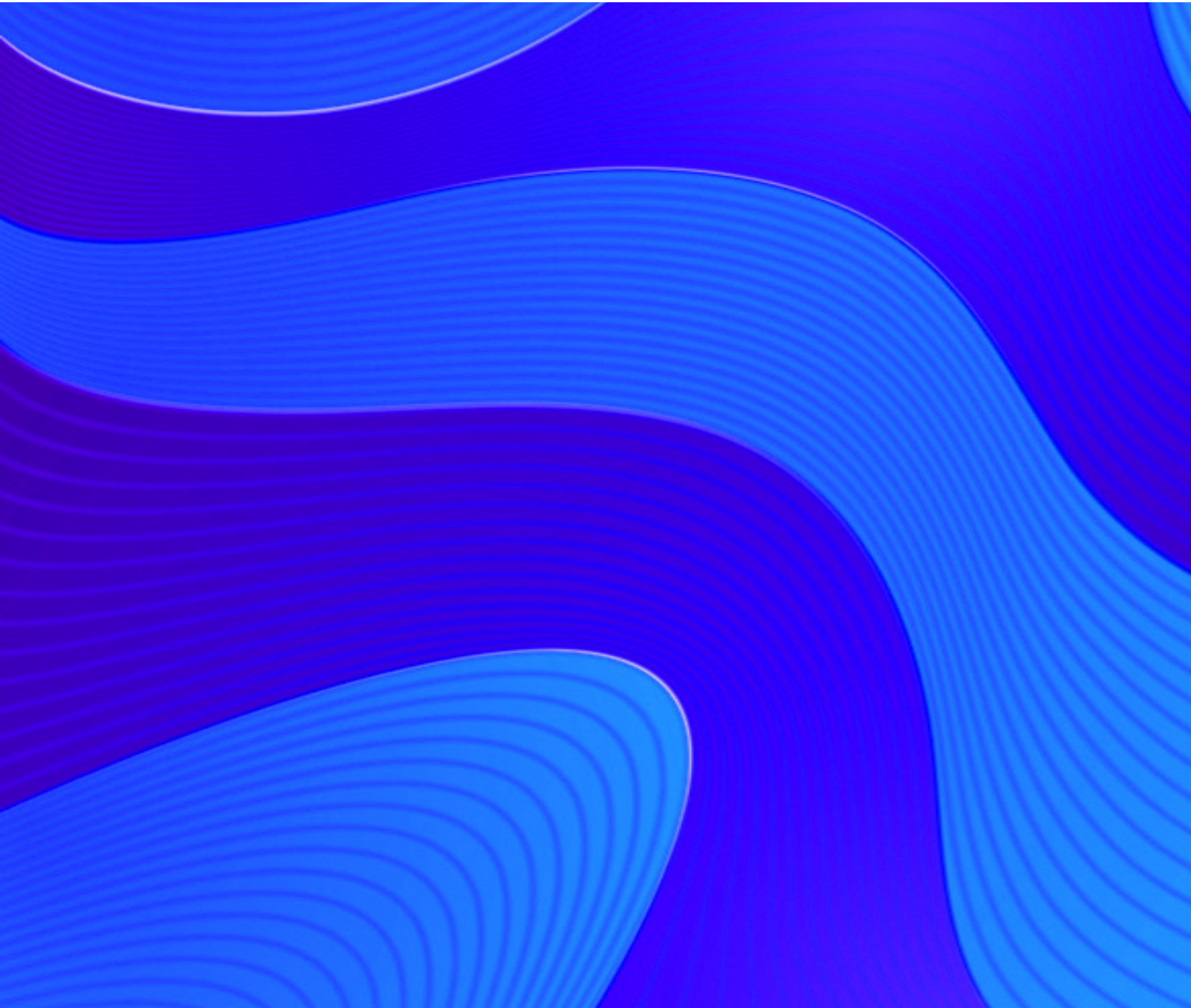


G20/OECD-INFE Report on supporting financial resilience and transformation through digital financial literacy



G20/OECD-INFE Report on supporting Financial Resilience and Transformation through Digital Financial Literacy



Please cite this publication as:

OECD (2021), *G20/OECD-INFE Report on supporting financial resilience and transformation through digital financial literacy*, www.oecd.org/finance/supporting-financial-resilience-and-transformation-through-digital-financial-literacy.htm

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

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

Examples and case studies referencing particular firms, financial products or services in this document are for illustrative purposes only, and their inclusion or reference does not constitute or suggest any endorsement by the OECD, the G20, GPFI or their member countries

© OECD 2021

Foreword

The COVID-19 outbreak shed a new light on the need to focus on individuals' and households' financial resilience and enhance preparedness against various shocks. In addition to the fiscal and regulatory measures put in place by governments to support consumers facing financial difficulties, sound money management and planning are crucial elements to support financial resilience. At the same time, the COVID-19 crisis also accelerated the shift towards digitalisation, in financial services, communication and policy responses, with growing risks of digital exclusion. It is therefore important to consider the role of digital tools in addressing the need to support financial resilience.

This report discusses the concept of financial resilience and its relationship with financial inclusion, financial literacy and financial well-being. It then offers a wide range of case studies looking at the role of digital financial education initiatives addressing financial resilience and vulnerability. It concludes by proposing a set of effective approaches describing how the digital financial education programmes can support individual financial resilience and long-term well-being. The effective approaches are consistent with and complement the provisions of the OECD Recommendation on Financial literacy, which was welcomed by G20 Finance Ministers and Central Bank Governors on 9-10 July 2021.

The OECD prepared this report in support of the agenda of the Global Partnership on Financial Inclusion (GPFI) and the Group of 20 (G20) under the G20 Italy Presidency 2021, as well as part of the work of the OECD International Network on Financial Education (OECD/INFE). The OECD is one of the Implementing Partners of the GPFI. This report complements two additional OECD reports prepared for the GPFI: "G20/OECD Report on Lessons Learnt and Effective Approaches to Protect Consumers and Support Financial Inclusion in the Context of COVID-19" and "Navigating the storm: MSMEs' financial and digital competencies in COVID-19 times".

The effective approaches and lessons learnt presented in this report have provided input for the development of the Menu of Policy options for enhancing digital financial inclusion "Digital financial literacy and financial consumer and MSME protection beyond the COVID-19 crisis" developed by the Global Partnership on Financial Inclusion (GPFI).

The report reflects inputs and guidance from GPFI member countries, Implementing Partners, Affiliated Partners and other key stakeholders, and particularly members of the OECD/INFE, via an extensive consultation process. The OECD wishes to acknowledge and thank all those who kindly provided contributions to this report.

Table of contents

Foreword	3
1. Introduction	6
Background	6
Aim and scope	6
2. Financial resilience and digital financial literacy in the context of the COVID-19 pandemic	7
Financial resilience, financial literacy and financial inclusion	7
How the pandemic affected financial resilience	8
How the pandemic pushed for greater digitalisation of financial education	9
3. Beyond resilience: transformation towards greater financial well-being leveraging digital financial literacy	11
Looking beyond financial resilience	11
Leveraging digital delivery of financial literacy	12
4. How digital delivery of financial literacy can support financial resilience and transformation	13
Increase awareness of, support the safe use of, and build trust towards digital financial services	13
Support financially resilient behaviours	14
Budgeting	14
Saving for the short and the long-term	15
Making safe use of credit	16
Addressing financial difficulties and over-indebtedness	16
Choosing financial products	17
Helping consumers avoid becoming victims of financial fraud and scams, especially online	18
Using digital financial literacy to empower vulnerable groups	19
Young people	19
Seniors	20
Women	21
Micro, Small and Medium-sized Enterprises and potential entrepreneurs	22
Migrants and forcibly displaced persons	23
How to make digital financial literacy work when digital access and skills are limited	23
5. Concluding remarks and effective approaches	25
Harnessing the momentum to strengthen long-term financial resilience and well-being	25
Developing a flexible, evidence-based, comprehensive and sustainable framework	26

Harnessing the potential of digital financial literacy tools	27
References	28
Annex A. Sources	34
Annex B. Glossary	35
Annex C. Data tables	36
Tables	
Table 1. Financial resilience	36
Table 2. Financial resilience, by socio-demographics	37
Table 3. Financial resilience and financial inclusion	38
Table 4. Financial resilience and financial literacy	39
Table 5. Financial resilience and financial well-being	40
Boxes	
Box 1. Financial resilience and financial well-being	11
Box 2. E-learning platforms	17

1 Introduction

Background

The COVID-19 pandemic shed a new light on the need to focus on individuals' and households' financial resilience and enhance preparedness against various economic and societal challenges that may arise. In spite of the fiscal and regulatory measures put in place by governments to support consumers facing financial difficulties, sound money management and planning remain crucial elements of any financial strategy to face the consequences of this and future crises. At the same time, the COVID-19 crisis also accelerated the shift towards digitalisation, in financial services, communication and policy responses, with growing risks of digital exclusion. It is therefore important to consider the role of digital tools in addressing the need to support financial resilience.

Aim and scope

The shock on households' finances induced by the COVID-19 pandemic, as dramatic as it is, may represent an opportunity for transformation towards enhanced financial outcomes. Starting from the lessons learned from the crisis, and in the context of the shift towards digitalisation, the report focuses on financial resilience, not so much as maintaining or rebuilding a previous state, but rather on the opportunity to push for transformation towards enhanced financial inclusion and resilience, aiming at ultimately supporting greater financial well-being.

To do so, this report discusses the concept of financial resilience and its relationship with financial inclusion, financial literacy and financial well-being. It then offers a wide range of case studies looking at the role of digital financial education initiatives addressing financial resilience and vulnerability. It concludes by proposing a set of effective approaches based on the lessons learnt from the case studies in ensuring that the digital delivery of financial literacy programmes sustains individual financial resilience and long-term well-being. The effective approaches are consistent with and complement the provisions of the OECD Recommendation on Financial literacy, which was welcomed by G20 Finance Ministers and Central Bank Governors on 9-10 July 2021.

The report covers both G20 and non-G20 economies, including low and middle-income countries whenever possible, also thanks to the wide membership of the OECD/INFE in over 130 countries and economies. The report builds on a wide range of sources based on the work of the OECD/INFE, as well as on desk research. Sources are listed in Annex A.

2 Financial resilience and digital financial literacy in the context of the COVID-19 pandemic

The COVID-19 crisis highlighted the extent to which job losses, income reductions, and uncertainty can be detrimental to household finances. At the same time, the pandemic accelerated the shift towards digitalisation in a wide range of domains, including in digital financial service and in the delivery of financial education. Definitions of main terms and concepts used in the report are included in Annex B.

Financial resilience, financial literacy and financial inclusion

Financial resilience can be thought of as the ability of individuals or households to resist, cope and recover from negative financial shocks. Such negative financial shocks can result from various unexpected events, including those related to employment, health, changes in family composition, damage to household possessions, or other large unexpected expenses (Salignac et al., 2019^[1]; McKnight, 2019^[2]; McKnight and Rucci, 2020^[3]).

At an individual level, financial resilience depends on the availability of appropriate resources and the ability to mobilise them to face a negative financial shock. Having sufficient income and savings is necessary not only to meet the cost of living expenses and provide for long term needs, but also to weather unexpected shocks and cope with emergencies. Access to affordable credit can be a way to cope with a negative shock in the absence of sufficient financial resources or other insurance mechanisms, but an excessive level of debt puts significant constraints on household resources and reduces resilience to future financial shocks (OECD, 2019^[4]). The ability to avoid losing financial resources from fraud/scams attempts can also support financial resilience.

In addition, financial resilience depends on having access to instruments to build such resources, including adequate levels of financial inclusion and financial literacy. Financial inclusion can be considered as an enabling factor for financial resilience, as it allows individuals to set aside and manage financial resources in a safer way with respect to informal and unregulated financial channels, and to engage in effective saving, borrowing and insurance behaviours.

Financial literacy, defined as a combination of awareness, knowledge, skills, behaviours and attitudes, is also crucial to build the resources needed to cope with financial shocks and to support financially resilient behaviours around budgeting, saving, making safe use of credit and developing other savvy strategies to manage risk. People need to have adequate knowledge, skills and attitudes to develop budgeting strategies, avoid falling into debt traps, make plans and follow them, anticipate future needs and possible unexpected expenses, and choose insurance and credit according to their needs and circumstances. People should also diversify their investments, in order to avoid losing all resources in the face of a single negative event. Awareness about common financial fraud and scams can also help avoiding becoming victim, under an adequate financial consumer protection framework.

External factors can also contribute to financial resilience, such as having a support network through family, friends and the broader community. Moreover, policy and institutional arrangements at the national level have an impact on households' financial resilience. Depending on the degree of coverage, the level of benefits and other national circumstances, education, health care, pension systems and social protection system more broadly provide a safety net and in kind services that reduce the need for families to plan and save individually for many short- and long-term expenses connected to education, health and retirement (Jappelli, 2010^[5]; McKnight, 2019^[2]). The availability of sound financial consumer protection frameworks, and of reliable information, education and advice make it easier to make financial plans, put in place formal coping strategies, and reduce the risk of falling victim of financial fraud (OECD, 2020^[6]; OECD, 2020^[7]). A stable economic and financial landscape further facilitates these tasks.

In turn, greater individual and household resilience can contribute to higher-level goals both at micro and aggregate level. For individuals, financial resilience matters not only per se, but also as a key component of the broader concept of financial well-being (see Box 1), and a lack of financial resilience can have a range of consequences, including on mental health. Moreover, collective financial resilience of individuals and households can contribute to a country's economic resilience and overall economic development.

The OECD/INFE 2020 International Survey of Adult Financial Literacy offers the opportunity to look at the relationship between financial resilience, financial literacy and financial inclusion, including across a range of population subgroups, before the crisis. The tables included in Annex C provide a summary of several indicators related to financial resilience before the pandemic. They highlight that women, young people, individuals who attained at most upper secondary education (high school) and individuals unemployed or out of the labor force were particularly likely to find themselves in situations of high vulnerability. The data also support the hypothesis that financial inclusion and financial literacy can be considered as enabling factors for financial resilience.

How the pandemic affected financial resilience

The restrictions imposed by the pandemic had enormous effects on global economies and on household finances. Surveys conducted in various G20 and non-G20 countries showed that the COVID-19 crisis primarily affected households' financial resilience through job and income losses (ADBI, 2020^[8]; Comitato per l'educazione finanziaria, 2020^[9]; Galicki, 2020^[10]; Bank of Italy, 2021^[11]; FCAC, 2021^[12]; Bundervoet, Dávalos and Garcia, 2021^[13]).

As a consequence, many households experienced financial difficulties. A survey conducted in OECD countries reported that close to one-third of respondents experienced at least one of the following financial difficulties since the start of the pandemic: failed to pay a usual expense; took money out of savings or sold assets to pay for a usual expense; took money from family or friends to pay for a usual expense; took on additional debt or used credit to pay for a usual expense; asked a charity or non-profit organisation for assistance because they could not afford to pay for a usual expense; went hungry because they could not afford to pay for food; lost their home because they could not afford the mortgage or rent; or declared bankruptcy or asked a credit provider for help (OECD, 2021^[14]). Similar results were found in national studies conducted in Australia, Italy, New Zealand, the UK and the US and in a range of low and middle income countries (Thomsen et al., 2020^[15]; Comitato per l'educazione finanziaria, 2020^[9]; Galicki, 2020^[10]; Carman and Nataraj, 2020^[16]; Waters et al., 2020^[17]; ADBI, 2020^[8]; Bundervoet, Dávalos and Garcia, 2021^[13]). At the same time, some households responded by increasing their savings, because of limited consumption possibilities during lockdown periods and/or for precautionary motives (Dossche and Zlatanov, 2020^[18]; Gebauer, Ouvrard and Thubin, 2021^[19]; Christelis et al., 2020^[20]).

In addition to the immediate impact on financial resources, the crisis also affected financial resilience in more indirect ways, by increasing levels of uncertainty, by making it more difficult to access informal support through family friends and the broader community, and by increasing feelings of stress and anxiety (MAPS, 2020^[21]; FCAC, 2021^[12]; Ranta, Silinskas and Wilska, 2020^[22]; Bond and D'Arcy, 2020^[23]).

To a large extent, the crisis affected low-income people, who were already in a financially fragile situation, with the consequence of increasing inequalities. Low income households are in a particularly vulnerable position because they are more likely to work in shut-down sectors, less able to work from home, and because they spend a higher proportion of income on essentials, they have less capacity to absorb an income shock (MAPS, 2020^[21]; Waters et al., 2020^[17]; Xu et al., 2021^[24]; Bundervoet, Dávalos and Garcia, 2021^[13])

Youth and low-skilled workers have been significantly more likely to lose their jobs, and have also found it hard to transition back into employment (Bundervoet, Dávalos and Garcia, 2021^[13]; OECD, 2021^[14]). Women have faced high risks of job and income loss, because of their already weaker labour position with respect to men, and also because they make up a large share of employment in many of the industries most immediately affected by COVID-19, such as retail, accommodation, and food and beverage service activities (OECD, 2020^[25]; MAPS, 2020^[21]). In developing economies, women have been negatively affected by shocks both on the supply side (e.g. from confinement measures forcing factory closures) and on the demand side (e.g. with the forced closure of retail stores) in sectors such as the garment industry, where most industry workers are women (Ishty, 2020^[26]). The pandemic also heavily affected people in occupational categories with lower job security, such as the self-employed, those working variable hours, or in the gig economy (Bank of Italy, 2021^[11]; MAPS, 2020^[21]; Thomsen et al., 2020^[15]). Renters, as opposed to homeowners, are often cited among the groups most negatively impacted by the COVID-19 pandemic (Thomsen et al., 2020^[15]; MAPS, 2020^[21]).

Workers and business owners in different industries have been differentially impacted. The unequal impact of the crisis across sectors also marks one of the main differences with previous crises, creating pockets of new vulnerable groups. In OECD countries, service sectors requiring close proximity between consumers and producers or between large groups of consumers, including hospitality services, leisure activities and cross-border travel, were severely impacted (OECD, 2021^[27]). In developing countries, workers in manufacturing, commerce, and other services have been more likely to stop working relative to those in agriculture (Bundervoet, Dávalos and Garcia, 2021^[13]). Impact on businesses and workers also varied by business size. SMEs have often been more affected than large firms, because they are overrepresented in the sectors most affected by the crisis and they are typically more financially fragile, have smaller cash buffers, and have weaker supply chain capabilities than their larger counterparts, which makes them less resilient to crises (OECD, 2021^[28]).

In emerging and developing economies, many households have been impacted also by a reduction in global remittances, induced by the business closures and disruption in migration flows brought about by the pandemic (European Commission, 2020^[29]; World Bank, n.d.^[30]; ADBI, 2020^[8]). At the same time, remittances have increased in some countries during the pandemic, also thanks to digital channels, allowing many families in home countries to maintain their financial resilience.¹

How the pandemic pushed for greater digitalisation of financial education

The COVID-19 crisis accelerated the shift towards greater digitalisation in all domains, including financial services, and financial information, education and advice.

The lockdowns and the containment measures implemented in many economies worldwide led many consumers to reduce the use of cash and increasingly use digital financial services and transact online, in some cases for the first time.² Digital financial services have also allowed governments to disburse funds

¹ The impact of the COVID-19 pandemic on the remittances market will be discussed in a forthcoming International Fund for Agricultural Development (IFAD) / World Bank report.

² The impact of COVID-19 on household digital financial inclusion will be discussed in the forthcoming World Bank report entitled "COVID-19 and Digitalization: Impact on Financial Inclusion, New Emerging Opportunities and Risks".

to those in need quickly and effectively, and allowed many households and firms to rapidly access online payments and financing (IMF, 2020^[31]; McKinsey, 2020^[32]). At the same time, financial fraud and scams online have grown significantly during the pandemic. All this meant that consumers, and especially the most vulnerable, have needed to understand the benefits and risks of digital financial services, how to make online transactions safely, and ways to identify and financial fraud and scams online.

As a result of the COVID-19 related restrictions and of the development in the financial marketplace, many governments also shifted the delivery of their financial education messages and programmes on line or via other digital tools. In the context of the COVID-19 pandemic, digital delivery has become almost the only way in which national authorities have been able to continue to disseminate financial education messages, especially among people experiencing financial difficulties. A survey conducted among members of the OECD/INFE in September 2020 indicated that many countries and authorities have made significant efforts to shift their financial education online during the COVID-19 crisis, and these approaches are likely to continue to be used in the future.

3 Beyond resilience: transformation towards greater financial well-being leveraging digital financial literacy

Looking beyond financial resilience

As the COVID-19 crisis is imposing significant health, economic, financial and social costs, much of the policy attention has been focused on maintaining the financial resilience of households and of entire economic systems, including through short-term relief measures. As the crisis unfolds, policy makers are also considering exit strategies and looking for opportunities to “build back better”. In this context, it is important to look beyond financial resilience intended as maintaining or rebuilding a previous state, and to focus on policy approaches aiming at long-term and higher-level goals, such as transformation towards enhanced financial inclusion and resilience, ultimately supporting greater individual financial well-being. Box 1 discusses the importance of financial well-being and its relationship with financial resilience.

Box 1. Financial resilience and financial well-being

The OECD developed a broad international framework for defining and measuring financial-wellbeing, which allows users to discuss financial well-being in a consistent way, whilst maintaining flexibility with respect to similar frameworks developed at the national level (OECD, 2019^[33]). The OECD financial well-being framework takes into account objective and subjective elements of financial well-being, including in particular:

- Objective factors contributing to resilience, including disposable income, personal wealth and financial control
- Subjective evaluation of day-to-day financial life and longer-term financial plans

The OECD financial well-being framework also acknowledges the importance of a wide range of factors associated with, or supporting, financial well-being, such as knowledge and skills, including adaptability and self-control; physical and mental health; support of friends, family and the broader community; and economic stability and growth.

By being broad, the OECD framework covers the main elements of national financial well-being frameworks (Guthrie et al., 2017^[34]; CFPB, 2015^[35]) and international efforts aimed at studying closely related concepts, such as financial health (Ladha et al., 2017^[36]; UNSGSA, 2021^[37]). In particular, this framework covers several elements that are relevant for financial resilience, including financial resources (income and wealth) and being in control of one’s own finances, including the ability to absorb financial shocks. Several national frameworks on financial well-being implicitly or explicitly consider financial resilience as an element of financial well-being (OECD, 2019^[33]).

Data from the OECD/INFE 2020 survey confirm that financial resilience and financial wellbeing are closely related. Table 5 shows that being able to cover a major expense, equivalent to one month of income, without borrowing or asking family/friends to help is related to higher financial well-being. Similarly, people who reported being able to cover their living expenses, without borrowing or moving house, if they lost their main source of income, for a longer period of time also indicated higher levels of financial well-being.

Leveraging digital delivery of financial literacy

In order to build financial resilience and enhance financial well-being, governments can put in place various policy approaches, including support to households to accumulate savings, debt relief measures, and more indirectly through policies that foster social protection, financial inclusion, financial literacy, and financial consumer protection (McKnight, 2019^[2]; Moore et al., 2019^[38]).

This report focuses on policies and interventions that aim at strengthening financial literacy in areas that are particularly relevant for financial resilience and well-being, and in particular on those that do so via digital means and tools. In the current context, and even if traditional of delivery methods remain important, digital delivery of financial literacy has the potential to help individuals ensure greater financial resilience, and ultimately support greater financial well-being, for a number of reasons (OECD, 2020^[39]):

- **Increasing use of digital tools during the pandemic and beyond.** Digital approaches are becoming the predominant form of communication and financial education delivery in the context of increasing digitalisation, and that they are likely to continue to be used in the future
- **Increasing scale in a cost effective way.** Digital delivery has the potential to increase reach, scale up interventions and make them available to a wider audience, often at a lower cost per user than traditional channels
- **Tailoring to different needs.** Digital delivery offers great opportunities in terms of flexibility and ability to adapt to different needs and preferences, meaning that content and format can be tailored to the needs of vulnerable groups
- **Taking advantage of behaviourally-inspired features.** Digital financial literacy can incentivise positive financial behaviours and encourage behaviour change, thereby facilitating individuals to engage in behaviours that build financial resilience, thanks to behaviourally-inspired features that can be easily embedded in digital tools, such as reminders, comparison tools, features to set personal goals, features to “learn by doing” (e.g., simulations), and so on.
- **Conducting monitoring and evaluation.** Digital tools allow policy makers and programme designers to closely monitor use and views of financial education resources, meaning that it is relatively easy to tailor and update the content and format to meet the needs of groups most in need.

At the same time, it is important to take into account a number of challenges to make sure that digital delivery of financial literacy is effective in supporting financial resilience. In particular, limited digital skills and the lack of access to digital infrastructure (including broadband internet or smartphones) may limit the extent to which many people may actually benefit from digital tools. People who are more likely to be in a financially vulnerable situation, such as low-income people or the elderly, may also be more likely to lack digital access and skills. The next section will describe examples of how digital delivery of financial literacy support financial resilience in practice.

4

How digital delivery of financial literacy can support financial resilience and transformation

Building on the challenges for financial resilience and transformation identified in Chapter 2, this chapter looks at the role of digital financial education initiatives aimed at supporting the safe use of digital financial services, strengthening resilient behaviours, supporting financial well-being and addressing the needs of groups at higher risk of financial vulnerability. Governments and public authorities are using digital delivery of financial education to address specific behaviours or combinations of them, including through comprehensive programmes such as e-learning platforms (see Box 2).

The chapter presents a wide range of examples and case studies drawn from both G20 and non-G20 economies, including low and middle-income countries whenever possible. Some of the examples below also discuss evidence about the programme impact and effectiveness, but the majority of interventions described are not currently evaluated and information about their effectiveness is not available.

Increase awareness of, support the safe use of, and build trust towards digital financial services

Access and use of safe and regulated financial products and services is a key factor to enable individuals to strengthen their financial resilience. To ensure that more people can use and benefit from DFS, it is important to increase awareness of their characteristics, advantages and risks, and offer to citizens the information and tools they need to understand when to trust financial service providers and services.

Governments and public authorities have used digital resources to increase awareness of and support safe use of DFS, through consumer education websites, digital financial education programmes, and through social media campaigns, also leveraging on influencers and stars. In many cases, these initiatives have been tailored to those with limited digital and financial literacy levels, the recently digitally financially included and the least familiar with DFS.

In **Argentina**, the Central Bank (BCRA) in cooperation with the Ministry of Education has 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 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. In Brazil and India, campaigns on the payment system have been implemented on social media with the contribution of digital influencers or movie stars. The **Central Bank of Brazil** has used social media campaigns and cooperated with digital influencers to increase awareness among Brazilians of a new digital payment scheme (Pix). Prior to its launch in November 2020, the central bank produced over thirty videos posted on YouTube and disseminated over a hundred social media posts to explain the technical features of Pix and generate trust in the population at large. This approach and the cooperation with digital influencers allowed the bank to reach 40 million registered users in the month of the launch and

a wide and quick adoption of the innovation. The **Reserve Bank of India** (RBI) designed a social media campaign highlighting the features and benefits of using digital modes of payments, using an Indian film industry celebrity who is RBI's brand ambassador. During the Hong Kong Money Month 2021, the Investor and Financial Education Council (IFEC) worked together with 60 stakeholders in **Hong Kong, China** on the annual campaign with a focus on digital money management and the prevention of digital scams. A series of Facebook talks and workshops were held to discuss the differences between traditional and virtual banks, how Fintech transforms personal investment and money management, etc. to enhance people's understanding of digital financial services.

The **Central Bank of Portugal** has 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). It is delivered on the central bank's websites, Instagram and Twitter pages and also through games developed by the central bank to raise awareness among students in schools. The central bank also cooperated with the Ministry of Education and delivered a webinar for teachers on the precautions required to use digital channels to access financial products and services, in particular to make payments. The central bank also designed and ran on its website and social media two campaigns, on strong customer authentication (two-factor authentication) and new security rules for digital payments and for accessing accounts online, and on new transaction limits on contactless payments.

Awareness on digital payment security and on other features of the financial system can also be promoted via popular instant messaging platforms that can be used also by users with very low digital skills. The **National Bank of Ukraine** set up a group on the popular instant messaging application *Viber* via which subscribers receive financial education content in plain language explaining the basics of personal finance management, the different types of financial services and financial institutions, as well as information on consumer rights, payment security, daily quizzes or short questionnaires.

In the **Russian Federation**, the Ministry of Finance has organised over 80 livestream sessions on the social media platform *Odnoklassniki* since the unfolding of the COVID-19 crisis, to educate Russian citizens, among others, on the new risks they faced linked to digital financial services. The Bank of Russia also regularly conducts educational campaigns on social media, as well as on mass media on topics such as countering fraud, psychological manipulation (social engineering), pyramid investment schemes and mis-selling practices. The Bank of Russia also produces videos that are broadcast in multifunctional centres providing public services, post offices, shops, public transport, trains, airports and monitors in various public facilities.

Finally, as more and more citizens go online for the first time due to the COVID-19 crisis, awareness on and safe use of DFS has been integrated in existing financial education programmes. The **Superintendency of Banking, Insurance and Private Pension Fund Administrators of Peru** (SBS) has added safe use of DFS to its distance-learning programme *Finanzas para Ti* as a consequence of the COVID-19 crisis. The programme now covers the adequate use of DFS, fraud prevention, and digital applications for financial decision-making.

Support financially resilient behaviours

This section looks at digital financial education initiatives aimed at strengthening resilient behaviours, including budgeting, saving, and making safe use of credit. While other behaviours are also relevant for financial resilience, the examples presented below focus on areas for which a sufficient number of relevant case studies is available.

Budgeting

Keeping track of money flows, like planning and recording expenses, keeping a budget, making sure income matches or is greater than expenditure is a crucial characteristic of financial resilience. Common

digital financial education examples to support budgeting skills include the use of messages and reminders, than can be customised and personalised, as well as broader communication campaigns.

The use of messaging has proven effective to support budgeting behaviours, and in particular to initiate budgeting behaviours and build confidence to budget among those who do not budget. The **Financial Consumer Agency of Canada** (FCAC) has leveraged targeted instruction, through personalised educational messages and questions to initiate budgeting behaviours among non-budgeters using a third-party mobile app that offered consumers incentives such as loyalty points and rewards. A randomised trial evaluation of its effects showed that the intervention improved knowledge of budgeting among non-budgeters by 10 percentage points, the confidence in budgeting among non-budgeters by 15 percentage points and that it increased the use of budgeting among non-budgeters by 14 percentage points (McLean-McKay and Leigh-Mossley, 2017^[40]). FCAC also created a new online budget planner with the aim of developing a simple and user-friendly tool to help Canadians manage money and debt wisely, and plan and save for their financial future. The online planner was developed using behavioural insights and it is uniquely tailored to each user, aiming to tackle key barriers to creating and following a budget.

Messaging to nudge consumers into action with respect to budgeting behaviour is also undertaken via a mobile app (*Mizaniyati*) developed by the **Moroccan Financial Education Foundation** (*Fondation Marocaine pour l'Education Financière*). In addition, the app contributes to supporting financial inclusion by targeting with a simplified language and different messages those unfamiliar with the (digital) financial system.

In some cases, financial education authorities have designed ad hoc communication campaigns to raise awareness on the importance of budgeting for financial well-being and on the tools created by public authorities. In **Portugal**, the financial supervisors (Central Bank of Portugal, Portuguese Insurance and Pension Funds Supervisory Authority and Portuguese Securities Market Commission) launched a campaign on social media (Facebook) relying on small videos to raise awareness about online tools and content available on the National Plan for Financial Education website (*Todos Contam*), which helps households to make sound financial decisions, like making a budget and building up savings.

Saving for the short and the long-term

Planning and saving are essential in ensuring financial resilience, as a way to create buffers both for emergencies and for the longer term. Typical digital financial education examples to encourage saving include personalised messages and reminders for saving towards a personal goal, or for the long-term/retirement; online retirement income calculators, to facilitate the complex calculations involved in long-term saving decisions and prompt individuals to action; as well as distance courses. More recent examples include the use of interactive apps to encourage retirement savings.

The **Peruvian Financial Superintendency of Banking, Insurance and Pensions (SBS)** designed an app (*Ahorrando Ando* - SBS Savings) that teaches and prompts users to save by establishing specific saving goals. Users can upload a picture representing the object linked to their saving goal, and set the amount and frequency of desired savings. Commitment to a saving goal also underpins a saving behaviour intervention inspired by behavioural economics and developed in **Canada**, by FCAC through an industry-academic-government partnership approach together with Washington University, Social Policy Institute and Intuit. The intervention aims to encourage people to save their tax refund. This is done by asking people to commit to saving before receiving their refund and to consider building an emergency savings fund. Early results show that many people are willing to commit to saving a potential refund and that up to 65% of participants overall were saving a portion of it.

Saving behaviours can also be nurtured through distance learning self-directed classes. In the **United States**, the Consumer Financial Protection Bureau (CFPB) delivers the *CFPB Savings Boot Camp*, a six-step email course with the objective of supporting building up precautionary savings, which provides the foundation users need to start saving incrementally.

Mobile apps can be particularly effective at supporting saving for the long-term when they can be used to access and manage voluntary pensions schemes, and when they include customised financial education content. A mobile app was chosen by the **Mexican Pensions System Regulator, CONSAR**, to increase workers' participation and voluntary contributions in the retirement saving system. The app, *Afore Movil*, includes features to manage the retirement saving account, communicate with or switch providers, and obtain administrative information, and allows the user to set saving goals. The app, together with other digital platforms account for 89% of the voluntary savings transactions and 81% of the amounts saved in 2019. They have been successful in multiplying contributions by a factor of 5.7 between 2013 and 2019 (OECD, 2020^[41]).

In **Thailand**, the Government Pension Fund (GPF) has developed an app that exploits two “digital twins” of the policy holder. The GPF aims to overcome inertia behaviours among users and to achieve a better understanding of the nature of investment choices and returns, and therefore higher contribution levels. The two “digital twins” allow the app to show what would be required in terms of contribution levels and investment plan to achieve the desired amount in retirement, and what will be achieved at retirement if the policyholder followed GPF advice with regards to investment plans and contributions above the default level of 3%.

Making safe use of credit

Credit products, if properly regulated and used by informed consumers, can contribute to financial resilience and well-being by meeting consumers' needs. However, excessive borrowing can lead to consumer detriment; online credit can be of particular concern because of its ease of access to consumers with limited means and because of its higher costs (OECD, 2019^[41]).

Typically, national financial education websites in a large number of countries and economies host educational material on credit of a variety of kinds, from mortgage credit to consumer credit or car loans, as well as digital tools such as repayment calculators.

In addition to educational material on websites and to comparison tools that help consumers understand their capacity to enter into credit agreements and compare offers, just-in-time messages and warnings are used to reach potential consumers of online credit at point of sale and encourage considered credit decisions. For instance, in **Australia**, consumers trying to enter an online payday loan receive a legislated warning statement that advises them of alternatives to payday lending and makes specific reference to the content of the Australian Securities and Investments Commission (ASIC) *MoneySmart* financial education website. The website provides general information to consumers about credit and debt, and includes a specific page on online credit (e.g., payday loans).

In **Hong Kong, China**, the IFEC launched the Debt and Borrowing campaign to reinforce responsible borrowing practices during the COVID-19 pandemic. The campaign provided a digital Borrowing and Debt Calculator, a checklist outlining the key considerations for taking out a loan and choosing a loan provider, plus a series of educational videos offering practical tips on borrowing and debt management.

Addressing financial difficulties and over-indebtedness

Many financial education websites host educational material for those experiencing financial hardship and struggling with unsustainable levels of debt. Most resources point people in difficulty towards debt relief services and advice, and aim at laying the foundations for longer-term financial resilience.

In the **Netherlands**, digital tools play an important role in the implementation of the Dutch Debt Relief Roadmap, a joint initiative among municipalities, businesses and non-for-profit partners. Digital solutions have in particular been chosen to provide information about debt prevention and personal financial management and tailored support to those experiencing financial hardship. The Ministry of Social Affairs, various banks and insurance companies, business and non-governmental organisations can direct those

with financial difficulties to the website *Geldfit.nl*, where users undergo a self-assessment that determines the level of difficulties and the kind of support that is most appropriate. Based on the results, they are provided help from volunteers (in person or digitally), local governments, or directed to additional educational websites, for minor financial problems. Help can be provided to those in financial difficulties via a mobile app, *Fikks*, which allow for users to remain anonymous and be assisted by volunteers (“buddies”) that are e-trained by the National Institute for Family Finance Information (Nibud). The app also gives users an overview of their income and expenses. The app *Fikks* was invented by the ADG group (a large employer offering cleaning and facility services), and its use is free for everyone.

Choosing financial products

Digital tools can be particularly useful to support financial resilience by helping individuals in making considerate purchases and shopping around before buying financial products. Making informed decisions can be particularly relevant for products such as credit, which bind consumers over a period of time and that can have considerable impact on financial resilience in the medium to long-term. Common tools include websites and mobile apps that compare financial products.

In several jurisdictions, public authorities offer consumers digital tools to compare prices and features of financial products and services as part of both financial education and financial consumer protection efforts. Such tools can be included in national financial education websites, as in **Portugal** (by the central bank in relation to payment accounts and by the Securities Market Commission in relation to investments products), **Mexico** (by the Bank of Mexico for credit products), or **Peru** (by the SBS, for savings, credit, insurance and pension funds products). In **Canada**, FCAC provides comparison tools to help consumers better assess features of bank accounts and credit cards as well as a link to a calculator comparing the costs of buying versus leasing a vehicle developed by Innovation, Science and Economic Development Canada. In the **Russian Federation**, the financial education website *vashifinancy.ru* offers calculators on mortgages, emergency loans and car loans; the educational website of the Bank of Russia *Fincult.info* offer its users inflation, deposits and credits calculators.

In other jurisdictions, public authorities have designed mobile apps for this purpose. In **Croatia**, the National Bank developed a mobile application, *mHNB*, to offer a searchable overview of data on the lending conditions of banks in Croatia, enabling users to compare different offers of selected loan types from all credit institutions and the of fees for standardised services related to payment accounts.

Box 2. E-learning platforms

In **Indonesia**, the Financial Services Authority (OJK) developed an online learning platform whose content is organised according to different levels of learning (basic, intermediate, and advanced) and various financial sector-specific topics. Also the SBS in **Peru** developed an e-learning platform, which includes three financial education courses aimed at the young population (on the financial system, duties and rights of financial consumers, and the importance of pension savings).

In **Portugal**, the financial education website *Todos Contam* includes an e-learning platform that hosts a set of lessons and materials on family budgeting, savings and investment, credit, insurance, and on the financial and economic system. It offers video training sessions with synchronised presentation in text format on the main topics covered. The e-learning platform also provides a tool for evaluating financial knowledge in a Moodle environment (free and open source learning management system). After answering the questions associated to each class provided by the platform, users get their score as well as an explanation for the questions in which they did not choose the correct option. This platform has been important to support financial education courses in the workplace developed within the national strategy.

In the **Russian Federation**, the Ministry of Finance adapted to digital delivery its workplace financial education programme, which was developed and launched as a face-to-face programme before the onset of the COVID-19. The programme involved the cooperation of private and state business companies and new partners such as a governmental agency on small industrial towns' development, and the association of employers, among others. In 2020, the Bank of Russia held online lessons on financial literacy for schoolchildren, with 2.9 million views.

Helping consumers avoid becoming victims of financial fraud and scams, especially online

Victims of financial fraud incur immediate damage and loss of resources, but also lose trust in financial services and might reduce their participation in the longer term. For a long time, public authorities in many countries have developed campaigns and websites to raise awareness among consumers of the ways in which digital financial services and digital technologies can expose them to digital crimes and abuse, such as online fraud, phishing, account hacking attacks or personal data breaches. These campaigns have been rapidly deployed, updated and amplified during the COVID-19 pandemic, and their content has often been relayed via other governmental digital resources and websites with information on COVID-19 support.

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 potentially reached over 10 million users.

In **Hong Kong, China** the IFEC launched the “Don't Fall Prey to Online Financial Scams” campaign to highlight the tactics of the more pervasive types of online financial and investment scams and caution the public to guard against them. The campaign included an Anti-scam Online Quiz.

The Bank of **Italy** participates through its financial education website in a nationwide cyber awareness campaign organised by the Italian banking association and the CERTFin – *CERT Finanziario Italiano* (a public-private cooperative aimed at increasing the cyber risk management capacity of financial operators and the cyber resilience of the Italian financial system). Also in Italy, CONSOB developed an edutainment programme, “Finance on stage”, aimed at raising knowledge of fraud schemes and improving the ability of investors to recognize and avoid scams. Since the beginning of the pandemic, this programme has been made available on digital platform and has prompted interaction with the public through a chat function or instant polls.

In **Peru**, the SBS includes fraud prevention on digital channels as part of its e-learning tools and explains the most common forms of fraud that have been identified in the jurisdiction. This takes place through the financial education programme *Finanzas para Ti*, which offers free lectures on financial education to employees in the workplace, to entities interested in receiving training, and to the public.

In **Portugal**, the central bank regularly launches campaigns on cybersecurity and fraud prevention in digital channels, namely during the European Cybersecurity Month (October), in the Internet day and during Christmas time. These campaigns are disseminated through the central bank's websites and social media and consist of several tips to raise awareness on precautions to take when shopping online and on personal data protection. The Portuguese Securities Market Commission (“CMVM”) launched an investor digital financial campaign focused on digital fraud, promoted on CMVM's social networks (LinkedIn, Twitter and Facebook), and supported by videos and online brochures.

Social media is widely used to relay educational material on frauds and scams and on the protection of personal data, both before and during the COVID-19 pandemic. The **Colombian Financial Superintendence** organised live webinars streamed through its social media pages, with the contribution of retired police officers. **Bank Negara Malaysia** used Facebook to distribute alerts on financial scams, informing consumers on the *modus operandi* of common financial scams and providing tips to avoid becoming victims. The **Spanish National Securities Market Commission (CNMV)** produced videos with practical steps to take to avoid fraud, which have been distributed through social media. The **National Bank of Ukraine** led a digital campaign called “#FraudsterGoodbye” with the contribution of over 60 stakeholders, including the national Cyber Police, commercial banks, payment systems, mobile operators, to raise awareness on frauds linked to cashless payments and online banking.

Using digital financial literacy to empower vulnerable groups

This section presents examples of digital financial education tools addressing the needs of groups at risk of financial vulnerability. The pandemic increased the vulnerability of particular groups, including women, young people, elderly people, informal workers, migrants and forcibly displaced people and MSMEs. The examples presented below cover vulnerable groups for which a sufficient number of relevant case studies is available.

Young people

Young people tend to display lower levels of financial literacy than working-age adults. As they transition from study to work, they often find themselves in precarious occupations and in situations of financial fragility. As such, they are being heavily affected by the COVID-19 crisis.

Common examples of digital tools to help young people set the foundations of solid financial skills and build long-term financial resilience include resources to support teaching financial education in the (virtual) classroom and beyond. Increasingly, public authorities and other stakeholders develop games and other interactive tools to allow young people to learn by doing on budgeting, saving, investing and other topics, with the expectation that this will help them develop greater financial resilience.

There are several examples of websites developed as repositories of digital financial education resources to be used by teachers and educators. In **Australia** digital resources are offered through *Moneysmart* designed by ASIC. In **New Zealand**, the Commission for Financial Capability (CFFC) makes available online a wide range of resources that support the delivery of *Sorted in Schools*, a programme developed to be delivered in the classroom as part of the school curriculum. The Bank of **Italy** has developed thematic paths for secondary school students in cooperation with the Ministry of Education, as well as an interactive website for the exploration of the educational booklets for schools of all grades, to support teaching in the classroom, whether in face-to-face or remotely, and to assign homework. Also in Italy, CONSOB has developed educational paths for secondary school students, with the patronage of the Regional School Offices, “Finance a story to tell... from bartering to bitcoin”, in order to support teachers in the selection of digital tools (such as a game on financial investment) and digital materials to be used during lessons. In **Spain**, as part of the national strategy, Bank of Spain and the Securities Commission (CNMV), provide guides for students and teachers, games and activity workshops on a dedicated website (*Geepeese*). This website and its resources provide complementary support to the school programme and aim to provide guidance, not only to pupils but also to their parents. In **Portugal**, the National Plan for Financial Education website (“*Todos Contam*”) provides a digital library solely dedicated to youth including videos, workbooks, games, tips and theatre performances.

Digital delivery also allows designing financial literacy interventions in which young people experience in a controlled environment the financial decisions that they will make in their (early) adult years. These resources make use in particular of gamification and simulations, which can enhance students’ learning

compared with non-game conditions and can incorporate behavioural insights (Clark, Tanner-Smith and Killingsworth, 2016^[42]).

In **Italy**, CONSOB designed a game to be used in schools in combination with face-to-face delivery with the objective of increasing awareness of behavioural biases affecting investment choices, while teaching the functioning of financial markets. The Bank of Italy designed a nationwide educational trivia quiz on the features and risks of electronic payment instruments for middle and high school classes. In **Luxembourg**, the financial markets commission designed a digital tool (*FinGol: The Financial Game of Life*) that through a chatbot simulates an adult's financial life, looking for a job, managing a budget, etc., offering associated educational material, for example on the features of credit and its possible risks. In **Peru**, the SBS created a game called *Grandes Ahorradores* (Big savers) to promote sound money management and saving habits among primary students. The game allows players to set savings goals and provides reminders and tips to reach them, while allowing players to use the money and simulate spending and saving. In the **Russian Federation**, the Ministry of Finance organised an online marathon, quests and tests on financial literacy at major digital educational platforms and portals (*Dnevnik, Ya-class*), as well as a digital financial literacy championship among school teams in cooperation with regional administrations.

In **Sweden**, the financial market authority *Finansinspektionen* and the Museum of Economy, offer a mobile app inspired by a physical game, the Coin Cabinet, to be used by children (8-10); the game involves trying different jobs, managing and taking responsibility for the corresponding salary and manage a budget (food, accommodation, etc.).

Digital delivery is also used in many economies to target teachers, encourage teaching of financial education in schools and support effective pedagogy. In Argentina, the BCRA in cooperation with state governments and ministries of education, organises virtual trainings for teachers; the modules last twelve weeks and allow teachers share their experiences of teaching financial education in the classroom, in addition to providing training on financial literacy topics.

Young people are also targeted by initiatives that seek to develop their business skills. In the **United Arab Emirates**, Khalifa Fund – an independent socio-economic development agency of the Government of the UAE - runs an annual virtual summer camp for school students between 10 and 18 years old. The Venturist Entrepreneurship Summer Camp provides an opportunity for youth to develop new financial and business skills, and to develop an understanding on what it takes to become an entrepreneur. One hundred students participated in the summer 2020 camp and another 100 are expected to participate in the upcoming 2021 camp.

In the context of the COVID-19 pandemic and distance learning, digital delivery of financial education has also proven particularly useful as a rapid response to deliver support to parents becoming increasingly involved in their children's education. In **Ireland**, the CCPC launched a Parents' Hub on their website for secondary school students and teachers, moneymatters.ccp.ie, with videos and links to activities on key financial education topics. Similarly, in **Peru** the SBS set up a website with financial education resources aimed at parents, such as digital cartoons and tales. In the **Russian Federation**, the Ministry of Finance organised webinars for parents "Classmates" with national media and experts on the social network platform *Odnoklassniki*. In 2020, the Bank of Russia organized online lessons on financial literacy for schoolchildren and webinars on investment literacy for students (and adults).

Seniors

Seniors tend to have lower take up of digital technologies and display lower digital literacy than working-age adults, as evidenced by international surveys (OECD, 2019^[43]). This puts them in a vulnerable position with regards to the use of digital financial services and to the fruition of digital financial literacy initiatives (OECD, 2020^[44]). Furthermore, the effects of the pandemic and its socio-economic consequences might contribute to the increased vulnerability of elderly people, together with low financial and digital literacy, and possibly declining cognitive abilities (OECD, 2020^[45]).

Public authorities and other stakeholders in various countries and economies have started providing seniors with basic skills to use digital financial services and protect themselves from online fraud, as a way to improve their financial well-being. This hinged on the use of simple digital solutions (as in the example of Brazil and the use of instant messaging platforms mentioned above), the support of external organisations with an in-depth knowledge and proximity with seniors (as in the examples below from Canada and Germany), to the use of traditional media (as in Hong Kong, China).

In **Quebec, Canada** the *Autorité des Marchés Financiers* started to offer conferences through webinars and promoted them to seniors through three associations. In **Germany**, the financial market supervisor (BaFin) participates in webinars organised by a NGO (Digital Kompass) to provide training to enhance the digital financial literacy of elderly consumers. During these events, which are facilitated by an NGO representative, seniors can discuss about developments in retail financial markets that affect them and obtain answers from BaFin experts.

In **Finland**, Finance Finland - the industry body representing the financial sector - launched a pilot with the City of Helsinki to help older people pay their bills online and use different paying methods. Finance Finland also cooperated with the Finnish Digital and Population Data Services Agency and the Finnish senior citizens' association to educate elderly people about the use of digital financial channels and support them with their finances during retirement.

In **Hong Kong, China**, the Investor and Financial Education Council (IFEC) developed *Listen to Money Matters in Retirement*, to address the financial literacy needs of elderly people and retirees with reading difficulties. The programme consists of eight audio articles, produced in cooperation with Metro Radio, which have been broadcast and made available on a dedicated webpage and on social media. The IFEC also collaborated with elderly centres and academic institutions during the pandemic to organise seminars and webinars on digital financial services for retirees to strengthen their confidence and knowledge towards the use of e-wallets and cybersecurity.

In **Malaysia**, the Securities Commission (MSC) took steps to facilitate the digital financial inclusion of seniors during the COVID-19 crisis. Commencing in December 2020, the MSC delivered monthly webinars targeting seniors with internet access and ability to go online, focused on digital access to capital market products and services and digital fraud and scam awareness.

In **Portugal**, the Dr. António Cupertino de Miranda Foundation, in partnership with the central bank, developed a set of webinars to deepen seniors' knowledge and skills when using digital financial services and to create precautionary habits against fraud.

In the **Russian Federation**, the Ministry of Finance relied also on young people from a volunteer programme to help elderly citizens avoid digital fraud and scams during the COVID-19 pandemic. In 2020, the Bank of Russia also held financial literacy events for seniors, and online lessons on financial literacy for seniors and social workers held in social service centers.

Women

Women tend to be more likely to experience financial vulnerability compared to men before the COVID-19 crisis, and have been particularly hit by its economic consequences. In the light of these potential or actual vulnerabilities, a number of financial education authorities have designed interventions to increase the financial resilience of women in difficult financial conditions, or to help prevent vulnerability among women in general.

In **Argentina**, the BCRA in coordination with the National Securities Commission, and the Ministry of Economy and with the support of the Ministry of Women, Gender and Diversity, have developed a self-directed virtual course delivered through the virtual platform of the National Institute of Public Administration (INAP). It addresses gender perspectives in the economy and finance, the financial system and the role of financial supervisors. It has a duration of twelve hours and is mainly aimed at women and

LGBTTIQ (Lesbian, Gay, Bisexual, Transsexual, Transgender, Intersex, and Queer), who are working in the public administration.

The **Reserve Bank of India** has co-ordinated with the National Rural Livelihood Mission, an agency focusing on livelihoods and skill generation for rural women, to share financial education messages. The messages, available in regional and local languages, have been disseminated widely through various platforms, including instant messaging apps such as WhatsApp.

As the COVID-19 pandemic was unfolding, the **Bank of Italy** launched two financial education programmes for women organised in collaboration with women associations and the national financial education committee, aimed at women in conditions of economic fragility and at the female staff of a public hospital. Both initiatives are specifically designed to respond to the challenges posed by the pandemic, and focused on issues that emerged as particularly relevant during the crisis (i.e. digitalisation of financial services, risk of scams and frauds, financial planning aimed at increasing consumers' resilience). Both initiatives were delivered digitally, and included videos, games and tests.

In **New Zealand**, the *Sorted at Work* seminars offered by the CFFC (described in Box 2) offer dedicated sessions for women focusing on financial situations women are likely to face. The sessions aim to help women develop knowledge, attitudes and beliefs that increase positive financial behaviours and to give women confidence to take action to secure their financial future.

Micro, Small and Medium-sized Enterprises and potential entrepreneurs

In many countries and economies, owners of micro, small and medium-sized enterprises (MSMEs) and potential entrepreneurs benefit from dedicated strategies on financial literacy with the objective of increasing their financial resilience, including through digital initiatives: these include websites with practical tools to support business creation and development, as well as mobile apps. In many jurisdictions, existing efforts have been complemented by new initiatives designed as a response to the COVID-19 crisis.

In **France**, the central bank has designed a website (*mesquestionsdentrepreneur.fr*, “my questions as an entrepreneur”) to support existing and potential entrepreneurs with adapted financial education resources and digital tools to support business creation and development, with a view to increasing the financial resilience of targeted entrepreneurs. It includes guides on topics such as effectively calculating selling prices and adequately insuring business operation, and it also offers guidance on administrative and legal procedures.

Also in **Morocco**, the Financial Education Foundation 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 better manage business finances, and navigate tax issues. During the COVID-19 crisis, the Foundation stepped up its digital initiatives to support MSMEs with social media campaigns, videos, and interviews with experts on topics linked to digital financial services and managing a company in times of crisis.

Similarly, in **Portugal**, the website of the National Plan for Financial Education has a dedicated area to support entrepreneurs who intend to launch a company. The information and tips available in this area provide an overview of what entrepreneurs need to be aware of before starting a business, such as the legal procedures required to set up a company and the different forms of financing they can benefit from. In addition, this area also includes a section aimed at managers whose firms are facing difficulties, in which a set of tips is available to help them overcome hard times.

Some countries developed dedicated training courses. To support micro and small businesses and help them recover from the COVID-19 crisis, the **Bank of Italy** partnered with business associations to launch a financial education initiative in 2021/2022, specifically aimed at teaching financial and entrepreneurial skills to run a small business. The initiative will include a mix of on line lessons and opportunities for participants to discuss and ask questions in person. In **Peru**, the Ministry of Production has implemented

a virtual financial education programme to educate and inform owners of micro and small enterprises on how to access and use credit for working capital, to inform them about business support programmes, and to teach them how to manage their business' finances. In order to target entrepreneurs coping with the consequences of the pandemic, in 2020, the Bank of **Russia** held webinars on “How can SMEs raise funds on the securities market”, “Faster payment System” and “State support for SMEs in the pandemic emergency” at the federal level.

Migrants and forcibly displaced persons

The provision of financial literacy through digital means can help migrants and forcibly displaced persons become familiar with the financial system of the host country and improve their financial skills. It can facilitate overcoming language barriers and tailoring the content of digital financial literacy resources in ways that would not be possible or cost-effective in traditional delivery (face-to-face or print). The International Organisation for Migration (IOM) has emphasised the need for more digital tools to improve migrants' financial literacy (IOM, 2008^[46]). The Bank of Rwanda is targeting forcibly displaced people with digital financial literacy initiatives to support the uptake of digital financial services; stakeholders in the country are delivering financial education training programmes via videos sent on mobile phones, to overcome the limitations imposed by the COVID-19 pandemic (AFI, 2021). Work conducted by the OECD in technical assistance projects in the Community of Independent States indicates that YouTube and social media networks are an effective outreach method and that a number of organisations in the region have used digital tools to promote investment and responsible spending of prospective migrants and their families (OECD, 2019^[47]). The Bank of **Italy** is designing a mobile app and online resources to support financially resilient behaviours among people attending adult education in public schools, which mostly target migrants.

How to make digital financial literacy work when digital access and skills are limited

Target audiences should ideally have access to digital technology and have basic digital literacy skills to be able to engage in digital financial education programmes directly and effectively. When target groups lack adequate access and skills, facilitators or trainers can be useful to mediate the use of digital financial education tools.

Common examples used by policy makers to overcome the limited ability of some groups to access and use digital financial education tools and ensure their effectiveness include:

- Making digital financial literacy tools accessible for populations with limited digital readiness by choosing very simple technologies, as in the cases of targeted communications through instant messages platforms, as in earlier examples of digital initiatives in Brazil for elderly people and in Ukraine to address all the population including the least digitally literate. This may be particularly relevant considering that groups with low digital skills are often falling victims of online fraud through instant messaging platforms, as people are sometimes not able to check the veracity of the message.
- Designing digital interventions that involve a combination of digital and face-to-face elements. Several examples of digital programmes presented earlier in the section are indeed intended to be delivered with the support of dedicated trainers or teachers, as a complement to face-to-face delivery.
- Establishing partnerships with external organisations to overcome lack of digital skills in the target audience and “bring” the digital resource to users. Policymakers can collaborate with not-for-profit organisations that facilitate reaching out to vulnerable audiences, and that can mediate the use of

technology, as in the examples of collaboration with front-line workers and NGOs for elderly people in Canada and Germany.

- Complementing digital financial literacy initiatives with traditional mass media such as radio or television, which can extend the reach of digital financial literacy resources.

With these goals in mind, the following examples explain how traditional channels have been chosen to support the effectiveness of digital delivery, raise awareness about digital financial literacy issues and to convey important messages in times of emergency, such as during COVID-19 measures.

In **Argentina**, the BCRA broadcasted on public TV the content of its digital financial education campaign on payments safety. The **Reserve Bank of India (RBI)** recorded a video on the importance of using digital payments to minimise contacts during the COVID-19 pandemic, featuring RBI's Governor. The video was distributed through RBI's social media channels, as well as major television channels.

In **Malaysia**, support to citizens and micro and small entrepreneurs during the national COVID-19 lockdown measures was provided via an extensive use of digital platforms, from social media (Facebook, Instagram, Twitter), dedicated websites, e-mail, instant message service (WhatsApp and Telegram) and complemented by traditional media, notably radio and television.

In **Indonesia**, the Financial Services Authority (OJK) carries out several digital financial literacy initiatives for a variety of priority target segments, including students and youth, professionals, employees, farmers and fishermen, Indonesian migrant workers and prospective migrant workers, disadvantaged, remote and outermost areas, people with disabilities, retirees, women, and MSMEs. Initiatives promoting digital financial literacy and education combine the use of various social media platforms and traditional mass media channels, such as radio, television, and public service advertisements through multiple platforms.

In **New Zealand**, in parallel with the growing role of digital delivery and the design of webinars to replace face-to-face programmes during the COVID-19 crisis, the Commission for Financial Capability used television to extend reach and facilitate uptake of their financial education resources. The CFFC produced a television show hosted by a consumer affairs personality and based on its COVID-19 financial education webinar called *My Money: What Now*; during the show, a CFFC facilitator answered questions from the public.

In **Peru**, notwithstanding the range of digital financial literacy resources available for teachers and students, the SBS collaborated with the Ministry of Education in its television programme *Aprendo en casa* ("I learn from home") aimed at students throughout the country during the COVID-19 pandemic.

In **South Africa**, the Financial Sector Conduct Authority (FSCA) has been using radio interviews in local languages to extend the reach of its Money Smart social media presence and websites.

5 Concluding remarks and effective approaches

As the COVID-19 crisis unfolds, it is crucial to look beyond financial resilience intended as rebuilding a previous state of financial security, and to focus on long-term policy approaches that aim at “building back better” and at transformation towards enhanced financial inclusion and resilience, ultimately supporting greater individual financial well-being.

Building on the lessons learnt from the case studies presented in the report, the following paragraphs discuss selected effective approaches developed among G20 and non-G20 economies to enable the digital delivery of financial literacy programmes to sustain individual and MSMEs financial resilience and their long-term well-being.

These effective approaches complement the provisions of the OECD Recommendation on Financial literacy, which was welcomed by G20 Finance Ministers and Central Bank Governors on 9-10 July 2021, and constitute an initial part of the implementation guidance of the Recommendation in the context of the COVID-19 pandemic.

Harnessing the momentum to strengthen long-term financial resilience and well-being

Treating the crisis as a learning opportunity

- The shock caused by the COVID-19 crisis on households and MSMEs finances induced many people to seek financial information and education from trusted sources. Financial education programmes have been adapted rapidly to digital delivery for the whole population and for vulnerable groups. This allowed governments to provide information and educational resources on support and relief measures. Policy makers in a wide range of countries and economies see that the crisis can also be a ‘teachable moment’ to attract consumers and MSMEs’ owners towards reliable financial education resources and to encourage them to acquire greater financial knowledge and skills for their long-term well-being and to improve the resilience of business finances (e.g. about better managing household/business finances, building savings, understand, detect and manage risks – including through insurance – choosing/negotiating better credit, becoming aware of financial fraud and scams, and so on).

Taking advantage of the momentum to develop long-term strategies and actions

- The COVID-19 crisis drew substantial policy attention to the need of improving financial resilience among citizens around the world. As they develop recovery packages and exit strategies, policy makers are exploiting the momentum created by the crisis to develop strategies and actions not only to support financial resilience in the short term but also, and foremost, to push for transformation to enhance individual financial well-being in the long term. Examples include the revision of national strategies for financial literacy to take into account the need to strengthen

financial resilience in the long term, as well as the challenges and opportunities offered by advances in digital finance and sustainable finance.

Developing a flexible, evidence-based, comprehensive and sustainable framework

Continuing to collect evidence on levels of financial resilience and groups at risk

- A first step in developing sound strategies to ensure that digital financial literacy interventions can build and sustain financial resilience and well-being in the short and long term may be to continue to advance the policy and research debate on financial resilience and financial well-being, to collect data and evidence on groups at risk of financial vulnerability, and to evaluate the impact of existing digital interventions. Some countries were already closely studying financial vulnerability before the pandemic and many more developed new surveys and studies to better understand the impact of the COVID-19 crisis on consumers' financial resilience and well-being, with a particular focus on the most affected groups such as youth, women, migrants, low-skilled workers and workers in particular sectors, and MSMEs.

Promoting multi-stakeholder and coordinated approaches

- National strategies for financial literacy are a valuable way to promote multi-stakeholder and coordinated approaches. Several countries are incorporating the use of digital and other types of financial literacy interventions within national strategies for financial literacy to make sure that they benefit all relevant vulnerable groups in a consistent manner, considering the advance of digitalisation before and during the COVID-19 crisis, and the fact that digital tools are likely to become an even more important form of communication in the future.
- Several countries and economies are creating (new) partnerships and coordination mechanisms involving private and not-for-profit stakeholders to benefit from their expertise and reach in the development and implementation of digital financial literacy programmes (while at the same time being mindful of avoiding conflicts of interest). In particular, NGOs working with (old and new) vulnerable audiences, social workers in community centres, debt-counselling networks, and private sector stakeholders with experience on digital issues are found to be valuable partners in disseminating digital financial education resources and supporting their implementation with vulnerable groups.

Focusing on core financial literacy competencies

- Policy makers are increasingly leveraging the opportunities offered by digital tools to strengthen the financial literacy basics that can support long-term financial resilience and improve well-being. Key competencies cover the importance of building up emergency and long-term savings, budgeting, medium and long-term planning, wise debt management, appropriate use of insurance, and avoidance of fraud and financial scams as a first 'line of defence' when faced with income fluctuations and the need to meet fixed costs, such as bills, rents and loan repayments. Policy makers are also showing growing interest to incorporate competences around sustainable finance as a way to further strengthen financial resilience and well-being.

Harnessing the potential of digital financial literacy tools

Using digital tools to help prevent and reduce financial vulnerability

- A large number of countries and economies is using digital financial literacy tools as a flexible and cost-effective way to reach a wide range of target audience that may be at higher risk of financial vulnerability to provide them basic financial literacy skills before they find themselves in difficult financial situations. Digital tools are used to a large extent to put in place broad and preventive interventions aiming at strengthening financial resilience.

Leveraging lessons from behavioural insights to support “financially resilient” behaviour changes

- Policy makers and programme designers in several countries and economies are using the flexible, adaptive and interactive features of digital tools to apply lessons from behavioural insights that can support “financially resilient” behaviour changes. Effective approaches can include the use of personal goal-setting features and feedback mechanisms to help people save for retirement or reach other saving goals; the use of personalised reminders and messages to help people to save or pay back a loan; the deployment of just-in-time information and comparison tools to help people take better and more considered spending and credit decisions; and the development of serious games to foster behaviour change via experiential learning.

Adapting content and format to the needs of those who need to improve their financial resilience the most

- Within the overall goal of supporting future financial resilience and financial well-being, policy makers and programme designers in several countries and economies are choosing the features of different digital financial literacy tools and adapting them to the preferences, needs and life situations of different target groups, including low-income or low-skills people, young people, elderly people, women, MSMEs, migrants, and any other relevant groups. This is done also taking into account local and national circumstances, the financial literacy and digital skills of end users, as well as their level of financial vulnerability. Targeted digital campaigns, info-graphic guides and online training sessions are frequently developed. In the future, the production of innovative and customized tools for financial education could be encouraged through competitions or hackathons.

Ensuring that delivery meets the needs of groups with limited digital access and skills

- Given the limited digital readiness of some people or groups, i.e. their levels of digital skills and access to smartphones or computers, policy makers and programme designers across a wide range of countries and economies are finding ways to make sure that digital financial literacy programmes are effective in reaching those who need them the most and do not exacerbate digital exclusion. This is done by resorting to simple forms of technology, such as instant messaging apps; developing hybrid delivery modes where facilitators and trainers help the end users interact with digital tools and transfer digital skills to them; and complementing digital financial literacy initiatives with traditional media such as TV and radio.

Making full use of the analytic features of digital tools

- Digital tools offer greater opportunities to collect data that can be used to monitor the use and evaluate impact of financial education delivered digitally as compared to traditional channels, ensuring full respect of data privacy issues. Policy makers in some countries are building on these increased data collection and analytical capabilities to monitor the use of digital resources and make them more adapted to the needs of specific groups, both in terms of content and format. However, relatively few digital financial literacy interventions are rigorously evaluated to understand the impact of the overall programme and of specific digital features.

References

- ADBI (2020), *COVID-19 Impacts on ASEAN Households: Survey Findings* | Asian Development Bank, <https://www.adb.org/adbi/news/infographics/covid-19-impacts-asean-households-survey-findings> (accessed on 8 February 2021). [8]
- Bank of Italy (2021), *Economic Bulletin*, Bank of Italy, https://www.bancaditalia.it/pubblicazioni/bollettino-economico/2021-2/en-boleco-2-2021.pdf?language_id=1 (accessed on 3 June 2021). [11]
- Belayeth Hussain, A. et al. (2019), “Does financial inclusion increase financial resilience? Evidence from Bangladesh”, *Development in Practice*, Vol. 29/6, pp. 798-807, <http://dx.doi.org/10.1080/09614524.2019.1607256>. [62]
- Bond, N. and C. D’Arcy (2020), *Income in Crisis*, The Money and Mental Health Policy Institute, https://www.moneyandmentalhealth.org/wp-content/uploads/2020/06/Income_in_Crisis.pdf (accessed on 29 May 2021). [23]
- Bundervoet, T., M. Dávalos and N. Garcia (2021), *The Short-Term Impacts of COVID-19 on Households in Developing Countries An Overview Based on a Harmonized Data Set of High-Frequency Surveys*, World Bank Group, <https://documents1.worldbank.org/curated/en/285001615830629714/pdf/The-Short-Term-Impacts-of-COVID-19-on-Households-in-Developing-Countries-An-Overview-Based-on-a-Harmonized-Data-Set-of-High-Frequency-Surveys.pdf> (accessed on 7 June 2021). [13]
- Carman, K. and S. Nataraj (2020), *How Are Americans Paying Their Bills During the COVID-19 Pandemic?*, RAND Corporation, <http://dx.doi.org/10.7249/rra308-3>. [61]
- Carman, K. and S. Nataraj (2020), *How Are Americans Paying Their Bills During the COVID-19 Pandemic?*, RAND Corporation, <http://dx.doi.org/10.7249/rra308-3>. [16]
- CFPB (2021), *Changes in consumer financial status during the early months of the pandemic*, Consumer Financial Protection Bureau, https://files.consumerfinance.gov/f/documents/cfpb_making-ends-meet-wave-2_report_2021-04.pdf (accessed on 2 June 2021). [65]
- CFPB (2015), *Financial well-being: The goal of financial education*, Consumer Financial Protection Bureau, https://files.consumerfinance.gov/f/201501_cfpb_report_financial-well-being.pdf (accessed on 17 September 2018). [35]
- Christelis, D. et al. (2020), “The Covid-19 crisis and consumption: survey evidence from six EU countries”, *Working Paper Series*, No. 2507, European Central Bank, <http://dx.doi.org/10.2866/453216>. [20]

- Clark, D., E. Tanner-Smith and S. Killingsworth (2016), “Digital Games, Design, and Learning: A Systematic Review and Meta-Analysis”, *Review of Educational Research*, Vol. 86/1, pp. 79-122, <http://dx.doi.org/10.3102/0034654315582065>. [42]
- Comitato per l'educazione finanziaria (2020), *Emergenza COVID-19: gli italiani tra fragilità e resilienza finanziaria*, Comitato per la programmazione e il coordinamento delle attività di educazione finanziaria, <http://www.quellocheconta.gov.it/export/sites/sitopef/modules/img/news/news095/Rapporto-Comitato-Doxa.pdf> (accessed on 8 February 2021). [9]
- Dossche, M. and S. Zlatanos (2020), “COVID-19 and the increase in household savings: precautionary or forced?”, *ECB Economic Bulletin*, No. 6, European Central Bank, https://www.ecb.europa.eu/pub/economic-bulletin/focus/2020/html/ecb.ebbox202006_05--d36f12a192.en.html (accessed on 4 June 2021). [18]
- European Commission (2020), *The impact of COVID-19 on remittances in EU and OECD countries*, https://ec.europa.eu/home-affairs/sites/default/files/00_eu_inform4_remittances_2020_en.pdf (accessed on 30 April 2021). [29]
- FCAC (2021), *Summary of findings COVID-19 surveys: Financial impact of the pandemic on Canadians*, <https://www.canada.ca/en/financial-consumer-agency/corporate/covid-19/summary-covid-19-surveys.html> (accessed on 27 May 2021). [12]
- G20 (2020), *G20 High-Level Policy Guidelines on Digital Financial Inclusion for Youth, Women and SMEs*, https://www.gpfi.org/sites/gpfi/files/saudiG20_youth_women_SME.pdf (accessed on 7 June 2021). [67]
- G20 (2019), *G20 Fukuoka Policy Priorities on Aging and Financial Inclusion*. [69]
- G20 (2018), *G20 Policy Guide Digitisation and informality: Harnessing digital financial inclusion for individuals and MSMEs in the informal economy*, https://www.gpfi.org/sites/gpfi/files/documents/G20_Policy_Guide_Digitisation_and_Informality.pdf (accessed on 7 June 2021). [68]
- Galicki, C. (2020), *Impact of COVID-19 on financial well-being*, Commission for Financial Capability, <https://cffc-assets-prod.s3.ap-southeast-2.amazonaws.com/public/Uploads/Research-2020%2B/COVID-19/CFFC-COVID-19-Research-Report-May-2020.pdf> (accessed on 8 February 2021). [10]
- Gebauer, S., J. Ouvrard and C. Thubin (2021), “Uncertainty due to Covid-19 is contributing to French household savings | Banque de France”, *Eco Notepad*, No. 206, Banque de France, <https://blocnotesdeleco.banque-france.fr/en/blog-entry/uncertainty-due-covid-19-contributing-french-household-savings> (accessed on 4 June 2021). [19]
- Guthrie, F. et al. (2017), *Exploring Financial Wellbeing in the Australian Context*, https://www.csi.edu.au/media/Exploring_Financial_Wellbeing_in_the_Australian_Context_Final_Report.pdf (accessed on 30 April 2021). [34]
- IMF (2020), *Digital Financial Services and the Pandemic: Opportunities and Risks for Emerging and Developing Economies*, <https://www.imf.org/en/Publications/SPROLLS/covid19-special-notes> (accessed on 15 June 2021). [31]

- IOM (2008), *IOM and Labour Migration*, [46]
https://www.iom.int/sites/default/files/our_work/ICP/IDM/Labour-Migration-Infosheet-2008.pdf
 (accessed on 9 June 2021).
- Ishty, S. (2020), 'Your order has been cancelled': *The Coronavirus impact on the RMG sector*, [26]
<https://thefinancialexpress.com.bd/views/views/your-order-has-been-cancelled-the-coronavirus-impact-on-the-rmg-sector-1584974682> (accessed on 30 April 2021).
- Jappelli, T. (2010), "Economic Literacy: An International Comparison*", *The Economic Journal*, [5]
 Vol. 120/548, pp. F429-F451, <http://dx.doi.org/10.1111/j.1468-0297.2010.02397.x>.
- Kim, L., M. Lugo and I. Uochi (2020), *How hard are families hit by the COVID-19 crisis? Six insights from our household surveys in East Asia and Pacific*, [50]
<https://blogs.worldbank.org/eastasiapacific/how-hard-are-families-hit-covid-19-crisis-six-insights-our-household-surveys-east> (accessed on 8 February 2021).
- Ladha, T. et al. (2017), *Beyond Financial Inclusion: Financial Health as a Global Framework*, [36]
 Center for Financial Services Innovation, <https://content.centerforfinancialinclusion.org/wp-content/uploads/sites/2/2017/03/FinHealthGlobal-FINAL.2017.04.11.pdf> (accessed on 30 April 2021).
- Lyons, A. et al. (2020), "Building financial resilience through financial and digital literacy in South Asia and Sub-Saharan Africa", *Working Paper Series*, No. 1098, ADBI, [63]
<https://www.adb.org/sites/default/files/publication/574821/adbi-wp1098.pdf> (accessed on 27 May 2021).
- MAPS (2020), *Impacts of COVID-19 on financial wellbeing*, Money and Pensions Service, [21]
 London, <https://www.financialcapability.gov.au/files/impacts-of-covid-19-on-financial-wellbeing.pdf> (accessed on 29 May 2021).
- McKinsey (2020), *Financial life during the COVID-19 pandemic--an update*, [32]
<https://www.mckinsey.com/industries/financial-services/our-insights/a-global-view-of-financial-life-during-covid-19> (accessed on 15 June 2021).
- McKnight, A. (2019), *Financial resilience among EU households*, European Commission, [2]
 Directorate-General for Employment, Social Affairs and Inclusion,
<https://op.europa.eu/en/publication-detail/-/publication/9a2c5116-3296-11ea-ba6e-01aa75ed71a1/language-en/format-PDF> (accessed on 8 February 2021).
- McKnight, A. and M. Rucci (2020), "The financial resilience of households: 22 country study with new estimates, breakdowns by household characteristics and a review of policy options", *CASE Papers*, [3]
<https://ideas.repec.org/p/cep/sticas/-219.html> (accessed on 29 May 2021).
- McLean-McKay, M. and J. Leigh-Mossley (2017), *Initiating budgeting behaviour among non-budgeters—A financial literacy pilot using mobile technology*, Financial Consumer Agency of Canada, [40]
<https://www.canada.ca/en/financial-consumer-agency/programs/research/pilot-mobile-technology.html> (accessed on 7 June 2021).
- MoneyWise and Nibud (2020), *Financial vulnerability: Literature study of groups in a financially vulnerable position*, MoneyWise, [51]
<https://www.wijzeringeldzaken.nl/platform-wijzeringeldzaken/publicaties/7521-wiq-nib-rapport-financial-vulnerability-en-web.pdf>
 (accessed on 8 February 2021).

- Moore, D. et al. (2019), *Building Resilience through Financial Inclusion: A Review of Existing Evidence and Knowledge Gaps*, Innovations for Poverty Action, <https://www.poverty-action.org/sites/default/files/publications/Building-Resilience-Through-Financial-Inclusion-January-2019.pdf> (accessed on 7 June 2021). [38]
- OECD (2021), *OECD Economic Outlook, Interim Report March 2021*, OECD Publishing, Paris, <https://dx.doi.org/10.1787/34bfd999-en>. [27]
- OECD (2021), *OECD Economic Outlook, Volume 2021 Issue 1: Preliminary version*, OECD Publishing, Paris, <https://dx.doi.org/10.1787/edfbca02-en>. [64]
- OECD (2021), *One year of SME and entrepreneurship policy responses to COVID-19: Lessons learned to “build back better”*, https://read.oecd-ilibrary.org/view/?ref=1091_1091410-rwx81cfwj&title=One-year-of-SME-and-entrepreneurship-policy-responses-to-COVID-19-Lessons-learned-to-build-back-better&_ga=2.43973925.1876960042.1623053355-561426593.1524816580 (accessed on 7 June 2021). [28]
- OECD (2021), *Risks that matter 2020: The long reach of COVID-19*, <http://dx.doi.org/10.1787/44932654-en>. [14]
- OECD (2021), *Towards Improved Retirement Savings Outcomes for Women*, OECD Publishing, Paris, <https://dx.doi.org/10.1787/f7b48808-en>. [56]
- OECD (2020), *Digital Delivery of Financial Education: Design and Practice*, <https://www.oecd.org/financial/education/Digital-delivery-of-financial-education-design-and-practice.pdf> (accessed on 8 February 2021). [39]
- OECD (2020), *Financial Consumer Protection and Ageing Populations*, <http://www.oecd.org/financial/education/Financial-Consumer-Protection-and-Ageing-Populations.pdf> (accessed on 18 September 2020). [44]
- OECD (2020), *Financial consumer protection responses to COVID-19*, https://read.oecd-ilibrary.org/view/?ref=124_124996-e6qk9dk3ta&title=Financial_consumer_protection_responses_to_COVID-19 (accessed on 7 June 2021). [70]
- OECD (2020), *OECD Pensions Outlook 2020*, OECD Publishing, Paris, <https://dx.doi.org/10.1787/67ede41b-en>. [41]
- 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> (accessed on 18 September 2020). [48]
- 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> (accessed on 8 February 2021). [54]
- OECD (2020), *Personal Data Use in Financial Services and the Role of Financial Education: A ConsumerCentric Analysis*, <http://www.oecd.org/daf/fin/financial-education/Personal-Data-Use-in-Financial-Services-and-the-Role-of-Financial-Education.pdf> (accessed on 5 March 2021). [52]
- OECD (2020), *Protecting online consumers during the COVID-19 crisis*, <https://www.oecd.org/coronavirus/policy-responses/protecting-online-consumers-during-the-covid-19-crisis-2ce7353c/> (accessed on 7 June 2021). [7]

- OECD (2020), *Strengthening seniors' financial well-being throughout the COVID-19 crisis and its aftermath*, <https://www.oecd.org/financial/education/Senior-financial-well-being-covid-19.pdf> (accessed on 18 September 2020). [45]
- OECD (2020), *Supporting the financial resilience of citizens throughout the COVID-19 crisis*, https://read.oecd-ilibrary.org/view/?ref=129_129607-awwyipbwh4&title=Supporting-the-financial-resilience-of-citizens-throughout-the-COVID-19-crisis (accessed on 7 June 2021). [6]
- OECD (2020), *Women at the core of the fight against COVID-19 crisis*, <https://bit.ly/3AheLUn> (accessed on 29 May 2021). [25]
- OECD (2019), *Financial Literacy Needs of Migrants and their Families in the Commonwealth of Independent States*, <https://www.oecd.org/financial/education/Financial-Literacy-Needs-of-Migrants-and-their-families-in-CIS-EN.pdf> (accessed on 7 June 2021). [47]
- OECD (2019), "Financial well-being and inclusiveness", in *Financial Markets Insurance and Pensions: Inclusiveness and Finance*, OECD, <https://www.oecd.org/finance/Financial-markets-insurance-pensions-inclusiveness-and-finance.pdf> (accessed on 16 April 2021). [33]
- OECD (2019), *Pensions at a Glance 2019: OECD and G20 Indicators*, OECD Publishing, Paris, <https://dx.doi.org/10.1787/b6d3dcfc-en>. [57]
- OECD (2019), *Short-Term Consumer Credit: provision, regulatory coverage and policy responses*, OECD, <http://www.oecd.org/daf/fin/financial-education/Short-term-consumer-credit-report.pdf>. [4]
- OECD (2019), *Skills Matter: Further Results from the Survey of Adult Skills. OECD Skills Studies*, <http://dx.doi.org/10.1787/23078731>. [43]
- OECD (2019), "The future of work: New evidence on job stability, under-employment and access to good jobs", in *OECD Employment Outlook 2019: The Future of Work*, OECD Publishing, Paris, <https://dx.doi.org/10.1787/59d17791-en>. [58]
- OECD (2018), *OECD/INFE Toolkit for measuring financial literacy and financial inclusion (version May 2018)*, OECD, <http://www.oecd.org/daf/fin/financial-education/2018-INFE-FinLit-Measurement-Toolkit.pdf>. [53]
- OECD (2017), *G20/OECD INFE Report on Ensuring Financial Education and Consumer Protection for All in the Digital Age*, OECD, <http://www.oecd.org/daf/fin/financial-education/G20-OECD-INFE-Report-Financial-Education-Consumer-Protection-Digital-Age.pdf> (accessed on 9 January 2018). [66]
- OECD (2017), *The Pursuit of Gender Equality: An Uphill Battle*, OECD Publishing, Paris, <https://dx.doi.org/10.1787/9789264281318-en>. [55]
- Ranta, M., G. Silinskas and T. Wilska (2020), "Young adults' personal concerns during the COVID-19 pandemic in Finland: an issue for social concern", *International Journal of Sociology and Social Policy*, Vol. 40/9-10, pp. 1201-1219, <http://dx.doi.org/10.1108/IJSSP-07-2020-0267>. [22]
- Salignac, F. et al. (2019), "Conceptualizing and Measuring Financial Resilience: A Multidimensional Framework", *Social Indicators Research*, Vol. 145/1, pp. 17-38, <http://dx.doi.org/10.1007/s11205-019-02100-4>. [1]

- Salignac, F. et al. (2019), “Conceptualizing and Measuring Financial Resilience: A Multidimensional Framework”, *Social Indicators Research*, Vol. 145/1, pp. 17-38, <http://dx.doi.org/10.1007/s11205-019-02100-4>. [71]
- Schneider, D., P. Tufano and A. Lusardi (2020), *Household Financial Fragility during COVID-19: Rising Inequality and Unemployment Insurance Benefit Reductions*. [49]
- Thomsen, A. et al. (2020), *COVID-19 and Consumers: from crisis to recovery*, Consumer Policy Research Centre, https://cprc.org.au/app/uploads/2020/08/Consumers-and-COVID-19_full-report_25June2020_compressed.pdf (accessed on 29 May 2021). [15]
- UNSGSA (2021), *UNSGSA Launches Working Group on Financial Health | United Nations | UNSGSA Queen Máxima*, <https://www.unsgsa.org/news/unsgsa-launches-working-group-financial-health> (accessed on 29 May 2021). [37]
- Waters, T. et al. (2020), *The effects of coronavirus on household finances and financial distress*, Institute for Fiscal Studies, <http://dx.doi.org/10.1920/bn.ifs.2020.bn0298>. [60]
- Waters, T. et al. (2020), *The effects of coronavirus on household finances and financial distress*, ESRC Centre for the Microeconomic Analysis of Public Policy (CPP) at IFS, <http://dx.doi.org/10.1920/BN.IFS.2020.BN0298>. [17]
- World Bank (n.d.), *World Bank Predicts Sharpest Decline of Remittances in Recent History*, <https://www.worldbank.org/en/news/press-release/2020/04/22/world-bank-predicts-sharpest-decline-of-remittances-in-recent-history> (accessed on 30 April 2021). [30]
- Xu, X. et al. (2021), *Inequalities in education, skills, and incomes in the UK: The implications of the COVID-19 pandemic*, Institute for Fiscal Studies, <http://dx.doi.org/10.1920/bn.ifs.2021.bn0321>. [59]
- Xu, X. et al. (2021), *Inequalities in education, skills, and incomes in the UK: The implications of the COVID-19 pandemic*, Centre for the Microeconomic Analysis of Public Policy, <http://dx.doi.org/10.1920/BN.IFS.2021.BN0321>. [24]

Annex A. Sources

The report builds on desk research and recent and ongoing work of the OECD/INFE, including:

- available evidence on pre-crisis levels of financial resilience from the OECD/INFE 2020 International Survey of Adult Financial Literacy (OECD, 2020[48]),
- roundtable discussions on the responses to COVID-19 that were held at OECD/INFE meeting in May and October 2020, as well as further discussions and presentations made during the May 2021 OECD/INFE meeting,
- webinars on the responses to COVID-19 held between May 2020 and February 2021 under regional projects in the Commonwealth of Independent States, South-east Europe, and Asia-Pacific, as well as a series of webinars on financial resilience and financial literacy held between November 2020 and January 2021
- OECD/INFE members' responses to the questionnaire on the implications of the COVID-19 pandemic on financial literacy policy and practice circulated in July-September 2020,
- work of the OECD working group on digital financial literacy, including the report "Digital Delivery of Financial Education: Design and Practice" published in January 2021 (OECD, 2020[39]) and the related "Guidance Note on Digital Delivery of Financial Education" (forthcoming),
- further case studies, updates and comments provided by OECD/INFE and GPF1 members.

Annex B. Glossary

This section lists relevant terminology and definition used in the report:

- **Financial inclusion.** The G20 2020 Financial Inclusion Action Plan conceives of financial inclusion as the access to, as well as the use of, sustainable formal financial services.
- **Financial literacy.** The 2020 OECD Recommendation on financial literacy defines financial literacy as “a combination of financial awareness, knowledge, skills, attitudes and behaviours necessary to make sound financial decisions and ultimately achieve individual financial well-being”. This definition is consistent with national and international definitions of similar concepts, such as financial capability.
- **Financial education.** The OECD/INFE High-level Principles on National Strategies for Financial Education (endorsed by G20 Leaders in 2012) define financial education as “the process by which financial consumers/investors improve their understanding of financial products, concepts and risks and, through information, instruction and/or objective advice, develop the skills and confidence to become more aware of financial risks and opportunities, to make informed choices, to know where to go for help, and to take other effective actions to improve their financial well-being”.
- **Financial resilience** can be thought of as the ability of individuals or households to resist, cope and recover from negative financial shocks.
- **Financial well-being.** The OECD framework for financial-wellbeing, takes into account objective and subjective elements of financial well-being, including in particular: i) Objective factors contributing to resilience, including disposable income, personal wealth and financial control, and ii) Subjective evaluation of day-to-day financial life and longer-term financial plans. The OECD financial well-being framework also acknowledges the importance of a wide range of factors associated with, or supporting, financial well-being, such as knowledge and skills, including adaptability and self-control; physical and mental health; support of friends, family and the broader community; and economic stability and growth.

Annex C. Data tables

Table 1. Financial resilience

Percentage of adults who reported the following behaviours or agreed with the following statements

	Would be able to cover a major expense, equivalent to one month of income, without borrowing or asking family/friends to help	If lost main source of income, would be able to cover living expenses, without borrowing or moving house, for at least three months	Income did not cover living expenses in the 12 months before interview	If lost main source of income, would be able to cover living expenses, without borrowing or moving house, for at most one month	Agree with the statement "I have too much debt right now"	Experienced financial fraud or scam in the last 2 years
Austria	79.2	58.9	14.6	14.9	8.3	6.1
Bulgaria	50.0	28.9	54.3	39.0	9.9	28.4
Colombia	41.7	33.3	56.5	31.0	24.0	20.8
Croatia	42.9	27.1	33.8	40.3	13.0	4.1
Czech Republic	67.8	56.6	18.8	18.1	11.1	n/a
Estonia	55.4	42.4	32.3	30.0	5.2	5.5
Georgia	28.4	17.7	57.0	57.3	23.0	4.7
Germany	62.1	56.9	20.3	18.0	16.1	24.6
Hong Kong, China	77.5	77.7	20.6	5.9	6.6	2.2
Hungary	54.1	30.9	20.8	39.3	11.3	4.4
Indonesia	63.7	18.4	63.6	58.7	11.9	31.3
Italy	69.1	60.8	25.4	14.3	8.5	9.4
Korea	58.6	60.5	12.1	10.3	12.0	5.3
Malaysia	48.5	31.8	29.2	30.1	33.7	23.1
Malta	76.8	n/a	33.8	n/a	12.9	n/a
Moldova	42.0	16.8	62.1	52.5	14.6	7.9
Montenegro	38.3	17.6	54.7	59.0	16.9	3.7
North Macedonia	47.7	21.9	38.4	48.8	16.5	3.8
Peru	49.5	35.1	62.7	29.1	19.3	21.0
Poland	62.5	38.0	14.2	27.4	15.1	7.5
Portugal	64.5	44.3	36.9	27.3	8.9	5.1
Romania	49.4	21.3	47.7	40.1	14.1	16.0
Russian Federation	n/a	22.3	35.2	48.3	n/a	n/a
Slovenia	59.9	47.6	32.5	23.5	n/a	n/a
Thailand	n/a	n/a	50.0	n/a	n/a	n/a
Average all	56.1	37.7	37.1	33.2	14.2	11.7
Average G20	65.0	39.6	36.1	34.8	12.1	21.8
Average OECD	61.4	48.2	25.9	23.1	12.0	9.9

Note: the G20 average should be interpreted with caution as it is based on a small number of countries.

Source: OECD/INFE 2020 International Survey of Adult Financial Literacy.

Table 2. Financial resilience, by socio-demographics

Percentage of people who reported that they could be able to cover living expenses for one month or less if they lost their main source of income, by socio-demographics

	Women	Men	18-29	30-59	60 and older	Up to upper secondary education	Higher education	Out of the labour force / unemployed	Active
Austria	15.0	14.8	30.3	13.5	8.3	15.9	8.5	18.1	12.9
Bulgaria	40.7	37.3	51.2	31.6	46.5	48.4	20.4	51.7	32.0
Colombia	33.7	28.2	35.6	28.2	32.6	n/a	n/a	36.3	27.3
Croatia	44.3	36.0	50.5	36.6	40.2	44.2	27.6	48.2	35.1
Czech Republic	19.7	16.6	29.5	17.9	12.6	20.9	8.8	21.7	16.7
Estonia	31.6	28.2	33.4	27.7	32.3	35.0	17.4	38.3	26.2
Georgia	61.8	52.1	48.9	56.1	68.1	64.0	49.9	64.5	48.4
Germany	17.7	18.3	17.4	22.8	9.3	18.3	19.7	17.1	17.9
Hong Kong, China	6.6	5.1	6.3	4.2	9.8	8.3	1.6	8.6	3.9
Hungary	38.5	40.3	47.9	33.7	44.5	44.1	18.9	49.2	34.1
Indonesia	59.9	57.5	59.7	57.7	67.6	61.4	50.0	64.4	55.6
Italy	14.2	14.4	18.7	13.3	14.2	16.3	6.5	17.6	11.6
Korea	9.9	10.8	24.5	7.5	6.0	11.4	8.9	16.4	8.2
Malaysia	29.3	30.8	30.8	29.6	32.5	31.8	25.6	30.6	29.9
Malta	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Moldova	52.9	52.1	47.8	51.3	61.6	56.3	43.8	59.2	47.7
Montenegro	65.0	52.7	66.5	55.9	59.8	66.0	42.2	66.6	54.6
North Macedonia	53.3	44.0	49.0	46.7	53.5	52.4	38.6	54.7	43.1
Peru	34.6	23.9	26.7	30.6	29.4	37.8	18.6	41.1	25.8
Poland	27.1	27.7	37.4	24.9	26.0	30.9	17.5	38.7	23.0
Portugal	31.1	23.0	42.0	21.9	29.0	31.9	13.5	36.3	19.9
Romania	39.5	40.8	43.4	37.9	43.2	46.7	24.4	51.5	35.4
Russian Federation	50.7	45.4	45.3	46.5	55.4	54.2	36.9	57.5	43.2
Slovenia	28.8	18.6	23.8	23.3	n/a	27.3	11.1	30.8	17.4
Thailand	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Average all	35.0	31.2	37.7	31.3	35.6	37.4	23.2	40.0	29.1
Average G20	35.6	33.9	35.3	35.1	36.6	37.5	28.3	39.2	32.1
Average OECD	24.3	21.9	31.0	21.3	19.5	25.2	13.1	29.1	19.6

Notes: Active includes respondents who are employees, self-employed and apprentices. Out of the labour force includes homemakers, pensioners, sick people, students, and the unemployed. The G20 average should be interpreted with caution as it is based on a small number of countries.

Source: OECD/INFE 2020 International Survey of Adult Financial Literacy.

Table 3. Financial resilience and financial inclusion

Percentage of people who reported that they could be able to cover living expenses for one month or less if they lost their main source of income, by whether they reported being aware of or holding given financial products

	Does not hold a current account, payment/debit card, or mobile payment facility	Holds a current account, payment/debit card, or mobile payment facility	Does not hold any insurance product	Holds any insurance product	Does not hold any savings, investment, or retirement products	Holds a savings, investment, or retirement product
Austria	42.4	14.5	28.5	10.4	56.1	9.9
Bulgaria	42.7	26.7	39.0	100.0	45.8	31.9
Colombia	33.5	23.0	31.7	29.5	36.2	22.4
Croatia	47.5	32.7	40.4	36.3	43.1	40.1
Czech Republic	33.8	16.7	28.7	11.9	37.7	9.0
Estonia	36.9	28.0	36.8	18.4	35.9	20.9
Georgia	61.6	44.1	57.0	62.9	64.8	48.3
Germany	18.3	18.0	22.8	16.2	16.0	18.2
Hong Kong, China	n/a	5.9	14.9	1.4	n/a	5.9
Hungary	56.1	32.3	50.7	24.7	45.6	20.5
Indonesia	60.3	56.1	59.8	51.5	67.2	57.0
Italy	26.3	10.5	14.8	5.8	18.7	4.3
Korea	16.0	9.7	16.9	7.7	17.6	7.1
Malaysia	35.8	28.0	36.2	22.0	48.0	29.0
Malta	n/a	n/a	n/a	n/a	n/a	n/a
Moldova	54.3	42.7	53.1	31.4	55.9	42.7
Montenegro	66.8	47.8	58.8	60.6	69.6	55.8
North Macedonia	52.0	44.0	48.3	68.9	52.6	47.3
Peru	37.5	17.5	31.7	19.1	40.3	23.1
Poland	41.7	26.3	36.9	21.7	34.0	16.2
Portugal	54.9	25.2	35.1	18.1	44.2	10.9
Romania	42.0	36.6	40.3	29.3	51.2	31.9
Russian Federation	n/a	n/a	n/a	n/a	n/a	n/a
Slovenia	n/a	23.5	33.6	19.4	27.2	10.8
Thailand	n/a	n/a	n/a	n/a	n/a	n/a
Average all	43.0	27.7	37.1	30.3	43.2	25.6
Average G20	35.0	28.2	32.5	24.5	34.0	26.5
Average OECD	36.0	20.4	30.6	16.7	33.6	13.6

Note: the G20 average should be interpreted with caution as it is based on a small number of countries.

Source: OECD/INFE 2020 International Survey of Adult Financial Literacy.

Table 4. Financial resilience and financial literacy

Percentage of people who reported that they could be able to cover living expenses for one month or less if they lost their main source of income, by levels of financial literacy, averages

	Low financial knowledge	High financial knowledge	Low financial behaviour	High financial behaviour	Low financial attitudes	High financial attitudes
Austria	25.4	11.5	26.6	8.5	19.3	10.6
Bulgaria	50.9	24.8	55.5	22.0	45.9	28.5
Colombia	32.1	28.3	37.4	21.0	31.7	29.2
Croatia	44.7	37.0	49.4	25.8	43.3	34.4
Czech Republic	25.6	12.8	28.6	7.5	24.1	12.3
Estonia	42.8	23.0	37.5	20.9	34.8	24.8
Georgia	61.8	53.2	65.5	48.8	58.8	51.8
Germany	19.1	17.5	22.9	14.0	19.0	16.8
Hong Kong, China	11.9	5.4	11.7	1.7	7.5	3.1
Hungary	49.8	31.2	47.5	21.2	56.1	25.6
Indonesia	67.2	37.6	63.1	56.7	70.7	51.9
Italy	19.9	8.5	19.4	4.4	15.8	12.2
Korea	11.5	9.3	13.5	6.7	12.3	7.8
Malaysia	35.4	21.3	40.2	25.6	33.6	22.7
Malta	n/a	n/a	n/a	n/a	n/a	n/a
Moldova	55.2	48.5	59.6	46.9	55.0	49.6
Montenegro	66.3	47.5	70.5	40.3	66.4	41.4
North Macedonia	54.6	40.7	60.5	35.2	52.4	41.9
Peru	31.2	25.0	37.5	19.2	32.7	25.2
Poland	31.2	25.3	39.0	17.3	26.9	28.6
Portugal	33.2	19.8	46.9	16.4	33.0	22.7
Romania	40.9	38.4	49.2	27.4	39.9	40.6
Russian Federation	54.0	44.4	57.0	35.6	51.0	43.5
Slovenia	33.7	16.8	45.8	17.8	32.9	16.9
Thailand	n/a	n/a	n/a	n/a	n/a	n/a
Average all	39.1	27.3	42.8	23.5	37.5	27.9
Average G20	40.0	27.0	40.6	27.7	39.1	31.1
Average OECD	29.5	18.5	33.2	14.2	27.8	18.9

Note: the G20 average should be interpreted with caution as it is based on a small number of countries.

Source: OECD/INFE 2020 International Survey of Adult Financial Literacy.

Table 5. Financial resilience and financial well-being

Differences in financial well-being scores (out of 20) between respondents who reported a certain behaviour (or agreed with a statement) and those who did not

	Would be able to cover a major expense, equivalent to one month of income, without borrowing or asking family/friends to help	If lost main source of income, would be able to cover living expenses, without borrowing or moving house, for at least three months	Income did not cover living expenses in the 12 months before interview	If lost main source of income, would be able to cover living expenses, without borrowing or moving house, for at most one month	Agree with the statement "I have too much debt right now"
Austria	4.9	5.3	-6.0	-5.5	-5.6
Bulgaria	5.2	5.1	-4.9	-4.4	-4.2
Colombia	2.1	2.5	-3.1	-1.8	-3.0
Croatia	3.0	2.8	-3.0	-2.5	-4.0
Czech Republic	4.7	5.0	-6.1	-5.6	-4.4
Estonia	3.4	3.6	-2.9	-3.6	-3.6
Georgia	4.1	4.0	-3.2	-3.2	-2.3
Germany	0.3	1.7	-3.5	-2.0	-4.4
Hong Kong, China	4.3	3.5	-4.8	-5.5	-2.9
Hungary	5.3	5.9	-6.3	-5.8	-4.1
Indonesia	0.4	2.1	-1.6	-1.6	-1.7
Italy	1.9	3.8	-3.4	-3.2	-2.4
Korea	1.2	1.4	-2.4	-1.5	-1.3
Malaysia	n/a	n/a	n/a	n/a	n/a
Malta	n/a	n/a	n/a	n/a	n/a
Moldova	3.1	2.9	-2.6	-2.8	-2.6
Montenegro	4.7	5.7	-4.7	-5.2	-4.8
North Macedonia	4.4	3.7	-4.0	-3.7	-2.7
Peru	0.8	1.4	-1.8	-1.1	-2.6
Poland	1.9	0.8	-1.5	-1.6	-1.4
Portugal	3.8	3.8	-3.4	-4.3	-3.5
Romania	3.1	3.6	-3.4	-3.1	-3.0
Russian Federation	n/a	n/a	n/a	n/a	n/a
Slovenia	5.5	5.1	-5.0	-5.6	n/a
Thailand	n/a	n/a	n/a	n/a	n/a
Average all	3.2	3.5	-3.7	-3.5	-3.2
Average G20	0.9	2.5	-2.8	-2.2	-2.8
Average OECD	3.2	3.5	-4.0	-3.7	-3.4

Note: the G20 average should be interpreted with caution as it is based on a small number of countries.

Source: OECD/INFE 2020 International Survey of Adult Financial Literacy.

www.oecd.org/financial/education

