Advancing the Digital Financial Inclusion of Youth

Report prepared for the G20 Global Partnership for Financial Inclusion by the OECD

OECD

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SAUDI ARABIA 2020

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Global Partnership for Financial Inclusion

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Foreword

Financial inclusion supports inclusive development and is a key enabler for many of the Sustainable Development Goals. Although progress has been made to advance the financial inclusion of the world's young people (aged 15-24), almost half are still financially excluded.

This report examines which young people are more likely to be financially excluded and the factors that contribute to their financial exclusion. It then explores opportunities and challenges relating to advancing youth digital financial inclusion. The report sets out a series of non-binding policy options based on data, research and country approaches, to advance the appropriate and safe digital financial inclusion of young people. *The policy options in this report form part of the basis for the G20 High-Level Policy Guidelines on Digital Financial Inclusion for Youth, Women and SMEs endorsed by the GPFI on 26 June 2020, and transmitted to the G20 Finance Ministers and Central Bank Governors for their meeting on 16 July 2020*.

The OECD, acting as an Implementing Partner, prepared this report for the Global Partnership on Financial Inclusion (GPFI) and the Group of 20 (G20) under the G20 Saudi Arabia Presidency 2020. It is one of three reports being produced by the GPFI under the G20 Saudi Arabia Presidency 2020 in line with the focus on harnessing digital and innovative technologies to boost the financial inclusion and wellbeing of youth, women and SMEs. The other two reports are *Advancing the Digital Financial Inclusion of Women*, produced by the World Bank, and *Promoting Digital and Innovative SME Financing*, produced by the SME Finance Forum.

The report reflects inputs and guidance from GPFI member countries, Implementing Partners, Affiliated Partners and other key stakeholders, particularly members of the G20/OECD Task Force on Financial Consumer Protection, FinCoNet, the OECD/International Network on Financial Education, the Arab Monetary Fund and the Alliance for Financial Inclusion, via an extensive consultation process. The OECD wishes to acknowledge and thank all those who kindly provided contributions to this report.

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Executive summary

Financial inclusion supports inclusive development. It is a key enabler for many of the Sustainable Development Goals and it is also at the heart of the G20 agenda. Notwithstanding progress made to date in advancing financial inclusion, almost half of the world's young adults (aged 15-24) are financially excluded. This report examines which young people are more likely to be financially excluded, the factors contributing to financial inclusion, the opportunities and risks brought about by digitalisation in relation to youth financial inclusion and country approaches to advance youth digital financial inclusion.

Digitalisation and access to digital financial services may offer ways to overcome some of the challenges that impede youth from accessing and using financial services, such as physical infrastructure barriers or high costs, by offering convenient, faster, secure and timely transactions and adapting to specific needs through customisation. Digital financial services, when provided in a responsible way within a robust infrastructure, may contribute to increased resilience of the financial sector and of individuals in times of crisis. Within the current environment, as governments around the world respond to the health, social and economic effects of the COVID-19 pandemic, the opportunities provided by digital means for individuals and businesses to continue accessing and using financial products and services, are important and relevant.

Children and young people have access to personal digital devices earlier and earlier in life, in some countries as young as seven or younger. They are commonly referred to as "digital natives". This brings new prospects for existing financial institutions, such as banks, credit unions or microfinance institutions as well as new Fintech companies to develop digital products and services for youth, alongside traditional financial products and services. The report considers opportunities for bringing youth into the formal financial sector in an appropriate and age-sensitive way through digital innovation and technology taking into account broader contextual factors affecting financial inclusion, since digitalisation is not experienced in isolation.

At the same time, it is equally important to acknowledge potential risks of technological innovations, especially when considering their impact on young people. The report therefore recognises that access to digital financial services must be supported by digital and financial education and provided in an appropriate financial consumer protection framework, in the context of broader child protection policies.

Depending on country context, cultural environment, young people's circumstances, available infrastructure and resources, a range of solutions may be considered to remove barriers to digital financial inclusion of youth. Based on the data and country approaches, collected through desk research and a global stocktake exercise, the report concludes with a number of suggested policy options to advance the appropriate and safe digital financial inclusion of young people. These policy options, and the commentary in the report more broadly, are subject to child protection laws wherever applicable, in recognition of the special importance of appropriate protections for children (i.e. those below the age of majority).

These policy options are indicative and non-binding and, in their application, jurisdictions should naturally consider their particular circumstances and contexts. Moreover, they do

not supersede or direct international standard setting bodies or other international bodies for regulatory coordination, and policy makers deciding to implement the below suggestions still need to adhere to their core mandates of ensuring financial stability, financial integrity, and financial consumer protection.

These policy options form part of the basis for the G20 High Level Policy Guidelines on Digital Financial Inclusion for Youth, Women, and SMEs, developed by the GPFI under the G20 Saudi Presidency.

Support an inclusive and evidence-based approach to advancing youth digital financial inclusion

1. Integrate youth voices in policymaking and programme design related to youth digital financial inclusion, whenever possible.
2. Consider the collection and use of anonymised youth-specific financial inclusion data.
3. Consider economic, social, cultural, gender and religious factors that may affect availability and accessibility of financial products for youth.

Enable inclusive, resilient, interoperable digital financial ecosystems that support youth financial inclusion

4. Support an enabling and resilient environment for responsible digital financial services, including trustworthy and secure digital identity systems, to facilitate youth financial inclusion.[1]
5. Support and promote youth-friendly design of digital financial products.
6. Support coordination of strategic efforts across stakeholders and encourage cooperation between public and private sectors where appropriate, aimed at advancing youth digital financial inclusion.

Support appropriate protections for financial and digital youth empowerment

7. Consider the needs, risks and vulnerabilities of youth in the digital environment in the context of financial consumer and data protection approaches.
8. Review blanket regulatory requirements relating to age to ensure they remain appropriate
9. Leverage technology to promote financial and digital literacy of young people.

[1] Digital financial services are responsible when they are safe, fair, meet consumer needs, and comply with applicable regulatory requirements, including AML/CFT, financial consumer protection, cybersecurity, and privacy protections.

1. Introduction

1.1. Objectives and scope

This report builds on work previously undertaken by the G20 and the Global Partnership for Financial Inclusion (GPFI) and explores opportunities and challenges relating to advancing youth digital financial inclusion. It sets out a range of policy options for policy makers based on data, research and country approaches, to advance the appropriate and safe digital financial inclusion of young people.[1] These policy options form part of the basis for the G20 High Level Policy Guidelines on Digital Financial Inclusion for Youth, Women, and SMEs, developed by the GPFI under the G20 Saudi Presidency. These policy options and the commentary in the report are subject to child protection laws wherever applicable, in recognition of the special importance of appropriate protections for children (i.e. those below the age of majority).

The world youth population is significant. Currently, there are 1.2 billion young people aged 15 to 24 years, (United Nations, 2020[1])[2] accounting for 16% of the global population, and their number is estimated to reach 1.3 billion by 2030. In some regions around the world, such as Sub-Saharan Africa, Middle East and North Africa, South Asia and Latin America, youth represent almost 20% of the entire population (United Nations, Department of Economic and Social Affairs and Population Division, 2019[2]). In 2019, the population of Sub-Saharan Africa was 1.1 billion, with 60% under the age of 24 and it is predicted to rise to 2.3 billion by 2050.

Depending on factors such as where they live, their gender or their social and economic environment, young people face a range of decisions and turning points relating to their futures. These include such things as pursuing further education or training, becoming employed, starting a business, founding a family and many more. Central to the decisions and turning points facing a young person is the question of financial resources and access to and use of financial products and services, both as an enabler and as a platform for a productive transition to adult life.

Digitalisation is transforming the world of financial products and services, as well as every other aspect of society and economy. Therefore, and consistent with young people as "digital natives", digitalisation alongside financial inclusion take the centre stage in this report. At the same time, the report recognises that, to be meaningful, access to digital financial products and services must be supported by digital and financial education and appropriate levels of financial consumer protection.

1.2. Global policy context

In 2015, Member States of the United Nations adopted the 2030 Agenda for Sustainable Development, pledging to "leave no one behind". Through its universal nature, the 2030 Agenda implies that young people must be considered across all goals and targets aimed at sustainable development.[3]

Financial inclusion is a key element of the G20 agenda (G20/GPFI, 2017[3]), and greater access to financial services is seen to support inclusive development (Klapper, El-Zoghbi and Hess, 2016[4]). Financial education, financial consumer protection and financial inclusion are essential ingredients for the financial empowerment of individuals and the

overall stability of the financial system, and globally recognised and endorsed by G20 leaders through a series of high-level principles: Innovative Financial Inclusion (2010); Financial Consumer Protection (2011); and National Strategies for Financial Education (2012).

Although progress has been made over the past 10 years, as of 2017, there were still more than 1.7 billion people[4] who did not have access to formal financial services. Almost half of the world's youth (15-24 year olds) remained unbanked. The 2017 Financial Inclusion Action Plan (FIAP) of the GPFI acknowledged the importance of leaving no one behind, and of focusing on reaching the last mile of the underserved and vulnerable populations, including youth.

Digitalisation and access to responsible digital financial services offer opportunities to overcome some of the challenges that impede youth (and other underserved groups) from accessing and using traditional financial services (OECD, 2017[5]). The G20 High-Level Principles for Digital Financial Inclusion were endorsed by G20 Leaders under the Chinese G20 Presidency. They explore the opportunities and challenges created by digital financial services, both for existing and for new users of financial products. The policy options developed in this report are aligned with these High-Level Principles.

Box 1.1. Impact of the COVID-19 pandemic: the evolving social and economic environment

This report has been prepared and published in the context of the evolving COVID-19 crisis, which poses significant challenges to individuals and businesses. To respond to the crisis, protect individuals, businesses and other institutions and provide critical support to developing and low-income countries, the G20, under the G20 Saudi Arabia Presidency 2020, have taken immediate steps by implementing unprecedented fiscal, monetary and financial stability actions and endorsed the implementation of a coordinated approach through the development of a G20 Action Plan to combat COVID-19.

The measures taken to prevent the further spread of the virus, such as temporary closure of businesses, schools, public facilities and social distancing measures, can have lasting impact on institutions and individuals' wellbeing, resulting in loss of income, trouble paying bills or meeting other financial obligations, and heightened risk of falling victim to financial scams and fraud. The G20 Finance Ministers and Central Bank Governors acknowledged the essential role of financial inclusion and financial consumer protection in these extraordinary circumstances, and committed to "promote financial inclusion by maintaining accessible and affordable financial products and services through conventional and responsible digital means while ensuring financial consumer protection" (G20 Finance Ministers and Central Bank Governors Communiqué, 15 April, 2020).

In terms of financial consumer protection, the G20/OECD Task Force on Financial Consumer Protection has released a guidance note setting out options for policy makers in terms of measures to protect and support financial consumers who may be facing financial difficulty as a result of the COVID-19 crisis. Alongside, the OECD International Network on Financial Education, (OECD/INFE) has also released guidance relating to supporting the financial wellbeing and resilience of citizens throughout the COVID-19 crisis.

While these guidance notes are not specific to youth, the measures outlined in the guidance may nonetheless be relevant to supporting the financial inclusion of youth affected by the COVID-19 crisis. Immediate measures may include, but not be limited to: flexibility on loan repayments; suspension or deferral of debt collection activities; enhanced access to

digital financial services (especially banking and payment services); warnings on immediate financial risks and awareness raising on government support measures, through digital and traditional communication channels; coordination and consistency in messaging, to ensure that trust in financial institutions is maintained.

While the longer term implications of the COVID-19 pandemic are still to be understood, the crisis has highlighted financial vulnerabilities faced by many around the world, including young people. Already before the COVID-19 pandemic, young people were 2.5 times more likely to be unemployed than people aged 25-64 (OECD, 2018[6]), they had less disposable income and less than half of young people (45%) across the OECD countries expressed trust in government (Gallup, 2019[7]). The COVID-19 pandemic may exacerbate the financial insecurity of vulnerable youth, such as those without safety nets or financial buffers, those working in the informal sector or dependant on remittance payments, and may negatively impact levels of youth employment, as young people are also more likely to work in non-standard employment (OECD, 2019[8]). Young people may experience increased financial stress that could have an impact on their mental health or result in their disengagement from, for example, education or training. According to a recent study by the OECD, youth organisations around the world expressed greatest concern about the impact of COVID-19 on mental well-being, employment, income loss, disruptions to education, familial relations and friendships, as well as a limitation to individual freedoms (OECD, 2020[9]).

To protect and support young people through these difficult times, governments may consider developing programmes that address any unique aspects impacting young people, by focusing on researching and addressing new vulnerabilities, raising awareness and providing appropriate information around available support, and using the situation as an opportunity to gauge young people's interest on money issues. For example, Canada's Covid-19 Economic Response Plan includes measures to help youth receive emergency income benefits, develop their skills, gain professional experience, and contribute to their communities through volunteering (Government of Canada, 2020[10]). The African Union has launched the African Youth Front on Coronavirus, to engage youth in decision-making for recovery (African Union, 2020[11]).

At the same time, as countries move from the immediate to longer term phase, the crisis could lead to new ways of interacting with the world and accelerate existing trends, e.g. digitalisation. Understanding these implications will be key for policy makers as they seek to develop policy responses over the longer term, and in considerations of the wellbeing of current and future generations and intergenerational solidarity and justice.

Sources: OECD (2020), *Policy note: Financial consumer protection responses to COVID-19* and OECD (2020), *Supporting the financial resilience of citizens throughout the COVID-19 crisis* and *OECD (2020), Youth and Covid-19: Response, Recovery and Resilience*

See also, for example: CGAP (2020), *COVID-19 (Coronavirus) - Insights for Inclusive Finance, http://cgap.org/topics/collections/coronavirus-inclusive-finance;*
Grace, D., E. Rhyne (2020), *Financial Consumer Protections in Unprecedented Times, Financial Access Initiative; www.financialaccess.org/blog/2020/4/23/financial-consumer-protections-in-unprecedented-times*

1.3. Methodology

This report is based on extensive desk research as well as data and information gathered through a stocktake exercise and surveys collected from G20 countries. In addition to members of the GPFI, the stocktake has benefited from inputs from members of the OECD International Network on Financial Education (OECD/INFE), G20/OECD Taskforce on Financial Consumer Protection and Arab Monetary Fund (AMF) member countries. A total of 45 survey were received, including from sixteen G20 countries, the EU, CGAP and six countries from the MENA region.

International and national statistics have been used (where available), with the aim of promoting data comparability while ensuring that national contextual information is integrated and accounted for. The World Bank's Findex is utilised as the main source of global financial inclusion data. Global in coverage, the report also features a special focus on the Middle East and North Africa (MENA) region, recognising the significantly lower levels of financial inclusion of youth in MENA countries.

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 GPFI.

2. Setting the scene

2.1. Who are "youth"?

The United Nations (UN) defines "youth" (or young people) as people between the ages of 15-24 years old. By this definition, therefore, children are those aged 14 and under. Within the category of "youth", the UN distinguishes between teenagers (15-19) and young adults (20-24) (United Nations, Department of Economic and Social Affairs and Youth, 2020[12]).

National definitions of youth differ widely. For some countries, the lower bound of the age band is set to when a child is born, while for others at ages 7, 12, 13 or 14. Some countries differentiate between children, adolescents and young adults, while others do not have any specific reference to ages in any of their legislations. However, at the country level, the upper age bracket for defining someone as youth often goes beyond 24. In some countries surveyed, the upper bound is 29 or 30, although in a few countries, such as China, Mozambique, South Africa, Saudi Arabia, Singapore, United Arab Emirates or Ukraine, young age is considered to continue until the age of 34 or 35. In many countries, the age of majority and the capacity to enter a legally binding contract is the age of 18 (in fewer countries majority is reached at 21); this applies to all contracts, including financial contracts, with specific exceptions that differ from country to country.

Given this variability in definitions and considering data availability on financial inclusion as collected through the Global Findex, the report refers to youth as people aged between 15-24 years, in accordance with the UN definition, and presents international statistics according to this age bracket, whenever possible. When national statistics are presented, the country definition of "youth" is then followed.

2.2. Young people and technology

Young people's interaction with digital technologies, from a very young age, is fundamentally different from that of just a generation older. Most of young people will not have known a world without digital technologies, and this will affect the way they interact with each other, the way they form friendships, the way they learn, the way they integrate in the society and their interaction with the financial services industry.

Globally, 71% of young people are online, versus 48% of the overall population (UNICEF, 2017[13]), while one in three internet users around the world is under the age of 18 (UNICEF, 2017[13]). Access to online information and services has become so important that several national governments, including those of Costa Rica, Estonia, Finland, France, Greece and Spain, have formally recognised Internet access as a human right (Burns and Gottschalk, 2019[14]). Across OECD countries, 18% of students in 2015 accessed the Internet for the first time before the age of six (OECD, 2017[15]). In the United Kingdom, recent results show that half of 3-4 year-olds and more than 80 percent of 5-7 year-olds are online (Ofcom, 2020[16]).

The ubiquitous presence of technology in young people's lives has led to the coinage of the term "digital natives". The term generally implies a certain ability to appropriately use the technology and devices that young people, including children, are surrounded by. Warnings about the dangers of assuming the existence of digital skills have become, however, more

important in recent years, alongside an emphasis of the vulnerabilities that can come with omnipresent digital access and the recognition that digital divides exist at several levels.

Worldwide, 88.8% of the global population has access to electricity (World Bank Data, 2019[17]), but those that do not are highly concentrated in a few least developed countries from Sub-Saharan Africa, where less than 30% of the population has access to electricity (the 15 countries[5] with the lowest access to electricity in the world are all in Sub-Saharan Africa). As such, while in developed countries, 94% of young people have access to and use the Internet, only 67% of them do so in developing countries and only 30% in Least Developed Countries (LDCs) (ITU, 2017[18]).

There is unequal exposure of youth to digital technologies and, in general, those vulnerable offline tend to be more vulnerable in online spaces as well (Burns and Gottschalk, 2019[14]). More specifically, the literature identifies three digital divides:

- Between those that have access to the internet and those that do not: major differences exist between countries, between rural and urban settings or households belonging to different socio-economic backgrounds (UNICEF, 2017[13]).
- Between usage patterns and inequalities in digital skills: the differences in usage of technologies and internet between advantaged and disadvantaged youth are significant, especially when considering the way in which pupils are using the internet and digital technologies. The OECD's Programme for International Students Assessment (PISA) results suggest that advantaged students are more likely to read the news and use the Internet to obtain practical information than their disadvantaged peers, who are more likely to spend their online time playing games or chatting (OECD, 2016[19]).
- The divide reflecting inequalities in offline outcomes: disadvantaged students, less than advantaged students, use the internet and digital technologies to take advantage of services such as financial services or job searching platforms, which results in, and reflects, inequalities in offline outcomes (Hatlevik et al., 2018[20]).

Factors such as socio-economic background and gender affect digital inequalities. For vulnerable young people, such as those living with disabilities, digital technologies and connectivity can either aggravate their vulnerabilities and social exclusion, or provide opportunities for integration (UNICEF, 2017[13]).

Gender also plays a role in digital access, with girls and young women, especially in countries with low connectivity, being less likely to go online compared to boys and young men: all available indicators suggest persistent gender gaps in terms of access and use of technology and digital media in low and middle income countries. In India, for example, only 29% of all internet users are female (UNICEF, 2017[13]), (Livingstone et al., 2017[21]).

Digital divides risk to further amplify inequalities among young people during the COVID-19 pandemic, for example in terms of access to digital learning or risk of disengagement and drop out from education and training (OECD, 2020[9]).

Young people's access to mobile devices and affordable internet serves as prerequisite for ensuring their digital financial inclusion, hence inequalities in access to digital technologies may be reflecting in inequalities resulting in levels of financial inclusion as well.

Box 2.1. Definitions

For the purpose of this report, the following definitions are adopted:

Financial Literacy is defined by the OECD and G20 as "a combination of awareness, knowledge, skill, attitude and behaviour necessary to make sound financial decisions and ultimately achieve individual financial wellbeing". The definition is often used interchangeably with "financial capability" which is preferred in some countries.

Financial Inclusion is defined by the GPFI as "effective and quality access to and usage of —at a cost affordable to the customers and sustainable for the providers—financial services provided by formal institutions".

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

Source: GPFI (2016), *Global Standard-Setting Bodies Financial Inclusion: The Evolving Landscape;* OECD (2005), *Recommendation on Principles and Good Practices for Financial Education and Awareness;* G20 OECD/INFE (2012), *High Level Principles on National Strategies for Financial Education*

2.3. Why is financial inclusion of young people important?

Financial inclusion of young people is important. Young people use and have access to money. Many young people, and even younger children, interact with money or have experience with money for example by receiving pocket money or earning money through chores or working in the family business. According to OECD's PISA (OECD, 2020[22]), some 84% of students received some money in the form of gift, 42% received money from an allowance or pocket money for regularly doing chores at home, 38% received money for working outside school hours and 36% from working at occasional informal jobs. There is great variation amongst countries. In the UK, almost all (97%) children (7-17) receive money either regularly in the form of pocket money or from paid work, or irregularly such as on special occasions (Hopkins and Farr, 2019[23]). Most youth in developing countries receive money from their parents and relatives (SEEP, 2013[24]).

In the right context, access to financial services can be an enabler for young people, contributing to their empowerment and increased wellbeing, according to their needs and life stage. Research suggests that children form their financial habits as young as seven years old (Whitebread and Bingham, 2013[25]), influenced throughout childhood by variables including social environment, parental influence, peer influence, experiential learning and others (see also Box 2.2.). Several studies exploring the effects of access to savings accounts and financial education by children and young people[6] indicate that these affect young people positively across three broad categories, by: i) instilling positive financial behaviours; ii) enabling asset accumulation and improving opportunities for upward economic mobility (Cramer et al., 2009[26]); iii) fostering an ancillary or halo effect (including positive psychological, behavioural, education and health effects) (SEEP, 2013[24]). Evidence from youth employment programmes in the USA also suggests that

young workers' access to non-custodial accounts is beneficial because it empowers them to manage their own money and work for their own savings goals (Financial Literacy and Education Commission, 2017[27]).

Box 2.2. The building blocks of youth financial capability in the US

Financial capability is defined as the capacity, based on knowledge, skills, and access, to manage financial resources effectively (U.S. Department of the Treasury, 2010[28]). The definition is interchangeable with the OECD/G20 definition of "financially literacy" (see Box 2.1 above).

Recent research from the United States around how youth acquire the knowledge, skills, attitudes and habits that support financial capability in adulthood suggests that these are a function of three important interlocking components of youth development: executive function, financial habits and norms, and financial knowledge and decision-making skills or the ability to take conscious and intentional decision-making skills.

According to the Consumer Financial Protection Bureau (CFPB) research, children start acquiring these building blocks from early childhood (3 to 5 years old) and the process continues up until the teen years and young adulthood; financial norms and habits begin forming around the age of seven, and continue through the adolescence years. Experiential learning, and interaction with parents, caregivers and peers play a fundamental role in this process called financial socialisation.[7]

Consequently, there are several relevant experiences through which children and young people acquire the three building blocks: early experience and environment; parental influence; financial socialisation; experiential learning; direct explicit instructions. These experiences can be acquired either at home, in schools, community organisations or in other environments, such as after school programmes, community based activities and other settings. These alternative settings may include virtual environments, such as computers, mobile technologies, games or videos.

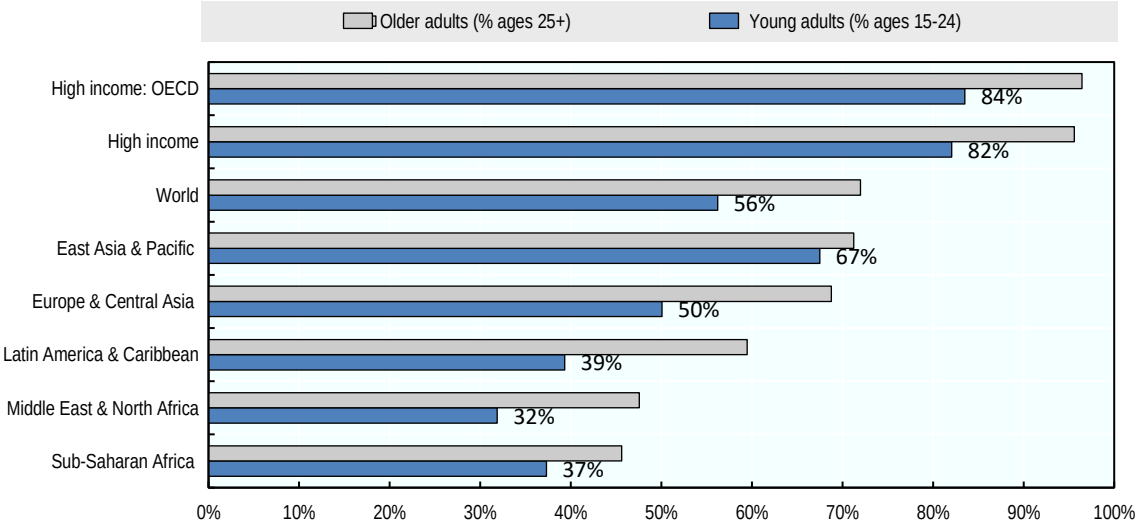
Source: CFPB (2016)*, Building blocks to help youth achieve financial capability*

2.4. What is the status of youth financial inclusion?

Currently, almost half of the young people around the world do not have a basic bank account at a formal financial institution.[8] According to Findex data, there are differences in access to bank accounts between adults and young people in high-income and low-income countries alike. This gap persists across regions and income, gender and education within economies.

However, differences in financial inclusion levels (Box 2.1 for definitions) amongst youth in different countries and regions are even more relevant than financial inclusion differences between adults and young people in the same countries. As such, they indicate a disparity in opportunities that youth in developing economies face in comparison to youth in developed economies. For instance, 84% of young people in high-income countries are financially included, compared with fewer than 40% in Sub-Saharan Africa (SSA), Middle East and North Africa (MENA) and Latin America and the Caribbean (Figure 2.1).

Figure 2.1. Account ownership at formal financial institution



Source: Global Findex, 2017

The 2016 school-to-work-transition (SWTS) dataset (Sykes et al., 2016[29]) shows that access to formal financial services increases with the age: the proportion of youth aged 15-19 that have access to financial services is less than half of youth aged 25-29. This is particularly relevant for the countries in the dataset from the MENA region, where 1.2% of youth aged 15-19 have access to formal financial services, compared to 6% of youth aged 20-24 and 12.2% of youth aged 25-29.

SWTS also suggests that socio-economic status is strongly associated with students holding a bank account (OECD, 2017[30]).[9] This is consistent with data from the OECD: in PISA participating countries, socio-economically advantaged students perform better in financial literacy than disadvantaged students, and are more likely to hold a bank account or a prepaid debit card compared to disadvantaged students (OECD, 2020[22]). SWTS also indicates that those who had more years of schooling are more likely to hold an account. These finding are also supported by countries' reported data.

PISA 2018 also confirms that gender gap in financial inclusion starts from a young age in many countries: in Brazil, Bulgaria, Indonesia, Italy, Latvia, Lithuania, Peru, Poland, Russia, Serbia and the Slovak Republic, boys were significantly more likely than girls to hold an account. In Georgia, the gender gap was 10 percentage points. Only in Portugal were girls more likely than boys to hold an account (OECD, 2020[22]). The SWTS data set shows the highest gender gap in the MENA region, where only 4.5% of young women compared to 8% of young men had access to formal financial services.

Young people living in rural areas are also less likely to be financially included. For example, IFAD (Gasparri and Munoz, 2019[31]) finds that financial services providers report that the hardest young people to serve are those living in rural areas, beyond the reach of existing banking infrastructure.

In summary, in light of the diverse data sources mentioned above, it can be seen that financially excluded youth are more likely to be:

- Concentrated in low income countries around the world, and in particular in three regions: Sub-Saharan Africa, Middle East and North Africa and Latin America and the Caribbean
- Belonging to the poorest 40% of their countries or to socio-economic disadvantaged backgrounds
- Unemployed or inactive in the labour market
- Less well educated
- Female
- Living in rural areas

In addition, these youth are also those most likely to have limited access to digital tools or mobile and internet connectivity. This has important implications for policy makers, in terms of where efforts to increase financial inclusion of young people should be concentrated. Ensuring availability and accessibility of financial products for all youth, and especially most vulnerable youth, regardless of ethnicity, religion, gender, ability, education, location or other criteria will be needed, for truly inclusive societies.

Box 2.3. Youth financial inclusion in the MENA region

The Middle East and North Africa (MENA) region exhibits lower levels of financial inclusion of youth when compared to other regions. In addition, the gender gap is considerably higher, which may indicate that young females may suffer from double discrimination (Figure 2.2).

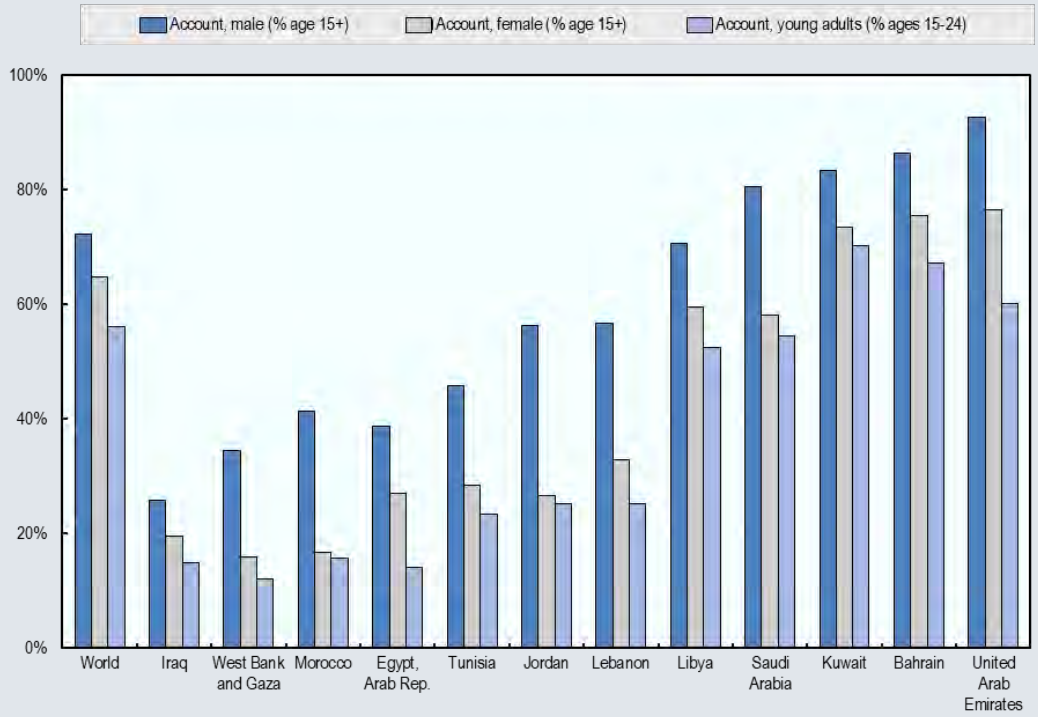
In terms of digitalisation, amongst those young people in the MENA region who do have access to a bank account the majority report making or receiving digital payments. In Jordan and Lebanon, about three in four young adults who have an account also use digital payments. This could indicate that young people are using innovative ways to perform digital payments, such as e-wallets, mobile applications or mobile payments. By contrast use of digital payments is reported by only half of these young people in Algeria and Egypt.

Formal savings for youth and older adults are generally low in MENA compared to the rest of the world, but youth more than adults use informal means to save. Banque du Liban finds that formal saving is highest among individuals that are self-employed while it is lowest among students (Banque du Liban, 2018[32]). However, young people seem to be more active savers than their older counterparts, with the exception of UAE and Morocco (where the percentage of young people and older adults that saved any money in the past year is relatively similar), and Lebanon and Tunisia (where there are more savers amongst adults than amongst young people).

When it comes to borrowing, a high percentage of young people in MENA borrowed money in the past year. A majority has borrowed from family and friends. Other informal means may also be common, although it is not possible to discern on details of informal types of credit providers. According to demand side data from Lebanon, 33% of young people have borrowed informally in 2018 (about 29% has a formal loan), a higher percentage compared to what data from Findex indicates (Banque du Liban, 2018[32]). In Lebanon, the most commonly cited source of informal borrowing, following borrowing from family and friends, is buying goods from a shop on credit or borrowing from a

religious institution. Informal borrowing may be riskier for young people when it involves short-term credit and pay day lenders. As in other parts of the world, common reasons for shadow banking seem to be high costs of formal financial services, over-indebtedness, strict collateral requirements, or excessive documentation requirements.

Figure 2.2. Account at a formal financial institution for male, female and young adults



Source: Global Findex, 2017

Data related to usage of digital financial services in the MENA region is scarce, as only a few countries have implemented comprehensive demand side studies and data collection to understand levels of financial inclusion at national level disaggregated by age, gender and other significant variables. Amongst them Morocco, Egypt, Lebanon and Palestine. Data from Lebanon indicates that the penetration of mobile banking services in the country is relatively low: in 2018, only 7% of adults reported using mobile banking services and 9% of adults reported using internet banking (Banque du Liban, 2018[32]). The young people (defined as those with ages between 18 and 24) were the group that most used mobile banking (9% overall). According to Banque du Liban's study, reasons for the low usage of mobile and digital financial services in the country are: 1) communication costs, which remain high; 2) distrust in the security of online and mobile transactions, making traditional transactions via branches and ATMs a preferred method. In Morocco,[10] 80% of those aged 39 and below have a smartphone. Seven out of ten households have Internet access, though mobile internet is the main way of accessing internet among Moroccan households (66.5%). 93% of those using a smartphone use a mobile application as well and 98.4% of young people (aged 15-24) are active members and users of social networks. The Central Bank is aiming at building on the opportunity provided by the high mobile and internet penetration and usage by young people to

encourage adoption of digital financial services, while at the same time promoting the responsible and informed use of digital financial services by young people.

2.5. Causes of youth financial exclusion

The following analysis of the causes of youth financial exclusion is based on responses to the stocktake questionnaire and available literature and research on the topic.

Personal financial situation and employment status

Countries indicated the personal financial situation of many young people, including youth unemployment and lack of money, as factors influencing their financial inclusion. Youth unemployment rates[11] remain high in much of the world (ILO, 2020[33]). Globally, the percentage of unemployed youth reached 13.1% in 2018 (up from 12.3% in 2008), with the MENA region seeing the highest overall increase. In Lebanon, for example, high youth unemployment is cited as the main barrier to youth financial inclusion, while in Mexico unemployment is the main reported reason for not having a retirement savings account (46.5% of respondents) (National Banking and Securities Commission (CNBV), 2018[34]). In Nigeria, according to the stocktake questionnaire, lack of income is cited as one of the major reasons for financial exclusion affecting youth.

The COVID-19 pandemic may exacerbate levels of youth unemployment. Vulnerable youth, such as those working in the informal sector or with unsecure contracts, may be further exposed to financial insecurity. Young women may also be disproportionately impacted, especially in developing countries. In Sub-Saharan Africa, and Asia and the Pacific, over 90% of young women (15-29) engage in informal employment while in Latin America and the Caribbean, 80% are in informal employment (Elder and Kring, 2016[35]). The SWTS indicates that the percentage of youth in non-vulnerable employment with access to formal financial services (23.7%) is almost double compared to unemployed youth (only 12% had access to formal financial services). The pandemic may also contribute to an overall increase in the number of young people not in education, employment or training (NEET)[12] (see Box 1.1).

Youth often have small, irregular income flows from seasonal work or from parents and relatives (SEEP, 2013[24]). In South Africa, for example, youth are more likely to have informal jobs (23%), to be unemployed (32%) and dependent on remittances (74%) (Finmark, 2018[36]). In Mexico, research from 2018 finds that young individuals' financial situation is an important factor affecting their financial inclusion, although not the main one: 22.5% stated that they did not have a bank account or debit card because they could not afford it or had insufficient income and 20.7% gave the same reason to explain lack of insurance coverage (National Banking and Securities Commission (CNBV), 2018[34]). In this context, facilitating digitally enabled financial services for low-income youth may not be a viable solution, as young people in such situations may simply lack access to any mobile device.

Higher rates of unemployment often mean youth accept precarious working contracts or look to start their own businesses. A higher percentage of youth work in the gig economy,[13] compared to any other demographic group. In the UK, a third of the gig economy workforce is aged between 16 and 30, compared to 11% of other self-employed workers. Younger Americans (18-34) are more likely than older cohorts to be working informally in addition to their full time employment and more likely to have used an app or website to obtain

work (Lin J. et al., 2018[37]). In Spain, nearly two-thirds of young people are independent workers, and they are disproportionately in temporary contracts (Manyika et al., 2016[38]). And while flexible work has many positive implications as well as risks,[14] it does require that young people have access to appropriate financial services to support their particular working status, and are financially literate and capable of managing more uncertain incomes (CGAP, 2019[39]).

To address these issues, policy makers may need to implement a range of policies that go beyond the scope of the current report, to provide youth with opportunities, support youth employment and youth empowerment. Conversely, facilitating access to finance for young entrepreneurs may also contribute to reduction of youth unemployment.

Lower levels of financial literacy

Studies, such as the OECD PISA financial literacy assessment, that have explored barriers to financial inclusion for youth worldwide suggest lower levels of financial literacy (also described as financial capability, see Box 2.1) as one important factor affecting financial exclusion (CGAP, 2011[40]). Not only youth lack financial knowledge, they lack skills and awareness of financial services and products. For example, a United Nations Capital Development Fund (UNCDF) demand-side research for youth financial services in The Gambia found that, of the youth interviewed in rural and urban areas alike, 50% did not understand how to open and operate a bank account (UNCDF, 2017[41]).

Policy makers have taken steps to address this issue by systematically implementing financial education policies and programmes. There is positive evidence that integration of financial education in school curricula leads to improved credit scores, decreased default rates, reduction of non-student debt, and shift of student borrowing from high-interest to low-interest methods (CFPB, 2019[42]). Chapter 4 explores this in detail.

Perception of need for financial services

For many young people, a combination of the factors outlined above contribute to a perception that they have no need for financial services. For example, in Mexico, young people lack interest in financial services and mention that they do not find financial services useful. This is the most cited reason for not having access to financial services by young people in Mexico (National Banking and Securities Commission (CNBV), 2018[34]). 36.6% of young people without a debit card or savings account in Mexico report not needing one, while 37.6% of the population without a loan or a credit card say they were uninterested in getting one or believed they did not need to acquire such products. This is also true for insurance products, where 33.9% felt they did not need insurance.

Lack of access to digital infrastructure

Access to digital technologies underpins the possibility of becoming digitally financially included. For those youth with no access to internet or a mobile phone, which also tend to be the most vulnerable youth in their communities, development of affordable digital infrastructure is a key pre-requisite for advancing digital financial inclusion.

Cultural, social or religious norms

Cultural, social or religious norms (including gender or parental control) were cited as a potentially constraining factor to youth financial inclusion by one quarter of the respondents to the stocktake questionnaire.

Cultural and social factors affect access to appropriate financial services by some young people, and in particular young women, and this seems to be independent of socio-economic status. Young women may also be subject to "double discrimination", both based on age and gender. In terms of access to finance, evidence particularly from the MENA region, shows that the average size of individual enterprise finance loans to youth from financial service providers was 50 to 75% that of loans extended to older borrowers, while the average size of individual enterprise finance loans approved for young women was only up to half that of their male counterparts (Coury and Rashid, 2015[43]).

Religious convictions are also an important factor affecting youth financial inclusion, especially in several Islamic or Muslim majority countries.[15] These factors may be especially relevant where there is a lack of Sharia compliant financial products.

2.6. Technological innovations and their impact on financial services

Digitalisation in the form of technological innovation has had a profound and significant effect on the financial sector, impacting old, and creating new business models, processes or products, and leading to supply of new or improved financial services to consumers.

Technological innovations have so far affected all sectors of banking and financial intermediation, from payments (instant payment, electronic wallets, near-field communication) to credit (crowdfunding and online market lending), insurance and investment (robo-advisory, artificial intelligence, internet of things) to core banking (online digital banks), biometric identification or back-end support services (cloud-computing and big data) (U.S. Department of the Treasury, 2018[44]).

On the supply side, this proliferation of new entrants in the financial sector has likely been driven by the ability of tech companies and start-ups to maintain an agile approach and grow faster than incumbents, adapt their offer to customers' requests and continuously innovate by utilising and learning from customers' data, without having the legacy of existing and well established banking systems or subsidiary networks, as the incumbent banking institutions have, and hence keeping the costs low.

On the demand side, the appetite for easy to access, simple, attractive and low cost financial services is expected to increase as the digitally aware and savvy cohorts enter the financial markets and become more involved in the labour and investment markets.

The benefits of such innovations for consumers are significant: responsible digital finance enables greater access to financial services and may positively impact financial inclusion of excluded and underserved individuals, it provides consumers a wider choice of financial products and services, at lower costs, expanded speed, convenience and security, and can ultimately contribute to increasing efficiency of operations of financial services providers by spurring competition.

Youth may be amongst key beneficiaries from the digitalisation of the financial services. The Fintech[16] adoption index for example (see following section for details) highlights that young people are driving overall Fintech adoption. Technology is changing the financial system. Policy makers have the role to ensure that this change is safe and inclusive and it leaves no one behind.

At the same time, traditional financial services providers have a key role to play, considering that often times those excluded financially are also more vulnerable and likely to lack access to digital means (such as those living with disabilities). Traditional financial services and their providers play an essential role, alongside other financial and non-

financial youth support programmes, such as education, employment, and training, coaching or mentoring, in ensuring inclusive youth development.

Box 2.4. Drivers behind the Fintech "revolution"

In the past ten years, mobile cellular subscriptions and percentage of individuals using the internet have increased at a much higher rate compared to access to financial services, bringing opportunities for financial service providers and Fintech companies to reach financially excluded populations through digital financial services. Accenture estimated that the "underbanked" population represents a global market opportunity for financial services providers worth $380 billion (Accenture, 2015[45]).

Alongside widespread adoption of smartphones and the availability of high speed internet connection, technological advancements that are underpinning the latest wave of financial innovations are the exponential increases in computing power alongside the use of data and expansion of information flow, the development of digital identity solutions for customer identification/verification at on-boarding and authorizing account access, and regulatory changes such as "open banking". The adoption of regulations such as the Payment Service Directive across the European Union (PSD2) and the affordability of cloud computing services play their part in decreasing entry barriers into financial services for new firms, who may provide lower-cost financial services to customers previously considered not commercially attractive, such as low-income customers or young people. Data analytics and machine learning (or artificial intelligence) are two of the top three areas of tech investment by financial services firms. This wave of innovations has affected most financial services if not all, where digitally versions of existing financial products have emerged alongside new types of products all together, disrupting the "business as usual" of the incumbent banks and financial institutions and making money "invisible" for their users.

Source: US Department of the Treasury (2018), *A Financial System That Creates Economic Opportunities: Nonbank Financials, Fintech, and Innovation*

Policy Exchange (2020)*, Fintech for all, https://policyexchange.org.uk/wp-content/uploads/Fintech-for-All.pdf*

3. Addressing young people's financial needs: the role of digital financial services

The financial product needs of young people vary and evolve depending on their age, personal circumstances, life stage and socio-cultural factors. In most countries, young persons below the age of majority are not entitled to access formal financial services, or can do so only with the supervision or permission of a parent or guardian. Savings and payment products are the most relevant and commonly available financial products to youth aged 15-19 (Sykes et al., 2016[29]).[17] As they reach the age of majority and beyond, young people's financial needs develop and grow, depending on their life course. Credit, insurance or investment products become more appropriate as the young people transition towards independent and autonomous life, and pursue further education and/or employment.

Insights from market research studies of young people conducted in 22 countries (SEEP, 2013[24]), indicate that young people in developing countries have a preference for products that:

- Have low opening and maintaining costs, and do not penalise the holders for periods of inactivity.
- Require minimal documentation and provide accessibility and flexibility, especially for emergencies.
- Are adapted to irregular transactions, as most young people lack the resources and discipline to save regularly and they also may experience financial pressures from life-cycle events such as education, marriage, child birth or taking care of family. In the absence of a customised savings product, youth prefer to save through informal methods (such as a trusted person, a family member, at home in money boxes, savings groups, or in kind).
- Have features that help young people with budgeting and basic financial education.
- Are customised for young entrepreneurs and based on market research, allowing for identification of specific needs of the target youth population.

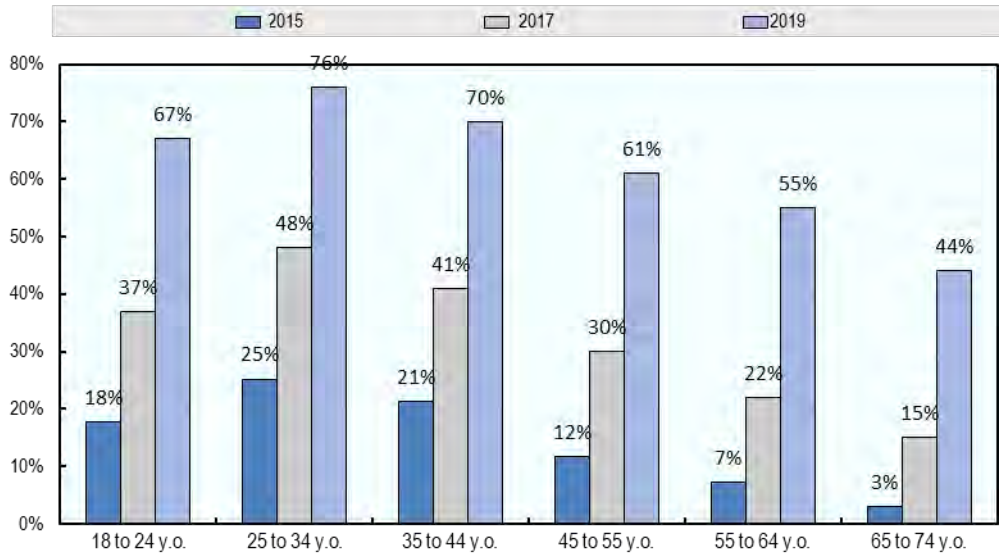
3.1. Digitalisation as an enabler for youth financial inclusion

There are opportunities for Fintech and digital financial services providers, including both incumbents and new entrants, to serve the unbanked youth, if they can develop and offer more convenient, faster, secure and flexible products, with lower fees, that serve youth's specific needs, and satisfy AML/CFT requirements, as outlined above. Responsible digital financial services are therefore a potential "game changer" for those youth unable to access financial products they need through traditional means.

Having access to the Internet as well as a mobile phone brings a wider range of financial services within reach, such as mobile banking, online applications, payment applications, mobile wallets, in-app purchases. Basic mobile phones enable access to simple digital financial services, such as mobile money and accounts, mobile payments, mobile savings or digital credit. Smartphones can offer access to more sophisticated financial services and products.

Young people adopt new technologies quickly, when given the opportunity to do so. This adaptability also applies to innovations in the financial sector. Young people using digital payments on their phones, purchasing mobile credit, or even using mobile credit for online gaming and in-app purchases is already a reality, much more accurate and present than that of young people utilising traditional and formal channels for opening bank accounts, through for example, queuing up at a bank counter. Young people are early adopters of Fintech products (see Figure 3.1). The Fintech adoption index[18] has increased from 16% to 64% in the span of only five years.[19] In emerging markets such as China, India, Russia and South Africa more than 80% of digitally active consumers had used at least one Fintech service in 2019 (EY, 2019[46]). A majority of them are below the age of 34, are financially included, using at least two Fintech products and belong to the high-income, high-value customer category (EY Global Financial Services Institute, 2015[47]).

Figure 3.1. Use of Fintech – age group of users



Source: EY, Fintech adoption index, 2015, 2017, 2019

In the United States, young people (with ages between 18 and 37) use Fintech tools more often than the rest of the working-age population (55% of young people versus 36% of older working-age adults) (Bolognesi et al., 2020[48]).

Technological innovations presented in the Table 1 below (includes examples from (Barnard et al., 2020[49]) and (OECD, 2020[50]))[20] have already made it possible for digital financial services providers to reach young people familiar with financial services and who value convenience, ease, speed and customisation when it comes to finance (EY Global Financial Services Institute, 2015[47]). By building on these innovations, there is huge potential for digital financial services to help close the financial inclusion gap, address young people's specific financial needs and therefore potentially reach the unserved. (Please note that the examples in Table 1 below are provided for illustrative purposes only, and their inclusion or reference does not constitute or suggest any endorsement by the OECD, G20, the GPFI or their member countries).

Table 1. Technological developments and related financial services accessible to youth

Examples of transformative technology and related financial services potentially accessible to youth (non-exhaustive list) [21]		Examples
Savings	Automatic e-wallet Affordable saving e-wallets	Moneybox, Oval, Acorns Plum, Chip
Online and digital banks	App-based banking, internet and mobile banking	Revolut, Atom, N26, Bunq, Monzo, Chime, Webank, TMRW, Kakao Bank
Budgeting and spending apps	Chat bot for youth spending advice and budgeting app	OptioAI, Emma, Cleo
Payments	Prepaid cards, e-wallet, mobile payment system (utilising NFC, cloud-based or QR code based), contactless payments; stored value cards; biometric payments; mobile applications; United Payments Interface (UPI) etc.	Nimbl, Osper, Mercado Pago eSewa, GCASH, ApplePay, Alipay, WeChat Pay, Venmo, GrabPay, MoMo
Money transfer services	Mobile money, digital wallets Peer-to-peer currency exchange services Overseas remittances (using DLT)	TransferWise, Xoom InstaRem, NowNow
Insurance	Digital and app based insurance (mobile insurance, car insurance or motorbike insurance, health and travel insurance etc.) Internet of Things; robo-advice; machine learning; Use of big data and telematics Online P2P insurance companies On-demand insurance	Metromile, Dinghy, Brolly, Luko, BIMA, Toffee, Arvi, So-sure
Credit	Online alternative finance (debt-based, equity-based and non-investment) Online lending platforms; crowdfunding; Digital challenger banks; Usage of social and alternative data-risk assessment algorithms	Credit Kudos, Fintq, GoJek, Holvi

While digitalisation itself cannot solve all the underlying causes of financial exclusion, the opportunities relating to different digital financial products and services to enable youth financial inclusion are explored in more detail below.

3.2. Online banking and savings accounts for youth

Bank accounts and savings accounts are the most relevant and commonly used financial products by young people in most countries. More than half of respondents to the stocktake exercise,[22] report that some form of current account (terminology differs between countries, ranging from bank, checking or payment account) is the most commonly accessed financial product by youth in their countries, while savings accounts are following, in terms of accessibility and usage by young people. In high income countries, access to basic financial services is almost universal, with 94% of Austrian youth, 99% of Canadian, and 100% of Estonian and Swiss youth having access to current accounts,[23] while as seen in previous section, access to a current account in developing countries is still lagging behind. Many of these young people access their accounts digitally.

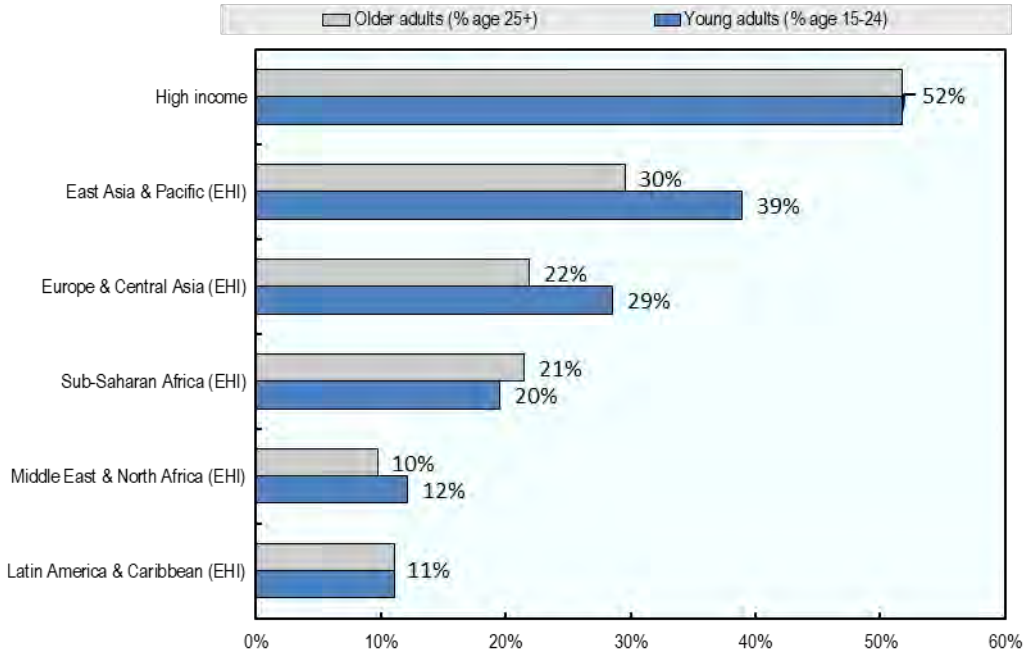
There is a higher propensity among young people to use internet or their phones to access an account in East Asia and Pacific, Europe and Central Asia, and MENA regions. The inverse percentages observed in Sub-Saharan Africa may be explained by the fact that generally in the region financial inclusion has been driven by mobile penetration and mobile money accounts, which implies that mobile usage for accessing an account is widespread across all age groups (Figure 3.2).

Customers in their 20s in most of Association of Southeast Asian Nations (ASEAN) countries are at least 50% more likely to use digital banking than those in their 40s (Barquin, HV and Yip, 2015[51]).

On average, across OECD countries/economies participating in the 2018 PISA financial literacy assessment, some 30% of 15-year-olds had a mobile app to access their financial account, and in some countries (such as Australia, Canadian provinces, Estonia, Latvia and Russia) more than 40% did (OECD, 2020[22]).[24] Online and mobile banking are common in the USA: 84% of Americans engage in online banking and 65% bank on their phones (at least sometimes) (Lin J. et al., 2018[37]). 87% of younger Americans (18 to 34 years old), use both mobile and online banking at least sometime, a higher percentage compared to any other age group (Lin J. et al., 2018[37]).

There are also more young people using mobile money accounts (6.43%) compared to older adults (3.87%). And while there are important differences between countries, we observe that, with the exception of eight countries[25] around the world, young people's adoption of mobile bank accounts is either higher or at least the same as that of older adults (Demirguc-Kunt et al., 2018[52]).

Figure 3.2. Used a mobile phone or the internet to access an account

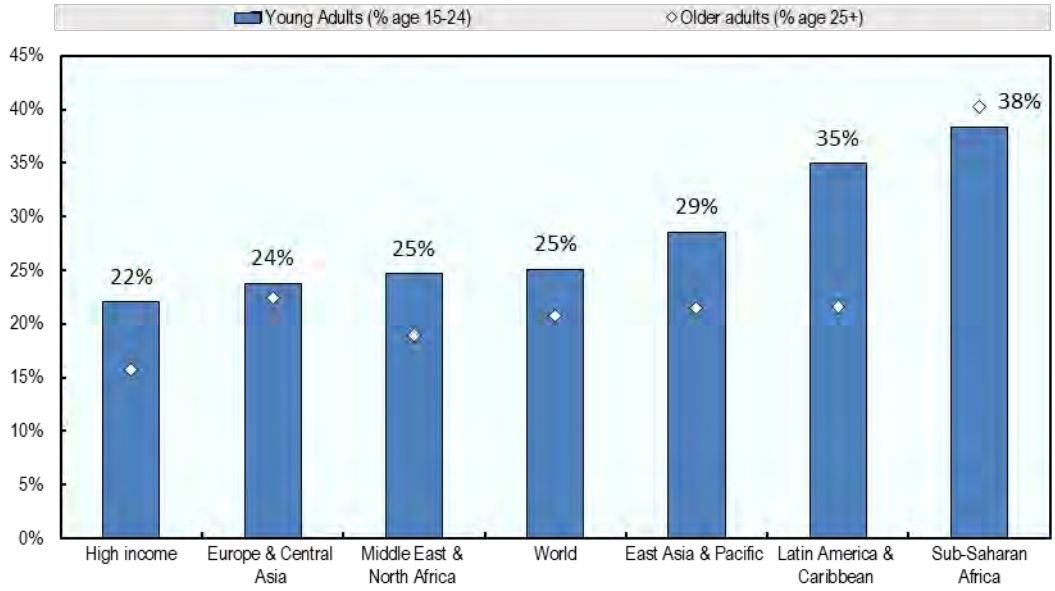


Source: Global Findex, 2017

In terms of formal savings accounts, ownership is also high in many high-income countries (e.g. around 70% of young people in Austria and Australia have one). That said, across all regions, more young people than adults use only informal means of savings (see Figure 3.3). This means there are opportunities to fulfil unmet demand for formal savings products in countries with low financial inclusion (Yamada et al., 2020[53]). By leveraging digital innovations, including trustworthy digital identity solutions for opening accounts and depositing funds, savings could be easily adapted to serve youth needs better and hence contribute to their financial inclusion. For example, digital savings products could be

adapted to irregular and small transactions, and be designed to provide easily accessible data alongside smart analytics of, for example, spending habits and simple money management tools.

Figure 3.3. Young people vs. older adults informal savings (only)



Notes: Regional data excludes values for high income economies.
Source: Global Findex, 2017

More innovative and nuanced services can encourage savings by offering smart tools and leveraging nudges. Hybrid and flexible products could also assist, for example by combining income smoothing, rainy day savings and long-term savings into a single product for the youth and the self-employed. These could also be used to provide savings matches for designated purposes, such as education or entrepreneurship.

Other innovations range from accounts or cards linked to applications controlled by parents to monitor their children's spending behaviour, to applications used to incentivise children's savings behaviour. These may include digital savings pots in which children can see their savings towards specific goals grow, usage of gamification and challenges or competitions to reward positive financial behaviour, or automatic set-ups that round-up amounts of a payment transaction, and the rounded amount is set up in a savings account (See Box 3.2 for some examples).

Box 3.1. Online and digital banks targeting young people

As of 2019, **Monzo**, one of the first neo digital banks in the UK had 3 million customers. Although it is targeting young people in general, Monzo has recently decided to also offer services for younger people (16 and 17 year old), which include a contactless debit card that works with Apple Pay and Google Pay and a full UK current account through which young people may send and receive money or setup direct debits and standing orders. Overdraft and spending on things which are illegal for below 18 year olds, like gambling,

is blocked. Monzo has integrated budgeting functionalities and tools, which allow for simple and effective money management.

Bunq is the only digital bank set up in the Netherlands, available in Germany, Austria, Italy, Spain, France, Belgium and Ireland. It has made of customer centricity the most important feature of its value proposition. Typically, through a bunq account, the customers will be able to set up instant notifications for each card payment, direct debit or any other transaction, block their cards in real-time, change PINs or adjust limits. For direct debits, an upfront notification allows the user to decide whether or not to approve it. Payments are processed in real-time and there are no foreign exchange fees. Bunq has partnered with TransferWise, providing money transfer services and support for 39 currencies. Although bunq does not primarily focus on young people, the features it provides are attractive to young people: for example, users can create multiple sub-accounts, each with their own IBAN, to make money management simpler, or open shared "Slice Groups" to keep track of group expenses, such as a holiday with friends. Bunq also focuses on people working in the gig economy, freelancers and entrepreneurs in smaller businesses, which often times are youth.

Singapore's United Overseas Bank (UOB) launched **TMRW**, a mobile-only bank to target ASEAN youth (currently launched in Thailand and Indonesia) who prefer to bank on their mobile phones, "anywhere and at any time". Its moto is "Banking for the digital generation". It offers a basic account, a debit card, a savings account and a credit card, all through a digital mobile banking app. Amongst its features are a no-fees bank account, unlimited cash withdrawals with the debit card, no fees for bill payments and fund transfers, integrated budgeting app, and a savings account featuring an interactive savings game (city of TMWR), incentivising young people to use their savings account to save. It is currently experimenting with fingerprint authentication match on card and facial recognition technology within Bank of Thailand's (BOT) regulatory sandbox.

In the UAE, **Liv** is a digital-only lifestyle banking, developed by Emirates NBD targeting the growing digital banking needs of youth in the UAE. Liv aims to be a young person's "financial buddy" that helps to achieve one's financial goals. Liv provides instant account opening with no paperwork and real time access to insightful financial data and transaction history. It is free for students below the age of 23 and charges a low fee for those above. The platform uses real-time analytics to leverage transactional history and spending patterns by category or merchant to help customers work towards their goals. Liv is designed to appeal to millennials and generation Z and provides them with a host of modern-day features, including the ability to pay friends by sharing a link through social media and mobile applications and a bill splitting feature which allows to split bills and keep track of the repayments. The "Goal Accounts" functionality allows customers to save money towards personalised goals while earning 2% interest p.a. Currently, 40% of the Goal Accounts are owned by young people aged 18 to 23. This reflects a growing savings culture amongst the youth in UAE. Liv attracts customers at 10% - 20% of the acquisition costs of a traditional financial institution, with more than 80% of new customers learning about Liv through a referral. Liv has been successful in serving the youth and women clients; in fact, youth make 25% of Liv's customer base, while women about 33%. The platform recently launched in Saudi Arabia and is planning to expand into MENA region in the near future.

Source: TMRW website, www.tmrwbyuob.com/global/index.html (Accessed 9 June 2020); Bunq website (2020), www.bunq.com/ (Accessed 9 June 2020); Monzo website (2020),

monzo.com/features/16-plus/ (Accessed 9 June 2020); Liv website (2020), www.liv.me/ (Accessed on 9 June 2020)

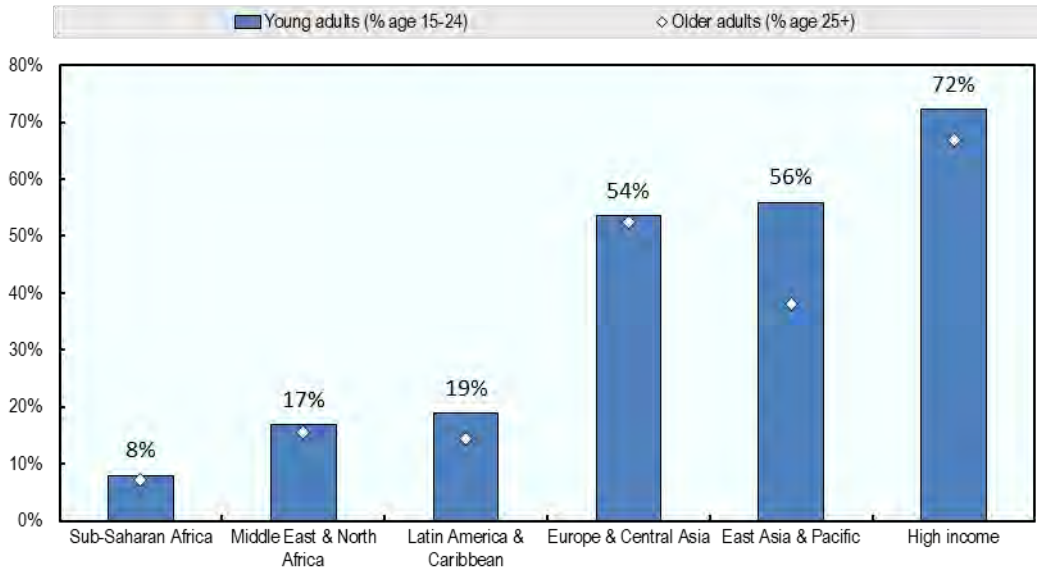
3.3. Digital payments and money transfer services

Digital innovations in payments may improve speed and security of transactions. Mobile and person-to-person payments allow for money transfers by utilising identifiers such as an e-mail address or phone number while contactless payment methods are increasingly being used as they are perceived as a more convenient and secure way to pay (U.S. Department of the Treasury, 2018[44]).

76% of account holders around the world reported having made or received at least one digital payment in the past year, according to Findex 2017 data.[26] About 75% of digitally active consumers used at least one money transfer or payment Fintech service in 2019 (amongst the most popular services being online digital-only banks and mobile phone payment at checkout) (EY, 2019[46]). In both India and Russia, 99.5% of digitally active consumers were aware of Fintech services to transfer money and make payments, while in China, the adoption rate of money transfer and payment apps is 95% (EY, 2019[46]).

While more older adults worldwide are making or receiving digital payments[27] compared to young people in general, more young people compared to older adults all around the world have used internet to pay bills or buy something online (Figure 3.4), suggesting a potential gap in the supply of digital payment products for young people.

Figure 3.4. Used the internet to pay bills or to buy something online in the past year



Source: Global Findex, 2017

Non-cash payments provide significant improvements in terms of security, by reducing the risk of loss and theft. For youth in vulnerable situations (such as working youth or youth with parents that have emigrated), financial access to reliable money transfer services could also allow them to safely manage income and expenditures. Moreover, youth over 18 could in many countries be eligible for government support or cash transfers, which provide an

opportunity and incentive for both youth and governments to build a digital financial inclusion connection.

Box 3.2. The role of G2P transfer in enhancing youth digital financial inclusion

Government-to-Person (G2P) payment transfers may contribute to increased financial inclusion, and in many countries have become a key pillar of national financial inclusion strategies to reach excluded population. For youth, G2P payments may represent an opportunity to increase digital financial inclusion and digital financial literacy. Digitising social benefits transfers may improve delivery, reach the intended beneficiary in a safe and quick manner. In **Indonesia**, the Program Keluarga Harapan (PKH), is a conditional cash transfer that provides social assistance, amongst others to children old enough for schools and pre-schools, to complete 12 years of basic education (Government of Indonesia, 2020[54]). The benefits are transferred to a bank account which is linked to a specially designed debit card that the beneficiaries can use. Although the digital transfers translated into almost 90% of the beneficiaries opening bank accounts for the first time, these accounts were mainly used for cashing-out the social benefits. An evaluation of the programme found that reasons for the low usage included: poor programme communication, poor digital literacy, lack of appropriate payments infrastructure in rural areas (Sri Sulastri and Ravi Kumar, 2019[55]).

Another example comes from **Mexico**, where there are three social programmes that are focused on the youth population: Becas Benito Juárez, Jóvenes Construyendo el Futuro and Jóvenes Escribiendo el Futuro. These social programmes promote account uptake and usage of digital payments, as the beneficiaries receive their scholarship support through a debit card.

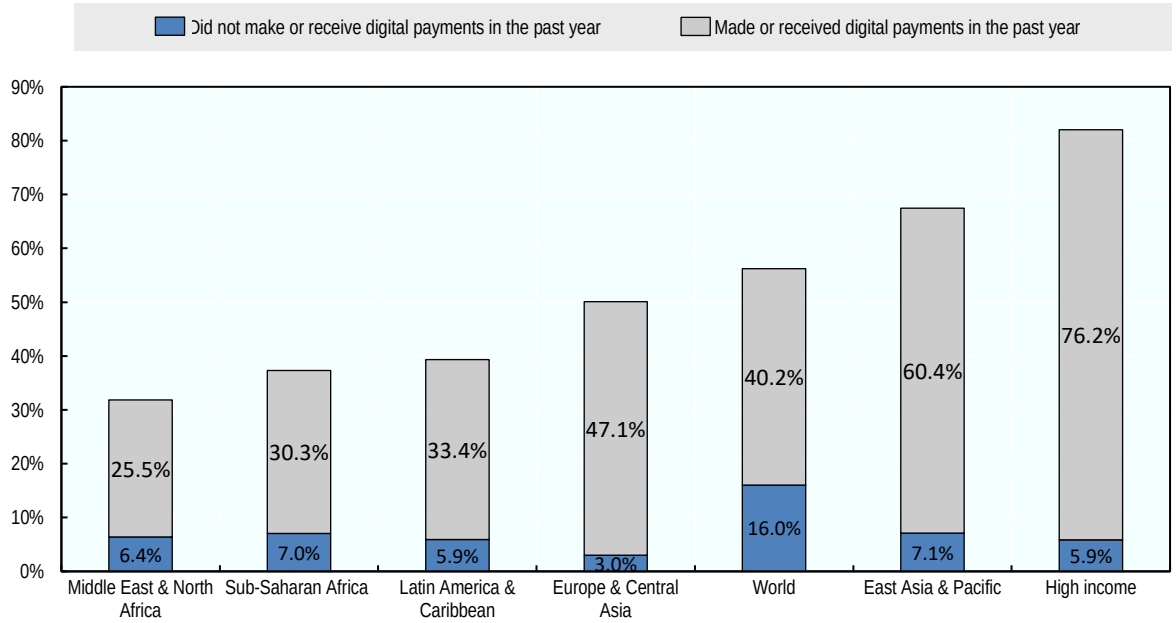
Similarly, in **Peru**, young people can benefit of state scholarships through a programme called "Beca 18". The beneficiaries of the scholarship receive basic notions of financial education, in relation to money management and budgeting, the correct and safe use of financial products and services, digital payments as money wallet, savings accounts, alongside the financial inclusion aspect.

Youth typically have access to some form of non-cash payment mechanisms, such as debit or credit card (pre-paid cards are common in Italy), or mobile e-wallets. In some developed countries, there is a digital infrastructure for school fees payments, canteen payments or public transportation payments, through rechargeable stored-value cards, sometimes using contactless payment mechanisms (near-field communication) or related technologies. These cards may, in certain contexts, be considered as a stepping stone towards other formal payment vehicles. Recent data from PISA reveals that 15-year-olds already have experience with digital financial transactions: on average, 73% of students had bought something online over the past 12 months and 39% had made payments using a mobile phone. In Russia, 69% of students had made a payment using a mobile phone while in Indonesia, 52% of students paid with a mobile phone. The gender gap observed in account ownership is even wider when considering mobile payments. On average across OECD countries/economies, boys are 12 percentage points more likely than girls to have made a payment using a mobile phone (OECD, 2020[22]).

In less developed countries, young people may have access to mobile money accounts, which provide users the flexibility of storing value and making payments through their mobile phones using SMS.

Young people, more than their older counterparts use their accounts whenever they have access to one: the activity rate of accounts owned by young people is higher in most regions around the world (with the exception of high income countries).[28] In general, young people who have an account also report making or receiving digital payments (Figure 3.5). This suggests that those young people who are currently unbanked, may become active users of digital technologies once they would be offered sensible alternative to cash.

Figure 3.5. Young account owners as users of digital payments (age 15-24)



Note: Regional aggregates exclude data for high-income countries;
Source: Findex 2017

Box 3.3. Innovators in payments and money transfer space

Some Fintech firms have been developed specifically to serve children, to start them on the path of financial acumen, through offering services such as savings and payments through mobile tools. Both **Osper** and **Nimbl** allow parents to teach their children to spend and save their pocket money wisely. Osper provides a debit card and an app for children to track their spending and saving each month. Parents have access to an application through which they can top up their children's account through an allowance. The child can then decide how much of it to save and what to safe for. The card is blocked for certain merchants and parents can easily enable or disable the possibility of online spending.

Nimbl is a payment card designed for children and young people between 8 and 18 years old. Parents can set up pocket money, unique parental controls and spending rules, lock and unlock the children's card whenever they need to, through their account and the linked account for the child. Children can use their card to shop in-store, online or to withdraw cash.

InstaReM is a digital cross-border payments company with presence across Asia-Pacific, North America and Europe, in over 35 markets. Launched in 2015, it offers innovative solutions to send, spend and collect money in fast, convenient and cost-effective ways in

multiple markets. InstaReM offers a special product for students, called InstaReM for Students, which allows for low cost money transfer for students planning to study abroad. Young people can open a free account online, the product has low costs and no hidden fees (a nominal fee between 0.25% and 1% is charged for any transfer, depending on the countries involved in the money transfer transaction).

E-Sewa is Nepal's first mobile wallet. Users can send, receive and pay money into eSewa wallet through mobile banking, Internet banking, and counter deposit at different banks and cash points. Half the active users of eSewa are 18 to 30 years old but less than 15 percent of the wallet's active users are women. This is attributed to the fact that Nepal is a cash-based society and, according to research from UNCDF Nepal, digital interactions with customers alone are not enough to encourage the use of digital financial services.

The **Unified Payments Interface** (UPI) is an application based electronic payment system enabled through smartphones that uses a registered virtual address to make or receive payments. It has revolutionised the mobile payments arena in India. The system is available "round the clock" and facilitates online payments by connecting multiple bank accounts through a mobile application, facilitating payments without the need to expose the bank account details. The UPI system enables easy on-boarding of customers and is also offered by non-bank third-party application providers like Google, Amazon, Whatsapp, which has ensured convenience and increased acceptance, especially among the youth.

Sources: Instarem website (2020), www.instarem.com/en-eu/students (Accessed on 20 May 2020); Nimbl website (2020), nimbl.com/how-it-works/ (Accessed on 20 May 2020); Osper website (2020), osper.com/ (Accessed on 20 May 2020);

Misquith, A., K.N. Massaly (23 July 2019), "Turning Remittances into Savings for Nepal's Migrant Families", CGAP blog, www.cgap.org/blog/turning-remittances-savings-nepals-migrant-families

3.4. Appropriate insurance products for young people

Alongside savings products and low risk payment instruments, insurance represents a basic financial product from which many young people might benefit if they had opportunities to access and use it. Young individuals are typically more likely to face irregular income streams, and have lower levels of buffer savings available in the event of financial shocks. Insurance can help young people manage risks that may arise in a variety of circumstances. Examples of relevant insurance types include health, motor and vehicle, travel, device, home contents.

Generally, amongst countries participating in the survey, there is low insurance take-up among young people. For example, in Mexico, 20.7% of young people have some form of insurance (and a decreasing trend over the years), 9.1% in Nigeria and only 4% in South Africa. In the UK, penetration of any protection cover (such as life insurance) is lowest among 18-24 years old (9%) (FCA, 2018[56]). 33.9% of young people in Mexico thought that they did not need insurance (National Banking and Securities Commission (CNBV), 2018[34]). In Hong Kong SAR, China, the distribution of insurance products is heavily dominated by insurance intermediaries. Insurance products with high protection but low commission are often not on the offer list of insurance intermediaries, which results in lower insurance levels for low-income individuals or young people who cannot afford insurance products with high premiums.

At the same time, some existing insurers are beginning to engage with a young and growing customer base, especially those between 18 and 24, by innovating and catering for a younger demographic via appropriate products and services. Innovations and digital delivery of life insurance are often strongly linked with a financial planning component (see Box 3.4 and Section 3.5).

Box 3.4. Life insurance – attracting a new customer base

Existing insurers have taken on the challenge of reaching a new, growing customer base composed of young people. Leveraging digital delivery, wearable collected data, and other attractive features, insurers hope to acquire new young customers.

MassMutual in the USA piloted and launched **Haven Life**, a digital life insurance agency that allows users to apply for and receive life insurance coverage online. It was aimed to attract younger consumers. Amongst the features, a life insurance calculator can determine how much coverage each individual needs. Vitality Program offers "life insurance that rewards you for being healthy." This type of life insurance is linked to personal lifestyles, which hinges on clients adopting the use of wearable tech and on the active usage of a gym membership. Premiums are reduced on the basis of gym attendance.

In India, Aviva launched a campaign targeted at young people (**Hello, Life. Hello, Aviva**) that aims to engage with the youth to help them understand the purpose of life insurance cover and help them start their financial journey. The campaign is aimed at inspiring people to have a good financial plan.

Source: Havenlife website (2020), havenlife.com/why-haven-life (Accessed 9 June 2020); Vitality life insurance website (2020), www.businessriskcalculator.co.uk/ (Accessed 9 June 2020); Aviva website (2020), www.avivaindia.com/insurance-guide/hello-2020-hello-life (Accessed 9 June 2020)

In developing countries, microinsurance reaches just under 300 million people, representing only around 10% of the potential market for insurance (Smit, Denoon-Stevens and Esser, 2017[57]). According to research from Cenfri, the top five challenges in microinsurance delivery are: lack of information on consumers; inadequate access to consumers; different and new consumer needs; customers' inexperience with formal financial services; and constrained business models (Smit, Denoon-Stevens and Esser, 2017[57]). There are opportunities for Fintech entrants in the insurance market to address some of the challenges in scaling up microinsurance reach. In emerging markets, Cenfri reports (Esser et al., 2019[58]) the existence of 292 insurtech companies in 85 countries across Africa, Asia and Latin America (Thom, 2019[59]). In 2017, McKinsey estimated that 75 percent of insurtech businesses was serving retail clientele, with the remainder in the commercial segment (Tanguy et al., 2017[60]).

Through technologies such as telematics and the Internet of Things, insurtech companies have developed new products in multiple lines of insurance – such as motor, home, travel and health insurance – that drive customer engagement and retention. Innovations such as machine learning coupled with access to more detailed data on consumers and usage of smart devices, such as meters for car mileage or calories burned, or in-home flood and fire detectors that autonomously signal emergency services, have allowed insurtechs to more accurately define certain risk pools and, therefore, to provide more affordable products, which further attract young clientele (see Box 3.5).

Religious convictions may affect youth financial inclusion, as seen above. These are especially relevant in the case of insurance products since, generally, there is a supply limitation related to the low number of Takaful-based insurers that could provide appropriate insurance services to youth self-excluded for religious reasons. The digitalisation of Islamic-based insurance services may support the self-excluded youth to access religiously acceptable insurance services provided by actors established in other regions (inside or outside their countries).

Box 3.5. InsurTech tailored to customers' needs

By customising their services and providing more affordable products, insurtech companies could help broaden inclusive insurance to the underserved, such as the youth.

Dinghy provides a smartphone-optimised website for freelance workers to purchase insurance for professional indemnity, public liability, cyber liability and business equipment. Dinghy insurance is bought on a pay-as-you-go basis, giving users the option of turning off their cover when they are not working.

Founded in France, **Luko** is a fully digital insurer which aims at simplifying its customers' experience with insurance and creating a more equitable insurance model. It uses artificial intelligence to prevent disasters and adds a social aspect, which attracts a young clientele: if the money pooled to reimburse claims is not fully used by the end of the year, it is donated to the association of the customers' choice. Luko claims to offer the lowest administrative fees in the home insurance market in France, thanks to a 100% digital insurance business model. In addition, it provides customer service available 24/7 and that connects with the clients through FaceTime calls.

BIMA is a mobile microinsurer based in Sweden that provides pay-as-you-go insurance and mobile health services for underserved families in emerging markets, where mobile penetration is relatively high and insurance coverage is very low. All BIMA's products are registered and paid for using mobile technology. It currently serves 31 million customers, of which 75% access insurance for the first time. BIMA operates in 13 countries and 93% of their customers live on less than $10 a day. BIMA leveraged mobile technology to unlock the mass-market potential of microinsurance.

As of 2019, 52 insurtech companies were active in India. Amongst them a few target specifically young people. **Toffee** is a demand-based insurance which targets urban youth with covers such as bicycle theft insurance, backpack insurance, even a cover for dengue fever. It partnered with traditional insurance companies, but it has de-bundled comprehensive products to create new products, wherever possible.

Source: Littlejohns, P. (14 March 2019), "Millennial insurance: How five start-ups are capturing Generation Y", www.nsinsurance.com/news/millennial-insurance-five-start-ups/ (Accessed 9 June 2020); BIMA website (2020), www.bimamobile.com/our-services/mobile-led/ (Accessed 9 June 2020); Luko website (2020), www.luko.eu/fr/ (Accessed 9 June 2020); Toffee insurance website (2020), toffeeinsurance.com/ (Accessed 20 May 2020)

3.5. Digital tools for personal financial management

Digitalisation is making financial planning and wealth management tools available to a wider range of consumers, through the usage of internet, mobile apps or chatbots. The use of data aggregators, data analytics, machine learning, and other computing advances has

allowed financial advice providers to cut costs and increase outreach: digital financial planning services may often be available to individuals with minimal balances (U.S. Department of the Treasury, 2018[44]).

Young people are amongst those more likely to use technology to help with personal financial management (Lin J. et al., 2018[37]). The availability of digital financial planning tools to young people may have significant positive effects: it may support with establishing a pattern of saving and investing during the early period of an individual's career, it may increase the probability of accumulating wealth or building retirement savings.

Financial management apps typically include services such as budgeting, goal setting, bill payments or account aggregation and may include behavioural nudges such as automatic reminders, analysis of spending patterns, comparisons of spending and savings with peer groups. Mobile applications leveraging computer algorithms may also provide recommendations on investment and asset allocation based on consumer's responses to questions regarding risk tolerance, time horizons, and other factors. Consumers are typically charged for the services either a fixed-fee or a percentage of assets under management. Alternatively, a limited set of services is offered for free while additional services must be paid for. Some Fintech financial planning entities may provide access to a human financial planner for an additional fee or with a higher level service package.

Box 3.6. Financial planning through digital means

LearnVest is a youth-focused financial planning company that Northwestern Mutual acquired in 2015. LearnVest's basic financial planning resources are free with a pay option to engage a financial planner who will give advice about spending, budgets, investing, and more. LearnVest has around 1.5 million users, mostly young professionals who sought a more modern way to manage and budget their money. For the Northwestern Mutual, LearnVest provides useful insights in better understanding young people's behaviours and motivations in relation to money, which helps Northwestern Mutual to develop insurance products adapted for young people.

Source: Northwesternmutual website (2020), www.northwesternmutual.com/ (Accessed 20 May 2020); LearnVest website (2020), learnvest.com/ (Accessed 20 May 2020)

3.6. Access to credit by young people

Access to credit by youth should always be provided responsibly within an appropriate regulatory framework, and be adapted to their needs and circumstances, as the consequences of becoming over-indebted at a young age can cause long term financial detriment.

According to 2017 Findex, 39% of young people reported to have borrowed some money in the past year. Only in high income economies young people borrowed from financial institutions or through their credit card (30%) more than through any other means. In other regions, youth borrow mostly informally, from friends, family members, and shopkeepers as they typically lack the documentation, experience, collateral, or guarantee necessary to borrow from a financial institution.

Young people may need credit for a variety of reasons. According to Findex data, globally, 8% of young people have borrowed money for health and medical purposes and 4% to start,

operate, or expand a farm or their own business. Credit products rank amongst top five most commonly accessed financial products by youth in half of the countries participating in the stocktake exercise. This includes access to credit cards or to some form of credit such as personal loans, student loans, credit granted by stores for durable goods or bank overdraft. Data from M-Shwari in Kenya shows that working-age youth use digital credit. Young people aged 18 to 30 make up more than half of M-Shwari's user base (BCG and Mastercard Foundation, 2018[61]).

Recent data from the USA indicate that most consumers who transition out of "credit invisibility"[29] do so at young ages (CFPB, 2017[62]). Almost 80 percent of the transitions out of credit invisibility occurs before age 25, most often triggered by credit cards or student loans. However, same research indicates that not all debt and credit records are intentional. Younger consumers are more likely than older consumers to acquire a credit record from a non-loan item, specifically as the result of third-party debt collection account. Debt collection accounts are most likely the result of unpaid medical bills followed by debts for cable or cellular service (across all age groups) (CFPB, 2017[62]).

Box 3.7. Young people and student loans

In high income economies, it is not uncommon for young people to graduate from their studies with a considerable amount of debt. Student loans are important for youth because they enable youth to invest in their futures. The choices around paying for post-secondary education are one of the first major financial decisions that youth will face. Student loans are commonly used by young people in many countries, such as Australia, Canada, Croatia, Turkey, United States and the Netherlands.

As the cost of higher education increases, so do the debts that young people need to carry from the beginning of their working life. This significantly reduces students' capacity of starting to save for retirement, to start a business or to buy a house. To mitigate these costs, some countries, provide support to students financing their education through debt, by offering beneficial interest rates and flexible term of use and repayment of the loan.

For example, Canada provides a special saving vehicle, the Registered Education Savings Plan (RESP) geared for higher education that can grow tax free, including for investment earnings. If saved for a child under 17, the Federal Government (and in some cases, Provincial governments) also contributes money as a grant or bond. The beneficiary can take money out of the RESP once they are enrolled in a specified education programme.

In the USA, almost half of young people (Bolognesi et al., 2020[48]) have one or more outstanding student loans and more than half is concerned about being able to pay it back. Another study from the United States reveals that 42% of student loan holders with payments due have been late with a payment at least once in the past year, while nearly half (47%) of Americans with student loan debt wish they had chosen less expensive colleges (Lin J. et al., 2018[37]).

The US Department of Education offers federal student loans to undergraduate, graduate, and parent borrowers. Federal student loans have the objective of helping borrowers to pay their loans on affordable terms.

Borrowers under this programmes may be eligible for income-driven repayment plans or no payments plans for low-income borrowers. These plans also feature loan forgiveness after 20 or 25 years. Borrowers who pursue a career in public service can benefit from the

Public Service Loan Forgiveness Program which forgives any remaining loan balance after a borrower makes 10 years of on-time payments while in a public service career. Borrowers returning to school, facing economic hardship, or disability may benefit from additional protections (US Department of Treasury, 2016[63]).

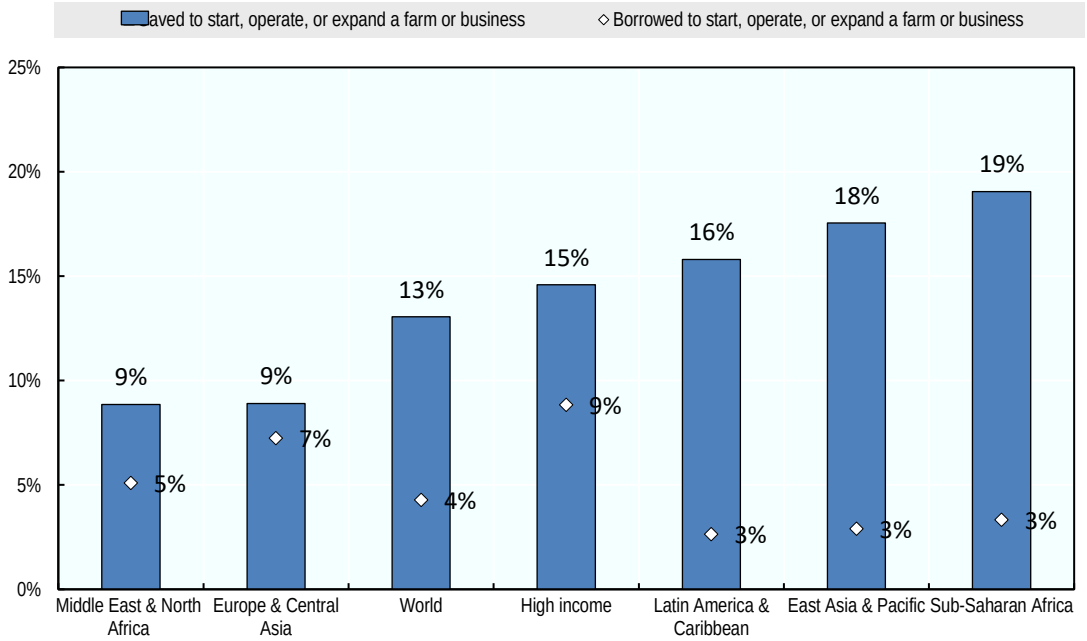
Online market lenders targeting student loans have also become active in the USA recently, with a focus on refinancing both private and federal loans into lower interest rate loans. However, they provide lower protection and flexibility compared to federal student loans (U.S. Department of the Treasury, 2018[44]).

Access to credit for young entrepreneurs

Access to credit is especially important for young people who are planning to start or are running their own businesses. According to ILO, based on SWTS data (Sykes et al., 2016[29]), self-employment amongst youth is especially prevalent among youth in Sub-Saharan Africa (almost 50%), South-Asia (24.7), East Asia (19.7) and Latin America (19.8). In MENA, 9.2% of young people are considered self-employed. Self-employed youth in developing countries indicate that access to financial resources is the number one barrier for growing their business (Sykes et al., 2016[29]). A study in developing countries, covering 37 impact evaluation studies finds that credit constraints are a significant barrier for young people who wanted to start their own income-generating activities (Cho and Honorati, 2013[64]). For example, in Brazil, among all microenterprises registered in Brazil, only about 19% have a bank account and 8% have had credit operations. While micro-entrepreneurs have more restricted access to credit when compared to bigger enterprises, younger entrepreneurs have an even more difficult situation. The same study shows that only 2% of the amount of credit granted to individual micro-entrepreneurs went to the youth of 24 years old or younger (Banco Central Do Brasil, 2017[65]).

Many young people rely on family and friends for borrowing, or on their own savings for starting, operating or expanding a farm or business, as Findex data reveals (Figure 3.6). According to research from SEEP Network, youth prefer to borrow from informal sources, especially to start up a business, as they value the privacy and additional understanding they may have in case of difficulties to repay a loan. Youth who did not have experience borrowing formally from MFIs[30] mention the following challenges in accessing funds: size of loans, short grace periods, high interest rates, lack of technical support, high fees for not paying loan instalment on time, slow process for distributing loans (SEEP, 2013[24]).

Figure 3.6. Young people (% age 15-24) who borrowed or saved for productive purposes



Notes: Regional averages exclude high-income economies
Source: Global Findex, 2017

Many circumstances will influence the financing strategy and the financing possibilities of each individual MSME. According to UNCTAD, formal financial institutions hesitate to lend to youth entrepreneurs, either because of perceived higher risks, due to lack of youth business experience and social capital, or because of lack or a bad credit history and assets to serve as collateral or proof of regular income (UNCTAD, 2015[66]).

Country level data confirm such findings. According to the National Survey on Enterprise Financing (ENAFIN 2018) in Mexico, 47% of the microenterprises that have been rejected by a financial institution stated that it was due to having no credit score or a bad credit history (15%). In Hong Kong SAR, China, there are concerns that start-ups (including those set up by youth) and small-and-medium sized enterprises, experience difficulties in accessing appropriate financial services because they are lacking adequate financial records or proof of regular income. In Ukraine, entrepreneurs must have a permanent source of income to be able to take out credit. Although these barriers apply more generally to all entrepreneurs, young people seem to be most affected by them, given their limited interaction with financial service providers, as well as limited access to traditional forms of collateral (Kwame Yeboah et al., 2019[67]).[31]

A global stocktake of different models for financing youth entrepreneurs recently published (see Box 3.7) provides insights and practical examples of financing products tailored for young entrepreneurs.

Box 3.8. Unlocking Finance for Youth Entrepreneurs

A recently published report identifies promising models for financing youth entrepreneurs. Through an analysis of 35 case studies, examples of good practices put in place by financial service providers serving the youth are also identified:

1. Market research of youth specific needs, including market and landscape analysis and conducting quantitative and qualitative research;
2. Develop flexible criteria in assessing youth clients credit worthiness, such as surveys or psychometric scoring;
3. Use tranched financing to mitigate risks. This can be based on business performance achievements, youth financial track record, skills acquisition (such as financial literacy);
4. Develop specific products for young entrepreneurs, for example loans without collateral requirements, interest free loans or flexible and personalised loans.

Fintech companies can leverage their agile models to make financing affordable and customised to young entrepreneurs' needs. They can integrate the above suggestions in their business models. They may also use alternative data sources, big data and machine learning to more accurately assess financial risks related to young entrepreneurs. It is important that such innovations are implemented in a framework which is adapted to appropriately mitigate those risks associated with data protection and privacy, especially related to the use of alternative data.

Source: World Bank Group (2020), *Unlocking Finance for Youth Entrepreneurs: Evidence from a Global Stocktaking*

Digitalisation can contribute to improving access to credit for young entrepreneurs through two channels (see Box 3.8 for details). Firstly, emerging solutions in digital credit and Fintech platforms such as peer-to-peer (P2P) origination platforms for small business lending, online marketplace lending[32] and equity–based crowdfunding could potentially help filling part of the MSME financing gap. In the USA for example, in 2015 (FED, 2016[68]), 20 percent of all small business owners applied for loans or lines of credit through online marketplace lenders, and 70 percent were approved (US Department of Treasury, 2016[63]). Secondly, digital approaches to credit scores and investment advice may facilitate access for some young people in certain markets.

Box 3.9 provides examples of Sharia compliant crowdfunding platforms.

Box 3.9. How digitalisation can improve access to finance for young entrepreneurs

Market place lending and equity-crowdfunding

Digitalisation has made the lending process faster and paperless. Traditional banks and Fintechs are introducing a wide range of innovations in their lending process, or creating new business models and distribution channels all together.

Lending-based and investment-based crowdfunding platforms represent a new model of financial intermediation by directly connecting lenders, investors and borrowers via internet platforms. There are broadly three main types of platforms catering to MSME funding: (i) pure intermediation platforms, connecting lenders and borrowers and providing information transparency about the borrower (or lending based crowdfunding platforms), (ii) platforms running asset pools (bank-like model), whereby lending funds and loans are pooled without proper allocation of which lender is lending to which borrower, and (iii) equity crowdfunding, in which entrepreneurs raise money in exchange for a percentage of equity (shares) in the company.

Still, these online alternative finance activities are strongly concentrated in a few countries: China, followed by the USA and the UK.

Young entrepreneurs may take advantage of the opportunities of alternative (and cheaper in many cases) funding; at the same time they should be aware of the risks involved in using these platforms, the real costs and potential limitations. Risks may include: the liability in case of flaws or malfunctioning of the platform; consumer protection issues around fraud or platform failure; use of personal data and financial information data ownership; potential lack of transparency and disclosure on loan performance metrics.

Alternative data credit scoring and AI-based credit scoring

Traditional credit scoring mechanisms, which are performed by financial services providers often at high-costs, rely on credit histories. Unbanked youth or youth-owned MSMEs often lack credit history or credit score. This leads to banks often rejecting borrowers who may be otherwise credit-worthy. By using alternative data sources (such as smartphone metadata, social media information) and behavioural insights, alternative credit scoring mechanisms may allow for a more nuanced understanding of data related to specific individuals and MSME, potentially facilitating access to debt capital. This is particularly relevant for young people, who are active on social network platforms and have high smartphone penetration. However, at the same time, new data sources used by online market lenders may pose new risks to consumers, such as those related to data privacy, data inaccuracies or usage of algorithms that may lead to unfair credit decisions.

An interesting example is FINTQ a Philippines-based Fintech start-up which launched a digital loan origination and loan management platform, **Lendr**, in 2015. The majority of customers who borrow through Lendr are young single females. The platform provides customers with a mobile-phone based interface on which they can view, select, and apply for loan products by FINTQ's partner banks and non-bank institutions. The platform operates as a one-stop-shop whereby customers can compare different loan products on the Lendr Loans Marketplace. It uses an alternative credit scoring mechanisms which includes data from utility companies, telecommunications operators, financial transactions data and

actual mobile devices. It encompasses over 280 variations of behavioural data. The credit score is applicable to both banked and unbanked customers.

Source: *OECD (2017), Financial Education for MSMEs and Potential Entrepreneurs; OECD (2019), Financing SMEs and Entrepreneurs 2019: An OECD Scoreboard; World Bank Group (2020), Unlocking Finance for Youth Entrepreneurs: Evidence from a Global Stocktaking; US Department of the Treasury (2016), Opportunities and Challenges in the online market place lending*

Box 3.10. Islamic crowdfunding

A Sharia compliant financial product includes prohibition of interest (riba); sharing of risk; sharing of loss and profits; reduction of information asymmetry; relying on equity rather than debt; and creating a system that reflects economic and social justice.

Islamic Fintech companies are providing technology-based solutions to improve access to Sharia compliant financial products or services. Amongst emerging new services is Islamic crowdfunding.

In Malaysia, Skolafund, an education-based crowdfunding platform, is helping students to crowdfund higher education scholarships. Ethis Ventures has launched an Islamic charity crowdfunding platform that connects Muslim donors with social projects around the world.

In Turkey, to increase access to financial products for youth who seek Sharia compliant products, the Capital Markets Board of Turkey has worked on diversification of Islamic finance instruments.

Source: The City UK, Borsa Istanbul (2019), UK-Turkey Islamic Fintech Working Group: Case studies and insights

3.7. Starting retirement savings from a young age

At the beginning of their working life, young people may find themselves needing to juggle diverse and sometimes conflicting financial priorities. These could range between becoming financially independent from parents, paying off a student loan or start saving for a home deposit (FCA - UK, 2019[69]). In addition to this, as seen in previous sections, often times young people are more at risk of unemployment than older individuals, and forced to accept precarious financial situations, unstable working contracts or to start their own businesses. Within this context of financial constraints and multiple and conflicting life and financial priorities, retirement savings may not be a priority for young people, even though the powerful wealth-building phenomenon known as compounding would be maximised the sooner the youth would start putting money aside for their old age.

In the USA for example, only 36% of people aged between 20 to 39 years old reported that they have tried to figure out how much money they will need in retirement and from those, 24% did not yet have a retirement account set up (Bolognesi et al., 2020[48]). In the UK, changes to the labour market, such as a rise in self-employment, and delayed property purchase have reduced awareness among young people of, and access to, insurance and pension products, as employment and property purchase typically trigger, either directly or indirectly, consideration of these wider products. Even when they may have the possibility

to start saving for old age, young people may not know where to start or what their options are. Where they exists, most systems for retirement savings have changed from defined benefits to defined contributions, and they may be non-existent in specific developing countries.

As life expectancy rises, healthcare costs increase and interest rates remain low, young people need to be supported and empowered to be able to build their long terms savings from an early as possible age. Governments may have a significant role in providing appropriate support and incentives to encourage youth retirement savings from as early as possible, alongside programmes that support youth employment, youth entrepreneurship and more generally financial capability. Tailored support, such as coaching and financial advice may be needed for young people with lower financial skills and fragile financial situations, to help them with financial choices they may face.

Amongst the countries participating in the stocktake exercise, only a few indicated that retirement savings were amongst top financial products owned by young people, or that there was a specific policy in place aimed at incentivising long term retirement savings by young people (see Box 3.9).

Retirement saving is different in each country, dependent of many variables and for young people is complicated by issues around employment, higher education – both in terms of extended periods of time studying without potential contributions and cost implications, and conflicting priorities and life cycle events. Although digitalisation is not a silver bullet that can increase young people's willingness and possibility of saving for retirement, in some particular situations, it may positively affect young people's financial decisions, by making retirement investments more accessible and easier to understand.

For example, digitalisation may improve the ways in which retirement providers interact and communicate with individual members. Digital disclosure can reduce compliance costs and roboadvice could make financial planning and financial advice more accessible to lower income individuals (OECD, 2017[70]) (see also Section 3.5).

Technology can be used to enhance digital and smart communication (such as social media, gamification, personalisation or interactivity) and lead to higher consumer engagement. This may be especially beneficial for young people who are accustomed to using technology to access financial services. New analytical techniques and big data may lead to the creation of more efficient and more personalised retirement solutions, which could take into consideration the variety of earning types and needs that young people face.

Leveraging technology and behavioural insights (such as push notifications to nudge young people into increasing contributions), there is scope for governments and pension providers to nudge young people to think and start saving for old age as part of managing other financial choices early in their careers. Online pension calculators, digital dashboards, digital pension advice, chat bots, the use of gamification, digital retirement coaches via mobile apps and virtual reality (see (Accenture, 2020[71])) may also contribute to this purpose, alongside provision of financial literacy and appropriate financial information, youth employment support, coaching, mentoring and in-person financial advice, to empower youth to take smart financial decisions about their retirement.

Box 3.11. Supporting young people to save for retirement

The Government of Canada has designed a Registered Retirement Savings Plan (RRSP) to help Canadians save for retirement. Contributions are exempt from tax in the year in which they are made and any earnings or interest is exempt from tax as long as the funds remain in the plan. Almost half of young people aged 18 to 24 had a RRSP, although their percentage seamed to decrease with the years.

In Hong Kong SAR, China, the Mandatory Provident Fund (MPF) System, launched in December 2000, was designed to form the Pillar Two, a mandatory, privately managed, fully funded contribution scheme (MPFA, 2020[72]). To further promote retirement savings, Hong Kong SAR, China has also introduced a tax incentive to allow tax deduction for premiums for qualified deferred annuity products as well as tax deductible voluntary contributions to eligible MPF schemes (MPF TVC) starting from April 2019. The annuity products are retirement planning tools that can help individuals, including the youth, to turn their accumulated savings into a stable stream of income over a period of time, while MPF TVC products encourage the public to start saving early for retirement purpose. MPF also provides a series of money-management cum life-planning workshops for secondary school students, to enable the students to experience different simulated situations in which they would encounter different financial needs. The workshops are complemented by discussion-cum-debriefing sessions hosted by experienced social workers to facilitate the students to pay attention to the appropriate attitudes towards financial management and the importance of having an early start in retirement planning.

Tax Free Savings Accounts allow individuals in South Africa, including youth, to invest up to R33.000 per year with a lifetime limit of R500.000, taking advantage of the medium- to long-term benefits of compounding, without paying any tax on interest, dividends or capital gains tax (CGT).

In Austria, 26% of young people have a private pension plan while in in Nigeria, only 9% of people use pension schemes like micro-pensions, which allow entrepreneurs to save for post-active service expenditures (EFInA, 2018[73]). In Mexico, where demographic changes drove the switch of the retirement savings system from defined benefits to defined contributions in the 1990s, only 30.4% of young individuals currently have retirement savings. As life expectancy increases, many of them will have to stretch such savings across more years than older generations (National Banking and Securities Commission (CNBV), 2018[34]).

In Australia, the government has imposed compulsory contributions equivalent to a minimum percentage of the employees' wages. The Superannuation Guarantee was introduced in 1992 and currently covers 80% of both men and women aged 25-54. All those earning 450 Australian dollars in a calendar month need to contribute, while the government provides co-contributions for low or middle income earners of up to 500 AUD to boost retirement savings. This type of policy may especially benefit young people who have low or irregular incomes (Commission, 2018[74])

In the UK, automatic enrolment in a pension scheme applies to workers aged 22 or over. Younger people, as long as they earn £6,240 or more (in the tax year), can still opt in and benefit from employer contribution in the same way as anyone else automatically enrolled. An employer must provide access to a pension scheme to any employee below the age of 22 asking for it and has to make arrangements for the employee to join, although in the case in which the earnings are below £6,240, matching contribution is not mandatory (Money and Pension Service, 2020[75]).

3.8. Potential risks arising from access to digital financial services by youth

Alongside many benefits and opportunities that digitalisation brings to reach financially excluded youth, there are potential risks. Digitalisation may enable providers to use alternative data sources to assess young people's credit worthiness, to communicate with their young clients in smart and engaging ways, to provide customised and lower cost financial services, and develop products with attractive and improved functionalities that increase usage. At the same time, these products also carry new risks, such as new types of fraud, concerns about security, privacy or confidentiality, rapid access to high-cost short-term credit or new types of financial exclusion linked to lack of access to mobile phones or computer, lack of connectivity, or due to digital profiling for credit and insurance decisions (OECD, 2018[76]). They also may present money laundering/terrorist financing risks, particularly when customer identification is lacking or not appropriately risk-based.

The stocktake questionnaire asked public authorities to consider whether in their countries young people were affected by specific risks in the digital environment. In addition to financial risks affecting all consumers, some jurisdictions indicated that young people may face additional specific risks.

Lack of experience with financial services, coupled with over confidence can result in scams targeting young people. Overuse of credit may lead to unsuitable indebtedness and financial exclusion in the future. Lack of appropriate insurance policies also increase financial risks, while concerns related to cyber security, exposure of personal data and internet fraud increase due to the regular online presence of youth.

At the same time, the virtual nature of payments may bring challenges for young people using digital financial products. Cashless purchasing options through online stores, social media, or with contactless cards may make money less real for users and young people may not even realise that they are spending real money, as in the case of in-app or in-game purchases that may be linked to automatic withdrawals (OECD, 2019[77]). This could lead to over-spending and over-indebtedness and may potentially raise financial consumer protection concerns.

Over indebtedness

As previous sections highlighted, young people face significant complexity around prioritising competing financial needs. Within a context of high youth unemployment, limited savings, precarious job conditions that provide lower incomes, and higher living costs, young people may find themselves constraint to recourse to credit to finance their daily financial needs.

In high income economies, the majority of people use credit cards either as a means for payment or as a source of short term credit. For young people, borrowing from a financial institution or through a credit card is the most common way of getting access to credit. At the same time, it is not uncommon for young people to engage in expensive credit behaviour. For example, 60% of young people in the USA who had used credit cards in 2018, had engaged in at least one form of expensive credit card behaviour (Bolognesi et al., 2020[48]). Reliance on short-term credit can lead young consumers to over-indebtedness and related episodes of increased stress levels[33] or late payments that can negatively impact one's credit score and hence future possibilities to access formal financial services.

Digitalisation may make credit more accessible to young people. Several public authorities participating in the survey indicated that speed and convenience of access to online loans

or credit encouraged impulsive borrowing in their jurisdictions. The repeated use of short-term credit can contribute to over-indebtedness. Limited disclosure of fees and conditions, aggressive lending practices, coupled with excess confidence of youth in their digital skills and lower levels of financial literacy can lead to negative consequences for young consumers, and aggravate behavioural biases.

The digitalisation of short-term consumer credit presents specific challenges for financial consumer protection supervisors. Young people can be more exposed to digitally-enabled short-term credit offers, given their presence on online platforms and familiarity with digital technologies (OECD, 2019[78]). One in five of all those who had used payday lending or a pawnbroker in 2017 in the UK was aged 18-24 years old (FCA, 2018[56]).

Buy now pay later arrangements also tend to affect younger consumers more. In Australia, a study found that 26% of buy now pay later users were aged between 18 and 24 years (ASIC, 2018[79]). This was the second highest usage demographic behind only 25 to 34-year olds. The report concluded that 64% of users spent more than they normally would due to the arrangement (ASIC, 2018[79]).

Online financial frauds and scams

Online frauds and scams may target individuals of any age, but youth may be more susceptible to certain schemes involving bank accounts (e.g. employment recruitment fraud), and credit cards (e.g. not adequately protecting personal information). Data from the USA indicates that younger people report losing money to fraud more often than older people, but their median lost is often lower (Federal Trade Commission, 2020[80]). Online fraud and cards' cloning may also apply to e-payment instruments, online banking and mobile money as well (FTC, 2020[81]).

Financial regulatory authorities may utilise digital technologies to mitigate risks related to online fraud such as maintaining or updating pages on protection from frauds and scams or utilising "consumer alerts" to push notifications to the public on emerging trends or issues which may include instances of fraud. Online and offline financial awareness campaigns may also be effective. For example, the FCAC in Canada takes part in the Fraud Prevention Month (March).

Box 3.12. Money Mules

A type of financial scam targeting youth specifically involves sharing of the young person's bank account details to criminals attempting to money-launder the profits of crime. In the UK only, the number of 14 to 18 year olds being used as money mules had soared by 73% between 2017 and 2019, with more than 5,800 cases of youngsters taking part in criminal activity in 2018. The fraudsters often use social media to target young people. Not only do the young people risk compromising their online ID security requirements and bank account, they may also become complicit in the crime itself.

Source: The money pages website (n.d.), www.themoneypages.com/saving-banking/rise-teenagers-acting-illegal-money-mules/ (Accessed on 20 May 2020)

Misleading advertising and mis-selling

New digital channels of marketing financial products and services, such as use of social media, create additional risks to consumers. Marketing and advertising practices can

influence, for instance, consumer uptake of short-term credit. While this issue may impact individuals of any age, youth may be more susceptible to improper advertising practices and fake advertisement, due to a lack of experience with finances and regular presence on online platforms.

Around 90% of 18-29 year olds in the USA, and around the same percentage of 16-24 Europeans use some form of social media (EU, 2017[82]). Social media advertising has a disproportionate impact on younger consumers. Such type of advertisement is common in relation to binary option, forex trading, crowdfunding, cryptocurrencies trading or other not regulated products, promoted to younger consumers. Influencers are often brought in to disseminate information about deceitful products against their knowledge that they are engaged in fraudulent practices (FCA, 2019[83]).

Data privacy and identity theft

Over 95% of 16-24 year-olds in the OECD used the Internet in 2016, creating new personal online data that can be collected and analysed by third parties. Technological developments and constant online interactions are enriching datasets already stored by financial institutions. Recent research suggests that when consumers consent to share their data to providers they lack an understanding of terms and conditions, including the privacy statement (OECD, 2020[84]). The research around young people's attitudes towards their personal digital data is inconclusive and in some ways young people's attitudes depend on country context and situation. Some research indicates that young people are more likely to share personal information online (Kaspersky, 2017[85]). One research found for example that 60% of those aged 16-24 and 25-34 shared private and sensitive photos of themselves with others and two-fifths of young people shared their financial and payment details (42% of 16-24 year olds and 46% of 25-34 year olds). Other studies suggest that amongst all age groups, younger consumers seem to take more proactive actions to safeguard their online privacy (Ipsos MORI, 2019[86]), (Pingitore G. et al., 2017[87]). Appropriate, risk-based data security and digital identity safeguards are important to protect youth's personal identity information (PII) online and combat identity theft-related fraud.

There are also concerns related to "big data" analytics, especially in relation to its usage for lending products. While there are several advantages related to usage of alternative data sources for better credit scoring, as seen in previous sections, potential risks relate to its unfair or discriminatory usage, concerns related to data privacy, usage of inaccurate data without the possibility for the credit applicants to redress the incorrect information, or algorithms that penalise customers without a significant digital footprint (US Department of Treasury, 2016[63]).

4. Approaches for advancing youth digital financial inclusion

This section outlines a range of elements and policy approaches for advancing youth digital financial inclusion and mitigating potential risks arising from access to digital financial services by youth.

4.1. Key elements of a youth digital financial inclusion enabling ecosystem

Advancing digital financial inclusion of youth cannot be achieved in a vacuum, and any specific policies aimed at young people should be implemented in an ecosystem which is generally supportive and conducive to digital financial inclusion.

The High-Level Principles for Digital Financial Inclusion (Box 4.1) encourage governments to adopt a digital approach to financial inclusion and provide guidance on how to leverage the huge potential offered by digital technologies.

Box 4.1. G20 High-Level Principles for Digital Financial Inclusion

In 2016, the G20 countries adopted the *G20 High-Level Principles for Digital Financial Inclusion* which provide guidance on concrete and significant actions to advance digital financial inclusion. The G20 High-Level Principles recognised the need to use digital technologies to accelerate the provision of high-quality and appropriate financial products and services to underserved and vulnerable populations. As such, governments should:

1. Promote a digital approach to financial inclusion
2. Balance innovation and risk to achieve digital financial inclusion
3. Provide an enabling and proportionate legal and regulatory framework for digital financial inclusion
4. Expand the digital financial services infrastructure ecosystem
5. Establish responsible digital financial practices to protect consumers
6. Strengthen digital and financial literacy and awareness
7. Facilitate customer identification for digital financial services
8. Track digital financial inclusion progress

Source: G20/GPFI (2016), G20 High-Level Principles for Digital Financial Inclusion

Digital infrastructure

In many developing countries, poor infrastructure, especially in rural areas, makes the provision of financial services through traditional means too costly to consider and to implement. In Brazil for example, 25.7% of rural inhabitants have never had a bank account compared to 15.8% of urban residents. In Turkey, the regional variation in income distribution and the geographical conditions influence the bank branch distribution and access. Economic development and geographical location play an important role in youth's access to financial products in Mexico as well.

In addition to adaptations to the physical infrastructure, for example the provision of financial services via post offices, the availability of digital financial services can be a key intervention that may reduce financial exclusion in rural areas. This requires infrastructure such as availability of mobile and internet connectivity.

The High-Level Principles for Digital Financial Inclusion refer to the need to develop digital infrastructure which allows for easier access and usage of the internet and mobile devices in all, including remote, locations (see Principle 4). Through providing and ensuring internet and mobile connectivity even in remote locations, geographical barriers to access financial services can be overcome through provision of digital services. Virtual and online banks, for example, can use remote on-boarding digital mechanisms, through electronic channels, without the physical presence of the customer. Such arrangements may be especially beneficial to rural youth or youth living in remote locations.

Naturally there are considerations and obstacles to be addressed in rolling out digital infrastructure, some of which are broader considerations addressed in this report (such as lack of consumer trust and confidence in digital channels, concerns about data security or low digital financial literacy) (Malady, 2016[88]). Others include ensuring an interoperable payments infrastructure, merchant acceptance of digital payments and a managed roll out so as not to inadvertently create new forms of exclusion (Asian Development Bank, 2016[89]).

Box 4.2. Expanding the digital payments ecosystem in India

The Government of India has taken important steps to expand and deepen the digital payments ecosystem, facilitating collaboration between government and private sector institutions to enhance digitalisation. State Level and Union Territories Bankers' Committees (SLBCs and UTLBCs) have been instructed to identify one district on pilot basis in their respective States/Union Territories and allocate the same to a member bank which will endeavour to make the district 100% digitally enabled within one year. Thus far 42 districts across 28 States and 8 Union Territories have been identified, 8 of which are also prioritised under the 'Transformation of Aspirational Districts' programme of the Government of India. SLBCs/ UTLBCs have developed a time bound road map, according to which member banks located in the identified districts will on board merchants/traders/businesses/public utility service providers to facilitate fully digital transactions by October 2020.

Digital customer identification[34]

Under the global anti-money laundering/counter-terrorist financing (AML/CFT) standards established by the Financial Action Task Force and implemented by countries' own national legal frameworks, financial institutions must conduct risk-based customer due diligence (CDD), including customer identification/verification when opening an account or providing a loan or other financial services to a customer.[2] Customer identification

[2] Industry often uses the term "Know Your Customer (KYC)" to refer to certain elements of the Customer Due Diligence (CDD) requirements established by the FATF and effectively implemented by countries' AML/CFT regimes. KYC is commonly used by industry to refer to a financial institution's process of identifying a customer and verifying the customer's identity at on-boarding, but it may be used more broadly to also include: identifying the beneficial owners of legal person

requirements, particularly when they are not risk-based, may disproportionately impact access to financial products for young people and other groups who do not have valid proof of official identity (G20/GPFI and World Bank Group, 2018[90]), (Atkinson and Messy, 2013[91]). Principle 7 of the High-Level Principles for Digital Financial Inclusion highlights the critical role of reliable identity data for achieving financial inclusion.

Forty percent of the 1.1 billion people worldwide who lack proper identification documents are under the age of 18 (World Bank Group, 2017[92]). The births of one quarter of children under age 5 worldwide have never been officially recorded (UNICEF, 2019[93]). In Sub-Saharan Africa, less than half of births between 2010 and 2018 were registered, which means that more than half of the children born in the past ten years did not have a birth certificate nor any other form of official identity documentation by the time they were five.[35] In addition to valid official identity documentation, financial institutions often require supplementary documentation, such as proof of residence or proof of income for opening basic accounts. Tiered CDD requirements could facilitate risk-based financial inclusion for youth, permitting acceptance of alternative forms of identification for younger youth (such as school IDs, municipal ID, letters from recognised authority such as village chief or local council or other reasonable means of identity verification) for low-risk financial services/products, while requiring more formal identification proof for older youth or those with higher account balances (UNDCF, Mastercard Foundation and MicroFinanza, 2015[94]), (FATF, 2020[95]).

The development of digital identity solutions to prove official identity may improve financial inclusion and enable the use of scalable, competitive digital financial services. Digital identity systems have the potential to generate cost savings and compliance efficiencies for financial services firms, while strengthening financial sector integrity, including AML/CFT safeguards. Digital identity systems may simplify the on-boarding process and enhance general risk management and antifraud measures (U.S. Department of the Treasury, 2018[44]), (FATF, 2020[95]). Alongside CDD, trustworthy digital identity solutions can facilitate access for consumers who are entering formal financial markets for the first time.

Undocumented persons (i.e. refugees) many of whom are youth, often remain financially excluded because of lack of official identify documentation. Financial inclusion of this segment may contribute to overall positive outcomes and broader social integration through: a) secure aid that may reach directly the beneficiaries, overcoming loopholes and potential inefficiencies and contributing to financial resilience; b) youth empowerment and integration into the labour market, thanks to greater access to economic opportunities; c) helping hosting governments implement effective AML/CFT safeguards and other monitoring/supervising exercises (through for example, digital IDs).

In Portugal, to facilitate the provision of digital banking products and services and the opening of bank deposit accounts via digital channels (online and mobile), Banco de Portugal has introduced changes to the existing regulatory framework. They include definition and introduction of new technical requirements for verifying customers'

customers; understanding and obtaining information on the purpose and intended nature of the business relationship; and conducting ongoing due diligence on that relationship and monitoring the customer's transactions to ensure consistency with the financial institution's knowledge of the customer and risk profile. The term is also used to refer to the laws and regulations governing these activities.

identification data through the use of videoconference, taking into account security and anti-money laundering concerns (OECD, 2018[96]).

The Central Bank of Egypt issued simplified CDD procedures for mobile payment service customers (tiered CDD) to enhance usage of financial inclusion products and services in accordance with the international practices of applying risk-based approach in customer identification/verification requirements. The objective of such regulation was to encourage the banking sector to develop products and services aimed at including the marginalised segments such as youth, women and micro-enterprises in the formal financial system (see Box 4.3 for further details).

Box 4.3. Egypt's adoption of simplified CDD to advance digital financial inclusion

Mobile money services in Egypt include cash-in/cash-out, person-to-person (P2P), person-to-merchant (P2M), merchant-to-merchant (M2M), ATM cash-in/cash-out, international money transfers (IMT), virtual card number (VCN) and account value load (AVL) from bank to wallet accounts. As of mid-2018, there were around 10.5 million mobile accounts in Egypt, of which 9.4 million unique users. Of these, 8% were aged 20 years or less and 16% were aged between 20 and 25 years old. To facilitate and encourage mobile payments, the Central Bank of Egypt introduced simplified Customer Due Diligence (CDD) procedures for mobile payment service customers. Specifically:

- Fewer documents are required to verify a customer's identity;
- Less data to conduct domestic mobile transfers;
- Possibility to update customer data and documents electronically; and
- Permits certain categories of service providers to conduct CDD procedures according to a set of prerequisites, i.e. agent banking.

Furthermore, as of 2020, CBE has rolled out an e-CDD process, largely motivated by the youthful tech-savvy population. The project enables customers to undergo customer identification/verification and open bank accounts electronically, without the need to visit bank branches or speak to an agent.

Source: Alliance for Financial Inclusion (2019), Financial inclusion through digital financial services and Fintech: the case of Egypt

4.2. Financial consumer protection frameworks adapted to digital innovations

Appropriate financial consumer protection to ensure fair treatment and financial safety online is of paramount importance. Principle 5 of the High-Level Principles for Digital Financial Inclusion makes specific reference to the importance of "a comprehensive approach to consumer and data protection that focuses on issues relevant to digital financial services". Young people may be particularly vulnerable to risks of transacting digitally, as seen above, as they are active in online spaces and at the same time are subject to behavioural biases and have relatively low levels of financial literacy.

The G20/OECD High Level Principles on Financial Consumer Protection set out the foundations of an effective and comprehensive financial consumer protection framework, and have been widely adopted by jurisdictions around the world. They relate to all sectors of the financial services industry and are applicable regardless of the size or nature of the

market. Such frameworks have an essential role to play in this context and should take into account the developments occurring in digital finance: identifying, analysing, monitoring and managing potential new risks for consumers (OECD, 2018[96]). The G20 has also issued policy guidance on approaches to protect consumers in the digital age through financial consumer protection and financial education policies that should be implemented hand in hand (OECD, 2018[76]), (OECD, 2018[96]). This policy guidance applies to all consumers, regardless of age.

Box 4.4. Effective grievance redress in a digital environment – The case of India

India has witnessed rapid growth in volume and value of digital financial transactions. The share of electronic transactions in the total volume of retail payments increased to 95.4 percent in 2018-19, up from 92.6 percent in 2017-18 (Reserve Bank of India, 2019[97]). Alongside the growth in digital transactions, the number of complaints have also grown, necessitating better redress mechanisms. The complaints received in the Offices of the Banking Ombudsman (OBOs) corroborate this observation. The percentage share of digital complaints to total complaints in the OBOs increased from 28% in 2017-18 to 33% in 2018-19 (RBI, 2019[98]). The Reserve Bank of India has therefore implemented steps for strengthening the grievance redress mechanism for digital transactions.

The Banking Ombudsman Scheme, launched in 1995, was updated by incorporating Mobile/ Electronic Banking as valid ground of complaint with effect from July 1, 2017. As many as 64,607 complaints pertaining to digital services (mobile electronic banking, cards) were received in 2018-19.

The emergence of Non-bank System Participants (NSPs) in the sphere of digital financial transactions has facilitated introduction of new products, which are popular among the youth. In order to provide an alternative dispute redress structure for customers of such NSPs regulated by the Reserve Bank, a dedicated Ombudsman Scheme for Digital Transactions (OSDT) (RBI, 2019[99]) was launched on 31 January 2019. Additionally, in order to strengthen the internal grievance redress mechanism of these NSPs, an Internal Ombudsman Scheme for Non-Bank System Participants was also was launched in October 2019. Accordingly, all issuers of Prepaid Payment Instruments (PPIs) with more than 10 million outstanding PPIs as on 31 March 2019 have been mandated to appoint an Internal Ombudsman (IO). The IO is an independent authority at the apex of the entity's grievance redress system. All complaints that are partially/wholly rejected by the internal grievance redress mechanism of the NSP are mandatorily referred to the IO for an independent assessment before advising the final resolution to the complainant. The opinion of the IO is binding on the NSPs.

At its end, the RBI launched the Complaints Management System (CMS), an application to digitise its grievance redress process and aid seamless flow of information amongst the participants (banks, NBFCs, System Participants etc.). The CMS also captures the details of the complainant, which can be useful in studying trends of complaints based on age-sensitive data analytics.

Sources: Reserve Bank of India

Most jurisdictions do not differentiate between adults and youth in terms of financial consumer protection policies. This is appropriate, because in most countries young people below the legal age of maturity cannot access most types of financial services

independently, or only under the supervision of a parent or legal guardian. Beyond that, financial consumer protection frameworks include provisions relating to responsible business conduct including lending, fair treatment of consumers and suitability, which generally require financial services providers to take account of the needs, objectives and personal situation of their customers, of which age could be a factor (see Box 4.5 for specific country examples).

Disclosure and transparency of key characteristics of digital financial products or services should be provided in a simple and accessible way to consumers. For young people, it may be relevant to ensure that chat bots and websites have accurate information about the products available and the requirements for accessing them. Use of digital technologies may provide new opportunities to explore supplementary or alternatives to disclosure based on greater capacity to analyse data on consumer behaviour for example.

Box 4.5. Examples of approaches relating to youth in financial consumer protection frameworks

Amongst the jurisdictions replying to the stocktake questionnaire, with the exception of one, all countries indicated having a general framework of financial consumer protection.

In **Hong Kong SAR, China** the Code of Banking Practice is a set of minimum standards that all banks are required to comply with in their dealing with and providing service to customers. The Code of Banking Practice (Code) contains the following specific provisions for youth:

Section 26.1(b) stipulates that card issuers should in all cases not open credit card accounts for customers who are less than 18 years old, unless the customers have submitted a written application and the card issuers have (i) financial information indicating that the customers have an independent ability to repay the proposed extension of credit in connection with the accounts, or (ii) an agreement signed by a co-signer, guarantor, or joint applicant who is at least 18 years old to be jointly liable with the customers for any debt on the accounts, and financial information indicating that such co-signer, guarantor, or joint applicant has the ability to repay such debts. If a credit card account has been opened pursuant to this section, the card issuers should not increase the credit limit on such account before the customer attains the age of 18 unless the said co-signer, guarantor, or joint account holder who assumed liability at account opening agrees in writing to assume liability on the increase.

Section 26.1(c) stipulates that card issuers should in all cases not grant credit limit exceeding HK$10,000 to students in an institution of higher education, unless the student has submitted a written application and has given financial information indicating that the student has an independent ability to repay the proposed extension of credit in connection with the account.

Australia provides another example of consumer protection in relation to credit. While there is no minimum age requirements to access credit, there are responsible lending obligations to protect all consumers from unsuitable loans. For example, the National Credit Act imposes obligations on licensees to lend responsibly. This includes making inquiries about the consumer's requirements and objectives and financial position, taking reasonable steps to verify information and assessing whether the credit product is unsuitable for the consumer. This may potentially limit credit being provided to youth who do not have permanent employment or sufficient income to support the application for

credit. Although these obligations are not aimed at protecting youth specifically, these obligations would protect youth from entering into unsuitable credit contracts.

In the **USA**, the Credit Card Accountability Responsibility and Disclosure Act (CARD Act) was adopted in 2009. Accordingly, consumers under the age of 21 applying for a credit card should obtain a qualified co-signer over age 21 or submit information indicating that they have an independent means to make the required payments on an account. In addition, restrictions are imposed in relation to marketing of credit cards on or near college campuses, or at college-sponsored or college-related events.

Although not specifically targeting youth, recent **EU legislation** (MiFID II, IDD and PRIIPs) focuses on the specific needs of potential customers. The legislation does not name "youth" as a distinction factor, but distributors are required to assess the individual situation of the potential customer when disclosing information and/or providing advice. For example in the PRIIPs Regulation (packaged retail and insurance-based investment products) when providing the potential customer with the product Key information document (KID) the person advising on or selling a PRIIP shall assess the time needed to consider the KID, taking into account inter alia the complexity and the knowledge and experience of the consumer. Complying with these rules means to conduct an individual assessment where age could be a relevant criterion. Furthermore the KID needs to describe the type of consumer the product is designed for and therefore would need to specify the consumer's age if relevant.

The **EU Consumer Credit Directive and the Mortgage Credit Directive** includes an obligation for lenders to provide clear and detailed information on loan conditions to consumers and an obligation for lenders to assess the creditworthiness of consumers. In particular, consumers should receive personalised information in good time prior to the conclusion of the credit agreement in order to enable them to compare and reflect on the characteristics of credit products.

Similarly, **Banque du Liban's** circular 134 addresses banks and financial institutions, to deal with customers in a continuously fair, equitable and professional manner that takes into account the customer's profile, and his/her perception of the operations and the risks and benefits associated thereto (e.g. customers with limited income and education, customers with special needs, and elderly). It does not mention explicitly the youth, however the customer profile information could also include reference to age.

Bank of Thailand's (BOT) market conduct regulation (No. SVG. 1/2561) provides guidelines and sets minimum requirements for financial service providers under BOT's supervision. The regulations require financial service providers to enhance their end-to-end process in nine market conduct management systems: (1) Corporate culture and roles and responsibilities of board of directors and senior management; (2) Product development and client segmentation; (3) Remuneration scheme; (4) Sales process; (5) Communication and training; (6) Data privacy; (7) Problem and complaint handling; (8) Three lines of defence; (9) Operation and business continuity. In addition, the regulations require financial service providers to disclose product information and service quality data to assist financial consumers in making informed decisions. Although, it does not specifically contain provision for youth, it requires financial service providers to take care of vulnerable consumers (elderly, low income people, or customers with limited experience in using financial products) who may need cautious communication and service from a service provider.

Sources: Responses to the stocktake questionnaire; Australian Government website, "National Consumer Credit Protection Act 2009" www.legislation.gov.au/Details/C2019C00154 (Accessed 20 May 2020); Securities Trading Act and Regulation (EU) 2017/565; Art. 19 of Regulation (EU) 2017/653; ec.europa.eu/info/business-economy-euro/banking-and-finance/consumer-finance-and-payments/retail-financial-services (Accessed 20 May 2020);
CFPB (2017), CFPB Data Point: Becoming Credit Visible

4.3. Data protection approaches

In the context of digital access to financial services, data protection[36] policies play a fundamental role, and they too, according to the Principle 5 of the High-Level Principles for Digital Financial Inclusion need to be in place as foundational policy in order to appropriately advance digital financial inclusion of youth.

According to recent policy guidance adopted by the G20/GPFI, there are three objectives that regulators should keep in mind when addressing data protection issues: 1) enhancing secure and effective consent mechanisms; 2) enhancing access, rectification, cancellation and opposition (ARCO) rights; 3) addressing data security. Regulators and policymakers should also clarify how alternative data may be processed, taking into consideration data privacy best practices (G20/GPFI Argentina, 2018[100]).

A host of emerging online practices potentially pose risks to children and young people active online, including relating to digital financial services. These include online marketing, digital marketing strategies (sometime including mis-leading advertising and mis-selling), in-app purchases and online financial fraud, identify theft and the growing prospect of 'big data' mining (see Section 3.7) (Federal Trade Commission, 2018[101]), (Burns and Gottschalk, 2019[14]). Amongst the jurisdictions participating in the survey, a majority had a data protection framework in place (i.e. laws or regulations governing the protection of consumers' data). About one third of the countries had special provision for youth, including Austria, Australia, Brazil, Canada, Croatia, Germany, Ireland, Italy, Portugal, Spain, Netherlands, Thailand, UK and USA. Box 4.6 provides details and examples of countries where data protection frameworks include special provision for youth.

Box 4.6. Examples of data protection frameworks and special provision for youth

In 14 jurisdictions amongst those that participated in the stocktake exercise, a data protection framework includes special provision for youth and minors.

The EU has adopted a data protection framework, the **General Data Protection Regulation (GDPR)**, which includes special provisions in relation to child's consent, defined as any person below the age of 16 years. European countries have adopted these regulations into national legislation. The directive also establishes that:

- Recital 38: Children merit specific protection with regard to their personal data, as they may be less aware of the risks, consequences and safeguards concerned and their rights in relation to the processing of personal data. Such specific protection should, in particular, apply to the use of personal data of children for the purposes of marketing or creating personality or user profiles and the collection of personal data with regard to children when using services offered directly to a child. The

consent of the holder of parental responsibility should not be necessary in the context of preventive or counselling services offered directly to a child.

- Recital 58: Given that children merit specific protection, any information and communication, where processing is addressed to a child, should be in such a clear and plain language that the child can easily understand.

In **Australia**, two sections of the Privacy Act 1988 give special provision for youth (sections 20C and 21D). These sections prohibit the collection or disclosure of credit information if the individual is under 18 years of age. Schedule 1 to the Privacy Act 1988 sets out the principles used by entities while handling personal information, in age-appropriate language. The more complex wording of the legislation is also supplemented by plain language summaries of the content of the Privacy Act found on the Office of the Australian Information Commissioner.

According to the **Brazilian General Data Protection Law** (LGPD), Article 14, Paragraph 1 of Law 13,709 of 2018, the processing of personal data of children and teenagers must be carried out with the specific and prominent consent given by at least one parent or legal guardian.

The **Personal Information Protection and Electronic Documents Act** (PIPEDA) in **Canada** requires organisations to limit the collection of personal information to that necessary for their identified purposes. The following passage is available as guidance to businesses operating in Canada in relation to youth:

- The ability for youth to provide meaningful consent for the collection and use of their personal information depends greatly on their age, and their cognitive and emotional development. Thus, businesses should consider the target audience for their service, and explain the practices – and their potential risks – in a manner that they can fully appreciate.
- If the audience includes younger children, this may not be possible, so businesses should find a way to communicate, in language that the user will understand, the requirement to involve a parent/guardian in the process.

In **Thailand**, the Ministry of Digital Economy and Society has produced a short animated video explaining briefly and in a child friendly language about the Personal Data Privacy Act effective as of 28 May 2020.

Sources: GDPR website (2020), gdpr.eu/ (Accessed 20 May 2020); Australian Government, Office of the Australian Information Commissioner website (n.d), The Privacy Act, www.oaic.gov.au/privacy/the-privacy-act/ (Accessed 20 May 2020); Office of the Privacy Commissioner of Canada website (December2015), "Collecting from kids? Ten tips for services aimed at children and youth", www.priv.gc.ca/en/privacy-topics/business-privacy/bus_kids/02_05_d_62_tips/ (Accessed 20 May 2020); Ministry of Digital Economy and Society, YouTube channel (2020), https://youtu.be/-Qejl-2F_Vk (Accessed 20 May 2020)

4.4. Age disaggregated data collection

Data granularity, as recognised by Principle 8 of the High-Level Principles for Digital Financial Inclusion, including data disaggregated by age and gender, is essential both for policy makers as well as for financial services providers, for the development of appropriate policies and financial services adapted to youth's specific needs. Very often young people are under-represented in demand side data collected, or data is not internationally

comparable, which makes it difficult to analyse and understand what the opportunities and constraints that young people face are. About one third of the jurisdictions that replied to the survey indicated that they did not collect age-disaggregated data relative to youth financial inclusion.

Oftentimes data on access to financial services is limited to youth above the legal age. This points to a possible lack of granularity of data. In addition to demand side data on access, and supply-side data collected from financial services providers, it would be important for countries to put in place mechanisms that allow for understanding of children and young people's financial knowledge and behaviours, their access to digital technologies as well as access and usage of digital financial products.

The UK is amongst few countries implementing specific surveys on financial matters for children and their guardians. For example, the Children and Young People's Financial Capability Survey was recently conducted, involving over 4,000 interviews with a nationally representative sample of children and young people aged 7–17 (Clarke and Finney, 2018[102]). This survey was aimed at understanding the most influential factors that are associated with more financially capable behaviours in children. These factors are children's responsibility for financial decisions; children's savings mind set; whether children shop around and children's engagement with bank accounts. The survey also found that children getting money regularly and having received any money in the previous week also have strong direct links with more financially capable behaviours.[37]

Six countries from the MENA region participated in the stocktake exercise. Amongst all respondents, only Lebanon, Palestine and UAE regulators were able to provide information and data in relation to the types of financial services available to youth in the country. UAE indicated that savings accounts are the most commonly accessed financial product by youth in the country. At the same time, none of the countries participating in the study had granular data on the supply side in relation to financial services and products offered by financial institutions to youth (above and below the legal age, or for younger and older youth). This points to the paramount importance of collecting gender and age disaggregated data in the region.

It is also difficult to find reliable and comparable data on usage of digital financial services by youth in the region or on young people's financial literacy levels. None of the MENA countries participate in international comparable assessments of financial literacy of young people (such as the optional PISA financial literacy assessment).

4.5. Coordination of strategic efforts to advance youth digital financial inclusion

Coordination of strategic approaches to financial inclusion and education, especially at a national level, enhance rationalisation of resources and avoid duplication. National strategies can act as a catalyst for the demand for financial services by young people (i.e. contracting services online) and their corresponding supply (i.e. integration of an electronic method of payment at the time of contracting).

National strategies for financial education and/or inclusion adopted by many countries, often identify specific target groups, such as youth, based on evidence gathered through measurement, through assessment of target groups needs and vulnerabilities, or because such interventions may complement wider policy agendas.

Thirty five respondents to the questionnaire indicated that youth financial inclusion issues were addressed through a coordinated or national strategy: either a strategy for financial

education, financial inclusion, entrepreneurship or other type of national strategy. Thirteen institutions indicated the existence of strategies for financial inclusion targeting youth: Argentina; Guatemala; Hong Kong SAR, China; Jordan; India; Iraq; Mexico; Nigeria; Palestine; Paraguay; Portugal; Slovenia and Turkey (see Box 4.7 for specific country examples). Four of these specifically targeted young entrepreneurs (Palestine; Slovenia; Hong Kong SAR, China and the Mainland of China).

Box 4.7. Addressing youth financial inclusion through a NSFI

The **Argentinian** National Strategy for Financial Inclusion identified young people, adults, people working in the informal sector and migrants and refugees as focus groups for the efforts to increase financial inclusion in the country, defined in terms of access, usage and quality of financial services. Specifically, the Central Bank (BCRA) decided to adopt regulation which will allow access to specific banking services to people below the legal age. The National Strategy identifies as well the need for young people and young adults to be exposed to financial education, therefore establishes targets for the number of young people who should receive financial education in secondary schools.

The NSFI of **Jordan** gives special attention to vulnerable groups, traditionally with lower levels of financial inclusion, namely the bottom 40% of households in terms of income; women; the youth (15 to 24 year-olds in general; 15 to 18 year-olds in particular); and refugees. The national strategy aims to promote account opening for the unbanked youth (aged 15-18), and conversely increase their financial education. Central Bank of Jordan has also committed to increase the financial inclusion access of Jordan's older youth (15-22 years) by 25.000 annually by 2020. The Central Bank of Jordan has made such commitment under the AFI Maya Declaration, announced at the AFI Global Policy Forum in 2016.

The NSFI of **Nigeria** considers youth as one of the main prioritised demographic groups, while also recognising the critical role of digital financial services in the financial inclusion agenda.

India's National Strategy for Financial Inclusion (2019-2024) sets forth the vision and key objectives of the financial inclusion policies in the country, to help expand and sustain the financial inclusion process at the national level through a broad convergence of actions involving all the stakeholders in the financial sector. The strategy document puts emphasis on supply side interventions through recommendations focusing on consent based digital architecture for customer on-boarding, leveraging on Fintech for adoption of innovative approaches to digital financial inclusion, strengthening digital infrastructure in underserved centres, beneficial for all, especially the youth. NSFI advocates usage of digital means for facilitating demand side measures by propagating financial literacy through digital kiosks, mobile apps and others. One of the key recommendations of India's NSFI highlights the need of livelihood and skill development of unemployed youth, through collaboration and coordination amongst various Government sponsored programmes to deepen financial inclusion.

Morocco announced in March 2019 the adoption of a national strategy for financial inclusion. Drafted and led by the Ministry of Finance and Bank Al Maghrib (Central Bank of Morocco), the Strategy focuses on advancing financial inclusion through widespread adoption of digital and mobile payments, enhancing the role of microfinance institutions and accelerating inclusive insurance. The NSFI targets specific groups: people living in rural areas, women, youth and micro-small businesses.

Other countries that have addressed youth as a target group in their NSFI include Bhutan, Fiji, Samoa, Tanzania and Zimbabwe. One of the main strategic objectives of **Samoa**'s National Financial Inclusion Strategy is to promote economic empowerment and participation of women and youth. **Tanzania**'s NSFI prioritises interventions for poor rural households and their enterprises, and low-income women and youth, with a special focus on children. Young people are also one of the key target groups of Bhutan's NSFI and NSFE as more than 60% of the population falls under this category.

Sources: Ministerio de Hacienda, Presidencia de la Nation (2019), Estrategia Nacional de Inclusión Financiera, Argentina, www.argentina.gob.ar/sites/default/files/estrategia-nacional-inclusion-financiera.pdf; AFI (2018), National financial inclusion strategies: current state of practice

4.6. Interventions to increase financial and digital literacy

The role of financial and digital education in advancing digital financial inclusion of youth

As recognised by Principle 6 of the High-Level Principles for Digital Financial Inclusion, there is an urgent need to build digital and financial literacy and awareness, especially among excluded and underserved groups.

Financial literacy is an essential skill for young people. Introducing and sustaining high-quality financial education initiatives at critical transition moments for young people, at scale and systematically, so that young people who need support are able to access it, is of paramount importance. Financial education provision should not be sporadic, should be based on evidence, and be focused on the youth that are most in need, such as those belonging to socio-economically disadvantaged backgrounds. Moreover, specific digital skills are essential for young people, in order to fully take advantage of the opportunities and to minimise the risks that digital technologies bring (OECD, 2012[103]). Digital education may also contribute to eliminating digital divides. Underlying successful delivery of financial and digital education are foundational skills (such as literacy, numeracy, and socio-emotional skills) that should be provided to young people from early formative years.

At the same time, financial education should not be seen only as a tool to increase financial inclusion. In many countries, lack of financial access may not be an issue for young people while financial illiteracy remains very much a priority. Countries with developed financial markets may be facing challenges related to sub-optimal use of higher cost and higher risk financial products by young people, or related to younger generations facing greater challenges in managing their money and planning and saving for the future. In this case, financial education of young people becomes the main priority.

Including financial education in the school curriculum (CFPB, 2019[42]), (CFPB, 2013[104]) is recognised as one of the most efficient and fair ways to reach a whole generation on a broad scale (OECD, 2012[105]). In addition to having several positive effects on students (such as increased financial knowledge, improved financial behaviour, graduation rates, increased savings or budgeting), some programmes' evaluation found positive spillovers on parents (Bruhn et al., 2016[106]) or teachers (Frisancho, 2018[107]). The OECD/INFE has produced guidance on integration of financial education in the school system (see Box 4.8).

Box 4.8. Introducing financial education in the school curricula

The OECD/INFE has developed research and guidelines to support the introduction and implementation of financial education in schools. They are to be considered as tailored supplement to the OECD High-level Principles on National Strategies for Financial Education endorsed by G20 Leaders in 2012.

The guidelines recommend that financial education in schools can be promoted by:

1. Integrating financial education into the school curriculum as part of a co-ordinated national strategy for financial education and on the basis of identified needs.
2. Setting appropriate, tailored and quantifiable goals of financial education in the school curriculum, including through dedicated learning frameworks.
3. Starting to teach financial education as early as possible and preferably at the beginning of formal schooling.
4. Implementing financial education in schools in a flexible manner adapted to national, regional and local circumstances either through a standalone or a cross curricular approach.
5. Identifying appropriate, commensurate and long-term financial and in-kind resources to ensure the sustainability and credibility of the development and implementation of financial education in schools.
6. Planning and establishing, at the outset of the programme, methods and criteria to evaluate the progress and impact of financial education in schools.
7. Ensuring the suitable involvement of important key stakeholders through both a top-down and bottom-up approach. This should include a leading and coordinating role for the government and ministry of education, other public authorities and the education system as well as a pivotal role for teachers and an appropriate role for parents, the local community, students and other relevant stakeholders.
8. Identifying, devising and making available adequate supporting tools and means to key stakeholders in the education system to facilitate the efficient introduction of financial education in schools.

Source: OECD (2012), *OECD/INFE Guidelines on financial education in schools*

An increasing number of countries (around 70 in 2020) have developed national strategies for financial education (NSFE), many of which have identified young people as one of the main target groups. Of the total respondents, 27 countries indicated having national strategies for financial education targeting young people while seven targeted young entrepreneurs. Several aim at introducing financial education in the mandatory school curricula (either as a standalone subject or integrated in other topics). In 13 countries financial education is integrated and compulsory for all schools (for particular age groups): Australia, Brazil,[38] Denmark, Estonia, Jordan, Lebanon, Mozambique, Paraguay, Peru, Portugal, Slovenia, the Slovak Republic and United Arab Emirates. For example, in Portugal, financial education was introduced into the school curriculum as one of the topics for "education for citizenship". It can be taught in all levels of education and it is compulsory in at least two levels of basic education.

In the majority of countries, financial education is taught in schools, but not as a mandatory subject. In the USA financial education provision in schools varies by State. In some States, financial education is required for all students before they obtain a high school diploma. In other States, local school districts may require financial education prior to high school graduation, while others do not. In the schools not governed by a requirement, some school districts still choose to offer personal finance as an elective course. There are no national requirements for financial literacy in standardised tests, though a few States have standardised testing in financial literacy.

In the UK, the most common delivery setting remain the schools: more than half of financial education interventions are delivered in secondary schools and more than two-fifths in primary schools (Griffiths and Buckley-Irvine, 2018[108]). In Japan, the Central Council for Financial Services Information, the Financial Services Agency and financial associations are working together to provide semi-annual courses on financial literacy in around 15 universities across the country.

Financial education is not compulsory in Italy either. Nonetheless, according to the National Strategy for Financial Education, there are several initiatives launched by the National Committee and by Supervisory Authorities. For example, CONSOB launched a project for secondary schools in 2018 to train the trainers (schools teachers), providing them with different educative modules (and relative background learning materials and tools). Bank of Italy started offering its yearly financial education programme for students from primary to secondary school in 2008/2009, involving thus far more than 600.000 students. Bank of Italy staff trains school teachers on financial topics, who in turn carry out classroom teaching, supported by free educational resources available developed by Bank of Italy. A key element of the programme is the assessment of its effectiveness.

The provision of financial education in schools settings may not be always possible or may encounter implementation challenges, depending on the jurisdiction. Many non-school solutions have emerged, often leveraging the digital environment whereby financial education can be provided through a variety of methods. Extracurricular, home and community based-activities may include seminars and conferences, hobby groups, camps, library and community programmes, financial literacy days and financial literacy training days, school visits to financial regulatory authority premises or visits to money museums or exhibitions. These bring unique and important value, both when provided alongside financial education in school settings or independently.

For example, in Mexico, the Interactive Economic Museum (MIDE) promotes financial education, not only within the Museum but through publications in collaboration with the private sector focused on financial education, conferences or workshops. Bank of Thailand organises “Fin. Dee We can do!” a contest aimed at providing vocational students with real-life experiences relevant to them in which they apply financial knowledge to tackle specific financial issues. In Austria, the Central Bank developed extra-curricular activities for school children and young people (EURO-Kids-Tour; EURO-Logo-Tour and EURO-Fit-Tour) through which different topics related to money are explored.

Box 4.9. The role of parents in supporting financial literacy of students

Parents may act as role models and in many cases transmit values, attitudes, knowledge and behaviours about money to their children. Recent PISA data reveals that 94% of students reported obtaining information about money matters from their parents or guardians. Second to parents, the Internet plays an important role as source of information related to money matters: 77% of students reported that Internet is a source of information for them.

Students whose parents are more engaged in discussing money matters with them performed slightly better in the PISA 2018 financial literacy assessment, although the topics discussed and the frequency of such discussions also play a significant role in influencing performance.

Recognising the important role of parents in their children's education, the MPF in Hong Kong, SAR China, integrates parenting elements in financial education programmes. Parents participate in financial planning workshops in which they discuss how they may act as role models for their children in financial management, including managing their mandatory pension funds and retirement investment.

Source: OECD (2020), PISA 2018 Results (Volume IV): Are Students Smart about Money?

Financial education for digital financial services

Digital delivery of financial services adds an additional layer of complexity for financial consumers. Especially for young people, who may feel confident in the digital environment, simple instructions on how digital financial products function, and plain indications on where to obtain more information and how to recourse on mistakes are key in ensuring a safe digital financial environment. Policy makers should remain aware of possible issues and new developments in the financial sector that may require consumers to acquire new financial skills and competencies, and take reasonable action to ensure that such key competencies are developed, for the safe usage of digital financial services, especially by vulnerable consumers, such as youth.

In 28 out of 45 countries participating in the stocktake exercise, young people have access to education around digital financial services. For example, in Australia, Moneysmart financial education curriculum covers all digital financial products, while the digital technologies curriculum discusses aspect of being a 'digital citizen' including using digital financial products. In Bhutan, where financial literacy is currently being integrated in phases into the mainstream curriculum, topics related to digital financial services are also discussed.

In Denmark, the banking association published guidelines for young people on how to stay safe online. The HKMA in Hong Kong SAR, China shares cybersecurity tips on the use of different financial products (e.g. credit cards, internet banking, ATM cards, e-wallets) in its youth education initiatives targeting secondary and tertiary students, while in Jordan, a whole chapter within grade ten curricula at schools is dedicated to digital financial services.

Banco de Portugal launched a digital financial education strategy for young people, with the goal of promoting the safe use of digital channels when accessing banking products and services. The toptip campaign, launched in 2018, provides tips on security procedures that should be adopted by youth. The five suggested tips to stay safe online, to prevent fraud

and over-indebtedness are: (i) Don't make the internet a high-risk gamble; (ii) Your phone says a lot about you; (iii) Think before you post; (iv) Don't be tricked; (v) Don't give in to fraud (Banco de Portugal, 2018[109]). Usage of simple and plain vocabulary or youth-friendly language may be also beneficial for young people in this context.

Digital delivery of financial education

Financial education may be delivered offline, in or outside of schools, as extracurricular activity or by leveraging digital tools. Digital tools may include games that help parents teach their children financial concepts and money management, digital budgeting tools and mobile apps, investment simulators or financial goal trackers, videos or online courses. They may be used alone or to complement non-digital financial education delivery. Box 4.10 provides examples on digital delivery of financial education.

The COVID-19 pandemic has further increased the relevance of digital delivery of financial education and may have longer term implications on the way in which financial education initiatives and programmes are designed and delivered.

Box 4.10. Digital delivery of financial education

Many jurisdictions participating in the stocktake questionnaire indicated that digital delivery for financial education was commonly used to reach youthful audiences.

People's Bank of **China** often uses social media networks, smartphone apps and video games to reach young people with financial education messages. Banco de **Portugal**'s Instagram account publishes information related to financial education, such as the #toptip digital financial education campaign on security procedures to be adopted by youth. The Money Matters website in **Ireland** is aimed at students aged 12 to 16 and provides useful materials and financial education, while the Central Bank of **Brazil** provides specific financial education videos called "Serie Eu e Meu Dinheiro". Bank of **Italy** developed specific online financial education resources, in response to the COVID-19 emergency, available on the financial education website "l'economia per tutti" (economics for all).

In **Hong Kong**, several interactive simulation games have been developed, that allow students to learn through experimental learning programmes, involving real life situations simulations (IFEC, 2020[110]). School-based online interactive activities are an effective programme format, enabling students to experience making financial decisions in a digitally simulated environment. It provides ample flexibility as teachers can mobilise students to take part in the activity at schools or let them do it at home.

In **Singapore**, MoneySense website has an online Financial Health Check (FHC) tool to help Singaporeans assess their financial health, identify gaps in their behaviours and take steps to address these gaps. The Student Financial Health Check is a student version, which provides students (aged 17 to 24) tailored recommendations to improve their financial health.

The **Moroccan** Foundation for Financial Education (FMEF) has implemented several initiatives to advance financial literacy of young people leveraging the digital environment. Dedicated session were developed and published on the FMEF website, including quizzes, games or videos. FMEF led several awareness campaigns through social media, mainly Facebook, discussing financial education subjects of interest to young people and utilising attractive formats and designs (more than 2.000.000 people were reached in every

campaign). Currently, the FMEF is developing a digital financial education strategy for young people (aged 18-25), which also includes gender considerations and targeted approaches for rural youth. FMEF is collaborating with the Casablanca Stock Exchange to develop an e-learning training programme on investing fundamentals.

Source: OECD (2018), G20/OECD INFE Policy Guidance on Digitalisation and Financial Literacy

Financial awareness campaigns

Financial awareness raising campaigns are an informal way to engage populations (including young people) in conversations around money management and financial topics. Some examples of international and national campaigns (such as World Savings Day, Global Money Week, and Dutch Money Week) with participation of a wide variety of stakeholders, including private sector, have proven successful.

Specific awareness campaigns have focused on anti-scam messages in response to frauds targeting young people (for example, the UK campaign on "money mules"). Many of these campaigns utilise mass communication channels, interactive videos, games and social media to reach their target groups. Within the context of the COVID-19 pandemic, digitally delivered financial awareness campaigns have been implemented alongside more traditional means of communication (such as TV, radio shows, etc.).

Box 4.11. Involving the private sector in financial education for youth

Financial institutions also play a role in the financial education of youth in 40 out of 45 jurisdictions participating in the survey. To manage potential conflict of interest that may arise from involvement of private sector actors in financial education initiatives, regulatory authorities have established principles and guidelines for the private sector involvement in financial education.

In **Luxembourg** for example, volunteers from financial institutions that participate in initiatives on financial education in schools must sign an agreement not to speak about their own financial institution nor use the initiative for marketing purposes. In **Portugal**, financial sector institutions may only participate in the preparation and implementation of financial education initiatives when developed with the respective sector associations, who are stakeholders of the National Plan for Financial Education. Since 2012, the country adopted Principles for Financial Education Initiatives , according to which the information provided in financial education initiatives must be: (i) accurate, up-to-date and complete; and (ii) impartial: no marketing; prevention of conflicts of interest.

In **Spain**, the two financial regulators, CNMV and Banco de España have developed a Code of Good Practice for Financial Education Initiatives. The Code seeks to serve as guideline for all the actions implemented in Spain by financial entities, not-for-profit entities in the financial sphere (sector groups) and not-for- profit entities from other fields but that are interested in financial education (for example, educational associations).

The OECD/INFE has also developed "Guidelines for private and not-for-profit stakeholders in financial education", which define the scope, modalities, and key criteria for the involvement of private and not-for-profit stakeholders in financial education

Source: OECD (2014), OECD/INFE Guidelines for private and not-for-profit stakeholders in financial education

Experiential learning: increasing financial inclusion alongside financial education

Research shows that supporting young people to learn about money at critical transition moments (National Youth Agency, 2019[111]) or the use of authentic contexts and experiences to teach financial education, can be particularly effective (Batty et al., 2016[112]).

Financial institutions can work with schools to support the delivery of financial education through school savings programmes, making it easy for students (and in many cases their families) to build experience saving money in an insured financial institution, helping them build skills and confidence.[39] The Central Bank of Papua New Guinea in collaboration with the Centre For Excellence In Financial Inclusion (CEFI) launched a national campaign called "Savings campaign for young minds", which targeted youth with ages of 6 up to 25. Accordingly, financial institutions were encouraged to partner with educational institutions (primary, secondary and tertiary) to reach young people and help them open student accounts. Educational institutions on the other side, were encouraged to provide necessary support to financial institutions to conduct school banking operations. The National Bank also advised parents and guardians on the opportunity. As a result over 172.000 accounts had been opened since December 2018 (AFI, 2020[113]).

Box 4.12 provides lessons learned from the USA with regards to provision of financial education alongside access to savings accounts.

Box 4.12. Linking Youth Savings with Financial Education: Lessons from the FDIC Pilot

Providing financial education and access to products simultaneously may advance youth financial inclusion and increase financial capability through experiential learning (Mandell, 2009[114]).

The USA Federal Deposit Insurance Corporation (FDIC) Youth Banking Network provides opportunities for 79 banks working to connect financial education to savings accounts for school-aged children, to learn from one another and FDIC staff. During the 2015–16 school year, 21 banks participated in the Youth Savings Pilot, designed to identify promising approaches to delivery of financial education and low-cost savings account to young people through the school environment. Through the programme, over 4,500 youth savings accounts were opened and thousands more children received financial education. Approaches used included opening school-based branches, setting up in-school banking operations in common areas so that students can make deposits on designated "banking days," and helping students to use nearby bank branches to open accounts.

Savings accounts offered low opening balance, low or no minimum monthly balance and no fees. One of the banks participating in the pilot opened Individual Development Accounts (IDAs), which accept matching funds, and funds in the account can be withdrawn only for specific purposes such as post-secondary education. Approximately half of the bank programmes offered monetary incentives, to encourage students to open and use savings accounts. Most student savings accounts were converted into regular savings accounts once a student completed high school.

A majority of the banks that participated in the pilot expanded their outreach programmes to engage even more young people over the course of the school year and beyond. The report

defines a range of models that offer banks flexibility to adapt to varying opportunities to promote youth savings.

Source: FDIC (2017), Linking Youth Savings with Financial Education: Lessons from the FDIC Pilot Hands-On Learning to Build Financial Habits: Federal Resources to Encourage School-Based and Youth Savings Programs

4.7. Regulatory requirements relating to age and other qualifying criteria

In most countries, there are age-related regulatory requirements for accessing different kinds of financial services.

Amongst the countries participating in the stocktake exercise, 29 countries indicated that 18 is recognised by national law as the age of majority, at which a person can enter in legally binding contracts independently. In some countries, the legal age is established at 20 (as in the case of Japan[40] or Thailand) or 21 (as in the case of Honduras or Mozambique). Generally, below the legal age, only a legal guardian or parent can open a bank account in the name of the youth.

In Belgium, Brazil, Canada, Italy, Lithuania, the Netherlands, Russian Federation and Spain, minors may open and operate an account only under the consent of parents or caregivers (OECD, 2017[30]). In Belgium, starting from the age of 16 youth can open savings accounts in their own name, but can only withdraw limited amounts from their savings account without parental authorisation. In Chile minors may operate savings account, however these must be opened by an adult in the name of the child. In Portugal, minors (below 18 years old) may hold deposit accounts, but they need legal representatives to act on their behalf. In Croatia, parental consent is typically required; however, minors from the age of 16 may open current and saving accounts under specific circumstances (such as being legally entitled to exercise a profession). In the USA, the statutory requirements for opening bank accounts for minors vary by State.[41] In Thailand banks allow children from the age of 7 to open a deposit account with valid ID (required for KYC process), which is normally issued for any Thai aged 7-70 years.

While age-restricting regulatory requirements could be seen as a factor limiting financial inclusion, it is important to note that access to financial products by youth is often restricted intentionally and appropriately. Increasing access for the sake of access may compromise financial protection of young consumers and lead to long lasting financial problems. Some countries have introduced limited exceptions and regulatory changes to lower the minimum age to access specific types of financial products (i.e. particular kinds of savings accounts), in an attempt to increase youth financial inclusion and promote youth empowerment. Recent examples of changes for this specific purpose come from Argentina, India, Jordan, Mexico and Uganda (Box 4.13).

Box 4.13. Legal age for opening and operating savings and current accounts

In **Argentina**, since May 2019, financial institutions can offer saving accounts for minors aged 13-17 (Savings Accounts in Pesos for Teenagers), without requiring their parents or legal guardians' intervention for opening the account.

In 2014, with a view to promote the objective of financial inclusion and also to bring uniformity among banks in opening and operating minors' accounts, Reserve Bank of **India** issued a circular advising banks on provisions for opening accounts for minors. It states that:

- A savings/fixed/recurring bank deposit account can be opened by a minor of any age through his/her natural or legally appointed guardian.
- Minors above the age of 10 years may be allowed to open and operate savings bank accounts independently, if they so desire. Banks may, however, keeping in view their risk management systems, fix limits in terms of age and amount up to which minors may be allowed to operate the deposit accounts independently.
- On attaining majority, the erstwhile minor should confirm the balance in his/her account and if the account is operated by the natural guardian / legal guardian, fresh operating instructions and specimen signature of erstwhile minor should be obtained and kept on record for all operational purposes.

Banks are free to offer additional banking facilities like ATM/debit card, cheque book facility, subject to safeguards that minor accounts are not allowed to be overdrawn and that these always remain in credit. Necessary instructions have been issued to banks regarding "Opening of Bank Accounts in the Names of Minors".

In **Mexico**, a 2019 law change allowed individuals between 15 and 17 years old who receive a scholarship and those working, to open bank accounts without the intervention of their guardians. In June 2020, Bank of Mexico issued regulation on these accounts' functionalities and transactional limits, following a proportional approach: the accounts display limited functionalities but have simplified identification requirements, and are offered in convenient terms to promote their opening and usage, with a view to fostering the use of digital financial services. Limited functionalities are as follows: deposits made into these accounts can only be made through electronic transfers from government programmes (scholarships), wage/salary payments from the account holder's employer, or from other accounts held by the account holder. In addition, there are upper limits to the level of monthly deposits made into these accounts. In turn, banks must offer prospective teenage users so-called "basic" account (i.e. it displays no fees for account services such as opening and maintenance, transfers, withdrawals, consulting balances). These accounts need to also display mobile banking, internet banking and telephone banking. The Ministry of Finance adapted the KYC regulation, to take into consideration these types of accounts.

In **Jordan** legal age is established as 18, which means that youth aged from 15 to less than 18 are more likely to be financially excluded since they need the approval of a legal guardian to open a bank account. Central Bank of Jordan is currently working on a legal/ regulatory amendment that could remove this provision.

In **Uganda**, any person of 18 years and older may open a savings accounts in their own-right, without having a joint account holder. The national authorities consider that this prevents younger people having access to financial services. As a result the NFIS of Uganda

aims to address this by: "introducing a legal/regulatory exemption amendment that allows youth (ages 15-17) to open savings accounts in their own right".

Sources: Reserve Bank of India (6 May 2014), circular DBOD.No.Leg.BC.108/09.07.005/2013-14, www.rbi.org.in/; National Financial Inclusion Strategy 2018-2020 Jordan; National Strategy of Financial Inclusion of Uganda; Alliance for Financial Inclusion (2020), Brief on youth financial inclusion

Guidance and clarification around rules and regulations that apply to child and youth accounts

Issuing clear guidance about the rules and regulations that apply to youth accounts or youth financial services may also encourage and reassure financial institutions and Fintech companies to serve the youth.

In 2015, the USA federal financial regulators, the Office of the Comptroller of the Currency (OCC), the Board of Governors of the Federal Reserve System, the Federal Deposit Insurance Corporation, the USA Department of the Treasury's Financial Crimes Enforcement Network, and the National Credit Union Administration issued "Guidance to Encourage Financial Institutions' Youth Savings Programs and Address Frequently Asked Questions". The interagency guidance provides answers to common questions, including those related to Customer Identification requirements that may arise as financial institutions collaborate with schools and other community stakeholders to facilitate youth savings and financial education programmes. The guidance provides principles that financial institutions should consider and is intended to encourage them to develop and implement programmes to expand the financial capability of youth and build opportunities for the financial inclusion of more families. The guidance clarifies the application of existing guidelines and addresses uncertainties regarding legal and regulatory issues in connection with financial institutions establishing youth savings programmes (Office of the Comtroller of the Currency, 2015[115]). For example, the guidance clarifies that (FDIC, 2017[116]):

- Consumer protection laws and regulations apply to youth savings accounts.
- If the goal of a youth savings programme is financial education designed to teach students the principles of personal financial management, banking operations, and saving for the future, then a financial institution might not be required to submit a branch application to their regulator.
- Because Customer Identification Program verification procedures are risk-based, institutions may use reasonable documentary or non-documentary methods to verify a minor's identity.

Consistent with this guidance, the USA Federal Financial Literacy and Education Commission issued additional resources for financial institutions and other stakeholders regarding youth savings accounts.

4.8. Youth-friendly banking accounts

Research from the United States indicates that young people save more when given the opportunity to open accounts that come with youth-friendly account features (Loke et al., 2016[117]), (Financial Literacy and Education Commission, 2017[27]) Financial institutions may create products using safe youth account standards based on the Bank on National Account Standards, developed by a non-governmental organisation.[42] Features of a youth-

friendly account include: no minimum or starting balance, zero or low monthly and minimum balance fees, no overdraft capability, no dormancy or inactivity fees, free and unrestricted access to customer service, free online/mobile banking and bill pay, ability to add cash or other direct deposit sources to the account/card without fees, and free and unrestricted use of Automated Teller Machines (ATMs). Some financial institutions allow remote account opening and may use student IDs, municipal IDs, programme documentation or other reasonable means of identity verification (Financial Literacy and Education Commission, 2017[27]).

In most jurisdictions, specific savings accounts or basic payment accounts are available to young people (depending on the legal and regulatory framework). These are tailored to youth as they typically have lower costs and often provide additional financial or non-financial incentives. These can generally take several forms, from basic payment accounts with low fees (such as Canada) and higher interest rates (such as in North Macedonia), tax free accounts (as in South Africa), free of charge youth accounts (Austria) or accounts that provide state interest subsidy or matched contributions to savings (free savings accounts for youth in Argentina and social savings accounts for vulnerable youth, through which young people receive subsidies). Examples include also cuentas de ahorro infantil in Honduras, basic bank account in Jordan, youth and child account in Paraguay, livret jeune in France, special youth savings accounts in Switzerland provided by state banks and post banks, child savings account with access to mobile banking in UAE or child savings account in Ukraine.

Governments and regulators may consider mechanisms to incentivise financial services providers and Fintech companies to develop targeted products for young people. For example, in the USA, under the Community Reinvestment Act[43] banks may receive favourable consideration when implementing financial literacy and education programmes targeted to low- and moderate-income youth that are responsive to community needs (Financial Literacy and Education Commission, 2017[27]).

At the same time, governments may decide to implement subsidies, tax benefits, fees waivers or matched contributions to incentivise usage and increase formal savings for and by young people (see Box 4.14 for specific examples).

Box 4.14. Savings for every child – examples of government interventions

In **Argentina**, child savings bank accounts can be opened, registered in the name of minors and their legal representative, allowing parents to generate savings for the minor, free of charge, in updatable Housing Units or Purchasing Value Units. The funds deposited in these accounts are unavailable, including updating, compensation, capitalisation until the minor's age of majority (18 years old).

“Savings for every child” is the National Plan of the Ministry of Finance of **Israel** and the National Insurance Institute, which came into effect in January 2017. According to the plan, the National Insurance Institute will deposit NIS 50 per month for each child in the State of Israel eligible for a child allowance, in addition to the allowance. Parent may also increase the savings by another NIS 50 per month out of the child allowance paid by the National Insurance Institute, bringing the monthly savings to NIS 100 per child. The plans will be managed in long-term savings investment provident funds or in banks. The money is deposited each month for every child eligible for child allowance until they reach the age of 18.

In the **UK**, the government introduced Junior Individual Savings Account (ISA)/Child Trust Funds (CTF). The policy was in place between 2005 and 2011. These were tax-free savings accounts designed to encourage children's savings, with the funds only accessible once the child reaches 18. CTFs were introduced to provide children with a financial asset at the start of adult life and to encourage long-term saving. All children born between 1 September 2002 and 2 January 2011 were eligible for an account, which included an initial government contribution (although the value of this varied over time and depending on individual circumstances). Over 6 million CTF accounts were opened. The CTF scheme was closed in 2011, and JISA was introduced as the successor (which does not attract a government contribution) to continue supporting children's savings. Around 907,000 JISAs were subscribed to in 2017-18. Families can subscribe up to £4,368 to a JISA or CTF tax-free in 2019-2020. The stock of CTF accounts will begin to mature in September 2020; accounts will retain their tax-free status if not immediately claimed, or the funds can be transferred to an adult ISA without affecting the individual's annual subscription limit of £20,000. JISAs convert automatically into an adult ISA once the child reaches 18.

New-borns in **Singapore** are eligible for Child Development Accounts (CDA), a special savings account. The CDA account is valid for up to 12 years, during which time the government will match the amount saved in the account for the child. Savings in the CDA can be used for purposes such as paying for kindergarten or hospital and clinic fees.

In **India**, the government has introduced in 2014 a new programme Sukanya Samriddhi Yojana, which is a savings scheme for girls and is part of a broader girls empowerment programme in India, the Beti Bachao Beti Padhao. Through this savings scheme, a special savings account can be opened at a girl's birth any time before the girl turns 10 years old. The special account provides high interest rates compared to other savings schemes and income tax is exempted from the contributions to this account (available both on interest and at the time of withdrawal). When the girl reaches maturity, the account balance including the interest accumulated will be directly paid to the policyholder (the girl): the objective of this condition is to provide financial independence to the girl once she reaches maturity.

The Central Bank of **Bangladesh** is implementing the SchoolBanking programme. The purpose of school banking is to familiarise the students aged below 18 years with banking service and modern banking techniques along with savings practices. The programme was initiated by Bangladesh Bank in 2010. In 2013, Bangladesh Bank issued guidelines to allow students under 18 years of age to open School Banking Accounts. As of December 2019, a total of 1.99 million school banking accounts had been opened and their total deposit stood at BDT 16.26 billion. 58 banks active in Bangladesh, that is all banks with one exception, have at least one school banking operation (Bangladesh Bank, 2019[118]). Bangladesh Bank has also issued directives for commercial banks to open charge-free no-frills accounts for underprivileged groups, including working/street children, with the purpose of supporting them to become financially independent. Working children can open an account with designated banks with the guardianship of registered non-governmental organisations (NGOs). The NGO is responsible for the operation of the accounts and to ensure the well-being of the account holders until maturity. As of December 2019, a total of 7,647 accounts of working children have been opened and the total deposit stood at BDT 3.82 million.

Sources: Responses to the stocktake questionnaire

4.9. Incorporate financial inclusion considerations into broader youth development programmes

Incorporating financial education and financial inclusion into youth employment programmes

Providing financial education at teachable moments, considering life cycles events, may contribute to increased receptivity to the educational messages and may lead to prompt and positive financial decisions, increasing financial well-being. For young people, transitioning from education to employment and receiving a first pay check, represents an important life event, which may be leveraged by programmes integrating youth employment support with access to basic financial services and financial education.

Results from a quasi-experimental study in the USA on integrated financial capability services into youth workforce development programmes show that providing financial education and access to appropriate and safe financial products at teachable moments leads to more effective and long lasting financial knowledge and financial behaviours, and it also more broadly contributes to youth empowerment, increased self-confidence and self-efficacy, asset accumulation and financial wellbeing (Loke et al., 2016[117]). In 2017, the USA Federal Financial Literacy and Education Commission (FLEC) issued specific information related to opening accounts for youth in youth employment training programmes. See Box 4.15 for more details.

Box 4.15. Financial Capability and Youth Employment Programmes: learning from the USA

The Workforce Innovation and Opportunity Act (WIOA) was adopted in the USA in 2014, with the objective of providing "funding, resources, services, training, leadership, and support for workforce development and related programmes across the country". Specifically, the Department of Labour (DOL) supports youth employment programmes under the WIOA, for low- and moderate-income in-school youth (ages 14 to 21), and out-of-school youth (ages 16 to 24).

Several studies had found that youth participating in youth employment programmes did not know how to access mainstream financial products and services and were largely financially excluded (Cities for Financial Empowerment Fund, 2017[119]). To leverage a potential teachable moment, and help young people build financial capability, WIOA-funded youth employment programmes require a financial literacy training element. The training must support "youth's ability to create budgets, open checking and savings accounts at financial institutions, learn about credit, and make informed financial decisions." Youth employment programme providers and financial institutions are encouraged to partner and work closely together to provide financial education and access to youth-friendly bank accounts, with the objective of "helping young people achieving greater financial wellbeing and employment success". This provision represents an opportunity to support young people earn a livelihood alongside increasing one's financial capability and, potentially, lead to positive implications for the larger family and community.

Sources: Workforce Innovation and Opportunity Act. Public Law 113-128 (22 July 2014) DOL, WIOA Final Rule,https://doleta.gov/wioa/Docs/wioa-regs-labor-final-rule.pdf; The FLEC Resource Guide for Financial Institutions; The FLEC Resource Guide for Youth Employment Programs

Incentivising and facilitating access to finance for young entrepreneurs

To facilitate access to finance by young entrepreneurs, governments around the world have adopted several approaches which generally combine a financing component with non-financial services such as entrepreneurial/vocational training or mentoring.

The Government of India has initiated several programmes to promote entrepreneurship amongst youth. For example, Start-up India is a flagship initiative intended to catalyse start-up culture and build a strong and inclusive ecosystem for innovation and entrepreneurship[44] which provides tax and regulatory support for start-ups for a defined period. Loans of up to 10 lakhs (1 million Rupees) are provided to non-corporate, non-farm small/micro-enterprises through the Pradhan Mantri MUDRA Yojana (PMMY) programme with the purpose of supporting and promoting entrepreneurship. Other countries, where promotion of entrepreneurship culture is coordinated nationally, such as Croatia, Estonia, Lebanon, Luxembourg, North Macedonia and South Africa have also a special focus and emphasis on youth in general. In Canada, Ireland, Italy, Sudan and Switzerland national entrepreneurship strategies target young entrepreneurs.

Tax reliefs, government credit guarantees, publicly funded venture capital funds or other types of regulatory incentives are also widely adopted amongst countries. However they are seldom focused on young entrepreneurs only.

The Croatian Agency for SMEs, Innovations and Investments (HAMAG-BICRO) has developed "Individual Guarantees for Rural Development", through which it provides small business entities in the agricultural, processing and forestry sectors guarantees to cover part of the loan principal or leasing in accordance with the terms of the Rural Development Program (2014-2020). The instrument provides better conditions for young farmers (under 40 years of age). In Canada there are several youth and youth entrepreneurs' support schemes. The Youth Employment and Skills Strategy (YESS) aims at helping young people, particularly those facing barriers to employment, get the information and gain the skills, work experience and abilities they need to make a successful transition into the labour market (Government of Canada, 2020[120]). Futurpreneur Canada is a national, non-profit organisation that provides financing, mentoring and support tools to aspiring business owners aged 18-39[45] while the Canada Service Corps, a federal government entity, provides micro-grants to youth who have project ideas in their communities.[46]

The Youth Entrepreneurial Development Programme was established by the Central Bank of Nigeria as part of its efforts to deepen credit delivery and address unemployment, promote entrepreneurial spirit among Nigerian young people and enhance the development of small and medium-sized enterprises. Through the programme, start-up and expansion projects by young graduates and non-graduates (18-34) can benefit from term loans and working capital at specific beneficial conditions (Development Finance Department CBN, 2016[121]).

The National Public Development Bank of Mexico is implementing Jóvenes Empresarios, a programme focused on young entrepreneurs. Through this initiative, the bank offers two distinct credit programmes to people aged 18 to 35 years old, to start or grow a business.

In Bhutan, a few programmes aim at supporting young people develop their businesses and get access to finance. They include Youth Ethics Banking programme, Jabchor-platform (a platform that brings together young entrepreneurs and start-ups who need early-stage financing with individuals and companies who have the capital and are willing to invest in them/angel investors), the Students Business Seedling programmes[47] and Little CEOs.

5. Conclusions and Policy Options

The examples and policy approaches presented in previous sections highlight that, depending on country contexts and other factors, multiple and diverse solutions may be implemented to advance the digital financial inclusion of youth.

Based on the analysis of these examples and approaches, the following conclusions and policy options may be drawn for advancing the appropriate and safe digital financial inclusion of young people. They build on, and are consistent with the High-Level Principles for Digital Financial Inclusion and form part of the basis for the G20 High Level Policy Guidelines on Digital Financial Inclusion for Youth, Women, and SMEs, developed by the GPFI under the G20 Saudi Presidency. These policy options, and the commentary in the report more broadly, are subject to child protection laws wherever applicable, in recognition of the special importance of appropriate protections for children (i.e. those below the age of majority).

The policy options presented below are indicative and non-binding and, in their application, jurisdictions should naturally consider their particular circumstances and contexts. Moreover, they do not supersede or direct international standard setting bodies or other international bodies for regulatory coordination, and policy makers deciding to implement the below suggestions still need to adhere to their core mandates of ensuring financial stability, financial integrity, and financial consumer protection.

It is also recognised that across different jurisdictions some of the actions suggested in support of the policy options may already be in place or under consideration.

Within the current evolving environment, as governments around the world respond to the health, social and economic effects of the COVID-19 pandemic, the opportunities provided by digital means for individuals and businesses to continue accessing and using financial products and services, are especially important.

Policy Options for Advancing Youth Financial Inclusion	G20 High Level Policy Guidelines on Digital Financial Inclusion for Youth, Women, and SMEs
Policy Option 1: Integrate youth voices in policymaking and programme design related to youth digital financial inclusion whenever possible	HLPG 4: Support the adoption of targeted policies and initiatives in national strategies
Policy Option 2: Consider the collection and use of anonymised youth-specific financial inclusion data	HLPG3: Improve the availability and accuracy of disaggregated data with regards to access and the use of financial products and services.
Policy Option 3: Consider economic, social, cultural, gender and religious factors that may affect availability and accessibility of financial products for youth	HLPG5: Support regulatory and legal reforms that reduce the unequal access to responsible digital financial services that result from social, economic, and cultural inequalities.
Policy Option 4: Support an enabling and resilient environment for responsible digital financial services, including trustworthy and secure digital identity systems, to facilitate youth financial inclusion	HLPG1: Promote a competitive environment for banks and non-banks and support the development of a widely accessible, secure, and responsible digital infrastructure and interoperable payment systems. HLPG6: Consider developing a regulatory framework that supports responsible innovation in private and public sectors.

Policy Option 5: Support and promote youth-friendly design of digital financial products	HLPG2: Encourage the availability and affordability of tailored digital financial products, whilst addressing the need for AML/CFT safeguards and the necessary customer due diligence measures and digital identity systems.
Policy Option 6: Support coordination of strategic efforts across stakeholders and encourage cooperation between public and private sectors where appropriate, aimed at advancing youth digital financial inclusion	HLPG 4: Support the adoption of targeted policies and initiatives in national strategies.
Policy Option 7: Consider the needs, risks and vulnerabilities of youth in the digital environment in the context of financial consumer and data protection approaches	HLPG8: Support financial consumer protection measures, including data protection that address the needs of youth, women, and SMEs.
Policy Option 8: Review blanket regulatory requirements relating to age to ensure they remain appropriate	HLPG5: Support regulatory and legal reforms that reduce the unequal access to responsible digital financial services that result from social, economic, and cultural inequalities.
Policy Option 9: Leverage technology to promote financial and digital literacy of young people	HLPG7: Enhance financial, business, and digital literacy and capabilities through targeted interventions and by leveraging technology.

Support an inclusive and evidence-based approach to advancing youth digital financial inclusion

1) Integrate youth voices in policymaking and programme design related to youth digital financial inclusion, whenever possible

It is important to ensure that youth voices are informed and heard in policy development relating to supporting youth financial inclusion, and that young people are appropriately engaged in programme design.

There are several levels of youth participation, ranging from provision of information; youth consultations; collaboration and involvement in decision-making (OECD, 2017[122]). Information is typically limited to communication strategies, while different forms of consultation and collaboration demonstrate that policy makers recognise and value the opinions of young people. A possible framework that may be applied by policy makers to ensure meaningful youth-centred participation is the Positive Youth Development framework.[48]

Barriers to youth participation in policymaking are often social, economic and institutional in nature and policy makers should take appropriate steps to address these to promote youth centred participation (Sinclair, 2004[123]). Policy makers should encourage participation from a range of youth voices (including gender diversity), consider the interests of marginalized groups, and encourage participation of advocacy or interest organisations representing these groups (for example youth from low-income communities). Youth-centred participation should be "be transparent, informative, voluntary, respectful, relevant, inclusive and accountable." (OECD, 2017[122])

In the context of the evolving COVID-19 pandemic, involving youth in development of recovery policy responses may rebuild young people's trust in governments and integrate long-term considerations of intergenerational solidarity and justice in crisis responses and recovery strategies (OECD, 2020[9]). The OECD Global Report on Youth Empowerment and Intergenerational Justice (OECD, forthcoming[123]) provides a holistic assessment framework to support countries in this regard.

2) Consider the collection and use of anonymised youth-specific financial inclusion data

Collecting, using and making publicly available data on supply and demand of financial products and product-use by youth would be beneficial to inform evidence-based policymaking. Any such data collection should be general in nature and *not* include personal data of youth (except where appropriate consent has been obtained for specific purposes).

The Global Findex produced by the World Bank is the primary international database on financial inclusion and provide useful insights on demand side data for youth. The optional financial literacy assessment conducted by the OECD PISA provides international comparable data on financial literacy of 15-year-old students and useful insights on young people's financial literacy, but also attitude towards money, behaviours and product holding. Specific data on youth financial literacy and access to financial services can also help policy makers identify the most vulnerable young people in their countries. Financially excluded youth, as seen in previous sections, are also more concentrated in specific geographical locations, they often have lower levels of education and income, or are unemployed.

Examples of key actions on youth-specific financial inclusion data include, but are not limited to, the following:

- Collect data relevant to youth access to digital infrastructure to inform policy-making (if not already available). This may include: youth access to internet, youth mobile phone and smartphone ownership etc.
- Consider whether digital financial inclusion data collected (both on supply and demand side) may be disaggregated by age to include youth (15-24 years) and adults (25+); and sex (male/female). Where possible, data aggregated by income level should be collected as well, as it could provide useful information on the composition of digital divide or insights on how to reach low-income youth/youth from low-income households. Specific examples may include the percentage of youth population with mobile/digital accounts; the percentage of active youth users of mobile/digital accounts; the types of transaction type performed by youth owner of mobile/digital account (i.e. bill payment, cash-in/cash-out, P2P transfers, e-commerce); access to credit by youth; insurance and type of insurance owned by young people; percentage of young people with retirement savings; etc. On the demand side, consider gathering data on demand and usage of digital financial services by young people, attitudes and behaviours in relation to digital financial services and digital literacy.
- Regularly assess financial literacy levels of youth using international comparable measurement instruments and consider participating in the optional PISA financial literacy assessment.
- Conduct in-depth qualitative and quantitative data collection and data analysis, to better understand youth financial needs, youth behaviours in relations to financial services, and barriers to access and usage by youth.
- Make available results of research and data collection for the benefit of the international community and for knowledge sharing purposes.

3) Consider economic, social, cultural, gender and religious factors that may affect availability and accessibility of financial products for youth

Economic, social, cultural and religious factors, gender and young people's personal situations may influence their attitudes and behaviours towards money matters, as well as their access to formal financial services, to digital tools and their propensity to use them. Policy makers should take these factors into account in implementing efforts to support financial inclusion for all young people. Both public and private sectors should consider designing policies, programmes and products for the most marginalised youth (such as those young people living with disabilities) as this may reveal gaps and solutions that might otherwise be overlooked.

The following actions could be considered:

- Specific interventions could address the needs and risks faced by sub-segments of youth population, in vulnerable or particularly disadvantaged environments, such as girls and young females, rural youth, youth without access to digital means, unemployed or inactive youth, youth with lower access to education, youth living with disabilities, youth working in the informal sector or youth refugees.
- Eliminating gender gaps from young age and the social pre-concepts associated with traditional roles for males and females could in the future support more gender equality in the financial services sphere and beyond. Through partnership with civil society organisations, policy makers may support the development of targeted programmes, to tackle social and cultural aspects alongside financial ones, and may consider appropriate ways to remove barriers that limit, for example, women's full financial inclusion and social participation.
- When possible, financial inclusion and financial literacy considerations should be integrated into broader youth empowerment, youth entrepreneurship, youth support policies and youth employment training programmes. Moreover, synergies and overlaps between such policies and those aimed at advancing youth digital financial inclusion should be explored. When appropriate, opportunities to link financial inclusion to efforts to address youth employment disparities should be nurtured. Policy makers should also consider specific constraints faced by young entrepreneurs or aspiring young entrepreneurs in accessing finance or appropriate non-financial support to start, operate and grow their businesses and support development of tailored programmes taking into account such needs and limitations.

Enable inclusive, resilient, interoperable digital financial ecosystems that support youth financial inclusion

4) Support an enabling and resilient environment for responsible digital financial services, including trustworthy and secure digital identity systems, to facilitate youth financial inclusion

An enabling and resilient environment for digital financial inclusion will benefit access to financial services by the entire population, and may have positive effects on youth financial inclusion in particular. At the same time, policy makers need to be aware of the risks associated with digital innovations that may impact the accessibility and affordability of financial services and products. It is also important to take account of broader child protection frameworks.

Examples of possible actions to support an enabling and resilient environment that facilitates youth digital financial inclusion include the following:

- Digital infrastructure: Develop robust and resilient digital infrastructure that allows for easier access and affordable usage of the internet and mobile devices in all, including remote, locations. This may benefit access to digital financial services by rural youth. Policy makers may also keep in mind digital gender divides and take appropriate steps to eliminate those.
- Digital Identity: Promote digital identification registration that is accessible to all children and youth, where feasible, while taking into account broader considerations of child protection.
- Adopt risk-based KYC for youth to take into consideration potential lack of documentation by youth in vulnerable situations (such as youth refugees), and consider the acceptability of alternative forms of identification for younger youth (such as school IDs, letters from recognised authority such as village chief or local council). Whenever appropriate, enable remote identification systems through e-KYC to facilitate digital on-boarding of youth.
- Interoperable payments system: Promote an interoperable digital payments infrastructure for government payments meant for young people, for example, government allowances, student loans, scholarships, social support benefits.
- Allow and promote the responsible use of alternative data sources to enhance the evaluation of creditworthiness of youth entrepreneurs (such as mobile phone data, social media, etc.), keeping into consideration potentially arising data privacy issues, and monitoring potential risks and/or biases.
- Consider creating a database readily available on the types of financial products accessible to youth in a specific jurisdiction. Such initiative would give easy access to a comprehensive overview on what types and how many products targeting youth are on the market, providing an understanding of gaps in provision and potential risks.

5) Support and promote youth-friendly design of digital financial products

Policy makers could work with financial services providers to encourage the development of products and services that cater to the needs and preferences of young people. These could include savings products; payment products; student loans; credit for young entrepreneurs; insurance; and retirement products. Youth-friendly products may be designed in consultation with youth, be based on thorough market research and on the principle of customer centricity, and include simple and attractive user interfaces, behaviourally-informed functionalities (such as nudges to encourage responsible financial behaviour and savings) and considerations in relation to youth preferences, youth working patterns including participation in the gig economy and religious beliefs (e.g. Sharia compliant products).

Examples of actions to promote development of youth-friendly products may include, but not be limited to:

- Encourage industry to offer child savings or current accounts with limited functionalities for younger youth, to start them on the path of financial acumen.

- Whenever possible, work with industry to provide additional benefits for child and youth accounts to incentivise uptake and usage, such as interest subsidy, matched contributions to savings, seed funding, tax-free savings accounts etc.
- Encourage financial services providers to open charge-free (no-frill) accounts, or accounts with low opening and maintaining costs for unprivileged groups of young people.
- Ensure that savings deposited in child and youth accounts are fully covered by deposit insurance schemes.
- Encourage development of hybrid and flexible digital products which could assist with multiple financial goals (such as short-term and long-term savings, insurance or credit).
- Consider adopting tax reliefs, government credit guarantees or other regulatory incentives to encourage financial services providers to issue business credit to young entrepreneurs.
- Issue clear guidance in relation to rules and regulations that apply to youth accounts or financial services, to encourage and reassure financial institutions and Fintech companies to serve the youth.

6) Support coordination of strategic efforts across stakeholders and encourage cooperation between public and private sectors where appropriate, aimed at advancing youth digital financial inclusion

Advancing digital financial inclusion of young people is more effective when efforts from a diverse range of stakeholders are coordinated, such as government agencies, financial regulatory authorities, educational institutions, financial services providers, Fintech companies as well as young people themselves and their parents. Youth may be identified as one of the main target groups in national strategies for financial inclusion, financial education, entrepreneurship or other relevant national strategies (such as financial sector development, etc.), depending on countries' national contexts and priorities. The following actions could be implemented:

- Coordinate efforts of relevant stakeholders around shared goals, including for example, with the Ministries of Education, with the aim of advancing financial and digital literacy of youth, or other relevant authorities engaged in youth workforce development and entrepreneurship policies.
- Consider the role of parents and guardians in young people's lives, and whenever possible, encourage relevant national associations (such as parents associations) or civil society organisations to develop programmes that foster positive dialogue around money matters between parents and children.
- Integrate digital financial inclusion considerations into broader policies relating to youth empowerment, employment and youth entrepreneurship.
- Establish measurable objectives, clear accountability frameworks and monitoring and evaluation mechanisms, to ensure effective implementation.

Support appropriate protections for financial and digital youth empowerment

7) Consider the needs, risks and vulnerabilities of youth in the digital environment in the context of financial consumer and data protection approaches

Appropriate levels of financial consumer and data protection, as well as broader child protection frameworks, are essential for safe interaction of young people with digital financial services, especially given the risks to which they may be exposed online and given their limited financial experience. Young people are vulnerable to risks such as misleading advertising and mis-selling, scams such as identity theft, or over-indebtedness amongst others. Policy makers should consider the needs and vulnerabilities of youth, especially those below the legal age of majority, in the digital environment in the broader context of child protection, financial consumer and data protection approaches (including data privacy). Similarly, issues relating to the collection and use of data of young people, especially those below the legal age of majority should be considered within the context of data protection frameworks, either existing or to be developed in the context of national circumstances.

Examples of actions to protect young people's financial interests and their personal data in the digital environment include, but are not limited, to:

- Ensure that any financial product and services targeting youth have terms and conditions that are stated in clear, easy to understand, accessible and youth-friendly language.
- Ensure digital channels such as chat bots and websites related to specific financial services have accurate information about products available and the requirements for opening them, redress mechanisms or complaints (in accessible, youth-friendly and simple language).
- Encourage financial services providers to monitor complaints by age, so as to identify and address specific needs and vulnerabilities of youth.
- Consider developing simplified processes to re-establish credit history and ratings for young people victims of identity theft.
- Consider developing a data protection framework, in accordance with national circumstances, and include consideration for how financial services providers (especially those digitally active) can collect, store, manage and process data of young people and especially of young people below the legal age of majority.
- Consider the role of parents and legal guardians in giving consent to third parties to access to young people's personal data.
- Limit the use of personal data of children and youth for the purposes of marketing, creating personality or user profiles, or any other use that may be against the direct benefit of the child and youth and may lead to unintended consequences immediately or later in their adult life.

8) Review blanket regulatory requirements relating to age to ensure they remain appropriate

Access restrictions based on age perform an important role in protecting young people from financial harm. For example, it is important to ensure that appropriate age limits apply and are enforced with regards to options like buying lottery tickets or gambling through mobile apps or to access credit.

Depending on specific local circumstances, and subject to broader child protection frameworks, it may be appropriate to review from time to time, blanket age-related regulatory requirements, where they exist, that restrict young people's access to all financial products and consider whether particular exemptions may be appropriate, such as in situations where young people are already in the labour force. For example, basic savings accounts or payment products may be useful for some young people and could support the formation of positive financial behaviour. Any review of age-based requirements should be undertaken extremely carefully ensuring that young people are not exposed to inappropriate risks and that the role of parents and guardians is properly considered. Additionally, any changes to age-based requirements should be accompanied by appropriate financial consumer protection, to ensure mismatches between rights and liabilities are addressed.

Many digital payment and savings products include functionalities that allow parents to set spending limits, monitor their child's spending and saving behaviour, select merchants where the payment product can be used and so on. These functionalities could be leveraged for the development of payment products that enable parents to take advantage of the benefits of experiential learning, by providing increasing financial autonomy to children and youth as they mature or begin to master financial concepts.

9) Leverage technology to promote financial and digital literacy of young people

Financial literacy is defined as "a combination of awareness, knowledge, skill, attitude and behaviour necessary to make sound financial decisions and ultimately achieve individual financial wellbeing" (OECD, 2005[124]). Low levels of financial literacy are closely correlated to financial exclusion of young people. As such, financial education, can empower young people, provide them with an understanding of the benefits and risks of using financial services, and ensure they are aware of their rights and responsibilities as financial consumers.

It is important for children and young people to have access to high quality education in their early (primary) years, to gain literacy, numeracy, and social-emotional skills. These are foundational skills that underscore future learning as well as the possibility of understanding and applying financial concepts. Alongside, and where possible, financial education should be integrated in school curricula from a young age, which is recognised as one of the most efficient ways to reach a whole generation and reduce digital divides and inequalities related to socio-economic backgrounds (OECD, 2012[125]).

Online learning is an increasing component of school life, regardless of the underlying subject and digital education may reduce digital divides. In order to reap the benefits of online learning, accessibility to digital tools should be secured.

Financial and digital education may also be provided through other delivery methods, such as extra-curricular activities, online, through peer education and counselling, using social media platforms, games and others.

Policy makers may consider the following actions:

- Leverage the digital environment to encourage use of tested, high-quality online financial education resources or trusted personal financial applications, to help young people find relevant and updated information, from reliable sources.
- Deploy evidence-based best practices for building financial skills, including the use of hands-on learning through activities such as access to accounts, games and simulations.[49]

- Build financial education programmes considering youth's developmental stages and life cycle events, gender, and the multitude of factors that may influence youth's financial skills development, such as social environment, parental and peers influence or direct experience.
- Work with industry representatives and civil society organisations to harness digital tools to develop and deliver appropriate and high-quality financial education and other money management applications such as digital budgeting tools or investment simulators at teachable moments (such as youth transition to higher-education, youth entering the labour force).
- Establish principles and guidelines for the private sector involvement (financial institutions and Fintech companies) in financial education for youth, and ensure that any potential conflict of interest that may arise from involvement of private sector actors in financial education initiatives is appropriately managed.
- Encourage partnerships and collaboration between financial services providers and schools or universities that consider and apply established guidelines to avoid potential conflict of interest. Examples of such programmes may include school banking, where youth can easily access banking facilities in the schools/university premises and gain financial skills through use of such services. Financial services providers may provide banking products facilities and practical application of financial literacy concepts, alongside financial education classes or other financial education programmes.
- Assess outcomes and integrate lessons learned to continuously improve the quality of financial education delivery.
- Consider implementing initiatives, such as awareness raising campaigns, that may reduce the risks of the online presence of young people (especially social media presence) such as personal information sharing in public contexts, data phishing, money mules schemes; utilise the potential of social media and youth's frequent presence on such platforms for peer education or for promotion of young people's rights.

Bibliography

Accenture (2020), *Retirement in the New*, Pensions, http:///www.accenture.com/us-en/services/public-service/pensions (accessed on 19 May 2020). [71]

Accenture (2015), *Newsroom, Banks have a $380 Billion market opportunity in Financial Inclusion*, https://newsroom.accenture.com/news/banks-have-a-380-billion-market-opportunity-in-financial-inclusion-accenture-and-care-international-uk-study-find.htm (accessed on 19 May 2020). [45]

AFI (2020), *Brief on youth financial inclusion*, Alliance for Financial Inclusion , Kuala Lumpur. [113]

African Union (2020), *African Youth Front on Coronavirus*, https://auyouthenvoy.org/ayfocovid19/. [11]

Asian Development Bank (2016), *Accelerating financial inclusion in South-East Asia with digital finance*, ADB, Oliver Wyman, Microsave, http://www.adb.org/sites/default/files/publication/222061/financial-inclusion-se-asia.pdf. [89]

ASIC (2018), *Report 600: Review of buy now pay later arrangements*, ASIC, Canberra, https://download.asic.gov.au/media/4957540/rep600-published-07-dec-2018.pdf. [79]

Atkinson, A. and F. Messy (2013), "Promoting Financial Inclusion through Financial Education: OECD/INFE Evidence, Policies and Practice", *OECD Working Papers on Finance, Insurance and Private Pensions*, No. 34, OECD Publishing, Paris, https://dx.doi.org/10.1787/5k3xz6m88smp-en. [91]

Banco Central Do Brasil (2017), "Panorama de credito concedido a microempreendedores individuals", *Série Cidadania Financeira*, No. 4, Banco Central Do Brasil, Brasilia, https://www.bcb.gov.br/content/cidadaniafinanceira/documentos_cidadania/serie_cidadania/serie_cidadania_financeira_4_credito_concedido_mei.pdf. [65]

Banco de Portugal (2018), *5 tips for staying safer online*, Report, https://clientebancario.bportugal.pt/sites/default/files/2018-11/Brochura%23ficaadica_EN.pdf (accessed on 19 May 2020). [109]

Bangladesh Bank (2019), *Survey on Impact Analysis of Access to Finance in Bangladesh*, Bangladesh Bank, Dhaka, http://www.bb.org.bd/pub/research/sp_research_work/srw1903.pdf. [118]

Banque du Liban (2018), *Financial Inclusion Demand Side Survey Report Implementation and Key Findings*. [32]

Barnard, B. et al. (2020), *FinTech for All Ensuring that everyone benefits from innovative financial services Afterword by Lord Darling of Roulanish*, Policy Exchange, London, https://policyexchange.org.uk/publication/fintech-for-all/. [49]

Barquin, S., V. HV and H. Yip (2015), *Digital banking in ASEAN: Increasing Consumer Sophistication and Openness*, About McKinsey & Company, http://www.mckinsey.com/~/media/mckinsey/business%20functions/mckinsey%20digital/pdf/digital%20banking%20in%20asean%20(4).ashx. [51]

Batty, M. et al. (2016), "Experiential Financial Capability Education: A Field Study of My Classroom Economy", No. 2016-9, Centre for Financial Security, Wisconsin, https://centerforfinancialsecurity.files.wordpress.com/2016/10/mce-brief-final.pdf. [112]

BCG and Mastercard Foundation (2018), *FINANCIAL SERVICES FOR YOUNG PEOPLE: PROSPECTS AND CHALLENGES*, BCG, Mastercard Foundation, https://mastercardfdn.org/wp-content/uploads/2018/06/Youth-Financial-Services-Accessible.pdf. [61]

Bolognesi, A. et al. (2020), *Trends and Issues February 2020 Millennials and money: The state of their financial management and how workplaces can help them*, TIAA Institute, https://www.tiaainstitute.org/sites/default/files/presentations/2020-02/TIAA%20Institute_Millennials%20and%20Money_T%26I_Lusardi_02%2020.pdf. [48]

Bruhn, M. et al. (2016), "The Impact of High School Financial Education: Evidence from a Large-Scale Evaluation in Brazil", *American Economic Journal: Applied Economics*, Vol. 8/4, pp. 256-295, http://dx.doi.org/10.1257/app.20150149. [106]

Burns, T. and F. Gottschalk (eds.) (2019), *Educating 21st Century Children: Emotional Well-being in the Digital Age*, Educational Research and Innovation, OECD Publishing, Paris, https://dx.doi.org/10.1787/b7f33425-en. [14]

CFPB (2019), *A review of youth financial education: Effects and evidence*, CONSUMER FINANCIAL PROTECTION BUREAU, https://files.consumerfinance.gov/f/documents/cfpb_youth-financial-education_lit-review.pdf. [42]

CFPB (2017), *CFPB Data Point: Becoming Credit Visible*, The CFPB Office of Research, https://files.consumerfinance.gov/f/documents/BecomingCreditVisible_Data_Point_Final.pdf. [62]

CFPB (2013), *Transforming the Financial Lives of a Generation of Young Americans: Policy Recommendations for Advancing K-12 Financial Education*, Consumer Financial Protection Bureau, http://files.consumerfinance.gov/f/201304_cfpb_OFE-Policy-White-Paper-Final.pdf. [104]

CGAP (2019), *How Are Kenya's Youth Experiencing the Gig Economy*, Blog series, http://www.cgap.org/blog/how-are-kenyas-youth-experiencing-gig-economy (accessed on 19 May 2020). [39]

CGAP (2011), *Paying Attention to the Financial Needs of Youth*, Blog series, http://www.cgap.org/blog/paying-attention-financial-needs-youth (accessed on 19 May 2020). [40]

Cho, Y. and M. Honorati (2013), "Entrepreneurship programs in developing countries : a meta regression analysis", *Policy Research working paper*, No. WPS 6402, World Bank, Washington, DC, http://documents.worldbank.org/curated/en/963251468332941560/Entrepreneurship-programs-in-developing-countries-a-meta-regression-analysis. [64]

Cities for Financial Empowerment Fund (2017), *Summer Jobs Connect: Where strong financial futures begin*, Cities for Financial Empowerment Fund, https://cfefund.org/wp-content/uploads/2017/11/Summer-Jobs-Connect-Where-Strong-Financial-Futures-Begin-1.pdf. [119]

Clarke, T. and A. Finney (2018), *Measuring Financial Capability in Children and Young People: What drives financial behaviour?*, Money Advice Service, Social Research and Statistics. [102]

Commission, P. (2018), *Superannuation: Assessing Efficiency and Competitiveness; Productivity Commission Inquiry Report*, Australian Government, http://www.pc.gov.au/inquiries/completed/superannuation/assessment/report/superannuation-assessment.pdf. [74]

Coury, T. and Q. Rashid (2015), "Youth microfinance services in MENA", *Silatech research paper*, https://silatech.org/wp-content/uploads/2018/12/youth-microfinance-services-in-mena.pdf. [43]

Cramer, R. et al. (2009), *A Penny Saved Is Mobility Earned*, Pew Charitable Trusts, http://www.pewtrusts.org/~/media/legacy/uploadedfiles/pcs_assets/2009/empsavingsreportpdf.pdf. [26]

Demirguc-Kunt, A. et al. (2018), *The Global Findex Database 2017: Measuring Financial Inclusion and the Fintech Revolution*, The World Bank, http://dx.doi.org/10.1596/978-1-4648-1259-0. [52]

Development Finance Department CBN (2016), *YOUTH ENTREPRENEURSHIP DEVELOPMENT PROGRAMME (YEDP)*, Central Bank of Nigeria, Abuja, http://www.cbn.gov.ng/out/2016/dfd/yedp%20guidelines.pdf. [121]

EFInA (2018), *EFInA Access to Financial Services in Nigeria 2018 Survey Key Findings*, http://www.efina.org.ng (accessed on 19 May 2020). [73]

Elder, S. and S. Kring (2016), "Young and female – a double strike? Gender analysis of school-to-transition survey in 32 developing countries", *Work4Youth publication series*, No. 32. [35]

Esser, A. et al. (2019), *Insurtech for development: Emerging market trends An update*, Cenfi, FSD Africa, http://www.cenfri.org. [58]

EU (2017), *Digital economy and society in the EU*, https://ec.europa.eu/eurostat/cache/infographs/ict/bloc-1b.html (accessed on 19 May 2020). [82]

EY (2019), *Global FinTech Adoption Index 2019*, EY, http://www.ey.com/en_gl/ey-global-fintech-adoption-index. [46]

EY Global Financial Services Institute (2015), "FinTech is gaining traction and young, high-income users are the early adopters", *The Journal of Financial Perspectives: FinTech*, Vol. 3/3, http://ey.com. [47]

FATF (2020), *Guidance on Digital Identity*, FATF, Paris, http://www.fatf-gafi.org/publications/documents/digital-identity-guidance.html. [95]

FCA (2019), *FCA opens debate on intergenerational finance: how industry and regulators should respond to demographic change*, Press release, London, http://www.fca.org.uk/news/press-releases/fca-opens-debate-on-intergenerational-finance (accessed on 20 May 2020). [83]

FCA (2018), *The financial lives of consumers across the UK Key findings from the FCA's Financial Lives Survey 2017*, Financial Conduct Authority - UK, London, https://www.fca.org.uk/publication/research/financial-lives-consumers-across-uk.pdf#page=14. [56]

FCA - UK (2019), *Millennials: Financial needs*, Infographic, https://www.fca.org.uk/publication/discussion/dp19-2-millennials-infographic.pdf (accessed on 19 May 2020). [69]

FDIC (2017), *Guidance to Encourage Financial Institutions' Youth Savings Programs and Address Related Frequently Asked Questions*, FDIC, http://www.fdic.gov/news/news/press/2015/pr15021a.pdf. [116]

FED (2016), *Small Business Credit Survey 2015*, The Federal Reserve Bank, http://www.newyorkfed.org/smallbusiness/joint-small-business-credit-survey-2014.html. [68]

Federal Trade Commission (2020), *Fraud Facts at a Glance*, FTC Consumer Sentinel Network, https://public.tableau.com/profile/federal.trade.commission#!/vizhome/FraudReports/FraudFacts (accessed on 19 May 2020). [80]

Federal Trade Commission (2018), *Child Identity Theft*, Article, http://www.consumer.ftc.gov/articles/0040-child-identity-theft (accessed on 19 May 2020). [101]

Financial Literacy and Education Commission (2017), *Resource Guide for Financial Institutions: Incorporating Financial Capability into Youth Employment Programs*, US Treasury. [27]

Finmark (2018), *FinScope SA 2018 Fact Sheet: How South Africans are leveraging informal and formal financial markets*, Finscope, http://finmark.org.za/wp-content/uploads/2019/01/FMT_Fsc_Leavebehind_CB4.pdf. [36]

Frisancho, V. (2018), "The Impact of School-Based Financial Education on High School Students and Their Teachers: Experimental Evidence from Peru", *SSRN Electronic Journal*, http://dx.doi.org/10.2139/ssrn.3305510. [107]

FTC (2020), *Consumer Sentinel Network Data Book 2019*, Federal Trade Commission, http://www.ftc.gov/reports/consumer-sentinel-network-data-book-2019. [81]

G20/GPFI (2017), *G20 Financial Inclusion Action Plan (FIAP)*, http://www.gpfi.org/publications/g20-financial-inclusion-action-plan-fiap-2017. [3]

G20/GPFI Argentina (2018), *G20/GPFI Policy Guide: Digitisation and informality: harnessing digital financial inclusion for individuals and MSMEs in the informal economy*, G20/GPFI, Buenos Aires, http://www.gpfi.org/sites/gpfi/files/documents/G20_Policy_Guide_Digitisation_and_Informality.pdf. [100]

G20/GPFI and World Bank Group (2018), *G20 Digital Identity Onboarding*, World Bank Group, http://www.gpfi.org/publications/g20-digital-identity-onboarding. [90]

Gallup (2019), *Gallup World Poll*, http://www.gallup.com/analytics/232838/world-poll.aspx. [7]

Gasparri, A. and L. Munoz (2019), *Inclusive finance and rural youth*, IFAD RESEARCH SERIES, http://www.ifad.org/ruraldevelopmentreport. [31]

Government of Canada (2020), *Canada's COVID-19 Economic Response Plan*, http://www.canada.ca/en/department-finance/economic-response-plan.html. [10]

Government of Canada (2020), *Youth Employment and Skills Strategy – Funding programs*, http://www.canada.ca/en/employment-social-development/services/funding/youth-employment-strategy.html (accessed on 19 May 2020). [120]

Government of Indonesia (2020), *PROGRAM KELUARGA HARAPAN*, KEMENTERIAN SOSIAL REPUBLIK INDONESIA, https://pkh.kemsos.go.id/?pg=tentangpkh-1 (accessed on 11 June 2020). [54]

Griffiths, A. and N. Buckley-Irvine (2018), *Children and Young People & Financial Capability: Provision Analysis*, The Money Advice Service, London, http://www.moneyadviceservice.org.uk/en/corporate/children-young-people-and-financial-capability-commissioning-plan--contributing-analysis-reports. [108]

Hatlevik, O. et al. (2018), "Students' ICT self-efficacy and computer and information literacy: Determinants and relationships", *Computers & Education*, Vol. 118, pp. 107-119, http://dx.doi.org/10.1016/j.compedu.2017.11.011. [20]

Hopkins, J. and B. Farr (2019), *CYP Financial Capability: UK Children and Young People's Survey Financial Education in Schools*, Money and Pensions Service, London, https://moneyandpensionsservice.org.uk/. [23]

IFEC (2020), *$avvy Planner Workshop*, Programmes, http://www.ifec.org.hk/web/en/other-resources/programmes/savvy-planner-workshop.page (accessed on 19 May 2020). [110]

ILO (2020), *Where is youth unemployment highest*, Youth unemployment trends, http://www.ilo.org/global/about-the-ilo/multimedia/maps-and-charts/enhanced/WCMS_600072/lang--en/index.htm (accessed on 19 May 2020). [33]

Ipsos MORI (2019), *UK Cyber Survey Key findings – General public*, National Cyber Security Centre and Department for Digital, Culture, Media and Sport (DCMS), http://www.ipsos.com/ipsos-mori/en-uk/uk-cyber-security-survey-2019. [86]

ITU (2017), *ICT Facts and Figures 2017*, http://www.itu.int/en/ITU-D/Statistics/Documents/facts/ICTFactsFigures2017.pdf (accessed on 19 May 2020). [18]

Kaspersky (2017), *Stranger danger: the connection between sharing online and losing the data we love*, Blogpost, http://www.kaspersky.com/blog/my-precious-data-report-three/16883/ (accessed on 20 May 2020). [85]

Klapper, L., H. El-Zoghbi and J. Hess (2016), *Achieving the Sustainable Development Goals: the Role of Financial Inclusion*, http://www.cgap.org/sites/default/files/Working-Paper-Achieving-Sustainable-Development-Goals-Apr-2016_0.pdf. [4]

Kwame Yeboah, F. et al. (2019), "Youth access to land, migration and employment opportunities: evidence from sub-Saharan Africa", *Papers of the 2019 Rural Development Report*, No. 53, IFAD, https://www.ifad.org/documents/38714170/41187395/13_Yeboah+et+al._2019+RDR+BACKGROUND+PAPER.pdf/49d161d8-bc5a-e154-fdb4-0d2d032a2f29. [67]

Lin J., C. et al. (2018), *The State of U.S. Financial Capability: The 2018 National Financial Capability Study*, FINRA, http://www.usfinancialcapability.org/downloads/NFCS_2018_Report_Natl_Findings.pdf. [37]

Livingstone, S. et al. (2017), *Young adolescents and digital media: uses, risks and opportunities in low- and middle-income countries: a rapid evidence review*, LSE, London, UK. [21]

Loke, V. et al. (2016), "Boosting the Power of Youth Paychecks: Integrating Financial Capability into Youth Employment Programs", No. 2016-03, Federal Reserve Bank of San Francisco, San Francisco, http://www.frbsf.org/community-development. [117]

Malady, L. (2016), "Consumer Protection Issues for Digital Financial Services in Emerging Markets", *SSRN Electronic Journal*, http://dx.doi.org/10.2139/ssrn.3028371. [88]

Mandell, L. (2009), "Two Cheers for school-based financial education", *Issue brief, Initiative on financial security*, The Aspen Institute, http://www.aspeninstitute.org/sites/default/files/content/docs/pubs/Two%20Cheers.pdf. [114]

McKinsey Global Institute (ed.) (2016), *INDEPENDENT WORK: CHOICE, NECESSITY, AND THE GIG ECONOMY*, McKinsey & Company, https://www.mckinsey.com/featured-insights/employment-and-growth/independent-work-choice-necessity-and-the-gig-economy. [38]

Money and Pension Service (2020), *Automatic enrollment if you're 21 or under*, Money Advice Service - UK, http://www.moneyadviceservice.org.uk/en/articles/automatic-enrolment-if-youre-21-or-under (accessed on 20 May 2020). [75]

MPFA (2020), *The Ageing Population and Retirement Protection*, Mandatory Provident Fund Schemes Authority website, http://www.mpfa.org.hk/eng/mpf_system/background/index.jsp (accessed on 19 May 2020). [72]

National Banking and Securities Commission (CNBV) (2018), *National Survey for Financial Inclusion*, http://www.gob.mx/cms/uploads/attachment/file/435813/ENIF_2018_en.pdf. [34]

National Youth Agency (2019), *Exploring the connection between social mobility and financial capability*, National Youth Agency, London, https://nya.org.uk/socmob-fincap/. [111]

OECD (2020), "A consumer-centric analysis of personal data use in financial services and the role of financial education", OECD, Paris. [84]

OECD (2020), *Financing SMEs and Entrepreneurs 2020: An OECD Scoreboard*, OECD Publishing, Paris, https://dx.doi.org/10.1787/061fe03d-en. [50]

OECD (2020), *Global Report on Youth Empowerment and Intergenerational Justice*, OECD. [126]

OECD (2020), *PISA 2018 Results (Volume IV): Are Students Smart about Money?*, PISA, OECD Publishing, Paris, https://dx.doi.org/10.1787/48ebd1ba-en. [22]

OECD (2020), "Youth and COVID-19: Response, Recovery and Resilience", *Tackling Coronavirus(COVID-19)*, OECD, Paris, http://www.oecd.org/coronavirus/en/. [9]

OECD (2019), *OECD Employment Outlook 2019: The Future of Work*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9ee00155-en. [8]

OECD (2019), *Policy Handbook on Financial Education for Young People in the Commonwealth of Independent States (CIS)*, OECD, Paris, https://www.oecd.org/financial/education/Youth-Policy-Handbook-on-Financial-Education-CIS-EN.pdf. [77]

OECD (2019), *Short-Term Consumer Credit: provision, regulatory coverage and policy responses*, G20 Taskforce on Financial Consumer Protection, Finconet, OECD/INFE, http://www.oecd.org/daf/fin/financial-education/Short-term-consumer-credit-report.pdf. [78]

OECD (2018), *G20/OECD INFE Policy Guidance on Digitalisation and Financial Literacy*, OECD, Paris, http://www.oecd.org/finance/G20-OECD-INFE-Policy-Guidance-Digitalisation-Financial-Literacy-2018.pdf. [76]

OECD (2018), *G20/OECD Policy Guidance on Financial Consumer Protection Approaches in the Digital Age*, OECD, Paris. [96]

OECD (2018), *OECD Labour Force Statistics 2018*, OECD Publishing, Paris, https://dx.doi.org/10.1787/oecd_lfs-2018-en. [6]

OECD (2017), *Evidence-based Policy Making for Youth Well-being: A Toolkit*, OECD Development Policy Tools, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264283923-en. [122]

OECD (2017), "G20/OECD INFE Report on ensuring financial education and consumer protection for all in the digital age", OECD, Paris, https://www.oecd.org/daf/fin/financial-education/G20-OECD-INFE-Report-Financial-Education-Consumer-Protection-Digital-Age.pdf. [5]

OECD (2017), *PISA 2015 Results (Volume III): Students' Well-Being*, PISA, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264273856-en. [15]

OECD (2017), *PISA 2015 Results (Volume IV): Students' Financial Literacy*, PISA, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264270282-en. [30]

OECD (2017), *Technology and Pensions: The potential for FinTech to transform the way pensions operate and how governments are supporting its development*, OECD, Paris, http://www.oecd.org/pensions/Technology-and-Pensions-2017.pdf. [70]

OECD (2016), *PISA 2015 Results (Volume II): Policies and Practices for Successful Schools*, PISA, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264267510-en. [19]

OECD (2012), *Connected Minds: Technology and Today's Learners*, Educational Research and Innovation, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264111011-en. [103]

OECD (2012), *OECD INFE GUIDELINES ON FINANCIAL EDUCATION IN SCHOOLS*, OECD, Paris, http://www.oecd.org/daf/fin/financial-education/2012%20Schools%20Guidelines.pdf. [105]

OECD (2012), *OECD/INFE HIGH-LEVEL PRINCIPLES ON NATIONAL STRATEGIES FOR FINANCIAL EDUCATION*, OECD, http://www.oecd.org. [125]

OECD (2005), *Recommendation on Principles and Good Practices for Financial Education and Awareness*, OECD, Paris, http://www.oecd.org/finance/financial-education/35108560.pdf. [124]

Ofcom (2020), *Children and Parents: Media Use and Attitudes Report 2019*, http://www.ofcom.org.uk/__data/assets/pdf_file/0023/190616/children-media-use-attitudes-2019-report.pdf. [16]

Office of the Comtroller of the Currency (2015), *Youth Savings Programs: Guidance to Encourage Financial Institutions' Youth Savings Programs and Address Related Frequently Asked Questions*, Office of the Comtroller of the Currency, http://www.occ.gov/news-issuances/bulletins/2015/bulletin-2015-16.html. [115]

Pingitore G. et al. (2017), *To share or not to share*, Deloitte University Press. [87]

RBI (2019), *Press Release on Ombudsman Scheme for Digital Transactions*, Press release, http://www.rbi.org.in/Scripts/BS_PressReleaseDisplay.aspx?prid=46163 (accessed on 19 May 2020). [99]

RBI (2019), *RBI Annual report on the Ombudsman Schemes 2018-19*, Reserve Bank of India, Mumbai, https://rbidocs.rbi.org.in/rdocs/Publications/PDFs/AR201820190FB8B9072F984910A9FC7BA568B634D8.PDF. [98]

Reserve Bank of India (2019), *Annual Report (2018-2019)*, Reserve Bank of India, Mumbai, https://rbidocs.rbi.org.in/rdocs/AnnualReport/PDFs/0ANNUALREPORT2018193CB8CB2D3DEE4EFA8D6F0F6BD624CEDE.PDF. [97]

SEEP (2013), *Understanding Youth and their Financial Needs Youth and Financial Services Working Group*, Innovations in Youth Financial Services Practitioner Learning Program. [24]

Sinclair, R. (2004), "Participation in practice: making it meaningful, effective and sustainable", *Children & Society*, Vol. 18/2, pp. 106-118, http://dx.doi.org/10.1002/chi.817. [123]

Smit, H., C. Denoon-Stevens and A. Esser (2017), *InsurTech for development: A review of insurance technologies and applications in Africa*, Cenfri, https://cenfri.org/wp-content/uploads/2017/11/InsurTech-Research-Study_March-2017.pdf. [57]

Sri Sulastri, A. and T. Ravi Kumar (2019), *Deepening financial inclusion through cash transfers: The case of PKH in Indonesia*, Blogpost Microsave Consulting, http://www.microsave.net/2019/11/13/deepening-financial-inclusion- [55]

through-cash-transfers-the-case-of-pkh-in-indonesia/ (accessed on 11 June 2020).

Sykes, J. et al. (2016), *Exploring the linkages between youth financial inclusion and job creation Evidence from the ILO school-to-work transition surveys Publication Series*, ILO, http://www.ilo.org/publns. [29]

Tanguy, C. et al. (2017), *Panorama Insurtech database: Insurtech—the threat that inspires*, http://www.mckinsey.com/industries/financial-services/our-insights/insurtech-the-threat-that-inspires. [60]

Thom, M. (2019), *Can insurtech unlock new opportunities for insurance in Africa?*, Cenfri, FSD Africa, https://cenfri.org/wp-content/uploads/Cenfri_FSDA-presentation_Can-insurtech-unlock-new-opportunities-for-insurance-in-Africa.pdf. [59]

U.S. Department of the Treasury (2018), *A Financial System That Creates Economic Opportunities Nonbank Financials, Fintech, and Innovation*, U.S. Department of the Treasury, https://home.treasury.gov/sites/default/files/2018-08/A-Financial-System-that-Creates-Economic-Opportunities---Nonbank-Financials-Fintech-and-Innovation.pdf. [44]

U.S. Department of the Treasury (2010), *Charter of the President's Advisory Council on Financial Capability*, U.S. Department of the Treasury, http://treasury.gov/resource-center/financialeducation/Documents/PACFC%202010%20Amended%20Charter.pdf. [28]

UNCDF (2017), *Demand-side research for youth financial services in The Gambia: Final report*, United Nations Capital Development Fund. [41]

UNCTAD (2015), *Policy Guide on Youth Entrepreneurship*, UNCTAD, New York and Geneva, https://unctad.org/en/PublicationsLibrary/webdiaeed2015d1_en.pdf. [66]

UNDCF, Mastercard Foundation and MicroFinanza (2015), *Final Evaluation of the YouthStart Program*, UNCDF, http://www.uncdf.org/article/831/final-evaluation-of-the-youthstart-programme. [94]

UNICEF (2019), *Birth Registration dataset*, Dataset, https://data.unicef.org/topic/child-protection/birth-registration/ (accessed on 20 May 2020). [93]

UNICEF (2017), *The State of the World's Children 2017*, UNICEF. [13]

United Nations (2020), *UN Youth*, http://www.un.org/en/sections/issues-depth/youth-0/index.html (accessed on 20 January 2020). [1]

United Nations, Department of Economic and Social Affairs and Population Division (2019), *World Population Prospects 2019, Volume I: Comprehensive Tables*, United Nations, New York, https://population.un.org/wpp/Publications/Files/WPP2019_Volume-I_Comprehensive-Tables.pdf. [2]

United Nations, Department of Economic and Social Affairs and Youth (2020), *Frequently asked questions - Definitions*, https://www.un.org/development/desa/youth/what-we-do/faq.html (accessed on 10 June 2020). [12]

US Department of Treasury (2016), *Opportunities and Challenges in Online Marketplace Lending*, US Department of Treasury, https://www.treasury.gov/connect/blog/Documents/Opportunities_and_Challenges_in_Online_Marketplace_Lending_white_paper.pdf. [63]

Whitebread, D. and S. Bingham (2013), *Habit Formation and Learning in Young Children*, The Money Advice Service, Cambridge, http://www.moneyadviceservice.org.uk/en/corporate/habit-formation-and-learning-in-young-children. [25]

World Bank Data (2019), *Access to electricity (% of population) indicator*, https://data.worldbank.org/indicator/EG.ELC.ACCS.ZS (accessed on 19 May 2020). [17]

World Bank Group (2017), *1.1 Billion 'Invisible' People without ID are Priority for new High Level Advisory Council on Identification for Development*, Press release, http://www.worldbank.org/en/news/press-release/2017/10/12/11-billion-invisible-people-without-id-are-priority-for-new-high-level-advisory-council-on-identification-for-development (accessed on 20 May 2020). [92]

Yamada, E. et al. (2020), "No Woman Left Excluded from Financial Services", in *Leave No One Behind: Time for Specifics on the Sustainable Development Goals*, Brookings Institution Press, Washington, D.C, https://www.jstor.org/stable/10.7864/j.ctvkjb38h [53]

Endnotes

[1] The terms "youth" and "young people" are used interchangeably in this document.

[2] According to UN definitions

[3] United Nations, General Assembly, 2017

[4] Findex data, 2017

[5] Burundi, Burkina Faso, Central African Republic, Congo, Dem. Rep., Guinea-Bissau, Liberia, Madagascar, Mozambique, Malawi, Niger, Sierra Leone, South Sudan, Chad, Tanzania and Uganda

[6] For evidence on child savings accounts, please refer to: FLEC (2015), *Hands-On Learning to Build Financial Habits: Research and Resources on Child Savings*

[7] Financial socialisation occurs when youth pick up financial attitudes, habits, and norms from observing financial behaviours of parents, peers, educators, media, or other influencers. See: CFPB (2016), *Building blocks to help youth achieve financial capability*

[8] Findex data, 2017

[9] In Australia, the Flemish Community of Belgium, B-S-J-G (China), Chile, Lithuania, Poland, Spain and USA.

[10] L'Agence Nationale de Réglementation des Télécommunications (2020)

[11] We note that data presented in this report, especially in regards to youth unemployment, refers to pre-COVID-19 pandemic, expected to have a significant impact on employment levels of youth all around the world.

[12] On average across the world, females are significantly more likely than males to be NEET. See ILOSTAT, https://www.ilo.org/ilostat/, (Accessed on 02 December 2019)

[13] It can include working arrangements such as freelancing, working part-time or independent contracting. The rapid development of such arrangements is closely connected to advances in technology and the trend of working remotely as so-called digital nomads.

[14] Research by McKinsey shows that 78% of gig workers say they are happier than those working traditional jobs, while 68% say they are healthier. See Manyika et al. (2016), *Independent work: choice, necessity, and the gig economy*, "Executive Summary", McKinsey Global Institute

[15] Islamic Development Bank contributions to the report through written comments process

[16] Financial technology or "Fintech" is defined as emerging innovation involving the use of technology for the provision of financial services. It includes, inter alia, digital banking, innovation in digital payments, P2P, currency exchanges, lending platforms, data analytics related to the provision of financial services and robo-advising.

[17] And as resulting from data gathered through the stocktake questionnaire.

[18] The Fintech adoption index was developed by EY in 2015, to understand whether digitally active consumers were actually using Fintech services on a regular basis. Fintech adopters are defined as those people that had used two or more Fintech services in the prior six months, where Fintech is defined as an industry that includes not only early-stage start-ups and new entrants, but also scale-ups, maturing firms and even non-financial services firms. Originally, research was carried out in Australia, Canada, Hong Kong SAR, China, Singapore, the UK and the US; the 2017 study contains an additional of 15 markets: Ireland, Belgium and Luxembourg, Brazil, China, France, Germany, India, Japan, Mexico, the Netherlands, South Africa, South Korea, Spain and Switzerland.

[19] Percentage of digitally active consumers who are using at least one Fintech product.

[20] Disclaimer: the products presented in Table 1 are for exemplification purposes only, and their reference should not be seen as an endorsement of the products per se.
[21] Examples have been collected from several sources and through online desk research. They are presented for exemplification purposes only, and their reference should not be seen as an endorsement of the products per se.
[22] From the countries participating in the data collection that answered to the question on the most commonly accessed financial products by youth.

[23] When disparities are observed between data reported by countries in the stocktake questionnaire and data available through Findex, we report the numbers and statistics provided by the country's national authorities.
[24] Data regarding apps should be interpreted with caution as students might have misinterpreted the question about apps, and responded that they had an app, in general, instead of an app to access their bank account.

[25] Cote d'Ivoire, Mongolia, Paraguay, Senegal, Singapore, Venezuela, UAE and Zimbabwe

[26] Digital payments include any payments done using mobile money, a debit or credit card, or a mobile phone or internet from an account.
[27] Findex data, 2017. Includes all respondents who reported using mobile money, a debit or credit card, or a mobile phone to make a payment from an account, or reported using the internet to pay bills or to buy something online, in the past 12 months, those who reported paying bills, sending or receiving remittances, receiving payments for agricultural products, or receiving wages, government transfers, or a public sector pension directly from or into a financial institution account or through a mobile money account in the past 12 months.

[28] We compared the activity rate in the accounts by looking at the following indicator from Findex: "The percentage of respondents who report neither a deposit into nor a withdrawal from their account in the past 12 months" and we compare young adults (% age 15-24) against older adults (% age 25+) activity rates, at regional level.
[29] A credit invisible consumer is defined by CFPB as "consumer who lacks a credit record at one of the nationwide credit reporting companies. (…) Without a credit record, lenders will have a harder time assessing the creditworthiness of applicants. As a result, the credit invisible may have a harder time accessing credit."

[30] Specific reference is made to findings from YouthInvest–Egypt and YouthInvest–Morocco

[31] For a discussion on the reduction of land availability to youth in developing countries, see: Kwame Yeboah et al., (2019)

[32] The term refers to online platforms which allow institutional investors, hedge funds, and financial institutions to provide financing to individual borrowers. See for definitions: U.S. Department of Treasury (2016), *Opportunities and Challenges in Online Marketplace Lending*

[33] Younger people in the US are more likely to experience their personal finances as anxiety- or stress-provoking; See: (Lin J. et al., 2018[37])

[34] Please refer to: G20/GPFI, World Bank Group (2018), *Digital Identity Onboarding*

[35] UNICEF global databases, 2019, based on DHS, MICS, other national surveys, censuses and vital registration systems. Indicator: Percentage of children under age 5 who were registered at the moment of the survey. The numerator of this indicator includes children reported to have a birth certificate, regardless of whether or not it was seen by the interviewer, and those without a birth certificate whose mother or caregiver says the birth has been registered.

[36] Data protection generally refers to securing data against unauthorised access while data privacy concerns arise wherever personal information is collected, stored, or used without the consent of the individual/subject. Within this document, data protection is understood to encompass data privacy principles.

[37] It involved over 4,000 interviews with a nationally representative sample of children and young people aged 7–17

[38] According to the new National Curricular Base released in December 2017, financial education is compulsory, however its implementation is still in progress.

[39] See fdic.gov/youthsavings

[40] It is planned that adult age will be lowered from 20 to 18 in 2022.

[41] Conference of State Bank Supervisors Statutory Requirements for Opening Bank Accounts for Minors by State, available at https://facts.csbs.org/.

[42] Bank On National Account Standards, available at http://joinbankon.org/wp-content/uploads/2018/12/BankOn_Standards_2019-2020.pdf

[43] CRA applies to FDIC-insured depository institutions, such as national banks, savings associations, and state-chartered commercial and savings banks. Through it, banks are encouraged to help meet the credit needs of all segments of their communities, including low- and moderate income neighbourhoods and individuals; Community Reinvestment Act; Interagency Questions and Answers Regarding Community Reinvestment; Guidance, 81 Fed. Reg. 48506 (July 25, 2016), available at https://www.gpo.gov/fdsys/pkg/FR-2016-07-25/pdf/2016-16693.pdf

[44] www.startupindia.gov.in/

[45] www.futurpreneur.ca/en/

[46] www.canada.ca/en/services/youth/canada-service-corps/grants.html

[47] The SBS Programme included design workshops, prototype building, mentoring sessions, field visits, development of simple business proposals and pitching business ideas by high-school students. For details please see Ministry of Labour and Human Resources website: www.molhr.gov.bt/molhr/?p=2783

[48] Positive Youth Development is an intentional, prosocial approach that engages youth within their communities, schools, organisations, peer groups, and families in a manner that is productive and constructive; recognises, utilises, and enhances young people's strengths; and promotes positive outcomes for young people by providing opportunities, fostering positive relationships, and furnishing the support needed to build on their leadership strengths. Definition retrieved from: https://youth.gov/youth-topics/positive-youth-development

[49] See for example: CFPB (2016), *Building blocks to help youth achieve financial capability* and CFED (2014), *Financial education & account access among elementary students*

www.oecd.org/financial/education

OECD