Policy Handbook on Financial Education for Young People in the Commonwealth of Independent States (CIS)







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# Table of Contents

Executive summary	6
Establishing institutional and coordination mechanisms	6
Designing financial literacy curricula and programmes	7
Delivering financial education in and outside of school	
Assessing financial literacy and evaluating the impact of financial education	9
Chapter 1. Introduction	11
Background	11
Aim and scope	
Process and next steps	12
Part I. The importance of financial literacy for children and young people	15
Chapter 2. Global trends	16
Access to money and financial products and services from a young age	16
Widespread emergence of digital financial products and services	
Risk shift and increased individual responsibility	18
Chapter 3. The need for financial education among young people in the CIS	20
Demographic, educational, and employment dynamics	21
Financial inclusion and access to digital financial products	
Financial literacy	
Part II. Status of financial education for children and young people in the CIS	34
National strategies for financial education targeting children and young people	34
Financial education in school as part of curricular teaching	35
Extracurricular and out-of-school programmes	
Seminars/trainings and summer schools	
Competitions, Olympiads and games	
Celebration of international events	
Printed and online resources	
Money museums	
Part III. Suggested approaches to developing and strengthening financial education properties of children and young people	
Chapter 4. Creating institutional and coordination mechanisms	
Setting coordination mechanisms among public authorities	
•	
Chapter 5. Designing financial literacy curricula and programmes	49
Collecting evidence to inform the design of financial education	
Developing core competencies and learning frameworks	53
Integrating financial literacy in the school curriculum	58
Designing effective programmes	
Financial education at different ages  Programme duration	

Design interventions that aim at affecting behaviour	66
Chapter 6. Delivering financial education in and outside of school	70
Training teachers and trainers	70
Developing teaching and learning resources	
Delivering extracurricular and out-of-school activities	
Digital vs. traditional delivery channels	
Video	77
Interactive delivery channels	
Involving parents in financial education activities for their children	80
Chapter 7. Assessing financial literacy and evaluating the impact of financial education	84
Assessment	84
Monitoring and evaluation	85
References	88
Annex	
Annex A. OECD/INFE Core Competencies Framework on Financial Literacy for Youth in the	
CIS	98
Principles of the framework	
Revision and adaptations for the CIS	
Key characteristics of the framework	
A. Money and transactions	
B. Planning and managing finances	
C. Risk and reward	
D. Financial landscape	108
Annex B. Examples of core competencies framework in the CIS	110
Armenia – Financial competencies matrix for schoolchildren	111
Kyrgyz Republic – Standards on basic financial literacy competencies	117
Russia – Framework on basic financial literacy competencies	121
Tables	
Table 1. Examples of financial literacy competencies and learning frameworks	55
Table 2. Examples of integration of financial education in the school curriculum	
Table 3. Examples of resources to support teaching in school	
Table 4. Examples of interactive financial education programmes	
Table 5. Examples of financial education programme involving both parents and children	
Table 6. Content areas within the framework	
Figures	
Figure 1. Channels for improving the financial literacy of children and young people	12
Figure 2. Distribution of the population by age groups, by country, 2017 (%)	
Figure 3. Share of young people who are unemployed or unengaged in 2016	
Figure 4. Account ownership at a financial institution or with a mobile-money-service provider,	·· = =
young people (% of population ages 15-24)	23
Figure 5. Account ownership at a financial institution or with a mobile-money-service provider,	
adults (% of population ages 25 and older)	24

Figure 6. Young adults (aged between 18 and 29 years) in the CIS-6 who have used mobile phones	
to make or receive payments (often and/or occasionally)	. 25
Figure 7. Awareness of financial products (young adults, CIS-6 average)	
Figure 8. Financial knowledge (% of young adults, CIS-6 average)	
Figure 9. Financial behaviour (young adults, CIS-6 average)	
Figure 10. Unable to make ends meet (young adults)	
Figure 11. Coping strategies when income does not cover living costs (young adults, CIS-6	
average)	30
Figure 12. Financial attitude statements (young adults, CIS-6 average)	
Figure 13. Financial knowledge, attitudes and behaviour (young adults, CIS-6 average)	
Figure 14. Financial literacy among young people	
1 iguite 14. I manetar interacy among young people	. 55
Boxes	
Box 1. OECD work on financial education for young people and in school	
Box 2. PISA financial literacy in eastern Europe and the CIS	. 33
Box 3. Case study: the role of the Ministry of Education and Science in the steering committee of	
the National Strategy for Financial Education in Armenia	. 44
Box 4. Case study: protocol between the ministry of education and the financial supervisors in	
Portugal	. 44
Box 5. Case study: The leading role of the ministry of education in the Kyrgyz Republic	. 45
Box 6. Case study: Principles for Financial Education Initiatives in Portugal	. 46
Box 7. Case study: Rules for finance professionals in the classroom in the Netherlands	
Box 8. Case study: An accreditation system to ensure the quality and impartiality of classroom	
resources in the United Kingdom	. 48
Box 9. OECD PISA financial literacy assessment	
Box 10. Case study: A regular survey of children's financial life in Japan	
Box 11. Case study: Asking young people how they want to learn about money in Canada	
Box 12. Case study: A survey of children, young people and parents in the United Kingdom	
Box 13. Case study: A survey of primary school children and parents in Hong Kong, China	
Box 14. OECD PISA financial literacy framework	
Box 15. OECD/INFE core competencies framework on financial literacy for youth	
Box 16. Case study: From the core competency framework to the curriculum in Armenia	
Box 17. Case study: A multi-stakeholder approach to developing a curriculum in Peru	
Box 18. Case study: Developing and supporting financial education as a cross curricular theme in	. 02
Australia	63
Box 19. Spillovers: When financial literacy increases performance in and engagement with	. 00
mathematics	64
Box 20. Case study: Using behavioural insights in developing financial education for children and	
young people	68
Box 21. The impact of financial education on young people's attitudes	
Box 22. Case study: Teachers' training in Portugal	
Box 23. Case study: Continuous Professional Development in Australia	
Box 24. Case Study: Continuous Professional Bevelopment in Australia.  Box 24. Case Study: Centres of Excellence in England	
Box 25. Case study: Financial literacy camps in Armenia.	
Box 26. Case study: Interactive financial education lab in Belgium	
Pox 27 Case study: "Talk Learn Do" a programme to halp negents teach their shildren shout	. 00
Box 27. Case study: "Talk, Learn, Do", a programme to help parents teach their children about	02
money	. 03
curriculum in Armenia	. 86
Culticulum III / Minchia	

Box 29.	Case study: Developing financial education in school through a pilot in Brazil	37
Box 30.	Case study: Piloting financial education courses in five regions in Russia	37

# **Executive summary**

Children and young people around the world increasingly need financial literacy. A number of demographic, financial, socio-economic and technological trends in the last decades imply a greater need for financial literacy among children and young people than in previous generations. Many have access to traditional and digital financial products and services from a young age. This can create a number of challenges and risks, given their limited experience and financial literacy. Moreover, demographic and socio-economic trends have brought about a transfer of risk to individuals, resulting in greater individual responsibility for many financial decisions, and greater economic insecurity for young people.

Financial literacy is also important for young people in the Commonwealth of Independents States (CIS), and levels are currently low. With over 40% of the population below 24 years old on average, the six CIS countries participating in the technical assistance project, Armenia, Azerbaijan, Belarus, Kazakhstan, the Kyrgyz Republic and Tajikistan (CIS-6 hereafter), have a young demographic profile. Basic educational achievements of young people are good, but opportunities to access higher education and employment are still limited. Financial inclusion is relatively low in the region, but it is increasing among young people, thanks to growing mobile and internet penetration and access to digital financial services. Financial literacy among young adults in the region is also low. In a region that is undergoing economic and financial transition, young people are facing complex individual financial decisions and a steep financial literacy learning curve in order to cope with them.

CIS-6 countries recognise the importance of providing financial education to children and young people, but they are at different stages of developing and implementing policies and programmes for these target audiences. The national strategies for financial education of Armenia, Azerbaijan, Belarus and the Kyrgyz Republic specifically target children and young people. Armenia, Azerbaijan and the Kyrgyz Republic have introduced elements of financial education in the curriculum of existing school subjects; in Belarus there are optional financial literacy courses. Tajikistan and Kazakhstan have developed pilot programmes to introduce financial literacy in schools, and offer extracurricular and out-of-schools activities.

CIS-6 countries, as many countries around the world, could further develop their financial education efforts for children and young people. The international experience available to date among the OECD/INFE suggests a number of approaches to developing and strengthening financial education provision for children and young people.

# **Establishing institutional and coordination mechanisms**

In order to set up effective institutional and coordination mechanisms for financial education targeting children and young people it is important to:

- Ensure high-level political support for financial education in schools, especially from the ministry of education, at an early stage.
- Develop formal co-operation arrangements through the governance mechanisms of the national strategy for financial education (where one exists) and/or through

dedicated protocols and agreements between financial authorities and the ministry of education, clearly setting out objectives, roles and responsibilities.

In addition to public authorities, several other stakeholders are often involved in providing financial education to children and young people. Ways of **ensuring that the contributions of not-for-profit organisations and the financial sector add value to financial education and minimising conflicts of interest include:** 

- Encouraging the involvement of financial institutions within the framework of a national strategy for financial education (where one exists) and preferably through national industry associations or self-regulatory bodies.
- Developing principles and criteria related to impartiality, objectivity, quality and fairness for their engagement, and developing related monitoring and quality assurance mechanisms.
- Depending on the country context, ensuring the approval of the ministry of education for all activities carried out in school by external stakeholders.

# **Designing financial literacy curricula and programmes**

As for any other target audience, it is important that the development of financial education for children and young people starts from a diagnosis. Collecting robust evidence on the financial literacy of children and young people and on the financial context they live in can include:

- Participating in international financial literacy surveys, like the OECD PISA financial literacy assessment, to set a 'baseline' against which to measure future progress, or compare against other countries, and to identify potentially vulnerable groups, and
- Conducting surveys to learn about the financial challenges and risks affecting young people, and about what and how young people would prefer to learn about money-related issues.

The design of financial education curricula and programmes in and outside of schools should ideally be based on **core competencies or learning frameworks on financial literacy**. It is important that these frameworks:

- set out the financial literacy outcomes, in terms not only of knowledge, but also skills, attitudes and behaviours, that will enable children and young people to participate fully in the financial and economic life in their country and to improve their financial well-being,
- describe financial literacy outcomes across a progression of ages and grades,
- are tailored to the specific needs of children and young people in the country,
- are agreed within the country, to improve coordination across financial education initiatives.

The **OECD/INFE** Core Competencies Framework on Financial Literacy for Youth in the **CIS** (Annex A) is an adaptation of the international OECD/INFE framework (OECD, 2015<sub>[1]</sub>) to the CIS context and can be used for programme development, assessment and evaluation at the national level.

**Introducing financial literacy in the school curriculum** can improve the quality, effectiveness and fairness of financial education, and offers basic skills to students who may not have the opportunity to learn from their families or through personal experience. However, this may be made more difficult by overloaded curricula or limited resources. Successful ways of introducing financial literacy in the curriculum include:

- Integrating financial literacy into one or more existing mandatory subjects (such as
  mathematics, social science, or civic studies). Introducing financial literacy as an
  optional standalone subject is also widespread, but it limits the number of students
  reached.
- Integrating financial literacy across a range of grades, in order to offer students the opportunity to learn a wide variety of concepts and skills and make sure that the content is relevant to their age.

The integration of financial literacy in the curriculum should carefully consider how core financial literacy competencies identified in national frameworks can be mapped into and linked to existing subjects. A revision of the national curriculum can make it easier to introduce financial literacy.

The effectiveness of financial education for children and young people depends not only on the content and topics, but also on when it is offered and how it is designed. The international experience suggests that it is important to:

- Start financial education early and to design it in ways that take into account age and the cognitive, social and psychological development of children and young people.
- Design programmes that are sufficiently long and follow a structural approach, rather than very short one-off programmes.
- Create programmes that offer opportunities to learn by doing, are relevant to young
  people's lives, allow participants to experience the impact of their decisions, and
  take into account young people's biases, attitudes and habits, as they have greater
  chances to support positive financial behaviour.

### Delivering financial education in and outside of school

Even when curricula and programmes are well structured and designed, much of the success of financial education for children and young people depends on its implementation.

**Training trainers and teachers** is a key component of a successful financial education programme. It is important that:

- Teachers and trainers are financially literate themselves, and feel confident managing their own finances.
- Training is designed to make teachers and trainers confident and well-prepared to teach financial literacy.
- Teacher training programmes are designed through a collaboration between financial literacy leaders and education authorities, involving teachers themselves, and they are accredited by education authorities.

The availability of quality teaching resources is a crucial component of effective delivery. Teachers and training should have continued access to up-to-date resources and professional development to ensure that their lessons remain of a high quality. It is important that **financial education teaching resources** are:

- Aligned to the national curriculum and/or core competencies for financial literacy,
- Compliant with national guidelines for the involvement of the private or not-forprofit sectors in financial education, if any.
- Linked to other subjects and/or easy to integrate in existing subjects.
- Easy for teachers to use and incorporate into their teaching plan.
- Accurate, up-to-date, engaging, appropriate to students' age, and relevant to their lives immediately or in the near future.

At the same time as financial literacy is being integrated in the school curriculum, much of the financial education delivered to children and young people takes place through **extracurricular and out-of-school programmes** (such as guest lectures, "money weeks" and "savings days", games, museums and competitions). Digital technologies are increasingly used. The international experience suggests that:

- Digital financial education resources have the advantage of being easily accessible, flexible and engaging, but some of them may provide limited opportunities for deep interaction.
- Visual media seems to be an effective way of delivering financial education to young people. The limited evidence available suggests that videos may be as effective as face-to-face training, and more effective than printed media.
- Interactive delivery channels like serious games, simulations, financial literacy camps, interactive museums, competitions, and unbiased savings clubs and bank-in-school programmes are best placed to offer engaging learning experiences.

Moreover, parents have a great role to play in fostering the financial literacy of their children. They are the first source of learning about financial knowledge, skills, habits and values. Policy makers can support parents and families to teach children and young people about financial literacy by encouraging practical activities to transmit knowledge, attitudes and habits around money. **Involving parents in financial education programmes** for their children seems to be effective in increasing the financial literacy of children and adolescents.

# Assessing financial literacy and evaluating the impact of financial education

Monitoring, evaluation and assessments are fundamental to understand to what extent students are progressing and whether programmes are making a difference.

Assessing the financial literacy of children and young people is a way to learn about their knowledge and skills, track changes over time, and identify vulnerable groups. Introducing assessment in school can be a way to make students and teachers aware of the importance of the topic, with the idea that 'what gets measured, gets taught'. Aside from international financial literacy assessment like PISA, very few countries test financial literacy in school systematically.

**Impact evaluation** is a key step to measure the causal effect of a programme. In combination with small scale pilots, it allows policymakers to evaluate the content, teaching materials, and teaching methods before adopting them on a larger scale. The majority of interventions for children and young people are not evaluated and more evidence is needed to understand the impact of specific features of interventions or of new delivery channels.

# **Chapter 1. Introduction**

# **Background**

This policy handbook was developed in the context of the OECD/INFE (International Network on Financial Education) technical assistance project on Financial Education in the Commonwealth of Independent States (CIS) with financial support from the Ministry of Finance of the Russian Federation (hereafter Russia).

Building on the OECD/INFE's internationally recognised expertise and longstanding commitment to advancing financial literacy around the world, the project seeks to provide dedicated guidance and technical support for the design, implementation and review of evidence-based financial education strategies and policies in six CIS countries (CIS-6):<sup>1</sup> Armenia, Azerbaijan, Belarus, Kazakhstan, the Kyrgyz Republic and Tajikistan. The project started at the end of 2016 and concludes in 2019.

The overall project involves four different work streams, which are adapted to each country context and specificities:

- Advanced data collection and analysis of financial literacy levels and gaps,
- Developing, implementing and reviewing effective national strategies for financial education,
- Addressing youth's financial literacy needs through school and out-of-school initiatives,
- Identifying and meeting the financial literacy needs of migrants and their families.

This policy handbook is part of the third work stream on addressing youth's financial literacy needs through school and out-of-school initiatives.

# Aim and scope

The policy handbook is primarily prepared for the CIS-6, but can be of interest to policy makers and other stakeholders more widely.

This policy handbook aims to provide:

- An overview of current experience across CIS-6 countries in providing financial education to children and young people,
- An overview of international good practice in designing and delivering financial education for children and young people based on the international experience of OECD/INFE members, available research and evidence, and previous OECD/INFE work.
- A summary of key lessons learnt.

<sup>&</sup>lt;sup>1</sup> Throughout the document, "CIS-6" is used to refer to the six CIS countries participating in the technical assistance project: Armenia, Azerbaijan, Belarus, Kazakhstan, the Kyrgyz Republic and Tajikistan.

This policy handbook covers financial education initiatives for children and young people of compulsory school age, delivered in a variety of settings including schools and outside of school.

Keeping in mind that children are typically defined as people under the age of 14, and young people as between the ages of 15 and 24 years, this handbook will mostly focus on age groups that typically attend primary or secondary education (from 5-6 to about 18-19, depending on the countries), and will cover to a lesser extent programmes for people attending tertiary education.

The handbook covers initiatives organised by public, not-for-profit and private stakeholders. It touches upon the role of parents in their children's financial socialisation, and on learning-by-doing (through direct experience), but these channels do not constitute the main focus on the report.

Figure 1 provides a schematic representation of the types of channels through which children and young people can improve their financial literacy.

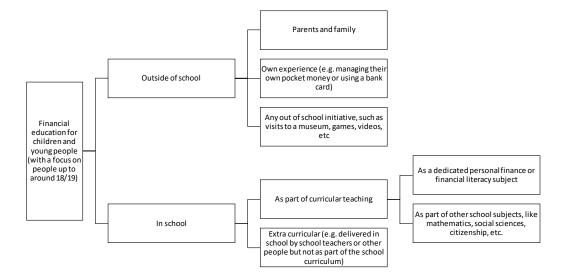


Figure 1. Channels for improving the financial literacy of children and young people

### **Process and next steps**

This policy handbook was developed by the OECD/INFE Secretariat drawing on a number of sources, including:

- Information obtained through regional meetings organised as part of the technical assistance project in the CIS, and, in particular, the conference and workshops held in Armenia, 11-12 July 2018, and the conference and workshops held in the Kyrgyz Republic, 27-28 August 2018.
- Information collected through a stocktaking questionnaire on the provision of financial education to children and young people circulated among the CIS-6 in July-August 2018. Armenia, Azerbaijan, Belarus, the Kyrgyz Republic and Tajikistan replied to the questionnaire.
- Mapping reports of existing financial education activities in the CIS-6 developed as part of the technical assistance project.

- Information collected through a stocktaking questionnaire on the provision of financial education to children and young people circulated among selected OECD/INFE members in January 2019. Australia; Belgium; Brazil, Bulgaria; Canada; Estonia; Georgia; Hong Kong, China; Italy; Japan; the Netherlands; Peru; Poland; Portugal; the Slovak Republic; Spain; Sweden; the United Kingdom and the United States replied to the questionnaire.
- Information collected during a roundtable that took place during the 11<sup>th</sup> meeting of the Technical Committee of the OECD/INFE on 22 May 2019 in Cape Town, South Africa.
- Comments on earlier drafts from OECD/INFE members and CIS-6 countries in the period May-September 2019.
- Previous OECD/INFE work on the topic, such as the OECD/INFE report on Financial Education for Youth: The Role of Schools (2014), the OECD/INFE Policy Handbook on National Strategies for Financial Education (2015), the OECD/INFE Core Competencies Framework on Financial Literacy for Youth (2015) and the OECD PISA financial literacy assessments of students conducted in 2012 and 2015. See Box 1 for more details on these publications.
- Desk research.

A draft annotated outline of the policy handbook, detailing the plan for developing the document, was circulated for comments among the CIS-6 in July-August 2018. A first draft was presented for discussion at the 11<sup>th</sup> meeting of the Technical Committee of the OECD/INFE in May 2019 and was shared for comments across the CIS-6 in July-August 2019. It was also shared for information at the 12<sup>th</sup> meeting of the OECD/INFE Technical Committee in October 2019. This version incorporates comments received from OECD/INFE members and the CIS-6.

#### Box 1. OECD work on financial education for young people and in school

The 2005 OECD's Principles and Good Practices for Financial Education and Awareness recommend that "financial education should start at school. People should be educated about financial matters as early as possible in their lives." (OECD, 2005<sub>[2]</sub>) providing financial education in school from an early age allows children to acquire the knowledge and skills to build responsible financial behaviour throughout each stage of their education. This is especially important as parents may be ill-equipped to teach their children about money and levels of financial literacy are generally low around the world.

The OECD PISA financial literacy assessments of students conducted in 2012, 2015 and 2018 explore student's experience with and knowledge about money and provide an overall picture of 15-year-olds' ability to apply their accumulated knowledge and skills to real-life situations involving financial issues and decisions (OECD, 2014<sub>[3]</sub>; OECD, 2017<sub>[4]</sub>). It is a valuable comparative tool for the participating economies and can help policy makers assess the progress they have made across time and against peers. Moreover, the PISA financial literacy assessment frameworks provide a discussion on the relevance of financial

literacy for young people and an example of how the concept of financial literacy can be operationalised into an assessment for 15-year-old students (OECD, 2017<sub>[5]</sub>).

The OECD/INFE report on Financial Education for Youth: The Role of Schools (2014), which includes the INFE Guidelines on Financial Education in Schools (2012), addresses the potential challenges of introducing financial education in schools and provides practical guidance and case studies to assist policy makers (OECD, 2014<sub>[6]</sub>).

The OECD/INFE Core Competencies Framework on Financial Literacy for Youth (2015) describes the basic level of financial literacy that is likely to be needed by all young people between the ages of 15-18 to fully and safely participate in economic and financial life. It also describes the more advanced competencies that may be expected among a portion of this age-group, particularly in countries where they may be required to make decisions about more sophisticated financial products. The framework is designed to be applicable irrespective of the national education system or approach to skills development. It also recognises that the competencies described need to be combined with adequate financial consumer protection and financial inclusion in order to fully empower young people (OECD, 2015[1]).

The OECD/INFE Policy Handbook on National Strategies for Financial Education (2015) provides guidance to the design and implementation of national strategies for financial education (OECD, 2015<sub>[7]</sub>). it also contains a section on financial education for youth and the role of schools, with key case studies and lessons learnt.

# Part I. The importance of financial literacy for children and young people

Over the past decades, developed and emerging economies have become increasingly aware of the importance of ensuring that their citizens are financially literate. This has stemmed in particular from shrinking public and private support systems, shifting demographic profiles including the ageing of the population, and wide-ranging developments in the financial marketplace including the increasing digitalisation of finance.

A lack of financial literacy leaves people ill-equipped to make appropriate financial decisions, which could, in turn, have tremendous adverse effects on both personal and, ultimately, global financial resilience (OECD, 2009<sub>[8]</sub>). As a result, financial literacy is now globally acknowledged as an essential life skill and targeted financial education policy is considered to be an important element of economic and financial stability and development.

This is reflected in the G20 endorsement of the OECD/INFE High-level Principles on National Strategies for Financial Education (G20, 2012<sub>[9]</sub>; OECD/INFE, 2012<sub>[10]</sub>) and the OECD/INFE Policy Handbook on National Strategies for Financial Education (OECD, 2015<sub>[7]</sub>). G20 leaders also recognised that this requires lifelong learning that starts in childhood, as indicated by their call for core competencies on financial literacy for young people and adults (OECD, 2015<sub>[1]</sub>; OECD, 2016<sub>[11]</sub>), and their statement supporting the widespread use of instruments to measure youth financial literacy, including the PISA financial literacy assessment (G20, 2013<sub>[12]</sub>).

Chapter 2 summarises a series of tangible trends underpinning the global interest in financial literacy as a key life skill, especially for young people. Chapter 3 focuses on the CIS and on the rationale for developing financial education for young people in the region.

# Chapter 2. Global trends

#### **Key messages**

A number of demographic, financial, socio-economic and technological trends in the last decades imply a greater need for financial literacy among children and young people around the world than in previous generations. Children and young people have increasingly access to traditional and digital financial products and services from a young age. This can create a number of new challenges and risks, given their limited experience and financial literacy. Moreover, demographic and socio-economic trends have brought about a transfer of risk to individuals, resulting in greater individual responsibility for many financial decisions, and greater economic insecurity for young people.

# Access to money and financial products and services from a young age

Greater financial inclusion in emerging economies, as well as worldwide developments in technology and deregulation, have resulted in widening access to all kinds of financial products. Growing numbers of consumers, therefore, have access to financial products and services from a variety of established and new providers delivered through traditional and digital channels, including traditional financial institutions, online banks and mobile phone companies. Whilst many of the products available bring advantages and help to improve financial well-being, some are also complex and pose new challenges or risks.

Young people and children increasingly have access to financial products and services. Data from the PISA 2012 and 2015 financial literacy assessments revealed that many 15-year-old students hold bank accounts and prepaid debits cards. In some countries, like China, the Netherlands, Russia and the UK, children as young as five or six can use debit cards linked to their parents' accounts (Imaeva et al., 2017<sub>[13]</sub>).

Even when they do not formally have an account or card, many young people can have access to money in the form of gifts, pocket money and wages from part time and/or informal jobs. PISA 2015 data shows that on average across 10 participating OECD countries and economies, 64% of students earn money from some formal or informal work activity, such as working outside school hours, working in a family business, or doing occasional informal jobs. More than one in three students, on average in each of the 15 participating countries and economies, reported that they receive money from an allowance or pocket money for regularly doing chores at home (OECD, 2017<sub>[4]</sub>)

Access to money and basic financial products can potentially provide young people with the opportunity to gain practical experience, under parental oversight and in a context with robust regulation and financial consumer protection. However, it is important that they begin to know their rights and responsibilities as financial consumers and understand the risks associated with different products and services.

# Widespread emergence of digital financial products and services

Recent years have seen a rapid increase in technological innovation and in the application of digital technology across a number of spheres, including to financial services. Young

people are particularly active users of digital financial services. On average in 20 economies, 37% of 18-24 year-olds and 48% of 25-34 year-olds who are digitally active use FinTech services on a regular basis (EY, 2017<sub>[14]</sub>).

Digital financial services offer great possibilities of lowering costs, offering faster and timely transactions, and potentially providing a seamless experience tailored to individual needs. At the same time, however, the spread of digital innovation in finance has created new sources of risk for consumers, including new types of fraud and risks related to the security and confidentiality of data. (OECD, 2017<sub>[15]</sub>).

Some of these risks are particularly relevant for children and young people, who are at ease with digital technologies and are often users of social media and other digital tools, while at the same time potentially having low financial literacy and little experience with financial services. Recent evidence from the US shows that Millennials using mobile phones to make payments tend to display lower financial knowledge and more problematic financial behaviours (overdrawing their current accounts, using credit cards in expensive ways, or using high-cost borrowing methods) than non-mobile-payment users (Lusardi, de Bassa Scheresberg and Avery,  $2018_{[16]}$ ).

The large availability of cashless purchasing options through online stores, interactive television, online and mobile games, social media, or with contactless cards may make money less real for users making their first spending decisions. As young people can feel under pressure to spend to keep up with their peers, many digital channels enable users to make instant purchases, which in turn makes it more difficult to control spending. In some digital contexts, 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 through a monthly telephone or internet bill or a credit card account. While in many countries issues related to in-game expenses have been addressed by financial regulation, it is also important that parents and children are alert in their online behaviour.

Young people are the most active users of social media. Around 90% of 18-29 year olds in the US, and of people age 16-24 in the European Union, use some form of social media (EU, 2017<sub>[17]</sub>; Perrin, 2015<sub>[18]</sub>), potentially bringing them into contact with information, marketing and consumer opinions. They may have a hard time distinguishing the source and accuracy of information posted on such platforms, and may succumb to behavioural biases when reading the same (mis)information from numerous sources. They may also be unaware that their data can be used to create digital profiles that are then used or sold to third parties to promote products or price them according to their personal characteristics.

Many young people also fall victims of fraud and scams with financial implications via social media, such as becoming prey to identity theft, following fraudulent offers to invest, or even, knowingly or unknowingly, allowing their personal bank accounts to be used for illicit purposes (Cifas, 2018<sub>[19]</sub>; FCA, 2018<sub>[20]</sub>; Startup, Cadywould and Laza, 2017<sub>[21]</sub>).

Despite being digital natives, young people may be more likely to be victims of online fraud because they take risky behaviours online. A survey conducted in 17 countries in 2017 showed that young people are very likely to share personal information online. More than 60% of those aged 16-24 and 25-34 shared private and sensitive photos of themselves with others; two-fifths of young people shared their financial and payment details (42% of 16-24 year olds and 46% of 25-34 year olds) (Kaspersky, 2017<sub>[22]</sub>).

Young people are often the target of aggressive marketing practices promoting high-cost short-term online credit. For instance, in the UK and the US some online payday loans platforms target university students, in some cases offering loans secured against income

from future student loan payments. Students are often not aware of the very high interest rates and possible late fees, and do not think about looking for cheaper alternatives. Some 6% of 18-24 year old people in the UK used one or more forms of high-cost loan in 2017, and this age group accounted for about one in five of all those who had used payday lending or a pawnbroker (FCA, 2017<sub>[23]</sub>).

While consumers of all ages should be adequately protected via financial regulation, it is clear, considering the pace of financial markets developments, that they also need to have the knowledge and skills to understand the products on offer, be alert to financial conditions that may be unfamiliar or not be clearly stated, and compare products and providers.

# Risk shift and increased individual responsibility

A number of demographic, socio-economic and technological trends in the last decades imply a transfer of risk to individuals, greater individual responsibility for many financial decisions, and greater economic insecurity for young people and future generations.

Continuing trends of increasing longevity, shrinking pay-as-you-go (PAYG) public pension schemes and public support systems, and the replacement of defined-benefit pension plans by defined-contribution pension plans for new entrants have implied a widespread transfer of risk from governments and employers to individuals. This means that in many countries people bear increasing financial responsibility and face directly the financial risks associated with longevity, investment, out-of-pocket healthcare and long-term care expenses, and for saving for retirement. The number of financial decisions that current and future have to make, and the significance of these decisions, is increasing (OECD, 2016<sub>[24]</sub>).

In this context, young people need to take decisions with important financial consequences, such as deciding whether to continue their studies or whether to enter the labour market. In some countries, this decision also includes how to finance tertiary education and whether to take a student loan. Countries differ significantly in the extent to which student loans are offered and used, and in how they work. In some countries, like the US, student loans are becoming a more important part of young people finances than in the past (Ratcliffe and McKernan, 2013<sub>[25]</sub>). If they decide to take a loan, students and their families need to be proficient in financial literacy to select the best arrangement given the family/student situation and to avoid over-indebtedness from a young age.

In addition, economic trends following the global financial crisis have made economic and job prospects for future generations more uncertain (OECD, 2017<sub>[26]</sub>; Dolphin, 2012<sub>[27]</sub>). Youth unemployment rates rose substantially in most OECD countries and in a number of emerging economies after the global financial crisis, and in many cases they remain at high rates. The crisis exacerbated issues of labour market segmentation in some countries, with an increase in the proportion of employed youth working in temporary and precarious jobs as they are unable to find a permanent job. In the aftermath of the global financial crisis, disposable income has fallen more for young people than for adults and the elderly, and young people face higher poverty rates than other age groups (OECD, 2013<sub>[28]</sub>; OECD, 2017<sub>[29]</sub>; OECD, 2016<sub>[30]</sub>). This means that young people need to have the financial skills to manage more uncertain incomes.

In this panorama of increasingly difficult financial choices, consumers have the opportunity to seek professional help, but they need to know where and when. Even when individuals use the services of financial intermediaries and advisers, they need to understand what is being offered or advised. They should be aware of conflicts of interest, for example if

commission is paid to the adviser for the sale of a financial product. They should also understand when advice is regulated and the adviser takes responsibility for the recommendation to buy a particular product, and when it is not. When a consumer relies on unregulated advice or guidance they remain fully responsible for the financial products they decide to purchase. Consumers also need to understand that "robo advice" may not be regulated as advice, meaning that they bear responsibility for their choice.

Changes in individual financial responsibility and choices are also underpinned by the recent increasing interest at policy and individual level for sustainable development, responsible consumption and inequalities reduction (United Nations, 2015<sub>[31]</sub>). European governments are looking into ways to ensure that the financial systems contributes to sustainable and inclusive growth (EU, 2018<sub>[32]</sub>). A growing number of consumers and investors have become concerned about the sustainability and ethics of their spending choices and focus on environmental, social and governance (ESG) factors in their investment decisions. In this context, it important that individuals understand the impact of their financial choices and investments on the economy, society and the environment, that they are aware of new products following ESG criteria and of any potential emerging risk associated with these products.

# Chapter 3. The need for financial education among young people in the CIS

#### Key messages

With over 40% of the population below 24 years old on average, the CIS-6 has a young demographic profile. Basic educational achievements of young people are good, but opportunities to access higher education and employment are still limited. Financial inclusion is relatively low in the region, but it is increasing, especially among young people, thanks to growing mobile and internet penetration and access to digital financial services. A 2018 OECD survey on the levels of financial literacy and financial inclusion in the CIS-6 shows that financial literacy among young adults in the region is low. In a region that is undergoing economic and financial transition, young people are facing complex individual financial decisions and a steep financial literacy learning curve in order to cope with them.

The CIS region, in particular the countries in Central Asia, has a young demographic profile. The basic educational achievements of young people are good with high levels of literacy, but further (tertiary and vocational) education and employment opportunities are still limited, with both the share of youth not in employment, education or training and young adults' unemployment being a stable 20% over the past decade. Financial inclusion is still relatively low in the region, but it is increasing, especially among young people, thanks to growing mobile and internet penetration. At the same time, financial literacy is low.

This chapter draws on the OECD survey on the levels of financial literacy and financial inclusion conducted in 2018 among the six countries covered in the project—Armenia, Azerbaijan, Belarus, Kazakhstan, Kyrgyz Republic, and Tajikistan (CIS-6) and Russia (OECD, 2018<sub>[33]</sub>). The survey targeted adults (18 to 79 years old), including about 30% of the respondents who can be classified as young adults (18 to 29 years old). The results reported in this policy handbook focus on this group of young adults. Based on these data, the chapter argues that despite some variation, the CIS has a youth population with low levels of financial literacy — especially when compared to neighbouring countries and international averages.

This has implications for financial consumer protection and financial education, as young people are already living in an interconnected world where important and complex financial decisions rest on their shoulders as individuals. New technologies have opened easy and fast access to ever more sophisticated financial products that may provide better opportunities for saving or acquiring an appropriate insurance or pensions product, among others, but are also exposing consumers to new risks.

As the wave of young people grows up, exits full time education and enters the labour force, the skills to manage their money and understanding financial risks will become essential for their individual well-being, but also for the overall financial stability of the countries. Thus, financial education needs to be an essential element in the education policy in the CIS in order to prepare these young people for the future.

# Demographic, educational, and employment dynamics

The CIS-6, alongside Russia, have an overall young demographic profile, on average. Figure 2 suggests that over 40% of the population in the seven CIS countries is 24-years-old or younger on average. There are some important distinctions beyond the average, however. In European CIS, the demographic pattern is more skewed towards an ageing population. In Belarus and Russia, for example, the share of the elderly population is about 15% and the share of people over 25 years of age represent around 75% of the entire population. This is in contrast to the central Asian republics like Tajikistan and the Kyrgyz Republic, where young people (aged 24 and younger) represent 55% and 50% of their respective populations.

Young people in some CIS countries are very likely to live in rural areas. In 2015, the share of the rural population in Central Asian CIS countries was significantly higher (73.4% for Tajikistan, followed by 64.5% for Kyrgyzstan) than in European CIS countries (24.1% for Belarus, for instance). As a comparison, the share of the rural population in the EU-28 Member States (25.6%) was smaller than the CIS average (35.9%) (Eurostat, 2016<sub>[34]</sub>).

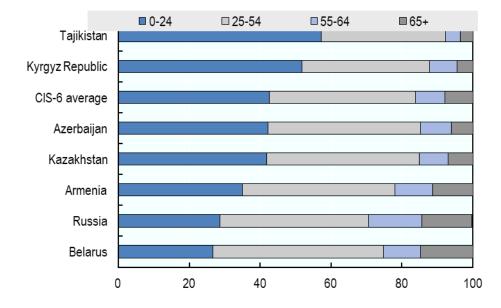


Figure 2. Distribution of the population by age groups, by country, 2017 (%)

Source: Eurostat, 2016.

Young people in the CIS usually have very good access to education, as reflected in a high basic literacy rate for youth (aged 15-24) (on average over 97% across all countries), because of the tradition of compulsory schooling in this region. There is also a high rate of formal educational attainment among the general adult population, with over 40% of the total CIS population aged 25 or older having a tertiary education degree while the EU-28 average is significantly lower (23.8%) (Eurostat,  $2016_{[34]}$ ). Variations among CIS countries are again notable, with shares of tertiary education graduates varying from 10.6% in Tajikistan to 60.1% in Russia (Eurostat,  $2016_{[34]}$ ).

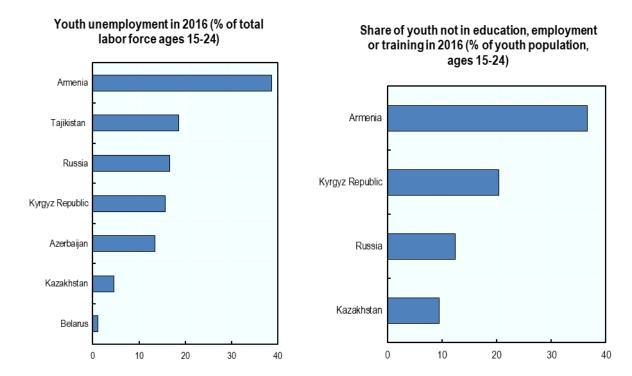
Nevertheless, young people in some countries have limited opportunities once they leave education. In 2016, over 15% of young people aged 15-24, who are registered in the labour

force in Tajikistan, Russia, Kyrgyz Republic and Azerbaijan were unemployed, considerably higher than the average unemployment for the population in these countries (respectively 11%, 5.6%, 7.2%, and 5%).

Large shares of young people were neither in education nor in employment or training in the region. The data in Figure 3 suggests that this share was highest in Armenia, 36% of young people in 2016, and lowest in Kazakhstan (10%).

Such numbers represent an unused macro-economic resource, but also imply high economic cost to the individuals themselves, as inactivity at an early age can lead to poor future employment opportunities and lower lifetime earnings (OECD, 2016<sub>[35]</sub>). Financial education can support such individuals to engage in economic and financial life, to avoid getting involved in frauds, and to start picking up good financial habits like saving and budgeting.

Figure 3. Share of young people who are unemployed or unengaged in 2016



*Note*: The two graphs use different sources, which have different country coverage. "Youth unemployment" uses data from the World Development Indicators and is an ILO modelled estimate. "Share of youth not in education, employment or training" uses data from the World Development Indicators and is a World Bank estimate.

Source: World Development Indicators, World Bank / International Labour Organisation

# Financial inclusion and access to digital financial products

There is limited research on financial inclusion in the CIS region in general, and even less for youth and young adults in particular.

The financial literacy and financial inclusion survey the OECD conducted across the CIS-6 reported that across all adults interviewed in the six countries some 78% were aware

of the existence of at least five financial products. Among young adults (aged 18 to 29 years old) the percentage was 80%.

The World Bank Global Findex Database, which contains a comprehensive dataset on financial inclusion, has been published every three years since 2011. It reports the level of financial inclusion among people aged 15 to 24 by measuring the percentage of account ownership at a financial institution (or with a mobile-money-service provider). Figure 4 illustrates this for select CIS countries and shows the growth in financial inclusion on average in the region from 15% to over 35% account ownership among young people. This increase is most pronounced in Tajikistan (a 10-fold growth from under 5% in 2011 to 50% in 2017) and Armenia (from 15% in 2011 to 45% in 2017), and least rapid in Belarus, which already had over 40% account ownership among young people in 2011.

On average among the CIS-6, young people have a lower percentage of account ownership compared to adults (aged 25 and over), as illustrated by Figure 4 and Figure 5. In 2011, 15% of young people had an account as opposed to 26% of adults. These percentages had risen to 38% and 54% respectively in 2017. While young people seem to have a lower financial inclusion rate than adults, they are catching up quickly. Young people opened accounts at a considerably faster rate than adults did – the percentage change between 2011 and 2017 was 147% for young people versus 111% for adults.

2011 2014 2017

2011 2014 2017

2017

Allegar Republic al

Figure 4. Account ownership at a financial institution or with a mobile-money-service provider, young people (% of population ages 15-24)

Source: Global Findex Database, 2017.

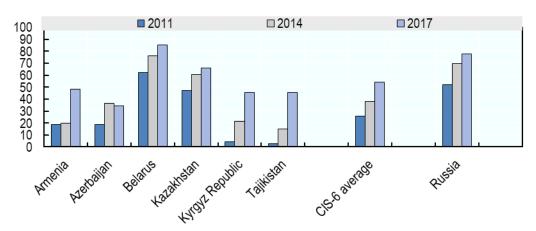


Figure 5. Account ownership at a financial institution or with a mobile-money-service provider, adults (% of population ages 25 and older)

Source: Global Findex Database, 2017.

Digital technologies offer the opportunity to improve financial inclusion among young people in the CIS. Both mobile and internet penetration have been surging in the CIS region relatively rapidly over the past decade. The CIS-6 had 100 or more mobile subscription per 100 people in 2017. Internet penetration in the region has gone up from under 30% (fraction of population using the internet) in any of the six countries in 2008 to over 50% in 2016, excluding only Tajikistan (20%) and the Kyrgyz Republic (30%). The highest internet penetration rate in 2016, over 75%, was reached in Belarus, Azerbaijan and Kazakhstan.

In addition to internet and mobile penetration, the use of connected mobile devices for financial services is now widespread in the CIS region. Figure 6, using data from the recent OECD survey of financial literacy and inclusion conducted in the CIS-6, shows the percentage of young adults aged 18-29 who responded that they used mobile phones to make or receive payments (often and/or occasionally). The average for the CIS-6 is 40%, ranging from 60% in Belarus to about 20% in Azerbaijan, Tajikistan and Armenia. This is almost twice as high as the percentage of adult (respondents aged 30 and older) who reported using a mobile phone to make or receive payments (often and/or occasionally), which was 21% on average across the CIS-6.

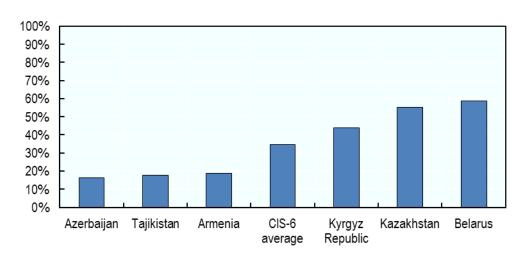


Figure 6. Young adults (aged between 18 and 29 years) in the CIS-6 who have used mobile phones to make or receive payments (often and/or occasionally)

Source: OECD/INFE financial literacy survey.

Widespread access to the internet and (often smart) mobile devices means easier, faster, and cheaper access to financial services. This is important for a region with a high fraction of the population living and working in rural and often hard to reach regions, where access to brick-and-mortar outlets for financial services may be costlier and more difficult. While acting as positive drivers of improved financial inclusion, digital financial innovations may also pose substantial risks to consumers (OECD, 2017<sub>[15]</sub>). In response to potential risks, policy makers in the CIS need to consider adapting their existing financial consumer protection and financial education frameworks for digital finance, alongside any prudential regulation that is in place. Special attention needs to be paid to young consumers, who belong to societies that are well versed in the use of mobile technology and significant portions of whom already use technology to access and use financial services.

Limited financial inclusion among young people is potentially related – among other factors – to limited awareness about financial products, as shown by the OECD survey.

Indeed, Figure 7 suggests that while around 60% or more of young adults in the CIS-6 have heard of various savings and deposit accounts, as well as multiple types of loans, fewer responders have heard of investment products such as stocks (49%), bonds (40%), and investment accounts that act as a broker that one usually needs in order to purchase investment products (21%).

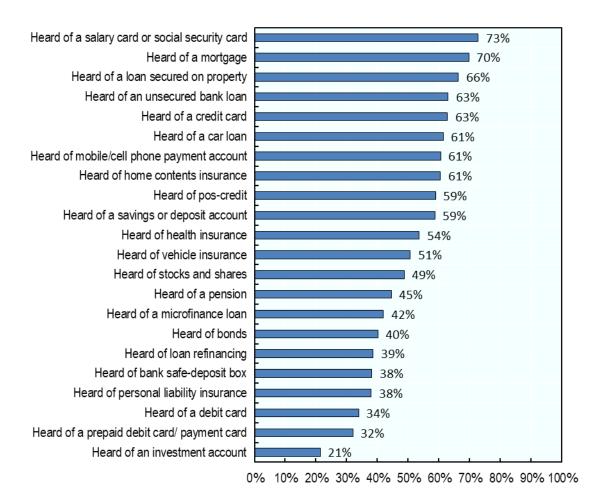


Figure 7. Awareness of financial products (young adults, CIS-6 average)

*Note*: \* POS-credit refers to providing credit to consumers at the Point-of-Sale. The point of sale, or POS, is the location in a merchant's establishment at which the sale is consummated by payment for goods or services received. It is also where many retailers offer their store's credit card applications to consumers. *Source*: OECD/INFE financial literacy survey.

## **Financial literacy**

The OECD survey on the levels of financial literacy and financial inclusion in the CIS provides data on the financial knowledge, financial behaviour, and financial attitudes of young adults in the CIS-6.

Figure 8 presents the financial knowledge scores, based on the answers to seven questions designed to assess familiarity with concepts such as inflation, interest rate, interest compounding, the relationship between risk and return, and an understanding of risk diversification. The graph suggests that only 25% of the young adult respondents in the survey answered five or more questions correctly, used by the OECD as the minimum target score. In contrast, 30% of the total sample of respondents (18-79 years old) achieved the minimum target score in the CIS-6 and 48% of respondents across G20 countries (OECD, 2018<sub>[33]</sub>; OECD, 2017<sub>[36]</sub>). The largest percentage of young adults answered four questions correctly (24%). This suggest a rather poor level of financial knowledge among young adults, which is lower than the average for all adults in the survey and is substantially

low in comparison to all adults in the G20 countries. Low financial knowledge in the region is consistent with relatively low financial literacy in neighbouring countries, as measured in the PISA financial literacy exercise; Box 2 provides more details.

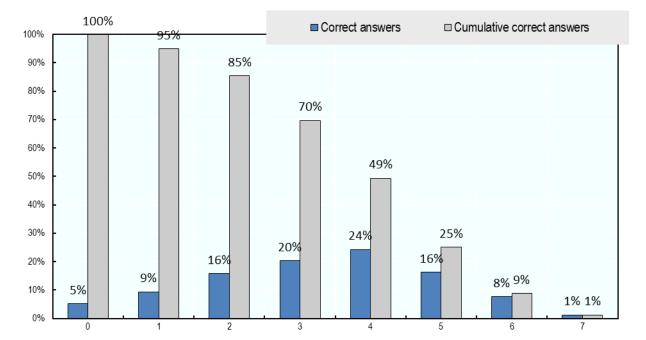


Figure 8. Financial knowledge (% of young adults, CIS-6 average)

*Note*: The blue (darker coloured) bars show the percentage of respondents who answered each of the seven questions correctly. The grey (lighter coloured) bars show the cumulative percentage of respondents who gave at least a given number of correct answers; for instance, the bar at zero is 100% as all respondents answered zero or more questions correctly, but only 25% of the respondents answered five or more questions correctly. *Source*: OECD/INFE financial literacy survey.

Figure 9 shows various indicators of financial behaviour related to budgeting and saving. Over 50% of young adults consider themselves responsible for their household budget and their own budget. Only 10% of the respondents reported not actively trying to save. The preferred saving method of the other 90% of respondents is keeping money in cash at home or in a wallet. Practically no young adult buys investment products, which may reflect limited awareness of such products (as shown in Figure 9), limited availability of affordable investment products in the CIS, or simply a low level of savings.

Saving cash at home or in the wallet
Responsible for personal budget
Responsible for household budget
Giving money to family to save
Making a decision to budget
Actively saving in another way
Is NOT actively saving
Paying money into a savings/deposit account
Saving in a consumer's cooperative society
Buying financial investment products (not pension)

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Figure 9. Financial behaviour (young adults, CIS-6 average)

Source: OECD/INFE financial literacy survey.

Young adults may often find themselves in a situation where they may not be able to meet all their expenses with their monthly income. This is because they are at a stage of life where they may be paying for education and/or training, setting up households, and others. As a result, they may be borrowing or trying to earn additional income to smooth consumption. In the CIS-6, the fraction of young adults who reported not being able to make ends meet at the end of the months were some 36%. Interestingly, this is less than the percentage of respondents from the entire sample of 18 to 79 year-olds, which was 41%. Figure 10, reports the percentages of young adults who were unable to make ends meet for each country in the CIS-6. Armenia and Azerbaijan appear to be outliers with almost 70% and 50% respondents who were unable to make ends meet at least once within a 12-month period. Young adults in Belarus and the Kyrgyz Republic were those least likely to be faced with a shortfall, with some 21% and 23% reporting at least one in a 12-month period.

Figure 11 reports young adults' strategies of dealing with an income shortfall at the end of the month. Only 12% of the respondents suggested they delay paying a bill or miss payments of expenses altogether. The majority tackled the shortfall without the need to borrow. Some 67% cut back on spending or did not make a purchase that would have tipped their budget balance in the negative. Some 41% received financial help from family, friends, or their community. One third worked overtime to earn extra and an equal share ran down their savings. Only 4% claimed support from public funds, which may well illustrate the limited availability or limited awareness of such support in the CIS-6. Some ended up borrowing, with 46% borrowing from family or friends, 10% taking out a personal loan and 8% using a credit line from a credit card. This illustrates that borrowing overall is not a widespread practice among young adults in the CIS-6. Exceptions were young adults in Armenia and to some extent Azerbaijan (where the largest percentage of young adults reported being unable to make ends meet in the first place) where 46% and 34% reported borrowing. At the other end was Tajikistan, where only about 10% reported borrowing. Even then, when young adults resorted to borrowing, they mostly did it informally through

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<sup>&</sup>lt;sup>2</sup> They responded positively to the question 'Sometimes people find that their income does not quite cover their living costs. In the last 12 months, has this happened to you, personally?'.

family and friends, while borrowing in a formal manner from a bank or financial institution appears very limited.

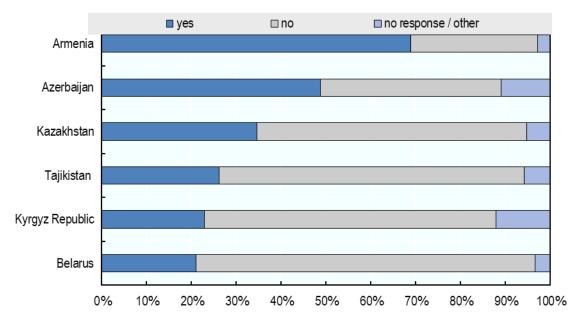


Figure 10. Unable to make ends meet (young adults)

*Note*: Young adults' responses to the question 'Sometimes people find that their income does not quite cover their living costs. In the last 12 months, has this happened to you, personally?' *Source*: OECD/INFE financial literacy survey.

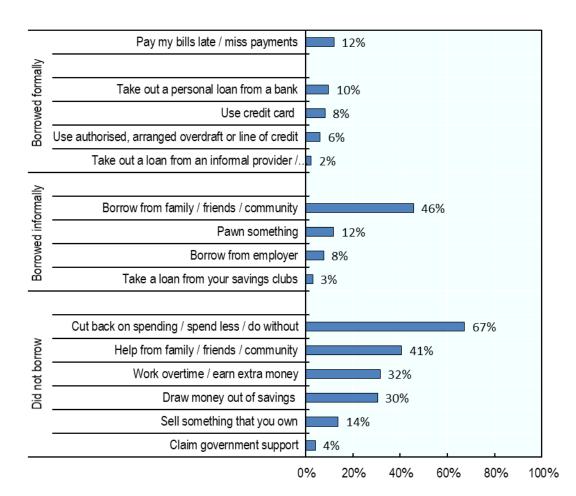


Figure 11. Coping strategies when income does not cover living costs (young adults, CIS-6 average)

*Note*: Multiple answers were possible *Source*: OECD/INFE financial literacy survey.

Figure 12 exhibits the responses of young adults across the CIS-6 to a set of financial attitudes questions. More financially literate people can be expected to disagree with the following statements related to attitudes towards the long term:

- "Money is there to be spent"
- "I find it more satisfying to spend money than to save it"
- "I tend to leave for today and let tomorrow take care of itself"

Young adults across the CIS-6 tend to disagree with the last statement (44% completely disagree), somewhat disagree with the middle statement (36% completely disagree), and overwhelmingly agree with the first statement (only 19% completely disagree).

While it is difficult to make conclusions, in general terms it appears that young adults are aware of the need to think long term, but short-term consumption pressures do exist and they do not see money as a store of value, but only as a medium of exchange.

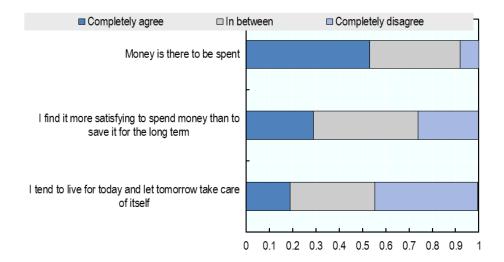


Figure 12. Financial attitude statements (young adults, CIS-6 average)

Source: OECD/INFE financial literacy survey.

Finally, Figure 13 exhibits a summary of the percentages of the maximum achievable score in financial literacy among young adults in the CIS-6 countries. The overall maximum score is 21, made up of the maximum scores for financial knowledge (9), financial behaviour (7), and financial attitude (5). The figure reports the percentage of the maximum achieved overall score in parenthesis for each country, while the bars represent the percentage of the maximum for each component of financial literacy.

The mean percentage of the maximum achievable score obtained across young adults in the CIS-6 countries is 53%. This is slightly lower than the average for the entire sample of respondents in the CIS-6 (56%), and the average for adults aged 30-79 only (59%). This result suggests that young adults (aged 18-29) in the CIS-6 on average have lower financial literacy as a group and may require special policy attention.

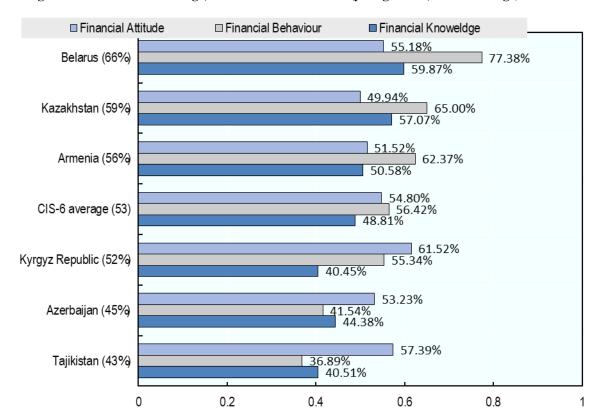


Figure 13. Financial knowledge, attitudes and behaviour (young adults, CIS-6 average)

*Note*: Average knowledge, behaviour and attitude scores as a percentage of maximum possible scores, financial knowledge, financial behaviour and financial attitudes. Sorted by percentage of overall score (reported in parentheses).

"Average, CIS-6" reports the mean of the 6 countries, where each country is given an equal weight. *Source*: OECD/INFE financial literacy survey.

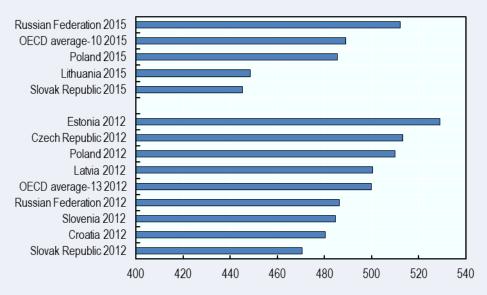
#### Box 2. PISA financial literacy in eastern Europe and the CIS

Since 2012, the OECD Programme for International Student Assessment (PISA) assessed students' financial literacy, in addition to their abilities in science, reading and mathematics. Apart from Russia, the CIS countries covered in this report have not participated in the PISA financial literacy assessment so far. This box provides some results from PISA about neighbouring and peer countries in order to provide a context for the CIS data presented in the rest of the handbook.

The results of the 2015 PISA survey show that financial literacy among young people around the world is not very high: across the participating OECD countries and economies, 22% were considered to be low performers, as they scored below the baseline level of proficiency in financial literacy (OECD, 2017<sub>[4]</sub>). Figure 14 shows that among the countries in eastern Europe and the CIS that participated in the 2015 assessment, only Russia performed above the OECD average, while Poland, Lithuania and the Slovak Republic scored below. Russia significantly improved is performance with respect to the 2012 assessment, when it performed slightly below the OECD average. The Czech Republic, Estonia, Latvia and Poland performed above the OECD average in 2012.

Figure 14. Financial literacy among young people

Mean financial literacy scores in selected countries that participated in the PISA 2012 and 2015 assessments.



Source: OECD PISA 2012 and 2015 databases.

## Part II. Status of financial education for children and young people in the CIS

#### **Key messages**

The CIS-6 recognise the importance of providing financial education to children and young people, but they are at different stages of developing and implementing such programmes. Armenia, Azerbaijan, Belarus and the Kyrgyz Republic have national strategies for financial education targeting specifically children and young people. Armenia, Azerbaijan and the Kyrgyz Republic have introduced elements of financial education in the curriculum of existing school subjects; other countries, such as Belarus, have designed optional financial literacy courses. Financial education has not been formally introduced yet in the school curriculum in Tajikistan and Kazakhstan but both countries have developed pilot programmes, extracurricular and out-of-schools activities, as do all CIS-6 countries.

The CIS-6 countries are at different stages of developing national strategies for financial education, and providing financial education to children and young people. Some have pursued systematic efforts to integrate financial literacy in the school curriculum, while in others the private sector, non-governmental organisations (NGOs), or international organisations conduct most of the activities, with limited coordination.

This section looks at the introduction of financial education topics in parts of the curriculum and the extracurricular or outside of school activities on financial education in the CIS-6.

#### National strategies for financial education targeting children and young people

The national strategies for financial education of Armenia, Azerbaijan, Belarus and the Kyrgyz Republic specifically target children and young people. As such, they aim at introducing financial education in schools and design extracurricular activities for young people. These countries also define financial education in school as one of the main priorities of their strategies and set up effective cooperation mechanisms between public authorities, in particular between ministries of education and central banks.

Armenia offers a good example of financial education in schools, which is the first priority of its national strategy. The Steering Committee for the design and implementation of the strategy defined the need and advantages of a comprehensive, lifelong learning approach to financial literacy. Consequently, the integration of financial education in school became one of the main components of the strategy and a priority at a government level. Since the adoption of the strategy in 2014, the Central Bank of Armenia closely collaborates with the Ministry of Education and Science and the National Institute of Education. In 2014, the Steering Committee created a Working Group responsible for the integration of financial education in schools. Since then, the Working Group has started the implementation of financial education components in schools (Boxes 3 and 16).

In Azerbaijan, financial education for youth is also part of the National Strategy initiated by the Central Bank of Azerbaijan and approved in 2016. The strategy states the need for developing financial services, consumer protection, and financial literacy in Azerbaijan.

The strategy document highlights the importance of collaborating with all relevant stakeholders including the ministry of education and defines schoolchildren and young people as one of the key target groups.

Belarus provides another example of collaboration at the national level. In 2014, the ministry of education and the National Bank of Belarus adopted a long-term joint action plan to increase the level of financial literacy of children in the Republic of Belarus between 2015 and 2018. In addition to that, the second revised national strategy called "Joint Action Plan on Improving Financial Literacy for 2019-2024" adopted by the government defines youth and schoolchildren as a core target group. A stated aim of the action plan is to introduce financial literacy in the school curricula in the form of facultative courses, in addition to extracurricular activities for youth.

In the Kyrgyz Republic, the introduction of financial education in schools is one of the first priorities of the "National Programme on Increasing the Financial Literacy of the population of Kyrgyz Republic for 2016-2020" approved by the Government in 2016. Young people are one of the main target groups, and improving the financial literacy of schoolchildren and young people is one of the main priorities of the national programme. The Ministry of Education and Science is responsible for introducing financial literacy elements into educational standards and programmes, as well as for coordinating other financial education activities in schools. The National Bank of the Kyrgyz Republic cooperates with the ministry of education, assists in the coordination of measures for the financial education of children and young people, participates in the development of recommendations and standards for financial education, and facilitates the dialogue between the ministry and donor organisations on financial education.

#### Financial education in school as part of curricular teaching

The experience of the OECD/INFE shows that an increasing number of countries have introduced financial education initiatives in primary and secondary schools. Countries are integrating financial education into one or more existing subjects through a cross-curricular approach, or as an optional stand-alone subject. A limited number of countries have financial education as a compulsory standalone topic (OECD, 2014<sub>[37]</sub>).

The CIS-6 countries have adopted various approaches to implement financial education in schools. Countries such as Armenia, Azerbaijan and the Kyrgyz Republic have introduced elements of financial education in existing subjects; other countries, such as Belarus, have designed optional courses in schools. Financial education has not been formally introduced yet in the school curriculum in Tajikistan and Kazakhstan but there are various pilot programmes, extracurricular and out-of-schools activities.

In Armenia, financial literacy was introduced progressively through all grades into the following subjects: Mathematics (age 6 to 12 years old, 2-6 grades); Me and the world around (age 6 to 10 years old, 2-4 grades), Algebra (age 13 to 17 years old, 7-11 grades); Social science (age 14 to 17 years old, 8-11 grades). The introduction of financial education in schools took place through a pilot programme (see Box 28). A nationwide teachers' training programme is implemented under the leadership of the Ministry of Education and Science in cooperation with the central bank. The implementation is delegated to the National Institute of Education of Armenia and supporting materials have been developed, including teacher training modules and teacher manuals for each subject (see Boxes 3 and 16).

In Azerbaijan, financial education elements have been integrated in the curriculum of subjects "Knowledge of the World" (grades 1-9) and "Mathematics" (grades 1-11). Financial education is carried out in all general schools and some vocational schools, in all regions. The Central Bank of Azerbaijan organises trainings on "Applying elements of financial literacy in education" for schoolteachers since 2014. Trainings last five working days (20 hours) and drawn on the resources of the financial literacy portal www.bizimpullar.az as supporting materials.

In Belarus, financial education is mainly introduced through optional courses in schools. As defined in the second version of the National Strategy of Financial education (2019-2024), one of the main working pillars are the further development and introduction of optional classes for all age groups into the educational process, the development of teaching supports, teaching kits, and workbooks for financial literacy. Currently, secondary school students have the opportunity to attend optional classes of economic and financial literacy. These elective classes are available as "Fundamentals of Economic Knowledge" for students of grades 5-11, "Fundamentals of Entrepreneurship" for students of grades 10-11, and "Fundamentals of Financial Literacy" for students of grades 8-9.

To support the project, the National Bank of Belarus organises financial literacy schools for teachers. Events are based at the educational institutions "Academy of Postgraduate Education" and "Minsk State Palace of Children and Youth". Seminars are held on various topics such as "Know your money", "Features of lending to individuals", "Carrying out deposit operations", "Credit histories", "Non-cash payments", "Remote banking services", and "Leasing for individuals". Other training opportunities for teachers follow the methodology of the Aflatoun International Foundation.

The Kyrgyz Republic has also adopted the approach of including elements of financial education in existing subjects to overcome the challenge of overcrowded curricula in schools. Based on the "Standards of basic competence on financial literacy" for grades 5-11 (see Annex B), financial literacy topics have been inserted in the new standards of the existing subject "Man and Society" for grades 5-9. After the approval by the Academic Council of the Kyrgyz Academy of Education, the revised subject is planned to be introduced in schools progressively, in different stages. Since the 2018-2019 school year, students of grades 5-6 are trained according to the new standards. New standards for the subject "Man and Society" for grades 7–9 are being piloted and will come into the effect after the approval of ministry of education. Financial education components are also integrated in the subject "Economic Geography" taught in high schools (grades 7-11).

To train teachers, the ministry of education of the Kyrgyz Republic developed an 18-hour module. Teachers' training courses are organised at the Republican Institute for Teacher Training and Retraining since 2017. Additionally, selective training opportunities are available in the Chui and Osh regions.

In addition, the Academic Council of the Kyrgyz Academy of Education approved teaching resources called "Key to financial independence" and recommended its use in secondary schools during extracurricular activities and elective discussion, as an addition to the subjects "Man and Society" and "Introduction to Economics". These resources include a textbook and a workbook for students of grades 10-11 and a methodological manual for teachers of the same grades. Before implementation, the textbook was piloted in two general education institutions.

In Tajikistan, the German Sparkassenstiftung für internationale Kooperation (Savings Banks Foundation for International Cooperation – SBFIC) implements a pilot project on

financial education as part of the "Savings banks partnership project for the introduction of dual vocational training in the financial sector of Kyrgyzstan, Tajikistan and Turkmenistan" (2014-2020) funded by the German Federal Ministry for Economic Cooperation and Development (BMZ).<sup>3</sup> The project supports the National Bank of Tajikistan in the integration of financial education in high schools. The first stage of the project includes the identification of the "multipliers" who would become "master trainers". During the second stage, the multipliers would train local schoolteachers. During the third stage, the teachers would start delivering financial education to high school students (16-17 years old). The materials for the first stage were developed by SBFIC. The Ministry of Education and Science of Tajikistan provides in-kind contributions and will approve the content of the curriculum.

#### Extracurricular and out-of-school programmes

Extracurricular activities include delivering financial education in schools, by teachers or other experts, but not as part of the school curriculum. In addition to public authorities, several other stakeholders are often involved in providing extracurricular financial education to children and young people in CIS, including national and international not-for-profit organisations and representatives of the financial sector, such as industry associations and financial institutions. Much of the financial education delivered to children and young people in the CIS-6 countries takes place in form of extracurricular activities.

In addition, many institutions deliver financial education to youth through large number of events and tools outside of schools. This includes using digital tools and games to reach a large audience, celebrating national money weeks/months, organising visits to financial institutions, and initiating competitions or summer schools. Below are examples of the most common programmes.

#### Seminars/trainings and summer schools

Optional classes and seminars are a common type of extracurricular activities implemented in the CIS-6 countries. International NGOs, such as Junior Achievement, are very active in supporting national authorities in the design and implementation of selective and pilot projects in the region. Occasional seminars by representatives of financial institutions and NGOs, including open door days and visits to financial institutions, are very common in the majority of the CIS-6.

In Armenia, extracurricular financial education activities in schools are partly supported by Junior Achievement, based on a Memorandum of Understanding with the ministry of education. Junior Achievement cooperates with some schools and organises extracurricular classes for students in these schools. The programme is based on the methodology provided by Aflatoun and includes: doing business and entrepreneurship (e.g., writing business plans), and a citizenship component (e.g., becoming responsible citizens).

Additionally, since 2011, some schools participate in the Citizen project on financial education, implemented in collaboration between the Central Bank of Armenia and the NGO "Civitas - Armenian Centre for Democratic Education". The objective of the project is to empower teachers and students with knowledge, skills, and tools that will allow them to foster personal budget management and develop their sense of responsibility as citizens.

http://www.sparkassenstiftung.de/en/projects/projects/region/caucasus-central-asia-and-middle-east/projekt/regionalprojekt-einfuehrung-der-dualen-berufsausbildung-zum-bankspezialisten/0/1.html

The project includes teachers' and students' training during the entire school year. This is an independent project and is realised in addition to the standard nationwide programme of financial education and training of teachers led by the ministry of education and the central bank

The "Mediator's Camp" is another example of out-of-school programme for schoolchildren in Armenia, which is led by the Financial System Mediator. The project was established in 2017 targeting children 11-13 years old from low-income families (See Box 25).

In Azerbaijan, Junior Achievement developed educational materials on financial literacy and implemented extracurricular projects in schools in collaboration with the Central Bank of Azerbaijan. Additionally, the central bank is organising summer schools "Learn, save and earn" for children of age 10-12. These are one-week training courses where children learn about the history of money, budgeting, saving and entrepreneurial skills through entertainment. It includes playing a board game on saving designed by SBFIC, and visiting financial sector institutions.

#### Competitions, Olympiads and games

Olympiads and competitions are an alternative way of teaching financial education in schools during extracurricular activities. They have the advantage of transmitting specialised knowledge and skills to youth interested in the topic, but do not cover a large number of students. Olympiads and competitions are popular in some CIS-6 countries, such as Armenia and Belarus.

In Armenia, Junior Achievement in cooperation with the central bank, organises an annual Brain-Ring Competition on economic and financial issues for high school students. Students from 100 different high schools compete on economic and financial questions. Participants and the winning team receive awards from the central bank, Junior Achievement and other financial institutions that express an interest to take part in the event.

The National Bank of Belarus, in cooperation with the Ministry of Education, organises a National Olympiad of Financial Education among pupils and a competition among university students for the best research project on economic issues.

Several financial games, such as Financial Football online game developed by VISA and the Saving board game developed by SBFIC, have been adapted and implemented in the majority of CIS-6 countries.

#### Celebration of international events

Armenia, Azerbaijan, Belarus, Kazakhstan, the Kyrgyz Republic and Tajikistan participate in the Global Money Week (GMW), an annual event initiated by the NGO Child and Youth Financial International. Several stakeholders from the public, private and not-for-profit sector take part in the event by organising various financial literacy activities for children and youth in schools and outside of school. Most CIS-6 countries also participate in the World Saving Day, which includes activities to raise the awareness about the importance of saving among youth.

In addition to international events, some countries also organise their own national celebrations. My Finance Month in Armenia is an annual project within the scope of the national strategy and led by the central bank. It includes a wide range of events, such as open seminars, contests, intellectual competitions, and visits to financial public and private

institutions. The target group of the project is the whole population, but young people are the majority of participants.

#### Printed and online resources

Printed and digital delivery channels are other examples to increase awareness about personal finance issues and deliverfinancial education to youth in the CIS.

For example, the Central Bank of Armenia created a financial educational website, www.abcfinance.am, which was updated and redesigned in 2017. The website contains simple and user-friendly educational materials structured around different target groups, including youth and schoolchildren, and different life events. The website also contains calculators, games and others interactive tools. Abcfinance.am is linked to social media channels such as Facebook, Twitter, Instagram and YouTube.

In Belarus, a number of educational videos and interactive presentations on the main financial education topics are available on the portal www.fingramota.by, created by the National Bank. A number of publications are available in the website such as "The ABC of Money", a book on financial literacy for students and their parents, "Money from the Piggy Bank", a book about money, and "Basic Financial Knowledge", which gives an idea of the main instruments in financial markets, designed for schoolchildren, youth and adults.

In Azerbaijan, the central bank developed the unified web portal on financial education www.bizimpullar.az, that contains materials for youth. The website is linked to social media channels and includes mobile tools and programmes on personal finance management for youth.

The National Bank of the Kyrgyz Republic issued the "Alphabet of Money" visual aids, which explain to children relatively difficult concepts such as money, salary, pensions, family budget, savings and credit, in an accessible and easy way. The materials have distributed to all schools of the republic.

The National Bank of Kazakhstan produced materials for classroom discussions in 2013. These include guides with interactive stories intended to be the basis of discussions between students and teachers, as well as a financial dictionary, games and quizzes. Educational materials have been also issued by the private sector and individual experts in the scope of the "Just about finance" programme. These include for example the book "Rich Child" written by a local journalist.

A few countries have also launched mass media programmes. Kyrgyz television companies have launched the children's project on financial literacy "Living Smartly", which hosts 12-year-olds. During every episode, children talk about planning their budget to achieve their dreams, make savings in banks, use payment cards, loans, coins, etc. Two TV channels in the country air the programme.

#### Money museums

The Central Bank of Armenia, the National Bank of Belarus, and the National Bank of the Kyrgyz Republic have money museum/exhibition centres in their institutions.

The museum of the Central Bank of Armenia, called the Visitor Center, was established in 2011, with the aim to increase public awareness of the operations and the role of the central bank by using various educational methods. High school and university students are the main target groups of the Visitor Center, which hosts around 10 000 attendees annually.

The National Bank of the Republic of Belarus has assembled a collection of over 52,000 artefacts of national importance to create a permanent exhibition, called the National Bank Money Museum. The exhibition presents materials on the history of monetary circulation and on development of financial and credit institutions in the country. The Money Museum will open in October 2019.

In the Kyrgyz Republic, the Numismatic Museum of the National Bank is open for schoolchildren's visits. Visits to the museum take place regularly and become more frequent during Global Money Week and World Savings Day.

# Part III. Suggested approaches to developing and strengthening financial education provision for children and young people

This section constitutes the core of the policy handbook and is structured around four chapters dedicated to the most important steps of designing and implementing financial education for children and young people. Chapter 4 is dedicated to institutional and coordination mechanisms. Chapter 5 discusses issues related to the design of financial education curricula and programmes, while Chapter 6 deals with delivery issues. Chapter 7 concludes with a discussion on assessment and evaluation.

In reading these chapters, it is important to keep in mind that it is difficult to draw a strict distinction between elements and approaches relevant to the provision of financial education within vs. outside of school, or as part of curricular vs. extracurricular teaching, meaning that in practice some elements are to some extent mixed within chapters.

#### Chapter 4. Creating institutional and coordination mechanisms

Depending on country contexts, the range of stakeholders involved in financial education in schools and for youth can be very wide. It may encompass national and local governments, education authorities and educational bodies, financial regulators, central banks, the financial services sector and other private sector stakeholders, not-for-profit organisations, community groups, school leaders, teachers, parents, and children and young people themselves.

Engaging and harnessing the efforts of these stakeholders at both a formal and informal level is important to ensure a comprehensive and consistent approach, but brings significant challenges. This chapter describes the key challenges identified and highlights successful approaches related to the creation of institutional and coordination mechanisms among public authorities and to the involvement of private and not-for-profit stakeholders.

#### Setting coordination mechanisms among public authorities

#### **Key lessons learnt**

In order to set up effective institutional and coordination mechanisms for financial education targeting children and young people it is important to:

- Ensure high-level political support for financial education in schools, especially from the ministry of education, at an early stage.
- Develop formal co-operation arrangements through the governance mechanisms of the national strategy for financial education (where one exists) and/or through dedicated protocols and agreements between financial authorities and the ministry of education, clearly setting out objectives, roles and responsibilities.
- Keep into account that additional co-ordination efforts may be needed with other national education authorities, or in countries where multiple authorities have responsibility for education at state, region or local level.

Many countries are developing and implementing national strategies or plans for financial education. At the beginning of 2019, more than 70 countries around the world were actively designing or implementing a national strategy. Most of these strategies identify children, young people and/or students among their main target audiences.

In most countries, the lead body for the national strategy for financial education is a financial regulator, finance ministry or central bank. The ministry of education is typically responsible for issues related to the introduction of financial education in schools, as part of its wider responsibilities for formal education.

This means that the development of financial education for children and young people, and especially in school, requires a close collaboration between financial and education authorities (more than is the case for other target audiences). Collaboration between financial and education authorities is a challenge for many countries, as they do not generally work in partnership, have different mandates, priorities and lines of accountability.

To overcome this challenge, some countries have found ways to coordinate through the governance mechanism of the national strategy (where one exists), and/or through dedicated protocols that set out more detailed arrangements for implementing financial education in schools.

The success of co-ordination mechanisms rests on first gaining high-level political support, especially from the ministry of education. In Portugal, for instance, the fact that the private sector was already engaged in uncoordinated and potentially biased financial education activities in school motivated the ministry of education to become involved, so that it could have greater control over what was happening in the classroom. The ministry of education could also be motivated by the importance of financial literacy as a 21<sup>st</sup> century skill, and by evidence that financial education increases engagement and performance in mathematics, and has 'spillover' effects on attainment more generally (see Box 19).

Public opinion can also encourage coordination between authorities. In England, for example, an all-party parliamentary group conducted several inquiries into financial education for children and young people. Its reports cited strong demand from parents for their children to be taught financial education, and generated public debate on the importance of financial literacy. This influenced the ministry of education, notably the decision to make financial education a compulsory subject in secondary schools.

In many countries around the world, the ministry of education sits on the committee that coordinates the national strategy. For example, in Poland, the ministry of finance has a dedicated team for the financial education system, which is responsible, with others, for co-operation with the ministry of education, to ensure a systematic approach to financial education. In Armenia and Belarus, coordinating financial education in schools is a joint responsibility between the central bank and the ministry of education, within the framework of the national strategy.

Whether or not the ministry of education is part of the body coordinating the national strategy, financial and education authorities sometimes adopt a close cooperation mechanism or formal protocol or memorandum of understanding, which sets out the roles and responsibilities of each of them. In Spain, the central bank and the National Securities Market Commission (Comisión Nacional del Mercado de Valores – CNMV) coordinate the national Financial Education Plan. They hold regular meetings with the Ministry of Education and Vocational Training and with several of its dependent institutes and subdirectorates about the development and implementation of financial education in schools.

Boxes 3 to 5 provide cases studies detailing how the collaboration between financial and education authorities works in practice in Armenia, the Kyrgyz Republic, and Portugal. Whichever body leads financial education at a national level, it is essential when developing financial education for children and youth to secure high-level political support, especially from the ministry of education, at an early stage.

Additional challenges emerge in federal countries or in countries with devolved responsibilities for education and other public policies. In countries like Australia, Brazil, Canada, Spain, the UK and the US, responsibility for education in schools is at the state or regional level. This may bring additional challenges for the development of financial education in school, as there is an additional layer of decision-making, and the coordinating body for the national strategy may need to co-ordinate with multiple education authorities. In Spain, for example, the financial regulators coordinating the national strategy organise regular meetings with the education authorities in the autonomous regions to inform them about the latest developments of the strategy. Similarly, in the UK, the Money and Pensions

Service (formerly the Money Advice Service) identifies opportunities for education departments in the four constituent countries (England, Scotland, Wales and Northern Ireland) to work together on shared/aligned goals, sharing evidence about the financial education needs of children and young people and about effective provision.

## Box 3. Case study: the role of the Ministry of Education and Science in the steering committee of the National Strategy for Financial Education in Armenia

In Armenia, the Steering Committee for the development and implementation of the National Strategy for Financial Education has the overall responsibility to design and implement projects under the strategy and its action plan.

The steering committee includes over 30 public, private and community organisations either as permanent members or as observers, and is chaired by the Central Bank of Armenia. The Ministry of Education and Science is one of the 14 permanent members of the steering committee and co-chair of Financial Education in school stream. Financial education projects in school are jointly implemented by the Central Bank and the Ministry of Education and Science.

The Central Bank works closely with the Deputy Minister of Education and Science coordinating general education. Two other representatives from the Ministry of Education and Science sit on the steering committee: the Head of the Department of General Education of Staff and the Head of the Division of the Training of the Pedagogical Staff of the National Education Institute.

The National Institute of Education is also a member of the steering committee. The institute has a key role in the implementation of financial education projects in school and was engaged in the development of financial education content materials to be used in school. The Ministry of Education and Science delegated the implementation of financial education teacher training to the institute, which reached over 2500 teachers across Armenia in 2018. The number of teachers and schools trained is expected to increase to 12000 in 2021.

## Box 4. Case study: protocol between the ministry of education and the financial supervisors in Portugal

In Portugal, the ministry of education has been involved in the National Plan for Financial Education since its inception in 2011. The Ministry signed a protocol of cooperation with the three financial supervisors (Central Bank of Portugal, the Portuguese Securities Market Commission and the Insurance and Pension Funds Supervision Authority) to develop a medium- to long-term strategy for promoting financial education in schools.

The protocol established a working group with representatives from each financial supervisor and representatives from the Directorate General of Education of the Ministry of Education. Every year this working group defines the plan of activities to be implemented in order to achieve the objectives of the financial education strategy for schools. The working group meets regularly and closely monitors activities, to ensure that implementation is proceeding according to plan.

The close cooperation between the financial supervisors and the ministry of education ensures a consistent and step-by-step implementation of the National Plan, including: the development of principles for financial education initiatives, core competencies for financial education, a teacher training programme, and the publication of workbooks to support financial education in schools.

#### Box 5. Case study: The leading role of the ministry of education in the Kyrgyz Republic

The Financial Literacy Programme of the Kyrgyz Republic 2016-2020 establishes that the Ministry of Education and Science is responsible for introducing financial literacy elements into educational standards and programmes. All financial education activities in schools are co-ordinated with the ministry. The National Bank of the Kyrgyz Republic assists the ministry of education in the co-ordination of financial education for children and young people, participates in the development of standards, and facilitates dialogue between the ministry and donor organisations.

#### **Involving private and not-for-profit stakeholders**

#### Key lessons learnt

Ways of ensuring that the contributions of not-for-profit organisations and the financial sector add value to financial education and minimising conflicts of interest include:

- Encouraging the involvement of financial institutions within the framework of a national strategy for financial education (where one exists) and preferably through national industry associations or self-regulatory bodies
- Developing principles and criteria related to impartiality, objectivity, quality and fairness for their engagement, and developing related monitoring and quality assurance mechanisms.
- Depending on the country context, ensuring the approval of the ministry of education for all activities carried out in school by external stakeholders

In addition to public authorities, several other stakeholders are often involved in providing financial education to children and young people, including national and international not-for-profit organisations and representatives of the financial sector, such as industry associations and financial institutions. In many countries, private and not-for-profit stakeholders participate in 'guest' lectures in school, develop teaching resources, and may sometimes be part of the governance mechanism of a national strategy.

In general, the involvement of private and not-for-profit stakeholders in financial education for any audience entails both benefits and challenges. The private sector can bring financial resources, specialist and up-to-date knowledge on financial issues, and efficient

communication. Not-for-profit organisations can be well-positioned to address hard-toreach audiences and can have significant expertise in developing financial education programmes for young people.

However, the involvement of private stakeholders in financial education may bring about potential shortcomings, and some challenges may become particularly strong when providing financial education to children and young people. The private sector may especially be affected by conflicts of interest between commercial and educational activities. A mix between educational and commercial messages may be especially detrimental to children and young people, who may be less able than adults to separate the two and to evaluate potential commercial messages critically. Other shortcomings may include a lack of coordination, duplication of efforts, lack of teaching experience and expertise, and lack of programme evaluation. Moreover, private organisations may be more prone than public and not-for-profit ones to selecting target audiences that can become potential clients in the future (e.g. targeting children to create brand loyalty), or that could be more profitable clients.

Based on the international experience, the OECD/INFE developed Guidelines for Private and Not-for-profit Stakeholders in Financial Education in 2014 (OECD, 2014<sub>[38]</sub>). The guidelines encourage public authorities to ensure that private and not-for–profit stakeholders involved in financial education:

- provide support to public strategies and programmes, particularly through national industry associations or self-regulatory bodies;
- contribute to the development of, and comply with codes of conduct for their involvement in the national strategy for financial literacy;
- clearly distinguish commercial and educational activities, ensuring that they do not promote their own products and services when implementing financial literacy activities; and
- apply criteria of impartiality, objectivity, quality and fairness in the design and implementation of their financial literacy programmes.

In most countries, the involvement of the private sector in schools, whether through direct participation in the classroom or through the development of teaching material, needs to be approved by the ministry of education. In addition, several countries developed mechanisms, such as guidelines, principles, and accreditation systems, to avoid or reduce conflicts of interest and to ensure the quality of financial education resources developed by private and not-for-profit stakeholders.

Boxes 6 to 8 illustrate how the Netherlands, Portugal and the United Kingdom have approached the issue of ensuring that private sector contributions to financial education in schools are impartial and support learning appropriately.

#### Box 6. Case study: Principles for Financial Education Initiatives in Portugal

In 2012, the National Council of Financial Supervisors in Portugal defined the Principles for Financial Education Initiatives (National Council of Financial Supervisors, 2012<sub>[39]</sub>). These principles apply to all financial education initiatives under the National Plan for Financial Education. They were adopted by the Ministry of Education, which sent a letter

to schools notifying them that financial education initiatives in schools must comply with the principles. Among other things, the principles cover classroom sessions and educational materials in any format. Some of the key points are:

- Initiatives should pursue the goals defined for the National Plan, which are to: raise awareness of financial issues, support financial inclusion, develop savings habits, promote responsible use of credit, create precautionary habits.
- Materials should take account of the characteristics of the target group and be presented in a pedagogical way.
- Information presented must be accurate, complete and up to date.
- Materials must provide impartial and objective information, and present different viewpoints where relevant.
- Materials must not be used for advertising or marketing, that is, must not refer to
  specific financial institutions, products or services. The use of logos is permitted,
  but only to identify the promoter. The logo or brand must be used together with
  that of the representative industry association to ensure impartiality. Its size and
  positioning are specified.
- Financial education must be provided by teachers with adequate financial knowledge and teaching skills.
- Financial education actions must incorporate evaluation methods that make it possible to measure results based on pre-established objectives.

The National Council of Financial Supervisors is responsible for monitoring the principles, and ensuring that only programmes that respect them use the brand of the national strategy.

#### Box 7. Case study: Rules for finance professionals in the classroom in the Netherlands

The MoneyWise (Wijzer in geldzaken) platform in the Netherlands is a platform of public, not-for-profit and private stakeholders, chaired by the ministry of finance, to develop and implement financial education in the country. It coordinates the national strategy and various initiatives for children, young people and adults. MoneyWise set rules for financial professionals visiting schools as part of National Money Week, which mainly targets students in school. These rules include:

- the form teacher should preferably be present in the classroom during the guest lecture;
- the visiting lecturer is not allowed to discuss specific products or other commercial activities during the guest lecture;
- visiting lecturers should adapt their language to their target audience. They should refrain from using technical jargon or difficult words;

• the visiting lecturer should take into consideration that money remains a sensitive topic for some children/families.

## Box 8. Case study: An accreditation system to ensure the quality and impartiality of classroom resources in the United Kingdom

The Financial Education Quality Mark is the UK's only widely recognised accreditation system for financial education resources. Originally developed by the Personal Finance Education Group (pfeg), the scheme is now administered by the not-for-profit organisation Young Money, supported by the Money and Pensions Service. It was extended in 2015 to cover resources used by volunteers, parents, carers and others, in addition to teachers in the classroom.

It is designed to give those delivering financial education confidence that the materials they are using contain accurate and up-to-date information that is engaging and relevant for young children, as well as being of high educational value. The mark also ensures that no financial education materials that are for direct use with children or young people contain any form of marketing or branding.

To be awarded the Quality Mark, a resource must:

- Have been developed in consultation with a teacher or educationalist and tested with young people in the target group.
- Have a dedicated 'theory of change' and evaluation plan.
- Have a principal focus on financial education.
- Include opportunities for structured learning.
- Be engaging and relevant for young people.
- Be clearly written and easy to use.
- Contain accurate, up to date information and be free of branding.

Young Money and the Money and Pensions Service support resource developers in a number of ways. Young Money issues a guidance booklet, with an explanation of the criteria for gaining a Quality Mark, and a step-by-step guide to the accreditation process. The Money Advice Service offers free consultancy on evaluation. The cost of the accreditation is £1500 plus tax for commercial organisations, half price for charities. The Quality Mark needs to be renewed every two years, at half the cost of the first accreditation. Young Money promotes resources that have gained a Quality Mark on its website.

#### Chapter 5. Designing financial literacy curricula and programmes

This chapter looks at key elements that are essential in designing effective financial education for children and young people, in or outside of school. It starts by considering the use of evidence to identify priorities and inform the design of interventions.

It then looks at the importance of developing core competency frameworks or learning frameworks to guide the development of programmes or curricula. In this respect, the Annex contains an adaptation of the OECD/INFE core competencies framework for the CIS region (Annex A) and examples of financial literacy frameworks from CIS countries (Annex B).

The chapter continues by looking at various approaches for integrating financial education into curricular teaching, and concludes with a broader overview on how to design effective pedagogical approaches for financial education, whether in school or out of school.

#### Collecting evidence to inform the design of financial education

#### **Key lessons learnt**

As for any other target audience, it is important that the development of financial education for children and young people starts from a diagnosis. Collecting robust evidence on the financial literacy of children and young people and on the financial context they live in can include:

- Participating in international financial literacy surveys, like the OECD PISA financial literacy assessment, to set a 'baseline' against which to measure future progress, or compare against other countries, and to identify potentially vulnerable groups, and
- Conducting surveys to learn about the financial challenges and risks affecting young people, and learn about what and how young people would prefer to learn about money-related issues.

The development of financial education for children and young people, like for any other audience, should ideally be based on an assessment of their level of financial literacy and on an understanding of the main financial education needs and priority groups.

Surveys are useful to know not only the average levels of financial literacy among children and young people, but also to identify areas and specific topics where children and young people are performing well or less well. They may set a 'baseline' against which to measure future progress, or compare against a national or international benchmark. Surveys are also useful to identify particular groups that are performing badly compared with their peers or that may be at risk of becoming financially vulnerable. Surveys or other types of data collection can be used to learn not only about students' knowledge but also their attitudes towards money, their behaviour in the financial domain and more generally about the socioeconomic and financial landscape they live in.

The results can be used to define or refine the priorities of a national strategy, set priorities for curriculum design, and inform the design of specific interventions. They can be particularly useful to design interventions for specific groups. To the extent that surveys can capture attitudes and learning preferences, they can also be useful to inform programme design and teaching methods. Surveys should take into account respondents' age, culture and the range of financial choices and decisions relevant for people of different age groups or living in different contexts.

Over time, more than 30 countries and economies have used the OECD PISA financial literacy assessment to collect evidence about the financial knowledge and skills of 15-year-old students. The PISA financial literacy assessment allows participating countries to learn how their students perform in financial literacy compared to other countries around the world, and also to see which subgroups of students have the lowest financial literacy. PISA results also show that financial literacy is not just a combination of mathematics and reading skills, and highlight the potential roles of parents and learning-by-doing in fostering financial skills. Box 9 provides some key results from the latest PISA report.

Some other countries have conducted bespoke national surveys of the financial literacy of children and young people. These are mostly broad-based surveys, covering attitudes and behaviours as well as knowledge and skills, recognising that behavioural insights are an important component of designing effective financial education. Boxes 10 to 13 provide examples of how surveys were used to change the content of financial education programmes (Japan); surveys that cover both parents and children (Hong Kong, China and the UK), and surveys aiming at understanding what and how young people wanted to learn about money (Canada).

The role of parents in financial education is considered in Chapter 6.

#### Box 9. OECD PISA financial literacy assessment

PISA is the OECD's Programme for International Student Assessment. Every three years it tests 15-year-old students from all over the world in reading, mathematics and science. Since 2012, PISA included an optional assessment on financial literacy which was also offered in 2015 and 2018 and will be repeated in 2021. The option provided a comparable assessment of the financial literacy of students across the world.

The 2015 assessment (OECD, 2017[4]) revealed that:

- Many students do not have even basic skills. On average across OECD countries and economies, as many as 22% of students are considered low performers in financial literacy. The percentage of low-performing students is larger than 20% in Brazil, Chile, Lithuania, Peru, Poland, the Slovak Republic, Spain and the United States. These students can, at best, recognise the difference between needs and wants, make simple decisions about everyday spending, and recognise the purpose of everyday financial documents, such as an invoice.
- Few students are proficient in financial literacy. Across the 10 participating OECD countries and economies, only 12% of are top performers in financial literacy. These students can analyse complex financial products, show an understanding of the wider financial landscape, such as the implications of incometax brackets, and can explain the financial advantages of different types of investments.

- Young people are already financial consumers but do not always have the skills to use basic financial services. On average across participating OECD countries and economies, 56% of 15-year-olds have a bank account, 19% have a prepaid debit card, and 64% earn money from some type of work activity. However, fewer than one in three students (31%) have the skills to manage a bank account.
- Financial literacy is more than just mathematics and reading. On average across participating OECD countries and economies, around 38% of the variation in financial literacy scores reflects factors that are uniquely captured by the financial literacy assessment, while the remaining 62% of variation in financial literacy reflects skills that can be measured in the mathematics and/or reading assessments.
- Students acquire financial skills from their parents, but not all families can transmit sound knowledge and skills. On average across participating OECD countries and economies, 84% discuss money matters with their parents at least once a month. Students who do so tend to perform better in financial literacy. But financial skills are strongly related to the socio-economic background of their family, as socio-economically advantaged students score 89 points higher in financial literacy than disadvantaged students.
- Students in some countries show significant differences in financial literacy across gender and immigrant status, in addition to large difference related to socio-economic status.

#### Box 10. Case study: A regular survey of children's financial life in Japan

Every five years since 2005, the Central Council for Financial Services Information (CCFSI) in Japan has conducted the "Survey on children's life and their behaviour towards money". The survey allowed the CCFSI to find, for example, that students who have more conversations with their parents on money, career, and other financial matters tend to show better financial behaviours than students who converse less with their parents on these matters.

The insights from the survey are used to choose topics for seminars and teachers' lectures, and to design 'edutainment' events for children and their parents. Knowing the percentage of children with mobile phones, or who use digital money, helped the CCFSI to develop the themes of lectures and seminars.

The survey also attracts media attention. Data on the amount of monthly pocket money that students receive from their parents or relatives regularly or at New Year are frequently quoted by the media and help to promote financial education.

#### Box 11. Case study: Asking young people how they want to learn about money in Canada

The Canadian Foundation for Economic Education and Scotiabank surveyed young people aged 12-17 across Canada, to find out what young people wanted to know about money,

and how they wanted to learn about it. Around 6,000 young people responded (CFEE,  $n.d._{[40]}$ )

The findings revealed that young people would most like to learn about (in decreasing order of interest) how to manage money and not waste or mismanage it (66.1%); how to save money (63.7%); how to choose a career area that will enable them, hopefully, to earn money (56.25%); and how to invest (55.6%).

Young people in Canada were least interested in "how to handle peer pressure when it comes to money decisions and buying things" (28.6%). Further, a lower proportion of young people found dealing with financial services a challenge (e.g., "managing my credit cards" [reported by 15.4%]; "monitoring pre-authorised payments I set up" [9%]), perhaps reflecting the relatively low holdings of financial products in this age group.

More than half of respondents reported that the main topics they wanted to learn about were:

- Best ways to prepare for earning money and getting a good job and career (58.3%).
- Making good spending decisions (57.2%).
- Ways and means to save money (55.7%).
- How to plan for my future education and be able to pay for it (52.1%).
- Taxes and how to file taxes (51.9%).

The survey also gave insights on how young people wanted to learn about money issues. The three preferred ways were: at home, from parents or guardians (60.5%), in school (53.7%) and from knowledgeable guests in school (41.6%). By contrast, learning from peers (13%), apps (16.2%), and interactive games (17.5%) were less popular.

#### Box 12. Case study: A survey of children, young people and parents in the United Kingdom

The Money Advice Service carried out a nationally representative financial capability survey of children and young people aged 4-17 in the UK. Around 5,000 children and young people and their parents took part, from March to June 2016 (Money Advice Service, 2016<sub>[41]</sub>). The survey covered how children get money; their attitudes to spending, saving and debt; confidence in managing money; understanding of the value of money and the need to make trade-offs; knowledge about products and money concepts; and parents' beliefs and attitudes towards their own financial capability and the skills, abilities and attitudes of their children.

The research found that, overall, children had a reasonable level of knowledge and understanding about money. They were cautious about debt, and had an understanding of the importance of saving and the concept of value for money. However, some children were doing less well than others, and the insights from the survey have implications for financial education.

Children demonstrated an understanding of concepts such as the value of money at a young age, and their knowledge and skills typically grew with age, with a significant step up at age 6, and at 16-17.

The survey also showed that children who get money regularly have better engagement and are more likely to save. For example, 4-6 year olds who get money regularly were less likely to spend a £5 windfall at once (31%) than those who don't (40%). Only 28% of children who said they 'never save' were confident in managing their money, compared with 63% who always saved. The survey also found a link between not keeping track of money and not saving. The main conclusion drawn was the importance of getting children to make plans and stick to them, and to keep track of their money.

#### Box 13. Case study: A survey of primary school children and parents in Hong Kong, China

In June 2018, the Hong Kong, China Investor and Financial Education Council (IFEC) conducted an online survey of 400 parents with children in primary school, and interviewed 400 primary schoolchildren (IFEC,  $2018_{[42]}$ ). The aim was to understand parents' attitudes to teaching their children about money, to gauge young children's understanding of money concepts, and to see if there were any gaps between parents' and children's ideas about money management.

The survey found that children generally showed financially literate behaviours: 78% planned how to use their pocket money; 88% checked their change when buying something; and 70% would save to buy something in the future.

However, only 43% of children kept track of their spending, and 46% said they never or seldom lost belongings, implying that over half did. There were also some big differences in perceptions between parents and children.

#### **Developing core competencies and learning frameworks**

#### **Key lessons learnt**

The design of financial education curricula and programmes in and outside of schools should ideally be based on core competencies or learning frameworks on financial literacy. It is important that these frameworks:

- set out the financial literacy outcomes, in terms not only of knowledge, but also skills, attitudes and behaviours, that will enable children and young people to participate fully in the financial and economic life in their country and to improve their financial well-being,
- describe financial literacy outcomes across a progression of ages and grades, are tailored to the specific needs of children and young people in the country,
- are agreed within the country, to improve coordination across financial education initiatives.

The OECD/INFE Core Competencies Framework on Financial Literacy for Youth in the CIS (Annex A) is an adaptation of the international OECD/INFE framework (OECD,

2015[1]) to the CIS context and can be used for programme development, assessment and evaluation at the national level.

Core competencies frameworks on financial literacy provide a set of key competencies that are likely to be needed by individuals to take sound financial decisions for themselves and their families, and to fully and safely participate in economic and financial life. Frameworks tailored to the needs of children and young people typically describe the financial literacy outcomes required in the near future, and can be used to develop assessment, training and/or evaluation, in school and outside. Learning frameworks on financial literacy are typically designed to support the teaching of financial education, usually within a national (or state/regional) education system.

Core competencies frameworks and learning frameworks provide a review of the key competencies that children and young people within a country/state/region should possess at different ages, and are a basis to design specific curricula and programmes. While they vary according to national priorities and cultures, such frameworks typically set out areas that children and young people should know about and understand, and may also include the skills they need to acquire, and the attitudes, values and behaviours that will help them achieve financial well-being.

Such frameworks are often drafted by ministries of education, other education agencies, or the institutions leading a national strategy for financial education, but they can be developed as part of a collective effort; in this sense they can provide a foundation for agreeing among different stakeholders on key competencies to taught in a country and can be a useful means for gaining 'buy in' from a wide range of stakeholders.

Several countries around the world have developed core competencies frameworks and learning frameworks to guide the design of financial education for children and young people, in and outside of schools. Most frameworks cover at least students in primary and secondary school ages, but others may extend to kindergarten, tertiary education and beyond. Most frameworks share some common topics, such as using money and basic financial products, saving and spending, debt, risk and rewards, consumers' rights and responsibilities, and understanding of the wider financial, economic and social system. Some countries also combine entrepreneurship with personal finance topics.

Table 1 summarises the key elements of and provides links to some selected core competencies and learning frameworks from different countries. Frameworks in the CIS region – from Armenia, the Kyrgyz Republic and Russia – are available in Annex B.

The OECD took inspiration from the frameworks available internationally to develop the PISA financial literacy analytical and assessment framework (initially developed for the PISA 2012 assessment and updated thereafter) – see Box 14. Responding to a G20 leaders' call in 2013, and based on international experience, the OECD/INFE then developed the core competencies framework on financial literacy for youth (see Box 15).

Based on the international frameworks, recent developments, and regional specifies, this policy handbook includes a version of the core competencies framework for youth tailored to the circumstances of the CIS countries. The OECD/INFE Core Competencies Framework on Financial Literacy for Youth in the CIS is available in Annex A.

Table 1. Examples of financial literacy competencies and learning frameworks

Country	Name	Coverage (age / grade)	Developed by	Link
Armenia	The Financial Competency Matrix for Learners	Age: from less than 10 to 18; grades: 2-12 (primary and secondary school)	Central Bank of Armenia and the Ministry of Education and Science	Not available online - Available in Annex B
Australia	National Consumer and Financial Literacy Framework	Age: 5-15; grades: foundation to year 10 (from kindergarten to lower secondary education)	Ministerial Council for Education, Early Childhood Development and Youth Affairs	http://www.curriculum.edu.au/verve/_resources/National_Consumer_Financial_Literacy_Framework_FINAL.pdf
Belarus	Curriculum for optional classes on "Fundamentals of financial literacy"	Grades 8-9 in general secondary education	Ministry of Education and the National Bank of Belarus	http://fingramota.by/files/2018/1/11/636512878319621005.doc (in Russian)
Canada	Economic and financial literacy learning framework	Grades 4 to 12 (primary and secondary education)	Canadian Foundation for Economic Education	http://www.cfee.org/resources/economic-financial-literacy-learning-framework.html
Hong Kong, China	Financial Competency Framework – Schoolchildren	Age: 6-17	Investor and Financial Education Council	https://www.ifec.org.hk/common/pdf/fcf/hkfcf_booklet.pdf
Japan	Financial Education Goals by Age Group from Primary School through High School	All grades in primary and secondary school	Central Council for Financial Services Information	https://www.shiruporuto.jp/e/consumer/pdf/financial_education_goals_by_age_group.pdf (English version)
Kyrgyz Republic	Standards of basic competence on financial literacy	Grade 5-11 (age 10- 18)	Coordination Council on the implementation of the program to improve financial literacy of the population of the Kyrgyz Republic for 2016-2020	Not available online - Available in Annex B
Netherlands	Learning outcomes and competencies for school-age children	Age: 6-17; grades: all grades in primary and secondary school	Nibud	$\underline{\text{https://www.nibud.nl/wp-content/uploads/Nibud-Learning-outcomes-for-school-age-children-2018.pdf} \ \ \textbf{(English version)}$

New Zealand	Financial capability progressions	All grades in primary and secondary school	Ministry of education	http://nzcurriculum.tki.org.nz/Curriculum-resources/Financial-capability/Financial-capability-progressions
Portugal	Core Competencies for Financial Education in Kindergarten, Basic Education, Secondary Education and Adult Learning and Training	Kindergarten, primary, secondary and adult education	Ministry of Education and Science, in conjunction with National Council of Financial Supervisors (Central Bank, Securities Market Commission and Insurance and Pension Funds Supervisory Authority)	https://www.todoscontam.pt/sites/default/files/SiteCollectionDocuments/CoreCompetenciesFinancialEducation.pdf (English version)
Russia	Framework of basic financial literacy competencies for Russia	Age: 15-18	Ministry of finance	https://www.minfin.ru/ru/document/?id_4=63407# (in Russian)
Slovak Republic	National standard of financial literacy version 1.1	All grades in primary and secondary school	Ministry of Education, Science, Research and Sport, and Ministry of Finance	http://www.minedu.sk/data/att/11069.pdf (English version)
UK	Financial Education Planning Frameworks	Primary and secondary school	Young Enterprise	https://www.young-enterprise.org.uk/teachers-hub/financial-education/resources-hub/financial-education-planning-frameworks/
US	National Standards for Financial Literacy	Grades: 4, 8 and 12 (primary and secondary education)	Council for Economic Education	https://www.councilforeconed.org/wp-content/uploads/2013/02/national-standards-for-financial-literacy.pdf

#### Box 14. OECD PISA financial literacy framework

As the first international measure of financial literacy of students (aged 15 years), the PISA financial literacy option provided the ideal foundation for the development of a harmonised international core competencies framework based on a commonly agreed definition.

The PISA financial literacy analytical and assessment framework (OECD, 2017<sub>[5]</sub>) was developed by experts drawn from finance, education, research and statistics. It was built on existing practices in other PISA domains and good practice in financial literacy at a national level, including the OECD report on financial education for youth (OECD, 2014<sub>[6]</sub>). The assessment framework was used to inform the content of a one-hour financial literacy assessment, designed to be internationally relevant, and to differentiate between young people with different levels of ability. The framework identified the key dimension of the financial literacy assessment:

- Content areas covered in the assessment: money and transactions, planning and managing finances, risk and reward, and financial landscape.
- Processes, which describe students' ability to recognise and apply concepts relevant to the content domain, and to understand, analyse, reason about, evaluate and suggest solutions. The process categories are: identify financial information, analyse information in a financial context, evaluate financial issues, and apply financial knowledge and understanding.
- Contexts in which assessment questions are set: education and work, home and family, individual and societal.

#### Box 15. OECD/INFE core competencies framework on financial literacy for youth

As a response to a G20 leaders' call in 2013, the OECD/INFE developed an outcome-based core competencies framework for youth in 2015 (OECD, 2015<sub>[1]</sub>). It benefitted from the experience and results of the PISA financial literacy assessment, and was developed through an iterative process by a dedicated expert subgroup of the OECD/INFE.

The framework provides guidance on the typical outcomes of benefit to youth aged 15 to 18. It can be adapted to national circumstances and used in a flexible manner, taking into account differences in culture and context at the national or local level and across all sectors of the youth population.

The core competencies framework covers the same content areas as the PISA framework (money and transactions, planning and managing finances, risk and reward, and financial landscape) and details competencies across: i) awareness, knowledge and understanding; ii) confidence, motivation and attitudes; and iii) skills and behaviour. As youth are typically only just beginning to be autonomous as they approach adult life, competencies are categorised as foundational outcomes 1, 2 and 3, which are designed to show how competencies may develop, rather than to map to specific age groups.

#### Integrating financial literacy in the school curriculum

#### **Key lessons learnt**

Introducing financial literacy in the school curriculum can improve the quality, effectiveness and fairness of financial education, and offers basic skills to students who may not have the opportunity to learn from their families or through personal experience. However, this may be made more difficult by overloaded curricula or limited resources. Successful ways of introducing financial literacy in the curriculum include:

- Integrating financial literacy into one or more existing mandatory subjects (such as mathematics, social science, or civic studies). Introducing financial literacy as an optional standalone subject is also widespread but it limits the number of students reached.
- Integrating financial literacy across a range of grades, in order to offer students the opportunity to learn a wide variety of concepts and skills and make sure that the content is relevant to their age.

The integration of financial literacy in the curriculum should carefully consider how core financial literacy competencies identified in national frameworks can be mapped into and linked to existing subjects. It can be facilitated by taking the opportunity of a revision of the national curriculum.

Introducing financial literacy in the school curriculum presents a number of advantages related to quality, effectiveness and fairness of financial education, as opposed to out-of-school initiatives. It offers the opportunity to benefit from pedagogical tools, school resources and already established high-quality teaching practices. Children in school are also an accessible audience with the necessary focus to learn.

Moreover, schools are well positioned to advance financial literacy among students who may not have the opportunity to learn from their families or through personal experience. PISA data and academic research shows that financial literacy among young people is strongly correlated to the socio-economic background of their family (Lusardi, Mitchell and Curto, 2010<sub>[43]</sub>; OECD, 2017<sub>[4]</sub>). Offering financial education as part of curricular education can be a way of reaching all or most students in compulsory school-age, including most children and young people from low income and/or migrants' families.

The 2005 Recommendation of the OECD Council on Principles and Good Practices in Financial Education and Awareness advised that "financial education should start at school. People should be educated about financial matters as early as possible in their lives" (OECD, 2005<sub>[2]</sub>). The Recommendation recognised the importance of teaching young people key life skills before they start to become active financial consumers, and the relative efficiency of providing financial education in schools rather than attempting remedial actions in adulthood.

However, one of the main practical challenges to incorporating financial education in formal education is that curricula are often already overloaded. Moreover, as societies change, new concepts and bodies of knowledge emerge that are considered to be of key importance for students to learn in school, including not only financial literacy but also subjects such as global competence/global citizenship, innovation or information technology, thus creating further pressure on school curricula (OECD, 2018<sub>[44]</sub>).

Only in a minority of countries is financial education a stand-alone mandatory subject. For instance, in the United States, stand-alone courses in personal finance are mandatory in a few states (Pelletier, 2017<sub>[45]</sub>; Urban and Schmeiser, 2015<sub>[46]</sub>). In Romania, the ministry of education is planning to introduce a mandatory standalone economics and financial education course in lower secondary education (8<sup>th</sup> grade in the national system) for 1 hour per week from the school year 2020/2021. Research by the US Consumer Financial Protection Bureau suggests that the choice between integrating financial education into existing subjects, or teaching it as a standalone topic, is often a practical one, depending on the characteristics and mandates of the national education system, the national strategy for financial education and wider educational objectives (CFPB, 2019<sub>[47]</sub>).

In the majority of countries where financial education is taught as part of the curriculum, it is integrated into existing subjects. This is most often a combination of numerical subjects (mathematics, business studies, economics), and social sciences (citizenship, civics, home economics). In some countries, such as Australia and New Zealand, financial capability is included in the curriculum as a theme that schools can use for cross-curricular teaching and learning programmes, providing a context for linking learning areas and strengthening literacy and numeracy skills. In other countries, personal finance elements are combined with wider economics, business, entrepreneurship, or career development topics. Table 2 offers some examples of the subjects into which financial literacy topics are integrated.

Box 16 offers a detailed example of how financial literacy was integrated into the school curriculum in Armenia starting from a core competencies framework. A successful strategy for introducing financial education in the curriculum is taking the opportunity of a revision of the national curriculum and to add financial education topics to other subjects. This is detailed, for example, in Boxes 17 and 18 about Peru and Australia.

Even when financial education is successfully integrated into the curriculum, it may not reach all children. Some subjects that include an element of financial education may be optional, or contain very few hours of financial education; or schools may have wide discretion about what they teach, even in compulsory subjects such as mathematics.

Some countries have made financial education compulsory through a national law. There are advantages to compulsory financial education in schools. A financial education mandate is an efficient way of offering basic financial education to all students and it sends a signal to stakeholders and the general public that the topic is a high priority for the government. Explicit mandates can also have the advantage of increasing public accountability, making it easier to establish clear responsibilities, and to measure outcomes over time. There is also research evidence that delivery models incorporating a mandatory course requirement yield large and robust impacts on financial literacy, while voluntary after-school programs yield smaller effects (Frisancho, 2019<sub>[48]</sub>). However, limited resources in education systems, overloaded curricula, and limited priority given to financial literacy often explain why is may only be part of optional subjects in some countries. For instance, Belarus has optional classes 'Fundamentals of Financial Literacy' for students in grades 8-9 in secondary school.

Table 2. Examples of integration of financial education in the school curriculum

Country	Subjects in which financial education is integrated	Education levels	Whether the subject is compulsory or optional for students	
Armenia	Me and World	Grades 2-4 (primary school)	Compulsory	
	Mathematics	Grades 2-6 (primary and lower secondary school)	Compulsory	
	Algebra	Grades 7-11 (lower and upper secondary school)	Compulsory	
	Social Studies	Grades 8-11 (lower and upper secondary school)	Compulsory	
Australia	Mathematics	Foundation to Year 10	Compulsory	
	English		Compulsory	
	Science		Compulsory	
	Economics and Business	Years 5 to 8	Compulsory	
	Mathematics	Grades 4-11	Compulsory	
Dalamia	Social Studies	Grades 10-11	Compulsory	
Belarus	History	Grades 8-11	Compulsory	
	Fundamentals of Financial Literacy	Grades 8-9	Optional	
Brazil	Any subject	Primary and high school	States can choose whether to make financial education compulsory, only a minority have done so. Teaching also varies according to teachers willingness	
Canada	Integrated into many topics, including Mathematics, Career Development, Business Studies, Accounting, or Social Studies, depending on provinces.	All ages of compulsory schooling	School curricula are the responsibility of Provinces/Territories. Quebec has a mandatory course in Secondary 5 on financial education. Some subjects with a financial education element are compulsory (e.g. Mathematics, Social Studies)	
Czech	Cross curricular	Secondary School	Compulsory since 2009 in secondary	
Republic	Citizenship education	Primary School	school and 2013 in primary school.	
Estonia	Cross curricular, within Entrepreneurship framework document	All ages of compulsory schooling		
Georgia	Integrated into four subjects: Me and World, Mathematics, Algebra, Social Studies.	Grades 2-11	At pilot stage	
Japan	Social Studies	All ages of compulsory schooling		
·	Home Economics			
	Moral Education			
Kyrgyz Republic	Man and Society	Secondary School	At pilot stage	
Hong	General Studies	Primary School	General studies and mathematics are	
Kong,	Mathematics	Primary and secondary school	compulsory	
China	Life and Society, Home Economics	Lower secondary		
	Accounting, Business, Economics.	Upper secondary		
New Zealand	Cross-curricular context in Social Science, Mathematics, English, Business Studies, Health and Technology, Economics and Accounting	All ages of compulsory schooling	Optional	
Peru	Citizenship (Primary)	Ages 6-17	Compulsory in all schools through Ministry of Education Resolution 440- 2008-ED, amended in 2015 by Resolution 199-2015-MINEDU	
	Social Science (Secondary)			

Poland	Basics of Entrepreneurship	Secondary school	Compulsory as part of Basics of	
	Integrated into Civics, Mathematics, Geography, History	All ages of compulsory schooling	Entrepreneurship and other subjects (Civics, Mathematics, Geography and History) by Regulation of the Minister of National Education.	
	Some elements of knowledge about money in pre-school			
Portugal	Citizenship and Development, optionally in other subjects	Can be delivered at any stage of education	Part of 'Education for Citizenship', which has been compulsory since 2018.	
Romania	Economics and financial education	grade 8 (lower secondary education)	From the school year 2020/2021, standalone subject for 1 hour per week	
Slovak Republic	Cross-curricular	All ages of compulsory schooling	Schools must teach the National Financial Literacy Standard, it is up to individual schools how they do this.	
South	Mathematical Literacy	All ages of compulsory schooling		
Africa	Economic and Management Sciences			
Spain	Social Sciences	Primary School	Compulsory	
	Economy	Secondary School	Optional	
Sweden	Civics	Primary and secondary school	Compulsory	
	Home economics	Primary and lower secondary school	Compulsory	
	Mathematics	Upper secondary school (15-18 years)	Compulsory	
UK - England	Citizenship and Mathematics	Secondary school	Financial education has been compulsory since 2014, but many schools are not obliged to follow the National Curriculum. Financial education is used as a context for Mathematics in primary school, but not formally part of the curriculum.	
UK -	Mathematics and Numeracy	Ages 5 - 14		
Northern Ireland	Learning for Life and work	Ages 14-16		
UK -	Mathematics	Ages 3-14		
Scotland	Numeracy across learning			
UK - Wales	Mathematical development and Personal and Social Education	All ages of compulsory schooling	A new national curriculum will be rolled out in 2022, to include financial education in a new 'Mathematics and numeracy' area of learning	
USA	Integrated into various subjects, including: Economics, Social Sciences, Mathematics, Family Consumer Sciences, Career Technical Education, History, depending on states	In some schools, depending on state policy.	Financial education is compulsory in some states.	

#### Box 16. Case study: From the core competency framework to the curriculum in Armenia

In 2015, the Central Bank of Armenia and the Ministry of Education and Science developed the Financial Competency Matrix for Learners, which outlines the key financial literacy competencies across seven themes (Economy, Budget management, Saving and Planning, Debt management, Shopping around, Rights Protection, Frauds and Scams) and four aspects (knowledge, skills, attitude, behaviour) separated into different age groups. The matrix is available in Annex B.

Based on the competency framework, a working group composed of experts in education, financial education, practitioners, and psychologists developed the financial education curriculum to be integrated into four school subjects, ensuring a comprehensive coverage of financial literacy topics in primary and secondary school (grades 2 to 11, according to the national system):

- Me and the World: grades 2-4 (primary school).
- Mathematics: grades 2-6 (primary and lower secondary school).
- Algebra: grades 7-11 (lower and upper secondary school).
- Social Studies: grades 8-11 (lower and upper secondary school).

The integration of financial literacy into the four subjects followed a number of steps:

- 1. **Mapping competencies across subjects**. Based on the specific aspects of each subject, working group experts outlined where the competencies included in the Financial Competency Matrix should be integrated. Some competencies were integrated only in one subject, while others in more than one subject.
- 2. Building "pro-formas". After mapping the competencies, working group experts broke competencies into small pieces according to a template ('pro-forma') which includes: Topic, Subject, Grade; Key competency; Learning objectives: Knowledge, Skills, Attitude; Subject Content; Teaching and Learning activates; Links to the other subjects; Assessment criteria. The core of each financial education curriculum document per subject includes all pro-formas related to that subject.
- 3. **Methodological guidelines**. In 2017, after developing the financial education curriculum documents per subject, working group experts developed teacher manuals for every subject, including methodological guidelines, lesson plan examples, teaching and learning activities, exercises, etc. Considering the interdisciplinary nature of financial education, project-based and inquiry-based methods and activities are highly promoted. All the materials are approved by the Ministry of Education and Science.

#### Box 17. Case study: A multi-stakeholder approach to developing a curriculum in Peru

Under a 2006 framework agreement, the ministry of education and the Superintendence of Banking, Insurance and Private Pension Funds (SBS) established a pilot financial education programme aimed at training teachers. In 2008, the ministry of education included financial education in secondary education when the curriculum was revised. In

2008, the ministry of education recognised the importance of financial education for youth and incorporated it into the National Curriculum for high schools at the occasion of a revision of the curriculum.

In 2012, the ministry of education started working on a competence-based curriculum for basic education. Every competence was broken down into a set of capacities that help teachers to understand the different angles of the learning outcome.

Between 2013 and 2014, the ministry invited the SBS, the National System of Evaluation, the Accreditation and Certification of Educational Quality (SINEACE) and other financial education experts to participate in a working group in order to develop the financial education learning framework. The working group reviewed other countries' curricula, national experiences on financial education and harnessed the pedagogical and technical expertise of its members.

As a result of the activity of the working group and recognition of the importance of financial education, an update of the national curricula was approved in March 2015. This incorporates the financial education competence: "He/she acts responsibly with regard to economic resources". This is divided in three more specific abilities:

- 1. understands the relationship between elements of economic and financial systems;
- 2. becomes aware that he/she is part of the economic system; and
- 3. manages resources with responsibility.

The update also included a set of indicators of achievement for each level for the students, in order to allow teachers to have a clear picture about their progression and to understand whether students meet the expectations for a particular level.

### Box 18. Case study: Developing and supporting financial education as a cross curricular theme in Australia

The teaching of financial education in Australian schools was guided by a nationally endorsed learning framework, the National Consumer and Financial Literacy Framework, which informed the introduction of financial education into some subjects (MCEECDYA, 2011<sub>[49]</sub>).

'Consumer and financial capability' is now a cross cutting theme of the Australian curriculum. The Australian Curriculum, Assessment and Reporting Authority (ACARA) leads the development of the National Curriculum in Australia. In partnership with educators, ACARA determines the shape of the curriculum, looking at the learning needs of young Australians, research, learning needs for the 21st century and leading national and international curricula. It then develops, and consults on, the detailed curriculum, in collaboration with experts and advisers. The curriculum is tested in schools before approval by Education Ministers and the ACARA Board.

Consumer and financial capability is included explicitly in the learning areas of mathematics, humanities and social sciences, and the general capability of numeracy from Foundation to Year 10. ACARA's 'Curriculum Connections' website identifies content across the Australian Curriculum that supports the development of financial literacy

(among other skills) in young people (https://www.australiancurriculum.edu.au/resources/curriculum-connections/). It guides teachers in identifying content and connects them to a range of interdisciplinary resources that have been developed by the Australian Securities and Investments Commission (ASIC) MoneySmart Teaching. These resources directly support the teaching and learning of consumer and financial literacy.

States and territories began a phased approach to implementing the Australian curriculum in 2012. Although financial education is part of the national curriculum, Australian states and territories manage schools and determine the curriculum within their own jurisdictions based on the national curriculum.

In Australian classrooms around the country, teachers are continually considering content and approaches that engage their students and ASIC continues to explore opportunities to work collaboratively to strengthen sustainable financial education programmes in schools.

## Box 19. Spillovers: When financial literacy increases performance in and engagement with mathematics

Many students find mathematics a difficult subject, or that it lacks 'real world' relevance for them. There is increasing evidence to show that using financial topics as a context for learning can increase engagement with mathematics and even improve attainment. This can be a powerful argument for including financial education in the curriculum.

In an experiment in Australia, researchers introduced financial literacy as a context for learning mathematics in four primary schools in low socio-economic areas. Teachers devised real life exercises and games, within the context of the national curriculum for mathematics. The research found that children taught financial literacy understood and applied mathematical concepts better, were more enthusiastic about mathematics, and expanded their knowledge and understanding of financial issues. There were also benefits in terms of general capabilities, such as collaborative working (Attard,  $2016_{[50]}$ ).

Similarly, a pilot project in the UK aimed to improve mathematical attainment by training teachers to deliver mathematics within a financial context. Findings showed that students improved their mathematical attainment by around 20% when answering public examination questions that used a financial context, significantly more than a control group. Teachers and students reported that being able to understand the financial context made it easier for them to focus on the mathematics. Teachers valued the effectiveness of this method and subsequently incorporated it into their school's mathematics curriculum (Winnard, 2015<sub>[51]</sub>).

More generally, other recent research indicates that financial education in school can have significant externalities, such as positive effects on the cumulative grade point average (GPA) of students (Frisancho, 2018<sub>[52]</sub>).

#### **Designing effective programmes**

#### **Key lessons learnt**

The effectiveness of financial education for children and young people depends not only on the content and topics, but also on when it is offered and how it is designed. The international experience suggests that it is important to:

- Start financial education early and to design it in ways that take into account age and the cognitive, social and psychological development of children and young people.
- Design programmes that are sufficiently long and follow a structural approach, rather than very short one-off programmes.
- Create programmes that offer opportunities to learn by doing, are relevant to young people's lives, allow participants to experience the impact of their decisions, and take into account young people's biases, attitudes and habits, as they have greater chances to support positive financial behaviour.

The effectiveness of financial education for children and young people – whether taking place in school or out of school – rests not only on the specific content and topics, but also on many other factors related to the design of interventions. This section summarises some lessons from literature and practice about when (at what age) financial education interventions should be provided, how long they should last, and how to design programmes in ways that sustain behaviour change.

#### Financial education at different ages

Children and young people represent an age group at which individuals undergo rapid biological, cognitive and psychological evolution. As a result, the design of financial education interventions for this group needs to take these factors into account.

First, it is important to start financial education early. The 2005 OECD's Principles and Good Practices for Financial Education and Awareness recommend that "financial education should start at school. People should be educated about financial matters as early as possible in their lives." (OECD, 2005<sub>[2]</sub>). Research highlights that children's money habits are formed as early as age 7 (Whitebread and Bingham, 2013<sub>[53]</sub>) and, as discussed in Chapter 2, young people are starting to access money and financial products from an early age. Providing well-designed financial education before adolescence can equip children and young people with basic notions an skills before they face with substantive financial decisions and risks. Preventative interventions can be more efficient than correcting misconceptions and bad habits later on (Heuberger, Kasman and Hammond, 2018<sub>[54]</sub>; Money Advice Service, 2018<sub>[55]</sub>). Starting financial education in primary school or earlier also offers the opportunity to expose young people to financial education for a longer period of time and to allow continuity with the initiatives – typically more frequent – that are organised during secondary school.

Second it is important that financial education is age appropriate and in line with the cognitive, social and psychological development of children and young people (MoneyWise and Nibud, n.d.<sub>[56]</sub>). The US Consumer Financial Protection Bureau (CFPB) designed a developmental model of acquiring financial literacy, to determine what approaches might be most effective for children at different ages (CFPB, 2016<sub>[57]</sub>). This

model takes account of how, and at what age, children and young people develop different aspects related to their financial skills, with clear implications for financial education design. In particular:

- During early childhood, children start to develop their executive function, meaning a set of cognitive processes used to make plans, defer gratification, focus attention, remember information, and juggle multiple tasks. These cognitive abilities support impulse control and future-oriented skills, which in turn provide a foundation for performing adult financial tasks such as setting financial goals, saving, and managing a budget.
- In middle childhood (ages 6-12), children typically acquire values, attitudes, standards, beliefs, habits and social norms about money that will influence a majority of their financial behaviours as adults. During this stage, children continue to develop executive function and related skills, such as impulse control and self-regulation.
- Financial knowledge and decision-making skills begin to be developed mostly during adolescence and young adulthood (ages 13-21). As youth start making consequential financial decisions, learning about personal financial management becomes personally relevant for the first time. Cognitive faculties, such as information processing and memory, continue to strengthen, enabling teens and young adults to practice financial research and decision-making skills.

#### Programme duration

A practical question that several stakeholders face when designing a new intervention is its duration.

A review of the MoneyWise (Wijzer in geldzaken) platform in the Netherlands and the National Institute for Family Finance Information (Nibud) includes some principles for financial education initiatives aimed at children and young people (MoneyWise and Nibud,  $n.d._{[56]}$ ). In particular, it highlights the importance of adopting a structural approach in the design of financial education programmes. It stresses that one-off or short interventions are not enough and that it is not realistic to expect that three hours of financial education will have a significant impact on behaviour.

This is confirmed by a meta-analysis of 37 experimental or quasi-experimental studies on the impact of financial education programmes in schools (Kaiser and Menkhoff, 2018<sub>[58]</sub>). The study finds that the impact of financial education on financial knowledge is positively correlated with its intensity but only up to a point, reflecting declining marginal returns to education. On average, 5 hours of training create a modest effect on financial knowledge (about 15% of a standard deviation), interventions of about 20-40 hours tend to have higher impact (about 20-25% of a standard deviation), while beyond 80 hours of teaching interventions do not bring additional value.

#### Design interventions that aim at affecting behaviour

Research on the effectiveness of financial education shows that several interventions are successful in improving financial knowledge but that it is relatively more difficult to bring about behaviour change (Amagir et al.,  $2018_{[59]}$ ; Kaiser and Menkhoff,  $2018_{[58]}$ ). Supporting savvy and responsible financial behaviour is one of the most important objectives of financial education, and an improvement in knowledge alone will be rather inconsequential if not acted upon. As a result, policy makers and researchers are devoting

significant efforts to understand how to support good financial behaviour, especially from a young age.

Several reviews highlight that "experiential learning" is key in fostering financial skills and behaviour (MoneyWise and Nibud, n.d.<sub>[56]</sub>; Money Advice Service, 2018<sub>[55]</sub>; Heuberger, Kasman and Hammond, 2018<sub>[54]</sub>). The 2014 OECD report on Financial Education for Youth examined several financial education learning frameworks and noted some common lessons learnt in terms of effective design and pedagogy (OECD, 2014<sub>[6]</sub>). These included the opportunity to engage with "real-world" financial contexts; inquiry-based learning; critical engagement and discussion; problem-solving approaches involving student research and projects; cross-curricular approaches; and activity-based approaches, including use of role-play and simulation.

More recently, a meta-analysis study of 36 interventions aimed at improving financial literacy among children and adolescents highlights that in elementary schools the focus should be on "hands-on pedagogy" and "learning by doing." In secondary school, a key characteristic is "relevance of the topic" by adding real-world experiences to the lessons, and take into account the students' perceptions of future goals. In both primary and secondary school, a key characteristic of effective financial education programmes seems to be that students experience the impact of their decisions by actively participating in the learning process. Financial education should not only be concerned with acquiring new skills, but also with knowing how to apply these skills, and, based on this, help students to gain experiences that makes them stronger (Amagir et al., 2018<sub>[59]</sub>).

Encouraging positive financial behaviour also needs to take account of ingrained habits and beliefs. Various behavioural biases can create hurdles to positive financial behaviours, including preferring short-term rewards over long-term objectives, being strongly influenced by how other people feel and behave, having unrealistic expectations, or having poor habits about maintaining budgets, managing debt and saving regularly (Spencer et al., 2015<sub>[60]</sub>).

Although most of these barriers refer to adults, also children and young people are subject to behavioural biases, notably the lack of self-control, the desire for instant gratification and the tendency to conform to social norms. Changing behaviour requires acknowledging and overcoming these hurdles.

There is a body of research that looks at the use of behavioural insights to design financial education programmes for adults (IOSCO and OECD,  $2018_{[61]}$ ). The Mindspace framework, developed by the UK Behavioural Insights Team (Dolan et al.,  $2010_{[62]}$ ), has some elements that may be helpful for thinking about interventions for children and young people:

- Messenger: Children and young people are more likely to take notice of a messenger they respect and trust. This could be a figure of authority, like a parent or teacher. For older children, messages from their peer group, or public figures they admire, may be more effective.
- Norms: Children don't like to feel excluded or different. They are more likely to change behaviour if they believe others in their peer group are doing so as well.
- Salience: Children need to see that what they are learning is relevant to their daily lives, either now, or in the near future.
- Affect: Interventions that appeal on an emotional level can be effective.

• Commitments: Making a commitment public – for example, a child telling the whole class that she is going to save every week, can help her stick to the plan and address self-control issues.

Most behaviourally-informed financial education interventions are designed for adults, but also some programmes for children and young people are inspired by behavioural insights (see Box 20). Moreover, research shows that financial education can improve certain behavioural biases and attitudes among young people (Box 21).

## Box 20. Case study: Using behavioural insights in developing financial education for children and young people

When developing the financial education curriculum, the National Bank of **Georgia** and ministry of education took inspiration from different behavioural frameworks, such as Mindspace and EAST. The curriculum covers topics that are relevant and close to students' lives, including how financial decision-making is influenced by advertisements, peers, family and society, and financial safety online. It provides easy, ready-to-use budget templates to schoolchildren and focuses on activities to build practical skills and induce behavioural changes.

In **Peru**, the Superintendence of Banking, Insurance and Private Pension Funds (SBS) applied the EAST framework to 'Finanzas en el Cole', a programme for secondary school students in Peru. The programme used clear language and simple concepts ('Easy'), edutainment such as comics and videos ('Attractive'), involved the community around the school to suggest income generating activities for the students ('Social'), and was 'Timely' as it prepared students for life after school at a 'teachable moment'. The programme reported an increase in students' knowledge about the financial system, and an improvement in management of resources (IOSCO and OECD, 2018<sub>[61]</sub>).

Young people are heavily influenced by their peers, and peer learning can be an effective tool. The programme 'I Can Manage My Money' implemented by Junior Achievement in **Turkey** uses a peer-based model to educate young people on how to budget and make wise choices regarding their finances. Young people from a similar age group, background, culture and/or social status educate each other about financial literacy (Junior Achievement Europe, 2016<sub>[63]</sub>).

#### Box 21. The impact of financial education on young people's attitudes

Self-control

A large-scale randomized controlled trial was implemented in 300 public schools in Peru to measure the effects of "Finanzas en mi Colegio" on students in the last three grades of high school (ages 14-16). Beyond financial knowledge gains, the programme increased the level of self-control among treated students with respect to a control group (Frisancho, 2018<sub>[52]</sub>).

Patience

A financial education programme implemented in state elementary schools in Istanbul, Turkey was designed to improve students' ability to imagine themselves in the future and encourage forward-looking behaviour. To give an example, one of the case studies used in the programme, titled "Zeynep's Time Machine," tells the story of Zeynep, a girl who wants a bike for which she has to save but is also faced with alluring short-term consumption possibilities. The time machine allows Zeynep to travel to two alternative future scenarios (having saved for the bike or not) and observe the consequences of her decisions. Students discuss how Zeynep would feel in each scenario and are asked to imagine themselves in similar situations. Case studies are complemented by class activities and games. A randomized controlled trial of this programme found that treated students made more patient choices in hypothetical tasks and that higher patience persisted up to almost 3 years following the intervention (Alan and Ertac, 2018<sub>[64]</sub>).

The Spanish Central Bank and Security Exchange Commission (CNMV) launched in the academic year 2012-2013 the programme "Finance for All" (Finanzas para Todos) for secondary school students. A randomised controlled trial among 3,000 9th grade students showed that the programme not only increased financial knowledge but also increased students' patience, measured by hypothetical consumption choices between consumption today and in three or six weeks time (Bover, Hospido and Villanueva, 2018<sub>[65]</sub>).

In the UK, the not-for-profit MyBnk runs a programme for children in school ('Money Twist') aiming to change behaviour by building capacity to defer gratification, discussing knowledge about money habits and improving the understanding of the concepts of 'future', 'plans' and 'consequences'. Sessions include videos, games, quizzes, working in pairs, and role play, covering topics such as the value of money, choices, mind-sets and prioritisation. An evaluation of the programme for 7-11 year olds found that, after the lessons, students were more likely to work towards a savings goal and delay gratification (Substance,  $2018_{166}$ ).

Another financial education programme implemented among primary school students in collaboration with the Museum of Saving (Museo del Risparmio) in Turin, Italy succeed in decreasing children's level of impatience, but only among boys (Migheli and Coda Moscarola, 2017<sub>[67]</sub>).

Consistency of intertemporal preferences

A financial education programme implemented by the German non-profit organisation My Finance Coach offered financial education to high school students, ages 13-15. An experimental study of its effectiveness showed that students who participated in the programme made more time-consistent choices and were more likely to behave as assumed in standard models of intertemporal choice (Lührmann, Serra-Garcia and Winter, 2018<sub>[68]</sub>).

## Chapter 6. Delivering financial education in and outside of school

Even with well-designed curricula and programmes, there are still many challenges related to the implementation and delivery of financial education. While the school curriculum defines the intended objectives of the education system in the content covered and time allocated to each subject, what matters for students' learning is what is actually delivered to them, and how. Teachers may not have sufficient financial knowledge and skills for their own use and for teaching it to students, or may not feel confident to do so. Teachers and other trainers may not have sufficient quality materials and tools to support teaching. Digital technologies offer opportunities for exploiting new delivery channels but also present some challenges, and evidence about their effectiveness is still scarce.

## **Training teachers and trainers**

#### **Key lessons learnt**

Training trainers and teachers is a key component of a successful financial education programme. It is important that:

- Teachers and trainers are financially literate themselves, and feel confident managing their own finances.
- Training is designed to make teachers and trainers confident, and well-prepared to teach financial literacy.
- Teacher training programmes are designed through a collaboration between financial literacy leaders and education authorities, involving teachers themselves, and they are accredited by education authorities.

Teacher training is a key component of a successful financial education programme. While support for financial education in schools may be secured at the governmental level, this will have little impact on student learning unless teachers and other trainers are actively encouraged and supported to incorporate financial education into their teaching programmes and have the necessary skills, knowledge and understanding to do so.

Even when financial literacy elements are integrated into the school curriculum, education authorities at the local level, schools and/or teachers may have autonomy in the extent to which they will implement the curriculum and modalities they choose. Teachers may not cover the elements of financial education included in the curriculum if they do not feel sufficiently confident, engaged or prepared to teach the new content, or if little teaching material and professional development is available. School principals and teachers may see financial literacy as a relatively low priority, particularly if it is not part of the assessment of students for formal examinations.

Financial education is a relatively new topic in school, meaning that teachers of existing subjects need to learn how to incorporate it into their subject area and that they may see it as an additional burden. They became a teacher because they wanted to teach mathematics, or economics, or geography, not necessarily financial education.

Teachers may themselves have low financial literacy. Many are relatively low paid members of society and may even have money problems. This will increase their reluctance

to teach a subject that they do not feel confident about in their daily lives. It is therefore important to give teachers adequate support with their own financial education. For example, Australia's MoneySmart website has a section dedicated to financial health for teachers<sup>4</sup> (see also Box 23).

Financial education teaching programmes have often been initiated by financial authorities, often as part of the national strategy for financial education. As financial education is introduced into formal education, ministries of education and affiliated agencies often assume a leading role in providing teachers' training as part of initial teachers' formation, or later as part of their professional development. For instance, in the Kyrgyz Republic, the Republican Institute of Advanced Training started training financial literacy teachers in 2017 through an 18-hour module. In some countries, financial and educational authorities collaborate to develop the content of teachers' training and/or to train teachers. For instance, in Japan, some university education departments invite lecturers from the Central Council for Financial Services Information (CCSFI), the Financial Services Agency (FSA), or Bank of Japan to deliver financial education to student teachers.

Some other countries have made available – often as part of the national strategy for financial education – online learning material and platforms for teachers. For instance, public authorities in Brazil developed a virtual platform with a distance-learning course and video lessons for schoolteachers. The platform includes a 40-hour course, activities to integrate financial education materials into school classes, and a forum to allow participants to exchange knowledge and reflections. In Spain, the National Institute of Educational Technologies and Teacher Training developed with the financial supervisors several Nano Open Online Courses (NOOCs) on topics such as the importance of financial education, saving, the use of credit and debit cards, e-commerce and the psychology of personal finance. These courses are especially aimed at teachers, but they are open to anyone interested.

Some countries have found innovative ways of reaching and engaging teachers. The Central Bank of Austria (OeNB) set up a contact point with universities to engage trainee teachers at an early stage. The financial literacy unit of the OeNB cooperates with the main Austrian universities that train prospective teachers on economic subjects. During one semester, OeNB experts work with students in dedicated courses about the management of personal finances and on how to teach financial literacy matters to young people. The OeNB also offers financial education courses for senior teachers in cooperation with the University College of Teacher Education. In Australia, ASIC has formed local partnerships to engage with teachers and school principals. It also consults teachers on what motivates them to access the MoneySmart Teaching website. In Japan, the CCSFI runs a competition for teachers and schoolchildren, where the winning teachers become trainers for other teachers. In England, the not-for-profit organisation Young Money developed the Centres of Excellence programme, to support and reward schools that commit to excellent leadership and teaching of financial education (Box 24). Involving trainee teachers in the design and development of classroom tasks can also be a way to understand teachers' professional learning needs and interests, and to help them to feel more confident about teaching financial literacy (Sawatzki and Sullivan, 2017<sub>[69]</sub>).

<sup>&</sup>lt;sup>4</sup> https://www.moneysmart.gov.au/teaching/financial-health-for-teachers;

The platform is available at http://www.vidaedinheiro.gov.br/moodle/

The case studies in Boxes 22 to 24 illustrate the approaches taken by Portugal, Australia and England to train teachers in financial literacy.

## Box 22. Case study: Teachers' training in Portugal

The ministry of education and the financial supervisors in Portugal have implemented a teachers' training programme on financial education since 2014. Training courses are organised regularly and they are conducted by experts from the financial supervisors and the ministry of education. Training courses take place at the premises of the financial supervisors or in schools.

The programme is accredited for the professional training of teachers, meaning that attending and getting approval in these courses counts for teachers' career development. As a rule, these courses include 25 hours of classroom training sessions, after which teachers have to prepare a report about their delivery of financial education in school. Teachers' evaluation and approval in these courses depend on their participation in the training sessions and on the assessment of their report.

Teachers from all stages of education and from all subject matters can participate in these training courses. Training content focuses on the Core Competencies on Financial Education defined for students of all ages, from kindergarten to the end of secondary education. Topics include needs and wants, budgeting, the importance of saving, the financial system and basic financial products, saving products, credit, ethics, and the rights and responsibilities of financial consumers.

So far, the financial education teachers' training programme has engaged teachers from all around the country. However, enlarging the number of trained teachers is still a challenge and since 2018, the ministry of education and the financial supervisors began organising courses specifically targeted at teachers from vocational training centres, who possibly will deliver themselves financial education courses to other teachers.

The training of teachers is critical to empower them to deliver financial education, to motivate them for the topic and to ensure the accuracy of the messages. However, it is also important to complement this training with the development of financial education materials to support teachers in the classroom.

#### Box 23. Case study: Continuous Professional Development in Australia

The Australian Securities and Investments Commission (ASIC) developed a programme for financial education in schools called MoneySmart Teaching (<a href="https://www.moneysmart.gov.au/teaching">https://www.moneysmart.gov.au/teaching</a>). This provides free professional development for teachers and ready-to-use classroom resources that are aligned to the Australian curriculum.

Professional development is accredited and aligned to the Australian Professional Standards for Teachers. The courses, all accessed online through a social learning platform called Open Learning, and is designed to build teachers' personal financial literacy as well as support them to integrate consumer and financial literacy education into their teaching. The social learning platform allows teachers to share how they are teaching financial literacy in their schools and classes.

The section on 'financial health for teachers' has a series of videos to help teachers increase their knowledge and confidence about personal finance. These cover life events, for example, getting a first job, having a baby, preparing for retirement, as well as personal finance topics, such as dealing with debt and starting to invest.

#### Box 24. Case Study: Centres of Excellence in England

In England, schools can apply to become Centres of Excellence for financial education, through a programme developed by the not-for-profit organisation YoungMoney (https://www.young-enterprise.org.uk/teachers-hub/financial-education/financial-education-programmes/centres-of-excellence/). These schools receive a package of support, including the services of a specialist education consultant, teacher training and development, and financial support to buy classroom resources. The schools work with local businesses who are willing to help students see the real world application of their learning. Successful schools must demonstrate to have a clear vision for financial education, to teach it through high quality approaches and to have programmes for teachers' professional development and students' assessment.

## **Developing teaching and learning resources**

## Key lessons learnt

It is important that financial education teaching resources are:

- Aligned to the national curriculum and/or core competencies for financial literacy.
- Compliant with national guidelines for the involvement of the private or not-forprofit sectors in financial education, if any.
- Linked to other subjects and/or easy to integrate in existing subjects.
- Easy for teachers to use and incorporate into their teaching plan.
- Accurate, up-to-date, engaging, appropriate to students' age, and relevant to their lives immediately or in the near future.

Together with training, the access of teachers to quality and effective resources is critical in order to teach financial education in school with confidence. The availability and easy access to objective and effective quality tools is essential to ensure teachers are provided with the best resources on financial education.

In many countries, ministries of education, financial authorities and other stakeholders coordinate to develop classroom teaching materials, including textbooks, lesson plans and digital resources. In most cases, financial education material has to be approved by the ministry of education to be used in formal education. National strategies for financial

education usually improve the coordination, quality, and fairness of the available resources, avoiding to the extent possible conflicts of interest and biased messages.

Table 3 provides some examples of financial education resources to support classroom teaching.

It is vital that classroom resources are based on core competencies on financial literacy highlighted in national or international frameworks, in order to ensure an adequate coverage of the most important topics in the country, and that they are linked to the national curriculum, because most teachers will be unwilling to teach topics that are not part of or related to official school programmes.

When financial literacy topics are integrated into the curriculum of other subjects, the availability of 'ready to use' teaching resources that can be easily integrated into lessons about mathematics, social sciences, or other subjects will increase the chances that teachers will use them.

A review undertaken by the MoneyWise platform in the Netherlands and Nibud recommends to involve education professionals when compiling course material to be used at schools and make use of teaching methods that have been proven to be effective and enabling (MoneyWise and Nibud, n.d.<sub>[56]</sub>).

Table 3. Examples of resources to support teaching in school

Country	Type of resources	Further information
Armenia	Financial Education Encyclopaedia	New editions of subject textbooks will include financial education topics. Electronic materials are available through the Central Bank of Armenia portal <a href="www.abcfinance.am">www.abcfinance.am</a> (in Armenian)
Australia	Resources to support classroom teaching	https://www.moneysmart.gov.au/teaching Also: https://www.australiancurriculum.edu.au/resources/curriculum-connections/portfolios/consumer-and-financial-literacy/
Belarus	Resources, including videos and articles	http://fingramota.by
Belgium	Resources to support classroom teaching	https://www.wikifin.be/fr/enseignants (in French)
Brazil	Textbooks, teachers manuals, implementation guidelines	http://www.vidaedinheiro.gov.br/
Canada	Financial literacy topics are integrated into subject textbooks	Learning resources – e.g. lesson plans – are available through teacher associations. Resources for parents and teachers are also available at <a href="https://talkwithourkidsaboutmoney.com">https://talkwithourkidsaboutmoney.com</a>
New Zealand	Teaching and learning plans, resources for assessment	https://sortedinschools.org.nz/
Peru	Financial education textbooks	http://www.sbs.gob.pe/educacion-financiera (in Spanish)
Portugal	Workbooks for three stages of basic education. Workbooks for secondary school are in preparation.	https://www.todoscontam.pt/sites/default/files/SiteCollectionDocuments/CadernoEducaoFinanceira1_EN.pdf; https://www.todoscontam.pt/sites/default/files/2019-05/cadernoeducaofinanceira2_en.pdf; https://www.todoscontam.pt/sites/default/files/2019-05/cadernoeducacaofinanceira3_en.pdf (in English)
Spain	Resources to support classroom teaching	http://www.finanzasparatodos.es/gepeese/es/materialesDidacticos/ (in Spanish)
Russia	Resources for students, teachers and parents	https://fmc.hse.ru/methodology (in Russian)
United Kingdom	Resources, including lesson plans	https://www.young-enterprise.org.uk/teachers-hub/resources/
United States	Resources, including lesson plans	https://www.mymoney.gov/Pages/for-teachers.aspx and https://www.econedlink.org

### Delivering extracurricular and out-of-school activities

#### **Key lessons learnt**

- Digital financial education resources have the advantage of being easily accessible, flexible and engaging, but some of them may provide limited opportunities for deep interaction.
- Visual media seems to be an effective way of delivering financial education to young people. The limited evidence available suggests that videos may be as effective as face-to-face training, and more effective than printed media.
- Interactive delivery channels like serious games, simulations, financial literacy camps, interactive museums, competitions, and unbiased savings clubs and bank-in-school programmes are best placed to offer engaging learning experiences.

At the same time as financial literacy is increasingly being integrated in the school curriculum, much of the financial education delivered to children and young people takes place in other forms. Extracurricular programmes (such as guest lectures and seminars from staff of public authorities, not-for-profit organisations, or representatives of the financial sector) and out-of-school programmes (such as events part of a "money week" or "savings day", games, visits to money museums or exhibitions, financial literacy camps, and so on) are very widespread. These channels offer the opportunity to reach a large number of children and young people, including potentially those who are not in school, and to develop content that is tailored and engaging for them. However, challenges may arise in relation to developing good quality materials and tools, and choosing the most effective delivery methods for specific groups of young people. Moreover, evidence about the effectiveness of relatively new tools, like financial education games and apps, is still limited.

## Digital vs. traditional delivery channels

While face-to-face interaction and printed books, booklets and brochures remain important and are still widely used, digital technologies are increasingly being used to deliver financial education (OECD, 2017<sub>[15]</sub>). The G20/OECD INFE Policy Guidance on Digitalisation and Financial Literacy encourage policy makers to support the design and use of digital tools to deliver financial education (OECD, 2018<sub>[70]</sub>). It is important to note that digital delivery channels include a wide variety of tools, not all of which are necessarily new (web portals and videos have been used for several years). On the contrary, online video games, mobile apps and other mobile resources, have started to become more widely used only recently.

Financial education online and mobile resources have the advantage of offering easy access and flexibility, as they can be accessed at any time and at user convenience. As young people are great users of online and digital media in general, they are expected to be particularly appealing to young audiences. From the point of view of the provider, online and mobile resources can be delivered to large audiences, with relatively low costs per user, and lend themselves easily to monitoring statistics about their use.

It is also easier to deliver behaviourally informed interventions through digital means. Websites, mobile applications or other digital gadgets can incorporate features that limit the negative impact of behavioural biases on financial decision-making. They can, for

instance, nudge consumers into specific action (e.g. through automated reminders to save or pay back a loan) and enhance opportunities for financial behaviour changes (e.g. through virtual price/product/offer comparison and just-in time reminders at the point of sale or immediately after) (OECD, 2019<sub>[71]</sub>).

However, there are also challenges associated with digital resources. Even if the cost of giving access to an additional user is virtually zero, the cost of producing resources and regularly updating content can be significant, especially in the case of videos or online games. Even if most young people have access to digital media, some specific groups may face limitations, including low levels of digital and financial literacy, and a lack of access to hardware and the internet.

Digital tools can be great complements of face-to-face interaction, but may not be able to completely substitute it. E-learning platforms often have functions that allow users to have some interaction with the trainer and other participants (comments, discussion fora, etc.), but many other digital tools, like videos or games, offer limited interaction and limited possibilities for clarification if some messages are not well understood.

#### Video

Financial education content is increasingly being delivered through visual tools, including in the form of short videos – to be used alone or as a complement of face-to-face training – or as longer video courses usually available online (e-learning platforms).

This can also include financial education messages on TV. For instance, in the Kyrgyz Republic a television company launched a children's project on financial literacy called "Living Smartly", which hosts 12-year-olds. In each issue of the program, children are told how to plan their budget to achieve their dreams, savings in a bank, payment cards, loans, coins, etc.

The effect of using visual media on learning are well documented in the literature. Film media can be used to enhance awareness and interest in a topic, it can generate cognitive and affective experiences, and emotion-related signals can assist cognitive processes (Angel, 2018<sub>[72]</sub>).

Evidence about the effectiveness of videos to teach financial education, per se and in comparison with other delivery channels, is still quite limited.

Visual media seems to be an effective way of delivering financial education to young people. For instance, the evaluation of a personal finance programme on DVD for high school students in the US (Financing Your Future) and the evaluation of a short online financial literacy course for university students in Italy showed positive effects on various measures of financial knowledge (Brugiavini et al.,  $2018_{[73]}$ ; Walstad, Rebeck and Macdonald,  $2010_{[74]}$ ).

When comparing video courses to other media, the limited evidence available suggests that videos may be as effective as face-to-face training, and more effective than printed media like brochures. In any case, available results should be taken with caution, as it is difficult to compare different delivery channels without changing the content or other potentially relevant factors. A recent literature review on economics education of US college undergraduates shows that overall there appear to be no learning differences when online technology is used to replace face-to-face teaching (Allgood, Walstad and Siegfried,  $2015_{[75]}$ ). A randomised study in the US evaluated the effectiveness of four different educational tools delivered online: an informational brochure, an interactive visual tool, a

written narrative, and a video narrative. Videos appeared to be the most effective at improving financial literacy scores and increasing levels of confidence in financial knowledge, and in particular they were more effective than the written narrative (Lusardi et al., 2017<sub>[76]</sub>). Another randomised study tested the effect of three different media tools on financial literacy, attitudes towards debt and self-reported financial behaviour among adolescents in Vienna, Austria. The study did not find an effect of the screening of a documentary movie on over-indebtedness in Austria on financial knowledge and interest in financial topics (Angel, 2018<sub>[72]</sub>).

## Interactive delivery channels

As highlighted in reviews about the characteristics and effectiveness of financial education programmes for young people, experiential learning and interactive learning experience appeared to be crucial elements in ensuring a positive impact of interventions (Amagir et al., 2018<sub>[59]</sub>; Totenhagen et al., 2015<sub>[77]</sub>; Drever et al., 2015<sub>[78]</sub>).

Experiential and interactive learning may include several delivery channels, such as various types of serious games (video games, board games, role plays, etc.), simulations (like the stock market game), financial literacy camps, interactive museums, olympiads and other competitions, and other programmes offering hands-on experience in using money and basic financial products, like savings clubs and bank-in-school programmes.

Table 4 provides a non-exhaustive list of examples of interactive and hands-on financial education programmes. Boxes 25 and 26 provide further examples about financial literacy camps in Armenia and an interactive financial education lab in Belgium.

The rest of the section discusses examples of experiential learning based on evaluated programmes.

Table 4. Examples of interactive financial education programmes

Country	Туре	Developed by	Description
Armenia, Georgia and Kyrgyz Republic	Board game	Savings Bank Foundation for International Cooperation (SBFIC)	Interactive board simulation game where students form teams and compete with each other in managing a family's budget in order to reach the highest quality of life score
Australia	Competition	Queensland Government	The Buy Smart Competition invites students in primary and secondary education to make a creative project that i) identify an important issue related to shopping or money, ii) explain the issue to a target audience of choice, and iii) give your audience some hints and tips that can help them with this issue <a href="https://www.qld.gov.au/law/laws-regulated-industries-and-accountability/queensland-laws-and-regulations/fair-trading-services-programs-and-resources/buy-smart-competition/">https://www.qld.gov.au/law/laws-regulated-industries-and-accountability/queensland-laws-and-regulations/fair-trading-services-programs-and-resources/buy-smart-competition/</a>
Belarus	Competition	National bank of Belarus	Financial Literacy Olympiads http://fingramota.by/files/2018/9/2/636714926649520239.pdf
Georgia	Competition	National Bank of Georgia and Savings Bank Foundation for International Cooperation (SBFIC)	Financial Literacy Olympiads: integrated financial literacy topics in Mathematics Olympiads
Russia	Various	Questigra company	Various financial role-play games <a href="http://questigra.ru/fingames">http://questigra.ru/fingames</a>
Russia	Competition	Ministry of Education	Financial Literacy Olympiads <a href="https://fmc.hse.ru/olympiads">https://fmc.hse.ru/olympiads</a>
Spain	Various	Financial supervisors	Collection of games on various financial topics <a href="http://www.finanzasparatodos.es/gepeese/es/ludoteca/">http://www.finanzasparatodos.es/gepeese/es/ludoteca/</a>

Several programmes combine financial education training for children and young people with access to basic financial services or participation in savings clubs or school banks. As long as these activities are unbiased and free from commercial messages, they may enhance student learning by providing young people opportunities to apply what they learn in financial literacy programmes, thereby increasing the relevance of the material and improving student engagement. Various studies evaluating the impact of such programmes in the US found that they had positive impact on children and young people's financial literacy (Sherraden et al., 2011<sub>[79]</sub>; Wiedrich et al., 2014<sub>[80]</sub>; FDIC, 2017<sub>[81]</sub>). A similar programme, SchoolBank, was developed in Georgia by the National Bank of Georgia and Child and Youth Finance International, combining a financial education module and prepaid cards for participating students. An evaluation of the programme found an overall improvement of financial literacy among participating students, even though this was mostly driven by an increase of financial knowledge and attitudes, while the effect on financial behaviour was limited (Barbakadze, 2018<sub>[82]</sub>).

Other programmes offer opportunities to simulate broader financial decisions related to saving and spending. The "My Classroom Economy" replicates a simplified economic system and can be implemented in primary or secondary education in the US. Students apply for classroom jobs and practice budgeting and saving through several core activities including: (1) earning salaries (in the form of classroom currency) for performing assigned tasks; (2) managing expenses, including paying rent for or purchasing their desks; (3) earning bonuses or incurring fines for particular behaviours; and (4) making spending decisions at classroom auctions and stores. A randomised evaluation of the programme in elementary schools in Florida, US finds statistically significant improvements in students' financial knowledge and behaviours, including the frequency with which students engage in budgeting, as well as student reports of discussing financial management outside of school (Batty et al., 2017<sub>[83]</sub>).

The Stock Market Game is an another example of a simulation, focused on financial investments. Teams of students are invited to manage real-time virtual online investments. Students use research and programme-provided news updates to invest a hypothetical \$100,000 in a portfolio and compete with other teams to increase the value of their portfolio. Two studies evaluated the impact of the Stock Market Game among primary and secondary school students in the US, finding that it had a positive impact on both financial knowledge and mathematics test scores (Harter and Harter, 2010<sub>[84]</sub>; Hinojosa et al., 2010<sub>[85]</sub>).

Serious games and edutainment are another way – if carefully designed – to support the development of higher-order cognitive skills, intrinsic motivation and positive attitudes. Learning through games reinforces experience and improves abilities through failure and feedback. A German study looked at the integration of digital games into financial literacy lessons. The game focused on introducing elements of costs and benefits, scarcity of resources, risk and reward, debt and saving, and strategic thinking into a setting where heroes have to accomplish certain missions. Pre-post small groups comparisons showed that the game was successful in improving outcomes in similar situations, ensuring a "near transfer" (Aprea, Schultheis and Stolle, 2018<sub>[86]</sub>).

Evidence about the effectiveness of other types of financial education games is quite limited. An online learning programme including financial educational materials, games and videos for lower secondary school students in Finland showed positive effects of the programme on financial knowledge, but no significant effects in terms of savings behaviour (Kalmi, 2018<sub>[87]</sub>).

Even less is known about mobile apps for budgeting or sharing educational content. A randomised study tested the effect of a budgeting app on adolescents in Vienna, Austria (together with the effect of two other delivery channels). The study shows that app users report to check their current account balance significantly more often than the control group, but that the app neither improves self-reported oversight about personal income and expenses nor increases joy in taking care of personal finance (Angel, 2018<sub>[72]</sub>).

#### Box 25. Case study: Financial literacy camps in Armenia

The Office of the Financial System Mediator of Armenia started the "Mediator's Camp" in 2017 with the aim of providing knowledge about bank accounts, deposits, credit, insurance and the role of the financial supervisors in an out-of-school format during summer holidays. The programme targets socially vulnerable children aged 11 to 13 who spend their summer attending summer camps and lasts 3 hours. Various financial regulators and institutions participate in the summer camp and organise games, contests and interactive workshops for children. At the end of the activities, children are invited to watch video clips on financial education prepared by the Office to strengthen their knowledge.

#### Box 26. Case study: Interactive financial education lab in Belgium

Starting from 2020, the Financial Services and Markets Authority of Belgium will open the Wikifin Lab. This is intended to be an interactive laboratory in which high school students will be able to experience situations of financial education and responsible consumption. The Wikifin Lab will not teach them a set of notions but will aim at awakening their critical sense and confront them with personal and citizenship choices.

Visits will last two hours under the supervision of a qualified pedagogue and in the presence of schoolteachers. The course is designed as an interactive game played either in small groups or individually. During many immersive experiences, students will tackle themes related to budget management, consumption, financial markets, social security and so on.

## Involving parents in financial education activities for their children

#### **Kev lessons learnt**

- Policy makers can support parents and families to teach children and young people about financial literacy by encouraging practical activities to transmit knowledge, attitudes and habits around money.
- Involving parents in financial education programmes for their children seem to be effective in increasing the financial literacy of children and adolescents

Parents are the first sources of learning for their children, including about financial knowledge, skills, habits and values (Gudmunson and Danes,  $2011_{[88]}$ ). Research by the UK found that children's money habits are formed as early as age 7 (Whitebread and Bingham,  $2013_{[53]}$ ). This presents challenges as parents may not be themselves financially literate, or have good money habits. It underlines the need for financial education in school, to overcome the disadvantage children face if they do not learn positive lessons about money at home.

Families may be motivated to help their children learn. As shown in qualitative research in the UK, parents would like to teach their children a strong work ethic, how to track their money and make it go a long way, to use money only to buy things that are worthwhile, to save, and to borrow sensibly (Money Advice Service, 2019<sub>[89]</sub>).

But some parents may not know how to go about this or may find it difficult. Parents may not feel confident talking to their children about money or may not know how to start conversations about money, especially about complex topics like debt. Some of them may want to avoid sensitive subjects, like a reduction in income or unemployment. Parents may find it difficult to teach their children about saving if they tend to be prone to spending impulsively themselves, or they may consider financial literacy as a lower priority than other life skills, such as health, relationships and staying safe. Parents may be aware to have poor financial skills themselves (Money Advice Service, 2016<sub>[41]</sub>). (Money Advice Service, 2019<sub>[89]</sub>). As suggested in research in Hong Kong, China, another reason why parents may not be thinking about explicitly teaching their children about money is that they may overestimate what children actually know (IFEC, 2018<sub>[42]</sub>).

Policy makers have a role to play in making parents aware of their role and in supporting families to teach children and young people about financial literacy. Some countries have websites that give parents tips and tools to help them teach their children about money. Some programmes include textbooks or workbooks that encourage children to talk to their parents about money. Table 5 includes some examples of programmes targeting both parents and children, or targeting parents to help them teach about money to their children.

Box 27 provides an example of an evaluated programme engaging parents in the UK.

Table 5. Examples of financial education programme involving both parents and children

Country	Developed by	Description	Link or reference
Australia	Australian Securities and Investments Commission	Some schools that use the MoneySmart programme engage parents and the wider community in financial education	https://www.moneysmart.gov.au/teaching/moneysmart-schools
Belarus	National Bank of Belarus	Joint financial literacy events for students and their parents, including games and competitions	
Brazil	National strategy for financial education	The financial education pilot in high schools in Brazil included take-home exercises to be completed by parents. Parents were also invited for a financial education workshop	(Bruhn et al., 2016 <sub>[90]</sub> )
Hong Kong, China	Investor and Financial Education Council	Online knowledge and tips for parents	https://www.thechinfamily.hk/web/en/parent/
Poland	Junior Achievement	Financial education programmes for children and young people of all ages that actively engages parents	(Junior Achievement Europe, 2016 <sub>[63]</sub> )
United Kingdom	Money and Pensions Service	Videos and activities to help parents teach children about money-savvy behaviours	https://www.moneyadviceservice.org.uk/en/corporate/you-your-kids-and-money
United Kingdom	Newcastle Upon Tyne Family Learning Service	Financial education modules for parents of young children in a community setting	https://lemosandcrane.co.uk/resources/Newcastle%20- %20Pots%20of%20Gold.pdf
United States	Council for Economic Education	The Financial Fitness for Life programme has material for parents of children aged 10 upwards, including guidance, activities, and further reading	http://fffl.councilforeconed.org

As research stressed the importance of experiential learning to build financial literacy, policy makers can also encourage parents to involve children in practical activities to transmit knowledge, attitudes and habits around money (IFEC, 2018<sub>[42]</sub>; Money Advice Service, 2019<sub>[89]</sub>). This can include activities such as:

- Involving children in everyday financial decisions, for example, when shopping or paying bills.
- Giving children responsibility over their own money, such as teaching children to look after their belongings, keep track of their spending, or using a savings account.
- Acting as role models, explaining why they were buying one thing rather than another, or not buying something that they wanted.
- Using pocket money as an opportunity to start conversations about money.

Research on the relationship between pocket money and young people's financial skills and behaviour gives contrasting results (Abramovitch, Freedman and Pliner, 1991<sub>[91]</sub>; OECD, 2014<sub>[3]</sub>; Pliner et al., 1996<sub>[92]</sub>; Sansone, Rossi and Fornero, 2018<sub>[93]</sub>; Webley and Nyhus, 2013<sub>[94]</sub>), but what seems to matter the most is the quality of the interaction between parents and children on the transfer of money, rather than receiving allowances per se. Without substantial parental interaction, discussion and guidance about finances, just giving money may not be sufficient for a successful socialisation process (Beutler and Dickinson, 2008<sub>[95]</sub>; Bucciol and Veronesi, 2014<sub>[96]</sub>; Xiao, Ford and Kim, 2011<sub>[97]</sub>).

Moreover, involving parents in financial education programmes for their children seem to be effective in increasing the financial literacy of children and adolescents (Batty, Collins and Odders-White, 2015<sub>[98]</sub>; Bruhn et al., 2016<sub>[90]</sub>; Harter and Harter, 2009<sub>[99]</sub>; MoneyWise and Nibud, n.d.<sub>[56]</sub>; Money Advice Service, 2018<sub>[55]</sub>).

## Box 27. Case study: "Talk, Learn, Do", a programme to help parents teach their children about money

The UK Money Advice service piloted a financial literacy programme for parents in Wales in 2016-2017, to help them teach their children about money (IFF Research and Belmana Consulting,  $2018_{[100]}$ ). The aims of the programme were to educate parents on the importance of talking to children about money from an early age, equip them with the skills and confidence needed to talk to their children about money, and enable them to help their children develop positive money habits.

Parents took part in a two-hour session, as part of a family learning week. Activities included inviting parents to discuss a shopping trip scenario or various pocket money options to find out the best ways to teach children of different ages about money. Parents were also encouraged to think about the most important things they wanted their children to learn about money growing older.

An impact evaluation showed that the programme had a positive effect, with some of the outcomes still showing an impact one year after implementation, including on parents' confidence and knowledge on how to talk to their children about money, parents' discussions with children, and parents' over-indebtedness.

# Chapter 7. Assessing financial literacy and evaluating the impact of financial education

Monitoring, evaluation and assessments are different ways to learn to what extent students are progressing over time and programmes are making a difference. They are essential components of the successful introduction of financial education programmes in schools, and for children and young people more generally (OECD, 2014<sub>[6]</sub>).

#### Assessment

#### **Key lessons learnt**

Assessing the financial literacy of children and young people is a way to learn about their knowledge and skills, track changes over time, and identify vulnerable groups. Introducing assessment in school can be a way to make students and teachers aware of the importance of the topic, with the idea that 'what gets measured, gets taught'. Aside from international financial literacy assessment like PISA, very few countries test financial literacy in school systematically.

Assessing students, or children and young people in general, is a way to identify and test their level of performance in financial literacy and to see if this changes over time. Assessment helps understand which financial education topics children find more difficult, to inform changes to what is taught, or pedagogical methods. It can also help identify children who are doing less well than their peers, and who might need extra help. Financial literacy assessments can include testing in the classroom, formal examinations, national and international tests.

In addition to providing evidence and track progress, assessments can send strong signals about the importance of the topic. Introducing a financial literacy component in classroom tests or national exams would increase significantly the importance attached by students and teachers to the subject, and would increase the chances that teachers' would teach it.

Aside from international financial literacy assessment like PISA [see Box 9 on the OECD PISA financial literacy assessment in Chapter 5], few, if any, countries conduct formal assessments of financial literacy on a regular basis. For example, the 2018 survey on financial education in the US published by the Council for Economic Education reports that only seven states test children and young people's learning in personal finance at school (Council for Economic Education, 2018[101]). The fact that financial education is usually integrated into other topics, like mathematics, makes it difficult to isolate financial literacy ability in formal examinations. Other subjects in which financial education is often integrated, like citizenship, are often not subject to formal examinations.

There are a few examples of national school inspection services testing the financial literacy of students. For instance, the Slovak schools inspection service tested financial literacy for primary and secondary school students in 2016. The schools inspection service in England (Ofsted) also published reports on Personal, Social, Health and Economic Education, including financial literacy, in 2010 and 2013.

Ideally, national financial literacy assessment should be based on national or international core competencies frameworks (as discussed in Chapter 5), on dedicated assessment frameworks, or be in line with learning frameworks on financial literacy defined at the national level.

## Monitoring and evaluation

#### **Key lessons learnt**

Impact evaluation is a key step to measure the causal effect of a programme. In combination with small-scale pilots, it allows policymakers to evaluate the content, teaching materials, and teaching methods before adopting them on a larger scale. The majority of interventions for children and young people are not evaluated and more evidence is needed to understand the impact of specific features of interventions or of new delivery channels.

One of the first important steps to understand the effectiveness of a programme consists of monitoring the actual teaching of financial education, for example through case studies and oversight mechanisms that can be put in place by local or national authorities. Monitoring aims at understanding how many people participated in a programme, whether the materials were sufficient for the number of participants, whether they were clear and accessible to the audience, whether the actual activities undertaken corresponded to those that were planned, and so on.

Another related and equally important phase consists in evaluating the impact of a programme. In most cases, impact evaluation is quantitative, and aims at measuring the causal effect of the programme on some observed and predefined outcomes. It is often accompanied by a qualitative component, that can be carried out by collecting direct feedback from involved stakeholders such as students, teachers, educational system's management, parents and the local community, to understand why an intervention worked or not.

Evidence from monitoring and evaluation is key to understanding if a programme is effective before scaling it up, improving the content and pedagogy, and strengthening the accountability of the stakeholders involved. It can also help understand if a programme is having unintended consequences. Monitoring and evaluation should ideally focus on each stage of the programme implementation, and should account for both short-term and long-term impacts.

Randomised control trials – if well-implemented – offer rigorous and reliable evidence about programme impact. They rely on random assignment of participants between treatment and control groups, and look at how measures of outcome change before and after the intervention. However, it may not always be possible to use randomised control trials, as they may be costly, demand significant expertise, and require some conditions to be implemented (e.g. it has to be possible to split participants randomly between a treatment and a control group) (Hutchison and Styles, 2010<sub>[102]</sub>; Yoong et al., 2013<sub>[103]</sub>).

Evaluation often accompanies small scale pilots limited to some schools, regions and/or education levels, as it allows policymakers to monitor the implementation of the programme and to evaluate the impact of the content, teaching materials, and teaching methods before adopting them on a larger scale or formally introducing financial education into the curriculum. Boxes 28 to 30 offer examples of evaluating pilot projects for the introduction of financial education in schools in Armenia, Brazil and Russia.

Even if meta-analyses of the effectiveness of financial education for children and young people have been developed, they are based on a limited number of studies (Amagir et al., 2018<sub>[59]</sub>; Kaiser and Menkhoff, 2018<sub>[58]</sub>). The majority of interventions for children and young people are not evaluated and there is still limited evidence to fully understand the impact of specific features of interventions (e.g. programme duration, teaching methods, how to train teachers) or the impact of mainstream but relatively new delivery channels (such as games and apps) (Money Advice Service, 2018<sub>[55]</sub>).

Longitudinal studies are another option for looking at long-term impact. These typically follow the same subjects over a period of years, or even decades. This potentially allows the effect of financial education on schoolchildren to be monitored as they move into adulthood. For instance, the central bank of Spain is planning to follow the students that participated in an impact evaluation of the "Finances for all" programme five years afterwards by collecting academic and survey data. However, by their nature, longitudinal studies may not yield results for many years, by which time the external environment may have changed significantly. These studies may also have high drop-out rates, as subjects may decide they no longer want to participate, or may simply be uncontactable.

## Box 28. Case study: Qualitative evaluation of the introduction of financial literacy in the curriculum in Armenia

The Central Bank and Ministry of Education and Science of Armenia developed a pilot project to introduce financial literacy into four subjects in the primary and secondary school curriculum (see Box 16). The pilot took place in 2017-2018 in Yerevan and involved 14 schools, over 1,700 students and 46 teachers. It was accompanied by an evaluation aimed at:

- Evaluating the impact of integrated financial education on knowledge, skills, attitude and behaviour of learners.
- Understand if impact varied across the subject into which financial literacy had been integrated and across primary, middle and high schools.
- Explore the potential challenges and highlight the success factors before full-scale implementation.
- Make necessary adjustments to the developed content materials.

The evaluation involved qualitative and evaluation methods, including classroom observations by experts; teacher feedback forms; and focus groups with students before and after the programme. Quantitative evaluation methods are planned to be used in 2018-2019, when more schools will be engaged.

The results of the qualitative evaluation showed that the pilot programme improved outcomes across all educational levels, even though it was easier to improve knowledge and attitudes than skills and behaviour. Students, parents and teachers had positive attitudes towards the project, which seemed to affect the financial literacy also of teachers and parents. The content appeared to match modern teaching and learning approaches and was adapted to students of different age and gender. Students were especially interested in the topics most closely related to their everyday life, and saving was the most popular topic.

The evaluation confirmed that active teaching and learning methods seemed to be effective, with games and plays being particularly effective in grades 5-7 (primary and middle school), and project and inquiry based learning being particularly effective at older grades. There were difficulties regarding lesson planning, but teachers gradually improved their skills and solved difficulties over time. While teachers generally appreciated the teaching resources provided, they also welcomed more materials and more time to prepare the lessons in the future.

Based on the pilot results, the content materials were reviewed and adjusted, and are now available online at www.abcfinance.am. The full-scale implementation of the project started in September 2018. The number of teachers and schools trained is expected to gradually reach all relevant ones by 2021.

#### Box 29. Case study: Developing financial education in school through a pilot in Brazil

Financial education was initially introduced in Brazilian high schools through a pilot in 2010-11 over 800 schools in six states. The pilot involved preparing a financial education curriculum, developed by a team of education experts, psychologists and sociologists. The content included innovative material designed to capture the interest of young adults and to be relevant to their lives. It consisted of case studies that can be integrated into regular school subjects, such as mathematics, Portuguese language, science, geography and history. Teacher guidelines explained how to integrate these case studies into the regular curriculum, and teachers had discretion over the order in which the cases are taught. Teachers were trained through workshops, DVDs and a guidebook. The pilot was then evaluated through a randomised control trial, which revealed higher average financial literacy, higher saving propensity and a greater likelihood to engage in financial planning among students who participated in the programme than among students who did not participate (Bruhn et al., 2016<sub>[90]</sub>).

The material developed for the pilot was then made available on line to all teachers across the country, and another pilot, for primary schools was developed.

### Box 30. Case study: Piloting financial education courses in five regions in Russia

The ministry of finance of Russia developed a pilot programme since 2011 in order to deepen and expand students' exposure to financial literacy. The pilot programme involved defining a learning framework on core financial competencies, developing teaching material, training teachers, and setting up specific initiatives in selected schools. In 2016, textbooks and teaching materials were evaluated in five regions in the country, before scaling up the whole programme nationwide.

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## Annex

#### This annex includes:

- Annex A. OECD/INFE Core Competencies Framework on Financial Literacy for Youth in the CIS
- Annex B. Examples of core competencies framework on financial literacy for youth from countries in the CIS

# Annex A. OECD/INFE Core Competencies Framework on Financial Literacy for Youth in the CIS

Financial literacy is a complex construct, including knowledge and skills as well as a wide range of attitudes and behaviours that are clearly influenced by factors such as the socioeconomic status, national context and access to a range of financial services. Recognising this complexity, the OECD/INFE developed an international Core Competencies Framework on Financial Literacy for Youth in 2015 (OECD, 2015<sub>[1]</sub>).

The OECD/INFE international framework presents flexible, outcome-based, core competencies that are relevant at the international level. It describes the basic level of financial literacy that is likely to be needed by all young people between the ages of 15 and 18 to fully and safely participate in economic and financial life. It covers a range of competencies, some of which will be more directly relevant in early adulthood and some which may become more relevant as financial systems develop and financial inclusion increases. This reflects the increasing possibilities and responsibilities that youth will face as they get older as well as the fast-changing financial landscape that they find themselves in

The OECD/INFE framework provides a harmonised benchmark for countries at different levels of financial development, enabling them to develop national frameworks as well as to set targets and identify appropriate ways of reaching them. It also identifies competencies that could be incorporated in an assessment framework and/or tool for measuring progress, providing information from which to draw conclusions about the effectiveness of different forms of education.

Some countries participating in the CIS technical assistance project, such as Armenia and the Kyrgyz Republic, have taken inspiration from the OECD/INFE international framework and have developed national frameworks to identify all of the core financial literacy competencies that are of relevance for youth in their countries. These national frameworks are a valuable source of guidance to policymakers, teachers, other financial education providers and parents in the country seeking to align learning goals with expected competencies and outcomes. They identify topics of relevance within the country context and are specifically tailored to the current education system or national curriculum. Other countries in the CIS project have not yet developed a national core competencies framework, but have recognised the importance of developing one.

Thus, this section presents the Core Competencies Framework on Financial Literacy for Youth in the CIS ('Core Competencies framework in CIS') which is a revised version of OECD/INFE international framework. It is adapted to the context of the CIS and to the needs of CIS countries. It provides guidance on how the OECD/INFE international

framework can be adapted to the CIS context to support the implementation of financial literacy programmes for young people and in school, their assessment and their evaluation.

### Principles of the framework

The Core Competencies Framework on Financial Literacy for Youth in the CIS describes the main outcomes of financial education for young people around the ages of 15-18 and provides regional policy guidance and tools that can be applied taking into account country specificities. The framework can be adapted as necessary to different audiences and cultures. The following points describe the main principles of the framework applicable to CIS countries.

The framework describes the intended outcomes of financial education: the framework describes the basic level of financial literacy that is likely to be needed by young people in CIS countries between the ages of 15-18 to fully and safely participate in economic and financial life. It also describes the more advanced competencies that may be expected among a portion of this age-group, particularly in countries where they may be required to make decisions about more sophisticated financial products. The framework is not a curriculum and does not prescribe or recommend any particular approaches to financial education for youth.

The framework is flexible for national circumstances: This document contains an outcome-based core competencies that are high-level and represent key outcomes, whilst detailed descriptions and examples are kept to a minimum. It can be further adapted to national circumstances, and used in a flexible manner, taking into account differences in culture and context at the national or local level and across all sectors of the youth population. Some competencies may be more relevant than others depending on cultural settings.

The framework is universal: It can be used not only for financial education in schools, but also for extracurricular activities for youth as well as their assessment and their evaluation. The framework is designed to be applicable irrespective of the national education system or approach to skills development. This is a valuable source of guidance to policy makers, teachers, other financial education providers and parents seeking to align learning goals with expected competencies and outcomes.

The framework proposes a harmonised approach: this regional core competencies framework provides an opportunity for all CIS countries in the project to benefit from a global approach to describing financial literacy, ensuring consistency. Such a tool is particularly important given the universal significance of financial literacy as a core skill, international nature of the financial services industry, mobility of populations and increasing expectations that financial services regulation and financial consumer protection frameworks will also be aligned regionally or internationally.

## Revision and adaptations for the CIS

The Core Competencies Framework in the CIS represents an updated version of the 2015 OECD/INFE Core Competencies Framework on Financial Literacy for Youth. It has been adapted to the CIS context taking in account the following factors:

• The existing national frameworks of financial literacy in the CIS countries: the national core financial literacy competencies frameworks developed in Armenia, the Kyrgyz Republic, and Russia have been used as a source of guidance

- to identify the needs of youth in the CIS and adapt the Core Competencies framework in the CIS accordingly.
- **Issues that are specific to the CIS countries:** The countries participating in the CIS technical assistance project face a number of issues that are specific to the region, in particular:
  - O Population migration and the related inflows or outflows of remittances. The CIS-6 experience various migration patterns: some countries (like Russia and Kazakhstan) are primarily host countries, others are primarily home countries (like the Kyrgyz Republic and Tajikistan) and some have significant internal migration. Greater emphasis on currency exchange and transactions in foreign currency have been incorporated in the Core competencies framework in the CIS.
  - Moreover, the financial education mapping exercises<sup>6</sup> of the CIS-6 and the 2018 OECD/INFE survey on levels of financial literacy in the CIS highlighted that young people in the region may need to have stronger competences in some areas than initially suggested in the OECD/INFE international framework (OECD, 2018<sub>[33]</sub>). These competencies include especially an understanding of the main macroeconomic factors affecting the personal budgeting and financial planning (such as inflation, exchange rate, interest rate) as well as a better understanding of how to use formal financial services to promote financial inclusion.
- New developments in the financial landscape: Since the development of OECD/INFE framework in 2015, the financial landscape evolved and new products and services, such as digital financial services and cryptocurrencies, became more widespread. The Core Competencies framework in the CIS takes into account these new developments and incorporates competencies related to digital financial literacy included in the 2018 G20/OECD INFE Policy Guidance on Digitalisation and Financial Literacy (OECD, 2018<sub>[70]</sub>).

## Key characteristics of the framework

The framework contains four sections, focusing on A) money and transactions; B) planning and managing finances; C) risk and reward and D) the financial landscape (as indicated in Table 6). Each section covers 1) awareness, knowledge and understanding; 2) confidence, motivation and attitudes; and 3) skills and behaviour.

As youth are typically only just beginning to be autonomous as they approach adult life, content is described in terms of creating a foundation for the future. The outcomes are therefore categorised as foundational outcomes 1, 2 and 3 – which are designed to show how competencies may develop, rather than to map to specific age groups. It should be noted that young people's competencies may not develop uniformly across the foundational outcomes; this will depend on a range of factors including national circumstances and personal characteristics.

<sup>&</sup>lt;sup>6</sup> The mapping documents have been developed under the OECD/INFE technical assistance projects in CIS and describe the status of financial education and inclusion in the six CIS countries: Armenia, Azerbaijan, Belarus, Kazakhstan, Kyrgyz Republic and Tajikistan.

The framework is arranged across several financial literacy content areas (identified in subheaders, and listed in Table 6). In some cases, there is no specific content that fits within a sub category – in such cases the content heading is not displayed. Similarly, sometimes there is no specific content in one or more of the foundational outcomes, as indicated by an empty cell in the table.

Table 6. Content areas within the framework

A. Money and transactions	Money; income Payments and purchases; prices Financial records and contracts Foreign currency	
B. Planning and managing	Budgeting; managing income and expenditure Saving Longer-term planning Credit	
C. Risk and reward	Changing value Identifying risks Financial safety nets and insurance Balancing risk and reward	
D. Financial landscape	Education, information and advice Financial service providers Scams and fraud Rights and responsibilities, regulation and consumer protec Taxes and public spending, external influences	

## A. Money and transactions

This content area incorporates the different forms and purposes of money, ways of paying and receiving money, income, national and foreign currency, and making and monitoring transactions. It recognises that financial transactions may incur a cost and that some options, such as borrowing money, may not be universally available. It also covers practices such as taking care of cash and other valuables, calculating value for money, and filing documents and receipts.

	Foundational outcome 1	Foundational outcome 2	Foundational outcome 3
	i. <b>Money</b>		
A.1 Awareness, knowledge and understanding	Aware of the common forms of money Understands that cash and coins have a financial value. Aware that people do not have unlimited amounts of money. Aware that people can store their cash in various ways, including in a bank. Aware that people who keep their cash in a bank can withdraw it over the counter or at a cashpoint. Aware that people with a bank account may be charged a fee to access their own money in certain places. Aware that money is an asset. Understands that being lent money is	Understands the role(s) that money plays within their culture. Understands that money held as cash loses value in real terms if there is inflation.	Understands that money held in the bank may also lose value in real terms if inflation outstrips interest payments.  Understand that cryptocurrencies can be used as forms of payment in some circumstances and that there are risks related to them.
A.2 Confidence, motivation and attitudes	different from being given money.  Confident to receive money in cash and other forms.  Confident to talk about money matters with family and other trusted adults.		Interested to know more about the benefits and risks of new forms of payment such as cryptocurrencies.
A.3 Skills and behaviour	Can recognise and count money in own currency.  Takes care of cash and valuable items in their possession.		Able to compare and contrast different ways of transferring money between people and organisations.  Considers the advantages and disadvantages of various types of transaction from their own perspective and from the perspective of others.
	ii. Income		
A.1 Awareness, knowledge and understanding	Aware of typical income sources. Aware of different potential career paths, including entrepreneurship.  Understands how certain factors such as education level are likely to affect wage levels.  Aware that take home pay is often less than the full amount earned due to deductions.  Understands that income may not be the same every month.  Understands that income can contribute to well-being for themselves, their family and community.  Understand that money coming from credit	Aware of potential income sources that may be relevant to them now or in the near future.	Identifies business opportunities and considers their viability, taking into account alternative options.
A.2 Confidence, motivation and attitudes	is not an income and needs to be repaid  Confident to seek ways to create an income.	Confident to discuss pay when applying for a job.	
A.3	Identifies potential sources of income.	Can identify ways to raise money	Can develop a simple business plan.
Skills and behaviour	Makes plans to ensure that they have an income when relevant.	through enterprising activities.	Can develop a simple pusifiess plan.

	iii. Payments and purch	ases	
A.1 Awareness, knowledge and understanding	Aware of different forms of payment methods including with digital tools. Understands that money can be exchanged for goods or services. Aware that once they spend their money, it is no longer available to them to spend on something else. Knows that money has to be added to a prepaid card before it can be used. Knows that a debit card is linked directly to a bank account. Understand the difference between bank account and banking card. Knows that a credit card provides a loan to the person using it.	Aware of new payment technologies, products or methods available locally.  Knows when it may be appropriate to use a credit card.  Knows that some cards may also provide a loan to an individual if the account has an overdraft facility [depending on country context].	Aware that some companies charge the buyer a fee when purchases are made by credit card.  Aware that a fee can be applied for international money transfers  Understand that not all debit cards can be used abroad due to national specificities.  Aware that some cards may have different fees and commissions when used abroad
A.2 Confidence, motivation and attitudes	Conscious of their own spending habits and use of money.  Motivated to shop around for a good deal when buying everyday goods.  Respects that different people may have different preferences in relation to spending as well as to saving or donating money.  Confident to speak up if they receive the wrong change or are charged the wrong amount.  Confident to handle simple transactions within an enterprise such as a shop or market stall.	Confident to make their own spending decisions even if their peers make different choices.  Understands that spending choices can have an ethical component, and that their choices can impact on others.	Confident to negotiate a fair price when making a purchase where necessary.
A.3 Skills and behaviour	Can make simple choices across similar products based on price and quantity.  Can use mental arithmetic to calculate the final price of a small selection of items, or a single item taking into account discount or tax, if relevant, before paying.  Offers correct money when buying something in cash, or offers a larger amount and checks change.  Checks receipts after making purchases.  Saves relevant receipts in case of future need.  Conducts sales and purchases in an honest and open manner.	Makes considered spending decisions – including when shopping for larger items.  Can compare and contrast different ways of paying and receiving payment of goods and services.	
	iv. Prices		
A.1 Awareness, knowledge and understanding	Has a realistic knowledge of the cost of basic items including food.  Knows that the same goods or services may be priced differently by different vendors.	Has a realistic idea of the price of high cost items that are frequently wanted or needed among their peer group and how this compares to their current income.  Knows that other external factors such as certain taxes or exchange rates may change the final price of a good.	Understands how inflation and other macro- economic changes can impact on the cost of things.  Understands that prices reflect a range of factors, including competition from different providers and the availability of alternative products.  Understands what inflation is and how it is formed.  Knows that besides the price, there are other criteria such as warranty, terms of payment, and terms of refund that should be taken into consideration when purchasing a product or service.

	v. Financial records and	d contracts	
A.1 Awareness, knowledge and understanding	Understands that documents provided by financial services, as well as bills and certain receipts and guarantees may be important, and should be kept safely. Understands that certain documents have legal implications and should be read.  Understands that signing a contract may make them legally obliged to pay for something or repay something and that they could face consequences if they fail to do so.		
A.2 Confidence, motivation and attitudes	Recognises that it is worth taking the time to read and understand a contract before signing it.		Confident to read financial documents and seek to query and rectify any errors.  Confident to take the needed time to read a contract before signing, and to ask as many questions as necessary
A.3 Skills and behaviour	Reads, checks, and takes care of financial documents.  Can identify some irregularities on a bank statement or similar financial document.  Completes financial forms carefully and accurately.  Competent in making the calculations necessary to check receipts and monitor spending, using appropriate tools where necessary.	Reads the terms and conditions of financial products and services before deciding whether to sign a contract.	Reads financial contracts and checks the meaning of unclear words or terms before deciding whether to sign a contract.  Ask for help to a trustworthy source when something is unclear before signing a contract
	vi. Foreign currency		
A.1 Awareness, knowledge and understanding	Aware that other countries may use a different currency from their own. Understand what is an exchange rate	Knows where to go to exchange currency.  Knows that some exchange rates can fluctuate.  Knows that the rate can be different when buying or selling the currency.	Understands that a cost is often incurred when exchanging currencies, and that this can vary by provider.  Understands that variations in exchange rates are caused by economic factors.  Understands that variations in exchange rates can have an impact on the costs of goods bought at home.  Understand that international money transfers or payments may be subject to currency exchange and a cost can be incurred
A.3 Skills and behaviour	Can make cash payments in a foreign currency [where necessary].	Can apply exchange rates to convert amounts in different currencies to their own currency.	Able to make considered decisions about purchases in foreign currencies.

## B. Planning and managing finances

This content area reflects the importance of planning and managing income and wealth over the short and long term. For youth, it particularly reflects the process of managing, planning and monitoring income and expenses and understanding ways of enhancing wealth and financial well-being. It includes competencies related to credit use as well as savings and wealth creation.

	i. Budgeting		
B.1 Awareness, knowledge and understanding	Understands the benefits of planning finances and drawing up a budget based on those plans.  Understands that they must keep track of all expenses, however incurred, in order to know whether they are staying within budget.	Understands the relevance of monitoring cash-flow across different time scales.	Understands that various factors may affect a budget (for example: inflation, variations in exchange rates, variations in interest rates, unexpected events)

B.3 Skills and behaviour	Lives within their means [taking into account external financial support and circumstances where relevant].	Differentiates between regular and irregular income and expenses and based on this creates a budget.	Identifies ways in which their plans for the following 1-2 years may impact on them financially, and considers ways to manage
	Able to select and use simple budgeting tools.	Keeps a close watch on their expenditure and income and makes adjustments when necessary.	these. Identifies and uses financial services for better budget management
	ii. Managing income an	d expenditure	
B.1 Awareness, knowledge and understanding	Knows the difference between needs and wants.  Understands the need to prioritise certain expenses when income is limited.	Understands that some expenses may be infrequent or irregular, and recognises the importance of planning for these.  Understands that income and expenditure need to be actively managed.	Can give a balanced argument for using credit in some situations rather than waiting and saving up and vice versa.  Understands the importance of managing personal or household money and that of a business separately.
		Knows that there are different ways in which expenditure can be smoothed over time through saving or borrowing.	
B.2 Confidence, motivation and attitudes	Motivated to develop effective money management as a tool for achieving financial well-being.  Confident to manage personal spending and saving.		Remains confident and motivated when faced with financial setbacks or unfavourable outcomes.
B.3 Skills and behaviour	Thinks about the different options for spending or saving the money that they receive and their implications.  Can successfully avoid overspending in everyday situations.  Plans ahead for expenses expected to occur in the near future.	Makes financial decisions in a timely manner. Critically assesses the effectiveness of their previous financial decisions and considers whether to repeat this behaviour in future.	Can compare across multiple factors in a range of common financial products to choose those that will help them reach their short-term financial goals.
	iii. Saving		
B.1 Awareness, knowledge and understanding	Aware of the benefits of saving. Understands that it may be necessary to save up to buy high cost items. Has a basic awareness of financial products that can be used for short-term and long-term saving. Knows the benefits and possible risks of making savings.	Knows how interest rate changes may impact saving. Understands the impact of compound interest on savings.	Knows approximately the typical interest paid on savings products most commonly used among their peer group.  Knows how inflation impacts on different types of saving. Understands why it is relevant to know the level of inflation as well as interest rates when choosing a savings product.
B.2 Confidence, motivation and attitudes	Motivated to save-up for a particular item.	Confident to make a decision about which savings product(s) to use.	Optimistic about the possibility of saving for the longer-term.  Feels confident to save using formal financial
B.3 Skills and behaviour	Can explain the benefits of having savings.  Can calculate how long it will take to save a certain amount of money given current income and expenditure.	Can make an informed decision about saving whilst having debt to repay.	services  Can develop a savings plan that will help them to reach a high value savings goal.  Takes into account the fact that the price of an item they are saving for may change over time.  Can assess the pros and cons of some products aimed at saving.

	iv. Longer-term plannin	g			
B.1 Awareness, knowledge and understanding	Understands the benefit of a financial plan for life events that are likely to occur in the future.  Aware of the need to save early for retirement.	Knows how to plan a simple investment portfolio.	Has a good understanding of the importance of planning ahead for longer-term needs such as education or independent living.  Knows how age, income and circumstance may affect a range of financial decisions.  Understands the role of pension provision or products in planning for retirement.  Knows some of the ways in which wealth can be built for individual, families and communities and recognises the benefits of doing so.  Understands why many people hold a mixture		
B.2 Confidence, motivation and attitudes	Is prepared to delay gratification in order to gain more in the future.	Confident to plan ahead over several months to achieve financial goals.	of savings and credit products.  Interested but cautious when hearing about new financial products, services and financial providers that may help them achieve their financial goals.		
B.3 Skills and behaviour	Makes an informed decision (possibly with parents) about whether to invest in additional study or move into work once compulsory schooling has ended.	Identifies milestones or future life stages that may require financial preparations from a young age.	Can assess the pros and cons of some products aimed at longer-term goals.		
	v. Credit				
B.1 Awareness, knowledge and understanding	Understands that if they borrow money they have a responsibility to repay it.  Understands why people often need to pay interest on money they borrow or expect to receive interest on savings; or understands shariah compliant products designed to avoid the payment of interest where relevant.  Aware of the difficulties faced by people with high levels of debt. Knows that goods bought on credit may be repossessed if the repayments are not made.	Knows how interest rate changes may impact certain forms of credit.  Knows that schemes like 'hire purchase', or 'buy now pay later' are forms of credit [where available].	Understands how various factors impact on the cost and availability of credit.  Understands the principle of credit worthiness and [where relevant] the potential benefit of having a good credit score.  Knows approximately the typical interest and fees charged on the credit products most commonly used among their peer group.  Able to give some reasons why borrowing money for productive purposes, such as starting a business can make more sense than borrowing to pay for consumer goods.  Understands what a credit score (and credit history) is and its role.		
B.2 Confidence, motivation and attitudes		Motivated to ask for advice before making decisions to use credit.	Confident in their own ability to make informed decisions about access to, and use of, some common forms of credit.		
B.3 Skills and behaviour	Pays anything they owe on time.  Speaks to a lender early in case of difficulty repaying.  Takes time to understand the overall cost implications of borrowing money.  Understands the liabilities and rights arising from credit or guarantee contracts.	Can apply their knowledge and understanding to describe the implications of defaulting on a specific credit obligation.	Can calculate the financial benefit of repaying credit early.		

### C. Risk and reward

Youth need to understand ways of protecting themselves from the risk of losing essential income or property as well as the risk inherent in certain financial products such as credit agreements with variable interest rates, or investment products. This content area therefore includes knowledge of the types of products that may help people to protect themselves from the consequences of negative outcomes such as insurance and savings, and assessing the level of risk and reward related to different products, purchases, behaviours or external factors.

	i. Changing value		
C 1. Awareness, knowledge and understanding	Understands that some purchases may lose value over time, whilst others may gain value. Understands that investments can lose value or gain value.	Aware that investment products have different levels of risk of losing the money invested.	
	ii. Identifying risks		
C.1 Awareness, knowledge and understanding	Aware of some of the risks that people face that may have financial consequences, such as flood or ill-health.  Knows that late payment or non-payment of	Understands that it is important to take into account different features of a financial product in order to assess its risk	Aware that people need to take calculated risks when making a number of investment decisions, including buying assets, funding education or choosing a pension fund.
	bills or credit repayment can have negative financial consequences.	Is aware that information provided by some firms or informal providers may only highlight the benefits or rewards of a particular product without providing a full indication of the risks.	Understands why longevity may pose a risk to people planning their own retirement.  Understands the role and risk taken by a guarantor and the responsibility it brings when credit repayments are not made.
		Identifies common price tricks and false advertising.	
C.2Confidence, motivation and attitudes	Is cautious about making financial decisions hastily, or without having access to good quality information or advice about the risk and rewards.	Confidently applies useful rules of thumb when considering investment opportunities, such as 'if it looks too good to be true, it probably is'.	Has the confidence to take some calculated financial risks. Is aware of one's own personal propensity for risky behaviour
C.3 Skills and behaviour	Takes care of money and valuable items to avoid losses.	Can make simple (non-scientific) assessments of the likelihood of events occurring that could have a financial consequence.	Can describe the difference between a genuine investment product and a fraudulent offer such as a pyramid scheme.
	iii. Financial safety nets	and insurance	
C.1 Awareness, knowledge and understanding	Aware that some people save a portion of their money to increase their sense of financial security.  Has a basic awareness of how saving products and insurance could help them	Aware of the possibility and limitation of government financial safety nets.	Knows whether they have a legal obligation to protect themselves against the financial implications of specific adverse events.
	when thinking about ways of managing risk.  Has a general understanding of the reasons that people buy insurance products.		
	Knows some common features of certain types of insurance such as travel insurance or car insurance [depending on national specificities].		
	Understands the purpose of disclosing relevant information when applying for insurance.		
C.3 Skills and behaviour	Able to describe the purpose of some financial products such as insurance policies designed to protect people from the negative consequences of certain events.	Makes an informed decision about the need for insurance when buying products or services or planning to travel.	
	Can decide whether simple insurance products are relevant to them in their current circumstances.		
	Checks whether their household already has protection for a particular adverse event before deciding whether to put a financial safety net in place.		

	iv. Balancing risk and re	eward	
C.1 Awareness, knowledge and understanding	Knows that financial products can come with both risks and rewards.	Knows that some products can potentially provide higher rewards because the bearer takes some risk.  Has a basic understanding of the relative risk of saving in a bank vs investment in the stock-market.  Aware that entrepreneurs may face difficulties finding investors or lenders and can explain these difficulties in terms of risk and reward.  Understands the risks and potential rewards of being self-employed rather than working as an employee.	Understands the basic idea of reducing investment risk through diversification.  Has some understanding of why the past performance of investments or firms does not guarantee future performance and why short-term price fluctuations may not be representative of longer-term trends.
C.2 Confidence, motivation and attitudes			Willing to take responsibility for negative and positive outcomes of their own financial decisions.
C.3 Skills and behaviour	Seeks advice on risk and rewards from reliable, informed sources before making financial decisions.	Draws on own or others previous experiences when considering risks and rewards.  Can assess the relative risks and rewards of simple business ventures or opportunities.	Can analyse various financial product choices or investment opportunities and interpret information about the performance of investments to weight up their potential risks and rewards.  Can analyse the risks and rewards of holding various non-financial assets such as gold or property.

#### D. Financial landscape

Financial landscape relates to the characteristics and features of the financial world. It covers knowing the rights and responsibilities of consumers in the financial marketplace, taking into account financial regulation and financial consumer protection. It also focuses on typical features of the general financial environment, such as recognising the implications of financial contracts, and understanding changes in certain external factors such as interest rates, inflation, taxation or welfare benefits can impact individuals, households and society.

	Foundational outcome 1	Foundational outcome 2	Foundational outcome 3									
	i. Regulation and consumer protection											
D.1 Awareness, knowledge and understanding	Aware of central banks and/or the relevant financial regulators in their country.	Has some knowledge of the roles of the relevant financial regulators in their country.  Has some knowledge of the role of	Aware that guarantee schemes (may) guarantee certain financial deposits held by financial service providers.									
		other financial authorities in their country.										
D.2 Confidence, motivation and attitudes	Confident and motivated to apply their rights and responsibilities as a consumer.	Has the confidence to make a complaint to the appropriate body when dissatisfied with a financial product or service.	Takes responsibility for decisions that they have control over.									
D.3 Skills and behaviour	Looks for information on whether consumers have complained about products that they are interested in taking out.	Makes a complaint about unsatisfactory products or services when necessary.										

	ii. Education, information	on and advice	
D.1 Awareness, knowledge and understanding	Aware of the importance of developing their own financial literacy in order to make better informed decisions and increase their financial well-being.  Knows how to find a trustworthy source of simple financial advice.  Aware of government bodies that provide trustworthy and impartial financial information, guidance, services or advice [where these exist].	Knows that some public and private sector organisations provide readymade calculators and online tools to compare financial products and understands the importance of checking whether these are impartial.	
	Knows the difference between impartial financial information or advice and marketing, product promotion or advertising in a financial context.		
D.2 Confidence, motivation and attitudes	Has the confidence to ask for advice when in doubt about financial decisions		
	iii. Rights and responsil	bilities	
D.1 Awareness, knowledge and understanding	Understands that providers and consumers have rights and responsibilities.  Understands that financial service providers have a duty to treat them fairly.  Knows that they may have the right to complain about certain financial services and products that they are dissatisfied with.  Knows the ways of protecting their rights,	Understands that there can be negative consequences for individuals and service providers who do not meet their responsibilities.	
	whom to address and how to proceed.  iv. Financial service pro	viders	
D.1 Awareness, knowledge and understanding	Aware that there may be several financial service/product providers offering similar products.  Knows the benefit of shopping around for a financial product.  Aware that formal financial service providers are regulated.	Understands that a financial service provider is still making money when a financial product or service is described as free, or offered without regular charges. Understands how to shop around for financial products, including the use of comparison tools, where available.	Knows that some financial service providers have an obligation to provide certain types of services, such as basic bank accounts.  Aware that some private sector or not-for-profit companies (such as telecom companies or microfinance institutions) that provide financial services are not regulated in the same way as other financial services providers.  Knows that some people or organisations offering savings and credit may not be regulated, and may be operating informally or illegally.
D.3 Skills and behaviour	Identifies potential formal financial service providers when deciding to take out a financial product or service.	Takes time to research widely used financial products and services before buying.  Can tell the difference between information from their financial provider and general promotional material sent from the same provider [where relevant].	Makes an effort to find out about new financial services or products being offered or discussed locally.

	v. Scams and fraud		
D.1 Awareness, knowledge and understanding	Aware of the reason for simple security features on financial products such as PIN numbers [where these are used].  Realises that it is important to take care of personal data, including when shopping online.  Knows which personal data should not be disclosed to other people.  Knows to whom and in which circumstances personal information can be disclosed	Aware of common financial scams and frauds and the approaches that can be used to safeguard against these.	
	Understands why it is important to be careful who they talk to about their financial situation.		
D.3 Skills and behaviour	Takes care to keep personal data, passwords and money safe.	Can assess requests that appear to come from financial companies, to decide whether they are genuine or potentially fraudulent.	Acts to resolve issues and impacts if become a victim of data and financial fraud.
	vi. Taxes and public spe	ending	
D.1 Awareness, knowledge and understanding	Understands that the government collects taxes to spend on public services.	Has a general idea about the national/regional tax system.  Aware that government decisions such as changing the level of tax and benefits can impact on the spending and saving decisions of individuals and households.	Can identify how certain government policies are designed to encourage start-up companies or support entrepreneurs.
	vii. External influences		
D.1 Awareness, knowledge and understanding		Aware that external factors (including marketing) can have an influence on their own financial decisions and those of others around them.	Understands how a person's financial decisions can have consequences that affect their own life and that of their family, and can also impact on their community and beyond.
		Has some understanding of how the financial landscape might impact on decisions to set up a new business.	

### Annex B. Examples of core competencies framework in the CIS

In Armenia, the "Financial competencies matrix for schoolchildren" was developed in 2015 and describes elements of financial knowledge, skills, attitudes and behaviour for four age groups covering primary and secondary education (from grades 1 to 12 in the national system), which are essential for the formation of respective financial abilities. All the competences are described gradually – from the simplest to the most complex, and include seven thematic sectors of financial education defined in the National Strategy of Financial Education in Armenia.

In the Kyrgyz Republic, the "Standards on basic financial literacy competencies for pupils of grades 5-11" were developed in 2017. They define and systematise financial competencies (basic knowledge, skills, abilities and behaviour), necessary for students in grades 5-11 to make savvy decisions about their financial matters, which will contribute to improving their families' financial well-being, as well as their attitude and motivation, which will support this process. These standards were developed as recommendations to the Ministry of Education and Science of the Kyrgyz Republic to be implemented in the standards of existing subjects ("Introduction to the economy", "Man and society"), curricula and general education programs.

In Russia, the framework on basic competencies in the field of financial literacy was developed in 2012-2013. The framework focuses on young people 15-18 years old. The structure of the framework for school-age students is divided into nine areas (subject areas) of financial literacy. Each of the areas is divided into three components: knowledge and understanding; skills and behaviour; personal specifications and settings. There are two levels of competencies: basic and advanced. The proposed competency framework can be used to form a financial literacy course for school-age students.

Armenia – Financial competencies matrix for schoolchildren

Thematic	Component	< 10 years old	11	l-12 years old		13-15 years old		16-18 years old
sectors		(up to the 4th class)		(5-6 class)		(7-9 class)		(10-12 class)
ECONOMY	Knowledge	<ul> <li>✓ To know what the money is</li> <li>✓ To know that the money is used to buy products and services</li> <li>✓ To know that Dram is the official currency of the RA and each country has its own currency</li> </ul>	cre ✓ To of ✓ To pa ✓ To cu	know the history of eation of money know the functions money know what types of yments exist know that each rrency has an change rate	\[   \lambda   \]	To know what the inflation is and what are its positive and negative sides  To understand that inflation is normal  To know what types of financial organisations exist and their role  To know what main types of financial services exist	✓ ✓ ✓	To know what is the role of the Central Bank of the RA in the financial system, wha are its objectives and authorities  To know what the monetary policy is an how it is implemented.  To know how the stat budget is formed and how the fiscal policy implemented.  To know the opportunities, advantages and possible risks while consuming financial services
	Skill	<ul> <li>✓ To be able to recognize and differentiate Drams by their nominal value</li> <li>✓ To differentiate between banknotes and coins</li> </ul>	dif dif an ex ✓ To the im	be able to ferentiate between ferent currencies d comment on their change rates be able to calculate e differences and pacts of foreign change rate		To be able to realize the impact of inflation on his/her standard of living  To be able to differentiate which financial organisation provides what types of financial services  To be able to calculate the impact of change of the currency exchange rate on financial instruments		To be able to assess the impact of change of the refinancing rate on the interest rates of credits  To be able to understand the impacts of monetary and fiscal policies  To be able to differentiate between reliable and non-reliable financial organisations
	Attitude	✓ To appreciate the value of money	the the	highlight the role of e exchange rate in e management of rsonal finances	✓	To highlight the role of inflation in the management of personal finances  To highlight the fact of inclusion in the financial system	•	To trust the financial system and operating reliable organisations
	Behaviour		inc	follow the dicators of the change rate, if cessary	✓	To take into consideration the inflation when managing personal finances	<b>√</b>	To consume formal financial services

BUDGET	Knowledge	✓ To understand the	<b>√</b>	To know what the	✓	To know that some	✓	To know the types
DUDGET	Allowedge	concept of "to consume or to save?"  To understand what means "to spend"  To understand on what it can be spent, e.g. food, clothing, etc.  To understand what income is  To understand that there are different sources of income, e.g. job		To know what main sources of income exist  To know what main sources of income exist  To know what main types of costs exist  To understand the types of costs	*	factors may affect the level of income and that some charges may be done from the income, by law (income tax, social payment, etc.)  To know that there are money inflows and outflows which might not be an income or cost  To know the main principles of money sharing (e.g. crowdfunding, volunteerism)  To know the concepts of net income, Income, profit, etc. (including from perspective of business)  To know what approaches of budget control exist For example, notes, keeping of checks and tickets, by extracts, etc.  To know what financial instruments exist that can ease the management and control of income, costs and money flows (banking account and payment card)	*	and kinds of banking accounts and payment cards  To know the benefits and possible risks of banking account and payment cards  To know what types of risks exist that may affect his/her personal finances (e.g. inflation, exchange rate, accidents, force majeure, etc.)  To know what types of financial services exist that can be useful for risk management (insurance)  To know the types and peculiarities of insurance services
	Skill	<ul> <li>✓ To be able to differentiate between need and wish</li> <li>✓ To be able to differentiate between short-term and long-term needs</li> <li>✓ To be able to differentiate between necessary and excessive costs</li> <li>✓ To be able to differentiate between the concepts of "employee" and "self-employed"</li> </ul>	* * * *	To be able to prepare a simple budget  To be able to combine income and costs (the concept of balance sheet)  To be able to classify the costs by their priority  To be able to distribute his/her seasonal income, taking into consideration the future costs  To be able to differentiate between personal income and costs and those of household	\[   \lambda   \]	To be able to list the main deductions, made from income To be able to separate money flows (e.g. getting a credit, insurance indemnity) from personal income (e.g. money remittance from relatives) and costs To be able to calculate a cost price, income, profit, profitability and other values To be able to identify the important information, mentioned on the financial document, and identify the main risky points	\[   \lambda   \]	To be able to make a measured choice between a banking account and a payment card To be able to interpret the extracts of banking accounts and payment cards and identify the mistakes To be able to list the main risks, affecting the personal finances, and classify them by impact and possibility of occurrence To be able to make a measured choice of insurance service

	Attitude	<ul><li></li><li></li></ul>	To realize that he/she should have an income for making spending To realize that income is limited To realize that making many costs now may affect the satisfaction of some needs in the future	\[   \lambda   \]	To highlight the management of personal finances To highlight the priority of his/her needs over the wishes To value the conduction of budgeting and planning	✓ ✓	To highlight the management of money flows (income, cost, financial inflow and outflow)  To highlight the concept of money sharing as a component of social responsibility  To highlight the keeping of financial documents (cash		To highlight the usage of banking account and payment cards for management of personal finances To highlight the risk management in order to avoid unnecessary losses To highlight the use of insurance services
	Behaviour			<b>√</b>	To prepare a budget, taking into	<b>✓</b>	receipts, check, excerpt) in order to analyse and control personal finances Conduct planning of money flows (income,	<b>✓</b>	To have a banking account and a
				✓	consideration the peculiarities of his/her personal income and costs  To distribute his/her income, taking into consideration the future costs and their		cost, financial inflow and outflow) and control over the budget, making respective notes	✓	payment card To follow the excerpts of his/her banking account and payment card To show a cautious approach to avoid the risks
041//1100	V l. l		To and only 1.1.1.		priorities		To be seen the seen of	<b>√</b>	If necessary, use any insurance service to manage the risks
SAVINGS	Knowledge	✓ ✓	To understand what means to save  To know the role of savings in one's life	<b>√</b>	To know the importance and benefits of making savings	<b>√</b>	To know that savings and investments can be short-term and long-term	<b>√</b>	To know the role, benefits and risks of making savings in a long-term period
			and that by saving it is possible to reach the future goals	✓ To know that depending on the goal, the methods of savings may vary ✓ To know the principles	<ul> <li>To know what types of financial instruments exist, in which it is possible to invest the savings</li> </ul>	✓	To know what types of financial instruments exist, which give an opportunity to make long-term savings		
				✓	of calculation of simple and compound interests  To know that by	✓	To know what a deposit is, what are its benefits and possible risks	✓	To know the types of securities, their benefits and possible risks
					investing the savings it is possible to earn additional income, but there are also some	<ul><li>✓</li></ul>	To know about the deposit guarantee scheme in Armenia To know what an	✓	To know how the funded pension system operates as a form of investing the
					risks	✓	annual interest yield is To understand the concepts of profitability, riskiness and liquidity	✓	savings To know the peculiarities of the pension system of Armenia
						✓	To know what the diversification is		

	Skill	✓ To be able to realize in which cases it is necessary to make savings at the expense of consumption     ✓ To be able to explain the importance of making savings	·	To be able to assess the benefits of making savings and make a measured choice: to save or to spend?  To be able to apply his/her knowledge on calculation of simple and compound interest	✓ ✓ ✓ ✓	To be able to make a measured choice of deposit  To be able to measure the annual interest yield  To understand the interrelationship between risk, liquidity and profitability (e.g. the higher is the profitability, the more risky it is)  To be able to assess the financial instruments by their profitability, riskiness and liquidity  To be able to apply the principle of diversification	✓	To understand the interrelationship between risk, liquidity and profitability in case of long-term savings  To be able to make a measured choice on acquisition of securities  To be able to manage his/her pension account
	Attitude	<ul> <li>✓ To highlight making savings</li> <li>✓ To realize that the addictions of people to make savings may be different</li> </ul>	✓	To be addicted to make savings  To highlight making investments thanks to savings	✓	To be addicted to make investments in the financial system thanks to savings  To highlight the application of a measured approach when making investments, taking into consideration the riskiness, liquidity and profitability of the financial instrument  To highlight the application of the principle of diversification for risk management	<b>✓</b>	To highlight making long-term savings
	Behaviour	✓ To have a money box and to start making savings	<b>✓</b>	To make savings regularly To have clear saving goals	✓	To make investments in different financial instruments, taking into consideration the principle of diversification  To take into consideration the riskiness, liquidity and profitability of the financial instrument, when making investments	<b>✓</b>	To make long-term savings and use respective financial instruments
DEBT	Knowledge	<ul> <li>✓ To understand what the debt is and why sometimes it is necessary to borrow</li> <li>✓ To understand that the debt should be repaid timely, making respective deductions from income</li> </ul>	✓	To know what types of sources of debt exist (e.g. formal and nonformal)  To know that some interest payments should be made for the credit  To know that some problems may occur in case the debt is not repaid timely	<ul><li>✓</li><li>✓</li></ul>	To know what types of credits exist  To know what the nominal and annual percentage rates of the credit are  To know what the credit history and credit bureau are	<ul><li></li><li></li><li></li><li></li><!--</td--><td>To know what the means of credit security are To know what types of rights and liabilities occur when signing a credit contract To know what the warranty is To know the principles of debt refinancing</td></ul>	To know what the means of credit security are To know what types of rights and liabilities occur when signing a credit contract To know what the warranty is To know the principles of debt refinancing

	Skills	<b>✓</b>	To be able to assess if there is a need to borrow	✓ ✓	To be able to assess the optimal size of debt  To be able to prepare a timetable for debt	✓	To be able to compare the types of credits, available in the market To be able to make measured and optimal	the I right cred cont	To be able to interpret the liabilities and rights, arising from credit and guarantee contracts
				✓	repayment To be able to assess from what sources to borrow in the most effective way		choice when getting a credit	<b>√</b>	To be able to assess if it is necessary to conduct a debt refinancing
				✓	To be able to assess the risks related with the delay of repayment				
	Attitude	✓	To realize that getting a credit may be useful but also risky	✓	To highlight getting the credit from formal sources	✓	To highlight the timely repayment of debts	✓	To weigh well before becoming a guarantor To avoid to repay the
									debt by another debt, if the option of refinancing is not cheaper
	Attitude			✓	To borrow within his/her abilities To have a timetable of	✓	To use the formal sources of borrowing	✓	To check his/her credit history, if necessary
				✓	debt repayment To repay the debt timely			✓ ✓	To refinance the debt, if necessary  To form a good credit
PURCHASE	Knowledge	✓	To know that the value of products and services is being reflected by its price To know that the price of the same product or service may differ,	✓	To know, that besides the price, there are other criteria that should be taken into consideration when purchasing any product or service	✓	To know how the prices of financial services are being formed  To know what other conditions, besides the price, exist that	✓	history  To know that any information and advice about types and conditions of financial services can be received from specialized
		✓	depending on different circumstances  To know that there are different ways (e.g. advertisement, etc.) to affect the people's decisions	<b>√</b>	To know what sources exist for getting information about financial services		are significant for comparison of financial services and making a choice		organisations and individuals
	Skill	✓	To be able to correctly pay for products and services and get the change	✓	To be able to assess the reliability of the information, received about financial	✓	To be able to perform a comparison of financial services by different criteria	✓	To be able to clearly formulate the questions for which the specialized
	✓	✓	To be able to assess the impact of the advertisement	✓	services  To be able to compare products and services by different criteria	✓	To be able to use electronic tools to perform the comparisons		organisation or individual can help him/her
	Attitude	✓	To realize, financial services also have a price as the products	✓	To highlight the getting of reliable information about	✓	To highlight the use of electronic tools  To highlight the	✓	To highlight the role of specialized financial consulting
			do (e.g. bread, sugar, etc.)		financial services		comparison of financial services before making a decision	✓	To be ready to pay for specialized financial consulting

	Behaviour √	To freely use trade and service centres	✓ ✓	To use the sources, providing reliable information about financial services  To make a realized shopping, comparing	✓	To compare the financial services by respective criteria and to make a realized choice  To use respective	· ✓	To use a specialized financial consulting when necessary
			✓	products and services  Not to make an		electronic tools		
				impulsive shopping				
RIGHTS	Knowledge		<b>√</b>	To know that people, as citizens, have some rights and liabilities	<b>√</b>	To know that there can occur some rights and liabilities when consuming financial	<b>√</b>	To know the official/legal ways of protection of their rights and its role
			✓	To know the main concepts, specific to the financial system	✓	services To know what legal framework exists that regulates the financial system	✓	To know about the Financial System Mediator
					✓	To know that it is their right to voice their complaints when consuming financial services		
	Skill		✓	To be able to explain how the financial sector is regulated To be able to explain the meaning of the	✓	To be able to differentiate between own rights and liabilities and those of the financial institution	<b>√</b>	To be able to identify to whom to apply in case of violation of his/her rights
				main concepts, specific to the financial sector	✓	To be able to write an application		
	Attitude		✓	To highlight the protection of own rights	<b>√</b>	To realize his/her role as well as the role of the financial institution or organisation in protection of his/her own rights	✓ ✓	To value the official/legal ways in protection of his/her rights  To highlight the role of
					✓	To realize the importance of official written relations		the Financial System Mediator
	Behaviour				✓	Before signing any contract, to read and understand its whole content	✓	To follow the official/legal ways when having a dispute with financial
					✓	If necessary, to take steps in order to protect his/her own rights		institution
SECURITY	Knowledge		<b>√</b>	To know which personal data should not be disclosed to other people	✓	To know that one should be very careful when discussing personal finances with	✓	To know the main types and kinds (examples) of financial defalcation and fraud
			✓	To know the risks related with disclosure of personal data	✓	somebody else To know that there are some financial	✓	To know how to avoid financial defalcation and fraud
				·		defalcation and fraud	✓	To know what to do when he/she has become a victim of financial defalcation and fraud

Skill	<b>√</b>	To be able to classify the information by its secrecy	<b>√</b>	To be able to assess the financial services (including the means of making electronic purchase) by their security	<b>√</b>	To be able to identify the attempt of financial defalcation and fraud
Attitude	<b>√</b>	To highlight the secrecy of personal data	<b>√</b>	To pay attention on ensuring the secrecy of personal data when consuming financial services	✓	To highlight the fact of being informed about financial defalcation or fraud
Behaviour			✓	To take steps to ensure the secrecy of personal data	✓	To pay attention to the information about financial defalcation and fraud
					✓	To take steps not to become a victim of financial defalcation and fraud

## Kyrgyz Republic – Standards on basic financial literacy competencies

This is an unofficial English translation of the Standards on basic financial literacy competencies for pupils of grades 5-11 in educational institutions of the Kyrgyz Republic.

## Grades 5-7 (10-13 year-old students) MYSELF (PERSONAL FINANCE)

Subject areas of financial literacy	Financial Literacy Components				
illianciai meracy	Information Competence	Socio-communicative competence	Self-organization and problem solving		
Financial planning and budget	Understand personal income and family income	Be able to distinguish between regular and irregular sources of income	Understand the difference between basic needs and wishes		
	Understand what wages are	Be able to control spontaneous purchases	Aware of the need to limit wishes and		
	Understand the need to plan personal income and expenses	Be able to choose a product or service in accordance with real financial possibilities	to choose a product or service in accordance with real financial opportunities		
	Understand the difference between regular and irregular sources of income and the need to take them into account when planning	Be able to keep track of incoming and outgoing money	Understand the difference between needs and desires		
Mandatory payments and deductions	Have a general idea of pensions				
Personal savings	Understand that savings can generate income	Be able to save money for specific purposes	Have financial goals and motivation to achieve them		
Borrowing	Understand what a loan is and why a loan is given at interest	Be able to highlight the pros and cons of using credit	Understand the reasons and goals (need) of a loan		
Investment					
Insurance	Understand the need for risk protection				
Consumers' rights protection	Know that consumers should expect to receive quality services				
	Know the basic rights and obligations of consumers				

Subject areas of financial literacy	Financial Literacy Components				
inancial illeracy	Information Competence	Socio-communicative competence	Self-organization and problem solving		
Risks and financial security	Understand what financial risks are, what they are and that all financial instruments are associated with risks		Develop critical thinking in relation to advertising messages  Recognise that money needs to be kept in a safe place.		
General knowledge about the economy and basic financial arithmetic	Understand that cash is not the only form of payment for goods and services	Be able to distinguish between forms of money (cash, plastic cards, checks, coupons, etc.)	Be motivated to improve one's own material situation		

# Grades 8-9 (14-15 year-old students) MYSELF AND A GROUP: FAMILY, CLASS, COMMUNITY (family budget, class budget)

Subject areas of financial literacy	Fir	nancial Literacy Components	Financial Literacy Components				
illianciai ilteracy	Information Competence	Socio-communicative competence	Competence "Self-organization and problem solving"				
Financial planning and budget	Understand the difference between mandatory and non-mandatory expenses and the need to take them into account when planning  Understand the need to keep records of income and expenses  Know the total family income and its sources, understand ways to increase income  Know what personal expenses and general cost management principles are	Be able to distinguish between mandatory costs and additional needs  Be able to draw up a personal budget  Know the required monthly spending and current needs at the moment  Be able to keep track of incoming and outgoing money	Recognize the importance of education that will provide income Match financial capacity and needs				
Mandatory payments and deductions	Have a general idea of taxes  Understand what mandatory deductions will be accompanied by income (income tax, insurance deductions for retirement, etc.)	Be able to distinguish between salary before payment of obligatory deductions and salary after their payment					
Personal savings	Have a general idea of the different ways of saving and types of savings products  Understand the risks associated with storing savings in cash	Be able to distinguish between a deposit (bank deposit) and current account  Be able to recognize products and services that cannot be purchased on a regular income	Have financial goals and motivation to achieve them  Recognize the effect of savings on financial security and stability				
Borrowing	Understand the basic terms of lending  Know what the full cost of a loan is	Be able to highlight important information in a loan agreement	Recognize personal propensity for risky behaviour				
Investment	Understand what investment is, and how it differs from savings and lending  Understand that investment risks are higher than bank deposit risks  Understand the possibility of obtaining additional income through investing	Be able to highlight the pros and cons of investment	Recognize personal propensity for risky behaviour				
Insurance	Understand the main objectives and principles of insurance  Know the different types of insurance products	Be able to compare different types of insurance products and make choices based on life goals and circumstances, life cycle events					

Subject areas of financial literacy	Financial Literacy Components				
illianciai ilteracy	Information Competence	Socio-communicative competence	Competence "Self-organization and problem solving"		
	Know the conditions of insurance payments in the event of an insured event				
Consumers' rights protection	Know the basic rights and obligations of consumers of financial services	Be able to read a contract with a financial institution			
		Be able to make a complaint			
		Be able to learn product information and be aware of the purpose of this information			
Risks and financial security	Know the main types of financial fraud and how not to become a victim of fraudsters	Be able to assess the degree of financial risk of products and services	Recognize that money needs to be kept in a safe place		
	Understand the need to have a financial safety cushion in case of emergency and crisis life situations				
General knowledge about the	Understand that interest rates and exchange rates may vary over time	Be able to distinguish between advertising and product information	Recognize responsibility for own financial decisions		
economy and			Develop critical thinking		
basic financial arithmetic			Be proactive in finding information and updating it		

# Grades 10-11 (16-18 year-old students) MYSELF, THE STATE AND THE SYSTEM (public finance, financial products)

Subject areas of financial literacy	Fii	nancial Literacy Components	
illiancial illeracy	Information Competence	Socio-communicative competence	Competence "Self- organization and problem solving"
Financial planning and budget	Understand that purchasing decisions can be made under the influence of advertising and environmental pressure  Understand the relationship between education and career  Understanding the effects of unemployment	Be able to draw up a personal budget Know the required monthly spending and current needs at the moment Be able to distinguish between short- term and long-term needs and determine priority spending Be able to keep track of incoming and outgoing money Be able to assess the various needs and desires in terms of financial opportunities	Match financial capacity and needs  Understand the difference between needs and capabilities  Take responsibility for financial decisions, be aware of the consequences of these decisions
Mandatory payments and deductions	Have a general idea of compulsory deductions, such as taxes, contributions to state insurance and pensions, to understand the purpose and purpose of their collection		
Personal savings	Understand the need to accumulate savings for future expenses  Understand the need for retirement savings  Understand the risks associated with storing savings in cash  Knowledge of the state deposit insurance system	Be able to distinguish between a deposit (term deposit) and a current account Be able to read and check bank statement	Recognize the effect of savings on financial security and stability

Subject areas of	Financial Literacy Components					
financial literacy	Information Competence	Socio-communicative competence	Competence "Self- organization and problem solving"			
		Be able to use a savings book, read and understand the deposit banking service agreement				
		Be able to save part of income				
Borrowing	Know the benefits and risks associated with different methods of lending	Be able to assess the material possibilities of repayment of the loan	Understand responsibility fo loan repayment			
	Know what credit history is and how it can influence the decisions of banks to issue a loan in the future					
	Understand the difference between debit and credit cards					
	Know the different types of loans and understand the differences in interest rates					
	Understand the consequences of non-fulfilment of loan obligations					
Investment	Understand that investing can generate extra income		Realize responsibility for making investmen decisions			
	Understand that investment risks are higher than bank deposit risks		decisions			
	Know the basic investment tools					
	Know the basic rules of investing: the higher the yield, the higher the risk					
Insurance	Know the conditions of insurance payments in the event of an insured event	Be able to compare different types of insurance products and make choices based on life goals and circumstances,	Recognise the need fo voluntary insurance			
	Know compulsory pension insurance, investment of pension savings, about non-state	life cycle events	Recognise that starting to wor at different moments will have			
	pension provision	Be able to use the insurance calculator on the insurer's website to calculate the cost of insurance	an impact on the pensic amount			
		Be able to distinguish between types of pensions and use a pension calculator				
Consumers' rights	Know where to file a complaint against financial	Be able to make a complaint	Be active in defending one's			
protection	institutions	Be able to learn about a financial product and be aware of the purpose of this information	own rights			
		Be able to understand bills and payment documents, including utility bills, etc.				
Risks and financial security	Understand the need to have a financial safety cushion in case of emergency and crisis life	Be able to assess the degree of financial risk of products and services	Recognize one's own risk appetite			
	situations	Have skills about digital security, including using a plastic card,	Aware of the consequences o risky behaviour			
		ATM, payments via the Internet, etc.	Be able to realistically assess one's own capabilities			
General knowledge about the	Understand what inflation is	To be able to translate the value of a	Be aware of the responsibility for one's own financia			
economy and basic	Know the economic situation in the country	currency using an exchange rate  Be able to compute interest in relation to	for one's own financial decisions			
financial arithmetic	Know about some official financial documents (for example, about bank statement), ATM services, credit cards, etc.	savings and loans	Be proactive in finding information and updating it			

Subject areas of financial literacy	• •					
illianolal includy	Information Competence	Socio-communicative competence	Competence "Self- organization and problem solving"			
		Be able to check bank statements, utility bills and other documents Be able to compare absolute and relative values	Be motivated to increase one's own financial literacy			

## Russia – Framework on basic financial literacy competencies

This is an unofficial English translation. The original text in Russian is available at  $\frac{\text{https://www.minfin.ru/ru/document/?id}_{4=63407\#}$ 

Subject areas of	Financial Literacy	Financial Literac	cy Competencies
financial literacy	Components	Basic level	Advanced level
Income and expenses	Knowledge and understanding	Understand what personal income is and how to increase it.	Know the total income of the family and its sources, understand ways to increase income.
		Understand what personal expenses are, know the general principles of cost management.	Understand what taxes are levied on income (income tax, deductions for retirement, etc.).
		Understand the differences between spending on essential goods and services and spending on	Understand what wages are and know different types of wages
		additional needs.  Understand the impact of education on the subsequent career.	Understand the effects of unemployment.
	Skills and behaviour	Be able to distinguish between regular and irregular sources of income.	To be able to distinguish between salary before income tax and salary after income tax
		To be able to give a financial assessment of costs for various needs and desires.	To be able to control spontaneous purchases, not to go beyond the budget.
		Be able to estimate your monthly expenses.	To be able to choose a product or service in accordance with real financial capabilities.
	Personal specifications and settings	Understand the importance of education, which will provide income.  Understand the difference between basic needs and desires.	Recognize the need to limit your desires and choose a product or service in accordance with real financial possibilities.
			Take responsibility for financial decisions, be aware of the consequences of these decisions.
Financial Planning and	Knowledge and	Understand the need to keep records of income and	Have a general idea of taxes.
Budget	understanding	expenses	Understand the need for planning income and
		Understand that purchasing decisions can be made under the influence of advertising and environmental pressure.	expenses.
	Skills and behaviour	Know the required monthly spending and current needs at the moment.	To be able to make a personal budget.
		To be able to keep a record of income and expenses.	
		To be able to distinguish between short-term and long-term needs and to determine priority spending.	
	Personal installation characteristics	Recognize the need to record and plan your income and expenses.	Understand the difference between needs and desires and measure financial opportunities and needs.

Personal savings	Knowledge and	Understand the need to accumulate savings for	Understand the need for retirement savings
	understanding	future expenses.  Understand the principle of keeping money in a bank	Understand the risks associated with storing savings in cash.
		account.  Recognize that savings can generate income.	Know about the existence of the state deposit insurance system.
			Have a general idea of the different ways to save.
	Skills and behaviour	To be able to save money for specific purposes.	Be able to read and check a bank statement.
		To be able to distinguish between a deposit (time deposit) and a current account.	To be able to use a savings book or a debit card, to read and understand a bank service agreement on
		To be able to distinguish goods and services that cannot be purchased on a regular income.	a deposit.
	Personal specifications and	Understand the importance of savings.	Have financial goals and motivation to achieve them.
	settings		Recognize the impact of savings on financial security and stability.
Crediting	Knowledge and understanding	Understand what a loan is and why a loan is given at interest.	Know the different types of loans and understand the differences in interest rates.
		Understand the basic principles of lending. Understand the differences between a debit card	Know the benefits and risks associated with different ways of lending.
		and a credit card.	Know what the full cost of a loan is.
			Know the features of mortgage lending.
			Know what a credit history is and how it can influence the decisions of banks to issue a loan in the future
	Skills and behaviour	Be able to highlight the pros and cons of using a loan.	To be able to assess the material possibilities of repayment of the loan.
			Be able to highlight important information in the loan agreement.
	Personal	Understand the motives and goals (need) of a loan.	Recognize personal propensity for risky behaviour.
	specifications and settings		Understand the responsibility for the payment of the loan.
Investment	Knowledge and understanding	Understand what investment is, how it differs from savings and lending.	Understand that investment risks are higher than the risks of bank deposits.
		Know the basic rule of investing: the higher the yield, the higher the risk.	Understand that investment companies cannot guarantee any return on investment.
	Skills and behaviour	Be able to compare profitability various investment products.	To be able to assess the degree of risk of a specific investment product.
	Personal specifications and settings	Realize that money should be invested.	Recognize investment as a long-term savings mechanism.
Insurance	Knowledge and	Understand the main objectives and principles of	Know the different types of insurance products.
	understanding	insurance.	Know the conditions of insurance payments in the event of an insured event.
	Skills and behaviour	To be able to distinguish what kind of insurance is required in a particular life situation.	To be able to compare different types of insurance products and make choices based on life goals and circumstances, life cycle events.
	Personal specifications and settings	Recognize the need to use insurance products in various areas of life.	Recognize the need for voluntary insurance in various areas of life.
Risks and financial	Knowledge and	Understand what financial risk is.	To know what financial risks are, and that all
security	understanding	Understand the need to have a financial safety cushion in case of emergency and crisis life situations.	financial instruments are associated with risks.  Know about the possibilities of financial fraud and what to do to avoid becoming a victim of fraudsters.
	Skills and behaviour	Be able to protect personal information, including on the Internet.	Be able to assess the degree of financial risk of products and services.
			To have the skills of technological security, including a plastic card, ATM, payments via the Internet, etc.

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	Personal	To be able to realistically assess their capabilities.	Awareness of the consequences of risky behaviour.
	specifications and settings	Recognize that money must be kept in a safe place.	
		Develop critical thinking in relation to advertising financial products and services.	
Consumer rights Protection	Knowledge and understanding	Know that the consumer has the right to receive quality services.	Know the rights and obligations of consumers of products and services, including financial
		Understand that the consumer has both obligations and rights.	Know where to file a consumer rights complaint
	Skills and behaviour	To be able to find information about the product and be aware of the purpose of this information.	To be able to make a complaint about the violation of consumer rights.
			To be able to understand bills and payment documents, incl. checks, utility payments, etc.
	Personal specifications and settings	Recognize that consumer rights are reserved.	Be active in defending your consumer rights.
General knowledge of	Knowledge and	Know the types of major financial organisations.	Know the economic situation in the country and
economics and the basics of financial	understanding	Understand that cash is not the only form of payment for goods and services.	understand its impact on personal well-being. Understand what inflation is.
arithmetic		Know about some official financial documents (for example, about bank statements), ATM services, credit cards, vouchers, etc.	
		Know that interest rates and exchange rates may vary over time.	
	Skills and behaviour	Be able to distinguish between types of money (cash, cards, checks, coupons, etc.).	Be able to count simple and compound interest in the application to savings and loans.
		Be able to count cash (bills and coins).	Be able to verify bank statements, utility bills and
		Be able to correctly count the change.	other documents.
		Be able to distinguish advertising from product or service information.	To be able to compare absolute and relative values in the economy.
		Be able to distinguish between Russian money and foreign currency.	
		Be able to translate the value of a currency using courses.	
	Personal	Be motivated to improve their financial situation.	Develop analytical thinking in relation to the impact
	specifications and settings	Show activity and initiative in finding information and updating it.	of the economic situation on personal finances.  Realize responsibility for your own financial
		Have the motivation to increase your financial literacy.	decisions.

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