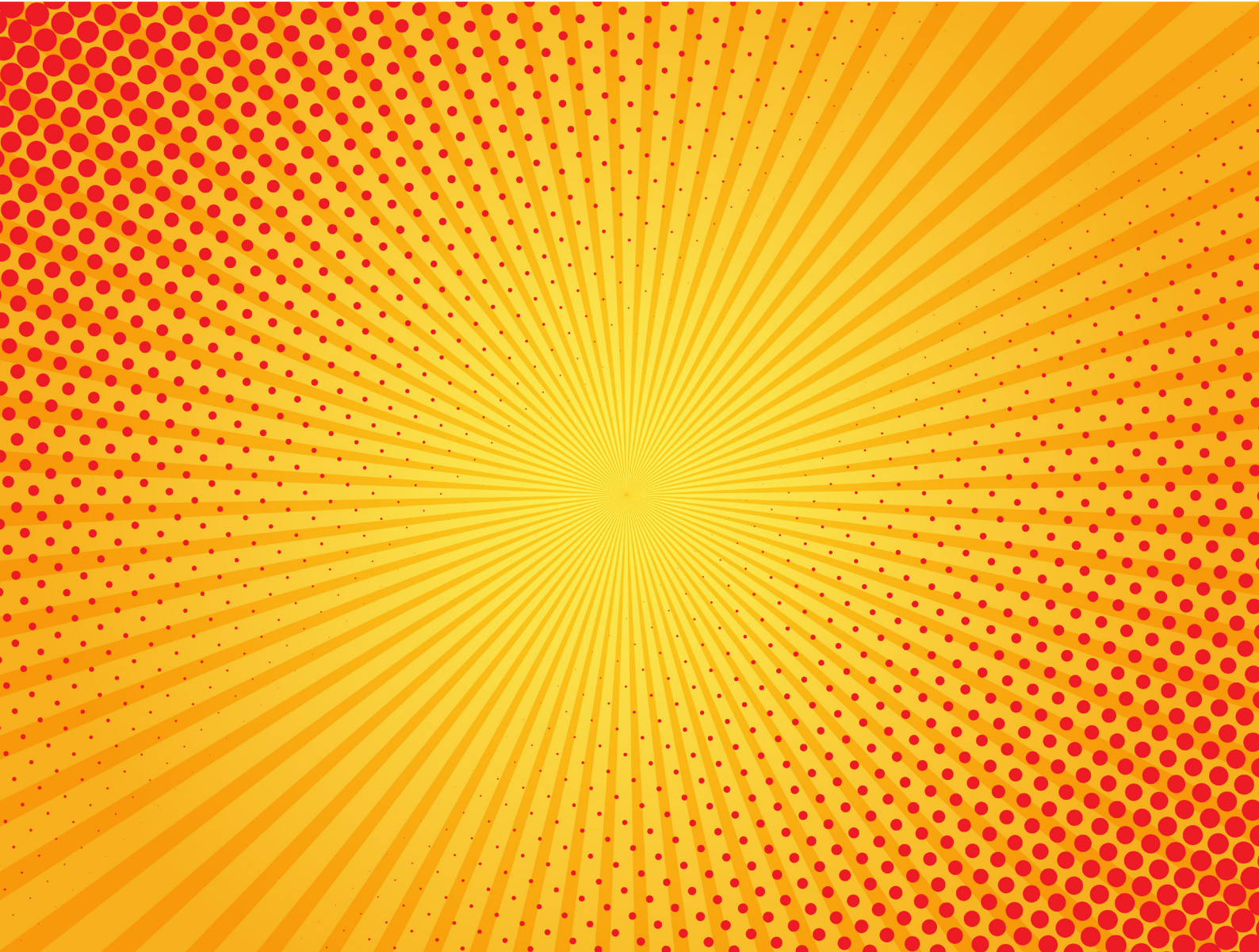# IMPLEMENTATION GUIDELINES TO STRENGTHEN DIGITAL FINANCIAL LITERACY IN ASEAN

OECD Report to ASEAN

Implementation Guidelines to Strengthen Digital Financial Literacy in ASEAN

OECD report to ASEAN

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Foreword

In recent years, the Member States of the Association of Southeast Asian Nations (ASEAN) have experienced an increasing digitalisation of financial services, that was further accelerated during the COVID-19 pandemic. Growing digitalisation highlighted among other things the need to strengthen digital financial literacy to ensure that people can benefit from the opportunities offered by digital financial services (DFS) and use them safely.

Recognising these challenges, the Indonesia ASEAN Chair 2023 invited the OECD to prepare these Implementation Guidelines to Strengthen Digital Financial Literacy in ASEAN, as part of the work of the ASEAN Working Committee on Financial Inclusion (WC-FINC). The Implementation Guidelines aim to provide action-oriented guidelines for policy makers in ASEAN Member States (AMS) to strengthen digital financial literacy, within the broader goals of promoting digital financial inclusion, economic inclusion and financial resilience. The Implementation Guidelines are developed in the context of the global financial inclusion agenda, with particular reference to existing G20, ASEAN and OECD work.

The development of the Implementation Guidelines by the OECD was supported by financial assistance from the Government of Japan.

Executive summary

As the use of digital financial services (DFS) grows within the Member States of the Association of Southeast Asian Nations (ASEAN), it is important to ensure that people have digital financial knowledge and skills to navigate the evolving financial landscape safely.

DFS have the potential to support greater financial inclusion in ASEAN Member States (AMS), by offering new types of financial services, increasing ease and efficiency of payments, lowering costs, and making transactions faster. At the same time, the extensive digitalisation of financial services brings new risks and challenges, such as greater exposure to fraud, data theft or user errors, particularly if the users lack digital or financial literacy. The evidence about general financial literacy levels indicate that financial literacy is relatively low in the majority of AMS, suggesting that digital financial literacy may also be limited. Digital financial literacy can empower individuals with the necessary skills to make informed decisions in choosing the appropriate DFS for their needs, ultimately supporting their financial well-being (OECD, 2021[1]).

The Indonesia ASEAN Chair 2023 recognised the importance of addressing the emerging challenges related to improving the digital financial literacy and invited the OECD to prepare Implementation Guidelines to Strengthen Digital Financial Literacy in ASEAN, building on existing G20, ASEAN and OECD work. These Implementation Guidelines aim to provide action-oriented guidelines for policy makers in AMS to strengthen digital financial literacy, within the broader goals of promoting digital financial inclusion, economic inclusion and financial resilience.

The motivations to strengthen digital financial literacy in AMS include supporting digital financial inclusion, empowering consumers to navigate the evolving DFS landscape, promoting a safe use of DFS and address the needs of different target groups. Evidence on levels of digital financial literacy in AMS remains limited, but most AMS have integrated at least some aspects of digital financial literacy into their national strategies for financial literacy or financial inclusion, or other national frameworks.

The Implementation Guidelines outline examples of digital financial literacy initiatives for the general public, children and youth, MSMEs and other target groups. Such initiatives are implemented by public authorities and other stakeholders in AMS, often as part of their national strategies for financial education or financial inclusion.

The Implementation Guidelines identify gaps in advancing digital financial literacy in the ASEAN region. These include the lack of robust data and evidence on digital financial literacy levels among the population and some limitations in the development of strategic and coordinated approaches to digital financial literacy in some AMS. There is limited availability of competence frameworks and more programmes on digital financial literacy could be developed, particularly targeting vulnerable target groups. There is also lack of evidence from the assessment and impact evaluation of implemented programmes.

Based on the analysis of available evidence, the following guidelines are put forward for consideration by AMS to strengthen digital financial literacy in ASEAN:

- **Collect evidence and develop a diagnosis on digital financial literacy levels.** This is a crucial step in developing sound digital financial literacy strategies and interventions. In addition to data on levels of digital financial literacy, a diagnosis also requires an understanding of the use of DFS across the population, the risks and challenges for consumers and MSMEs related to DFS, core education gaps and needs of different consumer profiles. Evidence could be drawn from

quantitative and qualitative data collections, ideally be collected on a regular basis. AMS can leverage the existing national or international surveys, and could also consider conducting coordinated ASEAN digital financial literacy surveys to track progress in a consistent way and benchmark against each other.

- **Develop co-ordinated and strategic approaches to strengthening digital financial literacy**. This is particularly important given the wide range of stakeholders involved and the rapid development of the digital finance landscape. AMS should continue to take a strategic approach to DFL by reinforcing its position among the priorities of existing co-ordinated and strategic frameworks, or by developing national roadmaps or action plans for improving DFL. AMS should also ensure that appropriate co-operation mechanisms are set up with key stakeholders from public and private sector as well as relevant guidelines are available for their involvement, to ensure impartiality of content and to manage conflicts of interest.

- **Develop competence frameworks on digital financial literacy.** AMS could consider defining at national or ASEAN level what are the main competences that consumers need to use DFS safely, and that digital financial literacy policies and programmes should improve. This could support the development of tailored financial education programmes, assessments, and evaluations.

- **Develop effective programmes to enhance digital financial literacy.** It is important to develop effective digital financial literacy initiatives that consider the needs, abilities, and preferences of the target audience. AMS could continue to develop digital financial literacy programmes for key target audiences, including not only the general public and young people, but also other groups who may have difficulties in accessing or dealing with DFS, such as MSMEs, older people, people living in rural/remote areas, low-income people, or women. It is also important to consider the best digital and non-digital channels to ensure that programmes are tailored to different audiences.

- **Facilitate the evaluation of programmes to enhance digital financial literacy.** Public authorities and other stakeholders in ASEAN should promote and support the monitoring and evaluation of programmes addressing DFS and aimed at enhancing digital financial literacy. AMS could consider conducting a diagnosis to identify digital financial literacy needs and vulnerable groups, conducting pilots and tests before full scale implementation, and assessing the impact and effectiveness of the programmes.

1. Introduction

1.1. Aim and scope

Recognising the importance of addressing the emerging challenges related to digital financial inclusion and of harnessing the potential of digital financial literacy, the Indonesia ASEAN Chair 2023 invited the OECD to prepare these Implementation Guidelines to Strengthen Digital Financial Literacy in ASEAN (hereafter "the Implementation Guidelines").

The objectives of the Implementation Guidelines are to:

- Promote digital financial inclusion and literacy in ASEAN, by integrating relevant aspects of international best practices and taking into account AMS' readiness to implement them.
- Support the increase of digital financial inclusion in ASEAN by strengthening digital financial literacy, in the context of supporting broader economic inclusion.

The Implementation Guidelines are developed in the context of the global financial inclusion agenda, with particular reference to the 2022 G20 Yogyakarta Financial Inclusion Framework (G20 GPFI, 2022[2]) and the Implementation Guide for the G20 High-Level Principles for Digital Financial Inclusion (BTCA et al., 2022[3]) developed by the G20 Global Partnership for Financial Inclusion (GPFI) during Indonesia 2022 G20 Presidency. In particular, these Implementation Guidelines build on Chapter 6 of the G20 Implementation Guide for the High-Level Principles for Digital Financial Inclusion, which focuses on Principle 6 "Strengthen Digital and Financial Literacy and Awareness" (BTCA et al., 2022[3]).

The Implementation Guidelines aim to complement and update existing guidelines developed in the ASEAN context, especially the 2018 ASEAN Guidance Note on Financial Education and Consumer Protection (ASEAN, 2018[4]), and the 2021 ASEAN AFI Policy Note on Digital Financial Literacy (AFI, 2021[5]).

The development of the Implementation Guidelines also takes into account other relevant global policy instruments, G20 deliverables and related studies, including the:

- OECD Recommendation on Financial Literacy (OECD, 2020[6]),
- G20/OECD High-Level Principles on Financial Consumer Protection (updated 2022) (OECD, 2022[7]),
- G20/OECD-INFE Policy Guidance on Digitalisation and Financial Literacy (OECD, 2018[8]),
- G20/OECD-INFE Report on Supporting Financial Resilience and Transformation through Digital Financial Literacy (OECD, 2021[1]),
- OECD report on the Impact of the COVID-19 Pandemic on Financial Consumers in Asia (OECD, 2022[9]).

The Implementation Guidelines are structured as follows:

- the rest of Chapter 1 provides background information on financial inclusion and financial literacy in AMS, offering a rationale for the development of the Implementation Guidelines,
- Chapter 2 focuses on a description of policies and programmes promoting digital financial literacy in ASEAN Member States (AMS),
- Chapter 3 identifies gaps in strengthening digital financial literacy in AMS,
- Chapter 4 provides action-oriented guidelines for policy makers to strengthen digital financial literacy in AMS, with the broader goal of promoting digital financial inclusion towards economic inclusion and financial resilience.

In reading the document, is it important to consider that:

- It provides analysis and action-oriented guidelines for strengthening digital financial literacy at the regional level in ASEAN.
- The information, analyses and implementation guidelines, especially Chapter 4. , focus primarily on the digital financial literacy (DFL) of individuals and households, but they also cover aspects related to the DFL of MSMEs.

Box 1.1. Definitions

Digital financial literacy ("DFL"): 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[10]).

Digital financial services ("DFS"): 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 (OECD, 2017[11]).

Financial education: The process by which financial consumers/investors improve their understanding of financial products, concepts and risks and, through information, instruction and/or objective advice, develop the skills and confidence to become more aware of financial risks and opportunities, to make informed choices, to know where to go for help, and to take other effective actions to improve their financial well-being (OECD, 2012[12]).

Financial literacy: 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[6]).

1.2. Background and rationale

The rapid pace of technological change is impacting every aspect of the design, distribution and use of financial products and services, accelerating the spread of DFS (OECD, 2018[8]). The COVID-19 pandemic has increased the importance of digital financial transactions, including online, mobile and contactless payments, catalysing a profound transformation of financial services (G20 GPFI, 2022[2]).

The Global Findex 2021 shows a significant increase in the use of DFS and especially of digital payments, with two-thirds of adults worldwide making or receiving digital payments in 2021. In developing countries, excluding the People's Republic of China, 40% of people who made a digital payment were a first-time user since the start of the COVID-19 pandemic (Demirgüç-Kunt et al., 2022[13]).

Furthermore, DFS have the potential to support greater financial inclusion in the ASEAN region, by increasing access to new types of financial services, increasing ease and efficiency of payments, lowering costs, and making transactions faster. ASEAN Member States have experienced a significant growth in financial inclusion, including the DFS ecosystem, with innovations in regulation, products, services, and players (AFI, 2021[5]). New players, such as FinTechs, and new services and products, such as peer-to-peer lending, have entered the market, sometimes operating on a cross-border basis.

As shown in Figure 1.1, the percentage of adults aged 15 and over with an account at a regulated institution, such as a bank, credit union, microfinance institution, post office, or mobile money service provider, has increased in AMS from 2017 to 2021. Among AMS, the largest increases in account holding were observed in Myanmar (22 percentage points increase), the Philippines (17 percentage points increase) and Thailand (14 percentage points increase).

Figure 1.1. Financial inclusion in ASEAN Member States

Percentage of adults age 15+ with an account at a regulated financial institution, bank, credit union, microfinance institution, post office, or mobile money service
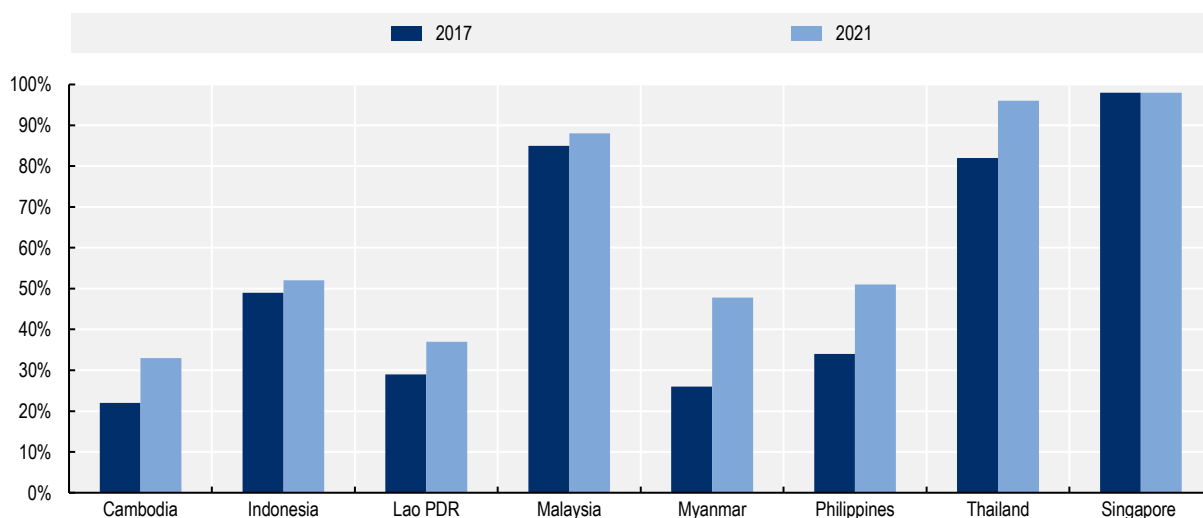
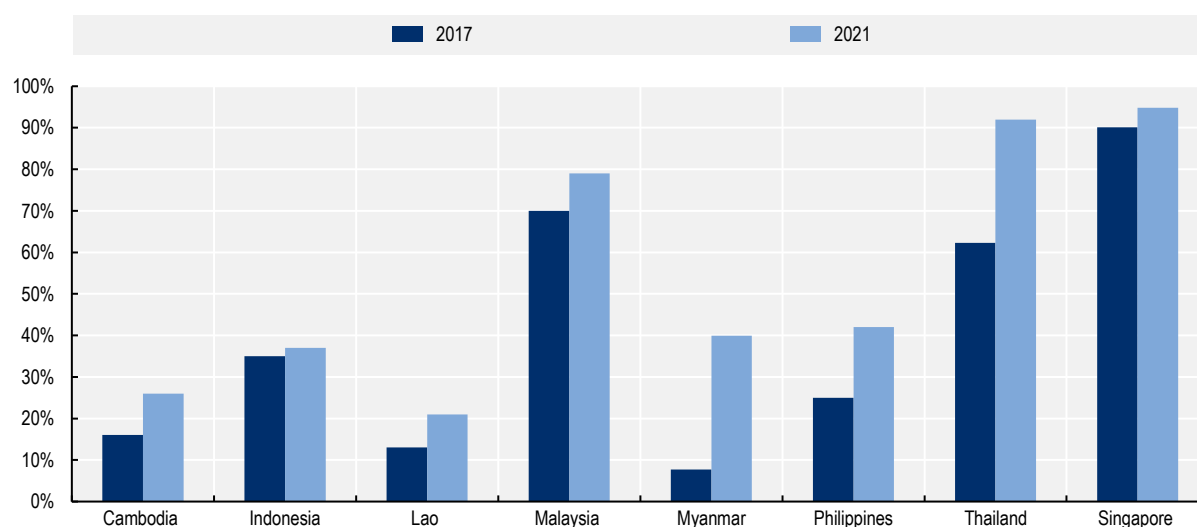Source: Global Findex Database 2021 (Demirgüç-Kunt et al., 2022[13]).

As shown in Figure 1.2, the percentage of adults aged 15 and over who have made or received digital payments in the year previous to the survey has increased significantly in most AMS between 2017 and 2021. This percentage increased by 30 percentage points or more in Myanmar and Thailand in the period 2017-2021 (Demirgüç-Kunt et al., 2022[13]).

Figure 1.2. Digital financial inclusion in ASEAN Member States

Percentage of adults age 15+ who made or received digital payments in the year previous to the survey

Source: Global Findex Database 2021 (Demirgüç-Kunt et al., 2022[13]).

ASEAN policy makers and regulators have supported the development of the DFS ecosystem by introducing innovative approaches, such as regulatory sandboxes, innovation desks and new regulations related to payment systems, crowdfunding and other DFS (AFI, 2021[5]).

Financial digitalisation also offers the opportunity to include in the financial system underserved groups in ASEAN, such as rural dwellers, micro-businesses and women (World Economic Forum, 2022[14]). However, the widespread digitalisation of financial services may also pose new risks and challenges, such as greater exposure to fraud, data theft or user errors, particularly if users lack digital or financial literacy (OECD, 2018[8]). Digitalisation may also increase financial exclusion, especially among people with limited digital access and skills (OECD, 2021[1]).

These developments mean that individuals not only need to be digitally and financially literate, but also that they need to be equipped with the necessary skills to be aware of the characteristics, benefits, and risks of DFS, to be able to use them safely, and to know where to obtain information and help in case of need (G20 GPFI, 2022[2])

While comparable evidence on levels of digital financial literacy in AMS is not available, existing evidence on general financial literacy levels indicate that financial literacy is low in the majority of AMS, suggesting that also digital financial literacy may be limited. According to the OECD/INFE 2020 International Survey of Adult Financial Literacy, adults in Indonesia had an average financial literacy score of 13.2 out of 21,[1] while adults in Malaysia scored only 12.5 out of 21 (OECD, 2020[15]). Data collected using the 2015 OECD/INFE Toolkit for Measuring Financial Literacy and Financial Inclusion revealed that levels of financial literacy were also low in Cambodia (11.8 out of 21), in the Lao PDR (12.5 out of 21), in Viet Nam (12.7 out 21) (Morgan, 2019[16]), and in Thailand (12.8 out 21), below the OECD average of 13.7 (OECD, 2016[17]).

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[1] The overall financial literacy score measures a set of basic financial skills, behaviours, and attitudes. The maximum financial score is 21. Scoring the maximum of 21 effectively means that an individual has acquired a basic level of understanding of financial concepts and applies some prudent principles in their financial dealings. Achieving the maximum thus suggests a basic knowledge of and use of finance.

2. Policies and programmes promoting digital financial literacy in ASEAN Member States

This chapter describes digital financial literacy policies and programmes in AMS. The information is based on desk research and on a dedicated stocktaking survey prepared by the OECD. The stocktaking survey aimed at gathering information on digital financial literacy policies and programmes and at understanding policy challenges and lessons learned among AMS. The dedicated stocktaking survey was circulated from 27 April to 26 May 2023 to AMS, and received responses from nine jurisdictions (the list of responding institutions is available in 4.5.Annex A).

2.1. Motivation to strengthen digital financial literacy

The OECD stocktaking survey aimed to identify the main motivations for improving digital financial literacy in AMS. The main reasons identified by AMS are grouped as follows:

- **Support digital financial inclusion:** Supporting financial inclusion is one of the motivations to strengthening the digital financial literacy in most AMS, as reported for example by the Lao PDR, Myanmar, the Philippines, and Viet Nam. Despite the efforts of AMS to improve financial inclusion, certain challenges, notably linked to low levels of financial and digital literacy, and low level of trust towards DFS, still limit its growth in some countries, such as in the Lao PDR and Cambodia.

- **Empower consumers to navigate the evolving DFS landscape**: AMS experienced a rapid growth of DFS in recent years, with the emergence of new products, services and providers. Thus, strengthening digital financial literacy is also linked to the need to continuously empower consumers and to equip them with knowledge and skills to allow them to make an informed and safe use of a wide array of DFS in fast changing digital finance landscape. This motivation was mentioned in particular by Indonesia, Malaysia, the Philippines and Thailand.

- **Promote a safe and responsible use of DFS:** Financial fraud and scams related to DFS or perpetrated via digital platforms and tools have been rising recently in AMS, as in other parts of the world. Thus, strengthening digital financial literacy in ASEAN is also motivated by the need to support individuals to understand their rights as consumers, recognise potential risks, protect their personal information and adopt safe practices when using DFS and digital platforms. This motivation was mentioned in particular by Brunei Darussalam, Indonesia, Malaysia, Philippines and Thailand.

- **Address the needs of different target groups:** Certain target groups, such as farmers, people living in rural and remote communities, MSMEs and the elderly population are more likely to lack digital or financial literacy and can have difficulties adapting to digital technologies. This may increase the risk of financial exclusion among these groups, as reported by Brunei Darussalam, Cambodia and Indonesia.

Box 2.1 provides data underpinning the need to improve digital financial literacy, with a focus on Indonesia, Malaysia and the Philippines.

Box 2.1. Evidence about the motivation to improve digital financial literacy in Indonesia, Malaysia and the Philippines

The digitalisation of the financial sector has played an important role in the increase in financial inclusion in **Indonesia** in recent years. According to the Indonesian National Financial Literacy and Inclusion Survey (SNLIK), the financial inclusion index rose to 85.1% in 2022, compared to 76.2% in 2019 (OJK, 2022[18]). Similarly, the World Bank's Global Findex 2021 found that the percentage of adults in Indonesia making or receiving digital payments in 2021 was 76%, up from 57% in 2017 (Demirgüç-Kunt et al., 2022[13]). However, according to the SNLIK, financial literacy remains limited in the country, despite improvements between the 2019 and 2022 surveys (OJK, 2022[18]). In addition, financial fraud and cyber-attacks are increasing in the country. For example, the Indonesian police's criminal investigation agency recorded 8831 cases of cybercrime in 2022, 14 times more than in 2021. Data manipulation, fraud via electronic media, and cybercrime were the three most frequent types of crimes.

In **Malaysia,** the COVID-19 pandemic accelerated the adoption of DFS. The recent Financial Capability and Inclusion Demand Side Survey 2021 (FCI 2021 Survey) estimated that 74% of Malaysians aged 15 and above use DFS (BNM, 2021[19]). In addition, the World Bank's Global Findex 2021 found that 79% of Malaysian adults use digital payments, including 42% who used them for the first time during the pandemic (Demirgüç-Kunt et al., 2022[13]). Following the growing adoption of DFS, Malaysia recognised the need to measure the level of digital financial literacy. The FCI 2021 Survey also showed the limited digital financial literacy among Malaysians aged 15 and above is a concern. For example, more than a third of respondents (37%) are willing to share passwords and/or personal identification numbers of bank accounts with their close friends, which could put users at risk of online fraud. Around 62% of those surveyed do not pay attention to the security of the bank websites they visit to carry out online banking transactions, with the risk of providing their banking credentials through fraudulent websites. Only 11% regularly change their passwords for online shopping and personal finance, limiting the security of their accounts. The results provide valuable insights into key areas and specific topics that should be addressed by (digital) financial literacy policies and programmes.

In the **Philippines** the massive adoption of DFS, particularly during the COVID-19 pandemic, accelerated the Bangko Sentral ng Pilipinas (BSP) initiatives to build an inclusive financial system. Data from the BSP's 2021 Financial Inclusion Survey (2021 FIS) showed that 60% of Filipinos with mobile phone and internet connection conducted financial transactions online, such as fund transfers and payments, which represents a significant increase from 17% in 2019 (BSP, 2021[20]). Despite the growth in DFS, the 2021 FIS mentions that significant challenges still exist to the adoption of DFS. Lack of awareness and knowledge about DFS remained among the top reason for not using them, followed by weak mobile signal and slow internet connection, trust related issues, and preference to transact at the bank or ATM.

Source: national submissions to the OECD stocktaking survey.

2.2. Collecting data in relation to digital financial literacy

The OECD Recommendation on Financial Literacy, as well as the G20 Implementation Guide for the High-Level Principles for Digital Financial Inclusion, stress that baseline and regular surveys, research and experiments are essential tools for implementing evidence-based (digital) financial literacy policies and programmes. The importance of collecting evidence to develop (digital) financial literacy initiatives is also

recognised in the 2018 ASEAN Guidance Note on Financial Education and Consumer Protection and in the 2021 ASEAN AFI Policy Note on Digital Financial Literacy (ASEAN, 2018[4]; AFI, 2021[5])

The OECD stocktaking survey sought to identify to what extent digital financial literacy is measured in AMS. In some AMS, public authorities and policy makers have recognised the crucial role of conducting survey and research to develop their policies and programmes. Although specific surveys focusing exclusively on digital financial literacy have not been conducted in ASEAN, some aspects related to digital financial literacy have been covered by general surveys on financial inclusion or financial literacy in some AMS.

Brunei Darussalam and Thailand measured levels of financial literacy among their adult population using the OECD/INFE 2022 Toolkit for Measuring Financial Literacy and Financial Inclusion (hereafter "OECD/INFE 2022 Toolkit") (OECD, 2022[21]), including some components of digital financial literacy. Malaysia has incorporated the questions on digital financial literacy from the OECD/INFE 2022 Toolkit into its national survey. More specifically:

- In **Brunei Darussalam**, the latest National Financial Literacy Survey was conducted in 2022. In this edition, the study also covered digital financial literacy using questions based on the OECD/INFE 2022 Toolkit. The findings of the survey will be used to monitor the level of financial literacy in Brunei and evaluate the effectiveness of financial literacy initiatives conducted. They will also serve as a basis in formulating effective policies and strategies in the country.

- In **Thailand**, the National Statistical Office (NSO) in collaboration with the Bank of Thailand (BOT collected data using the OECD/INFE 2022 Toolkit, which includes questions to measure digital financial literacy across the three components of behaviour, attitudes and knowledge. Results will be published as part of the OECD/INFE 2023 International survey of adult financial literacy (OECD, forthcoming 2023[22]). Financial literacy questions regarding e-payments are also included in the Financial Access Survey of Thai Households, a biennial survey on households' financial access conducted by the BOT (BOT, 2020[23]).

- In **Malaysia**, Bank Negara Malaysia assessed elements of digital financial literacy as part of the 2021 Financial Capability and Financial Inclusion Demand Survey (FCI 2021 Survey) (BNM, 2021[19]) The FCI 2021 Survey is a triennial cross-sectional survey that assesses the level of financial capability of Malaysians based on measures of financial knowledge, behaviour and attitudes. Questions to measure digital financial literacy in the FCI 2021 Survey were developed based on the OECD/INFE 2022 Toolkit.

Indonesia, Malaysia and Viet Nam measured aspects of digital financial literacy as part of national surveys on financial literacy and financial inclusion, or as part of international surveys different from the OECD/INFE one. More specifically:

- In **Indonesia,** the Financial Services Authority (OJK) conducted the National Survey on Financial Literacy and Financial Inclusion 2022 (SNLIK 2022), which included elements of digital financial literacy, such as knowledge of peer-to-peer lending or other DFS. Participants included adults, young people and owners of micro-small businesses, aged 15-79. The results of SNLIK 2022 are an important source of evidence enabling OJK and other stakeholders to formulate policies, design financial products and services tailored to the needs of consumers and improve the well-being of the population.

- In **Viet Nam**, the World Bank conducted a survey in 2019 on access to retail financial services, which collected information on customers' perceptions of financial products and services, including digital financial inclusion. It also collected information on aspects of (digital) financial literacy, such as the percentage of adults who are aware of the financial products and services provided by authorised financial institutions (including digital financial products and services) and the percentage of adults who have received financial education at high school, university, or vocational school. The State Bank of Viet Nam (SBV) is planning to collect data on the demand and supply

side to evaluate the implementation of their National Financial Inclusion Strategy Until 2025, including content related to digital financial inclusion.

Lao PDR and Myanmar have conducted financial literacy surveys, but without a specific focus on DFS.

All examples of data collections reported via the OECD stocktaking survey cover the overall adult population in relevant AMS; there are no examples of surveys on digital financial literacy focusing on specific subgroups of the population, such as young people or owners of MSMEs.

Indonesia and the Philippines have also conducted surveys to understand the digital literacy of their populations, as described in Box 2.2.

Box 2.2. Surveys on digital literacy

ITU ICT skills in AMS

Some AMS took part in a survey on ICT skills conducted by the International Telecommunication Union (ITU, that is the United Nation's specialised agency for Information and Communication Technology), targeting youth and adults in 200 countries (ITU, 2022[24]). This provides information on various types of ICT skills that individuals possess. The survey looks at basic, standard and advanced digital skills. Basic digital skills are defined as the ability to perform the following operations: copy or move files or folders; copy, paste or move information within a document or folder; send emails with attachments; and transfer files from one computer to another. Standard digital skills are defined as the ability to use basic formulas in a spreadsheet, connect and install new devices, create presentations, and download and install software. Advanced skills are related to the ability to programme or code (ITU, 2022[24]). Figure 2.1 shows the proportion of youth and adults that can perform activities requiring different levels of ICT skills in AMS with available data.

Figure 2.1. Proportion of youth and adults that have performed selected activities requiring advanced, standard, and basic skills in ASEAN Member States in 2019

- ■ %writing a computer program using a specialised programming language
- ■ %finding, downloading, installing and configuring software
- ■ %sending e-mails with attached files
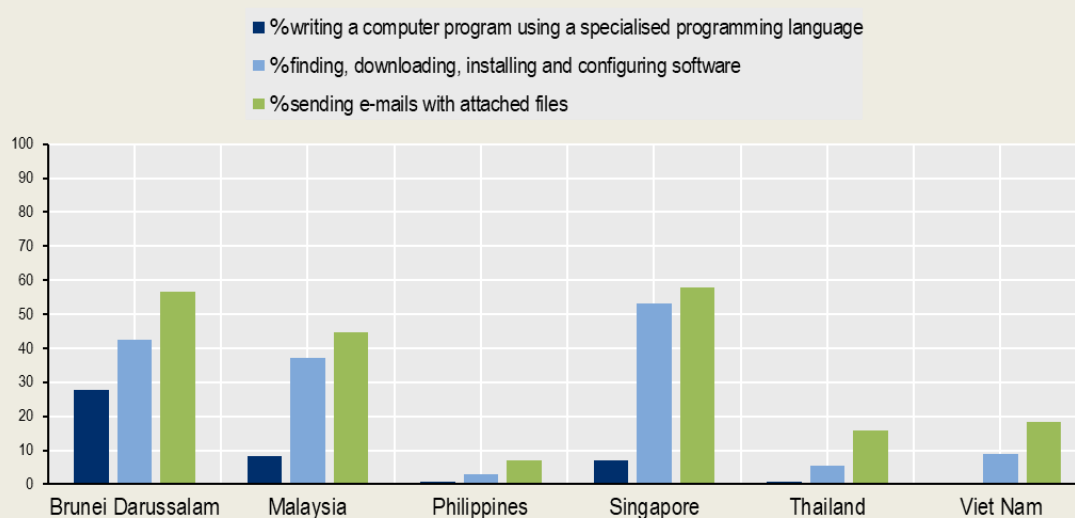
Source: (ITU, 2022[24]).

Indonesia Digital Literacy Index 2022

In Indonesia, the Ministry of Communication and Informatics and Katadata Insight Center (KIC) conducted a survey to measure the Indonesia Digital Literacy Index 2022. The survey was carried out in person and involved 10,000 internet users between the ages of 13 and 70.

Indonesia's Digital Literacy Index was 3.5 out of 5 in 2022. The overall index consists of four sub-indices, which cover digital skill (increase from 3.4 to 3.5), digital ethics (increase from 3.5 to 3.7), digital safety (stable around 3.1), and digital culture (stable around 3.9) (Statista, 2023[25]).

2.3. Strategic approaches to digital financial literacy

The OECD Recommendation on Financial Literacy, the G20 Implementation Guide for the High-Level Principles for Digital Financial Inclusion, the 2018 ASEAN Guidance Note on Financial Education and Consumer Protection and the 2021 ASEAN AFI Policy Note on Digital Financial Literacy emphasise the importance of having a strategic approach to (digital) financial literacy (OECD, 2020[6]; G20 GPFI, 2022[2]; ASEAN, 2018[4]; AFI, 2021[5]). Strategic approaches to digital financial literacy are usually part of national strategies for financial literacy or for financial inclusion.

The OECD stocktaking survey sought to identify to what extent digital financial literacy is included in national financial literacy or inclusion strategies, or in other policy frameworks, in AMS.

Most AMS have recognised the importance of digital financial literacy and have taken strategic steps to improve it, by integrating digital financial literacy or some of its aspects into their national strategies. In Cambodia, Indonesia, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Viet Nam, elements of digital financial literacy are part of existing national strategies for financial literacy or financial inclusion or other national frameworks. Additional information on the coordination mechanisms of selected national strategies is included in Box 2.3.

In **Cambodia**, the National Bank of Cambodia (NBC), with the support of the Alliance for Financial Inclusion, developed the Financial Literacy Roadmap for Cambodia (FLR), which is an essential framework to promote financial and digital literacy in the country. The roadmap contributes to the National Financial Inclusion Strategy 2019-2025, which defines financial literacy as one of the actions to promote digital payments. The FLR targets women, youth, adults. The aim is to improve the financial well-being of Cambodians by building their knowledge, skills, confidence and competences to become responsible financial consumers. It also aims to strengthen the capacity of financial regulators to implement an effective consumer protection framework and of financial service providers to practice responsible lending.

In **Indonesia,** the Financial Services Authority (OJK) developed the Indonesian National Financial Literacy Strategy (Strategi Nasional Literasi Keuangan Indonesia, SNLKI) 2021 – 2025 and its Roadmap, which include digital financial literacy (OJK, 2021[26]). The strategy was developed as part of the Indonesian National Strategy for Financial Inclusion. The financial literacy strategy stresses that the use of DFS must be balanced by an understanding of the functions, benefits and risks of these services. The roadmap of the SNLKI comprises the development of digital financial literacy programmes which will be further enhanced in 2025.

In **Malaysia,** the strategic approach to digital financial literacy is included in the Financial Sector Blueprint 2022 – 2026 (Central Bank of Malaysia, 2022[27]) with the aim of creating an inclusive digital society, and in the National Strategy for Financial Literacy 2019-2023 (FEN, 2019[28]). The main objective is to improve individual ability to assess the risks and benefits of DFS in order to make prudent financial decisions and adopt sound financial behaviours. The National Strategy for Financial Literacy is coordinated by the

Financial Education Network (FEN), that has identified digital financial literacy as a priority in its Programmatic Roadmap (up to 2025). The FEN has also stepped up its efforts to extend the reach of digital financial literacy programmes to meet the needs of financial consumers at all stages of life, such as youth, working adults, senior citizens, rural communities, and MSMEs. Their approach includes strengthening public-private partnerships, promoting effective awareness and communication, encouraging behavioural change and improving access to financial products and services.

In **Myanmar**, the Financial Inclusion Roadmap (2019-2023) (MOPFI, 2020[29]) highlights digital and financial literacy as key factors to support financial inclusion in the country, as the lack of adequate knowledge and confidence in accessing financial services remains a major barrier for most of the population. Digital and financial literacy are included in the Roadmap under the pillar "Empowering consumers", which includes interventions aimed at increasing the digital and financial literacy of consumers. In particular, the Roadmap proposes the introduction of financial education programmes in school, working with financial service providers to develop and expand digital and financial education interventions, and developing a national digital and financial education strategy.

In the **Philippines**, promoting financial literacy, including digital financial literacy, is among key objectives of the National Strategy for Financial Inclusion 2022-2028 (NSFI) (FISC, 2022[30]). One of the strategic objectives is the development of well-designed, comprehensive, and sustainable digital financial literacy programmes. These are considered as crucial interventions which can be delivered by various stakeholders, guided by a common framework. As such, priority initiatives include the development of a common framework for effective, consistent and sustainable implementation of (digital) financial literacy initiatives, monitoring and evaluation of financial education programmes, as well as developing financial education on traditional assets (bonds, shares, etc.) and emerging digital financial products (virtual assets, etc.).

In line with the NSFI's strategic objectives, the BSP also launched its Digital Payments Transformation Roadmap (DPTR) in October 2020, which aims to digitise at least 50% of retail payment volume by 2023 and to ensure that approximately 70% of Filipino adults have a payment or transaction account in the same year. Financial consumer protection and digital literacy are among the components identified in the DPTR to create an enabling policy and regulatory environment. The BSP, in collaboration with industry associations and selected stakeholders, will implement a programme to strengthen cybersecurity awareness and digital literacy in the Philippines.

In **Singapore**, MoneySense is the national financial education programme. MoneySense uses a variety of platforms and collaborates with many partners to offer financial literacy initiatives to the population, including topics on DFS (AFI, 2021[5]).

In **Thailand,** digital financial literacy is part of Thailand's Financial Literacy Action Plan 2022-2027, coordinated by the Financial Literacy Committee, chaired by the Minister of Finance. The Thai Financial Literacy Action Plan 2022-2027 has two main objectives. First, it aims to provide a central policy framework and cooperation mechanism for organisations and agencies involved in promoting financial literacy in Thailand. Secondly, it aims to provide these organisations and agencies with a common direction for financial literacy promotion activities and projects. Digital financial literacy is embedded in the measures taken under the Financial Literacy Action Plan to achieve its objectives. In particular, digital financial knowledge and skills are an integral part of the financial literacy competences that the Thai Financial Literacy Action Plan 2022-2027 aims to establish. Considering the severity of their needs, four target groups are prioritised: groups in the population with the highest level of financial vulnerability (including overindebted people, low-income people and/or disabled people), grassroots group, the children and young people, and the elderly/retirees.

In **Viet Nam**, the National Financial Inclusion Strategy (until 2025) has defined the tasks and solutions in terms of financial education, capacity building and financial knowledge. The educational content of these

programmes also includes information about the understanding of DFS and protecting consumers of financial products.

Box 2.3. Example of coordination mechanisms within national strategies for financial literacy and inclusion in ASEAN Member States

In **Indonesia**, the National Financial Inclusion Council (DNKI) is responsible for the coordination and implementation of the National Financial Inclusion Strategy. DNKI is chaired by the President of the Republic of Indonesia, and the implementation is led by the Coordinating Ministry of Economic Affairs, Bank Indonesia, and Indonesia Financial Services Authority (OJK). Other ministries, government agencies/institutions act as member of DNKI. OJK leads the working group on financial education, one of the working groups under DNKI, and is responsible for the implementation of National Strategy for Financial Literacy Roadmap 2021-2025.

In **Malaysia**, the Financial Education Network (FEN) is an inter-agency platform co-chaired by Bank Negara Malaysia and the Securities Commission Malaysia and whose members include the Ministry of Education, the Ministry of Higher Education, the Malaysia Deposit Insurance Corporation, the Employees Provident Fund, the Credit Counselling and Debt Management Agency and Permodalan Nasional Berhad. The FEN Working Group and the High-Level Inter-Agency Steering Committee identify and agree on areas of intervention and target groups. Each stakeholder has a role to play, such as developing and implementing digital financial education programmes for the general public and tailored programmes for specific groups, promote and disseminate digital financial literacy materials, and measure the effectiveness of digital financial literacy initiatives.

In the **Philippines**, BSP promotes financial education through its institutionalised strategic partnerships with key government agencies and private institutions. The Financial Inclusion Steering Committee (FISC) is the inter-agency governing body that leads the co-ordinated and collaborative approach to the implementation of the NSFI 2022-2028. Among the strategic objectives of the NSFI are promoting inclusive digital finance and strengthening financial education and consumer protection. The BSP, as chair-designate and Secretariat of the FISC, continues to lead the implementation of the NSFI and coordinates with relevant FISC members and various public and private sector partners to take forward its priority initiatives. BSP partners include government institutions, financial institution foundations, professional associations, development agencies and other not-for-profit organisations whose actions in favour of financial education, financial inclusion or consumer protection are part of their corporate social responsibility objectives. BSP is also continuing to work with its partners on capacity-building activities, which include digital financial education.

In **Thailand**, the Financial Literacy Committee, chaired by the Minister of Finance, has been set up to ensure that financial literacy is promoted in an integrated, continuous and sustainable manner, in line with Thailand's Financial Literacy Action Plan 2022-2027. The Thai Financial Literacy Action Plan 2022-2027 includes a diverse range of public and private sector stakeholders who cooperate to advance the promotion of inclusive financial literacy among target groups. The role of each stakeholder is mainly determined by their expertise, communication channels and target groups.

2.4. Initiatives to improve digital financial literacy, including for specific groups

The OECD stocktaking exercise and desk research highlighted a variety of approaches by AMS in implementing digital financial literacy programmes. This section presents selected examples of initiatives

implemented by public authorities in AMS. Programmes are grouped according to their main target audiences, including the general public, children and young people, Micro-, Small and Medium-sized Enterprises (MSMEs), and other groups. In many cases, these initiatives have been tailored to the needs of people with limited digital and financial literacy levels, the recently digitally financially included and the least familiar with DFS.

In some AMS, digital financial literacy programmes are based on financial literacy competence frameworks containing elements related to DFS, as described in Box 2.4.

Some of the examples reported below include a discussion about impact and effectiveness (summarised in Box 2.5) but most interventions described are not currently evaluated and information about their effectiveness is not available.

2.4.1. General public

The **Brunei Darussalam** Central Bank (BDCB) has implemented several initiatives to increase awareness about financial services, including DFS. These include:

- **Financial education roadshows, talks and courses:** The BDCB regularly organises conferences and courses throughout the year on financial planning, debt management, consumer protection and the benefits and risks of DFS. Such events address government, private sector agencies and students. Evaluation surveys are distributed to participants to measure the effectiveness of these initiatives and identify areas for improvement.

- **Smart Money Habits booklet**: the BDCB also produced a booklet, covering topics such as financial planning, takaful and insurance, debt management and investment, DFS and other consumer issues. The booklet is distributed to the public at roadshows, conferences and events organised by the BDCB, and is available online.

- **Social media posts to raise awareness about DFS**: the BDCB regularly shares awareness materials on digital financial literacy topics such as digital payments, cyber security, and online financial scams, on its Instagram account. These posts raise awareness on the benefits of DFS as well as on the associated risks. The BDCB monitors how the public interacts with the posts (e.g. whether they are shared, whether visitors ask questions, etc.).

In **Indonesia,** OJK and Bank Indonesia implement financial education programmes related to DFS:

- **DFS educational materials:** Since 2022, Bank Indonesia and OJK have been developing DFS educational materials (e-flyers, comics and videos) for the general public, with technical assistance from the World Bank. These resources are specifically aimed at non-DFS users, passive DFS users and potential DFS users. Given that smartphone use is high among these groups, they are reached via social media and other digital communication channels. The financial services industry also contributes to spreading these materials. The resources aim at raising public awareness of the benefits and risks of DFS, and at encouraging people to use them regularly, safely, and responsibly.

  Since 2022, Bank Indonesia, in collaboration with other stakeholders, implements a consumer education programme on the benefits, risks and security of payment products and services, particularly digital ones, called #PeKATALK. The programme is delivered through social events (talk shows and webinars), educational material (videos, posters and leaflets) and video contests. The programme is currently targeted at the general public, students, MSMEs, civil servants, and the police. These target groups may be extended based on the results of a forthcoming survey on consumers' empowerment.

  Bank Indonesia also conducts various forms of education (via traditional and digital channel) on consumer protection aspect of financial products and services, including DFS.

- **Digital financial literacy programme:** OJK launched a digital financial literacy programme via its Learning Management System (LMS). The programme is available in four forms: book, e-book, video and interactive games (which can be downloaded from major app stores). The modules cover an introduction to DFS, self-protection from cybercrimes, peer-to-peer lending, and consumer complaints. These initiatives are the result of a collaboration with the Asian Development Bank (ADB) and the World Bank.

In **Malaysia,** members and partners of FEN run digital financial literacy programmes, either individually or as part of FEN's flagship initiatives. Many of these initiatives target the general public and are conducted both physically and on digital platforms. These programmes include:

- Leveraging digital platforms to scale up interactions with financial consumers from all life stages. This is done through the FEN website[2] and social media platforms.
- Conducting outreach programmes, including series of financial education talks, to promote cashless communities and increase awareness of digital literacy and digital financial literacy.
- Conducting a national campaign to create awareness of the importance of digital financial literacy during Financial Literacy Month (FLM). FLM is FEN's annual flagship event held every October to enhance the awareness of consumers on key financial issues and improve financial literacy among Malaysians. In 2022, the FLM focused on promoting digital financial literacy, to ensure safe and effective use of DFS.[3]
- Conducting the nationwide "e-Duit" campaign in collaboration with the payment industry to increase the public awareness and build user confidence in e-payment adoption.[4]

The FEN is also developing a framework to evaluate and measure the effectiveness and impact of its initiatives, including digital financial literacy-related initiatives.

In **Myanmar,** the Ministry of Planning and Finance runs awareness campaigns in the national media on new financial products, services and technologies, and the national financial inclusion roadmap. These campaigns include a weekly cartoon programme on national television, a financial education radio programme, and a print campaign in brochures, newspapers and government magazines.

In the **Philippines,** the BSP implements a variety of virtual, face-to-face and hybrid financial education events and learning sessions. Examples of programmes targeting a broad audience include:

- The BSP's **Digital Financial Literacy Program** (DFLP) aims to increase consumers' awareness and ability to use DFS to their advantage and to enable users to protect themselves and their financial services providers from potential risks and threats arising from DFS use. The programme involved a series of awareness campaigns:
  - Phase 1: #SafeAtHome with e-payments campaign, to promote usage of e-payment solutions during the COVID-19 pandemic and beyond
  - Phase 2: #E-safety is Everyone's Responsibility (Cybersecurity Awareness) campaign, to ensure that financial consumers remain vigilant to protect their accounts and online transactions.
  - Phase 3: Continued dissemination key messages about the convenience of digital payments, e-safety, cyber vigilance and cyber hygiene. Under this phase, the BSP also encourages a wide use of the payment system based on QR codes ("QR Ph Person-to-Merchant Payments", or P2M).

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[2] https://www.fenetwork.my/eng

[3] BNM Annual Report 2022, Chapter on "Engaging Malaysians", page 142-144, https://www.bnm.gov.my/documents/20124/10150308/ar2022_en_ch2d.pdf

[4] https://www.bnm.gov.my/eduit

- **Financial Education Stakeholders Expo:** During the Financial Education Stakeholders Expo in November 2022, the BSP featured two learning sessions on the QR Ph Person-to-Merchant Payments (P2M) and on digital banking, which garnered over 12,000 views on social media. A session on digital financial literacy will be included in the first Financial Education Congress to be held in November 2023.

- **Economic and Financial E-Learning (EFEL) Project:** This project aims to expand the reach and to accelerate the implementation of the BSP's economic and financial education programmes by providing a channel for free learning and teaching activities within a seamless and borderless environment. Under the EFEL Project, the BSP is developing nine interactive and self-paced e-learning courses to be uploaded in the e-learning platforms of BSP and of its financial education partners. The BSP continues to promote key messages on digital literacy, through its economic and financial education social media page (PisoLit).

- **Digital Financial Literacy Learning Sessions:** The BSP also conducts standalone digital financial literacy learning sessions with its partner government agencies as well as private institutions upon request.

- **#FightBudol campaign:** The BSP, in collaboration with the Credit Card Association of the Philippines' (CCAP) implemented the campaign, #FightBudol, which aims to raise awareness about frauds related to credit cards among financial consumers. The BSP extended the reach of the campaign through its social media platforms.

- **The Check-Protect-Report (CPR) information campaign:** The BSP, in collaboration with the Bankers Association of the Philippines (BAP) and the Bank Marketing Association of the Philippines (BMAP), launched an information campaign aimed at improving consumer cyber hygiene. The CPR information campaign seeks to encourage the public to remain vigilant when conducting financial transactions, to protect themselves against illicit online activities and to report scams and frauds to the appropriate agencies.

In **Singapore**, MoneySense uses various channels to promote digital financial literacy. The MoneySense website publishes articles on digital financial literacy. It uses social media to extend reach and user engagement through online stories, competitions and quizzes. The Institute for Financial Literacy (IFL), the outreach arm of MoneySense, provides free and unbiased education programmes for the workplace and organises public talks, including on topics related to DFS (AFI, 2021[5]).

Under **Thailand**'s Financial Literacy Action Plan 2022-2027, a wide range of initiatives have been implemented to develop financial knowledge and skills for all population groups, including digital finance skills. These initiatives include training courses, seminars, information campaigns for various target groups. Different agencies cooperate and integrate their work to reduce duplication and implementation costs.

2.4.2. Children and young people

In **Brunei Darussalam**, the Ministry of Education launched the Financial Literacy Skills Framework for primary school children and adults in 2021. The framework is intended to serve as a benchmark for individual financial skills at different life stages, in order to improve their knowledge and understanding of financial matters. Some elements of digital financial literacy are introduced at this framework, including understanding the advantages and disadvantages of online shopping, as well as identifying the basic characteristics of financial scams. These topics are not taught as a separate subject, but are incorporated into the existing curriculum in subjects such as social studies. The Ministry of Education is currently developing a financial education competence framework for secondary education.

In **Indonesia,** digital financial literacy is not taught as part of formal school education, but different authorities have developed financial education programmes targeting young people, through schools or outside of school:

- The Ministry of Education has established a "Freedom to Learn Programme", which includes financial education among other topics and that is currently implemented in schools, but is not compulsory. The Ministry of Education is also seeking to improve its current financial education programme for school-age children (from pre-school to high school), in collaboration with BI, OJK and the Ministry of Communication and Information Technology.
- OJK has implemented several outreach campaigns targeting young people to promote digital financial literacy. These efforts include face-to-face social events where OJK engage with young people, and the dissemination of learning materials via its digital platforms.

In **Malaysia**, FEN continues its efforts to intensify financial education in schools and for youth, including in universities. E-payments have been incorporated into the formal education syllabus. Following the findings of the FCI Survey 2021, the FEN included digital financial literacy messages in its programmes for students in tertiary education nationwide, for instance, during the Financial Literacy Month 2022, #MyDuitStory video competition, and in other programmes (FEN, 2022[31]). The FEN is currently developing an online financial education programme for young people in tertiary education, including a module on digital financial literacy. In addition, a "cashless schools" programme was implemented in a number of schools with the aim to increase the use of formal financial services and DFS among youth. The cashless schools programme is currently under review for revitalisation.

In **Myanmar,** public authorities are currently developing plans to assess digital financial literacy levels among students exposed to digital financial literacy subjects in the formal education system. The aim is also to assess the impact of teaching digital financial literacy in the formal education system at secondary and tertiary education levels.

In the **Philippines,** the BSP is developing several projects targeting young people, through schools and outside of schools:

- The BSP is working with the Department of Education's Bureau of Curriculum Development to integrate financial education concepts into the basic education curriculum. Lesson exemplars developed prior to the COVID-19 pandemic (in 2018) are being reviewed to include digital financial literacy as a specific topic.
- The BSP is also developing a partnership with the Technical Education and Skills Development Authority to create an online financial education course (with a digital financial literacy component) for learners and Technical and Vocational Education and Training (TVET) workers. Another ongoing project is the development of a financial education course module for higher education students, in partnership with the Higher Education Commission (CHED).
- The BSP is also developing a digital financial education module for pupils from kindergarten to year 12, for stand-alone learning sessions requested by schools.
- On the teacher/educator side, the BSP is building the capacity of the Department of Education's teaching and non-teaching staff through the Department of Education's Bureau of Human Resources and Organisational Development (BHROD) and the National Academy of Educators of the Philippines (NEAP). The personal financial management module for the Department of Education staff includes topics on financial planning, savings and budgeting, debt management, investment basics, fraud and scam prevention and financial consumer protection. The BSP is also developing a module dedicated to digital financial literacy for teaching and non-teaching staff at the Ministry of Education.

In **Thailand,** the Ministry of Finance, in partnership with other implementing organisations of the Thai Financial Literacy Action Plan 2022-2027, is developing the Financial Literacy Framework for Thai Citizens, which includes digital financial literacy. The framework is expected to be completed in 2024. It will serve as a guide for future financial literacy training or educational programmes, as well as for improving the ones that are already in place.

Moreover, the Office of Vocational Education Commission, the Bank of Thailand and the Stock Exchange agreed to jointly develop an e-learning programme for financial literacy, which includes digital financial literacy competences for vocational students in Thailand.

In **Viet Nam,** the Ministry of Education and Training incorporated financial education into the school curriculum for primary schools and incorporated financial education topics into textbooks for secondary school pupils. However, digital financial literacy is not integrated in school curricula.

2.4.3. Micro, Small and Medium-sized Enterprises (MSMEs)

In **Indonesia,** Bank Indonesia has been working with the World Bank since 2022 to develop training modules for MSMEs that can be used by Bank Indonesia Regional Representative Offices and other interested parties. The modules are composed of general guidance on how to teach MSMEs, lesson plans and education materials that can be used by facilitators when training and assisting MSMEs in using DFS. The education materials include topics on savings accounts, QRIS payments (Indonesian Standard Quick Response Code, a standardisation of payments using a QR Code method developed by Bank Indonesia), e-commerce and marketplaces. Several mechanisms have been adopted to assess impact, monitor key success indicators, collect data for evaluating each theme, as described in Box 2.5.

In **Malaysia**, BNM has established the iTEKAD programme with the aim of assisting low-income microentrepreneurs to strengthen their financial management and business acumen towards generating sustainable income. Each iTEKAD programme combines the provision of business assets funded by social finance instruments with microfinance, supplemented with structured financial and business training, which includes elements of financial digital skills (BNM, 2022[32]).

In some AMS, digital financial literacy programmes target specific groups of MSMEs such as women.

In **Cambodia**, the NBC and the Ministry of Women's Affairs (MoWA) have been implementing a "training of trainers" programme since 2019 to improve the financial literacy of women, including women entrepreneurs. This programme aims to train selected women in communities and schools on the topics of financial management, use of financial services, digital payments and consumer protection. In turn, these trainers are expected to pass on their knowledge to other women in their community. Moreover, the NBC and the MoWA have organised various forums, training courses and seminars for women, female university students and female business owners, to promote their financial and digital literacy, economic empowerment and entrepreneurial development.

The NBC and the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) have been implementing the project "Catalysing Women's Entrepreneurship" since 2020. Among other things, this project includes training for women entrepreneurs to promote their financial and digital financial literacy, and to support their access and use of formal financial services. In 2022, the NBC and UNESCAP jointly organised training for women entrepreneurs in three target provinces, Kampong Thom, Siem Reap and Battambang. The objective of the training was to improve financial and digital literacy, increase awareness about the safe use of financial services and related risks, strengthen consumer protection and increase access to formal finance.

2.4.4. Other target groups

In **Malaysia,** the FEN runs various digital financial literacy programmes for specific target groups, such as low-income group including rural communities, gig workers, and seniors. Financial literacy programmes are conducted both physically and on digital platforms to cater to the target group's needs. For instance, the FEN implements programmes for gig workers to empower them with knowledge and skills to make effective use of financial technology for self-driven financial planning. The FEN is also intensifying financial education for lower income groups, including rural communities.

In the **Philippines,** the BSP implements a multi-stakeholder "Digital Financial Literacy Program" to increase public trust in the digital finance ecosystem and encourage the use of DFS by consumers across all sectors, such as individuals, businesses and even government institutions. The BSP's financial education programmes target different segments of the population, including, but not limited to, the low-income/unbanked sectors, civil servants, and overseas Filipino workers.

For instance, the BSP, together with selected institutional partners from the public and private sectors, also implements scalable programmes aiming to have a multiplier effect. Partners target specific audiences, establish clear terms of engagement, agree on key performance indicators, and collaborate to develop audience-specific modules. The BSP then trains the trainers of partner institutions and co-develops monitoring and evaluation mechanisms to track progress and measure impact. Digital financial literacy is one of the modules taught to trainers from partner agencies.

The BSP also organises learning sessions to encourage the use of its digital payment system by QR code (Paleng-QR Ph Plus) among market vendors and public utility vehicle (tricycles) drivers. One of the components of this programme is financial education, which focuses on the benefits of using the DFS, the importance of managing one's digital footprint, cyber hygiene practices and the redress mechanisms available from financial services providers, including the BSP's chatbot or BOB (BSP Online Buddy) that provides assistance to financial services consumers. The BSP intends to partner with other local government units to implement this programme.

Box 2.4. Examples of financial literacy competence frameworks related to DFS in ASEAN Member States

In Malaysia, the FEN developed the Financial Literacy Core Competencies for Malaysian Adults (FLCC), which comprises a wide range of financial literacy outcomes for improved financial management in the everyday life of Malaysian adults. The document provides high level guidance on a range of financial literacy competences in designing financial education initiatives, including related to DFS. It also emphasises financial literacy outcomes according to knowledge, behaviour and attitudes (FEN, 2021[33]).

In the **Philippines**, the BSP considers digital literacy in connection with financial literacy as a necessary skill in the 21st century. BSP defines digital financial literacy as a core competence with the following dimensions:

- Knowledge of DFS: Consumers are aware of the existence of DFS, have a basic understanding of how DFS are used, and are able to compare pros and cons of each product type.

- Awareness of risks in DFS: Consumers understand potential pitfalls of DFS usage, such as phishing, spoofing, personal data theft, hacking, and other cyber risks.

- Digital financial risk control: Consumers have the ability to protect themselves from cybersecurity risks related to the use of DFS through appropriate cyber hygiene practices, such as password/PIN protection, multifactor authentication, and account/data confidentiality.

- Knowledge of rights and redress procedures: Consumers know their basic rights as DFS users and what to do in case they fall victim to risks mentioned above.

The Ministry of Finance of **Thailand**, in collaboration with other organisations, is developing the Financial Literacy Framework for Thai Citizens, which includes digital financial literacy. The framework is expected to be completed in 2024.

Box 2.5. Examples of monitoring and evaluation of digital financial literacy programmes

Smart Digital Indonesia

In Indonesia, OJK took advantage of digital technology to monitor satisfaction with its Smart Digital Indonesia application. By offering an interactive and gamified approach to digital financial literacy, the Smart Digital Indonesia application appears to be well-received by users, as reflected in their reviews in the app stores from which the app can be downloaded. Users indicated that the games provided within the application are engaging and enjoyable, while also effectively enhancing knowledge about DFS. The positive reviews suggest that the app can educate users about various aspects of digital literacy, enabling them to make informed decisions and navigate digital platforms with confidence. OKJ will continue to conduct further monitoring and evaluation, and to develop new digital financial literacy modules.

MSMEs training modules in Indonesia

Bank Indonesia developed training modules consisting of general guidance, lesson plans and education materials that can be used by facilitators when training and assisting MSMEs in using DFS. The training modules are intended to be used by Bank Indonesia Regional Representative Offices and other interested parties throughout the country. The training modules also include mechanisms to assess impact, monitor key success indicators and collect data to evaluate MSMEs course on digital financial literacy, as described in Table 2.1.

Table 2.1. Monitoring and evaluation of Bank Indonesia MSMEs training course

Topic	Key Success Indicators	Method
Introduction to saving accounts and DFS	Understand saving accounts and DFS Understand how to adopt/open a saving account and other DFS, also to take the benefits from it in a safe manner	Quiz
Onboarding of saving accounts and DFS.	Understand to operate saving accounts and DFS Utilise digital payment on mobile-banking to support the business.	Quiz The total number of mobile-banking onboarded during the training The growth of frequency and volume in mobile -banking transactions during 6-12 months after training.
Introduction and onboarding of QRIS payments	Understand how to operate QRIS payments and other digital payments on mobile-banking to support the business.	Quiz The total number of the QRIS`s adoption during the training The growth of frequency and volume of QRIS transactions during 6-12 months after training.
Introduction and onboarding of e-commerce and marketplace.	Understand the benefits of online business. Understand how to use conversational commerce, marketplace, and payment methods in those places. Onboarding in WA, Facebook, and Instagram.	Quiz The total number of social-commerce adoption (WA, Facebook, Instagram) Total monthly average transaction and payment methods.
Introduction to other DFS	Knowing of the availability, benefit, and how to use P2P lending services.	Quiz

Source: Bank Indonesia, 2023.

Evaluation of digital financial literacy programmes in the Philippines

To properly monitor and evaluate their financial education programmes, BSP's financial education partners have agreed to jointly develop and deploy tools to monitor the effectiveness, use and impact of the learning tools and materials produced. BSP partners have also agreed to issue appropriate policy documents mandating their training institutions and regional/provincial offices to integrate financial education into existing training programmes, utilise the teaching materials developed under the partnership and deploy a measurement mechanism to monitor/evaluate the impact or success of the programme.

3. Strengthening digital financial literacy in ASEAN Member States

This chapter identifies a number of gaps and areas of focus to strengthen digital financial literacy in AMS, based on the information included in Chapter 2, the OECD Recommendation on Financial Literacy, the G20 Implementation Guide for the High-Level Principles for Digital Financial Inclusion , the 2018 ASEAN Guidance Note on Financial Education and Consumer Protection and the 2021 ASEAN AFI Policy Note on Digital Financial Literacy (OECD, 2020[6]; G20 GPFI, 2022[2]; ASEAN, 2018[4]; AFI, 2021[5]).

3.1. Collecting evidence on digital financial literacy

As emphasised by G20, OECD and ASEAN guidance, the implementation of digital financial literacy policies and programmes should draw on solid empirical evidence, whenever possible (OECD, 2020[6]; G20 GPFI, 2022[2]; ASEAN, 2018[4]).

However, only five AMS have collected data on digital financial literacy levels among the population, typically covering only some aspects of digital financial literacy. Specific surveys providing an extensive overview of digital financial literacy have not been conducted in any AMS. Components of digital financial literacy have been assessed in some AMS, as part of international or national general financial literacy surveys. The lack of robust data and evidence on individual knowledge, attitudes and behaviours in relation to DFS can limit policy makers' and other stakeholders' full understanding of the benefits and risks created by DFS, and how they may affect consumers and influence their financial behaviour. Policy makers and other stakeholders may also benefit by knowing more about the awareness, demand and current use of DFS among the population, as well as the level of digital financial literacy among consumers.

It is important to note that there is no co-ordinated approach to collecting comparative data on the level of digital financial literacy in the ASEAN region. Comparative data could allow AMS to compare themselves in relation to other countries with similar characteristics (such as national income, financial markets development or geographical characteristics), as well as to collaborate on digital financial literacy and inclusion issues when needed.

3.2. Developing strategic approaches to digital financial literacy

G20, OECD and ASEAN guidance highlight the importance of a strategic approach, not only to digital financial inclusion but also to digital financial literacy, so that policy makers, regulators and FSPs can work together (OECD, 2020[6]; G20 GPFI, 2022[2]; ASEAN, 2018[4]).

Most AMS recognise that the continued expansion of DFS and growing concerns about the associated risks require a co-ordinated commitment to advancing digital financial literacy at national level. Consequently, most AMS have integrated at least some aspects of digital financial literacy into their national strategies for financial literacy or financial inclusion, or other national frameworks. Nevertheless, some AMS could further integrate or develop the DFL elements within their strategic national approaches. A few AMS lack a strategic approach to digital financial literacy and formal cooperation mechanisms between all relevant stakeholders.

Some AMS have established co-operation mechanisms that bring together relevant stakeholders from the public, private and not-for-profit sectors. Evidence remains limited about the existence of guidelines or criteria for the involvement of private and not-for-profit stakeholders in programmes on digital financial literacy.

3.3. Developing effective programmes to enhance digital financial literacy

The effective implementation of policies aimed at enhancing digital financial literacy hinges on the provision of effective programmes. Such programmes should also be designed in ways that take into account the needs, abilities, and preferences of the target audience (OECD, 2020[6]; G20 GPFI, 2022[2]).

The majority of existing digital financial literacy initiatives in AMS focus on the general public or young people. While it is important to continue to target the population at large and young people, it is also important to address the needs of other socio-demographic groups who may have difficulties in accessing or transacting with DFS. Depending on national circumstances and available evidence, such groups may include older people, people living in rural/remote areas, low-income people, MSMEs, or women. While some AMS have already developed programmes for some of these groups, there could be scope for devoting more attention to them.

Only a few AMS developed or are developing competence frameworks on financial literacy which include aspects on digital financial literacy and DFS. To develop effective policies and programmes on digital financial literacy, it is crucial to identify the key competences that consumers need to have to use DFS safely (G20 GPFI, 2022[2]).

Some AMS offer a wider range of programmes on digital financial literacy than others. Despite evidence of the need for greater digital financial literacy in the region, specific programmes seem to be very limited in some AMS. Some AMS have reported that they lack capacity and resources to effectively implement financial education programmes on DFS.

Furthermore, some AMS encourage the use of digital channels in promoting digital financial literacy to increase outreach level and efficiency. However, these efforts may be constrained by the level of access to the digital infrastructure and general digital literacy of different target groups in many AMS. It is important to keep in mind that in some cases it may be relevant to combine digital channels with other more traditional channels, whenever digital skills and access are limited.

3.4. Evaluating digital financial literacy programmes

The importance of monitoring and impact evaluation of digital financial literacy programmes is emphasised in both the OECD Recommendation on Financial Literacy and Chapter 6 of the G20 Implementation Guide for the High-Level Principles for Digital Financial Inclusion (OECD, 2020[6]; G20 GPFI, 2022[2]).

However, evidence from pilots and impact assessments of digital financial literacy programmes is limited in the ASEAN region. Although some AMS have made efforts to evaluate the impact of their digital financial literacy programmes, most interventions described by AMS are not currently evaluated and information about their effectiveness is not available.

4. Implementation guidelines

Based on the evidence and considerations presented in previous chapters, this chapter proposes action-oriented implementation guidelines to strengthen digital financial literacy in ASEAN. It was developed taking into account Chapter 6 of the G20 Implementation Guide for the High-Level Principles for Digital Financial Inclusion, the OECD Recommendation on Financial Literacy, the 2018 ASEAN Guidance Note on Financial Education and Consumer Protection and the 2021 ASEAN AFI Policy Note on Digital Financial Literacy (G20 GPFI, 2022[2]; OECD, 2020[6]; ASEAN, 2018[4]; AFI, 2021[5]).

4.1. Collect evidence and develop a diagnosis on digital financial literacy levels

Collecting evidence and developing a diagnosis is a crucial first step in developing, targeting and evaluating sound digital financial literacy strategies and interventions (G20 GPFI, 2022[2]; OECD, 2020[6]).

Given the limited availability of evidence on levels of digital financial literacy in AMS, it is important that responsible public authorities in AMS continue their data collection efforts. Public authorities and other stakeholders in AMS need to have a good understanding of the risks and challenges that consumers encounter in using DFS. They should also know about awareness of, demand for, and current use of DFS across the population, in addition to knowing about the level of digital financial literacy of individuals. Responsible public authorities should use such diagnoses to detect emerging areas of consumer risks that warrant priority, as well as core education gaps and needs of different consumer profiles.

Evidence could be drawn from quantitative and qualitative surveys and may involve different types of sources, such as digital financial literacy surveys, qualitative information collected through focus groups, analysis of complaints, etc. Data should ideally be collected on a regular basis, as a way to ensure that strategies and programmes remain relevant and up to date. Ideally evidence should cover a broad range of issues related to digital financial literacy, such as access to the internet and digital technologies; digital literacy; access to and use of DFS; knowledge, attitudes and behaviours in using DFS; and any specific experiences of fraud and scams using DFS. It is important to collect data not only on the general population, but also on relevant subgroups, such as young or elderly people, women or MSMEs, to implement evidence-based programmes tailored to their needs.

AMS can leverage the existing national or international surveys studying levels of financial literacy and financial inclusion in order to focus more deeply on DFS. The OECD/INFE 2022 Toolkit for Measuring Financial Literacy and Financial Inclusion as well as the OECD/INFE survey instrument to measure the financial literacy of MSMEs can offer a good starting point (OECD, 2022[21]; OECD, 2020[34]). Moreover, the OECD/INFE has developed a dedicated Survey Instrument to Measure Digital Financial Literacy (DFL Survey Instrument). The implementation of the DFL Survey Instrument can offer valuable insights on a wide range of issues related to digital financial literacy and inclusion, risks faced by consumers related to DFS, awareness to regulatory framework related to DFS, and personal data protection. Evidence from the survey can be used to design and implement digital financial literacy and inclusion strategies, financial literacy programmes on DFS, and to support user-centric product design, by providing information for the whole population and specific target groups (OECD, forthcoming 2023[35]).

AMS could also consider conducting coordinated ASEAN digital financial literacy surveys in order to track progress in a consistent way and benchmark against each other. Co-ordinated studies would provide in-depth measures of digital financial literacy that are comparable across countries and over time, to support the development of digital financial literacy and digital financial inclusion strategies, and to better understand common opportunities and risks faced by consumers in the light of the increasing digitalisation of retail financial services in ASEAN.

4.2. Develop co-ordinated and strategic approaches to strengthening digital financial literacy

It is important that AMS develop co-ordinated, strategic and long-term approaches to strengthening digital financial literacy, given the wide range of stakeholders involved and the rapid development of the digital finance landscape. This can be achieved, among other things, by including digital financial literacy among the priorities of co-ordinated and strategic frameworks and by strengthening co-operation mechanisms across all relevant stakeholders (G20 GPFI, 2022[2]; OECD, 2020[6]; AFI, 2021[5]).

4.2.1. Including digital financial literacy among the priorities of co-ordinated and strategic frameworks

AMS should continue to take a strategic approach to DFL by reinforcing its position among the priorities of existing co-ordinated and strategic frameworks. For example, DFL can be explicitly defined as apriority in national strategies for financial literacy or financial inclusion, where they exist, or of other co-ordinated efforts aimed at improving the population's financial well-being, including financial consumer protection frameworks. Strengthening strategic approaches towards DFL can also include concrete actions, such as the development of national roadmaps or action plans for improving DFL and for the involvement all relevant stakeholders.

Given the rapid development of DFS and the growing need to equip individuals with relevant knowledge and skills to safely navigate the digital financial landscape, AMS may also consider developing dedicated strategies to strengthen digital financial literacy among the population, that could complement broader strategies to enhance financial literacy or financial inclusion. Consistent with the 2020 OECD Recommendation on Financial Literacy (OECD, 2020[6]), defining a digital financial literacy strategy would support a focused approach to addressing the digital financial literacy needs of the population, would ensure higher visibility, and raise the profile of the issue. Box 4.1 provides some examples from other regions.

> **Box 4.1. Examples of strategic approaches to digital financial literacy**
>
> **Digital Financial Literacy Strategy for Portugal**
>
> Banco de Portugal launched the "Digital Financial Literacy Strategy for Portugal" in 2023, developed in collaboration with the OECD and EU Commission.
>
> The Strategy sets out a long-term vision and objectives, supported by short and medium-term actions, to guide the Banco de Portugal and other Portuguese stakeholders with an interest in improving digital financial education. It is tailored to respond to the digital financial literacy needs of the Portuguese population and takes into consideration the existing national digital financial education ecosystem.
>
> The Strategy aims to empower the Portuguese population to use DFS as well as contribute to reducing digital financial exclusion. It seeks to enable people to make a safe use of DFS by adopting safe behaviours and attitudes, therefore supporting them to be more resilient to online fraud attempts and cybersecurity attacks. It also aims to make people more aware of their behavioural biases when accessing and using financial products and services through digital channels, and mitigate associated risks, such as impulsive buying and over-indebtedness.
>
> The Banco de Portugal is the leading authority for the implementation, monitoring and evaluation of the Strategy. In the implementation of the Strategy to improve digital financial literacy, the Banco de Portugal will co-operate and co-ordinate with permanent members of the National Council of Financial Supervisors i.e. the Securities Market Commission (CMVM) and the Insurance and Pension Funds Supervisory Authority (ASF). Moreover, the Banco de Portugal will co-operate and co-ordinate, including through formal agreements, with other relevant stakeholders from the public, private and not-for profit sector for the implementation of the Strategy.
>
> The Strategy includes an Implementation Roadmap for the period 2023-28.
>
> Source: (OECD, 2023[36])
>
> **National Financial Literacy Strategy in Canada**
>
> National Financial Literacy Strategy 2021 – 2026 of the Financial Consumer Agency of Canada (FCAC) sets out the vision of "A Canada where everyone can build financial resilience in an increasingly digital world," recognising that Canadians face an increasingly complex and digital financial marketplace. One of the priorities of the strategy ("Ecosystem Priority 3: Support Increased Digital Access and Digital Literacy") is dedicated to reducing barriers (e.g., reducing the digital divide and use of artificial intelligence and algorithms that can negatively affect access to appropriate products or services) for financial consumers by supporting increased digital access (inclusion) and digital literacy. FCAC will support this priority by collaborating with partners to strengthen digital financial literacy and access. The National Strategy encourages those in the financial services industry to test and build financial tools, resources and services that are appropriate for audiences with a diverse range of digital access and skills and provide non-digital alternatives when needed.
>
> Source: (FCAC, 2021[37]).

4.2.2. Strengthening co-operation mechanisms

Stakeholder coordination is vital for all financial literacy policies and programmes including when seeking to strengthen digital financial literacy given the wide range of relevant stakeholders. Public sector stakeholders may include not only financial authorities, but also agencies with responsibility for digital development, digital infrastructure or data protection. Relevant stakeholders include also those that are actively providing DFS, from traditional providers, such as banks, to telecommunication and FinTech companies. Formal co-operation mechanisms may include the creation of committees or working groups dedicated to advancing digital financial literacy or addressing barriers to the use of DFS.

Even if a formal coordination framework does not yet exist in some AMS, it will be important that the authorities responsible for financial literacy liaise with other government departments and agencies, or other private and not-for-profit stakeholders that can support the implementation of digital financial literacy initiatives to ensure that such programmes are coordinated and that they address the groups most in need. As emphasised in the Chapter 6 of the G20 Implementation Guide for the High-Level Principles for Digital Financial Inclusion, financial-sector authorities may consider opportunities and build partnerships with key financial institutions to embed financial education into programmes offering DFS at scale, including cash-transfer programmes, agricultural lending programmes, and so on (G20 GPFI, 2022[2]).

Accordingly, responsible authorities in AMS should consider developing guidelines or criteria for the involvement of private and not-for-profit stakeholders implementing programmes on digital financial literacy, in order to ensure that content is impartial and to manage conflicts of interest. Responsible authorities may also provide guidance to financial service providers to encourage them to integrate financial education holistically into their day-to-day operations and interactions with consumers.

4.3. Develop competence frameworks on digital financial literacy

Given the rapid evolution of DFS and the emergence of specific issues and challenges for consumers related to digital transactions and technology, it is important to define at national or ASEAN level the main competences that consumers need to use DFS safely, and that digital financial literacy policies and programmes should seek to develop. Defining competence frameworks for digital financial literacy could then support the development of tailored financial education programmes, assessments and evaluations.

Policy makers in AMS could draw on available data and research to develop or refine competence frameworks for the general population or identified target groups, and develop appropriate financial education content in cooperation with relevant stakeholders (OECD, 2018[8]). In developing national or ASEAN competence frameworks on digital financial literacy, AMS should take into account cultural, religious and socio-economic factors specific to the region and each country.

Box 4.2. provides examples of financial literacy competence frameworks related to DFS.

Box 4.2. Examples of financial literacy competence frameworks related to DFS

The **G20/OECD INFE Policy Guidance: Digitalisation and Financial Literacy** includes a set of core financial literacy competences for the safe use of DFS (OECD, 2018[8]). Competences cover especially the following areas:

- Building trust and promoting beneficial use of DFS and related technological innovations
- Protecting consumers and small businesses from vulnerability to digital crime and misuse/misselling
- Empowering consumers to counter new types of exclusion due to the potential misuse of data sources, including data analytics and digital profiling
- Supporting consumers at risk of overreliance on easy access to online sources of credit

The OECD/INFE Core competencies framework on financial literacy for MSMEs highlights a range of outcome-based financial literacy competences, including related to DFL, that may be important to sustain or improve the financial literacy of owners and managers of MSMEs and of potential entrepreneurs in their experience of starting, running or growing a business (OECD, 2018[38]).

The Financial Competence Framework for Adults in the European Union devotes special attention to competences related to financial digitalisation, while covering all areas of financial literacy (European Union/OECD, 2022[39]). In particular, it includes competences related to DFS, digital tools relevant for personal finance, digital assets, or any other competences related to digital media with relevance for personal finance. As digital financial competences are cross-cutting and relevant across the whole framework, they are integrated horizontally throughout all the content areas and sections. Particular attention has been devoted to formulating competences in a flexible way to take into account potential future developments. A similar framework for children and young people, including competences related to DFS and digital tools for personal finance, will be published in October 2023.

4.4. Develop effective programmes to enhance digital financial literacy

In order to support informed decision-making and a safe use of DFS, it is important to develop effective digital financial literacy initiatives that take into account the needs, abilities, and preferences of the target audience (OECD, 2020[6]; G20 GPFI, 2022[2])

Considering the existing initiatives, it is important that AMS continue to develop digital financial literacy programmes for key target audiences such as the general public and young people. Integrating digital financial literacy in school curricula, collaborating with universities, and providing digital financial literacy for youth through extra-curricular activities are important existing initiatives that help to develop a solid foundation. At the same time, AMS could also target to a greater extent other groups who may have difficulties in accessing or dealing with DFS. Depending on available evidence and national specificities, these groups may include older people, people living in rural/remote areas, low-income people, or women. Identifying relevant target groups may require the collection of specific evidence, as discussed in Section 4.1.

Efforts can also continue to promote the financial literacy and digital financial literacy of MSME owners, and to support them in developing a long-term strategic approach to finance and improving business resilience and prospects, as highlighted in the 2022 updated G20/OECD High-Level Principles on SME (OECD, 2022[40]). Actions could include improving MSME owners' awareness, understanding and ability to use a broad range of available financial instruments, including alternative and digital ones; and

supporting the access to information about changes in legislation, public support and programmes for MSMEs related to digitalisation of finance (OECD, 2022[40]).

In developing digital financial literacy programmes, AMS should also consider what would be the best channels to address the needs of different target groups. Digital technologies can help to disseminate tailored content widely and quickly, as in the case of the promotion of a unified set of key messages and communication materials by the BSP in the Philippines. Initiatives promoted via digital tools can be scaled up in an efficient and cost-effective way, for example through online awareness campaigns or mobile apps. Social media and e-learning platforms are already used in ASEAN for disseminating financial education programmes, as they enable to reach a wide audience, particularly in geographically dispersed countries, such as Indonesia, Malaysia and the Philippines. Digital channels can also be used to provide examples of appropriate financial behaviours related to DFS and associated risks, such as warnings about fraud and scams. Online learning platforms can provide users with flexible learning options and give them access to learning materials in various format, as in the case of the Learning Management System (LMS) developed by OJK in Indonesia.

However, when using digital financial education tools, policy makers and other stakeholders must be careful not to exacerbate the digital and financial exclusion of vulnerable groups, particularly those with limited digital access and skills. AMS could consider a combination of delivery methods to ensure that channels are appropriate for different audiences (for example, the use of the radio, which is a mainstream medium in some AMS). In some cases, it may be relevant to combine digital channels with in-person support, or to include digital financial literacy in programmes delivered in a non-digital manner, whenever digital skills and access are limited or when addressing sensitive financial issues. For example, Thailand's Financial Literacy Action Plan 2022-2027 ensures accessibility to all target groups by combining online channels, such as websites and social media, with traditional channels, such as helplines and news broadcasts.

Box 4.3 presents selected examples from a range of countries and economies of financial education initiatives for different target groups to support the awareness of, the safe use of, and trust toward DFS.

Box 4.3. Examples of digital financial education programmes for different target groups

Young People

The Central Bank of Portugal designed a digital financial education campaign aimed at young people addressing the necessary precautions to be adopted online with respect to the use of digital financial channels and services (#toptip). The central bank also ran awareness campaigns on strong customer authentication (two-factor authentication), new security rules for digital payments and for accessing accounts online, and on new transaction limits on contactless payments.

Women

The Bank of Italy implemented (virtual and face-to-face) training courses for low-income and/or low-education women to respond to the challenges of the COVID-19 pandemic. Modules relate to topics of particular relevance during the crisis, including digital payments and the risk of fraud and scams.

Older people

In **Brazil,** the Central Bank (BCB) and the Ministry of Women, Family and Human Rights, worked together with the Brazilian Federation of Banks on a campaign aimed at protecting elder citizens from financial fraud delivered through instant messaging platforms (WhatsApp) - since this is one of the channels used to target the elderly – as well as internet and TV ads. The BCB also implemented a campaign focusing on fraud and scam threats using Pix transactions, undertaken through social media posts and through short videos that could also be shared on WhatsApp. Thanks to cooperation with industry and digital financial education influencers, the campaign reached over 10 million users.

In **Hong Kong, China**, the Investor and Financial Education Council launched a Digital Financial Services Workshop specifically designed for retirees to learn about the application of common FinTech services. The workshop uses simulation games, which allow retirees to experience the applications of e-wallet and biometric authentication.

In **New Zealand**, the Office for Seniors published a "Better Later Life Action Plan" as part of its "Better later life" strategy. Enabling older people to embrace technology and ensuring everyone can access essential services is one of the three key priorities for 2021 – 2024.

In **Poland**, the initiative "Senior-Let's meet online" was launched to increase seniors' knowledge about being safe online. The campaign included messages to help seniors identify online threats and ways to avoid them, secure their data online, and raise their awareness on specific methods used by online fraudsters. The campaign also engages family members and encourages their support for their parents and grandparents in helping them navigate the digital world.

Vulnerable populations or people with limited access to technology

The Central Bank of the Republic of **Argentina** is also deploying the "Finances Nearby" programme, which trains representatives of ministries, agencies, and other organisations that assist groups that are vulnerable due to economic, social, and gender- and age-related issues, among others. The purpose of the programme is to encourage people's financial inclusion, including through DFS. The Central Bank of the Republic of Argentina, in cooperation with the Ministry of Education, has also undertaken a financial education campaign that includes tutorials to promote the use of debit cards; the management of security codes for ATMs and for non-bank cash withdrawal points; the use of online banking and digital wallets for the payment of services; cybersecurity; and the protection of financial consumers. The campaign was distributed digitally and on public television, to reach those without internet access, and is also used in schools.

MSMEs

The Bank of **Italy** has developed a financial education programme aimed at craftsmen and small business owners to strengthen their competences in making financial decisions, dealing with banks, and using customer protection tools. The programme - which is based on self-training sessions through e-learning platforms and meetings with trainers - includes a specific module on the risks and opportunities of using digital payment instruments.

The Financial Education Foundation in **Morocco** hosts a section on entrepreneurship on its financial-education website. Owners of micro and small firms can test their knowledge of accounting and other important aspects of business creation and development, find calculators to help manage business finances, and navigate tax issues. During the COVID-19 crisis, the Foundation stepped up its digital initiatives to support MSMEs on topics linked to DFS and managing a company in times of crisis.

More examples from a range of countries and economies of how (digital, traditional, and hybrid) financial education initiatives are supporting awareness, the safe use of, and trust toward DFS programmes are available in the following reports:

- G20 Implementation Guide for the High-Level Principles for Digital Financial Inclusion (G20 GPFI, 2022[2]);
- G20/OECD-INFE Policy Guidance on Digitalisation and Financial Literacy (OECD, 2018[8]),
- G20/OECD-INFE Report on Supporting Financial Resilience and Transformation through Digital Financial Literacy (OECD, 2021[1])
- OECD report on Financial planning and financial education for old age in times of change (OECD, 2022[41]).

Sources: G20 Implementation Guide for the High-Level Principles for Digital Financial Inclusion (G20 GPFI, 2022[2]); G20/OECD-INFE Report on Supporting Financial Resilience and Transformation through Digital Financial Literacy (OECD, 2021[1]) OECD report on Financial planning and financial education for old age in times of change (OECD, 2022[41])

AMS could also consider taking greater advantage of behavioural insights when designing their digital financial literacy programmes, with the aim to have greater impact on financial behaviour (OECD, 2019[42]; 2021[1]). Examples of relevant techniques can include making content focused, straightforward, with concrete steps and simple to understand to increase the interest and engagement. Taking advantage of digital technological functions can make it possible to implement arrangements to nudge consumers into specific actions or to provide "just in time" information or education (OECD, 2019[42]; 2021[1]; G20 GPFI, 2022[2]).

4.5. Facilitate the evaluation of programmes to enhance digital financial literacy

In light of the evolving challenges related to DFS and of the varied needs of different groups, it is important to gather evidence about the effectiveness of different approaches, content and channels to improve digital financial literacy.

Public authorities and other stakeholders in ASEAN should promote and support the monitoring and evaluation of programmes addressing DFS and aimed at enhancing digital financial literacy. In this respect, consistent with the OECD Recommendation on Financial literacy (OECD, 2020[6]), AMS could consider to:

- Conduct a diagnosis to identify digital financial literacy needs and vulnerable groups. Before delivering digital financial literacy programme, it is recommended to conduct a need assessment in order to identify the vulnerable target groups, their needs as well as relevant delivery channels for them.
- When feasible, conduct pilots and tests before full scale implementation. Piloting helps test the effectiveness of interventions on a small set of beneficiaries and provides an opportunity to adjust and recalibrate the financial education content, delivery tools, and mechanisms.
- Assess the impact and effectiveness of the programmes. It is important to monitor and evaluate the results achieved against the objectives set at the start of a particular programme. Simple, measurable objectives are often useful in quantifying success and identifying areas for improvement. Evaluating the impact and effectiveness of existing programmes can be crucial to ensure that content is relevant to learners, up to date with the changing financial landscape and that delivery methods are effective.

Wherever digital delivery tools are used, consideration should be given to capturing data directly to facilitate cost-effective monitoring and evaluation, whilst taking into account all applicable data protection rules and ethical considerations (OECD, 2022[10]).

Ultimately, financial and digital financial literacy are crucial to ensure the safe and responsible use of DFS for greater financial inclusion. There is, therefore, a need to have a clear alignment between financial literacy national strategies and financial inclusion outcomes, to enhance the financial well-being of individuals in today's rapidly evolving digital landscape.

Annex A. List of responding institutions to the OECD stocktaking survey in ASEAN Member States

Country	Institution
Brunei Darussalam	Brunei Darussalam Central Bank (BDCB)
Cambodia	National Bank of Cambodia
Indonesia	Bank Indonesia and Indonesian Financial Service Authority (Otoritas Jasa Keuangan, OJK)
Lao PDR	Bank of the Lao PDR
Malaysia	Bank Negara Malaysia (BNM)
Myanmar	Ministry of Planning and Finance
Philippines	Bangko Sentral ng Pilipinas (BSP)
Thailand	Ministry of Finance
Viet Nam	State Bank of Viet Nam (SBV)

Annex B. List of acronyms and abbreviations

ADB - Asian Development Bank

AFI - Alliance for Financial Inclusion

AMS - ASEAN Member States

ASEAN - The Association of Southeast Asian Nations

BDCB - The Brunei Darussalam Central Bank

BSP - Bangko Sentral ng Pilipinas

DFL - Digital financial literacy

DFLP- BSP's Digital Financial Literacy Program

DFS - Digital financial services

DNKI - National Financial Inclusion Council in Indonesia

DPTR - Digital Payments Transformation Roadmap in the Philippines

FEN - Financial Education Network in Malaysia

FCI 2021 Survey - Financial Capability and Inclusion Demand Side Survey 2021 in Malaysia

FISC - The Financial Inclusion Steering Committee in the Philippines

GPFI - G20 Global Partnership for Financial Inclusion

MSMEs - Micro-, Small and Medium-sized Enterprises

OECD - Organisation for Economic Co-operation and Development

OECD/INFE - OECD International Network for financial education

OJK - Financial Services Authority of Indonesia

SBV - The State Bank of Viet Nam

SNLIK - Indonesian National Financial Literacy and Inclusion Survey

SNLKI - Indonesian National Financial Literacy Strategy 2021 – 2025

References

AFI (2021), *Policy Note on Digital Financial Literacy for ASEAN*, Alliance for Financial Inclusion. [5]

ASEAN (2018), *ASEAN Guidance Note on Financial Education and Consumer Protection*. [4]

BNM (2022), *iTEKAD: Empowering low-income microentrepreneurs*, [32]
https://www.bnm.gov.my/social-finance.

BNM (2021), *The Financial Capability and Inclusion Demand Side Survey 2021*, [19]
https://www.fenetwork.my/wp-content/uploads/2022/12/BoxArticleFSR22_Eng.pdf ;
https://www.bnm.gov.my/publications/FSR2022h1.

BOT (2020), *Financial Access Survey of Thai Household*. [23]

BSP (2021), *Financial Inclusion Survey 2021*, [20]
https://www.bsp.gov.ph/Inclusive%20Finance/Financial%20Inclusion%20Reports%20and%20
Publications/2021/2021FISToplineReport.pdf.

BTCA et al. (2022), *Implementation Guide for the G20 High-Level Principles for Digital Financial* [3]
Inclusion.

Central Bank of Malaysia (2022), *Financial sector blueprint 2022-2026*, [27]
https://www.bnm.gov.my/documents/20124/5915429/fsb3_en_book.pdf.

Demirgüç-Kunt, A. et al. (2022), *The Global Findex Database 2021: Financial Inclusion, Digital* [13]
Payments, and Resilience in the Age of COVID-19, The World Bank, Washington, DC,
https://www.worldbank.org/en/publication/globalfindex (accessed on 4 March 2023).

European Union/OECD (2022), *Financial competence framework for adults in the European* [39]
Union.

FCAC (2021), *National Financial Literacy Strategy 2021- 2026*, [37]
https://www.canada.ca/en/financial-consumer-agency/programs/financial-literacy/financial-
literacy-strategy-2021-2026.html.

FEN (2022), *Annual report: Let's Go Digital Confi dently*, [31]
https://www.bnm.gov.my/documents/20124/10150308/ar2022_en_box6.pdf.

FEN (2021), *Financial Literacy Core Competencies For Malaysian Adults*, [33]
https://www.fenetwork.my/wp-content/uploads/2023/02/FLCC-for-Malaysian-
adults_compressed.pdf.

FEN (2019), *National Strategy for Financial Literacy 2019-2023*, [28]
https://www.sc.com.my/api/documentms/download.ashx?id=6385977c-bd2c-4612-bda8-
9ce6a5961720#:~:text=term%20behavioural%20change.-
,The%20National%20Strategy%20for%20Financial%20Literacy%202019%2D2023%20(Natio
nal%20Strategy,well%2Dbeing%20of%20all%20Malaysia.

FISC (2022), *National Strategy for Financial Inclusion 2022-2028 in Philippines*, https://www.bsp.gov.ph/Pages/InclusiveFinance/NSFI-2022-2028.pdf. [30]

G20 GPFI (2022), *Yogyakarta Financial Inclusion Framework: G20 Financial Inclusion Framework in Harnessing Digitalization to Increase Productivity, Sustainable and Inclusive Economy of Women, Youth and MSMEs*, https://www.gpfi.org/sites/gpfi/files/documents/3.%20G20%20Yogyakarta%20Framework.pdf. [2]

ITU (2022), *The ITU ICT SDG indicators*, https://www.itu.int/en/ITU-D/Statistics/Pages/SDGs-ITU-ICT-indicators.aspx. [24]

MOPFI (2020), *Myanmar Financial Inclusion Roadmap 2019–2023*, https://www.uncdf.org/article/5612/myanmar-financial-inclusion-roadmap-20192023. [29]

Morgan, P. (2019), *Determinants and Impacts of Financial Literacy in the Lao PDR*, ADBI Working Paper 928; Tokyo: Asian Development Bank Institute, https://www.adb.org/publications/determinants-and-impacts-financial-literacy-lao-pdr. [16]

OECD (2023), *A Digital Financial Literacy Strategy for Portugal*, https://www.oecd.org/finance/financial-education/a-digital-financial-literacy-strategy-for-portugal.htm. [36]

OECD (2022), *2022 Updated G20/OECD High-Level Principles on SME Financing*, https://www.oecd.org/cfe/smes/2022-Update-OECD-G20-HLP-on-SME-Financing.pdf. [40]

OECD (2022), *Financial planning and financial education for old age in times of change; OECD Finance and Business Policy Papers*, OECD Publishing, https://doi.org/10.1787/e1d4878e-en. [41]

OECD (2022), *OECD/INFE Guidance on Digital Delivery of Financial Education*, https://www.oecd.org/financial/education/infe-guidance-on-digital-delivery-of-financial-education.htm. [10]

OECD (2022), *OECD/INFE Toolkit for Measuring Financial Literacy and Financial Inclusion*, https://www.oecd.org/financial/education/2022-INFE-Toolkit-Measuring-Finlit-Financial-Inclusion.pdf. [21]

OECD (2022), *The Impact of the COVID-19 Pandemic on Financial Consumers in Asia*, https://www.oecd.org/financial/education/the-impact-of-the-covid-19-pandemic-on-financial-consumers-in-asia.htm. [9]

OECD (2022), *Updated G20/OECD High-Level Principles on Financial Consumer Protection*, OECD, Paris, https://www.oecd.org/finance/financial-education/high-level-principles-on-financial-consumer-protection.htm (accessed on 4 March 2023). [7]

OECD (2021), *G20/OECD-INFE Report Navigating the Storm: MSMEs' financial and digital*, https://www.oecd.org/financial/education/navigating-the-storm-msmes-financial-anddigital-competencies-in-covid-19-times.htm. [43]

OECD (2021), *G20/OECD-INFE Report on Supporting Financial Resilience and Transformation through Digital Financial Literacy*, https://www.oecd.org/finance/financial-education/supporting-financial-resilience-and-transformation-through-digital-financial-literacy.htm. [1]

OECD (2020), *OECD/INFE 2020 International Survey of Adult Financial Literacy*, https://www.oecd.org/financial/education/oecd-infe-2020-international-survey-of-adult-financial-literacy.pdf. [15]

OECD (2020), *OECD/INFE survey instrument to measure the financial literacy of MSMEs*, https://www.oecd.org/financial/education/2020-survey-to-measure-msme-financial-literacy.pdf. [34]

OECD (2020), *Recommendation of the Council on Financial Literacy, OECD/LEGAL/0461*, https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0461. [6]

OECD (2019), *Smarter financial education: key lessons from behavioural insights for financial literacy initiatives*, https://www.oecd.org/financial/education/smarter-financial-education-behavioural-insights.pdf. [42]

OECD (2018), *G20/OECD INFE Policy Guidance on Digitalisation and Financial Literacy*, http://www.oecd.org/finance/G20-OECD-INFE-Policy-Guidance-Digitalisation-Financial-Literacy-2018.pdf. [8]

OECD (2018), *OECD/INFE Core competencies framework on financial literacy for MSMEs*, https://www.oecd.org/finance/financial-education/OECD-INFE-core-competencies-framework-on-financial-literacy-for-MSMEs.pdf. [38]

OECD (2017), *G20/OECD INFE Report on ensuring financial education and consumer protection for all in the digital age*, https://www.oecd.org/daf/fin/financial-education/G20-OECD-INFE-Report-Financial-Education-Consumer-Protection-Digital-Age.pdf. [11]

OECD (2016), *OECD/INFE International Survey of Adult Financial Literacy Competencies*, OECD, http://www.oecd.org/daf/fin/financial-education/OECD-INFE-International-Survey-of-Adult-FInancial-Literacy-Competencies.pdf. [17]

OECD (2012), *High-level Principles on National Strategies for Financial Education*, https://www.oecd.org/daf/fin/financial-education/OECD-INFE-Principles-National-Strategies-Financial-Education.pdf. [12]

OECD (forthcoming 2023), *OECD/INFE 2023 International Survey of Adult Financial Literacy.*. [22]

OECD (forthcoming 2023), *OECD/INFE Survey Instrument to Measure Digital Financial Literacy*. [35]

OJK (2022), *National Financial Literacy and Inclusion Survey (SNLIK)*, https://www.ojk.go.id/iru/BE/uploads/policy/files/file_7c285f78-94ff-4042-9e30-65dc303eead2-05122022104906.pdf. [18]

OJK (2021), *2021 – 2025 National Strategy on Indonesian Financial Literacy (SNLKI)*, https://ojk.go.id/en/berita-dan-kegiatan/publikasi/Documents/Pages/National-Strategy-on-Indonesian-Financial-Literacy-%28SNLKI%29-2021---2025/National%20Strategy%20on%20Indonesian%20Financial%20Literacy%20%28SNLKI%29%202021%20%E2%80%93%202025.pdf. [26]

Statista (2023), *Digital literacy index in Indonesia*, https://www.statista.com/statistics/1337349/indonesia-digital-literacy-index-by-type/#:~:text=According%20to%20a%20survey%20in,2020%20to%203.54%20in%202022. [25]

World Economic Forum (2022), *ASEAN Digital Generation Report: Digital Financial Inclusion*, [14]
https://www3.weforum.org/docs/WEF_ASEAN_Digital_Generation_Report_2022.pdf.