

OECD/INFE 2023 international survey of adult financial literacy

© OECD 2023.

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.

This document, as well as any data and map included herein, are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

Cover design: © Douceflour / Getty Images.

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

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.

Foreword

As indicated in the OECD Recommendation on Financial Literacy, assessing levels of financial literacy is a key step in creating a successful national strategy for financial literacy (OECD, 2020^[1]). Collecting data on financial literacy levels using an internationally comparable survey instrument through a coordinated exercise enables countries and economies to benchmark themselves, identify common patterns and work together to find solutions for improving financial literacy and measure progress among their adult populations.

Some 39 countries and economies, including 20 OECD Member countries and 8 G20 members, participated in this third coordinated measurement exercise using the globally recognised OECD/INFE 2022 Toolkit for Measuring Financial Literacy and Financial Inclusion (OECD, 2022^[2]) to measure financial literacy levels among their adult populations. The results provide information about financial literacy levels covering aspects of financial knowledge, financial behaviour and financial attitudes. In addition, the findings also provide information about financial product holding, digital financial literacy levels and levels of financial well-being among adults in the participating countries and economies.

This publication was prepared by Federica D'Agostino and Rachel Karen under the supervision of Chiara Monticone, with oversight from Miles Larbey in the Capital Markets and Financial Institutions Division of the OECD Directorate for Financial and Enterprise Affairs. Editing support was provided by Jennah Huxley in the Capital Markets and Financial Institutions Division of the OECD Directorate for Financial and Enterprise Affairs. In most participating countries and economies, data collection was undertaken by national or regional authorities or research institutions. Data for some countries was collected by the OECD in the framework of technical assistance or regional projects (Cambodia, Cyprus, Greece, the Philippines and Yemen), with support from donors (the European Commission and the Government of Japan). The OECD Secretariat would like to thank all countries and economies that participated in this important exercise.

Table of contents

Foreword	3
Executive Summary	6
1 Introduction	9
Background	9
The OECD/INFE Toolkit to measure financial literacy and previous assessments	9
About this Report	10
2 Financial literacy and its components	12
Overall levels of financial literacy	13
Financial knowledge	17
Financial behaviour	21
Financial attitudes	25
Financial literacy levels across socio-demographic groups	27
Context for understanding financial literacy levels: financial product holding and experiences in the financial marketplace	29
3 Digital financial literacy	36
Digital financial literacy	37
Digital financial literacy questions	39
Digital financial literacy levels across socio-demographic groups	41
Context for understanding digital financial literacy levels: digital activities and digital financial services	42
4 Financial well-being	47
Levels of financial well-being	48
Responses to individual financial well-being questions	50
Financial well-being levels across socio-demographic groups	53
Financial well-being and financial literacy	55

5 Policy suggestions	56
References	59
Annex A. Information on data collection	62
Annex B. Descriptive statistics	66
Annex C. Notes on methodology	67
Annex D. Tables	75

FIGURES

Figure 2.1. Overall financial literacy	14
Figure 2.2. Minimum target financial literacy	16
Figure 2.3. Minimum target financial knowledge	18
Figure 2.4. Financial knowledge questions	20
Figure 2.5. Changes in financial knowledge	21
Figure 2.6. Minimum target financial behaviour	23
Figure 2.7. Financial behaviour questions	25
Figure 2.8. Financial attitude questions	27
Figure 2.9. Variation in financial literacy	28
Figure 2.10. Financial product holding and financial literacy	32
Figure 2.11. Holding savings, investment or retirement products and financial knowledge	33
Figure 2.12. Having been a victim of a financial fraud or scam and financial literacy	35
Figure 3.1. Digital financial literacy	38
Figure 3.2. Minimum target score on digital financial literacy	39
Figure 3.3. Digital financial literacy questions	41
Figure 3.4. Holding crypto-assets and digital financial literacy	44
Figure 3.5. Managing financial products and services online and digital financial literacy	45
Figure 3.6. Shopping online and digital financial literacy	46
Figure 4.1. Financial well-being	49
Figure 4.2. Financial well-being questions	51
Figure 4.3. Changes in financial resilience	53
Figure 4.4. Variation in financial well-being	54
Figure 4.5. Financial well-being and financial literacy	55

Executive Summary

Financial literacy has been recognised at a global level as a core life skill in the 21st century, one that is essential for the empowerment of individuals and for supporting individual and societies' financial well-being (G20, 2021^[3]). Important developments since the publication of the OECD/INFE 2020 International Survey of Adult Financial Literacy highlight the continued need to strengthen financial literacy to support the financial well-being of individuals and households (OECD, 2020^[4]). Such developments include the experience of the COVID-19 pandemic, increased cost-of-living pressures stemming from pandemic-related disruptions and Russia's invasion of Ukraine and the current context of high inflation and rising interest rates. Furthermore, the spread of digital financial services, that accelerated during the COVID-19 pandemic, underscores the need to equip individuals with adequate knowledge and skills to use such products and services safely. Other recent developments in the financial landscape, including a growing interest in and use of crypto-assets, new and alternative forms of financial advice (e.g. influencers), and the increased incidence and complexity of financial frauds and scams, also highlight the need to strengthen financial literacy skills among adults to help them make sound financial decisions.

As stated by the OECD Recommendation on Financial Literacy, collecting reliable and internationally comparable data to measure the financial literacy of adults is a key step in creating successful financial literacy national strategies and programmes (OECD, 2020^[1]). Such data can provide evidence of the areas in which financial knowledge and skills need to be improved and of the groups of adults who need financial literacy the most. Repeated measures of financial literacy also help identify trends, indicate where improvements have been made, and what more needs to be done.

Some 39 countries and economies, including 20 OECD Member countries and 8 G20 countries, participated in this third international survey of financial literacy levels using the 2022 OECD/INFE Toolkit for Measuring Financial Literacy and Financial Inclusion. This report presents average levels of financial literacy and digital financial literacy, computed following the OECD/INFE methodology, and how they vary across and within countries and economies. The report also presents evidence on levels of financial well-being. Policy suggestions are presented at the end of the report.

Financial literacy levels can be improved to support sound financial decisions in challenging economic contexts

- Financial literacy is a combination of financial awareness, knowledge, skills, attitudes and behaviours necessary to make sound financial decisions and ultimately achieve individual financial well-being (OECD, 2020^[1]). Results suggest that among many adults the understanding of certain basic financial concepts and the application of basic financial skills may not be sufficient to take sound financial decisions in challenging economic contexts, such as the current landscape characterised by cost of living pressures in many countries.
- The average financial literacy score across all participating countries and economies is 60 out of 100 points (63 out of 100 across participating OECD countries). On average across all participating countries and economies, only 34% of adults reached the minimum target score on financial

literacy, defined as scoring at least 70 out of 100 points (39% across participating OECD countries). Adults who have attained a higher level of formal education, adults with higher incomes, as well as adults who are employed have higher levels of financial literacy in many participating countries and economies.

- In terms of financial knowledge, some 84% of adults understand the definition of inflation, but only 63% can apply the concept of time value of money to their own savings, on average across participating countries and economies. The percentage of adults who understand the time value of money has increased in all countries with comparable data since the previous assessment in 2019, potentially due to the context of high inflation in many participating countries at the time when the survey took place. Furthermore, findings show that some 77% of adults understand the relationship between risk and reward, yet only 42% of adults can correctly answer a question about compound interest, on average across participating countries and economies. Even among adults who hold savings products across participating countries and economies, only 46% understand compound interest.
- In terms of financial behaviour, on average across participating countries and economies, 70% of adults report that they carefully consider if they can afford something before buying it. However, only 26% of adults compare financial products across providers and only 24% of adults seek advice from independent sources when purchasing financial products and services.
- On average across participating countries and economies, 15% of adults reported that they have been a victim of at least one type of financial frauds or scams such as phishing scams, scams involving personal information, investment scams, and unauthorized or unrecognized transactions. Across all participating countries and economies, around two out of three adults who have been a victim of one of these types of financial frauds or scams do not reach the minimum target financial literacy score.

Digital financial literacy levels may not be sufficient in light of the opportunities and risks posed by digital financial services

- Digital financial literacy is a combination of knowledge, skills, attitudes and behaviours necessary for individuals to be aware of and safely use digital financial services and digital technologies with a view to contributing to their financial well-being (OECD, 2022^[5]). Digital financial literacy is a specific area of overall financial literacy. The findings in this report show that many adults may not display sufficient knowledge and skills to use digital products and services safely.
- The average score relating to digital financial literacy across all participating countries and economies is 53 out of 100 points (55 out of 100 across participating OECD countries). On average across all participating countries and economies, only 29% of adults reach the minimum target score of at least 70 points out of 100 on digital financial literacy (34% across participating OECD countries). Digital financial literacy levels are significantly higher among adults who have higher incomes and higher levels of education.
- On average across participating countries and economies, most adults (86%) report that they do not share PINs and passwords of their bank accounts with close friends, however only 49% recognise that it is unsafe to shop online using public Wi-Fi networks. Only 54% understand that the personal data they share online can be used to target them with personalized commercial or financial offers.
- On average across participating countries and economies, 38% of adults who report to manage financial products and services online reach the minimum target score on digital financial literacy. Some 41% of adults on average across participating countries and economies understand that crypto-currencies are not legal tender.

Higher financial literacy is associated with greater individual financial well-being

- The OECD Recommendation on Financial Literacy recognises individual financial well-being as the ultimate goal of financial literacy policies and programmes (OECD, 2020^[1]).
- Across participating countries and economies, the average financial well-being score is 42 out of 100 points (47 out of 100 across participating OECD countries).
- One important element of financial well-being is financial resilience, which refers to the ability to cope with negative financial shocks. On average across participating countries and economies, only 54% of adults report that they would be able to pay a major expense, equivalent to one month of income, without borrowing or asking friends and family to help. Only 43% of adults across participating countries and economies report that they could cover their living expenses for at least three months if they lost their main source of income.
- Another dimension of financial well-being relates to individuals' subjective perceptions of their personal financial situation. On average across participating countries and economies, only 29% of adults report that they do not worry about their living expenses and 35% of adults do not feel that finances control their lives.
- Financial well-being and financial resilience levels are significantly higher among adults with higher incomes compared to adults with lower incomes.
- Adults who reach the minimum target score on financial literacy also have higher levels of financial well-being (by 10 points out of 100 on average across participating countries and economies) and of financial resilience (by 12 points out of 100) than adults who scored below the minimum target financial literacy score, after taking into account individual socio-economic characteristics.

Evidence in this report highlights areas where policymakers can focus their financial literacy policies and programmes

Based on the evidence presented in this report, it is possible to draw a series of policy suggestions for policymakers and stakeholders to consider as they develop financial literacy national strategies and programmes. These policy suggestions are to:

- Continue to improve basic financial knowledge to support sound financial decisions in the current economic context.
- Design programmes and strategies to strengthen behaviours and attitudes that are more likely to support financial resilience and financial well-being.
- Improve digital financial literacy to support the safe use of digital financial products and services.
- Continue to support people with the lowest financial literacy, digital financial literacy and well-being.
- Continue to collect and analyse evidence on financial literacy, including with a focus on digital financial literacy, to make sure that financial literacy policies and programmes support individual financial well-being.

1 Introduction

Background

Financial literacy has been recognized at a global level as a core life skill, one that is essential for the empowerment of individuals and for supporting individual and societies' financial well-being (G20, 2021^[3]). Financial literacy policies and programmes also can improve financial well-being by helping individuals to make informed decisions and develop greater control and confidence over personal financial matters.

As stated by the OECD Recommendation on Financial Literacy, national strategies for financial literacy should be based on relevant evidence and analysis in order to determine policy priorities and objectives, and to ensure that they remain relevant and up-to-date (OECD, 2020^[1]). Collecting reliable and internationally comparable data to measure financial literacy levels of populations is a crucial way to develop and evaluate effective financial education policies and programmes. Such data can provide evidence of the areas in which financial knowledge and skills need to be improved and of the groups of adults who need financial literacy the most. Repeated measures of financial literacy also help indicate where improvements have been made and what more needs to be done. They also provide the additional benefit of knowing how countries and economies compare on key dimensions of financial literacy to help identify those with successful financial education policies and those facing similar challenges, and in doing so, to share experience about effective solutions.

The OECD International Network on Financial Education (OECD/INFE) is committed to measuring and assessing financial literacy levels around the globe through coordinated measurement exercises. Some 39 countries and economies, including 20 OECD Member countries and 8 G20 countries, drawn from Asia, Europe and Latin America participated in this third international survey of financial literacy levels using the globally recognized OECD/INFE Toolkit for Measuring Financial Literacy and Financial Inclusion. This report presents the findings of this third coordinated measurement exercise.

The OECD/INFE Toolkit to measure financial literacy and previous assessments

The OECD/INFE has been committed to undertaking internationally comparable measurements of financial literacy via coordinated surveys since 2009. The first survey instrument to measure levels of financial literacy was developed in 2010 via a dedicated working group and drew on an OECD working paper (Kempson, 2009^[6]), national surveys, international research and expert advice. The initial questionnaire to measure financial literacy (the "Toolkit") was first piloted in 2010 as part of the first OECD/INFE International Financial Literacy and Financial Inclusion Measurement Exercise, which led to the publication of the working paper "Measuring Financial Literacy: Results of the OECD/INFE Pilot Study" (Atkinson and Messy, 2012^[7]). The Toolkit was welcomed by G20 leaders in September 2013.

The Toolkit was revised in 2015 and used in 2015/16 in a second round of data collection on adult financial literacy competencies. Results were published for a first set of 30 countries and economies in the OECD/INFE International Survey of Adult Financial Literacy Competencies (OECD, 2016^[8]). A complementary report was later released focusing on the G20 (OECD, 2017^[9]).

A subsequent revision of the Toolkit took place in 2018 with the aim of updating content and enlarging its scope to also cover financial well-being, which is a goal of financial literacy. The 2018 version of the Toolkit was used for an international survey of adult financial literacy competencies in 2019/20. Results were published in the OECD/INFE 2020 International Survey of Adult Financial Literacy (OECD, 2020^[4]).

In addition to these internationally coordinated measurement exercises, the Toolkit has also been used to collect financial literacy data in a variety of technical assistance projects implemented by the OECD such as in the Commonwealth of Independent States (OECD, 2021^[10]) and in South East Europe (OECD, 2018^[11]). Several countries developed or revised their national strategies for financial literacy using evidence collected via the OECD/INFE Toolkit (OECD, 2021^[12]; OECD, 2023^[13]; Portugal, 2022^[14]; CNMV, Banco de España and Ministry of Economy, 2022^[15]; Italian Committee for Financial Education, 2017^[16]). In addition, the Toolkit has also been used in country- or region-specific projects including Europe (Fessler, Jelovsek and Silgoner, 2020^[17]), Latin America (Mejía and Rodríguez Guzmán, 2016^[18]), Asia (Morgan and Trinh, 2019^[19]; Morgan and Trinh, 2017^[20]) and Africa (Roberts et al., 2018^[21]).

The OECD/INFE Toolkit for Measuring Financial Literacy and Financial Inclusion 2022 represents the latest version of the questionnaire and is the one used as the basis of this report. As in previous versions, the 2022 questionnaire collects information on financial literacy and related elements such as financial product holding, financial resilience and financial well-being. Moreover, the size and nature of the consumer financial services market has grown and changed considerably since the round of data collection in 2015/16, with new financial products and services along with increased digitalisation of the financial sector. The 2022 version of the questionnaire therefore includes questions to measure digital financial literacy across the three components of knowledge, behaviour and attitudes. It also includes questions about holding and use of digital financial products and services, holding sustainable finance products and attitudes toward sustainable finance.

About this Report

This report provides an overview and analysis of financial literacy data collected across 39 participating countries and economies, of which 20 are OECD Member countries, representing 68,826 total respondents of adults aged 18-79. The data used in this report are drawn from national surveys undertaken using the 2022 OECD/INFE Toolkit and submitted to the OECD as part of a coordinated measurement exercise. Data for some countries was collected in the framework of technical assistance or regional projects (Cambodia, Cyprus, Greece, the Philippines and Yemen), with support from donors (the European Commission and the Government of Japan). The use of a common instrument designed to be applicable in countries at different stages of economic development and with all population groups makes it possible to compare results across countries and explore patterns in financial literacy across socio-demographic groups within countries. Findings can help identify common patterns that may indicate shared challenges and/or effective solutions.

This report consists of:

- Chapter I. Overall levels of financial literacy
 - Levels of financial literacy
 - Financial knowledge
 - Financial behaviours
 - Financial attitudes
 - Changes in levels of financial knowledge over time
 - Variation in financial literacy levels across socio-demographic groups

- Background information on levels of financial product holding and individual experiences in the financial marketplace, in relation to financial literacy levels
- Chapter II. Digital financial literacy
 - Digital financial literacy
 - Variation in digital financial literacy across socio-demographic groups
 - Background information on the use of digital devices and digital financial services, in relation to digital financial literacy levels
- Chapter III. Financial well-being
 - Financial well-being
 - Variation in financial well-being across socio-demographic groups
 - Changes in levels of financial resilience over time
- Chapter IV. Policy conclusions

Every effort has been taken to ensure that the country-level data are comparable, however differences in sampling and data collection methods should be noted when considering the results.

It should also be noted that “overall averages” or “OECD averages” reported in this report correspond to the arithmetic means of the respective country/economy estimates. These two estimates were calculated for most indicators presented in this report. In the case of some participating countries and economies, data may not be available for specific indicators, or specific categories may not apply. It should therefore be kept in mind that the terms “overall average” or “OECD average” refer to the countries or economies with available data included in the respective comparisons.

More information about country-level data collection, the survey instrument, and the methodology used to construct financial literacy scores can be found in the Annexes:

- Annex A provides information about data collection in participating countries and economies.
- Annex B provides descriptive statistics about the sample in participating countries and economies including the age, gender, education level, geographic location (urban versus rural), occupational status and income level of respondents.
- Annex C contains information on how the financial literacy scores, digital financial literacy scores and financial well-being scores have been computed.
- Annex D includes data tables for all figures included in this Report.

2 Financial literacy and its components

Key results

- The average financial literacy score across all participating countries and economies is 60 out of 100 points (63 out of 100 across participating OECD countries).
- *Financial knowledge*: The average financial knowledge score across all participating countries and economies is 63 out of 100 points (67 out of 100 across participating OECD countries). Across participating countries and economies, 84% of adults understand the definition of inflation, however, only 63% can apply the concept of time value of money to their own savings. Furthermore, findings show that some 77% of adults understand the relationship between risk and reward, yet only 42% of adults can correctly answer a question about compound interest. Even among adults who hold savings products across participating countries and economies, only 46% understand compound interest.
- *Financial behaviour*: The average financial behaviour score across all participating countries and economies is 61 out of 100 points (62 out of 100 across participating OECD countries). Across participating countries and economies, 70% of adults report that they carefully consider if they can afford something before buying it. However, only 26% of adults compare financial products across providers and only 24% of adults seek advice from independent sources when purchasing financial products and services.
- *Financial attitudes*: The average financial attitude score across all participating countries and economies is 56 out of 100 points (58 out of 100 across participating OECD countries).
- Adults who have attained a higher level of formal education, adults with higher incomes, as well as adults who are employed have higher levels of financial literacy in many participating countries and economies.
- Across many participating countries and economies, a majority of adults (63%) who hold any type of financial product do not score at the minimum target financial literacy score (at least 70 out of 100 points).
- On average across participating countries and economies, 15% of adults reported that they have been a victim of at least one type of financial frauds or scams such as phishing scams, scams involving personal information, investment scams, and unauthorized or unrecognized transactions. Across all participating countries and economies, around two out of three adults who have been a victim of one of these types of financial frauds or scams do not reach the minimum target financial literacy score.

Financial literacy is defined by the OECD as a combination of “financial awareness, knowledge, skills, attitudes and behaviours necessary to make sound financial decision and ultimately achieve financial well-being” (OECD, 2022^[22]). Financial literacy can enable individuals to make informed financial decisions and develop greater control over personal financial matters. Financial literacy can also help individuals to avoid financial scams and have the confidence to navigate new aspects of the financial landscape. Moreover, financial literacy can encourage savings and investment for individuals to manage short-term income fluctuations and reach longer-term financial goals.

This chapter focuses on overall levels of financial literacy across participating countries and economies. It presents average financial literacy levels and describes financial behaviours, financial knowledge and financial attitudes – the three key components of financial literacy - across participating countries and economies. Findings also reveal differences in financial literacy levels by socio-demographic groups.

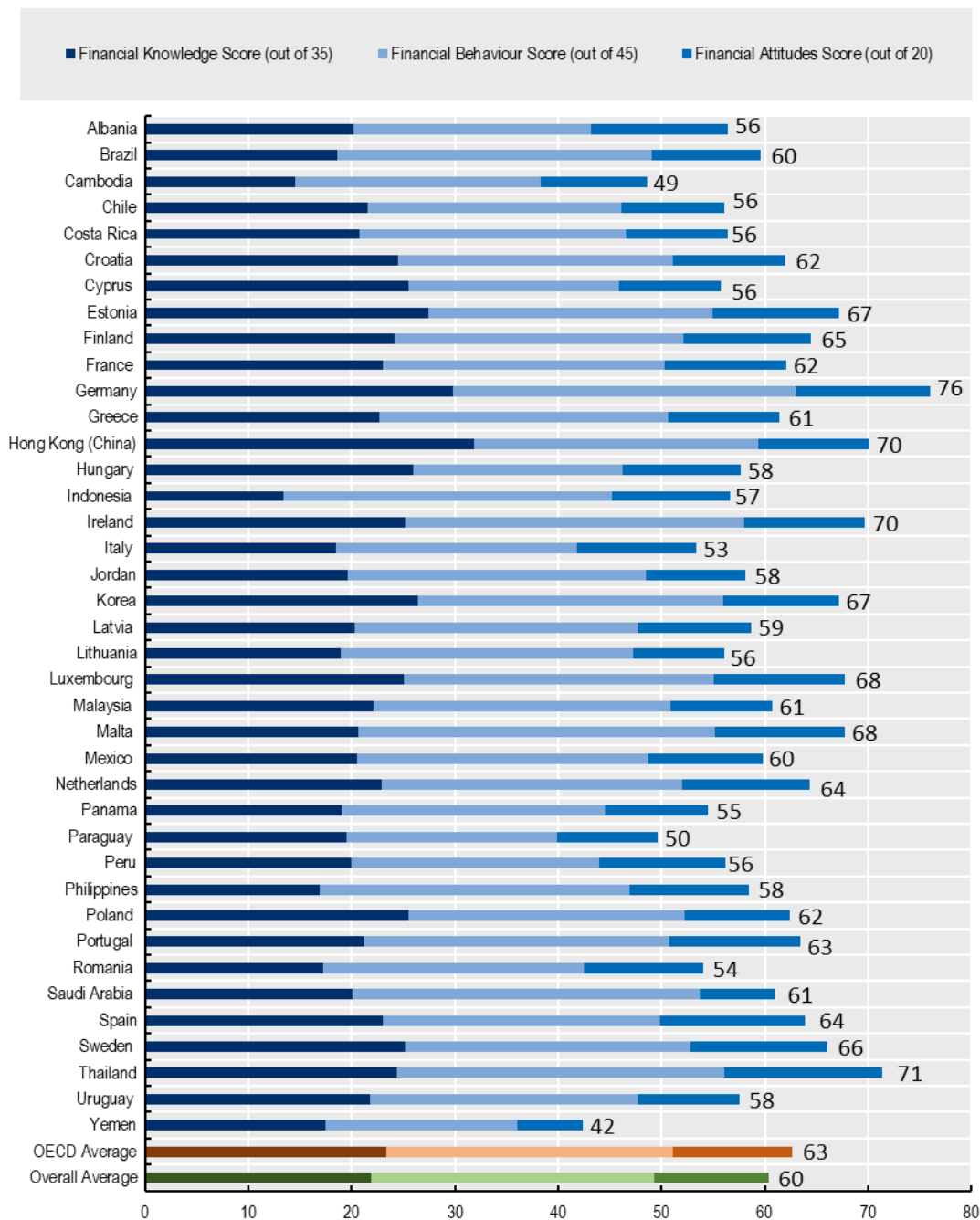
The overall financial literacy score is a constructed measure which is a summation of scores on questions that measure financial knowledge, financial behaviours, and financial attitudes. The overall financial literacy scores range from 0 to 100. Higher scores reflect higher levels of financial literacy. As the questions reflect basic aspects of financial knowledge, behaviours, and attitudes, it can be considered that respondents who score 100 points have a basic understanding of financial concepts and apply prudent principles in their personal finances and in their dealings with the financial sector. These overall financial literacy scores are calculated using the methodology defined in the OECD/INFE 2022 Toolkit; details about the survey items and methodology used to construct financial literacy scores are provided in Annex C.

Overall levels of financial literacy

Figure 2.1 reports the average financial literacy scores for 40 participating countries and economies, showing substantial heterogeneity. The overall average financial literacy score across all participating countries and economies is 60 points out of 100 points (63 out of 100 across participating OECD countries). A table of the average financial literacy scores by country is provided in Annex D.

Figure 2.1. Overall financial literacy

Average financial literacy scores (out of 100)



Notes: The overall financial literacy score is computed as the sum of the scores on financial knowledge, financial behaviour and financial attitudes. The overall financial literacy score was scaled to range between 0 and 100.

The results for Jordan, Mexico and Saudi Arabia should be interpreted with caution as the national samples may not be representative of the entire adult population. See Annex A for further details.

The results for Malaysia and Spain presented in this chapter are drawn from samples taken in 2021 using the 2018 Toolkit. See Annex A for further details.

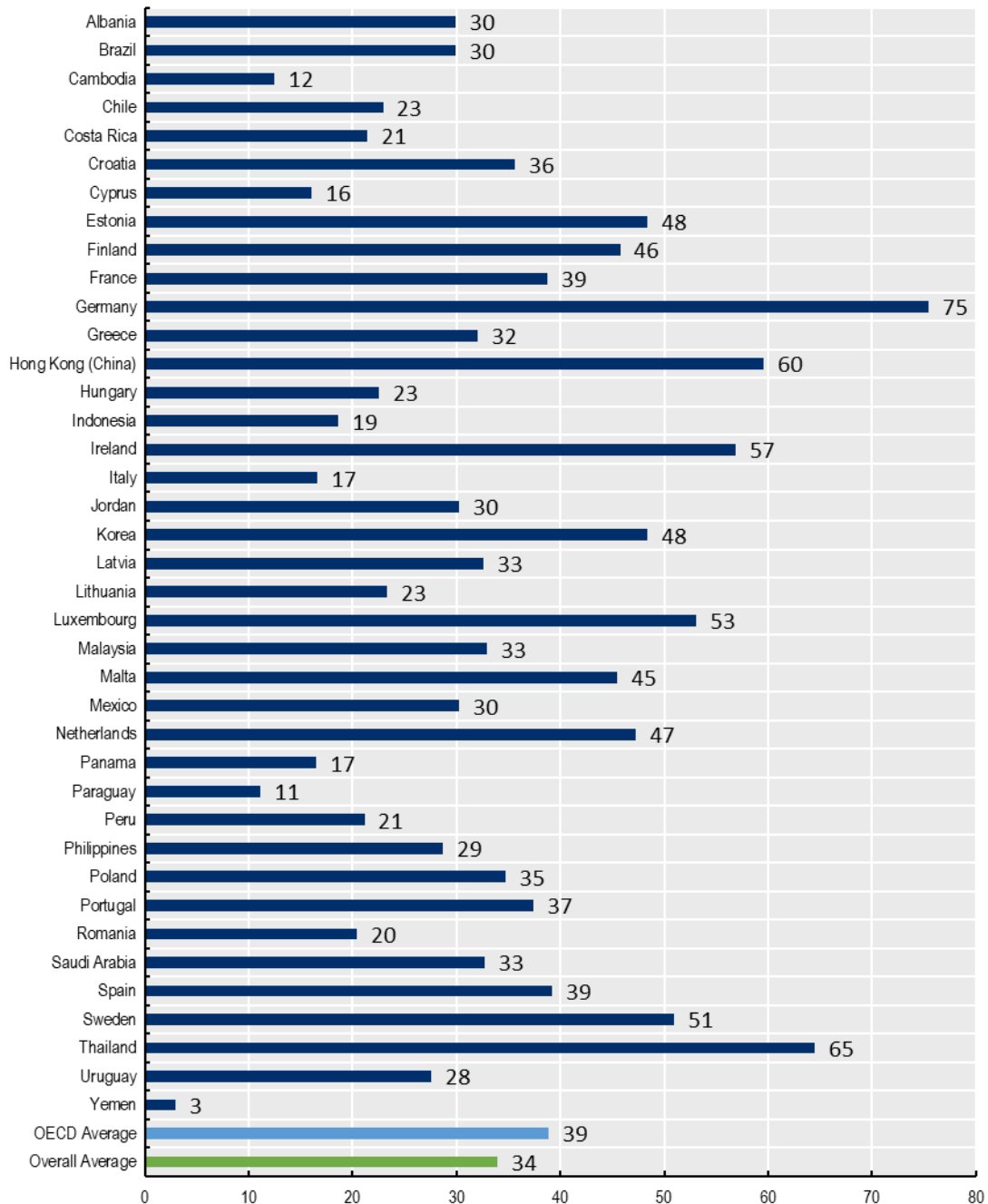
Source: OECD/INFE 2023 Survey of Adult Financial Literacy.

Minimum target score on financial literacy

The minimum target scores on financial literacy is defined as scoring at least 70 points out of 100 points. This threshold was chosen to be broadly consistent with definitions of minimum target scores on financial knowledge and financial behaviour described in the following sections. Figure 2.2 reports the percentage of adults who reach the minimum target score on financial literacy, showing wide variation across countries and economies. On average across all participating countries and economies, 34% of adults reach the minimum target score on financial literacy (at least 70 points out of 100). Across participating OECD countries, 39% of adults reach the minimum target score on financial literacy.

Figure 2.2. Minimum target financial literacy

Percentage of adults who scored at least 70 points (out of 100) on financial literacy



Notes: The results for Jordan, Mexico and Saudi Arabia should be interpreted with caution as the national samples may not be representative of the entire adult population. See Annex A for further details.

The results for Malaysia and Spain presented in this chapter are drawn from samples taken in 2021 using the 2018 Toolkit. See Annex A for further details.

Source: OECD/INFE 2023 Survey of Adult Financial Literacy.

Financial knowledge

Financial knowledge is one of the three components of financial literacy. Financial knowledge can be considered as having a basic knowledge of financial concepts and the ability to apply numeracy skills in financial contexts. Financial knowledge allows individuals to manage their financial matters, compare financial products and services to make appropriate and well-informed financial decisions, and to react to events that could affect their financial well-being.

This section looks at overall levels of financial knowledge across participating countries and economies, focusing on responses to seven questions designed to test different aspects of financial knowledge that are useful when making financial decisions. This includes knowledge of financial concepts such as inflation (the definition of inflation and the understanding of time value of money), the benefits of long-term saving/investing, interest and risk. Financial knowledge scores are computed as the number of correct responses to the seven financial knowledge questions. Raw financial knowledge scores range from 0 to 7 and were rescaled to be out of 100. Higher scores reflect higher levels of financial knowledge. More information about each survey item measuring financial knowledge is provided in Annex C.

This section reports the average financial knowledge scores across participating countries or economies, the proportion of adults scoring the minimum target financial knowledge score and the proportion of adults who correctly answered each financial knowledge question.

Levels of financial knowledge

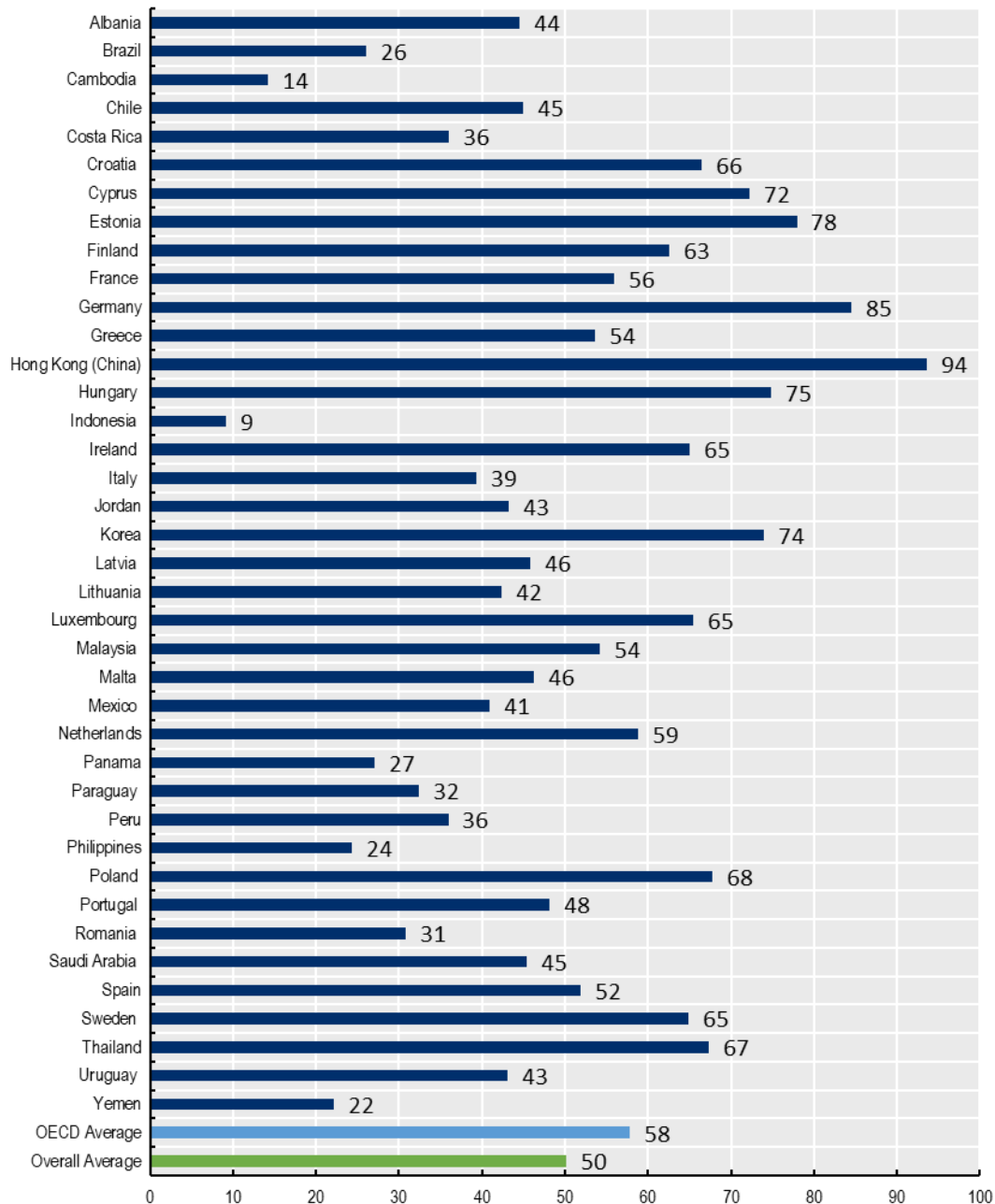
There is much variation in financial knowledge across participating countries and economies. The average financial knowledge score across all participating countries and economies is 63 out of 100 points (67 out of 100 across participating OECD countries). Levels of financial knowledge are highest among adults in Hong Kong, China (91), Germany (85) and Estonia (78). Table 2.5 in Annex D reports financial knowledge scores by country or economy.

In addition to average financial knowledge scores, the report also presents evidence on the percentage of adults who reach the minimum target financial knowledge score. The minimum target financial knowledge score is defined as answering at least five out of the seven financial knowledge questions correctly, which can be considered as the minimum score for a financially knowledgeable person.

Figure 2.3 presents the percentage of adults who obtained the minimum financial knowledge score, showing wide variation across countries and economies. Across all participating countries and economies, 50% of adults scored the minimum target financial knowledge score of at least five out of seven correct answers (58% of adults across participating OECD countries).

Figure 2.3. Minimum target financial knowledge

Percentage of adults who obtained the minimum financial knowledge score (correctly answering at least five out of seven financial knowledge questions)



Notes: The minimum financial knowledge score is defined as correctly answering at least five of the seven financial knowledge questions. Malta's minimum financial knowledge score is defined as correctly answering three of the four financial knowledge questions included in their survey.

The results for Jordan, Mexico and Saudi Arabia should be interpreted with caution as the national samples may not be representative of the entire adult population. See Annex A for further details.

The results for Malaysia and Spain presented in this chapter are drawn from samples taken in 2021 using the 2018 Toolkit. See Annex A for further details.

Source: OECD/INFE 2023 Survey of Adult Financial Literacy.

Responses to individual financial knowledge questions

The 2022 Toolkit contains seven financial knowledge questions that respondents are expected to answer. The financial knowledge score is created by attributing one point for each correct answer. These financial knowledge questions test knowledge of financial concepts such as inflation (the definition of inflation and the understanding of time value of money), the benefits of long-term saving/investing, interest and risk.

Figure 2.4 reports the percentage of adults who answered each financial knowledge question correctly, averaged across all participating countries and economies and across participating OECD countries. This figure reports the percentage of adults who correctly understand simple and compound interest (unconditionally), as well as the percentage of adults who understand compound interest conditional on understanding simple interest.

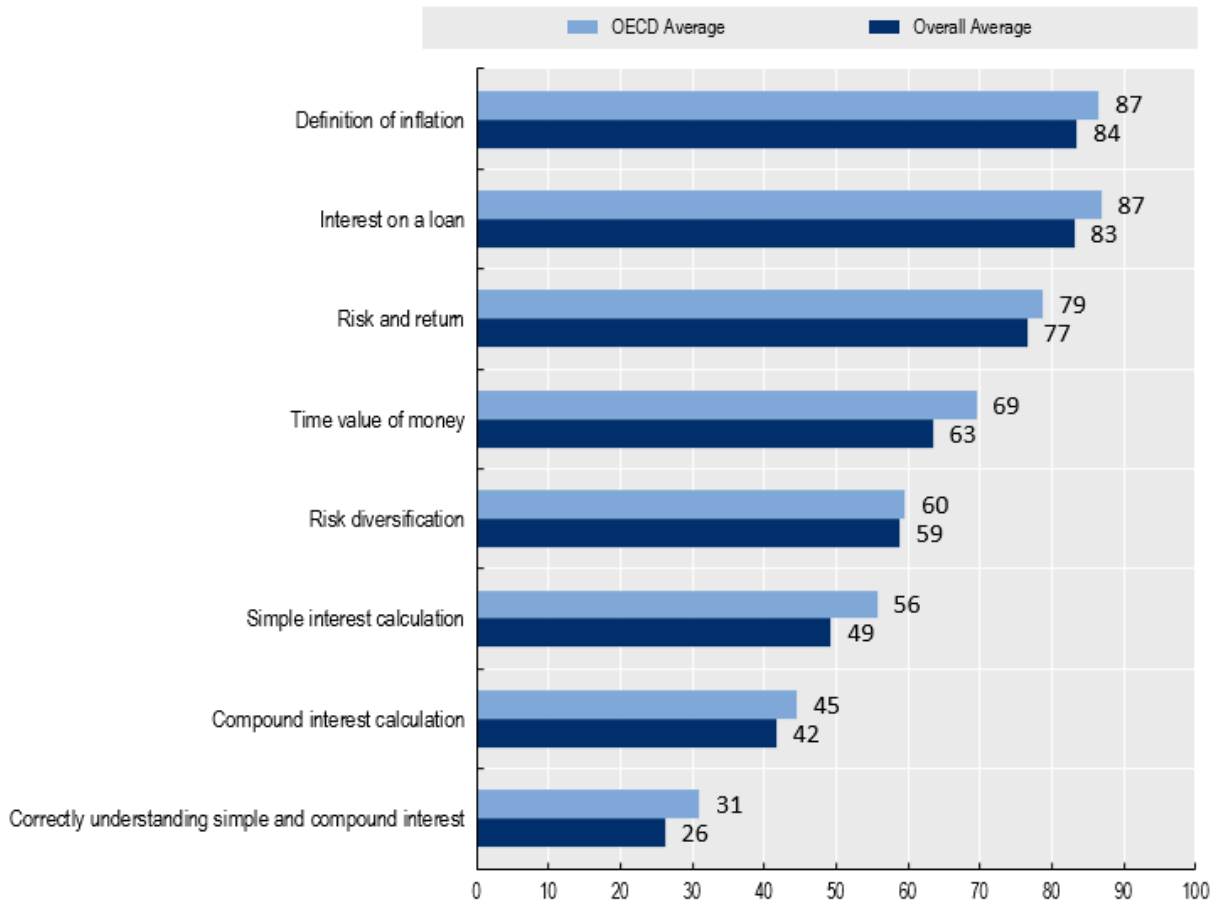
Overall, most adults understand the meaning of inflation and can make a simple numerical calculation on the interest on a loan. On average across all participating countries and economies, some 84% of adults correctly answered the question on the impact of inflation on the cost of living and the question on interest charged on a loan.

While most people understand the meaning of inflation, fewer understand the impact of inflation on their savings, as only 63% of adults on average across participating countries and economies can correctly answer the question on the time value of money.

However, compound interest seems to be a more difficult concept; on average across participating countries and economies, less than half of all adults correctly answered the question requiring them to make this calculation. In terms of understanding the relationship between risk and return, 77% of adults answered this question correctly whereas 59% of adults correctly understood the importance of diversification in reducing risk across participating countries and economies.

Figure 2.4. Financial knowledge questions

Percentage of adults who correctly answered each financial knowledge question



Notes: This graph displays the percentage of adults who correctly answered each financial knowledge question as well as the percentage of adults who correctly understand both simple and compound interest. Not every column displayed in the graph is used to calculate the financial knowledge score. For more information on the methodology used to calculate financial knowledge scores, please refer to Annex C.

Source: OECD/INFE 2023 Survey of Adult Financial Literacy.

Table 2.7 in Annex D reports the percentage of adults by participating country or economy who answered each financial knowledge question correctly.

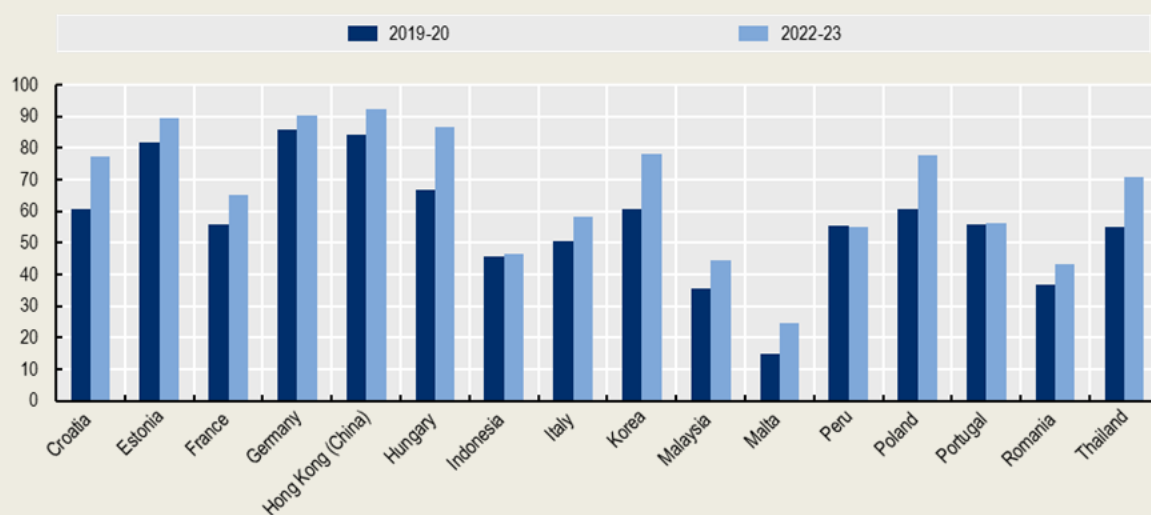
Box 2.1. Changes in financial knowledge

Given the current macro-economic context, characterised by growing inflation and cost of living pressures in many countries, it is interesting to see to what extent individuals are adapting their skills to the changing landscape.

Figure 2.5 presents the percentage of adults who correctly understand the concept of the time value of money according to the previous wave of data collection in 2019/20 and the current round of data collection in 2022/23 across 16 countries and economies with available data. In most of these participating countries or economies, the percentage of adults who understand the concept of time value for money has increased since the previous wave of data collection. In contrast, as shown in Table 2.10 in Annex D, knowledge of other concepts has not improved in a consistent way in countries and economies with available data. Furthermore, Table 2.10 in Annex D reports changes in the percentage of adults who correctly answered each financial knowledge score across participating countries and economies from the past two rounds of data collection (OECD, 2016^[8]; OECD, 2020^[4]).

Figure 2.5. Changes in financial knowledge

Changes in the percentage of adults who correctly understand the concept of the time value of money



Notes: Scores for 2019-20 are drawn from OECD (2020), OECD/INFE 2020 International Survey of Adult Financial Literacy.
Source: OECD/INFE 2023 Survey of Adult Financial Literacy.

Financial behaviour

Financial behaviour is the second component of financial literacy. Individuals' behaviours and actions affect their financial situation and well-being in both the short- and long- term. Some behaviours, such as putting off bill payments, failing to plan for future expenditures, or choosing financial products without shopping around, may negatively impact an individual's financial situation and well-being.

It is therefore essential to assess financial behaviour in a survey of financial literacy. The questionnaire includes a variety of questions to investigate if individuals are behaving in financially literate ways. These behaviours include:

- *Keeping track of money flows*: these questions evaluate if individuals keep a close watch on their personal finances, if they pay their bills on time and if they avoid falling into arrears.
- *Saving and long-term planning*: these questions determine if individuals are actively saving, if they borrow or avoid borrowing to make ends meet in the event of a short-term financial shortfall and whether they set themselves long-term financial goals.
- *Making considered purchases*: these questions explore if individuals seek independent information or advice when considering making a purchase of financial products and services, if they consider multiple options when selecting a financial product or service, and if they look to make informed decisions by shopping around rather than purchasing the most readily available financial product or service.

Together, the financial behaviour questions provide insight into individuals' actions, or behaviour, related to their finances. This section looks at overall levels of financial behaviours across participating countries and economies, focusing on responses to nine questions designed to give insight into financially savvy behaviours. This section reports the average financial behaviour scores across participating countries or economies, the proportion of adults scoring at the minimum target financial behaviour score and the proportion of adults who correctly answered each financial behaviour question.

Financial behaviour scores are computed as a count of the number of “financially savvy” behaviours. Raw financial behaviour scores range between 0 and 9, which were then rescaled to range from 0 to 100. Higher scores reflecting higher levels of financially savvy behaviour. More information on the individual survey items used to compute financial behaviour scores is provided in Annex C.

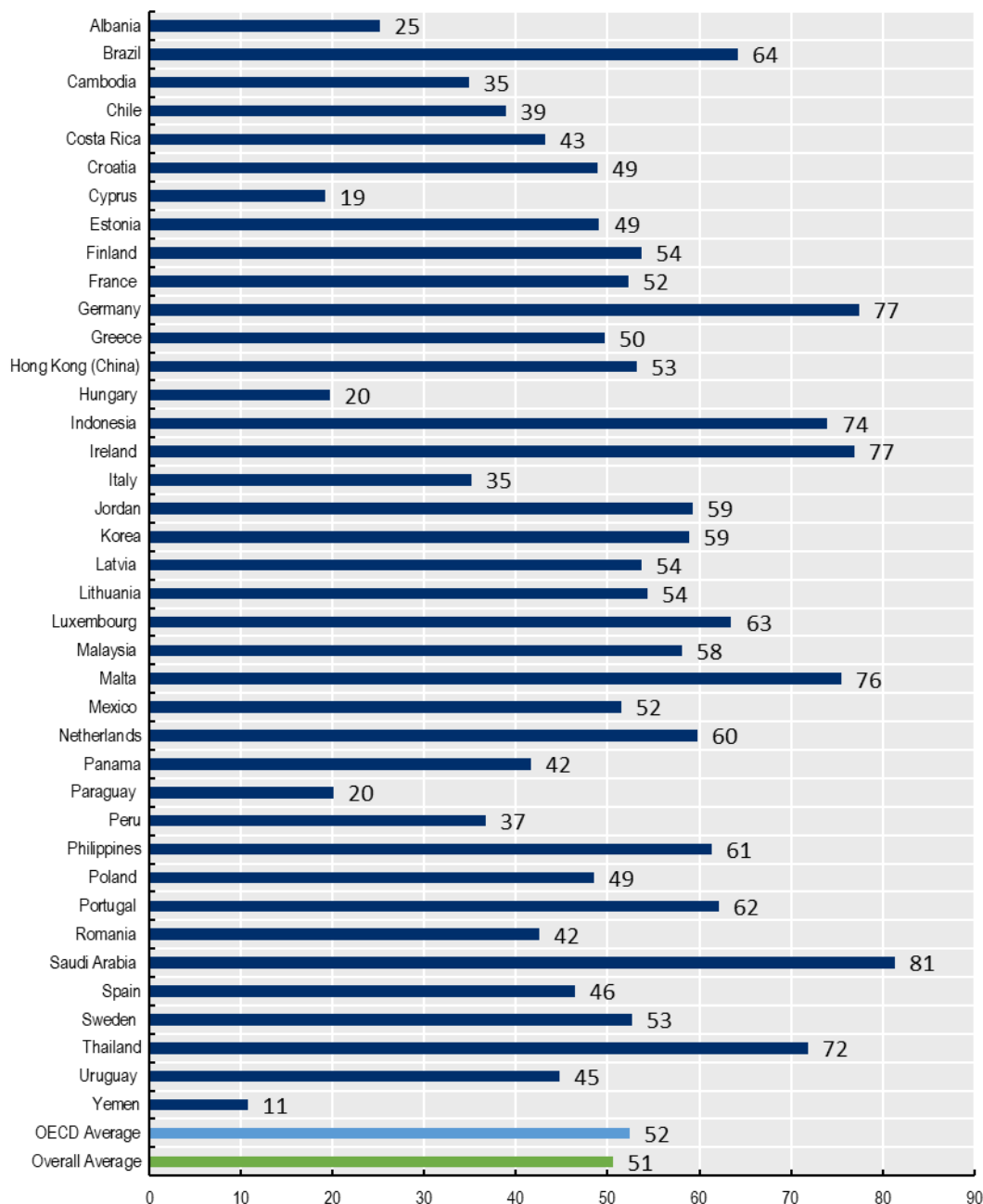
Levels of financial behaviour

Findings reveal that there is considerable variation in financial behaviours within and across participating countries and economies. The average financial behaviour score across all participating countries and economies is 61 out of the maximum 100 points (62 out of 100 across participating OECD countries). Table 2.11 in Annex D reports the average financial behaviour scores by participating country or economy.

In addition to average financial behaviour scores, the report also presents evidence on the percentage of adults who reach a minimum level of financial behaviour. The minimum financial behaviour score is defined as displaying at least six of nine financially literate behaviours. Figure 2.6 shows the percentage of respondents by country or economy who scored the minimum financial behaviour score. Across all participating countries and economies, 51% of adults reached the minimum target behaviour score (52% of adults across participating OECD countries).

Figure 2.6. Minimum target financial behaviour

Percentage of adults who obtained the minimum target financial behaviour score (displaying at least six out of nine financially savvy behaviours)



Notes: The minimum financial behaviour score is defined as displaying at least six of the nine financially savvy behaviours.

Malta's financial behaviour score is defined as displaying five out of seven financially savvy behaviours included in their survey, since not all questions on financial behaviour were included in Malta's survey.

The results for Jordan, Mexico and Saudi Arabia should be interpreted with caution as the national samples may not be representative of the entire adult population. See Annex A for further details.

The results for Malaysia and Spain presented in this chapter are drawn from samples taken in 2021 using the 2018 Toolkit. See Annex A for further details.

Source: OECD/INFE 2023 Survey of Adult Financial Literacy.

Responses to individual financial behaviour questions

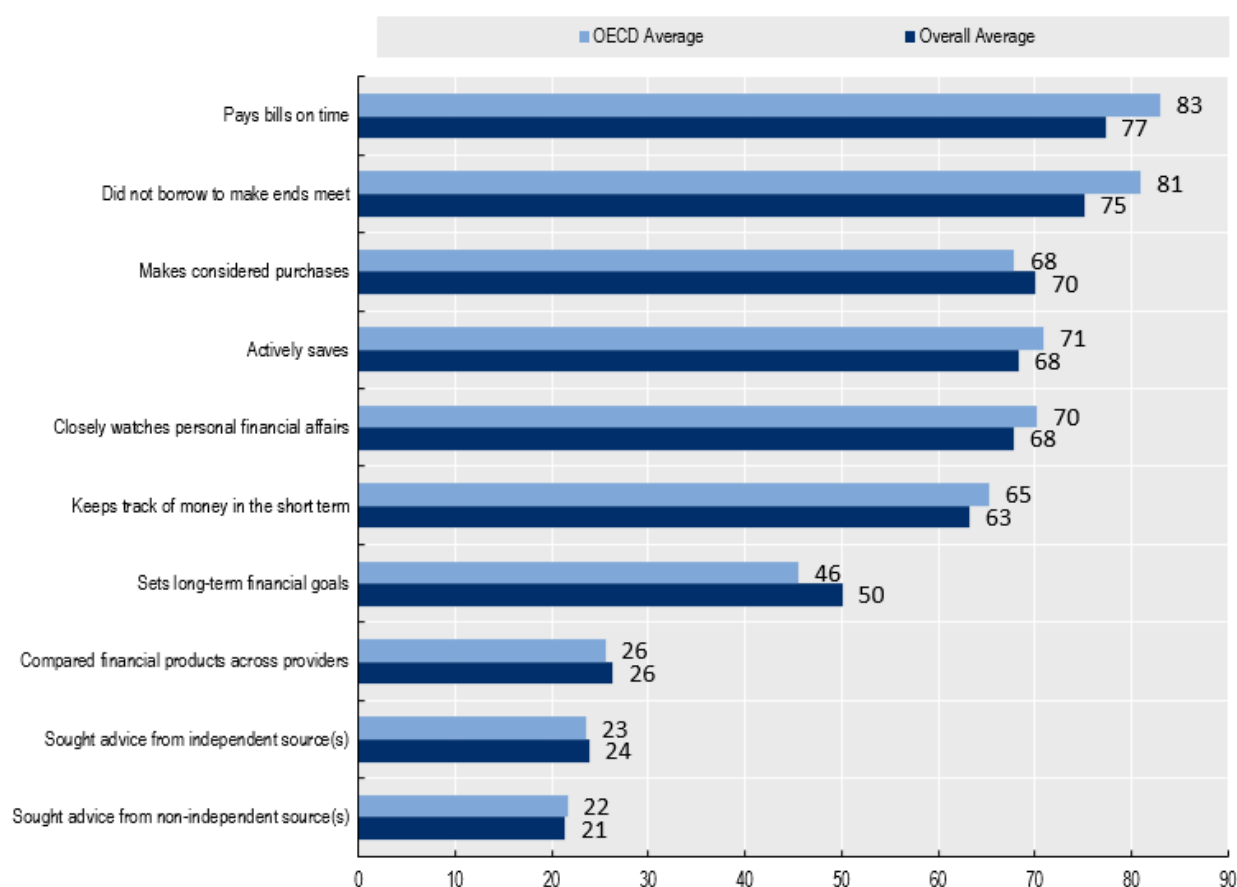
The 2022 Toolkit contains nine financial behaviour questions that respondents are expected to answer. The financial behaviour score is created by allocating one point for each financially savvy behaviour. These financial behaviour questions give an insight into individuals' actions related to their finances that may positively affect their financial situation.

Figure 2.7 reports the percentage of adults who received one point for each financial behaviour question, averaged across all participating countries and economies and across participating OECD countries. There are ten different financial behaviours presented in this figure to show the percentages of adults who sought advice from independent sources separately from the percentage of adults who sought advice from non-independent sources. For the purpose of calculating financial behaviour scores, however, these two indicators are combined to show the percentage of adults who seek advice (either from independent or non-independent sources) before making a purchase.

On average across participating countries and economies, about 77% of adults pay bills on time and did not borrow within the last year to make ends meet. However, only 26% of adults compare products across providers and only 24% of adults seek advice from independent sources when purchasing a financial product or service. Table 2.13 in Annex D reports the percentage of adults by participating country or economy who received one point for each financial behaviour question.

Figure 2.7. Financial behaviour questions

Percentage of adults who reported each financial behaviour



Note: There are ten different financial behaviours presented in this figure to show the percentages of adults who sought advice from independent sources separately from the percentage of adults who sought advice from non-independent sources. For the purpose of calculating financial behaviour scores, however, these two indicators are combined to show the percentage of adults who seek advice (either from independent or non-independent sources) before making a purchase. For more information about the methodology used to calculate financial behaviour scores, please refer to Annex C.

Source: OECD/INFE 2023 Survey of Adult Financial Literacy.

Financial attitudes

Financial attitudes are the third component of financial literacy. The OECD definition of financial literacy recognises that even if an individual has the knowledge and ability to act in a particular way, their attitudes towards money can also influence their decisions and behaviours. The questionnaire therefore includes a few questions, or statements, to measure respondents' attitudes towards money and planning for the future. Each of the questions focuses on preferences for spending money in the short term through "living for today." The questions ask individuals to use a scale to indicate the extent to which they agree or disagree with the following statements:

- "I find it more satisfying to spend money than to save it for the long-term."
- "I tend to live for today and let tomorrow take care of itself."
- "Money is there to be spent." (optional)

Each of these statements focuses on preferences for the short-term; such attitudes could hinder behaviours that could lead to improved financial resilience and well-being. The results presented in this report consider the extent to which people show financially literate attitudes, that is, the extent to which people *disagree* with these statements.

This section looks at overall levels of financial attitudes across participating countries and economies. This section reports the distribution of average financial attitude scores by country or economy and the proportion of adults who correctly answered each financial attitude question.

The financial attitude score is computed as the average response across the first two attitude questions.¹ The average score is rescaled to range from 0 to 100 points. Higher scores reflect more financially literate attitudes. More information on the individual survey items used to compute financial attitudes scores is provided in Annex C.

Levels of financial attitudes

There is variation in financial attitudes across participating countries and economies. The overall financial attitude score is 56 out of 100 points (58 out of 100 across participating OECD countries). Adults in Thailand (77), Spain (70) and Sweden (67) are more likely to display financial attitudes geared toward the long-term. Table 2.16 in Annex D reports average financial attitude scores by participating country or economy.

Responses to individual financial attitudes questions

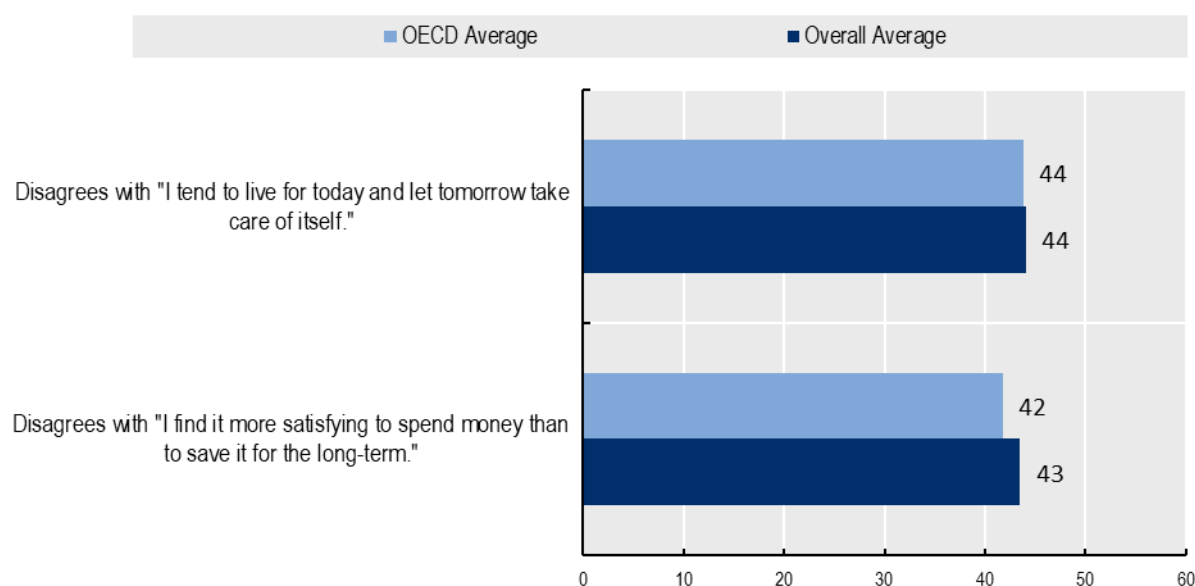
The 2022 Toolkit contains three financial attitude questions, including one that is optional. These financial attitude questions seek to determine individuals' orientations toward spending money in the short term versus planning for the long-term.

Figure 2.8 reports the percentage of adults who displayed long-term financial attitudes, averaged across all participating countries and economies and across participating OECD countries. On average across participating countries and economies, less than half of adults (44%) disagree with the statement "I tend to live for today and let tomorrow take care of itself." Some 43% of adults across all participating countries and economies disagree with the statement "I find it more satisfying to spend money than to save it for the long-term." Since the statement "Money is there to be spent." was optional and was not asked in a large number of participating countries and economies, results based on this statement are not included in the calculation of the financial attitudes score. However, results are available in in Table 2.17 of Annex D.

¹ In previous co-ordinated measurement exercises, the financial attitude score was calculated as an average of three statements, including also "Money is there to be spent" (QS1_3). However, "Money is there to be spent" became an optional question in the 2022 Toolkit and it was not asked in the surveys of a large number of countries participating in the 2022/2023 measurement exercise. For the sake of international comparison, for the 2022/2023 coordinated measurement exercise the optional financial attitude question was not included in the calculations of the financial attitude scores in any of the participating countries or economies irrespective of whether the question was asked on their survey. For more information, please refer to Annex C.

Figure 2.8. Financial attitude questions

Percentage of adults who display long-term financial attitudes



Source: OECD/INFE 2023 Survey of Adult Financial Literacy.

Table 2.17 in Annex D reports the percentage of adults by participating countries or economies who displayed attitudes geared toward longer-term financial planning.

Financial literacy levels across socio-demographic groups

While it is helpful to look at overall financial literacy and its components across countries, there can be significant variation in financial literacy (and its components) across individual-level characteristics such as age, gender, level of education, labour force status and income.

Figure 2.9 reports differences in financial literacy levels associated with age, gender, level of education, labour force status and income, considering all these individual-level characteristics at the same time, on average across participating countries and economies. Tables 2.9, 2.15 and 2.19 in Annex D report differences associated with these individual characteristics for the financial knowledge, behaviour and attitudes scores.

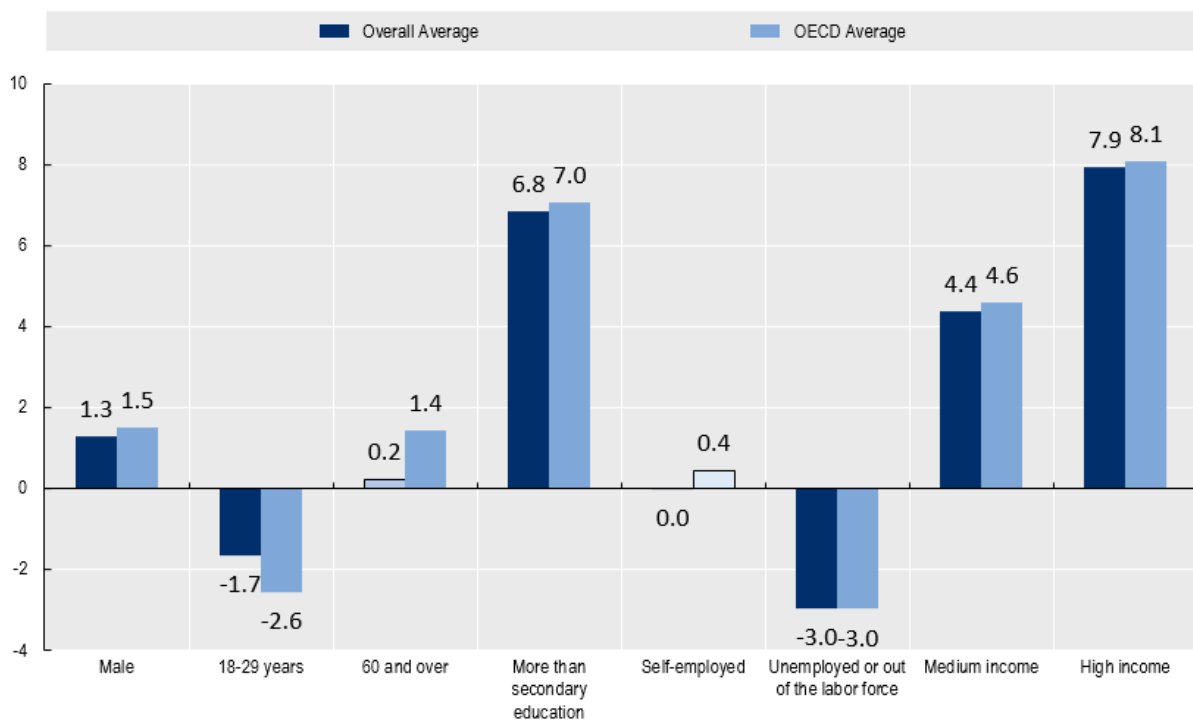
Overall, the analysis of the financial literacy score and its components across socio-demographic groups indicates that:

- **Income:** Financial literacy levels are higher among adults with higher incomes compared to adults with lower incomes. Income is also strongly correlated with financial knowledge, financial behaviour and financial attitudes. (Tables 2.9, 2.15 and 2.19 in Annex D).
- **Education:** on average across participating countries and economies, financial literacy levels are higher among adults who have a tertiary degree compared to adults who have secondary education or less. Levels of financial knowledge, behaviour and attitudes are also higher among adults who have a tertiary degree compared to adults who have secondary education or less (Tables 2.9, 2.15 and 2.19 in Annex D).

- *Employment status:* Adults who are unemployed or out of the labour force have lower levels of financial literacy than adults who are employees. Adults who are self-employed have lower levels of financial knowledge compared to adults who are employees (Table 2.9 in Annex D).
- *Age:* on average across participating countries and economies, financial literacy levels are lower among adults aged 18-29 years old compared to adults aged 30-59 years old, but these differences are small (around 2 points out of 100). However, in some Latin American countries, such as Brazil, Panama and Paraguay, younger adults have slightly higher financial literacy levels than adults aged 30-59 years old. The financial knowledge scores of young adults in Finland, Luxembourg and Sweden are at least 10 points lower than the scores of middle-age (Table 2.9 in Annex D).
- *Gender:* on average across participating countries and economies, men have slightly higher levels of financial literacy on average than women, but these differences are quite small (smaller than 2 points out of 100). To a large extent, gender differences in financial literacy are driven by gender differences in financial knowledge, while gender differences in financial attitudes or behaviour are very small. Gender differences in financial knowledge scores are larger than 10 points in Estonia, Finland, Greece, Jordan, Luxembourg, Saudi Arabia and Sweden, after taking other socio-demographic characteristics into account (Table 2.9 in Annex D).

Figure 2.9. Variation in financial literacy

Score-point differences associated with characteristics of the respondent



Notes: These results are based on a linear regression (OLS), with sampling weights (if available for a given country or economy). Comparison categories are: women, respondents 30-59 years old, respondents with upper secondary education or less, employees and respondents with low incomes.

Statistically significant values are marked in darker colours (5% level).

Source: OECD/INFE 2023 Survey of Adult Financial Literacy.

Context for understanding financial literacy levels: financial product holding and experiences in the financial marketplace

The questionnaire includes several questions to investigate the extent to which people are aware of and use various types of financial products to determine whether and how individuals are included in the financial sector and are active financial consumers. Financial products are grouped into the following categories; for more information on the specific survey items in the Toolkit used to create each category, please refer to Annex C:

- **Payment products** include credit cards, current checking/payment accounts, mobile/cell phone accounts and pre-paid debit cards/payment cards.
- **Savings, investment or retirement products** include pension or retirement products (excluding mandatory pensions or saving products), investment accounts, savings accounts, stocks and shares, bonds and crypto-assets.
- **Credit products** include credit cards, mortgage or home loans, loans secured on property, unsecured bank loans, car loans and microfinance loans.
- **Insurance products** are based on a single item in the survey.

This section describes awareness and use of financial products across participating countries and economies. This section also presents individuals' experiences in the financial marketplace, including negative experiences such as being a victim of a scam or fraud.

Awareness of financial products

Across participating countries and economies, awareness of financial products is relatively high. Table 2.20 in Annex D presents the percentage of adults by country or economy who are aware of various types of financial products. Overall, high percentages of adults in each of the participating countries and economies are aware of payment products, credit products, and some type of saving, investment, or retirement product, while awareness of insurance is somewhat lower. In particular:

- *Payment Products*: On average across participating countries and economies, 87% of adults are aware of at least some type of payment product. Almost all adults (at least 99%) in six participating countries and economies are aware of at least one type of payment product.
- *Saving, Investment or Retirement Products*: On average across participating countries and economies, 87% of adults are aware of a saving, investment or retirement product (excluding mandatory pensions or saving products). More than 90% of adults are aware of at least one savings, investment or retirement product in 22 participating countries and economies.
- *Credit Products*: On average across participating countries and economies, around 87% of adults are aware of a credit product. More than 90% of adults in 21 participating countries and economies are aware of a credit product.
- *Insurance Products*: Around three-fourths of all adults are aware of some type of insurance product. In 25 participating countries and economies, more than 75% of adults are aware of some type of insurance product.

Holding financial products

While awareness of many types of financial products is high, holding of these financial products is lower. Table 2.21 in Annex D presents the percentage of adults by country or economy who hold various types

of financial products. Overall, the most commonly held financial product is a type of payment product. Box 2.2 reports findings on awareness and holding of sustainable financial products.

Overall averages can mask important variation across participating countries and economies in adults' use of financial products.

- *Payment Products:* On average across participating countries and economies, 67% of adults hold a type of payment product (80% of adults across participating OECD countries).
- *Saving, Investment or Retirement Products:* On average across participating countries and economies, slightly more than half (52%) of adults hold a saving, investment or retirement product (excluding mandatory pensions or saving products). More than 75% of adults hold at least one savings, investment or retirement product in ten participating countries and economies. However, less than half of adults in 21 participating countries and economies hold a savings, investment, or retirement product.
- *Credit Products:* On average across participating countries and economies, 49% of adults hold a credit product (57% of adults across participating OECD countries).
- *Insurance Products:* On average across participating countries and economies, some 36% of adults hold some type of insurance product (46% across participating OECD countries).

Box 2.2. Sustainable finance products

An increasing interest in and demand for sustainable finance products by financial consumers and retail investors has been observed in several countries over the past years (OECD, 2023^[23]). The survey explored this by asking respondents about their awareness and holding of any types of sustainable finance products.

Awareness of sustainable financial products

Across participating countries and economies, levels of awareness of sustainable financial products varies substantially. On average across all participating countries and economies, 20% of adults are aware of any sustainable financial products (23% of adults across participating OECD countries). Table 2.20 in Annex D reports the percentages of adults by participating country and economy who are aware of sustainable financial products. More than 50% of adults in Lithuania (53%) and Germany (65%) are aware of sustainable financial products, but less than 10% of adults in six participating countries reported having heard of them.

Holding sustainable financial products

Few adults across participating countries and economies hold financial products that are labelled "sustainable", "green" or otherwise indicate a sustainable designation. On average across all participating countries and economies, 2.2% of adults hold sustainable financial products (2.7% of adults across participating OECD countries). Table 2.21 in Annex D reports the percentages of adults across participating countries and economies who hold sustainable financial products. Less than 1% of adults in eleven participating countries and economies hold sustainable financial products, but in Germany, almost 15% of adults declared to hold sustainable financial products.

Financial product holding and financial literacy

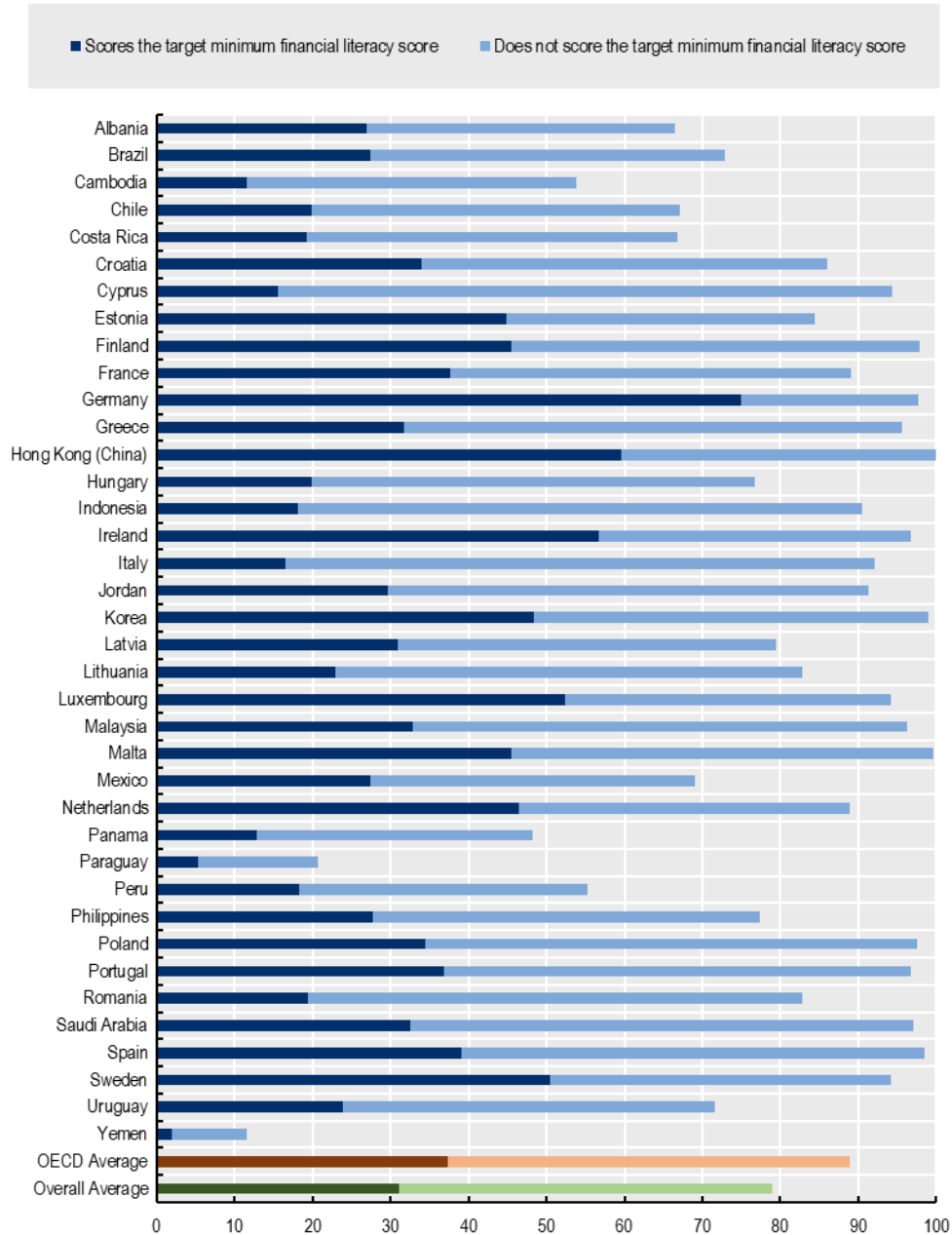
It is helpful for policymakers to also look at measures of awareness and holding of financial products in relation to financial literacy levels. This can help policymakers understand whether and to what extent adults who hold various types of financial products also display the requisite financial knowledge, behaviour and attitudes to make sound financial decisions.

Figure 2.10 displays the percentage of adults who hold any financial product, by their level of financial literacy, across participating countries and economies. Across many participating countries and economies, most adults who hold any type of financial product do not reach the minimum target score of financial literacy (at least 70 out of 100 points). On average across all participating countries and economies, only 37% of adults who hold any type of financial product reach the minimum target financial literacy score (42% of adults across participating OECD countries). In 14 participating countries and economies, less than 25% of adults who hold any type of financial product reach the minimum target financial literacy score. However, in Germany, Hong Kong (China) and Luxembourg over half of adults who hold any type of financial product reach the minimum target financial literacy score. Table 2.22 in Annex D reports the percentage of adults who hold any financial product, by their level of financial literacy in each participating country and economy.

For adults who hold savings, investment or retirement products, an important facet of financial knowledge is understanding compound interest. Figure 2.11 displays the percentage of adults who hold a savings product by knowledge of compound interest across participating countries and economies. On average across participating countries and economies, 46% of adults who hold a savings, investment or retirement product understand compound interest (51% of adults across participating OECD countries). In six participating countries and economies, less than one third of adults who hold savings, investment or retirement products understand compound interest. This is notable given that compound interest is an important feature of these financial products. Table 2.23 in Annex D reports the percentage of adults who hold savings, investment or retirement products, by financial knowledge in each participating country and economy.

Figure 2.10. Financial product holding and financial literacy

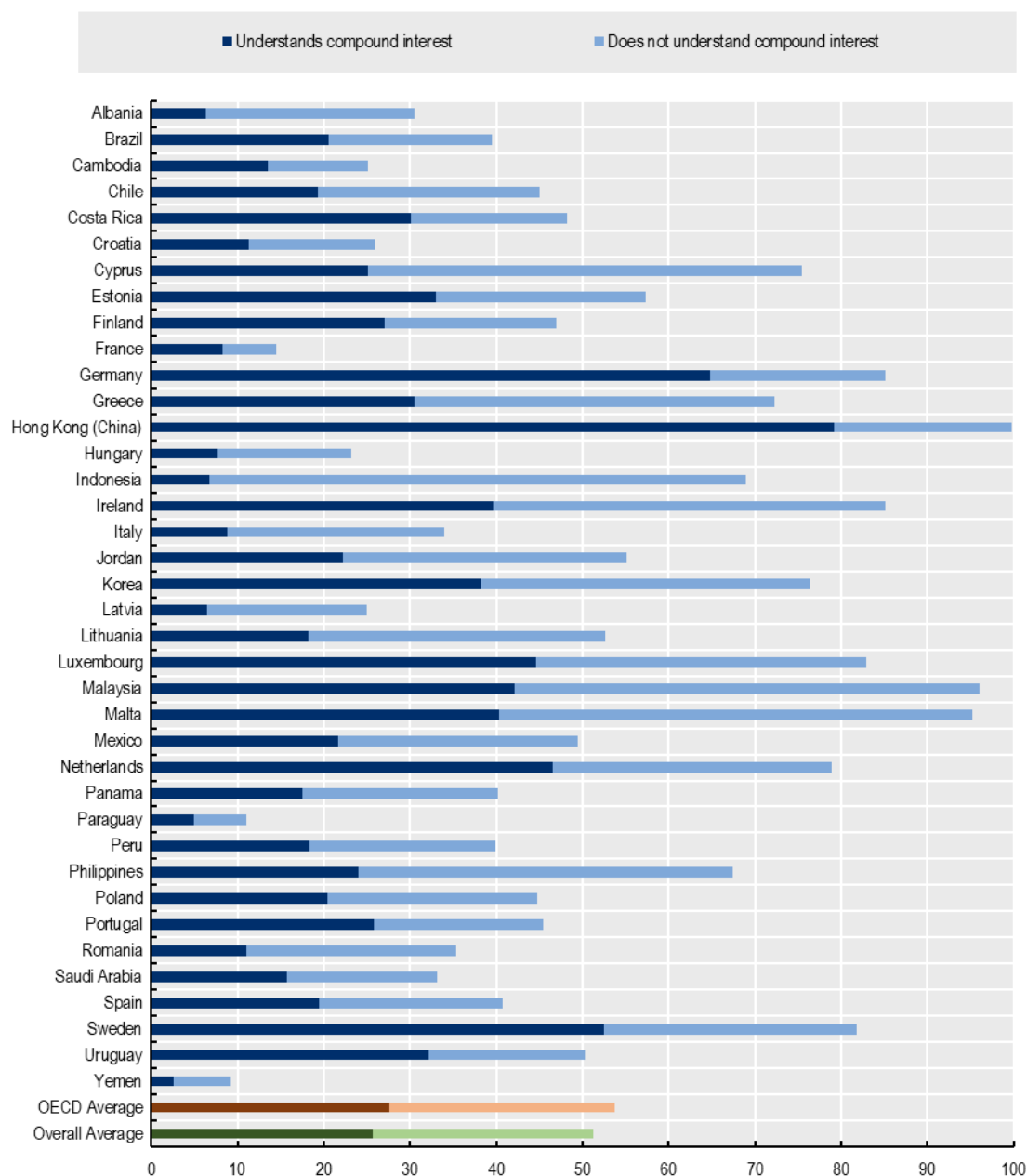
Percentage of adults holding any financial product, by financial literacy



Notes: The minimum target score on financial literacy is defined as scoring at least 70 points out of 100 points. The results for Jordan and Saudi Arabia should be interpreted with caution as the national samples may not be representative of the entire adult population. See Annex A for further details. The results for Malaysia and Spain presented in this chapter are drawn from samples taken in 2021 using the 2018 Toolkit. See Annex A for further details. Source: OECD/INFE 2023 Survey of Adult Financial Literacy.

Figure 2.11. Holding savings, investment or retirement products and financial knowledge

Percentage of adults who hold a savings, investment or retirement product, by knowledge of compound interest



Notes: The results for Jordan and Saudi Arabia should be interpreted with caution as the national samples may not be representative of the entire adult population. See Annex A for further details.

The results for Malaysia and Spain presented in this chapter are drawn from samples taken in 2021 using the 2018 Toolkit. See Annex A for further details.

Source: OECD/INFE 2023 Survey of Adult Financial Literacy.

Financial fraud, scams and other issues associated with using financial products and services

In addition to question about financial products awareness and holding, respondents were asked if they had experienced various types of issues associated with accessing and using financial products and services, which included:

- Being a victim of a scams or fraud, such as phishing scams, scams involving personal information, investment scams, and unauthorized or unrecognized transactions,
- Being denied access to financial services, such as a bank account or credit,
- Paying high fees for sending or receiving remittances,
- Being refused an insurance claim,
- Making a formal complaint.

These questions are designed to go beyond simple measures of access to financial products and services to provide a more complete view of the participation in financial markets in countries and economies.

Table 2.25 in Annex D reports the percentages of adults by country who have experienced various issues accessing or using financial products. The following section focuses on experiences related to financial fraud and scams. Other interesting findings include:

- *Denied opening a bank account.* On average across participating countries and economies, some 7% of adults reported that they tried to open a bank account but were refused, for any reason (4% of adults across participating OECD countries). More than one in ten adults in six participating countries and economies have been denied opening a bank account.
- *Denied credit.* On average across participating countries and economies, some one in ten adults have been denied credit for which they had applied (7% across participating OECD countries). More than one in five adults in three participating countries and economies have been denied credit.

Victim of a financial fraud or scam

One negative experience associated with making financial transactions is being a victim of a financial fraud or scam. The OECD/INFE Toolkit asks respondents if they have been a victim of a phishing scam, if they have been a victim of an investment scam, if they had been scammed into providing personal information, or if they had been subject to an unauthorized transaction. On average across participating countries and economies, 15% of adults reported that they have been a victim of at least one of these types of financial frauds or scams (14% of adults across participating OECD countries). Table 2.25 in Annex D reports the percentage on exposure to each type of issue separately.

It is helpful for policymakers to also look at financial frauds and scams in relation to financial literacy levels. This can help policymakers understand whether and to what extent adults have the financial literacy to spot and avoid financial frauds and scams.

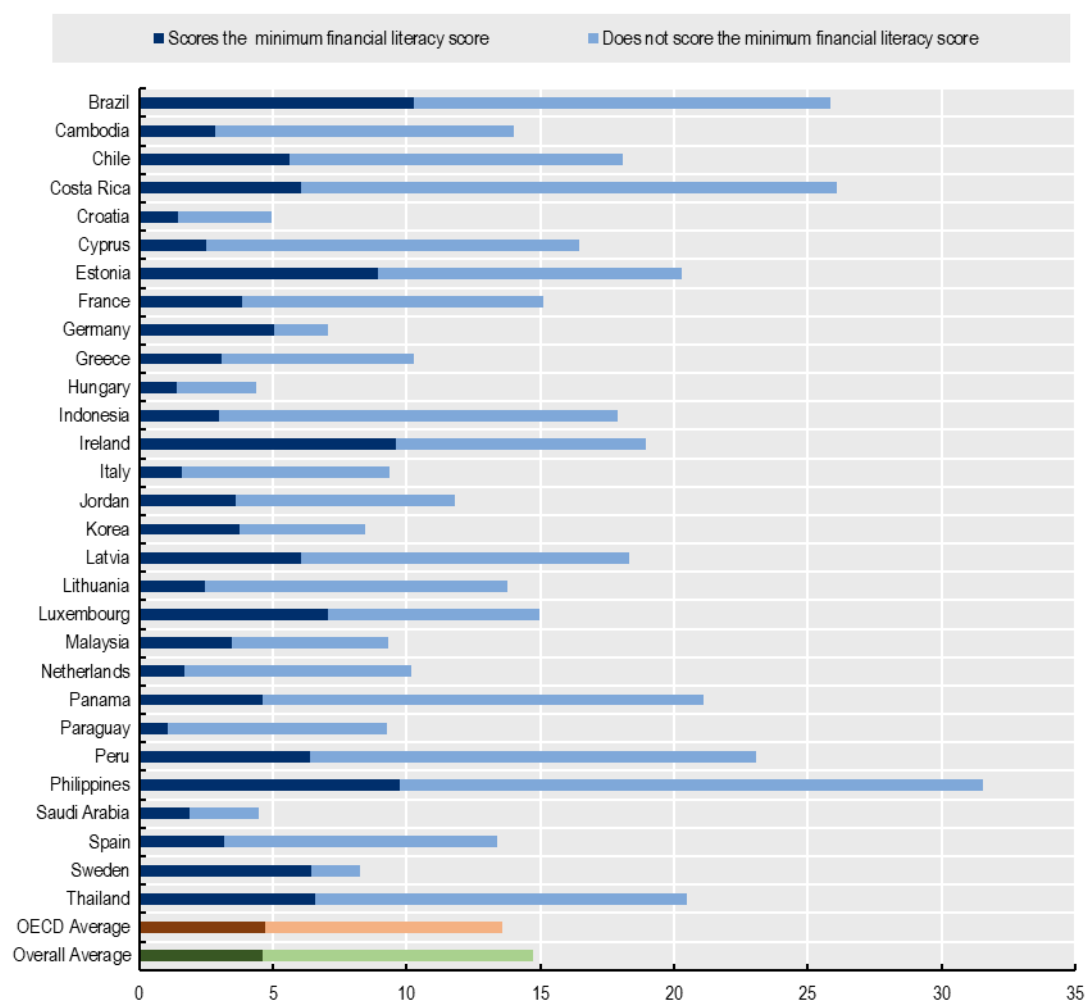
Figure 2.12 shows the percentage of adults who have been a victim of one of these types of financial frauds or scams (phishing scam, investment scam, scammed into providing personal information, or an unauthorized transaction), by level of financial literacy. It should be noted that the data reported in this figure capture whether a person has been victim of one of these several types of financial frauds and scams at least once, and should not be considered as an indication of the security of the financial system or of the payment system in a given country or economy, as it does not relate to the total number of transactions or the total value of transactions.

Across many participating countries and economies, many adults who have been a victim of one of these types of financial frauds or scams do not reach the minimum target financial literacy score (at least 70 out

of 100 points). For instance, across all participating countries and economies, around two out of three adults who have been a victim of one of these types of financial frauds or scams do not reach the minimum target financial literacy score. This suggests that efforts to improve financial literacy levels can also help individuals gain the knowledge, skills and behaviours to protect themselves from financial frauds and scams.

Figure 2.12. Having been a victim of a financial fraud or scam and financial literacy

Percentage of adults who have been a victim of a financial fraud or scam, by financial literacy level



Notes: Having been a victim of a scam or fraud was constructed based on responses from having been scammed into providing personal information, having an unauthorized transaction, having experienced a phishing scam, and having experienced an investment scam.

The data reported in the figure only capture whether a person has been victim of one of these types of financial frauds and scams at least once and should not be considered as an indication of the security of the financial system or of the payment system in each country or economy.

The minimum target score of financial literacy is defined as scoring at least 70 out of 100 points.

Data on the percentage of adults who have been a victim of a financial scam or fraud are not available for Albania, Finland, Hong Kong (China), Malta, Mexico, Poland, Portugal, Romania, Saudi Arabia and Yemen.

The results for Jordan should be interpreted with caution as the national sample may not be representative of the entire adult population. See Annex A for further details.

The results for Malaysia and Spain presented in this chapter are drawn from samples taken in 2021 using the 2018 Toolkit. See Annex A for further details.

Source: OECD/INFE 2023 Survey of Adult Financial Literacy.

3 Digital financial literacy

Key results

- The average digital financial literacy score across all participating countries and economies is 53 out of 100 points (55 out of 100 across participating OECD countries).
- Across all participating countries and economies, some 29% of adults score the minimum target digital financial literacy score (at least 70 points out of 100). Across participating OECD countries, 34% of adults score the minimum target digital financial literacy score.
- Digital financial literacy levels are higher among adults who have higher incomes and higher levels of education, compared to adults with lower incomes or lower levels of education.
- On average across participating countries and economies, 38% of adults who manage financial products and services online score the minimum target digital financial literacy score (at least 70 out of 100 points).

The size and nature of the consumer financial services market has grown and changed considerably since the OECD/INFE started to collect data on financial literacy, with new financial products, services and distribution channels along with increased digitalisation. The experience of the COVID-19 pandemic significantly accelerated the pace of digitalisation as lockdowns and confinements led to greater reliance on digital payments (OECD, 2020^[24]; OECD, 2021^[25]).

The OECD/INFE Toolkit was revised in 2022 to incorporate such changes. The 2022 survey included questions to explore the extent to which individuals use digital financial services and to measure their digital financial literacy. Results discussed in this chapter should be seen as preliminary findings about digital financial literacy in participating countries and economies because the digital financial literacy scores are based on a relatively small number of questions (see Annex C for more information on computing digital financial literacy scores). The OECD/INFE is currently developing a dedicated digital financial literacy survey instrument to provide more complete and robust results in future rounds of data collection (OECD, 2024 Forthcoming^[26]).

Overall digital financial literacy scores are constructed in a similar way to the overall financial literacy scores. Overall digital financial literacy are based on three components: knowledge, behaviour, and attitudes. The knowledge component of the digital financial literacy score is computed as the number of correct responses to three questions that measure understanding of digital contracts, personal data use, and crypto-assets. The behaviour component of the digital financial literacy score is computed as a count of the number of “savvy” digital behaviours elicited by four statements. The attitudes component is computed as a count of the number of “savvy” attitudes around digital finance elicited by three statements. Exact question wording and survey items are listed in Annex C. Given the small number of questions for each component, the report does not discuss separate scores for each of them.

The digital financial literacy score is therefore the sum of digital knowledge (3), behaviours (4) and attitudes (3) components. The raw digital financial literacy scores range between 0 to 10 and the final score is rescaled to range between 0 and 100. Higher scores reflect greater levels of digital financial literacy.

The chapter provides results on digital financial literacy and use of digital financial services for both the overall adult population and for adults who have internet access. Results for one of these two samples are not available for certain countries and economies depending on whether participating countries and economies asked respondents if they had internet access, and whether questions on digital financial literacy and use of digital financial services were asked to the overall adult population and only to adults who have internet access. For the sake of simplicity, the discussion of results in the rest of the chapter will only focus on results relevant for the overall adult population, even if relevant results for adults who have internet access are reported in figures and tables.

Digital financial literacy

The results of the 2023 survey provide initial insights on overall levels of digital financial literacy across participating countries and economies. Figure 3.1 reports overall average digital financial literacy levels across participating countries and economies and average digital financial literacy levels for adults with Internet access².

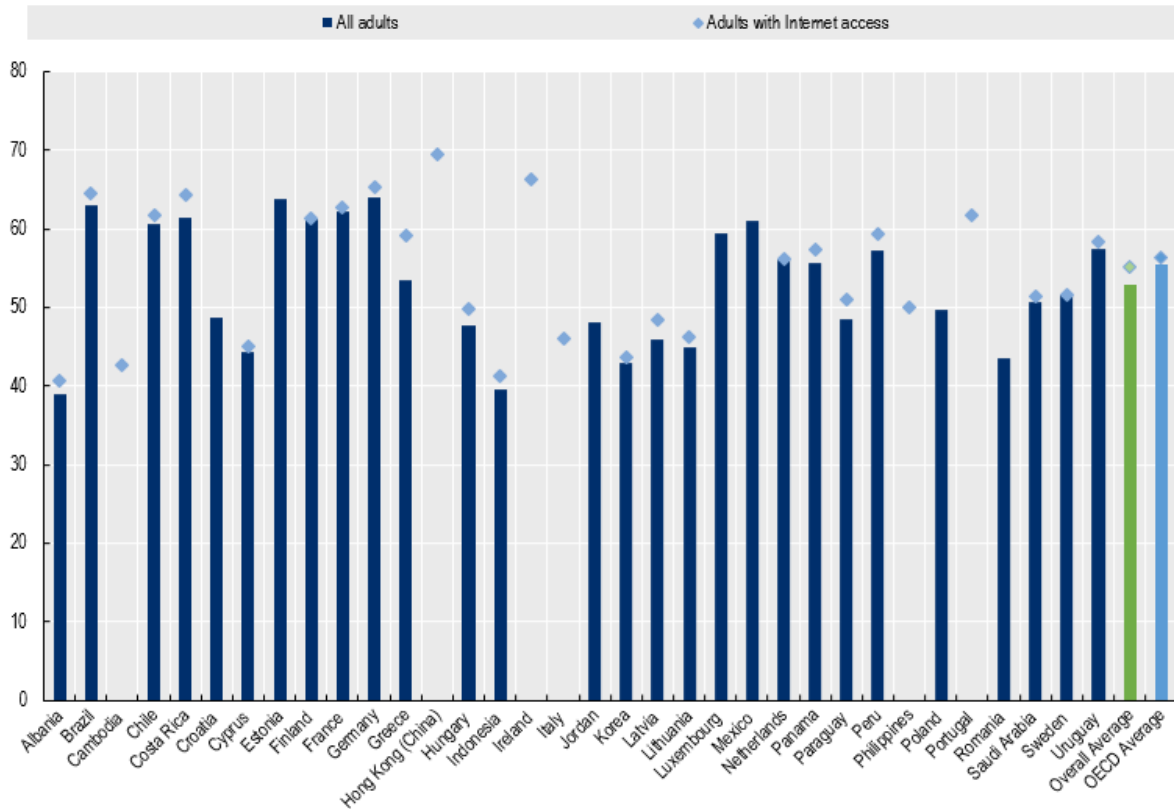
On average across participating countries and economies, the digital financial literacy score of the overall adult population is 53 out of 100 (55 out of 100 across participating OECD countries).

² There are two separate calculations of digital financial literacy scores: calculating digital financial literacy scores (1) across the entire sample and (2) across the sub-sample of respondents who indicated they had access to the Internet. Please note that for some participating countries and economies, both calculations are available whereas for other participating countries and economies, only one of the two scores are available:

- (1) Croatia, Estonia, Jordan, Luxembourg, Mexico, Poland and Romania: The digital financial literacy score is reported for all adults, but not for adults with Internet access, because surveys in these countries did not ask respondents whether they have Internet access.
- (2) Cambodia, Hong Kong (China), Ireland, Italy, the Philippines and Portugal: The digital financial literacy score is reported for adults with Internet access, but not for all adults, because surveys in these countries asked at least one question included in the digital financial literacy score only to respondents who indicated they had Internet access.
- (3) Finland, the Netherlands and Sweden: The digital financial literacy scores reported in the table is the same for all adults and for adults with Internet access because surveys in these countries were conducted entirely online.

Figure 3.1. Digital financial literacy

Average digital financial literacy scores (out of 100) across all adults and among those with Internet access



Notes: This figure includes two data points to reflect calculations of digital financial literacy scores (1) across the entire sample and (2) across the sub-sample of respondents who indicated they had access to the Internet. Please note that for some participating countries and economies, both calculations are available whereas for others only one of the two scores are available.

The samples from Jordan, Mexico and Saudi Arabia may not be representative of the entire adult population. See Annex A for more details.

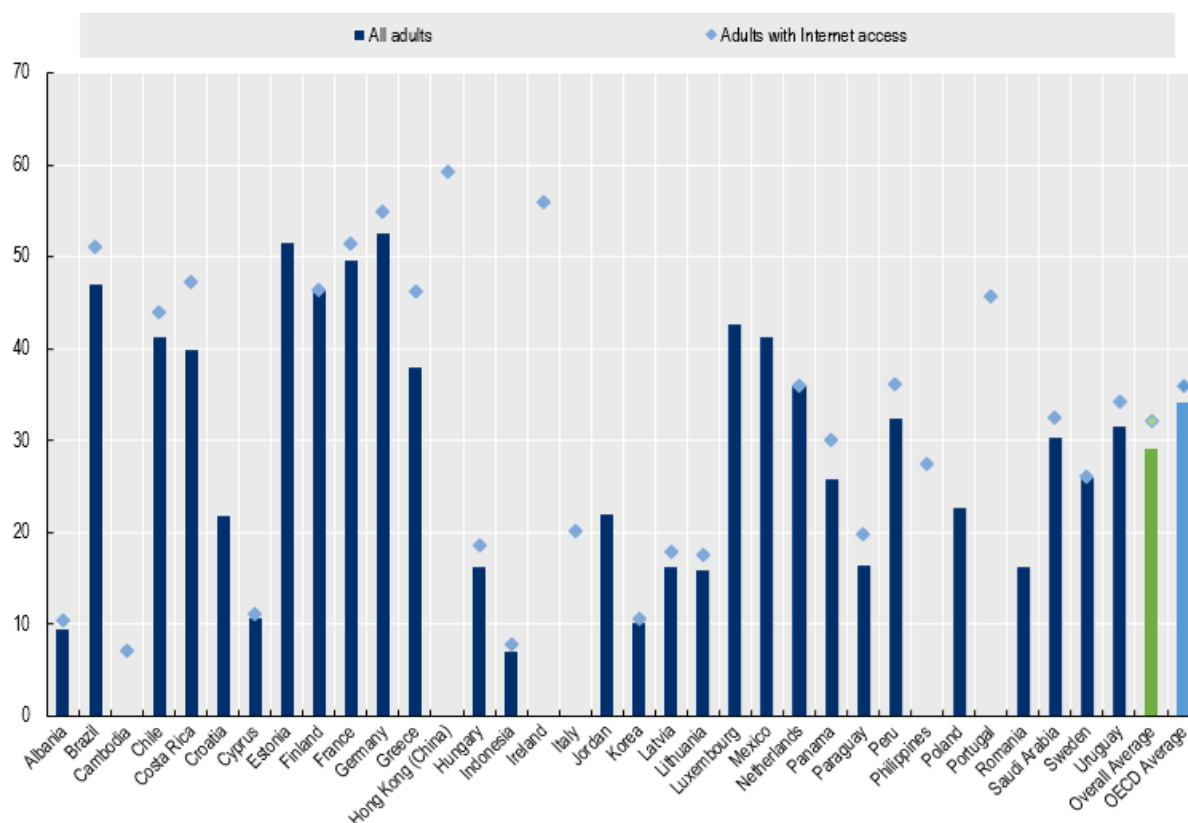
Source: OECD/INFE 2023 Survey of Adult Financial Literacy.

Minimum target score on digital financial literacy

The minimum target score on digital financial literacy is defined as a scoring at least 70 points out of 100 points. Figure 3.2 reports the percentage of adults who reach the minimum target score on digital financial literacy, showing wide variation across countries and economies. Across all participating countries and economies, 29% of adults reach the minimum target score on digital financial literacy (at least 70 points out of 100). Across participating OECD countries, 34% of adults reach the minimum target score on digital financial literacy.

Figure 3.2. Minimum target score on digital financial literacy

Percentage of adults who scored at least 70 points on digital financial literacy, across all adults and among those with Internet access



Notes: This figure includes two data points to reflect calculations of minimum digital financial literacy scores (1) across the entire sample and (2) across the sub-sample of respondents who indicated they had access to the Internet. Please note that for some participating countries and economies, both calculations are available whereas for others only one of the two scores are available.

The target minimum score of digital financial literacy is defined as scoring at least 70 out of 100 points.

The samples from Jordan, Mexico and Saudi Arabia may not be representative of the entire adult population. See Annex A for more details.

Source: OECD/INFE 2023 Survey of Adult Financial Literacy.

Digital financial literacy questions

The 2022 Toolkit contains ten questions to measure digital financial literacy. Figure 3.3 presents the percentage of adults who received one point for each digital financial literacy question, averaged across all participating countries and economies and across participating OECD countries.

One digital financial literacy question asks respondents if they agree or disagree with the statement “I share the passwords and PINs of my bank account with close friends.” While in some cases people might have good reasons for sharing passwords and PINs with family members (for instance of case of illness), it is usually considered unsafe to share passwords and PINs with friends.

On average across participating countries and economies, 86% of adults do not share the passwords and PINs of their accounts with close friends (87% of adults across participating OECD countries).

Another digital financial literacy question asks respondents if they agree or disagree with the statement “I share information about my finances publicly online.” On average across participating countries and

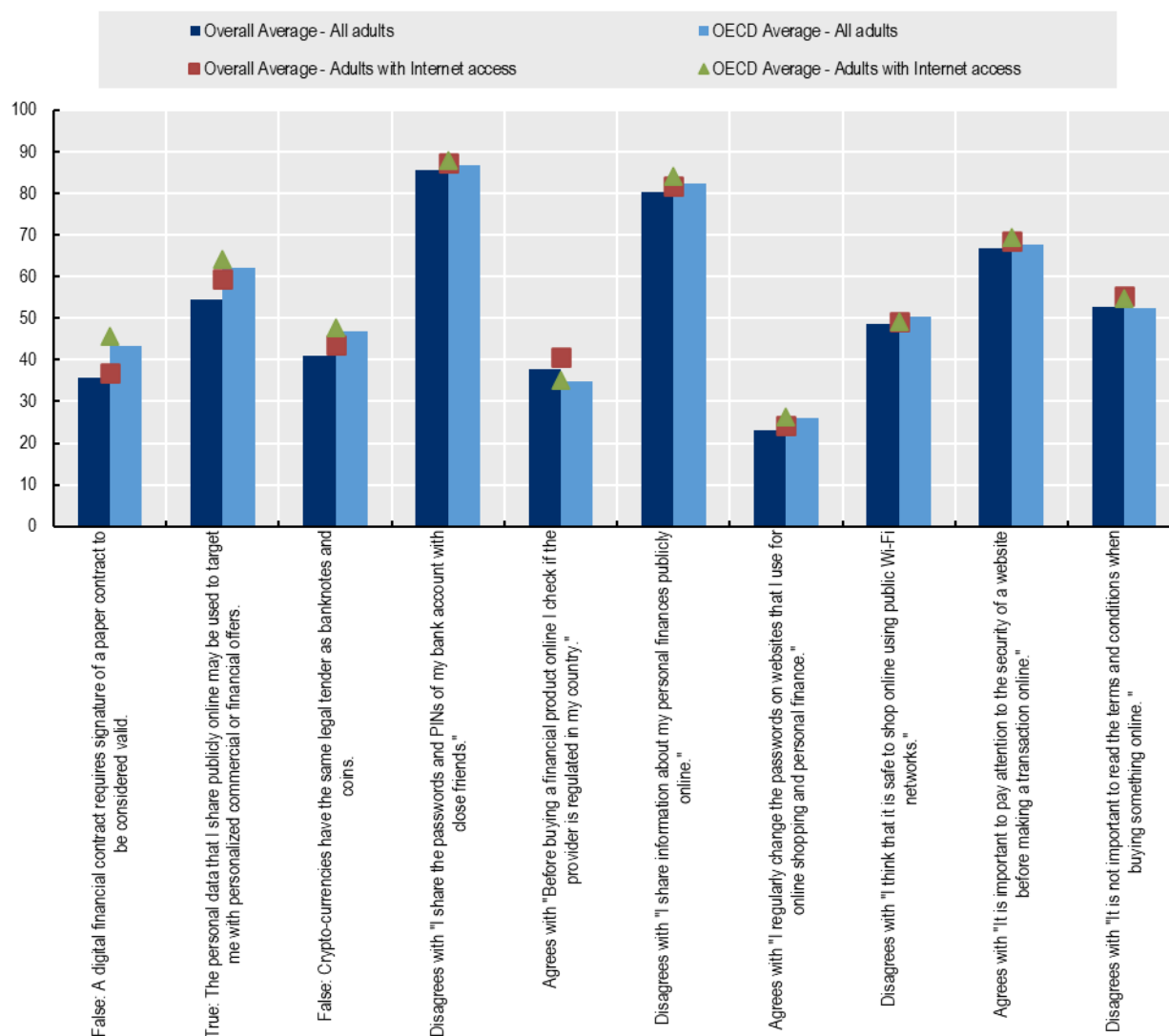
economies, 81% do not share information about their finances publicly online (83% of adults across participating OECD countries).

While it is usually considered unsafe to share passwords and PINs, or information about finances publicly online, other responses point to potentially risky behaviours. Some 23% of adults on average across participating countries and economies report regularly changing their passwords on websites they use for online shopping or personal finance. Failing to regularly change passwords may put their personal information at risk for cyberattack. In addition, 37% of adults on average across participating countries and economies report checking to see if a provider of a financial product is regulated in their country before making a purchase. Failing to check may put these financial consumers at risk of financial loss or harm if in fact the provider is not regulated in their country. Table 3.3 in Annex D presents the percentage of adults by participating country and economy who received one point for each of the digital financial literacy questions.

Another digital financial literacy question tests respondents' perceptions of the safety of public Wi-Fi networks. On average across participating countries and economies, 49% of adults disagree with the statement "I think that it is safe to shop online using public Wi-Fi networks" (50% of adults across participating OECD countries). This means that many adults do not disagree with this statement, suggesting they may be engaging in risky behaviours. Table 3.2 in Annex D presents the percentage of adults by participating country and economy who disagree with the statement "I think that it is safe to shop online using public Wi-Fi networks."

Figure 3.3. Digital financial literacy questions

Percentage of adults who reported the following aspects of digital financial literacy, across all adults and among those with Internet access



Note: There are four data points to reflect calculations of the percentage of adults who answered each digital financial literacy question (1) across the entire sample and (2) across the sub-sample of respondents who indicated they had access to the Internet.

Source: OECD/INFE Survey of Adult Financial Literacy.

Digital financial literacy levels across socio-demographic groups

While it is helpful to look at overall digital financial literacy and its components across countries, the aggregate country-level scores often mask significant variation in digital financial literacy (and its components) across individual-level characteristics such as age, gender, level of education, labour force status and income.

Table 3.6 in Annex D reports differences in digital financial literacy levels associated with age, gender, level of education, labour force status and income, considering all these individual-level characteristics at the same time, on average across participating countries and economies.

Overall, the analysis of the digital financial literacy score and its components across socio-demographic groups suggests that:

- *Income:* Digital financial literacy levels are higher (6 points out of 100) among adults with higher incomes compared to adults with lower incomes.
- *Education:* Digital financial literacy levels are higher among adults who have a secondary and/or tertiary degree compared to adults who have not finished secondary education. This score-point difference is 6 points on average across all participating countries and economies and 7 points across participating OECD countries.
- *Age:* On average across all participating countries and economies, digital financial literacy levels are lower (3 points out of 100) among older adults aged 60 years or more compared to middle-aged adults.

Context for understanding digital financial literacy levels: digital activities and digital financial services

Digital activities: using digital devices and tools

Another way to put the results on digital financial literacy in perspective is to look at the frequency with which adults carry out non-financial tasks using digital devices and tools.

For instance, Table 3.7 in Annex D reports the percentage of adults across participating countries and economies who have written a document on a computer. On average across participating countries and economies, some 61% of adults have written a document on a personal computer (66% of adults across participating OECD countries). There is also much variation across countries; the percentage of adults who have written a document on a personal computer ranges from a low of 31% in Indonesia to a high of 93% in Luxembourg.

Table 3.7 in Annex D reports the percentages of adults who perform other activities using digital devices and tools. Key findings from this table include:

- A vast majority of adults (94%) across participating countries and economies have used a mobile phone.
- Many adults across the globe use digital devices and tools to look for information online. On average across participating countries and economies, four out of five adults have looked for information online.
- Using instant messaging applications is another digital tool that is frequently used by adults across the globe. Over 90% of adults in Estonia, Hong Kong (China), Jordan, Luxembourg, Portugal and Saudi Arabia have used instant messaging applications.

Using digital financial services

Many financial services can be acquired and managed online, including via mobile phones. The 2022 OECD/INFE Toolkit therefore included questions to see whether and to what extent adults use digital financial services. This includes actions such as opening a payment account or savings account online, checking the balance and transactions of an account, or managing financial products and services completely online. Table 3.8 in Annex D reports the percentages of all adults (and adults with internet access) across participating countries and economies who use digital financial services.

For example, the percentage of adults who have opened a payment or savings account online varies considerably across participating countries and economies. Some 84% of adults in Korea, 63% of adults

in Sweden and 51% of adults in Estonia opened a payment or savings account online, compared to only 5% of adults in Paraguay who have done so. On average across all participating countries and economies, 27% of adults have opened a payment or savings account online (31% of adults across participating OECD countries).

The percentage of adults who have checked the balance or transactions of a bank account online also varies considerably across participating countries and economies. On average across all participating countries and economies, 67% of adults have checked the balance or transactions of a bank account online (77% of adults across participating OECD countries). Over 90% of adults in seven participating countries and economies have checked the balance or transactions of a bank account online.

Table 3.8 in Annex D also presents the percentage of adults by participating country and economy who have purchased goods or services online. On average across all participating countries and economies, 59% of adults overall have purchased goods and services online. On average across participating OECD countries, 71% of adults overall have made online purchases.

The percentage of adults who purchase goods and services online varies considerably across participating countries and economies: the percentage of adults who have purchased goods or services online ranges from 6% of adults in Paraguay to 97% of adults in Estonia.

In addition, the percentage of adults who have transferred money online varies considerably across participating countries and economies: the percentage of adults who have transferred money online ranges from 23% of adults in Paraguay to 93% of adults in Luxembourg.

Box 3.1. Crypto-assets

New digital assets such as crypto-assets (which include crypto-currencies) have rapidly expanded in recent years. As retail investor participation in capital markets grew during the COVID-19 pandemic, a desire for returns in the face of challenging and uncertain macro-economic conditions may have led some self-directed investors to more speculative investments in crypto-assets. However, crypto-assets can be highly volatile and thus it is important for individuals to understand the main features and the risks associated with these digital assets. Given the recent growth of crypto-assets, the 2022 Toolkit included survey items about awareness and holding of crypto-assets along with a question about the legal tender status of crypto-assets.

Awareness of crypto-assets

Awareness of crypto-assets varies widely across participating countries and economies. On average across all participating countries and economies, 41% of adults are aware of crypto-assets (49% of adults across participating OECD countries). Table 2.20 in Annex D reports the percentages of adults by participating country and economy who are aware of crypto-assets. Over two-thirds of adults in Spain³ (84%), Germany (83%), Ireland (75%), Korea (70%) and Hong Kong (China) (69%) are aware of crypto-assets, while less than one-fifth of adults in Malaysia (16%), Peru (16%), France (15%), Yemen (4%) and Indonesia (3%) have heard of them.

Holding crypto-assets

While many adults are aware of crypto-assets, much fewer hold them. On average across all participating countries and economies, 3.2% of adults hold crypto-assets (3.8% of adults across participating OECD

³ Spain asked respondents about awareness and holding of crypto-currencies rather than crypto-assets.

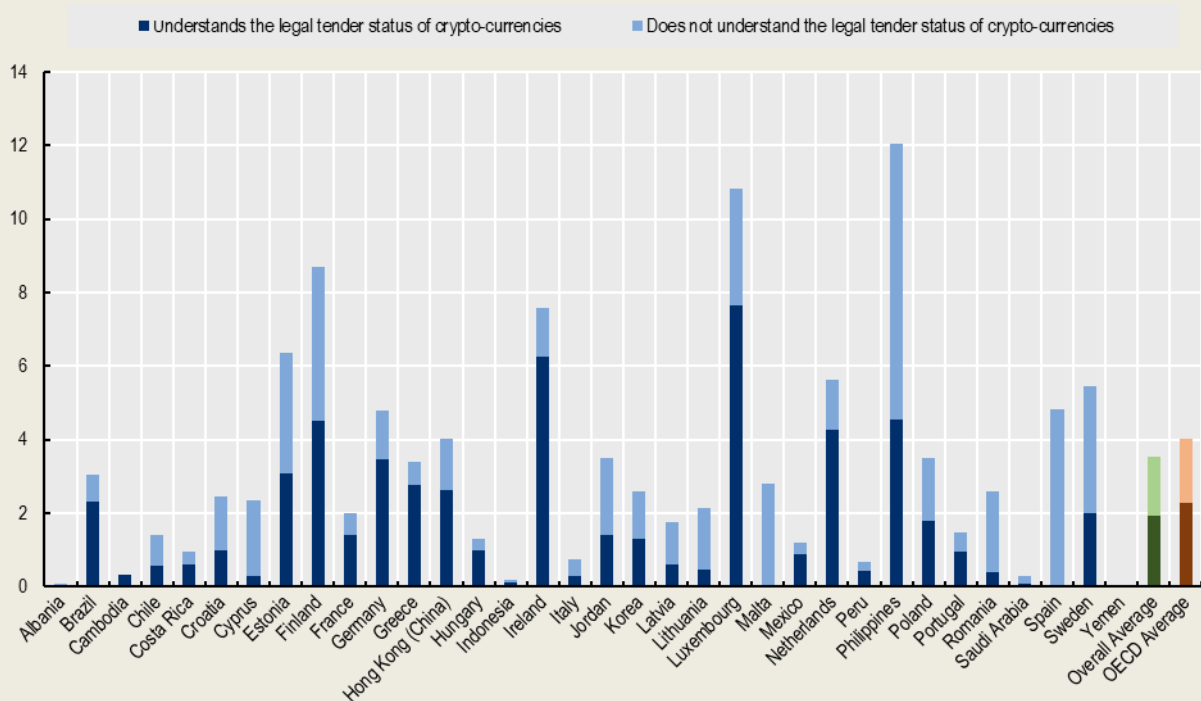
countries). Table 2.21 in Annex D reports the percentages of adults by participating country and economy who hold crypto-assets. Over 5% of adults in Luxembourg (11%), Finland (9%), Ireland (8%), Estonia (6%), the Netherlands (6%) and Sweden (6%) hold crypto-assets. Less than 2% of adults in ten participating countries and economies hold crypto-assets.

Knowledge about crypto-currencies

It is important for individuals, especially those who hold crypto-assets, to understand their main features. A survey item in the 2022 Toolkit asked respondents whether they thought that the statement “crypto-currencies have the same legal tender as bank notes and coins” was true or false. Figure 3.4 displays the percentage of adults who hold crypto-assets, by their answer to this statement, across participating countries and economies. In many participating countries and economies, not all adults who hold crypto-assets also correctly answered that this statement is false (i.e., crypto-currencies do not have the same legal tender as bank notes and coins).

Figure 3.4. Holding crypto-assets and digital financial literacy

Percentage of adults who hold crypto-assets, by digital financial literacy knowledge



Notes: These results should be interpreted with caution, as they are based on a small number of observations.

The results for Jordan, Mexico and Saudi Arabia should be interpreted with caution as the national samples may not be representative of the entire adult population. See Annex A for further details.

Source: OECD/INFE Survey of Adult Financial Literacy.

Digital financial services and financial literacy

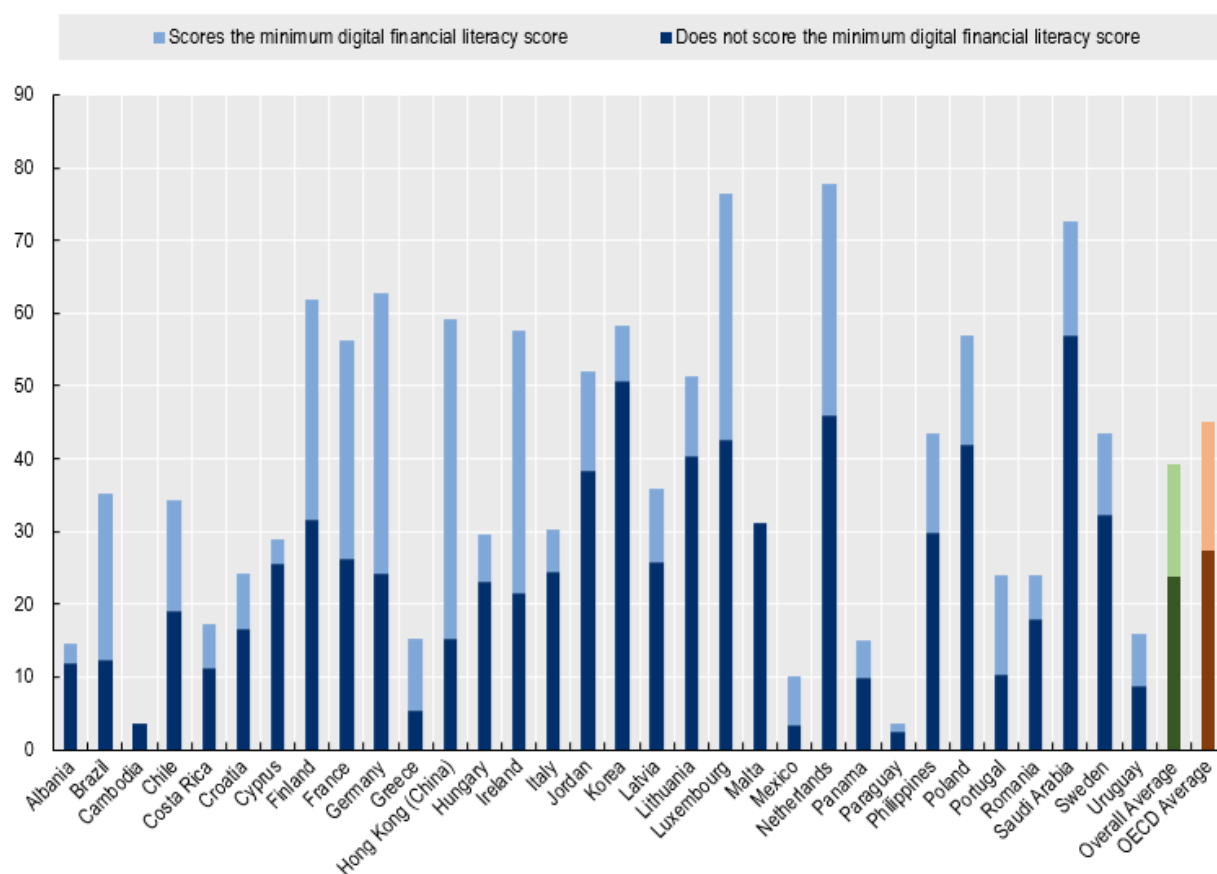
Given the increased digitalisation of the financial sector, people have more options to acquire and manage financial products and services online. It is therefore important for policymakers to be familiar with the

extent to which adults manage financial products and services online in relation to digital financial literacy levels. This can help policymakers understand whether and to what extent adults who engage with digital financial services also display the requisite digital financial knowledge, behaviour and attitudes to make sound financial decisions.

Figure 3.5 displays the percentage of adults who manage financial products and services online by digital financial literacy across participating countries and economies. On average across participating countries and economies, 38% of adults who manage financial products and services online also reached the minimum target score on digital financial literacy. This means that many adults who engage with digital financial services may not display the digital knowledge, behaviour or attitudes to effectively manage digital financial products and services.

Figure 3.5. Managing financial products and services online and digital financial literacy

Percentage of adults who manage financial products and services online, by digital financial literacy



Note: The minimum target score on digital financial literacy is defined as scoring at least 70 out of 100 points on digital financial literacy. Managing financial products and services online is constructed from survey item QP9_6 which asks "In the last 12 months, how often have you managed financial products and services (such as savings, investments, credit, insurance) online?" Responses of sometimes, often, and very often are coded as (1), all other cases are coded as (0).

The results for Jordan, Mexico and Saudi Arabia should be interpreted with caution as the national samples may not be representative of the entire adult population. See Annex A for further details.

Source: OECD/INFE 2023 Survey of Adult Financial Literacy.

Along with managing financial products and services online, many consumers also purchase goods or services, including financial products and services, online. Yet the safety (or lack thereof) of the Internet

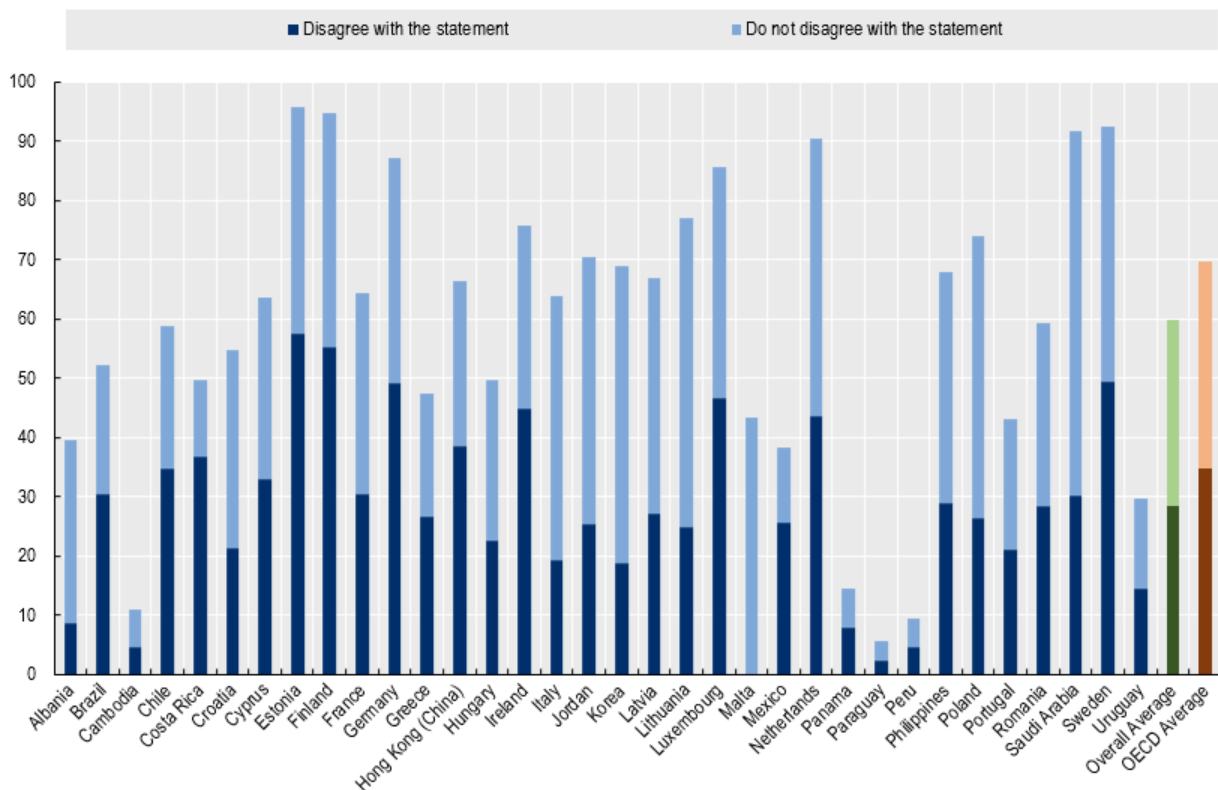
connection and of websites consumers use may put them at risk for harm if they are not using a secured and verified Internet connection. It is therefore important for adults who shop online to understand the (lack of) safety of public Wi-Fi.

Figure 3.6 displays the percentage of adults who shop online by whether they agree or disagree with the statement “I think it is safe to shop online using public Wi-Fi networks.”

On average across participating countries and economies, 49% of adults who shop online recognize that it is generally considered unsafe to shop online using public Wi-Fi networks, i.e. they *disagree* with the statement (50% of adults who shop online across participating OECD countries disagree with the statement). This means that many adults who shop online believe that public Wi-Fi networks are safe for such activities, and so these adults may be exposing themselves to harm.

Figure 3.6. Shopping online and digital financial literacy

Percentage of adults who shop online, by perception of the safety of public Wi-Fi



Notes: The statement reads: “I think it is safe to shop online using public Wi-Fi networks.”

The results for Jordan, Mexico and Saudi Arabia should be interpreted with caution as the national samples may not be representative of the entire adult population. See Annex A for further details.

Source: OECD/INFE 2023 Survey of Adult Financial Literacy.

4 Financial well-being

Key results

- Across participating countries and economies, the average financial well-being score is 42 out of 100 points (47 out of 100 across participating OECD countries).
- The score on financial resilience is 46 out of 100 across participating countries and economies (52 for participating OECD countries). The score on the subjective component of financial well-being across participating countries and economies is 38 out of 100 (41 for participating OECD countries).
- Financial well-being levels are significantly higher among adults with higher incomes compared to adults with lower incomes. On average across participating countries and economies, the score-point difference in financial well-being associated with income is 20 points (22 points on average across participating OECD countries). Differences in the financial resilience score associated with income are even higher: on average across participating countries and economies, high income adults have a financial resilience score that is 23 points higher than low-income adults (25 points on average across participating OECD countries).
- Adults who reach the minimum target financial literacy score (at least 70 points out of 100) have higher levels of financial well-being by 10 score points, on average across participating countries and economies. Adults who display high levels of financial literacy also have, on average, higher levels of financial resilience (by 12 score points on average across participating countries and economies).

The concept of individual financial well-being and the related concept of financial resilience have gained prominence in recent years. The 2008 Global financial crisis highlighted the need to focus on financial well-being and to ensure that people's interactions with the financial system was meaningful and beneficial to people's needs. Since then, the impact of the COVID-19 pandemic and cost of living pressures have highlighted the importance of protecting and supporting individuals and households to be able to face unexpected financial shocks. Financial education aims to make individuals better prepared at managing their money and finances, reaching their financial goals and avoiding stress related to financial problems, thereby improving individuals' financial well-being.

The OECD/INFE is conducting further work to define and measure financial well-being, considering that financial well-being is recognised as a goal of financial inclusion, financial consumer protection and financial literacy policies (OECD, 2024 Forthcoming^[27]). According to the existing literature, financial well-being has to do with the extent to which individuals can meet their current financial needs and commitments (and whether they can do so comfortably), they can cope with negative financial shocks, they feel secure about their own financial future, and they have the ability to make choices that allow them to meet their future financial goals. There is a general recognition in the literature that financial well-being has both an objective and subjective angle (Sorgente and Lanz, 2017^[28]; UNSGSA, 2021^[29]).

The OECD/INFE Toolkit offers the opportunity to develop a measure of financial well-being in an international context, based on the questions available in the survey. Such measure will inform further work of the OECD/INFE and will offer a useful contribution to the efforts of other organisations working in this field at a national and international level.

The financial well-being score reported in this chapter is based on twelve variables that cover the different components of financial well-being discussed above. Four questions are related to financial resilience, and can be taken to represent objective aspects of financial well-being related to the availability of financial resources to cope with negative financial shocks. Eight of the twelve questions are related to subjective elements of financial well-being, such as satisfaction with one's financial situation and feelings of stress about money matters. More details about these variables are included in Annex C.

Given the different focus of the questions on objective and subjective aspects of financial well-being, and given the large number of subjective questions, the report presents results separately for the two components, and gives them equal weight in the overall financial well-being score. Each component (objective and subjective) was rescaled to range between 0 and 50; these two scores were then added together to produce the overall financial well-being score. Overall financial well-being scores therefore range from 0 to 100, with higher scores indicating higher levels of financial well-being.

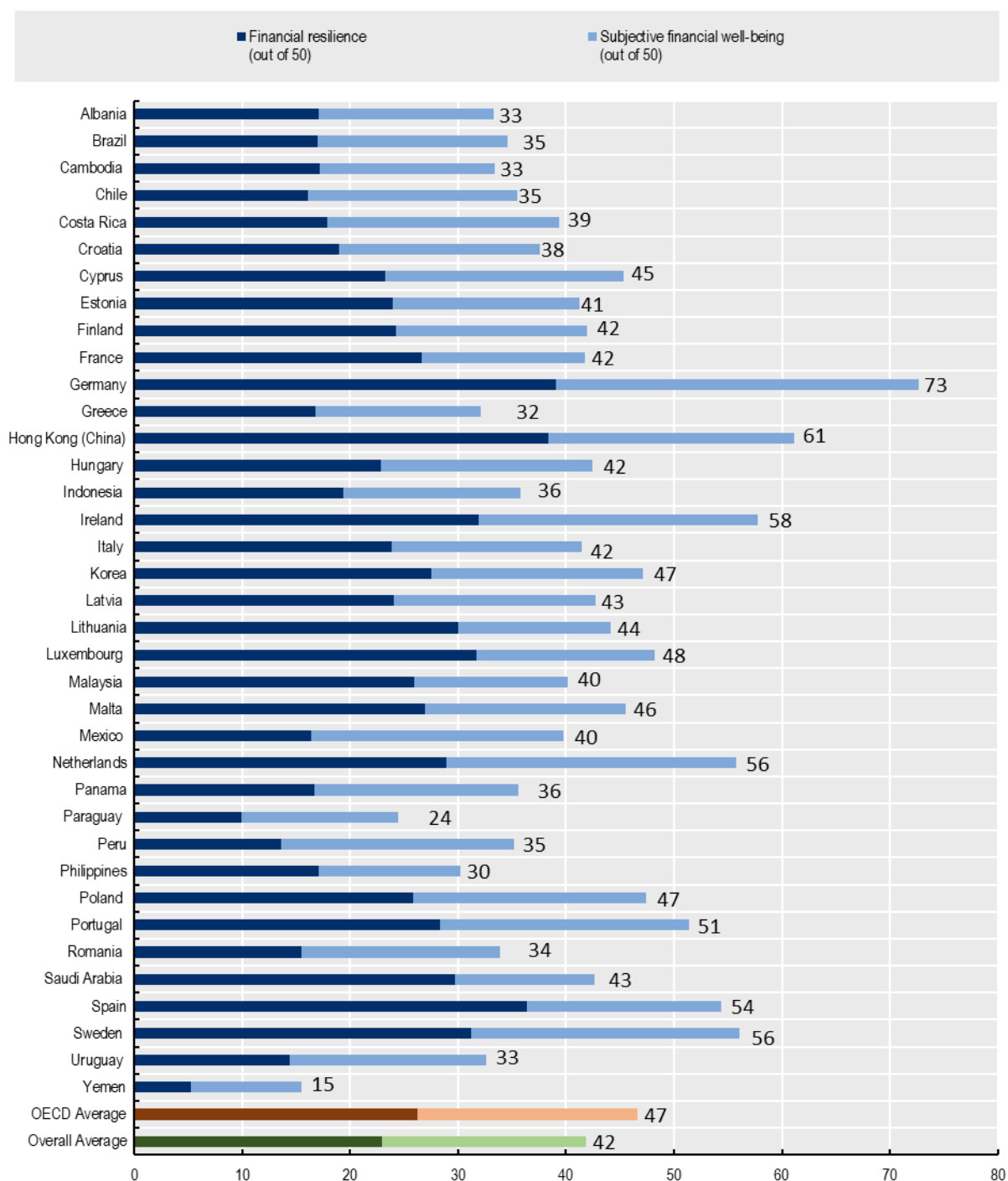
Levels of financial well-being

Overall levels of financial well-being vary widely across participating countries and economies. The overall average financial well-being score across participating countries and economies is 42 out of 100 (47 out of 100 across participating OECD countries). Figure 4.1 reports average financial well-being scores across participating countries and economies.

Some of the highest overall levels of financial well-being are reported among adults in Germany (73), Hong Kong (China) (61), Ireland (58), the Netherlands (56) and Sweden (56). Nineteen of the participating countries and economies have average levels of financial well-being above the overall average of 43. However, nineteen participating countries and economies have average levels of financial well-being below the overall average.

Figure 4.1. Financial well-being

Average financial well-being scores



Notes: The results for Mexico and Saudi Arabia should be interpreted with caution as the national samples may not be representative of the entire adult population. See Annex A for further details.

The results for Malaysia and Spain presented in this chapter are drawn from samples taken in 2021 using the 2018 Toolkit. See Annex A for further details.

Source: OECD/INFE 2023 Survey of Adult Financial Literacy.

Tables 4.2 and 4.3 in Annex D report the average scores on the objective and subjective components of financial well-being.

The score on financial resilience across participating countries and economies is 46 out of 100 (52 out of 100 across participating OECD countries). Some 22 participating countries and economies have average financial resilience scores above the overall average. Some of the highest overall levels in financial resilience are among adults in Hong Kong (China) (77), Germany (88) and Spain (73).

The score on the subjective component of financial well-being across participating countries and economies is 38 out of 100 (41 out of 100 across participating OECD countries). Sixteen participating countries and economies have overall average subjective financial well-being scores above the overall average, whereas twenty participating countries and economies have subjective financial well-being levels below the overall average. Some of the highest levels in subjective financial well-being are among adults in Germany (67), Ireland (52) and the Netherlands (54).

Responses to individual financial well-being questions

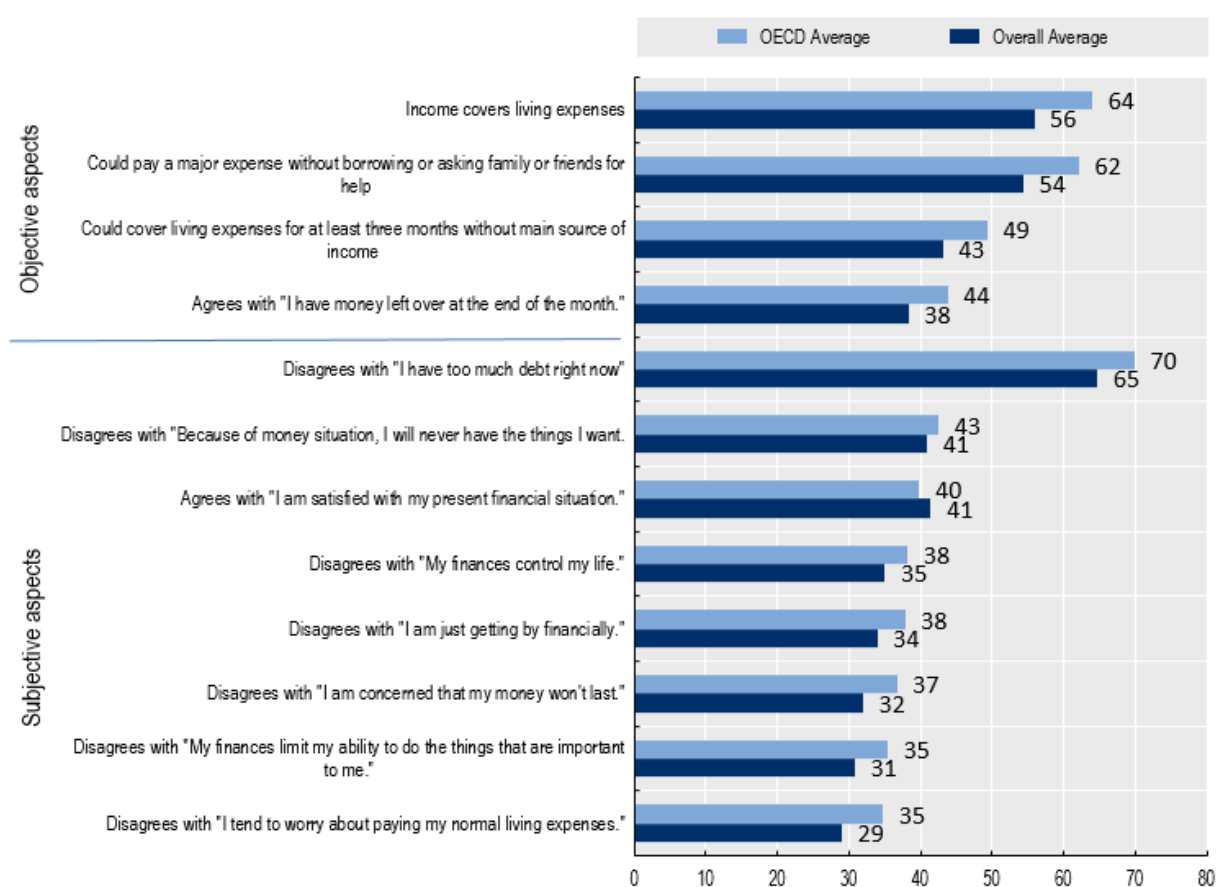
The 2022 Toolkit contains twelve questions to measure financial well-being. Four of the twelve questions are related to financial resilience, and can be taken to represent objective aspects of financial well-being related to the availability of financial resources to cope with negative financial shocks. These questions ask respondents whether their income covered living expenses in the last 12 months, how long they could continue to cover living expenses without borrowing or moving house if they lost their main source of income, if they could pay a major expense without borrowing money or asking family or friends to help, and whether or not they have money left over at the end of the month.

Eight of the twelve questions measure subjective aspects of financial well-being, or adults' perceptions and feelings about their financial situation. This includes questions asking respondents whether they are satisfied with their current financial situation, whether they feel they have too much debt and if they worry about paying living expenses. Other questions ask respondents whether they are concerned their money won't last, if they feel that their financial situation controls their life, and to what extent their finances limit their ability to do things that are important to them.

Figure 4.2 reports the percentage of adults who received one point for each financial well-being question, averaged across all participating countries and economies and across participating OECD countries.

Figure 4.2. Financial well-being questions

Percentage of adults who reported the following aspects of financial well-being



Source: OECD/INFE 2023 Survey of Adult Financial Literacy.

In terms of financial resilience, on average across participating countries and economies more than half of adults (54%) reported that they could face a major expense, equivalent to their monthly income without borrowing the money or asking family or friends to help (62% on average across participating OECD countries). In addition, more than half (56%) had not experienced situations where their income did not cover their living costs in the 12 months prior to the survey (64% on average across participating OECD countries).

On average across participating countries and economies, fewer than half adults (43%) could continue to cover their living expenses for at least three months without borrowing money or moving house, if they lost their main source of income (49% on average across participating OECD countries). Furthermore, only 38% of adults across all participating countries and economies report having money left over at the end of the month. This suggests that many adults could quickly find themselves in precarious financial situations in the event of an adverse economic shock or unexpected expense.

In terms of subjective aspects of financial well-being, only 41% of adults on average across participating countries and economies agree that they are satisfied with their present financial situation (40% on average across participating OECD countries). On average across participating countries and economies, 35% of adults do not feel that finances control their lives and 32% do not feel concerned that their money won't last. Only 29% of adults report that they do not worry about paying their normal living expenses (35% of adults across OECD countries). These feelings towards one's personal financial situation are consistent

with the findings that many adults do not have money left over at the end of the month and/or have experienced situations wherein their income did not cover their living expenses.

Table 4.4 in Annex D reports the percentage of adults by country or economy who reported each aspect of financial well-being.

Box 2. Changes in financial resilience over time

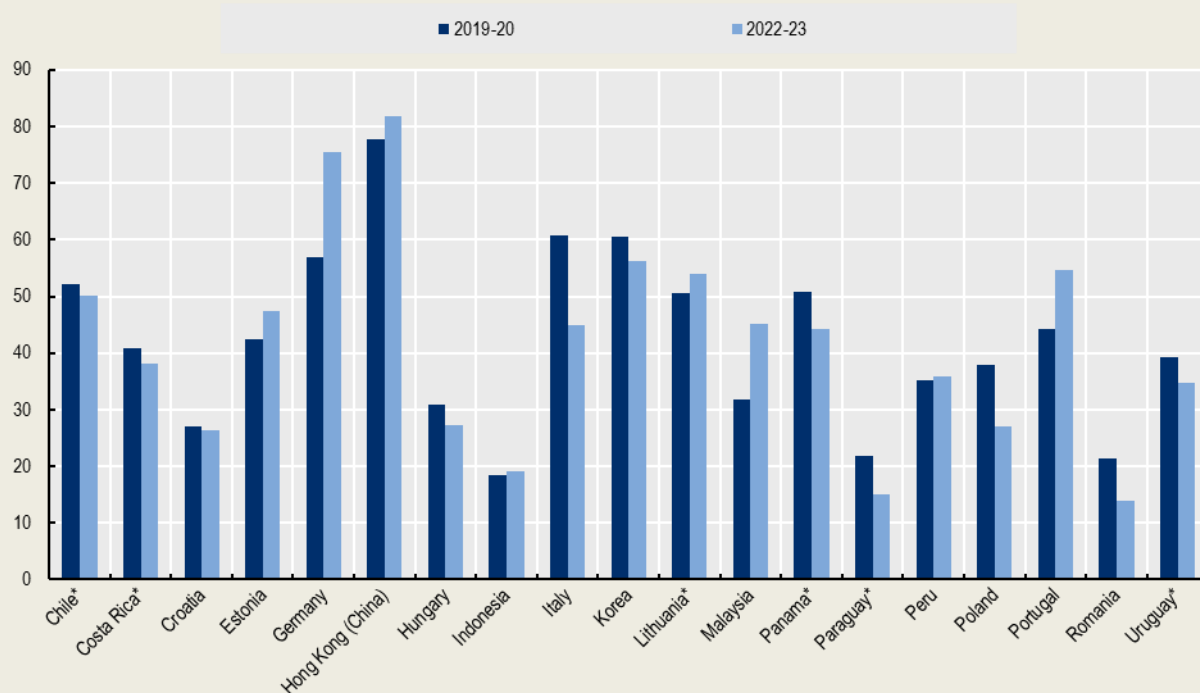
Table 4.14 in Annex D shows changes in two aspects of financial resilience from the last round of data collection in 2019-20 to the current round of data collection in 2022-23 across 24 countries and economies with available data.

Given that the previous data collection took place in 2019-20 before the COVID-19 pandemic, it is interesting to observe how financial resilience has evolved since the pandemic and during the cost-of-living crisis beginning in 2022. One aspect of financial resilience is the ability to cope when faced with an adverse economic shock or financial stress, such as income loss. Figure 4.3 presents the percentage of adults who reported the ability to cover their living expenses for at least three months, without having to borrow, if they were to lose their main source of income, from 2019-20 to 2022-23.

In many participating countries and economies, the percentage of adults who can cover living expenses for at least three months without their main source of income decreased from 2019-20 to 2022-23. This difference is most pronounced in Italy (decrease by 16 percentage points) and Poland (decrease by 11 percentage points). However, in eight participating countries and economies, the percentage of adults who report the ability to cover living expenses for at least three months without their main source of income increased from 2019-20 to 2022-23. This difference is largest in Germany (increase by 19 percentage points) and Malaysia (increase by 13 percentage points).

Figure 4.3. Changes in financial resilience

Changes in the percentage of adults who could cover living expenses for at least three months if they lost their main source of income, from 2019-20 to 2022-23



Notes: These results are based on a comparison of 2019-20 to 2022-23 data.

For countries marked with an asterisk, the 2019-20 data are based on the recollection of respondents elicited during the 2023 survey.

For countries not marked with an asterisk, the 2019-20 data are based on data collected in 2019-20 drawn from OECD (2020), OECD/INFE 2020 International Survey of Adult Financial Literacy.

Source: OECD/INFE Survey of Adult Financial Literacy.

Financial well-being levels across socio-demographic groups

As discussed in the existing literature, financial well-being varies with a variety of individual and aggregate contextual factors (OECD, 2024 Forthcoming^[27]). The data collected through the OECD/INFE 2022 Toolkit allows to explore levels of financial well-being across various individual-level characteristics such as age, gender, level of education, labour force status, and income.

Figure 4.4 reports average differences in financial well-being levels, considering these various individual-level characteristics at the same time, across participating countries and economies. Tables 4.9 and 4.10 in Annex D report the variation in the objective and subjective components of financial well-being associated with socio-demographic characteristics.

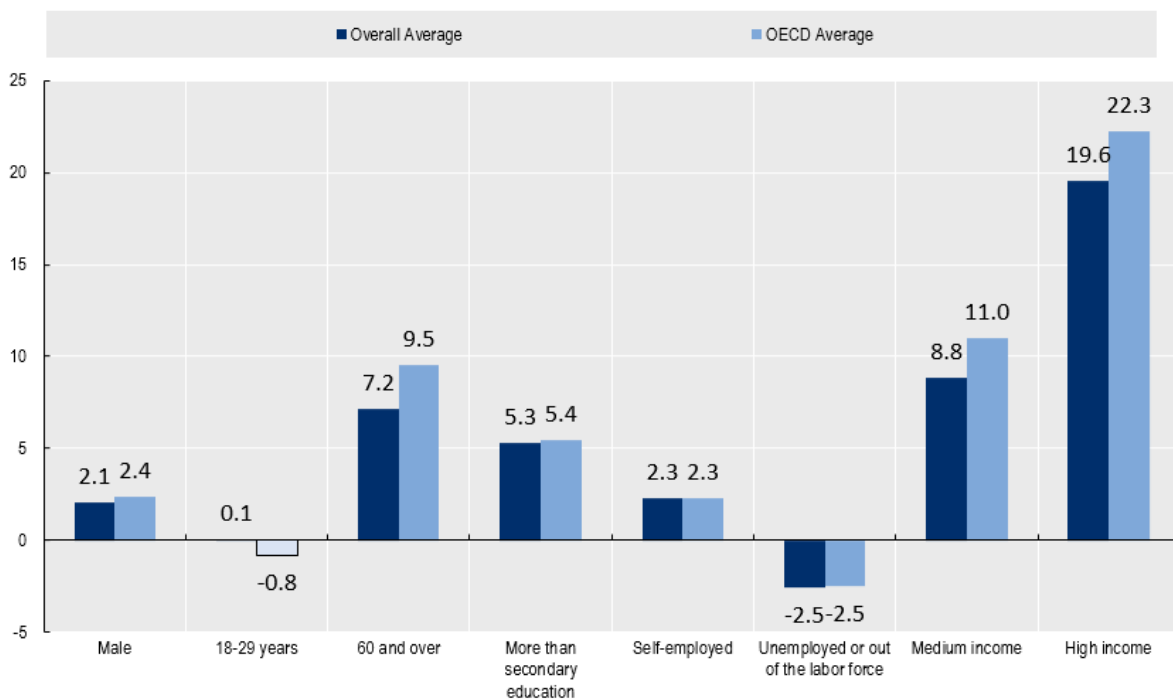
- **Income:** Financial well-being levels are significantly higher among adults with higher incomes compared to adults with lower incomes. On average across participating countries and economies, this score-point difference is 20 points (22 points across participating OECD countries). Differences in the financial resilience scores associated with income are even higher: on average across participating countries and economies, high income adults have a financial resilience score that is

23 points higher than low-income adults (25 points on average across participating OECD countries).

- **Education:** Financial well-being levels are significantly higher among adults who have a tertiary degree compared to adults who have not finished secondary education, on average in participating countries and economies.
- **Age:** On average in participating countries and economies, financial well-being levels are significantly higher among adults 60 years or older compared to adults aged 30-59 years old. On average in participating countries and economies, young people aged 18-29 have lower financial resilience scores than middle-aged adults.
- **Gender:** on average in participating countries and economies, men have slightly higher levels of financial well-being than women by 2 points out of 100. Men also have slightly higher levels of financial resilience than women (by 3 points out of 100 on average across participating countries and economies).

Figure 4.4. Variation in financial well-being

Score-point differences associated with characteristics of the respondent



Notes: These results are based on a linear regression (OLS), with sampling weights (if available for a given country or economy). Comparison categories are: women, respondents 30-59 years old, respondents with upper secondary education or less, employees, and respondents with low incomes.

Statistically significant values are marked in bold (5% level).

Source: OECD/INFE 2023 Survey of Adult Financial Literacy.

Financial well-being and financial literacy

The OECD Recommendation on Financial Literacy recognises individual financial well-being as the ultimate goals of financial literacy policies and programmes (OECD, 2020). It is therefore important to consider the relationship between levels of financial literacy and financial well-being, while also considering other potentially related factors.

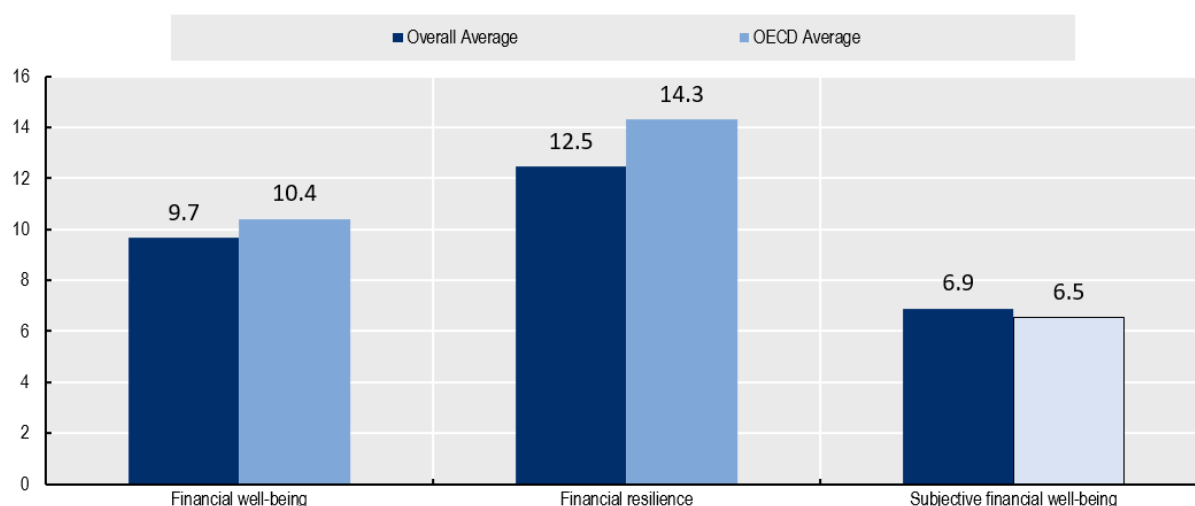
Figure 4.5 shows score-point differences on overall financial well-being, financial resilience, and subjective financial well-being for adults who meet the minimum target score of financial literacy (at least 70 points out of 100) compared to adults who do not meet the minimum target score, taking into account individual-level characteristics (such as age, gender, level of education, labour force status, and income) and holding of financial products.

Adults who scored at or above the minimum target financial literacy score have higher levels of overall financial well-being, financial resilience and subjective financial well-being than adults who scored below the minimum target financial literacy score. For example, adults who reached the minimum target score on financial literacy (at least 70 points out of 100) have higher levels of financial well-being than adults who scored below the minimum target score; on average, this score-point difference is 10 points across all participating countries, taking into account individual-level characteristics and holding of financial products.

Adults who reached the minimum target score for financial literacy also have higher levels of financial resilience; this score-point difference is 13 points across all participating countries and economies (14 points across participating OECD countries), taking into account individual-level characteristics and holding of financial products.

Figure 4.5. Financial well-being and financial literacy

Score-point differences in financial well-being associated with financial literacy, after taking individual characteristics into account



Notes: These results are based on a linear regression (OLS), with sampling weights (if available for a given country).

Comparison categories are: those who do not score the minimum target financial literacy score, those who do not hold any financial products, women, respondents 30-59 years old, respondents with upper secondary education or less, employees, and respondents with low incomes. Statistically significant values are marked in bold (5% level).

The minimum target score of financial literacy is defined as scoring at least 70 out of 100 points.

Source: OECD/INFE Survey of Adult Financial Literacy.

5 Policy suggestions

Key results highlighted in this Report reveal that:

- Financial literacy levels can be improved to support sound financial decisions in challenging economic contexts. Results from this latest coordinated measurement exercise reveal that there is room for improvement in financial literacy competencies: the overall average financial literacy score across all participating countries and economies is 60 points out of 100 points.
- Digital financial literacy levels may not be sufficient in light of the opportunities and risks posed by digital financial services. Results reveal that digital financial literacy levels are 53 out of 100 points across participating countries and economies.
- Higher financial literacy is associated with greater individual financial well-being. Results indicate that adults who reach the minimum target financial literacy level also have significantly higher levels of financial well-being and financial resilience.

Based on these key results, it is possible to draw a series of policy suggestions for policymakers and stakeholders to consider as they develop financial literacy national strategies and programmes.

Continue to improve basic financial knowledge to support sound financial decisions in the current economic-financial context

Results indicate that in many participating countries and economies, some areas of basic financial knowledge are particularly weak and have remained so since previous assessments (OECD, 2016^[8]; OECD, 2020^[4]), namely simple and compound interest as well as applying inflation in a real life context. Less than one-third of adults across participating countries and economies correctly understood both simple and compound interest calculations. These financial knowledge competencies are particularly important for adults who use savings and credit products as these are concepts that affect basic money management and the ability to build financial resilience. Strengthening understanding of these concepts would support individuals to make sound financial decisions in the face of challenging economic contexts, such as the current landscape characterised by cost-of-living pressures in many countries.

Strengthen behaviours and attitudes that are more likely to support financial resilience and well-being

The OECD Recommendation on Financial Literacy identifies financial well-being as a goal of financial literacy and financial education (OECD, 2020^[1]). Results in Chapter 4 of this report support the idea that financial literacy can support greater financial resilience and well-being, as adults who reach the minimum target financial literacy level also have significantly higher levels of financial well-being and financial resilience. Not only do individuals need to be supported to understand basic financial knowledge concepts, but attention should be given to promoting certain financial behaviours and to fostering certain attitudes

which can support financial well-being. This may also support goals beyond individual financial well-being, including supporting the development of competitive financial markets.

For instance, findings in this Report reveal that:

- Certain behaviours such as comparing products, shopping around when buying financial products and services, or seeking advice from independent sources are not common for a large part of the population in most participating countries. Considering trends about the use of crypto-assets and about self-directed investment decisions based on apps or alternative sources of advice (e.g. influencers), having sound financial behaviours in this respect can be key to preserve individual's financial resilience and well-being. Comparing financial products and services across providers and seeking advice from independent sources can help adults make informed decisions and choose products or services that best suit their needs.
- Furthermore, having the kind of critical thinking that is associated with shopping around and relying on formal and independent sources of information and advice can also be a useful skill as people try to protect themselves from more frequent fraud and scam attempts. Results presented in this Report show that most of the people who have fallen victim to financial frauds and scams (around two out of three adults) do not reach the minimum target level of financial literacy.
- Keeping track of money in the short term and sticking to long-term financial goals are also behaviours that can be improved in many countries to ensure that individuals develop effective strategies to ensure their financial resilience and well-being. These are particularly important behaviours considering the financial challenges that emerged for many during the COVID-19 pandemic and subsequent increases in cost-of-living pressures. Improving budgeting and planning may encourage adults to behave in financially prudent ways and increase the number of active savers by helping adults to set and plan for long-term financial goals.
- People may be encouraged to develop longer-term attitudes towards their personal finances. For example, more than half of adults across participating countries and economies find it more satisfying to spend money than to save it for the long-term, which may inhibit them from actively saving. Encouraging adults to develop longer-term attitudes towards their finances could also contribute to greater financial well-being.

Improve knowledge, behaviour and skills to support the safe and responsible use of digital financial products and services

Given the rapid pace of digitalisation of the financial sector, digital financial services are becoming increasingly widespread and even the “new normal” in many countries (OECD, 2020^[24]; OECD, 2021^[25]). This latest round of data collection revealed that many people regularly buy goods and services online and/or manage their finances online. Yet findings in this Report also reveal the level of skills related to digital financial services does not seem to match the current behaviour and needs. For example, 62% of those who report to manage their finances online do not reach the minimum target level of digital financial literacy. Some 51% of those who shop online do not understand that it may not be safe to use public Wi-Fi networks, while 14% of adults may not understand the risks of sharing the passwords and PINs of their bank account with friends. Many adults are also unaware of the potential risks of not paying attention to the security of a website before making a transaction, and even fewer adults report that they regularly change their passwords on websites used for online shopping and personal finance. Targeted policies or programmes to address gaps in digital financial knowledge, behaviour and attitudes can help adults safely engage with an increasingly digitised financial sector to make sound financial decisions.

Support people with the lowest financial literacy and well-being

Given the wide variation of financial literacy and digital financial literacy within countries and economies, it continues to be important to support those in the population with the lowest financial literacy, digital financial literacy and well-being. Policymakers should consider targeting relevant groups with tailored approaches to financial education provision. Findings in this Report point to differences in levels of financial literacy, digital financial literacy and financial well-being according to various individual-level characteristics. This includes individuals with low incomes and low education levels, however depending on the country context, they may also include other individuals such as women, young people or older people. Those who have the lowest financial literacy levels could also be the ones most in need of focused financial education efforts, as they tend to also have lower levels of financial well-being. Furthermore, the association between these individual-level characteristics (low incomes, low levels of education, etc.) and low financial literacy have not significantly changed since the previous survey in 2019/2020 (OECD, 2020^[4]). Policy interventions at national level may need a targeted approach to financial literacy which takes into account the needs and characteristics of these different groups.

Continue to collect and analyse evidence on financial literacy, including with a focus on digital financial literacy, to make sure that financial literacy policies and programmes support individual financial well-being

The importance of assessing levels of financial literacy is recognized by the OECD Recommendation on Financial Literacy (OECD, 2022^[22]) and this report is evidence that countries and economies across the globe, including OECD Member countries, are committed to collecting data on financial literacy to help inform their policies and programmes. Continuing to collect data using (appropriately updated versions of) the OECD/INFE Toolkit is important given an evolving economic and financial landscape, including digitalisation of the financial sector.

Countries and economies that have not participated in this coordinated measurement exercise are encouraged to do so in future exercises, not only to provide national baseline evidence but also to contribute to a growing international evidence base on adult financial literacy competencies, digital financial literacy competences, and financial well-being across the world.

References

- Atkinson, A. and F. Messy (2012), “Measuring Financial Literacy: Results of the OECD / International Network on Financial Education (INFE) Pilot Study”, *OECD Working Papers on Finance, Insurance and Private Pensions*, No. 15, OECD Publishing, Paris, <https://doi.org/10.1787/5k9csfs90fr4-en>. [7]
- CNMV, Banco de España and Ministry of Economy (2022), *Financial Education Plan 2022-2025*, <https://www.cnmv.es/DocPortal/Publicaciones/PlanEducacion/plan-educa-financiera-2022-2025-en.pdf> (accessed on 12 September 2023). [15]
- Fessler, P., M. Jelovsek and M. Silgoner (2020), “Financial literacy in Austria – focus on millennials”, *Monetary Policy & the Economy* Q3/20, pp. 21-38, <https://ideas.repec.org/a/onb/oenbmp/y2020iq3-20b2.html> (accessed on 17 August 2023). [17]
- G20 (2021), “Italian G20 Presidency Third Finance Ministers and Central Bank Governors Meeting Communiqué”, <http://www.g20italy.org/wp-content/uploads/2021/07/Communique-Third-G20-FMCBG-meeting-9-10-July-2021.pdf> (accessed on 11 August 2023). [3]
- Italian Committee for Financial Education (2017), *What Counts: A National Strategy for Financial Education*, https://www.quellocheconta.gov.it/it/pdf/chi_siamo/Strategia.pdf (accessed on 12 September 2023). [16]
- Kempson, E. (2009), “Framework for the Development of Financial Literacy Baseline Surveys: A First International Comparative Analysis”, *OECD Working Papers on Finance, Insurance and Private Pensions*, No. 1, OECD Publishing, Paris, <https://doi.org/10.1787/5kmddpz7m9zq-en>. [6]
- Mejía, D. and G. Rodríguez Guzmán (2016), “Socio-Economic Determinants of Financial Education: Evidence for Bolivia, Colombia, Ecuador and Peru”, *Public Policy and Productive Transformation Series*, N°23, <https://scioteca.caf.com/handle/123456789/873> (accessed on 17 August 2023). [18]
- Morgan, P. and L. Trinh (2019), “Determinants and Impacts of Financial Literacy in the Lao PDR”, *SSRN Electronic Journal*, <https://doi.org/10.2139/SSRN.3374793>. [19]
- Morgan, P. and L. Trinh (2017), *Determinants and Impacts of Financial Literacy and Cambodia and Viet Nam*, <http://www.adbi.org>. [20]
- OECD (2023), “Financial Consumers and Sustainable Finance: Policy implications and approaches”, *OECD Business and Finance Policy Papers*, Vol. 32, <https://doi.org/10.1787/bf84ff64-en>. [23]
- OECD (2023), *National Strategy for Financial Education For Poland*, <https://www.oecd.org/finance/financial-education/national-strategy-financial-education-poland.htm>. (accessed on 12 September 2023). [13]

- OECD (2022), *OECD/INFE Guidance on Digital Delivery of Financial Education*, [5]
<http://www.oecd.org/financial/education/INFE-guidance-on-digital-delivery-of-financial-education.htm>.
- OECD (2022), *OECD/INFE TOOLKIT FOR MEASURING FINANCIAL LITERACY AND FINANCIAL INCLUSION 2022*, [2]
<http://www.oecd.org/financial/education/2022-INFE-Toolkit-Measuring-Finlit-Financial-Inclusion.pdf>.
- OECD (2022), *Recommendation of the Council on*, [22]
<http://legalinstruments.oecd.org>.
- OECD (2021), *A National Financial Literacy Strategy for Austria*, [12]
<https://www.oecd.org/daf/fin/financial-education/austria-financial-literacy-strategy.htm>
 (accessed on 12 September 2023).
- OECD (2021), *Financial Literacy Levels in the Commonwealth of Independent States in 2021*, [10]
<http://www.oecd.org/financial/education/financial-literacy-levels-in-the-commonwealth-of-independent->
- OECD (2021), *G20/OECD-INFE Report on Supporting Financial Resilience and Transformation through Digital Financial Literacy*, [25]
<http://www.oecd.org/finance/supporting-financial-resilience-and-transformation-through-digital>.
- OECD (2020), *Digital Transformation in the Age of COVID-19: Building Resilience and Bridging Divides*, OECD, Paris, [24]
<http://www.oecd.org/digital/digital-economy-outlook-covid.pdf>
 (accessed on 5 September 2023).
- OECD (2020), *OECD Legal Instruments*, [1]
<https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0461> (accessed on 24 July 2023).
- OECD (2020), *OECD/INFE 2020 International Survey of Adult Financial Literacy*. [4]
- OECD (2018), *Levels of Financial Literacy in Eurasia*. [11]
- OECD (2017), “G20/OECD INFE Report on Adult Financial Literacy in G20 Countries”, [9]
<https://www.oecd.org/daf/fin/financial-education/G20-OECD-INFE-report-adult-financial-literacy-in-G20-countries.pdf> (accessed on 4 July 2023).
- OECD (2016), *OECD/INFE International Survey of Adult Financial Literacy Competencies*, [8]
 OECD, Paris, <https://www.oecd.org/finance/OECD-INFE-International-Survey-of-Adult-Financial-Literacy-Competencies.pdf> (accessed on 4 July 2023).
- OECD (2024 Forthcoming), *OECD/INFE Survey Instrument to Measure Digital Financial Literacy*, OECD. [26]
- OECD (2024 Forthcoming), *Policy Note on Defining and Measuring Financial Well-being*. [27]
- Portugal, N. (2022), *National Plan for Financial Education 2021-2025*, [14]
https://www.todoscontam.pt/sites/default/files/2022-05/national_plan_for_financial_education_2021-2025.pdf (accessed on 12 September 2023).
- Roberts, B. et al. (2018), *Financial Literacy in South Africa: Results from the 2017/18 South African Social Attitudes Survey round*, Financial Sector Control Authority, Pretoria. [21]

Sorgente, A. and M. Lanz (2017), “Emerging Adults’ Financial Well-being: A Scoping Review”, *Adolescent Research Review*, Vol. 2/4, pp. 255-292, <https://doi.org/10.1007/S40894-016-0052-X/FIGURES/5>. [28]

UNSGSA (2021), *Measuring Financial Health: Concepts and Considerations*, <https://www.unsgsa.org/publications/measuring-financial-health-concepts-and-considerations> (accessed on 21 April 2023). [29]

Annex A. Information on data collection

Country / Economy	Organisation commissioning the data collection	Timing of data collection	Method of data collection	Sample Size	Notes on the sample
Albania	Bank of Albania	10 – 29 June 2023	Face-to-face interviews	1000	
Brazil	Central Bank of Brazil	13 March – 10 April 2023	Face-to-face interviews	2000	
Cambodia	OECD (with support from the Government of Japan)	8 – 26 July 2023	Face-to-face (CAPI)	1000	
Chile	Development Bank of Latin America (CAF) in association with the Financial Market Commission (CMF)	29 April - 23 June 2023	Face-to-face interviews	1212	
Costa Rica	Development Bank of Latin America (CAF) in association with the Financial Institutions Superintendence (SUGEF)	7 June – 11 July 2023	Face-to-face interviews	1170	
Croatia	Croatian National Bank and Croatian Financial Services Supervisory Agency	2 March – 21 March 2023	Face-to-face interviews	1000	
Cyprus	OECD (with support from the European Commission DG REFORM)	27 June – 1 August 2023	Mixed method (telephone and face-to-face)	1255	
Estonia	Ministry of Finance	5 April – 3 May 2023	Web interviews (CAWI) and telephone interviews (CATI)	1119	
Finland	Ministry of Justice	25 January – 6 February 2023	Online	1806	

France	Bank of France	1 June – 20 June 2023	Mixed method: online (main) and telephone	2176	
Germany	German Federal Financial Supervisory Authority	19 September – 18 October 2022	Telephone interviews (CATI)	1000	
Greece	OECD (with support from the European Commission DG REFORM)	28 June – 25 July 2022	Telephone interviews (CATI)	1507	
Hong Kong (China)	Investor and Financial Education Council	18 August – 2 September 2022	Face-to-face interviews	1056	
Hungary	Money Compass Foundation and Central Bank of Hungary	14 July – 6 August 2022	Face-to-face interviews	1000	
Indonesia	Indonesian Financial Services Authority (OJK)	29 July – 16 September 2022	Face-to-face (CAPI)	1000	
Ireland	The Competition and Consumer Protection Commission	16 December 2022 – 1 March 2023	Telephone interviews	1505	
Italy	Bank of Italy	17 February – 27 March 2023	Telephone interviews (CATI)	4862	
Jordan	Central Bank of Jordan	26 February – 21 March 2023	Online	3536	Convenience sample of visitors of the CBJ's website, students and academic staff in several universities in Jordan, and customers of banks and non-banking financial institutions.
Korea	Bank of Korea and Financial Supervisory Service	29 August – 30 November 2022	Face-to-face	2400	
Latvia	Central Bank of Latvia	4 October – 3 November 2022	Face-to-face	1007	
Lithuania	Bank of Lithuania	16 March – 25 April 2023	Telephone and face-to-face	1068	
Luxembourg	ABBL foundation for financial education (ABBL) and the Financial Sector Surveillance Commission (CSSF)	15 – 30 December 2022	Online	1017	

Malaysia	Bank Negara Malaysia	October – December 2021	Face-to-face (CAPI)	3007	The results presented in this Report are based on a survey conducted in 2021 using the 2018 Toolkit.
Malta	Ministry of Social Policy and Children's Rights	June – July 2023	Online and CATI	1005	
Mexico	Bank of Mexico	December 2022	Face-to-face	2060	Sample representative of people living in cities with over 50,000 inhabitants
Netherlands	Ministry of Finance	22 November – 5 December 2022	Online	1050	
Panama	Development Bank of Latin America (CAF) and the Superintendency of Banks	30 March – 29 April 2022	Face-to-face	1200	
Paraguay	Development Bank of Latin America (CAF) and Ministry of Finance	8 – 31 July 2022	Face-to-face	1200	
Peru	Development Bank of Latin America (CAF) and the Superintendency of Banking, Insurance and Private Pension Funds (SBS)	10 – 29 December 2022	Face-to-face	1200	
Philippines	OECD (with support from the Government of Japan)	3 August – 14 September 2023	Face-to-face (CAPI)	1000	
Poland	National Bank of Poland	23 January – 13 February 2023	Face-to-face (CAPI)	1000	
Portugal	Bank of Portugal, Portuguese Securities Market Commission and Portuguese Insurance and Pension Funds Supervisory Authority (ASF)	6 January – 13 February 2023	Face-to-face	1473	
Romania	Institute for Financial Studies Foundation	31 January – 21 February 2023	Face-to-face	1005	
Saudi Arabia	Saudi Central Bank	13 November 2022 – 4 February 2023	Face-to-face (CAPI)	2059	Sample representative of the urban and semi-urban population
Spain	Bank of Spain	2 November 2021 – 23 July 2022	Telephone and face-to-face	7764	The results presented in this

					Report are based on a survey conducted in 2021 using the 2018 Toolkit.
Sweden	Swedish Financial Supervisory Authority	5 November 2022 – 15 December 2022	Online	1007	
Thailand	The Bank of Thailand	Q4 2022	Face-to-face	12402	
Uruguay	Development Bank of Latin America (CAF) and the Central Bank of Uruguay	22 April – 26 May 2022	Face-to-face	1200	
Yemen	OECD (with support from the European Commission)	11 March – 1 April 2023	Telephone and face-to-face (CATI and CAPI)	1000	

Annex B. Descriptive statistics

Tables with descriptions of the sample in each participating country and economy are available as a separate Excel file [at this link](#)

Annex C. Notes on methodology

Computing overall financial literacy scores

The overall financial literacy score is obtained as the sum of the three following scores: financial knowledge (7), financial behaviour (9) and financial attitudes (4). The raw score can take any value between 0 and 20; the final score is rescaled to range between 0 and 100.

Answers of don't know (-97), does not apply (-98), or refused to answer (-99) are not excluded from the analyses. Rather, these values are recoded according to the methodology listed in the Toolkit and shared below: these values are recoded either to values of zero (representing an incorrect response) or, for ordinal variables, as the "mid-point" in the scale (e.g. 3 if the scale is 1-5). As such, these answers are then included in the computations of financial knowledge scores, financial attitudes scores, financial behaviours scores and overall financial literacy scores.

Calculation of financial knowledge scores

The knowledge score is computed as the number of correct responses to seven financial knowledge questions (QK3 to QK7_3 in the Toolkit). The concept being tested in each of these questions is listed in the table below. The financial knowledge scores range between 0 and 7.

Question number	Question label	Text of the question	Creating financial knowledge scores
QK3	Time value of money	Five brothers are going to be given a gift of \$1,000 in total to share between them. Now imagine that the brothers have to wait for one year to get their share of the \$1,000 and inflation stays at <current rate of inflation in country> percent. In one year's time will they be able to buy:	1 for correct response [c, less than they could buy today; or d, it depends on the types of things that they want to buy if mentioned spontaneously] 0 in all other cases.
QK4	Interest on a loan	You lend \$25 to a friend one evening and he gives you \$25 back the next day. How much interest has he paid on this loan?	1 for correct response [Nothing, zero, "he didn't"] 0 in all other cases.
QK5	Simple interest calculation	Imagine that someone put \$100 into a tax-free savings account with a guaranteed interest rate of 2% per year. They don't make any further payments into this account, and they don't withdraw any money. How much would be in the account at the end of the first year once the interest payment is made?	1 for correct response (102). 0 in all other cases.
QK6	Compound interest calculation	How much would be in the account at the end of five years?	1 for correct response to QK6 [a. more than \$110] if and only if the response to calculation of interest plus principal (QK5) was all correct. 0 in all other cases.
QK7_1	Risk and return	True or False: An investment with a high return is likely to be high risk.	1 for a correct response [1/True]. 0 in all other cases.
QK7_2	Definition of inflation	True or False: High inflation means that the cost of living is increasing rapidly.	1 for a correct response [1/True]. 0 in all other cases.

QK7_3	Risk diversification	True or False: It is usually possible to reduce the risk of investing in the stock market by buying a wide range of stocks and shares.	1 for a correct response [1/True]. 0 in all other cases.
-------	----------------------	--	---

Calculation of financial attitudes scores

The following two statements (QS1_1 and QS3_11) are used to calculate the financial attitudes scores. The answer choices are a scale of 1-5 where 1= completely agree with the statement and 5= completely disagree with the statement. The attitude score is computed as the average response across these two attitude questions: i.e., the sum of the values for the two statements divided by two (after recoding to account for values -97, -98 and -99 as mentioned above). The average obtained should be rescaled to range from 0 to 4. The attitudes score, therefore, ranges from 0 to 4.

Question label	Text of the question
QS1_1	I find it more satisfying to spend money than to save it for the long term.
QS3_11	I tend to live for today and let tomorrow take care of itself.
QS1_3 (optional)*	Money is there to be spent.

Note: * In previous co-ordinated measurement exercises, the financial attitude score was calculated as an average of three statements, including also “Money is there to be spent” (QS1_3). However, “Money is there to be spent” became an optional question in the 2022 Toolkit and it was not asked in the surveys of a large number of countries participating in the 2022/2023 measurement exercise. For the sake of international comparison, for the 2022/2023 coordinated measurement exercise the optional financial attitude question was not included in the calculations of the financial attitude scores in any of the participating countries or economies irrespective of whether the question was asked on their survey.

Calculation of financial behaviour scores

The behaviour score is computed as a count of the number of “financially savvy” behaviours relating to budgeting (QF1 and QF2), active saving (QF3), avoiding borrowing to make ends meet (QF12) choosing products (various QP questions are used, creating two points on this score), keeping watch on financial affairs (QS1), striving to achieve goals (QS1), making considered purchases (QS2), paying bills on time (QS2). Financial behaviour scores range between 0 and 9.

Question number	Question label	Text of the question	Creating financial behaviour scores:
QF1	Keeps track of money in the short term	Who is responsible for making day-to-day decisions about money in your household	1 point if personally or jointly responsible for money management [QF1=1 or 2 OR QF_a=1] AND actively keeping track of money [at least 2 Yes responses on QF2]. 0 in all other cases.
QF1_a		Do you make day-to-day decisions about your own money?	
QF2 Parts 1-6		Yes or No: Do you do any of the following for yourself or for your household? Make a plan to manage your income and expenses Keep a note of your spending Keep money for bills separate from day-to-day spending money Make a note of upcoming bills to make sure you don't miss them Use a banking app or money management tool to keep track of your outgoings Arrange automatic payments for regular outgoings	
QF3 Parts 1-8	Actively saving	In the past 12 months have you been personally saving money in any of the following ways, whether or not you still have the money? Please don't take into account any money paid into a pension, but think about all kinds of savings, such as building up a rainy-day fund or putting money aside for a special occasion. 1. Saving cash at home or in your wallet 2. Paying money into a savings/deposit account	1 point for any type of active saving (answers yes to any option including any relevant options added at the national level).

		<ol style="list-style-type: none"> 3. Giving money to family to save on your behalf 4. Saving in an informal savings club 5. Buying bonds or time deposits' 6. Investing in crypto-assets 7. Investing in stocks and shares 8. Saving or investing in some other way, other than a pension 	0 in all other cases.
QF11	Did not borrow to make ends meet	<p>Yes or No: Sometimes people find that their income does not quite cover their living expenses. In the last 12 months has this happened to you personally?</p> <p>If yes, what did you do to make ends meet the last time this happened?</p> <ol style="list-style-type: none"> 1. Drew from existing resources 2. Drew from additional resources 3. Accessed credit by using exiting contacts or resources 4. Borrowed from existing credit line 5. Accessed additional credit 6. Fell behind/ went beyond arranged amount 	<p>This variable takes the value of 0 if the respondent borrowed to make ends meet and 1 if the respondent did not borrow to make ends meet or did not face a shortfall.</p> <p>Specifically, it takes a value of 0 if the respondent answered Yes at any _3 [Access credit by using existing contacts or resources] or any _4 [Borrow from existing credit line] or any _5 [Access additional credit] or any _6 [Fall behind] or other country specific responses indicating that he/she used credit to make ends meet.</p> <p>1 point is awarded in all other cases.</p> <p>Note that this means that missing data will therefore result in 1 point on this measure. This approach assumes that the % of missing data is small.</p>
QF12 Parts 1-6			
QP	Sought advice (from independent and non-independent sources)	Financial product awareness and product holding, making informed decisions about product choice	<p>The variable choosing products is constructed by creating two intermediate variables, and then creating a derived variable. Country specific responses can also be coded.</p> <p>The two intermediate variables are the following:</p> <p>Variable 1: QP_D1: Tried to compare across providers taking value of: 1 if variable QP5 is equal to 1 or 4 (I considered several or I looked around but there were no others), and 0 otherwise.</p> <p>Note that 0 includes no recent product choice/not applicable.</p> <p>Variable 2: QP_D2: Sought information or advice taking values</p> <ul style="list-style-type: none"> • 2 if yes at any of QP7_1 or QP7_2 or QP7_3 (Best-buy guidance / Price comparison website / Recommendation from independent financial adviser) • 1 if yes at any of QP7_4, QP7_5, QP7_6. or QP7_7

			<p>(information from an advert or brochure, recommendation from friends etc., information from bank staff, or other information</p> <ul style="list-style-type: none"> • 0 otherwise. Note that 0 includes no recent product choice. <p>The final variable Qb7_new Tried to shop around or use independent info or advice takes the following values:</p> <ul style="list-style-type: none"> • 2 if QP_D2 =2. The value of 2 indicates Used independent info or advice • 1 if QP_D1 =1 or QP_D2 =1. The value of 1 indicates Some attempt to make informed decision <p>0 Otherwise. The value 0 indicates 'Not shopped around and no attempt to make informed decisions (including no recent product choice).</p>
QS1_5	Closely watches personal financial affairs	I keep a close watch on my personal financial affairs.	1 point for agreeing (1 or 2 on the scale). 0 in all other cases.
QS1_8	Sets long-term financial goals	I set long term financial goals and strive to achieve them.	1 point for agreeing (1 or 2 on the scale) 0 in all other cases.
QS2_3	Makes considered purchases	Before I buy something I carefully consider if I can afford it.	1 point for agreeing (1 or 2 on the scale). 0 in all other cases.
QS2_5	Pays bills on time	I pay my bills on time.	1 point for agreeing (1 or 2 on the scale). 0 in all other cases.

Computing digital financial literacy scores

The knowledge part of the digital financial literacy score is computed as the number of correct responses to three questions (QK7_4, QK7_5, QK7_6). The behaviour part of the digital financial literacy score is computed as a count of the number of “savvy” behaviours elicited by four statements (three in QS2 and one in QS3). The attitudes part of the digital financial literacy score is computed as a count of the number of “savvy” attitudes elicited by three statements in QS4. Data have been processed according to instructions in the table below.

The digital financial literacy score is obtained as the sum of the three previous components: knowledge (3), behaviour (4) and attitudes (3). The raw score can take any value between 0 and 10; the final score has been rescaled to range between 0 and 100.

Question label	Concept being tested or text of the question	Creating digital financial literacy scores
<i>Digital financial knowledge:</i>		
QK7_4	True or False: A digital financial contract requires signature of a paper contract to be considered valid.	1 for a correct response [0/False – this will be checked at national level in participating countries]. 0 in all other cases.
QK7_5	True or False: The personal data that I share publicly online may be used to target me with personalized commercial or financial offers.	1 for a correct response [1/True – this will be checked at national level in participating countries]. 0 in all other cases.
QK7_6	True or False: Crypto-currencies have the same legal tender as banknotes and coins.	1 for a correct response [0/False – this will be checked at national level in participating countries]. 0 in all other cases.
<i>Digital financial behaviour:</i>		
QS2_6	I share the passwords and PINs of my bank account with close friends.	1 point for disagreeing (4 or 5 on the scale). 0 in all other cases.
QS2_7	Before buying a financial product online I check if the provider is regulated in my country.	1 point for agreeing (1 or 2 on the scale). 0 in all other cases.
QS2_8	I share information about my personal finances publicly online (e.g., on social media).	1 point for disagreeing (4 or 5 on the scale). 0 in all other cases.
QS3_13	I regularly change the passwords on websites that I use for online shopping and personal finance.	1 point for agreeing (1 or 2 on the scale). 0 in all other cases.
<i>Digital financial attitudes:</i>		
QS4_1	I think that it is safe to shop online using public Wi-Fi networks.	1 point for disagreeing (4 or 5 on the scale). 0 in all other cases.
QS4_2	It is important to pay attention to the security of a website before making a transaction online.	1 point for agreeing (1 or 2 on the scale). 0 in all other cases.
QS4_3	I think it is not important to read the terms and conditions when buying something online.	1 point for disagreeing (4 or 5 on the scale). 0 in all other cases.

Computing the financial well-being scores

The financial well-being score is computed using 12 dichotomous indicators created from the variables listed in the Table below. The first four variables represent measures of objective financial well-being, or financial resilience. The next eight variables represent measures of subjective financial well-being. Each component (objective and subjective financial well-being) are rescaled to be from 0 to 50. The two components are then added together to produce an overall financial well-being score that ranges from 0 to 100.

Question label	Text of the question	Creating financial well-being scores	
QF4	If you, personally, faced a major expense today – equivalent to your own monthly income – would you be able to pay it without borrowing the money or asking family or friends to help?	1 point for answering Yes	These four objective financial well-being indicators are rescaled to range from 0 to 50.
QF11	Sometimes people find that their income does not quite cover their living expenses. In the last 12 months, has this happened to you, personally?	1 point for answering No	
QF13	If you lost your main source of income today, how long could you continue to cover your living expenses, without borrowing any money or moving house?	1 point for being able to cover living expenses for at least three months [Answer options 4 or 5 on the scale].	
QS2_4	I have money left over at the end of the month.	1 point for agreeing [Answer options 1 or 2]	
QS1_4	I am satisfied with my present financial situation.	1 point for agreeing [Answer options 1 or 2 on the scale].	These eight subjective financial well-being indicators are rescaled to range from 0 to 50.
QS1_7	My financial situation limits my ability to do the things that are important to me.	1 point for disagreeing [4 or 5]	
QS1_10	I have too much debt right now.	1 point for disagreeing [4 or 5]	
QS2_1	I tend to worry about paying my normal living expenses.	1 point for disagreeing [Answer options 4 or 5]	
QS2_2	My finances control my life.	1 point for disagreeing [Answer options 4 or 5]	
QS3_3	Because of my money situation, I feel like I will never have the things I want in life.	1 point for disagreeing [Answer options 4 or 5]	
QS3_9	I am concerned that my money won't last.	1 point for disagreeing [4 or 5]	
QS3_10	I am just getting by financially.	1 point for disagreeing [4 or 5]	
			The objective and subjective components are added together; the overall financial well-being score therefore ranges from 0 to 100.

Calculations of other derived indicators included in this Report

Financial products

Awareness of payment products:

Question Label	Text of the question	Creating “aware of payment product” indicator
QP1_7	A credit card	1 for answering Yes to any of these four survey items. 0 in all other cases.
QP1_8	A current checking/payment account	
QP1_14	Mobile/cell phone payment account [not directly linked to a bank account]	
QP1_15	A prepaid debit card/ payment card [not directly linked to a bank account]	

Holding of payment products:

Question Label	Text of the question	Creating “holding payment product” indicator
QP2_7	A credit card	1 for answering Yes to any of these four survey items. 0 in all other cases.
QP2_8	A current checking/payment account	
QP2_14	Mobile/cell phone payment account [not directly linked to a bank account]	
QP2_15	A prepaid debit card/ payment card [not directly linked to a bank account]	

Awareness of savings, investment or retirement products:

Question Label	Text of the question	Creating “aware of savings, investment or retirement product” indicator
QP1_1	A pension or retirement product [NOTE TO AGENCY: The phrasing of this option should be clear as to exclude compulsory products]	1 for answering Yes to any of these six survey items. 0 in all other cases.
QP1_2	An investment account (provide <national examples>, such as a unit trust or income trust)	
QP1_9	A savings account	
QP1_12	Stocks and shares	
QP1_13	Bonds	
QP1_16	Crypto-assets	

Holding of savings, investment or retirement products:

Question Label	Text of the question	Creating “holding savings, investment or retirement product” indicator
QP2_1	A pension or retirement product [NOTE TO AGENCY: The phrasing of this option should be clear as to exclude compulsory products]	1 for answering Yes to any of these six survey items. 0 in all other cases.
QP2_2	An investment account (provide <national examples>, such as a unit trust or income trust)	
QP2_9	A savings account	
QP2_12	Stocks and shares	
QP2_13	Bonds	
QP2_16	Crypto-assets	

Awareness of credit products:

Question Label	Text of the question	Creating “aware of credit product” indicator
QP1_3	A mortgage or home-loan	1 for answering Yes to any of these six survey items. 0 in all other cases.
QP1_4	A loan secured on property	
QP1_5	An unsecured bank loan	
QP1_6	A car loan	
QP1_7	A credit card	
QP1_10	A microfinance loan	

Holding of credit products:

Question Label	Text of the question	Creating “holding credit product” indicator
QP2_3	A mortgage or home-loan	1 for answering Yes to any of these six survey items. 0 in all other cases.
QP2_4	A loan secured on property	
QP2_5	An unsecured bank loan	
QP2_6	A car loan	
QP2_7	A credit card	
QP2_10	A microfinance loan	

Victim of a financial fraud or scam

Question Label	Text of the question	Creating indicator for having been a victim of a financial fraud or scam:
QP10_1	Have you accepted advice to invest in a financial product that you later found to be a scam, such as a <pyramid> scheme?	1 for answering Yes to any of these four survey items. 0 in all other cases.
QP10_2	Have you accidentally provided personal financial information (such as passwords or card number) in response to an email, phone call or social media message that you later found out was not genuine?	
QP10_3	Have you discovered that someone has used your <card> details to pay for goods without your authorisation?	
QP10_10	Have you lost money as a result of hackers or phishing scams?	

Digital financial services

Manage financial products and services online:

Question Label	Text of the question	Creating indicator for managing financial products and services online:
QP9_6	In the last 12 months, how often have you managed financial products and services (such as savings, investments, credit, insurance) online?	1 for answering 2=Sometimes, 3=Often, 4=Very often. 0 in all other cases.

Annex D. Tables

Tables of the results included in the report are available as a separate Excel file [at this link](#).

