OECD/INFE survey instrument to measure digital financial literacy



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1 The purpose of the OECD/INFE survey instrument to measure digital financial literacy

Background

The OECD Recommendation on Financial Literacy recognises that new financial products and services, including digital financial services, may change the way in which consumers make financial decisions and product choices (OECD, 2020[1]). While the digitalisation of financial products and services may bring benefits, it also contributes to the complexity of retail finance, in particular among the most vulnerable. It also exposes individuals to new risks such as digital financial exclusion, online fraud or personal data hacks.

This raises policy concerns as recent international financial literacy surveys (OECD, 2020_[2]) indicate that substantial sectors of the population across all economies surveyed do not possess adequate levels of basic financial knowledge and are ill prepared to make savvy financial decisions. Low levels of digital financial literacy can compound these weaknesses and have a negative impact on personal financial well-being, with potential repercussion on financial inclusion and stability.

Higher levels of digital financial literacy can equip individuals with the knowledge, skills and attitudes needed to successfully navigate an increasingly digital retail financial market. Digital financial literacy can help individuals to benefit from innovative digital financial products and services while protecting themselves from related risks such as digital financial exclusion, digital frauds and scams.

The need for an international measure for digital financial literacy

The OECD has developed internationally recognised instruments and encouraged the collection of comparable data on financial literacy of adults, of owners of micro small and medium enterprises and of students. This provided insights into the needs of individuals and households and allowed policy makers and researchers to understand how equipped these are to benefit from developments in financial products and services and to protect themselves from risks to their financial well-being. The collection of financial literacy data and evidence continues to be a priority for the OECD and remains fundamental to the work of the OECD/INFE.

Over the years, the OECD/INFE has created important tools to measure the financial literacy and inclusion of adults (OECD, 2022_[3]), MSMEs owners (OECD, 2020_[4]) and students via the PISA assessment (OECD, 2019_[5]) which have significantly improved the ability of countries to understand levels of financial literacy and inclusion, benchmark themselves and monitor progress. These survey instruments have been updated over the years to cover elements related to the use of digital financial services and other digital tools.

Since 2022, thanks to work undertaken through the OECD/INFE Working Group on Digital Financial Literacy towards an international definition and a set of questions, the OECD/INFE financial literacy survey instruments also cover digital financial literacy.

Digital financial literacy is defined as:

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.

It is intended as a sub-set of financial literacy, required to be financially literate in the 21st century. Digital financial literacy is measured by OECD/INFE Toolkit to measure financial literacy and inclusion 2022 (hereinafter the "OECD/INFE FL Toolkit") (OECD, 2022_[3]). Initial results on levels of digital financial literacy in 39 countries and economies around the world are available in the OECD/INFE 2023 International Survey of Adult Financial Literacy (OECD, 2023_[6]).

However, policy makers and institutions might require a separate and more in-depth measure of digital financial literacy when digital is the focus, for example to support the development of digital financial literacy and inclusion strategies or to understand the risks and benefits faced by consumers in the light of the increasing digitalisation of retail financial services.

Use and objectives

This OECD/INFE survey instrument to measure digital financial literacy (hereinafter "the DFL Survey Instrument") is designed to measure digital financial literacy in an internationally comparable way. It is meant to be used as a stand-alone instrument to measure digital financial literacy, and to provide additional insights into the relationship between individuals and the digitalisation of retail financial services compared to the OECD/INFE FL Toolkit.

Policy makers and institutions using the OECD/INFE FL Toolkit and wishing to investigate additional aspects of digital financial literacy not covered by it, could use questions from the DFL Survey Instrument to expand the range of issues to investigate.

The implementation of the DFL Survey Instrument can offer valuable insights to design and implement digital financial literacy and inclusion strategies, financial literacy programmes on digital financial services, and to support user-centric product design, by providing information for the whole population and specific target groups on:

- Digital literacy
- Digital financial literacy and its three components: knowledge, attitudes, and behaviours
- Digital financial inclusion, through digital product and services awareness, choice, and use
- The risks faced by consumers in the light of their access to and understanding of specific digital products and services, such as digital payments, digital credit products, open banking
- Consumer awareness and understanding of elements of the regulatory framework applicable to digital financial products and services in their jurisdiction
- Attitudes to personal data sharing.

The use of the DFL Survey Instrument can also add to the evidence base for efforts to support and monitor the implementation of policy instruments such as the OECD Recommendation on Financial Literacy (OECD, 2020_[1]), the Updated G20/OECD High-Level Principles on Financial Consumer Protection (OECD, 2022_[6]) and the G20 High-level Principles on Digital Financial Inclusion (G20, 2016_[7]; G20 GPFI, 2022_[8]).

Content

The OECD/INFE Survey Instrument to Measure Digital Financial Literacy incorporates:

- Methodological guidance
- Questions designed to measure digital financial literacy, including elements of digital access and digital literacy, and personal characteristics
- Guidance on how to create the Digital Literacy score (DL score), the Digital Financial Services Access and Use score (DFS score), and the Digital Financial Literacy score (DFL score).

Complementarity with the OECD/INFE Toolkit for Measuring Financial Literacy and Financial Inclusion 2022

The DFL Survey Instrument includes the core questions developed to capture digital financial literacy and calculate a Digital Financial Literacy score included in the OECD/INFE FL Toolkit.

In addition to these core questions, the DFL Survey Instrument contains:

- A larger set of questions to capture digital financial literacy and explore further elements of digital financial literacy not covered by OECD/INFE FL Toolkit
- More questions on digital literacy than in the OECD/INFE FL Toolkit, allowing the calculation of a Digital Literacy score (DL score)
- More questions on access and use of DFS than in the OECD/INFE FL Toolkit, allowing the calculation of a Digital Financial Services Access and Use score (DFS score).

Scope

For the purposes of this instrument, digital financial literacy is measured in accordance with the definition of developed by the OECD/INFE in previous work (OECD, 2022[9]), building on existing international publications and on discussions with OECD/INFE policy makers and researchers (see Box 1.1).

The questionnaire covers:

- Behaviours linked to digital financial literacy
- Attitudes linked to digital financial literacy
- Digital financial knowledge.

In addition, the questionnaire collects information on:

- Digital access and digital literacy
- Digital financial inclusion, through questions that capture awareness, holding and use of digital financial products and services
- Questions about socio-demographic variables.

Box 1.1. Key definitions

Financial literacy: a combination of financial awareness, knowledge, skills, attitudes and behaviours necessary to make sound financial decisions and ultimately achieve financial well-being.

Digital financial literacy: 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.

Digital financial inclusion refers broadly to the use of digital financial services to advance financial inclusion. It involves "the deployment of digital means to reach financially excluded and underserved populations with a range of formal financial services suited to their needs, delivered responsibly at a cost affordable to customers and sustainable for providers." Digital is a means of distribution and reach of formal financial services, and not a goal in itself.

Digital financial services (DFS) can be defined as financial operations using digital technology, including electronic money, mobile financial services, online financial services, i-teller and branchless banking, whether through bank or non-bank institutions. DFS can encompass various monetary transactions such as depositing, withdrawing, sending and receiving money, as well as other financial products and services including payment, credit, saving, pensions and insurance. DFS can also include non-transactional services, such as viewing personal financial information through digital devices.

Sources: (OECD, 2020_[1]; OECD, 2022_[9]; OECD, 2017_[10]; OECD, 2020_[11]).

Development

The DFL Survey Instrument has been developed through an iterative process in 2022/23 and approved in November 2023. OECD/INFE members have reviewed and discussed it through the Working Group on Digital Financial Literacy as well as the Technical Committee.

Sources

The development of this survey instrument has been informed by several outputs of the OECD/INFE, as well as work undertaken by the OECD/INFE Secretariat with the European Commission and the G20. These include:

- The OECD/INFE 2023 International Survey of Adult Financial Literacy (OECD, 2023[6]).
- The development of a digital financial literacy survey as part of the project to develop a Digital Financial Literacy Strategy for Portugal, with the support of the European Commission DG REFORM. The current survey instrument and the one developed for Portugal refer to the same concepts but the survey for Portugal is tailored to the national context and the needs of the project (OECD, 2023[15]).
- The Financial competence framework for adults in the European Union (European Union/OECD, 2022[14]).
- The Implementation Guide for the G20 High-Level Principles for Digital Financial Inclusion (G20 GPFI, 2022[8])
- The report "Personal Data Use in Financial Services and the Role of Financial Education: A Consumer-centric Analysis" (OECD, 2020[13]).
- The report "Cryptoassets in Asia. Consumer attitudes, behaviours and experience" (OECD, 2019[16]).

The G20/OECD-INFE Policy Guidance on Digitalisation and Financial Literacy (OECD, 2018[12]).

In addition, the OECD/INFE Working Group on Digital Financial Literacy reviewed existing descriptions of digital financial literacy and digital literacy, which have inspired this work. Notable references include in particular:

- European Commission (2021), Survey on the use of ICT in households and by individuals (European Commission, 2021[17])
- Morgan P., Huang B. and Trinh, L (2019), The Need to Promote Digital Financial Literacy for the Digital Age (Morgan, Huang and Trinh, 2019[18])
- Josephine Kass-Hanna, Angela C. Lyons, Fan Liu (2022), Building financial resilience through financial and digital literacy in South Asia and Sub-Saharan Africa (Kass-Hanna, Lyons and Liu, 2022[19])
- Lyons, Angela and Kass-Hanna, Josephine (2021), A Multidimensional Approach to Defining and Measuring Financial Literacy in the Digital Age (Lyons and Kass-Hanna, 2021_[20]).

Pilot

In March 2023, ahead of its finalisation, the DFL Survey Instrument has been piloted by the Central Bank of Austria, the Investor and Financial Education Centre, Hong Kong (China), the Reserve Bank of India, the Central Bank of Italy, the Central Bank of Mexico and the Saudi Central Bank (SAMA). In addition, Central Bank of Malaysia (Bank Negara Malaysia), provided feedback on the digital financial literacy questions included in the OECD/INFE FL Toolkit.

As part of the pilot, the DFL Survey Instrument was translated into Arabic, Assamese, traditional Chinese, German, Gujarati, Hindi, Italian, Kannada, and Spanish and implemented on samples as large as over 500 adults. The survey was distributed online and face-to-face, including through Computer-Assisted Personal Interviews (CAPI).

The feedback from the pilot exercise has confirmed the applicability of the DFL Survey Instrument across a very diverse range of jurisdictions and has been very useful in fine-tuning the questionnaire. Minor revisions have been made throughout the questionnaire, for example clarifying statements that could lead to confusion, or removing statements that proved difficult to understand.

Methodology

The questionnaire included in this survey instrument is designed to collect relevant information about digital financial literacy, including digital literacy and digital financial inclusion, within a jurisdiction or selected groups of the population¹, and to compare such levels across countries. It can be undertaken alone or can be used in full or in part as a complement to financial literacy or digital literacy surveys.

Target population

The sample should be representative of adults in the country. For the sake of international comparisons, the intended population is **adult individuals aged between 18 and 79**. If additional respondents outside of this age range are included, the sample size should be increased as necessary, to ensure a sufficiently large sample of individuals within the international target. In countries where 79 is outside of the normal range for surveying, it would be preferable to set the upper age boundary to 69, in keeping with the suggested age bands used for analysis.

Data collection methods

Institutions wishing to undertake or commission the DFL Survey Instrument should carefully choose the most appropriate data collection method in order to obtain a representative sample of the target population in their country. The methods used can be identified in the dataset and taken into account during analyses.

Users should balance the advantages and disadvantages of different methods of data collection in their own national context and may consider the use of mixed methods.

The use of online data collection is suitable in countries with very high levels of literacy and high levels of internet penetration, or among segments of the population that may be hard to reach in other ways (potentially including young people). In some countries, online data collection methods have become commonplace as they have several advantages, including reduced cost and ease of collecting and managing the resulting data. They also allow people to respond to potentially sensitive questions in an anonymous and private manner.

However, as with all approaches to collecting data, online surveys also pose certain challenges. Responding to an online survey requires levels of reading and digital literacy that can be higher than what is required to access and use basic digital financial services. Adopting a fully online data collection method might therefore exclude from the sample groups that, depending on the economy, might represent an important sector of the population using DFS and an important potential target of digital financial literacy policies and programmes.

¹ The questionnaire can also be used to measure the digital financial literacy of a smaller population, such as the population of a region, or the employed population. Users should note that there may be relatively little variation in scores if the population being surveyed is particularly homogenous.

Therefore, even in countries with high levels of internet penetration and functional literacy, the use of telephone or face-to-face interviews may be considered as a complement to online methods to reach audiences with low levels of digital literacy and ensure that the sample is truly representative of the adult population.

Minimum sample size

The descriptive power of a sample size does not depend on the size of the population. A **minimum** *achieved* sample size of 1,000 participants per country should be collected for international comparisons and to analyse the national data by key socio-demographics such as gender and age. To interview 1,000 participants, survey agencies should have an original sample of 1,700 valid contact details from which to draw participants.² With an achieved sample of 1,000 participants, this will give a 95% confidence interval on a finding of 50% of around 47% to 53% (assuming a random sample). Countries should be aware that if they intend to undertake detailed analyses of differences within differences (such as financial literacy by gender within regions), or if they wish to increase the precision of the estimates, they will require larger sample sizes.³

Use in combination with other surveys and adaptations

Use to complement the OECD/INFE Toolkit to measure financial literacy and inclusion

Countries and institutions using the OECD/INFE Toolkit to measure financial literacy and inclusion 2022, or subsequent versions of the OECD/INFE Toolkit, could use parts or entire questions from this survey to capture additional elements of DFL not measured by the OECD/INFE 2022 Toolkit and complement some of its questions (see questions colour coded in blue).

Use to complement other surveys

There are various approaches to using the questions contained within this questionnaire, depending on whether they will be used alone, or in combination with questions from other sources:

- If the core questions will be added to a larger survey, they should be grouped with other questions that address similar topics (and care should be taken not to make the questionnaire too long).
- If additional questions are going to be added to the questions they should be grouped with similar topics. The length of the questionnaire should be taken into account.
- If the questions are used without any additional questions, the question order should be retained.

Adaptations

Some questions should be adapted to the national context to be fully relevant to respondents. This refers, in particular, to questions containing lists of financial products and services. This is indicated in <> within the text of certain questions.

² It is important to strive for a good response rate. However recent statistics suggest that it is becoming increasingly difficult to encourage participation in surveys, and so it may be necessary to adjust the original sample accordingly to interview 1000 respondents.

³ There are many tools developed to help with sample size determination. See for example https://www.surveysystem.com/sscalc.htm

A description of the DFS included in the questionnaire is provided in Annex A. Users planning to translate and adapt the questionnaire should consider these definitions to maintain the original meaning of the questions.

Coordinating and sharing with the OECD/INFE

This survey instrument is made available for public use by interested parties. Institutions wishing to use the questionnaire are invited to inform the OECD/INFE Secretariat, to ensure that they have the most upto-date questionnaire. While no separate data collection using this toolkit is organised at this stage, countries and institutions using the questionnaire on representative national samples are encouraged to consider giving the OECD permission to use and/or share the anonymised raw data for research purposes and for further international comparisons.

Institutions using the questionnaire are requested to cite it and to inform the OECD/INFE Secretariat (SecretariatINFE@oecd.org) about any publication using data collected with the questionnaire.

Preparing the fieldwork

Institutions seeking to commission a survey based on this questionnaire should identify a reputable agency (this may be a private company or a government body), with proven experience and the capacity to complete the process within the required timeframe. Where a survey agency is engaged to conduct the survey, it should be able to provide information about all aspects of the process including, but not limited to the following:

Achieving a robust sample

It is important to discuss with the survey agency how the sample will be drawn. It should be possible to draw a sample where each individual has a known probability of being selected. In some cases, it may also be necessary to stratify the population to reach particular groups, or even to replace probability sampling with quotas in order to ensure that the sample includes certain minorities. A good survey agency will be able to recommend the best approach for a given population. In many countries, the approach taken is to randomly select locations to sample from, and then set a quota to make sure that the interviewees are representative of the groups of interest. Commissioning institutions should discuss with survey agencies the benefit of setting quotas and/or including booster samples of hard-to-reach groups and the implications in terms of sample size and confidence in the results. They should also consider the policy implications of (not) having robust data on certain subgroups.

The survey agency should have a reputation and strategies in place for ensuring good response rates. It is recommended that survey agencies are given a target response rate of 60% - that means that at least 60% of the people that they contact to take part in the survey should be interviewed. This may mean attempting to contact a sampled individual several times before quitting. The agency should be able to show that they have strategies in place (such as contacting people at different times of the day) in order to reach a representative cross-section of the population.

⁴ For further information on sampling refer to Dorofeev, S. and P. Grant, (2006), Statistics for Real-life Sample Surveys, Cambridge University Press, Cambridge.

Preparing the questionnaire for fieldwork

The entire questionnaire (except any optional questions that have not been chosen), including all interviewer instructions, should be translated into national languages, as appropriate.

It is important that questions are translated so that they retain the same meaning; translators should have a good understanding of vocabulary describing digital financial services as well as words that could be translated in more than one way, such as 'saving'. It is advisable to have more than one translator work on the document in parallel, and to discuss any discrepancies/disagreements with the commissioning body before fielding the translated document.

Whether or not the questionnaire will be translated, it will be necessary to modify contextual information and some examples given on specific questions—these questions are indicated in the questionnaire.

The translated and modified questions should be tested on a few individuals before starting fieldwork to make sure that the translation is easy to understand, and the options are clear. If the questions are not well understood, or there is any concern that the question wording is ambiguous, then this must be addressed before fieldwork begins.

One question asks the respondent about their household. For this survey, please consider a household to be represented by the following basic definition: A household is composed of either a) a group of people (adults and/or children) living in the same dwelling space who each acknowledge the authority of the same person or couple as the head(s) of household or b) a lone individual. A young adult living at home should be encouraged to discuss their own financial situation rather than that of their parents. Interviewers are invited to explain the definition when asking question QD13. If the survey is administered online, the definition of household should be provided together with question QD13.

Once the questionnaire has been prepared in the national language(s) it may be necessary to enter it into a software package designed to make it easier for the interviewer to collect the data. Care should be taken to make sure that the package allows responses to be stored in the required formats (e.g., letters or digits, decimal places) and that the questions fit a single page of the screen where possible – to aid the interviewer when reading. The programme will need to take into account all filters indicated in the paper questionnaire, in order to make sure that the intended respondents are questioned in sufficient depth and unintended respondents are not asked irrelevant questions.

Interviewers' briefing

If the survey is undertaken face-to-face or through the telephone or through a combination of methods that includes these, interviewers and their manager(s) should be provided with a thorough briefing before undertaking the survey. This would ensure that they fully understand the purpose of the survey and the mechanics of the questionnaire. The interviewers are working on behalf of the commissioning body, and a poorly prepared interviewer will not only collect low quality data but will also risk damaging the public image of the body commissioning the research. For detailed guidance on how to brief interviewers, please see the OECD/INFE Financial Literacy Toolkit (OECD, 2022[3]).

Fieldwork and data collection

The survey agency will describe the purpose of the survey and its likely length to the potential participant and encourage them to take part in this important research. The institution commissioning the survey should work with the agency to ensure that the description is clear and unambiguous.

It is important that interviews are conducted at different times of day and throughout the week. It is also important to try to contact the identified person several times, if the first attempt is unsuccessful. Without these steps, it is very likely that people who are most often home, such as the elderly, homemakers,

students or the unemployed, will be more likely to participate than would be the case in a truly random selection and the results may well be biased as a result.

When introducing the questionnaire, the interviewer should make it clear to the respondent that the commissioning body is interested in their own personal situation and views rather than that of the household or main earner, unless otherwise stated. For languages that differentiate between 'you' in the singular, and 'you' in the plural, the singular version should be used for translation purposes in all questions that do not explicitly ask for information about the household.

The interviewers should ask the questions in the order that they are laid out in the national questionnaire, without changing the wording and they should immediately record the responses. If necessary, they can go back to previous questions to make a correction or clarify a point (such as when asking about the product chosen most recently). The questionnaire is designed so that respondents do not need to read any of the questions or write down their answers.⁵ It is important to inform and reassure respondents that their responses are confidential and encourage them to participate to have complete information. However, they must never be put under pressure or rushed to answer anything that they do not want to answer – doing so is unethical and is also likely to significantly bias their responses.

Interviewers should not read out response category options that are written in italics (such as "don't know"). However, if the respondent spontaneously gives a response that matches an option in italics, the interviewer should record this accordingly.

Data handling and preparation for analysis

The information provided by participants will become the raw data for the financial literacy measure. This raw data will need to be held in a software package such as Excel, SPSS or Stata in order to facilitate detailed analysis. For international comparison it is important to use the coding guide provided in the right-hand column of the questionnaire when inputting data in order to have data that can be included in the cross-country analyses. Similarly, for international comparisons, it will be important to store the data in the dataset template prepared by the OECD/INFE Secretariat, available upon request in SPSS, Stata, and Excel formats.

Commissioning institutions should check that the data are being stored and handled securely and in accordance with appropriate national or international data protection regulations and guidelines. At a minimum, the survey agency should not store any financial data (such as household income) alongside personal information such as name, phone number or address. They must also ensure that none of the contact details collected during fieldwork are used for any purpose other than to validate the survey responses or to follow up the respondent during the next phase of fieldwork (if conducting a longitudinal study). Data confidentiality statements should be provided to participants and adhered to.

The survey agency will be responsible for providing appropriate weights⁶ for the analysis, taking into account the probability of selection and making sure that the data are representative of the population in terms of i) individuals (not households); ii) gender mix; and iii) age profiles. It may also be necessary to weight the data according to region; if this is likely to be the case the survey agency should ensure that this information is recorded. It is important for international comparisons that the weights are labelled appropriately, and that documentation is created describing how they were established, and their purpose, with clear instructions for use.

⁵ In practice, some agencies have preferred to create a card of potential options for respondents to read through. Such a decision should be made at the country level taking into account the levels of literacy and possible bias that such an approach may have.

⁶ Weighting is designed to adjust samples when certain groups are over or under-represented in the sample.

The survey agency will need to prepare the data for analysis (using the dataset template provided by the OECD/INFE). The survey agency should check that values have been entered correctly, for example, and add relevant labels. They may create basic tables at this stage, to show that each of the questions has been asked, and to report the number of valid responses to each question. This will enable the commissioning institution to check the quality of the data and to identify potential issues (such as oversampling of certain groups).

It is important that the commissioning body also can go back to the original records collected by the survey agency, and to individual interviewers, if necessary, in order to clarify any issues that are highlighted by the analysis process. It is recommended that this is written into any contract with the survey agency for a minimum of 4 months after the receipt of data (12 months is recommended).

3 OECD/INFE questionnaire on digital financial literacy

These questions can be administered through online surveys or can be read out loud by an interviewer (by telephone or face to face).

The right-hand column of each question indicates the variable name and label that should be used to facilitate international comparison as well as the corresponding question in the OECD/INFE FL Toolkit when relevant.

Some questions would benefit from the inclusion of national examples to help respondents understand the content of the questions.

Colour coding

The questions in the questionnaire are categorised by colour:

- Questions in black are equivalent to questions included in the OECD/INFE FL Toolkit.
- Questions in green are optional.
- Questions in blue are new questions that are not included in the OECD/INFE FL Toolkit. They can
 be used to capture additional elements of DFL not measured by the OECD/INFE FL Toolkit.

Links to questions in the OECD/INFE Toolkit to measure financial literacy and inclusion 2022

When applicable, the questionnaire explains the relationship with questions in the OECD/INFE FL Toolkit, indicating whether these are equivalent or if there is a partial correspondence.

The questionnaire

Personal characteristics

ASK ALL

NOTE TO AGENCY: the option "Other answer" may be removed if deemed sensitive in the country.

RECORD OR ASK ALL

Gender	QD1 Equivalent to FL Toolkit question: QD1
	Label: Gender
Male	1
Female	0
Other answer	-98
Refused	-99

NOTE TO AGENCY: If this question is read out (for a telephone interview) or included in an online questionnaire, the respondent should be asked about the community they live in. Those who are away from their usual community, such as temporary migrants, adults being cared for away from home, or students in a different city, can provide information about the community they are living in at the time of the interview, even if it is not their usual community.

RECORD ALL OR ASK ALL.

Could you tell me which of these best describes the community you currently live in, please?	QD3 Equivalent to FL Toolkit question: QD3
	Label: Urban
A village, hamlet or rural area (fewer than 3 000 people)	1
A small town (3 000 to about 15 000 people)	2
A town (15 000 to about 100 000 people)	3
A city (100 000 to about 1 000 000 people)	4
A large city (with over 1 000 000 people)	5

ASK ALL

Please could you tell me how old you are, currently?	QD7 Equivalent to FL Toolkit question: QD7
	Label: Age
Age: Minimum value='18'	_
Refused	-99

Note to agency: For face-to-face interviews this can be put onto a showcard, and the respondent can give the corresponding letter. Do not include 'refused' on a showcard. If the interviewer is reading out the categories, it is not necessary to start from 18 if it is clear that the respondent is older.

ASK THOSE WHO REFUSED TO ANSWER QD7

Would you {instead} tell me which of these age bands you fall into?	QD7_a Equivalent to FL Toolkit question: QD7_a
	Label: Age bands
18-19	1
20-29	2
30-39	3
40-49	4
50-59	5
60-69	6
70-79	7
80+	8
Refused	-99

Access to the internet

Note to agency: this question is relevant if data collection takes place face-to-face or via the telephone. It may therefore need to be adapted or dropped depending on the method of data collection.

Note to agency: access to the internet in this question covers cases in which the responding individual has independent access, i.e., through their mobile phones, the household's broadband, hot-spots or wi-fi at school or work. It does not cover access to the internet through the mobile of a family member or mobile subscription plans that only give access to social networks and messaging apps: this might be specified by the interviewer or in the online survey in jurisdictions in which this is widespread.

ASK ALL

Do you have access to the internet, including through your mobile phone, your household's broadband connection, hot-spots. or wi-fi, at home, at school or at work?	QDL1 Similar to FL Toolkit question: QD14, with edits
	Label: Internet
Yes	1
No	0
Do not know	-97
Refused	-99

IF QDL1= DO NOT KNOW or REFUSED, STOP INTERVIEW

IF QDL1= NO, go to QDL1_a

OPTIONAL QUESTION

ASK if QDL1 = No THEN STOP THE INTERVIEW

INTERVIEWER READ OUT: I will now read you a list of possible reasons which might explain why you do not have access to the internet. Please tell me if these describe your situation, you can choose more than one.

Please indicate whether these reasons describe why you do not have access to the internet	QDL1_a
MULTICODED. Create a single variable for each response. Record responses as: 1='Yes, this reason applies to me,' 0='No, this reason does not apply to me,' -97='Don't' know, -99=Refused.	Label: <label statements="" using=""></label>
I do not have Internet coverage where I live	1
I cannot afford the subscription to the Internet	2
I think the internet subscription is too expensive even if I could afford it	3
I cannot afford the equipment to use the Internet	4
I do not have the equipment to use the Internet	5
I do not want it	6
I do not need it	7
I do not have time to use it	8
It is too complicated to use	9
It is not safe	10
Other reason (please specify)	11

After answering to QDL1_a, STOP INTERVIEW

Online behaviours and digital literacy

ASK if QDL1 = Yes

Thinking about the last 12 months, how often have you used the Internet?	QDL2
	Label: <internet 6="" months="" past=""></internet>
Never	1
About once a month	2
About once a week	3
Almost every day	4
Don't' know	-97
Refused	-99

Thinking about the last 12 months, how often have you used each of the following devices to access the internet?	QDL3
MULTICODED. Record responses as 1='Never,', 2= About once a month or less,' 3= About once a week, 4='Almost Every day' -97='Don't' know99=Refused	Label: Devices
Desktop or laptop computer	_1
Mobile phone/Smartphone (e.g., iPhone, Samsung Galaxy, <other examples="">)</other>	_2
Tablet (e.g., iPad)	_3
Other device (smart TV, smart speakers, game console, e-book reader, smart watch etc.)	_4
Refused entire question	-99

In the last 12 months, how often have you done the following?	QDL6 Corresponds to FL Toolkit question: QD6
MULTICODED. Create a single variable for each statement. Record responses as 1='Never,' 2='Sometimes,' 3='Often', 4='Very often' -97='Don't' know99=Refused	Label: <label using<br="">statements></label>
Written documents on a personal computer (desktop or laptop) DL score	_1
Sent or received an email DL score	_2
Used a mobile phone to make calls DL score	_3
Made video calls DL score	_4
Participated in social networks online (such as <national examples="">) DL score</national>	_5
Used instant messaging applications (such as <national examples="">) DL score</national>	_6
Looked for information online (such as looking for information about goods and services) DL score	_7
Undertook administrative tasks online (such as <national examples="">, including paying taxes, applying for public benefits, making appointments with the public administration, etc.) DL score</national>	_8
Accessed the news online (through websites or mobile apps) DL score	_9

OPTIONAL QUESTION

ASK if QDL1 = Yes

Note to agency: it is possible to ask this question only to certain age brackets based on responses to QD7_a

When using digital technologies, do you need the help of relatives or friends?	QDL6_a
Record responses as 1='Never,' 2='Sometimes,' 3='Often', 4='Very often', 5 'Always', -97='Don't' know99=Refused	Label: help to use IT
Never	1
Sometimes	2
Often	3
Very often	4
Always	5
Don't' know	-97
Refused	-99

In the last 12 months, have you carried out any of the following regarding the access to your personal data?	QDL7
MULTICODED. Create a single variable for each response. Record responses as: 1='Yes,' 0='No,' -97='Don't' know, -99=Refused.	Label: <label statements="" using=""></label>
Changed the password of one of your devices (smartphone, computer) DL score	_1
Changed the password of an online account (social media, e-commerce website, etc.) DL score	_2
Checked that a website where you provided personal data was secure (e.g., https sites, safety logo or certificate) DL score	_3
Read privacy policy statements before providing personal data DL score	_4
Restricted or refused access to your geographical location DL score	_5
Limited access to your profile or content on social networking sites DL score	_6
Refused the use of your personal data for advertising purposes DL score	_7
Requested access to your personal data stored by websites or providers [if applicable in the jurisdiction]	_8
Granted websites the permission to store your personal financial information (such as debit or credit card number, account number, passwords, etc.) DL score	_9

Digital financial inclusion and use of DFS

INTERVIEWER READ OUT: The following set of questions is about digital financial products and services. I will not ask you about the balance of any accounts you hold, we are just interested in whether you have heard of them or used them on your own or together with someone else.

NOTES TO AGENCY/INTERVIEWER:

- These three questions are used to develop indicators of digital financial inclusion; and to provide context for the digital financial literacy questions that follow. If space is at a premium, they could be shortened or omitted.
- The list of product types used in the national questionnaire **should be specific to the country**, and should cover digital payment, savings, investments, credit and insurance products as relevant. If necessary, give examples.
- It is not mandatory to use each item of the list of DFS provided if these are not available to consumers in the jurisdiction. See also Annex B for definitions and explanations of the different products.
- QDP1 should be asked of every product type that you are interest in and used to filter the list of products for the following questions.
- QDP2 should only be asked for product types that the respondent has heard of at QDP1.
- QDP3 is asking about recent product choice, irrespective of current product holdings. For this
 reason, it should be asked about all products that the respondent has heard of at QDP1, not only
 product types mentioned at QDP2.
- For each question, create one variable for each product type, plus one variable for don't know, and another for refused. For example, the first question will have one variable named QDP1 _1 and labelled Heard of mobile/cell phone payment account. This variable will take the value 0 if respondent says No, and 1 if respondent says Yes.

QDP1 / QDP2 / QDP3

Correspond to FL Toolkit questions (with edits): QP1 / QP2 / QP3

Labels: Heard of [followed by product]; Currently holds []; Recently chosen [].

Labels: Heard of [followed by product]; Currently holds []; Recently chosen [] MULTICODED. Create a single variable for each response. Record responses as: 1="Yes,' 0="No,' -97="Don't' know, -99=Refused.			
INTERVIEWER READ OUT RELEVANT PRODUCT TYPES EACH TIME. MARK ALL THAT APPLY.	ASK ALL Please can you tell me whether you have heard of any of these types of financial products or services	ASK IF QDP1=Yes and now can you tell me whether you [personally or jointly] currently hold or use any of these types of products or services All items contribute to the DFS score	ASK IF QDP1=Yes. and in the last two years, which of the following types of products or services have you chosen [Personally or jointly] whether or not you still hold them Please do not include products that were renewed automatically
Pension products that can be acquired fully online (such as <national examples="">)</national>	_1	_1	_1
Investment services that can be acquired fully online, excluding pension products (such as <national examples="">)</national>	_2	_2	_2
Mortgage that can be acquired fully online	_3	_3	_3
Short-term online credit allowing you to buy now and pay later with interest (e.g., <national etc.="" examples,="" klarna,="">)</national>	_4	_4	_4
Other credit that can be acquired fully online, excluding mortgages (e.g., online credit, payday lending, consumer credit) (such as <national examples="">)</national>	_5	_5	_5
<pre><current payment=""> account or <savings deposit=""> account that can only be opened and accessed online (such as <national examples="">)</national></savings></current></pre>	_6	_6	_6
Payment or debit card acquired online			_7
Saving products that can be acquired fully online (such as <national examples="">)</national>	_8	_8	_8_
Insurance that can be acquired fully online (such as <national examples="">)</national>	_9	_9	_9
Mobile/cell phone payment account [not directly linked to a bank account] such as <national examples="">)</national>	_10	_10	_10
Digital or mobile wallet (such as Apple Pay, Google Pay, <national examples="">)</national>	_11	_11	_11
Cryptocurrencies (such as Bitcoin, Ether, Ripple, <other examples="">)</other>	_12	_12	_12
Stablecoins (such as Tether, <other examples="">)</other>	_13	_13	_13
Non-fungible tokens (NFT)	_14	_14	_14
Crowdfunding, crowd investing, or peer- to-peer lending (<pre>provide national examples if any>)</pre>	_15	_15	_15
[country specific product 1]	_add_1	_add_1	_add_1
Don't know response given to the question as a whole	97	97	97
None	<u>98</u>	<u>98</u>	98
Refused to respond to the question as a whole	_99	_99	_99

OPTIONAL QUESTION

ASK if QDL1 = Yes

Note to agency: it is possible to ask this question only to certain age brackets based on responses to QD7 a

When using any of the digital financial products and services mentioned in the previous question, do you need the help of relatives or friends?	QDP2_a
Record responses as 1='Never,' 2='Sometimes,' 3='Often', 4='Very often' 5 'Always' -97='Don't' know99=Refused	Label: help to use DFS
Never	1
Sometimes	2
Often	3
Very often	4
Always	5
Don't know	-97
Refused	-99

ASK if YES at any of QDP3.

Please indicate which of the following statements best describes how you made your most recent choice of digital financial products or services DFL score – behaviour (addition compared to FL Toolkit)	QDP5 Equivalent to FL Toolkit question: QP5
INTERVIEWER: READ OUT; RECORD ONLY ONE THAT BEST DESCRIBES	<label statement="" using=""></label>
I considered several options from different companies before making my decision	1
I considered various options from one company	2
I didn't consider any other options at all	3
I looked around but there were no other options to consider	4
Do not know	-97
Not applicable	-98
Refused	-99

ASK if YES at any of QDP3.

and which of these sources of information do you feel significantly influenced your decision to buy the most recent digital financial product or service?	QDP7 Corresponds to FL Toolkit question: QP7 (with edits)
MULTICODED. Create a single variable for each statement. Record responses as 1='Yes,' 0='No,' -97='Don't' know98 not applicable, -99=Refused	Label: information source
Best-buy guidance (such as specialist magazines or consumer organisation's advice)	_1
Price comparaisons (e.g., website, magazines etc.)	_2
A recommendation from an independent financial advisor [Note to agency: if necessary, clarify that independent advisors are fee-based, and should not include commission-based ones]	_3
Information from an advert, including on the internet (social media, email, sponsored ad on websites)	_4
A recommendation from friends, family or acquaintances	_5
A recommendation from people you do not know (such as social media or "influencers")	_6
Information provided by staff of the financial product provider (in person, online or over the phone)	_7
Some other type of information, please specify	_8

OPTIONAL QUESTION

ASK If YES to QDP3_12, QDP3_13, QDP3_14

How did you acquire these crypto-assets?	Question QDC1
MULTICODED. Create a single variable for each statement. Record responses as: 1='Yes,' 0='No,' -95='Don't' understand the question, -97='Don't' know, -98 Not relevant, -99=Refused	
I bought them at a dedicated kiosk (e.g., an ATM-like machine)	_1
I bought them on an online platform (e.g., like Coinbase, Binance, OKX. Kraken, etc.)	_2
I mined them	_3
I received them in payment for goods or services	_4
They were transferred to me from family or friends	_5
Other, please specify:	_6

OPTIONAL QUESTION

ASK If YES to QDP3_12, QDP3_13, QDP3_14

Why did you acquire these crypto-assets?	Question QDC2
MULTICODED. Create a single variable for each statement. Record responses as: 1='Yes,' 0='No,' -95='Don't' understand the question, -97='Don't' know, -98 Not relevant, -99=Refused	
To support initiatives that build on blockchain technology	_1
To use as a means of payment for online purchases	_2
To make domestic or cross-border money transfers	_3
For fear of missing out	_4
For fun	_5
To know more about crypto-assets	_6
To make money quickly	_7
As a long-term investment or retirement fund	_8
To diversify your overall investment portfolio	_9
To leave an inheritance	_10
To pay less taxes (e.g., by storing sums of money outside of the formal financial system)	
Other, please specify:	_12

In the last 12 months, how often have you done the following?	QDP9 Equivalent to FL Toolkit question: QP9
MULTICODED. Create a single variable for each statement. Record responses as 1='Never,' 2='Sometimes,' 3='Often', 4='Very often' -97='Don't' know98 =Not applicable, -99=Refused	<label statement="" using=""></label>
Checked the balance and transactions of your bank account online DFS score	_1
Recharged a pre-paid card online (e.g., <national examples="">) DFS score</national>	_2
Paid bills online DFS score	_3
Bought goods and services online DFS score	_4
Transferred money to others online [note to agency: this should not include money sent through agents] DFS score	_5
Managed financial products and services (such savings, investments, credit, insurance) online DFS score	_6
Paid for goods and services in a physical shop with a mobile phone (e.g., using a QR code or mobile wallet, such as Apple Pay, Google Pay, <national examples="">) DFS score</national>	_7
Used a website or app that gives you access to your different financial accounts in one single place (e.g., <national examples="">) DFS score</national>	_8
Used an online platform for trading stocks and shares DFS score	_9
Consulted an online platform for automated financial advice (e.g., <national examples="" of="" robo-advice="">) DFS score</national>	_10
Accessed different financial accounts from the mobile app of your bank	_11
Received government benefits online	_12
[country specific action 1] (e.g., usage of services such as biometric machines or micro-ATMs)	_add1

OPTIONAL QUESTION

ASK If "Sometimes", "often" "very often" TO QDP9_8

Regarding your use of a website or app that aggregates several financial accounts, please indicate how much you agree or disagree with each of these statements	QDP10
MULTICODED. Please use a scale of 1 to 5, where:	Label: Issues
1 tells me that you completely disagree with the statement, and 5 shows that you completely agree	
I save time by accessing all my account information through a single platform	_1
It makes it easier to budget and monitor expenditure	_2
It helps me plan for the long-term	_3
It makes it easier to compare providers, in order to minimise fees and charges	_4

OPTIONAL QUESTION

ASK If "Never" TO QDP9_8

You indicated that you never use a website or an app that gives you access to all your financial accounts in one single place. Please indicate whether the following statements apply to you	QDP11
MULTICODED. Create a single variable for each statement. Record responses as: 1='Yes,' 0='No,' -95='Don't' understand the question, -97='Don't' know, -98 Not relevant, -99=Refused	Label: Issues
I only have one financial service provider	_1
I have never heard of this possibility	_2
I do not trust third-party providers with my personal data	_3
I am not able to use such account aggregators	_4

Thinking about financial products and services in general, in the last 2 years, have you experienced any of the following issues?	QP10 Equivalent to FL Toolkit question: QP10
MULTICODED. Create a single variable for each statement. Record responses as: 1='Yes,' 0='No,' -95='Don't' understand the question, -97='Don't' know, -98 Not relevant, -99=Refused	Label: Issues
{Have you} accidently 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?	_1
{Have you} discovered that someone has used your <card> details to pay for goods without your authorisation?</card>	_2
{Have you} lost money as a result of hackers or phishing scams?	_3
{Have you} accepted online advice to invest in a product that ended up being a scam	_4
{Have You} accidentally downloaded an application/clicked on external links, from unknown/unauthorised sources	_5

Digital financial literacy

ASK if QDL1 = Yes

How often would you say this statement applies to you? For each statement, could you tell me whether it Always, often, sometimes, rarely or never applies to you?	QDS2 Corresponds to FL Toolkit question: QS2
MULTICODED. Create a single variable for each statement. Record responses as: 1= 'Never,' 2, 3, 4, 5='Always,' -97='Don't' know, -98 Not relevant, or -99=Refused.	<label statement="" the="" using=""></label>
I share the passwords and PINs of my bank account with my close friends DFL score – behaviour	_1
Before buying a financial product online I check if the provider is regulated in my country DFL score- behaviour	_2
I share information about my personal finances publicly online (e.g.,on social media) DFL score- behaviour	_3

I would also like to know if these statements describe you or your situation or not:	QDS3 Corresponds to FL Toolkit question: QS3 with edits
MULTICODED. Create a single variable for each statement. Record responses as: 1='Yes,' 0='No,' -95='Don't' under know, -98 Not relevant, -99=Refused	rstand the question, -97='Don't'
I regularly change the passwords on websites that I use for online shopping and personal finances DFL score- behaviour	_1
I use different passwords for different financial and non-financial accounts (e.g., online banking, bank cards, e-mail, social media, e-commerce accounts, etc.) DFL score—behaviour (addition compared to FL Toolkit)	_2
I create strong passwords (e.g., alphanumeric, use of capitalisation, special characters etc.) DL score	_3
I use a password manager DL score	_4
I know who to contact (e.g., financial institution or authority) if I am victim of online fraud	_5

I am now going to read out some statements. I would like to know how much you agree or disagree with each of these statements (as it relates to you)	QDS4 Corresponds to FL Toolkit question: QS4 with edits	
MULTICODED. Create a single variable for each statement. Record responses as: 1= Completely disagree, 2, 3, 4, 97='Don't' know, -98 Not relevant, or -99=Refused	5= completely agree, -	
I think that it is safe to shop online using public Wi-Fi networks (e.g., in cafés, airports, shopping malls) DFL score – attitudes	_1	
It is important to pay attention to the security of a website before making a transaction online (e.g., https sites, safety logo or certificate) DFL score – attitudes	_2	
I don't think it is necessary to read terms and conditions when buying something online DFL score – attitudes	_3	
Digital tools facilitate the management of my personal finances	_3	
I trust the financial services provided by online financial services providers (e.g., online banks, digital payment providers, such as <national examples="">)</national>	_5	
I think that all financial services providers operating online are trustworthy	_5_alt	
I believe that financial service providers should use a wide range of non-financial personal data, including from social media, in decisions about granting credit	_6	
I am more likely to buy impulsively when I buy online than in person in a shop	_7	
It is more likely that I would read the small print of a contract if it is on paper than online	_8	
I am happy that my traditional financial services provider (bank) is digitalising existing traditional products and services	_9	
I find it easier to know how much I spent when I pay by cash than when I pay online	_10	
I would consider saving with non-financial companies (such as e-commerce platforms, social networks, telephone operators)	_11	
I would allow my bank to share my personal financial information with other companies, to receive personalised information about my personal finances	_12	

OPTIONAL QUESTION

ASK if QDL1 = Yes

Overall, on a scale of 1 to 5 where 1 is very confident, and 5 is not at all confident, how confident are you	QDS5	
Record responses as: 1='not at all confident', 2, 3, 4, 5='very confident'		
	Label: Issues	
Making a digital payment using a mobile app	_1	
Making a digital payment using a computer	_2	
Recognising a financial scam or fraud via social media or email	_3	
Buying financial products completely online with a digital signature	_4	
Taking appropriate measures to protect your personal financial data online	_5	

OPTIONAL QUESTION

How would you rate your overall knowledge about digital financial matters compared with other adults in <country name="">? For example, making financial transactions via mobile apps, signing digital contracts, recognising financial scams and frauds online, etc. Would you say it is</country>	QDK1 Corresponds to FL Toolkit question: QK1
Record responses as: 1='very' low, 2, 3, 4='very' high	
	Label: Self-rated knowledge
a) Very high	1
b) Quite high	2
d) Quite low	3
e) Very low	4
Don't know	-97
Refused	-99

I would like to know whether you think the following statements are true or false	QDK7 Corresponds to FL Toolkit question: QK7
MULTICODED. Create a single variable for each statement. Record responses as: 1='True', 0='False,' -97='Don't' ki	now, -99=Refused
A digital financial contract requires signature of a paper contract to be considered valid DFL score –knowledge	_1
The personal data that I share publicly online may be used to target me with personalised commercial or financial offers DFL score–knowledge	_2
Crypto-currencies (such as Bitcoin) have the same legal tender as banknotes and coins in my country DFL score-knowledge – correct reply to be checked at national level	_3
If I do not pay back a loan subscribed digitally, this affects my ability to enter in future digital contracts, but will not affect my ability to obtain a loan that is not subscribed digitally DFL score– knowledge (addition compared to FL Toolkit)	_4
Buying a financial product at the bank's branch or online entails the same level of legal protection DFL score-knowledge (addition compared to FL Toolkit)	_5
Financial authorities in my country deal with formal complaints related to crypto-currencies such as Bitcoin DFL score– knowledge (addition compared to FL Toolkit – correct reply to be checked at national level)	_6
The value of crypto-currencies such as Bitcoin can fluctuate dramatically, but it is always possible to recover the initial amount of money invested DFL score–knowledge (addition compared to FL Toolkit)	_7

Additional personal characteristics and background information

Note to agency: Reverse the order of the levels if more appropriate in your country –but make sure values remain as shown (e.g., post-graduate should still be recorded as 1). For face-to-face interviews 1-6 can be put onto a showcard and the respondent can give the corresponding number.

What is the highest level of education that you have completed?	QD9 Equivalent to FL Toolkit question: QD9
	Label: Educational level
Post-graduate education or equivalent (e.g., master's degree, PhD or advanced professional training)	1
University-level education (e.g., degree or higher-level vocational training)	2
Upper secondary school or high school	3
Lower secondary school or middle school (where relevant)	4
Primary school	5
No formal education	6
Refused	-99

Note to agency: the questions on work status may need to be further refined for the purpose of identifying target groups, such as those on parental leave. Additional questions could be added to explore the type of employer, size of enterprise, self-employed status, amount of time in business etc. as required at the national level. For international comparisons, it will be beneficial to keep the suggested high-level categories.

For face-to-face interviews, this can be put onto a showcard, and the respondent can give the corresponding letter. Do not include 'don't know' or 'refused' on the showcard.

And which of these best describes your current work situation? Please refer to your <i>main</i> working status	QD10 Equivalent to FL Toolkit question: QD10
Self-employed [work for yourself]	1
I own a business, alone or with someone else	2
In paid employment [work for someone else]	3
Apprentice	4
Looking after the home	5
Looking for work [unemployed]	6
Retired	7
Unable to work due to sickness or ill-health	8
Not working and not looking for work	9
Student	10
Other	11
Don't know	-97
Refused	-99

OPTIONAL QUESTION

ASK if QDL1 = Yes

Were you born in < Name of country/region, as required>?	Question: QD12
	Label: Place of birth
Yes	1
No No	0
Refused	-99

Note to interviewer: please stress confidentiality and inform the respondent that the information is needed to make sure that the sample is representative of the population.

Please explain that for the purpose of this survey, a household is composed of either a) a group of people (adults and/or children) living in the same dwelling space who each acknowledge the authority of the same person or couple as the head(s) of household or b) a lone individual. A young adult living at home should be encouraged to discuss their own financial situation rather than that of their parents

Note to agency: X= 75% of median household income; Y=125% of median household income; currency should be changed to local currency. Please make sure the **median (not mean)** monthly income for a household is used – before or after tax, depending on which is prevalent in your country. If monthly incomes are very uncommon, please choose a different time period and record this. Please provide information with the dataset to describe the source and date of the median income data, and the amount. Please create a table of household income before and after tax if necessary, in order to be able identify the correct bands regardless of how the respondent chooses to answer. It may also be necessary to create a conversion table of weekly or fortnightly income for the interviewer to use.

And finally, which of these categories your household income usually falls into [Use as appropriate: before/after tax? Would you say it is	QD13 Equivalent to FL Toolkit question: QD13
	Label: Income band
a) Up to <currency> X a month</currency>	1
b) Between <currency> X and EUR Y a month; or</currency>	2
c) <currency> Y or more a month</currency>	3
Don't know	-97
Refused	-99

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Annex A. Overview of questions and scores

Overview of questions

Table A A.1. Summary of questions

Question number	Information collected	Relationship with the OECD/INFE 2022 Toolkit to measure financial literacy an inclusion	Additional information	Creating the scores
QD1	Gender	Equivalent to Toolkit question: QD1		
QD3	Size of settlement	Equivalent to Toolkit question: QD3	The size of the settlement can make a difference to access to services and have an impact on the access and use of digital financial services.	
QD7	Age	Equivalent to Toolkit question: QD7	If countries want to create different age categories, this question could be useful	
QD7_a	Age	Equivalent to Toolkit question: QD7_a	Categories should be kept the same for international comparisons	
QDL1	Access to Internet	Equivalent to Toolkit question: QD14		
QDL1_a	Reasons for lack of access to the internet		Optional question	
QDL2	Frequency of access to the internet			
QDL3	Frequency of use of different devices to access the internet		This question can be useful to understand online behaviour and possibly to identify suitable delivery channels for financial literacy programmes	
QDL6	Digital literacy		This question captures behaviours that can be used to understand levels of digital literacy	Digital literacy (DL score): For all questions: 1 point for respondents who put themselves at 3 or 4 on the scale [Often, Very often]. 0 in all other cases.
QDL6_a	Help needed when using IT		Optional question. Can be asked only to certain age brackets based on answers to QD7_a	

Question number	Information collected	Relationship with the OECD/INFE 2022 Toolkit to measure financial literacy an inclusion	Additional information	Creating the scores
QDL7	Behaviours to protect personal data		This question can be useful to understand levels of digital literacy through behaviours that can contribute to protect personal data	Digital literacy (DL score): For questions _1 to _7: 1 point for [Yes]. 0 for [No]. For question _9: 1 point for [No]. 0 for [Yes].
QDP1	Digital financial product awareness	Corresponds to Toolkit question: QP1, with a modified list of products	Awareness is considered to be an important aspect of inclusion. Edits should be made to ensure that the	Digital financial services access and use score (DFS score): • For all questions included in QDP2: 1 point for [Yes]. 0 for [No].
QDP2	Digital financial product holding	Corresponds to Toolkit question: QP2, with a modified list of products	list of digital financial products provides relevant data at the national level	
QDP3	Digital financial product choice	Corresponds to Toolkit question: QP3, with a modified list of products		
QDP2_a	Help needed when using the DFS held		Optional question. Can be asked only to certain age brackets based on answers to QD7_a	
QDP5	How the most recent digital financial product choice was made	Corresponds to Toolkit question: QP5	This question is intended to show whether people are shopping around for digital financial products, and if they decided based on digital advertising.	Digital Financial Literacy— behaviour: One point for respondents that chose "I considered several options from different companies before making my decision" or "I looked around but there were no other options to consider", and 0 otherwise.
QDP7	Sources of information that influenced the product choice	Corresponds to Toolkit question QP7 with edits	This question collects information on what influenced the most recent digital financial product choice It includes both traditional sources of information as well as digital ones.	
QDC1	Crypto-assets holding		Optional question. It offers information on how crypto-assets were obtained by the respondent	
QDC2	Reasons for acquiring crypto- assets		Optional question. It offers information on why crypto-assets were obtained by the respondent	
QDP9	Information about using digital financial services	Equivalent to Toolkit question QP9	This question focuses on actions related to digital financial services that are carried more often	Digital financial services access and use score (DFS score): • For items 1 to 10: 1 point for respondents who put themselves at 3 or 4 in the scale [often] or [very often] 0 for the others.
QDP10	Benefits of using open banking		This optional question enquires about the perceived benefits of open banking	

Question number	Information collected	Relationship with the OECD/INFE 2022 Toolkit to measure financial literacy an inclusion	Additional information	Creating the scores
QDP11	Reasons for not using open banking		This optional question offers insights on the possible factors ranging from limited digital literacy to low awareness, that hinder the take up of open banking tools	
QP10	Information about issues related to financial product use	Equivalent to Toolkit question QP10	This question provides information that could be used to inform financial education and financial consumer protection policy	
QDS2	Various statements that are designed to indicate attitudes and behaviours	Corresponds to Toolkit question QS2	Statements to capture behaviours that contribute to digital financial literacy	 Digital financial literacy – behaviour: I share the passwords and PINs of my bank account with my close friends: 1 point for respondents who put themselves at 1 or 2 on the scale [never]. 0 in all other cases. Before buying a financial product online I check if the provider is regulated in my country: 1 point for respondents who put themselves at 4 or 5 on the scale [always]. 0 in all other cases. I share information about my personal finances publicly online (e.g., on social media): 1 point for respondents who put themselves at 1 or 2 the scale [never]. 0 in all other cases.
QDS3	Various statements that are designed to indicate attitudes and behaviours	Corresponds to Toolkit question QS3		Digital financial literacy – behaviour: I regularly change the passwords on websites that I use for online shopping and personal finance: 1 point for [Yes]. 0 for [No]. I use different passwords for different financial and non-financial accounts (e.g., online banking, bank cards, e-mail, social media, e-commerce accounts, etc.): 1 point for [Yes]. 0 for [No]. Digital literacy (DL score): I create strong passwords (e.g., alphanumeric, use of capitalisation, special characters etc.): 1 point for [Yes]. 0 for [No]. I use a password manager: 1 point for [Yes]. 0 for [No].
QDS4	Various statements about attitudes related to digital financial services	Corresponds to Toolkit question QS4	Statements 1 to 3 are included in the digital financial literacy score. The other statements refer to attitudes and behaviours that are not part of the score.	 Digital financial literacy – attitudes: I think that it is safe to shop online using public Wi-Fi networks: 1 point for respondents who put themselves at 1 or 2 on the scale [disagree]. 0 in all other cases. It is important to pay attention to the security of a website before making a transaction online: 1 point for respondents who put themselves at 4 or 5 on the scale [agree]. 0 in all other cases. I don't think it is necessary to read terms and conditions when buying something online: 1 point for respondents who put themselves at 1 or 2 on the scale [disagree]. 0 in all other cases.
QDS5	Confidence in undertaking various digital financial behaviours		Optional question	

Question number	Information collected	Relationship with the OECD/INFE 2022 Toolkit to measure financial literacy an inclusion	Additional information	Creating the scores
QDKT	Self-rated assessment of digital financial knowledge	Corresponds to QK1	Optional question	
QDK7	Understanding of digital contracts, personal data use and crypto assets, and other digital financial knowledge questions	Corresponds to QK7		 Digital financial literacy – knowledge: Digital contracts: 1 for a correct response [0/False – this will be checked at national level in participating countries]. 0 in all other cases. Personal data use: 1 for a correct response [1/True – this will be checked at national level in participating countries]. 0 in all other cases. Crypto-currencies: 1 for a correct response [0/False – this will be checked at national level in participating countries]. 0 in all other cases. Loan subscribed digitally: 1 for a correct response [0/False – this will be checked at national level in participating countries]. 0 in all other cases. Level of protection DFS versus traditional products: 1 for a correct response [1/True – this will be checked at national level in participating countries]. 0 in all other cases. Complain and redress about crypto-currencies: 1 for a correct response [1/True – this will be checked at national level in participating countries]. 0 in all other cases. The value of crypto assets can fluctuate dramatically but it is possible to recover initial investment: 1 point for [Yes]. 0 for [No].
QD9	Education level	Equivalent to FL Toolkit question: QD9		
QD10	Employment status (main)	Equivalent to FL Toolkit question: QD10		
QD12	Region	Equivalent to FL Toolkit question QD12		
QD13	Income level	Equivalent to FL Toolkit question: QD13	Countries need relevant household statistics to create this variable	

Creating the scores

This section discusses how the questions in this survey instrument can be used to measure levels of digital financial literacy and related concepts. This section proposes how they can be combined to compute scores.

Digital literacy (DL score)

The questionnaire collects information on behaviours that permit an understanding of the basic digital skills of respondents, as they are relevant to managing personal finances online and digitally. This information is used to calculate a Digital Literacy score. The DL score provides an indication of the level of digital proficiency of surveyed individuals, encompassing both basic digital financial skills and how these can be applied to the safe management of personal finances in a digital environment.

The digital literacy score is calculated taking into account:

- Behaviours that require varying degrees of digital literacy included in question QDL6 (from sending emails to undertaking administrative tasks online)
- Behaviours related to basic safety procedures online and to the protection of personal data included in question QDL7 and QDS3

It ranges between 0 and 19.

Digital financial services access and use (DFS score)

The questionnaire includes questions about choosing and using digital financial products that can be used to collect information about levels of digital financial inclusion and calculate a digital financial services access and use score (DFS score). This is calculated only for respondents who have access to the internet. The DFS score offers an indication of the level of digital financial inclusion of surveyed individuals and insights on the demand side of financial inclusion. Its purpose is to identify to what extent individuals experienced the use of various digital financial products and services.

The digital financial services access and use score is calculated taking into account:

- Digital financial product holding (question QDP2)
- Digital financial product usage (question QDP9)

It may range between 0 and 25 based on the scoring options suggested in the questionnaire. As some countries might add national options, the number of points might vary. The points will be rescaled to range from 0 to 25 so that it is normalised for all.

Digital financial literacy (DFL score)

The digital financial literacy score is calculated according to the definition of digital financial literacy adopted by the OECD/INE. It is calculated only for respondents who have access to the internet. It takes into account:

- Knowledge: the knowledge component of the digital financial literacy score is computed as the number of correct responses to the seven questions in QDK7. It ranges between 0 and 7.
- Behaviour: the behaviour component of the digital financial literacy score is computed as a count
 of the number of "savvy" behaviours (one in QDP5, three in QDS2, two in QDS3). It ranges between
 0 and 6.
- Attitudes: the attitudes component of the digital financial literacy score is computed as a count of the number of "positive" attitudes elicited by three statements in QDS4. It ranges between 0 and 3.

The overall DFL score is obtained as the sum of the three previous components: knowledge, behaviour and attitudes. It ranges between 0 and 16.

Annex B. Digital financial products and services

The survey instrument aims to be applicable across a diverse range of economies with different levels of financial market development, digitalisation, and different digital financial products and services (DFS) available to consumers. For this reason, the questionnaire uses broad categories to define DFS.

The list of product types used in the national questionnaire **should be specific to the country**, and should cover payment, savings, investments, credit and insurance products offered digitally as relevant. If necessary, give examples. It is not mandatory to use each item of the list of DFS provided if these are not available to consumers in the jurisdiction.

The table below offers a description of selected DFS included in the questionnaire to help institutions undertaking the survey understand which locally available DFS fall within each category and find the best national examples to provide.

Table A B.1. Description of the DFS mentioned in the questionnaire

Digital financial products or services	Description		
Mobile money account [not directly linked to a bank account]	A transaction account held at a non-bank institution that can be used for peer-to-peer payments, transfer of funds. Depending on the regulatory framework and the provider, it can also give access to products such as short-term loans. Examples include M-Pesa, Tigo. Paycell. Orange Money.		
Digital wallet /mobile wallet / mobile payment	A mobile app, electronic device, website, software system, or database that allow individuals to make payment transactions digitally by storing a consumer's debit or credit card and other payment data. Examples of digital or mobile wallets include: ApplePay, Google Wallet, Samsung Pay, PayPal, Venmo, AliPay.		
Mortgage that can be acquired fully online	A type of loan accessed to purchase or maintain a home or real estate that is offered digitally.		
Other credit that can be acquired fully online, excluding mortgages (e.g., online credit, payday lending, consumer credit)	Credit offered digitally (mostly by digital-only providers) for which the entire contractual process is done online*, which involves amounts of money that are small relative to other forms of credit in the market, mostly for relatively short periods of time (most commonly for durations of under 12 months), and at a rate that is considered to be high compared with other credit products available to consumers in their jurisdiction (OECD, 2019 _[21]).		
Short-term online financing schemes that allow consumers to make online purchases and pay for them at a future date (Buy now pay later acquired online)	Credit arrangements acquired online that allow consumers to buy and receive goods and services immediately but pay for that purchase over time.		
Insurance that can be acquired fully online	A variety of products offered digitally (by both traditional and digital-only providers) for which the entire contractual process is done online*, which allow end users to ensure assets or lives that they wish to protect. It includes life insurance and non-life insurance (against risks such as accident, sickness, fire and natural forces, other damage to property, motor vehicle liability, general liability, miscellaneous financial loss and legal expenses).		
Saving products that can be acquired fully online	A variety of products offered digitally (by both traditional and digital-only providers) for which the entire contractual process is done online*, which allow end users to store funds and earn interest.		
Investment services that can be acquired fully online, excluding pension products	A variety of services offered only digitally (by both traditional and digital-only providers) for which the entire contractual process is done online*, which allow end users to put funds into investments other than a savings account. These include roboadvisers that automate much of the investment process, suggesting investments based on information provided by the consumer.		
Crowdfunding, crowd investing, or peer-to-peer lending platform	Digital platforms open to the public in order to match or facilitate the matching of prospective investors or lenders with businesses that seek funding.		
Crypto-asset	The term "Crypto-Asset" is intended to cover any digital representation of value that relies on a cryptographically secured distributed ledger or a similar technology to validate and secure transactions, where the ownership of, or right to, such value can be traded or transferred to other individuals or Entities in a digital manner (OECD, 2022 _[22]).		

Cryptocurrency	Certain kinds of cryptoassets can function as digital means of exchange, which are not backed by an issuer. These types of assets are also referred to as "cryptocurrencies", of which Bitcoin was the first to be well known. Cryptocurrencies have been defined as "a digital representation of value that i) is intended to constitute a peer-to-peer alternative to government-issued legal tender, ii) is used as a general-purpose medium of exchange (independent of any central bank), iii) is secured by a mechanism known as cryptography and (iv) can be converted into legal tender" (OECD, 2019[16]).
Stablecoin	Crypto-assets created, or 'minted', in exchange for fiat currency, and designed to maintain a stable value relative to a national currency or other reference asset (OECD, 2022 _[22]). Examples include Tether, USD Circle.
Non-fungible token	Crypto-assets representing rights to collectibles, games, works of art, physical property or financial documents that can be traded or transferred to other individuals or Entities in a digital manner (OECD, 2022[22]).

^{*} These include those for which local regulation requires a paper signature during the process.