CBI Economics

Paving the way to financial wellbeing

How government and industry can collaborate to improve the nation's financial literacy

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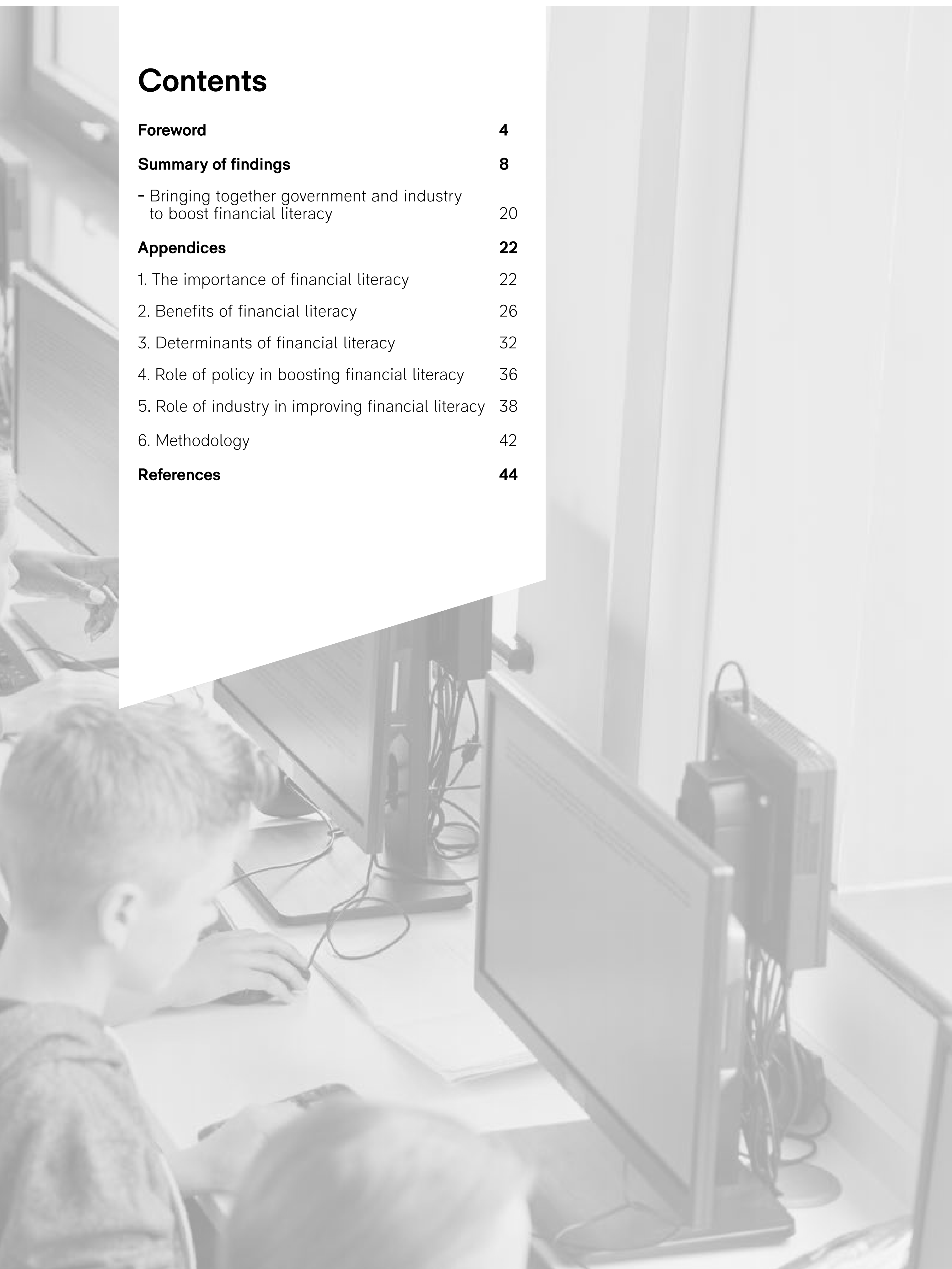
Commissioned by

gohenry wilson wright



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Foreword

Would you drop your child in the deep end of a pool for the first time and expect them to swim?

The reason I ask is because, just like swimming, money management is a vital life skill and one best taught young - and with aids - to ensure that when the next generation hits adulthood they don't sink amongst access to fast-credit and plenty of temptations.

This is even more important as we move to an ever-increasingly cashless society, where people use the tangible resource of notes and coins less and less.

I'm a firm believer that learning by doing is the best way to teach life skills. You can't just teach the theory of swimming, you need to get into the water and do it for yourself. It's the same with money management. However, financial education isn't as exciting to a child as swimming, so you need to find a way to make them want to get in the pool - to continue my analogy - and keep training.

For real progress to be made therefore, we need to first engage the people teaching this next generation (parents, carers and teachers) by equipping them with the right tools and knowledge to help children perfect their money skills.

This is why we're very grateful to have partnered with CBI Economics and Wilson Wright to pull together this financial wellbeing report and demonstrate the need for industry collaboration. Money management isn't the role of one person; it takes a village, to use a well-versed parenting analogy. We need to all work together - industry, government, schools and parents - to ensure everyone (no matter their background, the country they live in or the school they go to) has access to financial education from a young age.

As this report and our own independent research shows, access to financial education has proven positive benefits to individuals (those who didn't receive financial education as a child in the UK are more likely to be unemployed, or earning less today, than those who did); businesses (if all adults received financial education at school, an additional 76,400 businesses could be created each year, resulting in an annual increase of 123,000 direct jobs); and the economy (prioritising financial education could add an extra £6.98 billion to the UK economy each year - £202 billion by 2050).[1]

It's a win-win situation but what we need now is a collaborative approach, using all of our combined expertise, resources and knowledge so that when this next generation goes out into the world they've got the financial skills to stay afloat.

Louise Hill

Co-founder and Chief Operating Officer, GoHenry

Foreword

Money is worthless. It has no intrinsic value. It is also one of humanity's greatest inventions.

We only value money because of what we can do with it and we can only do things with it because other people value it too. We exchange it in return for the food, drink, shelter and clothing that meet our most basic needs.

Money is not only vital to our survival but also to fulfilling our values and goals in life.

Yet in a complex modern economy, it is not necessarily obvious how we can use our money to best effect. Using money effectively demands skill. This is a challenge faced by rich and poor alike.

It is also a basic premise of the services we offer at Wilson Wright and GoHenry.

At Wilson Wright, our accountancy, business advisory and tax advisory service are all at a fundamental level about helping our clients use their money as effectively as possible in pursuit of their goals.

Likewise, GoHenry's prepaid card and app with unique parental controls for young people aged six to 18 are ultimately about helping kids learn money skills for life.

We both recognise that using money effectively demands a sophisticated set of skills that people are unlikely to possess innately, ranging from basic mathematical skills, budgeting and understanding of how interest works, to emotional regulation.

It was natural, then for Wilson Wright and GoHenry to partner to commission CBI Economics to prepare this report, gathering evidence of the value of financial education to economic life generally and to entrepreneurship in particular.

We wanted to find out what the academic research says about the value of financial education in helping people become financially literate and empowering them to act entrepreneurially and the best ways to achieve this.

The report shows how improved financial literacy would deliver wide-ranging benefits across different social groups and circumstances, emphasising the importance of collaboration between the public and private sectors in creating a national strategy for financial literacy.

Money is worthless on its own but, with the right skills, it can be incredibly valuable.

Adam Cramer
CEO & Partner, Wilson Wright

Summary of findings

The importance of financial literacy

Financial literacy refers to the knowledge, understanding and confidence an individual needs to make informed and effective decisions with the financial resources available to them. It is a key determinant of lifelong financial outcomes for individuals and is increasingly recognised as a core 'life skill'.

In an increasingly digital world, more financial options than ever are being created for individuals to navigate, whether that is when shopping online, accessing music, games or entertainment through to managing income and investments. Financial literacy is crucial in giving individuals the ability to make informed financial decisions and there is strong evidence to show that this leads to improvements in lifelong wellbeing. **Appendix 1** highlights the importance of financial literacy in greater detail.

To this end, GoHenry and Wilson Wright commissioned CBI Economics to assess the evidence around the determinants of financial literacy, the benefits from improving it, and how government and industry can go further to improve financial skills amongst children and young people.

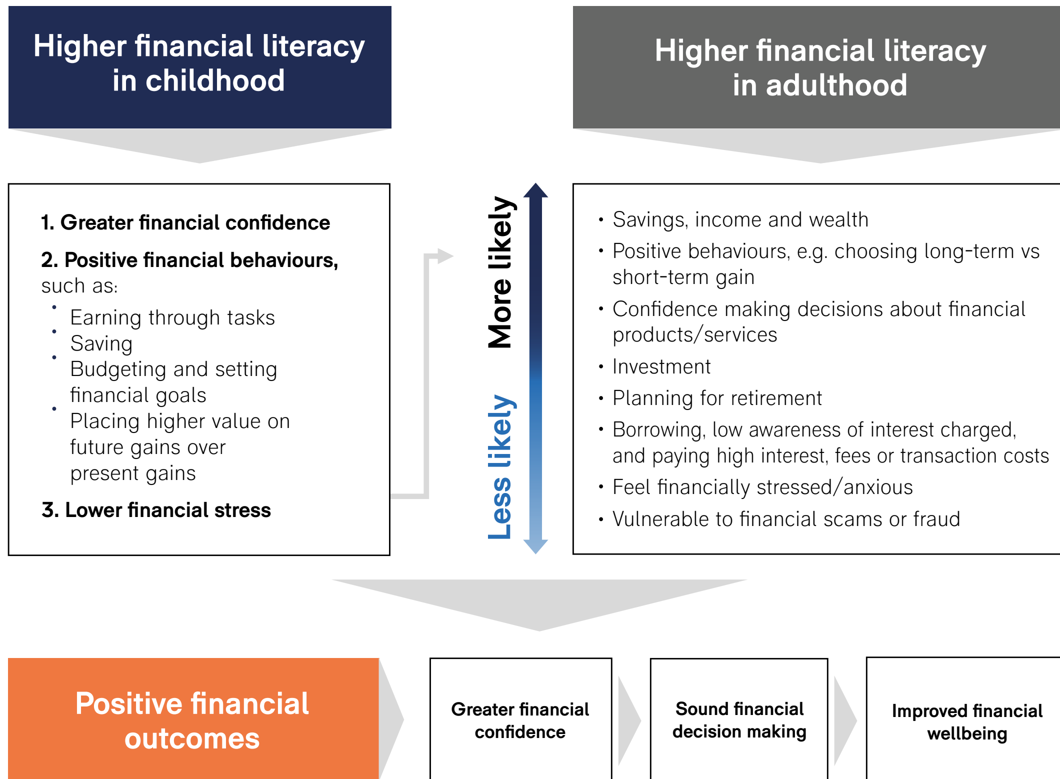
Impact of the pandemic on financial literacy in the UK

The pandemic had a disproportionate impact on the low paid and the younger generations. Those with the lowest levels of financial literacy were most affected, as has been the case in previous periods of economic shock. For those in employment, government schemes provided support, but those schemes are now phased out. For students it is estimated that they have lost one third of their learning during the first 12 months of the pandemic. As a result, and as further evidenced by **Appendix 1**, the UK faces an immense challenge in addressing this gap.

Benefits of financial literacy

Financial literacy has benefits for individuals, society and the government. It also has benefits for the labour market and business and plays a crucial role in encouraging entrepreneurship. These are set out in **Figure 1** below.

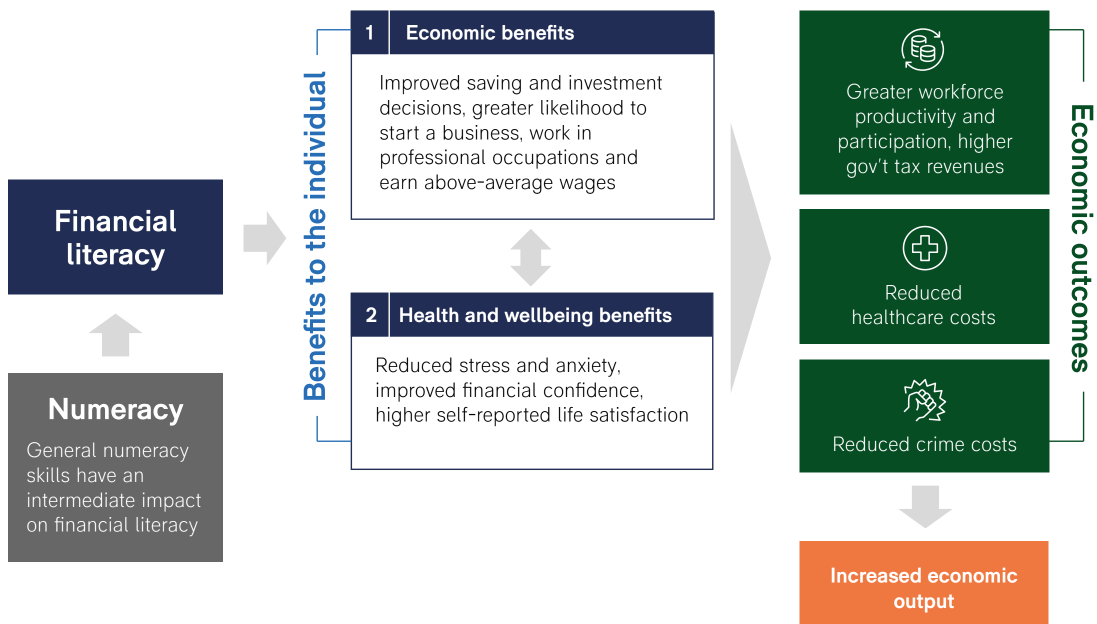
Figure 1 The benefits of financial literacy to individuals



Source: CBI Economics analysis

These benefits have wider implications for society and government, as illustrated by **Figure 2** below. Further detail of these impacts can be found in **Appendix 2**.

Figure 2 Wider benefits of financial literacy



Source: CBI Economics analysis

Benefits within the labour market and toward entrepreneurship

Financial literacy skills are highly transferable and help boost entrepreneurship. For businesses more widely, it means their employees have stronger foundational numeric skills, are more prepared for work and will likely be more productive over the course of their careers.

The financial literacy of an entrepreneur in the start-up phase of a business plays a key role in the likelihood that the start-up will survive beyond its first year. These skills mean entrepreneurs are more aware of their finances and have a stronger ability to find and access external funding sources. This is often crucial to a business's survival and ability to scale. Access to finance is considered a significant challenge for entrepreneurs, with the ability to navigate financing options a key barrier in drawing the necessary funding at the lowest cost. See **Appendix 2** for more detail.

The costs of financial illiteracy

The flipside to financial literacy is financial illiteracy. This often has long-lasting impacts on an individual and can impact future generations of the same family. Financial illiteracy has been linked to lower standards of living, lower mental health and wellbeing, and often a greater reliance on government support.

One study helps to quantify the costs to the UK of financial illiteracy. It investigated adult numeracy, one of the building blocks of, and markers for, financial literacy. It projected a cost to the UK of £20bn per year in lost output. Another recent study into the effect of financial education from a young age on adulthood found that prioritising financial education could add nearly £7 billion to the UK economy each year (£202 billion by 2050), increasing annual business formations in the UK by 76,400 each year, which could create up to 123,000 direct jobs annually.[2]

Determinants of financial literacy

The level of financial literacy an individual has is determined by their individual characteristics, parental influence, schooling, and the role of government and businesses more widely. **Appendix 3** sets out these factors in greater detail.

Individual characteristics

Some individual characteristics and behaviour, such as level of impulsivity or employment status have been shown to play a part in shaping financial behaviours.

Role of parents

Parental behaviour is one of the key determining factors, in particular in early ages of children. Young children imitate the financial behaviours of their parents/carers. Studies have shown that if parents or carers save regularly, children are less likely to borrow as young adults. The opposite has also been shown. When parents or carers have felt anxious about money or are over-indebted, children are more likely to buy on impulse and borrow as young adults.

Impact of schools

Schooling and financial education is another contributing factor. Children's attitudes to money are already well developed by the age of seven. It is for this reason organisations such as the Organisation for Economic Co-operation and Development (OECD) recommend that financial education starts as early as possible and be taught in schools. This is to help encourage responsible financial behaviour and empower individuals to take charge of their own financial futures. Developing aspects of financial behaviour, such as saving behaviour, having a savings mindset and goal setting at key ages in school have all been found to have a positive impact on financial behaviour in adulthood.

Role of business and regulation

Businesses and the government play an important role in supporting financial literacy too. Consumer protection, market regulation, financial inclusion policies and simplifying the decision-making process can all support financial literacy. Additionally, product innovation being accelerated predominantly by UK fintech businesses - businesses which use technology to automate the delivery and use of financial services - has the opportunity to further play a key role in equipping parents with tools to develop strong money habits at home.

Financial education across the UK

Financial education has gradually become incorporated within the education system in the UK, but it differs across nations and not all schools are required to adhere to the National Curriculum - e.g. Academies (which many Primary and Secondary schools are switching to) and private schools - resulting in an inconsistent approach to financial education in the classroom.

England

There is no statutory requirement to teach personal finance education in England. Personal finance education in schools was introduced as a non-statutory element of the National Curriculum in 2000 as part of the personal, social, health and economic education framework. In 2014, financial education became part of the national curriculum for secondary school students in England.

Scotland

Students in Scotland begin training in financial capability earlier, and by age 11 must have an awareness of budgets and comparing costs before moving onto studies of credit and debt.[3]

Wales

In Wales, foundational principles of financial education begin at primary level in Wales and continues through to secondary school.

Northern Ireland

In Northern Ireland, financial education is embedded across the whole curriculum from age 4 to 14, driven largely through mathematics and numeracy classes.

Lessons from other countries: strategic and collaborative approaches to improving financial literacy

Financial literacy in the UK falls short of rates observed elsewhere in the OECD, ranking it 15th of 29 OECD countries, with 67% of adults being assessed as financially literate.[4]

Lessons can be learnt from countries that have high financial literacy scores or evidence of higher incidence of positive financial behaviours. Countries are increasingly embracing stakeholder collaboration alongside the development of a national strategy for financial literacy to deliver effective financial education with impact.

Examples of how Denmark and Estonia have achieved this are set out below.

Denmark case study

State of play in Denmark

Since 2015, financial education has been a compulsory part of the Danish national curriculum in secondary schools. Students learn about budgeting, savings and comparing loans and about their rights as consumers.

Approach to achieving stakeholder collaboration

Finance Denmark, a financial services business association, works towards ensuring that every part of society gains a good understanding of money and financial affairs early on in life. In an annual Global Money Week, employees from Denmark's financial sector also take on the role of guest teachers with the aim to enhance the financial literacy of students aged 13 to 15.

Outcome

Denmark has the highest financial literacy rate amongst all OECD countries, with 71% of its adults considered financially literate and scoring highly on knowledge of financial concepts. This is also reflected in a high savings rate, as 80% of all aged 15 and above have saved in the past year.

Estonia case study

State of play in Estonia

Since 2010, financial literacy has been a component of secondary and high school curriculum in Estonia. Teachers benefit from courses and mentoring clubs to support their ability to teach financial skills as part of the core school curriculum.

Approach to achieving stakeholder collaboration

Beyond core financial education by teachers, Estonia also draws on the expertise of the private sector to provide practical courses which help students understand financial products, how to use them in managing their finances, and how to make informed financial decisions. A debit card is predictive of higher levels of financial literacy. For the past seven years, the Estonian Banking Association (EBA) have provided training in collaboration with banks. EBA initiatives are embedded in the school curriculum. The EBA are also active advocates for financial education.

Outcome

Estonian teachers collaborate with the banking sector to promote financial literacy. The Estonian government promotes and supports these collaborations with an enabling legislative environment. Estonia scores highly on financial literacy as part of the international PISA assessment, ranking 1st out of the 20 PISA OECD participating countries.

These case studies show how powerful collaboration between government and private sector stakeholders can be. While they do not show the full extent of how far collaboration can go, there are many other ways in which industry can support.

International assessments of national policies around improving financial literacy show that the countries which are most successful in increasing financial literacy scores are those that develop a strategic approach based on stakeholder collaboration and informed by regular data gathering and evidence. Estonia and South Korea are two examples provided below.

Estonia case study

Strategic approach

The Ministry of Finance of Estonia have developed a National Strategy of Financial Literacy. This builds on successful cooperation between the public and private sector stakeholders, enabled by trust and proximity between stakeholders.

The Ministry of Education is responsible for the implementation of the national strategy, but financial education is a voluntary subject at school.

Schools teach personal finance through other subjects, such as mathematics or civic studies, while some secondary schools (ages 16-18 years old) choose to teach financial and entrepreneurial skills together under a standalone subject, such as entrepreneurship or economics.

South Korea case study

Context

South Korea's success in promoting financial literacy stems from a long-standing tradition of savings promotion policies and campaigns after the second World War. Based on a strategic view of policy gaps from the 1950s, South Korea introduced dedicated institutions such as children's banks and postal savings. These policies and institutions constitute the predecessors of their current financial education policies.

Strategic approach

South Korea more recently developed a national framework to promote financial education and launched the Financial Education Activation Plan (FEAP) in September 2013. Financial literacy surveys were conducted among school students in 2009 and 2011 and among households in 2011. The resulting publication, endorsed by the Financial Services Commission (FSC), constituted a first mapping of financial education initiatives in the country and highlighted areas where financial education could be fostered, especially for young people.

The FEAP aimed to improve the infrastructure for the provision of financial education (training teachers, developing incentives for adoption of financial literacy in the curricula, etc.), to enhance customised education programmes, to improve the level of the programmes and instructors, and to establish a follow-up management and evaluation system.

Therefore, a national strategic approach which is developed in partnership with the private sector to identify the most effective ways to improve financial literacy and financial wellbeing could go a long way in addressing the challenges of raising financial literacy in the UK.

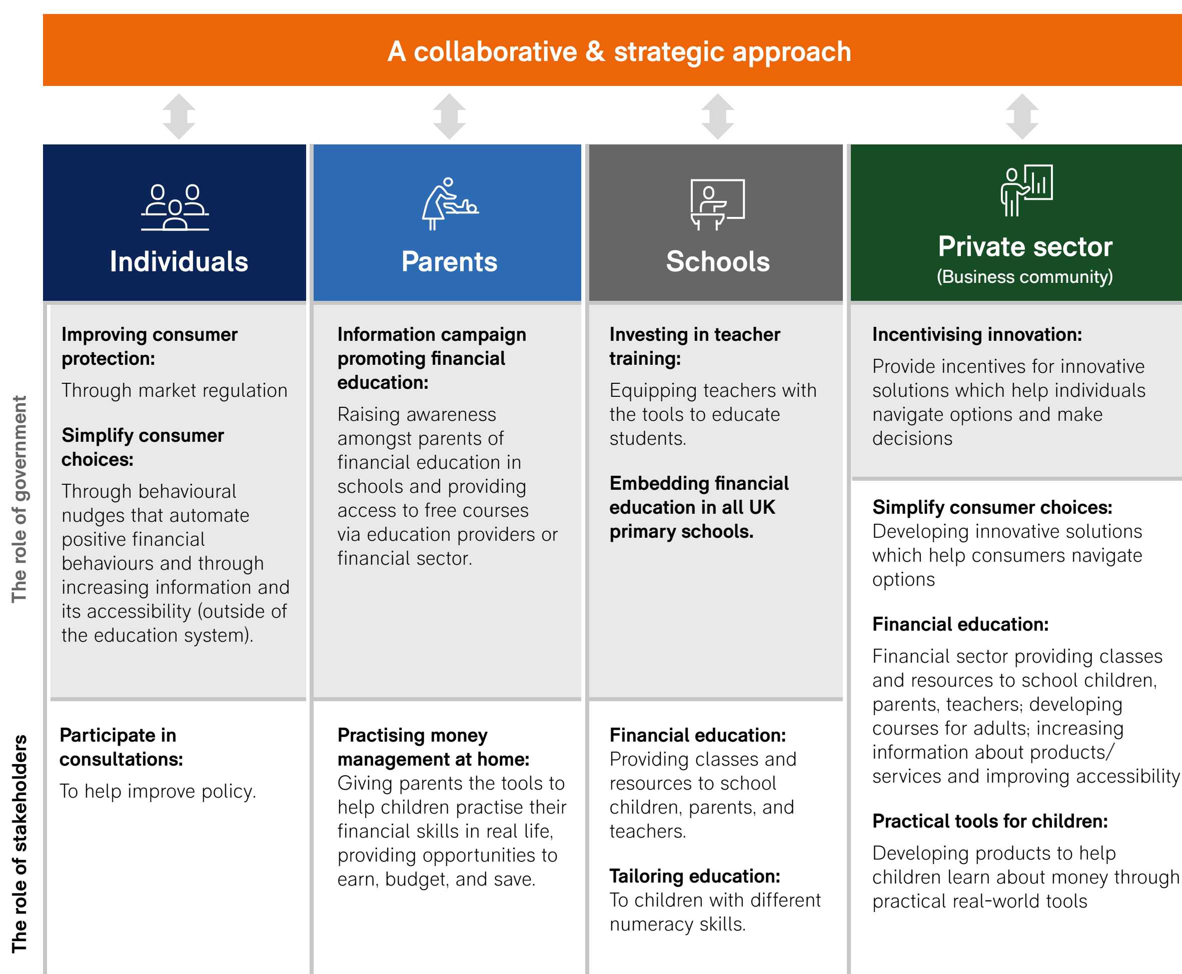
Role of policy in boosting financial literacy

The government can play a large role in raising financial literacy and there is sound rationale for policy intervention. Financial education is a key policy tool that governments have available to them which they can use to improve financial outcomes for individuals. However, there are alternative or complementary policies to financial education that can be used to improve financial outcomes for consumers. **Appendix 4** sets out complementary policy options which are due consideration.

In a world where choices are overwhelming and information is often complex, simplifying decision-making and building general skills for day-to-day financial management will enable individuals to make well-informed and sound decisions. To this end, financial education is one tool, amongst several, that can be used to improve financial literacy.

As illustrated by **Figure 3**, financial literacy can be influenced by other parts of society, each with different roles to play. However, harnessing these contributions will, in some cases, require government support or incentives to either enable or incentivise action.

Figure 3 Policy levers which can be used to harness the potential of all parts of society in improving financial literacy



Source: CBI Economics analysis

Role of industry in supporting financial literacy

Policy is found to be more effective when it builds on collaboration with the private sector. The private sector and industry can play their part in addressing financial illiteracy, through innovation and the development of new products and services. Industry can also work in collaboration with the government to help equip individuals with tools to assess options, or help parents teach children key money habits. See **Appendix 5** for more detail.

The evidence shows that there is an emerging market for financial products which allow parents to develop positive financial behaviours amongst their children from an early age through practical tools which help them earn money, budget, save, and spend. Such solutions upskill and empower parents to actively develop positive financial behaviours at home, building on financial education in the classroom. In England, this market also fills a gap in financial education for children in primary schools.

Industry contributions where there are societal challenges in the UK have had an impact. Recent examples include private sector contributions on net zero targets around carbon emissions, supporting entrepreneurs to access finance, and the strategy of tackling rising obesity levels in children. The work of the British Business Bank is presented in the following case study.

Access to finance case study

The British Business Bank is a government-owned development bank dedicated to making finance markets work better for smaller businesses. The Bank has a wide remit, with a focus on increasing the supply of finance available to SMEs and start-up businesses.

Through their Finance Hub, they support entrepreneurs in exploring the most suitable finance options for them, educating them on financial products and services, and supporting them in finding and accessing finance. They also provide guides which set out the options available to businesses at all stages, offer mentoring, and provide support with business plans.

To date, they have helped over 82,000 small businesses access more than £5.9bn in funding, in a market where nearly 50% of aspiring entrepreneurs cite a ‘lack of money’ as a major obstacle to success and 52% of SMEs are unaware of alternative sources of finance.

Tackling obesity case study

Tackling obesity is a pressing public health need. Obesity currently affects one in four adults and one in five children in the UK.

Businesses have taken several steps to tackle obesity and reduce calories consumed. Food manufacturers have reformulated their products, increased their range of healthier choices, and reduced portion sizes. Evidence from the Food & Drink Federation indicates that the food and drink industry sold 57.3 million fewer kilograms (14.3 billion fewer teaspoons) of sugar and 35.5 million fewer kilograms of fat, between 2015 and 2018, reducing calories sold by one trillion over the period.

The government now wants to go further. In July 2020, the government set out proposals for tackling obesity and banning advertising of products high in fat, sugar and salt before 9pm to limit exposure of children to tempting advertisements.

Bringing together government and industry to boost financial literacy

Based on the research presented in this report, there are actions the government and other stakeholders can take to improve financial literacy in the UK.

1. Develop a collaborative national strategy for financial literacy which works with industry and other private sector partners

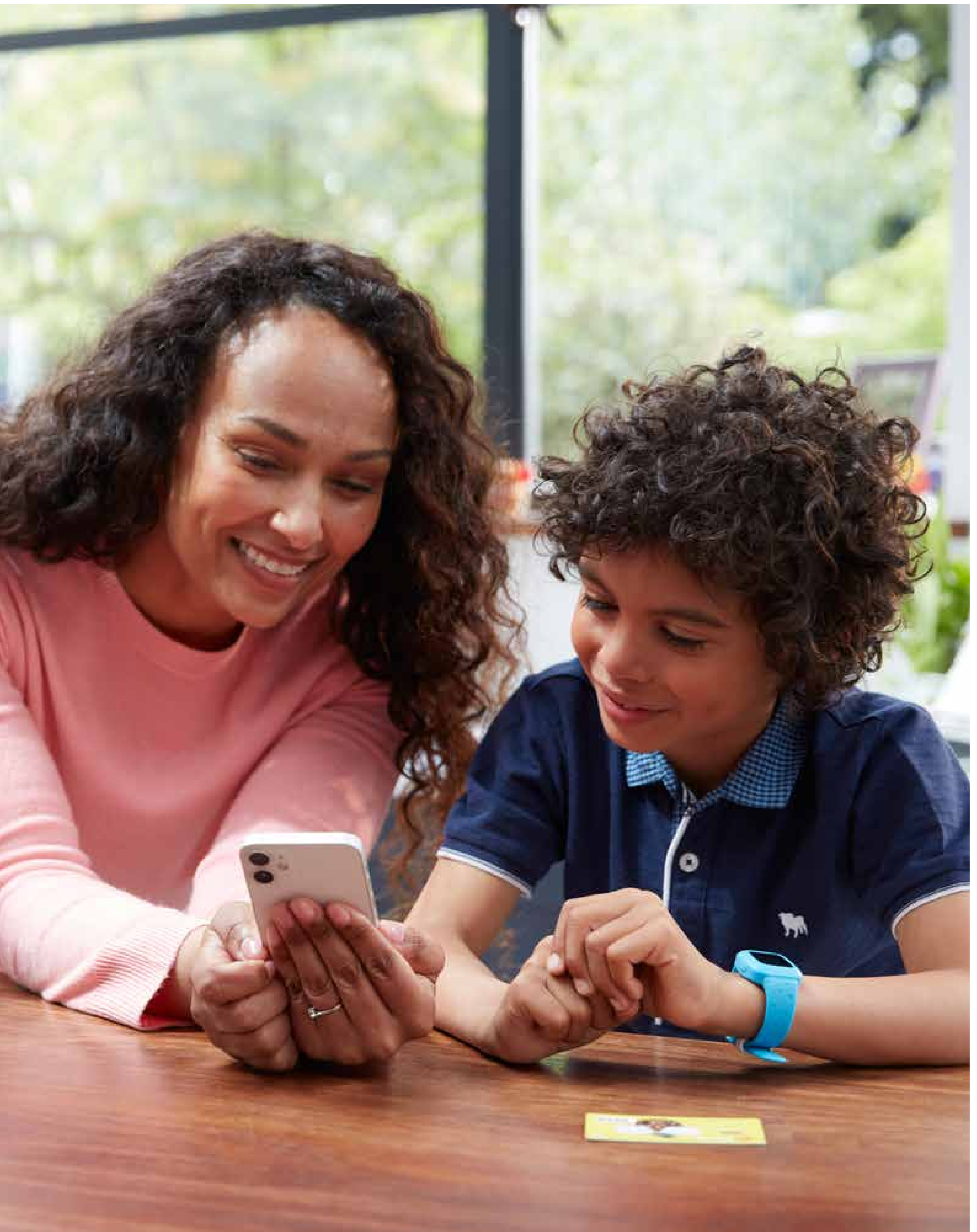
Adopting a collaborative approach with the private sector to improve and promote financial literacy – in particular, for young people - allows the government to leverage policy and draw on private sector expertise to achieve this objective. It means the private sector, in collaboration with government and regulators, can work to simplify consumer decisions in relation to financial products and services and increase consumer protection from financial scams.

2. Introduce financial management and financial literacy in the UK from primary school age

A comprehensive curriculum developed with input from across England, Scotland, Wales and Northern Ireland will ensure children receive similar education from primary age. This will provide help to ensure financial education feeds into children's attitudes to money during their formative years.

3. Provide practical learning tools for children and parents

Practical learning tools for parents will mean that those who have not received financial education from an early age are still able to build good financial management skills. For those who have received financial education, including children, these tools can help to reinforce earlier childhood education. For parents/carers, this will facilitate the passing of financial literacy to future generations.



Appendix 1: The importance of financial literacy

1.1 Financial literacy as a core life skill

Financial literacy is a key determinant of lifelong financial outcomes for individuals and is increasingly recognised as a core 'life skill' such as first aid and swimming.

> Financial literacy refers to the knowledge, understanding and confidence an individual needs to make informed and effective decisions with the financial resources available to them. It is a key determinant of lifelong financial outcomes for individuals and is increasingly recognised as a core 'life skill'.

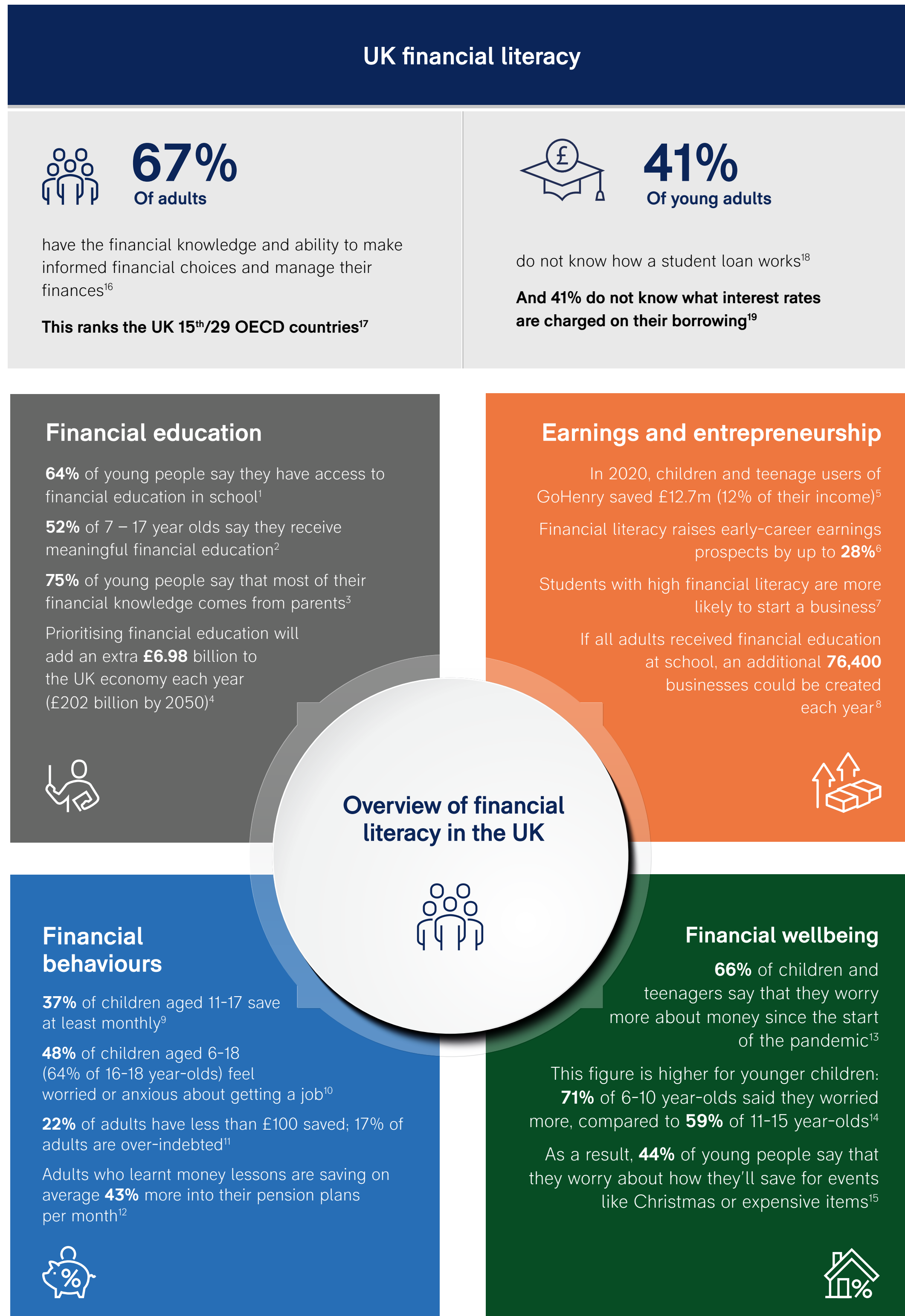
The UK Government's Plan for Growth[6] has set out its ambitions for reform in addressing the UK's skills gaps, but there is also an opportunity to look at how core life skills such as financial literacy are developed in the young to build lifelong resilience and allow individuals to take up opportunities with confidence.

1.2 Financial literacy in the UK

Financial literacy in the UK falls short of rates observed elsewhere in the Organisation for Economic Co-operation and Development (OECD), and this is reflected in low financial confidence and financial wellbeing (**Figure 4**). In the UK 67% of adults are financially literate.[7] This ranks the UK in 15th place out of 29 OECD countries, below the OECD average and well below France, Finland, Norway, or South Korea. Furthermore, 63% do not feel in control of their finances, 51% could last no more than 3 months without borrowing if they lost their main source of income, and 47% do not feel confident in making financial decisions.[8] Add to this, money worries start early in life, with 51% of children reportedly worrying about money, rising to 67% of 17-18 year-olds.[9]

A recent study commissioned by GoHenry into the impact learning financial education from a young age can have on adulthood showed that of those currently unemployed and actively seeking work, 41% did not receive any financial education compared with 9% of those who did.[10] Additionally, nearly half (46%) of those who did not receive any financial education as a child are earning £15,000 or less annually, less than half of the national average income.[11]

Figure 4 Overview of financial literacy in the UK



Sources: [1, 3, 18, 19] Financial Education & the Curriculum, The London Institute of Banking & Finance (2021), Young Persons' Money Index 2020-21; [2, 9] UK Children and Young People's Survey - Financial Capability 2019, Money and Pensions Service (2020); [4, 8, 12] Financial education could double your child's earning power, GoHenry (2021); [5, 9, 10, 13, 14, 15] The Legacy of Lockdown: UK Youth Economy Report, GoHenry (2021); [6] Returns to skills around the world: Evidence from PIAAC, Hanushek, E. A. et al. (2015); [7] The effects of financial literacy on sustainable entrepreneurship, Burchi et al. (2021); [11] Financial Resilience survey, Yorkshire Building Society (2021); [16, 17] Financial Literacy around the World: Insights from Standard & Poor's Ratings Services Global Financial Literacy Survey, Standard & Poor (2017)

1.3 The importance of financial literacy throughout the COVID-19 pandemic

The pandemic has had a disproportionate impact on the low paid and the young. And, as seen in previous periods of economic decline, those with the lowest financial literacy are more vulnerable to changes in their income and employment due to lack of a financial cushion. They are also more likely to become over-indebted.[12]

For those in employment, government support such as the furlough scheme cushioned the impact on jobs and mitigated unemployment, keeping it at half the forecast rate of 9%.[13] At its peak in May 2020, almost nine million jobs were furloughed while the peak in redundancies was delayed to the three months to November 2020, at 14 per 1,000 employees.[14,15] However, amongst those aged 16-24, the unemployment rate reached 40% in the quarter to June 2020.[16]

In education, students are estimated to have lost a third of their learning time during the first 12 months of the pandemic.[17] A combination of lockdowns and pupil absences due to self-isolation has created a disruptive atmosphere for learning and students from the poorest households have experienced higher learning loss. The UK faces an immense challenge of addressing this gap in learning and a feasible route to ensure all students can catch up effectively.

The pandemic has also shown changes in saving and earning patterns across the young and highlighted the importance of financial skills from an early age. Industry can support parents and children to develop positive financial behaviours through learning by doing.

1.4 The UK government response

In its Plan for Growth report the UK government outlined its ambitions for reform in addressing the UK's skill gaps, especially in the working-age population.[18] For example, the Industrial Strategy Council has forecast that 5 million workers could be under-skilled in basic digital skills by 2030.[19] Estimates by McKinsey prior to the pandemic also showed that 5 million workers will require retraining and 26 million workers will require upskilling by 2030.[20] However, 20% of these workers have not yet entered the workforce.[21]

Within this context, financial skills gaps could become more important as the UK government seeks to implement its Plan for Growth. There is therefore an opportunity to examine how core life skills such as financial literacy are developed in the young to build resilience and allow individuals to take up opportunities with confidence. This should build on the UK Strategy for Financial Wellbeing 2020-2030 developed by the Money & Pensions Service.[22]

Appendix 2: Benefits of financial literacy

2.1 The economic benefits of improving financial literacy

The benefits of improved financial literacy are manifested both at the individual level and at a broader societal and economic level. A financially literate society is one which is better able to make rational financial decisions which enables them to build resilience to changes in income and sustain spending even when incomes fall, resulting in greater stability in the demand for goods and services that sustains different sectors of the economy. A financially literate society is also one which is less financially anxious, making them more productive members of the labour market, increasing their participation in the economy, and reducing their dependency on the welfare system.[23]

These benefits lead to a more resilient and productive society, increasing societal welfare, health and wellbeing, and productivity.[24] They also translate into higher tax revenues and lower welfare benefits spend, reduced healthcare costs, and even reduced crime – all of which serve to raise economic output further (**Figure 2**).[25]

2.1.1 Building confident financial behaviours, good decision-making, and positive financial outcomes for individuals

The relationship between an individual's financial literacy and their financial decision-making is well-documented.[26,27,28,29,30,31,32,33,34,35,36,37,38,39] Financial literacy is a strong predictor of good day-to-day financial decision-making and financial management. Financial literacy is a key determinant of savings, income, borrowing and spending behaviours, as well as investment and wealth accumulation (**Figure 1**).[40,41]

While numeracy plays a key role in empowering individuals to take ownership of their finances, assess financial options, and save or invest with confidence, general financial literacy is significant in enabling day-to-day financial decisions, basic awareness of financial choices, debt management, and informed use of credit – particularly amongst individuals with lower incomes and qualifications.

Individuals unable to calculate interest rates are also found to be more likely to borrow and tend to accumulate less wealth, pointing to the role of general numeracy as a building block of good financial decisions.[42] Many of the less financially literate individuals also report that they do not know what interest rates are charged on their borrowing, including their mortgage balances.[43,44,45]

This indicates the importance of financial knowledge, particularly around an understanding of core financial concepts and being able to assess options and make informed financial decisions.

2.1.2 Maximising individuals' financial ability increases welfare, reduces financial stress, and builds financial resilience.

An individual's benefit from financial literacy over the course of their lifetime are significant. Analysis by the Money Advice Service [46] found a clear link between financial outcomes and other adult outcomes – in particular, health and life satisfaction.[i] Savers were more likely to rate their health higher, have better mental health, have better life satisfaction, and avoid interactions with the criminal justice system.

Self-assessed health measures are indicative of the mental toll that financial difficulties and a lack of financial confidence can take on an individual. **Figure 5** shows the difference that a high debt-to-income ratio amongst individuals aged 42 made to their overall health and wellbeing.[47]

Figure 5 The relationship between financial health and mental health & wellbeing

Financial health	Health and wellbeing outcomes
High debt-to-income ratio at age 42	Lower life satisfaction Higher stress and anxiety More likely to have a long-standing illness
Low debt-to-income ratio at age 42	Greater life satisfaction Lower stress and anxiety Better general health Lower likelihood of having a long-term illness

Source: CBI Economics analysis

[i] Note that the study controls for adult personal and socioeconomic background, as well as the respondent's subjectivity (their confidence, optimism and self-efficacy). This allowed them to isolate the links between financial and other outcomes for adults who are otherwise identical.

Notably, an individual's financial stress can influence their children's future financial capability. Parents are the strongest agent of financial socialisation in children. This inter-generational impact could be weakened by improving financial literacy in all children and adults today.

From an economic perspective, improving financial literacy can be seen as an investment in human capital, with implications for wealth inequality and welfare:

- One study showed that improving financial knowledge amongst those least educated before they join the labour market improves their wellbeing (or the happiness derived from wealth) by an amount equivalent to boosting initial wealth by 82%.[48] The equivalent value for college graduates is also estimated to be substantial, at 56%, suggesting that financial literacy has a significant impact on educated individuals as well as uneducated.
- Another study based on the OECD's Programme for the International Assessment of Adult Competencies[ii] (PIAAC) found that numeracy skills have a significant impact on early-career earnings, with an increase in numeracy leading to an average 18% increase in earnings – with the returns as high as 28% in the United States.
- A survey commissioned by GoHenry in September 2021 showed that of UK adults earning between £55,001 to £65,000 (nearly twice the national average income), more than three-quarters (77%) received some level of financial education.[50]

There are also significant economic benefits from these skills from reduced financial anxiety and increased financial confidence. In fact, a basic understanding of financial concepts and awareness of costs associated with different types of borrowing are sufficient to enable individuals to avoid high-cost borrowing options, maintain awareness of what interest rates are charged on their borrowing, and prevent themselves from becoming over-indebted. This has significant implications for an individual's financial wellbeing as it allows them to build lifelong resilience and maintain control of their finances during periods of falling income or unemployment. As an example, 40% of adults who didn't receive financial education said they have no savings at all and could not afford to save.[51]

[ii] A longitudinal panel tracking individuals across 23 countries from early years and across their entire working lives.

2.1.3 Financial literacy is a transferable skill which positively impacts other individual outcomes, with increased entrepreneurship a key co-benefit

Financial literacy has also been found to impact entrepreneurship. The financial literacy of the entrepreneur in early days plays a key role in the likelihood that the start-up will survive beyond its first year.[52] This is because the ability to scope out and access necessary external funding sources is important to its survival, particularly for ambitious ventures that start out with significant sunk costs to build up capital.

Access to finance is typically considered a significant challenge for entrepreneurs, with the ability to navigate financing options a key barrier in drawing the necessary funding at the lowest cost.[53] The recent British Business Bank SME Finance Survey 2020 points to nearly 50% of aspiring entrepreneurs citing a 'lack of money' as a major obstacle to success and 52% of SMEs being unaware of alternative sources of finance.

Research shows that information and training for entrepreneurs reduces the odds of pursuing projects with false positive returns and increases the odds of pursuing projects with false negative returns.[54] Further studies showed the benefits of financial literacy for entrepreneurs. They found that financial literacy enhances their decision-making process and leads to appropriate choices on financial issues.[55] It was also found that financial literacy improves entrepreneurs' skills, making them confident in making decisions about savings and the day-to-day financial management of their enterprises.

A small, but highly productive and innovative segment of business start-ups, defined as 'high-growth firms' are driven by entrepreneurs who are willing to take risks to bring new and disruptive solutions to market. While only 7% of UK SMEs are considered to be in this 'high-growth' category, they are nevertheless more than three times more likely to introduce new products or services to market and nearly four times more likely to develop process innovations.[56]

These start-ups initially make losses, but once capital costs are covered and the business takes off, they typically experience exponential growth, compared to the more stable growth of typical start-ups. However, financing these capital costs at the outset requires financial skills in the entrepreneur before they can afford to outsource finance tasks or recruiting finance and accounting experts. At this stage of the business, financial literacy can therefore make the difference between success or failure.

Recent evidence found that teaching even basic financial concepts to entrepreneurs has a significant positive impact on their success.[57] Other evidence shows that financial literacy plays a role in an entrepreneur's ability to access the necessary external sources of financing in the early stages of their business.[58] Evidence also found that financially literate entrepreneurs are more likely to access alternative sources of finance, in particular venture capital or angel investment.[59]

2.2 The costs of financial illiteracy

As previously discussed, poor financial decisions can have a long-lasting impact on individuals and future generations. These individual costs can also have broader societal and economic implications. For example, lack of financial literacy was an aggravating factor in many mortgage defaults in the 2008/09 financial crisis.[60] More recently, 51% of adults who did not receive financial education as a child said that they fell behind on utility bills or council tax payments between April to September 2021 while only 24% of respondents who received no financial education as a child said they would comfortably be able to pay for an increase of at least £100-£199 on monthly bills, mortgage payments, loan payments or rent.[61]

Several studies shed light on the economic cost of financial illiteracy. For example:

- A 2021 US study which surveyed more than 1,500 adults across six different age groups showed that financial illiteracy and lack of knowledge of how to manage one's personal finances cost on average $1,634 per head in 2020, based on self-reported estimates.[62] Further analysis of the Understanding America Study carried out by the Centre for Economic and Social Research found that financial literacy reduced the odds of being financially vulnerable to the economic shock induced by the COVID-19 pandemic by 9.1%.[63]
- UK studies estimated the long-term costs to the public purse associated with numeracy difficulties in schoolchildren at around £2.4bn every year, and the costs of low levels of adult numeracy at around £20bn per year.[64,65] The major contributor to this is employment costs, in the form of foregone tax revenues or increased unemployment benefits.
- A study by GoHenry in September 2021 showed prioritising financial education could add an extra £6.98 billion to the UK economy each year (£202 billion by 2050) with a boost to annual business formation in the UK meaning an additional 76,400 businesses could be created each year. This would result in an annual increase of 123,000 direct jobs which could reduce unemployment in the UK by over 8%.[66]

As a lack of core financial skills reduces an individual's employment options, poor financial decisions may have a proportionately larger impact on an individual's wealth, resilience to changes in income and employment, foregone retirement and investment earnings, health and wellbeing, productivity, as well as other impacts. These individual impacts have wider implications for financial market profits, government revenues and welfare payments, healthcare, educational, and crime costs.

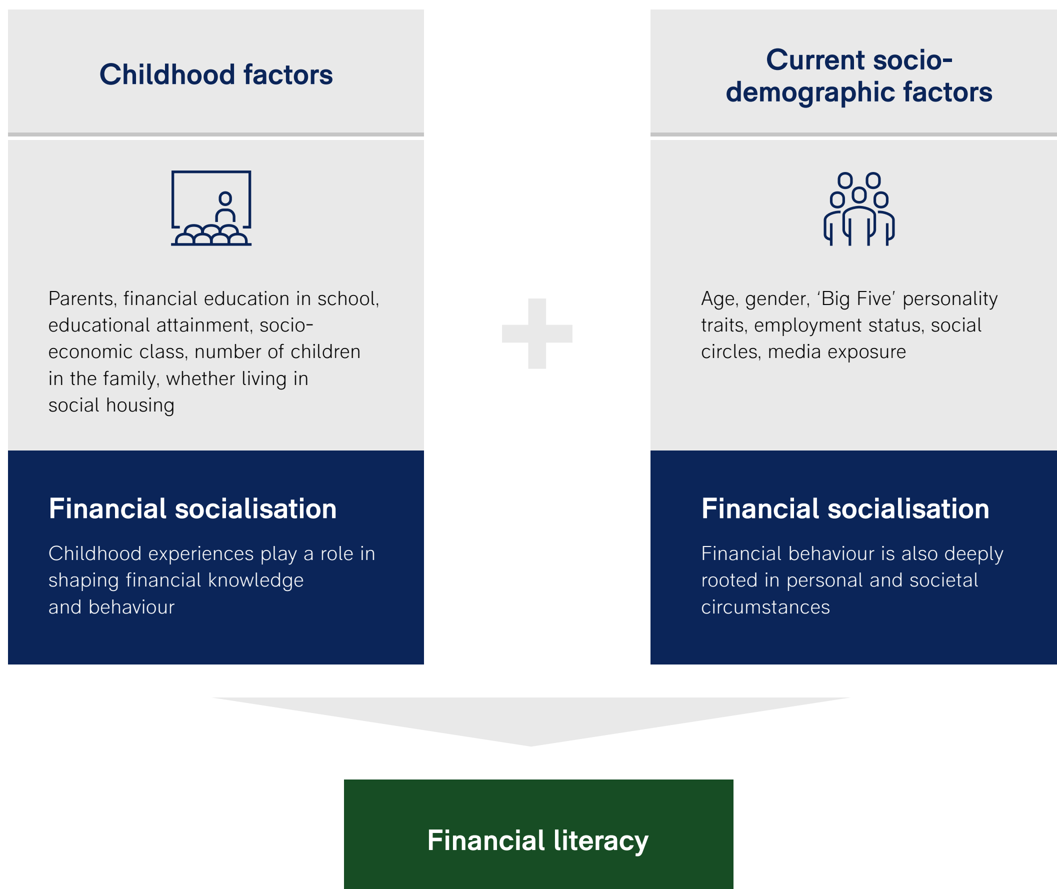
Appendix 3: Determinants of financial literacy

3.1 Developing financial literacy through a life-long process of financial socialisation.

Financial behaviour can be hard to influence because of a life-long process of **'financial socialisation'** by the society that people live in. Recognising and analysing the different socialisation 'agents' – or factors – which influence financial skills development and financial behaviours helps identify effective ways to support early years development of financial skills.

A clear distinction can be made between childhood determinants and socio-demographic determinants in adulthood (**Figure 6**).

Figure 6. The determinants of financial literacy



Source: CBI Economics analysis

3.2 The role of parents in shaping financial behaviours from an early age

Financial literacy is a skill developed through learning and can develop into habits. Research from Cambridge University found that as early as seven years old most children are able to understand and recognise the value of money and have formed habits around their use of money.[67] The core behaviours learned during this period are taken into adulthood and affect future financial decisions.

Childhood factors partially explain financial literacy in adults, and early childhood development (from as young as 5) play a significant role, with the strongest link between skills and financial outcomes found at the age of 10.[68] Within this, parents and family are found to play the greatest role, followed by school education. This nevertheless points to the importance of primary school age in a child's development.

A child's family background – in particular, their parents' own financial wellbeing and behaviour – plays the single largest role in a child's development of positive financial behaviours. It follows that improving financial literacy in today's children and young adults will have an impact on future generations. Equipping parents with the tools to better manage their finances will have a spillover effect on their children's financial wellbeing.

Research on habit formation and learning in young children shows that they learn through imitation and inductive learning from birth, and they begin to form habits from a very early age.[69] Parental socialisation plays the most significant role in the child's development at an early age, and most of the learning stems from practical experience.[70] As young children begin to develop an understanding of the world around them, parental education can play a significant role in setting them up for success.

Children can grow self-awareness from early ages, helping them learn to self-regulate, or take control of their own mental processes and emotions. Self-regulation helps develop resilience and self-control, leading to positive spending habits and a lower likelihood to take on debt.[71]

Studies show that when parents or carers saved regularly, children were less likely to borrow as young adults and when parents or carers felt anxious about money or were over-indebted, children were more likely to buy on impulse and borrow as young adults. Levels of parental education, household income, and welfare dependency (including living in social housing) are strong determinants of children's financial literacy, and their financial behaviours later in life.[73,74]

A Dutch study also found that parental teaching 'to save' raises the likelihood that an adult will save by 16%. It also found that these individuals save, on average, 30% more than individuals who did not benefit from parental teaching in childhood. The best strategy reported appears to draw on a combination of methods – from giving pocket money, setting limits on how the money is used, and advising about saving and budgeting. The impact of parental financial socialisation is found to persist with age into adulthood.[75]

Another study found that interventions to improve financial literacy have weaker effects amongst those in low-income households. This suggests that children from low-income households are more likely to be influenced by the home environment and parents' own financial decisions so any financial education policy should include parents to be effective.

One approach is to complement education in schools for today's children with additional measures to support today's parents. This is especially true given that financial education declines over time without practice. Parents should therefore be encouraged and supported in providing practical experience of money management for their children, as well as setting positive examples through their own financial behaviours.

3.3 Financial education in schools as a determinant of financial literacy

Children's attitudes about money are already well developed by the age of seven. Financial literacy is described by many as a core life skill that needs to be nurtured and developed as early as possible to encourage responsible financial behaviour and empower individuals to take charge of their own financial future. This suggests incorporating financial education into the school curriculum from pre-school onward.[76]

For this reason, the OECD recommends that financial education starts as early as possible and be taught in schools.[77] This recommendation is already being widely accepted as good practice, with recent discussions continuing to support this narrative.[78]

Young people's skills and financial behaviour at age 15-17 have also been linked to their financial wellbeing later in life. Financial literacy, saving behaviour, having a savings mindset, as well as setting goals at these ages are strong predictors of outcomes once they reach adulthood.[79]

Developing these aspects at these key ages in school are found to have a positive impact on financial behaviour in adulthood. Students who received financial education in school are more likely to make good financial decisions, with a clear link between financial education and financial knowledge.[80]

Financial education in schools today is also likely to make a greater difference to children who are unable to benefit from positive examples of money management at home, or who come from lower-income families with financial stress. Education provision in schools can impact the inequality of information amongst children and improve children's prospects of managing their personal finances in adulthood, even when financial stress in the home environment influences children's behaviour.[81]

3.4 Socio-demographic determinants in adulthood

Intermediate outcomes that occur between childhood and adulthood, such as educational attainment, employment status, marital status, income, or home ownership, can act as a counterbalance to lessen the impact of financial skills gaps in childhood on financial behaviour in adulthood. For example, educational attainment – even in the absence of financial skills in early childhood – can lead to a greater likelihood of positive financial behaviours such as wealth building and savings.[82]

Vocational education and employment are found to weaken the effect on financial behaviours of low cognitive skills in childhood.[83] At the same time, high qualifications and an academic education, employment, and having a professional occupation compensate for low non-cognitive financial skills in childhood.

Understanding the underlying factors behind poor financial literacy allows policymakers to develop policies and target them in a way that maximises their effectiveness and their impact. Insights in relation to the effect of household income and parents' qualifications suggest that policy to support children in these households should include measures which reduce information inequality amongst children. Embedding financial education in the school curriculum is one such measure. However, private sector solutions which can guide and simplifying decision-making, or practical tools to develop positive financial habits for parents and children alike are other potential measures to address this.

Appendix 4: Role of policy in boosting financial literacy

4.1 Government policy has a fundamental role to play in raising financial literacy

There is a sound rationale for policy intervention. Individuals can only make beneficial financial decisions which maximise their wealth if they are equipped with the financial skills and awareness to navigate a complex financial marketplace. This includes the ability to develop the confidence and the tools they need to prioritise long-term gain over short-term satisfaction.

In a world where choices are overwhelming and information is often complex, simplifying decision-making and building general skills for day-to-day financial management will enable individuals to make well-informed and sound decisions.

While financial education is an effective policy tool, one widely used amongst governments around the world, there are a range of measures which can be used to improve financial literacy. Financial literacy can be influenced by other parts of society, each with different roles to play. However, harnessing these contributions will, in some cases, require government support or incentives.

For example, parents play a key role in helping future generations develop healthy financial habits; however, in some cases, this may require access to free courses to educate them, or practical tools to help them teach children about money and practice earning or saving behaviours at home. The private sector can develop new solutions to support this, but businesses may require financial support or incentives to test ideas and bring new products or services to market.

This therefore calls for a holistic and strategic approach which builds on collaboration and seeks to harness each stakeholder's potential to develop solutions.

4.2 Financial education is a powerful policy tool, effective in influencing information availability, but choices are not always based on information

Financial education is found to increase the rates at which individuals save and accumulate wealth during their adult lives.[85,86] In order to change behaviour, the evidence shows that financial education needs to be targeted to specific groups based on numerical ability, as well as tailored to different social backgrounds and economic circumstances.[87] For example, studies which assessed the effectiveness of financial education on low-income groups showed that intensive programmes are more effective than short programmes.[88,89]

It is also shown that the impact of financial education declines over time. Even large and intensive programmes only have a small impact on financial behaviours 20 months or more from the time of delivery.[90] There is therefore a need to provide opportunities for the practical application of this knowledge in order to maximise retention of knowledge.[91,92]

Financial education is also only one of many policy levers, and international best practice shows that national strategic approaches which draw on a mix of policy tools and capitalise on the potential that different stakeholders can contribute is an effective way in which the UK could go further to improve financial literacy.

Appendix 5: Role of industry in improving financial literacy

5.1 The role for complementary measures to simplify decision-making and protect consumers

Financial education is a key policy tool that governments have available to them which they can use to improve financial outcomes for individuals. However, there are alternative or complementary policies to financial education that can be used to improve financial outcomes for consumers.

The OECD International Network for Financial Education (INFE) made significant strides in expanding the scope for government policy. INFE provided a useful framework underlining the importance of a coordinated and strategic approach to improving financial outcomes for individuals, which goes beyond financial education alone.[93,94] It considers financial education as a preventive tool that can help consumers to make informed decisions, know which service providers and products are trustworthy, and have appropriate levels of confidence in using financial products and services. They highlight the importance of having a strategy for financial inclusion, as well as one for financial consumer protection.

This points to the importance of looking beyond financial education in schools and harnessing the potential contributions that can be made by the private sector, both in developing innovative financial solutions, and in developing behavioural solutions which 'nudge' and automate positive behaviours to build good financial habits.

To benefit individuals' financial literacy and wellbeing, it is clear from the evidence that financial education should be supported by consumer protection, market regulation, financial inclusion policies, and behavioural approaches which automate beneficial financial behaviours and simplify decision-making. These additional solutions act to enhance government efforts in improving financial literacy.

5.2.1. Simplifying consumer decisions, building healthy habits, and the role of industry

Intervention to support individuals in navigating options could also be important in building financial confidence to take advantage of market opportunities and wealth accumulation. Whether to support with debt management or savings and investment decisions, it is important to reduce the costs and the complexity of acquiring information to help with decision-making. Increasing the availability, as well as structuring and simplifying information are other ways in which policy can support individuals.

Children in over-indebted and financially stressed households are more likely to make impulsive purchases and take high-interest credit. Financial education is found to be effective when behaviours are under cognitive and intentional control, but not where behaviours are dominated by a lack of self-control and impulsivity – key personality factors which influence financial outcomes, as discussed earlier.[95,96]

Developing financial awareness and numerical skills in isolation will not be sufficient. Alongside this, practical solutions which can be accessible to children from all backgrounds would be an effective way to help equip all children with the tools to overcome impulse spending tendencies and develop the healthier financial habits of day-to-day financial management.[97]

This means that information will have little effect on behaviours controlled by emotion or habit, making it more difficult for individuals who have benefitted from financial education to use the knowledge they have and apply it in practice.[98] Other solutions are therefore needed to increase awareness of damaging behaviours and habits and provide pre-commitment tools to help build self-control or develop better habits. Behavioural economics suggests that the most effective way to overcome bad habits is to gradually replace them with better habits.[99]

Evidence from behavioural economics and decision theory also points to effective policy alternatives that address behavioural biases like present bias and choice overload.[iii] Behavioural nudges are increasingly recognised as a key tool to improve financial behaviours and decisions by simplifying the decision-making process. For example, the Money & Pensions Service tested behavioural framing to encourage regular savings habits amongst clients when they sought debt advice and developed a Savings Prototype based on behavioural nudges.[100] They used goal setting and mental accounting to frame messages about saving and tested it with clients in different states of mind and financial situations to encourage clients to save in an empathetic way and overcome psychological barriers to saving.

There is also an emerging market for financial products which allow parents to develop positive financial behaviours amongst their children from an early age through practical tools which help them earn money, budget, save, and spend. Such solutions upskill and empower parents to actively develop positive financial behaviours at home, building on financial education at school. In England, this market also fills a gap in financial education for children in primary schools.

5.2.2. Consumer protection and the role of market regulation

Consumer protection is an important feature of strategic policy, crucial both as a preventative, and a potentially curative tool that must keep the balance between the growth of the financial sector and, simultaneously, protect the consumer interest.[101] To provide the confidence and trust in financial services, they believe, consumer protection measures should go hand in hand with financial education.

Regulation plays an important role in improving financial outcomes. The most effective use of regulation as a complementary policy tool to financial education is in designing policies that address biases and reduce the decision-making costs that consumers face in financial product markets.[102] Regulation is important in protecting consumers from financial scams, which individuals lacking financial literacy are more vulnerable to.

[iii] This is defined as a tendency to settle for a smaller reward today rather than wait for a larger reward in the future, in a trade-off situation.

Appendix 6: Methodology

CBI Economics was commissioned by GoHenry and Wilson Wright to research the benefits of financial literacy, including the determinants of financial literacy, and the current state of play in the UK and in selected benchmark countries with respect to financial literacy. These then led to the development of three focal points where the government could act to improve financial literacy in the UK.

Figure 7 below sets out the approach followed in this study, which was carried out in three phases.

Figure 7 Methodology

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