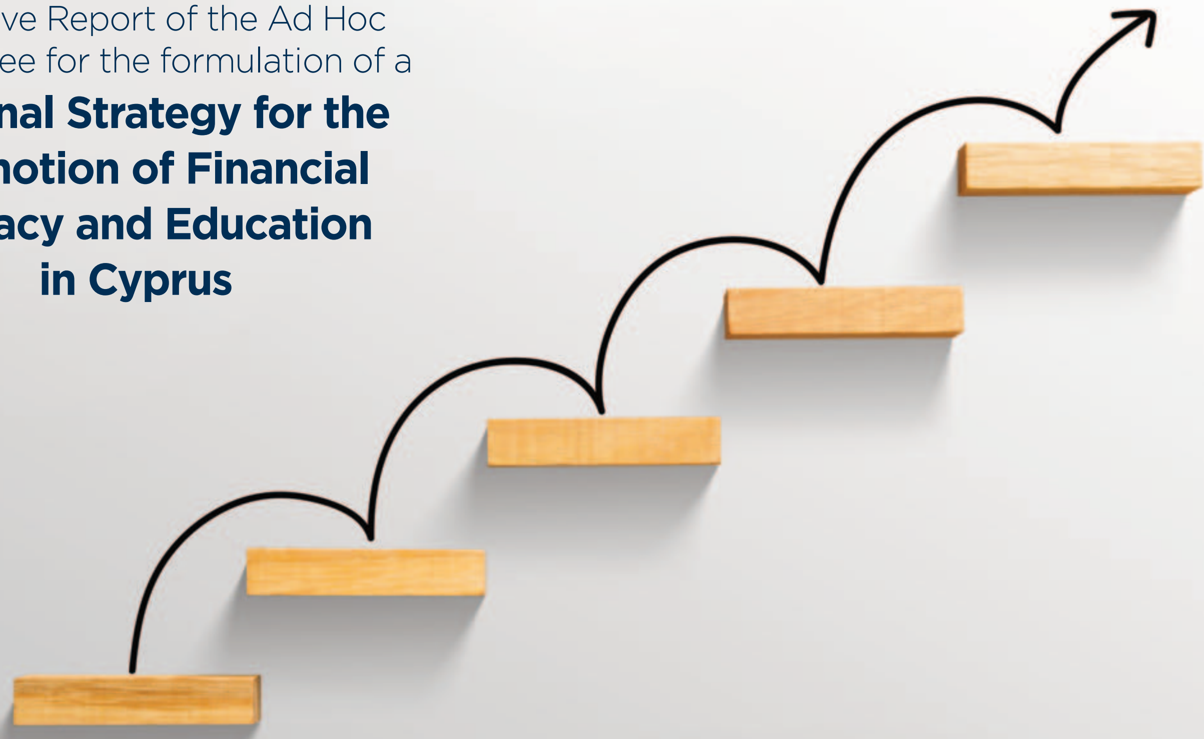
Knowledge that matters

AD HOC COMMITTEE FOR THE FORMULATION
OF A NATIONAL STRATEGY FOR THE PROMOTION
OF FINANCIAL LITERACY AND EDUCATION IN CYPRUS

Extensive Report of the Ad Hoc Committee for the formulation of a

National Strategy for the Promotion of Financial Literacy and Education in Cyprus

Financial Wellbeing



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Aiming for a society where financial literacy is a priority, the vision of the strategy is to empower citizens with the knowledge and skills required to enhance their financial well-being.

Foreword of the Governor of the Central Bank of Cyprus

This Report encompasses proposed actions for addressing the current challenge of financial illiteracy, a challenge whose resolution is crucial for economic prosperity and the enhancement of citizens' wellbeing.

The promotion of financial literacy and education in Cyprus is one of the strategic goals of the Central Bank of Cyprus (CBC). In 2018, the CBC initiated a survey to gauge the level of financial illiteracy among the population in Cyprus, on the basis of a standardised questionnaire from the Organisation for Economic Cooperation and Development (OECD). The survey results highlighted an urgent need for improving the level of financial literacy in Cyprus. They have also been instrumental in shaping this National Strategy proposal for the promotion of financial literacy and education in Cyprus. Along with future survey updates, the results are expected to serve as a valuable resource and guide in the implementation of the National Strategy.

Acknowledging the scientifically documented significance of financial literacy, the CBC has been a driving force behind the establishment and operation of an ad-hoc Committee for the National Strategy to promote financial literacy and education in Cyprus. The contribution of the CBC has been substantial in the Committee, not only through its coordinating role but also through the staffing of the Committee's Secretariat with CBC employees and through allocating additional human resources to the project.

The Committee, established in December 2020, comprises representatives from the CBC, the Ministry of Finance, the Ministry of Education, Sports, and Youth, the Cyprus Securities and Exchange Commission, and two academic experts from the University of Cyprus and the Cyprus University of Technology. The Committee also collaborated with international experts in the field, whose insights greatly enriched its work.

This Report is the result of a rigorous collective effort and effective collaboration among the Committee members and the CBC staff involved. The content of the Report is particularly significant, as a plethora of studies have established that enhancing financial literacy and education is directly linked to the financial prosperity of individuals and society at large. This also seems to have a tangible positive impact on a country's financial stability. At the current juncture, particularly in the wake of recent financial crises and the impact of the pandemic, the role of financial literacy in safeguarding citizens' well-being and shielding them from financial challenges and risks has become ever more critical.

As such, many countries, especially within the European Union, have adopted national strategies to promote financial literacy and education. Cyprus, in contrast, remained one of the few EU countries without a national strategy to address financial illiteracy, a gap that the current effort aims at bridging.

It should be mentioned that the Republic of Cyprus had already identified the national strategy for financial literacy as a key action within its 2021 Recovery and Resilience Plan. It is encouraging to see that both the CBC and the State share a common vision for the future of financial literacy and education in Cyprus.

According to international best practices, a national strategy for financial literacy should be continuously monitored, evaluated, and updated based on implementation experiences, developments, and the degree of its effectiveness. It goes without saying that the same holds true for Cyprus.

We are hopeful that all stakeholders in Cyprus, including the government, will embrace and support the implementation of the National Strategy for promoting financial literacy and education. This support is an essential social policy action that can significantly elevate the living standards of citizens, especially those in economically vulnerable groups.

I would like to express my deepest appreciation to all those who contributed to the completion of this significant project. All members of the Committee, the CBC staff team who played an active role in supporting the Committee, and the scientific collaborators, worked with dedication and professionalism. Their sole motivation was the completion of this Report, which is a landmark for our country. The quality of their contribution is indeed reflected in the substantive and scientifically documented outcome.

The adoption of the National Strategy for promoting financial literacy and education is a crucial step towards improving the financial well-being and quality of life for all citizens of Cyprus. It is our collective responsibility to ensure that this ambitious goal is achieved. We owe it to both the current and future generations.

Constantinos Herodotou
Governor of the Central Bank of Cyprus

Address by the Chair of the ad-hoc Committee for the promotion of financial literacy and education in Cyprus

I warmly welcome the completion of the Report by the ad-hoc Committee for the formulation of a National Strategy for financial literacy and education in Cyprus. This Report constitutes the capstone of collective efforts, rigorous work, and collaboration among the CBC technocrats and the members of the ad-hoc Committee, in conjunction with the valuable input of experienced scientific collaborators. It signifies the inception of a novel initiative aimed at enhancing the level of financial literacy in our country through an all-encompassing and strategic approach.

The ad-hoc Committee's proposal for a National Strategy on financial literacy and education in Cyprus relies on an all-inclusive plan that aims to enhance our country's financial literacy levels, thereby bolstering the financial well-being of its citizens. The Report draws upon scientific findings from Cyprus, insights, and suggestions from local and international financial literacy experts, OECD/INFE [1] guidelines, and best international practices. It also takes into consideration the existing level of financial education in Cyprus, based on the findings of the CBC sampling survey conducted in 2018, along with other significant studies and initiatives that were developed and implemented in the past by individual stakeholders and organisations.

I would like to warmly thank, both on behalf of the ad-hoc Committee and personally, the Governor of the Central Bank of Cyprus, Mr. Constantinos Herodotou, for his continuous and substantial support for the Committee's effort to successfully fulfil its mandate. The members of the ad-hoc Committee and their collaborators were greatly motivated by the support and involvement of a high-ranking state authority.

I extend my thanks to the members of the ad-hoc Committee, namely Dr Panayiotis Andreou from Cyprus University of Technology (CUT), Dr George Theocharides and Mr. George Karatzia from the Cyprus Securities and Exchange Commission, Ms. Avgi Chrysostomou Lapathioti from the Ministry of Finance, Dr Andreas Milidonis from University of Cyprus and Ms. Janet Hadjiosif from the Ministry of Education, Sports, and Youth. Our collaboration has been outstanding. I would also like to thank the CBC team of experts, who have shown dedication and professionalism in supporting the Committee's work, and these are: Christiana Argyridiou-Demetriou, Christia Doritou, Ioanna Evangelou, Dr Theodosis Kallenos, Lena Cleanthous, Marina Constantinou, Marios Louca, and Charis Charalambous. Likewise, for the excellent collaboration we had, I would like to thank the associates of the Committee members, namely, Marina Andreou (MOEC), Dr Sofia Anyfantaki (Bank of Greece and CUT), Elena Karkoti (CySEC), Ioanna Konstantinidi (Ministry of Finance), Marie Louroutziati (CySEC) and Fotini Panayi (UCY).

On behalf of all the members of the ad-hoc Committee, I would also extend my thanks to our external scientific collaborators, Dr Adele Atkinson (Atkinson Financial Research and Policy and University of Birmingham, former policy expert at the OECD), Dr Maria Demertzis (Deputy Director at Bruegel, Brussels), Professor Michael Haliassos (Goethe University, Frankfurt), Professor Alexander Michaelides (Imperial College London) and Professor Dennis Philip (Durham University Business School), who have significantly contributed to enriching and substantiating the Report's recommendations. These esteemed collaborators, drawing upon their extensive expertise and years of valu-

1. OECD/INFE: International Network on Financial Education (INFE) of the Organisation for Economic Cooperation and Develompent (OECD).

able experience in the field, made invaluable contributions to the Committee's work, based on best practices derived from academic research and rich country-specific experiences.

Additionally, I would like to express my gratitude to the Member of Parliament Ms. Savia Orphanidou, who advocated for establishment of the ad-hoc Committee for the promotion of financial literacy in Cyprus in a Parliamentary Committee session on Education and Culture held on 25 November 2020. Subsequently, the ad-hoc Committee was established without delay, and the CBC expeditiously implemented all essential mechanisms to effectively coordinate and support the Committee's work.

I firmly believe that the ad-hoc Committee's work is of immense value and utility. It lays out a well-researched, evidence-based, and comprehensive National Strategy on a subject that is pertinent to all citizens, particularly the economically vulnerable groups. The quality of the work is further underscored by the fact that funding has already been secured from the European Commission for implementing specific actions of the National Strategy, contingent upon its adoption by the Council of Ministers in Cyprus in the second quarter of 2022.

I am convinced that the State and the institutions involved will wholeheartedly embrace this initiative and lend their support to the implementation of the National Strategy for promoting financial literacy and education in Cyprus. I believe that the effective implementation of the National Strategy is paramount for materially improving the financial prosperity of citizens, especially those in economically vulnerable groups.

The success of this entire initiative is of great significance for all citizens. Consequently, the responsibility that rests on the shoulders of the State and the entities involved is immense, and it is imperative that they remain steadfast and committed to the goals of the National Strategy. This report is not only an important starting point but also a springboard that will provide momentum to the entire initiative.

Dr. George Kyriacou
Senior Manager
Economics, Statistics & Financial Stability Division
Central Bank of Cyprus
President of the ad-hoc Committee

Summary of the Report of the ad-hoc Committee for the promotion of Financial Literacy and Education in Cyprus

The Report[1] presents the proposal of the ad-hoc Committee for the formulation of a National Strategy for the promotion of financial literacy and education in Cyprus (henceforth "ad-hoc Committee"). The ad-hoc Committee was established in December 2020 and consists of members from the Central Bank of Cyprus (CBC), which also has a coordinating role, the Ministry of Finance, the Ministry of Education, Culture, Sport and Youth (MOEC), the Cyprus Securities and Exchange Commission and two academic experts from the University of Cyprus and the Cyprus University of Technology. The work of the ad-hoc Committee was supported by a Secretariat and other CBC staff who had a significant role in the conduct of related research work, the preparation of recommendations to the Committee and in the overall effort for completion of the project. The members of the Committee were also supported by their associates. Finally, it is noted that the ad-hoc Committee collaborated with external scientific professionals who are experts in the field.

The proposal for the formulation of a National Strategy, as reflected in this Report, is based on international practices and aims to benefit the citizens and the society as whole. The fact that Cyprus is one of the very few countries in the European Union without a National Strategy for the promotion of financial literacy, highlights the importance and usefulness of this proposal.

In recent years, the reinforcement of financial literacy has become a global challenge, as research findings have directly linked financial literacy with the financial welfare and prosperity of a country's citizens. According to the OECD, financial literacy is "a combination of awareness, knowledge, skill, attitude and behaviour necessary to make sound financial decisions and ultimately achieve individual financial well-being".

In the aftermath of the recent financial crisis, the ongoing pandemic developments and the Russian invasion of Ukraine, the role of financial literacy has become ever more important for the citizens' well-being and resilience, in times of uncertainty. Furthermore, market globalisation and digitalisation of financial products have increased the need for an even more coordinated and efficient financial education for citizens.

"the reinforcement of financial literacy has become a global challenge, as research findings have directly linked financial literacy with the financial welfare and prosperity of a country's citizens"

However, as indicated by scientific evidence from countries around the globe, a large percentage of the world's population does not completely understand basic financial concepts, such as lending, investments, the importance of saving, planning a family budget or managing financial risk. The lack of knowledge in basic financial concepts may lead to poor financial decisions with negative repercussions on individual economic prosperity.

The results of the CBC sampling survey for financial literacy indicate the relatively low levels of financial knowledge in the wider population in Cyprus. The average score for financial knowledge in Cyprus is below the minimum level set by the OECD as sufficient for someone to be considered as financially literate. The results of the survey also indicate specific population groups which are in greater need for financial education such as the young, the unemployed, low income and lower education citizens,

1. This is an extensive summary of the Report in Greek. The English Report of the ad-hoc Committee, taking into account the analysis of the CBC survey results and the relevant scientific literature, will be available in due course.

women and citizens who did not take economics courses during secondary education.

Even though financial literacy should first and foremost be an individual's concern, there are important and fundamental reasons as to why the State should intervene, aiming to enhance and promote financial literacy and education in the society. First, low levels of financial literacy are likely to lead to more severe consequences on financially vulnerable groups. In this respect, state intervention can be justified in the context of social policy for the protection of vulnerable groups. Second, financial illiteracy can have a negative effect on a country's financial stability if, for example, numerous borrowers are unable to service their loan instalments due to overindebtedness. At the same time, it may obstruct the efficient transmission of monetary policy, which heavily depends on the public's perceptions about central banks' decisions. Finally, it can potentially increase information asymmetry between transactions, leading to competition imbalances and distortions that will eventually result in a lower than optimal free market performance. In general, enhancing financial knowledge leads to higher resilience of an economy and supports financial stability and improved prosperity of all citizens.

According to evidence collected by the CBC in the context of the National Strategy formulation, a variety of stakeholders, including national supervisory authorities, professional associations, universities and other organisations, have engaged in the promotion of financial literacy in Cyprus through various initiatives. However, despite the commendable efforts, experience has highlighted the need for better coordination amongst individual initiatives, as there was overlapping of activities and coverage of only a small portion of the population. According to the OECD, a coordinated and well planned National Strategy could lead to more systematic, targeted and efficient promotion of financial literacy and education.

The ad-hoc Committee has performed an extensive analysis and evaluation of various financial literacy initiatives across the globe, taking into consideration the suggestions of scientific collaborators and stakeholders in Cyprus as well as the conclusions of relevant scientific studies. On the basis of the above, the Report features the mission and vision of the National Strategy for promoting Financial Literacy and Education in Cyprus, its strategic objectives and proposed initiatives. The Report also addresses the main features of the governance structure of the new body/Committee that should be established in order to implement the National Strategy. It is noted that the current ad-hoc Committee does not have any executive powers and its function is limited to a consultative and advisory role.

The proposed vision and mission of the Body responsible for the implementation of the National Strategy are as follows:

Vision: *"Empower citizens in Cyprus with the knowledge and skills required to enhance their financial wellbeing*."

Mission: *"The promotion of financial literacy and education among citizens in order to contribute to the efficient management of their financial resources and, consequently, to the enhancement of their financial wellbeing."*

In accordance to the above mission and vision, the level of financial literacy in Cyprus and the attitude and behaviour of people in Cyprus in relation to financial issues, the ad-hoc Committee proposes the following strategic objectives:

(1) Raise citizens' awareness on the importance of financial literacy and education for themselves and their family,
(2) Empower individuals, starting from the young, with core financial skills and habits in order to be able to efficiently manage their personal or family finances, aiming to enhance their financial wellbeing
(3) Raise awareness and enhance skills on the need for adequate financial planning for insurance and retirement
(4) Raise awareness and increase knowledge regarding the use and associated hazards of digital financial products and services.

On the basis of the vision, the mission and the strategic objectives, the Report provides a proposed Action Plan and a proposed governance structure for the establishment of a new Body that will undertake the implementation of the Strategy.

The proposed Actions in the National Strategy are as follows:

(1) Raise public awareness about the importance of financial literacy through targeted communication and public events,
(2) Promote financial education in public schools,
(3) Promote financial literacy through lifelong learning,
(4) Establish a website and smartphone application (telephones, tablets),
(5) Reinforce existing good practices and initiatives,
(6) Training of trainers.

The ad-hoc Committee proposes that the new Body to be established with the purpose of implementing the National Strategy is named the Cyprus Financial Literacy and Education Committee (CYFLEC). The envisaged CYFLEC should consist of the following: The Governing Board, the Coordination and Management Team, the Scientific Advisory Committee, the Thematic Project Teams and the Stakeholders Group.

It is proposed that the Governing Board consists of the heads of at least the following state institutions:

(a) the Central Bank of Cyprus (Chairing the Governing Board)
(b) Competent ministries, namely, at least, the Ministry of Finance and the Ministry of Education, Culture, Sport and Youth
(c) the national regulators, namely, the Cyprus Securities and Exchange Commission (CySEC) and the Insurance Companies Control Service (ICCS).

During the transitional period, it is proposed that the ad-hoc Committee acts as the Coordination and Management Team until the finalisation of the new governance structure.

The National Strategy and its initiatives should be evaluated and revised periodically. The evaluation should be made on the basis of the degree of effectiveness in achieving the strategic objectives, as well as the socio-economic developments in Cyprus.

The success of the National Strategy will depend to a large extent on raising public awareness about the importance of financial literacy and its positive impact on the society as a whole. Equally important and necessary is the embracing and support by the State and all relevant stakeholders in order to successfully implement the various initiatives included in the Report. All efforts towards this direction should be continuous and determined in order to fully reap the medium- and long-term benefits.

Extensive Report of the Ad Hoc Committee for the formulation of a National Strategy for the Promotion of Financial Literacy and Education in Cyprus

Introduction

Financial literacy is defined by the Organisation for Economic Co-operation and Development (OECD) as a "combination of awareness, knowledge, skill, attitude, and behaviour, necessary to make sound financial decisions and ultimately achieve individual financial wellbeing" (Atkinson and Messy, 2012).[1]

Financial literacy is one of the most important factors determining citizens' financial wellbeing, as it optimises decision making and maximises their potential to achieve their personal financial goals. According to a significant number of scientific studies, higher levels of financial literacy are associated with more adequate management of everyday financial issues, a lower probability of over-indebtedness, better retirement planning, lower vulnerability to being exploited or deceived, higher participation in the financial markets, more employment opportunities, as well as an increased probability of earning higher salaries.[2]

> **"financial literacy is a combination of awareness, knowledge, skill, attitude and behaviour, necessary to make souund financial decisions and ultimately achieve financial wellbeing."**

Financial literacy is a stepping-stone towards financial inclusion, that is, individuals and businesses having access to useful and affordable financial products and services that meet their needs.[3] Financial knowledge and education, being a form of human investment can have tremendous consequences on economic growth as it shows benefits to the individual, business, and societal fronts. While the field of financial literacy has many open questions in terms of priorities, there is a growing consensus that relates to the importance of multi-stakeholder partnerships that leverage both public and private sector actors, as well as society as a whole.

Financial literacy can be acknowledged to be primarily an individual's challenge. However, there are fundamental reasons why it is also an issue justifying state involvement. First, it is abundantly evident from the international literature that a lack of financial literacy harms lower income earners and other vulnerable groups to a greater extent (Demertzis, Domínguez-Jiménez and Lusardi, 2020; Clark, Lusardi and Mitchell, 2021; Andreou, Anyfantaki, and Atkinson, 2022). Therefore, State intervention could be justified as a social policy tool. Second, financial literacy is considered an important element of financial stability[4], alongside market regulation, supervision and financial consumer protection (GFLEC/OECD, 2018, pg. 3).[5] Accordingly, policy interventions towards enhancing individuals' financial literacy could play an important role in ensuring financial and economic stability and in mitigating the risk and impact of future financial crises by making households more resilient to shocks (Andreou, Anyfantaki and Atkinson, 2022, McKnight and Rucci, 2020). Third, as recently cited in the European Central Bank Strategy Re-

1. Similarly, Lusardi and Mitchell (2014) define financial literacy as peoples' ability to process economic information and make informed decisions about financial planning, wealth accumulation, debt, and pensions.
2. See Gomes, Haliassos and Ramadorai (2021); OECD (2016), Balloch, Nicolae, and Philip (2015), Lusardi and Tufano (2015), Campbell et al. (2011), Lusardi and Mitchell (2011) and Van Rooij, Lusardi, and Alessie (2011) among others.
3. Source: Financial Inclusion (worldbank.org)
4. Indicative for the case of Cyprus, is the high percentage of non-performing exposures which poses a significant risk for the stability of banks and the financial system.
5. According to the highlights of the 5th OECD-GFLEC Global Policy Research Symposium to Advance Financial Literacy (May, 2018), the stability of the financial system is linked to the individual decision making. Moreover, poor financial judgment and speculation at an aggregate level can have devastating consequences for the entire world economy.

Figure 1: Number of EU countries planning, actively designing or implementing a National Strategy for Financial Education

Sources: OECD, public press releases, and National Strategy documents

view (Assenmacher et al., 2021), financial illiteracy may hamper the effective transmission of monetary policy, which heavily depends on the public's perceptions about central banks' decisions. The more financially literate consumers are, the more likely inflation expectations are sound (Burke and Manz, 2014). Fourth, the enhancement of consumers' financial literacy can lead to more efficient resource allocation, and thus economic growth, as it can potentially mitigate information asymmetry in an economy (Hussain, Salia and Karim, 2018). In general, enhancing financial literacy leads to higher resilience of an economy and supports financial stability and improved prosperity for all citizens.

Despite the critical importance of financial literacy in economic welfare and prosperity, the existing literature suggests that the proportion of financially literate individuals around the world is rather low (see OECD, 2020, OECD 2016, Klapper, Lusardi, and van Oudheusden, 2015). Mindful of the low level of financial literacy, many countries around the world have embarked on the development of a National Strategy for enhancing financial literacy as a priority (OECD, 2015). **Figure 1** presents the number of EU countries which have been planning, actively designing or implementing a National Strategy for financial education at different points in time (2012, 2015 and 2021). These National Strategies are typically based on OECD principles, which have also been endorsed by the G20 (OECD, 2012a).

“the proportion of financially literate individuals around the world is rather low”

Regarding Cyprus, the experience from the stock market crisis in 1999-2000, as well as from the management of investor/consumer portfolios during the financial and banking crisis of 2013 have highlighted the issue of inadequate knowledge of basic financial concepts, as well as lack of rational attitude and behaviour for a large percentage of the population.[6] At the same time, scientific research records rather low financial knowledge proficiency level of individuals in Cyprus in relation to economic concepts spanning the "saving, portfolio, and mortgage" domain.[7]

Having in mind the aforementioned evidence and taking into account the importance of financial

6. It should be emphasised that the aforementioned experiences were also the result of a number of weaknesses in the Cypriot economy, such as regulatory gaps, that go beyond the scope of this report.
7. See Central Bank of Cyprus (2022), Central Bank of Cyprus (2020), Andreou, Anyfantaki and Atkinson (2022), Andreou and Anyfantaki (2021), Andreou and Philip (2018), Klapper, Lusardi, and van Oudheusden (2015). See also a speech by the Governor of the Central bank of Cyprus on the matter: Central Bank of Cyprus - Introduction by the Governor of the Central Bank of Cyprus, Mr Constantinos Herodotou, in the Cyprus Economic Society seminar (Central Bank of Cyprus, 2021).

literacy for individual and societal financial wellbeing, various stakeholders, including academics, regulators, and organised groups have, from time to time, stressed the importance of establishing a national strategy for the promotion of financial literacy in Cyprus. In December 2020, an ad-hoc Committee was established following a recommendation of the Cyprus Parliamentary Committee on Educational Affairs and Culture. The ad-hoc Committee was mandated to formulate a National Strategy for the promotion of financial literacy and education in Cyprus.

The National Strategy proposal provides a plan that seeks to sustainably improve financial literacy and promote financial education among individuals in Cyprus on the basis of evidence-based best practices from global experience. Use of these best practices can help to promote initiatives aiming to mitigate the problem for the population as a whole, as well as the groups of the society with the utmost need for financial education.

The remaining document is structured as follows:

Section 1 presents the rationale for a national approach to financial literacy and Section 2 describes the financial literacy level in Cyprus. In Section 3 the proposal for a national strategy is presented, while Section 4 presents the potential obstacles and challenges towards this endeavour.

Section 1: The Rationale for a National Approach on Financial Literacy

1.1 The importance of financial literacy

As noted in the introduction, being financially literate could have a material impact on financial wellbeing, both at an individual and household level. People, in general, should be aware of how to manage their financial affairs, including how to spend within their budget limits, invest in real and financial assets, fund their children's education, select a voluntary retirement plan, and ensure a secure and viable income for their retirement years. Additionally, financial education is key to unlocking the potential of economic opportunity and to empowering a strong and resilient economy via the more effective transmission of macroeconomic and monetary policy.

However, global evidence indicates that individuals often make financial mistakes that adversely affect their financial well-being. For instance, many households:

- have excessively high levels of debt,
- do not save for a rainy day,
- make poor investment decisions,
- have no adequate retirement planning.

Unfortunately, as indicated a various scientific studies, many consumers have a limited understanding of finances, how credit works, and the potential adverse effect on financial wellbeing that poor or unplanned financial decisions could create for many years. In fact, a lack of financial understanding has been signalled as one of the main reasons many people today struggle with saving and investing or other important financial decisions (Clark, Lusardi and Mitchell, 2021; Mandell and Klein, 2009; Perry, 2008; Braunstein and Welch, 2002 and Hilgert, Hogarth, and Beverly, 2003).

Nowadays, it is more important than ever to improve financial literacy among the general population and to strengthen people's ability to make sound and well-informed financial decisions. Consumers are shouldering more important and more complex financial decisions, than in the past. Choosing a finance method to purchase a home, applying for a credit card, assessing a health insurance proposal, and a voluntary non-occupational pension scheme or funding offspring education, could be onerous decisions for todays' citizens. Furthermore, retirement planning is an example of the increasing responsibility individuals must take for their own financial security during their later years in life.

Another reason which renders financial capability an integral part of our daily life, is the ongoing complexity of the modern financial technologies and the digital and technology-based finance (FinTech), which continuously alter the architecture of financial markets. Nowadays, savings and investment options are numerous, daunting, and difficult to comprehend. Thus, being financially savvy would support informed decisions when choosing among financial assets and deter consumers from fraudulent investments. In relation to the above, the number of monetary, financial, and other institutions offering products and services can be overwhelming, exacerbating decision-making pressure and stress for the consumers.

Digital transformation is a driver of economic growth and "a game changer", as it rapidly reshapes the banking and financial landscape, possibly forever, thus making traditional methods of transactions obsolete on the one hand but highlighting the need to strengthen consumers' financial education and protection on the other. Recent digital trends and modern financial technologies advancements render financial literacy a dynamic concept, since, in addition to the fundamental concepts, many new financial products are entering the market. The combination of financial and digital literacy can contribute to a country's economic growth, with a particular focus on jobs, skills, and the educational system. Given that FinTech is a driver of financial sector development, policymakers should take a closer look and adopt policies for its enhancement, along with financial literacy, aiming to harness the emerging opportunities and ensuring that the benefits are shared by all. In fact, financial literacy is becoming increasingly important and elevating financial literacy levels (in combination with improving consumers' digital proficiency to enable them to address the emerging issues pertaining to the digitalisation of financial products) has been identified as a top priority for policymakers internationally (OECD, 2018).

Financial literacy is also a major factor affecting the survival rate and growth prospects of small and medium enterprises (SMEs). Sufficient financial knowledge within the management of an SME can have a significant impact on the performance and the sustainability of an enterprise as it can affect a company's efficiency in terms of access to finance, credit management, as well as its financial risk attitude (Ye and Kulathunga, 2019; Mutegi, Njeru and Onsega, 2015).

Another important factor is financial resilience and its relation to increased levels of financial literacy. Financial literacy can help individuals cope both financially, and mentally during unexpected economic shocks and emergencies. Economic fallouts tend to be especially challenging for the financially fragile segments of the population, such as low-income individuals with little to no emergency savings and individuals with high levels of debt relative to their assets. As in the case of previous economic downturns, the current pandemic and the public health measures for the containment of the virus exacerbated existing inequalities and disproportionately affected lower socioeconomic groups (Wright, Steptoe and Fancourt, 2020, Rose-Redwood et al., 2020). However, according to the findings of Clark, Lusardi and Mitchel (2021) higher levels of financial literacy can provide protection against such shocks. According to the authors, this is probably due to the fact that people with higher levels of financial literacy were more likely to make better saving and spending decisions in the past and are more equipped to make better decisions in times of crisis.

The economic consequences of economic fallouts also led to an increase in financial stress.[8] However, according to various scientific studies, increased levels of financial literacy can mitigate financial stress and anxiety. Indicatively, Hasler, Lusardi, and Valdes (2021) find a strong link between financial literacy and financial anxiety by showing that individuals who are financially literate are significantly less likely to feel financially anxious or stressed (see also Bennett et al., 2012; Lyons, 2003; Saunders, 1998).

To conclude, sound financial knowledge and skills are crucial, not only for helping people to safely and confidently navigate their day-to-day personal finances, but also for taking informed decisions that will support a healthy and financially secure future, particularly in times of crises and financial distress.

1.2 The need of a National Strategy

The issues identified related to the lack of financial literacy can lead to individuals' and household's problems that may arise due to their poor financial decisions. However, if a large number of individuals or households encounter financial problems, then this also becomes a social problem.

The potential impact of financial literacy on personal wellbeing, global economic growth and sustainable development along with the low levels of financial literacy in almost all countries has led both public and private institutions around the globe to launch various initiatives for the promotion of financial literacy.

However, such initiatives, if not coordinated and monitored, may be ineffective as they can lead to duplication of effort and resources (Grifoni and Messy, 2012). As a result, the development of National Strategies became an important priority for many policy makers in countries around the world.

According to OECD (2015), there are four stages in achieving an effective national strategy for promoting financial literacy. The first stage is the development of a diagnosis to inform the national strategy. The second stage is the establishment of institutional and governing arrangements, whilst the third stage is related to setting and achieving objectives, evaluating and funding the national strategy. The last stage refers to ensuring effective and innovative provision of financial education

The establishment of a National Strategy is considered the most efficient way to improve financial literacy levels over the long-term as it provides countries with a strategic, evidence-based approach to financial literacy (OECD, 2021). It can set clear objectives for the enhancement of financial literacy and at the same time coordinate the efforts of all stakeholders towards achieving these objectives.

An evidence-based National Strategy can lead to the identification of these objectives, by distinguishing the groups that are in greater need of financial literacy interventions, as well as the gaps in the knowledge of these groups and the population as a whole. Moreover, it allows for the identification and continuous assessment of best practices that can help improve the delivery of financial education on different topics to various targeted segments of the population.

Moreover, a National Strategy can help rationalise and coordinate existing programmes and enhance the role of already active players. Coordination can help pull together various organisations and enhance their effectiveness by appropriately addressing the national gaps.

Furthermore, a National Strategy can also lead to potentially higher financial knowledge multiplier effects. Existing literature identifies the existence

8. See Panchal et al., (2021) for a discussion on the negative effect of the public health measures on individuals' mental health.

of financial knowledge spillover effects, that is, individuals experiencing an increase in their financial knowledge simply through exposure to financially literate individuals and interaction with individuals who have participated in financial education initiatives (Kallenos, Milidonis, Nishiotis, Zenios, 2022, Haliassos, Jansson and Karabulut, 2020 and Duflo and Saez, 2003). Initiatives under a National Strategy, are expected to reach a higher proportion of the population, than uncoordinated and fragmented initiatives, and thus increase the probability of such multiplier effects.

An additional issue to which the Strategy should pay attention is the importance of combining financial education and financial consumer protection policies. This has been acknowledged at the highest levels, and notably by the G20. The G20 High-level Principles on Financial Consumer Protection (OECD/G20, 2011), designed to assist policy makers to enhance financial consumer protection, include Financial Education and Awareness as one of their ten pillars. Specifically, principle number 6 states that:

"Financial education and awareness should be promoted by all relevant stakeholders and clear information on consumer protection, rights and responsibilities should be easily accessible by consumers" and that "Taking into account national circumstances, financial education and awareness should be encouraged as part of a wider financial consumer protection and education strategy, be delivered through diverse and appropriate channels, and should begin at an early age and be accessible for all life stages".

It is also vital to specifically define and develop the core financial competencies which the national strategy, via targeted initiatives seeks to instil in particular segments of the population. In order to avoid duplication and competition for the same target groups, lack of coordination and fragmented work and actions, an effective division of responsibilities should be established already at the stage of the design of the national strategy. A good strategy requires a common objective accepted by all parties that is clearly and articulately formulated and also communicated to the political decision and policy makers for their legal endorsement.

The National Strategy framework should be tailored to national circumstances. It should also rely on transparent co-ordination and governance mechanisms with an identified leading authority or governing mechanism and shared, but, as already mentioned, clearly defined roles and responsibilities for all involved stakeholders (OECD, 2012a).

Section 2: Financial Literacy in Cyprus

This section describes Cyprus's financial literacy through an explanation of historical incidences. In particular, it discusses the current financial situation of Cypriot households and empirical evidence regarding the level of financial literacy in Cyprus and the groups of the population in which the need for financial education may be higher. It concludes with a reference to ad-hoc initiatives which have been undertaken in the past by various stakeholders for the promotion of financial literacy in Cyprus.

2.1 Historical incidence suggesting inadequate levels of financial literacy in Cyprus

In addition to the current significant economic downturn due to the COVID-19 pandemic and the Russian invasion of Ukraine, the Cyprus economy has experienced two other major financial shocks in its recent history, which were detrimental for individuals and households' finances. In particular, the country went through a colossal stock market crisis in 1999-2000 and an unprecedented banking and economic crisis in 2013. The former resulted in a massive loss of wealth amongst investors and the latter in the bail-in of the two largest local banks with significant losses in uninsured deposits, subordinated debt, and equity holdings.[9]

The two events provided a strong indication that one of the important contributors to the crisis was that a significant part of the Cyprus population neither seemed to possess sufficient financial knowledge, nor exhibited a rational behaviour or attitude with regards to financial matters. The 2000 stock market crash highlighted the lack of basic knowledge regarding making investments in financial assets, including the benefits of portfolio diversification. Characteristically, in Antoniou et al. (2004) it was noted that 4% of households that owned only one financial instrument in 1999, owned a stock. Additionally, the 2013 financial crisis highlighted the lack of basic understanding on matters related to banking and depositor insurance. For example, according to the CBC survey results, more than half (52.2%) of the survey's respondents were not aware of the provisions of the Deposit Guarantee Scheme.

Another event to provide anecdotal evidence about the lack of financial knowledge of Cypriot households was the negligence of exchange rate risk prior to the adoption of the euro. Specifically, during the 2006-2007 period Cypriot households resorted to excessive foreign currency borrowing, particularly Swiss francs, to take advantage of the prevailing interest rate differential.[10] This resulted in severe financial losses for these households following a sudden increase in the value of the Swiss Franc versus the euro in 2015.[11]

It should be emphasised that the aforementioned experiences were also the result of a number of weaknesses in the Cypriot economy that go beyond the scope of this report. However, the evidence suggests that the insufficient levels of financial literacy, in the context of well-comprehending certain key financial concepts and exhibiting sound and rational economic and financial behaviour, have been one of the weaknesses factors and exacerbated the impact of these events on both individual and social financial wellbeing. In fact, the findings of the recent CBC sampling survey, presented in a subsequent section of this report (see Section 2.2), point directly towards the relationship between the lack of understanding of certain key financial concepts (risk diversification and interest compounding) and the banking and economic crises mentioned above.

2.2 More recent evidence on the level of financial literacy in Cyprus

The saving and borrowing behaviour of Cypriot households highlight that individuals continue to have insufficient awareness of a number of financial matters, such as the consequences of overindebtedness, the importance of saving for a rainy day and saving for retirement. A recent study by Demertzis, Domínguez-Jiménez and Lusardi (2020) shows that Cyprus (with a reference point in 2018) ranks very high in terms of household financial fragility when compared with the rest of the European Union member states.[12]

Furthermore, according to the Eurosystem

9. See Michaelides and Orphanides (2016); Brown, Evangelou and Stix (2018); Michaelides (2014) for more details on the Cypriot Crisis of 2013 and Charitou, Vafeas, and Zachariades (2005) for information on the Cyprus stock market crisis.
10. See Argyridou-Dimitriou, Karamanou, and Cleanthous (2012)
11. https://www.ft.com/content/f5a361ce-d862-11e0-8f0a-00144feabdc0
12. A financially fragile household is one that is unable to meet an unexpected financial shock e.g. an unexpected expense or unexpected loss of income (Hasler, Lusardi, and Oggero, 2018; Lusardi, Schneider, and Tufano, 2011).

Household Finance and Consumption Survey (HFCS) the average household in Cyprus experiences a high debt repayment difficulty, when compared to other euro area countries, as indicated by the relatively high level of the debt service to income ratio, with the problem being much more severe in the case of low-income households (Central Bank of Cyprus, 2019).[13] This repayment difficulty has led to a significant amount of Non-Performing Loans in the economy. Indicatively, the results of the third wave of the Eurosystem HFCS (2017) showed that 16.4% of households reported delaying or missing loan payments on loans and 14% have a 90 days past due loan.

Moreover, the average Cyprus employee does not save enough for retirement. According to a 2019 AON Hewitt Cyprus survey[14] on the retirement readiness of Cypriot employees, 80% of employees will not have saved enough to retire at age 65 and maintain their standard of living.[15] Specifically, according to the results of the survey, the average employee will have to work until the age of 72 in order to maintain the same quality of life upon retirement.

The asset allocation of individuals in Cyprus also signifies insufficient understanding regarding certain financial knowledge concepts among the population. According to the National Accounts, an overwhelming proportion of the portfolios of Cypriot households is concentrated in real assets while investments in financial assets constitute only a small fraction of individual wealth.[16] Such an investment behaviour could denote individuals' insufficient understanding of concepts associated with investment risk, such as diversification and liquidity risk.

The results of the Central Bank of Cyprus Survey (2022)[17] highlight the relatively insufficient levels of financial knowledge across Cyprus' households. The average financial knowledge score of individuals in Cyprus is below the benchmark score, set by OECD, for an individual to be considered as financially knowledgeable. More specifically, Cyprus has an average score of 4.78 out of 7, while according to the OECD methodology, a score of at least 5 out of 7 is required for an individual to be considered as financially knowledgeable.

> **“the 2018 Central Bank of Cyprus results confirm the relatively insufficient levels of financial knowledge across Cypriot households, based on the OECD benchmark score”**

The insufficient levels of financial knowledge across the population are also evident in other studies. Andreou and Anyfantaki (2021), find that only 37.33% of survey respondents show proficiency in financial knowledge. Similarly, Klapper, Lusardi and van Oudheusden (2015) find that only 35% of the population in Cyprus can be considered as financially knowledgeable.[18] Moreover, a recent analysis conducted by the CBC, using data from the 2021 HFCS, indicates that less than 50% of the people responsible for their household economic/financial decisions in Cyprus are able to respond correctly to 3 out of 4 basic financial knowledge questions and only 31% of the participants

13. According to the findings, the lowest income households exhibited the greatest difficulty in repaying their debt obligations in 2014 with the said ratio far exceeding 100%.
14. http://www.aonhewitt.com.cy/english/About/News?id=13.
15. Standard of living is defined as the level of income, comforts and services available, generally applied to a society or location, rather than to an individual (Cambridge English Dictionary).
16. The proportion or real assets is still significantly high even when one acknowledges the fact that wealth survey respondents typically underreport their level of deposits.
17. Central Bank of Cyprus Survey (2022), henceforth "CBC Survey", is presented as a working paper available online at https://www.centralbank.cy/images/media/pdf/2024-2.pdf.
18. The studies incorporate different methodologies for measuring proficiency in financial knowledge.

were capable of answering all four questions correctly.[19] In addition, Andreou and Philip (2018) provide evidence that financial illiteracy is prominent among Cypriot university students, aged mostly 18-24, with only 36.9% having a good financial knowledge proficiency level, a worrisome result.

While on average financial knowledge scores in Cyprus, albeit low they are not far away from the European average, Cypriot households appear to struggle relatively more in terms of understanding certain important financial knowledge concepts. According to the CBC Survey findings, only 44.7% of the sample appear to understand the concept of interest compounding.[20] Thus, it could partly explain the current financial situation of Cypriot households, including the lack of savings, the high levels of indebtedness and non-performing loans, as well as the lack of preparedness for retirement. The lack of understanding of the concept of interest compounding is also consistent with anecdotal evidence from the Ombudsman's office suggesting that part of the reasons some of the borrowers ended up with a non-performing loan (NPL) was their misunderstanding of how compounding interest may raise debt dramatically.[21]

“individuals who studied economics - related courses in high school, have an overall higher financial knowledge score relative to the rest ”

Similarly, only one out of two people (51.2%) comprehend the importance of risk diversification. The lack of knowledge regarding risk diversification could potentially be related with Cyprus' past experiences. More specifically, as discussed, the stock market crisis during 1999-2000 and the banking and economic crisis in 2013, provided a significant indication of individuals' wrongful understanding and attitude towards investments, risk and return.

Finally, a significant part of the population also appears to struggle in terms of digital financial literacy. According to the findings of Andreou and Anyfantaki (2021) one out of three individuals in Cyprus "rarely (or never)" use i-banking.[22] The results of the study, also indicate that a higher financial knowledge score is positively associated with i-banking use for receiving on-the-spot banking services.

2.3 Financial Literacy and Secondary Education Background

One of the policy measures to strengthen financial literacy around the globe is by introducing financial literacy courses at school or enriching existing courses with financial literacy concepts. In order to assess the usefulness of such potential measure in Cyprus, the CBC Survey included a question about the background of the respondents with regard to the high school educational direction i.e. Mathematics, Accounting/Economics/Political Economics, Physics/Chemistry/ Biology, Ancient Greek/Latin Language/History, Information Technology, Graphic Arts, other.

The results of the analysis suggest a strong link between high school educational direction and

19. The questions examine the understanding of inflation, simple interest, interest compounding and diversification. The results of the study have not yet been published.
20. Moreover, according to Andreou and Anyfantaki (2021), about 60% of the study's responders do not apprehend the usage and application of Annual Percentage Rate on debt matters, indicating that a significant number of individuals lack understanding of the effect the accumulated interest has on their loan's outstanding amount.
21. Article by the Financial Ombudsman, dated 2/11/2017 in "Machi" newspaper https://www.maxh.com.cy/gammanuomegamuepsilonsigma/2732668
22. Andreou and Anyfantaki (2021) perceive digital financial literacy as a nexus of competencies spanning elements of financial literacy and digital proficiency that enable individuals to maintain their financial wellbeing by confidently making effective and responsible use of digital financial products and services. Digital financial literacy can therefore be visualised as a multidimensional concept referring to individuals' breadth and depth of financial knowledge and skills, enhanced by their aptitude in using products and services offered in a digital fashion.

Table 1: Financial Knowledge by high school educational direction

Topic	Accounting/Economics/ Political Economics (% of individuals that responded correctly)	Rest of the population	Difference
Time value of money	60.4%	52.6%	7.8%
Interest paid on a loan	92.4%	86.4%	6.0%*
Simple Interest Calculation	84.1%	73.9%	10.2%**
Compound Interest	54.3%	41.5%	12.8%**
Risk and return	89.6%	82.9%	6.7%*
Definition of Inflation	91.7%	77.7%	14.0%***
Portf. Diversification	51.6%	51.2%	0.4%

Metric	Accounting/Economics/ Political Economics	Rest of the population	Difference
% of individuals with at least 5 out of 7 correct answers	70.0%	56.8%	13.2%**
Average Financial Knowledge Score (out of 7)	5.23	4.63	0.60***

***, **, * denote significance at the 1%, 5% and 10% level, respectively.
Source: Central Bank of Cyprus Survey (2022): https://www.centralbank.cy/images/media/pdf/2024-2.pdf

the level of financial knowledge (see Table 1). Individuals that have studied economics-related courses in high school have an overall higher average financial knowledge score relative to the rest. Specifically, individuals with an economics-related educational background have a financial knowledge score of 5.23 out of 7 while the rest of the population has a score of 4.63 out of 7. This difference is statistically robust and is supported by various robustness checks.

Another important statistic that indicates the effect of an economics related high school education on financial knowledge, is the ability to respond correctly to at least 5 out of 7 answers, a benchmark set by the OECD methodology for someone to be considered financially knowledgeable. According to the estimates of the CBC Survey, 70% of individuals with economics-related educational background have responded correctly to at least 5 out of 7 financial knowledge questions, while the respective percentage for the rest of the population is around 13% lower, at 56.8%.

The difference in financial knowledge score between those who had an economics-related education background and those who didn't, is also evident in most categories of questions. The difference of correct answers is striking in the case of understanding the concept of inflation, a concept that is taught in a typical economics course. The percentage of correct answers for the question measuring the understanding of inflation is 91.7% for individuals who have attended economics-related courses in high school and 78% for individuals who have attended other courses. However, it is important to note that the percentage of correct answers regarding the topics of compound interest and diversification is low for both i) individuals who were taught economics-related courses in high school (54.3% and 51.6%, respectively) and ii) individuals who were not (44.1% and 50.7%, respectively). This could be explained by the fact that these topics are not covered in a typical high school economics course.

The findings regarding the link between economics in high school and financial knowledge are also supported by the supplementary analysis conducted by the authors Andreou and Philip (2018) for the purpose of this report.[23] The findings of the analysis indicate that 57.43% of university students in Cyprus with high school economics background are classified as being financially knowledgeable, while only 32.65% of the rest of the individuals are classified as being financially knowledgeable.

Overall, the results suggest a clear positive impact of high school economics-related courses on financial knowledge. They also highlight the need for strengthening financial literacy in the school curriculum. Such enhancement may be achieved through the introduction of a compulsory financial education course and of cross curriculum interventions, which will focus on a systematic coverage of critical financial concepts.

"low levels of financial knowledge are found to be linked with higher financial fragility. This is particularly holds for the young, low-income, unemployed and less educated individuals"

2.4 Financial Knowledge, Financial Fragility and the groups with the highest need for financial education

As previously discussed, Cyprus ranks very high in terms of financial fragility when compared with the rest of the European Union member states. In particular, Cyprus is among the countries with the highest household debt.[24]

One of the key findings of the CBC Survey is the link between financial vulnerability and financial knowledge. For example, the results suggest that individuals with low levels of financial knowledge are less likely to be able to cope with a financial shortfall when compared to individuals with high levels of financial literacy. Indicatively, the results suggest that individuals who can cover their living expenses for more than 6 months have a mean financial knowledge score of 5.38 out of 7, while individuals with the capability to cover their living expenses between one week and less than 6 months have financial knowledge score ranging from 4.07 (less than a week) to 4.68 out of 7 (more than three months, but less than six months). These results are supported by the findings of a recent study of the Cyprus University of Technology (Andreou, Anyfantaki and Atkinson, 2022) which finds a strong and statistically significant negative relationship between financial knowledge and financial fragility.

Importantly, the results of the CBC Survey shed light on the population groups with the lowest level of financial knowledge and the highest financial fragility. Figure 2 presents a graphic representation of the level of financial knowledge and financial fragility of the demographic groups in Cyprus as well as the correlation between the two metrics.[25]

The groups with the lowest level of financial knowledge and highest financial fragility include younger individuals (age group: 18-29), who appear to be the most financially vulnerable group, individuals with low income, individuals not in employment[26], women and the less educated.[27]

23. See Appendix A.
24. According to the third wave of the Eurosystem HFCS (2017), Cyprus has the second highest conditional median value of outstanding balance of non-mortgage debt, among all participating countries. The same survey, shows that Cypriots hold the second largest debt to income median ratio of indebted households (208,6%) among all participating euro area countries; a figure well above the corresponding euro area median ratio (70,8%).
25. See https://www.centralbank.cy/images/media/pdf/2024-2.pdf , Section 5 for a more detailed discussion.
26. The group includes the unemployed and individuals outside the labour force.
27. The results for the young, women, low-income individuals and the less educated are consistent with the findings of Andreou and Anyfantaki, (2021), a recently published study examining financial literacy and its influence on internet banking behavior in Cyprus. Moreover, the results for younger individuals are also consistent with Andreou and Philip (2018) which find low levels of financial literacy in the case of university students in Cyprus.

Moreover, individuals with a high school Economics background perform better in terms of financial knowledge and experience lower levels of financial fragility.

The aforementioned findings provide insight that can help set the major priorities of the National Strategy in terms of targeted actions. Specifically, the relatively low levels of financial knowledge within the youngest age group, in conjunction with the important financial decisions that younger individuals often face (acquiring and repaying student loans and/or credit card debt, taking on a mortgage and starting to invest in real and financial assets) and the fact that younger individuals are classified within the financially fragile population groups, suggest that financial literacy interventions should start early in life.

In fact, the findings regarding the link between education and financial knowledge and, more importantly, the effect of high school economics related courses on financial knowledge and fragility highlight the importance of financial education in the school curriculum. Such interventions can prove beneficial not only for the students[28], but also for their social circle through knowledge spillover effects. In fact, such effects are observed in a recent study conducted using a sample of University of Cyprus students (see Kallenos, Milidonis, Nishiotis, and Zenios, 2022). The study shows that the parents of students who attended a newly introduced financial literacy course have experienced a statistically significant increase in their financial knowledge relative to parents of students who did not attend the course.

All the aforementioned findings show that financial education in schools should be a top priority for the National Strategy. Further, the results of the CBC Survey also indicate that financial education interventions can also have an impact, not only during the school and university years, but also later in life.

For example, the relatively low levels of financial knowledge of low-income households when compared to high income households suggest unhealthy dynamics in terms of income inequality in Cyprus. The enhancement of financial literacy among individuals with low income could contribute to the reduction of income inequalities across the Cypriot society.

Furthermore, the lack of financial knowledge for women relative to men along with gender differences in financial fragility, the gender wage gap and life interruptions that could slow a woman's career progress, make women a group of significant interest for the National Strategy. In fact, the results suggest that women are well aware of their lack of financial knowledge, a result implying that women are an ideal target group for financial education programmes.

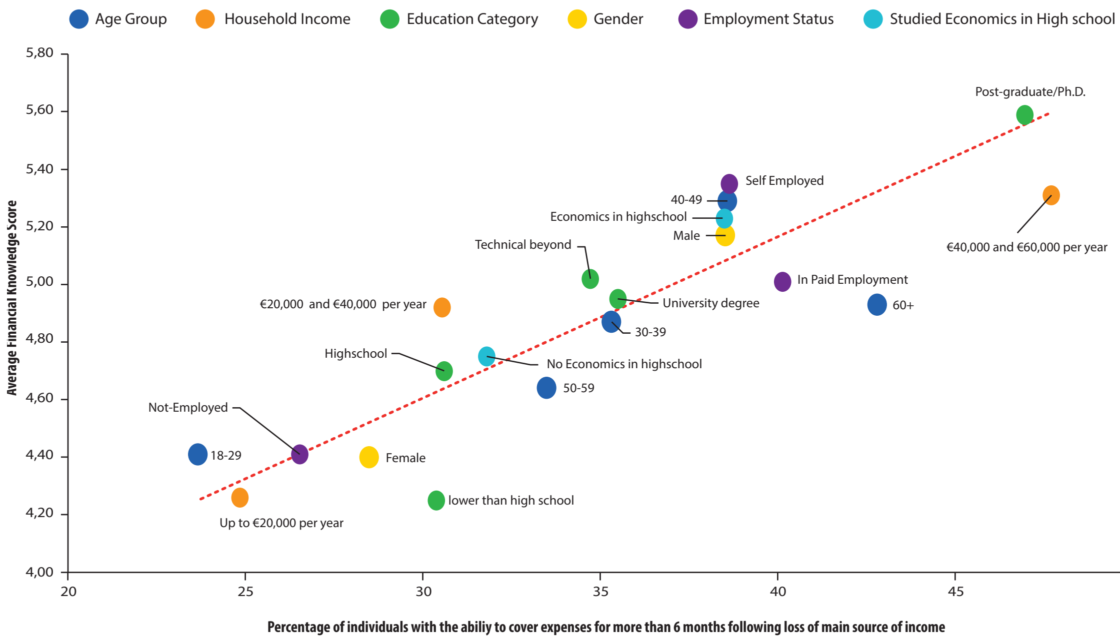
Moreover, the National Strategy should also concentrate on the needs of people outside the workforce by providing them with the knowledge to cope during periods of financial distress, information regarding labour market reintegration programmes as well as the basis for starting their own business.

Finally, financial education programmes could also close the knowledge gaps of individuals with a low level of education.

All the aforementioned results, underscore the need for enhancing financial education in Cyprus. Financial education should start in schools to provide future generations with the skills necessary for life-long financial prosperity. Moreover, the results in conjunction with the continuous digitalisation developments (see Section 1.1. of the Re-

28. A variety of studies examining the effects of financial education interventions in secondary education highlight the benefits of such interventions on financial literacy (see Kaiser et al., 2021, Becchetti, Caiazza, and Coviello, 2013, Walstad, Rebeck, and MacDonald, 2010, Lührmann, Serra-Garcia, and Winter, 2015 and Bernheim, Garrett, and Maki, 2001 among other).

Figure 2 - Financial Knowledge Scores and Financial Fragility



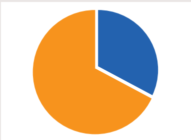
The figure presents the Average Financial Knowledge Score and the Percentage of individuals with the ability to cover expenses for more than 6 months following the loss of their main source of income without borrowing money or moving house for various sociodemographic groups. The lower the percentage of individuals with the ability to cover their expenses, the higher the financial fragility within the demographic group. The results for the household income category of more than €60,000 per year (Financial Knowledge Score 5.81 and the percentage of individuals with the ability to cover expenses for more than 6 months following the loss of their main source of income: 75.19%) are excluded from the figure. Source: Central Bank of Cyprus Survey (2022).

port) point towards the need for dynamic life-long learning initiatives through the use of targeted financial education initiatives.

The results provide further evidence that financial knowledge could contribute to greater financial resilience, both in the short and long-term, which is a crucial component for household financial stability and wellbeing in general.

Main results in relation to financial literacy in Cyprus

The level of financial literacy in Cyprus is low



The average financial knowledge score of individuals in Cyprus is below the benchmark score set by OECD for an individual to be considered as financially knowledgable.* Moreover, according to the scientific literature only around 1/3 of individuals in Cyprus can be considered as financially literate.

People in Cyprus have difficulties understanding the importance of diversification

Despite Cyprus' past experiences (stock market crisis, 1999-2000 and the 2013 banking and economic crisis) only one out of two people (51.2%) comprehend the importance of risk diversification.

The majority of individuals does not comprehend the concept of interest compounding

Only 44.7% of people in Cyprus appears to understand the concept of interest compounding. This could explain the high levels of overindebtedness and the large proportion of non-performing loans.

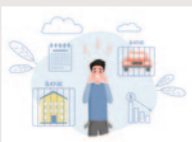
Lower financial knowledge is associated with higher financial fragility

Population groups with lower financial literacy scores are also the groups that have been identified as the least likely to cope financially in the event of an unexpected loss of their main source of income.

There is positive relationship between economics-related cources in high school and financial knowledge

Individuals that have studied economics-related courses in high school were found to have a higher average financial knowledge score as well as lower financial fragility when compared with individuals that do not follow economic courses in high school.

Young people lag behind the rest of the population in terms of financial knowledge



Younger individuals (age group: 18-29) have the lowest percentage of correct answers in almost all financial knowledge questions relative to the rest of the age groups. Moreover, younger individuals appear to be the most financially fragile demographic group.

* According to the OECD/INFE methodology, a person is classified as financially literate if they respond correctly to at least 5 out of 7 financial knowledge questions in a relevant standardised questionnaire.

Young people are not involved in decision-making

Only one out of five (20.1%) young individuals, aged 18-29, participate in the process of financial decision making in their household.

Significant gender differences in financial knowledge

Only 47.9% of women were able to answer at least 5 out of the 7 financial knowledge questions, compared with 72.5% of men. Given, however that women seem to be aware of their lack of sufficient financial knowledge, financial education programs could be more effective for them.

There is high correlation between education level and financial knowledge

Citizens with up to secondary education level lag significantly behind individuals with tertiary education in all measurements used to assess financial knowledge.

There is high correlation between household income and financial knowledge

Individuals who come from lower income households are characterised by relatively low levels of financial knowledge compared with individuals from high-income households. The results imply that the level of financial knowledge could be influencing income inequality in Cyprus.

Financial knowledge and employment status

Individuals outside the labour force have relatively poorer financial knowledge and are more financially fragile when compared with employed individuals.

Financial knowledge transmission/spillover effect

There is evidence of knowledge transmission from individuals that take part in financial education programmes to their social circle (knowledge multiplier effect).

* According to the OECD/INFE methodology, a person is classified as financially literate if they respond correctly to at least 5 out of 7 financial knowledge questions in a relevant standardised questionnaire.

2.5 Existing Initiatives in Cyprus

The importance of financial literacy to society as well as the low levels of financial knowledge across citizens in Cyprus has led various stakeholders, including professional associations, universities, consumer protection organisations as well as financial regulatory authorities, to introduce various initiatives for the promotion of financial literacy. This section presents initiatives that have been undertaken in Cyprus, in the recent past.

Initiatives for the whole population

- **Public Seminars, Lectures and Conferences**

Various stakeholders have been engaged in the promotion of financial literacy through seminars, lectures and conferences. For example, the Cyprus Security and Exchange Commission (CySEC) has organized seminars and lectures on basic financial knowledge open to the public in all cities.

The Department of Commerce, Finance and Shipping of the Cyprus University of Technology (CUT) has organised three fora since 2016, as well as an event titled "Financial Literacy in Cyprus" to enhance public awareness on the subject. Two of the aforementioned fora were co-organised with other organisations/institutions. The first forum was organised in collaboration with the Banking, Risk and Intermediation Durham UK research centre and was supported by the Central Bank of Cyprus (CBC) and the Cyprus Cooperative Bank, while the second forum was organised in collaboration with the CBC and was supported by the Cyprus Association of Economists and the Association of Cyprus Banks (ACB). Similarly, the Department of Accounting and Finance of the University of Cyprus (UCY) has organised workshops and lectures at private schools in Cyprus and also participated in conferences related to the promotion of financial literacy in Cyprus. In addition, academics from both public universities have engaged in raising awareness of the importance of enhancing financial literacy and the need for a National Strategy via a number of interventions (e.g. articles, interviews) in the local media.

Furthermore, in March 2016 the Association of Economist Teachers and the Cyprus International Institute of Management co-organized a conference on: "Economic literacy of the Cypriot society in the post-crisis era and the role of education".

The Cyprus Association of Economists has also organised a number of scientific events on the subject of Financial Literacy in collaboration with the Central Bank of Cyprus (CBC) since November 2017. These events focused on promoting data and suggestions related to the promotion of financial literacy in Cyprus.

Also, the Association of Cyprus Banks (ACB) has promoted various training seminars to the general public. These seminars aim to provide information to consumers on general banking issues such as bank accounts, loans and credit/debit cards.

Moreover, the Consumer Protection Service, in November 2018, held a seminar for consumers concerning debt management. The seminar was organized in cooperation with the ACB and the CBC.

The Chartered Institute of Investments and Securities (CISI) in collaboration with the Cyprus Investment Fund Association (CIFA) and the European Institute of Management and Finance (EIMF) and Invest Cyprus have organised, in December 2018, a joint public seminar on "Financial Literacy for the Cyprus market".

Furthermore, in October, 2021, the Cyprus Economic Society (CES) organised a conference on

"The Significance of being Financially Literate and National Strategies for Achieving it".

Finally, the recently established non-profit organisation Financial Wellbeing Institute is organising seminars, conferences, lectures and presentations for the promotion of financial literacy in Cyprus.

Media

Financial literacy is also promoted via the media through the podcast «Κουμάντο στη τσέπη σου», the first Greek-language podcast on personal and financial management, produced by Mr George Georgiou and Ms Cleopatra Kitti. The podcast is available on various podcast platforms. It is also available on Social Media, as well as on the website of "Politis" newspaper.

- **Publication of Educational and/or Information Material**

Several stakeholders have published printed and online content aiming to inform, educate and provide advice to the public.

The Consumer Protection Service has issued newsletters aiming to increase consumer awareness regarding consumer credit, residential real estate credit agreements, and payment accounts. Furthermore, the Cyprus Consumers' Union and Quality of Life is currently in the process of publishing a guide focusing on informing consumers about financial transactions. Moreover, CySEC has created a special section on its website with training material and tips and warnings issued by CySEC or supervisory authorities of other countries.

CARDET, in collaboration with various international bodies, has recently launched PIGGYBANK (https://piggybankproject.eu/), an eLearning platform aiming to support family financial education for all members of the household. The platform includes comic books for younger children, online educational escape rooms for teenagers, webquests for young people between 19 and 25 years old, a workshop training program for parents and guardians and a training program for financial consultants and vocational education trainers.

In addition, in 2021 the CFA Society Cyprus has published educational videos on its Facebook page covering key financial concepts, such as interest compounding and financial planning. The videos aim to convey to the public the effect of compounding on deposits and loans' outstanding amount through years, the key concepts of future savings and wise financial planning pertinent to financial wellbeing.

Similarly, Queens of Money (www.queensofmoney.com) is a website dedicated to increasing women financial awareness and financial knowledge. It includes various tools for personal financial planning providing women with practical tips and tools in order to make appropriate financial decisions. The initiative also organises seminars focusing on empowering women through financial awareness and education.

Initiatives for the inclusion of Financial Education in formal education

The importance of financial education at a young age along with the low levels of financial literacy among the young people have led various bodies to take the initiative to introduce financial education courses into the public educational system.

- **Tertiary Education**

In September 2020, the University of Cyprus became the first public university in Cyprus to offer a compulsory financial literacy course at the university level. The course is offered by the Department of Accounting and Finance as a compulsory course for first year Accounting and Finance undergraduate students. It is also offered as an elective to all undergraduate students of the university and has been running with full classes since its inception. So far students from almost all departments of the university have registered for this course, but also other university employees.

Similarly, the Cyprus University of Technology, introduced a "Personal Financial Resources Management" course, from academic year 2021/22, as an elective course to all undergraduate students.

- **Secondary Education**

In June 2021 the first compulsory Financial Education course was introduced in secondary education. The course was introduced by the Junior & Senior School, a private school domiciled in Nicosia, in cooperation with the University of Cyprus and CFA Society Cyprus. The course covers all the topics of Financial Education, so as for students to acquire sufficient knowledge of financial concepts and skills associated with personal financial management.

In October 2021, the University of Cyprus and the CFA Society Cyprus started a campaign to introduce the same course in all private schools in Cyprus. At the time of writing this report, at least fourteen additional private schools from five different districts (Nicosia, Limassol, Larnaca, Pafos and Ammochostos) have joined. The private secondary schools that will incorporate financial education in their program of study in September 2022, represent about two thirds of the student population in private secondary schools in Cyprus.

Initiatives targeting younger individuals

Junior Achievement Cyprus in collaboration with ACB and the Economics Inspectorate of the Ministry of Education have been promoting financial literacy programmes in primary and secondary schools throughout Cyprus over the past seven years. For example, the "More than Money" programme for students aged 10 to 12 and the "Economics for Success" programme for students of lower high school (gymnasium). The aforementioned organisations have also launched the "Spending Wisely" programme between 2016 and 2018 for primary school students.

The University of Cyprus' Department of Accounting and Finance, has been organizing a Summer School since 2016 targeted at high school students with a focus on finance.

CFA Society Cyprus organizes presentations on basic financial concepts in public and private high schools, since 2018, with the support of the Economics Inspectorate of the Ministry of Education.

CBC, in 2017, held 12 informative lectures for primary school students, in 10 schools throughout Cyprus, with the aim of familiarizing students with simple financial concepts. The lectures educated students in simple financial matters, with the ultimate goal of creating and cultivating financial awareness from a young age.

Similarly, the Institute of Certified Public Accountants of Cyprus (ICPAC) collaborates with universities in Cyprus as well as other stakeholders for the provision of educational seminars for tertiary education students. The seminars focus on information regarding the accounting profession. Moreover, ICPAC occasionally conducts seminars during the "vocational skills week" (εβδομάδα εργασίας) in secondary schools.

The Youth Board of Cyprus, through its Youth Information Centres (YIC) during the year 2021 implemented a series of online pilot lectures in collaboration with the Department of Commerce, Finance and Shipping of the Cyprus University of Technology. Moreover, the Cyprus University of Technology, following a suggestion be the Youth Board of Cyprus, will also introduce lectures focusing on financial knowledge that will be available to both the university's students as well as other young individuals interested in acquiring financial knowledge.

Furthermore, the Youth Board of Cyprus, following a suggestion by the Cyprus University of Technology is currently conducting a sampling survey among 15 year olds in Cyprus. The survey aims towards to assess of the level of financial knowledge of high school students in Cyprus.

Initiatives targeting workers, professionals and small business owners

In terms of initiatives focusing on workers, in September 2018, the Consumer Protection Service held a three-day seminar for the members of the ACB in relation to the legal framework applied by the Consumer Protection Service for contracts, loans, and financial services and, in particular, for liabilities arising from it. The seminar was organised in cooperation with the ACB and CBC. Moreover, the ACB provides distance education programmes for professionals as well as webinars on its newly established platform.

The Cyprus Chamber of Commerce and Industry organises various training programmes for the business community, including training programmes in the area of managing a family business.

ICPAC collaborates with the Cyprus Police in order to inform its members regarding topics on financial crime and money laundering.

Finally, the Cyprus University of Technology participates in a newly approved Erasmus+ project "DIFILIM – Digital Financial Literacy for Microenterprises" consisting of seven organisations from five European countries. The project aims to improve entrepreneurs' capacity to undertake responsible financial choices and understand digital techniques readily available to boost their enterprise wellbeing.

As already presented earlier in the report (section 1.2), albeit notable and useful, the aforementioned initiatives stand to benefit both in effect and reach once they are aligned and coordinated under a National Strategy.

Section 3: The Proposal for a National Strategy in Cyprus

The previous sections demonstrated clearly that financial literacy levels are low in Cyprus and there is a need for further enhancement. Moreover, the empirical and historical evidence suggests that the insufficient levels of financial literacy might have fuelled the impact of negative economic shocks on the financial wellbeing of citizens in Cyprus.

“a National Strategy is considered the most effective way to improve the level of financial literacy in the long term”

Although various stakeholders have engaged in the promotion of financial literacy through various initiatives, there is a need for a coordinated effort that will properly address the deficiencies in Cyprus, set clear objectives and increase the outreach of new and existing programmes.

To this end, the ad-hoc Committee has designed the proposal for the National Strategy for Financial Literacy in Cyprus.

3.1 Vision and Mission

The proposed vision and mission of the Body responsible for the implementation of the National Strategy are as follows:

Vision: *"Empower citizens in Cyprus with the knowledge and skills required to enhance their financial wellbeing."*

Mission: *"The promotion of financial literacy and education among citizens in order to contribute to the effective management of their financial resources and consequently to the enhancement of their financial wellbeing"*

3.2 Strategic Objectives

In accordance with the above mission and vision, the level of financial knowledge in Cyprus and the attitude and behaviour of people in Cyprus in relation to financial issues, the ad-hoc Committee proposes:

I. Raise citizens' awareness of the importance of financial literacy and education for themselves and their family; a necessary but not sufficient condition to effectively address and confront a problem is to first recognise it and acknowledge its implications. It is therefore important that citizens are made aware of the issue. In particular, it is important for them to understand the impact that increased levels of financial knowledge and skills and the positive impact of informed and responsible economic behaviours and attitudes have on their financial well-being.

II. Empower individuals, starting from the young, with core financial skills and habits to be able to efficiently manage their personal or family finances, aiming to enhance their financial well-being. These core skills can be developed mainly through formal education training and timely access to information and relate to parameters necessary to help make informed financial decisions, encourage responsible use of credit, avoid over-indebtedness, encourage the development of saving habits, promote the right attitude towards investments, insurance and risk management and empower individuals with the knowledge necessary to detect and deter financial fraud.

III. Raise awareness and enhance skills regarding the need for adequate financial planning for insurance and retirement; proper insurance and retirement planning can help ensure individuals have proper coverage and financial support against risks and that they have adequate levels of retirement income without any financial dependence.

IV. Raise awareness and increase knowledge regarding the use and the associated hazards of digital financial products and services; increased levels of digital financial literacy could enable individuals to make well-informed and sound decisions, to prevent irresponsible behaviour and to better judge the risks and benefits associated with products and services offered through financial technologies.

National Strategy for the Promotion of Financial Literacy and Education in Cyprus

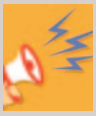
What is the Vision?

"Empower citizens in Cyprus with the knowledge and skills required to enhance their financial well-being."

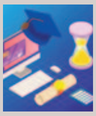
What is the Mission?

"The promotion of financial literacy and education among citizens in order to contribute to the efficient management of their financial resources and, consequently, to the enhancement of their financial wellbeing."

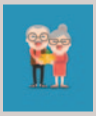
Which are the Strategic Objectives?



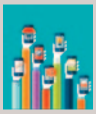
Raise citizens' awareness on the importance of financial literacy and education



Empower individuals, starting from the young, with core financial skills and habits in order to be able to efficiently manage their personal or family finances

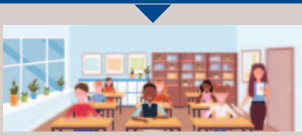


Raise awareness and enhance skills on the need for adequate financial planning for insurance and retirement



Raise awareness and increase knowledge regarding the use and associated hazards of digital financial products and services.

How?



formal education

lifelong learning

access to information

For whom?

the whole population

with emphasis on

the young

and other vulnerable groups

3.3 Proposed Action Plan: Initiatives for the promotion of Financial Literacy in Cyprus

To achieve the above strategic objectives, concrete actions and initiatives should be taken. The Report sets out a list of proposed initiatives and the related implementation strategy for each of them. The following initiatives are identified by the ad-hoc Committee as priorities for the National Strategy:

I. Raise public awareness about the importance of financial literacy through targeted communication and public events

In line with the strategic objective of increasing awareness about the importance of financial literacy, the ad-hoc Committee recommends making the whole endeavour well known and raising awareness via targeted communication and various events. Examples of such initiatives include media and social media campaigns, the introduction of a financial literacy week or month, seminars and competitions on topics closely related to financial literacy.

II. Promote financial education in public schools

Today's children will soon be an important part of the workforce and users of financial products and services. It is therefore important that the State pays the necessary attention and provides them, as early as possible in their lives, with the necessary competences to efficiently manage their personal finances. The Ministry of Education already undertakes relevant actions in public education, in some cases in cooperation with third parties, such as the Association of Cyprus Banks and Junior Achievement Cyprus (see section 2.5).

In addition to the already existing initiatives, the National Strategy proposal sets the promotion of financial education in the school curriculum as a necessary course of action and as a top priority.

The recommendation is consistent with the best common practices already implemented in many countries[29], as well as the position of the World Economic Forum, that financial literacy is now one of the top ten skills required by students in the 21st century.[30]

II (a). Introduction of a compulsory financial education course in secondary education

In its proposal, the ad-hoc Committee recommends the introduction of an independent, mandatory course in secondary public education, as the ideal solution. The recommendation is based on the scientific evidence highlighting the lack of financial literacy among young people in Cyprus. In particular, the CBC survey, which has covered a representative sample of the population of Cyprus, shows that the level of financial knowledge is particularly lower among people who did not receive economic education during secondary education. The ad-hoc Committee proposes that this gap in knowledge be reduced through a financial education course covering all pupils, regardless of their high school educational direction.

The ad-hoc Committee's recommendation for a required standalone financial education course is based on the existing empirical evidence regarding the positive impact of standalone courses on students' financial knowledge and behaviour[31] as well as the fact that a required standalone course provides time and attention to financial education topics.[32]

29. Examples are presented in Appendix B.
30. https://www.weforum.org/agenda/2016/03/21st-century-skills-future-jobs-students/
31. See Bover, Hospido, and Villanueva (2020) and Berry, Karlan, and Pradhan (2018) among other.
32. See Urban, Schmeiser, Collins, and Brown (2020) and OECD (2012b).

It should be stressed that the introduction of a financial education course into secondary education has already started in private schools at the initiative of the University of Cyprus and the CFA Society Cyprus. At the time of writing this report, at least 15 private schools from different provinces (representing about 2/3 of the student population in private schools) have formally committed to promoting financial education from September 2022 to their pupils and students. The course material has already been prepared and the trainers have been trained. The course material was prepared by the University of Cyprus in both Greek and English, and contains material and works covering approximately 25 weeks, with one teaching period per week.

It is important to mention that the learning objectives and the syllabus for the proposed course in the public school have already been prepared by the representative of MOEC in collaboration with the academic members of the ad-hoc Committee and agreed upon by the rest of the committee's members.

The ad-hoc Committee views the introduction of a financial education course into public secondary education to be of primary importance and deems that it should take place as soon as possible. Taking into account the inherent difficulties and lengthy procedures required to implement this initiative and the specificities of the education sector in Cyprus, the ad-hoc Committee proposes that a specific time frame be given to the bodies responsible for planning the implementation of these initiatives. During this period, the necessary preparation should be made, not excluding actions in a pilot format such as, for example, the introduction of a pilot course in a number of schools.

II (b). Introduction of a compulsory financial economic education course in public secondary education

The ad-hoc Committee also recommends the integration of financial education in Primary and Secondary education through cross-curricular interventions. The interventions shall include basic concepts (or case studies through the form of examples) of financial education in existing courses such as Mathematics, Home Economics, etc.

The ad-hoc Committee's recommendation is in line with the OECD/INFE Guidelines on Financial Education in Schools, which specify that people should be educated about financial matters "as early as possible, ideally from the beginning of formal schooling, and carry on until the end of the students' time at school".[33]

III. Promote financial literacy through lifelong learning

The ad-hoc Committee, mindful of the low levels of financial knowledge in Cyprus across a number of sectors of the population, recommends that financial education be promoted through lifelong learning programmes. Through lifelong learning initiatives, financial education and training for each age group should be gradually enriched, become more detailed, and adapted to the needs during different life-stages. In addition, lifelong learning education and training programmes should target specific groups of the population, which lag behind in the level of financial knowledge or have a greater and immediate need for financial education.

Such initiatives require cooperation with bodies representing specific groups of the population (youth organisations, women's organisations,

33. https://www.oecd.org/finance/financial-education/FinEdSchool_web.pdf

workers' associations, professional bodies, etc.) to organise educational-seminars and other relevant events tailored to the needs of individual groups. Furthermore, the ad-hoc Committee proposes the provision of financial training for workers, the unemployed, and minimum guaranteed income[34] recipients through Human Resources Development Authority (HRDA) programmes.

The ad-hoc Committee also proposes collaboration with local authorities, such as municipalities and local councils, for various initiatives such as the integration of Financial Education in the Open School lectures, the co-organisation of public seminars, and the establishment of the function of the Family Budget Advisor, where citizens can turn to for information/advice on their family – household budget/planning.

It is important to mention that the ad-hoc Committee has already held bilateral meetings with two municipalities. In both cases, the mayors expressed their interest and readiness to support the National Strategy through the aforementioned initiatives.

IV. Establish a website and smartphone application

The ad-hoc Committee recommends the establishment of a website that will include material related to financial education as well as tools that will aid the public in terms of informed financial decision-making.
The website will provide educational material and just in time access to information both for the specific target groups and the population as a whole.

The ad-hoc Committee's intention for the website is to serve as a one-stop-platform for financial education that will include the following material:

- A section with a dictionary on financial education (ABCs of Finance)
- A section with answers to frequently asked questions about the national strategy for financial literacy
- A section with guides on specific financial issues (buying a house, getting a mortgage or other loan, retirement, etc.)
- Online modules with interactive tools: home loan calculator, pension calculator, etc.
- A module that includes issues related to digitalisation (digital financial education) such as online shopping, e-commerce, online banking and opportunities/options, crypto-currencies, alternative investments
- A section focusing on the potential risks of specific alternative investments, electronic or other types of financial fraud
- A calendar of various events related to improving financial literacy
- Short educational videos related to the topics of the guides mentioned above
- A section with educational material for financial education trainers

Moreover, the ad-hoc Committee recommends the development of a smartphone application that will provide its users with easy access to the information included on the website.

V. Reinforce existing good practises and initiatives

The ad-hoc Committee proposes the reinforcement of existing good practises and initiatives in Cyprus based on the vision, the mission, and the strategic objectives of the proposed National Strategy. The ad-hoc Committee also encourages

34. Cyprus: Guaranteed minimum income | Eurofound (europa.eu)

the introduction of new stakeholder initiatives provided these are done in coordination with the endorsement of the committee responsible for the implementation of the National Strategy.

VI. Train the trainers

The ad-hoc Committee believes that the proper training of trainers and educators regarding the concepts they will have to teach, as well as the methods that should be used during the education/training programmes, will play a crucial part in the success of the adopted initiatives. Therefore, a coordinated effort should be launched to develop training programmes for trainers.

3.4 Implementation of Initiatives and way forward

Once adopted, the aforementioned initiatives should be continuously monitored to measure their effectiveness and detect any weaknesses in a timely manner. The obstacles and challenges that are expected to arise, such as possible different perspectives of stakeholders, securing valuable and long-term sources of funding and sharing responsibilities between private and non-profit stakeholders, should be addressed taking into account scientific evidence and international best practices.

The finalisation and implementation of the initiatives under the National Strategy is expected to take place following the establishment of the committee that will be the implementing body (see section 3.5).

It should be noted that the Republic of Cyprus, has obtained financing from the Directorate-General for Structural Reform Support (DG REFORM)[35] of the European Commission for the implementation of the following actions:

a) A sampling survey for measuring the level of financial literacy in Cyprus
b) The development of a website and a smartphone application
c) The training of financial education trainers

A prerequisite for the financing of the aforementioned actions is the immediate adoption of the National Strategy by the State.

3.5 Governance Structure of the Committee responsible for the implementation of the National Strategy

The ad-hoc Committee considers that the recommendations in this report are a useful tool for creating momentum in the effort to promote financial literacy and education in Cyprus. However, the implementation of the project needs continuity and consistency over the long-run. Taking this into consideration, it is recommended that a new committee is established to carry out the implementation of the National Strategy. The new committee should be responsible for the implementation, monitoring, and evaluation of the National Strategy for the promotion of financial literacy and education in Cyprus. The following proposal focuses on the key features of the governance of the new committee[36]. It should be noted that the final decisions will be undertaken later at a political level[37]. The full details of the operational parameters guiding the governance of the committee should be decided by the committee itself, once established and operational.

The new committee is proposed to be named

35. DG REFORM provides assistance to EU countries to design and implement reforms as part of their efforts to support job creation and sustainable growth.
36. The proposed structure of the envisaged committee was the result of discussions amongst the members of the ad-hoc Committee and consultations with external scientific collaborators.
37. To assist the process, the current ad-hoc Committee plans to prepare an additional report, to be submitted to CyFLEC, which will record in more detail its views on all relevant issues of the proposed governance structure.

the Cyprus Financial Literacy and Education Committee (CyFLEC). It is proposed that CyFLEC consists of the following bodies:

(a) The Governing Board

It is the highest body in the hierarchy of CyFLEC and it would be responsible for setting and updating the medium to long-term vision and mission of the strategy, addressing the priorities of the strategy and approving annual action plans through the identification of specific actions and initiatives.

It will also decide on the annual budget of the National Strategy. It is envisaged to meet once or twice per year.

The structure and operation of the Governing Board will be determined in the context of a Memorandum of Understanding (MoU) between the institutions involved.

In particular, the Governing Board shall at least consist of:

(i) the Central Bank of Cyprus (CBC),

(ii) Competent ministries, namely, at a minimum the Ministry of Finance and the Ministry of Education, Sport, and Youth.

(iii) the national regulators, namely, the Cyprus Securities and Exchange Commission (CySEC), and the Insurance Companies Control Service (ICCS).

There is consensus among members of the ad-hoc Committee and scientific collaborators that in the Governing Board, the Central Bank of Cyprus and representatives from the government and the national regulators should all participate, at the highest level, i.e. the Governor of the Central Bank, Ministers of the Government, and the Chairpersons of the main regulatory financial authorities.

There is also the possibility that other public institutions participate in the Governing Board, bearing in mind on the one hand the need to have a sufficient number of competent authorities that have ownership of the project, and on the other hand the minimum possible number of participants in the Board for reasons of efficiency.[38]

It is proposed that other institutions taking part in the Governing Board appoint full-time seconded staff to the CBC to aid in the undertaking of CyFLEC's everyday tasks and to proportionally share the cost of CyFLEC's running expenses.[39] Cost burden sharing is also proposed to be a precondition for participation in the Governing Board.

> **“a new Committee named Cyprus Financial Literacy and Education Committee (CyFLEC) will be established to implement, monitor, and evaluate the National Strategy for the promotion on financial literacy and education in Cyprus”**

(b) The Coordination & Management Team

CyFLEC's work will be supported by a Coordination and Management Team that will be physically located at the CBC. Its main responsibility will be the monitoring and execution of the Strategic Plan decided by the Governing Board, as well as the undertaking of the everyday tasks of CyFLEC.

The Coordination & Management Team shall begin its operations with at least five full time staff members (at least three Officers). This is the mini-

38. The aforementioned additional report to be prepared by the ad-hoc Committee can also be considered as a document comparing the advantages and disadvantages of the participation of various entities in the governance structure of CyFLEC. This document will be assessed by its first core members.

39. An alternative to secondment may be financial contribution to the CBC to cover for staff's compensation expenses.

mum number estimated to be adequate to ensure the smooth implementation of the national strategy at the initial stages. In fact, the staff numbers mentioned above are very important and are considered to be the minimum for the successful realisation of both the short-term and long-term objectives agreed with the European Commission, which is funding the project via the DG-REFORM's Technical Support Instrument 2022.

A Secretariat would support the functions of the Coordination and Management Team and would be staffed by a subset of the full time staff members of the said Team.

The Thematic Project Teams should be formed after a Board decision and would work on specialised themes, such as the promotion of financial literacy in public education and the workplace, digitalisation issues for the general population and training the family budget experts.

The thematic project teams would take direct guidelines from the Coordination & Management Team, within a mandate given by the Governing Board and would be chaired by representatives of stakeholders ex officio (e.g. Ministry of Education, Sport, and Youth chairing a sub-committee for financial education in schools). They will provide updates and reports to the Coordination & Management Team on a periodic basis.

(c) The Scientific Advisory Committee:

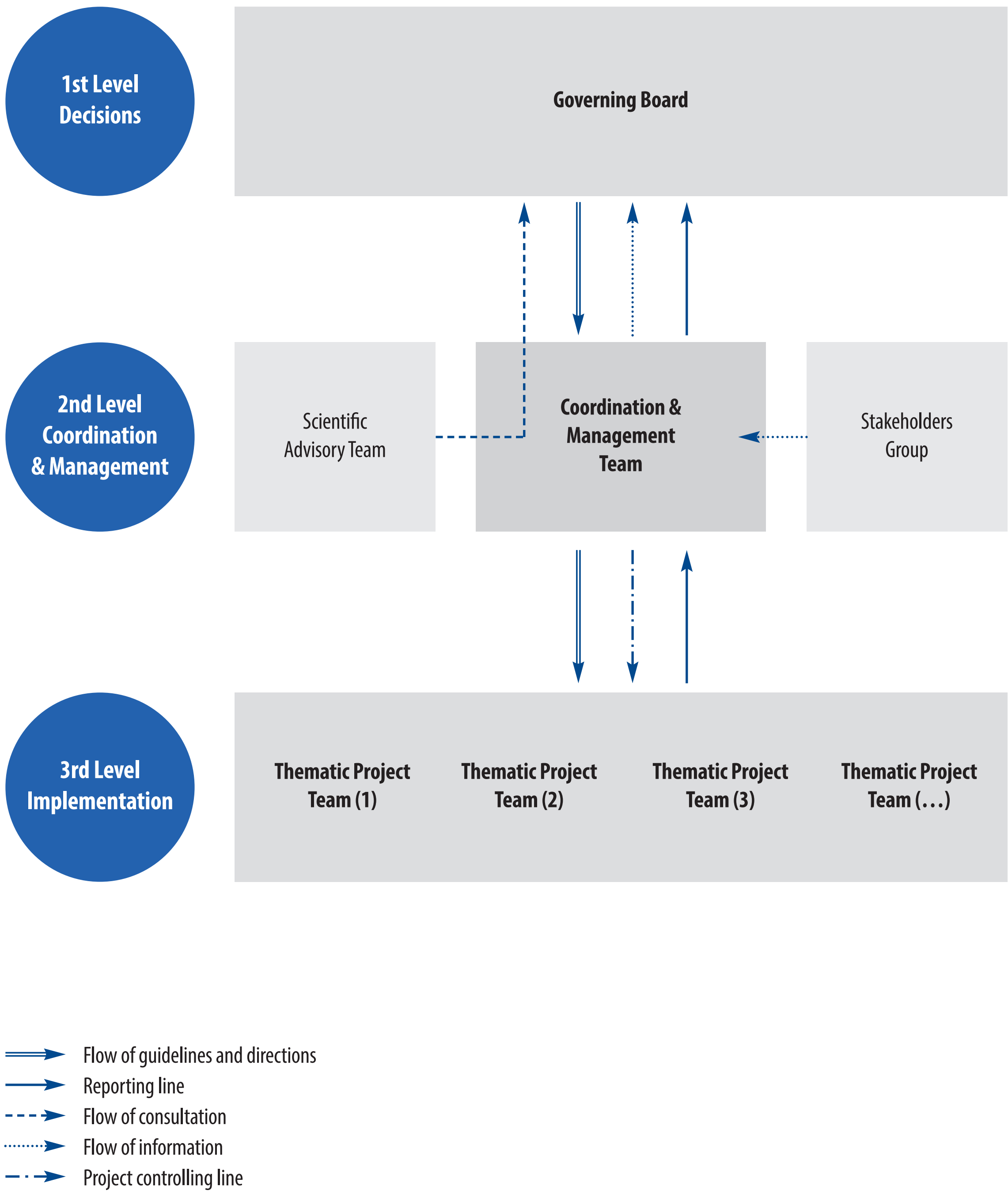
It would provide expert advice either through or in collaboration with the Coordination & Management Team to the Governing Board and consist of members from the Academia (public and private universities and any external scientific collaborators) who will have research, teaching and consulting experience on the subject of financial literacy and education, either abroad or in Cyprus. At the same time, it will be responsible for the design of the educational material, as well as the monitoring of the training process of the trainers. The said committee will be appointed by the Governing Board. Given the need for CyFLEC to receive the best possible support from experts in the field, the members of this committee could be remunerated.

(d) The Stakeholders' Group:

This Group would provide direct input to the Coordination & Management Team and include key stakeholders who will have relevant experience, willingness, and competence to contribute meaningfully, for example, to the different thematic project teams. The nature of the stakeholders' contribution will be defined by a code of conduct (in line with OECD guidelines) that will be signed by the stakeholders/entities upon joining the Group.

Membership in the Group should be limited to stakeholders/entities that have demonstrated their ability to contribute substantially to the implementation of the strategy or have the means and willingness to do so in the future. The composition of the Stakeholders Group will ensure broad representation of the Cyprus economy and society, however it is noted that for reasons of efficiency the number of participants should not be excessive.

Organisational Structure of the Cyprus Financial Literacy and Education (CYFLEC)



3.6 Funding

One of the main challenges in developing a National Strategy is securing credible and long-term sources of funding. As can be seen from the proposed actions, the committee that will be responsible for the implementation of the National Strategy will shoulder a significant financial burden. In addition to the adequate staffing costs required for its essential functions, there will be a need for significant operational costs related to, for example, information campaigns, maintenance of the related website, promotion of informational material, purchase of services for teachers' training, consultation, etc. In general, there should be sustainable core funding for the leadership and coordination of the National Strategy implementation itself. Core funding is typically provided by the lead organisations on an equal basis. At the same time, there will be continuous efforts for funding from other sources as well, such as European funds, some of which were already utilised by the ad-hoc Committee (see Section 3.4).

3.7 Evaluation – Monitoring

The monitoring and evaluation of the overall National Strategy is essential for the provision of valuable evidence to improve financial education interventions and policies and contribute to their sustainability in the longer term (OECD, 2015).

The National Strategy and its initiatives will have to be evaluated and updated at predetermined time intervals, taking into account their effectiveness in achieving the strategic goals and also the socio-economic developments in Cyprus.

Section 4: Concluding Comments

The proposal of the ad-hoc Committee for a National Strategy for the promotion of Financial Literacy and Education in Cyprus provides a holistic plan that aims to become the starting point of a continuous and consistent effort to empower citizens in Cyprus with the knowledge and skills needed to enhance their financial well-being.

This report is a patchwork of in-depth research, based on scientific findings for Cyprus, the contribution and suggestions of well-known experts in the field of financial literacy, the OECD/INFE guidelines and is structured on the basis of international best practices. It takes into account the current level of financial education in Cyprus, both for the entire population and for specific groups. Furthermore, it takes into account initiatives developed in the past and implemented by various stakeholders.

The proposed National Strategy aims towards the promotion of financial literacy and education among citizens in order to contribute to the effective management of their financial resources and consequently to the enhancement of their financial wellbeing.

The State and the relevant authorities must embrace and support the implementation of the National Strategy, which, according to international experiences, may demonstrably assist in improving the living standards of citizens and, especially, the economically vulnerable groups of the population.

Appendix A

Financial knowledge among university students and implications for personal debt and fraudulent investments[40]

Supplementary Results

The following results are presented supplementary to the ones included in the published version of the paper.

In our sample, 148 students declared that their concentration in high school falls under Accounting / Economics / Political Economy (called below as the ECON variable), while 732 students declare some other concentration falling under Mathematics, Physics / Chemistry/ Biology, Ancient Greek Language / Latin Language / History, Information Technology, Graphic Arts, et cetera (called below as non-ECON variable). The sample for this analysis is conducted with 880 observations (1 observation is missing).

The results presented in Table S1 show that students with an economics-related background (ECON) at high school tend to provide a higher rate of correct answers to the six financial literacy questions. Admittedly, ECON individuals considerably outperform Non-ECON ones by 20% (or more) correct answers in the two inflation-related questions (Q3 and Q4), whilst providing about 8%, 15% and 14% higher rates of correct answers in Q1, Q2 and Q6.

More importantly, on the aggregate, individuals with economics-related background have a much higher financial knowledge proficiency level. Specifically, 57.43% of ECON individuals are classified as being financially literate, while only 32.65% of Non-ECON individuals are classified as being financially literate.

Further, **Table S2** presents multivariate regression results to investigate the link between ECON and financial knowledge proficiency levels. For better identification of the estimate for ECON, we control for MATH, which is a binary variable that takes the value of one for students whose high school concentration is mainly in mathematics (without any formal Accounting / Economics / Political Economy training). This is necessary since in the paper we document a strong positive relationship between mathematical skills and financial knowledge.

In line with the descriptive evidence presented in **Table S1**, all regression results in Table S2 show

Table S1: Tabulation of correct answers (%) across economic and non-economic backgrounds at high school

	Q1	Q2	Q3	Q4	Q5	Q6	Financial Literacy
Entire sample⁂	68.90	36.89	54.60	27.70	79.57	31.10	36.9
Non-ECON	67.49	34.29	50.55	22.81	79.64	28.69	32.65
ECON	75.68	49.32	74.32	52.03	79.05	42.57	57.43

Notes
⁂ As reported in the paper based on 881 answers
Q1 = Simple interest calculation
Q2 = Compound interest calculation
Q3 = Understanding of inflation
Q4 = Consequences of inflation
Q5 = Risk and Return
Q6 = Benefits of risk diversification
Financial Literacy = The sample of students who are considered as being financially literate (i.e., those who provided at least 4 correct answers, captured with the FK DUMMY in the paper).

40. Panayiotis C. Andreou§,† and Dennis Philip†
§ Cyprus University of Technology, Cyprus, †Durham University Business School, United Kingdom. Cyprus Economic Policy Review, Vol. 12, No. 2, pp 3-23 (2018).

Table S2: Determinants of financial literacy.

	FK_DUMMY	FK_DUMMY	FK_SCORE_1	FK_SCORE_1
	(1)	(2)	(3)	(4)
GENDER	0.489***	0.505***	0.081***	0.082***
	(0.084)	(0.084)	(0.018)	(0.018)
AGE	2.397***	2.497***	0.173***	0.185***
	(0.682)	(0.751)	(0.084)	(0.084)
MATH	0.447***	0.493***	0.096***	0.098***
	(0.150)	(0.154)	(0.018)	(0.018)
UNI_BUSINESS_MAJOR		1.117***		0.133***
		(0.270)		(0.028)
ECON	1.429***	0.813***	0.222***	0.145***
	(0.242)	(0.078)	(0.024)	(0.029)
HIGH_INCOME	1.139***	1.232***	0.077*	0.084*
	(0.368)	(0.367)	(0.044)	(0.043)
QIC/Rsq	1090.71	1057.45	0.129	0.150

Notes
Logistic and OLS regression results of factors related to students' financial knowledge. The dependent variable in model (1) takes the value of 1 if the student correctly answers 4 or more financial literacy questions, and 0 otherwise. The dependent variable in model (3) is the average score from the student responses, wherein each correct answer takes a score of 1, while all other answers take a score of 0. * denotes p-value <0.1; ** denotes p<0.05; *** denotes p<0.01

a strong positive relationship between ECON and the students' financial knowledge level. Interestingly and gauging from the regression coefficients of ECON vs MATH in models (1) and (3), having an economics-related background, compared to a mathematical background, seems to be about 3-time more important in explaining individual's financial literacy levels. Further, the positive relationship remains strongly positive even after controlling for the student's concentration at the University (quantified using the UNI_BUSINESS_MAJOR that takes the value of 1 if student's major at university is in business, 0 otherwise).

Overall, the evidence lends strong support to the hypothesis that university students with an economics background at high school have significantly higher levels of financial literacy, and the impact of this this relationship is much larger than students with a mathematics background at high school.

Appendix B

Financial Literacy Initiatives around the Globe

1.Introduction

In this chapter, we present various existing financial literacy initiatives from around the globe. The main sources of the chapter include the national strategy documents of various developed countries with long experience in financial initiatives, as well as published documents listing various initiatives around the world.[41] We begin by presenting the financial literacy initiatives for the whole population and then proceed with the initiatives for specific demographic groups.

2.Financial Literacy Initiatives for the whole population

Below, we present various initiatives focusing on the population as a whole, including public events, promotion through the media, and online resources.

2.1 Public Events for the promotion of financial literacy

Various initiatives targeting the population as a whole include the organisation of public awareness events focusing on the importance of financial literacy.

In Spain, the Financial Education Day is an initiative included in the country's National Strategy, which dedicates the first Monday of October to raising awareness among citizens of the importance of having an adequate level of financial literacy to tackle the challenges faced throughout the various stages of life. The activities of the Financial Education Day include i) workshops for the general public on topics, such as indebtedness, use of credit/debit cards, home economics, use of current accounts, use of mobile banking or use of new technologies, ii) workshops in secondary schools and educational and vocational training centres, iii) financial planning and savings management courses, iv) radio programmes v) launch of financial education websites or microsites vi) publication of specialised articles or studies in the press or magazines vii) stands at street level to answer questions from citizens.[42]

Similarly, the Portuguese National Plan for Financial Education includes the World Savings Day initiative aiming at raising the awareness of the population about the importance of financial literacy.[43] In 2018 the Financial Literacy Week with the motto "In financial education everyone counts" addressed various target audiences, including youth, entrepreneurs, businessmen, managers of micro, small and medium-sized companies, professional footballers, teachers, psychologists, seniors, and social action experts.

In Canada, the Financial Consumer Agency of Canada (FCAC), the regulator mandated to provide financial consumer protection and consumer education, organises the "Financial Literacy Month" (FLM) as part of the National Strategy.[44] Throughout the month, organisations from across Canada are encouraged to host events and share resources to promote and enhance financial literacy. Each week of FLM features a different theme that draws attention to the benefits of basic money management, and highlights the importance of making a budget, having a saving plan, and reducing debt.

FCAC also hosts "The National Conference on Financial Literacy" every three years. The purpose of the conference is to shape and synchronize a

41. These include the EBA report on Financial Education 2019/20 (EBA, 2020), the EBF Financial Literacy Playbook for Europe 2020 (EBF, 2020) and the 2016 OECD report: Financial Education in Europe: Trends and Recent Developments (OECD, 2016).
42. Financial Education Plan 2018-2021 (cnmv.es)
43. National Plan for Financial Education 2016-2020 (todoscontam.pt)
44. Implementing the National Strategy for Financial Literacy – Count me in, Canada: Progress report 2015-2019 - Canada.ca

powerful movement that supports financial empowerment and well-being. Participants of the conference are informed about leading-edge research and emerging trends, and new tools to measure and evaluate financial literacy programmes to achieve successful outcomes.

2.2 Online Information Resources

Access to online information can play a critical role in enhancing financial education. To this end, the Canadian National Strategy has created the "Canadian Financial Literacy Database", an online one-stop resource for financial literacy resources and programmes, which is publicly available and easy to use. The database includes hundreds of events and resources searchable by topic, location, knowledge level, and audience. Organisations across Canada can submit financial literacy resources to the database. The database also includes a self-assessment tool in the form of a quiz which allows those who participate to observe how their financial literacy level compares with that of other Canadians, and directs them to resources in the database to improve their understanding of particular topics. Similarly, the Portuguese National Plan has launched the "Todos Contam" website in 2012. It is used as a platform for sharing information concerning financial education and provides information in simple language on relevant topics for the management of personal finances. Information on financial education initiatives and activities is also included.

In the U.S. the Financial Literacy and Education Commission (FLEC), the commission responsible for the development of the U.S. National Strategy, created a platform "MyMoney.gov" as a "one-stop shop" for Americans to find financial education information and resources from across the Federal Government in one place. The website includes information for youth, educators, and researchers, including articles, calculators, worksheets, checklists, and other information from over 20 government agencies. It also includes interactive quizzes.

New Zealand's (NZ) Commission for Financial Capability (CFFC), a commission responsible for NZ's National Strategy, has developed the "Sorted" programme in order to reach the public with calls to action, information and tools. The Sorted programme focuses on the part of the population that is disengaged with their finances in order to promote financial behaviour change and offer strategies that will improve financial wellbeing. The Sorted website includes various online tools such as a mortgage calculator, a debt calculator, and a retirement calculator. The website also provides comparison engines to help users make choices when investing their retirement savings based on their behavioural hierarchies. The website also includes a variety of booklets and online seminars focusing on various financial topics such as saving and investing, managing debt, insurance, and retirement planning.[45]

There are also similar initiatives in countries without a National Strategy in place. For example, in Austria,[46] the Austrian Financial Market Authority (FMA) developed a website for consumers, the "A-Z of Finance" offering relevant information on frequently asked topics, and cooperates with other stakeholders in the Investment Challenge, an online challenge to familiarise young people with shares and investing (OECD, 2021).

Similarly, in Flanders, Belgium, the Wikifin portal offers various tools to assist people with their personal finance. Visitors of the portal can use tips

45. See https://sorted.org.nz/
46. Austria is currently in the process of developing a National Strategy.

and checklists to evaluate and optimize their financial situation. The tools that can be found in the portal can assist individuals in budgeting for buying a house, comparing debit or savings accounts, analysing insurance portfolios, measuring the impact of inflation on savings, and calculating inheritance tax (De Witte et al., 2020).

2.3 Online Resources for teachers and trainers

In Portugal, "Todos Contam" also includes an e-learning platform aiming to support teacher training and financial education initiatives for the overall population. The platform includes classes and material on family budgeting, savings, investment, credit, and insurance.

Similarly, in Spain the website www.gepeese.es provides educational material to teachers. It includes a teacher's manual that addresses thematic areas related to money and transactions, planning and management of personal finances, risk and profit, and the financial outlook. The website also includes a repository of teaching resources, general tools, multimedia tools, games, and activity workshops - that can be used to support the teacher when delivering the classes.

In Flanders, Belgium, a central part of the Wikifin financial education programme is the Wikifin School platform. The platform includes background information for teachers, videos, tools, as well as course material.

2.4 Use of the Media

The media also play an important role in the promotion of financial literacy. The Portuguese Plan imposes a strategic role on the media as a means of promoting financial education among the general population by raising awareness of the importance of financial topics and communicating key financial education messages in order to reach the various segments of the population. Moreover, a Facebook page for Financial Education was launched to disseminate financial training content via social media.

Similarly, the Canadian National Strategy uses advertising campaigns in order to raise public awareness and promote financial literacy. The campaigns encourage Canadians to repay borrowed money to avoid the stress of living beyond their means. Moreover, in the U.S., FLEC agencies use social media campaigns on frauds and scams.[47]

In Spain, the micro-programmes "Las Cuentas Claras" (Clear Accounts) have been broadcasting weekly on the radio, since September 2017, in order to inform the population about useful day-to-day financial topics. These programmes are also publicly available on the Radio Televisión Española website. Moreover, the Financial Education Plan has a Twitter profile @finanzaspartods and a Facebook profile through which it regularly disseminates information of interest to the public and posts that are published weekly on the website www.finanzasparatodos.es.

Furthermore, in Czech Republic, the Czech Banking Association campaigns for specific target groups in public and commercial media (TV, broadcasts, social media) on issues such as cybersecurity, Christmas loans, unreasoned borrowing, and financial reserves. Also, in Lithuania, the Lithuanian Association of Banks cooperates initiatives for the promotion of financial literacy, which includes partnerships with social media influencers in order to reach youth more effectively (EBF, 2020).

In Denmark, the Danish Financial Supervisory Authority has established the Raadtilpenge Face-

47. Treasury Releases Report on National Financial Literacy Strategy | U.S. Department of the Treasury

book page. The page targets consumers and includes videos, memes, and gifs. Through this page consumers are provided with easy-to-understand advice, tips, and tools related to personal financial management (EBA, 2020).

3. Financial literacy initiatives for the young

3.1 Financial education in schools

The low levels of financial literacy among younger individuals, along with the importance of financial literacy at a young age, have led governments around the globe to introduce a financial education course in the school curriculum.[48]

In Portugal, Financial Education became mandatory in 2018 in the upper primary and lower secondary curriculum, and is an optional topic in upper secondary education. The Portuguese National Plan for Financial Education has also developed the Core Competencies for Financial Education (CCFE), which serve as guidelines for implementing Financial Education within the learning and training context for kindergarten, primary and secondary school children. Moreover, the Financial Education at Schools initiative includes a teacher's training programme to promote the use of the core competencies in financial education, the publication of workbooks on financial education for all school levels, and the award of a national prize for the best financial projects and for the teacher who stood out during the implementation of financial projects, every year.

Up until recently, Canada's financial education in schools was not compulsory in any province. In 2020, financial literacy learning became mandatory in Ontario for Grades 1 to 8 and includes the understanding of the value and use of money over time, how to manage financial well-being and the value of budgeting. In British Columbia, a new provincial curriculum was introduced in 2019, in response to students who were graduating with a lack of financial skills. In addition, Alberta has partnered with Enriched Academy on a pilot project this fall that will include financial education for students in grades 10 to 12.[49]

Moreover, financial education is a compulsory subject at school (up to 18 years old), integrated into various subjects such as mathematics and citizenship education classes in various countries such as Denmark, Sweden, Finland, Norway, and Croatia (EBF, 2020).

In the Netherlands, financial education is not compulsory although basic financial education elements are included in primary education (money calculus) and in secondary education (household economics). However, "Money Wise", the platform responsible for developing and implementing the Dutch National Strategy for Financial Education[50], has been advocating for the curriculum to be structurally modified to include financial skills. A proposal to include financial education in the school curriculum is at the time of writing the report under discussion in the Dutch Parliament.

In Spain, financial education is a voluntary subject at school, often an integrated part of the curriculum through mathematics and economics classes. However, in April 2021, the Bank of Spain, the National Securities Market Commission (CNMV) and the Ministry of Economic Affairs and Digital Transformation submitted a proposal to the Ministry of Education and Vocational Training which aims to ensure that students of all ages in primary

48. For more information on international financial education initiatives see Anyfantaki and Andreou (2021) and the EBF Financial Literacy Playbook for Europe 2020.
49. The best financial literacy lessons start early in life, experts say (cpacanada.ca)
50. https://www.wijzeringeldzaken.nl/

and secondary education, cover content related to financial education.[51]

In Belgium, financial education in primary schools is taught on a voluntary basis (introduced in existing disciplines). In secondary schools, financial education is compulsory in Flanders, either through integration into another subject or as a separate topic (depends on the school system). However, it is voluntary in secondary schools in French-speaking Brussels and Wallonia. In late-secondary schools, financial education is not compulsory in the entire country.

3.2 Other financial literacy initiatives for the young

Various projects in countries around the world focus on the promotion of financial literacy for younger individuals. For example, Banco de Portugal has recently launched #toptip campaign, a digital financial education campaign aiming to raise awareness among school-age children about precautions to take when using digital channels to access banking products and services.

Another notable initiative for young individuals is "Fortune" a free web-based trivia game by the Financial and Consumer Services Commission of New Brunswick's (Canada). It aims to help New Brunswickers increase their financial understanding by offering questions for adults and children on topics, such as saving, spending wisely, and combatting fraud. Players can test their money smarts and compete against friends and other players across the province for prizes. The game offers important insights into the concepts that participants lack understanding and the information gathered can help shape policy.

Also in Canada, "PennyDrops" is an initiative run by university students. Its mentors visit high schools and teach students free weekly courses that cover a number of topics, including the basics of banking, the importance of setting financial goals, and the nuances of investing and saving for their futures.

In the Netherlands, MoneyWise organises an annual event focusing on financial education, the National Money Week (NMW). It addresses primary school children and their parents. It takes the form of classroom training (accompanied by school materials, media events, etc.) on basic financial competencies conducted by over a hundred partner organisations.[52]

In the U.S. the Jump$tart Coalition organises Financial Literacy Month, a national campaign aiming to raise awareness about financial literacy and promote financial education.[53] Various events and initiatives are hosted throughout the month to improve financial literacy for the young in America.

In Portugal, several universities and polytechnics have held initiatives in collaboration with the National Plan to acquaint their students with topics related to financial literacy. Moreover, the current National Plan aims to enhance financial education in the university environment through conferences and seminars staged by universities across the country.

Finance Norway, the industry organisation for the financial industry in Norway, has created "Run Your Own Life" in collaboration with the Norwegian State Housing Bank and the Norwegian Labour and Welfare Administration. "Run Your Own Life" is a digital learning tool that teaches youngsters, from children to young adults, about the relationship between income, spending, and saving and the consequences of their

51. ACUERDO DE COLABORACIÓN ENTRE LA COMISIÓN (cnmv.es)
52. OECD (2016), Financial Education in Europe: Trends and Recent Developments, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264254855-en
53. Jump$tart Coalition | Advancing Financial Literacy for Students (jumpstart.org)

financial choices. Finance Norway has also produced "On Your Own Two Feet" in collaboration with the Consumer Authority. "On Your Own Two Feet" is a guide to personal finances tailored to young adults. This guide contains information that young people aged 16-25 should receive from their bank, over and above the minimum legal requirement. Based on this guide, Finance Norway and the Consumer Authority have developed a smartphone application for young adults. The app contains different calculators and facts about savings and loans among other subjects (EBF, 2020).

In Sweden, the Swedish Bankers' Association collaborates with other industry organisations and NGOs, to provide support to "Young Private Finance" project. The project provides late secondary school pupils (15-18 years old) with financial literacy lectures, and a book, distributed to the pupils for free (EBF, 2020).

Another important initiative for young individuals is the "European Stock Market learning", in which savings banks in Austria, France, Germany, Italy, Luxembourg, Spain, and Sweden partnered with schools and universities to jointly operate a financial education programme for 14–25-year-old students. The initiative consists of the online management of a virtual portfolio of securities over a ten-week period to help students understand economics, the stock market and experience portfolio investment (OECD, 2016).

In Denmark, Finance Denmark has established PengeQuizzen, a web-based quiz on personal finance, mathematics, and digital security. The quiz works on smartphones, tablets, and PCs and targets secondary school pupils. Pupils can battle with their friends, parents, and family by challenging them via Facebook.[54]

4. Financial education programmes for workers

In the Netherlands, the Money Wise platform organises "Pension3Day", an annual event that involves over 250 partner organisations aiming to raise awareness about pension issues. Recent events targeted mainly salaried workers aged 30 to 55 to stress the importance of retirement planning throughout their life. Moreover, participants of the event are encouraged to regularly examine their retirement planning situation and take action if necessary.

Workers are an important target group of the National Plan of Portugal. Initiatives for workers include conferences and seminars held by corporate associations in the workplace. The main topics covered in these initiatives include saving, access to credit and its different types, over-indebtedness, insurance, retirement and the development and promotion of distance learning by digital media.

In Canada, the FCAC and Credit Counselling Services of Atlantic Canada (CCSAC) have launched the "Workplace Pilot Project" in 2018 in order to deliver meaningful financial literacy education in the workplace. It consists of three modules, covering topics such as income, expenses and budgeting, credit and debt management, and consumer rights and responsibilities. The modules are delivered in workplaces across the country. The pilot project helped inform the development of a roadmap and practical tools and resources for Canadian employers to implement financial literacy programmes at work. Similarly, in 2016, FCAC piloted an innovative approach designed to encourage non-budgeters to start budgeting. The approach used financial education messages and an online budgeting tool delivered directly to the mobile phones of non-budgeters along with incentives for participating.

54. https://pengeuge.dk/elever/regler-for-pengequizzen

5.Financial literacy initiatives and over-indebtedness

There are also financial literacy initiatives which combine financial education with debt counselling. The Portuguese Central Bank, Banco de Portugal, along with the Consumer Directorate General of the Ministry of Economics provide information and education on over-indebtedness available as widely as possible. Their initiatives include training on preventing over-indebtedness situations, as well as the necessary actions one has to take in the case they end up facing such situations.

In France, the association of bank users organises workshops for both lawyers and social workers aiming to inform these groups about credit management and over-indebtedness. Similarly, the Lithuanian Central Bank has a social media campaign aiming to encourage Lithuanians to take borrowing decisions responsibly (OECD, 2016).

Moreover, in 2021 the Bank of Ireland launched an initiative to help customers reduce their credit card debt and be smarter about how they use their cards. The initiative is part of Bank of Ireland's Financial Wellbeing programme. Through this initiative, the Bank of Ireland will be contacting over 10,000 of its credit card customers to suggest alternatives such as paying more than the monthly minimum payments, making once-off payments where possible, or even switching to a personal loan with a lower interest rate.[55]

6.Financial education initiatives for financially vulnerable groups

Some financial education initiatives include education programmes for the financially vulnerable groups, such as the unemployed and low-income individuals.

In Denmark, the Danish Money and Pension Panel developed teaching materials which are distributed to all Danish job centres. The material targets young unemployed individuals aged between 18- to 25-year-old. It includes guides and information on budgeting, loans, and savings (OECD, 2016).

In Poland, the Microfinance Centre, a social finance network, has facilitated a group of Polish stakeholders active in providing financial education. Members of the initiative deliver financial education to a variety of groups including low-income families and vulnerable people (OECD, 2016).

In Canada, Prosper Canada leads the "National Financial Empowerment Champions" programme. The programme is delivered regionally by social service providers and helps low-income individuals i) to build money skills through financial education, ii) to access one-on-one coaching to help set financial goals iii) by providing tax-filing assistance.

7.Financial literacy initiatives for Seniors

In terms of financial literacy initiatives for the seniors, the Canadian Bankers Association developed "Your Money Seniors" in collaboration with FCAC. The initiative provides seminars to seniors and near-seniors and includes valuable insights into how to recognize and avoid fraud and financial abuse and plan retirement spending. The seminars are delivered by bank employee volunteers. Moreover, Aboriginal Financial Officers Association (AFOA) of Canada created a Seniors Retirement video podcast which provides a detailed, informative look at the key pillars of saving and retirement planning for older adults. It explores government benefits, other sources of income, taxation, insu-

55. https://www.bankofireland.com/about-bank-of-ireland/press-releases/2021/bank-of-ireland-launches-initiative-to-help-customers-reduce-their-credit-card-debt/

rance, estate planning, powers of attorney, and other financial considerations.[56]

Similarly, in Spain, the Spanish Banking Association has launched "Sí, dígame (Hello? This is him speaking)", a two-minute video series targeting the elderly. In these videos, finance experts explain complex financial concepts that are part of everyday life in plain terms.[57]

In Sweeden, the Swedish Bankers´ Association works on financial education through joint projects such as "Unexpected Possibilities", an information-sharing project with a website, printed materials, and lectures to reach senior consumers and senior organisations with information about how to make better use of digital banking (EBF, 2020).

8.Financial education initiatives for women

Various country authorities have established financial literacy initiatives which focus exclusively on women.

In Sweden, the Swedish Enforcement Authority initiated the "Women and the Economy" project, at the beginning of the previous decade, to confront women's over-indebtedness. It provides online tools and guidance for wise personal financial management. It also provides course material for groups and organisations educating women about personal finance (OECD, 2013).

In the US, the Financial Literacy Organization for Women and Girls (FLOW) a US based charitable organisation, promotes financial literacy for women and girls. It hosts conferences, seminars, workshops, and boot camps designed to help women and girls' control and manage their financial welfare.[58] Other initiatives in the US include the Department of Labor's "Wi$eUp" program, a financial education programme that promotes financial security for Generation X and Y women through online classes. Moreover, the Department of Health and Human Services offers counselling and education to low-income women, non-white women, and women with limited English proficiency through the National Education and Resource Centre on Women and Retirement (OECD, 2013).

In New Zealand, the Commission for Financial Capability (CFFC) recently initiated the "Sorted Women" course. It is offered to workplaces as a two-hour workshop or a two-day course and is designed and delivered by women for women. The course covers: i) the unique situations women face and strategies to overcome them ii) ways for women to improve their financial wellbeing and get ahead financially iii) ways to comfortably talk about money and iv) investing basics.[59]

In Australia, the Australian Securities and Investments Commission (ASIC), the lead Australian Government agency for financial literacy, has released a series of videos, "Women talk money", featuring Australian women sharing their personal money stories and habits. Topics covered by the videos include topics including: i) good and bad money habits, ii) financial highs and lows, iii) advice to their younger selves, iv) day to day money management, v) planning for the future and vi) making informed financial decisions.[60,61]

In Europe, Finlitforwomen.eu[62] is a newly established project, funded by the European Commission, that aims to design and publish a training package that will support adult education trainers

56. https://www.youtube.com/watch?v=ZO5M49pzKZo
57. https://www.bbva.com/en/sustainability/spain-needs-more-financial-education-to-face-the-challenges-of-the-future/
58. https://www.empowerwomen.org/en
59. https://cffc.govt.nz/sorted/sorted-at-work/
60. Moneysmart - YouTube
61. National Financial Capability Strategy 2018
62. http://www.finlitforwomen.eu/

in training NEET (Not in Education, Employment, or Training) women in financial literacy. The project will include i) the development of a combined financial literacy curriculum and handbook for NEET women ii) the creation of an online educational game to motivate NEET women to develop financial literacy skills ii) the development of a role-play games handbook to teach financial literacy and iv) the development of a board game to teach money management.

9. Initiatives by International Non-Governmental Organisations

Junior Achievement (JA) offers programmes inside and outside the classroom for children as young as eight years old. Its programme "More than Money" teaches elementary students about earning, spending, sharing, and saving money through in-class and extra-curricular programmes, as well as game-based activities.[63]

The Aflatoun[64] programmes offer social and financial education to children and young people worldwide. The organisation reaches 10.5 million children and young people each year in 108 countries. Aflatoun International creates child-centred financial curricula, for different age groups, which can be adapted to local needs or specific circumstances. The organisation also provides training programmes to teachers with regard to the Aflatoun classroom materials. They conduct research to evaluate the quality and effectiveness of their programmes.

Global Money Week (GMW)[65], coordinated by the OECD, is a global awareness-raising campaign organised annually with the participation of 175 countries from around the globe. It focuses on the importance of financial awareness, financial knowledge, attitudes, and behaviours necessary for young people to make sound financial decisions and ultimately achieve financial well-being and financial resilience. It includes various activities such as visits to Central Banks, Money museums, visits to universities, digital activities, and financial literacy workshops.

63. https://www.jaworldwide.org/
64. https://www.aflatoun.org/
65. https://globalmoneyweek.org/

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