

PISA 2022 Technical Report



1 Programme for International Student Assessment - An Overview

Introduction

The OECD Programme for International Student Assessment (PISA) is a collaborative effort among OECD Member countries and non-Member partner countries to measure how well 15-year-old students approaching the end of compulsory schooling are prepared to meet the challenges of today's knowledge societies. The assessment is forward-looking: rather than focusing on the extent to which these students have mastered a specific school curriculum, it looks at their ability to use their knowledge and skills to meet real-life challenges. This orientation reflects a change in curricular goals and objectives, focusing more on what students can do with what they learn at school.

PISA surveys take place every three years. The first survey took place in 2000 (followed by a further 8 and 3 countries/economies in 2001 and 2002, respectively), the second in 2003, the third in 2006, the fourth in 2009 (followed by a further 10 countries/economies in 2010), the fifth in 2012, the sixth in 2015, the seventh in 2018, and the eighth in 2022. The results of these surveys have been published in a series of reports (OECD, 2020^[1]; 2020^[2]; 2020^[3]; 2019^[4]; 2019^[5]; 2019^[6]) (OECD, 2017^[7]; 2017^[8]; 2017^[9]; 2016^[10]; 2016^[11]) (OECD, 2014^[12]; 2014^[13]; 2014^[14]; 2013^[15]; 2013^[16]) (OECD, 2011^[17]; 2010^[18]; 2010^[19]; 2010^[20]) (OECD, 2010^[21]; 2010^[22]; 2007^[23]; 2004^[24]; 2001^[25]) (OECD/UNESCO Institute for Statistics, 2003^[26]; Walker, 2011^[27]) and a wide range of thematic and technical reports, e.g. OECD (2021^[28]; 2021^[29]). The next survey will occur in 2025. For each assessment, reading, mathematics or science is chosen as the major domain and given greater emphasis than the remaining two domains. In 2000, 2009, and 2018, the major domain was reading; in 2003, 2012, and 2022 it was mathematics, in 2006 and 2015 it was science as it will be in 2025.

The three-year cadence of PISA cycles was disrupted by the coronavirus (COVID-19) global pandemic along with education systems worldwide. The implementation of the PISA 2021 Field Trial was impacted by the first wave of school closures and the uncertainty of when and how schools would reopen led the PISA Governing Board (PGB) to decide on postponing the ongoing PISA 2021 cycle and the upcoming PISA 2024 cycles by one year. Both cycles were renamed PISA 2022 and PISA 2025, respectively, and are thus referred throughout this report for coherence.

PISA is an age-based survey, assessing 15-year-olds in school in grade 7 or higher. These students are approaching the end of compulsory schooling in most participating countries/economies, and school enrolment at this level is close to universal in most OECD countries.

The PISA assessments take a literacy perspective, focusing on the extent to which students can apply the knowledge and skills they have learned and practised at school when confronted with situations and challenges for which that knowledge may be relevant. That is, PISA assesses the extent to which students can use their mathematical knowledge and skills to solve various kinds of numerical and spatial challenges and problems; the extent to which students can use their reading skills to understand and interpret the

various kinds of written material that they are likely to meet as they navigate everyday life; and the extent to which students can use their scientific knowledge and skills to understand, interpret and resolve various kinds of scientific situations and challenges. The PISA 2022 domains are fully described in the *PISA 2022 Assessment and Analytical Framework* (OECD, 2023^[30]).

PISA also conducts assessments of additional cross-curricular competencies from time to time as participating countries/economies see fit. For example, in PISA 2003, an assessment of general problem-solving competencies was included and in PISA 2009 a computer-delivered digital reading assessment (DRA) was included for the first time. In PISA 2012 a computer-delivered assessment of mathematics and problem solving was added, along with an assessment of financial literacy. The DRA was included again in 2012. In PISA 2015 financial literacy was assessed for a second time but for this cycle using a computer-delivered platform, which was followed for its third administration in PISA 2018. In PISA 2022 financial literacy was assessed for the fourth time, also using a computer-based platform, and was administered to 20 countries/economies. A computer-based assessment of critical thinking was also added in PISA 2022 and administered to 65 countries/economies.

In addition, PISA administers Student Questionnaires to collect information from students on various aspects of their home, family and school background, and School Questionnaires to collect information from school principals about various aspects of organisation and educational provision in schools. Both background questionnaires also included the PISA 2022 Global Crises Module (Bertling et al., 2020^[31]), developed to measure several aspects of the disruption caused by the school closures during the COVID-19 pandemic to students, and measures taken by schools. There are also optional questionnaire modules for students asking about Familiarity with Information and Communications Technology (ICT) and Well-being (WB).

In PISA 2022, 17 countries/economies also administered a Parent Questionnaire to the parents of the students participating in PISA. A Teacher Questionnaire was implemented in PISA 2018 and was administered in 19 countries/economies. In PISA 2022, a Student Well-being Questionnaire was also administered in 15 countries. Table 1.1 provides information about participation in the optional questionnaires.

Using the data from questionnaires, analyses linking contextual information with student achievement can address:

- differences between countries/economies in the relationships between student-level factors (such as gender and socio-economic background) and achievement;
- differences in the relationships between school-level factors and achievement across countries/economies;
- differences in the proportion of variation in achievement between (rather than within) schools, and differences in this value across countries/economies;
- differences between countries/economies in the extent to which schools moderate or increase the effects of individual-level student factors and student achievement;
- differences in education systems and national context that are related to differences in student achievement across countries/economies;
- changes in any or all of these relationships over time by linking the current and previous PISA cycles.

By collecting such information at the student and school level on a cross-nationally comparable basis, PISA adds significantly to the knowledge base that is available from national official statistics, such as aggregate national statistics on the educational programmes completed and the qualifications obtained by individuals.

The framework that describes the PISA 2022 questionnaires is included in the *PISA 2022 Assessment and Analytical Framework* (OECD, 2023_[30]).

Participation

The first PISA survey was implemented in 43 countries/economies (including 32 OECD Member countries). It was first conducted in 2000 in 32 countries/economies (including 28 OECD Member countries) using written tasks answered in schools under independently supervised test conditions. Another 11 countries/economies completed the same assessment in 2001 and 2002. PISA 2000 surveyed reading, mathematics, and science with a primary focus on reading.

The following cycle took place in 2003 with a focus in mathematics, in 2006 with a focus on science and every three years since then, including an increasing number of OECD Member countries, Associates, and Partner countries and economies. A detailed account of participation in PISA since 2000 can be found in Table 1.1.

The eighth cycle of PISA, was originally scheduled to take place in 2021, but it was postponed by one year, from 2021 to 2022, due to the COVID-19 pandemic. This cycle was renamed PISA 2022 and it covered reading, mathematics, science, creative thinking, and financial literacy. Mathematics was its primary focus and was implemented in 37 OECD countries and 45 partner countries/economies.

The participants in PISA 2022 are listed in Table 1.2. The figure also indicates whether countries/economies participated in the computer-based (CBA) or paper-based mode (PBA), and shows the countries/economies that participated in the critical thinking (CrT) and/or financial literacy assessment.

Features of PISA

The technical characteristics of the PISA survey involve several different aspects:

- the design of the tests and questionnaires and the features incorporated in the instruments developed for PISA;
- the sampling design, including both the school sampling and the student sampling requirements and procedures;
- rules and procedures to guarantee the equivalence of the different language versions used within and between participating countries/economies, and taking into account the diverse cultural contexts of those countries/economies;
- various operational procedures, including test administration arrangements, data capture and processing, and quality assurance mechanisms designed to ensure the generation of comparable data from all countries/economies;
- the technical requirements and procedures for administering computer-based tests in schools
- scaling and analysis of the data and their subsequent reporting;
- quality assurance procedures that enable PISA to provide high quality data to support policy formation and review.

This report describes the above-mentioned methodologies as they have been implemented in PISA 2022. Box 1.1 provides an overview of the central design elements of PISA 2022.

Box 1.1. Key features of PISA 2022

The content

The PISA 2022 survey focused on mathematics, with reading, science as minor areas of the assessment, and creative thinking as an innovative domain. PISA 2022 also included an assessment of young people's financial literacy, which was optional for participating countries and economies.

PISA assesses not only whether students can reproduce knowledge, but also whether they can extrapolate from what they have learned and apply their knowledge in new situations. It emphasises the mastery of processes, the understanding of concepts, and the ability to function in various types of situations.

The students

Some 690 000 students completed the assessment in 2022, representing about 29 million 15-year-olds in the schools of the 81 participating countries/economies.

The assessment

Computer-based tests were used in most countries, with assessments lasting a total of two hours. In mathematics and reading, a multi-stage adaptive approach was applied in computer-based tests whereby students were assigned a block of test items based on their performance in preceding blocks.

Test items were a mixture of multiple-choice questions and questions requiring students to construct their own responses. The items were organised into groups based on a passage of text describing a real-life situation. More than 15 hours of test items for reading, mathematics, science and creative thinking were covered, with different students taking different combinations of test items.

Students also answered a background questionnaire, which took about 35 minutes to complete. The questionnaire sought information about the students themselves, their attitudes, dispositions and beliefs, their homes, and their school and learning experiences. School principals completed a questionnaire that covered school management and organisation, and the learning environment. Both students and schools responded to the Global Crises Module additional items in their respective questionnaires, assessing how school closures caused by the COVID-19 pandemic affected student lives and school policies.

Some countries/economies also distributed additional questionnaires to elicit more information. These included: in 19 countries/economies, a questionnaire for teachers asking about themselves and their teaching practices; and in 17 countries/economies, a questionnaire for parents asking them to provide information about their perceptions of and involvement in their child's school and learning.

Countries/economies could also choose to distribute three other optional questionnaires for students: 53 countries/economies distributed a questionnaire about students' familiarity with computers and 15 countries/economies distributed a questionnaire about students' well-being.

Technical innovations in PISA 2022

PISA 2015 represented the first step of switching from a primarily paper-based survey that included optional computer-based modules to a fully computer-delivered survey, a process that continued into the 2018 and was further expanded into the 2022 cycle. The computer-based delivery mode allows PISA to measure new and expanded aspects of the domain constructs. In mathematics, new material was

incorporated aimed to move away from the need to perform basic calculations to assess mathematical reasoning and its interplay with problem solving. PISA 2022 extended and improved the computer-based multi-stage adaptive testing design implemented for the reading literacy domain in PISA 2018 to the assessment of mathematical literacy in the 2022 cycle, further improving measurement accuracy and efficiency, especially at the extremes of the proficiency distribution. In financial literacy, in PISA 2018 some interactive tasks were created that allowed students to manipulate variables and observe effects of financial choices. These were also included in PISA 2022. In addition, in PISA 2022, new tasks were created to fill in gaps in the framework coverage left by previously released tasks. Additionally, PISA 2022 retained a paper-based version of the assessment that included only trend units. This paper-based assessment was administered in a small number of countries/economies that did not implement the computer-based survey (see Table 1.2). Chapter 2 describes the integrated assessment design, and Chapter 20 describes the technical aspects of the computer delivery platform. Chapter 19 describes the platform used for the development and delivery of background questionnaires for students, school principals and teachers.

In addition to the implementation of PISA 2022 as a fully computer-based survey, an interactive portal was further developed to support survey implementation and enhance communication between national teams and the international contractors. Throughout this report references are made to the PISA Portal as it was used in a variety of tasks during the implementation of PISA 2022.

Roll-out of on- online marking of tests continued in PISA 2022 following its successful adoption as the main medium of test marking in PISA 2018. This mode offered considerable advantages in monitoring marking activities and enabling real-time checks on marker reliability, thereby increasing the accuracy and reliability of marking open-ended responses. In addition, responses from closed items in test and questionnaires were captured automatically without the need for manual data entry, saving time and resources, and avoiding potential operator error. Chapter 15 describes the marking process while Chapter 20 describes technical details of the Open-Ended Coding System (OECS) and the direct capture of responses from closed items.

The move to computer-based delivery as the main mode of assessment also made it possible to collect more in-depth information not just on student responses but also the process behind those responses, such as the amount of time it took to complete each task and the number of actions taken by the student. Chapter 20 describes the type of information that was collected.

The innovations in the scaling model implemented in 2015 continued in 2022 to improve the measurement of trends across PISA cycles. The ability to establish and maintain trends over time is an important goal for PISA. The integrated design for the assessment which is described in Chapter 2 further expanded on the 2018 design by increasing the number of items for the minor domains to previous major domain levels, reducing the potential for introducing systematic measurement error across PISA cycles. The methodology incorporated data from previous cycles for scaling and analysis, thus providing a solid base for linking across cycles and between paper-based and computer-based administrations.

PISA 2022, as do other large-scale international studies, uses an Item Response Theory (IRT) approach in the analysis and scaling of the data and the measurement of trends across cycles. The IRT model used from PISA 2015 onwards underwent some modifications compared with previous cycles which based the scaling entirely on a Rasch model. To increase the ability of the scaling to address the complexities of PISA response data, PISA 2015 and later cycles implemented a hybrid model which combined a Rasch approach with a two-parameter-logistic model and a generalised partial credit model (GPCM) used where appropriate. Chapter 11 describes this innovative approach in detail and Chapter 14 presents scaling outcomes.

Managing and implementing PISA

PISA is implemented within a framework established by the PGB which includes representation from all participating countries/economies at senior policy levels. The PGB establishes policy priorities and standards for developing indicators, for establishing assessment instruments, and for reporting results. Annex J lists the members of the PGB and observers from partner countries/economies or multilateral organisations.

Experts from participating countries/economies served on working groups linking the programme policy objectives with the best internationally available technical expertise in the assessment areas and in the areas included in the context questionnaires. These expert groups were referred to as Subject Matter Expert Groups (EGs) and the Questionnaire Expert Group (QEG). By participating in these expert groups and regularly reviewing outcomes of the groups' meetings, countries/economies ensured that the instruments were internationally valid, that they took the cultural and educational contexts of participating countries/economies into account, that the assessment materials had strong measurement potential, and that the instruments emphasised authenticity and educational validity. See Annex J for the list of members of the expert groups.

Each of the participating country/economy appointed a National Project Manager (NPM) to implement PISA. The NPMs ensured that internationally agreed common technical and administrative procedures were employed. These managers played a vital role in developing and validating the international assessment instruments and ensured that PISA implementation was of high quality. The NPMs also contributed to the verification and evaluation of the survey results, analyses and reports.

The OECD Secretariat was responsible for the overall management of the programme. It monitored its implementation on a day-to-day basis, served as the Secretariat for the PGB, fostered consensus building between the countries/economies involved, and served as the interlocutor between the PGB and the international contractors.

The design and implementation of the surveys, within the framework established by the PGB, is the responsibility of external contractors. For PISA 2022, the overall management of contractors and implementation was carried out by the Educational Testing Service (ETS) in the United States as part of its responsibility as the **Core A** contractor. The OECD Secretariat worked closely with the International Project Director and Project Manager, to co-ordinate all aspects of implementation. In addition to overall management, Core A was responsible for the computer-delivery platform, instrument development, scaling and analysis, and all data products. As the lead of Core A, ETS worked in co-operation with Westat in the United States for survey operations, cApStAn for translation and verification of the assessment instruments, the International Association for Evaluation of Educational Achievement (IEA) in the Netherlands for the data management software,

The additional tasks related to the implementation of PISA 2022 were carried out by three additional contractors – **Cores B1, B2, B3, C, D, and E**.

The Research Triangle Institute (RTI) in the United States facilitated the development of the mathematics assessment framework as the **Core B1** contractor. ETS also facilitated the development of the background questionnaire frameworks as the **Core B2** contractor. ACT in the United States and Cito in the Netherlands performed the test development for the innovative domain as the **Core B3** contractor. **Core C** focused on sampling and was implemented by Westat in the United States in co-operation with the Australian Council for Educational Research (ACER). **Core D** was managed by cApStAn Linguistic Quality Control in Belgium for linguistic quality control in co-operation with BranTra in Belgium. **Core E** focused on country preparation and implementation support and was managed by the Australian Council for Educational Research (ACER) in Australia.

Annex J lists the staff and consultants associated with the core contractors who have made significant contributions to the development and implementation of the project.

PISA 2022 publications

This Technical Report is designed to describe the technical aspects of the project at a sufficient level of detail to enable review and, potentially, replication of the implemented procedures and technical solutions to problems. It therefore does not report the results of PISA 2022 which are published as *PISA 2022 Results (Volume I): Student performance and Equity in education* (OECD, 2023^[32]), *PISA 2022 Results (Volume II): Resilient systems, schools and students* (OECD, 2023^[33]) and subsequent volumes and thematic reports.

Subsequent PISA 2022 result volumes are planned to be published by 2024 as Volumes III, IV, and V on creative thinking, financial literacy, and students' readiness for lifelong learning, respectively.

References

- Bertling, J. et al. (2020), "A tool to capture learning experiences during COVID-19: The PISA Global Crises Questionnaire Module", *OECD Education Working Papers*, No. 232, OECD Publishing, Paris, <https://doi.org/10.1787/9988df4e-en>. [31]
- OECD (2023), *PISA 2022 Assessment and Analytical Framework*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/dfc0bf9c-en>. [30]
- OECD (2023), *PISA 2022 Results (Volume I): Student Performance and Equity in Education*, PISA, OECD Publishing, Paris. [32]
- OECD (2023), *PISA 2022 Results (Volume II): Resilient Systems, Schools and Students*, PISA, OECD Publishing, Paris. [33]
- OECD (2021), *21st-Century Readers: Developing Literacy Skills in a Digital World*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/a83d84cb-en>. [29]
- OECD (2021), *PISA 2018: Sky's the Limit: Growth Mindset, Students, and Schools in PISA*, PISA, OECD Publishing, Paris, <https://www.oecd.org/pisa/growth-mindset.pdf>. [28]
- OECD (2020), *PISA 2018 Results (Volume IV): Are Students Smart about Money?*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/48ebd1ba-en>. [1]
- OECD (2020), *PISA 2018 Results (Volume V): Effective Policies, Successful Schools*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/ca768d40-en>. [2]
- OECD (2020), *PISA 2018 Results (Volume VI): Are Students Ready to Thrive in an Interconnected World?*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/d5f68679-en>. [3]
- OECD (2019), *PISA 2018 Results (Volume I): What Students Know and Can Do*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/5f07c754-en>. [4]
- OECD (2019), *PISA 2018 Results (Volume II): Where All Students Can Succeed*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/b5fd1b8f-en>. [5]

- OECD (2019), *PISA 2018 Results (Volume III): What School Life Means for Students' Lives*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/acd78851-en>. [6]
- OECD (2017), *PISA 2015 Results (Volume III): Students' Well-Being*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/9789264273856-en>. [9]
- OECD (2017), *PISA 2015 Results (Volume IV): Students' Financial Literacy*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/9789264270282-en>. [8]
- OECD (2017), *PISA 2015 Results (Volume V): Collaborative Problem Solving*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/9789264285521-en>. [7]
- OECD (2016), *PISA 2015 Results (Volume I): Excellence and Equity in Education*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/9789264266490-en>. [11]
- OECD (2016), *PISA 2015 Results (Volume II): Policies and Practices for Successful Schools*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/9789264267510-en>. [10]
- OECD (2014), *PISA 2012 Results: Creative Problem Solving (Volume V): Students' Skills in Tackling Real-Life Problems*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/9789264208070-en>. [13]
- OECD (2014), *PISA 2012 Results: Students and Money (Volume VI): Financial Literacy Skills for the 21st Century*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/9789264208094-en>. [14]
- OECD (2014), *PISA 2012 Results: What Students Know and Can Do (Volume I, Revised edition, February 2014): Student Performance in Mathematics, Reading and Science*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/9789264208780-en>. [12]
- OECD (2013), *PISA 2012 Results: Excellence through Equity (Volume II): Giving Every Student the Chance to Succeed*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/9789264201132-en>. [15]
- OECD (2013), *PISA 2012 Results: Ready to Learn (Volume III): Students' Engagement, Drive and Self-Beliefs*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/9789264201170-en>. [16]
- OECD (2013), *PISA 2012 Results: What Makes Schools Successful (Volume IV): Resources, Policies and Practices*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/9789264201156-en>. [34]
- OECD (2011), *PISA 2009 Results: Students On Line: Digital Technologies and Performance (Volume VI)*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/9789264112995-en>. [17]
- OECD (2010), *PISA 2009 Results: Learning to Learn: Student Engagement, Strategies and Practices (Volume III)*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/9789264083943-en>. [20]
- OECD (2010), *PISA 2009 Results: Learning Trends: Changes in Student Performance Since 2000 (Volume V)*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/9789264091580-en>. [22]
- OECD (2010), *PISA 2009 Results: Overcoming Social Background: Equity in Learning Opportunities and Outcomes (Volume II)*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/9789264091504-en>. [19]

- OECD (2010), *PISA 2009 Results: What Makes a School Successful?: Resources, Policies and Practices (Volume IV)*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/9789264091559-en>. [21]
- OECD (2010), *PISA 2009 Results: What Students Know and Can Do: Student Performance in Reading, Mathematics and Science (Volume I)*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/9789264091450-en>. [18]
- OECD (2007), *PISA 2006: Science Competencies for Tomorrow's World: Volume 1: Analysis*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/9789264040014-en>. [23]
- OECD (2004), *Learning for Tomorrow's World: First Results from PISA 2003*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/9789264006416-en>. [24]
- OECD (2001), *Knowledge and Skills for Life: First Results from PISA 2000*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/9789264195905-en>. [25]
- OECD/UNESCO Institute for Statistics (2003), *Literacy Skills for the World of Tomorrow: Further Results from PISA 2000*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/9789264102873-en>. [26]
- Walker, M. (2011), *PISA 2009 Plus Results: Performance of 15-year-olds in Reading, Mathematics and Science for 10 Additional Participants*, ACER Press, Melbourne. [27]

Chapter 1 tables

| Tables | Title |
|-----------|--|
| Table 1.1 | Participation and main domains in previous PISA cycles |
| Table 1.2 | PISA 2022 participants |

Table 1.1. Participation and main domains in previous PISA cycles

| Cycle | Main domain | OECD members / Associates | Partners | Participants |
|-------------------|-------------|------------------------------|----------|--------------|
| 2000 | Reading | 30 | 1 | 31 |
| 2000+ (2001/2002) | Reading | 3 | 7 | 10 |
| 2003 | Mathematics | 33 | 8 | 41 |
| 2006 | Science | 39 | 17 | 56 |
| 2009 | Reading | 39 | 25 | 64 |
| 2009+ (2010) | Reading | 1 | 8 | 9 |
| 2012 | Mathematics | 40 | 23 | 63 |
| 2015 | Science | 40 | 31 | 71 |
| 2018 | Reading | 40 | 38 | 78 |

Note: Brazil and Thailand have Associate status in PISA.

Table 1.2. Participating countries and economies in PISA 2022

Please refer to Excel file Chapter_1_tables.xlsx online for this table.

This work is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of the Member countries of the OECD.

Note by the Republic of Türkiye

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. Türkiye recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Türkiye 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 Türkiye. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.

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.

The use of this work, whether digital or print, is governed by the Terms and Conditions to be found at: <https://www.oecd.org/termsandconditions>