills that can be applied to financial situations and decisions.

At the same time, however, students' performance in financial literacy varies for any given level of performance in mathematics and reading. In the Flemish Community of Belgium, B-S-J-G (China), the Canadian provinces and Russia, where mean financial literacy performance is above the OECD average, students perform better in financial literacy than would be predicted on the basis of performance in mathematics and reading alone. Students in these countries may have developed financial literacy competencies beyond what they have learnt in mathematics and reading at school, possibly through dedicated financial education initiatives in or outside of school. In contrast, students in Australia, Brazil, Chile, Italy, Lithuania, the Netherlands, Poland, the Slovak Republic and Spain perform worse in financial literacy than students in other countries with similar performance in mathematics and reading. This suggests that students in these countries should be helped and encouraged to better use the skills widely taught in school to attain higher levels of financial literacy.

One way of helping students improve their financial literacy could be to complement what they learn through core subjects in school with more specific financial literacy content. As shown in Chapter 2, several countries have started integrating some financial literacy topics into existing subjects, such as mathematics or social sciences. As dedicated financial literacy approaches are relatively new (where they exist), the PISA financial literacy assessment cannot yet provide conclusive evidence on what strategies yield superior outcomes in financial literacy. More evidence is needed to show the extent to which infusing financial literacy elements in existing subjects is effective as compared to other approaches in raising students' levels of financial literacy. Promising approaches that have been evaluated are presented in Box IV.2.4.

Fostering the development of financial literacy skills in school could also be a way to offer students learning opportunities beyond those provided by parents and peers, to help overcome socio-economic inequalities, and to expose students to more balanced messages than those they may receive through media and advertising.

TARGET PARENTS AT THE SAME TIME AS YOUNG PEOPLE

What students know about financial literacy depends to a large extent on their families. In Australia, the Flemish Community of Belgium, B-S-J-G (China), Chile, the Netherlands, Peru and the United States, at least 10% of the variation in financial literacy performance is related to students' socio-economic status, which is a reflection of parents' education, parents' occupations, home possessions and educational resources available in the home. To some extent, families with high socio-economic status are providing students better opportunities to acquire financial literacy skills than socio-economically disadvantaged families.

Parents have a role to play in developing their children's financial literacy not only through the resources that they make available to them but also through direct engagement. Parents are among the most important sources through which young people can develop values, attitudes, habits, norms, knowledge and behaviours about money and finances (Gudmondson and Danes, 2011). In all countries and economies with available data, more than one in two students reported that they discuss money matters with their parents on a weekly or monthly basis. In 10 countries and economies, discussing money matters with parents is associated with higher financial literacy than never discussing the subject, even after taking into account students' socio-economic status.

While developing polices and initiatives aimed at directly improving the financial literacy of young people, countries should continue to strengthen their initiatives targeting adults through national strategies for financial education. Engaging parents and families is a way of targeting one of the most important sources of learning for young people, and it can complement what young people can learn from other sources. As not all parents may be equally equipped to transmit financial attitudes, knowledge and skills to their children, targeting disadvantaged adults and those with low levels of financial literacy at the same time as targeting young people can be another way of reducing inequalities in financial literacy.

PROVIDE YOUNG PEOPLE WITH SAFE OPPORTUNITIES TO LEARN OUTSIDE OF SCHOOL

Students may be developing the skills to take financial decisions for their current and future lives not only thanks to schools and families but also via direct experience and learning by doing. Indeed, many 15-year-old students in the participating countries with available data are already in contact with money and basic financial services. On average across OECD countries, over half of students hold a bank account, almost one in five has a prepaid debit card, around six in ten earn money from formal or informal work activities, around six in ten receive pocket money, more than eight in ten receive gifts of money, and about one in two reported that they save regularly.

Evidence that there is a positive relationship between performance in financial literacy and holding a bank account or receiving gifts of money may suggest that some kind of experience with money or financial products could provide students with an opportunity to reinforce financial literacy, or that students who are more financially literate are more motivated to use financial products – and perhaps more confident in doing so. Parents are very likely to be involved in these experiences, as they may have given their children money through allowances or gifts, opened a bank account for them and taught them how to use it.

Even under the supervision of parents, it is important that young people can access financial products and services that are safe and regulated, that they begin to know their rights and responsibilities as consumers, and that they start to have an understanding of the risks associated with the different products and services, so that they can safely approach the financial system even before they acquire full legal rights to enter into financial contracts by themselves. Again, socio-economically disadvantaged students should be supported even more, as they have lower financial literacy, are less likely to have first-hand experience with holding a bank account, and are less likely to receive gifts of money than advantaged students.

Young people can be further supported to learn by doing through after-school initiatives. In some countries, governments and not-for-profits are offering young people videos, competitions, interactive tools and serious games – via digital and/or traditional platforms – as described in Chapter 2. These initiatives are used not so much to disseminate information but to provide young people with applied knowledge and allow them to safely experience financial situations and decisions before they encounter them in real life. Most of these initiatives, however, have not yet evaluated their impact on participants' financial literacy. It should thus be a policy priority to collect more evidence on their effectiveness.

EVALUATE THE IMPACT OF INITIATIVES IN AND OUT OF SCHOOL

Financial literacy has emerged relatively recently as a relevant skill for students and society at large, and it competes with other important skills, from global citizenship to computational thinking, to be integrated into already overcrowded school curricula and students' time schedules. In spite of the challenges, more and more financial education initiatives are being developed in and outside of school, making it even more important to determine which approaches work best. Governments and other not-for-profit and private stakeholders involved should prioritise evaluating the impact of their initiatives in a rigorous way and disseminating the findings to advance knowledge in the field. The OECD and its International Network on Financial Education (INFE) can build on these findings and act as a clearinghouse with the aim of identifying more effective approaches to improve students' financial literacy.

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Annex A

PISA 2015 TECHNICAL BACKGROUND

All tables in Annex A are available on line

Annex A1: Indices from the student questionnaire

Annex A2: The PISA target population, the PISA samples and the definition of schools
http://dx.doi.org/10.1787/888933433129

Annex A3: Technical notes on analyses in this volume

Annex A4: Quality assurance

Annex A5: Changes in the administration and scaling of PISA 2015 and implications for trends analyses

Annex A6: The PISA 2015 field trial mode-effect study

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

Note regarding CABA (Argentina)
CABA (Argentina) refers to the Ciudad Autónoma de Buenos Aires, Argentina.

Note regarding FYROM
FYROM refers to the Former Yugoslav Republic of Macedonia.

Notes regarding Cyprus

Note by Turkey: The information in this document with reference to "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Turkey shall preserve its position concerning the "Cyprus issue".

Note by all the European Union Member States of the OECD and the European Union: The Republic of Cyprus is recognised by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.

A note regarding Israel

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.

ANNEX A1
INDICES FROM THE STUDENT QUESTIONNAIRE

Explanation of the indices

This section explains the indices derived from the PISA 2015 student questionnaires used in this volume.

Several PISA measures reflect indices that summarise responses from students, their parents, teachers or school representatives (typically principals) to a series of related questions. The questions were selected from a larger pool of questions on the basis of theoretical considerations and previous research. The *PISA 2015 Assessment and Analytical Framework* (OECD, 2016) provides an in-depth description of this conceptual framework. Structural equation modelling was used to confirm the theoretically expected behaviour of the indices and to validate their comparability across countries. For this purpose, a model was estimated separately for each country and collectively for all OECD countries. For a detailed description of other PISA indices and details on the methods, see the *PISA 2015 Technical Report* (OECD, forthcoming).

There are three types of indices: simple indices, new scale indices, and trend scale indices.

Simple indices are the variables that are constructed through the arithmetic transformation or recoding of one or more items in exactly the same way across assessments. Here, item responses are used to calculate meaningful variables, such as the recoding of the four-digit ISCO-08 codes into "Highest parents' socio-economic index (HISEI)" or teacher-student ratio based on information from the school questionnaire.

New and trend scale indices are the variables constructed through the scaling of multiple items. Unless otherwise indicated, the index was scaled using a two-parameter item response model (a generalised partial credit model was used in the case of items with more than two categories) and values of the index correspond to Warm likelihood estimates (WLE) (Warm, 1985). For details on how each scale index was constructed, see the *PISA 2015 Technical Report* (OECD, forthcoming). In general, the scaling was done in three stages:

1. The item parameters were estimated from equally-weighted samples of students from all countries and economies; only cases with a minimum number of three valid responses to items that are part of the index were included. In the case of **trend indices**, a common calibration linking procedure was used: countries/economies that participated in both PISA 2006 and PISA 2015 contributed both samples to the calibration of item parameters; each cycle, and, within each cycle, each country/economy contributed equally to the estimation.
2. The estimates were computed for all students and all schools by anchoring the item parameters obtained in the preceding step.
3. For **new scale indices**, the Warm likelihood estimates were then standardised so that the mean of the index value for the OECD student population was zero and the standard deviation was one (countries being given equal weight in the standardisation process). **Trend indices** were equated so that the mean and standard deviation across OECD countries of rescaled PISA 2006 estimates and of the original estimates included in the PISA 2006 database matched. Trend indices are therefore reported on the same scale as used originally in PISA 2006, so that values can be directly compared to those included in the PISA 2006 database.

Sequential codes were assigned to the different response categories of the questions in the sequence in which the latter appeared in the student, school or parent questionnaires. Where indicated in this section, these codes were inverted for the purpose of constructing indices or scales. Negative values for an index do not necessarily imply that students responded negatively to the underlying questions. A negative value merely indicates that the respondents answered less positively than all respondents did on average across OECD countries. Likewise, a positive value on an index indicates that the respondents answered more favourably, or more positively, on average, than respondents in OECD countries did. Terms enclosed in brackets < > in the following descriptions were replaced in the national versions of the student, school and parent questionnaires by the appropriate national equivalent. For example, the term <qualification at ISCED level 5A> was translated in the United States into "Bachelor's degree, post-graduate certificate program, Master's degree program or first professional degree program". Similarly the term <classes in the language of assessment> in Luxembourg was translated into "German classes" or "French classes", depending on whether students received the German or French version of the assessment instruments.

In addition to simple and scaled indices described in this annex, there are a number of variables from the questionnaires that were used in this volume and correspond to single items not used to construct indices. These non-recoded variables have prefix of "ST" for the questionnaire items in the student questionnaire and "SC" for the items in the school questionnaire. All the context questionnaires, and the PISA international database, including all variables, are available through www.oecd.org/pisa.

Student-level simple indices

Student age

The age of a student (AGE) was calculated as the difference between the year and month of the testing and the year and month of a student's birth. Data on student's age were obtained from both the questionnaire (ST003) and the student tracking forms. If the month of testing was not known for a particular student, the median month for that country was used in the calculation.

Parents' level of education

Students' responses on questions ST005, ST006, ST007 and ST008 regarding parental education were classified using ISCED 1997 (OECD, 1999). Indices on parental education were constructed by recoding educational qualifications into the following categories: (0) None, (1) <ISCED level 1> (primary education), (2) <ISCED level 2> (lower secondary), (3) <ISCED Level 3B or 3C> (vocational/pre-vocational upper secondary), (4) <ISCED level 3A> (general upper secondary) and/or <ISCED level 4> (non-tertiary post-secondary), (5) <ISCED level 5B> (vocational tertiary) and (6) <ISCED level 5A> and/or <ISCED level 6> (theoretically oriented tertiary and post-graduate). Indices with these categories were provided for a student's mother (MISCED) and father (FISCED). In addition, the index of highest education level of parents (HISCED) corresponds to the higher ISCED level of either parent. The index of highest education level of parents was also recoded into estimated number of years of schooling (PARED). The correspondence between education levels and years of schooling is available in the *PISA 2015 Technical Report* (OECD, forthcoming).

Parents' highest occupational status

Occupational data for both the student's father and the student's mother were obtained from responses to open-ended questions. The responses were coded to four-digit ISCO codes (ILO, 2007) and then mapped to the international socio-economic index of occupational status (ISEI) (Ganzeboom and Treiman, 2003). In PISA 2015, as in PISA 2012, the new ISCO and ISEI in their 2008 version were used rather than the 1988 versions that had been applied in the previous four cycles (Ganzeboom, 2010). Three indices were calculated based on this information: father's occupational status (BFMJ2); mother's occupational status (BMMJ1); and the highest occupational status of parents (HISEI) which corresponds to the higher ISEI score of either parent or to the only available parent's ISEI score. For all three indices, higher ISEI scores indicate higher levels of occupational status.

Immigrant background

The PISA database contains three country-specific variables relating to the students' country of birth, their mother and father (COBN_S, COBN_M, and COBN_F). The items ST019Q01TA, ST019Q01TB and ST019Q01TC were recoded into the following categories: (1) country of birth is the same as country of assessment and (2) other. The index of immigrant background (IMMIG) was calculated from these variables with the following categories: (1) non-immigrant students (those students who had at least one parent born in the country), (2) second-generation immigrant students (those born in the country of assessment but whose parent[s] were born in another country) and (3) first-generation immigrant students (those students born outside the country of assessment and whose parents were also born in another country). Students with missing responses for either the student or for both parents were assigned missing values for this variable.

Language spoken at home

Students indicated what language they usually speak at home (ST022), and the database includes a derived variable (LANGN) containing a country-specific code for each language. In addition, an internationally comparable variable (ST022Q01TA) was derived from this information with the following categories: (1) language at home is the same as the language of assessment for that student and (2) language at home is another language.

Student-level scale indices

New scale indices

Achievement motivation

The index of achievement motivation (MOTIVAT) was constructed using students' responses to a new question developed for PISA 2015 (ST119). Students reported, on a four-point Likert scale with the answering categories "strongly disagree", "disagree", "agree", and "strongly agree", their agreement with the following statements: I want top grades in most or all of my courses; I want to be able to select from among the best opportunities available when I graduate; I want to be the best, whatever I do; I see myself as an ambitious person; I want to be one of the best students in my class. Higher values indicate that students have greater achievement motivation.

Scaling of indices related to the PISA index of economic social and cultural status

The PISA index of economic, social and cultural status (ESCS) was derived, as in previous cycles, from three variables related to family background: parents' highest level of education (PARED), parents' highest occupation status (HISEI), and home possessions (HOMEPOS), including books in the home. PARED and HISEI are simple indices, described above. HOMEPOS is a proxy measure for family wealth.

Household possessions

In PISA 2015, students reported the availability of 16 household items at home (ST011), including three country-specific household items that were seen as appropriate measures of family wealth within the country's context. In addition, students reported the amount of possessions and books at home (ST012, ST013).

HOMEPOS is a summary index of all household and possession items (ST011, ST012 and ST013). The home possessions scale for PISA 2015 was computed differently than in the previous cycles, to align the IRT model to the one used for all cognitive and non-cognitive scales. Categories for the number of books in the home are unchanged in PISA 2015. The ST011-Items (1="yes", 2="no") were reverse-coded so that a higher level indicates the presence of the indicator.

Computation of ESCS

For the purpose of computing the PISA index of economic, social and cultural status (ESCS), values for students with missing PARED, HISEI or HOMEPOS were imputed with predicted values plus a random component based on a regression on the other two variables. If there were missing data on more than one of the three variables, ESCS was not computed and a missing value was assigned for ESCS.

The PISA index of economic, social and cultural status was derived from a principal component analysis of standardised variables (each variable has an OECD mean of zero and a standard deviation of one), taking the factor scores for the first principal component as measures of the PISA index of economic, social and cultural status. All countries and economies (both OECD and partner countries/economies) contributed equally to the principal component analysis, while in previous cycles, the principal component analysis was based on OECD countries only. However, for the purpose of reporting the ESCS scale has been transformed with zero being the score of an average OECD student and one being the standard deviation across equally weighted OECD countries.

Principal component analysis was also performed for each participating country or economy separately, to determine to what extent the components of the index operate in similar ways across countries or economy.

Response rate for variables about money experiences

Chapters 5 and 6 in this volume report several analyses about students' experience with money. In some countries and economies the response rate to questions about money experiences is relatively low. Table A1.1 reports the response rate for the relevant questions in the money management questionnaire. The last column of Table A1.1 reports the average response rate across all questions in the table.

Unless otherwise indicated, no adjustment is made for non-response to questionnaires in analyses included in this volume. The reported percentages and estimates refer to the proportion of the sample with valid responses to the corresponding questionnaire items. However, for each country and economy, results based on variables in the money management questionnaire are reported only when the average response rate to all money questions in the country/economy is at least 70%.

Tables A1.2a to 2d report how the probability that students give a valid response to any money management question varies with student characteristics, like gender, socio-economic status, immigrant background, performance in mathematics and whether the student completed the cognitive assessment. The probability of responding to the money management questions varies according to gender, socio-economic status, immigrant background and performance in mathematics in different ways across countries and economies. In most countries and economies, however, students who completed the cognitive assessment were more likely to reply to the money management questions, which were presented at the end of the cognitive booklets.

[Part 1/1]

Table A1.1 Weighted share of students responding to questions in the money management questionnaire

Percentage of non-missing observations, by questionnaire item

		Response rate													
		Discussing money matters with parents		Discussing money matters with friends		Holding a bank account		Holding a prepaid debit card		Receiving money from an allowance or pocket money for regularly doing chores at home		Receiving money from an allowance or pocket money, without having to do any chores		Receiving money from working outside school hours (e.g. a holiday job, part-time work)	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	79.1	(0.7)	78.6	(0.7)	78.3	(0.7)	76.1	(0.7)	74.3	(0.7)	72.0	(0.7)	74.0	(0.7)
OECD	Belgium (Flemish)	74.8	(2.5)	74.2	(2.5)	73.3	(2.5)	72.1	(2.5)	71.6	(2.3)	71.1	(2.4)	70.8	(2.4)
OECD	Canadian provinces	92.2	(0.8)	92.0	(0.8)	91.7	(0.8)	88.1	(0.9)	88.5	(1.0)	86.9	(1.0)	88.4	(1.0)
OECD	Chile	84.6	(1.3)	83.9	(1.3)	82.9	(1.4)	81.8	(1.4)	80.4	(1.3)	79.6	(1.3)	79.7	(1.3)
OECD	Italy	77.9	(1.5)	77.6	(1.5)	76.0	(1.5)	76.0	(1.6)	74.7	(1.4)	74.5	(1.5)	73.8	(1.4)
OECD	Netherlands	95.9	(1.0)	95.7	(1.0)	95.6	(1.0)	93.9	(1.1)	93.1	(1.1)	92.8	(1.0)	93.6	(1.0)
OECD	Poland	95.7	(0.6)	95.4	(0.6)	94.8	(0.7)	93.4	(0.7)	90.1	(0.7)	88.7	(0.8)	88.0	(0.8)
OECD	Slovak Republic	83.2	(1.3)	81.2	(1.4)	82.7	(1.3)	78.4	(1.3)	77.9	(1.6)	76.7	(1.5)	76.4	(1.5)
OECD	Spain	89.7	(1.0)	88.7	(1.0)	87.7	(1.1)	85.1	(1.2)	82.5	(1.2)	81.8	(1.3)	81.9	(1.2)
OECD	United States	89.4	(1.1)	88.4	(1.2)	88.4	(1.2)	87.3	(1.2)	87.5	(1.2)	85.5	(1.3)	85.2	(1.3)
OECD	OECD average-10	86.3	(0.4)	85.6	(0.4)	85.1	(0.4)	83.2	(0.4)	82.1	(0.4)	81.0	(0.4)	81.2	(0.4)
Partners	Brazil	40.1	(1.3)	38.9	(1.3)	38.2	(1.4)	35.9	(1.3)	35.2	(1.3)	33.5	(1.2)	33.8	(1.3)
Partners	B-S-J-G (China)	94.5	(1.0)	94.2	(1.0)	93.5	(1.1)	91.1	(1.2)	91.6	(1.0)	88.9	(1.1)	90.2	(1.1)
Partners	Lithuania	93.7	(0.9)	92.4	(0.8)	93.0	(0.9)	89.0	(1.0)	89.1	(0.9)	87.7	(1.0)	87.5	(1.0)
Partners	Peru	58.1	(2.1)	57.1	(2.1)	52.9	(2.2)	51.6	(2.2)	51.5	(2.1)	50.8	(2.1)	51.6	(2.1)
Partners	Russia	73.5	(2.4)	72.3	(2.4)	71.0	(2.5)	71.2	(2.5)	69.7	(2.5)	69.3	(2.4)	69.8	(2.4)

		Response rate													
		Receiving money from working in a family business		Receiving money from occasional informal jobs (e.g. baby-sitting or gardening)		Receiving gifts of money from friends or relatives		Receiving money from selling things (e.g. at local markets or on eBay)		Spending behaviour		Saving behaviour		Average across questionnaire items presented in the table	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	71.3	(0.7)	71.3	(0.7)	73.9	(0.8)	71.4	(0.7)	78.5	(0.7)	77.2	(0.7)	75.1	(0.7)
OECD	Belgium (Flemish)	69.3	(2.3)	69.3	(2.4)	70.5	(2.4)	69.4	(2.3)	74.4	(2.5)	72.6	(2.5)	71.8	(2.4)
OECD	Canadian provinces	86.5	(1.0)	87.4	(1.0)	89.4	(1.0)	87.2	(1.0)	92.0	(0.8)	91.4	(0.8)	89.3	(0.9)
OECD	Chile	79.1	(1.3)	79.0	(1.3)	81.1	(1.3)	79.5	(1.3)	84.1	(1.2)	82.5	(1.3)	81.4	(1.3)
OECD	Italy	74.1	(1.4)	73.8	(1.4)	74.7	(1.5)	73.0	(1.5)	76.9	(1.6)	75.4	(1.6)	75.3	(1.4)
OECD	Netherlands	92.0	(1.0)	92.0	(1.0)	93.3	(1.1)	92.2	(1.0)	95.5	(1.0)	95.3	(1.0)	93.9	(1.0)
OECD	Poland	85.5	(0.9)	86.2	(0.8)	89.9	(0.8)	86.4	(0.9)	95.8	(0.5)	94.8	(0.7)	91.2	(0.6)
OECD	Slovak Republic	75.1	(1.5)	75.8	(1.5)	77.4	(1.5)	74.2	(1.5)	83.5	(1.3)	82.9	(1.3)	78.9	(1.3)
OECD	Spain	81.5	(1.2)	80.9	(1.2)	83.2	(1.1)	80.4	(1.3)	89.5	(1.0)	88.0	(1.1)	84.7	(1.1)
OECD	United States	84.2	(1.3)	84.6	(1.3)	87.1	(1.2)	84.8	(1.3)	89.5	(1.1)	88.4	(1.2)	86.9	(1.2)
OECD	OECD average-10	79.8	(0.4)	80.0	(0.4)	82.0	(0.4)	79.8	(0.4)	86.0	(0.4)	84.8	(0.4)	82.8	(0.4)
Partners	Brazil	33.0	(1.2)	32.4	(1.2)	33.3	(1.2)	32.2	(1.2)	39.0	(1.3)	36.9	(1.3)	35.6	(1.2)
Partners	B-S-J-G (China)	87.8	(1.1)	87.7	(1.1)	90.1	(1.1)	88.7	(1.1)	94.2	(1.0)	93.8	(1.1)	91.3	(1.0)
Partners	Lithuania	86.5	(1.0)	86.6	(1.0)	87.9	(1.0)	85.8	(1.1)	93.7	(0.8)	93.1	(0.9)	89.7	(0.8)
Partners	Peru	51.3	(2.1)	50.5	(2.2)	51.2	(2.1)	50.0	(2.1)	56.4	(2.1)	53.3	(2.2)	52.8	(2.1)
Partners	Russia	69.0	(2.5)	68.9	(2.5)	69.6	(2.5)	68.9	(2.5)	73.2	(2.4)	71.9	(2.5)	70.6	(2.4)

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Table A1.2a Likelihood of a valid response about discussing money matters with parents or friends

		Increased likelihood of giving a valid response to the question on discussing money matters with parents													
		Boy		PISA index of economic, social and cultural status (ESCS)		Non-immigrant		Performing at Levels 2, 3 or 4 in mathematics		Performing at Levels 5 or 6 in mathematics		Gave a valid response to the last financial literacy cognitive item		Intercept	
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.
OECD	Belgium (Flemish)	1.19	(0.25)	1.07	(0.14)	0.80	(0.20)	**0.47**	(0.18)	**0.26**	(0.11)	**2.98**	(0.71)	**5.80**	(2.55)
	Canadian provinces	0.56	(0.22)	1.49	(0.35)	1.02	(0.43)	0.65	(0.50)	0.91	(1.00)	**3.72**	(1.92)	**35.76**	(39.23)
	Chile	0.97	(0.19)	0.94	(0.08)	1.89	(1.43)	0.68	(0.20)	1.23	(1.33)	**2.74**	(0.59)	2.96	(1.70)
	Italy	1.34	(0.29)	0.99	(0.13)	1.37	(0.51)	**0.45**	(0.17)	**0.21**	(0.11)	**2.17**	(0.58)	**10.05**	(4.96)
	Netherlands	0.20	(0.26)	0.42	(0.29)	3.05	(3.16)	0.95	(1.49)	c	c	**143.14**	(303.30)	27.49	(188.48)
	Poland	0.85	(0.25)	0.86	(0.18)	c	c	1.04	(0.58)	0.62	(0.58)	**2.57**	(1.19)	**23.10**	(12.57)
	Slovak Republic	1.36	(0.29)	**0.63**	(0.09)	c	c	0.84	(0.22)	0.64	(0.41)	**2.48**	(0.56)	2.52	(1.98)
	Spain	0.78	(0.18)	0.94	(0.11)	1.16	(0.40)	1.09	(0.29)	1.47	(1.07)	**2.80**	(0.59)	**5.88**	(2.74)
	United States	**1.76**	(0.44)	**1.30**	(0.15)	**2.22**	(0.65)	0.71	(0.29)	0.59	(0.63)	**4.58**	(2.54)	2.74	(1.67)
	OECD average-10	1.00	(0.09)	0.96	(0.06)	1.65	(0.52)	0.77	(0.20)	0.74	(0.27)	18.57	(33.70)	12.92	(21.45)
Partners	Brazil	1.04	(0.09)	**1.22**	(0.06)	c	c	**0.70**	(0.09)	0.49	(0.29)	0.98	(0.10)	2.08	(1.66)
	B-S-J-G (China)	1.18	(0.30)	1.16	(0.23)	c	c	0.72	(0.36)	0.73	(0.75)	**5.60**	(4.04)	**10.98**	(8.25)
	Lithuania	**0.39**	(0.16)	0.91	(0.22)	**3.50**	(2.00)	**2.60**	(1.04)	1.20	(1.16)	**4.80**	(1.48)	3.48	(3.10)
	Peru	**1.44**	(0.22)	**1.27**	(0.09)	c	c	0.73	(0.13)	c	c	0.71	(0.17)	7.70	(13.99)
	Russia	1.34	(0.24)	**0.72**	(0.09)	**2.20**	(0.53)	0.60	(0.22)	0.48	(0.25)	**1.94**	(0.41)	1.99	(0.85)

		Increased likelihood of giving a valid response to the question on discussing money matters with friends													
		Boy		PISA index of economic, social and cultural status (ESCS)		Non-immigrant		Performing at Levels 2, 3 or 4 in mathematics		Performing at Levels 5 or 6 in mathematics		Gave a valid response to the last financial literacy cognitive item		Intercept	
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.
OECD	Belgium (Flemish)	1.11	(0.22)	1.07	(0.14)	0.74	(0.20)	0.59	(0.20)	**0.35**	(0.13)	**3.11**	(0.72)	**4.67**	(1.95)
	Canadian provinces	0.55	(0.18)	**1.41**	(0.23)	1.25	(0.54)	0.62	(0.38)	0.93	(1.01)	**4.13**	(1.88)	**23.99**	(20.52)
	Chile	1.06	(0.19)	0.96	(0.08)	1.69	(1.22)	0.71	(0.19)	1.41	(1.55)	**2.38**	(0.52)	**3.10**	(1.74)
	Italy	1.30	(0.28)	1.05	(0.15)	1.13	(0.43)	**0.44**	(0.18)	**0.21**	(0.11)	**2.06**	(0.53)	**12.32**	(6.44)
	Netherlands	**0.07**	(0.09)	0.69	(0.31)	3.11	(1.99)	1.62	(2.29)	c	c	**18.14**	(23.05)	33.92	(81.12)
	Poland	1.06	(0.28)	0.87	(0.18)	c	c	1.25	(0.58)	0.84	(0.76)	**4.14**	(1.76)	1.90	(3.34)
	Slovak Republic	**1.54**	(0.30)	**0.76**	(0.08)	c	c	1.19	(0.27)	0.87	(0.48)	**2.41**	(0.47)	2.00	(1.55)
	Spain	0.81	(0.16)	1.00	(0.11)	0.93	(0.31)	1.30	(0.36)	1.80	(1.35)	**2.86**	(0.54)	**5.38**	(2.30)
	United States	1.37	(0.35)	1.24	(0.14)	**2.19**	(0.65)	1.06	(0.39)	1.01	(1.03)	**4.91**	(3.48)	1.76	(1.16)
	OECD average-10	0.99	(0.08)	1.01	(0.06)	**1.58**	(0.36)	0.98	(0.28)	0.93	(0.33)	**4.91**	(2.61)	**9.89**	(9.34)
Partners	Brazil	1.05	(0.10)	**1.23**	(0.06)	c	c	**0.73**	(0.10)	0.51	(0.31)	1.05	(0.10)	1.98	(1.58)
	B-S-J-G (China)	1.28	(0.35)	0.96	(0.18)	c	c	0.71	(0.34)	0.91	(0.92)	**6.79**	(3.99)	**6.29**	(3.56)
	Lithuania	**0.39**	(0.13)	0.82	(0.16)	1.56	(1.09)	**2.49**	(0.90)	1.57	(1.31)	**3.09**	(0.99)	**7.15**	(6.89)
	Peru	**1.41**	(0.20)	**1.25**	(0.09)	c	c	0.78	(0.13)	c	c	0.83	(0.18)	3.64	(4.65)
	Russia	1.20	(0.17)	**0.73**	(0.09)	**2.15**	(0.51)	0.66	(0.21)	0.57	(0.29)	**1.81**	(0.42)	1.87	(0.76)

Note: Values that are statistically significant are indicated in bold (see Annex A3).

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Table A1.2b Likelihood of a valid response about holding a bank account or a prepaid debit card

		Increased likelihood of giving a valid response to the question on holding a bank account													
		Boy		PISA index of economic, social and cultural status (ESCS)		Non-immigrant		Performing at Levels 2, 3 or 4 in mathematics		Performing at Levels 5 or 6 in mathematics		Gave a valid response to the last financial literacy cognitive item		Intercept	
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.
OECD	Belgium (Flemish)	1.20	(0.23)	1.07	(0.14)	0.72	(0.22)	**0.37**	(0.13)	**0.19**	(0.08)	**3.23**	(0.82)	**6.72**	(2.80)
	Canadian provinces	0.55	(0.17)	1.29	(0.25)	1.04	(0.47)	0.55	(0.34)	0.84	(0.96)	**4.92**	(2.12)	**24.67**	(22.61)
	Chile	1.18	(0.22)	0.89	(0.07)	1.26	(0.99)	0.63	(0.16)	1.41	(1.54)	**2.66**	(0.58)	**3.41**	(1.83)
	Italy	1.28	(0.25)	0.95	(0.12)	1.70	(0.61)	**0.50**	(0.17)	**0.25**	(0.12)	**2.11**	(0.56)	**5.83**	(2.65)
	Netherlands	0.33	(0.26)	0.95	(0.72)	**3.30**	(1.72)	1.65	(2.35)	c	c	**78.90**	(126.37)	4.30	(4.72)
	Poland	1.02	(0.30)	0.93	(0.17)	c	c	0.98	(0.46)	0.56	(0.43)	**3.96**	(1.69)	**12.81**	(6.39)
	Slovak Republic	**1.63**	(0.32)	**0.61**	(0.09)	c	c	0.65	(0.19)	0.52	(0.30)	**1.78**	(0.38)	6.75	(7.22)
	Spain	0.96	(0.21)	0.92	(0.09)	0.74	(0.30)	1.28	(0.36)	1.53	(0.98)	**2.43**	(0.45)	**5.72**	(3.08)
	United States	**1.95**	(0.45)	**1.37**	(0.16)	**1.98**	(0.57)	0.91	(0.31)	0.68	(0.61)	**3.63**	(1.90)	2.37	(1.35)
	OECD average-10	1.12	(0.09)	1.00	(0.09)	**1.54**	(0.32)	0.84	(0.28)	0.75	(0.28)	**11.51**	(14.05)	**8.06**	(2.85)
Partners	Brazil	1.13	(0.10)	**1.28**	(0.06)	c	c	**0.63**	(0.09)	0.40	(0.26)	0.93	(0.10)	0.48	(0.35)
	B-S-J-G (China)	1.20	(0.34)	**1.42**	(0.26)	c	c	0.74	(0.31)	0.69	(0.49)	**4.06**	(2.32)	**380.49**	(951.52)
	Lithuania	0.67	(0.20)	1.13	(0.27)	**3.12**	(1.66)	1.82	(0.79)	0.98	(0.92)	**3.05**	(0.85)	3.52	(2.96)
	Peru	**1.48**	(0.18)	**1.17**	(0.08)	c	c	0.82	(0.14)	c	c	0.78	(0.16)	3.45	(4.42)
	Russia	**1.50**	(0.27)	**0.74**	(0.08)	**2.65**	(0.49)	0.70	(0.22)	0.61	(0.32)	**1.75**	(0.39)	1.23	(0.56)

		Increased likelihood of giving a valid response to the question on holding a prepaid debit card													
		Boy		PISA index of economic, social and cultural status (ESCS)		Non-immigrant		Performing at Levels 2, 3 or 4 in mathematics		Performing at Levels 5 or 6 in mathematics		Gave a valid response to the last financial literacy cognitive item		Intercept	
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.
OECD	Belgium (Flemish)	1.17	(0.21)	1.10	(0.13)	0.63	(0.17)	0.64	(0.21)	**0.34**	(0.13)	**3.97**	(1.00)	**3.42**	(1.18)
	Canadian provinces	0.80	(0.18)	0.99	(0.16)	0.95	(0.26)	1.42	(0.51)	2.90	(2.42)	**2.52**	(0.81)	**5.79**	(2.91)
	Chile	1.14	(0.21)	0.90	(0.07)	1.08	(0.85)	0.70	(0.18)	1.40	(1.30)	**2.50**	(0.55)	**3.49**	(1.91)
	Italy	1.34	(0.23)	0.95	(0.12)	1.53	(0.53)	0.64	(0.21)	**0.31**	(0.14)	**2.03**	(0.43)	**5.19**	(2.62)
	Netherlands	0.62	(0.24)	1.23	(0.43)	0.66	(0.39)	3.09	(1.93)	5.02	(12.36)	**10.67**	(5.45)	4.32	(3.78)
	Poland	0.89	(0.22)	1.01	(0.19)	c	c	1.33	(0.53)	0.96	(0.66)	**2.86**	(0.95)	2.46	(4.42)
	Slovak Republic	**1.35**	(0.19)	**0.75**	(0.09)	c	c	1.44	(0.30)	1.42	(0.75)	**1.45**	(0.27)	3.69	(2.86)
	Spain	0.85	(0.17)	0.92	(0.07)	0.86	(0.26)	1.40	(0.33)	2.03	(1.20)	**2.09**	(0.44)	**4.06**	(1.67)
	United States	**1.52**	(0.31)	**1.27**	(0.15)	**1.83**	(0.49)	1.14	(0.36)	1.21	(1.12)	**3.12**	(1.48)	2.21	(1.17)
	OECD average-10	1.08	(0.07)	1.01	(0.06)	1.08	(0.18)	1.31	(0.24)	1.73	(1.42)	**3.47**	(0.66)	**3.85**	(0.91)
Partners	Brazil	1.14	(0.10)	**1.27**	(0.06)	c	c	**0.68**	(0.10)	0.46	(0.30)	1.02	(0.11)	0.66	(0.45)
	B-S-J-G (China)	0.88	(0.19)	1.23	(0.16)	c	c	1.14	(0.39)	1.52	(0.87)	**3.62**	(1.50)	**289.82**	(592.75)
	Lithuania	0.78	(0.16)	0.92	(0.14)	1.89	(1.01)	**2.83**	(0.88)	2.67	(1.98)	**2.32**	(0.60)	2.20	(1.61)
	Peru	**1.38**	(0.17)	**1.17**	(0.07)	c	c	0.85	(0.14)	c	c	0.89	(0.18)	1.99	(2.03)
	Russia	1.38	(0.25)	**0.76**	(0.08)	**2.80**	(0.50)	0.72	(0.19)	0.59	(0.27)	**1.80**	(0.39)	1.18	(0.51)

Note: Values that are statistically significant are indicated in bold (see Annex A3).

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Table A1.2c Likelihood of a valid response about money sources

		Increased likelihood of giving a valid response to the question on receiving money from an allowance or pocket money for regularly doing chores at home													
		Boy		PISA index of economic, social and cultural status (ESCS)		Non-immigrant		Performing at Levels 2, 3 or 4 in mathematics		Performing at Levels 5 or 6 in mathematics		Gave a valid response to the last financial literacy cognitive item		Intercept	
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.
OECD	Belgium (Flemish)	1.31	(0.23)	1.05	(0.12)	1.02	(0.22)	0.78	(0.22)	**0.45**	(0.16)	**2.72**	(0.66)	**2.28**	(0.60)
	Canadian provinces	**0.54**	(0.12)	1.21	(0.16)	0.88	(0.22)	1.00	(0.38)	2.12	(2.21)	**2.02**	(0.69)	**12.08**	(7.28)
	Chile	1.11	(0.20)	0.97	(0.07)	1.93	(1.10)	0.76	(0.17)	1.73	(1.56)	**2.64**	(0.49)	1.65	(0.71)
	Italy	1.01	(0.20)	1.06	(0.14)	1.19	(0.38)	0.59	(0.17)	**0.34**	(0.15)	**2.17**	(0.54)	**6.48**	(2.79)
	Netherlands	0.96	(0.31)	1.13	(0.27)	2.05	(0.87)	2.48	(1.23)	3.11	(4.48)	**6.02**	(2.30)	1.67	(0.90)
	Poland	1.02	(0.17)	1.09	(0.14)	c	c	0.98	(0.28)	1.16	(0.57)	1.49	(0.33)	3.20	(5.31)
	Slovak Republic	**1.49**	(0.26)	**0.69**	(0.07)	c	c	1.14	(0.25)	1.00	(0.54)	**2.27**	(0.39)	2.92	(2.06)
	Spain	0.92	(0.14)	0.99	(0.07)	0.59	(0.19)	**1.59**	(0.37)	2.29	(1.29)	**2.07**	(0.38)	**4.11**	(1.58)
	United States	**1.49**	(0.30)	1.17	(0.11)	**2.37**	(0.58)	1.17	(0.39)	1.41	(1.41)	**3.09**	(1.37)	1.85	(0.85)
	OECD average-10	1.09	(0.07)	1.04	(0.05)	**1.43**	(0.23)	1.17	(0.17)	1.51	(0.63)	**2.72**	(0.33)	**4.03**	(1.10)
Partners	Brazil	1.10	(0.10)	**1.20**	(0.05)	c	c	**0.75**	(0.10)	0.46	(0.27)	1.18	(0.12)	0.97	(0.71)
	B-S-J-G (China)	1.12	(0.24)	1.12	(0.15)	c	c	1.08	(0.38)	1.74	(1.06)	**3.60**	(1.59)	**220.22**	(474.01)
	Lithuania	0.76	(0.15)	0.92	(0.15)	2.23	(1.20)	**2.43**	(0.58)	2.65	(1.95)	**1.93**	(0.44)	2.16	(1.51)
	Peru	**1.46**	(0.18)	**1.17**	(0.08)	c	c	0.86	(0.15)	c	c	0.96	(0.20)	0.79	(0.73)
	Russia	**1.40**	(0.23)	**0.74**	(0.08)	**2.05**	(0.42)	0.71	(0.21)	0.59	(0.27)	**2.09**	(0.37)	1.30	(0.55)

		Increased likelihood of giving a valid response to the question on receiving money from an allowance or pocket money, without having to do any chores													
		Boy		PISA index of economic, social and cultural status (ESCS)		Non-immigrant		Performing at Levels 2, 3 or 4 in mathematics		Performing at Levels 5 or 6 in mathematics		Gave a valid response to the last financial literacy cognitive item		Intercept	
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.
OECD	Belgium (Flemish)	1.22	(0.23)	1.00	(0.11)	1.07	(0.25)	0.81	(0.22)	**0.50**	(0.17)	**2.81**	(0.70)	**2.04**	(0.55)
	Canadian provinces	**0.45**	(0.10)	1.08	(0.13)	0.99	(0.22)	1.28	(0.43)	2.32	(1.91)	**2.35**	(0.63)	**7.10**	(2.50)
	Chile	1.07	(0.18)	1.01	(0.08)	1.83	(0.82)	0.74	(0.17)	1.76	(1.93)	**2.75**	(0.52)	1.72	(0.65)
	Italy	1.05	(0.21)	1.06	(0.12)	0.96	(0.30)	0.59	(0.17)	**0.31**	(0.12)	**2.32**	(0.54)	**7.26**	(3.25)
	Netherlands	1.02	(0.35)	0.86	(0.26)	2.03	(0.99)	2.26	(1.12)	c	c	**7.90**	(3.28)	1.34	(0.67)
	Poland	1.06	(0.17)	0.91	(0.11)	c	c	1.28	(0.42)	1.86	(1.00)	**2.10**	(0.42)	2.16	(3.51)
	Slovak Republic	**1.53**	(0.23)	**0.75**	(0.07)	c	c	1.13	(0.24)	1.15	(0.63)	**1.99**	(0.31)	3.05	(2.25)
	Spain	0.91	(0.14)	0.99	(0.07)	0.68	(0.20)	1.42	(0.31)	2.71	(1.44)	**2.27**	(0.46)	**3.37**	(1.26)
	United States	1.34	(0.25)	1.11	(0.12)	**2.17**	(0.44)	1.33	(0.42)	1.54	(1.22)	**2.72**	(1.10)	1.62	(0.69)
	OECD average-10	1.07	(0.07)	0.97	(0.04)	**1.39**	(0.21)	1.20	(0.16)	1.52	(0.44)	**3.02**	(0.41)	**3.29**	(0.68)
Partners	Brazil	1.07	(0.11)	**1.20**	(0.06)	c	c	0.80	(0.11)	0.59	(0.39)	1.20	(0.13)	0.52	(0.41)
	B-S-J-G (China)	1.03	(0.21)	1.13	(0.11)	c	c	0.88	(0.27)	1.68	(0.88)	**2.67**	(1.03)	0.81	(2.56)
	Lithuania	0.90	(0.17)	1.08	(0.15)	2.57	(1.33)	**1.85**	(0.46)	2.31	(1.94)	**2.24**	(0.43)	1.57	(0.97)
	Peru	**1.48**	(0.18)	**1.18**	(0.08)	c	c	0.85	(0.15)	c	c	0.94	(0.19)	0.81	(0.75)
	Russia	**1.45**	(0.23)	**0.80**	(0.09)	**1.97**	(0.40)	0.73	(0.21)	0.64	(0.29)	**2.07**	(0.35)	1.23	(0.50)

		Increased likelihood of giving a valid response to the question on receiving money from working outside school hours (e.g. a holiday job, part-time work)													
		Boy		PISA index of economic, social and cultural status (ESCS)		Non-immigrant		Performing at Levels 2, 3 or 4 in mathematics		Performing at Levels 5 or 6 in mathematics		Gave a valid response to the last financial literacy cognitive item		Intercept	
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.
OECD	Belgium (Flemish)	1.08	(0.19)	1.00	(0.11)	1.28	(0.30)	0.79	(0.21)	**0.48**	(0.15)	**2.71**	(0.67)	**1.91**	(0.56)
	Canadian provinces	0.65	(0.16)	1.14	(0.15)	1.45	(0.35)	1.13	(0.45)	3.24	(3.48)	**2.56**	(0.86)	**5.66**	(2.69)
	Chile	1.07	(0.19)	0.97	(0.08)	2.45	(1.15)	0.80	(0.18)	2.01	(2.23)	**2.58**	(0.49)	1.26	(0.52)
	Italy	1.08	(0.21)	1.09	(0.12)	0.86	(0.26)	0.77	(0.19)	**0.42**	(0.16)	**2.39**	(0.51)	**5.69**	(2.29)
	Netherlands	0.70	(0.27)	0.90	(0.35)	2.12	(1.20)	2.16	(1.12)	3.47	(8.39)	**10.23**	(3.94)	1.68	(0.89)
	Poland	1.10	(0.18)	1.07	(0.12)	c	c	1.16	(0.31)	1.87	(0.81)	1.44	(0.36)	2.65	(4.45)
	Slovak Republic	**1.48**	(0.23)	**0.74**	(0.07)	c	c	1.00	(0.21)	0.91	(0.43)	**1.88**	(0.33)	1.51	(1.16)
	Spain	1.01	(0.18)	1.00	(0.07)	0.58	(0.17)	1.43	(0.30)	2.47	(1.41)	**2.51**	(0.43)	**3.44**	(1.27)
	United States	1.21	(0.20)	1.10	(0.11)	**1.72**	(0.31)	1.29	(0.38)	1.30	(0.98)	**3.13**	(1.10)	1.70	(0.63)
	OECD average-10	1.04	(0.07)	1.00	(0.05)	**1.50**	(0.25)	1.17	(0.16)	1.80	(1.06)	**3.27**	(0.48)	**2.83**	(0.68)
Partners	Brazil	1.11	(0.11)	**1.19**	(0.06)	c	c	0.80	(0.10)	0.52	(0.31)	1.19	(0.12)	0.75	(0.53)
	B-S-J-G (China)	1.04	(0.20)	1.00	(0.11)	c	c	0.67	(0.23)	1.15	(0.63)	**3.79**	(1.49)	**172.44**	(340.29)
	Lithuania	1.07	(0.22)	1.08	(0.15)	**2.77**	(1.38)	**1.70**	(0.41)	1.92	(1.65)	**1.69**	(0.35)	1.63	(1.05)
	Peru	**1.44**	(0.19)	**1.18**	(0.08)	c	c	0.87	(0.16)	c	c	1.13	(0.23)	1.59	(1.65)
	Russia	**1.40**	(0.22)	**0.75**	(0.08)	**2.16**	(0.42)	0.84	(0.23)	0.68	(0.34)	**1.99**	(0.39)	1.13	(0.47)

Note: Values that are statistically significant are indicated in bold (see Annex A3).

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[Part 2/3]

Table A1.2c Likelihood of a valid response about money sources

		Increased likelihood of giving a valid response to the question on receiving money from working in a family business													
		Boy		PISA index of economic, social and cultural status (ESCS)		Non-immigrant		Performing at Levels 2, 3 or 4 in mathematics		Performing at Levels 5 or 6 in mathematics		Gave a valid response to the last financial literacy cognitive item		Intercept	
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.
OECD	Belgium (Flemish)	1.11	(0.19)	0.96	(0.10)	1.20	(0.27)	1.02	(0.26)	0.63	(0.20)	**2.59**	(0.62)	1.49	(0.42)
OECD	Canadian provinces	**0.61**	(0.12)	1.03	(0.12)	0.99	(0.24)	1.25	(0.43)	3.04	(2.92)	**2.21**	(0.63)	**5.90**	(2.26)
OECD	Chile	1.06	(0.18)	0.98	(0.08)	1.75	(0.98)	0.80	(0.17)	1.83	(2.31)	**2.50**	(0.45)	1.73	(0.74)
OECD	Italy	1.04	(0.20)	1.05	(0.12)	1.17	(0.31)	**0.53**	(0.15)	**0.29**	(0.11)	**1.99**	(0.48)	**7.01**	(2.61)
OECD	Netherlands	0.91	(0.25)	0.96	(0.27)	1.61	(0.85)	**2.27**	(0.86)	3.80	(5.09)	**7.55**	(2.63)	1.33	(0.74)
OECD	Poland	1.14	(0.17)	1.09	(0.12)	c	c	1.02	(0.27)	1.67	(0.74)	**1.53**	(0.27)	2.72	(4.41)
OECD	Slovak Republic	**1.39**	(0.21)	**0.77**	(0.08)	c	c	1.07	(0.22)	1.01	(0.47)	**1.99**	(0.33)	1.85	(1.20)
OECD	Spain	1.01	(0.17)	0.99	(0.07)	0.64	(0.17)	1.46	(0.30)	2.20	(1.13)	**2.24**	(0.40)	**3.32**	(1.11)
OECD	United States	1.16	(0.18)	1.09	(0.10)	**1.68**	(0.29)	1.34	(0.39)	1.48	(0.95)	**2.66**	(0.94)	1.74	(0.70)
	OECD average-10	1.05	(0.06)	0.99	(0.04)	1.29	(0.20)	1.20	(0.13)	1.77	(0.73)	**2.81**	(0.34)	**3.01**	(0.67)
Partners	Brazil	1.08	(0.11)	**1.22**	(0.06)	c	c	0.79	(0.10)	0.54	(0.35)	**1.27**	(0.13)	0.50	(0.40)
Partners	B-S-J-G (China)	1.08	(0.18)	1.05	(0.10)	c	c	0.87	(0.24)	2.05	(1.04)	**2.90**	(1.02)	**204.57**	(408.42)
Partners	Lithuania	1.02	(0.19)	1.12	(0.14)	2.36	(1.16)	1.54	(0.37)	1.99	(1.72)	**1.69**	(0.29)	1.86	(1.17)
Partners	Peru	**1.45**	(0.19)	**1.17**	(0.08)	c	c	0.83	(0.14)	c	c	1.06	(0.21)	0.73	(0.68)
Partners	Russia	**1.47**	(0.21)	**0.78**	(0.09)	**2.09**	(0.41)	0.74	(0.20)	0.64	(0.32)	**2.16**	(0.36)	1.09	(0.42)

		Increased likelihood of giving a valid response to the question on receiving money from occasional informal jobs (e.g. baby-sitting or gardening)													
		Boy		PISA index of economic, social and cultural status (ESCS)		Non-immigrant		Performing at Levels 2, 3 or 4 in mathematics		Performing at Levels 5 or 6 in mathematics		Gave a valid response to the last financial literacy cognitive item		Intercept	
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.
OECD	Belgium (Flemish)	1.10	(0.18)	1.00	(0.10)	1.37	(0.28)	0.91	(0.23)	0.56	(0.18)	**2.58**	(0.59)	1.45	(0.41)
OECD	Canadian provinces	**0.39**	(0.09)	1.15	(0.15)	1.18	(0.29)	1.18	(0.41)	2.49	(2.31)	**3.03**	(0.91)	**6.48**	(2.62)
OECD	Chile	1.10	(0.19)	0.94	(0.08)	1.77	(0.99)	0.82	(0.19)	2.18	(2.49)	**2.54**	(0.46)	1.60	(0.69)
OECD	Italy	1.06	(0.20)	1.04	(0.12)	1.02	(0.31)	0.63	(0.18)	**0.38**	(0.16)	**1.98**	(0.43)	**6.59**	(2.46)
OECD	Netherlands	0.87	(0.28)	1.20	(0.31)	1.88	(0.98)	**2.36**	(1.01)	c	c	**6.53**	(2.12)	1.31	(0.64)
OECD	Poland	1.09	(0.15)	1.03	(0.11)	c	c	1.10	(0.29)	2.11	(1.00)	**1.67**	(0.37)	**4.22**	(1.15)
OECD	Slovak Republic	**1.53**	(0.24)	**0.78**	(0.07)	c	c	1.18	(0.23)	1.06	(0.54)	**2.25**	(0.36)	2.82	(2.00)
OECD	Spain	0.92	(0.14)	1.04	(0.07)	0.68	(0.18)	**1.57**	(0.33)	2.33	(1.17)	**2.35**	(0.43)	**2.95**	(1.01)
OECD	United States	1.33	(0.22)	**1.22**	(0.12)	**1.74**	(0.35)	1.52	(0.43)	2.27	(2.24)	**2.67**	(0.97)	1.55	(0.63)
	OECD average-10	1.04	(0.06)	1.04	(0.05)	**1.38**	(0.22)	1.25	(0.15)	1.67	(0.55)	**2.84**	(0.30)	**3.22**	(0.51)
Partners	Brazil	1.10	(0.10)	**1.20**	(0.06)	c	c	0.80	(0.10)	0.55	(0.33)	1.19	(0.12)	0.51	(0.40)
Partners	B-S-J-G (China)	0.95	(0.17)	1.07	(0.11)	c	c	0.82	(0.22)	1.94	(0.95)	**2.92**	(1.01)	0.74	(2.23)
Partners	Lithuania	0.94	(0.19)	1.10	(0.15)	2.44	(1.21)	**1.69**	(0.40)	2.12	(1.91)	**1.73**	(0.32)	1.75	(1.13)
Partners	Peru	**1.37**	(0.18)	**1.16**	(0.08)	c	c	0.90	(0.16)	c	c	1.03	(0.20)	0.75	(0.68)
Partners	Russia	**1.47**	(0.22)	**0.77**	(0.08)	**1.95**	(0.39)	0.74	(0.20)	0.63	(0.29)	**2.13**	(0.36)	1.19	(0.48)

		Increased likelihood of giving a valid response to the question on receiving gifts of money from friends or relatives													
		Boy		PISA index of economic, social and cultural status (ESCS)		Non-immigrant		Performing at Levels 2, 3 or 4 in mathematics		Performing at Levels 5 or 6 in mathematics		Gave a valid response to the last financial literacy cognitive item		Intercept	
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.
OECD	Belgium (Flemish)	1.19	(0.21)	1.05	(0.12)	1.26	(0.27)	0.94	(0.27)	0.57	(0.20)	**2.89**	(0.65)	1.44	(0.44)
OECD	Canadian provinces	**0.49**	(0.12)	1.20	(0.18)	1.10	(0.32)	1.28	(0.55)	3.82	(4.44)	**3.14**	(1.19)	**7.63**	(3.62)
OECD	Chile	1.01	(0.18)	0.94	(0.07)	1.27	(0.98)	0.73	(0.17)	1.62	(1.55)	**2.62**	(0.52)	2.87	(1.56)
OECD	Italy	1.01	(0.21)	1.09	(0.13)	1.24	(0.40)	0.61	(0.18)	**0.31**	(0.12)	**2.36**	(0.56)	**5.79**	(2.35)
OECD	Netherlands	0.60	(0.24)	1.03	(0.30)	1.57	(0.78)	**2.68**	(1.22)	6.36	(14.49)	**6.08**	(2.47)	2.59	(1.36)
OECD	Poland	0.98	(0.16)	1.11	(0.15)	c	c	1.15	(0.39)	1.55	(0.80)	**2.07**	(0.51)	2.59	(4.55)
OECD	Slovak Republic	**1.48**	(0.25)	**0.73**	(0.08)	c	c	1.18	(0.25)	1.10	(0.64)	**2.27**	(0.42)	2.09	(1.67)
OECD	Spain	0.98	(0.15)	0.96	(0.07)	0.78	(0.22)	**1.70**	(0.43)	2.60	(1.44)	**2.55**	(0.47)	**2.64**	(0.95)
OECD	United States	1.33	(0.27)	1.22	(0.13)	**2.27**	(0.48)	1.29	(0.39)	1.48	(1.49)	**3.45**	(1.54)	1.64	(0.79)
	OECD average-10	1.01	(0.07)	1.04	(0.05)	**1.36**	(0.21)	1.29	(0.17)	2.16	(1.71)	**3.05**	(0.38)	**3.25**	(0.77)
Partners	Brazil	1.04	(0.10)	**1.22**	(0.06)	c	c	0.79	(0.10)	0.54	(0.34)	1.17	(0.12)	0.37	(0.27)
Partners	B-S-J-G (China)	0.98	(0.19)	1.10	(0.13)	c	c	0.82	(0.24)	1.89	(1.25)	**4.00**	(1.56)	**212.98**	(440.57)
Partners	Lithuania	0.87	(0.20)	1.14	(0.17)	2.78	(1.48)	**1.89**	(0.50)	2.16	(1.90)	**2.39**	(0.51)	1.45	(0.93)
Partners	Peru	**1.38**	(0.17)	**1.18**	(0.08)	c	c	0.89	(0.15)	c	c	1.10	(0.20)	1.06	(1.08)
Partners	Russia	1.28	(0.22)	**0.80**	(0.09)	**1.97**	(0.40)	0.79	(0.22)	0.67	(0.33)	**2.13**	(0.39)	1.21	(0.48)

Note: Values that are statistically significant are indicated in bold (see Annex A3).

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[Part 3/3]

Table A1.2c Likelihood of a valid response about money sources

		Increased likelihood of giving a valid response to the question on receiving money from selling things (e.g. at local markets or on eBay)													
		Boy		PISA index of economic, social and cultural status (ESCS)		Non-immigrant		Performing at Levels 2, 3 or 4 in mathematics		Performing at Levels 5 or 6 in mathematics		Gave a valid response to the last financial literacy cognitive item		Intercept	
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.
OECD	Belgium (Flemish)	1.18	(0.20)	1.00	(0.10)	1.18	(0.24)	1.03	(0.26)	0.66	(0.23)	**2.68**	(0.63)	1.39	(0.40)
	Canadian provinces	**0.64**	(0.14)	1.06	(0.13)	1.28	(0.29)	1.24	(0.41)	2.66	(2.45)	**2.48**	(0.77)	**4.94**	(1.84)
	Chile	1.09	(0.19)	0.96	(0.08)	2.48	(1.34)	0.82	(0.18)	2.12	(2.37)	**2.40**	(0.44)	1.27	(0.55)
	Italy	0.92	(0.17)	1.06	(0.11)	1.04	(0.32)	0.62	(0.18)	**0.42**	(0.17)	**1.84**	(0.41)	**6.65**	(2.58)
	Netherlands	0.92	(0.31)	1.24	(0.33)	1.36	(0.72)	2.32	(1.02)	4.32	(8.34)	**6.19**	(2.14)	1.83	(1.09)
	Poland	1.07	(0.16)	1.15	(0.14)	c	c	1.13	(0.30)	1.80	(0.83)	**1.73**	(0.32)	2.60	(4.49)
	Slovak Republic	**1.59**	(0.26)	**0.76**	(0.07)	c	c	1.25	(0.23)	1.10	(0.49)	**2.21**	(0.37)	1.98	(1.60)
	Spain	1.10	(0.18)	1.03	(0.07)	0.62	(0.17)	1.49	(0.31)	2.08	(1.02)	**2.36**	(0.40)	**2.89**	(1.01)
	United States	**1.51**	(0.27)	1.13	(0.11)	**1.79**	(0.34)	1.55	(0.43)	1.80	(1.37)	**3.11**	(1.09)	1.28	(0.49)
	OECD average-10	1.11	(0.07)	1.04	(0.05)	**1.39**	(0.23)	**1.27**	(0.15)	1.88	(1.03)	**2.78**	(0.30)	**2.76**	(0.66)
Partners	Brazil	1.07	(0.10)	**1.21**	(0.05)	c	c	0.82	(0.11)	0.51	(0.29)	**1.26**	(0.13)	0.34	(0.25)
	B-S-J-G (China)	1.03	(0.16)	1.14	(0.11)	c	c	0.83	(0.21)	1.48	(0.66)	**3.03**	(1.00)	0.77	(2.26)
	Lithuania	0.98	(0.17)	1.01	(0.13)	2.13	(1.09)	**2.02**	(0.44)	2.54	(1.86)	**2.07**	(0.42)	1.39	(0.90)
	Peru	**1.42**	(0.18)	**1.15**	(0.07)	c	c	0.89	(0.14)	c	c	1.07	(0.21)	0.72	(0.64)
	Russia	**1.41**	(0.21)	**0.78**	(0.08)	**2.03**	(0.42)	0.81	(0.22)	0.66	(0.31)	**2.16**	(0.36)	1.07	(0.42)

Note: Values that are statistically significant are indicated in bold (see Annex A3).
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Table A1.2d Likelihood of a valid response about spending and saving behaviour

		Increased likelihood of giving a valid response to the question on spending behaviour													
		Boy		PISA index of economic, social and cultural status (ESCS)		Non-immigrant		Performing at Levels 2, 3 or 4 in mathematics		Performing at Levels 5 or 6 in mathematics		Gave a valid response to the last financial literacy cognitive item		Intercept	
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.
OECD	Belgium (Flemish)	1.24	(0.26)	1.08	(0.13)	0.73	(0.20)	0.54	(0.17)	**0.31**	(0.12)	**2.76**	(0.69)	**5.50**	(2.30)
	Canadian provinces	0.60	(0.20)	1.46	(0.30)	1.11	(0.47)	0.64	(0.38)	1.31	(1.38)	**3.15**	(1.42)	**28.92**	(34.38)
	Chile	1.21	(0.21)	0.92	(0.08)	2.65	(1.42)	**0.61**	(0.15)	1.24	(1.34)	**2.93**	(0.61)	1.80	(0.78)
	Italy	1.15	(0.26)	1.02	(0.13)	0.99	(0.37)	**0.43**	(0.15)	**0.22**	(0.11)	**2.70**	(0.74)	**11.19**	(6.14)
	Netherlands	**0.26**	(0.16)	0.61	(0.26)	**6.43**	(5.67)	2.30	(3.43)	c	c	**22.96**	(23.73)	4.51	(6.78)
	Poland	1.11	(0.34)	0.84	(0.20)	c	c	0.92	(0.55)	0.55	(0.57)	**3.81**	(1.87)	**18.67**	(12.57)
	Slovak Republic	1.47	(0.30)	**0.60**	(0.09)	c	c	0.66	(0.20)	0.52	(0.37)	**2.26**	(0.50)	4.10	(4.58)
	Spain	0.78	(0.17)	0.95	(0.11)	0.85	(0.38)	0.85	(0.25)	1.08	(0.77)	**2.84**	(0.54)	**9.17**	(4.13)
	United States	**2.06**	(0.53)	**1.30**	(0.14)	**2.51**	(0.72)	0.70	(0.29)	0.56	(0.59)	**3.06**	(1.47)	**3.63**	(2.16)
	OECD average-10	1.10	(0.10)	0.98	(0.06)	**2.18**	(0.85)	0.85	(0.39)	0.72	(0.28)	**5.16**	(2.66)	**9.72**	(4.26)
Partners	Brazil	1.04	(0.10)	**1.19**	(0.06)	c	c	**0.71**	(0.09)	0.52	(0.32)	1.12	(0.11)	1.36	(1.04)
	B-S-J-G (China)	1.03	(0.34)	0.96	(0.17)	c	c	0.61	(0.31)	0.50	(0.37)	**6.47**	(4.12)	**8.93**	(6.59)
	Lithuania	**0.48**	(0.17)	0.85	(0.23)	**3.97**	(2.15)	2.02	(0.84)	0.90	(0.78)	**3.18**	(1.00)	3.96	(3.09)
	Peru	**1.46**	(0.21)	**1.25**	(0.09)	c	c	0.73	(0.12)	c	c	0.81	(0.18)	3.66	(4.71)
	Russia	1.38	(0.26)	**0.69**	(0.08)	**2.30**	(0.50)	0.58	(0.20)	0.47	(0.24)	**1.90**	(0.39)	1.96	(0.85)
		Increased likelihood of giving a valid response to the question on saving behaviour													
		Boy		PISA index of economic, social and cultural status (ESCS)		Non-immigrant		Performing at Levels 2, 3 or 4 in mathematics		Performing at Levels 5 or 6 in mathematics		Gave a valid response to the last financial literacy cognitive item		Intercept	
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.
OECD	Belgium (Flemish)	1.14	(0.21)	1.04	(0.12)	0.78	(0.19)	0.56	(0.17)	**0.30**	(0.11)	**3.63**	(0.87)	**3.62**	(1.26)
	Canadian provinces	**0.48**	(0.14)	1.15	(0.25)	0.90	(0.40)	0.67	(0.39)	1.70	(2.22)	**4.29**	(1.76)	**24.96**	(20.94)
	Chile	1.28	(0.24)	0.94	(0.07)	1.53	(1.14)	**0.61**	(0.15)	0.96	(0.92)	**2.54**	(0.50)	2.80	(1.52)
	Italy	1.25	(0.25)	0.92	(0.12)	1.16	(0.42)	0.64	(0.21)	**0.36**	(0.17)	**2.12**	(0.55)	**6.10**	(2.31)
	Netherlands	**0.33**	(0.18)	0.86	(0.47)	1.64	(1.35)	2.01	(2.48)	c	c	**49.48**	(43.38)	4.64	(5.10)
	Poland	0.76	(0.22)	0.80	(0.16)	c	c	0.90	(0.56)	0.57	(0.58)	**4.00**	(1.69)	**16.95**	(9.90)
	Slovak Republic	**1.60**	(0.31)	**0.63**	(0.09)	c	c	0.57	(0.18)	0.36	(0.19)	**2.00**	(0.42)	7.00	(7.26)
	Spain	0.81	(0.18)	0.89	(0.09)	0.77	(0.28)	1.30	(0.35)	1.95	(1.46)	**2.59**	(0.51)	**5.72**	(2.55)
	United States	**1.87**	(0.46)	**1.26**	(0.14)	**1.85**	(0.52)	0.87	(0.32)	0.76	(0.73)	**5.24**	(2.04)	1.89	(0.88)
	OECD average-10	1.06	(0.09)	0.94	(0.07)	1.23	(0.28)	0.90	(0.29)	0.87	(0.37)	**8.43**	(4.83)	**8.19**	(2.79)
Partners	Brazil	1.16	(0.10)	**1.21**	(0.06)	c	c	**0.70**	(0.10)	0.45	(0.30)	1.11	(0.12)	1.11	(0.82)
	B-S-J-G (China)	1.18	(0.37)	1.24	(0.22)	c	c	0.71	(0.34)	0.72	(0.55)	**4.84**	(2.87)	**264.71**	(609.78)
	Lithuania	**0.51**	(0.16)	0.94	(0.22)	**3.21**	(1.63)	1.75	(0.69)	0.91	(0.80)	**4.40**	(1.54)	3.52	(2.71)
	Peru	**1.46**	(0.19)	**1.18**	(0.08)	c	c	0.78	(0.14)	c	c	0.89	(0.19)	3.13	(3.96)
	Russia	1.37	(0.23)	**0.73**	(0.09)	**2.41**	(0.49)	0.60	(0.19)	0.47	(0.23)	**2.18**	(0.56)	1.45	(0.71)

Note: Values that are statistically significant are indicated in bold (see Annex A3).
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ANNEX A2
THE PISA TARGET POPULATION, THE PISA SAMPLES AND THE DEFINITION OF SCHOOLS

Definition of the PISA target population

PISA 2015 provides an assessment of the cumulative outcomes of education and learning at a point at which most young adults are still enrolled in initial education.

A major challenge for an international survey is to ensure that international comparability of national target populations is guaranteed.

Differences between countries in the nature and extent of pre-primary education and care, the age at entry into formal schooling and the institutional structure of education systems do not allow for a definition of internationally comparable grade levels. Consequently, international comparisons of performance in education typically define their populations with reference to a target age group. Some previous international assessments have defined their target population on the basis of the grade level that provides maximum coverage of a particular age cohort. A disadvantage of this approach is that slight variations in the age distribution of students across grade levels often lead to the selection of different target grades in different countries, or between education systems within countries, raising serious questions about the comparability of results across, and at times within, countries. In addition, because not all students of the desired age are usually represented in grade-based samples, there may be a more serious potential bias in the results if the unrepresented students are typically enrolled in the next higher grade in some countries and the next lower grade in others. This would exclude students with potentially higher levels of performance in the former countries and students with potentially lower levels of performance in the latter.

In order to address this problem, PISA uses an age-based definition for its target population, i.e. a definition that is not tied to the institutional structures of national education systems. PISA assesses students who were aged between 15 years and 3 (complete) months and 16 years and 2 (complete) months at the beginning of the assessment period, plus or minus a 1-month allowable variation, and who were enrolled in an educational institution with grade 7 or higher, regardless of the grade level or type of institution in which they were enrolled, and regardless of whether they were in full-time or part-time education. Educational institutions are generally referred to as schools in this publication, although some educational institutions (in particular, some types of vocational education establishments) may not be termed schools in certain countries. As expected from this definition, the average age of students across OECD countries was 15 years and 9 months. The range in country means was 2 months and 18 days (0.20 years), from the minimum country mean of 15 years and 8 months to the maximum country mean of 15 years and 10 months.

Given this definition of population, PISA makes statements about the knowledge and skills of a group of individuals who were born within a comparable reference period, but who may have undergone different educational experiences both in and outside school. In PISA, these knowledge and skills are referred to as the outcomes of education at an age that is common across countries. Depending on countries' policies on school entry, selection and promotion, these students may be distributed over a narrower or a wider range of grades across different education systems, tracks or streams. It is important to consider these differences when comparing PISA results across countries, as observed differences between students at age 15 may no longer appear later on as/if students' educational experiences converge over time.

If a country's scores in science, reading or mathematics are significantly higher than those in another country, it cannot automatically be inferred that the schools or particular parts of the education system in the first country are more effective than those in the second. However, one can legitimately conclude that the cumulative impact of learning experiences in the first country, starting in early childhood and up to the age of 15, and embracing experiences in school, home and beyond, have resulted in higher outcomes in the literacy domains that PISA measures.

The PISA target population does not include residents attending schools in a foreign country. It does, however, include foreign nationals attending schools in the country of assessment.

To accommodate countries that requested grade-based results for the purpose of national analyses, PISA 2015 provided a sampling option to supplement age-based sampling with grade-based sampling.

Population coverage

All countries and economies attempted to maximise the coverage of 15-year-olds enrolled in education in their national samples, including students enrolled in special-education institutions. As a result, PISA 2015 reached standards of population coverage that are unprecedented in international surveys of this kind.

The sampling standards used in PISA permitted countries to exclude up to a total of 5% of the relevant population either by excluding schools or by excluding students within schools. All but 12 countries – the United Kingdom (8.22%), Luxembourg (8.16%), Canada (7.49%), Norway (6.75%), New Zealand (6.54%), Sweden (5.71%), Estonia (5.52%), Australia (5.31%),

Montenegro (5.17%), Lithuania (5.12%), Latvia (5.07%), and Denmark (5.04%) – achieved this standard, and in 29 countries and economies, the overall exclusion rate was less than 2%. When language exclusions were accounted for (i.e. removed from the overall exclusion rate), Denmark, Latvia, New Zealand and Sweden no longer had an exclusion rate greater than 5%. For details, see www.pisa.oecd.org.

Exclusions within the above limits include:

- At the school level: schools that were geographically inaccessible or where the administration of the PISA assessment was not considered feasible; and schools that provided teaching only for students in the categories defined under "within-school exclusions", such as schools for the blind. The percentage of 15-year-olds enrolled in such schools had to be less than 2.5% of the nationally desired target population (0.5% maximum for the former group and 2% maximum for the latter group). The magnitude, nature and justification of school-level exclusions are documented in the *PISA 2015 Technical Report* (OECD, forthcoming).
- At the student level: students with an intellectual disability; students with a functional disability; students with limited assessment language proficiency; other (a category defined by the national centres and approved by the international centre); and students taught in a language of instruction for the main domain for which no materials were available. Students could not be excluded solely because of low proficiency or common disciplinary problems. The percentage of 15-year-olds excluded within schools had to be less than 2.5% of the nationally desired target population.

Table A2.1 describes the target population of the countries participating in PISA 2015. Further information on the target population and the implementation of PISA sampling standards can be found in the *PISA 2015 Technical Report* (OECD, forthcoming).

- **Column 1** shows the total number of 15-year-olds according to the most recent available information, which in most countries means the year 2014 as the year before the assessment.
- **Column 2** shows the number of 15-year-olds enrolled in schools in grade 7 or above (as defined above), which is referred to as the "eligible population".
- **Column 3** shows the national desired target population. Countries were allowed to exclude up to 0.5% of students a priori from the eligible population, essentially for practical reasons. The following a priori exclusions exceed this limit but were agreed with the PISA Consortium: Belgium excluded 0.21% of its population for a particular type of student educated while working; Canada excluded 1.22% of its population from Territories and Aboriginal reserves; Chile excluded 0.04% of its students who live in Easter Island, Juan Fernandez Archipelago and Antarctica; and the United Arab Emirates excluded 0.04% of its students who had no information available. The adjudicated region of Massachusetts in the United States excluded 13.11% of its students, and North Carolina excluded 5.64% of its students. For these two regions, the desired target populations cover 15-year-old students in grade 7 or above in public schools only. The students excluded from the desired population are private school students.
- **Column 4** shows the number of students enrolled in schools that were excluded from the national desired target population, either from the sampling frame or later in the field during data collection.
- **Column 5** shows the size of the national desired target population after subtracting the students enrolled in excluded schools. This is obtained by subtracting Column 4 from Column 3.
- **Column 6** shows the percentage of students enrolled in excluded schools. This is obtained by dividing Column 4 by Column 3 and multiplying by 100.
- **Column 7** shows the number of students participating in PISA 2015. Note that in some cases this number does not account for 15-year-olds assessed as part of additional national options.
- **Column 8** shows the weighted number of participating students, i.e. the number of students in the nationally defined target population that the PISA sample represents.
- Each country attempted to maximise the coverage of PISA's target population within the sampled schools. In the case of each sampled school, all eligible students, namely those 15 years of age, regardless of grade, were first listed. Sampled students who were to be excluded had still to be included in the sampling documentation, and a list drawn up stating the reason for their exclusion. Column 9 indicates the total number of excluded students, which is further described and classified into specific categories in Table A2.2.
- **Column 10** indicates the weighted number of excluded students, i.e. the overall number of students in the nationally defined target population represented by the number of students excluded from the sample, which is also described and classified by exclusion categories in Table A2.2. Excluded students were excluded based on five categories: students with an intellectual disability (the student has a mental or emotional disability and is cognitively delayed such that he/she cannot perform in the PISA testing situation); students with a functional disability (the student has a moderate to severe permanent physical disability such that he/she cannot perform in the PISA testing situation); students with limited proficiency in the assessment language (the student is unable to read or speak any of the languages of the assessment in the country and would be unable to overcome the language barrier in the testing situation – typically a student who has received less than one year of instruction in the languages of assessment may be excluded); other (a category defined by the national centres and approved by the international centre); and students taught in a language of instruction for the main domain for which no materials were available.

[Part 1/1]

Table A2.1 PISA target populations and samples

		Population and sample information												Coverage indices		
		Total population of 15-year-olds	Total enrolled population of 15-year-olds at grade 7 or above	Total in national desired target population	Total school-level exclusions	Total in national desired target population after all school exclusions and before within-school exclusions	School-level exclusion rate (%)	Number of participating students	Weighted number of participating students	Number of excluded students	Weighted number of excluded students	Within-school exclusion rate (%)	Overall exclusion rate (%)	Coverage Index 1: Coverage of national desired population	Coverage Index 2: Coverage of national enrolled population	Coverage Index 3: Coverage of 15-year-old population
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
OECD	Australia	282 888	282 547	282 547	6 940	275 607	2.46	14 530	256 329	681	7 736	2.93	5.31	0.947	0.947	0.906
	Austria	88 013	82 683	82 683	790	81 893	0.96	7 007	73 379	84	866	1.17	2.11	0.979	0.979	0.834
	Belgium	123 630	121 954	121 694	1 597	120 097	1.31	9 651	114 902	39	410	0.36	1.66	0.983	0.981	0.929
	Canada	396 966	381 660	376 994	1 590	375 404	0.42	20 058	331 546	1 830	25 340	7.10	7.49	0.925	0.914	0.835
	Chile	255 440	245 947	245 852	2 641	243 211	1.07	7 053	203 782	37	1 393	0.68	1.75	0.983	0.982	0.798
	Czech Republic	90 391	90 076	90 076	1 814	88 262	2.01	6 894	84 519	25	368	0.43	2.44	0.976	0.976	0.935
	Denmark	68 174	67 466	67 466	605	66 861	0.90	7 161	60 655	514	2 644	4.18	5.04	0.950	0.950	0.890
	Estonia	11 676	11 491	11 491	416	11 075	3.62	5 587	10 834	116	218	1.97	5.52	0.945	0.945	0.928
	Finland	58 526	58 955	58 955	472	58 483	0.80	5 882	56 934	124	1 157	1.99	2.78	0.972	0.972	0.973
	France	807 867	778 679	778 679	28 742	749 937	3.69	6 108	734 944	35	3 620	0.49	4.16	0.958	0.958	0.910
	Germany	774 149	774 149	774 149	11 150	762 999	1.44	6 522	743 969	54	5 342	0.71	2.14	0.979	0.979	0.961
	Greece	105 530	105 253	105 253	953	104 300	0.91	5 532	96 157	58	965	0.99	1.89	0.981	0.981	0.911
	Hungary	94 515	90 065	90 065	1 945	88 120	2.16	5 658	84 644	55	1 009	1.18	3.31	0.967	0.967	0.896
	Iceland	4 250	4 195	4 195	17	4 178	0.41	3 374	3 966	131	132	3.23	3.62	0.964	0.964	0.933
	Ireland	61 234	59 811	59 811	72	59 739	0.12	5 741	59 082	197	1 825	3.00	3.11	0.969	0.969	0.965
	Israel	124 852	118 997	118 997	2 310	116 687	1.94	6 598	117 031	115	1 803	1.52	3.43	0.966	0.966	0.937
	Italy	616 761	567 268	567 268	11 190	556 078	1.97	11 583	495 093	246	9 395	1.86	3.80	0.962	0.962	0.803
	Japan	1 201 615	1 175 907	1 175 907	27 323	1 148 584	2.32	6 647	1 138 349	2	318	0.03	2.35	0.976	0.976	0.947
	Korea	620 687	619 950	619 950	3 555	616 395	0.57	5 581	569 106	20	1 806	0.32	0.89	0.991	0.991	0.917
	Latvia	17 255	16 955	16 955	677	16 278	3.99	4 869	15 320	70	174	1.12	5.07	0.949	0.949	0.888
	Luxembourg	6 327	6 053	6 053	162	5 891	2.68	5 299	5 540	331	331	5.64	8.16	0.918	0.918	0.876
	Mexico	2 257 399	1 401 247	1 401 247	5 905	1 395 342	0.42	7 568	1 392 995	30	6 810	0.49	0.91	0.991	0.991	0.617
	Netherlands	201 670	200 976	200 976	6 866	194 110	3.42	5 385	191 817	14	502	0.26	3.67	0.963	0.963	0.951
	New Zealand	60 162	57 448	57 448	681	56 767	1.19	4 520	54 274	333	3 112	5.42	6.54	0.935	0.935	0.902
	Norway	63 642	63 491	63 491	854	62 637	1.35	5 456	58 083	345	3 366	5.48	6.75	0.933	0.933	0.913
	Poland	380 366	361 600	361 600	6 122	355 478	1.69	4 478	345 709	34	2 418	0.69	2.38	0.976	0.976	0.909
	Portugal	110 939	101 107	101 107	424	100 683	0.42	7 325	97 214	105	860	0.88	1.29	0.987	0.987	0.876
	Slovak Republic	55 674	55 203	55 203	1 376	53 827	2.49	6 350	49 654	114	912	1.80	4.25	0.957	0.957	0.892
	Slovenia	18 078	17 689	17 689	290	17 399	1.64	6 406	16 773	114	247	1.45	3.07	0.969	0.969	0.928
	Spain	440 084	414 276	414 276	2 175	412 101	0.53	6 736	399 935	200	10 893	2.65	3.16	0.968	0.968	0.909
	Sweden	97 749	97 210	97 210	1 214	95 996	1.25	5 458	91 491	275	4 324	4.51	5.71	0.943	0.943	0.936
	Switzerland	85 495	83 655	83 655	2 320	81 335	2.77	5 860	82 223	107	1 357	1.62	4.35	0.956	0.956	0.962
	Turkey	1 324 089	1 100 074	1 100 074	5 746	1 094 328	0.52	5 895	925 366	31	5 359	0.58	1.10	0.989	0.989	0.699
	United Kingdom	747 593	746 328	746 328	23 412	722 916	3.14	14 157	627 703	870	34 747	5.25	8.22	0.918	0.918	0.840
	United States	4 220 325	3 992 053	3 992 053	12 001	3 980 052	0.30	5 712	3 524 497	193	109 580	3.02	3.31	0.967	0.967	0.835
Partners	Albania	48 610	45 163	45 163	10	45 153	0.02	5 215	40 896	0	0	0.00	0.02	1.000	1.000	0.841
	Algeria	389 315	354 936	354 936	0	354 936	0.00	5 519	306 647	0	0	0.00	0.00	1.000	1.000	0.788
	Argentina	718 635	578 308	578 308	2 617	575 691	0.45	6 349	394 917	21	1 367	0.34	0.80	0.992	0.992	0.550
	Brazil	3 430 255	2 853 388	2 853 388	64 392	2 788 996	2.26	23 141	2 425 961	119	13 543	0.56	2.80	0.972	0.972	0.707
	B-S-J-G (China)	2 084 958	1 507 518	1 507 518	58 639	1 448 879	3.89	9 841	1 331 794	33	3 609	0.27	4.15	0.959	0.959	0.639
	Bulgaria	66 601	59 397	59 397	1 124	58 273	1.89	5 928	53 685	49	433	0.80	2.68	0.973	0.973	0.806
	Colombia	760 919	674 079	674 079	37	674 042	0.01	11 795	567 848	9	507	0.09	0.09	0.999	0.999	0.746
	Costa Rica	81 773	66 524	66 524	0	66 524	0.00	6 866	51 897	13	98	0.19	0.19	0.998	0.998	0.635
	Croatia	45 031	35 920	35 920	805	35 115	2.24	5 809	40 899	86	589	1.42	3.63	0.964	0.964	0.908
	Cyprus*	9 255	9 255	9 253	109	9 144	1.18	5 571	8 785	228	292	3.22	4.36	0.956	0.956	0.949
	Dominican Republic	193 153	139 555	139 555	2 382	137 173	1.71	4 740	132 300	4	106	0.08	1.79	0.982	0.982	0.685
	FYROM	16 719	16 717	16 717	259	16 458	1.55	5 324	15 847	8	19	0.12	1.67	0.983	0.983	0.948
	Georgia	48 695	43 197	43 197	1 675	41 522	3.88	5 316	38 334	35	230	0.60	4.45	0.955	0.955	0.787
	Hong Kong (China)	65 100	61 630	61 630	708	60 922	1.15	5 359	57 662	36	374	0.65	1.79	0.982	0.982	0.886
	Indonesia	4 534 216	3 182 816	3 182 816	4 046	3 178 770	0.13	6 513	3 092 773	0	0	0.00	0.13	0.999	0.999	0.682
	Jordan	126 399	121 729	121 729	71	121 658	0.06	7 267	108 669	70	1 006	0.92	0.97	0.990	0.990	0.860
	Kazakhstan	211 407	209 555	209 555	7 475	202 080	3.57	7 841	192 909	0	0	0.00	3.57	0.964	0.964	0.912
	Kosovo	31 546	28 229	28 229	1 156	27 073	4.10	4 826	22 333	50	174	0.77	4.84	0.952	0.952	0.708
	Lebanon	64 044	62 281	62 281	1 300	60 981	2.09	4 546	42 331	0	0	0.00	2.09	0.979	0.979	0.661
	Lithuania	33 163	32 097	32 097	573	31 524	1.79	6 525	29 915	227	1 050	3.39	5.12	0.949	0.949	0.902
	Macao (China)	5 100	4 417	4 417	3	4 414	0.07	4 476	4 507	0	0	0.00	0.07	0.999	0.999	0.884
	Malaysia	540 000	448 838	448 838	2 418	446 420	0.54	8 861	412 524	41	2 344	0.56	1.10	0.989	0.989	0.764
	Malta	4 397	4 406	4 406	63	4 343	1.43	3 634	4 296	41	41	0.95	2.36	0.976	0.976	0.977
	Moldova	31 576	30 601	30 601	182	30 419	0.59	5 325	29 341	21	118	0.40	0.99	0.990	0.990	0.929
	Montenegro	7 524	7 506	7 506	40	7 466	0.53	5 665	6 777	300	332	4.66	5.17	0.948	0.948	0.901
	Peru	580 371	478 229	478 229	6 355	471 874	1.33	6 971	431 738	13	745	0.17	1.50	0.985	0.985	0.744
	Qatar	13 871	13 850	13 850	380	13 470	2.74	12 083	12 951	193	193	1.47	4.17	0.958	0.958	0.934
	Romania	176 334	176 334	176 334	1 823	174 511	1.03	4 876	164 216	3	120	0.07	1.11	0.989	0.989	0.931
	Russia	1 176 473	1 172 943	1 172 943	24 217	1 148 726	2.06	6 036	1 120 932	13	2 469	0.22	2.28	0.977	0.977	0.953
	Singapore	48 218	47 050	47 050	445	46 605	0.95	6 115	46 224	25	179	0.39	1.33	0.987	0.987	0.959
	Chinese Taipei	295 056	287 783	287 783	1 179	286 604	0.41	7 708	251 424	22	647	0.26	0.67	0.993	0.993	0.852
	Thailand	895 513	756 917	756 917	9 646	747 271	1.27	8 249	634 795	22	2 107	0.33	1.60	0.984	0.984	0.709
	Trinidad and Tobago	17 371	17 371	17 371	0	17 371	0.00	4 692	13 197	0	0	0.00	0.00	1.000	1.000	0.760
	Tunisia	122 186	122 186	122 186	679	121 507	0.56	5 375	113 599	3	61	0.05	0.61	0.994	0.994	0.930
	United Arab Emirates	51 687	51 518	51 499	994	50 505	1.93	14 167	46 950	63	152	0.32	2.25	0.978	0.977	0.908
	Uruguay	53 533	43 865	43 865	4	43 861	0.01	6 062	38 287	6	32	0.08	0.09	0.999	0.999	0.715
	Viet Nam	1 803 552	1 032 599	1 032 599	6 557	1 026 042	0.63	5 826	874 859	0	0	0.00	0.63	0.994	0.994	0.485

Notes: For a full explanation of the details in this table please refer to the *PISA 2015 Technical Report* (OECD, forthcoming).
The figure for total national population of 15-year-olds enrolled in Column 2 may occasionally be larger than the total number of 15-year-olds in Column 1 due to differing data sources.
For Mexico, in 2015, the Total population of 15-year-olds enrolled in grade 7 or above is an estimate of the target population size of the sample frame from which the 15-year-olds students were selected for the PISA test. At the time Mexico provided the information to PISA, the official figure for this population was 1 573 952.
* See note at the beginning of this Annex.

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[Part 1/2]

Table A2.2 Exclusions

		Student exclusions (unweighted)					
		Number of excluded students with functional disability (Code 1)	Number of excluded students with intellectual disability (Code 2)	Number of excluded students because of language (Code 3)	Number of excluded students for other reasons (Code 4)	Number of excluded students because of no materials available in the language of instruction (Code 5)	Total number of excluded students
		(1)	(2)	(3)	(4)	(5)	(6)
OECD	Australia	85	528	68	0	0	681
	Austria	8	15	61	0	0	84
	Belgium	4	18	17	0	0	39
	Canada	156	1 308	366	0	0	1 830
	Chile	6	30	1	0	0	37
	Czech Republic	2	9	14	0	0	25
	Denmark	18	269	156	70	1	514
	Estonia	17	93	6	0	0	116
	Finland	2	90	17	8	7	124
	France	5	21	9	0	0	35
	Germany	4	25	25	0	0	54
	Greece	3	44	11	0	0	58
	Hungary	3	13	9	30	0	55
	Iceland	9	66	47	9	0	131
	Ireland	25	57	55	60	0	197
	Israel	22	68	25	0	0	115
	Italy	78	147	21	0	0	246
	Japan	0	2	0	0	0	2
	Korea	3	17	0	0	0	20
	Latvia	7	47	16	0	0	70
	Luxembourg	4	254	73	0	0	331
	Mexico	4	23	3	0	0	30
	Netherlands	1	13	0	0	0	14
	New Zealand	23	140	167	0	3	333
	Norway	11	253	81	0	0	345
	Poland	11	20	0	3	0	34
	Portugal	4	99	2	0	0	105
	Slovak Republic	7	71	2	34	0	114
	Slovenia	33	36	45	0	0	114
	Spain	9	144	47	0	0	200
	Sweden	154	0	121	0	0	275
	Switzerland	8	42	57	0	0	107
	Turkey	1	23	7	0	0	31
	United Kingdom	77	690	102	0	1	870
	United States	16	120	44	13	0	193
Partners	Albania	0	0	0	0	0	0
	Algeria	0	0	0	0	0	0
	Argentina	10	10	1	0	0	21
	Brazil	20	99	0	0	0	119
	B-S-J-G (China)	6	25	2	0	0	33
	Bulgaria	39	6	4	0	0	49
	Colombia	3	4	2	0	0	9
	Costa Rica	3	1	0	9	0	13
	Croatia	2	75	9	0	0	86
	Cyprus*	12	164	52	0	0	228
	Dominican Republic	1	3	0	0	0	4
	FYROM	7	1	0	0	0	8
	Georgia	3	25	7	0	0	35
	Hong Kong (China)	0	35	1	0	0	36
	Indonesia	0	0	0	0	0	0
	Jordan	43	17	10	0	0	70
	Kazakhstan	0	0	0	0	0	0
	Kosovo	9	13	27	0	0	50
	Lebanon	0	0	0	0	0	0
	Lithuania	12	213	2	0	0	227
	Macao (China)	0	0	0	0	0	0
	Malaysia	10	22	9	0	0	41
	Malta	8	27	6	0	0	41
	Moldova	12	8	1	0	0	21
	Montenegro	14	23	5	0	258	300
	Peru	4	9	0	0	0	13
	Qatar	76	110	7	0	0	193
	Romania	1	1	1	0	0	3
	Russia	3	10	0	0	0	13
	Singapore	3	15	7	0	0	25
	Chinese Taipei	3	19	0	0	0	22
	Thailand	1	19	2	0	0	22
	Trinidad and Tobago	0	0	0	0	0	0
	Tunisia	0	0	3	0	0	3
	United Arab Emirates	16	24	23	0	0	63
	Uruguay	2	4	0	0	0	6
	Viet Nam	0	0	0	0	0	0

Exclusion codes:
Code 1: Functional disability – student has a moderate to severe permanent physical disability.
Code 2: Intellectual disability – student has a mental or emotional disability and has either been tested as cognitively delayed or is considered in the professional opinion of qualified staff to be cognitively delayed.
Code 3: Limited assessment language proficiency – student is not a native speaker of any of the languages of the assessment in the country and has been resident in the country for less than one year.
Code 4: Other reasons defined by the national centres and approved by the international centre.
Code 5: No materials available in the language of instruction.
Note: For a full explanation of the details in this table please refer to the *PISA 2015 Technical Report* (OECD, forthcoming).
* See note at the beginning of this Annex.
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[Part 2/2]

Table A2.2 Exclusions

		Student exclusion (weighted)					
		Weighted number of excluded students with functional disability (Code 1)	Weighted number of excluded students with intellectual disability (Code 2)	Weighted number of excluded students because of language (Code 3)	Weighted number of excluded students for other reasons (Code 4)	Weighted number of excluded students because of no materials available in the language of instruction (Code 5)	Total weighted number of excluded students
		(7)	(8)	(9)	(10)	(11)	(12)
OECD	Australia	932	6 011	793	0	0	7 736
	Austria	74	117	675	0	0	866
	Belgium	33	192	185	0	0	410
	Canada	1 901	18 018	5 421	0	0	25 340
	Chile	194	1 190	9	0	0	1 393
	Czech Republic	40	140	188	0	0	368
	Denmark	122	1 539	551	421	11	2 644
	Estonia	29	176	13	0	0	218
	Finland	18	858	156	67	58	1 157
	France	562	2 144	914	0	0	3 620
	Germany	423	2 562	2 357	0	0	5 342
	Greece	43	729	193	0	0	965
	Hungary	57	284	114	554	0	1 009
	Iceland	9	67	47	9	0	132
	Ireland	213	526	516	570	0	1 825
	Israel	349	1 070	384	0	0	1 803
	Italy	3 316	5 199	880	0	0	9 395
	Japan	0	318	0	0	0	318
	Korea	291	1 515	0	0	0	1 806
	Latvia	21	115	38	0	0	174
	Luxembourg	4	254	73	0	0	331
	Mexico	842	4 802	1 165	0	0	6 810
	Netherlands	33	469	0	0	0	502
	New Zealand	233	1 287	1 568	0	24	3 112
	Norway	105	2 471	790	0	0	3 366
	Poland	876	1 339	0	203	0	2 418
	Portugal	29	818	13	0	0	860
	Slovak Republic	44	567	12	288	0	912
	Slovenia	84	71	92	0	0	247
	Spain	511	7 662	2 720	0	0	10 893
	Sweden	2 380	0	1 944	0	0	4 324
	Switzerland	91	540	726	0	0	1 357
	Turkey	43	4 094	1 222	0	0	5 359
	United Kingdom	2 724	27 808	4 001	0	214	34 747
	United States	7 873	67 816	26 525	7 366	0	109 580
Partners	Albania	0	0	0	0	0	0
	Algeria	0	0	0	0	0	0
	Argentina	579	770	18	0	0	1 367
	Brazil	1 743	11 800	0	0	0	13 543
	B-S-J-G (China)	438	2 970	201	0	0	3 609
	Bulgaria	347	51	35	0	0	433
	Colombia	181	309	17	0	0	507
	Costa Rica	22	5	0	71	0	98
	Croatia	13	501	75	0	0	589
	Cyprus*	16	212	65	0	0	292
	Dominican Republic	24	82	0	0	0	106
	FYROM	15	4	0	0	0	19
	Georgia	19	170	41	0	0	230
	Hong Kong (China)	0	363	11	0	0	374
	Indonesia	0	0	0	0	0	0
	Jordan	656	227	122	0	0	1 006
	Kazakhstan	0	0	0	0	0	0
	Kosovo	28	37	104	0	0	174
	Lebanon	0	0	0	0	0	0
	Lithuania	40	1 000	10	0	0	1 050
	Macao (China)	0	0	0	0	0	0
	Malaysia	663	1 100	580	0	0	2 344
	Malta	8	27	6	0	0	41
	Moldova	66	51	1	0	0	118
	Montenegro	27	38	6	0	261	332
	Peru	224	520	0	0	0	745
	Qatar	76	110	7	0	0	193
	Romania	31	63	26	0	0	120
	Russia	425	2 044	0	0	0	2 469
	Singapore	22	115	43	0	0	179
	Chinese Taipei	78	568	0	0	0	647
	Thailand	114	1 830	163	0	0	2 107
	Trinidad and Tobago	0	0	0	0	0	0
	Tunisia	0	0	61	0	0	61
	United Arab Emirates	30	75	47	0	0	152
	Uruguay	10	22	0	0	0	32
	Viet Nam	0	0	0	0	0	0

Exclusion codes:
Code 1: Functional disability – student has a moderate to severe permanent physical disability.
Code 2: Intellectual disability – student has a mental or emotional disability and has either been tested as cognitively delayed or is considered in the professional opinion of qualified staff to be cognitively delayed.
Code 3: Limited assessment language proficiency – student is not a native speaker of any of the languages of the assessment in the country and has been resident in the country for less than one year.
Code 4: Other reasons defined by the national centres and approved by the international centre.
Code 5: No materials available in the language of instruction.
Note: For a full explanation of the details in this table please refer to the *PISA 2015 Technical Report* (OECD, forthcoming).
* See note at the beginning of this Annex.
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- **Column 11** shows the percentage of students excluded within schools. This is calculated as the weighted number of excluded students (Column 10), divided by the weighted number of excluded and participating students (Column 8 plus Column 10), then multiplied by 100.
- **Column 12** shows the overall exclusion rate, which represents the weighted percentage of the national desired target population excluded from PISA either through school-level exclusions or through the exclusion of students within schools. It is calculated as the school-level exclusion rate (Column 6 divided by 100) plus within-school exclusion rate (Column 11 divided by 100) multiplied by 1 minus the school-level exclusion rate (Column 6 divided by 100). This result is then multiplied by 100.
- **Column 13** presents an index of the extent to which the national desired target population is covered by the PISA sample. Australia, Canada, Denmark, Estonia, Latvia, Lithuania, Luxembourg, Montenegro, New Zealand, Norway, Sweden and the United Kingdom were the only countries where the coverage is below 95%.
- **Column 14** presents an index of the extent to which 15-year-olds enrolled in schools are covered by the PISA sample. The index measures the overall proportion of the national enrolled population that is covered by the non-excluded portion of the student sample. The index takes into account both school-level and student-level exclusions. Values close to 100 indicate that the PISA sample represents the entire education system as defined for PISA 2015. The index is the weighted number of participating students (Column 8) divided by the weighted number of participating and excluded students (Column 8 plus Column 10), times the nationally defined target population (Column 5) divided by the eligible population (Column 2) (times 100).
- **Column 15** presents an index of the coverage of the 15-year-old population. This index is the weighted number of participating students (Column 8) divided by the total population of 15-year-old students (Column 1).

This high level of coverage contributes to the comparability of the assessment results. For example, even assuming that the excluded students would have systematically scored worse than those who participated, and that this relationship is moderately strong, an exclusion rate on the order of 5% would likely lead to an overestimation of national mean scores of less than 5 score points (on a scale with an international mean of 500 score points and a standard deviation of 100 score points). This assessment is based on the following calculations: if the correlation between the propensity of exclusions and student performance is 0.3, resulting mean scores would likely be overestimated by 1 score point if the exclusion rate is 1%, by 3 score points if the exclusion rate is 5%, and by 6 score points if the exclusion rate is 10%. If the correlation between the propensity of exclusions and student performance is 0.5, resulting mean scores would be overestimated by 1 score point if the exclusion rate is 1%, by 5 score points if the exclusion rate is 5%, and by 10 score points if the exclusion rate is 10%. For this calculation, a model was used that assumes a bivariate normal distribution for performance and the propensity to participate. For details, see the *PISA 2015 Technical Report* (OECD, forthcoming).

Sampling procedures and response rates

The accuracy of any survey results depends on the quality of the information on which national samples are based as well as on the sampling procedures. Quality standards, procedures, instruments and verification mechanisms were developed for PISA that ensured that national samples yielded comparable data and that the results could be compared with confidence.

Most PISA samples were designed as two-stage stratified samples (where countries applied different sampling designs, these are documented in the *PISA 2015 Technical Report* [OECD, forthcoming]). The first stage consisted of sampling individual schools in which 15-year-old students could be enrolled. Schools were sampled systematically with probabilities proportional to size, the measure of size being a function of the estimated number of eligible (15-year-old) students enrolled. At least 150 schools were selected in each country (where this number existed), although the requirements for national analyses often required a somewhat larger sample. As the schools were sampled, replacement schools were simultaneously identified, in case a sampled school chose not to participate in PISA 2015.

In the case of Iceland, Luxembourg, Macao (China), Malta and Qatar, all schools and all eligible students within schools were included in the sample.

Experts from the PISA Consortium performed the sample selection process for most participating countries and monitored it closely in those countries that selected their own samples. The second stage of the selection process sampled students within sampled schools. Once schools were selected, a list of each sampled school's 15-year-old students was prepared. From this list, 42 students were then selected with equal probability (all 15-year-old students were selected if fewer than 42 were enrolled). The number of students to be sampled per school could deviate from 42, but could not be less than 20.

Data-quality standards in PISA required minimum participation rates for schools as well as for students. These standards were established to minimise the potential for response biases. In the case of countries meeting these standards, it was likely that any bias resulting from non-response would be negligible, i.e. typically smaller than the sampling error.

A minimum response rate of 85% was required for the schools initially selected. Where the initial response rate of schools was between 65% and 85%, however, an acceptable school-response rate could still be achieved through the use of replacement schools.

This procedure brought with it a risk of increased response bias. Participating countries were, therefore, encouraged to persuade as many of the schools in the original sample as possible to participate. Schools with a student participation rate between 25% and 50% were not regarded as participating schools, but data from these schools were included in the database and contributed to the various estimations. Data from schools with a student participation rate of less than 25% were excluded from the database.

PISA 2015 also required a minimum participation rate of 80% of students within participating schools. This minimum participation rate had to be met at the national level, not necessarily by each participating school. Follow-up sessions were required in schools in which too few students had participated in the original assessment sessions. Student participation rates were calculated over all original schools, and also over all schools, whether original sample or replacement schools, and from the participation of students in both the original assessment and any follow-up sessions. A student who participated in the original or follow-up cognitive sessions was regarded as a participant. Those who attended only the questionnaire session were included in the international database and contributed to the statistics presented in this publication if they provided at least a description of their father's or mother's occupation.

Table A2.3 shows the response rates for students and schools, before and after replacement.

- **Column 1** shows the weighted participation rate of schools before replacement. This is obtained by dividing Column 2 by Column 3.
- **Column 2** shows the weighted number of responding schools before school replacement (weighted by student enrolment).
- **Column 3** shows the weighted number of sampled schools before school replacement (including both responding and non-responding schools, weighted by student enrolment).
- **Column 4** shows the unweighted number of responding schools before school replacement.
- **Column 5** shows the unweighted number of responding and non-responding schools before school replacement.
- **Column 6** shows the weighted participation rate of schools after replacement. This is obtained by dividing Column 7 by Column 8.
- **Column 7** shows the weighted number of responding schools after school replacement (weighted by student enrolment).
- **Column 8** shows the weighted number of schools sampled after school replacement (including both responding and non-responding schools, weighted by student enrolment).
- **Column 9** shows the unweighted number of responding schools after school replacement.
- **Column 10** shows the unweighted number of responding and non-responding schools after school replacement.
- **Column 11** shows the weighted student participation rate after replacement. This is obtained by dividing Column 12 by Column 13.
- **Column 12** shows the weighted number of students assessed.
- **Column 13** shows the weighted number of students sampled (including both students who were assessed and students who were absent on the day of the assessment).
- **Column 14** shows the unweighted number of students assessed. Note that any students in schools with student-response rates of less than 50% were not included in these rates (both weighted and unweighted).
- **Column 15** shows the unweighted number of students sampled (including both students that were assessed and students who were absent on the day of the assessment). Note that any students in schools where fewer than half of the eligible students were assessed were not included in these rates (neither weighted nor unweighted).

Definition of schools

In some countries, subunits within schools were sampled instead of schools, and this may affect the estimation of the between-school variance components. In Austria, the Czech Republic, Germany, Hungary, Japan, Romania and Slovenia, schools with more than one study programme were split into the units delivering these programmes. In the Netherlands, for schools with both lower and upper secondary programmes, schools were split into units delivering each programme level. In the Flemish community of Belgium, in the case of multi-campus schools, implantations (campuses) were sampled, whereas in the French community, in the case of multi-campus schools, the larger administrative units were sampled. In Australia, for schools with more than one campus, the individual campuses were listed for sampling. In Argentina and Croatia, schools that had more than one campus had the locations listed for sampling. In Spain, the schools in the Basque region with multi-linguistic models were split into linguistic models for sampling. In Luxembourg, a school on the border with Germany was split according to the country in which the students resided. In addition, the International schools in Luxembourg were split into the students who were instructed in any of the three official languages, and those in the part of the schools that was excluded because no materials were available in the languages of instruction. The United Arab Emirates had schools split by curricula, and sometimes by gender, with other schools remaining whole. Because of reorganisation, some of Sweden's schools were split into parts, with each part having one principal. In Portugal, schools were reorganised into clusters, with teachers and the principal shared by all units in the school cluster.

[Part 1/1]

Table A2.3 Response rates

		Initial sample – before school replacement					Final sample – after school replacement					Final sample – students within schools after school replacement				
		Weighted school participation rate before replacement (%)	Weighted number of responding schools (weighted also by enrolment)	Weighted number of schools sampled (responding and non-responding) (weighted also by enrolment)	Number of responding schools (unweighted)	Number of responding and non-responding schools (unweighted)	Weighted school participation rate after replacement (%)	Weighted number of responding schools (weighted also by enrolment)	Weighted number of schools sampled (responding and non-responding) (weighted also by enrolment)	Number of responding schools (unweighted)	Number of responding and non-responding schools (unweighted)	Weighted student participation rate after replacement (%)	Number of students assessed (weighted)	Number of students sampled (assessed and absent) (weighted)	Number of students assessed (unweighted)	Number of students sampled (assessed and absent) (unweighted)
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
OECD	Australia	94	260 657	276 072	720	788	95	262 130	276 072	723	788	84	204 763	243 789	14 089	17 477
	Austria	100	81 690	81 730	269	273	100	81 690	81 730	269	273	87	63 660	73 521	7 007	9 868
	Belgium	83	98 786	118 915	244	301	95	113 435	118 936	286	301	91	99 760	110 075	9 635	10 602
	Canada	74	283 853	381 133	703	1 008	79	299 512	381 189	726	1 008	81	210 476	260 487	19 604	24 129
	Chile	92	215 139	232 756	207	232	99	230 749	232 757	226	232	93	189 206	202 774	7 039	7 515
	Czech Republic	98	86 354	87 999	339	344	98	86 354	87 999	339	344	89	73 386	82 672	6 835	7 693
	Denmark	90	57 803	63 897	327	371	92	58 837	63 931	331	371	89	49 732	55 830	7 149	8 184
	Estonia	100	11 142	11 154	206	207	100	11 142	11 154	206	207	93	10 088	10 822	5 587	5 994
	Finland	100	58 653	58 782	167	168	100	58 800	58 800	168	168	93	53 198	56 934	5 882	6 294
	France	91	679 984	749 284	232	255	94	706 838	749 284	241	255	88	611 563	693 336	5 980	6 783
	Germany	96	764 423	794 206	245	256	99	785 813	794 206	253	256	93	685 972	735 487	6 476	6 944
	Greece	92	95 030	103 031	190	212	98	101 653	103 218	209	212	94	89 588	94 986	5 511	5 838
	Hungary	93	83 897	89 808	231	251	99	88 751	89 825	244	251	92	77 212	83 657	5 643	6 101
	Iceland	99	4 114	4 163	122	129	99	4 114	4 163	122	129	86	3 365	3 908	3 365	3 908
	Ireland	99	61 023	61 461	167	169	99	61 023	61 461	167	169	89	51 947	58 630	5 741	6 478
	Israel	91	105 192	115 717	169	190	93	107 570	115 717	173	190	90	98 572	108 940	6 598	7 294
	Italy	74	383 933	516 113	414	532	88	451 098	515 515	464	532	88	377 011	430 041	11 477	12 841
	Japan	94	1 087 414	1 151 305	189	200	99	1 139 734	1 151 305	198	200	97	1 096 193	1 127 265	6 647	6 838
	Korea	100	612 937	615 107	168	169	100	612 937	615 107	168	169	99	559 121	567 284	5 581	5 664
	Latvia	86	14 122	16 334	231	269	93	15 103	16 324	248	269	90	12 799	14 155	4 845	5 368
	Luxembourg	100	5 891	5 891	44	44	100	5 891	5 891	44	44	96	5 299	5 540	5 299	5 540
	Mexico	95	1 311 608	1 373 919	269	284	98	1 339 901	1 373 919	275	284	95	1 290 435	1 352 237	7 568	7 938
	Netherlands	63	121 527	191 966	125	201	93	178 929	191 966	184	201	85	152 346	178 985	5 345	6 269
	New Zealand	71	40 623	56 875	145	210	85	48 094	56 913	176	210	80	36 860	45 897	4 453	5 547
	Norway	95	58 824	61 809	229	241	95	58 824	61 809	229	241	91	50 163	55 277	5 456	6 016
	Poland	88	314 288	355 158	151	170	99	352 754	355 158	168	170	88	300 617	343 405	4 466	5 108
	Portugal	86	87 756	102 193	213	254	95	97 516	102 537	238	254	82	75 391	91 916	7 180	8 732
	Slovak Republic	93	50 513	54 499	272	295	99	53 908	54 562	288	295	92	45 357	49 103	6 342	6 900
	Slovenia	98	16 886	17 286	332	349	98	16 896	17 286	333	349	92	15 072	16 424	6 406	7 009
	Spain	99	404 640	409 246	199	201	100	409 246	409 246	201	201	89	356 509	399 935	6 736	7 540
	Sweden	100	93 819	94 097	202	205	100	93 819	94 097	202	205	91	82 582	91 081	5 458	6 013
	Switzerland	93	75 482	81 026	212	232	98	79 481	81 375	225	232	92	74 465	80 544	5 838	6 305
	Turkey	97	1 057 318	1 091 317	175	195	99	1 081 935	1 091 528	187	195	95	874 609	918 816	5 895	6 211
	United Kingdom	84	591 757	707 415	506	598	93	654 992	707 415	547	598	89	517 426	581 252	14 120	16 123
	United States	67	2 601 386	3 902 089	142	213	83	3 244 399	3 893 828	177	213	90	2 629 707	2 929 771	5 712	6 376
Partners	Albania	100	43 809	43 919	229	230	100	43 809	43 919	229	230	94	38 174	40 814	5 213	5 555
	Algeria	96	341 463	355 216	159	166	96	341 463	355 216	159	166	92	274 121	296 434	5 494	5 934
	Argentina	89	508 448	572 941	212	238	97	556 478	572 941	231	238	90	345 508	382 352	6 311	7 016
	Brazil	93	2 509 198	2 692 686	806	889	94	2 533 711	2 693 137	815	889	87	1 996 574	2 286 505	22 791	26 586
	B-S-J-G (China)	88	1 259 845	1 437 201	248	268	100	1 437 652	1 437 652	268	268	97	1 287 710	1 331 794	9 841	10 097
	Bulgaria	100	56 265	56 483	179	180	100	56 600	56 600	180	180	95	50 931	53 685	5 928	6 240
	Colombia	99	664 664	673 817	364	375	100	672 526	673 835	371	375	95	535 682	566 734	11 777	12 611
	Costa Rica	99	66 485	67 073	204	206	99	66 485	67 073	204	206	92	47 494	51 369	6 846	7 411
	Croatia	100	34 575	34 652	160	162	100	34 575	34 652	160	162	91	37 275	40 803	5 809	6 354
	Cyprus*	97	8 830	9 126	122	132	97	8 830	9 126	122	132	94	8 016	8 526	5 561	5 957
	Dominican Republic	99	136 669	138 187	193	195	99	136 669	138 187	193	195	94	122 620	130 700	4 731	5 026
	FYROM	100	16 426	16 472	106	107	100	16 426	16 472	106	107	95	14 999	15 802	5 324	5 617
	Georgia	97	40 552	41 595	256	267	99	41 081	41 566	262	267	94	35 567	37 873	5 316	5 689
	Hong Kong (China)	75	45 603	60 716	115	153	90	54 795	60 715	138	153	93	48 222	51 806	5 359	5 747
	Indonesia	98	3 126 468	3 176 076	232	236	100	3 176 076	3 176 076	236	236	98	3 015 844	3 092 773	6 513	6 694
	Jordan	100	119 024	119 024	250	250	100	119 024	119 024	250	250	97	105 868	108 669	7 267	7 462
	Kazakhstan	100	202 701	202 701	232	232	100	202 701	202 701	232	232	97	187 683	192 921	7 841	8 059
	Kosovo	100	26 924	26 924	224	224	100	26 924	26 924	224	224	99	22 016	22 333	4 826	4 896
	Lebanon	67	40 542	60 882	208	308	87	53 091	60 797	270	308	95	36 052	38 143	4 546	4 788
	Lithuania	99	31 386	31 588	309	311	100	31 543	31 588	310	311	91	27 070	29 889	6 523	7 202
	Macao (China)	100	4 414	4 414	45	45	100	4 414	4 414	45	45	99	4 476	4 507	4 476	4 507
	Malaysia	51	229 340	446 237	147	230	98	437 424	446 100	224	230	97	393 785	407 396	8 843	9 097
	Malta	100	4 341	4 343	59	61	100	4 341	4 343	59	61	85	3 634	4 294	3 634	4 294
	Moldova	100	30 145	30 145	229	229	100	30 145	30 145	229	229	98	28 754	29 341	5 325	5 436
	Montenegro	100	7 301	7 312	64	65	100	7 301	7 312	64	65	94	6 346	6 766	5 665	6 043
	Peru	100	468 406	470 651	280	282	100	469 662	470 651	281	282	99	426 205	430 959	6 971	7 054
	Qatar	99	13 333	13 470	166	168	99	13 333	13 470	166	168	94	12 061	12 819	12 061	12 819
	Romania	99	171 553	172 652	181	182	100	172 495	172 495	182	182	99	162 918	164 216	4 876	4 910
	Russia	99	1 181 937	1 189 441	209	210	99	1 181 937	1 189 441	209	210	97	1 072 914	1 108 068	6 021	6 215
	Singapore	97	45 299	46 620	175	179	98	45 553	46 620	176	179	93	42 241	45 259	6 105	6 555
	Chinese Taipei	100	286 778	286 778	214	214	100	286 778	286 778	214	214	98	246 408	251 424	7 708	7 871
	Thailand	99	739 772	751 010	269	273	100	751 010	751 010	273	273	97	614 996	634 795	8 249	8 491
	Trinidad and Tobago	92	15 904	17 371	141	163	92	15 904	17 371	141	163	79	9 674	12 188	4 587	5 745
	Tunisia	99	121 751	122 767	162	165	99	121 838	122 792	163	165	86	97 337	112 665	5 340	6 175
	United Arab Emirates	99	49 310	50 060	473	477	99	49 310	50 060	473	477	95	43 774	46 263	14 167	15 014
	Uruguay	98	42 986	43 737	217	221	99	43 442	43 737	219	221	86	32 762	38 023	6 059	7 026
	Viet Nam	100	996 757	996 757	188	188	100	996 757	996 757	188	188	100	871 353	874 859	5 826	5 849

* See note at the beginning of this Annex.

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Grade levels

Students assessed in PISA 2015 are at various grade levels. The percentage of students at each grade level is presented by country in Table A2.4a and by gender within each country in Table A2.4b.

[Part 1/1]

Table A2.4a Percentage of students at each grade level

		All students											
		7th grade		8th grade		9th grade		10th grade		11th grade		12th grade and above	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	0.0	(0.0)	0.1	(0.0)	11.2	(0.3)	74.6	(0.4)	14.0	(0.4)	0.1	(0.0)
	Austria	0.0	(0.0)	2.0	(0.6)	20.8	(0.9)	71.2	(1.0)	5.9	(0.3)	0.0	(0.0)
	Belgium	0.6	(0.1)	6.4	(0.5)	30.7	(0.7)	61.0	(0.9)	1.3	(0.1)	0.0	(0.0)
	Canada	0.1	(0.0)	0.7	(0.1)	10.8	(0.5)	87.6	(0.6)	0.8	(0.1)	0.0	(0.0)
	Chile	1.7	(0.3)	4.1	(0.6)	24.0	(0.7)	68.1	(1.0)	2.1	(0.2)	0.0	(0.0)
	Czech Republic	0.5	(0.1)	3.9	(0.3)	49.4	(1.2)	46.2	(1.2)	0.0	(0.0)	0.0	c
	Denmark	0.2	(0.1)	16.4	(0.6)	81.9	(0.7)	1.4	(0.5)	0.0	c	0.0	c
	Estonia	0.8	(0.2)	21.3	(0.6)	76.6	(0.6)	1.3	(0.3)	0.0	c	0.0	(0.0)
	Finland	0.5	(0.1)	13.6	(0.4)	85.7	(0.4)	0.0	(0.0)	0.2	(0.1)	0.0	c
	France	0.0	(0.0)	1.0	(0.2)	23.1	(0.6)	72.5	(0.7)	3.2	(0.2)	0.1	(0.1)
	Germany	0.5	(0.1)	7.7	(0.4)	47.3	(0.8)	43.1	(0.8)	1.5	(0.5)	0.0	(0.0)
	Greece	0.2	(0.1)	0.7	(0.2)	3.8	(0.8)	95.3	(0.9)	0.0	c	0.0	c
	Hungary	1.7	(0.3)	8.5	(0.5)	75.8	(0.7)	14.0	(0.5)	0.0	c	0.0	c
	Iceland	0.0	c	0.0	c	0.0	c	100.0	c	0.0	c	0.0	c
	Ireland	0.0	(0.0)	1.8	(0.2)	60.6	(0.7)	26.5	(1.1)	11.1	(0.9)	0.0	c
	Israel	0.0	c	0.1	(0.0)	16.4	(0.9)	82.7	(0.9)	0.9	(0.3)	0.0	c
	Italy	0.1	(0.0)	1.0	(0.2)	15.2	(0.6)	77.2	(0.7)	6.6	(0.3)	0.0	c
	Japan	0.0	c	0.0	c	0.0	c	100.0	(0.0)	0.0	c	0.0	c
	Korea	0.0	c	0.0	c	9.1	(0.8)	90.4	(0.8)	0.5	(0.1)	0.0	c
	Latvia	0.9	(0.2)	11.7	(0.5)	84.4	(0.6)	2.9	(0.3)	0.0	(0.0)	0.0	c
	Luxembourg	0.3	(0.1)	7.9	(0.1)	50.9	(0.1)	40.3	(0.1)	0.6	(0.0)	0.0	c
	Mexico	2.3	(0.3)	4.8	(0.4)	31.9	(1.4)	60.3	(1.6)	0.5	(0.1)	0.2	(0.0)
	Netherlands	0.1	(0.0)	2.8	(0.3)	41.6	(0.6)	54.8	(0.6)	0.8	(0.2)	0.0	(0.0)
	New Zealand	0.0	c	0.0	c	0.0	(0.0)	6.2	(0.3)	88.8	(0.5)	5.0	(0.5)
	Norway	0.0	c	0.0	c	0.6	(0.1)	99.3	(0.2)	0.1	(0.1)	0.0	c
	Poland	0.6	(0.1)	4.9	(0.3)	93.8	(0.4)	0.6	(0.2)	0.0	c	0.0	c
	Portugal	3.2	(0.3)	8.4	(0.5)	22.9	(0.9)	65.1	(1.2)	0.4	(0.1)	0.0	c
	Slovak Republic	2.2	(0.4)	4.6	(0.4)	42.6	(1.3)	50.6	(1.2)	0.1	(0.0)	0.0	c
	Slovenia	0.0	c	0.3	(0.1)	4.8	(0.3)	94.6	(0.4)	0.3	(0.1)	0.0	c
	Spain	0.1	(0.0)	8.6	(0.5)	23.4	(0.6)	67.9	(0.9)	0.1	(0.1)	0.0	c
	Sweden	0.1	(0.1)	3.1	(0.4)	94.9	(0.8)	1.8	(0.7)	0.1	(0.1)	0.0	c
	Switzerland	0.5	(0.1)	11.8	(0.7)	61.3	(1.2)	25.9	(1.3)	0.5	(0.1)	0.0	(0.0)
	Turkey	0.6	(0.1)	2.6	(0.4)	20.7	(1.0)	72.9	(1.2)	3.0	(0.3)	0.1	(0.0)
	United Kingdom	0.0	c	0.0	c	0.0	c	1.6	(0.3)	97.4	(0.4)	1.0	(0.3)
	United States	0.0	(0.0)	0.5	(0.3)	9.6	(0.7)	72.4	(0.9)	17.3	(0.6)	0.1	(0.0)
Partners	Albania	0.2	(0.1)	1.0	(0.2)	35.8	(2.3)	61.7	(2.3)	1.2	(0.7)	0.0	(0.0)
	Algeria	18.8	(1.0)	23.5	(1.1)	35.1	(1.5)	19.4	(2.1)	3.2	(0.7)	0.0	c
	Brazil	3.5	(0.2)	6.4	(0.4)	12.5	(0.5)	35.9	(0.9)	39.2	(0.8)	2.5	(0.2)
	B-S-J-G (China)	1.1	(0.2)	9.2	(0.7)	52.7	(1.7)	34.6	(2.0)	2.2	(0.5)	0.1	(0.0)
	Bulgaria	0.5	(0.2)	3.0	(0.6)	92.2	(0.8)	4.3	(0.4)	0.0	c	0.0	c
	Colombia	5.3	(0.4)	12.3	(0.6)	22.7	(0.6)	40.2	(0.7)	19.5	(0.6)	0.0	c
	Costa Rica	6.2	(0.7)	14.0	(0.7)	33.0	(1.2)	46.5	(1.6)	0.2	(0.1)	0.1	(0.1)
	Croatia	0.0	c	0.2	(0.2)	79.2	(0.5)	20.6	(0.4)	0.0	c	0.0	c
	Cyprus*	0.0	c	0.3	(0.0)	5.8	(0.1)	93.1	(0.1)	0.7	(0.1)	0.0	c
	Dominican Republic	7.1	(0.8)	13.8	(1.2)	20.6	(0.8)	41.9	(1.1)	14.2	(0.7)	2.4	(0.3)
	FYROM	0.1	(0.1)	0.1	(0.1)	70.2	(0.2)	29.7	(0.2)	0.0	c	0.0	c
	Georgia	0.1	(0.0)	0.8	(0.2)	22.0	(0.8)	76.0	(0.9)	1.1	(0.3)	0.0	c
	Hong Kong (China)	1.1	(0.1)	5.6	(0.4)	26.0	(0.7)	66.7	(0.7)	0.6	(0.5)	0.0	c
	Indonesia	2.1	(0.3)	8.1	(0.7)	42.1	(1.5)	45.5	(1.6)	2.3	(0.4)	0.0	(0.0)
	Jordan	0.2	(0.1)	0.6	(0.1)	6.6	(0.4)	92.6	(0.4)	0.0	c	0.0	c
	Kosovo	0.0	(0.1)	0.6	(0.1)	24.9	(0.8)	72.4	(0.9)	2.1	(0.2)	0.0	c
	Lebanon	3.7	(0.5)	8.3	(0.8)	16.6	(1.1)	62.3	(1.4)	9.0	(0.8)	0.1	(0.1)
	Lithuania	0.1	(0.0)	2.6	(0.2)	86.3	(0.4)	11.0	(0.4)	0.0	(0.0)	0.0	c
	Macao (China)	2.9	(0.1)	12.2	(0.2)	29.7	(0.2)	54.5	(0.1)	0.6	(0.1)	0.0	c
	Malta	0.0	c	0.0	c	0.3	(0.1)	6.1	(0.2)	93.6	(0.1)	0.1	(0.0)
	Moldova	0.2	(0.1)	7.6	(0.5)	84.5	(0.8)	7.5	(0.8)	0.0	(0.0)	0.0	c
	Montenegro	0.0	c	0.0	c	83.7	(0.1)	16.3	(0.1)	0.0	c	0.0	c
	Peru	2.5	(0.3)	6.6	(0.4)	15.9	(0.5)	50.2	(0.8)	24.8	(0.8)	0.0	c
	Qatar	0.9	(0.1)	3.5	(0.1)	16.3	(0.1)	60.7	(0.1)	18.0	(0.1)	0.6	(0.0)
	Romania	1.4	(0.3)	8.9	(0.5)	74.8	(0.9)	14.9	(0.7)	0.0	c	0.0	c
	Russia	0.2	(0.1)	6.6	(0.3)	79.7	(1.5)	13.4	(1.5)	0.1	(0.0)	0.0	c
	Singapore	0.0	(0.0)	1.9	(0.3)	7.9	(0.8)	90.0	(1.0)	0.1	(0.0)	0.1	(0.0)
	Chinese Taipei	0.0	c	0.0	c	35.4	(0.7)	64.6	(0.7)	0.0	c	0.0	c
	Thailand	0.2	(0.1)	0.6	(0.2)	23.8	(1.0)	72.9	(1.0)	2.4	(0.4)	0.0	c
	Trinidad and Tobago	3.3	(0.2)	10.8	(0.3)	27.3	(0.3)	56.5	(0.3)	2.2	(0.2)	0.0	c
	Tunisia	4.3	(0.3)	10.6	(0.8)	19.6	(1.3)	60.9	(1.7)	4.6	(0.4)	0.0	c
	United Arab Emirates	0.6	(0.1)	2.5	(0.3)	10.6	(0.7)	53.4	(0.8)	31.4	(0.8)	1.5	(0.1)
	Uruguay	7.5	(0.6)	9.7	(0.5)	20.7	(0.7)	61.3	(1.2)	0.8	(0.1)	0.0	c
	Viet Nam	0.3	(0.1)	1.7	(0.4)	7.7	(1.8)	90.4	(2.2)	0.0	(0.0)	0.0	c
	Argentina**	1.6	(0.4)	9.7	(0.8)	27.4	(1.2)	58.5	(1.6)	2.8	(0.3)	0.0	c
	Kazakhstan**	0.1	(0.1)	2.7	(0.3)	60.4	(1.7)	36.2	(1.8)	0.6	(0.1)	0.0	c
	Malaysia**	0.0	c	0.0	c	3.2	(0.6)	96.4	(0.7)	0.4	(0.3)	0.0	c

* See note at the beginning of this Annex.
** Coverage is too small to ensure comparability (see Annex A4).
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[Part 1/1]

Table A2.4b Percentage of students at each grade level, by gender

		Boys												Girls											
		7th grade		8th grade		9th grade		10th grade		11th grade		12th grade and above		7th grade		8th grade		9th grade		10th grade		11th grade		12th grade and above	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	0.0	(0.0)	0.2	(0.1)	13.2	(0.4)	73.5	(0.5)	13.1	(0.5)	0.0	(0.0)	0.0	(0.0)	0.1	(0.0)	9.2	(0.3)	75.7	(0.5)	14.9	(0.6)	0.1	(0.1)
	Austria	0.1	(0.1)	2.0	(0.4)	21.6	(1.2)	71.1	(1.2)	5.2	(0.4)	0.0	(0.0)	0.0	c	2.0	(0.9)	20.0	(1.0)	71.4	(1.3)	6.6	(0.4)	0.0	(0.0)
	Belgium	0.7	(0.1)	6.7	(0.5)	33.6	(1.0)	57.9	(1.1)	1.2	(0.2)	0.0	c	0.6	(0.1)	6.2	(0.5)	27.7	(0.8)	64.2	(1.1)	1.3	(0.1)	0.0	(0.0)
	Canada	0.1	(0.1)	1.0	(0.2)	11.7	(0.6)	86.5	(0.6)	0.7	(0.1)	0.0	(0.0)	0.1	(0.0)	0.4	(0.1)	9.9	(0.6)	88.8	(0.6)	0.8	(0.1)	0.0	(0.0)
	Chile	2.2	(0.5)	4.8	(0.8)	26.4	(0.9)	64.8	(1.3)	1.8	(0.2)	0.1	(0.1)	1.2	(0.4)	3.5	(0.7)	21.5	(0.8)	71.4	(1.1)	2.4	(0.3)	0.0	c
	Czech Republic	0.6	(0.2)	5.5	(0.5)	52.3	(1.5)	41.5	(1.6)	0.0	(0.0)	0.0	c	0.4	(0.2)	2.2	(0.3)	46.2	(1.5)	51.2	(1.6)	0.0	c	0.0	c
	Denmark	0.3	(0.1)	21.9	(0.9)	76.6	(1.0)	1.2	(0.5)	0.0	c	0.0	c	0.1	(0.1)	10.8	(0.5)	87.3	(0.7)	1.7	(0.6)	0.0	c	0.0	c
	Estonia	1.3	(0.3)	23.7	(0.9)	74.2	(0.8)	0.8	(0.3)	0.0	c	0.0	(0.0)	0.2	(0.1)	18.8	(0.8)	79.1	(0.8)	1.9	(0.4)	0.0	c	0.0	c
	Finland	0.4	(0.1)	15.5	(0.6)	83.9	(0.6)	0.0	(0.0)	0.2	(0.1)	0.0	c	0.5	(0.1)	11.5	(0.5)	87.7	(0.5)	0.0	c	0.3	(0.2)	0.0	c
	France	0.0	c	1.0	(0.2)	26.1	(0.9)	69.6	(1.0)	3.1	(0.3)	0.2	(0.1)	0.1	(0.1)	1.0	(0.2)	20.1	(0.6)	75.4	(0.8)	3.3	(0.3)	0.1	(0.0)
	Germany	0.7	(0.2)	9.0	(0.5)	50.1	(1.0)	38.8	(1.0)	1.4	(0.4)	0.0	(0.0)	0.3	(0.1)	6.3	(0.6)	44.3	(0.9)	47.5	(1.0)	1.6	(0.6)	0.0	c
	Greece	0.4	(0.2)	1.1	(0.3)	4.7	(1.0)	93.8	(1.2)	0.0	c	0.0	c	0.1	(0.1)	0.2	(0.1)	2.8	(0.8)	96.9	(0.8)	0.0	c	0.0	c
	Hungary	1.8	(0.4)	10.1	(0.6)	75.6	(0.9)	12.5	(0.6)	0.0	c	0.0	c	1.6	(0.4)	6.9	(0.8)	76.0	(0.9)	15.5	(0.7)	0.0	c	0.0	c
	Iceland	0.0	c	0.0	c	0.0	c	100.0	c	0.0	c	0.0	c	0.0	c	0.0	c	0.0	c	100.0	c	0.0	c	0.0	c
	Ireland	0.0	c	2.2	(0.3)	62.8	(0.9)	24.1	(1.2)	10.9	(1.0)	0.0	c	0.0	(0.0)	1.4	(0.2)	58.2	(0.9)	29.0	(1.4)	11.3	(1.1)	0.0	c
	Israel	0.0	c	0.1	(0.1)	18.0	(1.2)	80.9	(1.3)	1.1	(0.6)	0.0	c	0.0	c	0.1	(0.0)	14.9	(0.8)	84.4	(0.8)	0.7	(0.1)	0.0	c
	Italy	0.2	(0.1)	1.3	(0.3)	18.1	(0.8)	75.0	(0.9)	5.4	(0.4)	0.0	c	0.1	(0.0)	0.7	(0.2)	12.2	(0.8)	79.3	(1.0)	7.7	(0.5)	0.0	c
	Japan	0.0	c	0.0	c	0.0	c	100.0	c	0.0	c	0.0	c	0.0	c	0.0	c	0.0	c	100.0	c	0.0	c	0.0	c
	Korea	0.0	c	0.0	c	10.1	(1.4)	89.4	(1.4)	0.5	(0.1)	0.0	c	0.0	c	0.0	c	8.0	(0.8)	91.5	(0.8)	0.5	(0.1)	0.0	c
	Latvia	1.5	(0.4)	14.7	(0.8)	81.8	(0.9)	1.9	(0.3)	0.0	(0.0)	0.0	c	0.4	(0.2)	8.7	(0.7)	87.0	(0.7)	3.9	(0.4)	0.0	c	0.0	c
	Luxembourg	0.2	(0.1)	9.4	(0.2)	52.4	(0.3)	37.3	(0.2)	0.7	(0.1)	0.0	c	0.3	(0.1)	6.4	(0.2)	49.4	(0.2)	43.3	(0.2)	0.6	(0.1)	0.0	c
	Mexico	3.1	(0.5)	5.9	(0.6)	32.2	(1.5)	58.0	(1.6)	0.6	(0.2)	0.2	(0.0)	1.5	(0.3)	3.7	(0.4)	31.6	(1.7)	62.5	(1.7)	0.4	(0.1)	0.2	(0.1)
	Netherlands	0.0	(0.0)	3.8	(0.4)	45.3	(0.8)	50.2	(0.8)	0.8	(0.3)	0.0	c	0.1	(0.0)	1.9	(0.3)	38.0	(0.7)	59.3	(0.7)	0.7	(0.2)	0.0	(0.0)
	New Zealand	0.0	c	0.0	c	0.0	c	6.9	(0.5)	88.6	(0.8)	4.5	(0.5)	0.0	c	0.0	c	0.0	(0.0)	5.4	(0.4)	89.1	(0.6)	5.5	(0.6)
	Norway	0.0	c	0.0	c	0.8	(0.2)	99.1	(0.2)	0.1	(0.1)	0.0	c	0.0	c	0.0	c	0.3	(0.1)	99.6	(0.1)	0.1	(0.1)	0.0	c
	Poland	0.9	(0.2)	6.8	(0.5)	92.1	(0.6)	0.2	(0.2)	0.0	c	0.0	c	0.4	(0.1)	3.0	(0.3)	95.6	(0.5)	1.1	(0.3)	0.0	c	0.0	c
	Portugal	4.2	(0.4)	10.5	(0.7)	25.4	(1.0)	59.6	(1.4)	0.3	(0.1)	0.0	c	2.1	(0.4)	6.4	(0.5)	20.5	(0.9)	70.5	(1.2)	0.5	(0.1)	0.0	c
	Slovak Republic	2.4	(0.4)	4.8	(0.5)	43.5	(1.6)	49.4	(1.8)	0.0	c	0.0	c	1.9	(0.5)	4.3	(0.6)	41.7	(1.8)	51.9	(1.8)	0.1	(0.1)	0.0	c
	Slovenia	0.0	c	0.5	(0.2)	5.4	(0.7)	93.9	(0.7)	0.2	(0.1)	0.0	c	0.0	c	0.2	(0.1)	4.1	(0.6)	95.3	(0.6)	0.4	(0.2)	0.0	c
	Spain	0.1	(0.1)	10.7	(0.7)	25.4	(0.8)	63.7	(1.1)	0.1	(0.1)	0.0	c	0.0	c	6.5	(0.5)	21.3	(0.8)	72.1	(1.0)	0.1	(0.1)	0.0	c
	Sweden	0.1	(0.1)	3.5	(0.5)	95.0	(0.9)	1.4	(0.7)	0.1	(0.1)	0.0	c	0.2	(0.1)	2.6	(0.4)	94.9	(1.0)	2.3	(0.9)	0.1	(0.1)	0.0	c
	Switzerland	0.7	(0.2)	13.4	(0.8)	60.7	(1.1)	24.7	(1.2)	0.5	(0.1)	0.0	c	0.3	(0.1)	10.1	(0.8)	62.0	(1.7)	27.2	(1.9)	0.5	(0.2)	0.0	(0.0)
	Turkey	0.8	(0.3)	3.1	(0.6)	25.4	(1.2)	68.4	(1.6)	2.2	(0.4)	0.1	(0.1)	0.4	(0.2)	2.1	(0.4)	16.1	(1.1)	77.5	(1.3)	3.8	(0.4)	0.1	(0.0)
	United Kingdom	0.0	c	0.0	c	0.0	c	1.9	(0.5)	97.3	(0.6)	0.9	(0.3)	0.0	c	0.0	c	0.0	c	1.4	(0.2)	97.5	(0.3)	1.1	(0.3)
	United States	0.0	c	0.5	(0.4)	11.6	(0.8)	72.4	(1.0)	15.3	(0.7)	0.2	(0.1)	0.1	(0.1)	0.5	(0.2)	7.6	(0.6)	72.4	(0.9)	19.4	(0.7)	0.1	(0.0)
Partners	Albania	0.2	(0.2)	0.9	(0.2)	41.2	(2.7)	56.3	(2.6)	1.3	(0.9)	0.0	(0.0)	0.1	(0.1)	1.1	(0.3)	30.4	(2.1)	67.1	(2.2)	1.2	(0.5)	0.1	(0.0)
	Algeria	24.4	(1.3)	25.7	(1.2)	32.6	(1.5)	14.7	(1.9)	2.6	(0.7)	0.0	c	12.6	(1.1)	21.0	(1.2)	37.9	(2.0)	24.6	(2.5)	3.9	(0.8)	0.0	c
	Brazil	4.6	(0.3)	7.8	(0.6)	13.9	(0.6)	36.5	(1.0)	35.3	(0.9)	1.8	(0.2)	2.4	(0.2)	5.0	(0.4)	11.1	(0.6)	35.3	(0.9)	43.0	(0.9)	3.1	(0.2)
	B-S-J-G (China)	1.2	(0.2)	9.9	(0.7)	55.4	(1.7)	31.6	(1.9)	1.9	(0.5)	0.1	(0.0)	1.1	(0.2)	8.4	(0.8)	49.6	(1.8)	38.1	(2.2)	2.6	(0.5)	0.1	(0.1)
	Bulgaria	0.6	(0.2)	4.1	(0.8)	91.8	(1.0)	3.5	(0.4)	0.0	c	0.0	c	0.4	(0.2)	1.8	(0.4)	92.7	(0.7)	5.2	(0.4)	0.0	c	0.0	c
	Colombia	7.2	(0.6)	14.3	(0.8)	25.2	(0.8)	37.1	(0.9)	16.2	(0.8)	0.0	c	3.6	(0.4)	10.5	(0.7)	20.5	(0.9)	42.9	(1.0)	22.5	(0.8)	0.0	c
	Costa Rica	7.8	(0.8)	16.7	(0.8)	34.3	(1.2)	41.2	(1.5)	0.1	(0.0)	0.0	c	4.7	(0.7)	11.4	(0.7)	31.8	(1.4)	51.6	(1.8)	0.3	(0.1)	0.2	(0.1)
	Croatia	0.0	c	0.2	(0.1)	80.5	(0.5)	19.4	(0.5)	0.0	c	0.0	c	0.0	c	0.3	(0.2)	78.0	(0.7)	21.7	(0.7)	0.0	c	0.0	c
	Cyprus*	0.0	c	0.3	(0.1)	6.6	(0.2)	92.4	(0.2)	0.6	(0.1)	0.0	c	0.0	c	0.3	(0.1)	5.1	(0.2)	93.8	(0.2)	0.8	(0.1)	0.0	c
	Dominican Republic	10.3	(1.1)	16.4	(1.5)	23.3	(1.2)	37.2	(1.4)	11.1	(0.8)	1.7	(0.3)	4.0	(0.6)	11.2	(1.1)	18.1	(0.8)	46.5	(1.1)	17.2	(0.8)	3.0	(0.3)
	FYROM	0.2	(0.2)	0.2	(0.2)	70.9	(0.3)	28.8	(0.2)	0.0	c	0.0	c	0.0	c	0.0	c	69.4	(0.3)	30.6	(0.3)	0.0	c	0.0	c
	Georgia	0.1	(0.0)	0.9	(0.2)	23.0	(1.0)	75.2	(1.0)	0.8	(0.2)	0.0	c	0.1	(0.1)	0.7	(0.2)	20.9	(0.9)	76.8	(1.0)	1.5	(0.4)	0.0	c
	Hong Kong (China)	1.3	(0.2)	6.4	(0.5)	28.5	(0.8)	63.3	(0.9)	0.5	(0.4)	0.0	c	1.0	(0.2)	4.7	(0.4)	23.5	(0.8)	70.2	(0.9)	0.6	(0.6)	0.0	c
	Indonesia	2.5	(0.4)	8.9	(0.9)	44.3	(1.9)	42.1	(2.0)	2.1	(0.4)	0.0	(0.0)	1.7	(0.3)	7.2	(1.0)	39.8	(1.9)	48.9	(2.1)	2.4	(0.4)	0.0	c
	Jordan	0.1	(0.1)	0.5	(0.1)	6.6	(0.7)	92.9	(0.7)	0.0	c	0.0	c	0.2	(0.1)	0.7	(0.1)	6.6	(0.6)	92.4	(0.6)	0.0	c	0.0	c
	Kosovo	0.1	(0.1)	0.5	(0.1)	26.4	(0.9)	71.5	(1.0)	1.6	(0.3)	0.0	c	0.0	c	0.7	(0.2)	23.5	(1.0)	73.3	(1.0)	2.5	(0.3)	0.0	c
	Lebanon	4.0	(0.6)	8.2	(0.9)	17.2	(1.4)	63.5	(1.7)	6.9	(0.7)	0.2	(0.1)	3.4	(0.6)	8.3	(1.0)	16.1	(1.2)	61.2	(1.8)	10.8	(1.2)	0.1	(0.1)
	Lithuania	0.2	(0.1)	3.5	(0.3)	87.4	(0.6)	8.8	(0.5)	0.0	(0.0)	0.0	c	0.0	(0.0)	1.7	(0.2)	85.1	(0.7)	13.1	(0.6)	0.0	(0.0)	0.0	c
	Macao (China)	4.3	(0.2)	16.4	(0.3)	30.8	(0.2)	48.2	(0.2)	0.4	(0.1)	0.0	c	1.6	(0.2)	8.0	(0.2)	28.7	(0.3)	60.8	(0.3)	0.9	(0.2)	0.0	c
	Malta	0.0	c	0.0	c	0.5	(0.1)	6.8	(0.3)	92.7	(0.2)	0.0	c	0.0	c	0.0	c	0.1	(0.0)	5.4	(0.2)	94.4	(0.2)	0.1	(0.1)
	Moldova	0.3	(0.1)	8.2	(0.7)	86.3	(0.9)	5.0	(0.9)	0.1	(0.1)	0.0	c	0.2	(0.1)	7.0	(0.6)	82.8	(1.2)	10.1	(1.2)	0.0	c	0.0	c
	Montenegro	0.0	c	0.0	c	85.2	(0.2)	14.8	(0.2)	0.0	c	0.0	c	0.0	c	0.0	c	82.2	(0.2)	17.8	(0.2)	0.0	c	0.0	c
	Peru	3.0	(0.5)	7.5	(0.5)	17.9	(0.7)	48.7	(0.9)	22.9	(1.0)	0.0	c	1.9	(0.3)	5.6	(0.5)	14.0	(0.6)	51.7	(1.0)	26.8	(0.9)	0.0	c
	Qatar	0.8	(0.1)	3.6	(0.1)	18.0	(0.2)	59.3	(0.2)	17.6	(0.2)	0.6	(0.1)	1.0	(0.1)	3.4	(0.1)	14.5	(0.1)	62.1	(0.2)	18.4	(0.2)	0.6	(0.1)
	Romania	1.7	(0.4)	10.7	(0.8)	74.3	(1.0)	13.3	(0.7)	0.0	c	0.0	c	1.1	(0.4)	7.2	(0.8)	75.3	(1.1)	16.4	(0.8)	0.0	c	0.0	c
	Russia	0.2	(0.1)	7.2	(0.5)	80.1	(1.7)	12.4	(1.7)	0.0	(0.0)	0.0	c	0.1	(0.1)	6.0	(0.4)	79.3	(1.5)	14.4	(1.6)	0.1	(0.1)	0.0	c
	Singapore	0.1	(0.0)	1.8	(0.3)	8.9	(0.9)	89.1	(1.1)	0.1	(0.1)	0.0	(0.0)	0.0	(0.0)	2.0	(0.4)	6.9	(0.8)	90.8	(1.1)	0.2	(0.1)	0.1	(0.0)
	Chinese Taipei	0.0	c	0.0	c	36.5	(1.3)	63.5	(1.3)	0.0	c	0.0	c	0.0	c	0.0	c	34.3	(1.3)	65.7	(1.3)	0.0	c	0.0	c
	Thailand	0.2	(0.1)	0.8	(0.3)	25.4	(1.2)	71.4	(1.2)	2.3	(0.4)	0.0	c	0.3	(0.1)	0.5	(0.2)	22.5	(1.3)	74.1	(1.3)	2.6	(0.4)	0.0	c
	Trinidad and Tobago	3.7	(0.3)	14.2	(0.5)	30.8	(0.5)	48.9	(0.5)	2.4	(0.2)	0.0	c	2.8	(0.2)	7.5	(0.4)	23.8	(0.4)	63.9	(0.5)	2.0	(0.3)	0.0	c
	Tunisia	5.9	(0.5)	13.8	(1.0)	22.0	(1.4)	54.0	(1.9)	4.3	(0.5)	0.0	c	3.0	(0.3)	7.8	(0.7)	17.5	(1.4)	67.0	(1.8)	4.8	(0.5)	0.0	c
	United Arab Emirates	0.7	(0.1)	2.9	(0.4)	11.4	(1.1)	54.0	(1.3)	29.6	(1.0)	1.4	(0.2)	0.4	(0.1)	2.2	(0.5)	9.9	(0.9)	52.8	(0.9)	33.1	(1.1)	1.6	(0.2)
	Uruguay	9.2	(0.8)	11.2	(0.7)	22.5	(0.9)	56.5	(1.5)	0.5	(0.1)	0.0	c	6.0	(0.7)	8.3	(0.6)	19.0	(0.8)	65.6	(1.1)	1.1	(0.2)	0.0	c
	Viet Nam	0.5	(0.2)	2.3	(0.6)	11.1	(2.6)	86.1	(3.2)	0.0	c	0.0	c	0.1	(0.0)	1.1	(0.4)	4.6	(1.2)	94.2	(1.4)	0.0	(0.0)	0.0	c
	Argentina**	2.3	(0.6)	11.5	(0.9)	27.8	(1.3)	56.0	(1.8)	2.4	(0.3)	0.0	c	1.0	(0.3)	8.1	(0.9)	26.9	(1.4)	60.8	(1.7)	3.2	(0.3)	0.0	c
	Kazakhstan**	0.1	(0.1)	3.1	(0.4)	62.8	(2.3)	33.5	(2.4)	0.5	(0.1)	0.0	c	0.1	(0.1)	2.3	(0.3)	57.8	(1.7)	39.0	(1.8)	0.7	(0.1)	0.0	c
	Malaysia**	0.0	c	0.0	c	4.2	(0.8)	95.4	(0.9)	0.4	(0.3)	0.0	c	0.0	c	0.0	c	2.3	(0.5)	97.2	(0.6)	0.4	(0.4)	0.0	c

* See note at the beginning of this Annex.
** Coverage is too small to ensure comparability (see Annex A4).
StatLink http://dx.doi.org/10.1787/888933433129

Sample for the financial literacy option

Out of the 72 countries and economies that participated in PISA 2015, 15 also conducted the optional (computer-based) financial literacy assessment. Within these countries and economies, a subsample of the PISA sample was also tested in financial literacy, in addition to mathematics, reading and science. Students who were assessed using the following booklets were also assessed in financial literacy:

- Booklets C31, C33, C39 and C42 (science and reading),
- Booklets C43, C45, C51 and C54 (science and mathematics),
- Booklets C55-C66 (science, mathematics and reading).

Financial literacy was tested on computers as none of the countries or economies participating in the financial literacy option chose a paper-based assessment.

Table A2.5 reports data about the subsample of students assessed in financial literacy.

- **Column 1** shows the unweighted number of students in countries and economies participating in the financial literacy assessment.
- **Column 2** shows the weighted number of students in countries and economies participating in the financial literacy assessment, i.e. the number of students in the nationally defined target population that the PISA financial literacy sample represents.
- **Column 3** shows the unweighted number of students subsampled in the financial literacy assessment.
- **Column 4** shows the weighted number of students subsampled in the financial literacy assessment.

[Part 1/1]

Table A2.5 PISA financial literacy sample

		Financial literacy assessment			
		Number of participating students	Weighted number of participating students	Number of students subsampled for financial literacy	Weighted number of students subsampled for financial literacy
		(1)	(2)	(3)	(4)
OECD	Australia	14 530	256 329	14 530	256 329
	Belgium (Flemish)	5 675	62 986	1 433	15 783
	Canadian provinces	13 082	213 562	3 409	55 936
	Chile	7 053	203 782	1 809	51 991
	Italy	11 583	495 093	3 034	131 053
	Netherlands	5 385	191 817	1 365	48 874
	Poland	4 478	345 709	1 739	134 602
	Slovak Republic	6 350	49 654	1 629	12 611
	Spain	6 736	399 935	1 750	104 119
	United States	5 712	3 524 497	1 486	917 275
Partners	Brazil	23 141	2 425 961	6 078	637 918
	B-S-J-G (China)	9 841	1 331 794	2 555	344 508
	Lithuania	6 525	29 915	1 720	7 898
	Peru	6 971	431 738	1 804	111 917
	Russia	6 036	1 120 932	1 558	289 793

Note: For a full explanation of the details in this table please refer to the *PISA 2015 Technical Report* (OECD, forthcoming).
StatLink http://dx.doi.org/10.1787/888933486286

Population modelling for the results of the PISA 2015 financial literacy assessment

PISA uses plausible values drawn from a posteriori distribution by combining the IRT scaling of the test items with a latent regression model, using information from the student questionnaire in a population model. In the latent regression model, the distribution of the proficiency variable is assumed to depend not only on the responses to the cognitive item but also on a number of predictors, which are variables obtained from the background questionnaire. Because the latent regression of PISA is applied to multiple domains (mathematics, science, reading, collaborative problem solving and financial literacy), the population modelling is expanded to the multivariate distribution. This multivariate model comes with a substantial correlation (0.8-0.9) among the cognitive domains, further enhancing the accuracy of the plausible values beyond a univariate latent regression model. As a result, it is possible to calculate unbiased plausible values for all domains, even in the absence of responses to a set of items from a particular domain, as long as responses to other domains are present. See the *PISA 2015 Technical Report* (OECD, forthcoming) for more details.

About one-third of students from the countries and economies participating in the financial literacy assessment received financial literacy cognitive booklets – as indicated above – along with a specific "money management questionnaire"; the remaining two-thirds of students did not respond to either the cognitive financial literacy questions or the questionnaire about

money. For each country and economy, a population model was constructed based on the 33% of students who received the financial literacy instruments. This population model included all cognitive responses including other domains and responses to the background questionnaire. In order to calculate financial literacy plausible values for the other 67% of students, a separate, reduced population model was calculated. The reduced population model excluded the financial literacy cognitive items and responses to the money management questionnaire, since these students did not receive or respond to these items, and including them would have introduced bias in the estimate of the plausible values. Aggregating financial literacy plausible values from the 33% and from the 67% of students gives the best estimate of the distribution of financial literacy proficiency in each country/economy.

Basque region sample in the financial literacy option

The small sample size of the Basque regional data made it impossible to estimate a distinct population model for the Basque region that would account for regional specificities. Such specificities imply that by borrowing population parameters from the national sample, bias may be introduced in the distribution of performance of students who were not assigned to financial literacy instruments. Therefore, it was decided to remove from the database the 2 678 students who were not tested in financial literacy.

In the case of the Basque regional dataset, the 934 students who were assigned to financial literacy instruments should be taken to represent the entire defined target population for the region, which includes 17 424 students. Weights in the dataset have not been modified, as the estimation of most population statistics and their uncertainty depends only on the relative weight given to each observation. Weights may nevertheless need to be rescaled (multiplied by 17 424/4 432) for certain statistics that also depend on the absolute size of weights.

Tables available online

Table A2.1 Regions PISA target populations and samples, by adjudicated regions
(http://dx.doi.org/10.1787/888933433129)

Table A2.2 Regions Exclusions, by adjudicated regions
(http://dx.doi.org/10.1787/888933433129)

Table A2.3 Regions Response rates, by adjudicated regions
(http://dx.doi.org/10.1787/888933433129)

Table A2.4a Regions Percentage of students at each grade level, by adjudicated regions
(http://dx.doi.org/10.1787/888933433129)

Table A2.4b Regions Percentage of students at each grade level, by gender and adjudicated regions
(http://dx.doi.org/10.1787/888933433129)

Table A2.5 Regions PISA financial literacy sample, by adjudicated regions
(http://dx.doi.org/10.1787/888933486291)

References

OECD (forthcoming), *PISA 2015 Technical Report,* PISA, OECD Publishing, Paris.

ANNEX A3
TECHNICAL NOTES ON ANALYSES IN THIS VOLUME

Methods and definitions

Relative risk

The relative risk is a measure of the association between an antecedent factor and an outcome factor. The relative risk is simply the ratio of two risks, i.e. the risk of observing the outcome when the antecedent is present and the risk of observing the outcome when the antecedent is not present. Figure A3.1 presents the notation that is used in the following.

Figure A3.1 ▪ **Labels used in a two-way table**

p_{11}	p_{12}	$p_{1.}$
p_{21}	p_{22}	$p_{2.}$
$p_{.1}$	$p_{.2}$	

p_{ij} represents the probabilities for each cell and is equal to the number of observations in a particular cell divided by the total number of observations. $p_{i.}$, $p_{.j}$ respectively represent the marginal probabilities for each row and for each column. The marginal probabilities are equal to the marginal frequencies divided by the total number of students.

Assuming that rows represent the antecedent factor, with the first row for "having the antecedent" and the second row for "not having the antecedent", and that the columns represent the outcome: the first column for "having the outcome" and the second column for "not having the outcome". The relative risk is then equal to:

$$RR = \frac{(p_{11}/p_{1.})}{(p_{21}/p_{2.})}$$

Odds ratio

The same notation can be used to define the odds ratio, another measure of the relative likelihood of a particular outcome across two groups. The odds ratio for observing the outcome when an antecedent is present is simply

$$OR = \frac{(p_{11}/p_{12})}{(p_{21}/p_{22})}$$

where p_{11}/p_{12} represents the "odds" of observing the outcome when the antecedent is present, and p_{21}/p_{22} represents the "odds" of observing the outcome when the antecedent is not present.

Logistic regression can be used to estimate the log ratio: the exponentiated logit coefficient for a binary variable is equivalent to the odds ratio. A "generalised" odds ratio, after accounting for other differences across groups, can be estimated by introducing control variables in the logistic regression.

Effect sizes

Sometimes it is useful to compare differences in an index between groups, such as boys and girls, across countries. A problem that may occur in such instances is that the distribution of the index varies across groups or countries. One way to resolve this is to calculate an effect size that accounts for differences in the distributions.

In accordance with common practices, effect sizes of less than 0.20 are considererd as small, effect sizes on the order of 0.50 as medium, and effect sizes greater than 0.80 as large.

A standardised difference is obtained by dividing the raw difference between two groups, such as boys and girls, by a measure of the variation in the underlying data. In this volume, the pooled standard deviation was used to standardise differences. The effect size between two subgroups is calculated as:

$$\frac{m_1 - m_2}{\sqrt{\sigma^2}}, \text{ i.e.}$$

m_1 and m_2, respectively, represent the mean values for the subgroups 1 and 2. σ^2 represents the overall (between and within-group) variance.

Standard errors and significance tests

The statistics in this report represent estimates of national performance based on samples of students, rather than values that could be calculated if every student in every country had answered every question. Consequently, it is important to measure the degree of uncertainty of the estimates. In PISA, each estimate has an associated degree of uncertainty, which is expressed through a standard error. The use of confidence intervals provides a way to make inferences about the population means and proportions in a manner that reflects the uncertainty associated with the sample estimates. From an observed sample statistic and assuming a normal distribution, it can be inferred that the corresponding population result would lie within the confidence interval in 95 out of 100 replications of the measurement on different samples drawn from the same population.

In many cases, readers are primarily interested in whether a given value in a particular country is different from a second value in the same or another country, e.g. whether girls in a country perform better than boys in the same country. In the tables and charts used in this report, differences are labelled as statistically significant when a difference of that size, smaller or larger, would be observed less than 5% of the time, if there were actually no difference in corresponding population values. Similarly, the risk of reporting an assoiciation as significant if there is, in fact, no correlation between two measures, is contained at 5%.

Throughout the report, significance tests were undertaken to assess the statistical significance of the comparisons made.

Gender differences and differences between subgroup means

Gender differences in student performance or other indices were tested for statistical significance. Positive differences indicate higher scores for boys while negative differences indicate higher scores for girls. Generally, differences marked in bold in the tables in this volume are statistically significant at the 95% confidence level.

Similarly, differences between other groups of students (e.g. non-immigrant students and students with an immigrant background, or socio-economically advantaged and disadvantaged students) were tested for statistical significance. The definitions of the subgroups can, in general, be found in the tables and the text accompanying the analysis. All differences marked in bold in the tables presented in Annex B of this report are statistically significant at the 95% level.

Differences between subgroup means, after accounting for other variables

For many tables, subgroup comparisons were performed both on the observed difference ("before accounting for other variables") and after accounting for other variables, such as the PISA index of economic, social and cultural status of students. The adjusted differences were estimated using linear regression and tested for significance at the 95% confidence level. Significant differences are marked in bold.

Performance differences between the top and bottom quartiles of PISA indices and scales

Differences in average performance between the top and bottom quarters of the PISA indices and scales were tested for statistical significance. Figures marked in bold indicate that performance between the top and bottom quarters of students on the respective index is statistically significantly different at the 95% confidence level.

Change in the performance per unit of the index

For many tables, the difference in student performance per unit on the index shown was calculated. Figures in bold indicate that the differences are statistically significantly different from zero at the 95% confidence level.

Relative risk and odds ratio

Figures in bold in the data tables presented in Annex B of this report indicate that the relative risk/odds ratio is statistically significantly different from 1 at the 95% confidence level. To compute statistical significance around the value of 1 (the null hypothesis), the relative-risk/odds-ratio statistic is assumed to follow a log-normal distribution, rather than a normal distribution, under the null hypothesis.

For many tables, "generalised" relative risks and odds ratios (after accounting for other variables) are also presented. These odds ratios were estimated using logistic regression and tested for significance against the null hypothesis of an odds ratio equal to 1 (i.e. equal likelihoods, after accounting for other variables). The relative risks were estimated using multinomial logistic regression and tested for significance against the null hypothesis of an odds ratio equal to 1 (i.e. equal likelihoods, after accounting for other variables).

Range of ranks

To calculate the range of ranks for countries, data are simulated using the mean and standard error of the mean for each relevant country to generate a distribution of possible values. Some 10 000 simulations are implemented and, based on these values, 10 000 possible rankings for each country are produced. For each country, the counts for each rank are aggregated from largest to smallest until they equal 9 500 or more. Then the range of ranks per country is reported, including all the ranks that have been aggregated. This means that there is at least 95% confidence about the range of ranks, and it is safe to assume unimodality in this distribution of ranks. This method has been used in all cycles of PISA since 2003, including PISA 2015.

The main difference between counting the number of countries whose performance is significantly higher (Figure IV.3.2) and the upper rank estimated in Figure IV.3.3 is that the former is based on pairwise comparisons of countries/economies, while the latter takes into account the multiple comparisons involved in computing a rank. Therefore, sometimes there is a slight difference between the range of ranks and counting the number of countries above a given country, based on pairwise comparisons of the selected countries' performance. For instance, the Netherlands and the Russian Federation have similar mean performance, based on Figure IV.3.3; but the rank for the Russian Federation can be restricted, with 95% confidence, to be between 4th and 5th, while the range of ranks for the Netherlands is slightly wider (between 4th and 6th) (Figure IV.3.3). Since the rank estimates for each country and economy provide a more nuanced interpretation of the rank positions than comparisons across countries, the results presented in Figure IV.3.3 should preferably be used when examining countries' and economies' rankings.

Standard errors in trend analyses of performance: link error

Standard errors for comparisons of performance across time account for the uncertainty in the equating procedure that allows scores in different PISA assessments to be expressed on the same scale. This additional source of uncertainty results in more conservative standard errors (larger than standard errors that were estimated before the introduction of this link error) (see Annex A5 for a technical discussion of the link error).

Figures in bold in the data tables for performance trends or changes presented in Annex B of this report indicate that the the change in performance for that particular group is statistically significantly different from 0 at the 95% confidence level. The standard errors used to calculate the statistical significance of the reported performance trend or change include the link error.

ANNEX A4
QUALITY ASSURANCE

Quality assurance procedures were implemented in all parts of PISA 2015, as was done for all previous PISA surveys. The PISA 2015 Technical Standards (www.oecd.org/pisa/) specify the way in which PISA must be implemented in each country, economy and adjudicated region. International contractors monitor the implementation in each of these and adjudicate on their adherence to the standards.

The consistent quality and linguistic equivalence of the PISA 2015 assessment instruments were facilitated by assessing the ease with which the original English version could be translated. Two source versions of the assessment instruments, in English and French were prepared (except for the financial literacy assessment and the operational manuals, which were provided only in English) in order for countries to conduct a double translation design, i.e. two independent translations from the source language(s), and reconciliation by a third person. Detailed instructions for the localisation (adaptation, translation and validation) of the instruments for the field trial and for their review for the main survey, and translation/adaptation guidelines were supplied. An independent team of expert verifiers, appointed and trained by the PISA Consortium, verified each national version against the English and/or French source versions. These translators' mother tongue was the language of instruction in the country concerned, and the translators were knowledgeable about education systems. For further information on PISA translation procedures, see the *PISA 2015 Technical Report* (OECD, forthcoming).

The survey was implemented through standardised procedures. The PISA Consortium provided comprehensive manuals that explained the implementation of the survey, including precise instructions for the work of school co-ordinators and scripts for test administrators to use during the assessment sessions. Proposed adaptations to survey procedures, or proposed modifications to the assessment session script, were submitted to the PISA Consortium for approval prior to verification. The PISA Consortium then verified the national translation and adaptation of these manuals.

To establish the credibility of PISA as valid and unbiased and to encourage uniformity in administering the assessment sessions, test administrators in participating countries were selected using the following criteria: it was required that the test administrator not be the science, reading or mathematics instructor of any students in the sessions he or she would conduct for PISA; and it was considered preferable that the test administrator not be a member of the staff of any school in the PISA sample. Participating countries organised an in-person training session for test administrators.

Participating countries and economies were required to ensure that test administrators worked with the school co-ordinator to prepare the assessment session, including reviewing and updating the Student Tracking Form; completing the Session Attendance Form, which is designed to record students' attendance and instruments allocation; completing the Session Report Form, which is designed to summarise session times, any disturbance to the session, etc.; ensuring that the number of test booklets and questionnaires collected from students tallied with the number sent to the school (paper-based assessment countries) or ensuring that the number of USB sticks used for the assessment were accounted for (computer-based assessment countries); and sending the school questionnaire, student questionnaires, parent and teacher questionnaires (if applicable), and all test materials (both completed and not completed) to the national centre after the testing.

The PISA Consortium responsible for overseeing survey operations implemented all phases of the PISA Quality Monitor (PQM) process: interviewing and hiring PQM candidates in each of the countries, organising their training, selecting the schools to visit, and collecting information from the PQM visits. PISA Quality Monitors are independent contractors located in participating countries who are hired by the international survey operations contractor. They visit a sample of schools to observe test administration and to record the implementation of the documented field-operations procedures in the main survey.

Typically, two or three PQMs were hired for each country, and they visited an average of 15 schools in each country. If there were adjudicated regions in a country, it was usually necessary to hire additional PQMs, as a minimum of five schools were observed in adjudicated regions.

All quality-assurance data collected throughout the PISA 2015 assessment were entered and collated in a central data-adjudication database on the quality of field operations, printing, translation, school and student sampling, and coding. Comprehensive reports were then generated for the PISA Adjudication Group. This group was formed by the Technical Advisory Group and the Sampling Referee. Its role is to review the adjudication database and reports to recommend adequate treatment to preserve the quality of PISA data. For further information, see the *PISA 2015 Technical Report* (OECD, forthcoming).

References

OECD (forthcoming), *PISA 2015 Technical Report,* PISA, OECD Publishing, Paris.

ANNEX A5

CHANGES IN THE ADMINISTRATION AND SCALING OF PISA 2015 AND IMPLICATIONS FOR TRENDS ANALYSES

Comparing performance across PISA cycles

PISA assessments of science, reading, mathematics and financial literacy carried out in different years use the same performance scale, which means that score points on a scale are directly comparable over time. Comparisons of scores across time are possible because some items are common across assessments and because an equating procedure aligns performance scales that are derived from different calibrations of item parameters to each other.

All estimates of statistical quantities are associated with statistical uncertainty, and this is also true for the transformation parameters used to equate PISA scales over time. A link error that reflects this uncertainty is included in the estimate of the standard error for estimates of PISA performance trends and changes over time. (For more details concerning link errors, see the sections below.)

The uncertainty in equating scales is the product of changes in the way the test is administered (e.g. differences related to the test design) and scaled (e.g. differences related to the calibration samples) across the years. It also reflects the evolving nature of assessment frameworks. PISA revisits the framework for science, reading and mathematics every nine years, according to a rotating schedule, in order to capture the most recent understanding of what knowledge and skills are important for 15-year-olds to acquire in order to participate fully in tomorrow's societies.

Changes in test administration and design can influence somewhat how students respond to test items. Changes in samples and the models used for the scaling produce different estimates of item difficulty. As a consequence, there is some uncertainty when results from one cycle are reported on the scale based on a previous cycle. All cycles of PISA prior to 2015, for instance, differed from each other in various ways:

- *The assessment design.*[1] The assessment design can influence how students respond in several ways. For example, students might not perceive the same item as equally difficult when it is presented at the beginning of a test as when it is presented across different places in the test. Similarly, students may not invest the same effort when the item is part of a 30-minute "reading" sequence in the middle of a mathematics and science test, compared to when reading is the major domain. In PISA, these effects are unsystematic and are typically small, but they are part of the uncertainty in the estimates.
- *The calibration samples.* In PISA cycles prior to 2015, item difficulty was estimated using only the responses of students who participated in the most recent assessment. In PISA 2009 and PISA 2012, the calibration sample was a random subset of 500 students per country/economy. In PISA 2000, 2003 and 2006, the calibration sample included 500 students per country taken only from OECD countries (OECD, 2009). This implies that each trend item had as many (independent) estimates of item difficulty as there were cycles in which it was used. These estimates were not identical, and the variability among these estimated item difficulties contributes to the uncertainty of comparisons over PISA cycles. The use of only a subsample of the PISA student data per country further increases this uncertainty, and was justified by the limited computational power available at the time of early PISA cycles.
- *The set and the number of items common to previous assessments.* Just as the uncertainty around country mean performance and item parameters is reduced by including more schools and students in the sample, so the uncertainty around the link between scales is reduced by retaining more items included in previous assessments for the purpose building this link. For the major domain, the items that are common to prior assessments are a subset of the total number of items that make up the assessment because PISA progressively renews its pool of items in order to reflect the most recent frameworks. The frameworks are based on the current understanding of the reading, mathematics, science and financial literacy competencies that are required of 15-year-olds to be able to thrive in society.

PISA 2015 introduced several improvements in the test design and scaling procedure aimed at reducing the three sources of uncertainty highlighted above. In particular, the assessment design for PISA 2015 reduced or eliminated the difference in construct coverage across domains and students' perception of certain domains as "major" or "minor". In the most frequently implemented version of the test, for example, 86% of students were tested in two domains only, for one hour each (see OECD [forthcoming] for details). The number of items that are common to previous assessments was also greatly increased for all domains, and most obviously for minor domains.

The scaling procedure was also improved by forming the calibration sample based on all student responses from the past cycles of the assessment. For the next PISA cycle (2018) the calibration sample will overlap by up to about 75% with the 2015 cycle. As a consequence, the uncertainty due to the re-estimation of item parameters in scaling will be reduced considerably compared to cycles up to 2012.

While these improvements can be expected to result in reductions in the link error between 2015 and future cycles, they may add to the uncertainty reflected in link errors between 2015 and past cycles, because past cycles had a different test design and followed a different scaling procedure.

In addition, PISA 2015 introduced further changes in test administration and scaling:

- **Change in the assessment mode.** Computer-based delivery became the main mode of administration of the PISA test in 2015. All trend items used in PISA 2015 were adapted for delivery on computer. The equivalence between the paper- and computer-based versions of trend items used to measure student proficiency in science, reading, mathematics and financial literacy was assessed on a diverse population of students from all countries/economies that participated in the PISA 2015 assessment as part of an extensive field trial. The results of this mode-effect study, concerning the level of equivalence achieved by items ("scalar" equivalence or "metric" equivalence; see e.g. Davidov, Schmidt and Billiet, 2011; Meredith, 1993) informed the scaling of student responses in the main study. Parameters of scalar- and metric-invariant items were constrained to be the same for the entire calibration sample, including respondents who took them in paper- and computer-based mode (see the section on "Comparing PISA results across paper and computer-based administrations" for further details).
- **Change in the scaling model.** A more flexible statistical model was fitted to student responses when scaling item parameters. This model, whose broadest form is the generalised partial credit model (i.e. a two-parameter item-response-theory model; see Birnbaum, 1968; Muraki, 1992), includes constraints for trend items so as to retain as many trend items with one-parameter likelihood functions as supported by the data, and is therefore referred to as a "hybrid" model. The one-parameter models on which scaling was based in previous cycles (Masters, 1982; Rasch 1960) are a special case of the current model. The main difference between the current hybrid model and previously used one-parameter models is that the hybrid model does not give equal weight to all items when constructing a score, but rather assigns optimal weights to tasks based on their capacity to distinguish between high- and low-ability students. It can therefore better accommodate the diversity of response formats included in PISA tests.
- **Change in the treatment of differential item functioning across countries.** In tests such as PISA, where items are translated into multiple languages, some items in some countries may function differently from how the item functions in the majority of countries. For example, terms that are harder to translate into a specific language are not always avoidable. The resulting item-by-country interactions are a potential threat to validity. In past cycles, common item parameters were used for all countries, except for a very small number of items that were considered "dodgy" and therefore treated as "not administered" for some countries (typically, less than a handful of items, for instance if careless errors in translation or printing were found only late in the process). In 2015, the calibration allowed for a (limited) number of country-by-cycle-specific deviations from the international item parameters (Glas and Jehangir, 2014; Oliveri and von Davier, 2011; Oliveri and von Davier, 2014). This approach preserves the comparability of PISA scores across countries and time, which is ensured by the existence of a sufficient number of invariant items, while reducing the (limited) dependency of country rankings on the selection of items included in the assessment, and thus increasing fairness. The Technical Report for PISA 2015 provides the number of unique parameters for each country/economy participating in PISA (OECD, forthcoming).
- **Change in the treatment of non-reached items.** Finally, in PISA 2015, non-reached items (i.e. unanswered items at the end of test booklets) were treated as not administered, whereas in previous PISA cycles they were considered as wrong answers when estimating student proficiency (i.e. in the "scoring" step) but as not administered when estimating item parameters (in the "scaling" step). This change makes the treatment of student responses consistent across the estimation of item parameters and student proficiency, and eliminates potential advantages for countries and test takers who randomly guess answers to multiple-choice questions that they could not complete in time compared to test takers who leave these non-reached items unanswered. However, this new treatment of non-reached items might result in higher scores than would have been estimated in the past for countries with many unanswered items.

A further change in test administration is specific to the financial literacy assessment:

- **Change in time of administration.** Sampling design and the scheduling of the test changed between the PISA 2012 and PISA 2015 financial literacy assessments. Students assessed in financial literacy in 2012 were tested in financial literacy – as well as in mathematics and reading – at the same time as other students were taking the core assessment; students assessed in financial literacy in 2015 took the test in a separate session after having been tested in mathematics, reading and science. In most participating countries and economies, the financial literacy testing session took place on the afternoon of the same day in a large majority of sampled schools. However, in M974, students in about one in three schools sat the financial literacy test on a different day than the day when they sat the mathematics, reading and science tests. Students in about eight out of ten schools in M265 and M394 sat the financial literacy test on a different day than the main test. Genuine financial literacy trends may be confounded by the change in the scheduling of the assessment, especially in countries and economies where most students sat the financial literacy assessment in the afternoon, as students sitting the financial literacy assessment in the afternoon may have been tired after a long testing day.

Comparing PISA results across paper- and computer-based administrations

The equivalence of link items, assessed at the international level, was established in the extensive mode-effect study that was part of the field trial for PISA 2015. These results provide strong support for the assertion that results can be reported on the same scale across modes. In addition, the possibility of country-by-cycle-specific parameters can, to some extent, account for national deviations from the international norm.

The equivalence of link items was first assessed during the field trial (in 2014) on equivalent populations created by random assignment within schools. More than 40 000 students from the countries and economies that were planning to conduct the PISA 2015 assessment on computers were randomly allocated to the computer- or paper-based mode within each school, so that the distribution of student ability was comparable across the two modes. As a result, it was possible to attribute any differences across modes in students' response patterns, particularly differences that exceeded what could be expected due to random variations alone, to an impact of mode of delivery on the item rather than to students' ability to use the mode of delivery. The field trial was designed to examine mode effects at the international level, but not for each national sample or for subsamples with a country.

The mode-effects study asked two main questions:

- Do the items developed in prior PISA cycles for delivery in paper-based mode measure the same skills when delivered on computer? For instance, do all the science items that were adapted for computer delivery measure science skills only, or do they measure a mixture of science and computer skills?
- Is the difficulty of the paper-based versions of these items the same as that of computer-based versions?

Only if a science, reading or mathematics item measured the same skills and was equally difficult across the two modes was it considered to be fully equivalent (i.e. scalar invariant) and to support meaningful comparisons of performance across modes. This analysis of test equivalence was based on pooled data from all countries/economies using explanatory item-response-theory (IRT) models. In these models, two distinct sets of parameters estimate how informative student responses are about proficiency on the intended scale, and what level of proficiency they indicate. The analysis identified three groups of items:

- **Group 1:** Items that had the same estimated difficulty and discrimination parameters in both modes and were therefore found to be fully equivalent on paper and computer (scalar invariance).
- **Group 2:** Items that had the same discrimination parameter but distinct difficulty parameter (metric invariance). Success on these items did say something about proficiency in the domain, in general; but the difficulty of items varied depending on the mode, often because of interface issues, such as answer formats that required free-hand drawing or the construction of equations. Several items proved to be more difficult on computers, and a few items were easier on computers.
- **Group 3:** Items for which field trial estimates indicated that they measured different skills, depending on the mode (no metric invariance).

Science, reading and mathematics items in Group 3 were not used in the computer-based test in the main study (two items in mathematics were used in the paper- based test only). Items from Group 1 and 2 were used, and the stability of item parameters across cycles and modes was further probed during scaling operations for the main study. These items function as anchor items or link items for scaling purposes and are the basis for comparisons of performance across modes and across time.

The full equivalence of link items across modes, assessed on a population representing all students participating in PISA who took the test on computers, ensures that results can be compared across paper- and computer-based modes, and that the link between these sets of results is solid. It implies, among other things, that if all students who took the PISA 2015 test on computer had taken the same test on paper, their mean score, as well as the proportion of students at the different levels of proficiency, would not have been significantly different.

Annex A6 provides further information on the exploratory analysis of mode-by-group interactions that was carried out on field-trial data. While the results of this analysis, in particular with respect to mode-by-gender interactions, are encouraging, the limitations of field-trial data for this type of exercise must be borne in mind when interpreting results.

Linking PISA 2015 financial literacy results to the existing reporting scale

Given the small number of countries/economies participating in the optional financial literacy assessment in the two cycles, a different procedure was used to link the 2012 and 2015 financial literacy assessments than the one described above for science, reading and mathematics.

Compared to the PISA 2012 design, the PISA 2015 data collection design for financial literacy provides stronger connections to the data collected in other domains. That is, every student who sat the financial literacy assessment also sat the reading or mathematics assessment, or both, in addition to the science assessment. Therefore, PISA 2015 provides a better estimate of the covariance between the core domains and financial literacy. However, because not every country conducted the financial literacy assessment in PISA 2015, there are only a few countries that have data available in both years. As such, the 2015 main survey calibration required data from PISA 2012 as well as the 2015 field trial. This approach provides a sound link for PISA 2015 because, in the 2015 field trial data, a larger group of countries took both the computer-based assessment and the

paper-based assessment (for the mode-effect study). This is also important since the 2015 administration of the financial literacy assessment is based on data collection for a subset of students in a second testing session. All available financial literacy data (2012 main survey, 2015 field trial, and 2015 main survey) were combined for the IRT scaling using a multiple-group IRT model based on an equivalent-groups (for the field trial samples) design for the linking. This particular linking method provides a sound link and is robust against changes in the percent correct observed in the 2015 main survey. Including the field trial data allows for the assumption of equivalent groups since students were randomly assigned in the field trial paper-based versus computer-based assessment.

The equivalent groups design is a method of linking that is common in test equating. While it provides a consistent linking approach, it does not provide information on which items are directly comparable; nor does it require or assume that the items be invariant across assessment modes, since the comparability is established based on the premise that the distribution of student ability is equivalent across groups. The link to financial literacy is established through common populations, while for the other scales (reading, mathematics and science) it was possible to link across modes and assessment cycles using common items.

In the PISA 2015 main survey, the financial literacy domain consists of 43 trend items. No items were excluded from the scaling. The IRT calibration shows a very good fit of the international/common item parameters. The scaling was able to retain common/international item parameters for 92.9% of the items (for 7.1% of the items, unique item parameters had to be estimated) and, thus, a high comparability of the scale across different countries and languages (see OECD [forthcoming] for more information about scaling outcomes).

Quantifying the uncertainty of scale comparability in the link error

Standard errors for estimates of changes in performance and trends across PISA cycles take into account the uncertainty introduced by the linking of scales produced under separate calibrations. These more conservative standard errors (larger than standard errors that were estimated before the introduction of the linking error) reflect not only the measurement precision and sampling variation as for the usual PISA results, but also the linking error. For PISA 2015, the linking error reflects not only the uncertainty due to the selection of link items, but also the uncertainty due to the changes in the scaling methodology introduced in 2015.

As in past cycles, only the uncertainty around the location of scores from past PISA cycles on the 2015 reporting scale is reflected in the link error. Because this uncertainty about the position in the distribution (a change in the intercept) is cancelled out when looking at location-invariant estimates (such as estimates of the variance, the inter-quartile range, gender gaps, regression coefficients, correlation coefficients, etc.), standard errors for these estimates do not include the linking error.

Link error for scores between two PISA assessments

Link errors for PISA 2015 were estimated based on the comparison of rescaled country/economy means per domain with the corresponding means derived from public use files and produced under the original scaling of each cycle. This new approach for estimating the link errors was used for the first time in PISA 2015. The number of observations used for the computation of each link error equals the number of countries with results in both cycles. Because of the sparse nature of the data underlying the computation of the link error, a robust estimate of the standard deviation was used, based on the Sn statistic (Rousseeuw and Croux, 1993).

This volume presents comparisons of performance in PISA 2015 and PISA 2012, using the link errors presented in Table A5.1.

[Part 1/1]

Table A5.1 Link errors for comparisons between PISA 2015 and PISA 2012

	PISA 2012 to 2015
Science	3.9228
Reading	5.2535
Mathematics	3.5462
Financial literacy	5.3309

Link error for other types of comparisons of student performance

The link error for comparisons based on non-linear transformations of scale scores can be estimated by simulation, based on the link error for comparison of scores between two PISA assessments. In particular, Table A5.2 presents the estimates of the link error for the comparison of the percentage of students performing below Level 2 and at or above Level 5.

The estimation of the link errors for the percentage of students performing below Level 2 and at or above Level 5 uses the assumption that the magnitude of the uncertainty associated with the linking of scales follows a normal distribution with a mean of 0 and a standard deviation equal to the scale link error shown in Table A5.1. From this distribution, 500 errors are drawn and added to the first plausible value of each country's/economy's 2015 students, to represent the 500 possible scenarios in which the only source of differences with respect to 2015 is the uncertainty in the link.

By computing the estimate of interest (such as the percentage of students in a particular proficiency level) for each of the 500 replicates, it is possible to assess how the scale link error influences this estimate. The standard deviation of the 500 replicate estimates is used as the link error for the change in the percentage of students scoring in a particular proficiency level. Because the influence of the scale link error on this estimate depends on the exact shape and density of the performance distribution around the cut-off points, link errors for comparisons of proficiency levels are different for each country, and within countries, for boys and girls.

Comparisons of performance: Difference between two assessments

To evaluate the evolution of performance, analyses in this volume report the change in performance between the 2015 and 2012 cycles. Comparisons between two assessments (e.g. a country's/economy's change in performance between PISA 2012 and PISA 2015 or the change in performance of a subgroup) are calculated as:

$$\Delta_{2015\text{-}t} = PISA_{2015} - PISA_t$$

where $\Delta_{2015\text{-t}}$ is the difference in performance between PISA 2015 and a previous PISA assessment (comparisons are only possible when the subject first became a major domain or later assessment cycles) $PISA_{2015}$ is the mathematics, reading, science or financial literacy score observed in PISA 2015, and PISAt is the mathematics, reading, science or financial literacy score observed in a previous assessment. The standard error of the change in performance $\sigma(\Delta_{2015\text{-}t})$ is:

$$\sigma(\Delta_{2015\text{-}t}) = \sqrt{\sigma_{2015}^2 + \sigma_t^2 + error_{2015,t}^2}$$

where σ_{2015} is the standard error observed for $PISA_{2015}$, σ_t is the standard error observed for $PISA_t$ and $error_{2015,t}$ is the link error for comparisons of science, reading or financial literacy performance between the PISA 2015 assessment and a previous (*t*) assessment. The value for $error_{2015,t}$ is shown in Table A5.1 for most of the comparisons and Table A5.2 for comparisons of proficiency levels.

Adjusted trends

PISA maintains its technical standards over time. Although this means that trends can be calculated over populations defined in a consistent way, the share of the 15-year-old population that this represents, and/or the demographic characteristics of 15-year-old students can also be subject to change, for example because of migration.

Because trend analyses illustrate the pace of progress of successive cohorts of students, in order to draw reliable conclusions from such results, it is important to examine the extent to which they are driven by changes in the demographic characteristics of students included in the sample. In this volume, two sets of trend results were therefore developed: unadjusted trends and adjusted trends accounting for changes in the demographic characteristics of the sample. Adjusted trends represent trends in performance estimated after neutralising the impact of concurrent changes in the demographic characteristics of the sample.

Adjusted trends accounting for changes in the demographic characteristics of the sample

A re-weighting procedure, analogous to post-stratification, is used to adjust the sample characteristics of past samples to the observed composition of the PISA 2015 sample.

In a first step, the sample included in each assessment cycle is divided into discrete cells, defined by the students' immigrant status (four categories: non-immigrant, first-generation, second-generation, missing), gender (two categories: boy, girl) and relative age (four categories, corresponding to four three-month periods). The few observations included in past PISA datasets with missing gender or age are deleted. This defines, at most, 32 discrete cells for the entire population. However, whenever the number of observations included in one of these 32 cells is less than 10 for a certain country/economy and PISA assessment, the corresponding cell is combined with another, similar cell, according to a sequential algorithm, until all cells reach a minimum sample size of 10.[4]

In a second step, the cells are reweighted so that the sum of final student weights within each cell is constant across assessments, and equal to the sum of final student weights in the PISA 2015 sample. Estimates of the mean and distribution of student performance are then performed on these reweighted samples, representing the (counterfactual) performance that would have been observed, had the samples from previous years had the same composition of the sample in PISA 2015 in terms of the variables used in this re-weighting procedure.

Table A5.3 provides, for each country/economy, the number of cells used for post-stratification, as well as, for each cycle, the number of observations excluded from trends accounting for changes in the demographic characteristics of the sample.

Comparing non-performance items and scales across PISA cycles

To gather information about students' and schools' characteristics, PISA asks both students and school principals to complete a background questionnaire. Between PISA 2012 and PISA 2015, several questions remained the same, allowing for a comparison of responses to these questions over time. Questions with subtle word changes or questions with major word changes were not compared across time (unless otherwise noted) because it is impossible to discern whether observed changes in the response are due to changes in the construct they are measuring or to changes in the way the construct is being measured.

OECD average

Throughout this report, the OECD average is used as a benchmark. It is calculated as the average across OECD countries and economies, weighting each country equally. Some OECD countries did not participate in certain assessments; other OECD countries and economies do not have comparable results for some assessments; still others did not include certain questions in their questionnaires or changed them substantially from assessment to assessment. In trends tables and figures, the OECD average is reported on consistent sets of OECD countries and economies. For instance, the "OECD average 7" includes only 7 OECD countries and economies that have non-missing observations for both the PISA 2012 and PISA 2015 assessments. This restriction allows for valid comparisons of the OECD average over time.

Tables available on line

Table A5.2. Link errors for comparisons of proficiency levels between PISA 2015 and PISA 2012
(http://dx.doi.org/10.1787/888933486300)

Table A5.3. Cells used to adjust financial literacy scores to the PISA 2015 samples
(http://dx.doi.org/10.1787/888933486315)

Notes

1. Also see Carstensen (2013) for the influence of test design on trend measurement.

2. The limited treatment of DIF in past cycles, combined with the cycle-specific calibration sample, has been criticised for leading to trend estimates that are inconsistent with national calibrations using concurrent samples (Urbach, 2013).

3. The number of not reached items is used in PISA 2015 as a source of background information in the generation of plausible values, so that the correlation of not-reached items and proficiency is modelled and accounted for in the results.

4. Samples are always first separated by immigrant status (unless this would result in groups with fewer than 10 observations), then, within groups defined by immigrant status, by gender (unless this would result in groups with fewer than 10 observations), and finally by age groups. At any stage, if there are groups with fewer than 10 observations, the following mergers are done; within each stage, the sequence of mergers stops as soon as all groups reach a minimum size of 10. Step 1 (immigrant status, within language groups defined previously): merge missing and non-immigrant; merge "first generation" and "second generation"; merge all categories. Step 2 (gender, within immigrant groups defined previously): merge boys and girls. Step 3 (age, within immigrant/gender groups defined previously): merge first and second quarter; merge third and fourth quarter; merge all categories.

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ANNEX A6
THE PISA 2015 FIELD TRIAL MODE-EFFECT STUDY

Available on line only.

It can be found at: www.oecd.org/pisa

Annex B

PISA 2015 DATA

All tables in Annex B are available on line

Annex B1: Results for countries and economies

Annex B2: Results for regions within countries

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

Note regarding CABA (Argentina)
CABA (Argentina) refers to the Ciudad Autónoma de Buenos Aires, Argentina.

Note regarding FYROM
FYROM refers to the Former Yugoslav Republic of Macedonia.

Notes regarding Cyprus

Note by Turkey: The information in this document with reference to "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Turkey shall preserve its position concerning the "Cyprus issue".

Note by all the European Union Member States of the OECD and the European Union: The Republic of Cyprus is recognised by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.

A note regarding Israel

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.

ANNEX B1
RESULTS FOR COUNTRIES AND ECONOMIES

[Part 1/1]

Table IV.2.1 Percentage of young people and adults engaged in basic financial activities

		Young people, 16-24 year-olds											
		Percentage of young people reporting that they do/did the following at least once a week in their job or last job						Percentage of young people reporting that they do the following at least once a week in their everyday life					
		Read bills, invoices, bank statements or other financial statements		Calculate prices, costs or budgets		Conduct transactions on the Internet, for example buying or selling products or services, or banking		Read bills, invoices, bank statements or other financial statements		Calculate prices, costs or budgets		Use the Internet in order to better understand such issues as those related to health/illness, financial matters, the environment	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	29.1	(2.0)	47.5	(2.2)	21.5	(2.6)	41.2	(1.8)	52.9	(1.8)	76.0	(1.9)
OECD	Canada	26.5	(1.3)	39.8	(1.4)	17.5	(1.3)	29.4	(1.2)	45.8	(1.2)	74.1	(1.2)
OECD	Chile	21.4	(2.1)	42.5	(3.3)	23.4	(3.9)	12.6	(1.5)	37.1	(2.4)	74.9	(2.2)
OECD	Flanders (Belgium)	21.5	(2.1)	20.1	(2.1)	18.2	(2.2)	30.2	(1.4)	31.6	(1.6)	72.1	(1.5)
OECD	Italy	15.3	(2.9)	25.9	(3.5)	18.7	(4.9)	7.5	(1.4)	32.2	(2.4)	58.2	(2.7)
OECD	Netherlands	17.3	(1.5)	26.9	(1.8)	14.3	(1.7)	43.0	(1.6)	29.7	(1.6)	66.8	(1.5)
OECD	Poland	29.8	(1.1)	26.0	(1.0)	23.7	(1.4)	15.0	(0.6)	38.6	(1.2)	74.3	(1.0)
OECD	Slovak Republic	25.5	(2.2)	34.1	(2.4)	22.4	(3.1)	14.7	(1.1)	43.5	(1.7)	77.8	(1.3)
OECD	Spain	20.7	(1.9)	32.9	(2.3)	12.8	(3.0)	18.8	(1.3)	42.4	(1.5)	70.5	(1.6)
OECD	United States	23.5	(2.6)	42.1	(2.0)	28.5	(2.5)	37.1	(2.0)	58.6	(2.1)	74.9	(2.0)
Partners	Lithuania	25.0	(3.0)	28.2	(2.9)	19.1	(3.7)	8.4	(1.1)	42.5	(2.4)	86.7	(1.5)
Partners	Russia	29.1	(2.2)	31.6	(2.0)	19.8	(1.8)	13.9	(1.5)	26.4	(2.7)	64.8	(4.3)

		Adults, 16-65 year-olds											
		Percentage of adults reporting that they do/did the following at least once a week in their job or last job						Percentage of adults reporting that they do the following at least once a week in their everyday life					
		Read bills, invoices, bank statements or other financial statements		Calculate prices, costs or budgets		Conduct transactions on the Internet, for example buying or selling products or services, or banking		Read bills, invoices, bank statements or other financial statements		Calculate prices, costs or budgets		Use the Internet in order to better understand such issues as those related to health/illness, financial matters, the environment	
OECD	Australia	42.2	(0.8)	45.7	(0.7)	32.5	(1.0)	61.6	(0.7)	51.8	(0.7)	75.7	(0.7)
OECD	Canada	36.4	(0.6)	39.4	(0.6)	26.3	(0.6)	54.5	(0.5)	46.8	(0.5)	74.4	(0.5)
OECD	Chile	28.4	(1.8)	41.8	(1.9)	37.6	(1.4)	24.1	(1.4)	37.4	(1.2)	75.5	(0.9)
OECD	Flanders (Belgium)	31.5	(0.8)	27.8	(0.7)	24.6	(0.9)	60.3	(0.6)	23.7	(0.6)	69.9	(0.7)
OECD	Italy	22.2	(0.8)	32.0	(1.0)	21.4	(1.3)	24.9	(1.0)	32.5	(1.4)	62.4	(1.3)
OECD	Netherlands	30.5	(0.7)	27.9	(0.7)	24.3	(0.7)	58.2	(0.7)	19.3	(0.7)	68.7	(0.8)
OECD	Poland	34.1	(0.8)	27.0	(0.9)	26.2	(1.1)	23.3	(0.6)	41.0	(0.7)	73.7	(0.7)
OECD	Slovak Republic	30.3	(0.9)	35.9	(0.9)	29.1	(0.9)	23.1	(0.8)	41.9	(0.8)	74.3	(0.8)
OECD	Spain	30.0	(0.8)	33.8	(0.7)	19.8	(0.9)	49.6	(0.9)	43.0	(0.8)	73.4	(0.7)
OECD	United States	34.2	(0.9)	40.2	(0.8)	30.9	(1.1)	61.3	(0.8)	57.7	(0.8)	73.5	(1.0)
Partners	Lithuania	26.2	(0.8)	27.5	(0.8)	26.3	(1.3)	11.3	(0.6)	40.2	(1.2)	83.9	(0.8)
Partners	Russia	26.5	(1.0)	29.0	(0.9)	13.2	(1.0)	12.6	(1.4)	29.4	(2.1)	56.1	(2.1)

Note: Please note that the sample for Russia does not include the population of the Moscow municipal area. The data published, therefore, do not represent the entire resident population aged 16-65 in Russia but rather the population of Russia excluding the population residing in the Moscow municipal area. More detailed information regarding the data from Russia as well as that of other countries can be found in the Technical Report of the Survey of Adult Skills.

Source: OECD, Survey of Adult Skills (PIAAC) (2012, 2015). http://www.oecd.org/skills/piaac/

StatLink http://dx.doi.org/10.1787/888933485453

[Part 1/1]

Table IV.3.1 Change between 2012 and 2015 in mean financial literacy performance

		PISA 2012		PISA 2015		Change between 2012 and 2015 (PISA 2015 – PISA 2012)	
		Mean score	S.E.	Mean score	S.E.	Score dif.	S.E.
OECD	Australia	526	(2.1)	504	(1.9)	**-22**	(6.0)
	Belgium (Flemish)	541	(3.5)	541	(3.0)	0	(7.0)
	Canadian provinces	m	m	533	(4.6)	m	m
	Chile	m	m	432	(3.7)	m	m
	Italy	466	(2.1)	483	(2.8)	**17**	(6.4)
	Netherlands	m	m	509	(3.3)	m	m
	Poland	510	(3.7)	485	(3.0)	**-25**	(7.1)
	Slovak Republic	470	(4.9)	445	(4.5)	**-25**	(8.5)
	Spain	484	(3.2)	469	(3.2)	**-16**	(7.0)
	United States	492	(4.9)	487	(3.8)	-4	(8.2)
	OECD average-7	499	(1.4)	488	(1.2)	-11	(5.6)
	OECD average-10	m	m	489	(1.1)	m	m
Partners	Brazil	m	m	393	(3.8)	m	m
	B-S-J-G (China)	m	m	566	(6.0)	m	m
	Lithuania	m	m	449	(3.1)	m	m
	Peru	m	m	403	(3.4)	m	m
	Russia	486	(3.7)	512	(3.3)	**26**	(7.3)

Note: Values that are statistically significant are indicated in bold (see Annex A3).

StatLink http://dx.doi.org/10.1787/888933485464

[Part 1/1]

Table IV.3.2 Percentage of students at each proficiency level in financial literacy

		Percentage of students at each proficiency level in PISA 2015									
		Level 1 or below (below 400.33 score points)		Level 2 (from 400.33 to less than 475.10 score points)		Level 3 (from 475.10 to less than 549.86 score points)		Level 4 (from 549.86 to less than 624.63 score points)		Level 5 (at or above 624.63 score points)	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	19.7	(0.6)	19.0	(0.5)	24.4	(0.5)	21.5	(0.5)	15.4	(0.6)
	Belgium (Flemish)	12.0	(0.9)	15.0	(0.7)	22.3	(1.0)	26.7	(0.8)	24.0	(1.0)
	Canadian provinces	12.7	(1.0)	17.1	(0.9)	24.5	(0.8)	23.9	(1.1)	21.8	(1.2)
	Chile	38.1	(1.5)	26.5	(1.0)	21.8	(0.8)	10.5	(0.8)	3.1	(0.4)
	Italy	19.8	(1.1)	25.2	(0.9)	29.3	(0.9)	19.2	(0.8)	6.5	(0.5)
	Netherlands	19.2	(1.2)	18.5	(1.0)	23.0	(0.9)	21.8	(0.9)	17.5	(0.8)
	Poland	20.1	(1.0)	24.5	(0.8)	28.4	(0.9)	19.0	(0.8)	8.0	(0.8)
	Slovak Republic	34.7	(1.5)	23.6	(1.0)	22.0	(0.7)	13.4	(1.1)	6.3	(0.6)
	Spain	24.7	(1.2)	25.9	(0.8)	27.3	(0.9)	16.4	(0.7)	5.6	(0.5)
	United States	21.6	(1.3)	23.3	(0.9)	25.7	(1.1)	19.2	(0.9)	10.2	(0.7)
	OECD average-10	22.3	(0.4)	21.8	(0.3)	24.9	(0.3)	19.2	(0.3)	11.8	(0.2)
Partners	Brazil	53.3	(1.4)	22.2	(0.6)	14.8	(0.7)	7.1	(0.5)	2.6	(0.4)
	B-S-J-G (China)	9.4	(1.0)	13.3	(0.9)	20.3	(1.1)	23.6	(1.1)	33.4	(2.0)
	Lithuania	31.5	(1.3)	27.3	(0.9)	24.8	(0.9)	12.6	(0.8)	3.7	(0.5)
	Peru	48.2	(1.4)	25.8	(0.9)	17.9	(0.9)	6.9	(0.6)	1.2	(0.2)
	Russia	10.9	(0.9)	22.7	(1.1)	32.2	(1.0)	23.6	(1.0)	10.5	(0.9)

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Table IV.3.3 Top performers in financial literacy, mathematics, reading and science

		Percentage of students who are:								Percentage of top performers in financial literacy who are also top performers in…					
		Not top performers in any of the four domains		Top performers in at least one subject, but not in financial literacy		Top performers in financial literacy, but not in any of the other subjects assessed		Top performers in financial literacy and in at least one other subject		…mathematics		…reading		…science	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	76.9	(0.6)	7.7	(0.4)	4.7	(0.4)	10.7	(0.5)	48.5	(2.6)	45.2	(2.1)	51.2	(1.4)
	Belgium (Flemish)	67.0	(1.0)	9.0	(0.6)	7.8	(0.6)	16.3	(0.8)	57.3	(2.2)	36.7	(2.1)	38.6	(2.2)
	Canadian provinces	69.9	(1.3)	8.4	(0.7)	9.3	(0.8)	12.5	(0.8)	38.3	(2.5)	40.7	(2.3)	39.0	(2.2)
	Chile	94.8	(0.5)	2.1	(0.3)	1.9	(0.3)	1.2	(0.2)	22.2	(4.7)	26.9	(4.5)	20.7	(4.0)
	Italy	83.7	(0.8)	9.9	(0.7)	2.9	(0.3)	3.6	(0.4)	46.9	(3.5)	27.0	(3.4)	27.8	(2.8)
	Netherlands	74.6	(0.9)	7.9	(0.6)	5.4	(0.5)	12.0	(0.6)	56.2	(2.5)	42.8	(2.7)	46.4	(2.3)
	Poland	82.0	(1.1)	10.0	(0.8)	2.2	(0.4)	5.9	(0.7)	62.7	(3.5)	45.0	(4.0)	47.6	(4.6)
	Slovak Republic	87.1	(0.8)	6.6	(0.5)	3.2	(0.4)	3.1	(0.4)	40.5	(3.8)	22.6	(3.1)	25.1	(3.5)
	Spain	86.7	(0.7)	7.7	(0.6)	2.4	(0.3)	3.3	(0.3)	43.1	(4.0)	32.8	(3.2)	36.2	(3.1)
	United States	83.3	(1.0)	6.5	(0.5)	3.5	(0.4)	6.8	(0.6)	38.0	(4.0)	50.1	(3.1)	51.7	(2.9)
	OECD average-10	80.6	(0.3)	7.6	(0.2)	4.3	(0.1)	7.5	(0.2)	45.4	(1.1)	37.0	(1.0)	38.4	(1.0)
Partners	Brazil	95.9	(0.5)	1.5	(0.2)	1.9	(0.3)	0.7	(0.2)	14.4	(3.8)	18.1	(3.7)	11.9	(2.6)
	B-S-J-G (China)	60.6	(2.0)	5.9	(0.6)	11.7	(0.8)	21.7	(1.9)	60.4	(2.8)	29.3	(2.7)	36.6	(2.5)
	Lithuania	89.1	(0.8)	7.2	(0.7)	1.4	(0.2)	2.3	(0.5)	48.6	(5.6)	35.2	(5.9)	37.8	(5.4)
	Peru	98.4	(0.2)	c	c	1.0	(0.2)	c	c	c	c	c	c	c	c
	Russia	81.4	(1.2)	8.0	(0.6)	5.5	(0.5)	5.0	(0.5)	33.7	(2.5)	26.8	(2.7)	19.9	(2.0)

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Table IV.3.4 Low performers in financial literacy, mathematics, reading and science

		Percentage of students who are:								Percentage of low performers in financial literacy who are also low performers in…					
		Not low performers in any of the four domains		Low performers in at least one subject, but not in financial literacy		Low performers in financial literacy, but not in any of the other subjects assessed		Low performers in financial literacy and in at least one other subject		…mathematics		…reading		…science	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	68.7	(0.7)	11.6	(0.5)	2.9	(0.2)	16.8	(0.5)	69.6	(1.3)	65.3	(1.6)	67.1	(1.5)
	Belgium (Flemish)	75.3	(1.1)	12.7	(0.8)	1.1	(0.3)	10.9	(0.8)	75.2	(3.2)	77.3	(2.9)	79.4	(2.8)
	Canadian provinces	76.0	(1.2)	11.3	(0.7)	3.6	(0.5)	9.1	(0.7)	56.0	(2.9)	48.4	(3.1)	53.6	(2.5)
	Chile	42.7	(1.3)	19.2	(1.0)	4.3	(0.5)	33.8	(1.3)	84.1	(1.4)	58.2	(2.0)	70.1	(1.8)
	Italy	62.9	(1.3)	17.2	(0.8)	3.7	(0.4)	16.1	(0.9)	62.6	(2.4)	60.0	(2.8)	67.5	(2.1)
	Netherlands	71.5	(1.2)	9.3	(1.0)	3.4	(0.4)	15.8	(1.1)	60.1	(2.9)	64.4	(2.4)	68.8	(2.4)
	Poland	70.1	(1.1)	9.8	(0.8)	5.6	(0.6)	14.4	(0.8)	53.7	(3.0)	50.0	(2.6)	54.2	(2.0)
	Slovak Republic	50.3	(1.3)	15.0	(1.1)	8.8	(0.7)	25.8	(1.3)	55.0	(2.1)	63.0	(1.9)	60.8	(2.0)
	Spain	64.8	(1.1)	10.5	(0.6)	7.0	(0.7)	17.8	(0.9)	58.2	(2.0)	48.6	(2.2)	54.2	(2.0)
	United States	63.5	(1.5)	14.9	(1.0)	2.9	(0.4)	18.7	(1.1)	78.7	(2.1)	61.9	(2.3)	66.3	(2.0)
	OECD average-10	64.6	(0.4)	13.2	(0.3)	4.3	(0.2)	17.9	(0.3)	65.3	(0.8)	59.7	(0.8)	64.2	(0.7)
Partners	Brazil	21.6	(1.0)	25.1	(1.1)	3.7	(0.4)	49.7	(1.3)	89.1	(1.0)	73.7	(1.1)	80.1	(1.1)
	B-S-J-G (China)	73.3	(1.6)	17.3	(1.1)	0.7	(0.2)	8.7	(1.0)	72.8	(2.9)	86.2	(2.3)	77.9	(3.2)
	Lithuania	56.5	(1.3)	11.9	(0.7)	8.1	(0.6)	23.5	(1.1)	57.0	(2.0)	58.4	(1.6)	58.4	(1.8)
	Peru	26.3	(1.4)	25.5	(1.2)	1.4	(0.2)	46.9	(1.4)	92.7	(0.7)	86.9	(1.1)	89.8	(0.9)
	Russia	68.4	(1.6)	20.7	(1.1)	2.4	(0.4)	8.5	(0.7)	56.0	(3.4)	54.1	(3.7)	60.9	(3.8)

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Table IV.3.5 Change between 2012 and 2015 in mean financial literacy performance adjusted for demographic changes

		PISA 2012		PISA 2015		Change between 2012 and 2015 (PISA 2015 – PISA 2012)	
		Mean score	S.E.	Mean score	S.E.	Score dif.	S.E.
OECD	Australia	528	(2.2)	504	(1.9)	**-24**	(6.1)
	Belgium (Flemish)	546	(4.1)	541	(3.0)	-5	(7.4)
	Canadian provinces	m	m	533	(4.6)	m	m
	Chile	m	m	432	(3.7)	m	m
	Italy	465	(2.2)	483	(2.8)	**18**	(6.4)
	Netherlands	m	m	509	(3.3)	m	m
	Poland	511	(3.7)	485	(3.0)	**-26**	(7.1)
	Slovak Republic	467	(5.1)	445	(4.5)	**-22**	(8.7)
	Spain	485	(3.2)	469	(3.2)	**-16**	(7.0)
	United States	491	(4.8)	487	(3.8)	-3	(8.1)
	OECD average-7	499	(1.4)	488	(1.2)	**-11**	(5.7)
	OECD average-10	m	m	489	(1.1)	m	m
Partners	Brazil	m	m	393	(3.8)	m	m
	B-S-J-G (China)	m	m	566	(6.0)	m	m
	Lithuania	m	m	449	(3.1)	m	m
	Peru	m	m	403	(3.4)	m	m
	Russia	487	(3.7)	512	(3.3)	**26**	(7.3)

Note: Values that are statistically significant are indicated in bold (see Annex A3).
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Table IV.3.6 Change between 2012 and 2015 in the percentage of students at each proficiency level in financial literacy

		Proficiency levels in PISA 2012									
		Level 1 or below (below 400.33 score points)		Level 2 (from 400.33 to less than 475.10 score points)		Level 3 (from 475.10 to less than 549.86 score points)		Level 4 (from 549.86 to less than 624.63 score points)		Level 5 (at or above 624.63 score points)	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	10.3	(0.7)	19.4	(1.3)	29.4	(1.2)	24.9	(1.0)	16.0	(0.8)
	Belgium (Flemish)	8.7	(1.0)	15.1	(1.4)	26.2	(1.5)	30.4	(1.7)	19.7	(1.3)
	Canadian provinces	m	m	m	m	m	m	m	m	m	m
	Chile	m	m	m	m	m	m	m	m	m	m
	Italy	21.7	(0.9)	29.5	(1.0)	31.7	(0.9)	14.9	(0.8)	2.1	(0.3)
	Netherlands	m	m	m	m	m	m	m	m	m	m
	Poland	9.8	(1.2)	23.2	(1.7)	34.2	(1.8)	25.6	(1.8)	7.2	(1.0)
	Slovak Republic	22.8	(2.0)	26.5	(2.1)	28.1	(1.9)	16.9	(1.6)	5.7	(1.0)
	Spain	16.5	(1.2)	26.4	(1.6)	34.6	(1.6)	18.6	(1.5)	3.8	(0.9)
	United States	17.8	(1.5)	26.2	(1.8)	27.1	(1.8)	19.4	(1.8)	9.4	(1.2)
	OECD average-7	15.4	(0.5)	23.8	(0.6)	30.2	(0.6)	21.6	(0.6)	9.1	(0.4)
	OECD average-10	m	m	m	m	m	m	m	m	m	m
Partners	Brazil	m	m	m	m	m	m	m	m	m	m
	B-S-J-G (China)	m	m	m	m	m	m	m	m	m	m
	Lithuania	m	m	m	m	m	m	m	m	m	m
	Peru	m	m	m	m	m	m	m	m	m	m
	Russia	16.7	(1.4)	25.4	(1.5)	33.1	(1.7)	20.5	(1.6)	4.3	(0.8)

		Proficiency levels in PISA 2015									
		Level 1 or below (below 400.33 score points)		Level 2 (from 400.33 to less than 475.10 score points)		Level 3 (from 475.10 to less than 549.86 score points)		Level 4 (from 549.86 to less than 624.63 score points)		Level 5 (at or above 624.63 score points)	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	19.7	(0.6)	19.0	(0.5)	24.4	(0.5)	21.5	(0.5)	15.4	(0.6)
	Belgium (Flemish)	12.0	(0.9)	15.0	(0.7)	22.3	(1.0)	26.7	(0.8)	24.0	(1.0)
	Canadian provinces	12.7	(1.0)	17.1	(0.9)	24.5	(0.8)	23.9	(1.1)	21.8	(1.2)
	Chile	38.1	(1.5)	26.5	(1.0)	21.8	(0.8)	10.5	(0.8)	3.1	(0.4)
	Italy	19.8	(1.1)	25.2	(0.9)	29.3	(0.9)	19.2	(0.8)	6.5	(0.5)
	Netherlands	19.2	(1.2)	18.5	(1.0)	23.0	(0.9)	21.8	(0.9)	17.5	(0.8)
	Poland	20.1	(1.0)	24.5	(0.8)	28.4	(0.9)	19.0	(0.8)	8.0	(0.8)
	Slovak Republic	34.7	(1.5)	23.6	(1.0)	22.0	(0.7)	13.4	(1.1)	6.3	(0.6)
	Spain	24.7	(1.2)	25.9	(0.8)	27.3	(0.9)	16.4	(0.7)	5.6	(0.5)
	United States	21.6	(1.3)	23.3	(0.9)	25.7	(1.1)	19.2	(0.9)	10.2	(0.7)
	OECD average-7	21.8	(0.4)	22.3	(0.3)	25.6	(0.3)	19.3	(0.3)	10.9	(0.3)
	OECD average-10	22.3	(0.4)	21.8	(0.3)	24.9	(0.3)	19.2	(0.3)	11.8	(0.2)
Partners	Brazil	53.3	(1.4)	22.2	(0.6)	14.8	(0.7)	7.1	(0.5)	2.6	(0.4)
	B-S-J-G (China)	9.4	(1.0)	13.3	(0.9)	20.3	(1.1)	23.6	(1.1)	33.4	(2.0)
	Lithuania	31.5	(1.3)	27.3	(0.9)	24.8	(0.9)	12.6	(0.8)	3.7	(0.5)
	Peru	48.2	(1.4)	25.8	(0.9)	17.9	(0.9)	6.9	(0.6)	1.2	(0.2)
	Russia	10.9	(0.9)	22.7	(1.1)	32.2	(1.0)	23.6	(1.0)	10.5	(0.9)

		Change between 2012 and 2015 (PISA 2015 – PISA 2012)									
		Level 1 or below (below 400.33 score points)		Level 2 (from 400.33 to less than 475.10 score points)		Level 3 (from 475.10 to less than 549.86 score points)		Level 4 (from 549.86 to less than 624.63 score points)		Level 5 (at or above 624.63 score points)	
		% dif.	S.E.	% dif.	S.E.	% dif.	S.E.	% dif.	S.E.	% dif.	S.E.
OECD	Australia	**9.4**	(1.4)	-0.4	(1.5)	**-5.1**	(1.3)	**-3.3**	(1.2)	-0.6	(2.3)
	Belgium (Flemish)	**3.4**	(1.5)	-0.1	(1.6)	**-3.9**	(1.9)	**-3.7**	(1.9)	4.4	(4.1)
	Canadian provinces	m	m	m	m	m	m	m	m	m	m
	Chile	m	m	m	m	m	m	m	m	m	m
	Italy	-1.9	(2.5)	**-4.4**	(1.7)	-2.4	(1.3)	**4.3**	(2.2)	**4.4**	(0.7)
	Netherlands	m	m	m	m	m	m	m	m	m	m
	Poland	**10.3**	(2.3)	1.3	(2.1)	**-5.8**	(2.0)	**-6.6**	(3.0)	0.8	(1.5)
	Slovak Republic	**11.8**	(3.3)	-2.9	(2.3)	**-6.1**	(2.0)	-3.6	(2.2)	0.7	(1.3)
	Spain	**8.2**	(3.0)	-0.5	(1.9)	**-7.3**	(1.9)	-2.3	(2.4)	1.8	(1.1)
	United States	3.7	(2.6)	-3.0	(2.0)	-1.4	(2.1)	-0.2	(2.0)	0.8	(1.8)
	OECD average-7	**6.4**	(1.7)	-1.4	(0.9)	**-4.6**	(0.7)	**-2.2**	(1.1)	1.8	(1.2)
	OECD average-10	m	m	m	m	m	m	m	m	m	m
Partners	Brazil	m	m	m	m	m	m	m	m	m	m
	B-S-J-G (China)	m	m	m	m	m	m	m	m	m	m
	Lithuania	m	m	m	m	m	m	m	m	m	m
	Peru	m	m	m	m	m	m	m	m	m	m
	Russia	**-5.8**	(2.1)	-2.7	(2.6)	-0.9	(2.0)	3.1	(2.6)	**6.3**	(1.5)

Note: Values that are statistically significant are indicated in bold (see Annex A3).

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Table IV.3.7 Change in the percentage of students at each proficiency level in financial literacy adjusted for demographic changes

Change between 2012 and 2015

		Proficiency levels in PISA 2012									
		Level 1 or below (below 400.33 score points)		Level 2 (from 400.33 to less than 475.10 score points)		Level 3 (from 475.10 to less than 549.86 score points)		Level 4 (from 549.86 to less than 624.63 score points)		Level 5 (at or above 624.63 score points)	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	10.0	(0.7)	19.2	(1.3)	29.1	(1.3)	25.5	(1.1)	16.3	(0.8)
	Belgium (Flemish)	8.0	(1.1)	14.1	(1.6)	26.0	(1.8)	31.0	(1.9)	20.9	(1.6)
	Canadian provinces	m	m	m	m	m	m	m	m	m	m
	Chile	m	m	m	m	m	m	m	m	m	m
	Italy	22.2	(1.0)	29.4	(1.0)	31.5	(1.0)	14.7	(0.8)	2.1	(0.3)
	Netherlands	m	m	m	m	m	m	m	m	m	m
	Poland	9.6	(1.2)	22.9	(1.7)	34.2	(1.8)	25.9	(1.8)	7.4	(1.1)
	Slovak Republic	24.0	(2.0)	26.1	(2.1)	27.7	(1.9)	16.6	(1.6)	5.5	(1.0)
	Spain	16.2	(1.2)	26.3	(1.6)	34.8	(1.7)	18.9	(1.5)	3.8	(0.9)
	United States	18.3	(1.6)	26.1	(1.8)	27.3	(1.8)	19.3	(1.8)	9.0	(1.2)
	OECD average-7	15.5	(0.5)	23.4	(0.6)	30.1	(0.6)	21.7	(0.6)	9.3	(0.4)
	OECD average-10	m	m	m	m	m	m	m	m	m	m
Partners	Brazil	m	m	m	m	m	m	m	m	m	m
	B-S-J-G (China)	m	m	m	m	m	m	m	m	m	m
	Lithuania	m	m	m	m	m	m	m	m	m	m
	Peru	m	m	m	m	m	m	m	m	m	m
	Russia	16.9	(1.4)	25.0	(1.4)	33.1	(1.7)	20.6	(1.6)	4.3	(0.8)

		Proficiency levels in PISA 2015									
		Level 1 or below (below 400.33 score points)		Level 2 (from 400.33 to less than 475.10 score points)		Level 3 (from 475.10 to less than 549.86 score points)		Level 4 (from 549.86 to less than 624.63 score points)		Level 5 (at or above 624.63 score points)	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	19.7	(0.6)	19.0	(0.5)	24.4	(0.5)	21.5	(0.5)	15.4	(0.6)
	Belgium (Flemish)	12.0	(0.9)	15.0	(0.7)	22.3	(1.0)	26.7	(0.8)	24.0	(1.0)
	Canadian provinces	12.7	(1.0)	17.1	(0.9)	24.5	(0.8)	23.9	(1.1)	21.8	(1.2)
	Chile	38.1	(1.5)	26.5	(1.0)	21.8	(0.8)	10.5	(0.8)	3.1	(0.4)
	Italy	19.8	(1.1)	25.2	(0.9)	29.3	(0.9)	19.2	(0.8)	6.5	(0.5)
	Netherlands	19.2	(1.2)	18.5	(1.0)	23.0	(0.9)	21.8	(0.9)	17.5	(0.8)
	Poland	20.1	(1.0)	24.5	(0.8)	28.4	(0.9)	19.0	(0.8)	8.0	(0.8)
	Slovak Republic	34.7	(1.5)	23.6	(1.0)	22.0	(0.7)	13.4	(1.1)	6.3	(0.6)
	Spain	24.7	(1.2)	25.9	(0.8)	27.3	(0.9)	16.4	(0.7)	5.6	(0.5)
	United States	21.6	(1.3)	23.3	(0.9)	25.7	(1.1)	19.2	(0.9)	10.2	(0.7)
	OECD average-7	21.8	(0.4)	22.3	(0.3)	25.6	(0.3)	19.3	(0.3)	10.9	(0.3)
	OECD average-10	22.3	(0.4)	21.8	(0.3)	24.9	(0.3)	19.2	(0.3)	11.8	(0.2)
Partners	Brazil	53.3	(1.4)	22.2	(0.6)	14.8	(0.7)	7.1	(0.5)	2.6	(0.4)
	B-S-J-G (China)	9.4	(1.0)	13.3	(0.9)	20.3	(1.1)	23.6	(1.1)	33.4	(2.0)
	Lithuania	31.5	(1.3)	27.3	(0.9)	24.8	(0.9)	12.6	(0.8)	3.7	(0.5)
	Peru	48.2	(1.4)	25.8	(0.9)	17.9	(0.9)	6.9	(0.6)	1.2	(0.2)
	Russia	10.9	(0.9)	22.7	(1.1)	32.2	(1.0)	23.6	(1.0)	10.5	(0.9)

		Change between 2012 and 2015 (PISA 2015 – PISA 2012)									
		Level 1 or below (below 400.33 score points)		Level 2 (from 400.33 to less than 475.10 score points)		Level 3 (from 475.10 to less than 549.86 score points)		Level 4 (from 549.86 to less than 624.63 score points)		Level 5 (at or above 624.63 score points)	
		% dif.	S.E.	% dif.	S.E.	% dif.	S.E.	% dif.	S.E.	% dif.	S.E.
OECD	Australia	**9.8**	(1.4)	-0.2	(1.5)	**-4.7**	(1.4)	**-3.9**	(1.4)	-0.9	(2.3)
	Belgium (Flemish)	**4.0**	(1.6)	0.9	(1.8)	-3.7	(2.1)	**-4.3**	(2.1)	3.1	(4.2)
	Canadian provinces	m	m	m	m	m	m	m	m	m	m
	Chile	m	m	m	m	m	m	m	m	m	m
	Italy	-2.4	(2.6)	**-4.2**	(1.7)	-2.2	(1.4)	**4.5**	(2.2)	**4.3**	(0.7)
	Netherlands	m	m	m	m	m	m	m	m	m	m
	Poland	**10.5**	(2.3)	1.5	(2.1)	**-5.8**	(2.0)	**-6.8**	(3.0)	0.6	(1.5)
	Slovak Republic	**10.7**	(3.3)	-2.5	(2.4)	**-5.7**	(2.0)	-3.2	(2.1)	0.8	(1.3)
	Spain	**8.5**	(3.0)	-0.4	(1.9)	**-7.4**	(2.0)	-2.5	(2.4)	1.9	(1.2)
	United States	3.3	(2.7)	-2.8	(2.1)	-1.6	(2.1)	-0.2	(2.1)	1.2	(1.8)
	OECD average-7	**6.3**	(1.8)	-1.1	(0.9)	**-4.5**	(0.7)	**-2.3**	(1.1)	1.6	(1.2)
	OECD average-10	m	m	m	m	m	m	m	m	m	m
Partners	Brazil	m	m	m	m	m	m	m	m	m	m
	B-S-J-G (China)	m	m	m	m	m	m	m	m	m	m
	Lithuania	m	m	m	m	m	m	m	m	m	m
	Peru	m	m	m	m	m	m	m	m	m	m
	Russia	**-6.0**	(2.1)	-2.3	(2.5)	-0.9	(2.0)	3.0	(2.6)	**6.2**	(1.5)

Note: Values that are statistically significant are indicated in bold (see Annex A3).

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Table IV.3.8 Change between 2012 and 2015 in mean performance in the core PISA subjects

		Mathematics					
		PISA 2012		PISA 2015		Change between 2012 and 2015 (PISA 2015 – PISA 2012)	
		Mean score	S.E.	Mean score	S.E.	Score dif.	S.E.
OECD	Australia	504	(1.6)	494	(1.6)	**-10**	(4.2)
	Belgium (Flemish)	531	(3.3)	521	(2.5)	-9	(5.4)
	Canadian provinces	m	m	509	(2.9)	m	m
	Chile	423	(3.1)	423	(2.5)	0	(5.3)
	Italy	485	(2.0)	490	(2.8)	4	(5.0)
	Netherlands	523	(3.5)	512	(2.2)	**-11**	(5.4)
	Poland	518	(3.6)	504	(2.4)	**-13**	(5.6)
	Slovak Republic	482	(3.4)	475	(2.7)	-6	(5.6)
	Spain	484	(1.9)	486	(2.2)	2	(4.6)
	United States	481	(3.6)	470	(3.2)	**-12**	(6.0)
	OECD average-9[1]	492	(1.0)	486	(0.8)	-6	(3.8)
	OECD average-10	m	m	488	(0.8)	m	m
Partners	Brazil	389	(1.9)	377	(2.9)	**-11**	(5.0)
	B-S-J-G (China)	m	m	531	(4.9)	m	m
	Lithuania	479	(2.6)	478	(2.3)	0	(5.0)
	Peru	368	(3.7)	387	(2.7)	**18**	(5.8)
	Russia	482	(3.0)	494	(3.1)	**12**	(5.6)

		Reading					
		PISA 2012		PISA 2015		Change between 2012 and 2015 (PISA 2015 – PISA 2012)	
		Mean score	S.E.	Mean score	S.E.	Score dif.	S.E.
OECD	Australia	512	(1.6)	503	(1.7)	-9	(5.7)
	Belgium (Flemish)	518	(3.0)	511	(2.8)	-7	(6.7)
	Canadian provinces	m	m	525	(3.2)	m	m
	Chile	441	(2.9)	459	(2.6)	**17**	(6.5)
	Italy	490	(2.0)	485	(2.7)	-5	(6.2)
	Netherlands	511	(3.5)	503	(2.4)	-8	(6.7)
	Poland	518	(3.1)	506	(2.5)	-12	(6.6)
	Slovak Republic	463	(4.2)	453	(2.8)	-10	(7.3)
	Spain	488	(1.9)	496	(2.4)	8	(6.1)
	United States	498	(3.7)	497	(3.4)	-1	(7.3)
	OECD average-9	493	(1.0)	490	(0.9)	-3	(5.4)
	OECD average-10	m	m	494	(0.8)	m	m
Partners	Brazil	407	(2.0)	407	(2.8)	1	(6.3)
	B-S-J-G (China)	m	m	494	(5.1)	m	m
	Lithuania	477	(2.5)	472	(2.7)	-5	(6.4)
	Peru	384	(4.3)	398	(2.9)	13	(7.4)
	Russia	475	(3.0)	495	(3.1)	**19**	(6.8)

		Science					
		PISA 2012		PISA 2015		Change between 2012 and 2015 (PISA 2015 – PISA 2012)	
		Mean score	S.E.	Mean score	S.E.	Score dif.	S.E.
OECD	Australia	521	(1.8)	510	(1.5)	**-12**	(4.6)
	Belgium (Flemish)	518	(3.2)	515	(2.6)	-3	(5.7)
	Canadian provinces	m	m	524	(2.6)	m	m
	Chile	445	(2.9)	447	(2.4)	2	(5.4)
	Italy	494	(1.9)	481	(2.5)	**-13**	(5.0)
	Netherlands	522	(3.5)	509	(2.3)	**-13**	(5.7)
	Poland	526	(3.1)	501	(2.5)	**-24**	(5.6)
	Slovak Republic	471	(3.6)	461	(2.6)	-10	(5.9)
	Spain	496	(1.8)	493	(2.1)	-4	(4.8)
	United States	497	(3.8)	496	(3.2)	-1	(6.3)
	OECD average-9	499	(1.0)	490	(0.8)	**-9**	(4.1)
	OECD average-10	m	m	494	(0.8)	m	m
Partners	Brazil	402	(2.1)	401	(2.3)	-1	(5.0)
	B-S-J-G (China)	m	m	518	(4.6)	m	m
	Lithuania	496	(2.6)	475	(2.7)	**-20**	(5.4)
	Peru	373	(3.6)	397	(2.4)	**24**	(5.8)
	Russia	486	(2.9)	487	(2.9)	0	(5.7)

1. OECD average-9 refers to all OECD countries and economies that participated in the PISA 2015 financial literacy assessment, and with available results in mathematics, reading and science for both 2012 and 2015.
Note: Values that are statistically significant are indicated in bold (see Annex A3).
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[Part 1/1]

Table IV.3.9 Correlation of financial literacy performance with performance in the core PISA subjects

		Correlation[1] between performance in financial literacy and performance in…						For comparison, correlation between performance in…					
		…mathematics		…reading		…science		…mathematics and reading		…mathematics and science		…reading and science	
		Corr.	S.E.	Corr.	S.E.	Corr.	S.E.	Corr.	S.E.	Corr.	S.E.	Corr.	S.E.
OECD	Australia	0.79	(0.01)	0.80	(0.01)	0.85	(0.00)	0.79	(0.01)	0.88	(0.00)	0.87	(0.00)
	Belgium (Flemish)	0.80	(0.01)	0.80	(0.01)	0.83	(0.01)	0.84	(0.01)	0.90	(0.01)	0.90	(0.01)
	Canadian provinces	0.68	(0.02)	0.70	(0.02)	0.74	(0.01)	0.78	(0.01)	0.88	(0.01)	0.87	(0.01)
	Chile	0.75	(0.01)	0.75	(0.01)	0.78	(0.01)	0.80	(0.01)	0.88	(0.01)	0.87	(0.01)
	Italy	0.68	(0.01)	0.67	(0.02)	0.73	(0.01)	0.75	(0.01)	0.85	(0.01)	0.84	(0.01)
	Netherlands	0.81	(0.01)	0.81	(0.01)	0.84	(0.01)	0.87	(0.01)	0.91	(0.00)	0.89	(0.00)
	Poland	0.74	(0.01)	0.75	(0.01)	0.77	(0.01)	0.80	(0.01)	0.90	(0.00)	0.86	(0.01)
	Slovak Republic	0.66	(0.02)	0.66	(0.03)	0.68	(0.03)	0.83	(0.01)	0.88	(0.01)	0.87	(0.01)
	Spain	0.71	(0.01)	0.72	(0.01)	0.75	(0.01)	0.76	(0.01)	0.88	(0.01)	0.86	(0.00)
	United States	0.80	(0.01)	0.80	(0.01)	0.83	(0.01)	0.83	(0.01)	0.90	(0.00)	0.90	(0.00)
	OECD average-10	0.74	(0.00)	0.75	(0.00)	0.78	(0.00)	0.80	(0.00)	0.89	(0.00)	0.87	(0.00)
Partners	Brazil	0.62	(0.02)	0.65	(0.01)	0.68	(0.01)	0.75	(0.01)	0.84	(0.01)	0.86	(0.01)
	B-S-J-G (China)	0.80	(0.01)	0.80	(0.01)	0.83	(0.01)	0.84	(0.01)	0.91	(0.01)	0.90	(0.01)
	Lithuania	0.70	(0.01)	0.73	(0.01)	0.75	(0.01)	0.79	(0.01)	0.90	(0.01)	0.87	(0.00)
	Peru	0.76	(0.01)	0.81	(0.01)	0.79	(0.01)	0.81	(0.01)	0.86	(0.01)	0.88	(0.01)
	Russia	0.60	(0.01)	0.61	(0.02)	0.68	(0.01)	0.66	(0.01)	0.82	(0.01)	0.81	(0.01)

1. The reported correlations are pairwise correlations between the corresponding latent constructs.

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[Part 1/1]

Table IV.3.10a Variation in financial literacy performance associated with mathematics and reading performance

		Variation in financial literacy performance associated with mathematics and reading performance									
		Total explained variation[1]		Variation uniquely associated[2] with mathematics performance		Variation uniquely associated with reading performance		Variation associated with more than one domain		Residual (unexplained) variation[3]	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	71.0	(0.7)	6.6	(0.5)	8.3	(0.7)	56.0	(1.0)	29.0	(0.7)
	Belgium (Flemish)	70.3	(1.3)	5.8	(0.7)	5.6	(0.8)	58.9	(1.5)	29.7	(1.3)
	Canadian provinces	53.1	(1.9)	4.6	(1.0)	7.0	(1.2)	41.4	(1.8)	46.9	(1.9)
	Chile	61.8	(1.6)	6.2	(1.1)	6.2	(1.0)	49.4	(1.8)	38.2	(1.6)
	Italy	52.4	(1.7)	7.0	(1.3)	6.4	(1.3)	39.0	(1.6)	47.6	(1.7)
	Netherlands	70.6	(1.8)	4.5	(0.9)	5.0	(0.8)	61.1	(1.7)	29.4	(1.8)
	Poland	61.6	(1.5)	6.0	(0.8)	6.4	(0.9)	49.2	(1.4)	38.4	(1.5)
	Slovak Republic	47.5	(4.0)	3.8	(0.9)	4.5	(1.5)	39.2	(3.3)	52.5	(4.0)
	Spain	58.1	(1.4)	5.7	(0.8)	8.1	(0.9)	44.3	(1.1)	41.9	(1.4)
	United States	69.8	(1.5)	6.1	(1.0)	5.9	(0.8)	57.8	(1.3)	30.2	(1.5)
	OECD average-10	61.6	(0.6)	5.6	(0.3)	6.3	(0.3)	49.7	(0.6)	38.4	(0.6)
Partners	Brazil	46.7	(1.9)	4.1	(0.7)	7.8	(0.9)	34.8	(1.8)	53.3	(1.9)
	B-S-J-G (China)	69.2	(1.6)	5.0	(0.7)	5.8	(0.9)	58.5	(1.8)	30.8	(1.6)
	Lithuania	57.9	(1.5)	4.0	(0.9)	8.4	(1.1)	45.4	(1.6)	42.1	(1.5)
	Peru	68.4	(1.3)	3.3	(0.7)	11.0	(1.4)	54.1	(1.4)	31.6	(1.3)
	Russia	44.5	(1.8)	6.7	(1.0)	8.5	(1.2)	29.3	(1.5)	55.5	(1.8)

1. Total explained variance is the R-squared coefficient from a regression of financial literacy performance on mathematics and reading performance.
2. Variation uniquely associated with mathematics (reading) is measured as the difference between the R-squared of the full regression (a regression of financial literacy on mathematics and reading performance) and the R-squared of a regression of financial literacy on reading (mathematics) only.
3. The residual variation is computed as: 100 – total explained variation.

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[Part 1/1]

Table IV.3.10b Variation in financial literacy performance associated with performance in the core PISA subjects

		Variation in financial literacy performance associated with science, reading and mathematics performance											
		Total explained variation[1]		Variation uniquely associated[2] with mathematics performance		Variation uniquely associated with reading performance		Variation uniquely associated with science performance		Variation associated with more than one domain		Residual (unexplained) variation[3]	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	74.4	(0.6)	0.6	(0.1)	1.4	(0.2)	3.5	(0.4)	69.0	(0.7)	25.6	(0.6)
	Belgium (Flemish)	72.0	(1.1)	1.2	(0.4)	1.2	(0.3)	1.7	(0.5)	67.9	(1.1)	28.0	(1.1)
	Canadian provinces	56.4	(1.6)	0.3	(0.2)	0.9	(0.4)	3.3	(0.8)	51.9	(1.7)	43.6	(1.6)
	Chile	64.1	(1.4)	0.9	(0.4)	1.3	(0.4)	2.3	(0.6)	59.6	(1.4)	35.9	(1.4)
	Italy	55.4	(1.5)	0.9	(0.4)	1.2	(0.5)	3.0	(0.7)	50.3	(1.5)	44.6	(1.5)
	Netherlands	73.5	(1.4)	0.6	(0.4)	1.1	(0.4)	2.9	(0.8)	68.9	(1.5)	26.5	(1.4)
	Poland	63.0	(1.5)	0.8	(0.3)	2.3	(0.4)	1.4	(0.3)	58.6	(1.4)	37.0	(1.5)
	Slovak Republic	48.8	(3.9)	0.8	(0.4)	1.4	(0.7)	1.3	(0.4)	45.3	(3.6)	51.2	(3.9)
	Spain	59.8	(1.2)	0.7	(0.3)	2.1	(0.4)	1.7	(0.5)	55.2	(1.1)	40.2	(1.2)
	United States	71.9	(1.4)	1.1	(0.4)	1.1	(0.4)	2.1	(0.5)	67.7	(1.3)	28.1	(1.4)
	OECD average-10	63.9	(0.6)	0.8	(0.1)	1.4	(0.1)	2.3	(0.2)	59.4	(0.5)	36.1	(0.6)
Partners	Brazil	48.8	(1.9)	0.7	(0.3)	1.6	(0.5)	2.1	(0.6)	44.4	(1.8)	51.2	(1.9)
	B-S-J-G (China)	71.0	(1.5)	0.7	(0.3)	1.4	(0.4)	1.8	(0.5)	67.2	(1.6)	29.0	(1.5)
	Lithuania	59.4	(1.4)	0.4	(0.2)	2.5	(0.5)	1.6	(0.4)	55.0	(1.4)	40.6	(1.4)
	Peru	69.3	(1.2)	1.0	(0.3)	4.1	(0.9)	0.9	(0.3)	63.3	(1.3)	30.7	(1.2)
	Russia	47.7	(1.7)	0.8	(0.3)	1.3	(0.5)	3.1	(0.6)	42.5	(1.5)	52.3	(1.7)

1. Total explained variance is the R-squared coefficient from a regression of financial literacy performance on mathematics, reading and science performance.
2. Variation uniquely associated with each domain is measured as the difference between the R-squared of the full regression (a regression of financial literacy on mathematics, reading and science performance) and the R-squared of a regression of financial literacy on the two other domains only.
3. The residual variation is computed as: 100 – total explained variation.

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[Part 1/2]

Table IV.3.11 Relative performance in financial literacy compared with performance in the core PISA subjects

		Relative performance in financial literacy compared with students around the world[1] with similar scores in…							
		… Mathematics and reading (expected performance)				… Mathematics, reading and science (expected performance)			
		Relative performance across all students[2] (actual minus expected score)		Percentage of students who perform above their expected score[3]		Relative performance across all students[4] (actual minus expected score)		Percentage of students who perform above their expected score[3]	
		Score dif.	S.E.	%	S.E.	Score dif.	S.E.	%	S.E.
OECD	Australia	**-3**	(1.4)	49.1	(0.9)	**-6**	(1.4)	**47.0**	(1.0)
	Belgium (Flemish)	**14**	(2.1)	**59.6**	(1.5)	**17**	(2.2)	**61.5**	(1.5)
	Canadian provinces	**8**	(3.3)	**55.1**	(1.7)	**7**	(3.3)	**54.7**	(1.7)
	Chile	**-16**	(2.9)	**40.9**	(1.9)	**-16**	(2.8)	**40.6**	(1.8)
	Italy	**-14**	(2.2)	**41.8**	(1.4)	**-8**	(2.2)	**44.6**	(1.5)
	Netherlands	**-8**	(2.6)	**45.6**	(1.5)	**-6**	(2.6)	**46.7**	(1.6)
	Poland	**-29**	(2.1)	**32.8**	(1.4)	**-25**	(2.0)	**34.8**	(1.4)
	Slovak Republic	**-29**	(4.2)	**36.6**	(1.7)	**-25**	(4.2)	**38.0**	(1.8)
	Spain	**-30**	(2.8)	**32.4**	(1.5)	**-29**	(2.7)	**32.7**	(1.5)
	United States	-3	(1.5)	48.3	(1.4)	**-6**	(1.5)	**46.0**	(1.3)
	OECD average-10	**-11**	(0.8)	**44.2**	(0.5)	**-10**	(0.8)	**44.7**	(0.5)
Partners	Brazil	**-8**	(2.1)	**46.9**	(1.0)	**-8**	(2.1)	**46.9**	(0.9)
	B-S-J-G (China)	**40**	(2.5)	**72.6**	(1.5)	**40**	(2.4)	**73.3**	(1.5)
	Lithuania	**-36**	(2.7)	**29.6**	(1.5)	**-34**	(2.5)	**30.7**	(1.4)
	Peru	1	(2.5)	51.6	(1.9)	3	(2.4)	53.2	(1.7)
	Russia	**9**	(2.1)	**55.4**	(1.4)	**14**	(2.0)	**58.9**	(1.3)

		Relative performance in financial literacy compared with students around the world with similar scores in…							
		… Mathematics							
		Relative performance across all students[5]		Relative performance among students performing at or above Level 4 in mathematics[5]		Relative performance among students performing at or below Level 3 in mathematics[5]		Difference in relative performance: students performing at or above Level 4 minus students performing at or below Level 3	
		Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.
OECD	Australia	-3	(1.7)	4	(2.4)	**-6**	(2.1)	**10**	(2.8)
	Belgium (Flemish)	**9**	(2.4)	6	(3.3)	**11**	(3.3)	-4	(4.5)
	Canadian provinces	**13**	(3.8)	**11**	(4.9)	**14**	(4.1)	-3	(4.6)
	Chile	**-8**	(3.1)	**-12**	(4.5)	**-7**	(3.2)	-5	(4.7)
	Italy	**-19**	(2.8)	**-44**	(3.7)	**-9**	(3.1)	**-35**	(4.2)
	Netherlands	**-14**	(2.7)	-1	(3.4)	**-23**	(3.8)	**22**	(4.8)
	Poland	**-31**	(2.2)	**-38**	(3.2)	**-27**	(2.9)	**-10**	(4.2)
	Slovak Republic	**-44**	(4.4)	**-53**	(5.2)	**-41**	(4.7)	**-12**	(4.8)
	Spain	**-30**	(2.9)	**-40**	(3.4)	**-27**	(3.0)	**-13**	(3.0)
	United States	**4**	(1.7)	**8**	(3.3)	3	(2.0)	5	(3.9)
	OECD average-10	**-12**	(0.9)	**-16**	(1.2)	**-11**	(1.0)	**-5**	(1.3)
Partners	Brazil	**-6**	(2.5)	**-28**	(9.5)	**-5**	(2.4)	**-22**	(9.3)
	B-S-J-G (China)	**26**	(2.9)	**27**	(3.0)	**25**	(3.9)	2	(4.0)
	Lithuania	**-43**	(2.8)	**-55**	(3.9)	**-40**	(3.0)	**-16**	(3.9)
	Peru	-5	(2.9)	-12	(6.5)	-4	(3.0)	-8	(7.9)
	Russia	**6**	(2.4)	**-22**	(3.7)	**17**	(2.8)	**-39**	(4.4)

1. "Students around the world" refers to 15-year-old students in countries and economies that participated in the PISA 2015 assessment of financial literacy. National samples are weighted according to the size of the target population using final student weights.
2. This column reports the difference between actual performance and the fitted value from a regression using a second-degree polynomial as regression function (math, math sq., read, read sq., math×read).
3. This column reports the percentage of students for whom the difference between actual performance and the fitted value from a regression is positive. Values that are indicated in bold are significantly larger or smaller than 50%.
4. This column reports the difference between actual performance and the fitted value from a regression using a second-degree polynomial as regression function (math, math sq., read, read sq., scie, scie sq., math×read, math×scie, read×scie).
5. This column reports the difference between actual performance and the fitted value from a regression using a cubic polynomial as regression function.

Note: Values that are statistically significant are indicated in bold (see Annex A3).

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Table IV.3.11 Relative performance in financial literacy compared with performance in the core PISA subjects

		Relative performance in financial literacy compared with students around the world[1] with similar scores in…							
		… Reading							
		Relative performance across all students[5]		Relative performance among students performing at or above Level 4 in reading[5]		Relative performance among students performing at or below Level 3 in reading[5]		Difference in relative performance: students performing at or above Level 4 minus students performing at or below Level 3	
		Score dif.	S.E.	%	S.E.	Score dif.	S.E.	%	S.E.
OECD	Australia	2	(1.7)	5	(2.9)	0	(1.9)	5	(3.2)
	Belgium (Flemish)	**32**	(2.3)	**30**	(3.5)	**33**	(2.8)	-2	(4.3)
	Canadian provinces	**11**	(3.3)	9	(5.0)	**13**	(3.8)	-4	(5.7)
	Chile	**-30**	(3.2)	**-28**	(4.8)	**-30**	(3.4)	2	(5.3)
	Italy	-2	(2.5)	**-27**	(3.6)	**6**	(2.6)	**-33**	(3.6)
	Netherlands	**7**	(2.7)	**17**	(3.8)	2	(3.2)	**14**	(4.4)
	Poland	**-19**	(2.4)	**-23**	(3.7)	**-18**	(2.5)	-6	(3.8)
	Slovak Republic	**-13**	(4.0)	**-25**	(5.5)	**-10**	(4.6)	**-15**	(6.7)
	Spain	**-27**	(3.0)	**-33**	(3.9)	**-25**	(3.1)	**-8**	(3.4)
	United States	**-9**	(1.9)	**-11**	(2.9)	**-8**	(2.1)	-3	(3.1)
	OECD average-10	**-5**	(0.9)	**-9**	(1.3)	**-4**	(1.0)	**-5**	(1.4)
Partners	Brazil	**-25**	(2.3)	**-43**	(6.3)	**-23**	(2.2)	**-20**	(5.9)
	B-S-J-G (China)	**72**	(2.6)	**72**	(3.5)	**72**	(3.1)	1	(4.0)
	Lithuania	**-26**	(2.6)	**-40**	(4.2)	**-23**	(2.8)	**-18**	(4.3)
	Peru	**-6**	(2.3)	-10	(7.5)	**-6**	(2.4)	-4	(8.1)
	Russia	**18**	(2.5)	**-12**	(3.4)	**28**	(2.8)	**-40**	(3.6)

		Relative performance in financial literacy compared with students around the world with similar scores in…							
		… Science							
		Relative performance across all students[5]		Relative performance among students performing at or above Level 4 in science[5]		Relative performance among students performing at or below Level 3 in science[5]		Difference in relative performance: students performing at or above Level 4 minus students performing at or below Level 3	
		Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.
OECD	Australia	**-7**	(1.6)	-4	(2.4)	**-9**	(1.7)	**6**	(2.5)
	Belgium (Flemish)	**25**	(2.3)	**20**	(3.2)	**27**	(2.7)	**-8**	(3.7)
	Canadian provinces	**9**	(3.5)	6	(4.4)	**10**	(3.9)	-4	(4.3)
	Chile	**-19**	(2.7)	**-19**	(4.4)	**-19**	(2.9)	-1	(4.5)
	Italy	0	(2.5)	**-25**	(3.4)	**7**	(2.6)	**-31**	(3.5)
	Netherlands	0	(2.7)	5	(3.6)	-3	(3.4)	8	(4.6)
	Poland	**-18**	(2.0)	**-28**	(3.2)	**-14**	(2.2)	**-15**	(3.5)
	Slovak Republic	**-19**	(4.2)	**-36**	(5.9)	**-16**	(4.5)	**-20**	(5.9)
	Spain	**-26**	(2.7)	**-37**	(3.2)	**-23**	(3.0)	**-14**	(3.2)
	United States	**-10**	(1.7)	**-15**	(2.3)	**-9**	(1.9)	**-6**	(2.6)
	OECD average-10	**-7**	(0.9)	**-13**	(1.2)	**-5**	(0.9)	**-9**	(1.2)
Partners	Brazil	**-13**	(2.3)	**-25**	(7.9)	**-13**	(2.2)	-13	(7.5)
	B-S-J-G (China)	**48**	(2.5)	**51**	(3.2)	**46**	(3.3)	5	(4.4)
	Lithuania	**-30**	(2.5)	**-47**	(4.8)	**-25**	(2.7)	**-22**	(5.2)
	Peru	0	(2.5)	0	(8.6)	0	(2.6)	-1	(9.4)
	Russia	**23**	(2.2)	-4	(3.2)	**30**	(2.5)	**-33**	(3.4)

1. "Students around the world" refers to 15-year-old students in countries and economies that participated in the PISA 2015 assessment of financial literacy. National samples are weighted according to the size of the target population using final student weights.
2. This column reports the difference between actual performance and the fitted value from a regression using a second-degree polynomial as regression function (math, math sq., read, read sq., math×read).
3. This column reports the percentage of students for whom the difference between actual performance and the fitted value from a regression is positive. Values that are indicated in bold are significantly larger or smaller than 50%.
4. This column reports the difference between actual performance and the fitted value from a regression using a second-degree polynomial as regression function (math, math sq., read, read sq., scie, scie sq., math×read, math×scie, read×scie).
5. This column reports the difference between actual performance and the fitted value from a regression using a cubic polynomial as regression function.

Note: Values that are statistically significant are indicated in bold (see Annex A3).

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Table IV.3.12 Contexts of countries participating in the assessment of financial literacy

		GDP, PPP, 2015[1]	Per capita GDP, PPP, 2015[1]	Gini coefficient (most recent between 2010 and 2011)[1]	Percentage of people who have an account at a formal financial institution, 2014[2]			
					Age 15-24		Age 25-64	
		Billion 2011 international USD	Current international USD	Coeff.	%	S.E.	%	S.E.
OECD	Australia	1 038	45 514	0.35	94.8	(2.5)	99.5	(0.3)
OECD	Belgium (Flemish)	m	m	m	m	m	m	m
OECD	Canadian provinces	m	m	m	m	m	m	m
OECD	Chile	397	22 316	0.51	62.5	(4.0)	69.8	(1.8)
OECD	Italy	2 042	35 896	0.35	60.8	(5.8)	92.4	(1.0)
OECD	Netherlands	785	48 459	0.28	99.1	(0.8)	99.6	(0.3)
OECD	Poland	944	26 135	0.33	63.7	(5.5)	85.5	(1.4)
OECD	Slovak Republic	149	28 877	0.27	37.6	(5.1)	91.1	(1.1)
OECD	Spain	1 523	34 527	0.36	84.7	(5.2)	98.6	(0.4)
OECD	United States	16 890	55 837	0.40	87.6	(3.2)	94.2	(1.0)
Partners	Brazil	3 004	15 359	0.53	52.6	(4.0)	72.3	(1.7)
Partners	B-S-J-G (China)	m	m	m	m	m	m	m
Partners	Lithuania	77	27 730	0.33	33.4	(3.8)	93.4	(1.0)
Partners	Peru	366	12 402	0.45	19.5	(2.8)	32.9	(1.8)
Partners	Russia	3 498	24 451	0.41	54.4	(3.1)	74.1	(1.2)

		Stock market capitalisation as a percentage of GDP, 2013[3]	Percentage of adults who can answer correctly at least 5 out of 7 financial knowledge questions, 2015[4]	Cumulative expenditure per student between 6 and 15 years (in equivalent USD converted using PPPs)[5]	Performance in financial literacy in PISA 2015		Percentage of 15-year-old students holding a bank account in PISA 2015	
		%	%	Equivalent USD converted using PPPs	Mean score	S.E.	%	S.E.
OECD	Australia	87.9	m	92 316	504	(1.9)	79.0	(0.5)
OECD	Belgium (Flemish)	m	m	m	541	(3.0)	74.7	(1.4)
OECD	Canadian provinces	m	m	m	533	(4.6)	77.6	(1.3)
OECD	Chile	103.5	m	40 607	432	(3.7)	27.2	(1.3)
OECD	Italy	26.2	m	86 701	483	(2.8)	35.3	(1.7)
OECD	Netherlands	86.9	64.0	99 430	509	(3.3)	95.0	(0.6)
OECD	Poland	37.0	55.0	67 767	485	(3.0)	27.8	(1.2)
OECD	Slovak Republic	4.9	m	58 382	445	(4.5)	42.3	(1.4)
OECD	Spain	77.9	m	74 947	469	(3.2)	52.4	(1.3)
OECD	United States	128.1	m	115 180	487	(3.8)	52.8	(1.8)
Partners	Brazil	43.4	48.0	38 190	393	(3.8)	n	n
Partners	B-S-J-G (China)	m	m	m	566	(6.0)	46.1	(1.6)
Partners	Lithuania	m	60.0	48 389	449	(3.1)	39.0	(1.5)
Partners	Peru	45.1	m	20 114	403	(3.4)	n	n
Partners	Russia	38.0	45.0	51 492	512	(3.3)	28.1	(1.5)

1. World Bank, World Development Indicators.
2. Demirguc-Kunt, A., L. Klapper, D. Singer and P. van Oudheusden (2015), "The Global Findex Database 2014: Measuring Financial Inclusion around the World", World Bank Policy Research Working Paper 7255.
3. World Bank, Global Financial Development Database.
4. OECD (2016), OECD/INFE International Survey of Adult Financial Literacy Competencies.
5. OECD, PISA 2015 Database, Table II.6.59.

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Table IV.4.1 Distribution of student performance in financial literacy

		Mean score		Standard deviation		Percentiles									
						10th		25th		Median (50th)		75th		90th	
		Mean	S.E.	S.D.	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.
OECD	Australia	504	(1.9)	118	(1.1)	342	(3.1)	425	(2.9)	510	(2.3)	589	(2.2)	651	(2.6)
	Belgium (Flemish)	541	(3.0)	112	(2.6)	386	(6.9)	467	(4.6)	552	(3.6)	622	(3.2)	676	(4.0)
	Canadian provinces	533	(4.6)	116	(2.7)	382	(6.7)	458	(5.5)	538	(4.7)	613	(4.7)	677	(5.4)
	Chile	432	(3.7)	106	(2.1)	295	(5.1)	360	(4.2)	433	(4.3)	507	(4.4)	569	(5.3)
	Italy	483	(2.8)	97	(1.9)	356	(4.9)	419	(3.5)	488	(3.0)	552	(2.9)	605	(3.9)
	Netherlands	509	(3.3)	120	(3.4)	348	(7.9)	426	(5.5)	517	(3.6)	596	(2.9)	660	(3.6)
	Poland	485	(3.0)	102	(1.8)	351	(5.0)	418	(3.9)	489	(3.2)	556	(3.7)	614	(4.1)
	Slovak Republic	445	(4.5)	121	(2.3)	287	(6.4)	364	(5.3)	450	(4.8)	530	(5.3)	598	(4.8)
	Spain	469	(3.2)	103	(1.5)	332	(5.0)	401	(4.2)	473	(3.4)	541	(3.2)	597	(3.3)
	United States	487	(3.8)	108	(1.8)	346	(5.6)	413	(4.5)	490	(4.7)	564	(4.3)	626	(4.2)
	OECD average-10	489	(1.1)	110	(0.7)	342	(1.8)	415	(1.4)	494	(1.2)	567	(1.2)	627	(1.3)
Partners	Brazil	393	(3.8)	117	(1.9)	246	(4.6)	312	(3.8)	390	(4.3)	473	(4.5)	548	(5.0)
	B-S-J-G (China)	566	(6.0)	121	(3.6)	405	(8.0)	485	(6.8)	573	(7.0)	653	(6.7)	717	(7.4)
	Lithuania	449	(3.1)	102	(2.2)	313	(5.0)	379	(4.4)	452	(3.8)	520	(3.8)	579	(4.7)
	Peru	403	(3.4)	105	(1.7)	263	(4.4)	328	(3.9)	405	(4.2)	478	(4.2)	539	(4.3)
	Russia	512	(3.3)	90	(1.8)	396	(4.4)	452	(4.3)	514	(3.8)	574	(4.3)	627	(4.4)

		Range of performance													
		25th percentile – 10th percentile		50th percentile – 25th percentile		75th percentile – 50th percentile		90th percentile – 75th percentile		50th percentile – 10th percentile		90th percentile – 50th percentile		90th percentile – 10th percentile	
		Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.
OECD	Australia	**83**	(2.3)	**86**	(2.0)	**78**	(2.0)	**63**	(1.9)	**169**	(2.8)	**141**	(2.6)	**309**	(3.9)
	Belgium (Flemish)	**82**	(5.2)	**85**	(4.0)	**70**	(2.5)	**55**	(3.0)	**166**	(6.4)	**124**	(4.0)	**291**	(8.5)
	Canadian provinces	**76**	(3.7)	**80**	(2.4)	**75**	(2.8)	**65**	(3.0)	**155**	(4.4)	**140**	(4.5)	**295**	(6.7)
	Chile	**65**	(3.3)	**73**	(2.8)	**73**	(3.3)	**62**	(3.3)	**139**	(4.8)	**136**	(4.4)	**274**	(6.6)
	Italy	**63**	(3.4)	**69**	(2.4)	**64**	(2.1)	**53**	(3.0)	**132**	(4.2)	**117**	(4.0)	**249**	(6.0)
	Netherlands	**78**	(5.0)	**90**	(4.4)	**80**	(2.6)	**63**	(3.1)	**168**	(7.4)	**143**	(4.0)	**312**	(8.8)
	Poland	**67**	(4.1)	**71**	(2.7)	**68**	(2.8)	**57**	(3.0)	**137**	(4.3)	**125**	(3.6)	**262**	(5.5)
	Slovak Republic	**78**	(3.7)	**85**	(3.5)	**80**	(3.0)	**68**	(2.5)	**163**	(4.6)	**148**	(3.3)	**311**	(6.1)
	Spain	**69**	(3.2)	**72**	(2.6)	**67**	(2.4)	**56**	(2.2)	**141**	(3.7)	**124**	(3.3)	**265**	(4.8)
	United States	**67**	(3.2)	**77**	(2.9)	**74**	(3.3)	**62**	(3.2)	**144**	(4.0)	**136**	(4.1)	**280**	(5.8)
	OECD average-10	**73**	(1.2)	**79**	(1.0)	**73**	(0.9)	**60**	(0.9)	**151**	(1.5)	**133**	(1.2)	**285**	(2.0)
Partners	Brazil	**66**	(2.6)	**79**	(2.2)	**83**	(2.0)	**75**	(2.9)	**145**	(3.7)	**157**	(3.9)	**302**	(5.3)
	B-S-J-G (China)	**80**	(4.4)	**88**	(3.9)	**80**	(4.1)	**64**	(3.9)	**168**	(7.1)	**143**	(6.0)	**312**	(10.0)
	Lithuania	**66**	(3.5)	**73**	(3.0)	**68**	(2.6)	**59**	(3.3)	**139**	(4.2)	**127**	(4.5)	**266**	(6.4)
	Peru	**65**	(2.7)	**77**	(2.8)	**73**	(2.8)	**61**	(3.1)	**143**	(4.0)	**133**	(3.7)	**276**	(5.4)
	Russia	**56**	(3.3)	**62**	(2.4)	**60**	(2.8)	**54**	(2.6)	**118**	(4.0)	**114**	(3.7)	**232**	(5.1)

Note: Values that are statistically significant are indicated in bold (see Annex A3).

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Table IV.4.2 Change between 2012 and 2015 in financial literacy performance, by percentiles

		PISA 2012									
		10th		25th		Median (50th)		75th		90th	
		Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.
OECD	Australia	398	(4.7)	462	(3.4)	528	(2.7)	594	(3.6)	653	(3.7)
	Belgium (Flemish)	409	(6.7)	480	(6.3)	550	(4.1)	611	(3.9)	660	(6.8)
	Canadian provinces	m	m	m	m	m	m	m	m	m	m
	Chile	m	m	m	m	m	m	m	m	m	m
	Italy	350	(4.3)	412	(3.6)	472	(2.6)	528	(2.9)	574	(2.9)
	Netherlands	m	m	m	m	m	m	m	m	m	m
	Poland	401	(5.9)	454	(5.3)	514	(5.0)	566	(3.7)	611	(6.3)
	Slovak Republic	331	(13.0)	409	(7.6)	477	(6.0)	541	(6.1)	596	(6.9)
	Spain	371	(6.0)	429	(5.1)	489	(3.9)	543	(4.3)	593	(4.0)
	United States	364	(7.3)	424	(6.1)	490	(6.8)	561	(7.2)	620	(8.3)
	OECD average-7	375	(2.8)	439	(2.1)	503	(1.8)	564	(1.8)	615	(2.2)
	OECD average-10	m	m	m	m	m	m	m	m	m	m
Partners	Brazil	m	m	m	m	m	m	m	m	m	m
	B-S-J-G (China)	m	m	m	m	m	m	m	m	m	m
	Lithuania	m	m	m	m	m	m	m	m	m	m
	Peru	m	m	m	m	m	m	m	m	m	m
	Russia	367	(6.2)	432	(6.3)	492	(4.6)	549	(4.5)	593	(5.4)

		PISA 2015									
		10th		25th		Median (50th)		75th		90th	
		Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.
OECD	Australia	342	(3.1)	425	(2.9)	510	(2.3)	589	(2.2)	651	(2.6)
	Belgium (Flemish)	386	(6.9)	467	(4.6)	552	(3.6)	622	(3.2)	676	(4.0)
	Canadian provinces	382	(6.7)	458	(5.5)	538	(4.7)	613	(4.7)	677	(5.4)
	Chile	295	(5.1)	360	(4.2)	433	(4.3)	507	(4.4)	569	(5.3)
	Italy	356	(4.9)	419	(3.5)	488	(3.0)	552	(2.9)	605	(3.9)
	Netherlands	348	(7.9)	426	(5.5)	517	(3.6)	596	(2.9)	660	(3.6)
	Poland	351	(5.0)	418	(3.9)	489	(3.2)	556	(3.7)	614	(4.1)
	Slovak Republic	287	(6.4)	364	(5.3)	450	(4.8)	530	(5.3)	598	(4.8)
	Spain	332	(5.0)	401	(4.2)	473	(3.4)	541	(3.2)	597	(3.3)
	United States	346	(5.6)	413	(4.5)	490	(4.7)	564	(4.3)	626	(4.2)
	OECD average-7	343	(2.0)	415	(1.6)	493	(1.4)	565	(1.4)	624	(1.5)
	OECD average-10	342	(1.8)	415	(1.4)	494	(1.2)	567	(1.2)	627	(1.3)
Partners	Brazil	246	(4.6)	312	(3.8)	390	(4.3)	473	(4.5)	548	(5.0)
	B-S-J-G (China)	405	(8.0)	485	(6.8)	573	(7.0)	653	(6.7)	717	(7.4)
	Lithuania	313	(5.0)	379	(4.4)	452	(3.8)	520	(3.8)	579	(4.7)
	Peru	263	(4.4)	328	(3.9)	405	(4.2)	478	(4.2)	539	(4.3)
	Russia	396	(4.4)	452	(4.3)	514	(3.8)	574	(4.3)	627	(4.4)

		Change between 2012 and 2015 (PISA 2015 – PISA 2012)									
		10th		25th		Median (50th)		75th		90th	
		Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.
OECD	Australia	**-56**	(7.7)	**-37**	(7.0)	**-17**	(6.4)	-6	(6.8)	-2	(7.0)
	Belgium (Flemish)	**-23**	(11.0)	-13	(9.5)	2	(7.6)	11	(7.3)	17	(9.5)
	Canadian provinces	m	m	m	m	m	m	m	m	m	m
	Chile	m	m	m	m	m	m	m	m	m	m
	Italy	6	(8.4)	7	(7.3)	**16**	(6.7)	**24**	(6.7)	**30**	(7.2)
	Netherlands	m	m	m	m	m	m	m	m	m	m
	Poland	**-50**	(9.4)	**-36**	(8.5)	**-25**	(8.0)	-10	(7.5)	2	(9.2)
	Slovak Republic	**-44**	(15.4)	**-45**	(10.7)	**-28**	(9.3)	-12	(9.7)	1	(10.0)
	Spain	**-38**	(9.4)	**-28**	(8.5)	**-16**	(7.4)	-2	(7.6)	4	(7.4)
	United States	-18	(10.7)	-11	(9.3)	0	(9.8)	3	(9.9)	6	(10.7)
	OECD average-7	**-32**	(6.3)	**-23**	(5.9)	-10	(5.8)	1	(5.8)	8	(6.0)
	OECD average-10	m	m	m	m	m	m	m	m	m	m
Partners	Brazil	m	m	m	m	m	m	m	m	m	m
	B-S-J-G (China)	m	m	m	m	m	m	m	m	m	m
	Lithuania	m	m	m	m	m	m	m	m	m	m
	Peru	m	m	m	m	m	m	m	m	m	m
	Russia	**29**	(9.3)	**20**	(9.3)	**21**	(8.0)	**25**	(8.2)	**34**	(8.8)

Note: Values that are statistically significant are indicated in bold (see Annex A3).

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Table IV.4.3 Change between 2012 and 2015 in financial literacy performance, by percentiles, adjusted for demographic changes

		PISA 2012									
		10th		25th		Median (50th)		75th		90th	
		Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.
OECD	Australia	401	(5.0)	463	(3.7)	530	(2.9)	596	(3.5)	654	(4.2)
OECD	Belgium (Flemish)	413	(7.9)	487	(8.4)	555	(5.2)	614	(4.1)	663	(5.7)
OECD	Canadian provinces	m	m	m	m	m	m	m	m	m	m
OECD	Chile	m	m	m	m	m	m	m	m	m	m
OECD	Italy	348	(5.1)	410	(4.0)	471	(2.8)	527	(3.1)	573	(2.8)
OECD	Netherlands	m	m	m	m	m	m	m	m	m	m
OECD	Poland	402	(6.1)	455	(5.3)	515	(4.9)	567	(3.9)	612	(5.8)
OECD	Slovak Republic	321	(13.2)	405	(8.1)	474	(6.0)	540	(6.0)	595	(6.8)
OECD	Spain	371	(6.0)	430	(5.0)	490	(3.9)	543	(4.5)	593	(4.2)
OECD	United States	364	(7.3)	422	(6.4)	490	(6.5)	561	(7.2)	618	(7.8)
OECD	OECD average-7	374	(2.9)	439	(2.3)	504	(1.8)	564	(1.8)	615	(2.1)
OECD	OECD average-10	m	m	m	m	m	m	m	m	m	m
Partners	Brazil	m	m	m	m	m	m	m	m	m	m
Partners	B-S-J-G (China)	m	m	m	m	m	m	m	m	m	m
Partners	Lithuania	m	m	m	m	m	m	m	m	m	m
Partners	Peru	m	m	m	m	m	m	m	m	m	m
Partners	Russia	367	(6.1)	432	(6.5)	493	(4.4)	550	(4.3)	594	(5.6)

		PISA 2015									
		10th		25th		Median (50th)		75th		90th	
		Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.
OECD	Australia	342	(3.1)	425	(2.9)	510	(2.3)	589	(2.2)	651	(2.6)
OECD	Belgium (Flemish)	386	(6.9)	467	(4.6)	552	(3.6)	622	(3.2)	676	(4.0)
OECD	Canadian provinces	382	(6.7)	458	(5.5)	538	(4.7)	613	(4.7)	677	(5.4)
OECD	Chile	295	(5.1)	360	(4.2)	433	(4.3)	507	(4.4)	569	(5.3)
OECD	Italy	356	(4.9)	419	(3.5)	488	(3.0)	552	(2.9)	605	(3.9)
OECD	Netherlands	348	(7.9)	426	(5.5)	517	(3.6)	596	(2.9)	660	(3.6)
OECD	Poland	351	(5.0)	418	(3.9)	489	(3.2)	556	(3.7)	614	(4.1)
OECD	Slovak Republic	287	(6.4)	364	(5.3)	450	(4.8)	530	(5.3)	598	(4.8)
OECD	Spain	332	(5.0)	401	(4.2)	473	(3.4)	541	(3.2)	597	(3.3)
OECD	United States	346	(5.6)	413	(4.5)	490	(4.7)	564	(4.3)	626	(4.2)
OECD	OECD average-7	343	(2.0)	415	(1.6)	493	(1.4)	565	(1.4)	624	(1.5)
OECD	OECD average-10	342	(1.8)	415	(1.4)	494	(1.2)	567	(1.2)	627	(1.3)
Partners	Brazil	246	(4.6)	312	(3.8)	390	(4.3)	473	(4.5)	548	(5.0)
Partners	B-S-J-G (China)	405	(8.0)	485	(6.8)	573	(7.0)	653	(6.7)	717	(7.4)
Partners	Lithuania	313	(5.0)	379	(4.4)	452	(3.8)	520	(3.8)	579	(4.7)
Partners	Peru	263	(4.4)	328	(3.9)	405	(4.2)	478	(4.2)	539	(4.3)
Partners	Russia	396	(4.4)	452	(4.3)	514	(3.8)	574	(4.3)	627	(4.4)

		Change between 2012 and 2015 (PISA 2015 – PISA 2012)									
		10th		25th		Median (50th)		75th		90th	
		Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.
OECD	Australia	**-59**	(7.9)	**-39**	(7.1)	**-19**	(6.5)	-8	(6.8)	-2	(7.3)
OECD	Belgium (Flemish)	**-28**	(11.8)	-20	(11.0)	-3	(8.3)	8	(7.5)	13	(8.8)
OECD	Canadian provinces	m	m	m	m	m	m	m	m	m	m
OECD	Chile	m	m	m	m	m	m	m	m	m	m
OECD	Italy	8	(8.9)	9	(7.6)	**16**	(6.7)	**25**	(6.8)	**31**	(7.2)
OECD	Netherlands	m	m	m	m	m	m	m	m	m	m
OECD	Poland	**-51**	(9.5)	**-37**	(8.5)	**-27**	(7.9)	-11	(7.6)	1	(8.9)
OECD	Slovak Republic	**-34**	(15.6)	**-41**	(11.1)	**-25**	(9.3)	-10	(9.6)	2	(9.9)
OECD	Spain	**-39**	(9.4)	**-29**	(8.4)	**-16**	(7.4)	-3	(7.7)	4	(7.5)
OECD	United States	-18	(10.6)	-9	(9.5)	0	(9.6)	3	(10.0)	8	(10.3)
OECD	OECD average-7	**-32**	(6.4)	**-24**	(6.0)	-10	(5.8)	1	(5.8)	8	(5.9)
OECD	OECD average-10	m	m	m	m	m	m	m	m	m	m
Partners	Brazil	m	m	m	m	m	m	m	m	m	m
Partners	B-S-J-G (China)	m	m	m	m	m	m	m	m	m	m
Partners	Lithuania	m	m	m	m	m	m	m	m	m	m
Partners	Peru	m	m	m	m	m	m	m	m	m	m
Partners	Russia	**29**	(9.2)	**20**	(9.4)	**21**	(7.9)	**24**	(8.0)	**34**	(8.9)

Note: Values that are statistically significant are indicated in bold (see Annex A3).

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Table IV.4.4 Mean financial literacy performance in countries/economies and regions

		Mean financial literacy scores		Difference (region – country)	
		Mean score	S.E.	Score dif.	S.E.
OECD	**Canadian provinces**	533	(4.6)		
	British Columbia	551	(7.1)	**17**	(6.6)
	Manitoba	503	(7.1)	**-30**	(6.9)
	New Brunswick	511	(7.4)	**-22**	(7.3)
	Newfoundland and Labrador	519	(7.6)	-14	(8.3)
	Nova Scotia	526	(6.7)	-7	(7.1)
	Ontario	533	(6.1)	0	(2.3)
	Prince Edward Island	522	(10.4)	-11	(10.6)
	Italy	483	(2.8)		
	Bolzano	523	(6.2)	**39**	(7.4)
	Campania	452	(7.1)	**-31**	(7.1)
	Lombardia	505	(5.7)	**21**	(5.7)
	Trento	510	(3.1)	**27**	(4.2)
	Spain	469	(3.2)		
	Basque Country	459	(5.3)	-10	(6.9)
	United States	487	(3.8)		
	Massachusetts	523	(6.7)	**36**	(7.5)
	North Carolina	496	(5.5)	8	(6.0)

Notes: Values that are statistically significant are indicated in bold (see Annex A3).
For Massachusetts and North Carolina, the desired target population covers 15-year-old students in grade 7 or above in public schools only (see Annex A2).
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Table IV.4.5 Mean score and variation in financial literacy performance, by gender

		Boys													
						Percentiles									
		Mean score		Standard deviation		10th		25th		Median (50th)		75th		90th	
		Mean	S.E.	S.D.	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.
OECD	Australia	498	(2.7)	125	(1.4)	325	(3.7)	411	(4.0)	505	(3.4)	588	(3.4)	655	(3.7)
OECD	Belgium (Flemish)	541	(3.8)	113	(2.8)	382	(8.5)	464	(6.1)	552	(4.3)	623	(3.8)	679	(4.8)
OECD	Canadian provinces	531	(4.8)	120	(2.7)	373	(7.7)	451	(5.7)	535	(5.6)	615	(5.4)	680	(6.8)
OECD	Chile	434	(4.5)	108	(2.4)	294	(6.4)	360	(4.9)	436	(5.6)	511	(5.5)	573	(5.9)
OECD	Italy	489	(3.9)	100	(2.4)	357	(6.5)	422	(4.6)	494	(4.6)	559	(4.4)	614	(4.4)
OECD	Netherlands	507	(3.9)	125	(3.9)	340	(9.8)	419	(6.9)	514	(5.2)	596	(4.0)	665	(5.7)
OECD	Poland	478	(3.6)	107	(2.2)	335	(6.5)	406	(4.8)	482	(4.0)	553	(4.6)	614	(4.9)
OECD	Slovak Republic	433	(4.9)	123	(2.4)	274	(6.2)	348	(6.0)	436	(5.5)	519	(6.2)	592	(6.0)
OECD	Spain	464	(3.7)	107	(1.9)	321	(6.0)	393	(5.0)	469	(4.2)	538	(4.2)	599	(4.1)
OECD	United States	488	(4.4)	113	(2.1)	341	(6.6)	410	(5.6)	490	(5.6)	569	(5.3)	634	(6.1)
OECD	OECD average-10	486	(1.3)	114	(0.8)	334	(2.2)	408	(1.7)	491	(1.5)	567	(1.5)	630	(1.7)
Partners	Brazil	389	(4.5)	119	(2.1)	240	(5.8)	304	(4.9)	384	(4.9)	470	(5.4)	548	(5.7)
Partners	B-S-J-G (China)	568	(6.1)	123	(3.7)	404	(8.6)	485	(7.5)	576	(7.2)	657	(6.6)	720	(7.4)
Partners	Lithuania	435	(3.7)	105	(2.6)	296	(5.4)	363	(4.8)	437	(4.7)	510	(4.4)	572	(5.7)
Partners	Peru	400	(4.1)	106	(2.0)	259	(5.8)	325	(4.6)	402	(4.9)	477	(5.2)	539	(5.6)
Partners	Russia	510	(4.2)	94	(2.3)	387	(5.7)	447	(5.8)	512	(4.9)	575	(5.5)	631	(5.3)

		Girls													
						Percentiles									
		Mean score		Standard deviation		10th		25th		Median (50th)		75th		90th	
		Mean	S.E.	S.D.	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.
OECD	Australia	510	(2.1)	111	(1.3)	361	(4.0)	437	(3.1)	515	(2.5)	589	(2.3)	647	(2.9)
OECD	Belgium (Flemish)	541	(4.3)	110	(3.0)	389	(8.4)	471	(6.0)	552	(5.2)	620	(5.1)	674	(5.1)
OECD	Canadian provinces	536	(5.2)	112	(3.2)	391	(7.6)	464	(6.0)	540	(4.8)	611	(5.7)	675	(6.8)
OECD	Chile	430	(4.2)	104	(2.6)	295	(6.6)	360	(5.7)	431	(4.7)	502	(5.0)	564	(7.2)
OECD	Italy	478	(4.0)	94	(2.2)	354	(6.6)	416	(5.0)	482	(4.2)	544	(4.6)	594	(5.8)
OECD	Netherlands	512	(3.6)	116	(3.3)	357	(8.2)	433	(6.1)	519	(4.6)	596	(3.8)	656	(4.5)
OECD	Poland	493	(3.2)	96	(2.3)	368	(5.1)	431	(4.0)	495	(3.3)	559	(4.2)	614	(5.4)
OECD	Slovak Republic	458	(5.6)	118	(3.4)	305	(9.0)	382	(7.7)	464	(6.1)	539	(5.6)	603	(6.3)
OECD	Spain	474	(4.1)	98	(2.1)	344	(6.3)	409	(5.3)	478	(4.6)	542	(4.2)	596	(4.4)
OECD	United States	487	(4.1)	103	(2.3)	352	(6.4)	416	(5.2)	489	(5.0)	559	(5.0)	619	(5.3)
OECD	OECD average-10	492	(1.3)	106	(0.8)	352	(2.2)	422	(1.8)	497	(1.5)	566	(1.5)	624	(1.7)
Partners	Brazil	397	(4.3)	115	(2.1)	251	(5.1)	318	(4.5)	396	(4.8)	475	(5.6)	547	(5.9)
Partners	B-S-J-G (China)	563	(6.7)	119	(3.9)	406	(9.3)	485	(7.7)	570	(7.8)	648	(7.6)	712	(9.1)
Partners	Lithuania	462	(3.2)	97	(2.3)	335	(5.9)	397	(4.4)	466	(3.8)	529	(4.0)	585	(4.8)
Partners	Peru	405	(4.0)	104	(2.1)	266	(5.0)	332	(5.2)	409	(5.0)	480	(4.8)	538	(5.3)
Partners	Russia	514	(3.3)	87	(1.8)	403	(4.4)	456	(4.2)	515	(4.0)	572	(4.9)	623	(5.5)

		Gender differences (boys – girls)													
						Percentiles									
		Mean score		Standard deviation		10th		25th		Median (50th)		75th		90th	
		Score dif.	S.E.	Dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.
OECD	Australia	**-12**	(2.8)	**13**	(1.6)	**-36**	(5.2)	**-26**	(4.3)	**-10**	(3.6)	0	(3.7)	8	(4.5)
OECD	Belgium (Flemish)	0	(5.6)	3	(2.7)	-7	(11.1)	-7	(8.2)	0	(6.4)	3	(6.5)	4	(5.9)
OECD	Canadian provinces	-5	(3.9)	**8**	(2.5)	**-18**	(7.3)	**-13**	(4.6)	-5	(4.5)	4	(5.6)	6	(7.0)
OECD	Chile	4	(4.4)	5	(2.9)	-1	(7.6)	1	(6.2)	5	(5.6)	9	(5.9)	8	(6.5)
OECD	Italy	**11**	(5.6)	**6**	(2.5)	3	(8.3)	5	(6.6)	11	(6.5)	**15**	(6.1)	**20**	(7.0)
OECD	Netherlands	-5	(3.6)	**9**	(2.6)	-17	(8.7)	**-13**	(6.4)	-5	(6.3)	0	(5.0)	9	(6.9)
OECD	Poland	**-15**	(3.5)	**11**	(2.8)	**-33**	(7.2)	**-25**	(5.3)	**-14**	(4.4)	-6	(4.7)	0	(6.2)
OECD	Slovak Republic	**-25**	(5.3)	6	(3.6)	**-31**	(8.7)	**-34**	(7.7)	**-28**	(6.9)	**-20**	(6.0)	-10	(7.1)
OECD	Spain	**-10**	(4.4)	**9**	(2.6)	**-23**	(7.0)	**-16**	(5.8)	-9	(5.7)	-4	(5.3)	3	(5.5)
OECD	United States	2	(3.8)	**9**	(2.3)	-11	(6.8)	-6	(5.4)	1	(4.9)	**10**	(5.0)	**14**	(6.7)
OECD	OECD average-10	**-5**	(1.4)	**8**	(0.8)	**-17**	(2.5)	**-13**	(1.9)	**-5**	(1.8)	1	(1.7)	**6**	(2.0)
Partners	Brazil	-8	(4.4)	**5**	(2.0)	**-12**	(5.9)	**-14**	(5.0)	**-11**	(5.1)	-5	(5.9)	1	(5.3)
Partners	B-S-J-G (China)	5	(4.2)	4	(2.4)	-3	(8.0)	1	(6.0)	7	(5.5)	9	(5.2)	9	(5.8)
Partners	Lithuania	**-27**	(3.0)	**8**	(2.2)	**-38**	(6.1)	**-35**	(4.8)	**-29**	(4.3)	**-19**	(4.1)	**-13**	(5.7)
Partners	Peru	-5	(4.5)	2	(2.2)	-7	(6.7)	-7	(4.9)	-7	(5.2)	-3	(6.1)	1	(6.9)
Partners	Russia	-3	(3.6)	**8**	(2.3)	**-16**	(5.7)	-10	(5.4)	-3	(4.8)	3	(6.3)	8	(6.3)

Note: Values that are statistically significant are indicated in bold (see Annex A3).

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Table IV.4.6 Mean score and variation in the core PISA subjects, by gender

		Mathematics											
		Boys				Girls				Gender differences (boys – girls)			
		Mean score		Standard deviation		Mean score		Standard deviation		Mean score		Standard deviation	
		Mean	S.E.	S.D.	S.E.	Mean	S.E.	S.D.	S.E.	Score dif.	S.E.	Dif.	S.E.
OECD	Australia	497	(2.1)	96	(1.4)	491	(2.5)	90	(1.5)	6	(3.4)	**7**	(1.5)
	Belgium (Flemish)	530	(3.4)	101	(2.3)	512	(3.1)	96	(2.0)	**18**	(4.3)	**5**	(2.3)
	Canadian provinces	513	(3.5)	88	(1.7)	505	(3.3)	84	(1.4)	**8**	(3.5)	4	(1.8)
	Chile	432	(3.1)	87	(1.7)	413	(3.0)	83	(1.7)	**18**	(3.6)	3	(1.9)
	Italy	500	(3.5)	96	(2.0)	480	(3.4)	90	(2.2)	**20**	(4.3)	**5**	(2.6)
	Netherlands	513	(2.6)	94	(1.8)	511	(2.5)	89	(1.6)	2	(2.4)	**5**	(1.9)
	Poland	510	(2.8)	89	(1.9)	499	(2.8)	85	(2.2)	**11**	(2.9)	4	(2.4)
	Slovak Republic	478	(3.0)	96	(1.8)	472	(3.6)	94	(2.2)	6	(3.9)	2	(2.4)
	Spain	494	(2.4)	87	(1.7)	478	(2.8)	82	(1.6)	**16**	(2.8)	**5**	(2.0)
	United States	474	(3.6)	91	(1.6)	465	(3.4)	86	(2.3)	**9**	(3.1)	5	(2.6)
	OECD average-10	494	(1.0)	92	(0.6)	483	(1.0)	88	(0.6)	**11**	(1.1)	**4**	(0.7)
Partners	Brazil	385	(3.2)	92	(1.9)	370	(3.0)	86	(1.9)	**15**	(2.4)	**5**	(1.4)
	B-S-J-G (China)	534	(4.8)	108	(2.6)	528	(5.7)	104	(2.8)	6	(3.6)	**4**	(2.1)
	Lithuania	478	(2.8)	89	(1.5)	479	(2.5)	84	(1.9)	-1	(2.7)	**5**	(2.0)
	Peru	391	(3.0)	83	(1.7)	382	(3.2)	82	(1.7)	**9**	(3.0)	2	(2.0)
	Russia	497	(4.0)	85	(1.7)	491	(3.2)	82	(1.6)	6	(3.5)	3	(1.9)

		Reading											
		Boys				Girls				Gender differences (boys – girls)			
		Mean score		Standard deviation		Mean score		Standard deviation		Mean score		Standard deviation	
		Mean	S.E.	S.D.	S.E.	Mean	S.E.	S.D.	S.E.	Score dif.	S.E.	Dif.	S.E.
OECD	Australia	487	(2.3)	105	(1.4)	519	(2.3)	98	(1.4)	**-32**	(3.0)	**7**	(1.6)
	Belgium (Flemish)	503	(3.3)	102	(2.1)	519	(3.6)	99	(2.3)	**-16**	(4.1)	3	(2.4)
	Canadian provinces	511	(3.5)	95	(1.9)	540	(3.5)	90	(1.8)	**-29**	(2.8)	**5**	(2.3)
	Chile	453	(3.4)	90	(2.2)	465	(2.9)	86	(2.0)	**-12**	(3.6)	3	(2.3)
	Italy	477	(3.5)	95	(2.0)	493	(3.6)	92	(1.9)	**-16**	(4.7)	3	(2.2)
	Netherlands	491	(3.0)	103	(1.9)	515	(2.9)	97	(1.9)	**-24**	(3.4)	**6**	(2.0)
	Poland	491	(2.9)	92	(1.6)	521	(2.8)	84	(1.8)	**-29**	(2.9)	**8**	(2.2)
	Slovak Republic	435	(3.3)	104	(2.2)	471	(3.5)	101	(2.4)	**-36**	(4.0)	3	(2.9)
	Spain	485	(3.0)	90	(1.6)	506	(2.8)	83	(1.9)	**-20**	(3.5)	**7**	(2.1)
	United States	487	(3.7)	103	(1.9)	507	(3.9)	96	(2.0)	**-20**	(3.6)	**7**	(2.3)
	OECD average-10	482	(1.0)	98	(0.6)	505	(1.0)	93	(0.6)	**-23**	(1.1)	**5**	(0.7)
Partners	Brazil	395	(3.1)	102	(1.6)	419	(3.0)	97	(1.7)	**-23**	(2.5)	**6**	(1.4)
	B-S-J-G (China)	486	(5.0)	108	(3.1)	503	(5.8)	109	(3.1)	**-16**	(3.4)	0	(2.3)
	Lithuania	453	(3.1)	95	(1.9)	492	(3.0)	89	(1.9)	**-39**	(3.1)	**6**	(2.0)
	Peru	394	(3.4)	88	(1.8)	401	(3.6)	90	(2.0)	**-8**	(3.9)	-1	(1.9)
	Russia	481	(3.4)	88	(1.9)	507	(3.5)	85	(1.8)	**-26**	(3.3)	3	(2.4)

		Science											
		Boys				Girls				Gender differences (boys – girls)			
		Mean score		Standard deviation		Mean score		Standard deviation		Mean score		Standard deviation	
		Mean	S.E.	S.D.	S.E.	Mean	S.E.	S.D.	S.E.	Score dif.	S.E.	Dif.	S.E.
OECD	Australia	511	(2.1)	107	(1.2)	509	(1.7)	98	(1.2)	2	(2.3)	**9**	(1.6)
	Belgium (Flemish)	522	(3.2)	104	(2.1)	509	(3.4)	99	(1.9)	**12**	(4.2)	**5**	(2.0)
	Canadian provinces	524	(3.1)	97	(1.4)	525	(2.9)	90	(1.5)	-1	(2.9)	**6**	(1.9)
	Chile	454	(3.1)	88	(1.8)	440	(2.7)	83	(1.5)	**15**	(3.4)	**5**	(2.0)
	Italy	489	(3.1)	93	(1.5)	472	(3.6)	89	(1.8)	**17**	(4.6)	**4**	(2.1)
	Netherlands	511	(2.9)	104	(1.8)	507	(2.5)	97	(1.7)	4	(3.0)	**7**	(1.9)
	Poland	504	(2.9)	94	(1.8)	498	(2.8)	87	(1.7)	**6**	(2.9)	**7**	(2.4)
	Slovak Republic	460	(3.0)	101	(1.7)	461	(3.3)	96	(2.0)	-1	(3.5)	**5**	(2.2)
	Spain	496	(2.5)	91	(1.5)	489	(2.5)	84	(1.4)	**7**	(2.7)	**7**	(1.9)
	United States	500	(3.7)	102	(1.8)	493	(3.4)	95	(1.8)	**7**	(3.1)	**7**	(2.2)
	OECD average-10	497	(0.9)	98	(0.5)	490	(0.9)	92	(0.5)	**7**	(1.0)	**6**	(0.6)
Partners	Brazil	403	(2.5)	93	(1.4)	399	(2.4)	86	(1.4)	**4**	(1.6)	**7**	(1.2)
	B-S-J-G (China)	522	(4.5)	105	(2.6)	513	(5.3)	101	(2.8)	**9**	(3.0)	3	(2.0)
	Lithuania	472	(3.3)	94	(1.8)	479	(2.8)	88	(1.5)	**-7**	(3.0)	**6**	(1.8)
	Peru	402	(2.8)	78	(1.5)	392	(2.9)	75	(1.7)	**10**	(3.3)	2	(1.6)
	Russia	489	(3.6)	85	(1.5)	485	(3.1)	80	(1.0)	4	(3.2)	**5**	(1.5)

Note: Values that are statistically significant are indicated in bold (see Annex A3).

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Table IV.4.7 Percentage of students at each proficiency level in financial literacy, by gender

		Boys									
		Level 1 or below (below 400.33 score points)		Level 2 (from 400.33 to less than 475.10 score points)		Level 3 (from 475.10 to less than 549.86 score points)		Level 4 (from 549.86 to less than 624.63 score points)		Level 5 (at or above 624.63 score points)	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	22.9	(0.8)	18.1	(0.7)	22.9	(0.8)	20.2	(0.8)	15.9	(0.7)
OECD	Belgium (Flemish)	12.6	(1.3)	15.2	(1.0)	21.5	(1.3)	26.2	(1.1)	24.5	(1.3)
OECD	Canadian provinces	14.1	(1.1)	17.3	(1.0)	23.6	(1.1)	22.7	(1.5)	22.3	(1.4)
OECD	Chile	37.5	(1.8)	25.9	(1.6)	22.0	(1.1)	11.0	(1.1)	3.5	(0.5)
OECD	Italy	19.2	(1.4)	23.9	(1.3)	28.5	(1.1)	20.4	(1.2)	8.0	(0.8)
OECD	Netherlands	20.9	(1.4)	18.1	(1.3)	22.2	(1.2)	20.9	(1.2)	17.9	(1.0)
OECD	Poland	23.4	(1.4)	24.2	(1.2)	26.5	(1.1)	17.9	(1.1)	8.0	(0.8)
OECD	Slovak Republic	39.3	(1.7)	23.2	(1.3)	19.7	(1.2)	12.0	(1.1)	5.8	(0.7)
OECD	Spain	27.2	(1.4)	25.1	(1.2)	26.2	(1.1)	15.7	(0.8)	5.9	(0.6)
OECD	United States	22.5	(1.5)	22.4	(1.1)	24.2	(1.3)	19.4	(1.2)	11.4	(0.9)
OECD	OECD average-10	24.0	(0.4)	21.3	(0.4)	23.7	(0.4)	18.6	(0.4)	12.3	(0.3)
Partners	Brazil	55.1	(1.6)	21.1	(0.8)	14.1	(0.9)	7.0	(0.6)	2.7	(0.4)
Partners	B-S-J-G (China)	9.6	(1.1)	13.1	(1.0)	19.4	(1.2)	23.3	(1.2)	34.6	(2.0)
Partners	Lithuania	37.1	(1.5)	26.7	(1.1)	21.9	(1.0)	11.2	(1.0)	3.2	(0.6)
Partners	Peru	49.4	(1.7)	25.1	(1.1)	17.2	(1.3)	7.1	(0.8)	1.2	(0.3)
Partners	Russia	12.5	(1.1)	22.7	(1.5)	30.6	(1.4)	22.9	(1.4)	11.4	(1.1)

		Girls									
		Level 1 or below (below 400.33 score points)		Level 2 (from 400.33 to less than 475.10 score points)		Level 3 (from 475.10 to less than 549.86 score points)		Level 4 (from 549.86 to less than 624.63 score points)		Level 5 (at or above 624.63 score points)	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	16.5	(0.7)	19.8	(0.7)	25.9	(0.7)	22.9	(0.7)	14.9	(0.7)
OECD	Belgium (Flemish)	11.4	(1.1)	14.7	(0.9)	23.2	(1.4)	27.2	(1.3)	23.5	(1.5)
OECD	Canadian provinces	11.3	(1.1)	16.9	(1.2)	25.5	(1.0)	25.2	(1.0)	21.2	(1.5)
OECD	Chile	38.7	(1.9)	27.1	(1.5)	21.6	(1.1)	10.0	(1.0)	2.6	(0.5)
OECD	Italy	20.5	(1.5)	26.4	(1.3)	30.1	(1.2)	18.0	(1.2)	5.0	(0.8)
OECD	Netherlands	17.5	(1.4)	18.9	(1.5)	23.9	(1.3)	22.6	(1.3)	17.1	(1.2)
OECD	Poland	16.6	(1.1)	24.8	(1.0)	30.3	(1.4)	20.3	(1.0)	8.0	(1.0)
OECD	Slovak Republic	29.7	(1.9)	24.0	(1.2)	24.5	(1.3)	14.9	(1.3)	6.9	(0.7)
OECD	Spain	22.3	(1.5)	26.7	(1.3)	28.5	(1.4)	17.1	(1.1)	5.3	(0.8)
OECD	United States	20.7	(1.5)	24.1	(1.2)	27.2	(1.4)	18.9	(1.3)	9.1	(0.9)
OECD	OECD average-10	20.5	(0.4)	22.3	(0.4)	26.1	(0.4)	19.7	(0.4)	11.4	(0.3)
Partners	Brazil	51.6	(1.6)	23.3	(0.8)	15.4	(1.0)	7.1	(0.6)	2.5	(0.4)
Partners	B-S-J-G (China)	9.2	(1.2)	13.4	(1.1)	21.4	(1.4)	24.0	(1.4)	32.1	(2.3)
Partners	Lithuania	25.8	(1.3)	27.8	(1.3)	27.9	(1.1)	14.1	(1.0)	4.3	(0.6)
Partners	Peru	47.0	(1.7)	26.5	(1.0)	18.5	(1.1)	6.7	(0.7)	1.2	(0.3)
Partners	Russia	9.4	(0.9)	22.7	(1.3)	33.8	(1.2)	24.3	(1.3)	9.7	(1.1)

		Gender differences (boys – girls)									
		Level 1 or below (below 400.33 score points)		Level 2 (from 400.33 to less than 475.10 score points)		Level 3 (from 475.10 to less than 549.86 score points)		Level 4 (from 549.86 to less than 624.63 score points)		Level 5 (at or above 624.63 score points)	
		% dif.	S.E.	% dif.	S.E.	% dif.	S.E.	% dif.	S.E.	% dif.	S.E.
OECD	Australia	**6.3**	(1.0)	-1.7	(1.0)	**-3.0**	(1.1)	**-2.7**	(1.1)	1.1	(0.9)
OECD	Belgium (Flemish)	1.1	(1.5)	0.6	(1.3)	-1.7	(1.6)	-1.0	(1.6)	1.0	(2.0)
OECD	Canadian provinces	**2.7**	(1.0)	0.4	(1.2)	-1.9	(1.5)	-2.5	(1.4)	1.2	(1.5)
OECD	Chile	-1.1	(2.1)	-1.2	(2.4)	0.4	(1.4)	1.0	(1.1)	0.9	(0.6)
OECD	Italy	-1.3	(1.9)	-2.5	(1.8)	-1.6	(1.6)	2.4	(1.8)	**3.0**	(1.1)
OECD	Netherlands	**3.5**	(1.5)	-0.8	(1.9)	-1.7	(1.6)	-1.7	(1.8)	0.7	(1.4)
OECD	Poland	**6.9**	(1.6)	-0.7	(1.4)	**-3.8**	(1.8)	-2.4	(1.3)	0.0	(1.0)
OECD	Slovak Republic	**9.6**	(2.1)	-0.8	(1.6)	**-4.7**	(1.9)	**-2.9**	(1.2)	-1.1	(0.9)
OECD	Spain	**4.8**	(1.6)	-1.7	(2.0)	-2.3	(1.6)	-1.4	(1.3)	0.6	(1.0)
OECD	United States	1.8	(1.5)	-1.7	(1.4)	-3.0	(1.6)	0.5	(1.5)	**2.3**	(1.2)
OECD	OECD average-10	**3.4**	(0.5)	-1.0	(0.5)	**-2.3**	(0.5)	**-1.1**	(0.5)	**1.0**	(0.4)
Partners	Brazil	**3.5**	(1.7)	-2.3	(1.2)	-1.3	(1.1)	-0.1	(0.7)	0.2	(0.3)
Partners	B-S-J-G (China)	0.4	(1.0)	-0.3	(1.1)	-2.0	(1.4)	-0.7	(1.3)	2.5	(1.6)
Partners	Lithuania	**11.2**	(1.4)	-1.1	(1.5)	**-6.0**	(1.3)	**-2.9**	(1.2)	-1.1	(0.6)
Partners	Peru	2.4	(1.9)	-1.4	(1.2)	-1.3	(1.5)	0.3	(0.9)	0.0	(0.4)
Partners	Russia	**3.1**	(1.0)	-0.1	(1.7)	-3.2	(1.7)	-1.5	(1.7)	1.7	(1.4)

Note: Values that are statistically significant are indicated in bold (see Annex A3).

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Table IV.4.8 Gender differences in financial literacy performance, by performance in other PISA subjects

		Gender differences in financial literacy performance (boys – girls)											
		Before accounting for performance in other subjects		After accounting for performance in mathematics		After accounting for performance in reading		After accounting for performance in science		After accounting for performance in mathematics and reading		After accounting for performance in mathematics, reading and science	
		Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.
OECD	Australia	**-12**	(2.8)	**-18**	(2.9)	**18**	(2.9)	**-14**	(1.9)	2	(2.4)	**-7**	(1.9)
	Belgium (Flemish)	0	(5.6)	**-16**	(5.2)	**15**	(4.5)	**-11**	(4.5)	-1	(4.6)	-6	(4.7)
	Canadian provinces	-5	(3.9)	**-13**	(4.4)	**20**	(3.5)	-4	(3.0)	7	(4.0)	1	(3.3)
	Chile	4	(4.4)	**-13**	(3.6)	**15**	(3.3)	**-10**	(3.0)	1	(3.3)	-5	(3.0)
	Italy	**11**	(5.6)	-3	(4.2)	**23**	(4.3)	-2	(3.9)	**10**	(4.2)	4	(4.0)
	Netherlands	-5	(3.6)	**-8**	(3.2)	**18**	(3.9)	**-9**	(3.1)	7	(3.5)	-1	(3.2)
	Poland	**-15**	(3.5)	**-25**	(3.0)	**10**	(2.9)	**-21**	(2.9)	**-8**	(3.3)	**-13**	(3.4)
	Slovak Republic	**-25**	(5.3)	**-30**	(5.2)	3	(4.5)	**-24**	(4.6)	**-14**	(5.2)	**-19**	(5.0)
	Spain	**-10**	(4.4)	**-24**	(4.3)	8	(4.4)	**-16**	(3.7)	-7	(4.5)	**-10**	(4.3)
	United States	2	(3.8)	-6	(3.7)	**19**	(3.3)	-4	(3.5)	**7**	(3.4)	2	(3.8)
	OECD average-10	**-5**	(1.4)	**-16**	(1.3)	**15**	(1.2)	**-12**	(1.1)	0	(1.2)	**-5**	(1.2)
Partners	Brazil	-8	(4.4)	**-21**	(3.9)	**9**	(4.3)	**-12**	(4.0)	-3	(4.4)	-7	(4.3)
	B-S-J-G (China)	5	(4.2)	0	(2.7)	**19**	(3.8)	-4	(3.0)	**11**	(3.1)	4	(3.2)
	Lithuania	**-27**	(3.0)	**-26**	(2.2)	4	(2.7)	**-21**	(2.2)	**-7**	(2.6)	**-12**	(2.3)
	Peru	-5	(4.5)	**-14**	(3.1)	3	(2.3)	**-16**	(2.9)	-3	(2.2)	**-7**	(2.2)
	Russia	-3	(3.6)	**-7**	(3.6)	**14**	(3.2)	**-7**	(3.2)	5	(3.3)	-1	(3.6)

Note: Values that are statistically significant are indicated in bold (see Annex A3).

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Table IV.4.9 Change between 2012 and 2015 in mean financial literacy performance, by gender

		PISA 2012						PISA 2015						Change between 2012 and 2015 (PISA 2015 – PISA 2012)					
		Boys		Girls		Difference (boys – girls)		Boys		Girls		Difference (boys – girls)		Boys		Girls		Difference (boys – girls)	
		Mean score	S.E.	Mean score	S.E.	Score dif.	S.E.	Mean score	S.E.	Mean score	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.
OECD	Australia	524	(3.3)	528	(2.4)	-3	(4.0)	498	(2.7)	510	(2.1)	**-12**	(2.8)	**-27**	(6.8)	**-18**	(6.2)	-9	(4.9)
	Belgium (Flemish)	547	(4.7)	536	(4.8)	11	(6.4)	541	(3.8)	541	(4.3)	0	(5.6)	-6	(8.1)	5	(8.4)	-11	(8.5)
	Canadian provinces	m	m	m	m	m	m	531	(4.8)	536	(5.2)	-5	(3.9)	m	m	m	m	m	m
	Chile	m	m	m	m	m	m	434	(4.5)	430	(4.2)	4	(4.4)	m	m	m	m	m	m
	Italy	470	(3.1)	462	(2.2)	**8**	(3.4)	489	(3.9)	478	(4.0)	**11**	(5.6)	**19**	(7.3)	**16**	(7.0)	3	(6.5)
	Netherlands	m	m	m	m	m	m	507	(3.9)	512	(3.6)	-5	(3.6)	m	m	m	m	m	m
	Poland	512	(4.7)	508	(4.2)	3	(5.0)	478	(3.6)	493	(3.2)	**-15**	(3.5)	**-34**	(8.0)	**-15**	(7.5)	**-19**	(6.1)
	Slovak Republic	469	(5.8)	472	(6.2)	-3	(6.9)	433	(4.9)	458	(5.6)	**-25**	(5.3)	**-36**	(9.3)	-14	(9.9)	**-22**	(8.7)
	Spain	487	(4.3)	481	(4.3)	6	(5.8)	464	(3.7)	474	(4.1)	**-10**	(4.4)	**-23**	(7.8)	-8	(8.0)	**-16**	(7.3)
	United States	492	(6.3)	491	(6.0)	1	(7.4)	488	(4.4)	487	(4.1)	2	(3.8)	-4	(9.3)	-5	(9.0)	1	(8.3)
	OECD average-7	500	(1.8)	497	(1.7)	3	(2.2)	484	(1.5)	491	(1.5)	**-7**	(1.7)	**-16**	(5.8)	-6	(5.8)	**-10**	(2.8)
	OECD average-10	m	m	m	m	m	m	486	(1.3)	492	(1.3)	**-5**	(1.4)	m	m	m	m	m	m
Partners	Brazil	m	m	m	m	m	m	389	(4.5)	397	(4.3)	-8	(4.4)	m	m	m	m	m	m
	B-S-J-G (China)	m	m	m	m	m	m	568	(6.1)	563	(6.7)	5	(4.2)	m	m	m	m	m	m
	Lithuania	m	m	m	m	m	m	435	(3.7)	462	(3.2)	**-27**	(3.0)	m	m	m	m	m	m
	Peru	m	m	m	m	m	m	400	(4.1)	405	(4.0)	-5	(4.5)	m	m	m	m	m	m
	Russia	487	(4.5)	486	(4.2)	1	(4.7)	510	(4.2)	514	(3.3)	-3	(3.6)	**23**	(8.1)	**28**	(7.6)	-5	(6.0)

Note: Values that are statistically significant are indicated in bold (see Annex A3).

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Table IV.4.10 Change between 2012 and 2015 in low and top performers in financial literacy, by gender

		Proficiency levels in PISA 2012											
		Boys				Girls				Differences (boys – girls)			
		Below Level 2 (less than 400.33 score points)		Level 5 (at or above 624.63 score points)		Below Level 2 (less than 400.33 score points)		Level 5 (at or above 624.63 score points)		Below Level 2 (less than 400.33 score points)		Level 5 (at or above 624.63 score points)	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	% dif.	S.E.	% dif.	S.E.
OECD	Australia	12.2	(1.0)	17.5	(1.3)	8.5	(0.8)	14.4	(1.0)	**3.7**	(1.1)	3.1	(1.7)
	Belgium (Flemish)	8.7	(1.5)	21.7	(2.2)	8.6	(1.2)	17.7	(1.8)	0.0	(1.8)	4.0	(3.0)
	Canadian provinces	m	m	m	m	m	m	m	m	m	m	m	m
	Chile	m	m	m	m	m	m	m	m	m	m	m	m
	Italy	22.0	(1.4)	3.2	(0.4)	21.4	(1.0)	1.0	(0.3)	0.6	(1.6)	**2.2**	(0.5)
	Netherlands	m	m	m	m	m	m	m	m	m	m	m	m
	Poland	10.9	(1.8)	9.9	(1.8)	8.7	(1.6)	4.7	(1.2)	2.1	(2.3)	**5.2**	(2.2)
	Slovak Republic	25.3	(2.4)	6.5	(1.5)	20.3	(2.6)	4.7	(1.0)	5.0	(3.0)	1.8	(1.5)
	Spain	16.5	(1.8)	4.5	(1.3)	16.5	(1.7)	3.0	(1.2)	0.0	(2.6)	1.5	(1.7)
	United States	19.0	(1.8)	10.1	(1.7)	16.8	(2.1)	8.8	(1.5)	2.2	(2.5)	1.3	(2.2)
	OECD average-7	16.4	(0.7)	10.5	(0.6)	14.4	(0.6)	7.8	(0.5)	**2.0**	(0.8)	**2.7**	(0.7)
	OECD average-10	m	m	m	m	m	m	m	m	m	m	m	m
Partners	Brazil	m	m	m	m	m	m	m	m	m	m	m	m
	B-S-J-G (China)	m	m	m	m	m	m	m	m	m	m	m	m
	Lithuania	m	m	m	m	m	m	m	m	m	m	m	m
	Peru	m	m	m	m	m	m	m	m	m	m	m	m
	Russia	17.5	(1.9)	4.8	(1.3)	16.0	(1.8)	3.7	(1.1)	1.4	(2.3)	1.1	(1.7)

		Proficiency levels in PISA 2015											
		Boys				Girls				Differences (boys – girls)			
		Below Level 2 (less than 400.33 score points)		Level 5 (at or above 624.63 score points)		Below Level 2 (less than 400.33 score points)		Level 5 (at or above 624.63 score points)		Below Level 2 (less than 400.33 score points)		Level 5 (at or above 624.63 score points)	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	% dif.	S.E.	% dif.	S.E.
OECD	Australia	22.9	(0.8)	15.9	(0.7)	16.5	(0.7)	14.9	(0.7)	**6.3**	(1.0)	1.1	(0.9)
	Belgium (Flemish)	12.6	(1.3)	24.5	(1.3)	11.4	(1.1)	23.5	(1.5)	1.1	(1.5)	1.0	(2.0)
	Canadian provinces	14.1	(1.1)	22.3	(1.4)	11.3	(1.1)	21.2	(1.5)	**2.7**	(1.0)	1.2	(1.5)
	Chile	37.5	(1.8)	3.5	(0.5)	38.7	(1.9)	2.6	(0.5)	-1.1	(2.1)	0.9	(0.6)
	Italy	19.2	(1.4)	8.0	(0.8)	20.5	(1.5)	5.0	(0.8)	-1.3	(1.9)	**3.0**	(1.1)
	Netherlands	20.9	(1.4)	17.9	(1.0)	17.5	(1.4)	17.1	(1.2)	**3.5**	(1.5)	0.7	(1.4)
	Poland	23.4	(1.4)	8.0	(0.8)	16.6	(1.1)	8.0	(1.0)	**6.9**	(1.6)	0.0	(1.0)
	Slovak Republic	39.3	(1.7)	5.8	(0.7)	29.7	(1.9)	6.9	(0.7)	**9.6**	(2.1)	-1.1	(0.9)
	Spain	27.2	(1.4)	5.9	(0.6)	22.3	(1.5)	5.3	(0.8)	**4.8**	(1.6)	0.6	(1.0)
	United States	22.5	(1.5)	11.4	(0.9)	20.7	(1.5)	9.1	(0.9)	1.8	(1.5)	**2.3**	(1.2)
	OECD average-7	23.9	(0.5)	11.4	(0.3)	19.7	(0.5)	10.4	(0.4)	**4.2**	(0.6)	**1.0**	(0.5)
	OECD average-10	24.0	(0.4)	12.3	(0.3)	20.5	(0.4)	11.4	(0.3)	**3.4**	(0.5)	**1.0**	(0.4)
Partners	Brazil	55.1	(1.6)	2.7	(0.4)	51.6	(1.6)	2.5	(0.4)	**3.5**	(1.7)	0.2	(0.3)
	B-S-J-G (China)	9.6	(1.1)	34.6	(2.0)	9.2	(1.2)	32.1	(2.3)	0.4	(1.0)	2.5	(1.6)
	Lithuania	37.1	(1.5)	3.2	(0.6)	25.8	(1.3)	4.3	(0.6)	**11.2**	(1.4)	-1.1	(0.6)
	Peru	49.4	(1.7)	1.2	(0.3)	47.0	(1.7)	1.2	(0.3)	2.4	(1.9)	0.0	(0.4)
	Russia	12.5	(1.1)	11.4	(1.1)	9.4	(0.9)	9.7	(1.1)	**3.1**	(1.0)	1.7	(1.4)

		Change between 2012 and 2015 (PISA 2015 – PISA 2012)											
		Boys				Girls				Differences (boys – girls)			
		Below Level 2 (less than 400.33 score points)		Level 5 (at or above 624.63 score points)		Below Level 2 (less than 400.33 score points)		Level 5 (at or above 624.63 score points)		Below Level 2 (less than 400.33 score points)		Level 5 (at or above 624.63 score points)	
		% dif.	S.E.	% dif.	S.E.	% dif.	S.E.	% dif.	S.E.	% dif.	S.E.	% dif.	S.E.
OECD	Australia	**10.7**	(1.7)	-1.6	(2.4)	**8.1**	(1.5)	0.4	(2.6)	2.6	(1.5)	-2.0	(1.9)
	Belgium (Flemish)	3.9	(2.2)	2.8	(4.1)	2.8	(1.8)	5.8	(5.0)	1.1	(2.4)	-3.0	(3.6)
	Canadian provinces	m	m	m	m	m	m	m	m	m	m	m	m
	Chile	m	m	m	m	m	m	m	m	m	m	m	m
	Italy	-2.8	(3.0)	**4.8**	(0.9)	-1.0	(2.6)	**4.0**	(1.0)	-1.9	(2.5)	0.9	(1.2)
	Netherlands	m	m	m	m	m	m	m	m	m	m	m	m
	Poland	**12.6**	(2.7)	-1.8	(2.1)	**7.8**	(2.8)	3.3	(1.7)	4.7	(2.8)	**-5.2**	(2.5)
	Slovak Republic	**14.0**	(3.4)	-0.7	(1.7)	**9.5**	(4.3)	2.2	(1.4)	4.6	(3.7)	-2.9	(1.7)
	Spain	**10.6**	(3.3)	1.4	(1.5)	5.8	(3.4)	2.3	(1.5)	4.8	(3.1)	-0.9	(2.0)
	United States	3.6	(3.0)	1.3	(2.2)	3.9	(3.0)	0.3	(2.1)	-0.4	(2.9)	1.0	(2.5)
	OECD average-7	**7.5**	(1.8)	0.9	(1.2)	**5.3**	(1.9)	2.6	(1.4)	**2.2**	(1.0)	**-1.7**	(0.9)
	OECD average-10	m	m	m	m	m	m	m	m	m	m	m	m
Partners	Brazil	m	m	m	m	m	m	m	m	m	m	m	m
	B-S-J-G (China)	m	m	m	m	m	m	m	m	m	m	m	m
	Lithuania	m	m	m	m	m	m	m	m	m	m	m	m
	Peru	m	m	m	m	m	m	m	m	m	m	m	m
	Russia	-5.0	(2.6)	**6.6**	(1.8)	**-6.6**	(2.3)	**6.0**	(2.0)	1.6	(2.5)	0.6	(2.2)

Note: Values that are statistically significant are indicated in bold (see Annex A3).

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Table IV.4.11 Mean performance in financial literacy, by students' socio-economic status

Results based on students' self-reports

		Performance in financial literacy, by national quarters of the ESCS[1] index								Difference in financial literacy performance between students in the top quarter and students in the bottom quarter of this index	
		Bottom quarter		Second quarter		Third quarter		Top quarter			
		Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Score dif.	S.E.
OECD	Australia	454	(2.8)	489	(2.3)	521	(3.1)	561	(3.1)	**107**	(3.9)
	Belgium (Flemish)	488	(5.1)	518	(4.7)	566	(4.1)	598	(4.4)	**110**	(7.1)
	Canadian provinces	495	(5.9)	525	(5.3)	549	(6.2)	572	(6.4)	**77**	(7.9)
	Chile	381	(6.2)	430	(5.9)	438	(5.1)	484	(4.4)	**103**	(6.8)
	Italy	452	(5.3)	483	(3.7)	494	(3.9)	512	(4.3)	**60**	(6.4)
	Netherlands	462	(7.3)	494	(4.7)	518	(4.5)	566	(4.5)	**104**	(9.0)
	Poland	453	(4.6)	475	(4.0)	491	(4.6)	526	(5.0)	**73**	(6.5)
	Slovak Republic	409	(9.1)	435	(4.7)	452	(5.0)	488	(6.3)	**80**	(10.0)
	Spain	429	(4.8)	459	(4.3)	480	(4.6)	508	(4.6)	**79**	(5.8)
	United States	445	(5.2)	469	(4.8)	499	(5.9)	542	(5.1)	**97**	(7.2)
	OECD average-10	447	(1.8)	478	(1.4)	501	(1.5)	536	(1.5)	**89**	(2.3)
Partners	Brazil	364	(4.7)	382	(3.9)	394	(5.2)	441	(7.0)	**78**	(8.1)
	B-S-J-G (China)	500	(7.2)	552	(7.0)	580	(6.1)	632	(12.2)	**132**	(13.4)
	Lithuania	419	(4.3)	432	(4.2)	460	(4.8)	490	(5.1)	**71**	(6.5)
	Peru	341	(3.6)	394	(5.2)	418	(4.7)	458	(5.6)	**117**	(6.3)
	Russia	489	(4.7)	508	(4.7)	523	(4.3)	535	(4.7)	**46**	(6.2)

1. ESCS refers to the PISA index of economic, social and cultural status.
Note: Values that are statistically significant are indicated in bold (see Annex A3).
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Table IV.4.12 Students' socio-economic status and performance in financial literacy

Results based on students' self-reports

		Score-point difference in financial literacy associated with a one-unit increase in ESCS[1] (slope of the socio-economic gradient)		Percentage of variance in student performance in financial literacy explained by ESCS (strength of the socio-economic gradient)	
		Score dif.	S.E.	%	S.E.
OECD	Australia	**51**	(1.7)	12.0	(0.8)
	Belgium (Flemish)	**50**	(3.2)	16.0	(1.7)
	Canadian provinces	**38**	(3.4)	6.9	(1.1)
	Chile	**35**	(2.2)	13.3	(1.5)
	Italy	**24**	(2.4)	5.5	(1.0)
	Netherlands	**51**	(4.4)	10.5	(1.5)
	Poland	**34**	(2.8)	7.8	(1.2)
	Slovak Republic	**32**	(4.3)	6.5	(1.7)
	Spain	**26**	(1.8)	9.1	(1.2)
	United States	**36**	(2.4)	11.1	(1.3)
	OECD average-10	**38**	(0.9)	9.9	(0.4)
Partners	Brazil	**26**	(2.6)	6.5	(1.2)
	B-S-J-G (China)	**45**	(3.8)	16.8	(2.7)
	Lithuania	**31**	(2.8)	6.7	(1.2)
	Peru	**36**	(1.9)	17.2	(1.7)
	Russia	**22**	(3.2)	3.4	(1.0)

1. ESCS refers to the PISA index of economic, social and cultural status.
Note: Values that are statistically significant are indicated in bold (see Annex A3).
StatLink http://dx.doi.org/10.1787/888933485703

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Table IV.4.13 Students' socio-economic status and performance in the core PISA subjects

Results based on students' self-reports

		Percentage of variance in student performance explained by ESCS[1] (strength of the socio-economic gradient)													
										Difference between performance in financial literacy and performance in…					
		Financial literacy		Mathematics		Reading		Science		Mathematics		Reading		Science	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	% dif.	S.E.	% dif.	S.E.	% dif.	S.E.
OECD	Australia	12.0	(0.8)	12.1	(0.9)	10.7	(0.8)	11.7	(0.8)	-0.1	(0.8)	**1.3**	(0.6)	0.3	(0.5)
	Belgium (Flemish)	16.0	(1.7)	15.6	(1.5)	15.6	(1.6)	17.6	(1.5)	0.3	(1.2)	0.4	(1.2)	-1.6	(1.3)
	Canadian provinces	6.9	(1.1)	9.1	(1.1)	8.3	(1.1)	8.4	(1.0)	**-2.2**	(1.0)	-1.5	(1.1)	-1.5	(1.1)
	Chile	13.3	(1.5)	17.8	(1.4)	14.0	(1.5)	16.9	(1.3)	**-4.5**	(1.3)	-0.7	(1.7)	**-3.6**	(1.2)
	Italy	5.5	(1.0)	9.6	(1.2)	11.1	(1.2)	9.6	(1.0)	**-4.2**	(1.2)	**-5.6**	(0.9)	**-4.2**	(0.7)
	Netherlands	10.5	(1.5)	11.0	(1.5)	11.1	(1.5)	12.5	(1.3)	-0.6	(1.1)	-0.6	(1.2)	**-2.0**	(1.0)
	Poland	7.8	(1.2)	12.2	(1.3)	12.5	(1.2)	13.4	(1.3)	**-4.5**	(0.9)	**-4.8**	(1.1)	**-5.6**	(1.0)
	Slovak Republic	6.5	(1.7)	15.8	(1.6)	16.9	(1.6)	16.0	(1.4)	**-9.2**	(2.2)	**-10.3**	(1.7)	**-9.4**	(1.8)
	Spain	9.1	(1.2)	14.3	(1.2)	12.5	(1.1)	13.4	(1.1)	**-5.2**	(1.2)	**-3.4**	(1.2)	**-4.3**	(1.3)
	United States	11.1	(1.3)	13.1	(1.3)	8.6	(1.3)	11.4	(1.1)	-2.0	(1.4)	**2.5**	(1.1)	-0.3	(1.1)
	OECD average-10	9.9	(0.4)	13.1	(0.4)	12.1	(0.4)	13.1	(0.4)	**-3.2**	(0.4)	**-2.3**	(0.4)	**-3.2**	(0.4)
Partners	Brazil	6.5	(1.2)	14.2	(1.5)	9.1	(1.1)	12.5	(1.3)	**-7.7**	(1.6)	**-2.6**	(1.2)	**-6.0**	(1.3)
	B-S-J-G (China)	16.8	(2.7)	17.0	(2.3)	20.1	(2.5)	18.5	(2.4)	-0.2	(1.8)	**-3.2**	(1.3)	-1.6	(1.2)
	Lithuania	6.7	(1.2)	11.0	(1.3)	11.4	(1.3)	11.6	(1.3)	**-4.4**	(0.9)	**-4.8**	(1.0)	**-4.9**	(0.8)
	Peru	17.2	(1.7)	18.6	(1.7)	25.2	(1.9)	21.6	(1.8)	-1.4	(1.4)	**-8.0**	(1.3)	**-4.4**	(1.1)
	Russia	3.4	(1.0)	4.6	(1.0)	6.4	(1.0)	6.7	(1.0)	-1.2	(1.0)	**-3.0**	(1.2)	**-3.3**	(1.2)

1. ESCS refers to the PISA index of economic, social and cultural status.
Note: Values that are statistically significant are indicated in bold (see Annex A3).
StatLink http://dx.doi.org/10.1787/888933485712

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Table IV.4.14 Percentage of students, by school location

		Percentage of students attending schools located in…					
		A village, hamlet or rural area (fewer than 3 000 people)		A town (3 000 to about 100 000 people)		A city (100 000 people or more)	
		%	S.E.	%	S.E.	%	S.E.
OECD	Australia	4.1	(0.7)	28.4	(1.4)	67.6	(1.3)
	Belgium (Flemish)	2.2	(1.3)	79.0	(3.3)	18.8	(3.1)
	Canadian provinces	7.7	(1.9)	37.3	(3.1)	54.9	(3.0)
	Chile	1.8	(0.8)	32.6	(3.4)	65.6	(3.4)
	Italy	2.2	(1.0)	69.2	(3.0)	28.5	(2.7)
	Netherlands	0.8	(0.7)	72.3	(4.3)	26.9	(4.3)
	Poland	36.3	(2.0)	38.1	(2.4)	25.6	(1.6)
	Slovak Republic	17.6	(1.6)	70.0	(2.4)	12.4	(1.7)
	Spain	3.8	(1.2)	62.2	(3.3)	34.0	(3.2)
	United States	10.4	(1.8)	50.7	(3.6)	38.9	(3.4)
	OECD average-10	8.7	(0.4)	54.0	(1.0)	37.3	(0.9)
Partners	Brazil	3.4	(0.7)	47.2	(2.4)	49.5	(2.4)
	B-S-J-G (China)	6.8	(1.8)	55.7	(3.7)	37.6	(3.3)
	Lithuania	21.0	(1.3)	41.1	(1.5)	37.9	(0.8)
	Peru	26.0	(2.4)	60.4	(3.1)	13.6	(2.1)
	Russia	14.1	(1.6)	35.1	(2.3)	50.8	(2.2)

Note: Values that are statistically significant are indicated in bold (see Annex A3).
StatLink http://dx.doi.org/10.1787/888933485720

[Part 1/1]

Table IV.4.15 Student performance in financial literacy, by school location

Results based on students' self-reports

		Students attending schools located in a village, hamlet or rural area (fewer than 3 000 people)		Students attending schools located in a town (3 000 to about 100 000 people)		Students attending schools located in a city (100 000 people or more)		Difference in financial literacy performance between students attending schools located in a city (100 000 people or more) and those attending schools in a village, hamlet or rural area (fewer than 3 000 people)					
								Before accounting for ESCS[1]		After accounting for ESCS		After accounting for ESCS and ISCED level[2]	
		Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.
OECD	Australia	468	(10.8)	482	(3.9)	518	(3.0)	**51**	(11.4)	**26**	(10.4)	**25**	(10.3)
	Belgium (Flemish)	c	c	549	(4.2)	514	(14.8)	c	c	c	c	c	c
	Canadian provinces	520	(14.1)	525	(6.6)	547	(6.1)	27	(14.6)	12	(12.9)	11	(12.7)
	Chile	397	(26.6)	411	(8.2)	447	(4.7)	50	(27.4)	26	(22.9)	-5	(20.1)
	Italy	456	(22.1)	484	(4.4)	505	(6.9)	**49**	(23.0)	39	(20.4)	38	(20.4)
	Netherlands	c	c	502	(7.4)	523	(15.7)	c	c	c	c	c	c
	Poland	472	(3.9)	487	(4.9)	505	(6.4)	**34**	(7.4)	**15**	(7.0)	13	(6.9)
	Slovak Republic	403	(10.9)	449	(4.7)	489	(12.1)	**86**	(14.5)	**59**	(13.0)	**53**	(19.5)
	Spain	490	(11.2)	464	(3.2)	476	(6.6)	-14	(12.8)	**-29**	(13.6)	**-29**	(13.6)
	United States	506	(8.1)	495	(4.7)	476	(7.5)	**-30**	(11.2)	**-26**	(10.0)	**-27**	(9.9)
	OECD average-10	464	(5.4)	485	(1.7)	500	(2.9)	**32**	(5.8)	**15**	(5.2)	10	(5.3)
Partners	Brazil	351	(12.9)	390	(4.8)	407	(6.5)	**56**	(14.4)	23	(12.8)	3	(11.4)
	B-S-J-G (China)	501	(18.9)	541	(8.9)	622	(9.3)	**121**	(20.6)	**76**	(19.3)	**54**	(17.2)
	Lithuania	422	(6.0)	444	(4.6)	473	(6.0)	**51**	(9.1)	**28**	(8.5)	**28**	(8.5)
	Peru	349	(7.4)	417	(4.7)	439	(11.4)	**90**	(14.1)	**53**	(14.2)	**46**	(12.8)
	Russia	496	(7.8)	502	(5.0)	527	(4.5)	**31**	(8.3)	**18**	(8.6)	**18**	(8.3)

1. ESCS refers to the PISA index of economic, social and cultural status.
2. Accounting for whether students attend lower secondary school (ISCED level 2) or upper secondary school (ISCED level 3).
Notes: Means and differences in financial literacy performance are calculated considering only students for whom data on the PISA index of economic, social and cultural status and on ISCED level are available.
Values that are statistically significant are indicated in bold (see Annex A3).
StatLink http://dx.doi.org/10.1787/888933485734

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Table IV.4.16 Differences in financial literacy performance, by school location and performance in the core PISA subjects

		Difference in financial literacy performance between students attending schools located in a city (100 000 people or more) and those attending schools in a village, hamlet or rural area (fewer than 3 000 people)											
		Before accounting for performance in other subjects		After accounting for performance in mathematics		After accounting for performance in reading		After accounting for performance in science		After accounting for performance in mathematics and reading		After accounting for performance in mathematics, reading and science	
		Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.
OECD	Australia	**51**	(11.4)	13	(6.9)	13	(7.3)	**15**	(6.3)	9	(5.9)	11	(5.8)
	Belgium (Flemish)	c	c	c	c	c	c	c	c	c	c	c	c
	Canadian provinces	26	(14.5)	0	(9.6)	7	(9.1)	6	(8.5)	1	(8.3)	4	(8.1)
	Chile	49	(27.4)	-5	(17.7)	1	(19.2)	0	(17.5)	-8	(16.3)	-6	(16.6)
	Italy	**48**	(22.9)	19	(12.1)	10	(13.1)	11	(11.8)	10	(11.0)	8	(10.9)
	Netherlands	c	c	c	c	c	c	c	c	c	c	c	c
	Poland	**33**	(7.5)	4	(5.3)	-6	(5.6)	-4	(5.0)	-6	(5.3)	-7	(5.1)
	Slovak Republic	**87**	(14.6)	16	(10.7)	2	(9.6)	7	(9.8)	2	(9.2)	0	(9.0)
	Spain	-15	(12.7)	-17	(12.5)	-19	(10.9)	-15	(11.3)	-19	(11.3)	-17	(11.0)
	United States	**-30**	(11.3)	-7	(6.7)	-12	(7.7)	-2	(7.4)	-7	(6.6)	-4	(6.6)
	OECD average-10	**31**	(5.8)	3	(3.8)	0	(3.9)	2	(3.7)	-2	(3.5)	-1	(3.5)
Partners	Brazil	**53**	(14.9)	8	(10.0)	1	(11.0)	0	(9.9)	-3	(9.9)	-4	(9.7)
	B-S-J-G (China)	**120**	(20.6)	**44**	(11.0)	**26**	(11.2)	**27**	(10.1)	**26**	(9.8)	**22**	(9.6)
	Lithuania	**50**	(9.1)	7	(6.3)	-1	(5.9)	3	(5.4)	-3	(5.8)	-3	(5.5)
	Peru	**90**	(14.1)	**27**	(8.2)	8	(7.5)	**24**	(7.5)	7	(6.8)	8	(6.7)
	Russia	**31**	(8.3)	11	(6.9)	-2	(7.1)	1	(6.2)	-1	(6.5)	-2	(6.2)

Note: Values that are statistically significant are indicated in bold (see Annex A3).
StatLink http://dx.doi.org/10.1787/888933485740

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Table IV.4.17 Change between 2012 and 2015 in the percentage of students with an immigrant background

Results based on students' self-reports

		PISA 2012							
		Non-immigrant students		Immigrant students		Second-generation immigrant students		First-generation immigrant students	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	78.6	(1.1)	21.4	(1.1)	12.3	(0.8)	9.1	(0.7)
	Belgium (Flemish)	89.1	(1.5)	10.9	(1.5)	6.7	(1.0)	4.2	(1.0)
	Canadian provinces	m	m	m	m	m	m	m	m
	Chile	m	m	m	m	m	m	m	m
	Italy	92.5	(0.5)	7.5	(0.5)	2.4	(0.2)	5.1	(0.4)
	Netherlands	m	m	m	m	m	m	m	m
	Poland	99.9	(0.1)	0.1	(0.1)	0.0	c	0.1	(0.1)
	Slovak Republic	99.0	(0.4)	1.0	(0.4)	0.5	(0.2)	0.5	(0.4)
	Spain	88.6	(1.1)	11.4	(1.1)	1.6	(0.4)	9.7	(1.1)
	United States	77.0	(2.4)	23.0	(2.4)	17.2	(2.2)	5.8	(0.8)
	OECD average-7	89.2	(0.5)	10.8	(0.5)	5.8	(0.4)	4.9	(0.3)
	OECD average-10	m	m	m	m	m	m	m	m
Partners	Brazil	m	m	m	m	m	m	m	m
	B-S-J-G (China)	m	m	m	m	m	m	m	m
	Lithuania	m	m	m	m	m	m	m	m
	Peru	m	m	m	m	m	m	m	m
	Russia	90.2	(1.0)	9.8	(1.0)	7.2	(0.8)	2.6	(0.6)

		PISA 2015							
		Non-immigrant students		Immigrant students		Second-generation immigrant students		First-generation immigrant students	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	75.0	(0.7)	25.0	(0.7)	12.7	(0.6)	12.3	(0.4)
	Belgium (Flemish)	86.0	(1.0)	14.0	(1.0)	7.2	(0.7)	6.8	(0.7)
	Canadian provinces	66.4	(1.7)	33.6	(1.7)	18.4	(1.2)	15.2	(0.9)
	Chile	97.9	(0.5)	2.1	(0.5)	0.5	(0.2)	1.6	(0.4)
	Italy	92.0	(0.5)	8.0	(0.5)	3.2	(0.3)	4.8	(0.4)
	Netherlands	89.3	(0.9)	10.7	(0.9)	8.6	(0.8)	2.2	(0.3)
	Poland	99.7	(0.1)	0.3	(0.1)	0.1	(0.1)	0.2	(0.1)
	Slovak Republic	98.8	(0.2)	1.2	(0.2)	0.6	(0.1)	0.6	(0.1)
	Spain	89.0	(0.8)	11.0	(0.8)	1.9	(0.2)	9.1	(0.7)
	United States	76.9	(1.5)	23.1	(1.5)	15.7	(1.0)	7.4	(0.7)
	OECD average-7	88.2	(0.3)	11.8	(0.3)	5.9	(0.2)	5.9	(0.2)
	OECD average-10	87.1	(0.3)	12.9	(0.3)	6.9	(0.2)	6.0	(0.2)
Partners	Brazil	99.2	(0.1)	0.8	(0.1)	0.5	(0.1)	0.3	(0.1)
	B-S-J-G (China)	99.7	(0.1)	0.3	(0.1)	0.1	(0.0)	0.2	(0.1)
	Lithuania	98.2	(0.2)	1.8	(0.2)	1.4	(0.1)	0.4	(0.1)
	Peru	99.5	(0.1)	0.5	(0.1)	0.3	(0.1)	0.1	(0.0)
	Russia	93.1	(0.5)	6.9	(0.5)	3.8	(0.3)	3.1	(0.3)

		Change between 2012 and 2015 (PISA 2015 – PISA 2012)							
		Non-immigrant students		Immigrant students		Second-generation immigrant students		First-generation immigrant students	
		% dif.	S.E.	% dif.	S.E.	% dif.	S.E.	% dif.	S.E.
OECD	Australia	**-3.6**	(1.3)	**3.6**	(1.3)	0.4	(0.9)	**3.2**	(0.8)
	Belgium (Flemish)	-3.2	(1.8)	3.2	(1.8)	0.6	(1.2)	**2.6**	(1.2)
	Canadian provinces	m	m	m	m	m	m	m	m
	Chile	m	m	m	m	m	m	m	m
	Italy	-0.4	(0.7)	0.4	(0.7)	**0.7**	(0.4)	-0.3	(0.6)
	Netherlands	m	m	m	m	m	m	m	m
	Poland	-0.1	(0.1)	0.1	(0.1)	0.1	(0.1)	0.0	(0.1)
	Slovak Republic	-0.2	(0.5)	0.2	(0.5)	0.1	(0.3)	0.1	(0.4)
	Spain	0.4	(1.4)	-0.4	(1.4)	0.3	(0.4)	-0.7	(1.3)
	United States	-0.1	(2.9)	0.1	(2.9)	-1.5	(2.5)	1.5	(1.1)
	OECD average-7	-1.0	(0.6)	1.0	(0.6)	0.1	(0.4)	**0.9**	(0.3)
	OECD average-10	m	m	m	m	m	m	m	m
Partners	Brazil	m	m	m	m	m	m	m	m
	B-S-J-G (China)	m	m	m	m	m	m	m	m
	Lithuania	m	m	m	m	m	m	m	m
	Peru	m	m	m	m	m	m	m	m
	Russia	**3.0**	(1.1)	**-3.0**	(1.1)	**-3.4**	(0.9)	0.5	(0.6)

Note: Values that are statistically significant are indicated in bold (see Annex A3).

StatLink http://dx.doi.org/10.1787/888933485751

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Table IV.4.18 Students' immigrant background and performance in financial literacy

Results based on students' self-reports

		Financial literacy performance in PISA 2015							
						Difference in financial literacy performance between non-immigrant and immigrant students in PISA 2015			
		Immigrant students		Non-immigrant students		Before accounting for ESCS[1]		After accounting for ESCS	
		Mean score	S.E.	Mean score	S.E.	Score dif.	S.E.	Score dif.	S.E.
OECD	Australia	514	(3.8)	506	(1.8)	**-8**	(3.8)	**-11**	(3.4)
	Belgium (Flemish)	459	(6.7)	558	(2.7)	**99**	(7.0)	**75**	(6.7)
	Canadian provinces	540	(6.3)	536	(4.9)	-4	(6.3)	-3	(5.9)
	Chile	390	(18.4)	435	(3.6)	**46**	(17.8)	**36**	(13.5)
	Italy	459	(7.0)	488	(2.8)	**29**	(6.9)	**18**	(7.2)
	Netherlands	457	(10.7)	518	(3.3)	**61**	(11.1)	**32**	(10.9)
	Poland	c	c	487	(2.9)	c	c	c	c
	Slovak Republic	381	(28.2)	449	(4.2)	**68**	(27.1)	**67**	(27.0)
	Spain	441	(8.1)	474	(3.0)	**33**	(7.9)	**19**	(7.7)
	United States	468	(6.8)	498	(3.8)	**30**	(7.1)	1	(6.6)
	OECD average-10	456	(4.3)	495	(1.1)	**39**	(4.2)	**26**	(4.0)
Partners	Brazil	276	(19.2)	398	(3.8)	**122**	(19.9)	**122**	(19.4)
	B-S-J-G (China)	397	(41.5)	569	(6.0)	**171**	(42.0)	**170**	(43.9)
	Lithuania	437	(10.8)	452	(3.1)	15	(10.8)	19	(10.9)
	Peru	345	(27.3)	405	(3.3)	**60**	(26.5)	**65**	(22.3)
	Russia	509	(7.0)	515	(3.5)	6	(8.3)	5	(8.4)

1. ESCS refers to the PISA index of economic, social and cultural status.
Notes: Means and differences in financial literacy performance between non-immigrant and immigrant students are calculated considering only students for whom data on the PISA index of economic, social and cultural status are available.
Values that are statistically significant are indicated in bold (see Annex A3).
StatLink http://dx.doi.org/10.1787/888933485765

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Table IV.4.19 Student performance in financial literacy, by immigrant background

Results based on students' self-reports

		Difference in performance related to students' immigrant background divided by the variation in scores within each country/economy (effect size)													
										Difference between performance in financial literacy and performance in…					
		Financial literacy		Mathematics		Reading		Science		Mathematics		Reading		Science	
		Effect size	S.E.	Effect size	S.E.	Effect size	S.E.	Effect size	S.E.	Effect size dif.	S.E.	Effect size dif.	S.E.	Effect size dif.	S.E.
OECD	Australia	-6	(3.3)	**-11**	(3.6)	**-8**	(3.6)	-1	(3.6)	**5**	(2.5)	2	(2.8)	-5	(2.4)
	Belgium (Flemish)	**89**	(6.0)	**80**	(5.8)	**74**	(5.9)	**80**	(5.2)	**10**	(4.7)	**15**	(3.8)	**9**	(3.5)
	Canadian provinces	-3	(5.4)	**-20**	(5.3)	**-13**	(4.3)	-7	(4.2)	**16**	(5.4)	**10**	(4.7)	3	(4.4)
	Chile	**43**	(16.9)	24	(13.5)	20	(16.0)	**37**	(16.7)	19	(11.2)	**23**	(11.1)	6	(11.3)
	Italy	**30**	(7.2)	**38**	(5.3)	**53**	(5.5)	**36**	(4.4)	-8	(6.7)	**-22**	(7.9)	-6	(6.6)
	Netherlands	**51**	(9.0)	**54**	(8.9)	**47**	(8.6)	**59**	(8.3)	-4	(7.1)	4	(5.9)	-8	(5.1)
	Poland	c	c	c	c	c	c	c	c	c	c	c	c	c	c
	Slovak Republic	**53**	(22.0)	**65**	(16.4)	**84**	(16.5)	**71**	(13.7)	-11	(17.3)	-31	(22.6)	-18	(20.9)
	Spain	**33**	(7.6)	**51**	(5.2)	**46**	(5.6)	**48**	(5.0)	**-19**	(6.8)	**-14**	(6.7)	**-15**	(5.9)
	United States	**27**	(6.4)	**29**	(5.7)	**24**	(6.1)	**33**	(5.1)	-2	(5.4)	3	(5.3)	-5	(4.7)
	OECD average-10	**35**	(3.6)	**34**	(2.9)	**36**	(3.1)	**40**	(2.9)	1	(2.8)	-1	(3.2)	-4	(3.0)
Partners	Brazil	**106**	(16.8)	**69**	(13.6)	**105**	(11.9)	**74**	(11.5)	**37**	(17.7)	1	(17.0)	32	(17.2)
	B-S-J-G (China)	**142**	(34.9)	**132**	(22.9)	**130**	(23.6)	**140**	(18.2)	10	(40.1)	12	(37.0)	2	(31.4)
	Lithuania	14	(10.6)	-10	(9.4)	6	(11.0)	9	(9.2)	24	(12.6)	8	(14.0)	5	(9.9)
	Peru	**61**	(24.4)	**78**	(31.3)	**57**	(24.7)	40	(26.2)	-17	(29.5)	4	(22.9)	21	(18.5)
	Russia	7	(9.1)	7	(7.5)	6	(9.2)	12	(7.8)	0	(7.9)	1	(11.0)	-5	(8.2)

Note: Values that are statistically significant are indicated in bold (see Annex A3).
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Table IV.4.20 Differences in financial literacy performance, by immigrant background and performance in the core PISA subjects

		Differences in financial literacy performance related to students' immigrant background (non-immigrant – immigrant students)											
		Before accounting for performance in other subjects		After accounting for performance in mathematics		After accounting for performance in reading		After accounting for performance in science		After accounting for performance in mathematics and reading		After accounting for performance in mathematics, reading and science	
		Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.
OECD	Australia	-7	(3.9)	4	(2.6)	1	(3.0)	**-6**	(2.6)	3	(2.6)	-2	(2.2)
	Belgium (Flemish)	**100**	(6.9)	**31**	(5.4)	**36**	(4.4)	**28**	(4.2)	**27**	(4.6)	**25**	(4.2)
	Canadian provinces	-4	(6.2)	**12**	(5.4)	7	(5.1)	2	(5.0)	**11**	(5.0)	5	(4.6)
	Chile	**45**	(17.8)	**26**	(12.1)	**29**	(11.4)	15	(11.4)	**26**	(10.7)	20	(10.8)
	Italy	**29**	(6.9)	5	(6.2)	-5	(7.3)	4	(6.3)	-4	(6.6)	-1	(6.4)
	Netherlands	**61**	(11.3)	8	(8.0)	**16**	(7.1)	1	(6.2)	8	(7.0)	3	(6.3)
	Poland	c	c	c	c	c	c	c	c	c	c	c	c
	Slovak Republic	**65**	(26.8)	13	(20.7)	-4	(25.0)	6	(24.3)	-2	(22.3)	-2	(23.0)
	Spain	**34**	(7.8)	-4	(7.0)	-1	(6.8)	-4	(6.2)	-7	(6.6)	-7	(6.2)
	United States	**30**	(7.0)	4	(5.6)	9	(5.5)	0	(5.1)	4	(5.4)	1	(5.1)
	OECD average-10	**39**	(4.2)	**11**	(3.2)	**10**	(3.5)	5	(3.4)	**7**	(3.2)	5	(3.2)
Partners	Brazil	**124**	(19.7)	**74**	(18.8)	**44**	(19.0)	**65**	(19.2)	**48**	(18.5)	**52**	(18.1)
	B-S-J-G (China)	**171**	(41.9)	43	(46.7)	45	(43.6)	30	(38.5)	33	(42.8)	28	(39.9)
	Lithuania	14	(10.8)	21	(11.6)	10	(12.5)	8	(9.4)	15	(11.9)	10	(10.8)
	Peru	**64**	(25.6)	2	(26.2)	16	(22.3)	31	(17.9)	5	(21.7)	11	(20.1)
	Russia	6	(8.3)	2	(6.9)	3	(8.4)	-1	(7.0)	2	(7.6)	0	(7.1)

Note: Values that are statistically significant are indicated in bold (see Annex A3).
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[Part 1/1]

Table IV.4.21 Percentage of students, by language spoken at home

Results based on students' self-reports

		All students				Immigrant students				Non-immigrant students				Difference between non-immigrant students and immigrant students			
		Students who speak another language at home		Students who speak the language of assessment at home		Students who speak another language at home		Students who speak the language of assessment at home		Students who speak another language at home		Students who speak the language of assessment at home		Students who speak another language at home		Students who speak the language of assessment at home	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	% dif.	S.E.	% dif.	S.E.
OECD	Australia	11.6	(0.5)	88.4	(0.5)	38.4	(1.2)	61.6	(1.2)	2.3	(0.2)	97.7	(0.2)	**-36.1**	(1.3)	**36.1**	(1.3)
	Belgium (Flemish)	15.5	(1.2)	84.5	(1.2)	60.2	(2.7)	39.8	(2.7)	7.7	(1.0)	92.3	(1.0)	**-52.5**	(2.5)	**52.5**	(2.5)
	Canadian provinces	18.8	(0.9)	81.2	(0.9)	46.6	(1.4)	53.4	(1.4)	4.7	(0.4)	95.3	(0.4)	**-41.9**	(1.4)	**41.9**	(1.4)
	Chile	1.2	(0.2)	98.8	(0.2)	4.5	(1.4)	95.5	(1.4)	1.0	(0.2)	99.0	(0.2)	**-3.5**	(1.4)	**3.5**	(1.4)
	Italy	16.4	(0.7)	83.6	(0.7)	59.1	(2.8)	40.9	(2.8)	12.7	(0.6)	87.3	(0.6)	**-46.4**	(2.8)	**46.4**	(2.8)
	Netherlands	7.2	(0.6)	92.8	(0.6)	47.7	(2.6)	52.3	(2.6)	1.9	(0.3)	98.1	(0.3)	**-45.8**	(2.6)	**45.8**	(2.6)
	Poland	1.1	(0.2)	98.9	(0.2)	c	c	c	c	0.9	(0.2)	99.1	(0.2)	c	c	c	c
	Slovak Republic	8.8	(0.6)	91.2	(0.6)	51.7	(7.6)	48.3	(7.6)	7.8	(0.6)	92.2	(0.6)	**-43.9**	(7.5)	**43.9**	(7.5)
	Spain	18.7	(1.0)	81.3	(1.0)	52.3	(2.9)	47.7	(2.9)	14.3	(0.9)	85.7	(0.9)	**-38.0**	(3.0)	**38.0**	(3.0)
	United States	18.5	(1.4)	81.5	(1.4)	66.9	(1.7)	33.1	(1.7)	3.5	(0.4)	96.5	(0.4)	**-63.5**	(1.6)	**63.5**	(1.6)
	OECD average-10	11.8	(0.3)	88.2	(0.3)	47.5	(1.1)	52.5	(1.1)	5.7	(0.2)	94.3	(0.2)	**-41.3**	(1.1)	**41.3**	(1.1)
Partners	Brazil	1.3	(0.1)	98.7	(0.1)	15.0	(3.6)	85.0	(3.6)	1.2	(0.1)	98.8	(0.1)	**-13.9**	(3.6)	**13.9**	(3.6)
	B-S-J-G (China)	1.7	(0.2)	98.3	(0.2)	22.0	(9.3)	78.0	(9.3)	1.6	(0.2)	98.4	(0.2)	**-20.4**	(9.3)	**20.4**	(9.3)
	Lithuania	5.4	(0.5)	94.6	(0.5)	26.7	(4.3)	73.3	(4.3)	4.9	(0.5)	95.1	(0.5)	**-21.9**	(4.3)	**21.9**	(4.3)
	Peru	7.4	(0.8)	92.6	(0.8)	14.8	(6.4)	85.2	(6.4)	7.2	(0.8)	92.8	(0.8)	-7.6	(6.4)	7.6	(6.4)
	Russia	5.2	(1.2)	94.8	(1.2)	15.0	(2.3)	85.0	(2.3)	4.5	(1.4)	95.5	(1.4)	**-10.5**	(2.9)	**10.5**	(2.9)

Note: Values that are statistically significant are indicated in bold (see Annex A3).
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[Part 1/1]

Table IV.4.22 Student performance in financial literacy, by language spoken at home

Results based on students' self-reports

		All students							
		Students who speak another language at home		Students who speak the language of assessment at home		Difference in financial literacy performance between students who speak and those who do not speak the language of assessment at home			
						Before accounting for ESCS[1]		After accounting for ESCS	
		Mean score	S.E.	Mean score	S.E.	Score dif.	S.E.	Score dif.	S.E.
OECD	Australia	484	(6.1)	509	(1.8)	**25**	(6.0)	**14**	(5.3)
	Belgium (Flemish)	464	(9.9)	557	(2.8)	**93**	(10.2)	**76**	(8.3)
	Canadian provinces	526	(6.7)	538	(4.7)	11	(5.9)	8	(5.8)
	Chile	398	(22.7)	434	(3.7)	36	(22.0)	**51**	(20.7)
	Italy	456	(5.7)	491	(2.7)	**35**	(5.4)	**25**	(5.2)
	Netherlands	448	(11.6)	515	(3.1)	**67**	(11.1)	**40**	(11.0)
	Poland	453	(22.0)	487	(2.9)	34	(21.5)	**42**	(20.8)
	Slovak Republic	375	(15.8)	453	(3.9)	**78**	(14.7)	**56**	(13.3)
	Spain	459	(7.3)	472	(3.2)	13	(7.5)	9	(7.2)
	United States	450	(6.3)	497	(3.7)	**47**	(6.5)	**16**	(6.3)
	OECD average-10	451	(4.1)	495	(1.1)	**44**	(4.0)	**34**	(3.8)
Partners	Brazil	359	(19.9)	396	(3.8)	37	(19.8)	**50**	(19.3)
	B-S-J-G (China)	489	(14.0)	568	(6.1)	**79**	(15.3)	**61**	(13.4)
	Lithuania	383	(10.1)	454	(3.1)	**71**	(9.9)	**66**	(9.9)
	Peru	304	(6.6)	411	(3.4)	**106**	(6.8)	**79**	(6.7)
	Russia	485	(10.1)	516	(3.3)	**31**	(10.5)	**24**	(11.2)

		Immigrant students							
		Students who speak another language at home		Students who speak the language of assessment at home		Difference in financial literacy performance between students who speak and those who do not speak the language of assessment at home			
						Before accounting for ESCS		After accounting for ESCS	
		Mean score	S.E.	Mean score	S.E.	Score dif.	S.E.	Score dif.	S.E.
OECD	Australia	502	(6.7)	521	(3.6)	**19**	(6.8)	8	(6.1)
	Belgium (Flemish)	439	(7.9)	490	(9.7)	**50**	(10.9)	**44**	(10.6)
	Canadian provinces	537	(8.0)	543	(6.4)	5	(6.8)	0	(6.8)
	Chile	c	c	388	(18.7)	c	c	c	c
	Italy	449	(9.1)	474	(9.1)	**26**	(12.2)	24	(12.5)
	Netherlands	446	(12.7)	468	(11.3)	22	(11.5)	19	(11.7)
	Poland	c	c	c	c	c	c	c	c
	Slovak Republic	396	(35.2)	365	(35.2)	-32	(42.2)	-31	(43.0)
	Spain	432	(11.8)	451	(8.0)	18	(12.5)	18	(12.3)
	United States	457	(7.5)	488	(7.8)	**31**	(7.8)	**17**	(7.8)
	OECD average-10	458	(5.4)	465	(5.1)	**17**	(6.2)	12	(6.3)
Partners	Brazil	c	c	273	(20.3)	c	c	c	c
	B-S-J-G (China)	c	c	c	c	c	c	c	c
	Lithuania	402	(24.7)	450	(10.7)	48	(25.9)	43	(26.0)
	Peru	c	c	c	c	c	c	c	c
	Russia	480	(18.4)	514	(7.1)	34	(18.6)	34	(19.2)

		Non-immigrant students							
		Students who speak another language at home		Students who speak the language of assessment at home		Difference in financial literacy performance between students who speak and those who do not speak the language of assessment at home			
						Before accounting for ESCS		After accounting for ESCS	
		Mean score	S.E.	Mean score	S.E.	Score dif.	S.E.	Score dif.	S.E.
OECD	Australia	402	(8.9)	508	(1.9)	**107**	(8.9)	**97**	(8.6)
	Belgium (Flemish)	501	(13.2)	562	(2.9)	**62**	(13.6)	**56**	(10.0)
	Canadian provinces	489	(9.5)	539	(5.1)	**50**	(9.7)	**49**	(9.6)
	Chile	404	(24.4)	436	(3.6)	32	(24.1)	**48**	(22.7)
	Italy	460	(6.5)	492	(2.7)	**32**	(6.1)	**23**	(5.7)
	Netherlands	467	(14.8)	519	(3.3)	**52**	(14.6)	**44**	(13.3)
	Poland	450	(22.5)	488	(2.9)	38	(21.8)	40	(20.6)
	Slovak Republic	376	(15.7)	455	(3.9)	**79**	(14.8)	**55**	(13.8)
	Spain	475	(6.2)	474	(3.2)	0	(6.7)	-1	(6.5)
	United States	428	(11.0)	500	(3.8)	**72**	(10.9)	**47**	(11.5)
	OECD average-10	445	(4.6)	497	(1.1)	**52**	(4.5)	**46**	(4.2)
Partners	Brazil	368	(21.0)	399	(3.8)	31	(20.7)	**41**	(20.2)
	B-S-J-G (China)	498	(14.5)	570	(6.1)	**72**	(15.9)	**54**	(14.1)
	Lithuania	387	(9.8)	455	(3.0)	**69**	(9.5)	**63**	(9.4)
	Peru	308	(6.6)	412	(3.4)	**105**	(6.9)	**76**	(6.7)
	Russia	488	(12.5)	516	(3.6)	**29**	(12.7)	20	(13.5)

1. ESCS refers to the PISA index of economic, social and cultural status.

Notes: Means and differences in financial literacy performance between students who speak and those who do not speak the language of assessment at home are calculated considering only students for whom data on the PISA index of economic, social and cultural status and on immigrant background are available.

Values that are statistically significant are indicated in bold (see Annex A3).

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[Part 1/2]

Table IV.4.23 Differences in financial literacy performance, by motivation and performance in the core PISA subjects

		Differences in financial literacy performance related to students' achievement motivation (agree – disagree)					
		I want top grades in most or all of my courses					
		Before accounting for performance in other subjects		After accounting for performance in mathematics and reading		After accounting for performance in mathematics, reading and science	
		Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.
OECD	Australia	**45**	(4.2)	4	(4.0)	**7**	(3.3)
	Belgium (Flemish)	**-17**	(4.1)	**-8**	(3.7)	**-8**	(3.4)
	Canadian provinces	**32**	(6.7)	0	(4.7)	3	(4.4)
	Chile	17	(8.8)	3	(7.0)	4	(6.8)
	Italy	11	(6.2)	5	(4.6)	7	(4.4)
	Netherlands	**25**	(7.7)	6	(5.6)	8	(5.2)
	Poland	**9**	(3.5)	-1	(2.4)	-1	(2.4)
	Slovak Republic	**40**	(5.6)	10	(5.7)	10	(5.5)
	Spain	**24**	(4.1)	3	(2.9)	3	(3.0)
	United States	**26**	(7.9)	7	(5.7)	11	(5.5)
	OECD average-10	**21**	(1.9)	3	(1.5)	**4**	(1.5)
Partners	Brazil	**36**	(10.7)	2	(9.7)	3	(9.9)
	B-S-J-G (China)	-1	(4.1)	-2	(2.9)	-3	(2.9)
	Lithuania	**37**	(4.9)	0	(3.5)	1	(3.4)
	Peru	**18**	(9.1)	7	(7.0)	5	(6.9)
	Russia	**19**	(5.5)	8	(5.4)	8	(5.2)

		Differences in financial literacy performance related to students' achievement motivation (agree – disagree)					
		I want to be able to select from among the best opportunities available when I graduate					
		Before accounting for performance in other subjects		After accounting for performance in mathematics and reading		After accounting for performance in mathematics, reading and science	
		Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.
OECD	Australia	**79**	(6.2)	10	(5.5)	8	(4.5)
	Belgium (Flemish)	**24**	(6.2)	0	(4.3)	-2	(4.2)
	Canadian provinces	**40**	(11.8)	-7	(9.5)	-5	(10.1)
	Chile	**40**	(12.9)	5	(11.8)	4	(10.9)
	Italy	**37**	(10.7)	2	(7.6)	4	(7.0)
	Netherlands	**39**	(8.8)	2	(6.5)	0	(6.3)
	Poland	**29**	(4.3)	-4	(3.6)	-4	(3.6)
	Slovak Republic	**67**	(8.5)	2	(6.7)	3	(6.4)
	Spain	**54**	(8.4)	0	(6.4)	0	(6.5)
	United States	**35**	(12.0)	1	(9.3)	7	(8.7)
	OECD average-10	**44**	(3.0)	1	(2.4)	2	(2.3)
Partners	Brazil	**62**	(11.8)	6	(11.0)	4	(10.5)
	B-S-J-G (China)	12	(11.9)	-5	(8.7)	-2	(8.3)
	Lithuania	**63**	(6.1)	7	(4.1)	7	(4.1)
	Peru	**67**	(9.1)	**23**	(6.7)	**20**	(6.4)
	Russia	**44**	(8.6)	7	(9.7)	8	(8.8)

		Differences in financial literacy performance related to students' achievement motivation (agree – disagree)					
		I want to be the best, whatever I do					
		Before accounting for performance in other subjects		After accounting for performance in mathematics and reading		After accounting for performance in mathematics, reading and science	
		Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.
OECD	Australia	-3	(3.0)	0	(3.0)	4	(2.2)
	Belgium (Flemish)	-8	(4.7)	-5	(3.5)	-4	(3.1)
	Canadian provinces	10	(6.7)	3	(6.4)	6	(6.1)
	Chile	1	(5.6)	-2	(4.4)	-1	(4.4)
	Italy	-3	(4.1)	**7**	(3.5)	**8**	(3.3)
	Netherlands	6	(4.7)	1	(3.2)	0	(3.0)
	Poland	-2	(3.2)	-3	(2.2)	-4	(2.2)
	Slovak Republic	8	(5.6)	7	(5.7)	7	(5.6)
	Spain	**12**	(4.0)	-1	(3.5)	-2	(3.5)
	United States	-2	(7.3)	4	(5.4)	7	(5.7)
	OECD average-10	2	(1.6)	1	(1.3)	2	(1.3)
Partners	Brazil	**-9**	(4.3)	-5	(4.0)	-5	(4.1)
	B-S-J-G (China)	-12	(7.1)	2	(5.5)	4	(5.4)
	Lithuania	**24**	(3.4)	1	(3.0)	0	(2.9)
	Peru	**34**	(6.1)	**12**	(4.8)	**11**	(4.5)
	Russia	5	(4.7)	4	(4.9)	5	(4.6)

Note: Values that are statistically significant are indicated in bold (see Annex A3).

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[Part 2/2]

Table IV.4.23 Differences in financial literacy performance, by motivation and performance in the core PISA subjects

		Differences in financial literacy performance related to students' achievement motivation (agree – disagree)					
		I see myself as an ambitious person					
		Before accounting for performance in other subjects		After accounting for performance in mathematics and reading		After accounting for performance in mathematics, reading and science	
		Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.
OECD	Australia	**20**	(3.6)	**8**	(3.0)	**9**	(2.3)
	Belgium (Flemish)	**36**	(3.7)	0	(2.5)	0	(2.4)
	Canadian provinces	10	(5.5)	2	(4.4)	5	(4.9)
	Chile	**25**	(4.8)	-3	(3.7)	-4	(3.7)
	Italy	**19**	(4.1)	5	(3.3)	**7**	(3.2)
	Netherlands	**40**	(5.1)	**10**	(3.6)	**9**	(3.5)
	Poland	**12**	(4.3)	-3	(3.5)	-3	(3.4)
	Slovak Republic	**30**	(5.6)	8	(4.5)	7	(4.5)
	Spain	**35**	(3.5)	2	(2.7)	2	(2.8)
	United States	**17**	(5.0)	7	(4.4)	**11**	(3.9)
	OECD average-10	**24**	(1.4)	**4**	(1.1)	**4**	(1.1)
Partners	Brazil	**20**	(4.9)	0	(4.5)	-2	(4.2)
	B-S-J-G (China)	6	(5.1)	0	(3.0)	1	(3.4)
	Lithuania	**36**	(4.1)	4	(3.9)	4	(3.8)
	Peru	**41**	(3.9)	3	(3.1)	2	(3.1)
	Russia	**23**	(4.9)	9	(4.8)	9	(4.8)

		Differences in financial literacy performance related to students' achievement motivation (agree – disagree)					
		I want to be one of the best students in my class					
		Before accounting for performance in other subjects		After accounting for performance in mathematics and reading		After accounting for performance in mathematics, reading and science	
		Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.
OECD	Australia	**50**	(2.9)	**8**	(2.6)	**8**	(2.0)
	Belgium (Flemish)	4	(4.2)	-4	(3.5)	-4	(3.3)
	Canadian provinces	**36**	(5.0)	3	(4.4)	5	(4.1)
	Chile	6	(5.2)	-5	(4.0)	-4	(4.4)
	Italy	**15**	(4.2)	5	(3.6)	**7**	(3.3)
	Netherlands	**21**	(4.8)	2	(3.3)	1	(3.4)
	Poland	**36**	(3.7)	1	(3.3)	1	(3.2)
	Slovak Republic	**35**	(4.5)	**15**	(4.0)	**14**	(4.0)
	Spain	**30**	(4.1)	4	(3.0)	3	(3.2)
	United States	**16**	(5.3)	1	(3.6)	4	(3.9)
	OECD average-10	**25**	(1.4)	**3**	(1.1)	**4**	(1.1)
Partners	Brazil	6	(4.0)	4	(3.7)	4	(3.7)
	B-S-J-G (China)	**43**	(5.0)	4	(3.6)	3	(3.4)
	Lithuania	**35**	(3.5)	-2	(2.9)	-3	(3.0)
	Peru	**18**	(4.9)	**10**	(4.2)	**9**	(4.0)
	Russia	**19**	(4.1)	7	(3.9)	7	(3.8)

Note: Values that are statistically significant are indicated in bold (see Annex A3).
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Table IV.4.24 Motivation to achieve and performance in the core PISA subjects

Results based on students' self-reports

		Difference in performance related to students' achievement motivation divided by the variation in scores within each country/economy (effect size)													
										Difference between performance in financial literacy and performance in…					
		Financial literacy		Mathematics		Reading		Science		Mathematics		Reading		Science	
		Effect size	S.E.	Effect size	S.E.	Effect size	S.E.	Effect size	S.E.	Effect size dif.	S.E.	Effect size dif.	S.E.	Effect size dif.	S.E.
OECD	Australia	**23**	(1.0)	**21**	(1.6)	**21**	(1.5)	**20**	(1.0)	1	(1.6)	2	(1.4)	**3**	(0.8)
	Belgium (Flemish)	3	(2.9)	**8**	(2.8)	3	(2.8)	5	(2.6)	**-6**	(2.6)	-1	(2.8)	-2	(2.0)
	Canadian provinces	**20**	(1.9)	**22**	(1.7)	**22**	(1.6)	**20**	(1.4)	-2	(2.5)	-1	(1.8)	0	(2.0)
	Chile	**11**	(2.1)	**12**	(1.9)	**16**	(1.9)	**13**	(1.7)	-1	(2.3)	**-4**	(2.1)	-2	(2.0)
	Italy	**11**	(2.4)	**8**	(2.1)	**8**	(2.4)	**6**	(2.2)	3	(1.8)	3	(2.1)	**5**	(2.0)
	Netherlands	**13**	(2.8)	**14**	(2.6)	**10**	(2.8)	**14**	(2.6)	-1	(2.0)	3	(2.2)	-1	(1.8)
	Poland	**17**	(1.9)	**21**	(2.0)	**19**	(2.2)	**22**	(1.9)	**-5**	(1.7)	-3	(1.9)	**-5**	(1.5)
	Slovak Republic	**21**	(2.2)	**23**	(2.0)	**22**	(1.7)	**23**	(1.6)	-2	(2.9)	-1	(2.3)	-1	(2.6)
	Spain	**23**	(2.0)	**28**	(1.6)	**23**	(1.6)	**27**	(1.6)	**-5**	(1.5)	0	(1.8)	-4	(1.8)
	United States	**13**	(2.0)	**13**	(2.2)	**13**	(2.0)	**10**	(1.6)	0	(2.5)	0	(1.7)	3	(1.6)
	OECD average-10	**16**	(0.7)	**17**	(0.7)	**16**	(0.7)	**16**	(0.6)	**-2**	(0.7)	0	(0.6)	0	(0.6)
Partners	Brazil	**17**	(2.0)	**18**	(2.1)	**20**	(1.8)	**21**	(1.5)	-2	(2.4)	-4	(2.1)	**-4**	(1.5)
	B-S-J-G (China)	**19**	(2.0)	**20**	(1.9)	**19**	(1.8)	**20**	(1.6)	-1	(1.9)	0	(1.5)	-1	(1.6)
	Lithuania	**20**	(1.3)	**24**	(1.5)	**26**	(1.4)	**25**	(1.2)	**-4**	(1.4)	**-5**	(1.5)	**-4**	(1.4)
	Peru	**24**	(2.4)	**26**	(2.2)	**21**	(2.3)	**25**	(2.1)	-2	(2.3)	3	(2.0)	-1	(1.7)
	Russia	**15**	(2.6)	**18**	(2.2)	**16**	(2.1)	**17**	(1.5)	-4	(3.6)	-2	(3.3)	-3	(2.6)

Note: Values that are statistically significant are indicated in bold (see Annex A3).
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[Part 1/1]

Table IV.4.25a Likelihood of low performance in financial literacy, by student characteristics and performance in mathematics and reading

Results based on students' self-reports

		Increased likelihood of being a low performer in financial literacy (performing at or below Level 1)							
				PISA index of economic, social and cultural status (ESCS)					
		Boys		Bottom quarter of ESCS		Second quarter of ESCS		Third quarter of ESCS	
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.
OECD	Australia	**1.29**	(0.15)	**2.81**	(0.52)	**2.01**	(0.34)	**1.39**	(0.21)
	Belgium (Flemish)	1.13	(0.29)	**3.12**	(1.01)	**2.74**	(0.91)	1.83	(0.61)
	Canadian provinces	1.04	(0.16)	**1.86**	(0.44)	1.49	(0.41)	1.16	(0.33)
	Chile	1.01	(0.12)	**2.20**	(0.42)	**1.49**	(0.24)	**1.40**	(0.23)
	Italy	0.88	(0.16)	1.37	(0.32)	1.34	(0.29)	1.07	(0.22)
	Netherlands	1.06	(0.20)	**2.62**	(0.65)	**2.25**	(0.57)	**1.82**	(0.47)
	Poland	**1.50**	(0.20)	1.37	(0.24)	1.37	(0.24)	1.21	(0.22)
	Slovak Republic	**1.39**	(0.17)	1.22	(0.20)	1.33	(0.20)	1.24	(0.20)
	Spain	**1.30**	(0.16)	**1.82**	(0.30)	**1.46**	(0.24)	1.34	(0.20)
	United States	0.96	(0.15)	**2.22**	(0.46)	**1.96**	(0.38)	**1.66**	(0.34
	OECD average-10	**1.16**	(0.06)	**2.06**	(0.16)	**1.75**	(0.14)	**1.41**	(0.10)
Partners	Brazil	1.14	(0.11)	**1.42**	(0.21)	1.31	(0.20)	1.27	(0.16)
	Lithuania	**1.50**	(0.14)	**1.47**	(0.27)	**1.51**	(0.25)	1.28	(0.19)
	Peru	1.18	(0.11)	**2.24**	(0.36)	1.23	(0.21)	1.12	(0.14)
	Russia	1.17	(0.19)	1.26	(0.30)	1.04	(0.26)	0.92	(0.19)

		Increased likelihood of being a low performer in financial literacy (performing at or below Level 1)											
		Non-immigrant students		Students attending school located in a city (100 000 people or more)		Student is a low performer in mathematics		Student is a low performer in reading		Intercept		Pseudo R2	
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Pseudo R2	S.E.
OECD	Australia	0.77	(0.12)	0.83	(0.12)	**7.30**	(0.74)	**9.91**	(1.16)	**0.04**	(0.01)	0.399	(0.017)
	Belgium (Flemish)	**0.37**	(0.10)	1.40	(0.34)	**6.88**	(1.90)	**8.98**	(2.24)	**0.02**	(0.01)	0.445	(0.029)
	Canadian provinces	0.75	(0.17)	0.83	(0.17)	**5.49**	(1.07)	**6.34**	(1.07)	**0.05**	(0.02)	0.247	(0.022)
	Chile	0.65	(0.26)	0.89	(0.15)	**6.52**	(0.89)	**4.93**	(0.74)	**0.15**	(0.07)	0.313	(0.017)
	Italy	0.84	(0.24)	0.71	(0.15)	**5.18**	(0.72)	**5.15**	(1.01)	**0.09**	(0.03)	0.259	(0.022)
	Netherlands	0.63	(0.18)	0.72	(0.17)	**6.88**	(1.72)	**8.23**	(1.98)	**0.07**	(0.02)	0.361	(0.040)
	Poland	c	c	0.95	(0.16)	**6.43**	(1.31)	**6.91**	(1.24)	**0.06**	(0.06)	0.271	(0.023)
	Slovak Republic	1.03	(0.50)	0.76	(0.17)	**3.36**	(0.53)	**4.58**	(0.84)	**0.16**	(0.09)	0.212	(0.023)
	Spain	1.03	(0.19)	0.99	(0.15)	**5.76**	(0.84)	**6.41**	(0.99)	**0.08**	(0.02)	0.268	(0.020)
	United States	1.00	(0.20)	1.09	(0.18)	**7.59**	(1.21)	**7.18**	(1.38)	**0.03**	(0.01)	0.366	(0.020)
	OECD average-10	**0.79**	(0.08)	0.92	(0.06)	**6.14**	(0.37)	**6.86**	(0.43)	**0.08**	(0.01)	0.314	(0.008)
Partners	Brazil	0.28	(0.19)	1.07	(0.12)	**3.67**	(0.43)	**4.43**	(0.37)	0.72	(0.73)	0.211	(0.014)
	Lithuania	0.83	(0.25)	0.88	(0.11)	**4.78**	(0.58)	**5.57**	(0.77)	**0.14**	(0.05)	0.266	(0.018)
	Peru	0.33	(0.20)	0.98	(0.23)	**5.75**	(0.75)	**9.27**	(1.18)	**0.18**	(0.15)	0.382	(0.016)
	Russia	0.87	(0.29)	0.89	(0.16)	**4.23**	(0.76)	**4.75**	(0.90)	**0.05**	(0.02)	0.194	(0.022)

Notes: Multivariate logistic regression model: likelihood of being a low performer in financial literacy (performing at or below Level 1) is regressed on all variables in the table. Reference categories are: girls, students in the top quarter of ESCS, immigrant students, students attending school in a town or rural area, students who perform at or above Level 2 in mathematics, students who perform at or above Level 2 in reading.
Results are not reported for countries and economies where the percentage of low performers in financial literacy is less than 10%.
Values that are statistically significant are indicated in bold (see Annex A3).
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[Part 1/1]

Table IV.4.25b Likelihood of low performance in financial literacy, by student characteristics and performance in the core PISA subjects

Results based on students' self-reports

		Increased likelihood of being a low performer in financial literacy (performing at or below Level 1)							
				PISA index of economic, social and cultural status (ESCS)					
		Boys		Bottom quarter of ESCS		Second quarter of ESCS		Third quarter of ESCS	
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.
OECD	Australia	**1.48**	(0.16)	**2.69**	(0.49)	**1.99**	(0.35)	**1.37**	(0.21)
	Belgium (Flemish)	1.27	(0.32)	**2.86**	(1.03)	**2.58**	(0.92)	1.77	(0.60)
	Canadian provinces	1.07	(0.16)	**1.86**	(0.45)	1.50	(0.45)	1.18	(0.34)
	Chile	1.11	(0.15)	**1.98**	(0.39)	**1.44**	(0.23)	1.36	(0.22)
	Italy	0.97	(0.17)	1.29	(0.27)	1.30	(0.29)	1.05	(0.22)
	Netherlands	1.17	(0.25)	**2.40**	(0.61)	**2.10**	(0.55)	**1.77**	(0.48)
	Poland	**1.61**	(0.22)	1.25	(0.22)	1.29	(0.24)	1.16	(0.21)
	Slovak Republic	**1.47**	(0.19)	1.14	(0.19)	1.29	(0.19)	1.22	(0.20)
	Spain	**1.36**	(0.17)	**1.70**	(0.29)	**1.39**	(0.23)	1.31	(0.19)
	United States	1.02	(0.17)	**2.16**	(0.42)	**1.92**	(0.38)	**1.65**	(0.35)
	OECD average-10	**1.25**	(0.06)	**1.93**	(0.16)	**1.68**	(0.14)	**1.38**	(0.10)
Partners	Brazil	1.21	(0.12)	1.32	(0.21)	1.23	(0.20)	1.23	(0.16)
	Lithuania	**1.59**	(0.16)	1.39	(0.26)	**1.46**	(0.23)	1.27	(0.19)
	Peru	**1.30**	(0.13)	**2.05**	(0.32)	1.15	(0.20)	1.07	(0.14)
	Russia	1.25	(0.20)	1.18	(0.28)	0.99	(0.25)	0.92	(0.19)

		Increased likelihood of being a low performer in financial literacy (performing at or below Level 1)													
		Non-immigrant students		Students attending school located in a city (100 000 people or more)		Student is a low performer in mathematics		Student is a low performer in reading		Student is a low performer in science		Intercept		Pseudo R2	
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Pseudo R2	S.E.
OECD	Australia	0.81	(0.12)	0.80	(0.11)	**3.80**	(0.53)	**4.96**	(0.73)	**6.38**	(0.78)	**0.03**	(0.01)	0.439	(0.016)
	Belgium (Flemish)	**0.39**	(0.11)	1.40	(0.34)	**3.81**	(1.13)	**4.50**	(1.22)	**5.15**	(1.69)	**0.02**	(0.01)	0.471	(0.029)
	Canadian provinces	0.78	(0.19)	0.82	(0.16)	**3.25**	(0.75)	**3.67**	(0.81)	**3.83**	(0.88)	**0.05**	(0.02)	0.267	(0.023)
	Chile	0.74	(0.30)	0.90	(0.15)	**4.16**	(0.62)	**2.72**	(0.47)	**3.72**	(0.56)	**0.12**	(0.06)	0.340	(0.018)
	Italy	0.78	(0.23)	0.74	(0.17)	**2.83**	(0.47)	**2.92**	(0.62)	**4.32**	(0.81)	**0.08**	(0.03)	0.291	(0.022)
	Netherlands	0.73	(0.22)	0.72	(0.17)	**3.14**	(1.02)	**3.97**	(1.06)	**6.95**	(1.86)	**0.05**	(0.02)	0.405	(0.039)
	Poland	c	c	0.97	(0.17)	**3.75**	(0.87)	**4.42**	(0.95)	**3.55**	(0.73)	**0.06**	(0.05)	0.290	(0.022)
	Slovak Republic	1.13	(0.61)	0.78	(0.17)	**2.23**	(0.39)	**3.10**	(0.59)	**2.75**	(0.50)	**0.14**	(0.08)	0.227	(0.023)
	Spain	1.03	(0.20)	0.99	(0.15)	**3.57**	(0.65)	**3.92**	(0.79)	**3.54**	(0.76)	**0.08**	(0.02)	0.287	(0.020)
	United States	1.05	(0.22)	1.05	(0.18)	**4.90**	(0.94)	**4.04**	(0.93)	**3.82**	(0.75)	**0.03**	(0.01)	0.389	(0.021)
	OECD average-10	0.83	(0.09)	0.92	(0.06)	**3.54**	(0.24)	**3.82**	(0.27)	**4.40**	(0.33)	**0.07**	(0.01)	0.341	(0.008)
Partners	Brazil	0.28	(0.19)	1.09	(0.13)	**2.50**	(0.31)	**2.72**	(0.29)	**2.96**	(0.34)	0.65	(0.63)	0.233	(0.015)
	Lithuania	0.89	(0.29)	0.87	(0.11)	**2.87**	(0.53)	**3.65**	(0.62)	**3.29**	(0.70)	**0.12**	(0.05)	0.284	(0.018)
	Peru	0.31	(0.19)	0.97	(0.24)	**3.47**	(0.46)	**5.43**	(0.76)	**3.93**	(0.58)	**0.16**	(0.15)	0.406	(0.017)
	Russia	0.86	(0.30)	0.90	(0.16)	**2.55**	(0.52)	**2.83**	(0.59)	**3.66**	(0.89)	**0.05**	(0.02)	0.220	(0.025)

Notes: Multivariate logistic regression model: likelihood of being a low performer in financial literacy (performing at or below Level 1) is regressed on all variables in the table. Reference categories are: girls, students in the top quarter of ESCS, immigrant students, students attending school in a town or rural area, students who perform at or above Level 2 in mathematics, students who perform at or above Level 2 in reading, and students who perform at or above Level 2 in science.
Results are not reported for countries and economies where the percentage of low performers in financial literacy is less than 10%.
Values that are statistically significant are indicated in bold (see Annex A3).
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[Part 1/1]

Table IV.5.1 Percentage of students who discuss money matters with parents

Results based on students' self-reports

		Percentage of students who discuss money matters with parents							
		Never or hardly ever		Once or twice a month		Once or twice a week		Almost every day	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	15.7	(0.4)	34.9	(0.6)	37.1	(0.6)	12.4	(0.4)
	Belgium (Flemish)	16.1	(1.2)	37.5	(1.4)	32.8	(1.5)	13.6	(1.0)
	Canadian provinces	13.1	(0.8)	33.0	(1.4)	36.4	(1.3)	17.4	(1.1)
	Chile	18.7	(1.1)	29.0	(1.3)	29.6	(1.4)	22.6	(1.2)
	Italy	17.6	(1.1)	25.3	(1.1)	34.5	(1.5)	22.7	(1.4)
	Netherlands	13.1	(0.9)	35.6	(1.4)	36.7	(1.2)	14.5	(1.1)
	Poland	15.7	(0.9)	35.0	(1.2)	34.6	(1.2)	14.7	(0.8)
	Slovak Republic	20.2	(1.3)	33.6	(1.5)	31.1	(1.3)	15.1	(1.1)
	Spain	21.6	(0.9)	28.0	(1.3)	32.1	(1.5)	18.3	(1.1)
	United States	12.3	(1.0)	32.4	(1.5)	34.1	(1.5)	21.2	(1.3)
	OECD average-10	16.4	(0.3)	32.4	(0.4)	33.9	(0.4)	17.3	(0.3)
Partners	Brazil	n	n	n	n	n	n	n	n
	B-S-J-G (China)	21.8	(1.3)	40.5	(1.2)	29.7	(1.2)	8.0	(0.7)
	Lithuania	11.6	(0.9)	27.4	(1.2)	38.0	(1.3)	23.0	(1.2)
	Peru	n	n	n	n	n	n	n	n
	Russia	14.6	(1.0)	29.2	(1.7)	35.9	(1.7)	20.3	(1.5)

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[Part 1/1]

Table IV.5.2 Percentage of students who discuss money matters with friends

Results based on students' self-reports

		Percentage of students who discuss money matters with friends							
		Never or hardly ever		Once or twice a month		Once or twice a week		Almost every day	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	38.5	(0.5)	34.3	(0.5)	21.0	(0.5)	6.1	(0.3)
	Belgium (Flemish)	47.4	(1.8)	30.3	(1.4)	17.4	(1.3)	5.0	(0.8)
	Canadian provinces	42.3	(1.2)	31.2	(1.2)	20.4	(1.0)	6.2	(0.6)
	Chile	42.6	(1.4)	28.3	(1.3)	20.8	(1.2)	8.2	(0.8)
	Italy	45.6	(1.5)	29.6	(1.3)	17.4	(1.2)	7.4	(0.7)
	Netherlands	39.0	(1.6)	32.9	(1.3)	21.5	(1.1)	6.7	(0.8)
	Poland	31.0	(1.1)	36.2	(1.0)	23.4	(1.1)	9.4	(0.7)
	Slovak Republic	32.5	(1.4)	34.0	(1.2)	21.2	(1.0)	12.4	(1.0)
	Spain	42.0	(1.2)	30.1	(1.1)	20.5	(1.0)	7.4	(0.8)
	United States	45.2	(1.6)	30.2	(1.4)	15.7	(1.0)	8.9	(0.9)
	OECD average-10	40.6	(0.4)	31.7	(0.4)	19.9	(0.3)	7.8	(0.2)
Partners	Brazil	n	n	n	n	n	n	n	n
	B-S-J-G (China)	38.3	(1.3)	32.4	(1.2)	22.2	(1.1)	7.1	(0.6)
	Lithuania	26.5	(1.2)	34.3	(1.2)	25.9	(1.4)	13.3	(0.9)
	Peru	n	n	n	n	n	n	n	n
	Russia	37.5	(1.7)	28.5	(1.5)	23.3	(1.4)	10.7	(1.0)

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Table IV.5.3 Likelihood of discussing money matters with parents, by student characteristics

Results based on students' self-reports

		Likelihood of discussing money matters with parents									
		Once or twice a month									
				PISA index of economic, social and cultural status (ESCS)							
		Boys		Second quarter of ESCS		Third quarter of ESCS		Top quarter of ESCS		Intercept	
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.
OECD	Australia	**0.70**	(0.04)	1.07	(0.10)	**1.32**	(0.12)	**1.42**	(0.12)	**2.31**	(0.16)
	Belgium (Flemish)	0.82	(0.15)	1.38	(0.35)	1.17	(0.35)	1.54	(0.47)	**2.08**	(0.46)
	Canadian provinces	0.96	(0.17)	1.08	(0.24)	1.28	(0.31)	1.35	(0.42)	**2.26**	(0.41)
	Chile	1.28	(0.26)	0.98	(0.22)	1.27	(0.30)	1.38	(0.35)	1.23	(0.22)
	Italy	1.08	(0.21)	1.29	(0.41)	1.18	(0.32)	1.57	(0.42)	1.14	(0.26)
	Netherlands	0.85	(0.15)	1.60	(0.40)	**1.99**	(0.60)	1.81	(0.61)	**1.92**	(0.40)
	Poland	0.84	(0.13)	**2.10**	(0.47)	**1.66**	(0.36)	**1.65**	(0.39)	**1.61**	(0.24)
	Slovak Republic	0.76	(0.13)	**1.83**	(0.42)	1.38	(0.28)	**2.21**	(0.55)	1.30	(0.19)
	Spain	1.04	(0.15)	0.73	(0.15)	0.92	(0.18)	1.22	(0.25)	**1.35**	(0.20)
	United States	0.94	(0.19)	0.97	(0.25)	1.59	(0.41)	**1.80**	(0.43)	**2.12**	(0.42)
	OECD average-10	0.93	(0.05)	**1.30**	(0.10)	**1.38**	(0.11)	**1.59**	(0.13)	**1.73**	(0.10)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	0.84	(0.13)	**1.59**	(0.34)	**1.58**	(0.26)	**2.87**	(0.64)	1.32	(0.19)
	Lithuania	0.72	(0.15)	1.70	(0.49)	1.19	(0.33)	1.66	(0.52)	**2.16**	(0.43)
	Peru	n	n	n	n	n	n	n	n	n	n
	Russia	**0.40**	(0.09)	0.94	(0.30)	0.90	(0.23)	1.12	(0.32)	**3.44**	(0.84)

		Likelihood of discussing money matters with parents									
		Once or twice a week									
				PISA index of economic, social and cultural status (ESCS)							
		Boys		Second quarter of ESCS		Third quarter of ESCS		Top quarter of ESCS		Intercept	
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.
OECD	Australia	**0.81**	(0.05)	1.11	(0.10)	**1.51**	(0.13)	**1.67**	(0.15)	**2.10**	(0.17)
	Belgium (Flemish)	**0.62**	(0.13)	1.18	(0.33)	1.11	(0.32)	1.42	(0.44)	**2.24**	(0.50)
	Canadian provinces	1.28	(0.22)	1.21	(0.24)	**1.71**	(0.41)	1.51	(0.41)	**1.88**	(0.30)
	Chile	1.18	(0.20)	0.90	(0.26)	1.32	(0.38)	1.57	(0.40)	1.26	(0.26)
	Italy	1.32	(0.22)	1.08	(0.28)	0.65	(0.17)	1.57	(0.39)	**1.68**	(0.36)
	Netherlands	0.80	(0.14)	0.90	(0.21)	1.30	(0.35)	1.46	(0.45)	**2.76**	(0.48)
	Poland	0.93	(0.13)	**1.67**	(0.35)	**1.59**	(0.32)	1.52	(0.37)	**1.66**	(0.26)
	Slovak Republic	1.10	(0.19)	**1.83**	(0.40)	1.41	(0.33)	**2.12**	(0.61)	1.00	(0.20)
	Spain	0.98	(0.16)	0.81	(0.16)	0.96	(0.23)	1.13	(0.24)	**1.56**	(0.27)
	United States	1.07	(0.23)	0.96	(0.29)	1.13	(0.34)	**1.72**	(0.44)	**2.32**	(0.56)
	OECD average-10	1.01	(0.06)	**1.17**	(0.09)	**1.27**	(0.10)	**1.57**	(0.13)	**1.85**	(0.11)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	0.99	(0.19)	**2.03**	(0.45)	**1.88**	(0.37)	**4.98**	(1.27)	**0.68**	(0.12)
	Lithuania	0.73	(0.14)	1.52	(0.36)	1.25	(0.33)	1.73	(0.53)	**3.04**	(0.56)
	Peru	n	n	n	n	n	n	n	n	n	n
	Russia	**0.54**	(0.13)	1.42	(0.42)	0.91	(0.23)	1.08	(0.24)	**3.41**	(0.82)

		Likelihood of discussing money matters with parents											
		Almost every day											
				PISA index of economic, social and cultural status (ESCS)									
		Boys		Second quarter of ESCS		Third quarter of ESCS		Top quarter of ESCS		Intercept		Pseudo R2	
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Pseudo R2	S.E.
OECD	Australia	**0.79**	(0.07)	0.85	(0.09)	1.05	(0.12)	1.10	(0.13)	0.92	(0.08)	0.004	(0.001)
	Belgium (Flemish)	0.94	(0.21)	1.07	(0.32)	0.82	(0.24)	0.92	(0.35)	0.91	(0.21)	0.005	(0.004)
	Canadian provinces	1.09	(0.21)	0.84	(0.19)	1.33	(0.30)	1.38	(0.40)	1.18	(0.23)	0.004	(0.003)
	Chile	0.79	(0.15)	0.76	(0.17)	1.21	(0.27)	1.15	(0.30)	1.35	(0.25)	0.006	(0.003)
	Italy	1.24	(0.28)	1.14	(0.36)	1.05	(0.28)	1.38	(0.41)	1.03	(0.27)	0.007	(0.003)
	Netherlands	**0.61**	(0.11)	1.47	(0.43)	1.65	(0.57)	1.45	(0.58)	1.03	(0.24)	0.007	(0.004)
	Poland	0.73	(0.14)	**2.09**	(0.57)	**1.73**	(0.45)	1.33	(0.37)	0.75	(0.15)	0.005	(0.003)
	Slovak Republic	0.84	(0.17)	**1.76**	(0.42)	1.27	(0.32)	1.63	(0.51)	**0.61**	(0.15)	0.007	(0.004)
	Spain	**0.77**	(0.10)	0.74	(0.17)	0.86	(0.21)	0.99	(0.22)	1.09	(0.18)	0.003	(0.002)
	United States	1.16	(0.27)	0.74	(0.21)	1.29	(0.38)	1.52	(0.41)	1.45	(0.31)	0.005	(0.003)
	OECD average-10	0.90	(0.06)	1.15	(0.10)	**1.23**	(0.11)	**1.28**	(0.12)	1.03	(0.07)	0.005	(0.001)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	0.98	(0.22)	1.28	(0.32)	**1.75**	(0.42)	**3.37**	(1.04)	**0.24**	(0.06)	0.016	(0.005)
	Lithuania	**0.55**	(0.10)	1.60	(0.48)	1.34	(0.40)	1.84	(0.63)	**2.00**	(0.45)	0.005	(0.003)
	Peru	n	n	n	n	n	n	n	n	n	n	n	n
	Russia	**0.45**	(0.11)	1.10	(0.32)	0.81	(0.25)	0.99	(0.31)	**2.29**	(0.62)	0.010	(0.005)

Notes: Multinomial logistic regression model: likelihood of discussing money matters with parents on a monthly, weekly or almost daily basis compared with never discussing is regressed on all variables in the table. Reference categories are: girls and students in the bottom quarter of ESCS.
Values that are statistically significant are indicated in bold (see Annex A3).

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Table IV.5.4 Likelihood of discussing money matters with friends, by student characteristics

Results based on students' self-reports

		Likelihood of discussing money matters with friends									
		Once or twice a month									
				PISA index of economic, social and cultural status (ESCS)							
		Boys		Second quarter of ESCS		Third quarter of ESCS		Top quarter of ESCS		Intercept	
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.
OECD	Australia	**1.15**	(0.06)	0.99	(0.08)	1.06	(0.08)	0.93	(0.08)	**0.84**	(0.04)
	Belgium (Flemish)	1.17	(0.16)	1.10	(0.21)	1.03	(0.20)	1.28	(0.24)	**0.54**	(0.08)
	Canadian provinces	1.19	(0.17)	1.09	(0.17)	1.13	(0.17)	1.24	(0.22)	**0.61**	(0.09)
	Chile	1.27	(0.18)	0.88	(0.16)	1.11	(0.20)	0.95	(0.15)	**0.60**	(0.09)
	Italy	**1.66**	(0.23)	1.09	(0.20)	**0.62**	(0.10)	0.96	(0.20)	**0.56**	(0.07)
	Netherlands	1.12	(0.17)	1.25	(0.24)	1.15	(0.23)	1.35	(0.29)	**0.68**	(0.11)
	Poland	1.02	(0.11)	**1.53**	(0.29)	**1.65**	(0.30)	1.37	(0.23)	0.85	(0.12)
	Slovak Republic	1.25	(0.17)	1.21	(0.25)	1.25	(0.25)	0.87	(0.19)	0.87	(0.14)
	Spain	1.13	(0.14)	1.16	(0.21)	1.08	(0.24)	1.39	(0.24)	**0.58**	(0.09)
	United States	1.00	(0.15)	0.71	(0.13)	0.93	(0.15)	**1.37**	(0.21)	**0.66**	(0.12)
	OECD average-10	**1.20**	(0.05)	1.10	(0.06)	1.10	(0.06)	**1.17**	(0.07)	**0.68**	(0.03)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	0.96	(0.12)	1.22	(0.22)	0.92	(0.16)	**1.73**	(0.33)	**0.74**	(0.10)
	Lithuania	1.32	(0.19)	**1.55**	(0.25)	1.37	(0.32)	**1.75**	(0.37)	0.84	(0.12)
	Peru	n	n	n	n	n	n	n	n	n	n
	Russia	0.95	(0.16)	1.18	(0.27)	1.08	(0.31)	1.16	(0.25)	0.72	(0.13)

		Likelihood of discussing money matters with friends									
		Once or twice a week									
				PISA index of economic, social and cultural status (ESCS)							
		Boys		Second quarter of ESCS		Third quarter of ESCS		Top quarter of ESCS		Intercept	
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.
OECD	Australia	**1.20**	(0.08)	0.94	(0.10)	0.94	(0.08)	1.05	(0.11)	**0.51**	(0.04)
	Belgium (Flemish)	**1.70**	(0.32)	1.06	(0.23)	0.83	(0.22)	0.89	(0.23)	**0.29**	(0.05)
	Canadian provinces	**1.35**	(0.18)	0.79	(0.15)	0.86	(0.18)	0.98	(0.22)	**0.46**	(0.07)
	Chile	1.31	(0.23)	0.78	(0.20)	1.03	(0.28)	1.02	(0.25)	**0.45**	(0.11)
	Italy	**2.45**	(0.48)	0.94	(0.24)	0.99	(0.25)	0.82	(0.18)	**0.25**	(0.06)
	Netherlands	1.32	(0.20)	**1.78**	(0.42)	1.35	(0.28)	**1.76**	(0.41)	**0.34**	(0.06)
	Poland	1.31	(0.19)	1.15	(0.21)	1.25	(0.23)	1.16	(0.23)	**0.58**	(0.09)
	Slovak Republic	**1.60**	(0.28)	1.22	(0.26)	0.95	(0.23)	0.85	(0.18)	**0.51**	(0.10)
	Spain	1.16	(0.16)	0.86	(0.23)	0.76	(0.18)	0.97	(0.22)	**0.50**	(0.10)
	United States	1.35	(0.25)	**0.56**	(0.14)	0.66	(0.17)	0.67	(0.17)	**0.42**	(0.09)
	OECD average-10	**1.47**	(0.08)	1.01	(0.07)	0.96	(0.07)	1.02	(0.07)	**0.43**	(0.02)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	1.16	(0.17)	**1.56**	(0.32)	1.41	(0.32)	**1.52**	(0.29)	**0.39**	(0.06)
	Lithuania	1.11	(0.17)	**1.69**	(0.32)	1.51	(0.37)	**2.06**	(0.46)	**0.64**	(0.10)
	Peru	n	n	n	n	n	n	n	n	n	n
	Russia	1.15	(0.29)	**2.12**	(0.49)	**2.15**	(0.61)	1.63	(0.62)	**0.36**	(0.08)

		Likelihood of discussing money matters with friends											
		Almost every day											
				PISA index of economic, social and cultural status (ESCS)									
		Boys		Second quarter of ESCS		Third quarter of ESCS		Top quarter of ESCS		Intercept		Pseudo R2	
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Pseudo R2	S.E.
OECD	Australia	**1.63**	(0.18)	0.80	(0.11)	**0.65**	(0.08)	**0.60**	(0.08)	**0.16**	(0.02)	0.003	(0.001)
	Belgium (Flemish)	1.51	(0.48)	0.72	(0.29)	0.96	(0.47)	0.53	(0.26)	**0.11**	(0.04)	0.007	(0.005)
	Canadian provinces	**2.78**	(0.58)	0.59	(0.17)	0.76	(0.25)	0.97	(0.27)	**0.10**	(0.02)	0.008	(0.003)
	Chile	1.38	(0.35)	0.82	(0.28)	0.85	(0.30)	0.80	(0.25)	**0.19**	(0.05)	0.003	(0.003)
	Italy	**4.82**	(1.21)	1.28	(0.48)	1.04	(0.38)	1.11	(0.37)	**0.06**	(0.02)	0.025	(0.006)
	Netherlands	1.42	(0.36)	0.62	(0.20)	0.57	(0.21)	0.90	(0.32)	**0.19**	(0.04)	0.007	(0.004)
	Poland	**1.79**	(0.34)	1.32	(0.37)	1.35	(0.37)	1.18	(0.32)	**0.19**	(0.04)	0.006	(0.003)
	Slovak Republic	**2.09**	(0.47)	0.96	(0.28)	1.09	(0.26)	0.67	(0.18)	**0.27**	(0.05)	0.008	(0.004)
	Spain	1.20	(0.24)	1.60	(0.60)	1.08	(0.34)	0.69	(0.24)	**0.15**	(0.04)	0.005	(0.003)
	United States	**1.68**	(0.38)	0.57	(0.18)	0.58	(0.18)	0.52	(0.19)	**0.23**	(0.05)	0.012	(0.005)
	OECD average-10	**2.03**	(0.17)	0.93	(0.10)	0.89	(0.10)	**0.80**	(0.08)	**0.16**	(0.01)	0.008	(0.001)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	**1.90**	(0.46)	1.36	(0.45)	1.14	(0.37)	1.69	(0.50)	**0.10**	(0.03)	0.009	(0.004)
	Lithuania	**1.79**	(0.38)	**1.71**	(0.41)	0.94	(0.32)	1.58	(0.48)	**0.31**	(0.07)	0.009	(0.004)
	Peru	n	n	n	n	n	n	n	n	n	n	n	n
	Russia	1.02	(0.27)	1.09	(0.38)	1.12	(0.42)	0.85	(0.27)	**0.29**	(0.08)	0.007	(0.004)

Notes: Multinomial logistic regression model: likelihood of discussing money matters with friends on a monthly, weekly or almost daily basis compared with never discussing is regressed on all variables in the table. Reference categories are: girls and students in the bottom quarter of ESCS.
Values that are statistically significant are indicated in bold (see Annex A3).

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Table IV.5.5 Student performance in financial literacy, by discussing money matters with parents

Results based on students' self-reports

		Financial literacy performance in PISA 2015								Difference in financial literacy performance in PISA 2015 (monthly, weekly or almost every day – never)				Difference in financial literacy performance in PISA 2015 (almost every day – monthly or weekly)			
		Students who discuss money matters with parents															
		Never or hardly ever		Once or twice a month		Once or twice a week		Almost every day		Before accounting for ESCS[1]		After accounting for ESCS		Before accounting for ESCS		After accounting for ESCS	
		Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.
OECD	Australia	480	(4.3)	515	(2.7)	518	(2.4)	480	(4.6)	**31**	(4.1)	**23**	(4.1)	**-36**	(4.8)	**-31**	(4.5)
	Belgium (Flemish)	517	(11.1)	557	(5.2)	545	(7.2)	533	(8.3)	**32**	(10.7)	**27**	(9.3)	**-18**	(9.0)	-9	(9.0)
	Canadian provinces	527	(8.6)	539	(6.6)	544	(5.8)	534	(8.4)	13	(9.1)	8	(8.5)	-8	(8.9)	-7	(8.9)
	Chile	410	(7.3)	439	(6.4)	449	(6.1)	434	(6.2)	**31**	(7.3)	**25**	(7.0)	-10	(7.1)	-8	(6.6)
	Italy	453	(8.1)	493	(6.0)	501	(5.0)	490	(6.2)	**43**	(8.2)	**40**	(7.8)	-7	(6.4)	-7	(6.4)
	Netherlands	474	(9.0)	531	(6.2)	535	(4.8)	505	(10.4)	**54**	(9.3)	**46**	(8.7)	**-28**	(10.9)	**-26**	(10.2)
	Poland	462	(7.7)	488	(5.3)	497	(4.6)	491	(8.5)	**30**	(8.1)	**26**	(7.9)	-2	(8.1)	-1	(7.8)
	Slovak Republic	402	(7.9)	451	(7.3)	452	(8.1)	447	(9.5)	**49**	(7.5)	**42**	(7.4)	-4	(10.4)	-2	(10.4)
	Spain	459	(7.8)	469	(5.6)	472	(5.3)	465	(7.2)	10	(7.5)	8	(7.0)	-5	(7.7)	-2	(7.0)
	United States	486	(8.3)	503	(4.9)	504	(5.9)	462	(6.8)	7	(8.0)	-1	(7.9)	**-41**	(7.3)	**-41**	(7.0)
	OECD average-10	467	(2.6)	498	(1.8)	502	(1.8)	484	(2.5)	**30**	(2.6)	**25**	(2.4)	**-16**	(2.6)	**-13**	(2.5)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	537	(9.0)	581	(7.3)	581	(10.5)	544	(12.1)	**40**	(10.4)	**20**	(9.0)	**-37**	(12.2)	**-36**	(11.0)
	Lithuania	403	(8.7)	454	(6.2)	469	(4.8)	454	(5.8)	**57**	(8.7)	**53**	(8.6)	-9	(6.2)	-10	(6.2)
	Peru	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	Russia	480	(8.0)	503	(6.5)	509	(6.4)	520	(5.8)	**30**	(7.6)	**30**	(7.7)	**13**	(6.5)	**13**	(6.7)

1. ESCS refers to the PISA index of economic, social and cultural status.
Notes: Means and differences in performance in this table are calculated considering only students for whom data on the PISA index of economic, social and cultural status are available.
Values that are statistically significant are indicated in bold (see Annex A3).
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Table IV.5.6 Student performance in financial literacy, by discussing money matters with friends

Results based on students' self-reports

		Financial literacy performance in PISA 2015								Difference in financial literacy performance in PISA 2015 (monthly, weekly or almost every day – never)				Difference in financial literacy performance in PISA 2015 (almost every day – monthly or weekly)			
		Students who discuss money matters with friends															
		Never or hardly ever		Once or twice a month		Once or twice a week		Almost every day		Before accounting for ESCS[1]		After accounting for ESCS		Before accounting for ESCS		After accounting for ESCS	
		Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.
OECD	Australia	518	(2.5)	515	(2.8)	496	(3.2)	431	(6.7)	**-17**	(2.6)	**-16**	(2.5)	**-77**	(6.7)	**-67**	(5.8)
	Belgium (Flemish)	545	(5.5)	551	(6.8)	545	(8.8)	499	(18.6)	-1	(6.8)	-1	(5.9)	**-50**	(18.9)	**-36**	(15.9)
	Canadian provinces	543	(5.4)	539	(6.2)	540	(7.4)	494	(15.1)	-9	(6.6)	-11	(6.3)	**-45**	(15.0)	**-43**	(14.8)
	Chile	444	(5.5)	439	(5.5)	425	(7.6)	409	(8.8)	**-14**	(6.1)	**-16**	(5.3)	**-24**	(9.9)	**-23**	(10.4)
	Italy	487	(4.8)	492	(5.7)	496	(8.6)	460	(9.4)	2	(6.0)	2	(5.8)	**-33**	(10.7)	**-35**	(11.2)
	Netherlands	515	(5.9)	536	(6.5)	530	(7.1)	457	(17.6)	10	(7.8)	6	(7.2)	**-77**	(17.7)	**-68**	(15.8)
	Poland	490	(5.2)	496	(5.2)	481	(6.6)	468	(8.8)	-3	(6.3)	-4	(6.2)	**-22**	(8.6)	**-22**	(8.1)
	Slovak Republic	455	(6.1)	453	(7.6)	441	(8.4)	385	(10.6)	**-19**	(7.2)	**-17**	(7.3)	**-63**	(10.7)	**-60**	(9.7)
	Spain	474	(5.3)	478	(5.6)	457	(6.0)	426	(9.5)	-11	(5.5)	**-12**	(5.1)	**-44**	(10.2)	**-38**	(10.6)
	United States	503	(4.4)	508	(6.4)	481	(9.7)	422	(9.6)	**-17**	(5.9)	**-18**	(5.6)	**-77**	(10.6)	**-69**	(10.4)
	OECD average-10	497	(1.6)	501	(1.9)	489	(2.4)	445	(3.8)	**-8**	(2.0)	**-9**	(1.9)	**-51**	(3.9)	**-46**	(3.7)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	564	(6.2)	577	(9.0)	570	(9.8)	554	(14.8)	8	(7.3)	1	(5.8)	-20	(12.3)	-21	(13.2)
	Lithuania	454	(5.7)	462	(5.2)	454	(6.4)	439	(7.7)	2	(5.9)	-3	(5.6)	**-19**	(8.6)	**-18**	(8.4)
	Peru	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	Russia	501	(6.0)	514	(6.4)	509	(6.8)	498	(10.6)	8	(5.9)	7	(5.8)	-14	(11.0)	-12	(11.2)

1. ESCS refers to the PISA index of economic, social and cultural status.
Notes: Means and differences in performance in this table are calculated considering only students for whom data on the PISA index of economic, social and cultural status are available.
Values that are statistically significant are indicated in bold (see Annex A3).
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Table IV.5.7 Student performance in financial literacy, by discussing money matters with parents and/or friends

Results based on students' self-reports

		Percentage of students who discuss money matters						Financial literacy performance in PISA 2015: Students who discuss money matters						Difference in financial literacy performance in PISA 2015 (more often with parents than with friends – more often with friends than with parents)			
		More often with friends than with parents		Equally often with parents and friends		More often with parents than with friends		More often with friends than with parents		Equally often with parents and friends		More often with parents than with friends		Before accounting for ESCS[1]		After accounting for ESCS	
		%	S.E.	%	S.E.	%	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Score dif.	S.E.	Score dif.	S.E.
OECD	Australia	12.0	(0.4)	37.7	(0.5)	50.3	(0.5)	460	(4.5)	501	(2.6)	523	(2.2)	**64**	(4.6)	**25**	(1.9)
	Belgium (Flemish)	11.2	(1.2)	32.0	(1.4)	56.8	(1.8)	512	(13.6)	544	(7.3)	551	(4.5)	**39**	(14.2)	**14**	(5.6)
	Canadian provinces	10.1	(0.8)	31.9	(1.2)	57.9	(1.2)	512	(11.7)	532	(6.0)	546	(4.9)	**34**	(12.2)	**14**	(4.9)
	Chile	14.5	(1.0)	31.2	(1.3)	54.3	(1.5)	389	(7.7)	434	(6.0)	450	(4.7)	**60**	(8.0)	**24**	(3.7)
	Italy	11.8	(1.0)	25.3	(1.2)	62.9	(1.5)	447	(8.6)	485	(6.0)	497	(3.8)	**49**	(8.9)	**20**	(3.7)
	Netherlands	12.0	(0.9)	36.0	(1.4)	52.0	(1.5)	482	(11.8)	519	(5.8)	532	(4.8)	**50**	(12.9)	**20**	(4.9)
	Poland	19.4	(1.0)	34.4	(1.3)	46.2	(1.3)	455	(6.6)	496	(5.5)	496	(4.5)	**41**	(7.8)	**16**	(3.7)
	Slovak Republic	25.0	(1.5)	30.3	(1.4)	44.7	(1.5)	392	(7.5)	453	(6.6)	465	(5.8)	**72**	(7.7)	**32**	(3.7)
	Spain	14.4	(1.2)	35.0	(1.3)	50.6	(1.3)	431	(8.7)	470	(5.5)	478	(4.5)	**47**	(9.3)	**18**	(3.9)
	United States	10.5	(1.1)	26.9	(1.5)	62.6	(1.7)	452	(10.8)	487	(6.5)	504	(4.1)	**52**	(10.9)	**17**	(4.5)
	OECD average-10	14.1	(0.3)	32.1	(0.4)	53.8	(0.5)	453	(3.0)	492	(1.9)	504	(1.4)	**51**	(3.2)	**20**	(1.3)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	18.0	(1.2)	44.4	(1.3)	37.6	(1.7)	549	(9.8)	571	(7.4)	576	(8.1)	**28**	(9.5)	4	(4.1)
	Lithuania	19.1	(1.1)	30.2	(1.2)	50.8	(1.4)	422	(7.0)	461	(5.0)	465	(4.4)	**43**	(7.3)	**18**	(3.3)
	Peru	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	Russia	17.6	(1.8)	27.0	(1.8)	55.4	(1.9)	486	(7.3)	509	(6.1)	512	(5.1)	**26**	(7.3)	**11**	(3.3)

1. ESCS refers to the PISA index of economic, social and cultural status.
Notes: Means and differences in performance in this table are calculated considering only students for whom data on the PISA index of economic, social and cultural status are available.
Values that are statistically significant are indicated in bold (see Annex A3).
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Table IV.5.8 Change between 2012 and 2015 in the percentage of students holding a bank account

Results based on students' self-reports

		PISA 2012						PISA 2015						Change between 2012 and 2015 (PISA 2015 – PISA 2012)					
		Yes		No		Do not know what it is		Yes		No		Do not know what it is		Yes		No		Do not know what it is	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	% dif.	S.E.	% dif.	S.E.	% dif.	S.E.
OECD	Australia	81.6	(1.2)	17.7	(1.2)	0.7	(0.2)	79.0	(0.5)	19.4	(0.5)	1.6	(0.2)	-2.6	(1.3)	1.7	(1.3)	0.9	(0.3)
	Belgium (Flemish)	78.1	(1.7)	21.0	(1.7)	0.9	(0.5)	74.7	(1.4)	24.9	(1.4)	0.5	(0.2)	-3.5	(2.2)	3.9	(2.2)	-0.4	(0.5)
	Canadian provinces	m	m	m	m	m	m	77.6	(1.3)	21.9	(1.3)	0.5	(0.1)	m	m	m	m	m	m
	Chile	m	m	m	m	m	m	27.2	(1.3)	70.4	(1.4)	2.3	(0.4)	m	m	m	m	m	m
	Italy	35.9	(1.3)	62.2	(1.3)	1.9	(0.4)	35.3	(1.7)	63.0	(1.7)	1.7	(0.3)	-0.6	(2.1)	0.8	(2.2)	-0.2	(0.5)
	Netherlands	m	m	m	m	m	m	95.0	(0.6)	4.7	(0.6)	0.3	(0.1)	m	m	m	m	m	m
	Poland	15.5	(1.8)	83.4	(1.9)	1.1	(0.5)	27.8	(1.2)	69.9	(1.2)	2.3	(0.4)	**12.3**	(2.1)	**-13.5**	(2.2)	1.2	(0.6)
	Slovak Republic	25.1	(1.9)	73.2	(2.2)	1.7	(0.6)	42.3	(1.4)	53.6	(1.5)	4.2	(0.6)	**17.2**	(2.4)	**-19.6**	(2.6)	**2.4**	(0.8)
	Spain	59.1	(2.3)	38.7	(2.2)	2.2	(0.8)	52.4	(1.3)	45.9	(1.3)	1.7	(0.4)	**-6.7**	(2.6)	**7.2**	(2.5)	-0.5	(0.9)
	United States	51.4	(2.4)	47.3	(2.4)	1.3	(0.7)	52.8	(1.8)	46.3	(1.8)	0.8	(0.2)	1.4	(3.0)	-0.9	(3.0)	-0.5	(0.8)
	OECD average-7	49.5	(0.7)	49.1	(0.7)	1.4	(0.2)	52.0	(0.5)	46.1	(0.5)	1.8	(0.1)	**2.5**	(0.9)	**-2.9**	(0.9)	0.4	(0.3)
	OECD average-10	m	m	m	m	m	m	56.4	(0.4)	42.0	(0.4)	1.6	(0.1)	m	m	m	m	m	m
Partners	Brazil	m	m	m	m	m	m	n	n	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	m	m	m	m	m	m	46.1	(1.6)	50.1	(1.5)	3.8	(0.5)	m	m	m	m	m	m
	Lithuania	m	m	m	m	m	m	39.0	(1.5)	59.0	(1.4)	2.0	(0.4)	m	m	m	m	m	m
	Peru	m	m	m	m	m	m	n	n	n	n	n	n	n	n	n	n	n	n
	Russia	n	n	n	n	n	n	28.1	(1.5)	70.0	(1.6)	1.9	(0.5)	n	n	n	n	n	n

Note: Values that are statistically significant are indicated in bold (see Annex A3).
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Table IV.5.9 Change between 2012 and 2015 in the percentage of students holding a prepaid debit card

Results based on students' self-reports

		PISA 2012						PISA 2015						Change between 2012 and 2015 (PISA 2015 – PISA 2012)					
		Yes		No		Do not know what it is		Yes		No		Do not know what it is		Yes		No		Do not know what it is	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	% dif.	S.E.	% dif.	S.E.	% dif.	S.E.
OECD	Australia	26.4	(1.4)	62.2	(1.4)	11.4	(0.9)	32.7	(0.5)	58.0	(0.5)	9.2	(0.4)	**6.3**	(1.5)	**-4.2**	(1.5)	**-2.1**	(1.0)
	Belgium (Flemish)	16.7	(1.6)	45.1	(1.9)	38.1	(2.1)	16.4	(1.1)	60.6	(1.4)	23.0	(1.5)	-0.3	(1.9)	**15.4**	(2.3)	**-15.1**	(2.6)
	Canadian provinces	m	m	m	m	m	m	16.3	(1.0)	74.3	(1.2)	9.4	(0.8)	m	m	m	m	m	m
	Chile	m	m	m	m	m	m	8.6	(0.9)	89.0	(1.0)	2.4	(0.4)	m	m	m	m	m	m
	Italy	19.2	(1.1)	75.8	(1.2)	5.0	(0.5)	36.6	(1.4)	60.9	(1.4)	2.5	(0.5)	**17.4**	(1.8)	**-14.9**	(1.8)	**-2.5**	(0.7)
	Netherlands	m	m	m	m	m	m	10.5	(1.1)	76.7	(1.2)	12.7	(1.2)	m	m	m	m	m	m
	Poland	8.7	(1.4)	89.8	(1.5)	1.5	(0.6)	21.2	(1.1)	76.5	(1.1)	2.3	(0.4)	**12.4**	(1.8)	**-13.3**	(1.8)	0.8	(0.7)
	Slovak Republic	19.5	(1.9)	79.2	(2.0)	1.3	(0.4)	16.5	(1.1)	70.3	(1.8)	13.2	(1.1)	-3.0	(2.2)	**-8.9**	(2.7)	**11.9**	(1.2)
	Spain	12.6	(1.8)	74.1	(2.1)	13.3	(1.7)	8.7	(0.7)	76.0	(1.1)	15.3	(1.0)	**-3.8**	(1.9)	1.9	(2.3)	2.0	(2.0)
	United States	14.3	(1.6)	82.2	(1.8)	3.4	(0.9)	21.6	(1.2)	74.0	(1.3)	4.4	(0.6)	**7.3**	(2.0)	**-8.2**	(2.2)	0.9	(1.1)
	OECD average-7	16.8	(0.6)	72.6	(0.6)	10.6	(0.5)	22.0	(0.4)	68.0	(0.5)	10.0	(0.3)	**5.2**	(0.7)	**-4.6**	(0.8)	-0.6	(0.6)
	OECD average-10	m	m	m	m	m	m	18.9	(0.3)	71.6	(0.4)	9.4	(0.3)	m	m	m	m	m	m
Partners	Brazil	m	m	m	m	m	m	n	n	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	m	m	m	m	m	m	7.9	(0.7)	62.1	(1.2)	30.0	(1.3)	m	m	m	m	m	m
	Lithuania	m	m	m	m	m	m	13.6	(1.0)	67.1	(1.3)	19.3	(1.1)	m	m	m	m	m	m
	Peru	m	m	m	m	m	m	n	n	n	n	n	n	n	n	n	n	n	n
	Russia	n	n	n	n	n	n	38.5	(1.7)	60.0	(1.8)	1.5	(0.4)	n	n	n	n	n	n

Note: Values that are statistically significant are indicated in bold (see Annex A3).

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Table IV.5.10 Percentage of students holding a bank account and/or a prepaid debit card

Results based on students' self-reports

		Percentage of students holding a bank account and/or a prepaid debit card										Out of the students holding a bank account and/or a prepaid debit card...					
		Student has both a bank account and a prepaid debit card		Student has a bank account but no prepaid debit card		Student has a prepaid debit card but no bank account		Student has neither a bank account nor a prepaid debit card		Student has a bank account and/or a prepaid debit card		...percentage of students holding both a bank account and a prepaid debit card		...percentage of students holding a bank account but no prepaid debit card		...percentage of students holding a prepaid debit card but no bank account	
		(a)		(b)		(c)		(d)		(e)		100*(a)/(e)		100*(b)/(e)		100*(c)/(e)	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	30.7	(0.5)	48.1	(0.7)	1.9	(0.2)	19.3	(0.5)	80.7	(0.5)	38.1	(0.7)	59.6	(0.7)	2.3	(0.2)
	Belgium (Flemish)	15.4	(1.1)	59.0	(1.7)	1.1	(0.3)	24.6	(1.3)	75.4	(1.3)	20.4	(1.4)	78.2	(1.5)	1.4	(0.4)
	Canadian provinces	13.4	(1.0)	63.5	(1.2)	2.8	(0.4)	20.3	(1.2)	79.7	(1.2)	16.8	(1.1)	79.6	(1.1)	3.6	(0.6)
	Chile	5.3	(0.7)	21.5	(1.4)	2.9	(0.5)	70.3	(1.5)	29.7	(1.5)	17.7	(2.4)	72.4	(2.7)	9.9	(1.7)
	Italy	15.3	(1.2)	19.8	(1.2)	21.5	(1.3)	43.4	(1.5)	56.6	(1.5)	26.9	(2.0)	35.0	(1.9)	38.0	(2.2)
	Netherlands	10.1	(1.1)	84.9	(1.2)	0.5	(0.2)	4.5	(0.6)	95.5	(0.6)	10.6	(1.1)	88.9	(1.1)	0.5	(0.2)
	Poland	19.0	(1.0)	8.6	(0.7)	2.1	(0.4)	70.4	(1.3)	29.6	(1.3)	64.0	(2.1)	29.1	(2.0)	6.9	(1.2)
	Slovak Republic	11.8	(0.9)	28.6	(1.4)	4.4	(0.6)	55.2	(1.6)	44.8	(1.6)	26.3	(1.9)	63.9	(2.2)	9.8	(1.3)
	Spain	6.2	(0.6)	45.8	(1.3)	2.3	(0.4)	45.8	(1.2)	54.2	(1.2)	11.4	(1.0)	84.4	(1.3)	4.2	(0.8)
	United States	17.6	(1.2)	34.7	(1.6)	3.8	(0.5)	43.9	(1.9)	56.1	(1.9)	31.4	(1.9)	61.9	(1.9)	6.7	(0.8)
	OECD average-10	14.5	(0.3)	41.5	(0.4)	4.3	(0.2)	39.8	(0.4)	60.2	(0.4)	26.4	(0.5)	65.3	(0.6)	8.3	(0.4)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	4.5	(0.6)	40.3	(1.4)	3.0	(0.5)	52.1	(1.5)	47.9	(1.5)	9.5	(1.2)	84.2	(1.4)	6.3	(1.1)
	Lithuania	11.2	(1.0)	25.8	(1.3)	2.0	(0.3)	60.9	(1.4)	39.1	(1.4)	28.7	(2.2)	66.2	(2.2)	5.1	(0.9)
	Peru	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	Russia	18.4	(1.3)	9.4	(1.1)	18.8	(1.3)	53.4	(1.7)	46.6	(1.7)	39.5	(2.5)	20.2	(2.2)	40.3	(2.4)

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Table IV.5.11 Likelihood of holding a bank account, by student characteristics

Results based on students' self-reports

		Increased likelihood of holding a bank account											
				PISA index of economic, social and cultural status (ESCS)									
		Boys		Second quarter of ESCS		Third quarter of ESCS		Top quarter of ESCS		Non-immigrant students		Students attending school located in a city (100 000 people or more)	
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.
OECD	Australia	0.92	(0.07)	**1.61**	(0.17)	**1.95**	(0.17)	**2.21**	(0.25)	**1.80**	(0.14)	0.93	(0.06)
	Belgium (Flemish)	0.80	(0.17)	1.34	(0.30)	**2.31**	(0.45)	**2.58**	(0.61)	**1.58**	(0.33)	0.87	(0.21)
	Canadian provinces	0.74	(0.13)	1.47	(0.37)	**1.65**	(0.35)	1.68	(0.45)	**1.53**	(0.31)	0.88	(0.16)
	Chile	0.98	(0.18)	1.17	(0.28)	1.34	(0.33)	**2.02**	(0.45)	c	c	0.70	(0.13)
	Italy	0.92	(0.15)	1.37	(0.36)	**1.96**	(0.54)	1.43	(0.43)	2.01	(0.73)	1.00	(0.19)
	Netherlands	1.18	(0.40)	2.32	(1.55)	1.06	(0.42)	3.38	(3.44)	**7.00**	(4.30)	1.61	(0.83)
	Poland	1.06	(0.14)	1.23	(0.27)	**2.03**	(0.38)	**3.32**	(0.73)	c	c	**1.53**	(0.23)
	Slovak Republic	0.97	(0.12)	1.09	(0.20)	1.02	(0.21)	**1.65**	(0.35)	c	c	1.39	(0.26)
	Spain	1.02	(0.13)	**1.43**	(0.25)	**1.89**	(0.33)	**2.18**	(0.40)	1.23	(0.21)	0.95	(0.12)
	United States	0.93	(0.12)	**2.39**	(0.54)	**3.46**	(0.70)	**6.36**	(1.29)	1.16	(0.21)	0.80	(0.15)
	OECD average-10	0.95	(0.06)	**1.54**	(0.18)	**1.87**	(0.13)	**2.68**	(0.39)	**2.33**	(0.63)	1.07	(0.10)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	1.09	(0.12)	**1.85**	(0.38)	**2.17**	(0.38)	**3.52**	(0.64)	c	c	**1.46**	(0.24)
	Lithuania	1.21	(0.16)	**1.73**	(0.32)	**2.57**	(0.46)	**2.70**	(0.62)	1.15	(0.57)	1.02	(0.17)
	Peru	n	n	n	n	n	n	n	n	n	n	n	n
	Russia	1.04	(0.15)	0.84	(0.21)	0.97	(0.24)	1.16	(0.36)	0.62	(0.26)	1.03	(0.15)

		Increased likelihood of holding a bank account													
		Students who receive money from:													
		An allowance or pocket money for regularly doing chores at home		An allowance or pocket money, without having to do any chores		Working outside school hours (e.g. a holiday job, part-time work)		Working in a family business		Occasional informal jobs (e.g. baby-sitting or gardening)		Gifts of money from friends or relatives		Selling things (e.g. at local markets or on eBay)	
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.
OECD	Australia	1.00	(0.07)	0.99	(0.08)	**3.51**	(0.24)	1.00	(0.08)	**1.21**	(0.10)	**1.38**	(0.15)	0.89	(0.06)
	Belgium (Flemish)	1.19	(0.20)	**1.59**	(0.25)	**2.28**	(0.40)	1.00	(0.21)	0.99	(0.19)	1.75	(0.62)	0.85	(0.15)
	Canadian provinces	0.83	(0.11)	0.91	(0.17)	**4.24**	(0.84)	0.93	(0.20)	1.07	(0.19)	**1.97**	(0.42)	1.35	(0.28)
	Chile	1.01	(0.17)	**1.36**	(0.21)	1.10	(0.25)	1.16	(0.24)	1.20	(0.25)	1.41	(0.26)	1.19	(0.21)
	Italy	1.43	(0.33)	1.09	(0.17)	**1.56**	(0.34)	1.03	(0.26)	0.91	(0.20)	**1.91**	(0.45)	0.89	(0.15)
	Netherlands	1.23	(0.54)	1.22	(0.50)	**3.34**	(1.38)	0.44	(0.21)	0.91	(0.41)	**4.07**	(1.65)	0.90	(0.62)
	Poland	0.99	(0.13)	1.25	(0.15)	0.99	(0.16)	**1.85**	(0.25)	0.87	(0.14)	1.09	(0.17)	**1.58**	(0.24)
	Slovak Republic	**1.64**	(0.19)	**1.36**	(0.21)	1.23	(0.17)	**1.87**	(0.33)	1.11	(0.18)	1.17	(0.18)	1.25	(0.18)
	Spain	1.16	(0.15)	1.19	(0.16)	1.16	(0.22)	1.17	(0.21)	0.99	(0.14)	**1.40**	(0.20)	0.86	(0.13)
	United States	0.90	(0.15)	1.26	(0.20)	**2.08**	(0.28)	1.02	(0.20)	**1.48**	(0.21)	**1.60**	(0.38)	0.92	(0.12)
	OECD average-10	1.14	(0.08)	**1.22**	(0.07)	**2.15**	(0.18)	**1.15**	(0.07)	1.07	(0.07)	**1.77**	(0.20)	1.07	(0.08)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	1.30	(0.18)	1.03	(0.12)	0.90	(0.13)	1.44	(0.37)	1.26	(0.26)	1.20	(0.18)	1.07	(0.22)
	Lithuania	1.13	(0.15)	1.24	(0.14)	**1.49**	(0.26)	1.12	(0.17)	**0.66**	(0.09)	0.83	(0.17)	**1.82**	(0.29)
	Peru	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	Russia	0.94	(0.18)	0.93	(0.14)	**1.52**	(0.23)	1.19	(0.25)	1.34	(0.31)	0.88	(0.24)	1.15	(0.22)

		Increased likelihood of holding a bank account									
		Students who discuss money matters with parents									
		Once or twice a month		Once or twice a week		Almost every day		Intercept		Pseudo R2	
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Pseudo R2	S.E.
OECD	Australia	**1.47**	(0.14)	**1.65**	(0.18)	**2.02**	(0.29)	**0.54**	(0.08)	0.104	(0.008)
	Belgium (Flemish)	1.40	(0.26)	1.28	(0.31)	1.79	(0.59)	**0.34**	(0.13)	0.080	(0.020)
	Canadian provinces	1.12	(0.26)	**1.86**	(0.37)	**1.68**	(0.41)	0.65	(0.25)	0.126	(0.021)
	Chile	1.48	(0.45)	1.59	(0.43)	**2.15**	(0.66)	**0.04**	(0.03)	0.042	(0.015)
	Italy	1.21	(0.32)	1.20	(0.29)	1.21	(0.30)	**0.09**	(0.04)	0.034	(0.017)
	Netherlands	1.59	(0.91)	1.91	(1.01)	2.28	(2.30)	0.36	(0.26)	0.218	(0.051)
	Poland	1.07	(0.23)	1.08	(0.22)	1.46	(0.33)	0.56	(1.02)	0.077	(0.016)
	Slovak Republic	0.88	(0.18)	1.21	(0.26)	1.03	(0.25)	0.49	(0.35)	0.053	(0.012)
	Spain	**1.53**	(0.28)	**1.46**	(0.23)	1.15	(0.21)	**0.33**	(0.08)	0.031	(0.011)
	United States	0.98	(0.20)	1.31	(0.30)	1.17	(0.28)	**0.14**	(0.04)	0.123	(0.018)
	OECD average-10	**1.27**	(0.12)	**1.46**	(0.13)	**1.59**	(0.26)	**0.36**	(0.12)	0.089	(0.007)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	**1.58**	(0.25)	**1.43**	(0.24)	**1.73**	(0.43)	3.79	(10.06)	0.073	(0.014)
	Lithuania	0.89	(0.19)	1.10	(0.24)	1.10	(0.29)	**0.19**	(0.12)	0.060	(0.015)
	Peru	n	n	n	n	n	n	n	n	n	n
	Russia	1.18	(0.33)	1.51	(0.39)	1.50	(0.43)	0.37	(0.23)	0.025	(0.014)

Notes: Multivariate logistic regression model: likelihood of holding a bank account is regressed on all variables in the table. Reference categories are: girls, students in the bottom quarter of ESCS, immigrant students, students attending school in a town or rural area, students who do not receive money from a given source, and students who never discuss money matters with parents.
Values that are statistically significant are indicated in bold (see Annex A3).

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Table IV.5.12 Likelihood of holding a prepaid debit card, by student characteristics

Results based on students' self-reports

		Increased likelihood of holding a prepaid debit card											
				PISA index of economic, social and cultural status (ESCS)									
		Boys		Second quarter of ESCS		Third quarter of ESCS		Top quarter of ESCS		Non-immigrant students		Students attending school located in a city (100 000 people or more)	
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.
OECD	Australia	1.07	(0.07)	**1.43**	(0.13)	**1.65**	(0.15)	**1.99**	(0.17)	**1.48**	(0.11)	0.96	(0.08)
	Belgium (Flemish)	1.05	(0.21)	1.20	(0.34)	1.70	(0.59)	**2.33**	(0.77)	0.66	(0.18)	0.90	(0.26)
	Canadian provinces	**1.58**	(0.30)	1.29	(0.36)	**1.91**	(0.46)	**1.92**	(0.46)	0.93	(0.22)	**0.67**	(0.12)
	Chile	0.76	(0.16)	1.23	(0.93)	**4.52**	(3.03)	**7.26**	(4.79)	c	c	0.84	(0.21)
	Italy	**1.49**	(0.23)	**1.97**	(0.45)	**1.81**	(0.45)	**2.70**	(0.66)	0.93	(0.51)	0.96	(0.20)
	Netherlands	**2.39**	(0.59)	1.43	(0.62)	1.50	(0.54)	1.45	(0.59)	1.24	(0.57)	1.11	(0.49)
	Poland	0.87	(0.12)	1.24	(0.29)	1.53	(0.39)	**3.08**	(0.70)	c	c	**1.84**	(0.32)
	Slovak Republic	1.22	(0.20)	1.36	(0.43)	1.51	(0.58)	**2.68**	(0.85)	c	c	**1.97**	(0.61)
	Spain	0.82	(0.21)	2.21	(0.97)	2.27	(1.04)	**4.36**	(1.71)	0.87	(0.31)	**1.65**	(0.42)
	United States	0.76	(0.11)	**1.93**	(0.51)	**2.13**	(0.52)	**3.27**	(0.83)	**0.57**	(0.11)	1.30	(0.21)
	OECD average-10	**1.20**	(0.08)	**1.53**	(0.18)	**2.05**	(0.35)	**3.10**	(0.54)	0.96	(0.13)	**1.22**	(0.11)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	1.08	(0.24)	1.09	(0.29)	1.16	(0.39)	1.47	(0.43)	m	m	0.98	(0.24)
	Lithuania	1.14	(0.18)	1.23	(0.32)	1.62	(0.47)	**2.44**	(0.72)	**0.29**	(0.14)	**1.69**	(0.37)
	Peru	n	n	n	n	n	n	n	n	n	n	n	n
	Russia	1.19	(0.17)	1.02	(0.29)	1.12	(0.30)	1.28	(0.32)	0.80	(0.27)	1.20	(0.20)

		Increased likelihood of holding a prepaid debit card													
		Students who receive money from:													
		An allowance or pocket money for regularly doing chores at home		An allowance or pocket money, without having to do any chores		Working outside school hours (e.g. a holiday job, part-time work)		Working in a family business		Occasional informal jobs (e.g. baby-sitting or gardening)		Gifts of money from friends or relatives		Selling things (e.g. at local markets or on eBay)	
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.
OECD	Australia	0.95	(0.07)	**1.28**	(0.09)	**2.05**	(0.14)	**1.28**	(0.11)	**1.16**	(0.08)	0.93	(0.07)	**1.24**	(0.08)
	Belgium (Flemish)	1.22	(0.24)	1.16	(0.25)	1.18	(0.27)	0.90	(0.25)	1.10	(0.26)	1.00	(0.37)	1.03	(0.20)
	Canadian provinces	**1.52**	(0.30)	1.22	(0.20)	1.20	(0.20)	1.14	(0.26)	0.82	(0.15)	1.57	(0.58)	1.18	(0.24)
	Chile	1.15	(0.27)	1.54	(0.39)	1.09	(0.41)	1.30	(0.45)	1.39	(0.44)	0.98	(0.24)	1.48	(0.39)
	Italy	0.88	(0.15)	1.04	(0.15)	0.99	(0.23)	1.02	(0.23)	1.28	(0.25)	**1.50**	(0.25)	**1.53**	(0.33)
	Netherlands	0.91	(0.29)	1.47	(0.49)	1.21	(0.38)	1.71	(0.61)	0.78	(0.25)	0.63	(0.29)	1.24	(0.30)
	Poland	1.06	(0.15)	**1.59**	(0.23)	0.96	(0.16)	**1.68**	(0.25)	1.01	(0.15)	0.94	(0.18)	**1.55**	(0.24)
	Slovak Republic	**1.45**	(0.26)	**1.76**	(0.31)	1.04	(0.23)	**1.97**	(0.45)	1.29	(0.29)	0.90	(0.17)	**1.64**	(0.33)
	Spain	0.87	(0.24)	1.22	(0.27)	**1.82**	(0.48)	1.75	(0.56)	**1.73**	(0.42)	1.42	(0.45)	1.51	(0.44)
	United States	1.31	(0.20)	**1.75**	(0.36)	**1.56**	(0.30)	0.79	(0.16)	1.12	(0.18)	1.01	(0.25)	**1.49**	(0.24)
	OECD average-10	1.13	(0.07)	**1.40**	(0.09)	**1.31**	(0.09)	**1.35**	(0.12)	**1.17**	(0.09)	1.09	(0.10)	**1.39**	(0.09)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	1.27	(0.35)	1.32	(0.28)	0.84	(0.18)	1.25	(0.48)	**1.77**	(0.45)	1.05	(0.31)	1.56	(0.39)
	Lithuania	0.93	(0.21)	**1.53**	(0.25)	**1.56**	(0.30)	1.07	(0.24)	**0.61**	(0.13)	0.85	(0.23)	1.19	(0.26)
	Peru	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	Russia	1.28	(0.18)	1.21	(0.18)	**1.80**	(0.28)	1.03	(0.23)	0.99	(0.19)	0.69	(0.16)	0.95	(0.12)

		Increased likelihood of holding a prepaid debit card									
		Students who discuss money matters with parents									
		Once or twice a month		Once or twice a week		Almost every day		Intercept		Pseudo R2	
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Pseudo R2	S.E.
OECD	Australia	1.18	(0.12)	**1.41**	(0.13)	**1.59**	(0.15)	**0.11**	(0.02)	0.054	(0.005)
	Belgium (Flemish)	1.11	(0.40)	1.11	(0.37)	1.24	(0.59)	**0.11**	(0.06)	0.020	(0.016)
	Canadian provinces	0.77	(0.22)	**0.53**	(0.16)	0.83	(0.30)	**0.08**	(0.04)	0.043	(0.016)
	Chile	1.72	(0.91)	2.61	(1.57)	2.31	(1.34)	**0.00**	(0.00)	0.117	(0.041)
	Italy	**1.73**	(0.47)	1.49	(0.32)	**2.24**	(0.56)	**0.11**	(0.06)	0.055	(0.016)
	Netherlands	**0.47**	(0.16)	0.59	(0.23)	0.65	(0.27)	**0.06**	(0.04)	0.054	(0.021)
	Poland	1.35	(0.30)	1.20	(0.27)	**2.11**	(0.54)	0.17	(0.25)	0.085	(0.016)
	Slovak Republic	1.14	(0.28)	1.29	(0.32)	1.49	(0.44)	**0.09**	(0.07)	0.093	(0.023)
	Spain	1.54	(0.51)	1.86	(0.71)	2.10	(0.84)	**0.01**	(0.01)	0.095	(0.021)
	United States	0.94	(0.27)	1.38	(0.46)	1.22	(0.41)	**0.09**	(0.04)	0.065	(0.017)
	OECD average-10	1.20	(0.13)	**1.35**	(0.19)	**1.58**	(0.20)	**0.08**	(0.03)	0.068	(0.007)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	**2.34**	(1.00)	**2.42**	(0.93)	**4.88**	(2.26)	**0.02**	(0.01)	0.052	(0.022)
	Lithuania	1.13	(0.33)	1.34	(0.36)	1.56	(0.48)	**0.17**	(0.10)	0.063	(0.017)
	Peru	n	n	n	n	n	n	n	n	n	n
	Russia	1.24	(0.29)	1.38	(0.34)	**1.54**	(0.32)	**0.37**	(0.17)	0.031	(0.012)

Notes: Multivariate logistic regression model: likelihood of holding a prepaid debit card is regressed on all variables in the table. Reference categories are: girls, students in the bottom quarter of ESCS, immigrant students, students attending school in a town or rural area, students who do not receive money from a given source, and students who never discuss money matters with parents.
Values that are statistically significant are indicated in bold (see Annex A3).

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Table IV.5.13a Financial literacy performance, by holding a bank account

Results based on students' self-reports

		Students holding a bank account											
		Yes		No		Do not know what it is		No or Do not know what it is		Difference in financial literacy performance in PISA 2015 (yes – no or do not know)			
										Before accounting for ESCS[1]		After accounting for ESCS	
		Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Score dif.	S.E.	Score dif.	S.E.
OECD	Australia	514	(2.0)	482	(3.7)	373	(10.2)	474	(3.7)	**41**	(3.3)	**26**	(3.0)
	Belgium (Flemish)	553	(3.9)	510	(9.6)	c	c	509	(9.5)	**44**	(9.0)	**24**	(7.8)
	Canadian provinces	547	(4.3)	508	(8.4)	c	c	507	(8.3)	**40**	(8.7)	**31**	(8.4)
	Chile	453	(7.4)	430	(4.3)	339	(17.9)	428	(4.2)	**25**	(7.5)	12	(6.9)
	Italy	505	(5.2)	480	(4.5)	406	(29.6)	478	(4.6)	**26**	(7.4)	**23**	(7.5)
	Netherlands	526	(3.8)	446	(14.3)	c	c	440	(13.5)	**85**	(13.5)	**72**	(13.2)
	Poland	498	(5.2)	485	(4.1)	399	(17.5)	483	(4.1)	**16**	(5.6)	2	(5.5)
	Slovak Republic	435	(6.6)	448	(5.9)	356	(14.7)	442	(5.7)	-7	(6.1)	**-14**	(5.8)
	Spain	485	(4.8)	451	(5.0)	c	c	448	(5.1)	**37**	(6.1)	**28**	(5.7)
	United States	513	(4.7)	473	(4.8)	c	c	471	(4.7)	**42**	(6.0)	**22**	(6.3)
	OECD average-10	503	(1.6)	471	(2.3)	375	(8.5)	468	(2.2)	**35**	(2.5)	**23**	(2.4)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	584	(7.8)	565	(7.2)	441	(17.7)	556	(7.3)	**27**	(7.5)	4	(7.2)
	Lithuania	457	(5.9)	455	(4.1)	341	(16.9)	451	(4.2)	5	(6.6)	-4	(6.6)
	Peru	n	n	n	n	n	n	n	n	n	n	n	n
	Russia	503	(6.9)	508	(4.1)	c	c	507	(4.1)	-4	(6.4)	-5	(6.2)

1. ESCS refers to the PISA index of economic, social and cultural status.
Notes: Means and differences in performance in this table are calculated considering only students for whom data on the PISA index of economic, social and cultural status are available.
Values that are statistically significant are indicated in bold (see Annex A3).
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[Part 1/1]

Table IV.5.13b Percentage of students at each proficiency level in financial literacy, by holding a bank account

Results based on students' self-reports

		Percentage of students holding a bank account		Percentage of students at each proficiency level in PISA 2015, among students holding a bank account									
				Level 1 or below (below 400.33 score points)		Level 2 (from 400.33 to less than 475.10 score points)		Level 3 (from 475.10 to less than 549.86 score points)		Level 4 (from 549.86 to less than 624.63 score points)		Level 5 (at or above 624.63 score points)	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	79.0	(0.5)	17.4	(0.6)	18.3	(0.7)	24.8	(0.7)	22.5	(0.7)	17.0	(0.7)
	Belgium (Flemish)	74.7	(1.4)	7.8	(1.2)	13.7	(1.4)	24.1	(2.1)	30.0	(2.3)	24.4	(1.8)
	Canadian provinces	77.6	(1.3)	8.4	(0.9)	15.5	(1.2)	26.5	(1.6)	27.2	(1.9)	22.5	(1.8)
	Chile	27.2	(1.3)	31.0	(3.5)	28.4	(3.0)	21.2	(2.9)	15.0	(2.2)	4.4	(1.2)
	Italy	35.3	(1.7)	12.4	(2.1)	23.8	(2.6)	31.0	(3.4)	25.6	(2.4)	7.3	(1.4)
	Netherlands	95.0	(0.6)	15.3	(1.3)	16.8	(1.3)	23.9	(1.5)	25.1	(1.5)	18.9	(1.4)
	Poland	27.8	(1.2)	18.1	(1.9)	19.6	(2.3)	28.5	(2.4)	24.4	(2.7)	9.4	(1.8)
	Slovak Republic	42.3	(1.4)	39.3	(2.9)	22.7	(2.6)	19.1	(2.1)	13.5	(2.1)	5.4	(1.4)
	Spain	52.4	(1.3)	18.1	(2.0)	26.0	(2.2)	30.8	(2.1)	19.4	(1.7)	5.8	(1.1)
	United States	52.8	(1.8)	14.2	(1.8)	19.6	(1.9)	28.3	(1.8)	24.3	(2.3)	13.6	(1.8)
	OECD average-10	56.4	(0.4)	18.2	(0.6)	20.4	(0.6)	25.8	(0.7)	**22.7**	(0.7)	**12.9**	(0.5)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	46.1	(1.6)	7.8	(1.4)	10.1	(1.5)	16.9	(1.9)	25.4	(2.4)	39.6	(3.2)
	Lithuania	39.0	(1.5)	29.2	(2.8)	26.3	(2.6)	27.0	(2.7)	14.1	(2.0)	3.4	(1.1)
	Peru	n	n	n	n	n	n	n	n	n	n	n	n
	Russia	28.1	(1.5)	12.0	(2.8)	24.5	(3.5)	34.5	(3.8)	21.9	(2.9)	7.1	(1.9)

StatLink http://dx.doi.org/10.1787/888933485981

[Part 1/1]

Table IV.5.14 Financial literacy performance, by holding a prepaid debit card

Results based on students' self-reports

		Students holding a prepaid debit card											
		Yes		No		Do not know what it is		No or Do not know what it is		Difference in financial literacy performance in PISA 2015 (yes – no or do not know)			
										Before accounting for ESCS[1]		After accounting for ESCS	
		Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Score dif.	S.E.	Score dif.	S.E.
OECD	Australia	514	(3.0)	509	(2.4)	482	(5.1)	506	(2.2)	**8**	(3.1)	-2	(2.9)
	Belgium (Flemish)	554	(8.6)	548	(5.2)	527	(7.5)	542	(4.7)	12	(9.4)	-4	(7.7)
	Canadian provinces	528	(9.7)	546	(4.6)	513	(11.7)	542	(4.3)	-14	(9.7)	-19	(10.0)
	Chile	474	(13.5)	434	(4.3)	c	c	431	(4.3)	**43**	(13.9)	12	(12.7)
	Italy	507	(4.2)	480	(4.2)	407	(21.7)	477	(4.3)	**30**	(5.4)	**23**	(5.3)
	Netherlands	509	(9.6)	532	(3.9)	484	(11.7)	526	(3.9)	-16	(10.8)	**-21**	(10.2)
	Poland	505	(5.4)	486	(3.9)	386	(16.1)	483	(4.0)	**21**	(5.7)	8	(6.1)
	Slovak Republic	418	(10.9)	454	(5.9)	419	(10.4)	448	(5.8)	**-30**	(12.5)	**-42**	(12.1)
	Spain	454	(10.8)	472	(4.2)	454	(8.2)	469	(3.9)	-15	(10.2)	**-28**	(9.8)
	United States	496	(7.5)	497	(4.1)	438	(17.9)	494	(4.0)	2	(7.3)	-12	(7.1)
	OECD average-10	496	(2.8)	496	(1.4)	457	(4.4)	492	(1.3)	4	(3.0)	**-8**	(2.8)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	568	(16.9)	577	(7.0)	560	(7.3)	571	(6.1)	-3	(13.7)	-17	(11.1)
	Lithuania	476	(9.1)	454	(4.2)	453	(6.9)	454	(3.8)	**23**	(9.1)	14	(8.9)
	Peru	n	n	n	n	n	n	n	n	n	n	n	n
	Russia	505	(6.2)	508	(4.1)	c	c	508	(4.1)	-3	(5.3)	-4	(5.2)

1. ESCS refers to the PISA index of economic, social and cultural status.
Notes: Means and differences in performance in this table are calculated considering only students for whom data on the PISA index of economic, social and cultural status are available.
Values that are statistically significant are indicated in bold (see Annex A3).
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[Part 1/1]

Table IV.5.15 Students' sources of money

Results based on students' self-reports

		Percentage of students who receive money from:																			
		An allowance or pocket money for regularly doing chores at home		An allowance or pocket money, without having to do any chores		Working outside school hours (e.g. a holiday job, part-time work)		Working in a family business		Occasional informal jobs (e.g. baby-sitting or gardening)		Gifts of money from friends or relatives		Selling things (e.g. at local markets or on eBay)		Any allowance or pocket money (for regularly doing chores at home and/or without having to do any chores)		Any work activity (working outside school hours and/or working in a family business and/or occasional informal jobs)		Difference between the percentage of students receiving money from any work activity and that of students receiving money from allowances	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	% dif.	S.E.
OECD	Australia	49.0	(0.6)	30.4	(0.6)	51.9	(0.6)	20.3	(0.4)	44.4	(0.6)	87.6	(0.4)	36.6	(0.6)	71.2	(0.6)	59.0	(0.6)	**-12.2**	(0.9)
	Belgium (Flemish)	50.0	(1.6)	69.8	(1.6)	47.6	(1.7)	14.4	(1.0)	49.2	(1.6)	89.6	(1.0)	30.7	(1.6)	70.2	(1.4)	82.8	(1.3)	**12.6**	(2.1)
	Canadian provinces	40.5	(1.5)	34.0	(1.3)	46.7	(1.8)	17.2	(0.8)	54.6	(1.8)	90.2	(0.8)	31.7	(1.3)	72.3	(1.5)	55.7	(1.6)	**-16.7**	(2.6)
	Chile	40.3	(1.5)	34.1	(1.5)	25.1	(1.5)	17.8	(1.1)	17.1	(1.1)	69.7	(1.7)	34.8	(1.6)	38.1	(1.4)	56.5	(1.6)	**18.4**	(1.8)
	Italy	30.7	(1.3)	33.1	(1.8)	16.3	(1.2)	16.0	(1.2)	20.7	(1.2)	83.4	(1.1)	19.7	(1.2)	35.3	(1.4)	53.1	(1.8)	**17.8**	(2.3)
	Netherlands	41.3	(1.4)	69.8	(1.4)	52.6	(1.6)	15.0	(1.0)	47.0	(1.4)	89.3	(0.9)	33.5	(1.5)	73.7	(1.5)	82.2	(1.0)	**8.5**	(1.8)
	Poland	47.1	(1.4)	48.2	(1.3)	42.6	(1.4)	23.3	(1.2)	33.9	(1.4)	82.4	(1.1)	40.5	(1.4)	56.7	(1.5)	71.3	(1.2)	**14.6**	(1.7)
	Slovak Republic	48.9	(1.6)	42.4	(1.6)	44.8	(1.6)	22.3	(1.1)	46.2	(1.4)	75.7	(1.2)	36.0	(1.4)	66.4	(1.5)	68.6	(1.4)	2.3	(2.0)
	Spain	36.0	(1.5)	31.8	(1.3)	22.6	(1.1)	16.5	(1.1)	25.0	(1.2)	79.0	(1.2)	23.1	(1.1)	37.7	(1.5)	55.2	(1.5)	**17.5**	(1.8)
	United States	43.7	(1.5)	28.8	(1.2)	37.6	(1.5)	19.7	(1.1)	55.1	(1.5)	90.6	(0.8)	39.0	(1.5)	69.3	(1.4)	55.6	(1.5)	**-13.8**	(2.1)
	OECD average-10	42.7	(0.5)	42.3	(0.4)	38.8	(0.5)	18.3	(0.3)	39.3	(0.4)	83.8	(0.3)	32.6	(0.4)	59.1	(0.4)	64.0	(0.4)	**4.9**	(0.6)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	46.0	(1.4)	44.7	(1.5)	36.3	(1.5)	13.7	(0.9)	16.2	(1.0)	68.3	(1.3)	28.0	(1.2)	41.4	(1.5)	73.9	(1.4)	**32.5**	(2.4)
	Lithuania	45.7	(1.4)	47.8	(1.4)	44.5	(1.6)	29.6	(1.3)	55.1	(1.6)	86.7	(1.0)	47.5	(1.7)	73.1	(1.4)	70.9	(1.2)	-2.3	(1.9)
	Peru	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	Russia	36.3	(1.7)	58.7	(1.9)	51.2	(2.1)	17.6	(1.2)	24.8	(1.8)	87.6	(1.1)	28.9	(1.3)	62.2	(1.8)	70.0	(2.0)	**7.8**	(2.5)

Note: Values that are statistically significant are indicated in bold (see Annex A3).
StatLink http://dx.doi.org/10.1787/888933486003

[Part 1/2]

Table IV.5.16a Likelihood of receiving money from an allowance for regularly doing chores at home, by student characteristics

Results based on students' self-reports

		Increased likelihood of receiving money from an allowance or pocket money for regularly doing chores at home															
				PISA index of economic, social and cultural status (ESCS)													
		Boys		Second quarter of ESCS		Third quarter of ESCS		Top quarter of ESCS		Non-immigrant students		Students attending school located in a city (100 000 people or more)		Students who hold a bank account		Students who hold a prepaid debit card	
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.
OECD	Australia	**1.28**	(0.08)	0.92	(0.08)	0.91	(0.08)	0.97	(0.09)	**1.30**	(0.10)	0.98	(0.06)	1.05	(0.08)	0.95	(0.07)
OECD	Belgium (Flemish)	**2.14**	(0.36)	1.24	(0.24)	1.23	(0.29)	0.83	(0.20)	**0.61**	(0.12)	0.92	(0.16)	1.16	(0.21)	1.17	(0.25)
OECD	Canadian provinces	1.26	(0.17)	1.11	(0.28)	1.16	(0.23)	1.29	(0.29)	**1.47**	(0.28)	1.07	(0.19)	0.80	(0.12)	1.38	(0.34)
OECD	Chile	1.46	(0.29)	1.41	(0.37)	1.18	(0.35)	0.65	(0.21)	c	c	0.97	(0.21)	1.09	(0.23)	0.97	(0.29)
OECD	Italy	1.07	(0.20)	1.26	(0.32)	1.20	(0.31)	0.96	(0.29)	0.55	(0.21)	0.84	(0.15)	1.38	(0.31)	0.93	(0.17)
OECD	Netherlands	1.24	(0.19)	0.92	(0.22)	0.88	(0.20)	0.96	(0.22)	0.89	(0.19)	0.71	(0.15)	1.53	(0.75)	0.90	(0.28)
OECD	Poland	**1.52**	(0.20)	0.86	(0.13)	1.09	(0.16)	0.88	(0.13)	c	c	0.84	(0.13)	0.90	(0.16)	1.11	(0.22)
OECD	Slovak Republic	**1.80**	(0.32)	0.84	(0.19)	0.92	(0.19)	0.89	(0.19)	c	c	0.89	(0.28)	**1.51**	(0.21)	1.18	(0.21)
OECD	Spain	0.91	(0.13)	0.75	(0.14)	0.74	(0.13)	**0.70**	(0.12)	0.71	(0.19)	**1.48**	(0.23)	1.13	(0.17)	0.85	(0.25)
OECD	United States	1.06	(0.15)	0.84	(0.21)	0.70	(0.15)	1.00	(0.23)	0.88	(0.16)	1.09	(0.18)	0.86	(0.17)	**1.78**	(0.33)
OECD	OECD average-10	**1.37**	(0.07)	1.01	(0.07)	1.00	(0.07)	0.91	(0.07)	0.91	(0.07)	0.98	(0.06)	1.14	(0.09)	1.12	(0.08)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
Partners	B-S-J-G (China)	1.03	(0.13)	1.10	(0.22)	1.38	(0.32)	1.37	(0.31)	m	m	0.87	(0.13)	1.31	(0.19)	1.04	(0.32)
Partners	Lithuania	1.11	(0.14)	1.16	(0.23)	0.78	(0.16)	0.85	(0.18)	0.98	(0.73)	0.73	(0.12)	1.22	(0.20)	0.79	(0.21)
Partners	Peru	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
Partners	Russia	0.90	(0.15)	0.81	(0.18)	0.92	(0.24)	0.95	(0.27)	**2.40**	(1.05)	**0.71**	(0.12)	0.80	(0.19)	**1.43**	(0.20)

		Increased likelihood of receiving money from an allowance or pocket money for regularly doing chores at home											
		Students who receive money from:											
		An allowance or pocket money, without having to do any chores		Working outside school hours (e.g. a holiday job, part-time work)		Working in a family business		Occasional informal jobs (e.g. baby-sitting or gardening)		Gifts of money from friends or relatives		Selling things (e.g. at local markets or on eBay)	
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.
OECD	Australia	**2.21**	(0.15)	**0.82**	(0.06)	**1.45**	(0.11)	**2.01**	(0.12)	1.01	(0.08)	**1.49**	(0.10)
OECD	Belgium (Flemish)	1.42	(0.26)	1.18	(0.15)	1.52	(0.40)	**2.54**	(0.41)	0.96	(0.26)	**1.52**	(0.26)
OECD	Canadian provinces	**1.90**	(0.30)	0.80	(0.13)	0.86	(0.21)	**1.33**	(0.18)	1.02	(0.27)	1.26	(0.19)
OECD	Chile	**1.74**	(0.35)	0.68	(0.20)	**1.90**	(0.58)	**2.09**	(0.56)	1.49	(0.32)	**1.87**	(0.37)
OECD	Italy	1.06	(0.17)	1.01	(0.23)	**2.66**	(0.68)	**1.86**	(0.47)	0.75	(0.17)	1.40	(0.28)
OECD	Netherlands	0.90	(0.15)	1.22	(0.20)	**2.38**	(0.51)	**1.71**	(0.26)	0.80	(0.18)	**1.73**	(0.27)
OECD	Poland	0.88	(0.11)	1.19	(0.17)	**2.05**	(0.32)	**1.71**	(0.29)	0.77	(0.13)	1.07	(0.14)
OECD	Slovak Republic	1.35	(0.24)	**2.11**	(0.34)	1.25	(0.20)	**1.82**	(0.28)	**0.66**	(0.13)	**1.60**	(0.24)
OECD	Spain	0.83	(0.14)	1.09	(0.22)	**2.26**	(0.52)	**2.16**	(0.30)	0.88	(0.16)	1.23	(0.21)
OECD	United States	**1.58**	(0.22)	0.78	(0.12)	**1.56**	(0.29)	**1.67**	(0.24)	1.33	(0.32)	**1.68**	(0.32)
OECD	OECD average-10	**1.39**	(0.07)	1.09	(0.06)	**1.79**	(0.13)	**1.89**	(0.11)	0.97	(0.07)	**1.49**	(0.08)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n
Partners	B-S-J-G (China)	**0.46**	(0.07)	0.78	(0.13)	**2.06**	(0.49)	0.97	(0.19)	1.02	(0.17)	**1.34**	(0.19)
Partners	Lithuania	1.20	(0.16)	**1.67**	(0.23)	**1.74**	(0.29)	**1.39**	(0.23)	**0.48**	(0.10)	1.09	(0.18)
Partners	Peru	n	n	n	n	n	n	n	n	n	n	n	n
Partners	Russia	**2.68**	(0.50)	0.98	(0.21)	**2.44**	(0.59)	**2.72**	(0.45)	**0.50**	(0.17)	**1.71**	(0.32)

Notes: Multivariate logistic regression model: likelihood of receiving money from a given source is regressed on all variables in the table. Reference categories are: girls, students in the bottom quarter of ESCS, immigrant students, students who attend school located in towns or rural areas, students who do not hold a bank account, students who do not hold a prepaid debit card, students who do not receive money from a given source, students who never discuss money matters with parents, students in the bottom quarter of total time per week spent learning in regular lessons, and students in the bottom quarter of total time per week spent studying after school.
Values that are statistically significant are indicated in bold (see Annex A3).

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[Part 2/2]

Table IV.5.16a Likelihood of receiving money from an allowance for regularly doing chores at home, by student characteristics

Results based on students' self-reports

		Increased likelihood of receiving money from an allowance or pocket money for regularly doing chores at home											
		Students who discuss money matters with parents						Total time per week spent learning in regular lessons					
		Once or twice a month		Once or twice a week		Almost every day		Second quarter of school learning time		Third quarter of school learning time		Top quarter of school learning time	
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.
OECD	Australia	1.12	(0.11)	1.16	(0.11)	1.13	(0.14)	0.85	(0.07)	0.89	(0.07)	0.87	(0.08)
	Belgium (Flemish)	0.84	(0.20)	1.14	(0.25)	1.06	(0.29)	c	c	1.12	(0.47)	1.63	(0.71)
	Canadian provinces	**1.72**	(0.37)	**1.73**	(0.44)	**2.23**	(0.57)	c	c	0.98	(0.16)	0.96	(0.20)
	Chile	1.05	(0.31)	0.81	(0.29)	1.27	(0.44)	1.38	(0.35)	0.73	(0.20)	**0.53**	(0.14)
	Italy	**0.55**	(0.15)	0.68	(0.19)	0.98	(0.27)	0.85	(0.21)	0.77	(0.22)	0.78	(0.22)
	Netherlands	**1.59**	(0.30)	**1.65**	(0.39)	**2.45**	(0.71)	0.86	(0.23)	1.01	(0.23)	0.87	(0.21)
	Poland	0.94	(0.17)	1.12	(0.20)	0.85	(0.18)	1.05	(0.17)	0.71	(0.13)	0.95	(0.16)
	Slovak Republic	0.82	(0.15)	0.94	(0.20)	0.91	(0.26)	1.10	(0.27)	1.02	(0.28)	0.88	(0.21)
	Spain	1.07	(0.21)	1.02	(0.22)	1.49	(0.35)	1.29	(0.27)	1.21	(0.40)	1.17	(0.27)
	United States	1.33	(0.35)	1.58	(0.42)	1.63	(0.51)	0.90	(0.22)	0.93	(0.19)	0.92	(0.19)
	OECD average-10	1.10	(0.08)	**1.18**	(0.09)	**1.40**	(0.13)	1.04	(0.08)	0.94	(0.08)	0.96	(0.09)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	**1.44**	(0.26)	**1.82**	(0.32)	**1.97**	(0.46)	**1.38**	(0.21)	1.24	(0.22)	1.04	(0.17)
	Lithuania	0.78	(0.21)	0.76	(0.18)	0.94	(0.24)	0.86	(0.17)	0.82	(0.18)	0.84	(0.17)
	Peru	n	n	n	n	n	n	n	n	n	n	n	n
	Russia	0.58	(0.16)	0.74	(0.19)	0.68	(0.15)	0.72	(0.18)	1.03	(0.37)	1.53	(0.40)

		Increased likelihood of receiving money from an allowance or pocket money for regularly doing chores at home									
		Total time per week spent studying after school (e.g. homework, additional instruction, private study)									
		Second quarter of school learning time		Third quarter of school learning time		Top quarter of school learning time		Intercept		Pseudo R2	
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Pseudo R2	S.E.
OECD	Australia	1.18	(0.10)	**1.27**	(0.12)	1.07	(0.09)	**0.29**	(0.05)	0.068	(0.006)
	Belgium (Flemish)	0.93	(0.24)	0.89	(0.20)	1.40	(0.34)	**0.23**	(0.16)	0.102	(0.022)
	Canadian provinces	0.90	(0.21)	1.04	(0.24)	**1.55**	(0.24)	**0.15**	(0.06)	0.045	(0.017)
	Chile	1.30	(0.36)	1.41	(0.46)	0.90	(0.27)	0.20	(0.17)	0.093	(0.025)
	Italy	**1.94**	(0.53)	1.61	(0.43)	**1.81**	(0.50)	0.47	(0.24)	0.081	(0.022)
	Netherlands	1.26	(0.28)	1.07	(0.24)	1.18	(0.26)	**0.20**	(0.13)	0.069	(0.016)
	Poland	1.36	(0.29)	1.11	(0.23)	1.44	(0.33)	**0.54**	(0.16)	0.064	(0.015)
	Slovak Republic	0.86	(0.18)	1.15	(0.26)	1.07	(0.22)	0.23	(0.18)	0.120	(0.018)
	Spain	1.30	(0.28)	1.29	(0.29)	**1.75**	(0.32)	**0.34**	(0.12)	0.069	(0.015)
	United States	1.39	(0.38)	1.40	(0.32)	1.22	(0.27)	**0.18**	(0.07)	0.064	(0.018)
	OECD average-10	**1.24**	(0.10)	**1.22**	(0.09)	**1.34**	(0.10)	**0.28**	(0.05)	0.078	(0.006)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	0.89	(0.13)	1.25	(0.20)	**1.44**	(0.23)	**0.40**	(0.10)	0.067	(0.016)
	Lithuania	1.51	(0.32)	1.32	(0.26)	**1.48**	(0.26)	0.87	(0.71)	0.075	(0.017)
	Peru	n	n	n	n	n	n	n	n	n	n
	Russia	1.66	(0.45)	0.99	(0.22)	0.97	(0.22)	**0.18**	(0.11)	0.149	(0.021)

Notes: Multivariate logistic regression model: likelihood of receiving money from a given source is regressed on all variables in the table. Reference categories are: girls, students in the bottom quarter of ESCS, immigrant students, students who attend school located in towns or rural areas, students who do not hold a bank account, students who do not hold a prepaid debit card, students who do not receive money from a given source, students who never discuss money matters with parents, students in the bottom quarter of total time per week spent learning in regular lessons, and students in the bottom quarter of total time per week spent studying after school.
Values that are statistically significant are indicated in bold (see Annex A3).

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[Part 1/2]

Table IV.5.16b Likelihood of receiving money from an allowance without having to do any chores, by student characteristics

Results based on students' self-reports

		Increased likelihood of receiving money from an allowance or pocket money, without having to do any chores															
				PISA index of economic, social and cultural status (ESCS)													
		Boys		Second quarter of ESCS		Third quarter of ESCS		Top quarter of ESCS		Non-immigrant students		Students attending school located in a city (100 000 people or more)		Students who hold a bank account		Students who hold a prepaid debit card	
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.
OECD	Australia	**0.79**	(0.06)	0.90	(0.09)	0.94	(0.10)	0.93	(0.10)	**0.45**	(0.04)	**1.38**	(0.10)	0.96	(0.08)	**1.26**	(0.10)
OECD	Belgium (Flemish)	0.77	(0.13)	1.05	(0.23)	0.96	(0.22)	1.11	(0.29)	0.67	(0.16)	1.50	(0.40)	**1.62**	(0.27)	1.05	(0.23)
OECD	Canadian provinces	0.78	(0.12)	0.67	(0.15)	0.83	(0.16)	0.68	(0.14)	**0.44**	(0.07)	0.99	(0.17)	0.97	(0.18)	1.33	(0.30)
OECD	Chile	1.09	(0.23)	0.97	(0.26)	0.92	(0.28)	1.30	(0.40)	c	c	1.50	(0.39)	**1.44**	(0.26)	1.06	(0.31)
OECD	Italy	1.38	(0.34)	1.25	(0.37)	1.31	(0.31)	1.04	(0.26)	1.11	(0.40)	1.28	(0.25)	1.10	(0.20)	1.03	(0.15)
OECD	Netherlands	0.89	(0.17)	1.07	(0.22)	**1.54**	(0.31)	**2.02**	(0.58)	0.67	(0.18)	1.30	(0.26)	1.80	(0.91)	1.45	(0.50)
OECD	Poland	0.84	(0.12)	1.23	(0.22)	1.27	(0.24)	1.17	(0.18)	c	c	1.12	(0.15)	0.95	(0.16)	**1.74**	(0.36)
OECD	Slovak Republic	1.08	(0.19)	0.96	(0.24)	1.07	(0.22)	1.05	(0.27)	c	c	1.03	(0.25)	1.31	(0.24)	**1.60**	(0.33)
OECD	Spain	0.92	(0.14)	0.99	(0.22)	1.33	(0.33)	1.30	(0.30)	**0.60**	(0.12)	1.22	(0.20)	1.15	(0.18)	1.23	(0.28)
OECD	United States	**0.70**	(0.12)	0.92	(0.20)	0.87	(0.18)	0.87	(0.18)	0.74	(0.14)	0.97	(0.15)	1.06	(0.19)	1.52	(0.37)
OECD	OECD average-10	0.93	(0.06)	1.00	(0.07)	1.10	(0.08)	1.15	(0.10)	**0.67**	(0.07)	**1.23**	(0.08)	**1.24**	(0.11)	**1.33**	(0.10)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
Partners	B-S-J-G (China)	**1.28**	(0.13)	**1.48**	(0.26)	1.31	(0.21)	1.22	(0.28)	c	c	**1.57**	(0.29)	1.06	(0.14)	1.23	(0.31)
Partners	Lithuania	**0.76**	(0.10)	0.91	(0.17)	1.34	(0.25)	1.10	(0.25)	1.49	(0.95)	1.43	(0.26)	1.21	(0.15)	**1.49**	(0.27)
Partners	Peru	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
Partners	Russia	0.89	(0.13)	**1.84**	(0.32)	1.08	(0.20)	1.42	(0.30)	0.46	(0.20)	**1.73**	(0.27)	0.97	(0.17)	1.19	(0.21)

		Increased likelihood of receiving money from an allowance or pocket money, without having to do any chores											
		Students who receive money from:											
		An allowance or pocket money for regularly doing chores at home		Working outside school hours (e.g. a holiday job, part-time work)		Working in a family business		Occasional informal jobs (e.g. baby-sitting or gardening)		Gifts of money from friends or relatives		Selling things (e.g. at local markets or on eBay)	
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.
OECD	Australia	**2.22**	(0.15)	**0.57**	(0.04)	**2.04**	(0.17)	**0.85**	(0.06)	**1.35**	(0.14)	**1.39**	(0.10)
OECD	Belgium (Flemish)	1.40	(0.26)	**0.61**	(0.11)	0.81	(0.19)	1.01	(0.18)	**2.50**	(0.51)	**1.40**	(0.23)
OECD	Canadian provinces	**1.92**	(0.31)	**0.51**	(0.08)	1.18	(0.31)	0.83	(0.15)	**1.75**	(0.40)	1.26	(0.20)
OECD	Chile	**1.75**	(0.35)	**0.60**	(0.13)	1.63	(0.43)	1.04	(0.27)	1.34	(0.27)	0.98	(0.18)
OECD	Italy	1.06	(0.17)	**0.40**	(0.12)	1.26	(0.35)	0.93	(0.21)	**1.88**	(0.46)	1.03	(0.36)
OECD	Netherlands	0.90	(0.15)	**0.57**	(0.11)	0.90	(0.21)	1.29	(0.17)	**1.76**	(0.34)	1.36	(0.28)
OECD	Poland	0.88	(0.11)	**0.73**	(0.09)	1.35	(0.21)	1.15	(0.16)	1.20	(0.19)	0.98	(0.12)
OECD	Slovak Republic	1.34	(0.24)	**0.42**	(0.07)	**1.81**	(0.38)	0.83	(0.13)	**1.94**	(0.38)	1.06	(0.19)
OECD	Spain	0.82	(0.14)	0.68	(0.17)	1.25	(0.27)	1.03	(0.19)	1.28	(0.26)	1.01	(0.18)
OECD	United States	**1.57**	(0.22)	0.73	(0.14)	1.36	(0.26)	0.88	(0.14)	0.83	(0.22)	1.18	(0.23)
OECD	OECD average-10	**1.39**	(0.07)	**0.58**	(0.04)	**1.36**	(0.09)	0.98	(0.05)	**1.58**	(0.11)	**1.16**	(0.07)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n
Partners	B-S-J-G (China)	**0.46**	(0.07)	**0.47**	(0.08)	1.27	(0.34)	0.65	(0.15)	**1.37**	(0.22)	**0.74**	(0.10)
Partners	Lithuania	1.20	(0.16)	**0.64**	(0.09)	**0.69**	(0.10)	1.11	(0.19)	**1.87**	(0.33)	1.12	(0.15)
Partners	Peru	n	n	n	n	n	n	n	n	n	n	n	n
Partners	Russia	**2.68**	(0.50)	0.99	(0.17)	1.23	(0.32)	1.09	(0.23)	**3.49**	(1.15)	0.83	(0.19)

Notes: Multivariate logistic regression model: likelihood of receiving money from a given source is regressed on all variables in the table. Reference categories are: girls, students in the bottom quarter of ESCS, immigrant students, students who attend school located in towns or rural areas, students who do not hold a bank account, students who do not hold a prepaid debit card, students who do not receive money from a given source, students who never discuss money matters with parents, students in the bottom quarter of total time per week spent learning in regular lessons, and students in the bottom quarter of total time per week spent studying after school.
Values that are statistically significant are indicated in bold (see Annex A3).

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[Part 2/2]

Table IV.5.16b Likelihood of receiving money from an allowance without having to do any chores, by student characteristics

Results based on students' self-reports

		Increased likelihood of receiving money from an allowance or pocket money, without having to do any chores											
		Students who discuss money matters with parents						Total time per week spent learning in regular lessons					
		Once or twice a month		Once or twice a week		Almost every day		Second quarter of school learning time		Third quarter of school learning time		Top quarter of school learning time	
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.
OECD	Australia	1.14	(0.12)	0.99	(0.10)	**1.26**	(0.14)	0.93	(0.10)	0.90	(0.08)	**0.82**	(0.07)
	Belgium (Flemish)	1.63	(0.41)	**1.88**	(0.42)	1.77	(0.59)	c	c	0.43	(0.28)	0.57	(0.36)
	Canadian provinces	0.72	(0.18)	0.89	(0.18)	0.73	(0.21)	c	c	0.77	(0.16)	0.89	(0.21)
	Chile	1.46	(0.43)	**1.81**	(0.55)	1.28	(0.37)	1.27	(0.46)	1.10	(0.34)	1.27	(0.38)
	Italy	0.78	(0.17)	1.06	(0.24)	0.83	(0.21)	1.07	(0.30)	1.11	(0.28)	1.18	(0.30)
	Netherlands	1.53	(0.39)	**2.02**	(0.56)	**1.93**	(0.57)	1.18	(0.27)	0.98	(0.23)	1.16	(0.24)
	Poland	1.24	(0.22)	**1.61**	(0.29)	1.20	(0.26)	1.04	(0.18)	0.87	(0.16)	1.02	(0.22)
	Slovak Republic	**1.57**	(0.28)	**1.79**	(0.38)	**1.98**	(0.57)	0.92	(0.26)	1.02	(0.26)	1.19	(0.30)
	Spain	0.89	(0.17)	0.75	(0.13)	0.98	(0.24)	1.03	(0.18)	0.71	(0.21)	0.74	(0.14)
	United States	1.48	(0.46)	1.83	(0.61)	**2.44**	(0.82)	0.97	(0.26)	0.90	(0.24)	0.83	(0.24)
	OECD average-10	**1.24**	(0.10)	**1.46**	(0.12)	**1.44**	(0.14)	1.05	(0.10)	0.88	(0.07)	0.97	(0.08)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	0.91	(0.17)	1.18	(0.22)	1.18	(0.32)	1.47	(0.31)	1.47	(0.31)	**1.86**	(0.35)
	Lithuania	1.23	(0.30)	1.53	(0.36)	1.32	(0.31)	1.37	(0.32)	1.11	(0.26)	1.16	(0.25)
	Peru	n	n	n	n	n	n	n	n	n	n	n	n
	Russia	1.55	(0.40)	1.52	(0.33)	**3.03**	(0.86)	1.10	(0.35)	1.12	(0.42)	0.80	(0.19)

		Increased likelihood of receiving money from an allowance or pocket money, without having to do any chores									
		Total time per week spent studying after school (e.g. homework, additional instruction, private study)									
		Second quarter of school learning time		Third quarter of school learning time		Top quarter of school learning time		Intercept		Pseudo R2	
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Pseudo R2	S.E.
OECD	Australia	1.10	(0.11)	1.05	(0.12)	**1.37**	(0.12)	**0.30**	(0.05)	0.086	(0.008)
	Belgium (Flemish)	1.36	(0.38)	1.00	(0.22)	1.22	(0.30)	1.14	(0.81)	0.059	(0.021)
	Canadian provinces	1.09	(0.26)	1.03	(0.22)	0.96	(0.16)	0.97	(0.36)	0.085	(0.018)
	Chile	1.09	(0.25)	1.22	(0.40)	1.04	(0.22)	**0.06**	(0.06)	0.052	(0.015)
	Italy	0.97	(0.29)	1.16	(0.30)	1.08	(0.24)	**0.16**	(0.11)	0.037	(0.019)
	Netherlands	0.89	(0.25)	0.80	(0.21)	0.93	(0.27)	0.63	(0.40)	0.059	(0.017)
	Poland	1.17	(0.21)	0.76	(0.14)	0.96	(0.17)	**0.53**	(0.15)	0.031	(0.011)
	Slovak Republic	1.10	(0.26)	0.69	(0.16)	0.86	(0.18)	**0.13**	(0.11)	0.077	(0.018)
	Spain	0.71	(0.14)	1.08	(0.20)	0.85	(0.17)	0.66	(0.21)	0.026	(0.012)
	United States	0.63	(0.17)	0.71	(0.21)	0.77	(0.16)	0.42	(0.20)	0.046	(0.019)
	OECD average-10	1.01	(0.08)	0.95	(0.07)	1.00	(0.06)	**0.50**	(0.10)	0.056	(0.005)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	1.19	(0.24)	1.37	(0.26)	0.97	(0.20)	**0.45**	(0.13)	0.096	(0.016)
	Lithuania	**0.59**	(0.12)	**0.58**	(0.11)	**0.69**	(0.12)	0.30	(0.24)	0.055	(0.015)
	Peru	n	n	n	n	n	n	n	n	n	n
	Russia	0.88	(0.19)	1.09	(0.21)	1.01	(0.23)	0.31	(0.25)	0.099	(0.020)

Notes: Multivariate logistic regression model: likelihood of receiving money from a given source is regressed on all variables in the table. Reference categories are: girls, students in the bottom quarter of ESCS, immigrant students, students who attend school located in towns or rural areas, students who do not hold a bank account, students who do not hold a prepaid debit card, students who do not receive money from a given source, students who never discuss money matters with parents, students in the bottom quarter of total time per week spent learning in regular lessons, and students in the bottom quarter of total time per week spent studying after school.
Values that are statistically significant are indicated in bold (see Annex A3).

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[Part 1/2]

Table IV.5.16c Likelihood of receiving money from working outside school hours, by student characteristics

Results based on students' self-reports

		Increased likelihood of receiving money from working outside school hours (e.g. a holiday job, part-time work)															
				PISA index of economic, social and cultural status (ESCS)													
		Boys		Second quarter of ESCS		Third quarter of ESCS		Top quarter of ESCS		Non-immigrant students		Students attending school located in a city (100 000 people or more)		Students who hold a bank account		Students who hold a prepaid debit card	
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.
OECD	Australia	**0.77**	(0.05)	1.10	(0.09)	0.92	(0.08)	**0.82**	(0.07)	**1.24**	(0.10)	**0.78**	(0.06)	**3.32**	(0.26)	**1.74**	(0.12)
OECD	Belgium (Flemish)	1.11	(0.18)	0.81	(0.19)	**0.55**	(0.11)	**0.52**	(0.10)	1.47	(0.34)	0.94	(0.23)	**2.39**	(0.49)	1.01	(0.24)
OECD	Canadian provinces	**1.42**	(0.23)	0.82	(0.17)	1.02	(0.18)	0.94	(0.19)	**2.86**	(0.62)	0.86	(0.14)	**4.94**	(1.08)	1.04	(0.19)
OECD	Chile	**2.13**	(0.64)	**0.47**	(0.16)	**0.49**	(0.17)	**0.25**	(0.09)	c	c	0.96	(0.27)	0.92	(0.31)	1.42	(0.52)
OECD	Italy	1.21	(0.28)	1.09	(0.38)	1.22	(0.40)	1.13	(0.41)	0.74	(0.40)	0.65	(0.16)	**1.76**	(0.39)	1.00	(0.27)
OECD	Netherlands	1.07	(0.17)	0.91	(0.20)	0.73	(0.13)	**0.45**	(0.10)	1.30	(0.38)	1.03	(0.23)	**4.83**	(2.13)	1.16	(0.34)
OECD	Poland	**1.36**	(0.19)	0.96	(0.20)	0.74	(0.14)	**0.59**	(0.13)	c	c	**0.73**	(0.11)	1.16	(0.28)	0.82	(0.20)
OECD	Slovak Republic	1.06	(0.16)	0.78	(0.20)	1.20	(0.25)	0.72	(0.14)	c	c	1.20	(0.37)	1.24	(0.20)	0.92	(0.22)
OECD	Spain	1.04	(0.18)	0.72	(0.18)	0.78	(0.19)	**0.60**	(0.14)	1.47	(0.44)	0.71	(0.14)	0.94	(0.19)	1.47	(0.45)
OECD	United States	**1.61**	(0.28)	0.69	(0.18)	0.84	(0.20)	0.67	(0.19)	**1.79**	(0.36)	0.87	(0.14)	**1.85**	(0.32)	1.38	(0.30)
OECD	OECD average-10	**1.28**	(0.09)	**0.83**	(0.07)	**0.85**	(0.06)	**0.67**	(0.06)	**1.55**	(0.15)	0.87	(0.06)	**2.34**	(0.26)	**1.20**	(0.10)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
Partners	B-S-J-G (China)	**0.73**	(0.11)	0.94	(0.18)	0.71	(0.13)	**0.58**	(0.14)	c	c	1.16	(0.22)	0.93	(0.15)	0.78	(0.19)
Partners	Lithuania	**1.44**	(0.19)	0.74	(0.13)	0.77	(0.19)	**0.48**	(0.10)	0.66	(0.50)	0.91	(0.16)	1.36	(0.25)	1.24	(0.26)
Partners	Peru	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
Partners	Russia	**1.63**	(0.22)	0.87	(0.25)	0.92	(0.20)	0.89	(0.26)	1.57	(0.71)	**0.63**	(0.11)	1.26	(0.22)	**1.65**	(0.27)

		Increased likelihood of receiving money from working outside school hours (e.g. a holiday job, part-time work)											
		Students who receive money from:											
		An allowance or pocket money for regularly doing chores at home		An allowance or pocket money, without having to do any chores		Working in a family business		Occasional informal jobs (e.g. baby-sitting or gardening)		Gifts of money from friends or relatives		Selling things (e.g. at local markets or on eBay)	
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.
OECD	Australia	**0.82**	(0.05)	**0.58**	(0.05)	**1.89**	(0.16)	**1.32**	(0.08)	0.85	(0.08)	**1.56**	(0.10)
OECD	Belgium (Flemish)	1.18	(0.15)	**0.61**	(0.11)	**2.18**	(0.56)	**1.87**	(0.31)	1.64	(0.54)	**1.97**	(0.35)
OECD	Canadian provinces	0.82	(0.13)	**0.51**	(0.08)	**2.40**	(0.54)	**1.56**	(0.22)	**0.53**	(0.12)	1.31	(0.20)
OECD	Chile	0.69	(0.22)	**0.60**	(0.13)	**6.42**	(2.04)	**4.01**	(1.54)	0.79	(0.24)	**2.54**	(0.62)
OECD	Italy	1.02	(0.24)	**0.40**	(0.12)	**2.89**	(0.87)	**5.00**	(1.43)	**0.54**	(0.14)	**1.77**	(0.46)
OECD	Netherlands	1.21	(0.20)	**0.58**	(0.11)	1.48	(0.32)	**1.86**	(0.27)	1.32	(0.27)	1.00	(0.17)
OECD	Poland	1.20	(0.17)	**0.73**	(0.09)	**1.81**	(0.33)	**5.07**	(0.75)	1.06	(0.21)	**1.77**	(0.24)
OECD	Slovak Republic	**2.09**	(0.33)	**0.42**	(0.07)	**1.76**	(0.39)	**2.95**	(0.49)	0.92	(0.16)	**1.82**	(0.30)
OECD	Spain	1.09	(0.22)	0.65	(0.17)	**4.50**	(1.27)	**7.27**	(1.70)	0.69	(0.16)	**1.97**	(0.39)
OECD	United States	0.80	(0.12)	0.73	(0.14)	**3.95**	(0.92)	**2.29**	(0.40)	0.61	(0.17)	0.99	(0.16)
OECD	OECD average-10	1.09	(0.06)	**0.58**	(0.04)	**2.93**	(0.29)	**3.32**	(0.29)	0.90	(0.08)	**1.67**	(0.11)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n
Partners	B-S-J-G (China)	0.78	(0.13)	**0.47**	(0.08)	**6.85**	(2.14)	**3.07**	(0.75)	0.85	(0.14)	**4.07**	(0.86)
Partners	Lithuania	**1.68**	(0.24)	**0.64**	(0.09)	**1.57**	(0.29)	**2.58**	(0.37)	0.81	(0.19)	**1.74**	(0.31)
Partners	Peru	n	n	n	n	n	n	n	n	n	n	n	n
Partners	Russia	0.99	(0.21)	0.99	(0.17)	**1.71**	(0.35)	**2.11**	(0.36)	1.08	(0.25)	**1.69**	(0.31)

Notes: Multivariate logistic regression model: likelihood of receiving money from a given source is regressed on all variables in the table. Reference categories are: girls, students in the bottom quarter of ESCS, immigrant students, students who attend school located in towns or rural areas, students who do not hold a bank account, students who do not hold a prepaid debit card, students who do not receive money from a given source, students who never discuss money matters with parents, students in the bottom quarter of total time per week spent learning in regular lessons, and students in the bottom quarter of total time per week spent studying after school.
Values that are statistically significant are indicated in bold (see Annex A3).

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[Part 2/2]

Table IV.5.16c Likelihood of receiving money from working outside school hours, by student characteristics

Results based on students' self-reports

		Increased likelihood of receiving money from working outside school hours (e.g. a holiday job, part-time work)											
		Students who discuss money matters with parents						Total time per week spent learning in regular lessons					
		Once or twice a month		Once or twice a week		Almost every day		Second quarter of school learning time		Third quarter of school learning time		Top quarter of school learning time	
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.
OECD	Australia	**1.25**	(0.13)	**1.77**	(0.19)	**2.19**	(0.29)	1.11	(0.14)	1.02	(0.09)	0.93	(0.09)
	Belgium (Flemish)	0.98	(0.22)	1.23	(0.27)	1.79	(0.54)	c	c	**0.32**	(0.13)	**0.37**	(0.16)
	Canadian provinces	1.19	(0.31)	1.61	(0.39)	**2.08**	(0.68)	c	c	0.89	(0.15)	0.82	(0.19)
	Chile	**3.89**	(1.65)	**3.93**	(1.61)	**3.68**	(1.82)	1.21	(0.61)	1.89	(0.81)	1.45	(0.55)
	Italy	0.78	(0.37)	0.96	(0.30)	1.43	(0.45)	1.11	(0.41)	0.94	(0.35)	1.10	(0.37)
	Netherlands	1.03	(0.21)	1.32	(0.34)	1.41	(0.42)	0.86	(0.20)	1.08	(0.26)	0.82	(0.18)
	Poland	1.30	(0.27)	1.36	(0.29)	1.61	(0.46)	**0.60**	(0.11)	0.74	(0.16)	0.94	(0.19)
	Slovak Republic	0.91	(0.18)	1.10	(0.24)	1.51	(0.44)	0.94	(0.23)	1.06	(0.22)	1.05	(0.23)
	Spain	1.00	(0.28)	1.15	(0.33)	1.23	(0.41)	0.93	(0.28)	**0.39**	(0.17)	0.66	(0.16)
	United States	1.57	(0.49)	**2.16**	(0.62)	**2.50**	(0.83)	0.82	(0.23)	1.26	(0.31)	0.76	(0.19)
	OECD average-10	**1.39**	(0.19)	**1.66**	(0.19)	**1.94**	(0.24)	0.95	(0.11)	0.96	(0.10)	0.89	(0.08)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	1.11	(0.23)	0.87	(0.20)	1.14	(0.45)	0.72	(0.15)	**0.62**	(0.12)	**0.62**	(0.12)
	Lithuania	0.67	(0.19)	1.22	(0.40)	1.13	(0.39)	1.21	(0.24)	1.03	(0.22)	1.17	(0.28)
	Peru	n	n	n	n	n	n	n	n	n	n	n	n
	Russia	1.64	(0.50)	1.54	(0.49)	**2.20**	(0.70)	0.75	(0.15)	0.66	(0.25)	1.07	(0.22)

		Increased likelihood of receiving money from working outside school hours (e.g. a holiday job, part-time work)									
		Total time per week spent studying after school (e.g. homework, additional instruction, private study)						Intercept		Pseudo R2	
		Second quarter of school learning time		Third quarter of school learning time		Top quarter of school learning time					
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Pseudo R2	S.E.
OECD	Australia	**0.77**	(0.07)	0.84	(0.10)	1.02	(0.09)	**0.27**	(0.04)	0.122	(0.009)
	Belgium (Flemish)	1.28	(0.34)	1.25	(0.30)	1.03	(0.24)	0.45	(0.28)	0.109	(0.022)
	Canadian provinces	0.82	(0.22)	1.03	(0.24)	1.29	(0.28)	**0.10**	(0.04)	0.186	(0.022)
	Chile	1.40	(0.63)	1.50	(0.68)	1.93	(0.82)	**0.04**	(0.04)	0.249	(0.045)
	Italy	0.96	(0.42)	1.32	(0.48)	1.17	(0.34)	**0.12**	(0.06)	0.193	(0.040)
	Netherlands	0.84	(0.23)	0.72	(0.17)	0.67	(0.15)	**0.21**	(0.14)	0.070	(0.015)
	Poland	0.98	(0.21)	1.02	(0.20)	1.04	(0.17)	0.63	(0.86)	0.167	(0.019)
	Slovak Republic	1.20	(0.32)	0.94	(0.23)	1.20	(0.30)	0.19	(0.22)	0.165	(0.026)
	Spain	0.80	(0.26)	0.87	(0.28)	1.02	(0.27)	**0.14**	(0.06)	0.245	(0.032)
	United States	1.28	(0.29)	0.91	(0.22)	0.91	(0.19)	**0.12**	(0.06)	0.142	(0.026)
	OECD average-10	1.03	(0.10)	1.04	(0.10)	1.13	(0.11)	**0.23**	(0.09)	0.165	(0.009)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	0.76	(0.15)	1.00	(0.23)	0.79	(0.17)	0.29	(0.76)	0.227	(0.031)
	Lithuania	0.99	(0.22)	0.88	(0.22)	1.11	(0.24)	0.47	(0.46)	0.140	(0.022)
	Peru	n	n	n	n	n	n	n	n	n	n
	Russia	1.01	(0.29)	0.95	(0.23)	1.21	(0.28)	**0.23**	(0.16)	0.100	(0.023)

Notes: Multivariate logistic regression model: likelihood of receiving money from a given source is regressed on all variables in the table. Reference categories are: girls, students in the bottom quarter of ESCS, immigrant students, students who attend school located in towns or rural areas, students who do not hold a bank account, students who do not hold a prepaid debit card, students who do not receive money from a given source, students who never discuss money matters with parents, students in the bottom quarter of total time per week spent learning in regular lessons, and students in the bottom quarter of total time per week spent studying after school.
Values that are statistically significant are indicated in bold (see Annex A3).

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[Part 1/2]

Table IV.5.16d Likelihood of receiving money from working in a family business, by student characteristics

Results based on students' self-reports

		Increased likelihood of receiving money from working in a family business															
				PISA index of economic, social and cultural status (ESCS)													
		Boys		Second quarter of ESCS		Third quarter of ESCS		Top quarter of ESCS		Non-immigrant students		Students attending school located in a city (100 000 people or more)		Students who hold a bank account		Students who hold a prepaid debit card	
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.
OECD	Australia	1.8	(0.12)	1.17	(0.12)	1.00	(0.11)	0.79	(0.10)	1.05	(0.10)	**0.72**	(0.06)	0.98	(0.09)	**1.36**	(0.12)
OECD	Belgium (Flemish)	**2.14**	(0.60)	1.27	(0.39)	1.00	(0.34)	0.64	(0.21)	0.88	(0.28)	0.95	(0.32)	1.09	(0.27)	0.92	(0.27)
OECD	Canadian provinces	**1.61**	(0.33)	1.15	(0.32)	0.97	(0.26)	0.88	(0.26)	0.89	(0.27)	0.70	(0.14)	1.01	(0.25)	0.69	(0.20)
OECD	Chile	**2.01**	(0.58)	1.21	(0.66)	0.95	(0.57)	0.81	(0.44)	c	c	0.63	(0.21)	1.02	(0.32)	2.14	(0.91)
OECD	Italy	**1.71**	(0.42)	0.99	(0.36)	0.72	(0.27)	0.75	(0.35)	0.97	(0.41)	1.40	(0.44)	1.18	(0.32)	0.99	(0.22)
OECD	Netherlands	1.59	(0.47)	0.65	(0.18)	**0.50**	(0.17)	0.54	(0.19)	**0.48**	(0.18)	0.84	(0.19)	0.35	(0.20)	1.56	(0.61)
OECD	Poland	**1.45**	(0.25)	0.96	(0.22)	1.00	(0.20)	0.93	(0.18)	c	c	**0.64**	(0.11)	**1.70**	(0.42)	1.16	(0.31)
OECD	Slovak Republic	1.29	(0.26)	1.29	(0.40)	1.33	(0.37)	1.38	(0.39)	c	c	1.03	(0.30)	1.40	(0.30)	**1.72**	(0.46)
OECD	Spain	**1.49**	(0.30)	1.03	(0.30)	1.16	(0.34)	0.74	(0.23)	1.05	(0.41)	0.92	(0.24)	1.10	(0.22)	1.85	(0.79)
OECD	United States	1.35	(0.29)	1.03	(0.31)	0.97	(0.29)	0.94	(0.28)	0.96	(0.27)	1.07	(0.24)	1.35	(0.31)	0.68	(0.18)
OECD	OECD average-10	**1.61**	(0.12)	1.07	(0.11)	0.96	(0.10)	0.84	(0.09)	0.90	(0.11)	0.89	(0.08)	1.12	(0.09)	**1.31**	(0.15)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
Partners	B-S-J-G (China)	**1.80**	(0.32)	0.98	(0.33)	1.33	(0.50)	0.75	(0.30)	c	c	0.69	(0.18)	1.30	(0.39)	1.02	(0.43)
Partners	Lithuania	**1.59**	(0.24)	0.96	(0.21)	0.98	(0.20)	0.82	(0.17)	0.81	(0.60)	1.21	(0.19)	1.05	(0.20)	1.12	(0.27)
Partners	Peru	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
Partners	Russia	1.45	(0.36)	**1.86**	(0.58)	1.46	(0.49)	1.87	(0.68)	0.61	(0.37)	0.82	(0.22)	1.26	(0.38)	0.95	(0.26)

		Increased likelihood of receiving money from working in a family business											
		Students who receive money from:											
		An allowance or pocket money for regularly doing chores at home		An allowance or pocket money, without having to do any chores		Working outside school hours (e.g. a holiday job, part-time work)		Occasional informal jobs (e.g. baby-sitting or gardening)		Gifts of money from friends or relatives		Selling things (e.g. at local markets or on eBay)	
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.
OECD	Australia	**1.42**	(0.11)	**1.95**	(0.16)	**1.83**	(0.15)	**1.90**	(0.16)	1.07	(0.11)	**1.69**	(0.13)
OECD	Belgium (Flemish)	1.53	(0.40)	0.83	(0.20)	**2.19**	(0.57)	1.53	(0.35)	**0.40**	(0.12)	1.25	(0.27)
OECD	Canadian provinces	0.84	(0.20)	1.14	(0.29)	**2.38**	(0.53)	1.30	(0.25)	0.73	(0.23)	1.50	(0.35)
OECD	Chile	1.89	(0.65)	1.58	(0.44)	**6.52**	(2.07)	0.85	(0.28)	0.88	(0.31)	1.16	(0.36)
OECD	Italy	**2.71**	(0.67)	1.29	(0.37)	**2.87**	(0.84)	1.34	(0.36)	0.58	(0.17)	1.24	(0.32)
OECD	Netherlands	**2.33**	(0.51)	0.87	(0.21)	1.45	(0.30)	**1.81**	(0.43)	0.76	(0.30)	1.12	(0.25)
OECD	Poland	**2.04**	(0.32)	1.33	(0.20)	**1.83**	(0.33)	**1.65**	(0.32)	1.16	(0.28)	**1.55**	(0.26)
OECD	Slovak Republic	1.26	(0.21)	**1.81**	(0.39)	**1.86**	(0.43)	1.09	(0.23)	1.04	(0.21)	1.43	(0.29)
OECD	Spain	**2.22**	(0.54)	1.26	(0.27)	**4.43**	(1.27)	0.77	(0.22)	**0.57**	(0.14)	**2.31**	(0.53)
OECD	United States	**1.50**	(0.29)	1.31	(0.25)	**3.95**	(0.90)	1.13	(0.22)	0.68	(0.20)	1.37	(0.31)
OECD	OECD average-10	**1.77**	(0.14)	**1.34**	(0.09)	**2.93**	(0.29)	**1.34**	(0.09)	**0.79**	(0.07)	**1.46**	(0.10)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n
Partners	B-S-J-G (China)	**2.02**	(0.45)	1.15	(0.29)	**6.59**	(1.96)	**3.81**	(0.98)	1.04	(0.25)	**1.88**	(0.49)
Partners	Lithuania	**1.73**	(0.29)	**0.68**	(0.10)	**1.58**	(0.29)	1.31	(0.19)	1.35	(0.34)	**1.91**	(0.35)
Partners	Peru	n	n	n	n	n	n	n	n	n	n	n	n
Partners	Russia	**2.36**	(0.56)	1.21	(0.30)	**1.66**	(0.34)	1.57	(0.44)	0.82	(0.33)	**2.53**	(0.68)

Notes: Multivariate logistic regression model: likelihood of receiving money from a given source is regressed on all variables in the table. Reference categories are: girls, students in the bottom quarter of ESCS, immigrant students, students who attend school located in towns or rural areas, students who do not hold a bank account, students who do not hold a prepaid debit card, students who do not receive money from a given source, students who never discuss money matters with parents, students in the bottom quarter of total time per week spent learning in regular lessons, and students in the bottom quarter of total time per week spent studying after school.
Values that are statistically significant are indicated in bold (see Annex A3).

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[Part 2/2]

Table IV.5.16d Likelihood of receiving money from working in a family business, by student characteristics

Results based on students' self-reports

		Increased likelihood of receiving money from working in a family business											
		Students who discuss money matters with parents						Total time per week spent learning in regular lessons					
		Once or twice a month		Once or twice a week		Almost every day		Second quarter of school learning time		Third quarter of school learning time		Top quarter of school learning time	
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.
OECD	Australia	0.91	(0.11)	0.94	(0.10)	0.96	(0.14)	0.94	(0.11)	0.88	(0.09)	1.04	(0.11)
	Belgium (Flemish)	0.79	(0.27)	0.96	(0.30)	0.67	(0.31)	c	c	0.68	(0.24)	0.63	(0.24)
	Canadian provinces	0.95	(0.43)	1.87	(0.72)	1.73	(0.90)	c	c	0.99	(0.27)	1.18	(0.34)
	Chile	1.15	(0.68)	0.74	(0.44)	1.06	(0.63)	0.96	(0.43)	**0.43**	(0.16)	0.87	(0.41)
	Italy	1.27	(0.44)	1.12	(0.48)	1.73	(0.73)	1.78	(0.72)	1.25	(0.63)	1.67	(0.82)
	Netherlands	1.07	(0.47)	0.78	(0.36)	0.98	(0.48)	1.08	(0.34)	0.61	(0.20)	0.85	(0.25)
	Poland	0.71	(0.15)	0.76	(0.17)	0.84	(0.21)	0.94	(0.19)	1.02	(0.24)	1.13	(0.25)
	Slovak Republic	0.94	(0.22)	0.68	(0.19)	0.92	(0.31)	0.84	(0.27)	1.16	(0.41)	1.08	(0.31)
	Spain	1.15	(0.41)	1.34	(0.46)	1.46	(0.55)	1.02	(0.31)	0.98	(0.35)	1.18	(0.37)
	United States	2.23	(1.12)	2.18	(1.06)	**3.38**	(1.57)	0.95	(0.26)	**0.52**	(0.14)	0.61	(0.19)
	OECD average-10	1.12	(0.16)	1.14	(0.16)	1.37	(0.22)	1.06	(0.13)	0.85	(0.10)	1.02	(0.12)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	1.85	(0.72)	1.98	(0.87)	1.30	(0.70)	1.23	(0.44)	0.84	(0.28)	1.30	(0.46)
	Lithuania	0.66	(0.23)	0.71	(0.22)	1.19	(0.38)	1.05	(0.27)	1.05	(0.23)	1.07	(0.22)
	Peru	n	n	n	n	n	n	n	n	n	n	n	n
	Russia	**0.49**	(0.16)	**0.48**	(0.14)	0.62	(0.18)	0.99	(0.31)	1.59	(0.57)	**0.53**	(0.13)

		Increased likelihood of receiving money from working in a family business									
		Total time per week spent studying after school (e.g. homework, additional instruction, private study)						Intercept		Pseudo R2	
		Second quarter of school learning time		Third quarter of school learning time		Top quarter of school learning time					
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Pseudo R2	S.E.
OECD	Australia	0.98	(0.13)	1.17	(0.16)	1.24	(0.15)	**0.05**	(0.01)	0.102	(0.009)
	Belgium (Flemish)	1.02	(0.39)	1.18	(0.47)	1.19	(0.43)	**0.16**	(0.11)	0.101	(0.034)
	Canadian provinces	0.95	(0.30)	0.92	(0.31)	1.43	(0.38)	**0.07**	(0.04)	0.092	(0.025)
	Chile	1.43	(0.61)	1.71	(0.78)	1.01	(0.46)	**0.09**	(0.08)	0.194	(0.040)
	Italy	1.03	(0.36)	0.63	(0.25)	0.78	(0.23)	**0.06**	(0.03)	0.126	(0.035)
	Netherlands	0.71	(0.27)	0.98	(0.33)	1.32	(0.48)	0.72	(0.54)	0.108	(0.025)
	Poland	0.75	(0.16)	1.08	(0.23)	1.43	(0.31)	**0.07**	(0.02)	0.117	(0.020)
	Slovak Republic	1.29	(0.37)	0.72	(0.21)	1.41	(0.33)	**0.14**	(0.12)	0.090	(0.025)
	Spain	1.48	(0.50)	1.43	(0.49)	1.28	(0.46)	**0.04**	(0.02)	0.168	(0.031)
	United States	0.89	(0.29)	1.00	(0.31)	1.64	(0.45)	**0.04**	(0.02)	0.132	(0.026)
	OECD average-10	1.05	(0.12)	1.08	(0.12)	**1.27**	(0.12)	**0.14**	(0.06)	0.123	(0.009)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	0.84	(0.33)	0.54	(0.17)	1.14	(0.43)	**0.01**	(0.00)	0.277	(0.036)
	Lithuania	**0.42**	(0.10)	0.74	(0.19)	1.04	(0.20)	**0.18**	(0.15)	0.113	(0.023)
	Peru	n	n	n	n	n	n	n	n	n	n
	Russia	1.62	(0.60)	1.05	(0.40)	1.25	(0.39)	**0.10**	(0.09)	0.164	(0.035)

Notes: Multivariate logistic regression model: likelihood of receiving money from a given source is regressed on all variables in the table. Reference categories are: girls, students in the bottom quarter of ESCS, immigrant students, students who attend school located in towns or rural areas, students who do not hold a bank account, students who do not hold a prepaid debit card, students who do not receive money from a given source, students who never discuss money matters with parents, students in the bottom quarter of total time per week spent learning in regular lessons, and students in the bottom quarter of total time per week spent studying after school.
Values that are statistically significant are indicated in bold (see Annex A3).

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[Part 1/2]

Table IV.5.16e Likelihood of receiving money from occasional informal jobs, by student characteristics

Results based on students' self-reports

		Increased likelihood of receiving money from occasional informal jobs (e.g. baby-sitting or gardening)															
				PISA index of economic, social and cultural status (ESCS)													
		Boys		Second quarter of ESCS		Third quarter of ESCS		Top quarter of ESCS		Non-immigrant students		Students attending school located in a city (100 000 people or more)		Students who hold a bank account		Students who hold a prepaid debit card	
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.
OECD	Australia	**0.67**	(0.04)	1.09	(0.10)	**1.21**	(0.11)	**1.40**	(0.16)	**1.83**	(0.17)	**0.85**	(0.06)	**1.22**	(0.10)	1.11	(0.08)
OECD	Belgium (Flemish)	**0.42**	(0.06)	1.25	(0.30)	1.34	(0.28)	**1.65**	(0.37)	1.57	(0.38)	1.30	(0.29)	0.97	(0.19)	1.07	(0.25)
OECD	Canadian provinces	**0.51**	(0.08)	1.09	(0.21)	1.05	(0.23)	1.39	(0.25)	**2.45**	(0.44)	0.90	(0.16)	1.18	(0.22)	0.77	(0.17)
OECD	Chile	1.12	(0.28)	0.84	(0.35)	0.73	(0.25)	1.13	(0.38)	c	c	0.87	(0.23)	1.31	(0.36)	1.29	(0.50)
OECD	Italy	0.87	(0.20)	1.25	(0.35)	1.08	(0.37)	0.81	(0.28)	1.67	(0.95)	0.88	(0.19)	0.97	(0.20)	1.32	(0.29)
OECD	Netherlands	**0.47**	(0.08)	1.30	(0.30)	**1.70**	(0.43)	**2.13**	(0.44)	**5.47**	(2.50)	0.87	(0.18)	0.80	(0.40)	0.85	(0.27)
OECD	Poland	0.91	(0.13)	0.86	(0.20)	0.90	(0.19)	1.32	(0.30)	c	c	0.77	(0.13)	0.65	(0.16)	1.38	(0.29)
OECD	Slovak Republic	1.06	(0.16)	0.87	(0.16)	0.79	(0.17)	0.85	(0.18)	c	c	1.51	(0.43)	0.99	(0.19)	1.20	(0.29)
OECD	Spain	0.85	(0.15)	0.92	(0.27)	1.13	(0.28)	1.08	(0.24)	0.79	(0.23)	0.96	(0.17)	1.05	(0.17)	1.69	(0.46)
OECD	United States	**0.62**	(0.10)	1.02	(0.22)	1.14	(0.25)	1.55	(0.37)	**1.52**	(0.29)	0.81	(0.13)	**1.57**	(0.27)	0.91	(0.18)
OECD	OECD average-10	**0.75**	(0.05)	1.05	(0.08)	1.11	(0.09)	**1.33**	(0.10)	**2.19**	(0.40)	0.97	(0.07)	1.07	(0.08)	1.16	(0.10)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
Partners	B-S-J-G (China)	1.18	(0.25)	0.97	(0.25)	0.96	(0.28)	1.33	(0.40)	c	c	0.93	(0.25)	1.20	(0.24)	**1.87**	(0.53)
Partners	Lithuania	1.00	(0.12)	0.90	(0.16)	0.81	(0.17)	0.84	(0.15)	0.91	(0.50)	1.01	(0.17)	0.75	(0.14)	0.74	(0.19)
Partners	Peru	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
Partners	Russia	0.98	(0.16)	0.83	(0.19)	0.62	(0.20)	0.66	(0.25)	0.96	(0.53)	0.68	(0.16)	1.39	(0.35)	0.96	(0.20)

		Increased likelihood of receiving money from occasional informal jobs (e.g. baby-sitting or gardening)											
		Students who receive money from:											
		An allowance or pocket money for regularly doing chores at home		An allowance or pocket money, without having to do any chores		Working outside school hours (e.g. a holiday job, part-time work)		Working in a family business		Gifts of money from friends or relatives		Selling things (e.g. at local markets or on eBay)	
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.
OECD	Australia	**2.01**	(0.12)	**0.86**	(0.06)	**1.32**	(0.08)	**1.93**	(0.16)	**1.32**	(0.12)	**2.02**	(0.11)
OECD	Belgium (Flemish)	**2.52**	(0.40)	1.02	(0.18)	**1.87**	(0.31)	**1.62**	(0.36)	1.31	(0.28)	0.99	(0.16)
OECD	Canadian provinces	**1.34**	(0.18)	0.82	(0.15)	**1.53**	(0.21)	1.31	(0.25)	**2.18**	(0.54)	**1.39**	(0.19)
OECD	Chile	**2.16**	(0.60)	0.97	(0.26)	**4.17**	(1.58)	0.85	(0.26)	**0.53**	(0.15)	**1.68**	(0.40)
OECD	Italy	**1.90**	(0.47)	0.96	(0.22)	**4.99**	(1.39)	1.24	(0.35)	0.86	(0.18)	**1.85**	(0.43)
OECD	Netherlands	**1.71**	(0.26)	1.27	(0.17)	**1.85**	(0.27)	**1.85**	(0.43)	1.06	(0.29)	**1.40**	(0.23)
OECD	Poland	**1.70**	(0.28)	1.16	(0.16)	**5.08**	(0.75)	**1.65**	(0.31)	0.73	(0.14)	**1.89**	(0.32)
OECD	Slovak Republic	**1.83**	(0.28)	0.83	(0.13)	**2.97**	(0.49)	1.07	(0.23)	0.72	(0.12)	**2.04**	(0.34)
OECD	Spain	**2.16**	(0.30)	1.02	(0.19)	**7.20**	(1.63)	0.82	(0.21)	0.90	(0.23)	**2.17**	(0.45)
OECD	United States	**1.66**	(0.24)	0.89	(0.14)	**2.27**	(0.39)	1.14	(0.22)	**1.56**	(0.35)	1.21	(0.19)
OECD	OECD average-10	**1.90**	(0.11)	0.98	(0.05)	**3.32**	(0.29)	**1.35**	(0.09)	1.12	(0.09)	**1.66**	(0.10)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n
Partners	B-S-J-G (China)	1.00	(0.19)	**0.64**	(0.14)	**3.17**	(0.78)	**3.65**	(0.91)	0.92	(0.19)	**2.14**	(0.44)
Partners	Lithuania	**1.40**	(0.23)	1.12	(0.19)	**2.58**	(0.37)	1.30	(0.19)	1.31	(0.27)	**2.04**	(0.29)
Partners	Peru	n	n	n	n	n	n	n	n	n	n	n	n
Partners	Russia	**2.80**	(0.47)	1.04	(0.21)	**2.11**	(0.36)	1.63	(0.42)	0.83	(0.18)	**2.09**	(0.42)

Notes: Multivariate logistic regression model: likelihood of receiving money from a given source is regressed on all variables in the table. Reference categories are: girls, students in the bottom quarter of ESCS, immigrant students, students who attend school located in towns or rural areas, students who do not hold a bank account, students who do not hold a prepaid debit card, students who do not receive money from a given source, students who never discuss money matters with parents, students in the bottom quarter of total time per week spent learning in regular lessons, and students in the bottom quarter of total time per week spent studying after school.
Values that are statistically significant are indicated in bold (see Annex A3).

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[Part 2/2]

Table IV.5.16e Likelihood of receiving money from occasional informal jobs, by student characteristics

Results based on students' self-reports

		Increased likelihood of receiving money from occasional informal jobs (e.g. baby-sitting or gardening)											
		Students who discuss money matters with parents						Total time per week spent learning in regular lessons					
		Once or twice a month		Once or twice a week		Almost every day		Second quarter of school learning time		Third quarter of school learning time		Top quarter of school learning time	
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.
OECD	Australia	**1.23**	(0.10)	**1.25**	(0.11)	**1.53**	(0.17)	**1.33**	(0.13)	1.07	(0.09)	**1.32**	(0.10)
	Belgium (Flemish)	1.11	(0.30)	1.01	(0.26)	1.19	(0.37)	c	c	0.94	(0.42)	0.81	(0.36)
	Canadian provinces	**0.60**	(0.12)	1.02	(0.24)	1.12	(0.33)	c	c	1.01	(0.23)	1.15	(0.27)
	Chile	0.50	(0.22)	1.07	(0.39)	0.75	(0.28)	0.67	(0.26)	0.50	(0.19)	0.76	(0.22)
	Italy	1.14	(0.36)	1.03	(0.29)	1.43	(0.52)	1.32	(0.43)	**1.87**	(0.50)	**2.04**	(0.60)
	Netherlands	1.37	(0.44)	1.83	(0.58)	1.46	(0.59)	0.86	(0.19)	0.96	(0.20)	1.26	(0.30)
	Poland	**0.67**	(0.13)	0.85	(0.20)	1.07	(0.30)	1.53	(0.34)	1.48	(0.37)	**1.54**	(0.31)
	Slovak Republic	1.32	(0.29)	**1.75**	(0.39)	1.33	(0.37)	0.72	(0.18)	0.75	(0.18)	0.79	(0.20)
	Spain	1.39	(0.35)	1.34	(0.33)	1.46	(0.49)	1.11	(0.30)	1.50	(0.52)	1.61	(0.42)
	United States	1.26	(0.31)	**2.09**	(0.53)	1.64	(0.46)	1.06	(0.27)	0.96	(0.26)	1.00	(0.20)
	OECD average-10	1.06	(0.09)	**1.32**	(0.11)	**1.30**	(0.13)	1.08	(0.10)	1.10	(0.10)	**1.23**	(0.10)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	0.90	(0.29)	1.39	(0.50)	1.54	(0.53)	0.68	(0.21)	0.70	(0.22)	0.57	(0.19)
	Lithuania	1.25	(0.31)	1.22	(0.31)	1.47	(0.39)	0.96	(0.21)	0.85	(0.22)	0.71	(0.14)
	Peru	n	n	n	n	n	n	n	n	n	n	n	n
	Russia	1.09	(0.31)	1.24	(0.34)	**2.17**	(0.58)	0.68	(0.16)	**0.26**	(0.10)	0.79	(0.17)

		Increased likelihood of receiving money from occasional informal jobs (e.g. baby-sitting or gardening)									
		Total time per week spent studying after school (e.g. homework, additional instruction, private study)						Intercept		Pseudo R2	
		Second quarter of school learning time		Third quarter of school learning time		Top quarter of school learning time					
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Pseudo R2	S.E.
OECD	Australia	1.02	(0.09)	1.06	(0.11)	1.03	(0.07)	**0.11**	(0.02)	0.101	(0.007)
	Belgium (Flemish)	1.12	(0.27)	1.19	(0.33)	1.01	(0.23)	0.25	(0.18)	0.086	(0.019)
	Canadian provinces	1.35	(0.30)	**1.71**	(0.35)	1.38	(0.27)	**0.23**	(0.10)	0.110	(0.018)
	Chile	1.10	(0.37)	0.57	(0.23)	0.74	(0.27)	0.25	(0.36)	0.129	(0.040)
	Italy	1.76	(0.60)	1.64	(0.52)	1.89	(0.63)	**0.03**	(0.02)	0.142	(0.032)
	Netherlands	0.86	(0.20)	1.30	(0.26)	0.94	(0.21)	**0.05**	(0.03)	0.120	(0.025)
	Poland	1.10	(0.24)	1.08	(0.22)	1.08	(0.21)	0.52	(0.57)	0.177	(0.019)
	Slovak Republic	1.35	(0.28)	**1.65**	(0.34)	1.27	(0.24)	**0.11**	(0.10)	0.137	(0.022)
	Spain	1.10	(0.26)	0.99	(0.23)	0.88	(0.19)	**0.08**	(0.03)	0.182	(0.025)
	United States	0.93	(0.24)	1.22	(0.24)	0.73	(0.15)	**0.22**	(0.08)	0.106	(0.018)
	OECD average-10	1.17	(0.10)	**1.24**	(0.09)	1.10	(0.09)	**0.19**	(0.07)	0.129	(0.008)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	1.05	(0.31)	1.17	(0.27)	0.92	(0.26)	0.14	(0.41)	0.206	(0.033)
	Lithuania	1.02	(0.24)	1.17	(0.24)	1.16	(0.21)	0.43	(0.27)	0.095	(0.018)
	Peru	n	n	n	n	n	n	n	n	n	n
	Russia	**1.93**	(0.59)	1.46	(0.38)	**1.80**	(0.43)	**0.10**	(0.07)	0.167	(0.028)

Notes: Multivariate logistic regression model: likelihood of receiving money from a given source is regressed on all variables in the table. Reference categories are: girls, students in the bottom quarter of ESCS, immigrant students, students who attend school located in towns or rural areas, students who do not hold a bank account, students who do not hold a prepaid debit card, students who do not receive money from a given source, students who never discuss money matters with parents, students in the bottom quarter of total time per week spent learning in regular lessons, and students in the bottom quarter of total time per week spent studying after school.
Values that are statistically significant are indicated in bold (see Annex A3).

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[Part 1/2]

Table IV.5.16f Likelihood of receiving money as gifts from friends or relatives, by student characteristics

Results based on students' self-reports

		Increased likelihood of receiving money from gifts of money from friends or relatives															
				PISA index of economic, social and cultural status (ESCS)													
		Boys		Second quarter of ESCS		Third quarter of ESCS		Top quarter of ESCS		Non-immigrant students		Students attending school located in a city (100 000 people or more)		Students who hold a bank account		Students who hold a prepaid debit card	
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.
OECD	Australia	**0.71**	(0.07)	**1.29**	(0.14)	**1.35**	(0.14)	**1.55**	(0.20)	**1.51**	(0.16)	**1.30**	(0.13)	**1.30**	(0.16)	**0.82**	(0.07)
	Belgium (Flemish)	0.69	(0.19)	1.14	(0.31)	1.77	(0.65)	1.48	(0.55)	**3.79**	(0.94)	**0.45**	(0.17)	1.57	(0.60)	0.92	(0.39)
	Canadian provinces	0.75	(0.17)	0.98	(0.33)	1.06	(0.36)	0.89	(0.31)	**2.05**	(0.55)	1.40	(0.38)	**1.98**	(0.45)	1.40	(0.53)
	Chile	1.20	(0.27)	1.26	(0.35)	**1.93**	(0.59)	**2.54**	(0.83)	c	c	0.94	(0.21)	1.25	(0.30)	0.79	(0.24)
	Italy	0.75	(0.17)	1.16	(0.34)	1.60	(0.60)	1.85	(0.69)	1.33	(0.48)	0.86	(0.15)	**1.93**	(0.47)	**1.48**	(0.29)
	Netherlands	1.30	(0.34)	**0.42**	(0.17)	0.51	(0.20)	0.86	(0.30)	1.75	(0.62)	1.15	(0.40)	**3.92**	(1.60)	0.65	(0.33)
	Poland	**0.53**	(0.10)	**1.80**	(0.35)	**2.08**	(0.47)	**2.24**	(0.57)	c	c	1.07	(0.20)	1.31	(0.37)	0.82	(0.24)
	Slovak Republic	**0.65**	(0.11)	1.28	(0.30)	1.44	(0.35)	**1.74**	(0.46)	c	c	0.65	(0.21)	1.23	(0.22)	0.86	(0.20)
	Spain	0.69	(0.13)	1.27	(0.30)	1.34	(0.28)	**1.64**	(0.35)	**1.83**	(0.46)	1.20	(0.25)	1.21	(0.20)	1.17	(0.36)
	United States	0.76	(0.19)	1.83	(0.67)	1.53	(0.55)	1.77	(0.71)	1.06	(0.28)	0.76	(0.24)	**1.94**	(0.58)	0.77	(0.25)
	OECD average-10	**0.80**	(0.06)	**1.24**	(0.11)	**1.46**	(0.14)	**1.66**	(0.17)	**1.90**	(0.21)	0.98	(0.08)	**1.76**	(0.20)	0.97	(0.10)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	0.96	(0.15)	**1.63**	(0.33)	**2.66**	(0.54)	**2.36**	(0.54)	c	c	1.12	(0.17)	1.21	(0.20)	1.36	(0.34)
	Lithuania	0.65	(0.15)	0.78	(0.24)	0.79	(0.26)	0.85	(0.28)	3.13	(2.33)	0.90	(0.20)	0.89	(0.20)	0.87	(0.29)
	Peru	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	Russia	0.93	(0.23)	0.57	(0.21)	0.55	(0.20)	0.79	(0.35)	1.11	(0.82)	0.83	(0.25)	0.94	(0.31)	0.74	(0.17)

		Increased likelihood of receiving money from gifts of money from friends or relatives											
		Students who receive money from:											
		An allowance or pocket money for regularly doing chores at home		An allowance or pocket money, without having to do any chores		Working outside school hours (e.g. a holiday job, part-time work)		Working in a family business		Occasional informal jobs (e.g. baby-sitting or gardening)		Selling things (e.g. at local markets or on eBay)	
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.
OECD	Australia	1.01	(0.08)	**1.35**	(0.14)	0.86	(0.08)	1.05	(0.11)	**1.31**	(0.12)	**1.56**	(0.16)
	Belgium (Flemish)	0.95	(0.26)	**2.57**	(0.54)	1.60	(0.57)	**0.40**	(0.12)	1.34	(0.30)	1.47	(0.38)
	Canadian provinces	1.04	(0.28)	**1.78**	(0.44)	**0.50**	(0.11)	0.73	(0.23)	**2.19**	(0.55)	1.53	(0.36)
	Chile	1.50	(0.32)	1.33	(0.27)	0.83	(0.26)	0.95	(0.32)	**0.55**	(0.16)	**2.11**	(0.47)
	Italy	0.75	(0.18)	**1.91**	(0.48)	**0.54**	(0.14)	0.58	(0.18)	0.83	(0.18)	1.27	(0.34)
	Netherlands	0.77	(0.17)	**1.82**	(0.37)	1.35	(0.29)	0.69	(0.26)	1.10	(0.29)	**2.12**	(0.64)
	Poland	0.77	(0.13)	1.20	(0.19)	1.04	(0.20)	1.17	(0.27)	0.73	(0.14)	0.93	(0.15)
	Slovak Republic	**0.66**	(0.13)	**1.90**	(0.37)	0.93	(0.15)	1.02	(0.20)	**0.71**	(0.12)	**0.60**	(0.10)
	Spain	0.88	(0.16)	1.28	(0.26)	0.66	(0.15)	**0.56**	(0.13)	0.89	(0.23)	1.11	(0.23)
	United States	1.31	(0.33)	0.85	(0.23)	0.62	(0.17)	0.66	(0.20)	**1.60**	(0.37)	1.42	(0.44)
	OECD average-10	0.96	(0.07)	**1.60**	(0.11)	0.89	(0.08)	**0.78**	(0.07)	1.13	(0.09)	**1.41**	(0.12)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	1.02	(0.17)	**1.37**	(0.21)	0.87	(0.14)	1.06	(0.24)	0.91	(0.19)	**1.88**	(0.27)
	Lithuania	**0.48**	(0.11)	**1.90**	(0.34)	0.83	(0.20)	1.32	(0.31)	1.32	(0.28)	0.81	(0.23)
	Peru	n	n	n	n	n	n	n	n	n	n	n	n
	Russia	**0.48**	(0.16)	**3.57**	(1.17)	1.07	(0.26)	0.74	(0.25)	0.78	(0.17)	0.89	(0.25)

Notes: Multivariate logistic regression model: likelihood of receiving money from a given source is regressed on all variables in the table. Reference categories are: girls, students in the bottom quarter of ESCS, immigrant students, students who attend school located in towns or rural areas, students who do not hold a bank account, students who do not hold a prepaid debit card, students who do not receive money from a given source, students who never discuss money matters with parents, students in the bottom quarter of total time per week spent learning in regular lessons, and students in the bottom quarter of total time per week spent studying after school.
Values that are statistically significant are indicated in bold (see Annex A3).

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[Part 2/2]

Table IV.5.16f Likelihood of receiving money as gifts from friends or relatives, by student characteristics

Results based on students' self-reports

		Increased likelihood of receiving money from gifts of money from friends or relatives											
		Students who discuss money matters with parents						Total time per week spent learning in regular lessons					
		Once or twice a month		Once or twice a week		Almost every day		Second quarter of school learning time		Third quarter of school learning time		Top quarter of school learning time	
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.
OECD	Australia	**1.95**	(0.21)	**2.09**	(0.24)	**1.90**	(0.29)	1.18	(0.14)	1.29	(0.17)	0.99	(0.13)
	Belgium (Flemish)	1.29	(0.43)	1.60	(0.56)	0.91	(0.40)	c	c	1.78	(1.07)	1.05	(0.64)
	Canadian provinces	**2.23**	(0.89)	**3.02**	(1.13)	**2.74**	(1.20)	c	c	1.35	(0.47)	1.01	(0.35)
	Chile	**2.56**	(0.91)	**2.02**	(0.65)	**1.85**	(0.54)	0.61	(0.25)	0.64	(0.20)	0.87	(0.28)
	Italy	1.12	(0.38)	1.19	(0.48)	1.31	(0.49)	1.00	(0.33)	1.17	(0.38)	0.67	(0.21)
	Netherlands	**3.26**	(0.99)	**2.52**	(0.98)	2.27	(1.00)	1.59	(0.62)	0.98	(0.35)	1.30	(0.46)
	Poland	**1.92**	(0.44)	**1.72**	(0.38)	**3.25**	(1.18)	1.18	(0.25)	1.31	(0.31)	1.12	(0.24)
	Slovak Republic	1.48	(0.33)	**1.85**	(0.48)	1.77	(0.54)	1.45	(0.36)	**2.39**	(0.61)	0.82	(0.20)
	Spain	0.99	(0.21)	**2.20**	(0.48)	1.50	(0.38)	**1.76**	(0.36)	1.35	(0.42)	1.40	(0.27)
	United States	1.38	(0.50)	1.31	(0.56)	1.33	(0.65)	1.36	(0.49)	1.14	(0.38)	1.17	(0.40)
	OECD average-10	**1.82**	(0.19)	**1.95**	(0.20)	**1.88**	(0.23)	**1.27**	(0.13)	**1.34**	(0.16)	1.04	(0.11)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	**1.64**	(0.29)	**1.78**	(0.39)	1.23	(0.32)	0.88	(0.17)	0.84	(0.17)	0.87	(0.15)
	Lithuania	1.66	(0.51)	**4.18**	(1.49)	**3.21**	(1.05)	**1.90**	(0.61)	1.07	(0.26)	1.42	(0.38)
	Peru	n	n	n	n	n	n	n	n	n	n	n	n
	Russia	**2.39**	(0.79)	**2.74**	(0.79)	**2.57**	(1.08)	1.35	(0.64)	1.37	(1.02)	1.11	(0.41)

		Increased likelihood of receiving money from gifts of money from friends or relatives									
		Total time per week spent studying after school (e.g. homework, additional instruction, private study)									
		Second quarter of school learning time		Third quarter of school learning time		Top quarter of school learning time		Intercept		Pseudo R2	
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Pseudo R2	S.E.
OECD	Australia	0.85	(0.14)	0.78	(0.11)	**0.61**	(0.08)	**1.99**	(0.51)	0.051	(0.007)
	Belgium (Flemish)	0.80	(0.36)	1.16	(0.52)	0.74	(0.28)	0.79	(0.84)	0.168	(0.038)
	Canadian provinces	0.92	(0.27)	0.66	(0.22)	0.80	(0.27)	1.19	(0.69)	0.092	(0.031)
	Chile	0.84	(0.22)	**0.40**	(0.13)	0.95	(0.27)	2.31	(3.43)	0.097	(0.034)
	Italy	0.75	(0.29)	0.83	(0.25)	1.10	(0.32)	3.07	(1.79)	0.089	(0.027)
	Netherlands	1.16	(0.45)	1.05	(0.37)	0.67	(0.27)	0.45	(0.38)	0.116	(0.028)
	Poland	1.01	(0.26)	0.72	(0.16)	0.77	(0.17)	**2.67**	(0.89)	0.067	(0.020)
	Slovak Republic	1.15	(0.26)	**1.66**	(0.41)	0.92	(0.23)	0.44	(0.35)	0.115	(0.024)
	Spain	1.43	(0.29)	0.86	(0.25)	1.10	(0.29)	1.12	(0.42)	0.071	(0.016)
	United States	1.30	(0.53)	1.15	(0.43)	0.65	(0.22)	**4.34**	(2.18)	0.076	(0.028)
	OECD average-10	1.02	(0.10)	0.93	(0.10)	0.83	(0.08)	**1.84**	(0.47)	0.094	(0.008)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	1.09	(0.22)	1.01	(0.17)	0.99	(0.17)	0.12	(0.60)	0.062	(0.016)
	Lithuania	1.02	(0.30)	0.95	(0.30)	0.83	(0.19)	1.34	(1.27)	0.108	(0.031)
	Peru	n	n	n	n	n	n	n	n	n	n
	Russia	0.90	(0.43)	0.71	(0.33)	**0.41**	(0.15)	5.94	(6.90)	0.126	(0.043)

Notes: Multivariate logistic regression model: likelihood of receiving money from a given source is regressed on all variables in the table. Reference categories are: girls, students in the bottom quarter of ESCS, immigrant students, students who attend school located in towns or rural areas, students who do not hold a bank account, students who do not hold a prepaid debit card, students who do not receive money from a given source, students who never discuss money matters with parents, students in the bottom quarter of total time per week spent learning in regular lessons, and students in the bottom quarter of total time per week spent studying after school.
Values that are statistically significant are indicated in bold (see Annex A3).

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[Part 1/2]

Table IV.5.16g Likelihood of receiving money from selling things, by student characteristics

Results based on students' self-reports

		Increased likelihood of receiving money from selling things (e.g. at local markets or on eBay)															
				PISA index of economic, social and cultural status (ESCS)													
		Boys		Second quarter of ESCS		Third quarter of ESCS		Top quarter of ESCS		Non-immigrant students		Students attending school located in a city (100 000 people or more)		Students who hold a bank account		Students who hold a prepaid debit card	
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.
OECD	Australia	**2.02**	(0.14)	0.94	(0.08)	0.91	(0.07)	0.85	(0.08)	**1.27**	(0.10)	0.95	(0.06)	0.88	(0.07)	**1.29**	(0.09)
OECD	Belgium (Flemish)	**1.97**	(0.35)	1.01	(0.21)	0.96	(0.23)	**0.49**	(0.12)	0.88	(0.22)	0.85	(0.20)	0.84	(0.15)	1.02	(0.20)
OECD	Canadian provinces	**2.65**	(0.45)	0.96	(0.23)	1.00	(0.20)	0.92	(0.21)	1.22	(0.28)	0.91	(0.17)	1.33	(0.29)	1.17	(0.25)
OECD	Chile	0.88	(0.17)	0.84	(0.32)	1.18	(0.46)	1.49	(0.55)	c	c	0.85	(0.20)	1.12	(0.22)	**1.88**	(0.52)
OECD	Italy	**2.53**	(0.80)	0.87	(0.26)	1.40	(0.39)	1.20	(0.35)	1.05	(0.61)	0.89	(0.20)	0.82	(0.15)	**1.58**	(0.37)
OECD	Netherlands	**2.05**	(0.35)	1.19	(0.29)	1.39	(0.28)	0.80	(0.20)	**2.76**	(1.08)	0.92	(0.16)	1.01	(0.65)	1.40	(0.37)
OECD	Poland	**1.75**	(0.21)	1.42	(0.28)	**1.49**	(0.24)	**1.72**	(0.34)	c	c	1.33	(0.23)	1.50	(0.36)	1.09	(0.24)
OECD	Slovak Republic	**1.39**	(0.23)	1.42	(0.34)	1.29	(0.32)	0.97	(0.26)	c	c	**0.39**	(0.15)	1.27	(0.20)	1.40	(0.30)
OECD	Spain	**3.00**	(0.55)	1.02	(0.28)	1.25	(0.33)	1.40	(0.34)	0.73	(0.17)	**1.40**	(0.19)	0.84	(0.14)	1.49	(0.43)
OECD	United States	**2.39**	(0.35)	0.96	(0.23)	1.00	(0.21)	0.71	(0.15)	**1.76**	(0.36)	0.99	(0.17)	0.85	(0.13)	**1.52**	(0.29)
OECD	OECD average-10	**2.06**	(0.13)	1.06	(0.08)	**1.19**	(0.09)	1.05	(0.09)	**1.38**	(0.19)	0.95	(0.06)	1.05	(0.09)	**1.38**	(0.10)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
Partners	B-S-J-G (China)	1.13	(0.20)	0.88	(0.18)	0.69	(0.16)	1.01	(0.23)	c	c	0.87	(0.14)	1.07	(0.23)	1.57	(0.44)
Partners	Lithuania	**1.85**	(0.29)	1.32	(0.29)	1.06	(0.22)	1.32	(0.30)	2.15	(1.25)	0.85	(0.15)	**1.94**	(0.36)	0.83	(0.20)
Partners	Peru	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
Partners	Russia	**2.99**	(0.48)	1.52	(0.35)	1.12	(0.30)	1.03	(0.24)	1.10	(0.66)	**1.90**	(0.26)	1.28	(0.33)	0.79	(0.15)

		Increased likelihood of receiving money from selling things (e.g. at local markets or on eBay)											
		Students who receive money from:											
		An allowance or pocket money for regularly doing chores at home		An allowance or pocket money, without having to do any chores		Working outside school hours (e.g. a holiday job, part-time work)		Working in a family business		Occasional informal jobs (e.g. baby-sitting or gardening)		Gifts of money from friends or relatives	
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.
OECD	Australia	**1.50**	(0.10)	**1.38**	(0.10)	**1.55**	(0.10)	**1.72**	(0.13)	**2.02**	(0.11)	**1.60**	(0.16)
OECD	Belgium (Flemish)	**1.54**	(0.27)	**1.40**	(0.23)	**1.96**	(0.35)	1.26	(0.27)	0.97	(0.16)	1.28	(0.33)
OECD	Canadian provinces	1.26	(0.19)	1.25	(0.21)	1.30	(0.20)	1.49	(0.34)	**1.38**	(0.19)	1.54	(0.36)
OECD	Chile	**1.83**	(0.36)	0.98	(0.19)	**2.44**	(0.57)	1.26	(0.38)	**1.70**	(0.41)	**2.06**	(0.45)
OECD	Italy	1.41	(0.30)	1.02	(0.36)	**1.82**	(0.46)	1.27	(0.35)	**1.86**	(0.42)	1.26	(0.35)
OECD	Netherlands	**1.74**	(0.27)	1.35	(0.28)	0.97	(0.17)	1.15	(0.25)	**1.40**	(0.23)	**2.07**	(0.60)
OECD	Poland	1.07	(0.14)	0.99	(0.12)	**1.76**	(0.24)	**1.54**	(0.26)	**1.88**	(0.31)	0.93	(0.15)
OECD	Slovak Republic	**1.60**	(0.23)	1.10	(0.19)	**1.81**	(0.30)	1.41	(0.29)	**2.05**	(0.34)	**0.60**	(0.10)
OECD	Spain	1.21	(0.20)	0.98	(0.19)	**1.96**	(0.37)	**2.32**	(0.52)	**2.19**	(0.44)	1.14	(0.23)
OECD	United States	**1.68**	(0.32)	1.19	(0.24)	0.99	(0.17)	1.43	(0.31)	1.22	(0.19)	1.44	(0.44)
OECD	OECD average-10	**1.48**	(0.08)	**1.16**	(0.07)	**1.66**	(0.10)	**1.48**	(0.10)	**1.67**	(0.10)	**1.39**	(0.11)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n
Partners	B-S-J-G (China)	**1.36**	(0.20)	**0.74**	(0.09)	**4.04**	(0.86)	**1.82**	(0.43)	**2.15**	(0.43)	**1.89**	(0.29)
Partners	Lithuania	1.09	(0.18)	1.11	(0.15)	**1.72**	(0.31)	**1.91**	(0.35)	**2.05**	(0.29)	0.80	(0.22)
Partners	Peru	n	n	n	n	n	n	n	n	n	n	n	n
Partners	Russia	**1.64**	(0.31)	0.81	(0.18)	**1.67**	(0.29)	**2.59**	(0.70)	**2.15**	(0.43)	0.80	(0.21)

Notes: Multivariate logistic regression model: likelihood of receiving money from a given source is regressed on all variables in the table. Reference categories are: girls, students in the bottom quarter of ESCS, immigrant students, students who attend school located in towns or rural areas, students who do not hold a bank account, students who do not hold a prepaid debit card, students who do not receive money from a given source, students who never discuss money matters with parents, students in the bottom quarter of total time per week spent learning in regular lessons, and students in the bottom quarter of total time per week spent studying after school.
Values that are statistically significant are indicated in bold (see Annex A3).

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[Part 2/2]

Table IV.5.16g Likelihood of receiving money from selling things, by student characteristics

Results based on students' self-reports

		Increased likelihood of receiving money from selling things (e.g. at local markets or on eBay)											
		Students who discuss money matters with parents						Total time per week spent learning in regular lessons					
		Once or twice a month		Once or twice a week		Almost every day		Second quarter of school learning time		Third quarter of school learning time		Top quarter of school learning time	
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.
OECD	Australia	0.99	(0.09)	**1.25**	(0.12)	**1.43**	(0.18)	0.89	(0.08)	1.02	(0.09)	0.99	(0.09)
OECD	Belgium (Flemish)	1.12	(0.27)	1.37	(0.27)	1.48	(0.49)	c	c	1.14	(0.48)	1.24	(0.53)
OECD	Canadian provinces	1.08	(0.27)	1.24	(0.31)	1.75	(0.53)	c	c	0.88	(0.17)	1.31	(0.31)
OECD	Chile	0.86	(0.28)	1.17	(0.38)	0.89	(0.33)	1.03	(0.34)	1.23	(0.35)	0.87	(0.29)
OECD	Italy	0.77	(0.26)	0.82	(0.29)	0.99	(0.55)	0.87	(0.28)	1.03	(0.35)	1.04	(0.35)
OECD	Netherlands	1.25	(0.35)	1.33	(0.40)	**1.91**	(0.63)	1.06	(0.33)	1.16	(0.30)	1.35	(0.34)
OECD	Poland	**1.57**	(0.32)	1.51	(0.32)	**1.99**	(0.43)	0.91	(0.16)	0.99	(0.17)	1.21	(0.22)
OECD	Slovak Republic	0.76	(0.18)	0.71	(0.16)	0.89	(0.23)	0.81	(0.19)	0.97	(0.22)	0.79	(0.21)
OECD	Spain	1.01	(0.27)	1.35	(0.34)	1.43	(0.38)	0.80	(0.19)	0.97	(0.28)	1.02	(0.22)
OECD	United States	1.28	(0.33)	1.49	(0.41)	**2.04**	(0.64)	1.14	(0.25)	1.38	(0.30)	0.75	(0.17)
OECD	OECD average-10	1.07	(0.09)	**1.22**	(0.10)	**1.48**	(0.15)	0.94	(0.09)	1.08	(0.09)	1.06	(0.09)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n
Partners	B-S-J-G (China)	0.97	(0.24)	1.51	(0.35)	1.76	(0.55)	1.27	(0.30)	1.02	(0.24)	0.97	(0.21)
Partners	Lithuania	1.06	(0.31)	1.06	(0.31)	1.29	(0.42)	0.98	(0.22)	1.11	(0.30)	1.02	(0.23)
Partners	Peru	n	n	n	n	n	n	n	n	n	n	n	n
Partners	Russia	1.19	(0.44)	1.23	(0.54)	1.50	(0.59)	0.94	(0.22)	1.80	(0.63)	1.24	(0.31)

		Increased likelihood of receiving money from selling things (e.g. at local markets or on eBay)									
		Total time per week spent studying after school (e.g. homework, additional instruction, private study)						Intercept		Pseudo R2	
		Second quarter of school learning time		Third quarter of school learning time		Top quarter of school learning time					
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Pseudo R2	S.E.
OECD	Australia	0.96	(0.11)	1.17	(0.11)	1.04	(0.10)	**0.08**	(0.01)	0.097	(0.007)
OECD	Belgium (Flemish)	1.12	(0.25)	1.29	(0.33)	1.47	(0.30)	**0.09**	(0.05)	0.086	(0.018)
OECD	Canadian provinces	0.93	(0.26)	0.84	(0.22)	1.20	(0.24)	**0.06**	(0.03)	0.086	(0.021)
OECD	Chile	1.21	(0.33)	1.01	(0.33)	0.93	(0.27)	**0.05**	(0.05)	0.099	(0.024)
OECD	Italy	0.81	(0.22)	0.55	(0.21)	**0.46**	(0.12)	**0.10**	(0.08)	0.097	(0.032)
OECD	Netherlands	1.56	(0.41)	1.10	(0.23)	1.41	(0.32)	**0.02**	(0.01)	0.082	(0.018)
OECD	Poland	0.97	(0.19)	1.07	(0.22)	0.88	(0.16)	0.08	(0.16)	0.096	(0.015)
OECD	Slovak Republic	0.91	(0.19)	0.91	(0.24)	1.01	(0.21)	1.02	(1.67)	0.125	(0.022)
OECD	Spain	0.93	(0.27)	1.42	(0.40)	1.27	(0.36)	**0.06**	(0.03)	0.143	(0.019)
OECD	United States	1.20	(0.29)	1.09	(0.28)	1.24	(0.27)	**0.07**	(0.03)	0.079	(0.017)
OECD	OECD average-10	1.06	(0.08)	1.04	(0.09)	1.09	(0.08)	0.16	(0.17)	0.099	(0.006)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n
Partners	B-S-J-G (China)	1.39	(0.29)	1.04	(0.24)	1.28	(0.27)	**0.07**	(0.02)	0.177	(0.025)
Partners	Lithuania	0.85	(0.20)	**0.58**	(0.14)	1.03	(0.23)	**0.11**	(0.07)	0.121	(0.021)
Partners	Peru	n	n	n	n	n	n	n	n	n	n
Partners	Russia	1.30	(0.33)	1.28	(0.40)	1.20	(0.37)	**0.04**	(0.03)	0.158	(0.024)

Notes: Multivariate logistic regression model: likelihood of receiving money from a given source is regressed on all variables in the table. Reference categories are: girls, students in the bottom quarter of ESCS, immigrant students, students who attend school located in towns or rural areas, students who do not hold a bank account, students who do not hold a prepaid debit card, students who do not receive money from a given source, students who never discuss money matters with parents, students in the bottom quarter of total time per week spent learning in regular lessons, and students in the bottom quarter of total time per week spent studying after school.
Values that are statistically significant are indicated in bold (see Annex A3).

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[Part 1/3]

Table IV.5.17a Performance in financial literacy and the core PISA subjects, by sources of money

Results based on students' self-reports

		Effect size: Difference in performance related to receiving money from a given source divided by the variation in scores within each country/economy (standard deviation)													
		Financial literacy													
		An allowance or pocket money for regularly doing chores at home		An allowance or pocket money, without having to do any chores		Working outside school hours (e.g. a holiday job, part-time work)		Working in a family business		Occasional informal jobs (e.g. baby-sitting or gardening)		Gifts of money from friends or relatives		Selling things (e.g. at local markets or on eBay)	
		Effect size	S.E.	Effect size	S.E.	Effect size	S.E.	Effect size	S.E.	Effect size	S.E.	Effect size	S.E.	Effect size	S.E.
OECD	Australia	**-23**	(2.3)	**-26**	(2.8)	**-12**	(2.7)	**-35**	(3.0)	3	(2.5)	**55**	(3.7)	**-27**	(2.6)
	Belgium (Flemish)	**-34**	(6.4)	-3	(5.5)	-5	(6.5)	-16	(9.0)	11	(5.9)	**80**	(10.4)	**-19**	(5.9)
	Canadian provinces	**-13**	(5.6)	**-17**	(7.0)	-10	(6.5)	**-27**	(7.6)	**19**	(5.3)	**40**	(12.1)	**-19**	(6.3)
	Chile	-13	(6.4)	6	(6.5)	**-20**	(8.0)	**-37**	(8.7)	-1	(8.1)	**42**	(6.7)	10	(6.9)
	Italy	**-23**	(7.2)	**-14**	(6.5)	-16	(9.2)	**-38**	(8.4)	-9	(7.3)	**54**	(8.0)	4	(6.4)
	Netherlands	**-19**	(5.2)	**29**	(6.5)	-5	(5.3)	**-40**	(8.5)	8	(5.4)	**52**	(10.4)	-3	(5.2)
	Poland	**-18**	(5.1)	-2	(5.1)	-10	(5.6)	**-37**	(6.8)	**-24**	(6.3)	**44**	(6.8)	0	(4.6)
	Slovak Republic	**-17**	(5.6)	-4	(6.2)	-11	(6.2)	**-43**	(6.7)	-9	(6.2)	**42**	(7.3)	**-14**	(6.2)
	Spain	-11	(5.8)	-1	(5.3)	**-16**	(7.7)	**-44**	(10.4)	2	(7.6)	**41**	(6.9)	**-31**	(7.3)
	United States	**-29**	(5.3)	**-26**	(6.1)	-5	(5.8)	**-24**	(7.5)	**28**	(5.6)	**79**	(8.7)	**-21**	(5.8)
	OECD average-10	**-20**	(1.8)	**-6**	(1.8)	**-11**	(2.1)	**-34**	(2.5)	3	(2.0)	**53**	(2.7)	**-12**	(1.9)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	-12	(6.3)	**35**	(5.6)	-11	(6.3)	**-43**	(9.6)	8	(9.5)	**38**	(6.1)	-14	(7.9)
	Lithuania	**-23**	(5.3)	**18**	(5.8)	-10	(5.7)	**-29**	(6.4)	-5	(5.5)	**75**	(7.5)	-5	(6.5)
	Peru	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	Russia	**-24**	(7.4)	**23**	(6.6)	-6	(6.8)	**-41**	(7.5)	**-16**	(7.5)	**36**	(10.3)	10	(7.6)

		Effect size: Difference in performance related to receiving money from a given source divided by the variation in scores within each country/economy (standard deviation)													
		Mathematics													
		An allowance or pocket money for regularly doing chores at home		An allowance or pocket money, without having to do any chores		Working outside school hours (e.g. a holiday job, part-time work)		Working in a family business		Occasional informal jobs (e.g. baby-sitting or gardening)		Gifts of money from friends or relatives		Selling things (e.g. at local markets or on eBay)	
		Effect size	S.E.	Effect size	S.E.	Effect size	S.E.	Effect size	S.E.	Effect size	S.E.	Effect size	S.E.	Effect size	S.E.
OECD	Australia	**-21**	(2.9)	**-18**	(3.4)	**-14**	(3.1)	**-29**	(3.4)	0	(2.7)	**42**	(4.4)	**-23**	(3.0)
	Belgium (Flemish)	**-27**	(6.7)	**-15**	(5.8)	-10	(6.9)	-8	(9.4)	8	(6.1)	**70**	(10.1)	**-20**	(6.9)
	Canadian provinces	-7	(7.1)	**-14**	(6.8)	**-14**	(7.0)	**-25**	(7.6)	10	(6.2)	**31**	(11.6)	**-16**	(7.0)
	Chile	-12	(6.6)	6	(7.3)	**-21**	(9.8)	**-34**	(8.0)	5	(8.6)	**37**	(6.8)	14	(7.1)
	Italy	**-23**	(8.1)	**-23**	(7.4)	-15	(11.0)	**-25**	(9.1)	-9	(8.7)	**51**	(9.3)	4	(6.9)
	Netherlands	**-18**	(5.6)	**25**	(7.0)	-9	(5.8)	**-41**	(8.8)	6	(5.4)	**40**	(11.3)	-4	(5.7)
	Poland	**-14**	(5.2)	-4	(4.9)	**-12**	(6.2)	**-28**	(7.1)	**-21**	(6.7)	**29**	(8.1)	6	(5.0)
	Slovak Republic	**-15**	(6.1)	4	(6.2)	-11	(5.8)	**-24**	(8.1)	-8	(6.7)	**30**	(8.1)	-12	(6.5)
	Spain	-11	(6.1)	5	(6.1)	**-23**	(7.9)	**-28**	(10.5)	-1	(7.4)	**40**	(8.0)	**-20**	(7.8)
	United States	**-25**	(6.3)	**-24**	(7.1)	-1	(6.7)	**-22**	(8.0)	**29**	(6.4)	**70**	(10.6)	**-19**	(6.1)
	OECD average-10	**-17**	(2.0)	**-6**	(2.0)	**-13**	(2.3)	**-26**	(2.6)	2	(2.1)	**44**	(2.9)	**-9**	(2.0)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	-8	(6.6)	**28**	(5.9)	**-21**	(6.5)	**-41**	(10.2)	11	(9.6)	**36**	(6.0)	-8	(8.2)
	Lithuania	**-22**	(6.4)	**21**	(6.4)	**-13**	(6.0)	**-21**	(6.8)	-11	(5.7)	**41**	(8.3)	-5	(7.0)
	Peru	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	Russia	**-21**	(8.1)	**14**	(6.6)	**-15**	(7.1)	**-25**	(8.6)	-3	(9.7)	21	(12.4)	10	(7.7)

Note: Values that are statistically significant are indicated in bold (see Annex A3).

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[Part 2/3]

Table IV.5.17a Performance in financial literacy and the core PISA subjects, by sources of money

Results based on students' self-reports

		Effect size: Difference in performance related to receiving money from a given source divided by the variation in scores within each country/economy (standard deviation)													
		Reading													
		An allowance or pocket money for regularly doing chores at home		An allowance or pocket money, without having to do any chores		Working outside school hours (e.g. a holiday job, part-time work)		Working in a family business		Occasional informal jobs (e.g. baby-sitting or gardening)		Gifts of money from friends or relatives		Selling things (e.g. at local markets or on eBay)	
		Effect size	S.E.	Effect size	S.E.	Effect size	S.E.	Effect size	S.E.	Effect size	S.E.	Effect size	S.E.	Effect size	S.E.
OECD	Australia	**-23**	(2.7)	**-22**	(3.0)	**-14**	(3.0)	**-37**	(3.5)	4	(2.7)	**42**	(4.8)	**-29**	(2.9)
	Belgium (Flemish)	**-33**	(7.1)	-9	(6.3)	-12	(7.1)	**-19**	(9.5)	10	(6.4)	**74**	(9.6)	**-19**	(6.6)
	Canadian provinces	**-15**	(5.9)	-13	(7.5)	**-20**	(6.0)	**-33**	(9.0)	**20**	(5.5)	**43**	(12.6)	**-23**	(6.9)
	Chile	**-14**	(6.8)	3	(6.4)	**-30**	(9.7)	**-41**	(8.6)	7	(8.6)	**33**	(7.1)	11	(7.2)
	Italy	**-22**	(7.9)	**-18**	(6.8)	**-23**	(11.4)	**-36**	(10.0)	-15	(8.2)	**60**	(7.7)	-8	(6.8)
	Netherlands	**-21**	(5.1)	**27**	(6.8)	**-14**	(5.5)	**-44**	(8.5)	**11**	(5.4)	**43**	(10.4)	-9	(5.7)
	Poland	**-18**	(5.4)	-2	(4.6)	**-16**	(5.8)	**-37**	(6.6)	**-18**	(6.4)	**41**	(7.9)	1	(4.8)
	Slovak Republic	**-19**	(5.7)	1	(6.1)	-11	(5.7)	**-29**	(8.0)	-3	(5.7)	**36**	(7.0)	**-16**	(6.1)
	Spain	**-17**	(6.3)	1	(6.3)	**-25**	(8.3)	**-37**	(9.8)	4	(7.7)	**51**	(7.7)	**-31**	(7.1)
	United States	**-25**	(5.5)	**-26**	(7.2)	**-16**	(6.4)	**-24**	(7.6)	**28**	(6.4)	**79**	(10.2)	**-23**	(6.0)
	OECD average-10	**-21**	(1.9)	**-6**	(2.0)	**-18**	(2.3)	**-34**	(2.6)	**5**	(2.1)	**50**	(2.8)	**-15**	(1.9)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	-10	(6.9)	**32**	(6.2)	**-17**	(6.8)	**-41**	(10.6)	6	(9.7)	**37**	(5.8)	-14	(7.5)
	Lithuania	**-22**	(5.7)	**21**	(6.8)	**-15**	(6.0)	**-29**	(6.7)	**-12**	(5.8)	**46**	(8.8)	-9	(7.2)
	Peru	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	Russia	**-26**	(7.9)	16	(8.9)	**-19**	(7.5)	**-28**	(9.0)	-10	(8.4)	**30**	(11.2)	11	(8.1)

		Effect size: Difference in performance related to receiving money from a given source divided by the variation in scores within each country/economy (standard deviation)													
		Science													
		An allowance or pocket money for regularly doing chores at home		An allowance or pocket money, without having to do any chores		Working outside school hours (e.g. a holiday job, part-time work)		Working in a family business		Occasional informal jobs (e.g. baby-sitting or gardening)		Gifts of money from friends or relatives		Selling things (e.g. at local markets or on eBay)	
		Effect size	S.E.	Effect size	S.E.	Effect size	S.E.	Effect size	S.E.	Effect size	S.E.	Effect size	S.E.	Effect size	S.E.
OECD	Australia	**-20**	(2.5)	**-27**	(3.0)	**-17**	(2.6)	**-33**	(3.4)	2	(2.5)	**44**	(4.0)	**-25**	(2.6)
	Belgium (Flemish)	**-31**	(6.7)	-11	(7.0)	-12	(6.4)	-15	(8.5)	7	(6.5)	**71**	(9.6)	**-18**	(6.5)
	Canadian provinces	-11	(6.6)	**-15**	(7.0)	**-15**	(6.2)	**-31**	(8.3)	**19**	(5.8)	**37**	(11.8)	**-19**	(6.7)
	Chile	**-13**	(6.5)	5	(6.5)	**-27**	(9.4)	**-39**	(8.5)	2	(7.8)	**37**	(6.7)	**14**	(6.8)
	Italy	**-21**	(7.8)	**-21**	(6.9)	-20	(10.4)	**-34**	(9.8)	-9	(8.5)	**57**	(9.1)	4	(6.4)
	Netherlands	**-18**	(5.4)	**27**	(7.3)	**-13**	(6.1)	**-46**	(8.6)	7	(5.8)	**42**	(10.9)	-4	(5.8)
	Poland	**-15**	(5.0)	-5	(4.4)	-11	(6.1)	**-31**	(6.6)	**-23**	(6.2)	**33**	(7.5)	4	(5.1)
	Slovak Republic	**-16**	(5.5)	0	(6.5)	**-12**	(5.4)	**-31**	(7.7)	-7	(6.3)	**30**	(8.1)	-11	(6.1)
	Spain	**-14**	(5.6)	1	(6.2)	**-26**	(7.9)	**-35**	(10.1)	0	(7.1)	**46**	(7.6)	**-23**	(7.4)
	United States	**-26**	(5.5)	**-30**	(6.6)	-5	(6.3)	**-25**	(8.3)	**28**	(6.2)	**70**	(9.4)	**-18**	(6.0)
	OECD average-10	**-18**	(1.9)	**-8**	(2.0)	**-16**	(2.2)	**-32**	(2.6)	3	(2.0)	**47**	(2.8)	**-10**	(1.9)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	-8	(6.6)	**32**	(5.6)	**-21**	(6.6)	**-45**	(11.0)	11	(9.5)	**38**	(5.8)	-12	(8.3)
	Lithuania	**-23**	(6.1)	**19**	(6.5)	**-12**	(5.7)	**-26**	(7.0)	**-14**	(5.5)	**40**	(8.5)	-6	(6.8)
	Peru	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	Russia	**-28**	(6.9)	12	(7.2)	**-14**	(6.2)	**-29**	(7.8)	-10	(8.4)	21	(11.7)	**16**	(7.2)

Note: Values that are statistically significant are indicated in bold (see Annex A3).

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[Part 3/3]

Table IV.5.17a Performance in financial literacy and the core PISA subjects, by sources of money

Results based on students' self-reports

		Difference between financial literacy and …													
		Mathematics													
		An allowance or pocket money for regularly doing chores at home		An allowance or pocket money, without having to do any chores		Working outside school hours (e.g. a holiday job, part-time work)		Working in a family business		Occasional informal jobs (e.g. baby-sitting or gardening)		Gifts of money from friends or relatives		Selling things (e.g. at local markets or on eBay)	
		Effect size dif.	S.E.	Effect size dif.	S.E.	Effect size dif.	S.E.	Effect size dif.	S.E.	Effect size dif.	S.E.	Effect size dif.	S.E.	Effect size dif.	S.E.
OECD	Australia	-1	(2.4)	**-8**	(2.7)	3	(2.7)	**-6**	(2.5)	2	(2.0)	**13**	(3.5)	-4	(2.6)
OECD	Belgium (Flemish)	-6	(4.7)	**12**	(4.6)	6	(5.4)	-9	(8.0)	2	(4.9)	10	(8.4)	1	(5.7)
OECD	Canadian provinces	-6	(5.1)	-3	(4.8)	4	(6.8)	-2	(6.6)	9	(5.0)	10	(11.0)	-3	(5.2)
OECD	Chile	-1	(5.0)	0	(5.3)	0	(7.7)	-4	(6.5)	-7	(7.2)	4	(5.2)	-4	(5.5)
OECD	Italy	0	(5.7)	9	(5.7)	-1	(8.9)	-13	(7.7)	0	(7.5)	3	(7.5)	-1	(7.4)
OECD	Netherlands	0	(4.3)	4	(4.2)	5	(4.1)	1	(5.8)	2	(3.8)	11	(8.4)	1	(3.9)
OECD	Poland	-5	(4.6)	3	(4.5)	2	(5.2)	-9	(5.4)	-2	(5.6)	**15**	(5.8)	-6	(4.8)
OECD	Slovak Republic	-2	(5.0)	-8	(5.1)	-1	(6.1)	**-20**	(8.0)	-1	(5.9)	12	(6.5)	-2	(5.6)
OECD	Spain	0	(5.6)	-7	(4.9)	7	(7.1)	**-16**	(7.8)	3	(6.5)	1	(5.7)	-11	(6.9)
OECD	United States	-3	(4.7)	-2	(4.7)	-4	(5.3)	-1	(5.5)	-1	(4.4)	9	(8.5)	-2	(4.0)
OECD	OECD average-10	-2	(1.5)	0	(1.5)	2	(2.0)	**-8**	(2.1)	1	(1.7)	**9**	(2.3)	-3	(1.7)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n	n	n
Partners	B-S-J-G (China)	-4	(3.9)	7	(4.3)	**10**	(4.9)	-2	(5.6)	-3	(5.7)	2	(4.9)	-6	(5.4)
Partners	Lithuania	-1	(5.0)	-3	(4.4)	4	(5.1)	-8	(4.8)	6	(5.1)	**35**	(7.4)	0	(5.4)
Partners	Peru	n	n	n	n	n	n	n	n	n	n	n	n	n	n
Partners	Russia	-2	(8.3)	9	(6.9)	9	(7.2)	**-17**	(8.4)	-13	(9.2)	14	(12.0)	0	(9.0)

		Difference between financial literacy and …													
		Reading													
		An allowance or pocket money for regularly doing chores at home		An allowance or pocket money, without having to do any chores		Working outside school hours (e.g. a holiday job, part-time work)		Working in a family business		Occasional informal jobs (e.g. baby-sitting or gardening)		Gifts of money from friends or relatives		Selling things (e.g. at local markets or on eBay)	
		Effect size dif.	S.E.	Effect size dif.	S.E.	Effect size dif.	S.E.	Effect size dif.	S.E.	Effect size dif.	S.E.	Effect size dif.	S.E.	Effect size dif.	S.E.
OECD	Australia	0	(2.3)	-4	(2.3)	3	(2.1)	1	(2.5)	-2	(2.3)	**13**	(4.2)	1	(2.4)
OECD	Belgium (Flemish)	0	(4.9)	6	(5.2)	8	(5.8)	3	(6.8)	0	(4.9)	6	(7.6)	-1	(5.0)
OECD	Canadian provinces	2	(5.2)	-4	(5.6)	10	(5.7)	6	(5.8)	-1	(4.1)	-3	(8.4)	4	(5.0)
OECD	Chile	2	(4.7)	3	(4.4)	10	(6.3)	4	(7.0)	-8	(6.5)	9	(5.1)	-1	(5.5)
OECD	Italy	-1	(5.7)	4	(5.8)	6	(9.0)	-2	(7.7)	6	(6.2)	-6	(7.2)	12	(7.1)
OECD	Netherlands	2	(4.1)	2	(3.9)	**9**	(4.3)	3	(6.4)	-3	(3.7)	8	(6.4)	6	(4.1)
OECD	Poland	0	(4.9)	0	(4.0)	6	(5.2)	0	(5.0)	-6	(5.3)	3	(6.0)	-1	(4.6)
OECD	Slovak Republic	2	(4.6)	-5	(5.8)	0	(5.7)	**-14**	(6.9)	-6	(6.2)	6	(6.4)	1	(5.8)
OECD	Spain	7	(5.7)	-2	(5.1)	9	(6.8)	-7	(7.4)	-2	(6.2)	-10	(5.5)	0	(6.3)
OECD	United States	-4	(4.1)	0	(4.6)	**10**	(5.2)	0	(5.0)	0	(4.8)	0	(7.3)	3	(4.3)
OECD	OECD average-10	1	(1.5)	0	(1.5)	**7**	(1.9)	-1	(2.0)	-2	(1.6)	3	(2.1)	3	(1.6)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n	n	n
Partners	B-S-J-G (China)	-2	(4.2)	3	(4.8)	6	(4.9)	-2	(5.7)	2	(5.1)	1	(4.7)	0	(4.7)
Partners	Lithuania	0	(5.3)	-4	(4.6)	5	(5.1)	0	(4.4)	8	(5.1)	**29**	(7.2)	4	(4.8)
Partners	Peru	n	n	n	n	n	n	n	n	n	n	n	n	n	n
Partners	Russia	3	(7.5)	7	(7.7)	14	(7.0)	-13	(9.4)	-6	(6.9)	6	(12.5)	-1	(10.4)

		Difference between financial literacy and …													
		Science													
		An allowance or pocket money for regularly doing chores at home		An allowance or pocket money, without having to do any chores		Working outside school hours (e.g. a holiday job, part-time work)		Working in a family business		Occasional informal jobs (e.g. baby-sitting or gardening)		Gifts of money from friends or relatives		Selling things (e.g. at local markets or on eBay)	
		Effect size dif.	S.E.	Effect size dif.	S.E.	Effect size dif.	S.E.	Effect size dif.	S.E.	Effect size dif.	S.E.	Effect size dif.	S.E.	Effect size dif.	S.E.
OECD	Australia	-3	(1.6)	2	(1.8)	**5**	(2.0)	-2	(2.5)	1	(1.9)	**10**	(2.9)	-3	(1.7)
OECD	Belgium (Flemish)	-3	(4.3)	8	(5.5)	8	(4.7)	-1	(7.0)	3	(4.5)	9	(7.8)	-1	(4.6)
OECD	Canadian provinces	-2	(4.6)	-2	(4.5)	6	(4.9)	5	(5.0)	0	(4.6)	3	(8.6)	1	(4.6)
OECD	Chile	0	(4.4)	1	(4.1)	7	(7.1)	2	(5.5)	-3	(6.1)	5	(4.6)	-4	(4.6)
OECD	Italy	-2	(4.4)	7	(5.2)	3	(8.1)	-4	(7.2)	1	(6.4)	-3	(6.1)	-1	(7.0)
OECD	Netherlands	-1	(3.4)	2	(3.7)	**8**	(3.8)	5	(5.3)	1	(3.5)	9	(6.9)	1	(3.9)
OECD	Poland	-3	(4.4)	3	(3.9)	1	(4.6)	-6	(4.8)	-1	(4.9)	**11**	(5.4)	-4	(5.0)
OECD	Slovak Republic	-1	(4.3)	-4	(5.9)	0	(5.1)	-12	(7.0)	-2	(6.0)	12	(6.1)	-3	(5.6)
OECD	Spain	3	(4.3)	-3	(4.2)	10	(6.4)	-9	(6.6)	2	(5.9)	-5	(5.3)	-8	(5.9)
OECD	United States	-3	(3.7)	4	(4.0)	0	(4.5)	1	(5.5)	0	(4.3)	9	(6.5)	-3	(3.6)
OECD	OECD average-10	-1	(1.3)	2	(1.4)	**5**	(1.7)	-2	(1.8)	0	(1.6)	**6**	(2.0)	-2	(1.5)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n	n	n
Partners	B-S-J-G (China)	-4	(3.5)	2	(3.9)	**10**	(4.7)	2	(5.4)	-4	(5.2)	0	(4.0)	-2	(5.2)
Partners	Lithuania	0	(5.6)	-1	(4.2)	3	(4.7)	-3	(4.4)	9	(4.9)	**35**	(6.4)	1	(4.4)
Partners	Peru	n	n	n	n	n	n	n	n	n	n	n	n	n	n
Partners	Russia	4	(7.6)	10	(5.8)	8	(6.4)	-12	(8.3)	-6	(7.3)	15	(12.5)	-6	(8.8)

Note: Values that are statistically significant are indicated in bold (see Annex A3).

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[Part 1/3]

Table IV.5.17b Performance in financial literacy and the core PISA subjects, by sources of money, after accounting for student characteristics

Results based on students' self-reports

		Effect size: Difference in performance related to receiving money from a given source divided by the variation in scores within each country/economy (standard deviation), after accounting for student characteristics[1]													
		Financial literacy													
		An allowance or pocket money for regularly doing chores at home		An allowance or pocket money, without having to do any chores		Working outside school hours (e.g. a holiday job, part-time work)		Working in a family business		Occasional informal jobs (e.g. baby-sitting or gardening)		Gifts of money from friends or relatives		Selling things (e.g. at local markets or on eBay)	
		Effect size	S.E.	Effect size	S.E.	Effect size	S.E.	Effect size	S.E.	Effect size	S.E.	Effect size	S.E.	Effect size	S.E.
OECD	Australia	**-18**	(2.4)	**-26**	(3.1)	**-7**	(2.9)	**-26**	(3.7)	0	(3.1)	**35**	(4.7)	**-20**	(2.9)
	Belgium (Flemish)	**-23**	(6.2)	6	(5.7)	-5	(6.0)	-8	(9.1)	1	(5.2)	**36**	(11.3)	-11	(6.4)
	Canadian provinces	-9	(6.2)	-13	(7.1)	-2	(7.2)	-9	(10.8)	**14**	(5.6)	**29**	(13.8)	**-13**	(6.9)
	Chile	-14	(8.0)	-8	(8.2)	-1	(13.1)	**-35**	(12.2)	12	(11.0)	13	(8.0)	3	(8.1)
	Italy	**-18**	(6.9)	**-21**	(7.6)	-18	(11.4)	**-50**	(9.5)	3	(8.0)	**52**	(9.9)	-4	(7.3)
	Netherlands	**-20**	(5.3)	**21**	(6.4)	-1	(5.9)	**-23**	(9.6)	-6	(6.4)	**39**	(10.9)	-2	(5.5)
	Poland	**-12**	(4.8)	-5	(5.0)	-9	(5.8)	**-30**	(6.4)	**-19**	(6.1)	**35**	(6.9)	-8	(4.8)
	Slovak Republic	**-18**	(6.0)	-8	(6.4)	-11	(6.8)	**-43**	(7.6)	-6	(7.0)	**34**	(7.8)	-10	(6.1)
	Spain	-10	(6.2)	2	(6.3)	-13	(8.9)	**-39**	(9.7)	0	(8.2)	**29**	(7.5)	**-34**	(7.9)
	United States	**-25**	(6.1)	**-17**	(6.9)	-12	(6.9)	-7	(9.4)	**16**	(6.4)	**68**	(10.3)	**-14**	(6.4)
	OECD average-10	**-17**	(1.9)	**-7**	(2.0)	**-8**	(2.5)	**-27**	(2.9)	2	(2.2)	**37**	(3.0)	**-11**	(2.0)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	**-14**	(5.8)	**17**	(6.0)	-4	(5.6)	**-44**	(9.6)	9	(8.3)	**20**	(5.1)	-8	(7.1)
	Lithuania	**-19**	(5.1)	**12**	(5.4)	3	(6.0)	**-21**	(6.2)	-5	(5.6)	**67**	(7.4)	-2	(5.9)
	Peru	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	Russia	**-21**	(8.1)	**18**	(6.7)	-7	(8.0)	**-47**	(8.5)	-4	(8.3)	**33**	(10.6)	1	(9.0)

		Effect size: Difference in performance related to receiving money from a given source divided by the variation in scores within each country/economy (standard deviation), after accounting for student characteristics													
		Mathematics													
		An allowance or pocket money for regularly doing chores at home		An allowance or pocket money, without having to do any chores		Working outside school hours (e.g. a holiday job, part-time work)		Working in a family business		Occasional informal jobs (e.g. baby-sitting or gardening)		Gifts of money from friends or relatives		Selling things (e.g. at local markets or on eBay)	
		Effect size	S.E.	Effect size	S.E.	Effect size	S.E.	Effect size	S.E.	Effect size	S.E.	Effect size	S.E.	Effect size	S.E.
OECD	Australia	**-19**	(3.1)	**-18**	(3.7)	**-11**	(3.4)	**-22**	(4.2)	0	(3.2)	**27**	(5.7)	**-20**	(3.2)
	Belgium (Flemish)	**-22**	(6.6)	-5	(6.5)	-6	(6.5)	-4	(11.2)	2	(6.2)	**33**	(11.9)	**-14**	(6.5)
	Canadian provinces	-6	(6.9)	-13	(6.8)	-6	(8.5)	-12	(10.2)	12	(7.4)	26	(15.0)	-15	(7.9)
	Chile	-4	(8.5)	-11	(9.4)	-1	(13.6)	**-33**	(13.0)	14	(11.7)	13	(8.7)	6	(8.5)
	Italy	**-19**	(8.0)	**-32**	(8.2)	-10	(11.5)	**-34**	(9.7)	4	(8.3)	**53**	(10.9)	-6	(8.8)
	Netherlands	**-20**	(6.7)	**19**	(6.8)	-8	(6.3)	**-25**	(10.1)	-5	(6.7)	**30**	(11.2)	-8	(6.0)
	Poland	-8	(5.1)	-8	(5.2)	-10	(6.4)	**-25**	(6.6)	**-15**	(6.6)	**23**	(7.8)	-7	(5.3)
	Slovak Republic	**-19**	(6.4)	1	(6.3)	-7	(5.8)	**-27**	(9.1)	-9	(6.7)	**23**	(8.2)	-11	(6.6)
	Spain	-6	(6.6)	5	(6.6)	**-19**	(8.9)	**-24**	(9.8)	-3	(7.9)	**28**	(8.2)	**-29**	(6.9)
	United States	**-19**	(6.9)	-13	(7.1)	-6	(7.6)	-8	(9.3)	**19**	(7.4)	**49**	(12.6)	-12	(7.1)
	OECD average-10	**-14**	(2.1)	**-8**	(2.2)	**-9**	(2.6)	**-21**	(3.0)	2	(2.4)	**30**	(3.3)	**-12**	(2.2)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	-7	(6.6)	10	(6.4)	**-13**	(6.3)	**-41**	(10.6)	12	(8.3)	**20**	(5.7)	-1	(7.9)
	Lithuania	**-18**	(6.6)	**17**	(6.0)	-3	(6.6)	**-15**	(7.2)	-10	(5.5)	**38**	(8.5)	-7	(6.7)
	Peru	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	Russia	**-22**	(9.4)	14	(8.2)	**-18**	(9.1)	**-25**	(10.6)	7	(9.9)	**25**	(12.9)	0	(9.6)

1. Student characteristics include: gender, PISA index of economic, social and cultural status (ESCS), immigrant background, school location, holding a bank account, holding a prepaid debit card, receiving money from the other sources, discussing money matters with parents, total time per week spent learning in regular lessons, and total time per week spent studying after school (e.g. homework, additional instruction, private study).

Note: Values that are statistically significant are indicated in bold (see Annex A3).

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[Part 2/3]

Table IV.5.17b Performance in financial literacy and the core PISA subjects, by sources of money, after accounting for student characteristics

Results based on students' self-reports

		Effect size: Difference in performance related to receiving money from a given source divided by the variation in scores within each country/economy (standard deviation), after accounting for student characteristics[1]													
		Reading													
		An allowance or pocket money for regularly doing chores at home		An allowance or pocket money, without having to do any chores		Working outside school hours (e.g. a holiday job, part-time work)		Working in a family business		Occasional informal jobs (e.g. baby-sitting or gardening)		Gifts of money from friends or relatives		Selling things (e.g. at local markets or on eBay)	
		Effect size	S.E.	Effect size	S.E.	Effect size	S.E.	Effect size	S.E.	Effect size	S.E.	Effect size	S.E.	Effect size	S.E.
OECD	Australia	**-17**	(2.6)	**-21**	(2.9)	**-11**	(3.3)	**-25**	(4.1)	-1	(3.2)	**23**	(6.0)	**-19**	(3.6)
	Belgium (Flemish)	**-20**	(6.2)	-1	(6.6)	-9	(6.6)	-9	(10.6)	0	(6.3)	**43**	(11.3)	-8	(7.6)
	Canadian provinces	-10	(7.2)	-12	(7.9)	-7	(7.7)	-21	(11.4)	9	(6.9)	**29**	(14.7)	-11	(8.7)
	Chile	-11	(7.9)	-7	(8.7)	-2	(14.0)	**-51**	(13.1)	18	(11.9)	8	(9.1)	4	(8.6)
	Italy	**-18**	(7.9)	**-25**	(7.0)	-10	(12.3)	**-44**	(9.7)	-2	(9.8)	**51**	(9.0)	-16	(8.8)
	Netherlands	**-18**	(5.4)	**19**	(7.2)	-10	(6.1)	**-31**	(10.0)	-3	(6.5)	**31**	(10.9)	-11	(6.4)
	Poland	-9	(5.1)	-7	(4.8)	-10	(5.9)	**-29**	(6.4)	-12	(6.6)	**25**	(8.2)	-7	(4.5)
	Slovak Republic	**-20**	(5.6)	1	(5.9)	-6	(6.0)	**-30**	(8.6)	-3	(5.7)	**29**	(7.2)	-11	(6.1)
	Spain	**-14**	(6.5)	4	(6.8)	**-19**	(9.4)	**-29**	(9.4)	-1	(7.9)	**37**	(8.0)	**-30**	(6.5)
	United States	**-18**	(6.6)	-16	(8.1)	**-17**	(7.5)	-2	(9.5)	**16**	(7.3)	**61**	(12.3)	-11	(6.6)
	OECD average-10	**-15**	(2.0)	**-7**	(2.1)	**-10**	(2.7)	**-27**	(3.0)	2	(2.4)	**34**	(3.2)	**-12**	(2.2)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	-11	(6.6)	**16**	(7.1)	-10	(6.1)	**-36**	(9.7)	7	(7.9)	**19**	(5.4)	-8	(6.5)
	Lithuania	**-17**	(5.8)	**14**	(6.7)	-1	(6.1)	**-21**	(7.2)	-11	(5.7)	**41**	(8.7)	-3	(6.9)
	Peru	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	Russia	**-28**	(8.8)	12	(8.3)	-15	(8.3)	**-26**	(10.4)	4	(8.7)	**33**	(11.8)	11	(10.3)

		Effect size: Difference in performance related to receiving money from a given source divided by the variation in scores within each country/economy (standard deviation), after accounting for student characteristics													
		Science													
		An allowance or pocket money for regularly doing chores at home		An allowance or pocket money, without having to do any chores		Working outside school hours (e.g. a holiday job, part-time work)		Working in a family business		Occasional informal jobs (e.g. baby-sitting or gardening)		Gifts of money from friends or relatives		Selling things (e.g. at local markets or on eBay)	
		Effect size	S.E.	Effect size	S.E.	Effect size	S.E.	Effect size	S.E.	Effect size	S.E.	Effect size	S.E.	Effect size	S.E.
OECD	Australia	**-17**	(2.5)	**-25**	(3.1)	**-13**	(3.0)	**-26**	(4.3)	0	(3.0)	**28**	(5.0)	**-20**	(3.1)
	Belgium (Flemish)	**-21**	(6.2)	0	(7.5)	-8	(6.2)	-13	(10.0)	0	(6.4)	**32**	(11.1)	-11	(6.7)
	Canadian provinces	-10	(6.9)	-9	(7.0)	-9	(8.0)	-19	(11.5)	13	(7.2)	27	(14.8)	-15	(7.5)
	Chile	-9	(7.7)	-10	(8.4)	-9	(13.5)	**-43**	(12.8)	17	(11.3)	14	(8.1)	5	(8.3)
	Italy	**-18**	(7.3)	**-31**	(7.1)	-15	(11.0)	**-43**	(9.4)	3	(9.3)	**57**	(11.0)	-9	(8.4)
	Netherlands	**-20**	(5.4)	**20**	(6.9)	-11	(6.5)	**-31**	(9.9)	-5	(6.9)	**31**	(11.6)	-9	(6.2)
	Poland	**-10**	(4.7)	-9	(4.7)	-8	(6.3)	**-26**	(6.3)	**-16**	(6.4)	**25**	(7.0)	-10	(5.3)
	Slovak Republic	**-20**	(5.7)	0	(6.7)	-9	(5.7)	**-34**	(8.2)	-7	(6.0)	**25**	(8.0)	-8	(5.8)
	Spain	-10	(5.9)	3	(7.0)	**-22**	(9.3)	**-28**	(9.2)	-2	(8.1)	**33**	(8.0)	**-29**	(6.7)
	United States	**-18**	(6.0)	**-17**	(7.5)	-10	(7.7)	-6	(9.6)	**17**	(6.6)	**56**	(10.6)	**-13**	(6.5)
	OECD average-10	**-15**	(1.9)	**-8**	(2.1)	**-11**	(2.6)	**-27**	(3.0)	2	(2.3)	**33**	(3.1)	**-12**	(2.1)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	-9	(6.3)	**14**	(6.5)	**-14**	(6.1)	**-42**	(10.3)	13	(8.1)	**21**	(5.4)	-6	(7.8)
	Lithuania	**-18**	(6.2)	**14**	(6.0)	-1	(6.1)	**-20**	(7.5)	**-14**	(5.6)	**38**	(8.2)	-5	(6.1)
	Peru	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	Russia	**-29**	(8.1)	11	(8.3)	**-17**	(7.6)	**-28**	(8.8)	4	(9.0)	**23**	(11.8)	8	(8.6)

1. Student characteristics include: gender, PISA index of economic, social and cultural status (ESCS), immigrant background, school location, holding a bank account, holding a prepaid debit card, receiving money from the other sources, discussing money matters with parents, total time per week spent learning in regular lessons, and total time per week spent studying after school (e.g. homework, additional instruction, private study).

Note: Values that are statistically significant are indicated in bold (see Annex A3).

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[Part 3/3]

Table IV.5.17b Performance in financial literacy and the core PISA subjects, by sources of money, after accounting for student characteristics

Results based on students' self-reports

		Difference between financial literacy and …													
		Mathematics													
		An allowance or pocket money for regularly doing chores at home		An allowance or pocket money, without having to do any chores		Working outside school hours (e.g. a holiday job, part-time work)		Working in a family business		Occasional informal jobs (e.g. baby-sitting or gardening)		Gifts of money from friends or relatives		Selling things (e.g. at local markets or on eBay)	
		Effect size dif.	S.E.	Effect size dif.	S.E.	Effect size dif.	S.E.	Effect size dif.	S.E.	Effect size dif.	S.E.	Effect size dif.	S.E.	Effect size dif.	S.E.
OECD	Australia	1	(2.9)	**-8**	(3.4)	3	(2.9)	-4	(3.2)	0	(2.5)	9	(4.6)	-1	(2.8)
	Belgium (Flemish)	-1	(5.8)	**11**	(5.3)	2	(5.7)	-4	(9.9)	-1	(6.0)	3	(10.5)	4	(6.1)
	Canadian provinces	-2	(5.9)	0	(5.7)	4	(7.5)	4	(8.1)	2	(6.3)	3	(11.8)	2	(7.1)
	Chile	-10	(7.9)	2	(7.0)	0	(10.9)	-2	(9.6)	-2	(10.1)	0	(8.7)	-3	(7.2)
	Italy	1	(7.8)	11	(7.4)	-7	(10.4)	-16	(9.7)	-1	(8.3)	-1	(10.0)	2	(9.6)
	Netherlands	1	(5.9)	3	(4.5)	7	(5.1)	2	(7.3)	-1	(5.3)	10	(8.3)	6	(4.6)
	Poland	-4	(5.1)	3	(4.6)	1	(5.4)	-5	(5.4)	-4	(6.0)	12	(6.3)	-1	(5.3)
	Slovak Republic	1	(5.8)	-9	(5.1)	-4	(6.3)	-16	(8.8)	3	(6.7)	12	(7.0)	1	(6.6)
	Spain	-3	(5.2)	-3	(5.4)	7	(7.8)	-15	(8.1)	3	(7.0)	1	(6.2)	-5	(7.5)
	United States	-6	(5.9)	-4	(5.2)	-5	(7.0)	1	(8.0)	-3	(5.5)	19	(11.3)	-1	(5.9)
	OECD average-10	-2	(1.9)	1	(1.7)	1	(2.3)	**-6**	(2.5)	0	(2.1)	**7**	(2.8)	0	(2.1)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	-6	(4.8)	7	(4.6)	9	(5.0)	-2	(6.9)	-2	(6.8)	1	(4.7)	-7	(6.1)
	Lithuania	-1	(5.5)	-5	(4.4)	6	(5.5)	-6	(5.6)	5	(5.2)	**29**	(8.2)	5	(5.3)
	Peru	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	Russia	1	(8.3)	4	(7.8)	11	(7.9)	-22	(11.3)	-11	(9.0)	7	(11.3)	1	(9.4)

		Difference between financial literacy and …													
		Reading													
		An allowance or pocket money for regularly doing chores at home		An allowance or pocket money, without having to do any chores		Working outside school hours (e.g. a holiday job, part-time work)		Working in a family business		Occasional informal jobs (e.g. baby-sitting or gardening)		Gifts of money from friends or relatives		Selling things (e.g. at local markets or on eBay)	
		Effect size dif.	S.E.	Effect size dif.	S.E.	Effect size dif.	S.E.	Effect size dif.	S.E.	Effect size dif.	S.E.	Effect size dif.	S.E.	Effect size dif.	S.E.
OECD	Australia	-1	(2.4)	-4	(2.5)	4	(2.5)	-1	(2.8)	1	(2.6)	**12**	(5.2)	-1	(3.1)
	Belgium (Flemish)	-3	(5.4)	7	(6.0)	5	(6.4)	1	(8.2)	1	(5.3)	-7	(9.1)	-3	(5.7)
	Canadian provinces	1	(6.6)	-1	(6.1)	6	(6.9)	12	(7.4)	5	(4.8)	0	(11.4)	-3	(7.1)
	Chile	-4	(7.9)	-1	(7.0)	1	(9.9)	16	(11.0)	-6	(10.4)	5	(9.1)	-1	(7.2)
	Italy	-1	(6.9)	4	(6.2)	-8	(10.7)	-6	(8.4)	4	(8.7)	1	(9.6)	12	(9.8)
	Netherlands	-1	(5.0)	2	(4.9)	10	(5.1)	7	(7.7)	-2	(4.7)	8	(7.1)	9	(5.4)
	Poland	-3	(5.5)	2	(4.3)	1	(5.2)	-1	(5.4)	-7	(5.7)	10	(6.4)	-1	(4.8)
	Slovak Republic	2	(5.0)	-9	(5.5)	-6	(5.8)	-12	(7.0)	-3	(6.8)	5	(6.9)	1	(6.1)
	Spain	4	(6.0)	-2	(5.6)	7	(7.3)	-11	(8.4)	1	(6.4)	-8	(6.8)	-4	(7.5)
	United States	-8	(4.9)	-1	(5.2)	5	(6.1)	-5	(6.8)	0	(5.7)	7	(9.6)	-3	(5.1)
	OECD average-10	-1	(1.8)	0	(1.7)	2	(2.2)	0	(2.4)	-1	(2.0)	3	(2.6)	1	(2.0)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	-3	(4.8)	2	(5.3)	6	(5.4)	-8	(6.5)	2	(6.6)	1	(4.5)	1	(4.7)
	Lithuania	-2	(5.9)	-2	(5.1)	4	(5.0)	0	(5.3)	6	(5.7)	**26**	(7.8)	2	(4.9)
	Peru	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	Russia	6	(7.7)	6	(7.5)	8	(6.5)	-21	(10.7)	-8	(7.4)	0	(12.3)	-11	(10.9)

		Difference between financial literacy and …													
		Science													
		An allowance or pocket money for regularly doing chores at home		An allowance or pocket money, without having to do any chores		Working outside school hours (e.g. a holiday job, part-time work)		Working in a family business		Occasional informal jobs (e.g. baby-sitting or gardening)		Gifts of money from friends or relatives		Selling things (e.g. at local markets or on eBay)	
		Effect size dif.	S.E.	Effect size dif.	S.E.	Effect size dif.	S.E.	Effect size dif.	S.E.	Effect size dif.	S.E.	Effect size dif.	S.E.	Effect size dif.	S.E.
OECD	Australia	-1	(1.9)	0	(2.3)	**5**	(2.4)	0	(2.9)	0	(2.1)	7	(3.7)	0	(2.4)
	Belgium (Flemish)	-1	(5.1)	6	(6.3)	4	(5.4)	5	(7.3)	0	(5.4)	4	(8.6)	0	(5.3)
	Canadian provinces	1	(5.5)	-4	(4.9)	8	(5.9)	11	(6.8)	0	(5.2)	2	(10.6)	1	(6.2)
	Chile	-6	(6.0)	2	(6.4)	8	(10.6)	8	(10.2)	-5	(9.9)	0	(7.8)	-2	(6.1)
	Italy	0	(5.9)	9	(6.0)	-3	(8.9)	-7	(8.3)	-1	(8.2)	-5	(8.6)	5	(8.9)
	Netherlands	0	(4.1)	1	(4.3)	**10**	(4.1)	7	(6.6)	0	(4.1)	9	(7.1)	7	(4.8)
	Poland	-2	(4.7)	4	(3.9)	-2	(4.7)	-4	(5.1)	-3	(5.3)	10	(5.6)	2	(5.7)
	Slovak Republic	2	(5.0)	-8	(6.0)	-3	(6.0)	-9	(7.5)	1	(6.3)	10	(6.3)	-1	(5.8)
	Spain	1	(4.5)	-1	(4.7)	9	(7.5)	-11	(7.0)	2	(7.1)	-4	(5.7)	-5	(7.0)
	United States	-7	(4.7)	0	(4.7)	-2	(5.9)	-1	(7.0)	-1	(5.2)	12	(8.7)	-1	(4.7)
	OECD average-10	-1	(1.5)	1	(1.6)	4	(2.1)	0	(2.2)	-1	(2.0)	4	(2.4)	1	(1.9)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	-5	(4.6)	4	(3.9)	**10**	(4.9)	-2	(6.4)	-3	(6.5)	-1	(4.0)	-1	(5.5)
	Lithuania	-1	(5.7)	-2	(4.2)	4	(4.8)	-1	(5.3)	9	(5.2)	**29**	(6.9)	3	(4.5)
	Peru	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	Russia	8	(7.8)	7	(6.8)	10	(6.2)	**-20**	(9.0)	-8	(6.9)	9	(12.6)	-8	(8.3)

1. Student characteristics include: gender, PISA index of economic, social and cultural status (ESCS), immigrant background, school location, holding a bank account, holding a prepaid debit card, receiving money from the other sources, discussing money matters with parents, total time per week spent learning in regular lessons, and total time per week spent studying after school (e.g. homework, additional instruction, private study).

Note: Values that are statistically significant are indicated in bold (see Annex A3).

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[Part 1/2]

Table IV.5.18 Student performance in financial literacy, by sources of money

Results based on students' self-reports

		Score-point difference in financial literacy, before accounting for student characteristics[1]													
		Students who receive money from an allowance or pocket money for regularly doing chores at home		Students who receive money from an allowance or pocket money, without having to do any chores		Students who receive money from working outside school hours (e.g. a holiday job, part-time work)		Students who receive money from working in a family business		Students who receive money from occasional informal jobs (e.g. baby-sitting or gardening)		Students who receive gifts of money from friends or relatives		Students who receive money from selling things (e.g. at local markets or on eBay)	
		Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.
OECD	Australia	**-22**	(3.0)	**-26**	(3.8)	**-14**	(3.4)	**-39**	(3.9)	2	(3.5)	**55**	(5.3)	**-27**	(3.1)
OECD	Belgium (Flemish)	**-34**	(7.3)	-4	(6.3)	-5	(7.1)	-18	(9.8)	12	(6.7)	**93**	(12.3)	**-17**	(6.9)
OECD	Canadian provinces	**-14**	(7.2)	**-21**	(8.2)	-2	(8.0)	-22	(11.9)	**14**	(6.7)	**36**	(15.4)	**-17**	(8.0)
OECD	Chile	**-24**	(9.1)	2	(9.6)	-17	(13.8)	**-39**	(13.1)	13	(12.6)	**31**	(9.0)	5	(9.4)
OECD	Italy	**-20**	(8.7)	-13	(7.7)	-14	(10.9)	**-44**	(11.0)	-4	(8.1)	**52**	(10.0)	7	(7.3)
OECD	Netherlands	**-28**	(6.6)	**35**	(9.0)	-3	(6.8)	**-45**	(11.4)	10	(7.4)	**59**	(13.6)	-6	(7.0)
OECD	Poland	**-18**	(5.2)	-2	(5.0)	**-12**	(6.0)	**-35**	(6.8)	**-17**	(6.4)	**45**	(7.6)	0	(5.3)
OECD	Slovak Republic	**-24**	(7.3)	-3	(8.3)	-16	(8.5)	**-47**	(9.1)	-5	(7.7)	**52**	(9.6)	**-16**	(7.6)
OECD	Spain	-10	(6.3)	2	(6.2)	-12	(8.5)	**-51**	(11.0)	8	(7.9)	**34**	(7.8)	**-27**	(7.5)
OECD	United States	**-24**	(5.9)	**-26**	(7.3)	-7	(7.3)	**-18**	(8.7)	**29**	(6.6)	**85**	(10.0)	**-23**	(6.7)
OECD	OECD average-10	**-22**	(2.2)	**-6**	(2.3)	**-10**	(2.7)	**-36**	(3.2)	**6**	(2.4)	**54**	(3.3)	**-12**	(2.2)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n	n	n
Partners	B-S-J-G (China)	-9	(7.3)	**38**	(7.4)	-12	(7.4)	**-56**	(11.2)	3	(12.4)	**48**	(7.7)	-12	(10.0)
Partners	Lithuania	**-22**	(6.0)	**21**	(5.8)	-5	(6.1)	**-26**	(6.6)	-8	(5.8)	**74**	(8.3)	-3	(6.9)
Partners	Peru	n	n	n	n	n	n	n	n	n	n	n	n	n	n
Partners	Russia	**-19**	(6.9)	**18**	(6.2)	-5	(7.1)	**-34**	(6.7)	-9	(7.1)	**35**	(8.9)	4	(7.7)

		Score-point difference in financial literacy, after accounting for student characteristics													
		Students who receive money from an allowance or pocket money for regularly doing chores at home		Students who receive money from an allowance or pocket money, without having to do any chores		Students who receive money from working outside school hours (e.g. a holiday job, part-time work)		Students who receive money from working in a family business		Students who receive money from occasional informal jobs (e.g. baby-sitting or gardening)		Students who receive gifts of money from friends or relatives		Students who receive money from selling things (e.g. at local markets or on eBay)	
		Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.
OECD	Australia	**-22**	(2.7)	**-28**	(3.3)	**-16**	(3.3)	**-31**	(3.7)	-1	(3.2)	**40**	(4.9)	**-24**	(3.1)
OECD	Belgium (Flemish)	**-22**	(5.9)	1	(6.1)	-3	(6.1)	-11	(8.9)	3	(5.9)	**51**	(10.0)	-7	(6.4)
OECD	Canadian provinces	**-13**	(6.7)	**-17**	(7.1)	-5	(7.2)	-16	(11.6)	**16**	(6.3)	29	(14.9)	**-18**	(7.3)
OECD	Chile	**-23**	(8.0)	-8	(8.6)	-5	(11.5)	**-31**	(11.7)	9	(10.6)	16	(8.2)	-7	(8.2)
OECD	Italy	**-19**	(7.5)	**-17**	(7.0)	-19	(10.2)	**-43**	(9.6)	1	(6.9)	**44**	(10.7)	0	(7.3)
OECD	Netherlands	**-23**	(6.2)	**26**	(8.0)	-4	(6.4)	**-25**	(11.6)	-5	(7.4)	**40**	(13.1)	-5	(6.2)
OECD	Poland	**-16**	(4.8)	-7	(4.8)	-6	(5.9)	**-32**	(6.8)	**-21**	(6.2)	**32**	(7.0)	-8	(4.9)
OECD	Slovak Republic	**-24**	(6.7)	-9	(7.7)	**-16**	(8.0)	**-47**	(8.1)	-5	(7.6)	**36**	(9.2)	-11	(7.5)
OECD	Spain	-8	(6.2)	2	(6.3)	-8	(8.5)	**-49**	(9.7)	6	(8.4)	**26**	(7.3)	**-28**	(7.5)
OECD	United States	**-24**	(6.0)	**-20**	(6.5)	**-15**	(7.2)	-8	(8.6)	**20**	(6.6)	**68**	(9.6)	**-22**	(6.3)
OECD	OECD average-10	**-19**	(2.0)	**-8**	(2.1)	**-10**	(2.4)	**-29**	(3.0)	2	(2.3)	**38**	(3.1)	**-13**	(2.1)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n	n	n
Partners	B-S-J-G (China)	**-15**	(7.0)	**22**	(6.9)	-7	(7.0)	**-53**	(10.3)	9	(10.5)	**26**	(6.3)	-8	(8.9)
Partners	Lithuania	**-15**	(5.4)	**11**	(5.5)	0	(5.9)	**-20**	(6.5)	-4	(5.5)	**68**	(7.6)	-4	(6.0)
Partners	Peru	n	n	n	n	n	n	n	n	n	n	n	n	n	n
Partners	Russia	**-16**	(6.7)	**13**	(6.0)	-6	(6.8)	**-35**	(7.0)	-4	(6.2)	**33**	(9.1)	-1	(7.6)

1. Student characteristics include: gender, PISA index of economic, social and cultural status (ESCS), immigrant background, school location, holding a bank account, holding a prepaid debit card, receiving money from the other sources, discussing money matters with parents, total time per week spent learning in regular lessons, and total time per week spent studying after school (e.g. homework, additional instruction, private study).

Notes: Score differences are calculated considering only students for whom data on all student characteristics are available.

Values that are statistically significant are indicated in bold (see Annex A3).

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[Part 2/2]

Table IV.5.18 Student performance in financial literacy, by sources of money

Results based on students' self-reports

		Score-point difference in financial literacy, after accounting for student characteristics and performance in mathematics and reading													
		Students who receive money from an allowance or pocket money for regularly doing chores at home		Students who receive money from an allowance or pocket money, without having to do any chores		Students who receive money from working outside school hours (e.g. a holiday job, part-time work)		Students who receive money from working in a family business		Students who receive money from occasional informal jobs (e.g. baby-sitting or gardening)		Students who receive gifts of money from friends or relatives		Students who receive money from selling things (e.g. at local markets or on eBay)	
		Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.
OECD	Australia	**-5**	(2.4)	**-11**	(2.6)	-2	(2.3)	**-7**	(2.4)	0	(2.3)	**17**	(3.9)	**-5**	(2.6)
	Belgium (Flemish)	-7	(4.8)	6	(4.5)	3	(5.0)	-4	(6.4)	2	(4.5)	**16**	(7.4)	-2	(4.7)
	Canadian provinces	-6	(6.0)	-4	(5.3)	2	(6.3)	-2	(7.3)	8	(4.8)	9	(10.3)	-6	(5.7)
	Chile	-10	(6.2)	-1	(5.7)	-1	(8.1)	-2	(9.1)	0	(7.9)	8	(6.4)	-6	(5.7)
	Italy	-6	(5.8)	1	(5.3)	-7	(8.2)	**-21**	(6.9)	0	(6.0)	12	(7.8)	3	(6.4)
	Netherlands	-3	(5.3)	8	(4.7)	7	(5.2)	-1	(7.3)	-1	(4.9)	15	(8.4)	7	(4.8)
	Poland	-7	(4.2)	0	(3.7)	0	(4.3)	**-12**	(4.9)	-9	(5.0)	**17**	(5.2)	-3	(4.3)
	Slovak Republic	-6	(5.0)	-9	(6.0)	-8	(6.5)	**-24**	(7.5)	-4	(6.5)	**18**	(7.4)	-1	(6.4)
	Spain	-2	(4.8)	-2	(4.3)	3	(5.9)	**-23**	(7.4)	4	(5.8)	2	(5.2)	-8	(6.1)
	United States	**-10**	(4.3)	-7	(4.4)	-4	(5.4)	-3	(6.0)	3	(4.3)	**20**	(8.0)	-6	(4.5)
	OECD average-10	**-6**	(1.6)	-2	(1.5)	-1	(1.9)	**-10**	(2.1)	0	(1.7)	**13**	(2.3)	-3	(1.7)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	-6	(4.2)	**10**	(4.9)	7	(5.3)	**-16**	(6.0)	1	(6.7)	6	(5.0)	-4	(5.6)
	Lithuania	-5	(4.7)	1	(3.7)	4	(4.6)	-9	(4.5)	3	(4.5)	**40**	(6.2)	1	(4.3)
	Peru	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	Russia	-4	(6.2)	6	(5.4)	5	(4.9)	**-21**	(6.1)	-9	(5.4)	15	(8.6)	-4	(7.4)

		Score-point difference in financial literacy, after accounting for student characteristics and performance in mathematics, reading and science													
		Students who receive money from an allowance or pocket money for regularly doing chores at home		Students who receive money from an allowance or pocket money, without having to do any chores		Students who receive money from working outside school hours (e.g. a holiday job, part-time work)		Students who receive money from working in a family business		Students who receive money from occasional informal jobs (e.g. baby-sitting or gardening)		Students who receive gifts of money from friends or relatives		Students who receive money from selling things (e.g. at local markets or on eBay)	
		Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.
OECD	Australia	**-5**	(2.0)	**-7**	(2.3)	-1	(2.3)	**-6**	(2.4)	0	(2.1)	**15**	(3.2)	**-5**	(2.3)
	Belgium (Flemish)	-7	(4.6)	6	(4.6)	3	(4.9)	-3	(6.2)	3	(4.3)	**17**	(7.5)	-2	(4.4)
	Canadian provinces	-6	(5.6)	-5	(5.0)	3	(5.4)	-1	(6.4)	6	(4.8)	9	(9.9)	-6	(5.6)
	Chile	-9	(5.8)	-2	(5.6)	1	(8.3)	-1	(9.2)	0	(8.2)	7	(6.2)	-5	(5.4)
	Italy	-6	(5.3)	2	(5.0)	-5	(7.9)	**-19**	(6.6)	-1	(6.1)	9	(6.9)	2	(6.3)
	Netherlands	-3	(4.7)	7	(4.5)	9	(4.5)	0	(7.0)	-1	(4.5)	**15**	(7.7)	7	(4.6)
	Poland	-7	(4.0)	0	(3.5)	-1	(4.0)	**-12**	(4.9)	-8	(4.9)	**16**	(5.1)	-2	(4.5)
	Slovak Republic	-5	(4.9)	-9	(6.2)	-7	(6.4)	**-22**	(7.5)	-3	(6.5)	**19**	(7.1)	-1	(6.2)
	Spain	-2	(4.5)	-1	(4.1)	4	(6.0)	**-22**	(6.7)	4	(6.1)	2	(4.9)	-8	(5.8)
	United States	**-10**	(4.2)	-5	(4.1)	-4	(5.1)	-2	(6.1)	3	(4.3)	**20**	(7.5)	-6	(4.3)
	OECD average-10	**-6**	(1.5)	-1	(1.5)	0	(1.8)	**-9**	(2.1)	0	(1.7)	**13**	(2.2)	-3	(1.6)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	-6	(4.1)	**10**	(4.6)	7	(5.3)	**-14**	(5.9)	0	(6.6)	5	(4.8)	-3	(5.5)
	Lithuania	-4	(4.7)	2	(3.5)	3	(4.5)	-7	(4.5)	4	(4.4)	**40**	(6.0)	2	(4.2)
	Peru	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	Russia	-3	(6.2)	7	(5.2)	5	(5.0)	**-20**	(5.9)	-9	(5.3)	16	(8.8)	-4	(7.0)

1. Student characteristics include: gender, PISA index of economic, social and cultural status (ESCS), immigrant background, school location, holding a bank account, holding a prepaid debit card, receiving money from the other sources, discussing money matters with parents, total time per week spent learning in regular lessons, and total time per week spent studying after school (e.g. homework, additional instruction, private study).

Notes: Score differences are calculated considering only students for whom data on all student characteristics are available.

Values that are statistically significant are indicated in bold (see Annex A3).

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Table IV.5.19 Decomposition of gender differences in financial literacy performance

		Mean score						Decomposition of gender differences in financial literacy													
								Differences in financial literacy between boys and girls associated with different characteristics of boys and girls (endowments)						Differences in financial literacy between boys and girls associated with how different characteristics of boys and girls are related to their performance (returns)							
		Boys		Girls		Gender differences (boys – girls)		Performance in mathematics and reading		Experience with money matters		Total (performance in mathematics and reading + experience with money matters)		Performance in mathematics and reading		Experience with money matters		Intercept		Total (performance in mathematics and reading + experience with money matters + intercept)	
		Mean	S.E.	Mean	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.
OECD	Australia	509	(3.0)	521	(2.2)	**-12**	(3.6)	**-13**	(3.1)	**-3**	(0.6)	**-16**	(3.2)	**29**	(10.7)	-1	(6.5)	**-23**	(11.3)	4	(2.6)
	Belgium (Flemish)	549	(6.3)	545	(5.5)	5	(7.7)	5	(6.8)	**-4**	(1.7)	0	(6.7)	-7	(25.9)	-7	(18.3)	19	(31.6)	4	(5.4)
	Canadian provinces	539	(5.4)	547	(4.8)	-8	(5.6)	**-15**	(4.8)	**-4**	(1.8)	**-19**	(5.3)	**58**	(28.9)	3	(20.6)	-50	(36.7)	**11**	(4.3)
	Chile	441	(6.3)	436	(5.5)	6	(8.0)	2	(6.7)	-1	(1.1)	1	(7.0)	11	(25.7)	1	(12.9)	-7	(28.5)	4	(5.5)
	Italy	498	(4.6)	481	(4.6)	**17**	(6.0)	5	(4.4)	-1	(1.5)	4	(4.8)	28	(24.1)	2	(15.0)	-17	(28.7)	**13**	(4.0)
	Netherlands	524	(5.1)	529	(4.0)	-4	(6.0)	-6	(5.6)	-1	(1.2)	-7	(5.9)	27	(28.0)	24	(23.8)	-49	(33.3)	3	(5.2)
	Poland	486	(4.7)	498	(4.1)	**-12**	(5.0)	-4	(3.9)	**-5**	(1.4)	**-9**	(4.4)	17	(26.3)	-7	(10.5)	-14	(27.8)	-3	(4.0)
	Slovak Republic	445	(6.7)	455	(6.1)	-9	(7.2)	-1	(5.1)	**-7**	(2.0)	-8	(5.7)	20	(33.9)	16	(18.0)	-38	(36.2)	-1	(5.4)
	Spain	476	(4.7)	476	(4.8)	0	(5.3)	8	(4.1)	**-3**	(1.2)	5	(4.2)	10	(24.6)	9	(13.8)	-23	(27.2)	-4	(4.7)
	United States	500	(5.3)	497	(4.7)	4	(6.1)	-6	(4.9)	-2	(1.2)	-8	(5.1)	43	(22.6)	-5	(16.3)	-26	(27.4)	**11**	(4.4)
	OECD average-10	497	(1.7)	498	(1.5)	-1	(2.0)	-3	(1.6)	**-3**	(0.4)	**-6**	(1.7)	**24**	(8.1)	4	(5.1)	**-23**	(9.4)	**4**	(1.5)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	578	(7.0)	574	(8.0)	4	(6.2)	-4	(5.5)	-1	(0.7)	-5	(5.7)	-10	(22.4)	5	(11.7)	14	(25.5)	9	(4.6)
	Lithuania	452	(4.9)	474	(4.6)	**-22**	(6.4)	**-17**	(4.9)	**-5**	(1.7)	**-22**	(5.2)	21	(24.9)	-30	(19.9)	8	(31.1)	-1	(4.5)
	Peru	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	Russia	509	(5.2)	512	(4.6)	-3	(5.2)	-7	(3.8)	-4	(2.1)	**-10**	(5.0)	14	(38.7)	5	(18.8)	-12	(40.4)	7	(4.8)

Notes: Oaxaca-Blinder decomposition. Gender differences may differ slightly from those in Table IV.4.5 because results in this table are calculated considering only students for whom data on all the variables in the model are available.
Experience with money matters include: holding a bank account, holding a prepaid debit card, money sources, discussing money matters with parents, and discussing money matters with friends.
Values that are statistically significant are indicated in bold (see Annex A3).
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[Part 1/1]

Table IV.6.1 Students' expected spending behaviour

Results based on students' response to the question "If you don't have enough money to buy something you really want (e.g. an item of clothing. sports equipment) what are you most likely to do?"

		Percentage of students who would do the following if they did not have enough money to buy something they really wanted									
		Buy it with money that really should be used for something else		Try to borrow money from a family member		Try to borrow money from a friend		Save up to buy it		Not buy it	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	4.1	(0.2)	15.0	(0.5)	2.1	(0.2)	66.5	(0.6)	12.2	(0.4)
	Belgium (Flemish)	5.7	(0.7)	14.1	(1.1)	4.5	(0.6)	58.4	(1.4)	17.3	(1.1)
	Canadian provinces	3.8	(0.6)	13.8	(1.0)	1.7	(0.3)	63.2	(1.4)	17.5	(1.0)
	Chile	3.3	(0.5)	13.2	(0.9)	2.2	(0.5)	70.7	(1.2)	10.6	(0.8)
	Italy	4.1	(0.6)	22.2	(1.3)	2.5	(0.4)	58.6	(1.4)	12.6	(0.9)
	Netherlands	4.7	(0.6)	12.2	(0.9)	1.3	(0.3)	64.7	(1.3)	17.2	(1.2)
	Poland	6.1	(0.6)	22.3	(1.2)	3.6	(0.5)	58.9	(1.3)	9.2	(0.8)
	Slovak Republic	8.0	(0.7)	16.7	(1.1)	8.8	(1.0)	52.5	(1.7)	13.9	(0.9)
	Spain	4.9	(0.6)	17.6	(1.0)	2.9	(0.5)	65.6	(1.5)	9.0	(0.9)
	United States	3.7	(0.5)	11.6	(0.8)	1.2	(0.3)	69.2	(1.3)	14.3	(1.1)
	OECD average-10	4.8	(0.2)	15.9	(0.3)	3.1	(0.2)	62.8	(0.4)	13.4	(0.3)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	6.0	(0.6)	11.5	(0.8)	4.2	(0.6)	68.3	(1.2)	9.9	(0.8)
	Lithuania	8.0	(0.8)	13.3	(1.0)	4.9	(0.7)	60.8	(1.2)	13.0	(0.9)
	Peru	n	n	n	n	n	n	n	n	n	n
	Russia	5.0	(0.7)	13.4	(1.1)	4.1	(0.6)	69.3	(1.4)	8.2	(0.7)

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[Part 1/2]

Table IV.6.2 Students' expected spending behaviour, by student characteristics

Results based on students' response to the question "If you don't have enough money to buy something you really want (e.g. an item of clothing, sports equipment) what are you most likely to do?"

		Try to borrow money from a family member													
				PISA index of economic, social and cultural status (ESCS)											
		Boys		Second quarter of ESCS		Third quarter of ESCS		Top quarter of ESCS		Index of achievement motivation		Students who discuss money matters with parents at least sometimes		Intercept	
		Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.
OECD	Australia	0.83	(0.11)	1.22	(0.19)	**1.42**	(0.24)	**1.53**	(0.32)	1.05	(0.08)	**1.59**	(0.23)	**2.23**	(0.40)
	Belgium (Flemish)	**2.03**	(0.60)	1.46	(0.63)	2.33	(1.29)	1.65	(0.85)	0.77	(0.13)	**3.34**	(1.22)	0.42	(0.24)
	Canadian provinces	0.73	(0.23)	1.96	(1.00)	1.05	(0.43)	1.99	(0.91)	0.91	(0.15)	0.78	(0.34)	**4.03**	(1.98)
	Chile	0.71	(0.25)	2.29	(1.64)	1.78	(0.83)	2.46	(1.18)	0.99	(0.19)	**2.78**	(1.29)	1.34	(0.94)
	Italy	**0.41**	(0.14)	0.96	(0.40)	1.64	(0.67)	1.40	(0.59)	0.73	(0.19)	**3.65**	(1.38)	**2.69**	(1.23)
	Netherlands	1.12	(0.34)	0.95	(0.43)	0.98	(0.39)	0.88	(0.45)	1.32	(0.25)	1.57	(0.66)	2.01	(1.00)
	Poland	1.22	(0.28)	1.10	(0.35)	0.99	(0.31)	0.95	(0.29)	1.03	(0.14)	**1.89**	(0.56)	2.00	(0.72)
	Slovak Republic	1.08	(0.23)	0.81	(0.28)	1.35	(0.44)	1.62	(0.62)	0.93	(0.16)	1.18	(0.34)	1.62	(0.60)
	Spain	0.71	(0.24)	0.84	(0.32)	**2.16**	(0.77)	**2.79**	(1.27)	1.01	(0.18)	0.64	(0.26)	**4.52**	(1.83)
	United States	0.67	(0.22)	1.37	(0.73)	1.99	(0.91)	1.40	(0.76)	1.15	(0.25)	1.05	(0.49)	2.52	(1.83)
	OECD average-10	0.95	(0.09)	1.30	(0.23)	**1.57**	(0.22)	**1.67**	(0.25)	0.99	(0.06)	**1.85**	(0.25)	**2.34**	(0.39)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	1.34	(0.37)	0.96	(0.34)	1.40	(0.49)	1.44	(0.54)	1.04	(0.19)	**2.00**	(0.71)	0.80	(0.32)
	Lithuania	0.65	(0.15)	1.01	(0.34)	1.27	(0.49)	1.60	(0.61)	1.03	(0.13)	1.23	(0.41)	1.71	(0.74)
	Peru	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	Russia	1.55	(0.61)	0.73	(0.44)	0.75	(0.36)	0.68	(0.38)	1.09	(0.22)	1.58	(0.67)	1.92	(1.54)

		Try to borrow money from a friend													
				PISA index of economic, social and cultural status (ESCS)											
		Boys		Second quarter of ESCS		Third quarter of ESCS		Top quarter of ESCS		Index of achievement motivation		Students who discuss money matters with parents at least sometimes		Intercept	
		Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.
OECD	Australia	**1.86**	(0.38)	0.83	(0.22)	1.17	(0.33)	0.95	(0.32)	1.00	(0.14)	0.91	(0.18)	**0.36**	(0.09)
	Belgium (Flemish)	**4.09**	(1.67)	0.83	(0.42)	3.08	(1.92)	1.87	(1.29)	0.58	(0.17)	2.38	(1.23)	**0.10**	(0.07)
	Canadian provinces	3.24	(1.97)	1.46	(1.13)	1.62	(1.23)	2.20	(1.88)	**0.58**	(0.14)	0.35	(0.24)	0.34	(0.30)
	Chile	0.86	(0.40)	1.13	(1.28)	0.56	(0.41)	1.05	(0.85)	0.83	(0.21)	1.37	(0.80)	0.61	(0.61)
	Italy	1.17	(0.75)	0.82	(0.54)	0.31	(0.24)	**0.22**	(0.13)	0.56	(0.29)	1.24	(0.74)	0.77	(0.49)
	Netherlands	c	c	c	c	c	c	c	c	c	c	c	c	c	c
	Poland	**2.49**	(0.87)	0.73	(0.30)	0.49	(0.23)	0.89	(0.41)	1.15	(0.22)	0.74	(0.29)	0.56	(0.28)
	Slovak Republic	**2.01**	(0.62)	0.87	(0.38)	1.29	(0.58)	2.16	(1.14)	0.91	(0.16)	0.77	(0.28)	0.73	(0.28)
	Spain	1.41	(0.66)	1.21	(0.80)	0.92	(0.56)	1.03	(0.87)	1.17	(0.29)	0.52	(0.25)	0.86	(0.41)
	United States	c	c	c	c	c	c	c	c	c	c	c	c	c	c
	OECD average-10	**2.14**	(0.38)	0.98	(0.26)	1.18	(0.31)	1.30	(0.36)	0.85	(0.07)	1.03	(0.22)	**0.54**	(0.13)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	1.70	(0.78)	1.03	(0.60)	1.40	(0.76)	0.82	(0.41)	0.93	(0.20)	0.89	(0.47)	0.50	(0.23)
	Lithuania	1.04	(0.38)	1.13	(0.55)	0.74	(0.43)	1.91	(0.92)	1.02	(0.15)	**0.46**	(0.17)	0.94	(0.44)
	Peru	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	Russia	**5.03**	(2.85)	0.77	(0.71)	0.82	(0.70)	0.31	(0.27)	1.06	(0.35)	0.73	(0.41)	0.50	(0.48)

		Save up to buy it													
				PISA index of economic, social and cultural status (ESCS)											
		Boys		Second quarter of ESCS		Third quarter of ESCS		Top quarter of ESCS		Index of achievement motivation		Students who discuss money matters with parents at least sometimes		Intercept	
		Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.
OECD	Australia	1.01	(0.12)	1.27	(0.19)	**1.43**	(0.23)	**1.58**	(0.30)	**1.17**	(0.08)	**2.37**	(0.31)	**6.11**	(0.96)
	Belgium (Flemish)	**2.57**	(0.63)	1.11	(0.39)	2.18	(0.88)	1.83	(0.92)	0.83	(0.13)	**2.33**	(0.65)	**2.36**	(0.93)
	Canadian provinces	1.04	(0.28)	1.93	(0.85)	1.14	(0.46)	1.60	(0.71)	0.93	(0.14)	1.04	(0.45)	**12.47**	(6.89)
	Chile	0.65	(0.20)	2.19	(1.54)	1.84	(0.83)	1.41	(0.68)	1.22	(0.22)	**3.27**	(1.30)	**7.57**	(5.21)
	Italy	**0.52**	(0.16)	0.87	(0.35)	1.05	(0.39)	0.84	(0.32)	0.76	(0.19)	**4.20**	(1.56)	**7.75**	(3.33)
	Netherlands	1.31	(0.34)	0.92	(0.36)	0.91	(0.33)	1.14	(0.56)	1.22	(0.21)	**2.13**	(0.78)	**7.14**	(3.50)
	Poland	1.02	(0.23)	1.11	(0.33)	1.00	(0.32)	1.11	(0.32)	1.03	(0.14)	**1.91**	(0.53)	**5.53**	(1.94)
	Slovak Republic	1.11	(0.25)	0.87	(0.26)	1.49	(0.46)	**2.48**	(0.96)	1.11	(0.18)	1.60	(0.40)	**3.73**	(1.08)
	Spain	0.86	(0.28)	0.97	(0.33)	1.48	(0.53)	1.91	(0.81)	1.18	(0.18)	0.81	(0.31)	**15.83**	(6.13)
	United States	1.08	(0.34)	1.14	(0.48)	1.94	(0.78)	1.60	(0.80)	0.98	(0.19)	1.65	(0.64)	**9.23**	(6.24)
	OECD average-10	1.12	(0.10)	1.24	(0.20)	**1.45**	(0.18)	**1.55**	(0.22)	1.04	(0.05)	**2.13**	(0.25)	**7.77**	(1.35)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	0.74	(0.17)	0.60	(0.17)	0.95	(0.30)	0.81	(0.24)	1.02	(0.13)	**2.22**	(0.51)	**8.97**	(2.92)
	Lithuania	**0.63**	(0.12)	0.99	(0.26)	1.23	(0.43)	**1.92**	(0.60)	1.05	(0.11)	**2.64**	(0.75)	**3.77**	(1.31)
	Peru	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	Russia	1.47	(0.45)	0.61	(0.36)	0.73	(0.38)	0.65	(0.32)	1.08	(0.21)	**2.28**	(0.85)	**8.11**	(5.72)

Notes: Multinomial logistic regression model: likelihood of choosing a spending option with respect to choosing «Buy it with money that really should be used for something else» is regressed on all variables in the table. Reference categories for categorical variables are: girls, students in the bottom quarter of ESCS, and students who never discuss money matters with parents.
Values that are statistically significant are indicated in bold (see Annex A3).

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[Part 2/2]

Table IV.6.2 Students' expected spending behaviour, by student characteristics

Results based on students' response to the question "If you don't have enough money to buy something you really want (e.g. an item of clothing, sports equipment) what are you most likely to do?"

		Not buy it															
				PISA index of economic, social and cultural status (ESCS)													
		Boys		Second quarter of ESCS		Third quarter of ESCS		Top quarter of ESCS		Index of achievement motivation		Students who discuss money matters with parents at least sometimes		Intercept		Pseudo R2	
		Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Pseudo R2	S.E.
OECD	Australia	**0.71**	(0.09)	1.08	(0.16)	1.34	(0.24)	1.42	(0.26)	**1.19**	(0.10)	1.28	(0.21)	**2.38**	(0.41)	0.012	(0.002)
	Belgium (Flemish)	**2.01**	(0.57)	0.82	(0.34)	2.22	(1.07)	1.75	(0.96)	0.84	(0.14)	**1.86**	(0.54)	1.01	(0.42)	0.017	(0.007)
	Canadian provinces	0.89	(0.25)	**2.42**	(0.98)	1.62	(0.74)	1.84	(0.90)	0.98	(0.15)	0.61	(0.32)	**4.78**	(2.41)	0.013	(0.005)
	Chile	0.50	(0.19)	2.79	(1.85)	1.75	(0.82)	1.67	(0.79)	1.30	(0.26)	1.88	(1.05)	1.74	(1.23)	0.022	(0.007)
	Italy	0.67	(0.21)	0.53	(0.27)	0.70	(0.30)	0.63	(0.28)	0.72	(0.19)	**3.84**	(1.54)	2.00	(1.04)	0.026	(0.010)
	Netherlands	0.96	(0.32)	0.96	(0.46)	0.88	(0.38)	1.16	(0.69)	1.27	(0.27)	1.33	(0.47)	**3.26**	(1.61)	0.011	(0.007)
	Poland	0.89	(0.23)	1.06	(0.38)	0.85	(0.31)	0.57	(0.22)	0.97	(0.16)	1.61	(0.53)	1.26	(0.52)	0.011	(0.005)
	Slovak Republic	1.28	(0.32)	0.76	(0.27)	1.21	(0.42)	**3.66**	(1.51)	0.96	(0.17)	0.96	(0.27)	1.26	(0.41)	0.017	(0.006)
	Spain	1.00	(0.41)	1.17	(0.53)	1.33	(0.56)	1.53	(0.75)	**1.47**	(0.23)	0.56	(0.26)	**2.87**	(1.46)	0.015	(0.006)
	United States	0.63	(0.20)	0.88	(0.38)	2.00	(0.81)	1.74	(0.84)	0.87	(0.18)	0.80	(0.36)	**5.02**	(3.17)	0.019	(0.008)
	OECD average-10	0.95	(0.10)	1.25	(0.23)	**1.39**	(0.20)	**1.60**	(0.26)	1.06	(0.06)	**1.47**	(0.22)	**2.56**	(0.49)	0.016	(0.002)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	0.90	(0.23)	**0.43**	(0.14)	0.80	(0.32)	0.92	(0.35)	1.09	(0.18)	1.47	(0.49)	1.71	(0.63)	0.019	(0.008)
	Lithuania	1.12	(0.29)	0.66	(0.21)	1.42	(0.59)	1.56	(0.53)	0.92	(0.11)	1.33	(0.43)	1.21	(0.51)	0.024	(0.006)
	Peru	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	Russia	1.54	(0.69)	0.50	(0.37)	0.62	(0.40)	0.88	(0.55)	0.97	(0.27)	2.43	(1.70)	0.88	(0.73)	0.019	(0.010)

Notes: Multinomial logistic regression model: likelihood of choosing a spending option with respect to choosing «Buy it with money that really should be used for something else» is regressed on all variables in the table. Reference categories for categorical variables are: girls, students in the bottom quarter of ESCS, and students who never discuss money matters with parents.
Values that are statistically significant are indicated in bold (see Annex A3).
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[Part 1/2]

Table IV.6.3 Students' expected spending behaviour, by performance in financial literacy

Results based on students' response to the question "If you don't have enough money to buy something you really want (e.g. an item of clothing, sports equipment) what are you most likely to do?"

		Increased likelihood of students at each proficiency level, compared with students at or below Level 1, to report the following options instead of reporting "Buy it with money that really should be used for something else"																	
		Before accounting for student characteristics[1]																	
		Try to borrow money from a family member				Try to borrow money from a friend				Save up to buy it				Not buy it				Pseudo R2	
		Levels 2 or 3 (from 400.33 to less than 549.86 score points)		Levels 4 or 5 (from 549.86 score points)		Levels 2 or 3 (from 400.33 to less than 549.86 score points)		Levels 4 or 5 (from 549.86 score points)		Levels 2 or 3 (from 400.33 to less than 549.86 score points)		Levels 4 or 5 (from 549.86 score points)		Levels 2 or 3 (from 400.33 to less than 549.86 score points)		Levels 4 or 5 (from 549.86 score points)			
		Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Pseudo R2	S.E.
OECD	Australia	**2.32**	(0.33)	**3.84**	(0.86)	**0.51**	(0.13)	0.65	(0.21)	**3.17**	(0.42)	**6.46**	(1.25)	**3.41**	(0.58)	**7.68**	(1.81)	0.020	(0.002)
	Belgium (Flemish)	2.12	(0.98)	**2.95**	(1.38)	2.98	(2.06)	**4.58**	(2.95)	2.64	(1.42)	**6.24**	(2.98)	2.32	(1.30)	**4.08**	(2.37)	0.013	(0.006)
	Canadian provinces	0.94	(0.49)	1.98	(1.21)	0.21	(0.22)	0.27	(0.23)	1.48	(0.73)	**3.92**	(2.22)	1.02	(0.52)	2.71	(1.64)	0.015	(0.007)
	Chile	**4.13**	(1.88)	5.14	(5.60)	1.16	(0.95)	2.94	(4.00)	**4.61**	(2.14)	5.83	(6.78)	**5.02**	(2.35)	5.56	(8.14)	0.014	(0.005)
	Italy	**2.34**	(1.01)	3.36	(2.42)	0.44	(0.34)	0.19	(0.22)	2.01	(0.85)	2.75	(1.79)	1.44	(0.77)	1.42	(1.10)	0.014	(0.006)
	Netherlands	1.22	(0.55)	2.17	(1.20)	c	c	c	c	1.98	(0.90)	**4.35**	(2.53)	2.17	(1.00)	**3.79**	(2.24)	0.012	(0.006)
	Poland	1.33	(0.41)	**2.43**	(0.98)	**0.34**	(0.12)	**0.22**	(0.14)	**2.30**	(0.64)	**4.74**	(1.79)	1.56	(0.54)	**2.49**	(1.14)	0.023	(0.006)
	Slovak Republic	**1.85**	(0.57)	2.29	(1.24)	0.73	(0.24)	0.59	(0.45)	**3.46**	(1.01)	**7.45**	(3.89)	**2.91**	(0.93)	**5.08**	(2.98)	0.035	(0.008)
	Spain	**4.22**	(1.65)	**6.74**	(5.39)	0.86	(0.55)	0.78	(0.97)	**5.33**	(1.83)	**11.12**	(8.19)	**2.83**	(1.11)	3.66	(2.95)	0.032	(0.007)
	United States	1.43	(0.66)	1.41	(0.90)	c	c	c	c	**3.04**	(1.31)	**3.71**	(2.31)	2.50	(1.24)	**3.91**	(2.38)	0.014	(0.006)
	OECD average-10	**2.19**	(0.31)	**3.23**	(0.87)	0.90	(0.30)	1.28	(0.64)	**3.00**	(0.39)	**5.66**	(1.27)	**2.52**	(0.37)	**4.04**	(1.04)	0.019	(0.002)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	1.07	(0.58)	2.06	(1.11)	0.63	(0.47)	1.15	(0.91)	1.13	(0.43)	1.76	(0.64)	0.65	(0.39)	0.98	(0.49)	0.005	(0.003)
	Lithuania	1.68	(0.58)	5.10	(5.10)	**0.19**	(0.08)	0.26	(0.29)	**3.38**	(0.97)	**15.84**	(15.99)	1.61	(0.52)	5.33	(4.96)	0.051	(0.009)
	Peru	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	Russia	2.00	(1.22)	5.65	(5.33)	0.54	(0.36)	1.66	(1.78)	2.48	(1.23)	**10.35**	(9.02)	1.42	(0.91)	5.34	(5.62)	0.020	(0.008)

		Increased likelihood of students at each proficiency level, compared with students at or below Level 1, to report the following options instead of reporting "Buy it with money that really should be used for something else"																	
		After accounting for student characteristics																	
		Try to borrow money from a family member				Try to borrow money from a friend				Save up to buy it				Not buy it				Pseudo R2	
		Levels 2 or 3 (from 400.33 to less than 549.86 score points)		Levels 4 or 5 (from 549.86 score points)		Levels 2 or 3 (from 400.33 to less than 549.86 score points)		Levels 4 or 5 (from 549.86 score points)		Levels 2 or 3 (from 400.33 to less than 549.86 score points)		Levels 4 or 5 (from 549.86 score points)		Levels 2 or 3 (from 400.33 to less than 549.86 score points)		Levels 4 or 5 (from 549.86 score points)			
		Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Pseudo R2	S.E.
OECD	Australia	**2.23**	(0.33)	**3.67**	(0.89)	**0.51**	(0.14)	0.62	(0.21)	**3.03**	(0.44)	**6.00**	(1.28)	**3.33**	(0.60)	**7.67**	(1.92)	0.028	(0.003)
	Belgium (Flemish)	1.83	(0.95)	2.44	(1.30)	3.13	(3.78)	3.97	(4.89)	2.49	(1.47)	**5.64**	(3.17)	2.13	(1.35)	3.60	(2.40)	0.025	(0.008)
	Canadian provinces	0.92	(0.50)	2.01	(1.37)	0.25	(0.29)	0.35	(0.36)	1.58	(0.80)	**4.50**	(2.91)	1.02	(0.55)	2.84	(1.99)	0.025	(0.008)
	Chile	**3.30**	(1.51)	3.49	(4.09)	1.12	(0.99)	2.91	(4.42)	**3.94**	(1.83)	4.48	(5.41)	**4.43**	(2.21)	4.54	(7.25)	0.030	(0.008)
	Italy	1.99	(0.91)	3.53	(3.02)	0.48	(0.41)	0.29	(0.37)	1.73	(0.77)	2.92	(2.26)	1.26	(0.68)	1.57	(1.39)	0.034	(0.010)
	Netherlands	1.18	(0.55)	2.10	(1.28)	c	c	c	c	1.92	(0.88)	**4.17**	(2.64)	2.16	(1.06)	3.73	(2.52)	0.020	(0.009)
	Poland	1.32	(0.44)	**2.49**	(1.15)	**0.36**	(0.14)	**0.22**	(0.15)	**2.25**	(0.67)	**4.83**	(2.11)	1.63	(0.58)	**3.03**	(1.48)	0.030	(0.008)
	Slovak Republic	1.90	(0.63)	2.35	(1.31)	0.77	(0.26)	0.61	(0.47)	**3.28**	(0.96)	**6.53**	(3.40)	**2.78**	(0.95)	**4.65**	(2.77)	0.041	(0.009)
	Spain	**3.66**	(1.60)	5.27	(4.88)	0.84	(0.60)	0.69	(1.02)	**4.97**	(1.89)	**9.78**	(8.03)	**2.54**	(1.11)	2.82	(2.56)	0.042	(0.010)
	United States	1.32	(0.64)	1.29	(0.84)	c	c	c	c	**2.94**	(1.36)	**3.68**	(2.37)	2.40	(1.26)	**4.02**	(2.56)	0.029	(0.009)
	OECD average-10	**1.97**	(0.29)	**2.87**	(0.77)	0.93	(0.50)	1.21	(0.84)	**2.81**	(0.38)	**5.25**	(1.21)	**2.37**	(0.36)	**3.85**	(0.99)	0.030	(0.003)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	1.06	(0.60)	1.71	(0.97)	0.65	(0.50)	1.27	(1.08)	1.15	(0.45)	1.68	(0.65)	0.65	(0.39)	0.89	(0.47)	0.020	(0.008)
	Lithuania	1.54	(0.53)	4.25	(4.46)	**0.20**	(0.08)	0.25	(0.28)	**3.15**	(0.93)	**13.95**	(14.86)	1.58	(0.52)	4.94	(4.86)	0.063	(0.010)
	Peru	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	Russia	1.85	(1.19)	5.14	(5.18)	0.59	(0.41)	1.92	(2.26)	2.36	(1.26)	**9.69**	(9.14)	1.27	(0.87)	4.53	(5.08)	0.033	(0.012)

1. Student characteristics include gender, socio-economic status, achievement motivation, and discussing money matters with parents at least sometimes.
Note: Values that are statistically significant are indicated in bold (see Annex A3).
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Table IV.6.3 Students' expected spending behaviour, by performance in financial literacy

Results based on students' response to the question "If you don't have enough money to buy something you really want (e.g. an item of clothing, sports equipment) what are you most likely to do?"

		Increased likelihood of students at each proficiency level, compared with students at or below Level 1, to report the following options instead of reporting "Buy it with money that really should be used for something else"																	
		After accounting for student characteristics[1] and performance in mathematics and reading																	
		Try to borrow money from a family member				Try to borrow money from a friend				Save up to buy it				Not buy it				Pseudo R2	
		Levels 2 or 3 (from 400.33 to less than 549.86 score points)		Levels 4 or 5 (from 549.86 score points)		Levels 2 or 3 (from 400.33 to less than 549.86 score points)		Levels 4 or 5 (from 549.86 score points)		Levels 2 or 3 (from 400.33 to less than 549.86 score points)		Levels 4 or 5 (from 549.86 score points)		Levels 2 or 3 (from 400.33 to less than 549.86 score points)		Levels 4 or 5 (from 549.86 score points)			
		Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Pseudo R2	S.E.
OECD	Australia	**1.58**	(0.34)	1.91	(0.79)	0.68	(0.20)	1.08	(0.50)	**2.22**	(0.43)	**3.28**	(1.13)	**2.09**	(0.54)	**3.09**	(1.39)	0.032	(0.003)
	Belgium (Flemish)	1.90	(1.27)	2.65	(2.42)	3.12	(4.23)	4.20	(7.57)	1.84	(1.26)	3.20	(2.87)	1.67	(1.25)	2.26	(2.27)	0.031	(0.010)
	Canadian provinces	0.68	(0.46)	1.18	(1.45)	0.26	(0.40)	0.37	(0.85)	1.32	(0.81)	3.31	(3.56)	0.73	(0.47)	1.50	(1.69)	0.030	(0.010)
	Chile	2.15	(1.49)	1.48	(2.48)	1.40	(1.79)	4.14	(9.07)	2.76	(1.92)	2.18	(3.60)	2.96	(1.99)	2.13	(5.28)	0.034	(0.010)
	Italy	1.49	(0.93)	2.17	(2.86)	0.45	(0.53)	0.24	(0.41)	1.26	(0.75)	1.64	(1.79)	0.97	(0.67)	1.06	(1.42)	0.037	(0.011)
	Netherlands	0.92	(0.56)	1.26	(1.37)	c	c	c	c	1.35	(0.80)	2.05	(2.25)	1.48	(0.87)	1.77	(2.00)	0.024	(0.010)
	Poland	1.06	(0.48)	1.57	(1.09)	0.38	(0.21)	0.24	(0.28)	1.78	(0.69)	2.99	(1.90)	1.25	(0.51)	1.80	(1.25)	0.034	(0.008)
	Slovak Republic	1.60	(0.70)	1.69	(1.33)	0.91	(0.38)	0.87	(0.85)	**2.71**	(1.00)	**4.62**	(3.01)	**2.35**	(1.00)	3.44	(2.79)	0.046	(0.011)
	Spain	2.40	(1.27)	2.36	(2.59)	0.70	(0.67)	0.46	(0.93)	**3.46**	(1.78)	4.85	(5.05)	2.46	(1.51)	2.70	(3.37)	0.047	(0.011)
	United States	2.08	(1.70)	3.49	(5.38)	c	c	c	c	3.07	(2.12)	4.34	(5.74)	2.32	(1.75)	3.92	(4.71)	0.034	(0.011)
	OECD average-10	**1.59**	(0.32)	1.98	(0.80)	0.99	(0.59)	1.45	(1.49)	**2.18**	(0.41)	**3.25**	(1.07)	**1.83**	(0.37)	**2.37**	(0.93)	0.035	(0.003)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	0.98	(0.64)	1.52	(1.44)	0.66	(0.60)	1.40	(1.63)	0.96	(0.39)	1.17	(0.65)	0.56	(0.35)	0.73	(0.61)	0.022	(0.009)
	Lithuania	1.40	(0.67)	3.54	(4.77)	**0.20**	(0.11)	0.26	(0.33)	**2.50**	(1.04)	9.18	(12.76)	1.25	(0.60)	3.14	(3.92)	0.066	(0.011)
	Peru	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	Russia	1.40	(1.00)	3.16	(4.76)	0.71	(0.61)	3.22	(6.13)	2.10	(1.38)	8.04	(11.45)	1.09	(0.86)	3.60	(5.86)	0.039	(0.014)

1. Student characteristics include gender, socio-economic status, achievement motivation, and discussing money matters with parents at least sometimes.
Note: Values that are statistically significant are indicated in bold (see Annex A3).
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Table IV.6.4 Students' saving behaviour

Results based on students' self-reports

		Percentage of students who reported that this statement about saving money best applies to them											
		I save the same amount of money each week or month		I save some money each week or month, but the amount varies		I save money only when I have some to spare		I save money only when I want to buy something		I do not save any money		I have no money so I do not save	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	24.6	(0.5)	32.3	(0.6)	16.0	(0.5)	17.3	(0.4)	3.9	(0.2)	5.9	(0.3)
	Belgium (Flemish)	22.0	(1.3)	31.1	(1.7)	15.1	(0.9)	21.3	(1.1)	7.9	(1.0)	2.7	(0.5)
	Canadian provinces	19.5	(1.2)	32.8	(1.1)	16.7	(1.0)	20.1	(1.0)	4.1	(0.6)	6.8	(0.7)
	Chile	22.3	(1.2)	22.9	(1.3)	22.3	(1.3)	23.4	(1.2)	4.4	(0.5)	4.8	(0.7)
	Italy	12.0	(0.9)	31.3	(1.1)	21.5	(1.2)	26.8	(1.2)	4.6	(0.6)	3.8	(0.5)
	Netherlands	23.7	(1.0)	34.8	(1.4)	12.5	(0.9)	20.4	(1.2)	7.2	(0.7)	1.3	(0.3)
	Poland	18.3	(1.0)	19.6	(1.0)	28.4	(1.1)	23.0	(1.1)	7.9	(0.7)	2.8	(0.4)
	Slovak Republic	15.7	(0.9)	23.5	(1.2)	25.9	(1.2)	24.8	(1.2)	7.2	(0.7)	2.9	(0.4)
	Spain	18.4	(1.1)	31.4	(1.2)	23.0	(1.0)	19.4	(1.0)	4.4	(0.6)	3.3	(0.5)
	United States	17.7	(1.1)	31.8	(1.3)	19.4	(1.2)	19.8	(1.2)	4.6	(0.6)	6.7	(0.7)
	OECD average-10	19.4	(0.3)	29.1	(0.4)	20.1	(0.3)	21.6	(0.3)	5.6	(0.2)	4.1	(0.2)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	14.8	(1.0)	43.3	(1.2)	18.9	(1.0)	13.6	(0.9)	4.7	(0.5)	4.7	(0.6)
	Lithuania	12.4	(0.9)	29.9	(1.3)	22.9	(1.0)	26.0	(1.2)	6.5	(0.7)	2.3	(0.4)
	Peru	n	n	n	n	n	n	n	n	n	n	n	n
	Russia	16.2	(1.2)	19.7	(1.4)	20.5	(1.4)	29.5	(1.5)	10.4	(1.1)	3.7	(0.6)

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[Part 1/2]

Table IV.6.5 Students' saving behaviour, by student characteristics

Results based on students' self-report about which statement about saving money best applies to them

		I save the same amount of money each week or month													
				PISA index of economic, social and cultural status (ESCS)											
		Boys		Second quarter of ESCS		Third quarter of ESCS		Top quarter of ESCS		Index of achievement motivation		Students who discuss money matters with parents at least sometimes		Intercept	
		Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.
OECD	Australia	**1.51**	(0.17)	**1.50**	(0.25)	1.34	(0.22)	**1.39**	(0.23)	**1.27**	(0.10)	**2.38**	(0.31)	**1.91**	(0.31)
	Belgium (Flemish)	**2.23**	(0.66)	0.97	(0.37)	1.19	(0.48)	0.94	(0.33)	1.23	(0.25)	1.41	(0.46)	1.75	(0.91)
	Canadian provinces	**2.94**	(0.93)	1.37	(0.60)	1.23	(0.53)	2.18	(0.89)	1.18	(0.20)	**2.04**	(0.71)	1.09	(0.47)
	Chile	1.67	(0.50)	0.51	(0.25)	0.76	(0.34)	0.51	(0.21)	**1.98**	(0.28)	1.71	(0.82)	**3.59**	(1.86)
	Italy	1.54	(0.53)	1.14	(0.63)	1.07	(0.50)	1.37	(0.54)	1.05	(0.23)	**3.04**	(1.19)	0.79	(0.41)
	Netherlands	1.38	(0.32)	1.67	(0.55)	**3.12**	(1.39)	**3.30**	(1.34)	1.19	(0.25)	1.52	(0.51)	1.12	(0.49)
	Poland	**1.77**	(0.38)	0.74	(0.29)	0.89	(0.24)	1.30	(0.40)	**1.65**	(0.25)	0.64	(0.19)	**3.04**	(1.14)
	Slovak Republic	1.31	(0.36)	1.19	(0.54)	1.09	(0.44)	1.73	(0.73)	1.34	(0.20)	1.09	(0.29)	1.70	(0.56)
	Spain	1.52	(0.43)	0.49	(0.23)	0.70	(0.35)	0.67	(0.30)	1.04	(0.17)	1.61	(0.54)	**3.43**	(1.60)
	United States	**2.32**	(0.84)	0.87	(0.43)	1.28	(0.66)	1.65	(0.73)	1.35	(0.24)	0.82	(0.44)	2.17	(1.43)
	OECD average-10	**1.82**	(0.18)	1.04	(0.14)	1.27	(0.19)	**1.50**	(0.21)	**1.33**	(0.07)	**1.63**	(0.19)	**2.06**	(0.33)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	0.82	(0.29)	1.86	(0.87)	0.65	(0.22)	0.79	(0.30)	1.00	(0.20)	**2.00**	(0.65)	2.42	(1.30)
	Lithuania	**2.47**	(0.67)	1.07	(0.48)	1.66	(0.69)	2.18	(0.91)	0.97	(0.13)	1.30	(0.54)	0.66	(0.31)
	Peru	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	Russia	**2.55**	(0.59)	1.56	(0.63)	1.95	(0.95)	0.96	(0.44)	1.27	(0.21)	1.21	(0.41)	0.64	(0.34)

		I save some money each week or month, but the amount varies													
				PISA index of economic, social and cultural status (ESCS)											
		Boys		Second quarter of ESCS		Third quarter of ESCS		Top quarter of ESCS		Index of achievement motivation		Students who discuss money matters with parents at least sometimes		Intercept	
		Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.
OECD	Australia	1.12	(0.13)	**1.74**	(0.28)	**1.80**	(0.28)	**2.14**	(0.34)	**1.32**	(0.10)	**3.10**	(0.40)	**1.85**	(0.31)
	Belgium (Flemish)	1.22	(0.29)	1.09	(0.40)	1.37	(0.53)	1.33	(0.44)	1.25	(0.26)	**2.42**	(0.90)	1.86	(0.80)
	Canadian provinces	1.80	(0.60)	1.29	(0.54)	1.27	(0.49)	**2.76**	(1.19)	1.10	(0.18)	**2.02**	(0.72)	2.41	(1.09)
	Chile	0.91	(0.27)	0.85	(0.40)	1.52	(0.76)	1.17	(0.49)	**1.57**	(0.16)	1.35	(0.58)	**3.96**	(2.03)
	Italy	1.22	(0.41)	1.84	(0.73)	1.00	(0.41)	1.51	(0.59)	1.11	(0.21)	**2.98**	(1.04)	2.15	(1.02)
	Netherlands	0.99	(0.22)	1.12	(0.41)	**2.24**	(0.85)	**2.55**	(0.81)	1.11	(0.22)	**3.04**	(0.95)	1.35	(0.49)
	Poland	1.12	(0.24)	1.42	(0.43)	1.38	(0.34)	**2.25**	(0.65)	1.21	(0.18)	0.93	(0.28)	1.86	(0.67)
	Slovak Republic	1.03	(0.29)	1.15	(0.41)	1.62	(0.53)	1.86	(0.77)	**1.38**	(0.21)	**2.11**	(0.67)	1.56	(0.48)
	Spain	1.42	(0.40)	0.72	(0.34)	1.07	(0.47)	1.17	(0.52)	1.04	(0.17)	1.71	(0.52)	**4.12**	(1.54)
	United States	1.58	(0.53)	0.74	(0.34)	1.09	(0.51)	1.78	(0.72)	**1.42**	(0.24)	1.23	(0.74)	3.41	(2.48)
	OECD average-10	**1.24**	(0.12)	1.20	(0.14)	**1.44**	(0.17)	**1.85**	(0.22)	**1.25**	(0.06)	**2.09**	(0.23)	**2.45**	(0.41)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	**0.41**	(0.14)	1.60	(0.73)	0.75	(0.23)	1.08	(0.38)	0.76	(0.14)	**2.62**	(0.71)	**7.97**	(3.87)
	Lithuania	1.40	(0.31)	0.84	(0.28)	1.50	(0.56)	**2.09**	(0.65)	1.15	(0.15)	1.64	(0.58)	2.04	(0.84)
	Peru	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	Russia	**1.93**	(0.45)	1.09	(0.36)	1.81	(0.65)	0.64	(0.20)	1.16	(0.20)	1.70	(0.62)	0.85	(0.35)

		I save money only when I have some to spare													
				PISA index of economic, social and cultural status (ESCS)											
		Boys		Second quarter of ESCS		Third quarter of ESCS		Top quarter of ESCS		Index of achievement motivation		Students who discuss money matters with parents at least sometimes		Intercept	
		Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.
OECD	Australia	1.17	(0.14)	**1.40**	(0.23)	1.18	(0.22)	1.21	(0.17)	**1.22**	(0.09)	**1.70**	(0.24)	**2.08**	(0.34)
	Belgium (Flemish)	1.31	(0.39)	0.82	(0.36)	1.16	(0.47)	0.89	(0.33)	1.22	(0.26)	1.62	(0.64)	1.53	(0.72)
	Canadian provinces	1.70	(0.58)	0.78	(0.33)	0.97	(0.40)	1.92	(0.96)	1.00	(0.15)	1.28	(0.39)	**2.59**	(1.16)
	Chile	1.10	(0.36)	0.63	(0.35)	1.03	(0.48)	0.93	(0.35)	**1.66**	(0.23)	0.92	(0.42)	**5.81**	(2.84)
	Italy	0.82	(0.29)	1.52	(0.65)	1.05	(0.41)	1.54	(0.64)	1.04	(0.20)	1.77	(0.56)	**2.71**	(1.29)
	Netherlands	**0.58**	(0.15)	0.99	(0.36)	1.96	(0.85)	2.07	(0.79)	1.17	(0.27)	1.89	(0.75)	1.06	(0.46)
	Poland	1.05	(0.22)	0.96	(0.33)	0.93	(0.24)	1.22	(0.38)	1.25	(0.18)	0.84	(0.23)	**4.42**	(1.61)
	Slovak Republic	0.95	(0.23)	1.20	(0.45)	1.26	(0.45)	1.65	(0.65)	**1.35**	(0.19)	1.56	(0.47)	**2.47**	(0.80)
	Spain	1.10	(0.31)	0.40	(0.19)	1.01	(0.43)	0.94	(0.39)	0.84	(0.14)	1.45	(0.45)	**4.58**	(1.73)
	United States	1.43	(0.51)	1.02	(0.41)	1.03	(0.49)	1.23	(0.54)	1.38	(0.24)	0.78	(0.39)	3.59	(2.49)
	OECD average-10	1.12	(0.11)	0.97	(0.12)	1.16	(0.15)	**1.36**	(0.18)	**1.21**	(0.06)	**1.38**	(0.15)	**3.08**	(0.49)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	0.83	(0.27)	1.52	(0.64)	0.69	(0.22)	0.70	(0.25)	0.74	(0.14)	**1.99**	(0.55)	**3.46**	(1.73)
	Lithuania	1.34	(0.33)	0.85	(0.26)	1.28	(0.44)	**1.87**	(0.59)	1.11	(0.16)	1.98	(0.79)	1.43	(0.61)
	Peru	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	Russia	1.16	(0.25)	1.30	(0.40)	1.83	(0.63)	0.86	(0.32)	**1.42**	(0.23)	1.39	(0.55)	1.19	(0.54)

Notes: Multinomial logistic regression model: likelihood of choosing a statement about saving instead of choosing «I do not save any money» is regressed on all variables in the table. Reference categories for categorical variables are: girls, students in the bottom quarter of ESCS, and students who never discuss money matters with parents.
Values that are statistically significant are indicated in bold (see Annex A3).

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[Part 2/2]

Table IV.6.5 Students' saving behaviour, by student characteristics

Results based on students' self-report about which statement about saving money best applies to them

		I save money only when i want to buy something													
				PISA index of economic, social and cultural status (ESCS)											
		Boys		Second quarter of ESCS		Third quarter of ESCS		Top quarter of ESCS		Index of achievement motivation		Students who discuss money matters with parents at least sometimes		Intercept	
		Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.
OECD	Australia	**1.53**	(0.20)	**1.44**	(0.22)	1.28	(0.21)	1.21	(0.21)	1.14	(0.08)	**1.77**	(0.24)	**1.89**	(0.32)
	Belgium (Flemish)	1.63	(0.44)	1.30	(0.45)	1.44	(0.56)	0.96	(0.36)	1.15	(0.23)	1.56	(0.55)	1.59	(0.72)
	Canadian provinces	**2.06**	(0.72)	0.85	(0.34)	0.92	(0.36)	1.78	(0.73)	0.98	(0.16)	1.84	(0.71)	2.12	(0.91)
	Chile	1.60	(0.53)	0.57	(0.29)	1.04	(0.49)	0.62	(0.24)	**1.74**	(0.24)	1.54	(0.67)	**3.82**	(2.11)
	Italy	1.08	(0.35)	1.43	(0.67)	0.92	(0.39)	0.94	(0.38)	1.03	(0.20)	**2.25**	(0.82)	**2.95**	(1.40)
	Netherlands	0.90	(0.22)	1.10	(0.40)	1.73	(0.64)	1.72	(0.58)	0.93	(0.22)	1.91	(0.67)	1.36	(0.57)
	Poland	1.29	(0.29)	0.99	(0.32)	1.10	(0.30)	1.10	(0.33)	1.18	(0.16)	1.20	(0.39)	**2.24**	(0.88)
	Slovak Republic	1.30	(0.30)	0.91	(0.32)	1.01	(0.35)	1.35	(0.51)	1.11	(0.16)	1.69	(0.49)	**2.14**	(0.61)
	Spain	1.55	(0.45)	0.82	(0.35)	1.00	(0.47)	0.84	(0.36)	0.87	(0.14)	1.22	(0.36)	**3.26**	(1.30)
	United States	**2.00**	(0.64)	0.92	(0.40)	0.76	(0.32)	0.80	(0.36)	1.12	(0.19)	0.82	(0.46)	**4.13**	(2.69)
	OECD average-10	**1.49**	(0.14)	1.03	(0.12)	1.12	(0.13)	1.13	(0.14)	**1.13**	(0.06)	**1.58**	(0.18)	**2.55**	(0.43)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	0.62	(0.25)	1.62	(0.82)	**0.41**	(0.14)	0.70	(0.27)	0.77	(0.16)	1.59	(0.50)	**3.85**	(2.02)
	Lithuania	1.45	(0.35)	0.95	(0.34)	1.29	(0.46)	1.61	(0.53)	0.95	(0.12)	1.41	(0.54)	2.12	(0.95)
	Peru	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	Russia	1.19	(0.27)	0.73	(0.19)	1.10	(0.36)	**0.42**	(0.12)	1.00	(0.16)	1.37	(0.42)	**2.66**	(1.15)

		I have no money so I do not save															
				PISA index of economic, social and cultural status (ESCS)													
		Boys		Second quarter of ESCS		Third quarter of ESCS		Top quarter of ESCS		Index of achievement motivation		Students who discuss money matters with parents at least sometimes		Intercept		Pseudo R2	
		Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Pseudo R2	S.E.
OECD	Australia	0.89	(0.13)	1.00	(0.19)	1.00	(0.20)	1.18	(0.23)	**1.21**	(0.12)	0.88	(0.14)	**1.67**	(0.30)	0.014	(0.001)
	Belgium (Flemish)	c	c	c	c	c	c	c	c	c	c	c	c	c	c	0.015	(0.007)
	Canadian provinces	1.44	(0.50)	0.69	(0.31)	0.50	(0.22)	0.40	(0.19)	0.95	(0.18)	1.13	(0.44)	1.97	(0.93)	0.017	(0.005)
	Chile	0.66	(0.33)	0.37	(0.31)	0.71	(0.54)	0.92	(0.66)	**2.06**	(0.40)	**0.28**	(0.16)	**3.90**	(2.51)	0.026	(0.007)
	Italy	0.76	(0.30)	0.88	(0.67)	0.97	(0.71)	1.56	(0.96)	1.02	(0.32)	2.87	(1.71)	0.38	(0.29)	0.012	(0.006)
	Netherlands	c	c	c	c	c	c	c	c	c	c	c	c	c	c	0.020	(0.006)
	Poland	0.81	(0.30)	0.49	(0.27)	0.47	(0.21)	0.36	(0.20)	1.22	(0.31)	**0.41**	(0.15)	1.43	(0.77)	0.015	(0.005)
	Slovak Republic	**0.39**	(0.16)	0.19	(0.17)	1.41	(0.71)	0.76	(0.54)	**1.85**	(0.35)	1.18	(0.54)	0.75	(0.32)	0.016	(0.005)
	Spain	1.00	(0.46)	0.62	(0.40)	0.76	(0.54)	0.92	(0.57)	1.05	(0.26)	0.92	(0.44)	0.99	(0.67)	0.012	(0.005)
	United States	1.23	(0.48)	0.85	(0.41)	0.74	(0.35)	0.75	(0.33)	1.36	(0.25)	**0.34**	(0.18)	3.43	(2.36)	0.020	(0.006)
	OECD average-10	0.89	(0.13)	**0.64**	(0.13)	0.82	(0.17)	0.86	(0.19)	**1.34**	(0.10)	1.00	(0.24)	**1.82**	(0.47)	0.017	(0.002)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	0.90	(0.42)	0.95	(0.58)	**0.35**	(0.18)	0.67	(0.35)	0.63	(0.15)	1.18	(0.65)	1.54	(0.84)	0.024	(0.007)
	Lithuania	0.65	(0.32)	1.77	(1.42)	3.87	(3.31)	2.38	(1.50)	1.02	(0.25)	1.10	(0.56)	**0.17**	(0.13)	0.013	(0.005)
	Peru	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
	Russia	1.36	(0.51)	0.45	(0.28)	1.01	(0.59)	0.32	(0.19)	1.13	(0.31)	2.80	(2.04)	**0.18**	(0.14)	0.022	(0.008)

Notes: Multinomial logistic regression model: likelihood of choosing a statement about saving instead of choosing «I do not save any money» is regressed on all variables in the table. Reference categories for categorical variables are: girls, students in the bottom quarter of ESCS, and students who never discuss money matters with parents.
Values that are statistically significant are indicated in bold (see Annex A3).

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[Part 1/3]

Table IV.6.6 Students' saving behaviour, by performance in financial literacy

Results based on students' self-reports

		Increased likelihood of students at each proficiency level, compared with students at or below Level 1, to report the following options instead of reporting "I do not save any money"											
		Before accounting for student characteristics[1]											
		I save the same amount of money each week or month				I save some money each week or month, but the amount varies				I save money only when I have some to spare			
		Levels 2 or 3 (from 400.33 to less than 549.86 score points)		Levels 4 or 5 (from 549.86 score points)		Levels 2 or 3 (from 400.33 to less than 549.86 score points)		Levels 4 or 5 (from 549.86 score points)		Levels 2 or 3 (from 400.33 to less than 549.86 score points)		Levels 4 or 5 (from 549.86 score points)	
		Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.
OECD	Australia	**1.48**	(0.24)	**1.86**	(0.33)	**2.97**	(0.52)	**6.57**	(1.11)	**1.52**	(0.28)	**2.52**	(0.46)
	Belgium (Flemish)	1.29	(0.58)	1.40	(0.64)	2.38	(1.11)	**4.97**	(2.42)	1.25	(0.59)	2.00	(1.01)
	Canadian provinces	1.18	(0.62)	**3.28**	(1.95)	1.76	(0.87)	**8.33**	(4.99)	1.58	(0.82)	**4.89**	(3.33)
	Chile	1.20	(0.48)	1.25	(0.75)	2.26	(0.96)	3.49	(2.22)	1.93	(0.75)	3.40	(2.16)
	Italy	1.58	(0.70)	1.26	(0.77)	1.96	(0.85)	2.84	(1.55)	1.47	(0.63)	1.45	(0.76)
	Netherlands	1.13	(0.44)	**2.99**	(1.29)	**2.08**	(0.74)	**5.86**	(2.52)	1.34	(0.59)	**3.27**	(1.58)
	Poland	0.89	(0.30)	0.62	(0.24)	1.05	(0.38)	1.61	(0.60)	0.94	(0.33)	1.16	(0.39)
	Slovak Republic	1.07	(0.32)	0.95	(0.51)	1.54	(0.44)	**3.19**	(1.72)	1.65	(0.48)	**2.96**	(1.44)
	Spain	1.03	(0.42)	1.55	(1.06)	1.87	(0.81)	**3.66**	(2.42)	1.60	(0.64)	2.78	(1.92)
	United States	1.31	(0.55)	1.60	(0.98)	**2.49**	(1.09)	**5.56**	(3.17)	2.32	(1.06)	**4.73**	(2.86)
	OECD average-10	1.22	(0.15)	**1.68**	(0.31)	**2.04**	(0.26)	**4.61**	(0.81)	**1.56**	(0.21)	**2.92**	(0.58)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	0.53	(0.59)	0.50	(0.46)	0.29	(0.27)	0.34	(0.29)	0.44	(0.46)	0.47	(0.45)
	Lithuania	1.01	(0.35)	0.85	(0.48)	**2.50**	(0.74)	**3.84**	(1.71)	1.44	(0.49)	1.54	(0.68)
	Peru	n	n	n	n	n	n	n	n	n	n	n	n
	Russia	0.69	(0.35)	0.69	(0.33)	0.65	(0.33)	0.99	(0.45)	0.91	(0.53)	1.66	(0.97)

		Increased likelihood of students at each proficiency level, compared with students at or below Level 1, to report the following options instead of reporting "I do not save any money"									
		Before accounting for student characteristics									
		I save money only when I want to buy something				I have no money so I do not save				Pseudo R2	
		Levels 2 or 3 (from 400.33 to less than 549.86 score points)		Levels 4 or 5 (from 549.86 score points)		Levels 2 or 3 (from 400.33 to less than 549.86 score points)		Levels 4 or 5 (from 549.86 score points)			
		Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Pseudo R2	S.E.
OECD	Australia	**1.49**	(0.29)	1.48	(0.31)	**2.43**	(0.57)	**3.75**	(0.87)	0.015	(0.002)
	Belgium (Flemish)	1.95	(0.97)	1.64	(0.93)	c	c	c	c	0.015	(0.005)
	Canadian provinces	1.46	(0.71)	2.55	(1.43)	1.02	(0.56)	2.71	(1.78)	0.016	(0.005)
	Chile	1.46	(0.60)	2.30	(1.44)	1.72	(1.15)	4.53	(4.23)	0.008	(0.004)
	Italy	1.74	(0.76)	1.63	(0.88)	1.75	(1.38)	1.75	(1.48)	0.005	(0.004)
	Netherlands	1.14	(0.52)	1.69	(0.78)	c	c	c	c	0.015	(0.005)
	Poland	0.76	(0.23)	0.86	(0.28)	0.98	(0.59)	0.93	(0.59)	0.005	(0.003)
	Slovak Republic	1.66	(0.50)	2.38	(1.20)	0.73	(0.35)	2.69	(1.65)	0.009	(0.003)
	Spain	1.51	(0.57)	2.35	(1.62)	1.31	(0.73)	1.60	(1.53)	0.006	(0.003)
	United States	1.13	(0.49)	1.03	(0.60)	2.25	(1.44)	4.22	(3.36)	0.019	(0.005)
	OECD average-10	**1.43**	(0.19)	**1.79**	(0.33)	1.52	(0.33)	**2.77**	(0.80)	0.011	(0.001)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	0.34	(0.36)	0.29	(0.29)	0.17	(0.18)	0.17	(0.17)	0.004	(0.003)
	Lithuania	1.73	(0.59)	1.21	(0.54)	1.22	(0.76)	0.89	(0.92)	0.013	(0.004)
	Peru	n	n	n	n	n	n	n	n	n	n
	Russia	1.17	(0.55)	1.06	(0.49)	0.49	(0.40)	0.80	(0.75)	0.008	(0.004)

1. Student characteristics include gender, socio-economic status, achievement motivation, and discussing money matters with parents at least sometimes.
Note: Values that are statistically significant are indicated in bold (see Annex A3).
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[Part 2/3]

Table IV.6.6 Students' saving behaviour, by performance in financial literacy

Results based on students' self-reports

		Increased likelihood of students at each proficiency level, compared with students at or below Level 1, to report the following options instead of reporting "I do not save any money"											
		After accounting for student characteristics[1]											
		I save the same amount of money each week or month				I save some money each week or month, but the amount varies				I save money only when I have some to spare			
		Levels 2 or 3 (from 400.33 to less than 549.86 score points)		Levels 4 or 5 (from 549.86 score points)		Levels 2 or 3 (from 400.33 to less than 549.86 score points)		Levels 4 or 5 (from 549.86 score points)		Levels 2 or 3 (from 400.33 to less than 549.86 score points)		Levels 4 or 5 (from 549.86 score points)	
		Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.
OECD	Australia	1.34	(0.23)	1.44	(0.28)	**2.55**	(0.46)	**4.85**	(0.90)	**1.48**	(0.29)	**2.34**	(0.47)
OECD	Belgium (Flemish)	1.28	(0.64)	1.14	(0.59)	2.48	(1.27)	**4.48**	(2.55)	1.42	(0.73)	2.07	(1.18)
OECD	Canadian provinces	1.29	(0.69)	3.21	(2.08)	1.84	(0.90)	**8.12**	(5.19)	1.70	(0.89)	**5.22**	(3.79)
OECD	Chile	1.17	(0.52)	1.01	(0.67)	2.11	(0.97)	2.85	(1.95)	2.07	(0.86)	3.33	(2.28)
OECD	Italy	1.31	(0.63)	0.94	(0.63)	1.62	(0.76)	2.18	(1.32)	1.24	(0.59)	1.20	(0.70)
OECD	Netherlands	0.97	(0.41)	2.07	(1.00)	1.70	(0.65)	**4.02**	(1.98)	1.11	(0.51)	2.26	(1.14)
OECD	Poland	0.91	(0.31)	0.53	(0.22)	0.98	(0.37)	1.30	(0.52)	0.93	(0.33)	1.08	(0.38)
OECD	Slovak Republic	0.99	(0.32)	0.73	(0.41)	1.31	(0.41)	2.24	(1.35)	1.41	(0.47)	2.23	(1.21)
OECD	Spain	1.10	(0.45)	1.77	(1.25)	1.92	(0.86)	**3.84**	(2.60)	1.71	(0.68)	3.30	(2.34)
OECD	United States	1.29	(0.56)	1.33	(0.88)	2.43	(1.13)	**4.89**	(2.93)	2.52	(1.21)	**5.27**	(3.48)
OECD	OECD average-10	1.16	(0.16)	1.42	(0.30)	**1.89**	(0.26)	**3.88**	(0.78)	**1.56**	(0.22)	**2.83**	(0.65)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n
Partners	B-S-J-G (China)	0.48	(0.53)	0.46	(0.43)	0.25	(0.23)	0.29	(0.24)	0.38	(0.37)	0.46	(0.43)
Partners	Lithuania	1.01	(0.38)	0.73	(0.45)	**2.36**	(0.78)	**3.16**	(1.55)	1.28	(0.48)	1.18	(0.61)
Partners	Peru	n	n	n	n	n	n	n	n	n	n	n	n
Partners	Russia	0.70	(0.36)	0.67	(0.33)	0.65	(0.33)	0.97	(0.46)	0.86	(0.51)	1.45	(0.87)

		Increased likelihood of students at each proficiency level, compared with students at or below Level 1, to report the following options instead of reporting "I do not save any money"									
		After accounting for student characteristics									
		I save money only when I want to buy something				I have no money so I do not save					
		Levels 2 or 3 (from 400.33 to less than 549.86 score points)		Levels 4 or 5 (from 549.86 score points)		Levels 2 or 3 (from 400.33 to less than 549.86 score points)		Levels 4 or 5 (from 549.86 score points)		Pseudo R2	
		Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Pseudo R2	S.E.
OECD	Australia	1.42	(0.29)	1.28	(0.29)	**2.49**	(0.59)	**3.82**	(0.96)	0.025	(0.002)
OECD	Belgium (Flemish)	1.90	(0.95)	1.33	(0.77)	c	c	c	c	0.028	(0.007)
OECD	Canadian provinces	1.58	(0.78)	2.65	(1.65)	1.27	(0.73)	4.03	(3.01)	0.029	(0.007)
OECD	Chile	1.43	(0.62)	1.90	(1.25)	2.18	(1.32)	**6.36**	(5.52)	0.032	(0.008)
OECD	Italy	1.51	(0.71)	1.46	(0.87)	1.37	(1.15)	1.41	(1.28)	0.014	(0.006)
OECD	Netherlands	1.01	(0.48)	1.35	(0.71)	c	c	c	c	0.031	(0.007)
OECD	Poland	0.78	(0.24)	0.83	(0.29)	1.17	(0.71)	1.30	(0.84)	0.019	(0.005)
OECD	Slovak Republic	1.53	(0.50)	1.98	(1.07)	0.58	(0.27)	1.84	(1.35)	0.019	(0.006)
OECD	Spain	1.70	(0.65)	2.94	(2.14)	1.36	(0.75)	1.71	(1.71)	0.014	(0.006)
OECD	United States	1.24	(0.56)	1.15	(0.71)	2.43	(1.65)	4.96	(4.45)	0.035	(0.008)
OECD	OECD average-10	**1.41**	(0.19)	**1.69**	(0.35)	**1.61**	(0.35)	**3.18**	(1.03)	0.025	(0.002)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n
Partners	B-S-J-G (China)	0.30	(0.29)	0.28	(0.27)	0.17	(0.18)	0.21	(0.21)	0.024	(0.007)
Partners	Lithuania	1.80	(0.65)	1.22	(0.60)	1.04	(0.72)	0.64	(0.76)	0.022	(0.007)
Partners	Peru	n	n	n	n	n	n	n	n	n	n
Partners	Russia	1.28	(0.62)	1.22	(0.60)	0.60	(0.50)	1.01	(1.01)	0.023	(0.008)

1. Student characteristics include gender, socio-economic status, achievement motivation, and discussing money matters with parents at least sometimes.
Note: Values that are statistically significant are indicated in bold (see Annex A3).
StatLink http://dx.doi.org/10.1787/888933486177

[Part 3/3]

Table IV.6.6 Students' saving behaviour, by performance in financial literacy

Results based on students' self-reports

		Increased likelihood of students at each proficiency level, compared with students at or below Level 1, to report the following options instead of reporting "I do not save any money"											
		After accounting for student characteristics[1] and performance in mathematics and reading											
		I save the same amount of money each week or month				I save some money each week or month, but the amount varies				I save money only when I have some to spare			
		Levels 2 or 3 (from 400.33 to less than 549.86 score points)		Levels 4 or 5 (from 549.86 score points)		Levels 2 or 3 (from 400.33 to less than 549.86 score points)		Levels 4 or 5 (from 549.86 score points)		Levels 2 or 3 (from 400.33 to less than 549.86 score points)		Levels 4 or 5 (from 549.86 score points)	
		Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.
OECD	Australia	1.33	(0.34)	1.51	(0.63)	**2.02**	(0.50)	**3.18**	(1.21)	1.16	(0.31)	1.57	(0.70)
	Belgium (Flemish)	1.01	(0.74)	0.78	(1.14)	1.69	(1.24)	2.31	(3.17)	1.32	(1.06)	1.96	(2.77)
	Canadian provinces	0.82	(0.53)	1.38	(1.28)	0.97	(0.59)	2.38	(2.17)	0.89	(0.56)	1.50	(1.44)
	Chile	1.18	(0.73)	0.97	(0.92)	1.55	(0.97)	1.53	(1.62)	1.24	(0.71)	1.19	(1.18)
	Italy	1.53	(0.98)	1.32	(1.41)	1.23	(0.74)	1.33	(1.29)	1.06	(0.61)	0.94	(0.81)
	Netherlands	0.86	(0.44)	1.64	(1.34)	1.15	(0.55)	1.82	(1.45)	0.98	(0.52)	1.83	(1.45)
	Poland	0.77	(0.34)	0.39	(0.29)	0.69	(0.35)	0.66	(0.50)	0.58	(0.25)	0.44	(0.30)
	Slovak Republic	1.05	(0.42)	0.85	(0.63)	1.23	(0.49)	2.03	(1.50)	1.38	(0.59)	2.12	(1.44)
	Spain	0.93	(0.58)	1.36	(1.53)	1.46	(0.93)	2.35	(2.33)	1.14	(0.67)	1.67	(1.87)
	United States	1.45	(0.96)	1.82	(2.08)	1.66	(1.00)	2.46	(2.14)	1.83	(1.13)	3.10	(3.08)
	OECD average-10	1.09	(0.20)	1.20	(0.39)	1.37	(0.25)	**2.00**	(0.59)	1.16	(0.22)	1.63	(0.54)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	0.59	(0.71)	0.73	(0.88)	0.32	(0.30)	0.48	(0.54)	0.53	(0.57)	0.97	(1.42)
	Lithuania	0.84	(0.39)	0.56	(0.54)	1.67	(0.69)	1.74	(1.47)	1.01	(0.48)	0.79	(0.70)
	Peru	n	n	n	n	n	n	n	n	n	n	n	n
	Russia	0.67	(0.35)	0.63	(0.38)	0.44	(0.23)	0.47	(0.28)	0.65	(0.38)	0.84	(0.57)

		Increased likelihood of students at each proficiency level, compared with students at or below Level 1, to report the following options instead of reporting "I do not save any money"									
		After accounting for student characteristics and performance in mathematics and reading									
		I save money only when I want to buy something				I have no money so I do not save					
		Levels 2 or 3 (from 400.33 to less than 549.86 score points)		Levels 4 or 5 (from 549.86 score points)		Levels 2 or 3 (from 400.33 to less than 549.86 score points)		Levels 4 or 5 (from 549.86 score points)		Pseudo R2	
		Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Relative risk	S.E.	Pseudo R2	S.E.
OECD	Australia	1.42	(0.40)	1.35	(0.64)	1.53	(0.51)	1.61	(0.84)	0.030	(0.003)
	Belgium (Flemish)	1.70	(1.19)	1.15	(1.42)	c	c	c	c	0.032	(0.008)
	Canadian provinces	1.16	(0.73)	1.48	(1.27)	0.63	(0.44)	1.06	(1.09)	0.035	(0.008)
	Chile	1.38	(0.83)	1.70	(1.70)	1.57	(1.13)	3.35	(4.70)	0.039	(0.009)
	Italy	1.25	(0.75)	1.07	(1.04)	1.04	(1.28)	0.94	(1.71)	0.019	(0.008)
	Netherlands	1.10	(0.69)	1.67	(1.56)	c	c	c	c	0.037	(0.008)
	Poland	0.57	(0.22)	0.48	(0.29)	0.65	(0.45)	0.44	(0.43)	0.025	(0.006)
	Slovak Republic	1.65	(0.68)	2.34	(1.61)	0.61	(0.34)	2.03	(1.77)	0.021	(0.007)
	Spain	1.52	(0.80)	2.55	(2.89)	0.92	(0.79)	0.86	(1.37)	0.017	(0.007)
	United States	1.07	(0.69)	0.94	(0.93)	2.67	(2.75)	7.44	(15.14)	0.042	(0.009)
	OECD average-10	1.28	(0.23)	1.47	(0.47)	1.20	(0.43)	2.22	(2.02)	0.030	(0.002)
Partners	Brazil	n	n	n	n	n	n	n	n	n	n
	B-S-J-G (China)	0.45	(0.47)	0.75	(1.04)	0.19	(0.22)	0.28	(0.38)	0.026	(0.008)
	Lithuania	1.85	(0.83)	1.33	(0.94)	0.65	(0.59)	0.30	(0.60)	0.027	(0.008)
	Peru	n	n	n	n	n	n	n	n	n	n
	Russia	1.13	(0.59)	0.97	(0.63)	0.54	(0.51)	0.95	(1.42)	0.029	(0.010)

1. Student characteristics include gender, socio-economic status, achievement motivation, and discussing money matters with parents at least sometimes.
Note: Values that are statistically significant are indicated in bold (see Annex A3).
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Table IV.6.7 Educational attainment and students' education expectations

Results based on students' self-reports

		Population with tertiary education (ISCED level 5A, 5B or 6) – Percentage in same age group[1]			Estimates of the population expecting to complete tertiary education (ISCED level 5A, 5B or 6)[2]	
		25-34 year-olds	35-44 year-olds	45-54 year-olds	Percentage of 15-year-old students	Percentage of 15-year-olds[3]
		(1)	(2)	(3)	(4)	(5)
		%	%	%	%	%
OECD	Australia	48.5	48.9	38.2	57.4	52.0
	Belgium (Flemish)	m	m	m	64.2	59.6
	Canadian provinces	m	m	m	80.7	67.4
	Chile	27.3	24.2	16.9	79.9	63.8
	Italy	25.1	20.5	13.5	58.9	47.3
	Netherlands	45.1	39.7	31.0	44.7	42.5
	Poland	43.2	33.4	19.4	48.9	44.5
	Slovak Republic	31.3	22.3	15.7	m	m
	Spain	41.0	43.2	30.9	63.9	58.0
	United States	46.5	46.7	43.8	83.2	69.4
Partners	Brazil	m	m	m	55.2	39.0
	B-S-J-G (China)	m	m	m	53.0	33.9
	Lithuania	54.8	40.8	31.2	70.6	63.7
	Peru	m	m	m	76.5	56.9
	Russia	58.2	55.3	53.3	51.1	48.7

1. Source: OECD, *Education at a Glance 2015: OECD Indicators*. Data refer to 2015, except for Poland and Russia, where the reference year is 2013.
2. Source: OECD, PISA 2015 Database.
3. The percentage of 15-year-olds expecting to complete tertiary education in column (5) is computed as the product of the percentage of 15-year-old students expecting to complete tertiary education in column (4) times the Coverage index 3 reported in Table I.6.1 of PISA 2015 Results, Volume I.

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Table IV.6.8 Students' education expectations, by socio-economic status and performance in financial literacy

Results based on students' self-reports

		Percentage of students expecting to complete education at ISCED level 5A or 6																			
				By socio-economic status						By proficiency level in financial literacy											
		All students		Bottom quartile of ESCS[1]		Top quartile of ESCS		Difference between top and bottom quartiles		Level 1 or below (below 400.33 score points)		Level 2 (from 400.33 to less than 475.10 score points)		Level 3 (from 475.10 to less than 549.86 score points)		Level 4 (from 549.86 to less than 624.63 score points)		Level 5 (at or above 624.63 score points)	
		%	S.E.	%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	54.2	(0.6)	33.9	(0.9)	76.4	(0.9)	**42.5**	(1.3)	21.3	(1.2)	37.3	(1.2)	54.7	(1.4)	71.7	(1.2)	88.4	(0.9)
	Belgium (Flemish)	28.8	(0.8)	12.3	(1.1)	47.4	(1.8)	**35.1**	(2.0)	11.3	(2.3)	11.9	(1.9)	19.5	(1.6)	32.2	(1.8)	50.0	(1.7)
	Canadian provinces	64.1	(1.2)	42.0	(1.7)	84.8	(1.1)	**42.8**	(1.8)	37.1	(2.6)	50.2	(2.5)	62.2	(2.0)	72.6	(1.8)	82.0	(1.6)
	Chile	66.6	(1.0)	46.1	(1.7)	84.2	(0.9)	**38.1**	(1.9)	47.6	(1.5)	68.9	(1.7)	81.6	(1.8)	89.0	(1.8)	93.3	(2.5)
	Italy	38.3	(1.2)	20.5	(1.5)	58.4	(1.7)	**37.9**	(2.2)	17.5	(2.2)	30.5	(1.7)	42.4	(1.9)	53.1	(2.4)	63.2	(3.7)
	Netherlands	17.4	(0.7)	7.3	(0.8)	33.6	(1.6)	**26.3**	(1.9)	2.6	(0.7)	3.7	(0.7)	8.4	(1.1)	22.3	(1.9)	50.9	(2.5)
	Poland	48.0	(1.1)	22.8	(1.3)	80.2	(1.2)	**57.4**	(1.8)	21.9	(2.1)	36.3	(2.0)	52.4	(1.9)	68.9	(2.2)	83.2	(2.7)
	Slovak Republic	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Spain	51.0	(1.0)	27.0	(1.2)	78.0	(1.0)	**51.0**	(1.4)	20.6	(1.4)	42.3	(2.0)	62.0	(1.5)	78.1	(1.7)	89.6	(2.5)
	United States	76.0	(0.8)	60.3	(1.4)	91.6	(0.8)	**31.3**	(1.6)	55.6	(2.0)	71.4	(1.5)	80.6	(1.4)	87.5	(1.6)	93.7	(1.3)
	OECD average-10	49.4	(0.3)	30.2	(0.4)	70.5	(0.4)	**40.3**	(0.6)	26.1	(0.6)	39.2	(0.6)	51.5	(0.5)	63.9	(0.6)	77.1	(0.8)
Partners	Brazil	46.2	(0.6)	32.9	(0.8)	63.5	(1.0)	**30.6**	(1.3)	34.8	(0.9)	52.0	(1.2)	61.0	(1.7)	67.8	(2.2)	72.3	(3.2)
	B-S-J-G (China)	37.7	(1.8)	15.8	(1.3)	66.7	(2.4)	**50.9**	(2.6)	4.4	(1.2)	10.3	(1.8)	20.7	(1.7)	38.5	(2.1)	67.5	(2.2)
	Lithuania	53.6	(1.3)	25.6	(1.2)	82.4	(1.4)	**56.9**	(1.9)	28.1	(1.6)	47.9	(2.2)	68.7	(2.0)	85.5	(1.9)	92.8	(2.2)
	Peru	64.3	(0.8)	50.9	(1.7)	79.7	(1.1)	**28.8**	(1.9)	50.1	(1.3)	69.8	(1.7)	82.5	(1.4)	89.6	(2.0)	94.4	(3.1)
	Russia	16.9	(0.7)	7.2	(1.0)	29.4	(1.3)	**22.3**	(1.6)	7.3	(1.5)	10.3	(1.2)	15.4	(1.1)	21.8	(1.6)	33.1	(2.8)

1. ESCS refers to the PISA index of economic, social and cultural status.
Note: Values that are statistically significant are indicated in bold (see Annex A3).

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Table IV.6.9 Students' education expectations and performance in financial literacy

Results based on students' self-reports

		Increased likelihood of students at each proficiency level, compared with students at or below Level 1, to expect to complete education at ISCED level 5A or 6									
		Before accounting for student characteristics[1]									
		Level 2 (from 400.33 to less than 475.10 score points)		Level 3 (from 475.10 to less than 549.86 score points)		Level 4 (from 549.86 to less than 624.63 score points)		Level 5 (at or above 624.63 score points)		Pseudo R2	
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Pseudo R2	S.E.
OECD	Australia	**2.21**	(0.19)	**4.48**	(0.39)	**9.43**	(0.88)	**28.25**	(3.60)	0.161	(0.008)
OECD	Belgium (Flemish)	1.07	(0.28)	**1.92**	(0.49)	**3.72**	(0.84)	**7.84**	(1.83)	0.085	(0.010)
OECD	Canadian provinces	**1.70**	(0.22)	**2.77**	(0.33)	**4.48**	(0.66)	**7.70**	(1.17)	0.071	(0.010)
OECD	Chile	**2.46**	(0.21)	**4.98**	(0.71)	**9.04**	(1.72)	**16.85**	(9.19)	0.099	(0.011)
OECD	Italy	**2.09**	(0.39)	**3.51**	(0.62)	**5.40**	(0.96)	**8.26**	(2.14)	0.062	(0.010)
OECD	Netherlands	1.48	(0.55)	**3.47**	(1.08)	**10.90**	(3.31)	**39.26**	(10.91)	0.213	(0.016)
OECD	Poland	**2.03**	(0.30)	**3.91**	(0.56)	**7.87**	(1.22)	**17.69**	(4.19)	0.109	(0.011)
OECD	Slovak Republic	m	m	m	m	m	m	m	m	m	m
OECD	Spain	**2.84**	(0.35)	**6.30**	(0.61)	**13.89**	(1.86)	**34.24**	(9.66)	0.150	(0.010)
OECD	United States	**2.00**	(0.23)	**3.36**	(0.39)	**5.72**	(1.11)	**12.13**	(3.05)	0.080	(0.010)
OECD	OECD average-10	**1.99**	(0.11)	**3.86**	(0.20)	**7.83**	(0.53)	**19.14**	(2.07)	0.114	(0.004)
Partners	Brazil	**2.02**	(0.12)	**2.92**	(0.26)	**3.93**	(0.43)	**4.87**	(0.84)	0.048	(0.006)
Partners	B-S-J-G (China)	**2.56**	(0.88)	**5.77**	(1.63)	**13.96**	(4.33)	**46.08**	(14.79)	0.196	(0.017)
Partners	Lithuania	**2.37**	(0.29)	**5.70**	(0.66)	**15.22**	(2.55)	**33.88**	(12.53)	0.145	(0.012)
Partners	Peru	**2.31**	(0.25)	**4.70**	(0.57)	**8.74**	(1.99)	**17.97**	(15.12)	0.079	(0.009)
Partners	Russia	1.48	(0.39)	**2.35**	(0.55)	**3.58**	(0.85)	**6.39**	(1.71)	0.042	(0.008)

		Increased likelihood of students at each proficiency level, compared with students at or below Level 1, to expect to complete tertiary education (ISCED level 5A or 6)									
		After accounting for student characteristics and performance in mathematics and reading									
		Level 2 (from 400.33 to less than 475.10 score points)		Level 3 (from 475.10 to less than 549.86 score points)		Level 4 (from 549.86 to less than 624.63 score points)		Level 5 (at or above 624.63 score points)		Pseudo R2	
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Pseudo R2	S.E.
OECD	Australia	1.17	(0.13)	**1.57**	(0.22)	**2.09**	(0.35)	**3.62**	(0.79)	0.268	(0.008)
OECD	Belgium (Flemish)	0.66	(0.18)	0.72	(0.22)	0.84	(0.25)	1.01	(0.33)	0.170	(0.013)
OECD	Canadian provinces	0.92	(0.14)	0.92	(0.15)	0.90	(0.20)	0.87	(0.23)	0.249	(0.010)
OECD	Chile	**1.27**	(0.14)	**1.54**	(0.29)	**1.75**	(0.47)	2.13	(2.09)	0.201	(0.012)
OECD	Italy	1.46	(0.36)	**1.78**	(0.45)	**2.06**	(0.61)	**2.61**	(1.21)	0.176	(0.011)
OECD	Netherlands	0.64	(0.25)	0.68	(0.23)	1.07	(0.38)	1.94	(0.73)	0.320	(0.016)
OECD	Poland	0.94	(0.18)	0.93	(0.19)	1.01	(0.25)	1.07	(0.41)	0.306	(0.013)
OECD	Slovak Republic	m	m	m	m	m	m	m	m	m	m
OECD	Spain	1.31	(0.19)	**1.68**	(0.24)	**2.23**	(0.45)	**3.43**	(1.14)	0.307	(0.011)
OECD	United States	1.07	(0.20)	1.11	(0.25)	1.19	(0.45)	1.41	(0.71)	0.197	(0.012)
OECD	OECD average-10	1.05	(0.07)	**1.21**	(0.09)	**1.46**	(0.13)	**2.01**	(0.34)	0.244	(0.004)
Partners	Brazil	**1.35**	(0.09)	**1.43**	(0.14)	**1.44**	(0.22)	1.36	(0.29)	0.119	(0.006)
Partners	B-S-J-G (China)	1.16	(0.44)	1.23	(0.37)	1.40	(0.47)	1.82	(0.62)	0.330	(0.019)
Partners	Lithuania	1.10	(0.18)	1.42	(0.27)	**2.03**	(0.51)	2.30	(1.03)	0.335	(0.017)
Partners	Peru	1.28	(0.23)	**1.80**	(0.36)	**2.40**	(0.79)	3.57	(3.44)	0.125	(0.010)
Partners	Russia	1.08	(0.30)	1.21	(0.32)	1.34	(0.37)	1.77	(0.59)	0.139	(0.014)

		Increased likelihood of students at each proficiency level, compared with students at or below Level 1, to expect to complete tertiary education (ISCED level 5A or 6)									
		After accounting for student characteristics and performance in mathematics, reading and science									
		Level 2 (from 400.33 to less than 475.10 score points)		Level 3 (from 475.10 to less than 549.86 score points)		Level 4 (from 549.86 to less than 624.63 score points)		Level 5 (at or above 624.63 score points)		Pseudo R2	
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Pseudo R2	S.E.
OECD	Australia	1.15	(0.13)	**1.52**	(0.20)	**2.00**	(0.34)	**3.43**	(0.77)	0.268	(0.008)
OECD	Belgium (Flemish)	0.63	(0.17)	0.66	(0.19)	0.72	(0.21)	0.84	(0.27)	0.173	(0.013)
OECD	Canadian provinces	0.94	(0.15)	0.94	(0.15)	0.95	(0.21)	0.92	(0.25)	0.249	(0.011)
OECD	Chile	1.23	(0.14)	1.44	(0.27)	1.59	(0.43)	1.82	(1.58)	0.203	(0.011)
OECD	Italy	1.40	(0.35)	1.64	(0.43)	**1.82**	(0.54)	2.26	(1.06)	0.179	(0.011)
OECD	Netherlands	0.60	(0.23)	0.61	(0.21)	0.92	(0.33)	1.59	(0.61)	0.322	(0.015)
OECD	Poland	0.93	(0.17)	0.92	(0.19)	0.99	(0.23)	1.04	(0.37)	0.306	(0.013)
OECD	Slovak Republic	m	m	m	m	m	m	m	m	m	m
OECD	Spain	1.27	(0.19)	**1.57**	(0.22)	**2.02**	(0.39)	**3.01**	(0.98)	0.310	(0.011)
OECD	United States	1.09	(0.21)	1.18	(0.26)	1.31	(0.49)	1.62	(0.81)	0.198	(0.012)
OECD	OECD average-10	1.03	(0.07)	**1.16**	(0.08)	**1.37**	(0.12)	**1.84**	(0.28)	0.245	(0.004)
Partners	Brazil	**1.33**	(0.10)	**1.40**	(0.15)	**1.39**	(0.22)	1.29	(0.30)	0.120	(0.006)
Partners	B-S-J-G (China)	1.12	(0.41)	1.14	(0.34)	1.23	(0.40)	1.52	(0.52)	0.333	(0.019)
Partners	Lithuania	1.11	(0.19)	1.45	(0.28)	**2.10**	(0.56)	2.39	(1.10)	0.336	(0.017)
Partners	Peru	1.25	(0.21)	**1.72**	(0.33)	**2.21**	(0.70)	3.12	(2.84)	0.127	(0.010)
Partners	Russia	1.06	(0.30)	1.16	(0.30)	1.24	(0.34)	1.60	(0.54)	0.141	(0.013)

1. Student characteristics include gender, socio-economic status and achievement motivation.
Note: Values that are statistically significant are indicated in bold (see Annex A3).
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Table IV.6.10 Students' career expectations, by socio-economic status and performance in financial literacy

Results based on students' self-reports

		Percentage of students expecting to work in a high-skilled occupation[1] around the age of 30																	
				By socio-economic status						By proficiency level in financial literacy									
		All students		Bottom quartile of ESCS[2]		Top quartile of ESCS		Difference between top and bottom quartiles		Level 1 or below (below 400.33 score points)		Level 2 (from 400.33 to less than 475.10 score points)		Level 3 (from 475.10 to less than 549.86 score points)		Level 4 (from 549.86 to less than 624.63 score points)		Level 5 (at or above 624.63 score points)	
		%	S.E.	%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	60.2	(0.6)	47.3	(1.2)	73.2	(1.0)	**25.9**	(1.4)	35.7	(1.3)	50.6	(1.3)	62.9	(1.2)	71.7	(1.4)	79.6	(1.4)
	Belgium (Flemish)	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Canadian provinces	71.4	(0.9)	58.8	(1.4)	83.5	(1.1)	**24.7**	(1.6)	51.8	(2.7)	61.7	(2.1)	68.8	(1.9)	77.5	(1.7)	84.9	(1.3)
	Chile	66.1	(0.9)	55.7	(1.8)	77.2	(1.1)	**21.5**	(2.2)	54.5	(1.6)	66.4	(1.7)	75.7	(1.8)	79.9	(2.3)	82.1	(3.3)
	Italy	51.8	(1.0)	37.3	(1.9)	68.3	(1.3)	**31.0**	(2.1)	34.2	(2.6)	46.2	(2.0)	56.1	(1.9)	63.2	(2.2)	68.7	(2.8)
	Netherlands	42.9	(0.8)	34.0	(1.6)	54.2	(1.6)	**20.2**	(2.2)	24.5	(1.8)	34.6	(1.9)	41.8	(1.7)	50.8	(2.0)	60.3	(1.9)
	Poland	41.0	(1.0)	24.3	(1.5)	62.0	(1.6)	**37.7**	(2.1)	21.0	(1.9)	35.2	(1.8)	45.5	(1.8)	53.4	(2.3)	63.3	(3.2)
	Slovak Republic	42.4	(1.2)	26.9	(1.9)	58.1	(1.4)	**31.2**	(2.1)	27.0	(1.7)	41.7	(2.4)	49.9	(2.3)	58.7	(2.6)	64.5	(3.1)
	Spain	65.0	(0.8)	51.2	(1.4)	79.6	(1.0)	**28.4**	(1.7)	47.5	(1.5)	62.2	(1.7)	71.6	(1.4)	78.6	(1.7)	80.4	(2.9)
	United States	63.9	(0.7)	57.9	(1.2)	72.5	(1.2)	**14.7**	(1.8)	50.3	(1.6)	58.1	(1.8)	67.8	(1.5)	71.5	(1.8)	79.2	(2.3)
	OECD average-10	56.1	(0.3)	43.7	(0.5)	69.9	(0.4)	**26.1**	(0.6)	38.5	(0.6)	50.7	(0.6)	60.0	(0.6)	67.3	(0.7)	73.7	(0.9)
Partners	Brazil	71.2	(0.5)	68.0	(0.9)	76.5	(0.9)	**8.5**	(1.2)	65.7	(0.8)	73.9	(1.2)	78.1	(1.2)	81.5	(1.8)	83.9	(2.3)
	B-S-J-G (China)	45.2	(1.0)	34.5	(1.7)	56.3	(1.7)	**21.9**	(2.5)	31.4	(2.6)	34.1	(2.7)	40.0	(1.9)	46.0	(1.5)	55.2	(1.6)
	Lithuania	54.9	(0.8)	38.0	(1.4)	72.7	(1.3)	**34.7**	(2.0)	36.8	(1.5)	52.5	(1.9)	65.1	(1.9)	74.3	(2.5)	82.1	(3.3)
	Peru	72.4	(0.8)	62.2	(1.3)	82.8	(1.1)	**20.7**	(1.6)	63.0	(1.1)	77.1	(1.4)	83.9	(1.2)	87.2	(2.4)	87.5	(4.2)
	Russia	63.9	(1.1)	52.6	(2.5)	74.6	(1.6)	**21.9**	(2.6)	47.9	(3.8)	56.3	(2.3)	64.9	(1.6)	70.3	(2.0)	77.2	(2.5)

1. Occupations classified as highly skilled (ISCO Skills Level 4) are occupations within ISCO major group 1 (managers), with the exception of submajor group 14 (hospitality, retail and other services managers); occupations within ISCO major group 2 (professionals); and occupations within ISCO submajor group 01 (commissioned armed forces officers) (ILO, 2012).
2. ESCS refers to the PISA index of economic, social and cultural status.
Note: Values that are statistically significant are indicated in bold (see Annex A3).
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[Part 1/1]

Table IV.6.11 Students' career expectations and performance in financial literacy

Results based on students' self-reports

		Increased likelihood of students at each proficiency level, compared with students at or below Level 1, to expect to work in a highly-skilled occupation[1] around the age of 30									
		Before accounting for student characteristics[2]									
		Level 2 (from 400.33 to less than 475.10 score points)		Level 3 (from 475.10 to less than 549.86 score points)		Level 4 (from 549.86 to less than 624.63 score points)		Level 5 (at or above 624.63 score points)		Pseudo R2	
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Pseudo R2	S.E.
OECD	Australia	**1.86**	(0.14)	**3.07**	(0.25)	**4.59**	(0.43)	**7.03**	(0.74)	0.069	(0.006)
	Belgium (Flemish)	m	m	m	m	m	m	m	m	m	m
	Canadian provinces	**1.48**	(0.18)	**2.04**	(0.32)	**3.17**	(0.47)	**5.15**	(0.70)	0.046	(0.007)
	Chile	**1.64**	(0.17)	**2.60**	(0.29)	**3.31**	(0.54)	**3.83**	(0.91)	0.035	(0.006)
	Italy	**1.66**	(0.24)	**2.47**	(0.36)	**3.32**	(0.47)	**4.25**	(0.76)	0.034	(0.007)
	Netherlands	**1.62**	(0.20)	**2.21**	(0.27)	**3.17**	(0.39)	**4.69**	(0.62)	0.043	(0.006)
	Poland	**2.07**	(0.30)	**3.19**	(0.43)	**4.36**	(0.62)	**6.60**	(1.31)	0.052	(0.007)
	Slovak Republic	**1.95**	(0.25)	**2.72**	(0.34)	**3.88**	(0.52)	**4.97**	(0.80)	0.050	(0.007)
	Spain	**1.82**	(0.17)	**2.79**	(0.24)	**4.08**	(0.54)	**4.58**	(0.93)	0.045	(0.006)
	United States	**1.38**	(0.16)	**2.10**	(0.20)	**2.50**	(0.28)	**3.80**	(0.59)	0.029	(0.004)
	OECD average-10	**1.72**	(0.07)	**2.57**	(0.10)	**3.60**	(0.16)	**4.99**	(0.28)	0.045	(0.002)
Partners	Brazil	**1.48**	(0.11)	**1.86**	(0.15)	**2.30**	(0.30)	**2.72**	(0.49)	0.016	(0.003)
	B-S-J-G (China)	1.14	(0.20)	**1.47**	(0.22)	**1.87**	(0.24)	**2.70**	(0.36)	0.021	(0.005)
	Lithuania	**1.88**	(0.20)	**3.20**	(0.36)	**4.98**	(0.71)	**7.94**	(1.98)	0.063	(0.007)
	Peru	**1.98**	(0.18)	**3.07**	(0.30)	**4.06**	(0.90)	**4.29**	(1.97)	0.040	(0.005)
	Russia	1.41	(0.26)	**2.03**	(0.35)	**2.60**	(0.46)	**3.73**	(0.78)	0.024	(0.006)

		Increased likelihood of students at each proficiency level, compared with students at or below Level 1, to expect to work in a highly-skilled occupation around the age of 30									
		After accounting for student characteristics and performance in mathematics and reading									
		Level 2 (from 400.33 to less than 475.10 score points)		Level 3 (from 475.10 to less than 549.86 score points)		Level 4 (from 549.86 to less than 624.63 score points)		Level 5 (at or above 624.63 score points)		Pseudo R2	
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Pseudo R2	S.E.
OECD	Australia	**1.20**	(0.11)	**1.50**	(0.17)	**1.66**	(0.22)	**1.81**	(0.29)	0.115	(0.007)
	Belgium (Flemish)	m	m	m	m	m	m	m	m	m	m
	Canadian provinces	0.97	(0.14)	0.94	(0.18)	1.04	(0.19)	1.15	(0.23)	0.145	(0.009)
	Chile	1.19	(0.15)	**1.49**	(0.22)	**1.55**	(0.34)	1.47	(0.48)	0.079	(0.008)
	Italy	1.19	(0.18)	**1.38**	(0.20)	**1.50**	(0.24)	**1.65**	(0.36)	0.114	(0.010)
	Netherlands	1.27	(0.17)	**1.37**	(0.21)	**1.58**	(0.28)	**1.82**	(0.41)	0.063	(0.006)
	Poland	1.24	(0.19)	1.26	(0.20)	1.17	(0.23)	1.20	(0.33)	0.178	(0.010)
	Slovak Republic	1.21	(0.18)	1.25	(0.19)	1.39	(0.27)	1.37	(0.31)	0.131	(0.009)
	Spain	1.19	(0.14)	**1.35**	(0.15)	**1.51**	(0.30)	1.32	(0.33)	0.110	(0.009)
	United States	1.00	(0.12)	1.22	(0.15)	1.19	(0.20)	1.44	(0.33)	0.088	(0.007)
	OECD average-10	**1.16**	(0.05)	**1.31**	(0.06)	**1.40**	(0.09)	**1.47**	(0.12)	0.114	(0.003)
Partners	Brazil	1.11	(0.09)	1.19	(0.11)	1.26	(0.18)	1.31	(0.27)	0.065	(0.005)
	B-S-J-G (China)	0.91	(0.16)	0.94	(0.14)	0.95	(0.15)	1.02	(0.20)	0.059	(0.006)
	Lithuania	1.12	(0.14)	1.25	(0.19)	1.30	(0.25)	1.50	(0.46)	0.137	(0.008)
	Peru	1.20	(0.15)	**1.36**	(0.19)	1.37	(0.41)	1.06	(0.50)	0.076	(0.008)
	Russia	1.12	(0.26)	1.32	(0.31)	1.41	(0.36)	1.75	(0.51)	0.094	(0.010)

		Increased likelihood of students at each proficiency level, compared with students at or below Level 1, to expect to work in a highly-skilled occupation around the age of 30									
		After accounting for student characteristics and performance in mathematics, reading and science									
		Level 2 (from 400.33 to less than 475.10 score points)		Level 3 (from 475.10 to less than 549.86 score points)		Level 4 (from 549.86 to less than 624.63 score points)		Level 5 (at or above 624.63 score points)		Pseudo R2	
		Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Pseudo R2	S.E.
OECD	Australia	1.17	(0.10)	**1.42**	(0.16)	**1.53**	(0.20)	**1.62**	(0.27)	0.115	(0.007)
	Belgium (Flemish)	m	m	m	m	m	m	m	m	m	m
	Canadian provinces	0.96	(0.14)	0.92	(0.18)	1.00	(0.19)	1.10	(0.24)	0.146	(0.009)
	Chile	1.15	(0.14)	**1.40**	(0.22)	1.41	(0.32)	1.29	(0.44)	0.081	(0.007)
	Italy	1.17	(0.18)	**1.33**	(0.19)	**1.43**	(0.24)	**1.55**	(0.34)	0.115	(0.010)
	Netherlands	1.26	(0.17)	1.34	(0.21)	**1.53**	(0.28)	**1.75**	(0.40)	0.063	(0.006)
	Poland	1.23	(0.19)	1.22	(0.20)	1.11	(0.23)	1.12	(0.32)	0.178	(0.010)
	Slovak Republic	1.19	(0.17)	1.19	(0.18)	1.29	(0.25)	1.23	(0.28)	0.133	(0.009)
	Spain	1.17	(0.14)	**1.30**	(0.14)	1.43	(0.28)	1.23	(0.32)	0.111	(0.008)
	United States	0.99	(0.12)	1.18	(0.15)	1.13	(0.20)	1.35	(0.32)	0.088	(0.007)
	OECD average-10	**1.14**	(0.05)	**1.26**	(0.06)	**1.32**	(0.08)	**1.36**	(0.11)	0.115	(0.003)
Partners	Brazil	1.10	(0.09)	1.16	(0.11)	1.22	(0.18)	1.26	(0.27)	0.065	(0.005)
	B-S-J-G (China)	0.90	(0.16)	0.91	(0.14)	0.90	(0.15)	0.93	(0.19)	0.060	(0.006)
	Lithuania	1.11	(0.14)	1.23	(0.19)	1.26	(0.26)	1.43	(0.45)	0.137	(0.008)
	Peru	1.19	(0.14)	**1.32**	(0.18)	1.30	(0.39)	0.99	(0.47)	0.076	(0.008)
	Russia	1.11	(0.26)	1.28	(0.30)	1.34	(0.34)	1.62	(0.49)	0.095	(0.010)

1. Occupations classified as highly skilled (ISCO Skills Level 4) are occupations within ISCO major group 1 (managers), with the exception of submajor group 14 (hospitality, retail and other services managers); occupations within ISCO major group 2 (professionals); and occupations within ISCO submajor group 01 (commissioned armed forces officers) (ILO, 2012).
2. Student characteristics include gender, socio-economic status and achievement motivation.
Note: Values that are statistically significant are indicated in bold (see Annex A3).
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ANNEX B2
RESULTS FOR REGIONS WITHIN COUNTRIES

[Part 1/1]

Table B2.IV.1 Mean score and variation in student performance in financial literacy

	Mean score		Standard deviation		Percentiles									
					10th		25th		Median (50th)		75th		90th	
	Mean	S.E.	S.D.	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.
OECD														
Canadian provinces														
British Columbia	551	(7.1)	114	(5.0)	404	(10.9)	477	(8.5)	555	(7.6)	629	(7.7)	691	(9.4)
Manitoba	503	(7.1)	112	(3.5)	358	(10.0)	429	(8.3)	507	(8.1)	582	(8.3)	643	(6.9)
New Brunswick	511	(7.4)	115	(5.3)	362	(12.1)	438	(9.8)	513	(8.3)	592	(7.2)	655	(9.3)
Newfoundland and Labrador	519	(7.6)	104	(3.3)	381	(9.8)	451	(9.1)	524	(8.1)	591	(9.5)	651	(10.3)
Nova Scotia	526	(6.7)	106	(2.9)	386	(9.4)	457	(8.6)	531	(7.0)	598	(7.5)	659	(8.1)
Ontario	533	(6.1)	117	(3.3)	380	(9.3)	456	(7.2)	537	(6.3)	614	(6.7)	679	(7.5)
Prince Edward Island	522	(10.4)	104	(6.2)	392	(15.9)	458	(13.5)	524	(12.2)	592	(13.2)	649	(14.8)
Italy														
Bolzano	523	(6.2)	86	(2.1)	409	(7.8)	464	(6.2)	528	(6.0)	582	(6.9)	629	(7.7)
Campania	452	(7.1)	96	(3.4)	329	(8.5)	384	(8.4)	452	(8.4)	519	(8.5)	577	(9.0)
Lombardia	505	(5.7)	95	(3.4)	379	(9.2)	440	(8.0)	508	(5.9)	572	(6.2)	624	(7.3)
Trento	510	(3.1)	84	(2.4)	398	(5.7)	458	(5.0)	515	(4.2)	568	(3.1)	614	(4.5)
Spain														
Basque Country•	459	(5.3)	95	(2.7)	330	(9.8)	396	(7.2)	462	(5.5)	527	(6.4)	580	(5.7)
United States														
Massachusetts•	523	(6.7)	103	(2.8)	387	(11.5)	456	(8.6)	528	(7.2)	596	(6.8)	652	(8.0)
North Carolina•	496	(5.5)	104	(2.1)	357	(6.3)	424	(6.3)	497	(7.2)	571	(6.7)	631	(6.4)

• PISA adjudicated region.
Notes: For Massachusetts and North Carolina, the desired target population covers 15-year-old students in grade 7 or above in public schools only (see Annex A2).
See Table IV.4.1 for national data.
StatLink http://dx.doi.org/10.1787/888933486321

[Part 1/1]

Table B2.IV.2 Percentage of students, by proficiency level in financial literacy

	Percentage of students at each proficiency levels in PISA 2015									
	Level 1 or below (below 400.33 score points)		Level 2 (from 400.33 to less than 475.10 score points)		Level 3 (from 475.10 to less than 549.86 score points)		Level 4 (from 549.86 to less than 624.63 score points)		Level 5 (at or above 624.63 score points)	
	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.
OECD										
Canadian provinces										
British Columbia	9.6	(1.5)	14.8	(1.5)	24.0	(1.6)	24.9	(1.3)	26.7	(2.2)
Manitoba	18.4	(2.2)	21.1	(1.4)	25.7	(1.7)	21.0	(1.7)	13.8	(1.4)
New Brunswick	16.7	(1.9)	19.0	(1.2)	26.2	(1.7)	21.7	(1.5)	16.4	(1.9)
Newfoundland and Labrador	14.3	(1.8)	18.8	(1.7)	28.2	(1.6)	23.5	(2.0)	15.1	(2.3)
Nova Scotia	12.5	(1.7)	18.6	(1.4)	27.7	(1.7)	24.2	(2.0)	17.0	(1.6)
Ontario	13.2	(1.2)	17.1	(1.1)	24.3	(1.2)	23.4	(1.4)	22.0	(1.8)
Prince Edward Island	12.3	(2.2)	20.7	(3.2)	27.5	(3.5)	24.9	(3.0)	14.5	(2.7)
Italy										
Bolzano	8.4	(0.9)	20.4	(1.5)	31.9	(2.0)	28.2	(2.2)	11.2	(1.4)
Campania	30.8	(2.9)	28.6	(1.8)	24.5	(1.7)	12.4	(1.7)	3.6	(0.8)
Lombardia	13.8	(2.0)	22.9	(1.6)	30.2	(1.8)	23.3	(1.7)	9.8	(1.4)
Trento	10.4	(1.1)	21.7	(1.8)	34.7	(1.8)	25.4	(1.9)	7.8	(1.1)
Spain										
Basque Country•	25.8	(2.3)	30.5	(1.9)	26.1	(2.3)	14.7	(1.7)	2.8	(0.7)
United States										
Massachusetts•	12.0	(1.6)	18.7	(1.6)	27.8	(1.5)	25.3	(1.5)	16.2	(2.3)
North Carolina•	18.8	(1.7)	23.5	(1.3)	26.4	(1.2)	20.2	(1.5)	11.2	(1.2)

• PISA adjudicated region.
Notes: For Massachusetts and North Carolina, the desired target population covers 15-year-old students in grade 7 or above in public schools only (see Annex A2).
See Table IV.3.2 for national data.
StatLink http://dx.doi.org/10.1787/888933486337

[Part 1/1]

Table B2.IV.3 Correlation of financial literacy performance with student performance in the core PISA subjects

	Correlation[1] between performance in financial literacy and performance in…						For comparison, correlation between performance in…					
	…mathematics		…reading		…science		…mathematics and reading		…mathematics and science		…reading and science	
	Corr.	S.E.	Corr.	S.E.	Corr.	S.E.	Corr.	S.E.	Corr.	S.E.	Corr.	S.E.
OECD												
Canadian provinces												
British Columbia	0.63	(0.03)	0.65	(0.03)	0.72	(0.02)	0.74	(0.03)	0.85	(0.01)	0.85	(0.01)
Manitoba	0.67	(0.03)	0.70	(0.03)	0.74	(0.02)	0.79	(0.02)	0.88	(0.01)	0.87	(0.01)
New Brunswick	0.65	(0.03)	0.68	(0.02)	0.71	(0.02)	0.80	(0.02)	0.89	(0.01)	0.89	(0.01)
Newfoundland and Labrador	0.72	(0.02)	0.74	(0.02)	0.77	(0.02)	0.82	(0.01)	0.90	(0.01)	0.90	(0.01)
Nova Scotia	0.68	(0.02)	0.72	(0.02)	0.76	(0.02)	0.80	(0.02)	0.88	(0.01)	0.88	(0.01)
Ontario	0.69	(0.02)	0.70	(0.02)	0.75	(0.01)	0.79	(0.01)	0.88	(0.01)	0.88	(0.01)
Prince Edward Island	0.69	(0.03)	0.70	(0.04)	0.75	(0.03)	0.78	(0.03)	0.88	(0.02)	0.88	(0.02)
Italy												
Bolzano	0.71	(0.02)	0.70	(0.02)	0.76	(0.01)	0.76	(0.01)	0.87	(0.01)	0.85	(0.01)
Campania	0.64	(0.03)	0.61	(0.04)	0.68	(0.03)	0.72	(0.03)	0.83	(0.02)	0.82	(0.02)
Lombardia	0.67	(0.02)	0.65	(0.03)	0.71	(0.02)	0.75	(0.02)	0.86	(0.01)	0.84	(0.01)
Trento	0.72	(0.01)	0.70	(0.02)	0.76	(0.01)	0.78	(0.01)	0.88	(0.01)	0.86	(0.01)
Spain												
Basque Country•	0.72	(0.02)	0.76	(0.02)	0.78	(0.02)	0.77	(0.01)	0.86	(0.01)	0.86	(0.01)
United States												
Massachusetts•	0.80	(0.02)	0.78	(0.01)	0.83	(0.01)	0.83	(0.01)	0.90	(0.01)	0.90	(0.01)
North Carolina•	0.80	(0.01)	0.80	(0.01)	0.83	(0.01)	0.83	(0.01)	0.90	(0.01)	0.90	(0.01)

• PISA adjudicated region.
1. The reported correlations are pairwise correlations between the corresponding latent constructs.
Notes: For Massachusetts and North Carolina, the desired target population covers 15-year-old students in grade 7 or above in public schools only (see Annex A2).
See Table IV.3.9 for national data.
StatLink http://dx.doi.org/10.1787/888933486343

[Part 1/1]

Table B2.IV.4 Mean score and variation in student financial literacy performance, by gender

	Boys				Girls				Gender differences (boys – girls)			
	Mean score		Standard deviation		Mean score		Standard deviation		Mean score		Standard deviation	
	Mean	S.E.	S.D.	S.E.	Mean	S.E.	S.D.	S.E.	Score dif.	S.E.	Dif.	S.E.
OECD												
Canadian provinces												
British Columbia	548	(8.6)	117	(5.6)	554	(7.5)	110	(5.5)	-6	(7.3)	7	(5.1)
Manitoba	501	(7.1)	111	(4.4)	506	(8.8)	113	(4.5)	-5	(7.4)	-2	(5.3)
New Brunswick	510	(9.0)	117	(6.7)	512	(8.3)	113	(5.6)	-2	(9.2)	4	(6.6)
Newfoundland and Labrador	520	(9.3)	109	(4.6)	518	(8.8)	100	(4.7)	2	(9.8)	9	(6.4)
Nova Scotia	524	(7.7)	110	(3.9)	528	(7.4)	102	(3.8)	-4	(6.9)	8	(5.1)
Ontario	530	(6.5)	121	(3.2)	535	(6.6)	113	(4.2)	-5	(4.9)	**9**	(3.4)
Prince Edward Island	516	(13.1)	111	(8.5)	529	(10.1)	97	(6.7)	-13	(10.8)	14	(9.4)
Italy												
Bolzano	531	(6.6)	91	(2.8)	515	(6.6)	81	(2.7)	**16**	(4.7)	**10**	(3.3)
Campania	458	(8.3)	96	(4.2)	446	(8.2)	95	(4.3)	13	(8.5)	1	(4.8)
Lombardia	511	(7.4)	99	(4.7)	498	(7.9)	91	(3.6)	12	(10.2)	9	(5.1)
Trento	517	(4.5)	84	(3.0)	505	(3.1)	83	(3.0)	**12**	(4.5)	2	(3.6)
Spain												
Basque Country•	453	(7.0)	102	(3.8)	464	(5.9)	87	(3.4)	-10	(7.1)	**15**	(4.6)
United States												
Massachusetts•	526	(6.8)	106	(3.6)	520	(7.9)	100	(3.4)	6	(5.8)	5	(4.1)
North Carolina•	494	(6.2)	108	(2.8)	497	(6.6)	100	(2.6)	-3	(6.6)	**8**	(3.5)

• PISA adjudicated region.
Notes: For Massachusetts and North Carolina, the desired target population covers 15-year-old students in grade 7 or above in public schools only (see Annex A2).
Values that are statistically significant are indicated in bold (see Annex A3).
See Table IV.4.5 for national data.
StatLink http://dx.doi.org/10.1787/888933486351

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Table B2.IV.5 Percentage of low and top performers in financial literacy, by gender

	Boys				Girls				Gender differences (boys – girls)			
	Below Level 2 (less than 400.33 score points)		Level 5 (at or above 624.63 score points)		Below Level 2 (less than 400.33 score points)		Level 5 (at or above 624.63 score points)		Below Level 2 (less than 400.33 score points)		Level 5 (at or above 624.63 score points)	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	% dif.	S.E.	% dif.	S.E.
OECD												
Canadian provinces												
British Columbia	10.9	(1.8)	26.6	(3.0)	8.3	(1.5)	25.7	(2.3)	2.6	(1.7)	0.9	(2.9)
Manitoba	18.4	(2.5)	12.7	(1.8)	17.7	(2.7)	15.0	(2.1)	0.7	(3.1)	-2.3	(2.3)
New Brunswick	17.3	(2.8)	16.7	(2.1)	15.5	(1.9)	16.4	(2.5)	1.8	(2.8)	0.3	(2.8)
Newfoundland and Labrador	14.8	(2.6)	17.5	(2.7)	12.0	(2.5)	14.4	(2.6)	2.8	(3.5)	3.1	(2.6)
Nova Scotia	14.0	(2.2)	18.2	(2.3)	10.6	(1.9)	16.7	(2.3)	3.3	(2.5)	1.5	(2.6)
Ontario	14.4	(1.5)	22.8	(2.0)	11.5	(1.5)	21.1	(2.0)	**2.9**	(1.3)	1.6	(2.0)
Prince Edward Island	13.6	(3.0)	16.0	(4.2)	9.1	(2.9)	15.8	(4.2)	4.5	(3.6)	0.1	(5.3)
Italy												
Bolzano	14.4	(2.6)	11.9	(2.0)	14.4	(2.8)	7.9	(1.7)	0.0	(3.4)	4.1	(2.2)
Campania	8.8	(1.7)	14.5	(2.6)	8.3	(1.4)	8.3	(1.6)	0.5	(1.7)	**6.2**	(2.1)
Lombardia	28.4	(3.5)	4.2	(1.1)	33.0	(3.9)	3.1	(1.0)	-4.6	(4.2)	1.1	(1.2)
Trento	9.7	(1.4)	9.2	(1.3)	11.1	(1.1)	6.5	(1.2)	-1.3	(1.6)	2.7	(1.7)
Spain												
Basque Country•	31.0	(3.1)	3.6	(1.1)	21.8	(2.6)	2.3	(0.8)	**9.2**	(3.4)	1.3	(1.3)
United States												
Massachusetts•	11.9	(1.9)	18.0	(2.5)	12.3	(2.1)	14.1	(2.2)	-0.4	(2.1)	3.8	(2.5)
North Carolina•	20.2	(2.1)	12.0	(1.5)	17.3	(2.0)	10.6	(1.7)	2.9	(2.4)	1.5	(2.0)

• PISA adjudicated region.
Notes: For Massachusetts and North Carolina, the desired target population covers 15-year-old students in grade 7 or above in public schools only (see Annex A2).
Values that are statistically significant are indicated in bold (see Annex A3).
See Table IV.4.10 for national data.
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Table B2.IV.6 Students' socio-economic status and financial literacy performance

	Performance in financial literacy, by national quarters of the ESCS[1] index								Difference in financial literacy performance between students in the top quarter and students in the bottom quarter of this index		Score-point difference in financial literacy associated with a one-unit increase in ESCS[1] (slope of the socio-economic gradient)		Percentage of variance in student performance in financial literacy explained by ESCS (strength of the socio-economic gradient)	
	Bottom quarter		Second quarter		Third quarter		Top quarter							
	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Score dif.	S.E.	Score dif.	S.E.	%	S.E.
OECD														
Canadian provinces														
British Columbia	524	(10.2)	535	(9.2)	564	(10.4)	590	(11.3)	**66**	(14.1)	**32**	(5.7)	5.2	(1.7)
Manitoba	465	(10.5)	502	(11.3)	510	(8.3)	542	(8.3)	**77**	(12.4)	**34**	(5.2)	7.2	(2.1)
New Brunswick	476	(12.5)	501	(10.8)	515	(10.2)	554	(10.7)	**79**	(15.2)	**33**	(6.5)	5.9	(2.0)
Newfoundland and Labrador	485	(12.1)	516	(11.0)	536	(10.9)	544	(10.4)	**59**	(12.9)	**29**	(5.1)	6.0	(2.1)
Nova Scotia	503	(7.0)	520	(10.1)	539	(9.4)	559	(9.9)	**56**	(9.5)	**27**	(4.2)	4.8	(1.5)
Ontario	490	(8.2)	527	(6.7)	550	(7.0)	571	(8.7)	**80**	(9.7)	**40**	(4.5)	7.2	(1.5)
Prince Edward Island	499	(15.4)	527	(17.1)	528	(17.2)	534	(16.4)	35	(22.5)	17	(9.4)	1.7	(1.8)
Italy														
Bolzano	502	(6.9)	523	(8.5)	525	(7.2)	544	(7.4)	**42**	(6.3)	**20**	(2.8)	3.7	(1.0)
Campania	426	(9.1)	449	(8.6)	457	(8.5)	492	(11.0)	**67**	(12.9)	**25**	(4.5)	6.8	(2.3)
Lombardia	471	(8.1)	504	(8.8)	512	(7.3)	535	(7.7)	**64**	(10.6)	**24**	(3.6)	5.8	(1.6)
Trento	488	(4.5)	507	(5.4)	520	(5.2)	534	(5.5)	**46**	(6.8)	**21**	(2.7)	4.7	(1.2)
Spain														
Basque Country•	432	(8.4)	451	(9.3)	460	(10.7)	493	(7.5)	**61**	(10.9)	**21**	(3.4)	6.2	(1.9)
United States														
Massachusetts•	475	(8.0)	506	(10.1)	545	(9.3)	572	(9.0)	**97**	(11.0)	**38**	(3.7)	12.7	(2.5)
North Carolina•	462	(7.9)	478	(7.4)	502	(7.6)	543	(8.1)	**82**	(9.4)	**30**	(3.5)	8.3	(1.9)

• PISA adjudicated region.
1. ESCS refers to the PISA index of economic, social and cultural status.
Notes: For Massachusetts and North Carolina, the desired target population covers 15-year-old students in grade 7 or above in public schools only (see Annex A2).
Values that are statistically significant are indicated in bold (see Annex A3).
See Tables IV.4.11 and IV.4.12 for national data.
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Table B2.IV.7 Students holding a bank account and financial literacy performance

	Percentage of students holding a bank account		Mean performance, by students holding a bank account				Difference in financial literacy performance in PISA 2015 (yes – no or do not know)			
			Yes		No or Do not know		Before accounting for ESCS[1]		After accounting for ESCS	
	%	S.E.	Mean score	S.E.	Mean score	S.E.	Score dif.	S.E.	Score dif.	S.E.
OECD										
Canadian provinces										
British Columbia	81.5	(2.4)	567	(6.1)	529	(10.5)	**38**	(11.4)	**27**	(10.9)
Manitoba	73.3	(3.0)	519	(6.9)	473	(18.2)	**45**	(18.1)	**40**	(17.5)
New Brunswick	71.4	(3.0)	532	(7.7)	501	(12.8)	**32**	(14.6)	21	(13.7)
Newfoundland and Labrador	78.8	(2.7)	527	(7.5)	479	(16.2)	**48**	(18.9)	36	(19.1)
Nova Scotia	77.2	(2.2)	538	(6.1)	507	(15.5)	31	(16.9)	29	(15.9)
Ontario	77.1	(1.7)	545	(5.9)	506	(10.9)	**38**	(11.6)	**31**	(11.0)
Prince Edward Island	89.4	(4.0)	530	(14.4)	c	c	c	c	c	c
Italy										
Bolzano	54.6	(2.8)	546	(7.2)	521	(10.9)	**26**	(11.1)	19	(10.8)
Campania	26.4	(2.3)	457	(15.0)	458	(9.6)	-1	(15.7)	-7	(15.4)
Lombardia	38.3	(2.8)	526	(7.7)	500	(8.2)	**26**	(10.7)	**25**	(10.1)
Trento	62.4	(2.9)	524	(5.9)	515	(9.8)	9	(11.8)	9	(11.4)
Spain										
Basque Country•	65.3	(1.8)	474	(6.3)	433	(7.0)	**40**	(7.0)	**34**	(7.0)
United States										
Massachusetts•	66.7	(2.9)	557	(7.4)	514	(13.5)	**43**	(15.1)	**27**	(13.7)
North Carolina•	50.4	(3.3)	510	(8.6)	476	(8.1)	**34**	(10.0)	20	(11.7)

• PISA adjudicated region.
1. ESCS refers to the PISA index of economic, social and cultural status.
Notes: Means and differences in performance in this table are calculated considering only students for whom data on the PISA index of economic, social and cultural status are available.
For Massachusetts and North Carolina, the desired target population covers 15-year-old students in grade 7 or above in public schools only (see Annex A2).
Values that are statistically significant are indicated in bold (see Annex A3).
See Tables IV.5.8 and IV.5.13 for national data.
StatLink http://dx.doi.org/10.1787/888933486384

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Table B2.IV.8 Students holding a prepaid debit card and financial literacy performance

	Percentage of students holding a prepaid credit card		Mean performance, by students holding a prepaid credit card				Difference in financial literacy performance in PISA 2015 (yes – no or do not know)			
			Yes		No or Do not know		Before accounting for ESCS[1]		After accounting for ESCS	
	%	S.E.	Mean score	S.E.	Mean score	S.E.	Score dif.	S.E.	Score dif.	S.E.
OECD										
Canadian provinces										
British Columbia	13.8	(1.9)	541	(19.2)	565	(6.7)	-24	(21.8)	-31	(20.6)
Manitoba	16.5	(2.3)	504	(14.6)	513	(7.9)	-9	(14.4)	-11	(14.6)
New Brunswick	16.6	(2.5)	535	(14.6)	526	(7.6)	9	(15.9)	0	(15.4)
Newfoundland and Labrador	28.6	(3.0)	489	(13.8)	532	(7.2)	**-43**	(14.6)	**-42**	(14.2)
Nova Scotia	15.2	(2.2)	542	(10.9)	532	(6.9)	11	(12.5)	16	(13.4)
Ontario	16.6	(1.3)	528	(13.6)	540	(6.0)	-11	(14.0)	-18	(14.5)
Prince Edward Island	24.6	(5.2)	c	c	535	(15.8)	c	c	c	c
Italy										
Bolzano	33.9	(2.3)	538	(8.2)	532	(9.2)	6	(10.7)	2	(10.7)
Campania	34.3	(2.6)	479	(11.4)	449	(10.0)	**30**	(12.5)	19	(12.4)
Lombardia	40.5	(2.9)	533	(7.6)	495	(7.2)	**39**	(8.4)	**32**	(9.0)
Trento	41.5	(2.9)	532	(8.6)	513	(6.5)	19	(11.2)	18	(10.4)
Spain										
Basque Country•	8.5	(1.2)	465	(18.8)	461	(5.3)	5	(17.6)	-6	(17.1)
United States										
Massachusetts•	16.8	(1.8)	550	(10.8)	542	(7.6)	8	(11.6)	-3	(10.9)
North Carolina•	22.7	(2.2)	495	(12.5)	492	(8.0)	3	(13.9)	-8	(13.4)

• PISA adjudicated region.
1. ESCS refers to the PISA index of economic, social and cultural status.
Notes: Means and differences in performance in this table are calculated considering only students for whom data on the PISA index of economic, social and cultural status are available.
For Massachusetts and North Carolina, the desired target population covers 15-year-old students in grade 7 or above in public schools only (see Annex A2).
Values that are statistically significant are indicated in bold (see Annex A3).
See Tables IV.5.9 and IV.5.14 for national data.
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Annex C

THE DEVELOPMENT AND IMPLEMENTATION OF PISA: A COLLABORATIVE EFFORT

PISA is a collaborative effort, bringing together experts from the participating countries, steered jointly by their governments on the basis of shared, policy-driven interests.

A PISA Governing Board, representing each country, determines the policy priorities for PISA, in the context of OECD objectives, and oversees adherence to these priorities during the implementation of the programme. This includes setting priorities for the development of indicators, for establishing the assessment instruments and for reporting the results.

Experts from participating countries also serve on working groups that are charged with linking policy objectives with the best internationally available technical expertise. By participating in these expert groups, countries ensure that: the instruments are internationally valid and take into account the cultural and educational contexts in OECD countries and in partner countries and economies; the assessment materials have strong measurement properties; and the instruments emphasise authenticity and educational validity.

Participating countries and economies implement PISA at the national level through National Project Managers, subject to the agreed administration procedures. National Project Managers play a vital role in ensuring that the implementation of the survey is of high quality, and verify and evaluate the survey results, analyses, reports and publications.

External contractors are responsible for designing and implementing the surveys, within the framework established by the PISA Governing Board. Pearson developed the science and collaborative problem-solving frameworks, and adapted the frameworks for reading and mathematics, while the Deutsches Institut für Pädagogische Forschung (DIPF) designed and developed the questionnaires. Management and oversight of this survey, the development of the instruments, scaling and analyses are the responsibility of the Educational Testing Service (ETS) as is development of the electronic platform. Other partners or subcontractors involved with ETS include: cApStAn Linguistic Quality Control and the Department of Experimental and Theoretical Pedagogy at the University of Liège (SPe) in Belgium; the Center for Educational Technology (CET) in Israel; the Public Research Centre (CRP) Henri Tudor and the Educational Measurement and Research Center (EMACS) of the University of Luxembourg in Luxembourg; and GESIS – Leibniz-Institute for the Social Sciences in Germany. Westat assumed responsibility for survey operations and sampling with the subcontractor, the Australian Council for Educational Research (ACER).

The OECD Secretariat has overall managerial responsibility for the programme, monitors its implementation daily, acts as the secretariat for the PISA Governing Board, builds consensus among countries, and serves as the interlocutor between the PISA Governing Board and the international Consortium charged with implementing the activities. The OECD Secretariat also produces the indicators and analyses and prepares the international reports and publications in co-operation with the PISA Consortium and in close consultation with OECD countries and partner countries and economies at both the policy level (PISA Governing Board) and the level of implementation (National Project Managers).

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Argentina: Elena Duro, Martín Guillermo Scasso* and Liliana Pascual*

Azerbaijan (Baku City only): Emin Amrullayev

Belarus (Republic of): Aliaksandr Yakabchuk and Mikalai Fiaskou

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Brunei Darussalam: Dr. Azman Ahmad

Bulgaria: Neda Kristanova

Beijing-Shanghai-Jiangsu-Guangdong (China): Ping Luo

Colombia: Ximena Dueñas and Adriana Molina*

Costa Rica: Alicia Vargas and Leonardo Garnier Rimolo*

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Dominican Republic: Ancell Scheker Mendoza

Former Yugoslav Republic of Macedonia: Natasha Janevska (PISA 2018) and Dejan Zlatkovski*

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Viet Nam: Le Thi My Ha

PISA 2015 National Project Managers

(* Former PISA 2015 NPM)

Albania: Rezana Vrapi and Alfons Harizaj*

Algeria: Samia Mezaib

Argentina: Liliana Pascual

Australia: Sue Thomson

Austria: Birgit Suchan

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Eckhard Klieme (Chair until 2013) (German Institute for International Educational Research, Germany (DIPF), Frankfurt, Germany)

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Silke Hertel (Questionnaire development)
Franz Klingebiel (Questionnaire development)
Susanne Kuger (Questionnaire framework and development)
Ingrid Mader (Team assistance)
Tamara Marksteiner (Questionnaire analysis)
Jean-Paul Reeff (International Consultant)
Nina Roczen (Questionnaire development)
Brigitte Steinert (Questionnaire development)
Svenja Vieluf (Questionnaire development)

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Catherine Hayes (Programme manager)
Elise Bromley (Programme administrator)
Rose Clesham (Content lead, scientific literacy)
Peter Foltz (Content lead, collaborative problem solving)
Christine Rozunick (Content lead, scientific literacy)
Jon Twing (Psychometric consultant)
Michael Young (Psychometric consultant)

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Sheila Krawchuk (Sampling, weighting and quality monitoring)
Andrew Caporaso (Weighting)
Jessica Chan (Sampling and weighting)
William Chan (Weighting)
Susan Fuss (Sampling and weighting)
Amita Gopinath (Sampling and weighting)
Evan Gutentag (Weighting)
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Veronique Lieber (Sampling and weighting)
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Michael Lemay (Manager of Core 4 Contractor for Survey Operations)
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Beverley McGaughan (National Centre Support, Quality Control)

PISA 2015 Contributors, working with Lead Contractors

Australian Council for Educational Research (AUSTRALIA) – Core 5 contributor

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Alla Routitsky (Within-school sampling)
Charlotte Waters (Within-school sampling)
Jorge Fallas (Within-school sampling)
Renee Chow (Within-school sampling)
David Tran (Programmer)
Martin Murphy (School sampling)
Clare Ozolins (School sampling)
Greg Macaskill (School sampling)
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Jorge Fallas (School sampling)
Renee Chow (School sampling)
Thomas Stephen (School sampling)

Center for Educational Technology – Core 3 contributor on test development

Tali Freund (Test Development Coordinator, Science and Collaborative Problem Solving)
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Nurit Keinan (Test Development, Science)
Hava Ben-Horin (Test Development, Science)
Sherman Rosenfeld (Test Development, Science)
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Nadav Caspi (Test Development, Science)
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Helit Heffer (Test Development, Collaborative Problem Solving)
Estela Melamed (Test Development, Science and Collaborative Problem Solving)

cApStAn Linguistic Quality Control (BELGIUM) – Core 3 contributor on linguistic quality control

Steve Dept (Project director, translatability assessment,)
Lieve Deckx (Verification management, cognitive units)

Andrea Ferrari (Linguistic quality assurance and quality control designs)

Musab Hayatli (Right-to-left scripts, cultural adaptations)

Elica Krajceva (Verification management, questionnaires)

Shinoh Lee (Verification management, cognitive units)

Irene Liberati (Verification management, cognitive units)

Roberta Lizzi (Verification management, trend content)

Laura Wayrynen (Translation and verification operations)

GESIS-Leibniz Institute for the Social Sciences (GERMANY) – Core 3 contributor on test development

Anouk Zabal (Test Development Coordinator, Science and Collaborative Problem Solving, Software Testing)

Dorothee Behr (Test Development, Science and Collaborative Problem Solving, Software Testing)

Daniela Ackermann (Test Development, Science and Collaborative Problem Solving, Software Testing)

HallStat SPRL (BELGIUM) – Core 3 contributor as the translation referee

Beatrice Halleux (Consultant, translation/verification referee, French source development)

Luxembourg Institute for Science and Technology (LUXEMBOURG) – Core 2 Contributor on the development of the computer-based platform for the background questionnaire and cognitive assessment

Jehan Bihim (Questionnaire development)

Joël Billard (Multilingual framework and questionnaire development)

Cyril Hazotte (System administration)

Anne Hendrick (Platform Leader, project co-ordination)

Raynald Jadoul (Project management and software architecture)

Isabelle Jars (Project management and testing)

Lionel Lecaque (Software quality and knowledge base administration)

Primaël Lorbat (Multilingual framework and questionnaire architecture)

Matteo Melis (Portal integration and questionnaire development)

Jean-François Merche (System integration and administration)

Vincent Porro (Lead designer and staff co-ordination)

Igor Ribassin (Workflow development and offline tools development)

Somsack Sipasseuth (Workflow development and knowledge base integration)

Nicolas Yodi (Portal integration and questionnaire development)

Statistics Canada (CANADA) – Core 6 contributor on questionnaires

Sylvie Grenier (Overall management)

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Publication layout

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VOLUME IV

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Chapter 6: Students' financial literacy, behaviour and expectations
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