

## In focus

# How to build a stronger investor culture across Europe

July 2020

Creating a culture of investing across Europe has to start with the individual. Instead of focussing only on what information fund managers and distributors need to disclose, how and when, we need a framework which starts with people's needs and priorities. We need to recognise that people are not on the lookout for a specific product. They need solutions to real life problems and a culture of investing is about them being aware of the possibility to reach out to capital markets and invest to get these solutions. For this to happen, we must ensure that they have: financial advice they value and trust; financial literacy; meaningful information; and, a framework based on technology supporting them in their investment journey.



**Anastasia Petraki**  
Head of Policy Research

### What is the Capital Markets Union (CMU) and why should we care?

Work to establish a single market for capital in the European Union (EU) spans half a decade, from the first [action plan](#) on building a CMU in September 2015, to the [latest recommendations](#) by a purposely set High-Level Forum in June 2020. The ultimate goal and ambition has been to complement bank-based finance with market-based finance so that companies in the EU are able to raise money from multiple and diversified sources.

The potential benefits are immense. The think-tank [New Financial](#) estimates that if the capital market in each Member State were as large relative to GDP as in the five most developed Member States, the EU could have an additional 4,000 companies by 2027, raising an extra €600bn per year in capital markets. This is roughly double the existing levels of activity and could happen through different channels, such as:

- an extra 295 IPOs a year raising around €76bn each year;
- an additional 280 companies raising an extra €105bn a year through corporate bonds;
- nearly 1,900 additional companies raising an extra €2.6bn a year in venture capital.

The stakes are high but fulfilling the CMU ambition is not straightforward. The multifaceted approach, set in 2015, has combined actions relating to companies themselves and the infrastructure of capital markets. It has also captured the other end of the chain, that is, the source of the money: individual savers and their willingness to invest (directly or indirectly) in capital markets.

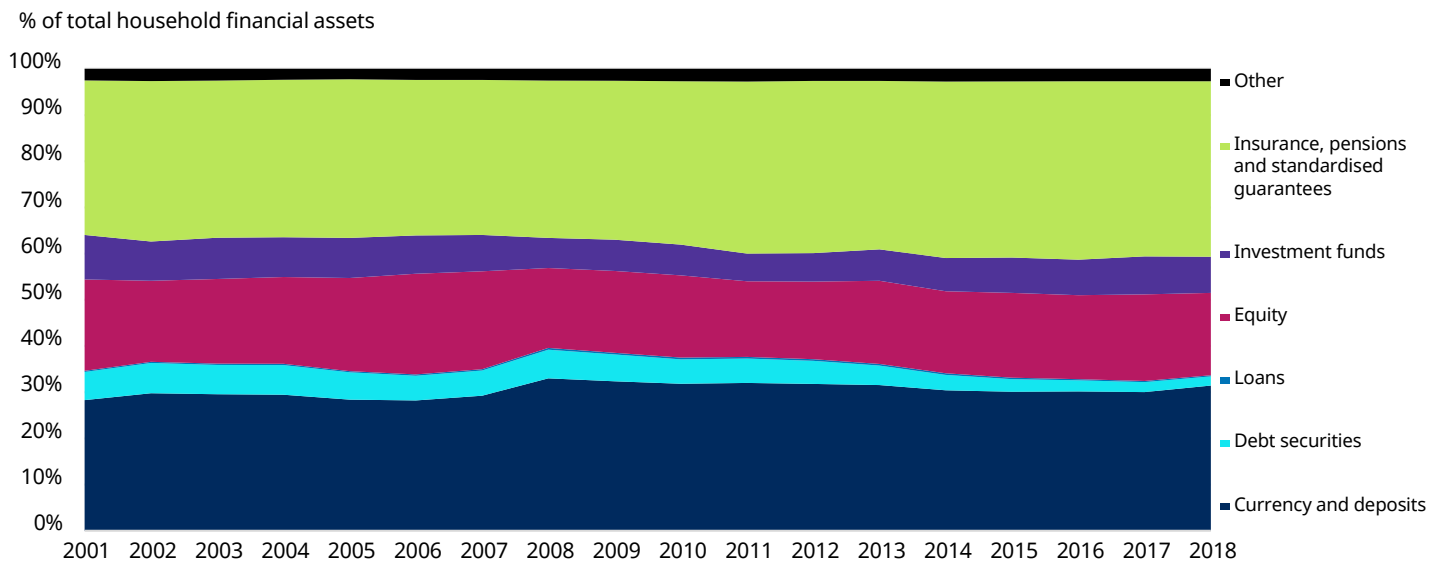
### Europeans are reluctant to invest

The bad news for delivering the CMU is that European households have a very persistent preference for holding cash instead of investing in capital markets (Figure 1). Roughly, for the last 20 years, currency and deposits have accounted for about one third of household assets, which is almost as much as investment funds, equity and debt securities put together (Panel A). In fact, European households seem to have moved further away from securities and funds since 2001 although there has been a considerable increase in the value of pension and insurance assets. Still, currency and deposits have overtaken all the other types of financial assets in the time since the CMU was launched (Panel B).

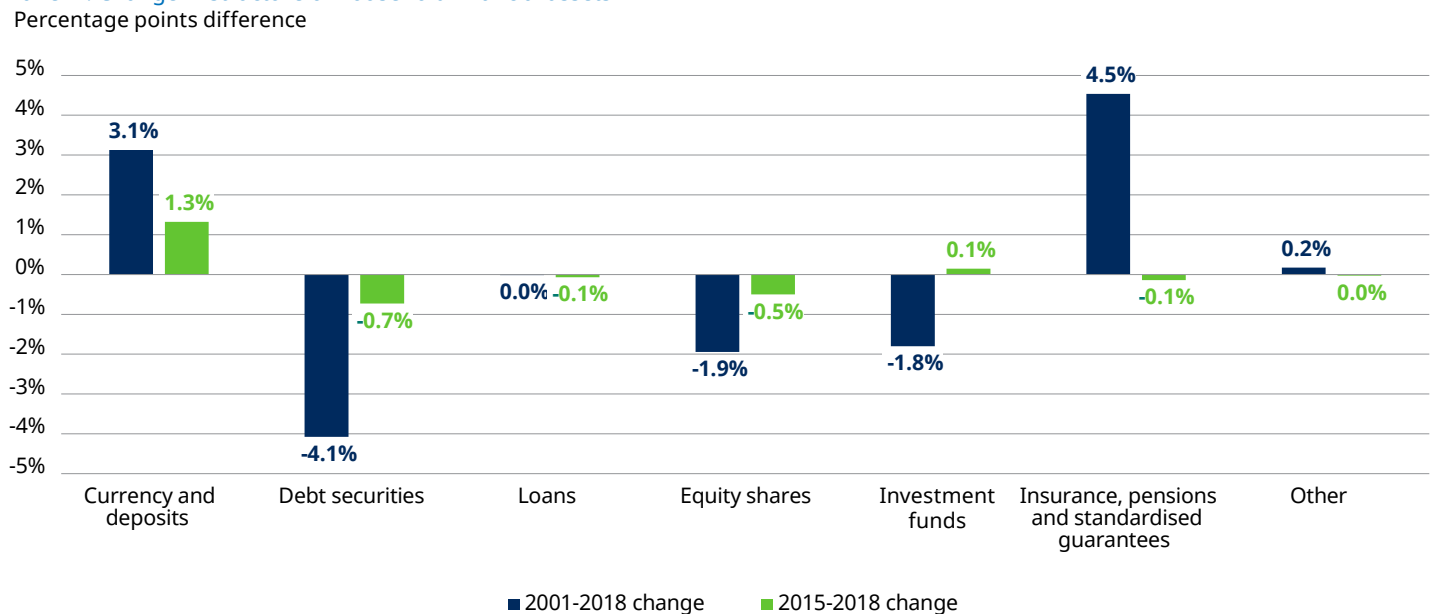
All this is despite the value of European household assets increasing by almost 47% between 2008 and 2018 while liabilities grew at less than half that rate (Panel C).

**Figure 1: Household financial assets – EU27 and UK**

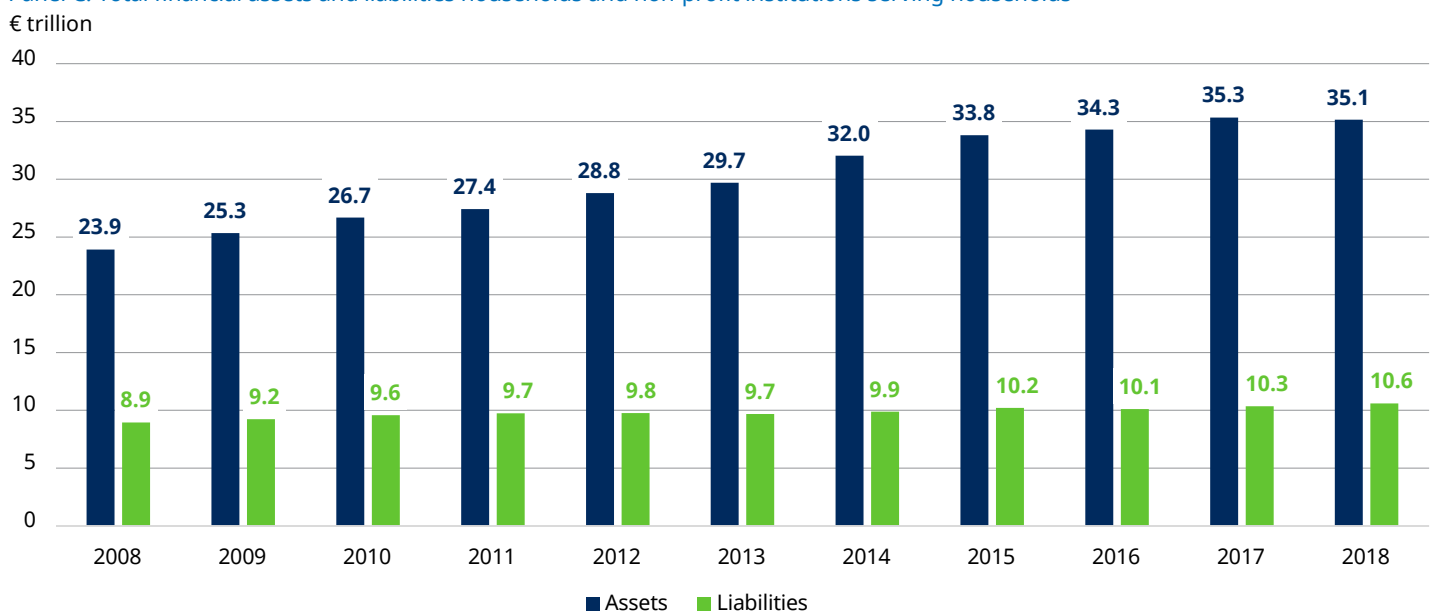
**Panel A: Structure of household financial assets**



**Panel B: Change in structure of household financial assets**



**Panel C: Total financial assets and liabilities households and non-profit institutions serving households**

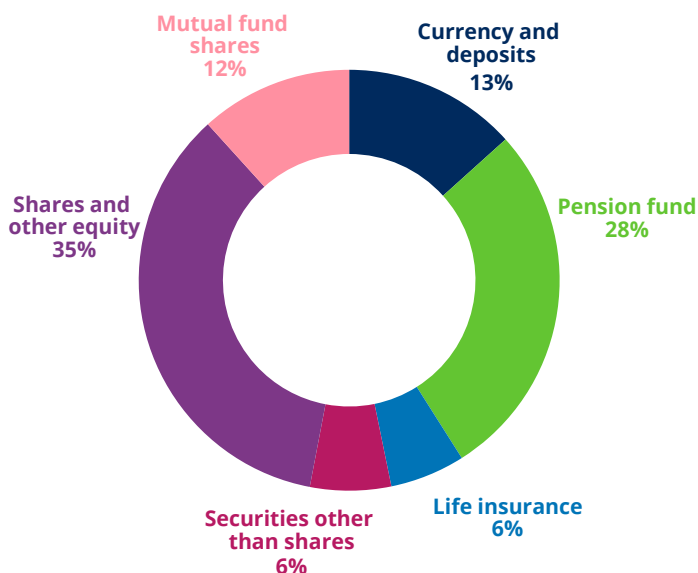


Source: Eurostat.

The inevitable comparison to the US follows. “Inevitable” because, according to [New Financial](#), the capital market in the US is almost twice as large relative to GDP as in the UK, which in turn is almost twice as large as in EU27 (EU excl. UK). For an indication of what this means in more tangible terms, the split between bank lending and corporate bond issuance in the US is 26%-74% while in the EU27 it is practically the opposite (77%-23%).

Alongside having a less fragmented and more homogenous market, American households are overall more accustomed to investing. According to the [OECD](#), only 13% of household financial assets are in currency and deposits (less than half the figure in Europe) and over 50% in securities and funds (Figure 2).

**Figure 2: Structure of household financial assets in the US – 2018**



Source: [OECD](#).

People not willing to invest in capital markets is a worrying sign in light of continued low interest rates across the EU, and indeed worldwide. Furthermore, even though inflation has been low, rates on cash have been lower still. As a result, money saved in cash has fallen in value once inflation has been taken into account. The implications are not negligible given the investment returns that people will need in the future, not least for retirement considering the demographic challenges the EU faces.

### What have we been doing wrong?

Policymakers and regulators have so far strongly favoured an approach which centres around consumer protection. Their main goal has been to make sure that there is:

- enough price and performance transparency to ensure competition which works in the interests of the consumer and instils confidence to invest;
- effective disclosure and management of conflicts of interest that may arise when someone is sold a product;
- more recently, appropriate governance structures that consider the appropriateness and suitability of products offered.

Multiple legislative files, including MiFID II, UCITS, AIFMD, and PRIIPs, have been developed and implemented to do exactly this. Despite that, the evidence in the previous section would indicate that people's preferences on how to split their financial assets have not changed. The question is why.

Much as regulation is needed for establishing a solid framework which protects people once they decide to invest, it needs to consider what comes before that decision as well. Creating a culture of investing is not only about what fund managers, distributors and advisers do at the point of sale. It must start with the individual and look at investing through their eyes.

So far, there has been an implicit assumption that people want to invest and the only barrier is inadequate disclosure. In some cases, this may be true. But in most cases, the reality is that people are on a long journey with different needs and priorities, which arise at different times. They are not on the lookout for the best investment product but for solutions to real life problems that can help them achieve their financial aspirations.

Most important of all, creating a culture of investing is about ensuring people are aware of and understand all their options (including investment) in solving these problems, trust and use the information that is available to them. It is not about, somehow, forcing people to invest. It should help them make good investment decisions even if this means not to invest at all.

### Starting with the individual

Most people don't suddenly decide they want to buy a specific type of investment fund. Any consideration of specific products comes very late in the process. People need to go first through a review of their financial situation, priorities and goals. Investing is not a separate, independent, out-of-the-blue decision. It needs to be seen through the lens of people's broader financial needs, such as:

- Making repayments on debts;
- Accumulating and maintaining “rainy day” cash which may need to be accessed at short notice;
- Having protection, through insurance cover, for belongings, illness or death;
- Ensuring income in retirement, through a combination of state provision, workplace provision and private provision;
- Accumulating “discretionary savings”, which are not cash but rather more long-term and do not necessarily need to be accessed at short notice.

Of course, this is a somewhat simplified version of people's financial needs and the distinction is not always clear-cut. For example, workplace and private pensions may overlap. Or people may treat private pensions as part of their discretionary savings. Still, this list gives a fair idea where the major financial decisions in a person's life lie.

The order of those needs will depend on individual circumstances. For example, the existence of family wealth will play a role for the relevance and hierarchy of the above needs. In some cases, regulation may leave no choice to consumers, for example with mandatory car insurance. The depth of social services provision by the state may be a significant factor as well. Someone living in a country with generous state pension provision, a reliable health system and benefit support during “rainy days” will prioritise differently from someone in a country where these services are being cut back by the state.

Figure 1 above indicated that people in Europe place too much weight on “rainy day” cash compared to longer-term investment. This is somewhat surprising given the better social security net in Europe compared to the US, which should reduce the need for holding rainy day cash and insurance and free up funds for investing. Alternatively, it is possible that the lack of social security provision by the state could drive people to look elsewhere, including capital markets, to meet their financial needs.

In any case, the [CFA Institute](#) has flagged retirement as the top investment goal among retail investors across the world (see Figure 3). This is irrespective of income although this probably reflects the fact that all CFA survey respondents had financial assets of at least \$100,000. The only exception were people in the 25-34 age bracket, who, as expected, prioritised saving for a large purchase, emergency funds and education.

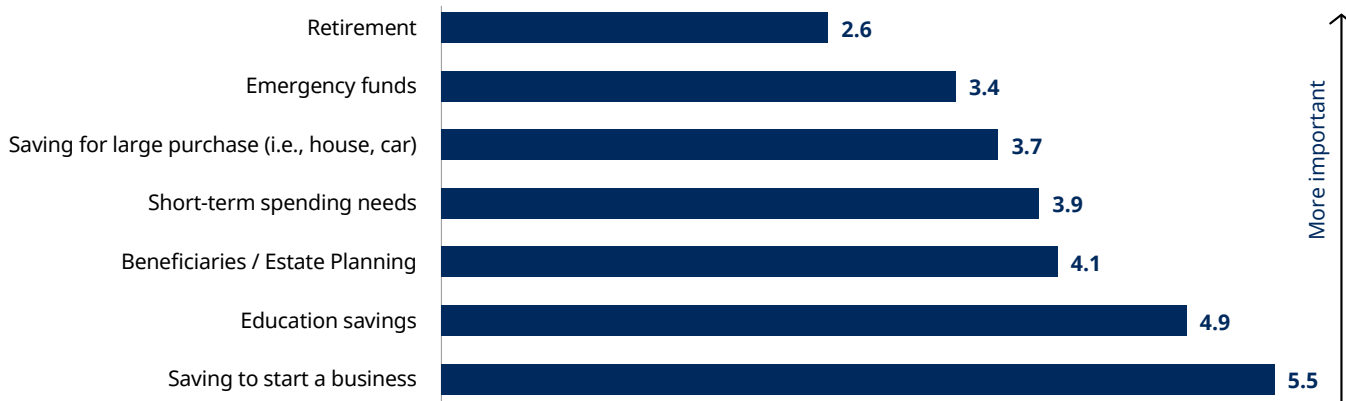
[PwC](#) offers an additional insight into UK people's attitude towards financial products and what they regard to be essential as opposed to "nice-to-have". Insurance, mortgage and a current account are essential utilities for the majority. Investment products such as ISAs (individual savings accounts) and stocks are clearly seen as an added value product. So even in a country with a relatively deep capital market, people can view investment as a "nice-to-have" (Figure 4).

This combines with a fairly low expectation that investing in capital markets can bring a benefit. Only 25% of retail investors globally strongly agree with the statement that they have a fair opportunity to profit from it. Unsurprisingly, investors in the US and the UK were more inclined to believe in capital markets than those in France and Germany (Figure 5).

### Why are people reluctant to invest?

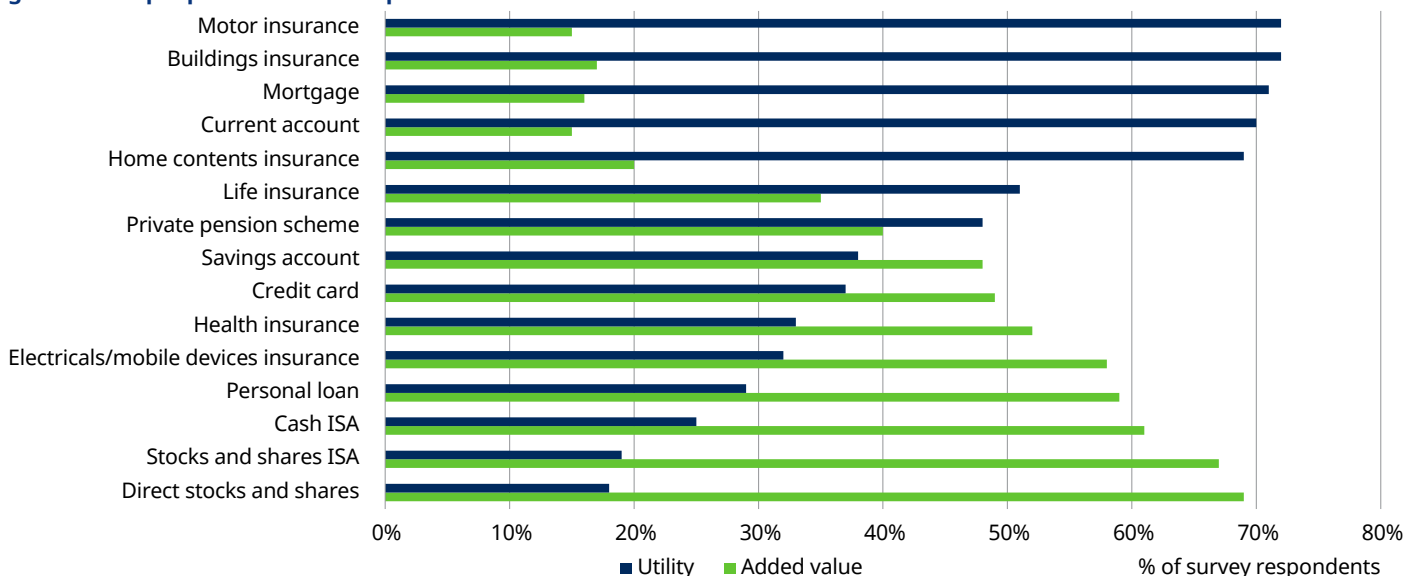
The challenge with developing a culture of investing is not only that people see investment as "nice-to-have" once they have addressed other, more pressing, financial needs. It is that, on top of that, there is lack of trust, low financial literacy, and risk aversion, all of which are connected. Each has been well documented but there are some things that merit highlighting.

**Figure 3: Ranking of retail investors' investment goals** (where 1 is 'most important' and 7 is 'least important')



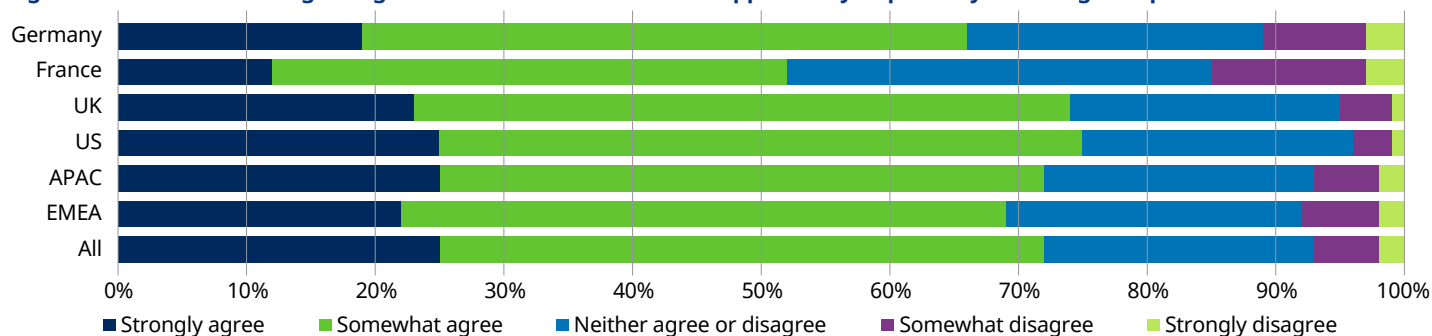
Source: [CFA Institute](#) as at 2019.

**Figure 4: How people view financial products in the UK**



Source: [PwC](#) as at 2014.

**Figure 5: Retail investors agreeing with statement: 'I have a fair opportunity to profit by investing in capital markets.'**



Source: [CFA Institute](#) as at 2019.

### The prevailing low levels of trust in financial services

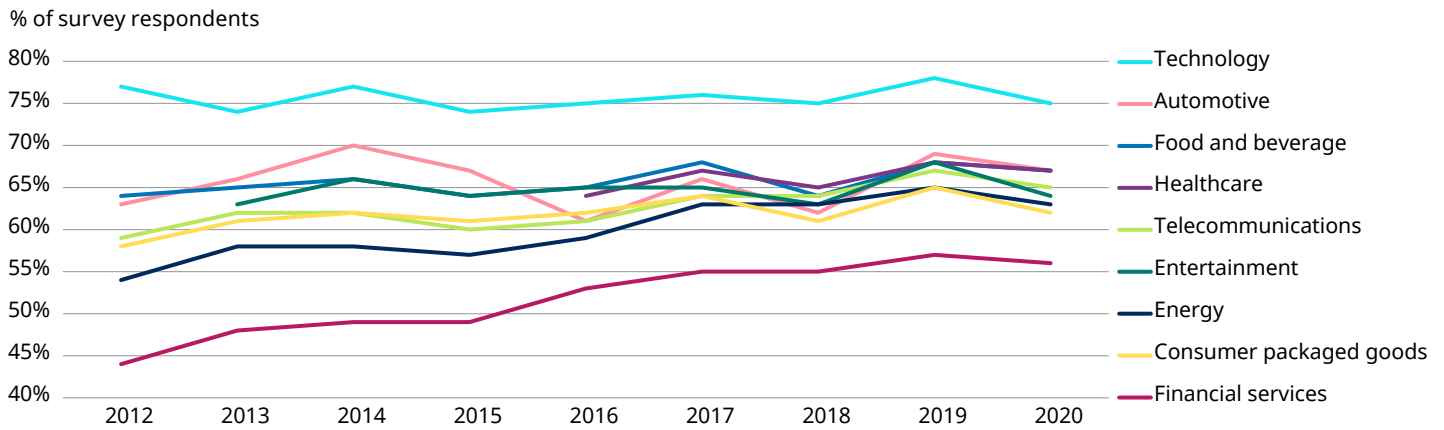
It may sound strange but, in a way, financial services are still recovering from the loss of trust caused by the 2008 global financial crisis. They remain by far the least trusted service sector even if trust levels have improved faster compared to other sectors such as energy (Figure 6).

An interesting nuance within this is that people tend to trust more the types of financial organisations with which they have more direct contact such as banks. Fund managers and investment banks are the least trusted (Figure 7) and the only ones for which PwC reported that press coverage is the most influential factor affecting trust (as opposed to personal experience which is so important for retail banks and insurers).

A further interesting nuance is that although retail investors have similar levels of trust for all types of professionals (around 40%), they view robo-advisers with particular scepticism. There is a strong element of age in this with, broadly, the older demographic disliking robo-advice while the younger demographic seems to trust more not just robo-advisers but all financial services professionals (Figure 8).

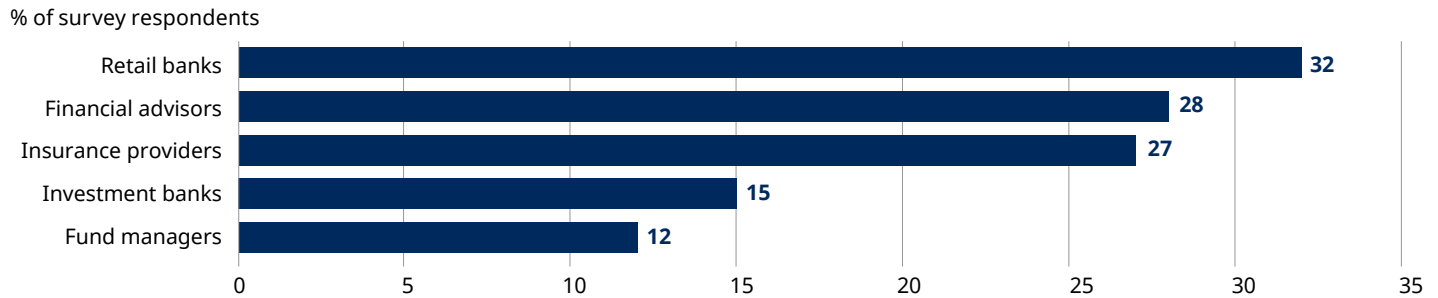
It is quite likely that the root of the matter relates to a lack of familiarity with, and understanding of, capital markets and investment. For example, the 2018 edition of the European Commission's [Consumer Markets Scoreboard](#) showed that the category "investment products, private personal pensions and securities" ranks second from the bottom amongst all services when it comes to trust (that suppliers respect rules and

**Figure 6: Trust in service sectors**



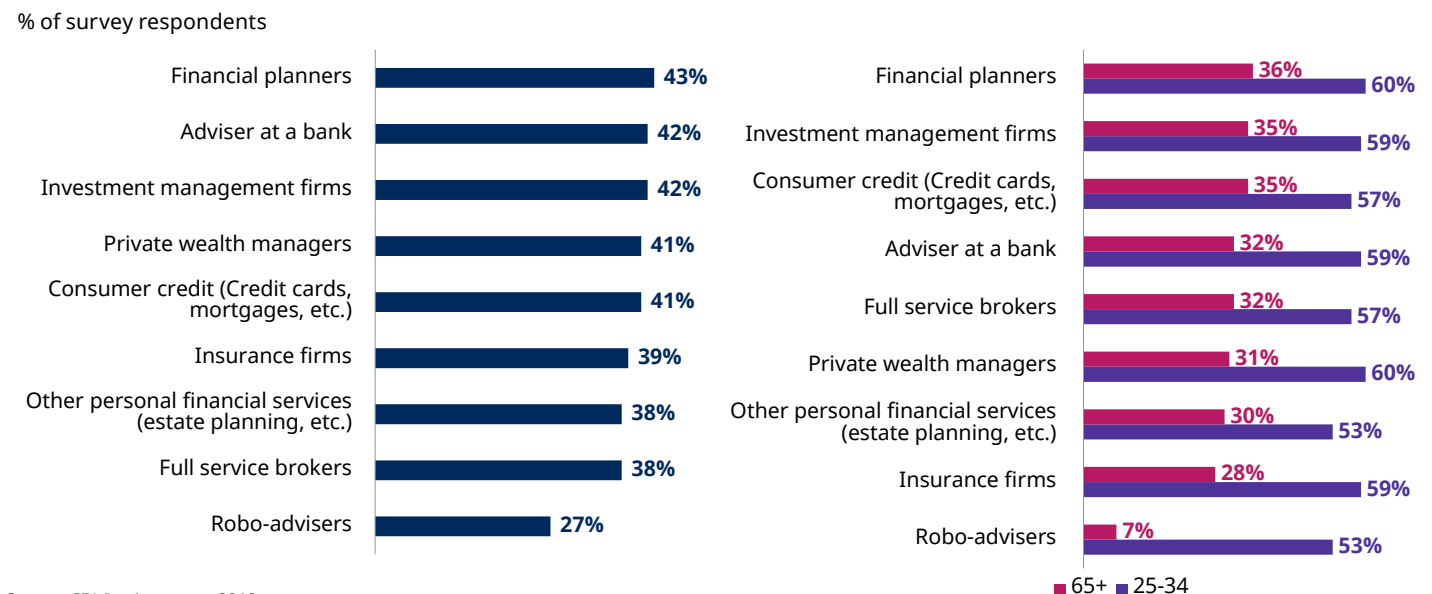
Source: [Edelman Trust Barometer 2020](#).

**Figure 7: Trust in financial organisations in the UK**



Source: [PwC](#) as at 2014.

**Figure 8: Level of trust for financial services professionals among retail investors**



Source: [CFA Institute](#) as at 2019.

regulations protecting consumers) but, at the same time, it ranks far better than the average in terms of experiencing problems and detriment. So the lack of trust does not come from an experience of detriment but rather from lack of understanding. Which brings us to the issue of financial literacy.

### Financial literacy remains as elusive as ever

Financial literacy, or rather lack thereof, has been the subject of considerable research. Repeated studies have shown that the majority of adults around the world are not able to answer correctly questions on numeracy, interest compounding, inflation and (especially) risk diversification. [S&P](#) reported that only 1 in 3 adults worldwide are financially literate. There is a strong geographical variation within this with developed countries scoring significantly higher – noting that EU27 lags behind countries with deeper capital markets (Figure 9).

Although [recent research](#) points to literacy increasing the probability of investment in shares, the direction of causality between financial literacy and investing remains ambiguous. Nevertheless, it is clear that those who invest, score higher in literacy tests. A [US study](#) has found that exposure to investment through a workplace pension makes a small difference but it is actually investing on one's own initiative that is connected to greater financial literacy (Figure 10). This implies that as long as people in Europe do not invest outside schemes that are provided by someone else such as an employer, it is unlikely that they will become more financially literate. And vice versa.

Low financial literacy is bad news for individuals as several studies such as from the [OECD](#), [FINRA](#), and [Bruegel](#), have established that it:

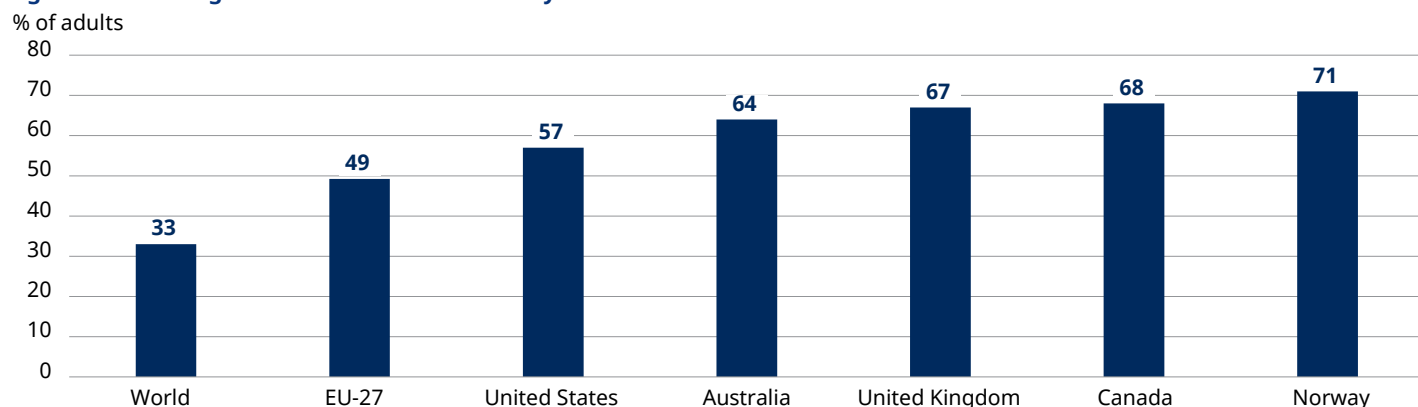
- is a barrier to participation in capital markets;
- increases the chances of over-indebtedness;
- reduces the chances of planning for retirement;
- is connected with higher risk of poverty;
- exacerbates wealth inequality.

### When risk aversion becomes too much

People's aversion to risk is natural and, indeed, one of the foundations of portfolio theory. Behavioural economics have taught us two lessons: first, we feel losses more strongly than gains, and second, the loss of something that we have feels much worse than not gaining something we never had. So effectively, the fear of losing from investing is several multiples of any joy we may experience from profiting.

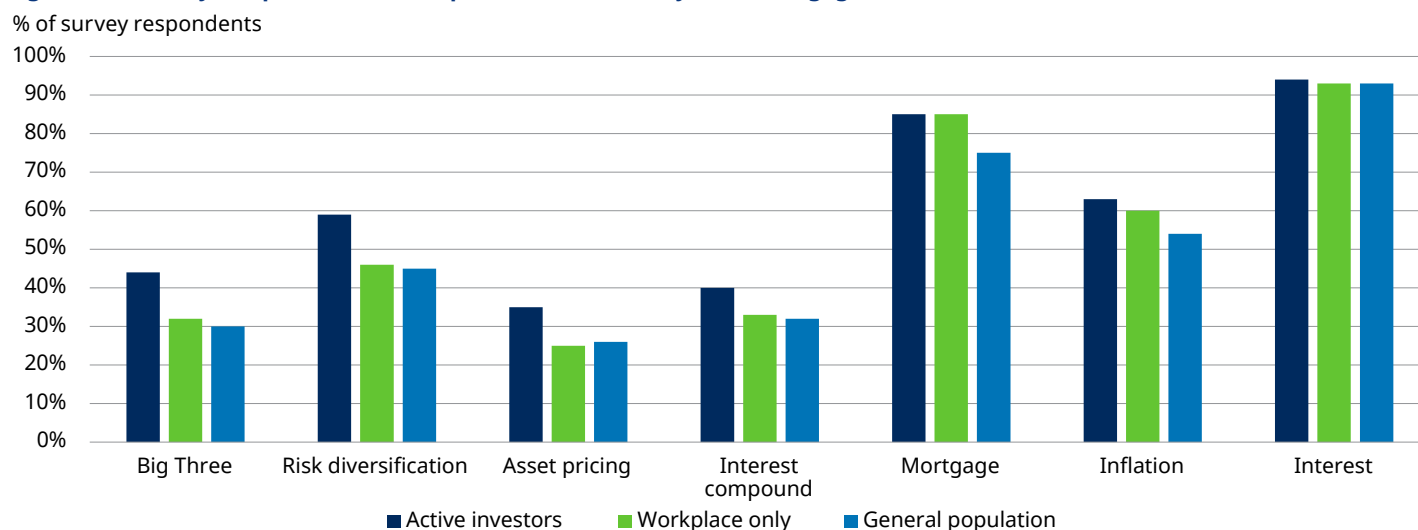
On top of that, people's [subjective perception](#) of risk is as important as objective measures of financial market volatility when determining what assets they hold. Institutional and cultural factors matter as well and vary significantly across countries. People in the Netherlands, Austria, and Germany consider investments in securities and funds to be extremely risky whilst their expected returns are very low (contrary to the "high return-high risk" principle). People in the US, UK, and Australia are the exact opposite, in that they have a low risk perception and believe that investing can bring high benefits.

**Figure 9: Percentage of adults who are financially literate**



Source: [S&P global financial literacy survey](#) as at 2014.

**Figure 10: Literacy on specific financial questions in the US by level of engagement with investment**



Source: [FINRA Investor Education Foundation and Global Financial Literacy Excellence Center](#). Note: The "Big Three" are the three standard questions used to assess financial literacy: interest compounding, inflation, and risk diversification. Information as at 2019.

As one may expect, the willingness to take risk increases the more engaged people are with investment, and contrary to financial literacy, this connection holds if the investment itself is driven by someone else, such as with workplace pensions (Figure 11).

### Why does it matter?

The problem with low trust, low financial literacy and high risk aversion is that they are mutually reinforcing. People will be less willing to take risks associated with investment the less they understand investment and the less they trust financial services and professionals. Trust will not increase without understanding and familiarity. Risk aversion reduces the chances of getting close enough to become familiar.

This creates a vicious circle where individuals take too little risk or structure their financial assets in a way that will make it difficult for them to meet their own long-term goals. There are many examples of this. In the [2019 edition](#) of the Schroders Global Investor Study we found that as much as one in five people (21%) moved some of their portfolio into cash during the short-lived market volatility in Q4 2018. Furthermore, the average holding period of an investment product worldwide is a little over 2.5 years; about half the recommended holding period for most investment funds (Figure 12).

Knee-jerk reactions to volatility result in demonstrably poor outcomes. For example, dashing for cash has historically given the [worst outcome](#) for investors and it practically guarantees that it would take investors a very long time to recoup losses. At the same time, there is [evidence](#) to suggest that the longer one invests for, the lower the risk of losing money is.

### How to nudge people to consider investing?

Any attempt to encourage people to at least consider investing their savings in capital market products needs to recognise three things. First, investment is part of a much bigger financial plan which, among others, includes repaying debt, getting insurance cover, and planning for retirement so investing will almost certainly not be a priority. Second, people may not even think in terms of “financial plan” and their financial asset allocation choices may not follow a consciously determined path. Third, as and when investment becomes part of the picture, people need to overcome their mistrust, lack of literacy and risk aversion.

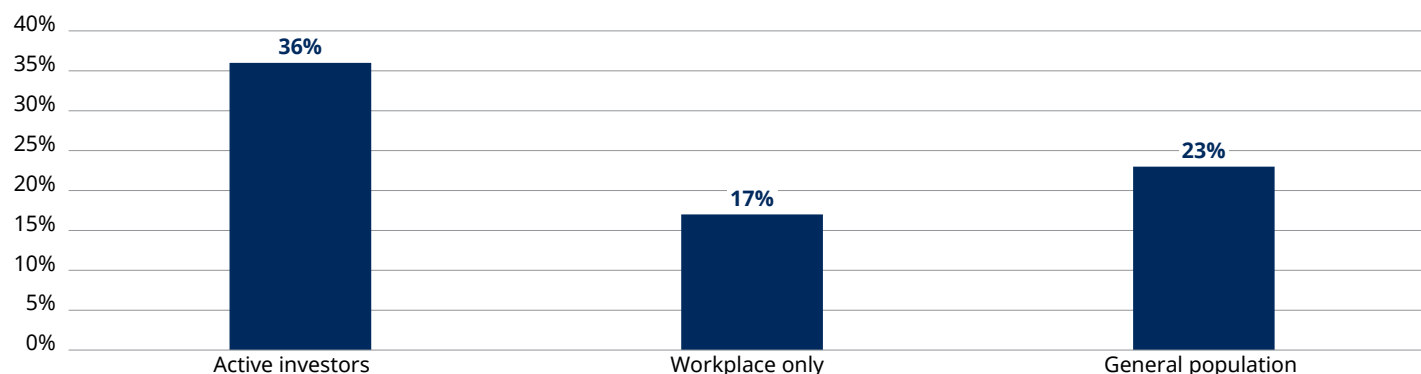
Behavioural economics would tell us that if we want people to consider investing as part of their routine financial plan, we have to [make it easy](#) for them. Unfortunately, there is no silver bullet. This will require a radical change in the way we have been working so far. We need to start with the individual and develop a mind-set of talking:

- With people, not at them;
- About solutions, not products;
- About communication, not disclosure;
- About empowering, not just informing people;
- About good quality support and advice, not just selling.

As the [report](#) of the High-Level Forum on CMU has indicated, many things need to happen in parallel. People should be financially literate, have financial advice they value and trust, be supported by technology, and receive information which is meaningful.

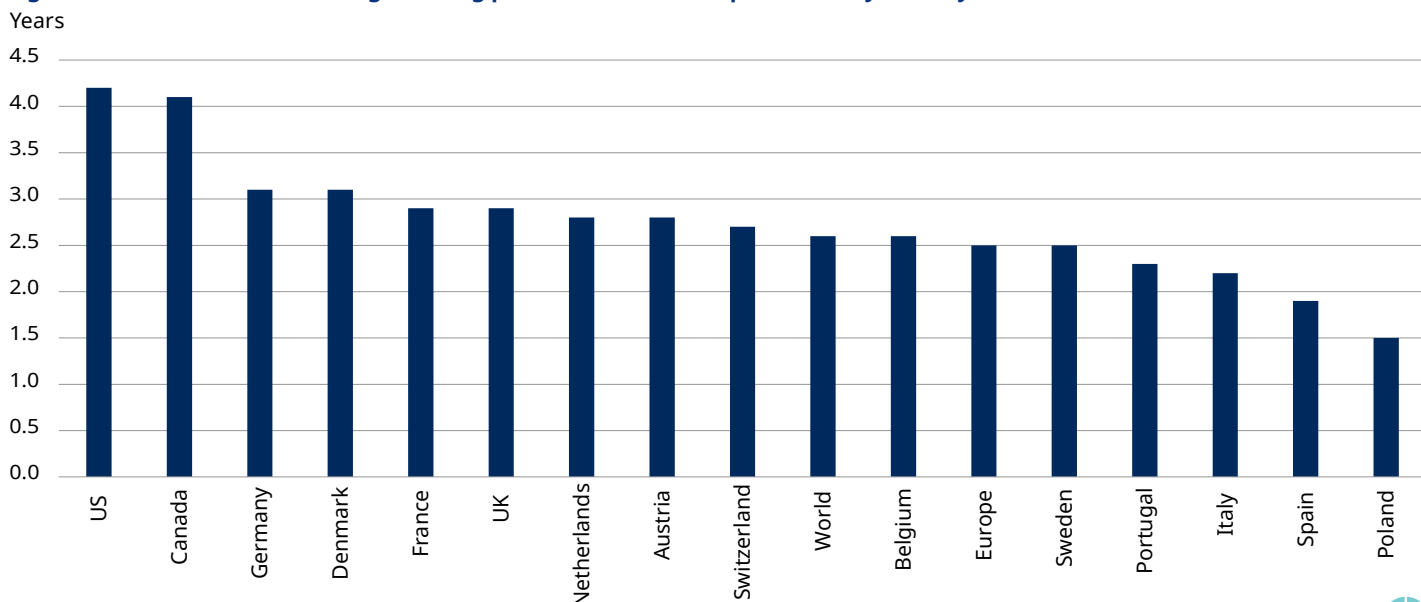
**Figure 11: Percentage of respondents willing to take risks in the US by level of engagement with investment**

% of survey respondents



Source: [FINRA Investor Education Foundation and Global Financial Literacy Excellence Center](#). Information as at 2019.

**Figure 12: Retail investors' average holding period of investment products - by country**



Source: [Schroders](#) as at 2019.

## Building financial literacy

Financial literacy is not about turning every person into a professional portfolio manager or investment adviser. Acquiring this skill requires years of dedicated training and that is the reason why someone would go to a professional for this service in the first place. But being financially literate means being aware of the option to use capital markets to meet financial needs, being able to follow the conversation with a financial adviser, understanding the information in regulated disclosures, and being confident in the decision to invest.

Building financial literacy is probably the keystone of unlocking a culture of investing but it is easier said than done. It is no coincidence that the High-Level Forum on CMU recommended a multipronged approach which combines financial learning, measuring and monitoring financial competence, and promoting free financial guidance. Financial education is important at all stages in life but particularly when people are at their most receptive, such as at an early age or at life milestones such as when having children.

The industry has to do its bit too, by using language in communications that people understand and contribute towards a broader financial education agenda. One example is the Schroders [MoneyLens](#) website, launched in 2018, which explains matters around saving and investing without using any jargon or acronyms and is mainly targeted at younger demographics. Another element in financial education is explaining what types of behavioural biases may influence people's attitudes towards investing and may result in poor investment choices. There can be simple online tools for people to learn more about their biases such as [InvestIQ](#), the purpose being not to change themselves but rather to be aware and manage these biases. It is a matter of being "predictably irrational" to quote from behavioural economist Dan Ariely.

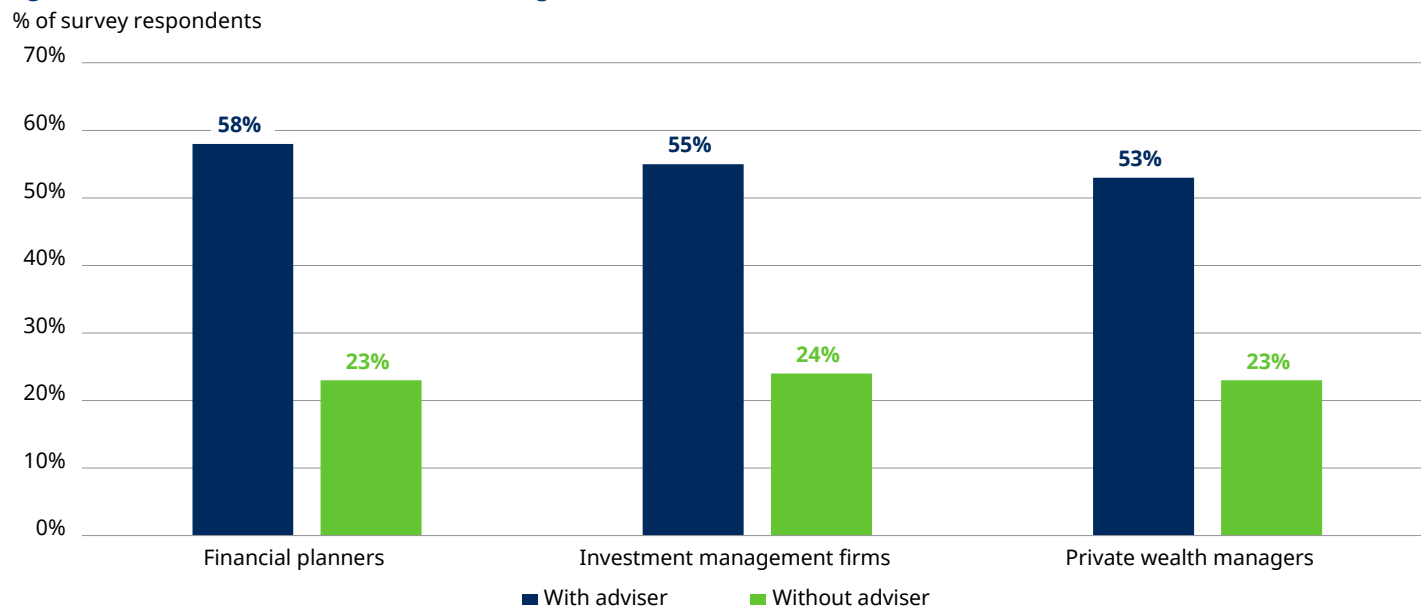
## Trusted advice

The value of financial advice should not be underestimated. Figures 7 and 8 above, showed that financial planners are among the most trusted professionals within financial services which probably reflects the more direct contact with investors. Having an adviser significantly increases retail investors' trust in different types of financial services professionals altogether, which implies that the interaction with an adviser improves familiarity and understanding more broadly.

When we talk about "advice" and "financial advisers", we refer to a financial planning service. This is not just about choosing an investment product but rather covers all aspects of investing: assessing an individual's financial position and aspirations for the future, establishing a "solution" that is most likely to help achieve these aspirations, considering whether and, if so, how investment may fit into this. Notably, advice continues after investment, with communication about the delivery of the "solution" and ongoing review of the individual's circumstances and priorities. This is essential, particularly in times of short-term market volatility where consumers may need to get some reassurance about their long-term goals and the potential of the chosen route to help them meet those goals. Importantly, advisers can [help people](#) understand and manage their behavioural biases which could lead them to poor choices. Overall, there is [evidence](#) to suggest, investors with an adviser achieve better financial outcomes than those without such support.

It is because of all this that a financial adviser needs to be knowledgeable about all aspect of the process, including: client profiling, law and regulation, tax principles, financial management, investment planning, risk management and insurance planning, retirement planning. It does not stop there. Technical knowledge needs to be complemented with knowledge of the local product market, communication skills and ethics.

**Figure 13: Trust in financial subindustries among retail investors with and without advisers**



Source: [CFA Institute](#) as at 2019.



All of this translates to professional skill. The most straightforward way to address this is by means of a regulatory requirement to achieve a professional qualification in order to be able to provide investment advice (as was the case with the Retail Distribution Review (RDR) in the UK) which is why qualification of advisers was a key recommendation in the High-Level Forum report.

Such a requirement can serve to not only improve advice but also to signal to consumers that there is a high level of competence as a minimum. Professional qualification standards should be complemented by requirements for full transparency on the incentive structure for the adviser. This can help people have a clear picture on any conflicts of interest that may affect the appropriateness of the advice that they receive.

There have been calls for a European-wide ban on “inducements”, that is, fund managers paying commission to advisers and distributors, as was done in the UK and the Netherlands, in order to improve the quality of advice. Quality of advice is hard to measure and although most will agree that RDR increased it, it is not clear whether this was due to more stringent qualification requirements for advisers or the inducement ban. Moreover, the UK market was dominated by individual advisers whose remuneration was directly linked to the recommended product, whereas distribution in EU27 is based on the bankassurance model where advisers are not independent entities, hence, their remuneration is not directly connected to their recommendation.

A further, unintended, consequence of RDR has been the creation of an [advice gap](#) as many advisers left the market and others found catering to people with smaller pots of money unprofitable while, at the same time, investors were reluctant to pay for advice, which many (mistakenly) [thought](#) was for free. Particularly the latter point may have negatively skewed people’s appreciation of the value of advice, especially if they do not consider the level of professional skill that is required. For context, the hourly cost of a financial adviser in the UK is [estimated](#) at £185 per hour while that of a [qualified lawyer](#) is on average £218 per hour. So it would seem that the value (as opposed to cost) of advice remains little understood and this is an issue which, although not mentioned in the High-Level Forum report, will ultimately need to be addressed.

### Embracing technology

Technology in the operational sense, e.g. online platforms, can be an enabler of investment. But in the context of developing an investment culture, the question is how technology can serve as a facilitator for investment.

To make investment easy, it should be possible to establish an individual’s current financial position without an inordinate amount of effort. Having different products and disclosures in many different places and in many different ways reduces the chances that people will engage with it, or consider investing. Open banking has some lessons to teach us about bringing all relevant information to the same place.

There is already investor appetite for an “open finance” framework. For example, the vast majority of the respondents to our [2019 Global Investors Study](#) indicated that they would prefer to have all financial products on one consolidated platform. We should be mindful, however, that although there is little geographical variation in this, older demographics are more reserved than younger ones even if they still prefer it in their majority (Figure 14).

Furthermore, it should be stressed that the purpose of an open finance framework is not to sell products or make clever marketing. The objective is to give people a tool which makes it easy for them to consider investment by removing the resource constraints involved with establishing what is available and/or feasible for them.

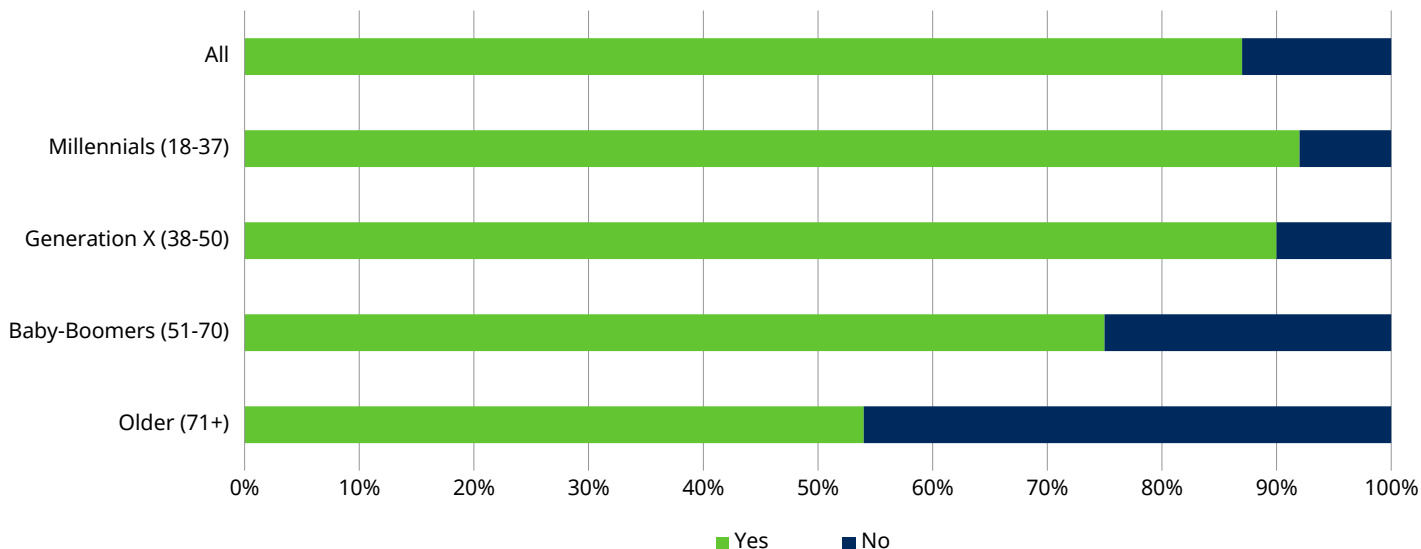
### Disclosure which engages people

This paper has already argued that disclosure alone is not sufficient to develop a culture of investing as disclosure becomes relevant only once people have decided to invest; which happens towards the end of a long process which reviews financial position, sets goals and the way in which these goals can be achieved. But this does not mean that disclosure is not important. It does become very relevant once people have decided to invest, have set their asset allocation in light of their risk tolerance, and are about to choose specific products. This is when we need to ensure that disclosure is meaningful, consistent, and delivered in a consumer-friendly language so that it does not put people off from investing.

Meaningful information is one which conveys the individual characteristics of each product including price, risk and performance. The debate around the PRIIP Key Information Document is indicative of how regulated disclosure can move away from this goal, particularly when comparability of information across very different types of products is prioritised over meaningfulness.

**Figure 14: Percentage of respondents who prefer to view, check and make changes to all bank accounts, savings, investments and pensions on one consolidated platform (e.g. a website or an app)**

% of survey respondents



Source: [Schroders](#) as at 2019.

Consistent information relates to people being able to see the same information, in the same format and the same figures independently of what channel they choose to use to invest in a product. People should not be in a position where understanding why there are different numbers on an platform and the key information document is an extra hurdle to go through before investing. This is why it is important that any inconsistencies and overlaps between legislative files, such as MiFID II and PRIIPs, are addressed once it has been established what type of information is meaningful. It is also why the High-Level Forum on CMU included this point as a distinct recommendation.

Once we have addressed this, we need to ensure that whatever this information looks like, we convey it in an engaging way. Technology can be a facilitator in this area too. We have [written](#) about the merits of an online tool to allow people to interact with fund information, which they can customise and personalise, and how this can increase the chances of both engagement and understanding. Schroders has developed such a platform, which is being gradually rolled out to different regions, more recently in the [UK](#). This platform is effectively an online library of all funds available to clients, where each fund has a unique page with its main characteristics and where clients can select and compare funds and personalise the way the information is being shown, e.g. in percentages or monetary terms.

## Conclusion

**There is certainly no silver bullet which will immediately make people start saving and investing. It is a question which we must tackle in multiple ways, starting with people's needs and priorities. Rather than focusing only on how to make investment products accessible to people, the solution lies in making clear how investment can help them solve their problems and meet their financial aspirations for the future. Many obstacles are in the way such as people viewing investment as a "nice-to-have", being too risk averse, and not understanding financial concepts. But these can be overcome with a coordinated and persistent effort on multiple fronts.**

**A professional and trustworthy financial adviser, who can assess an individual's circumstances on an ongoing basis, nudge when necessary and support when the need to ride out short-term turbulence arises, can be central in achieving this. Having a toolkit which allows people to quickly review their financial situation can help. Financial education that makes people more confident in their investment choices and more familiar with capital markets is key. Meaningful and consistent disclosure communicated in a way which engages instead of scaring people is part of the equation as well.**

## Important Information

The views and opinions contained herein are those of the authors as at the date of publication and are subject to change and may become outdated due to market or regulatory developments. Such views and opinions may not necessarily represent those expressed or reflected in other Schroders communications.

This document is intended to be for information purposes only. The material is not intended as an offer or solicitation for the purchase or sale of any financial instrument or security or to adopt any investment strategy. The information provided is not intended to constitute investment advice, an investment recommendation or investment research and does not take into account specific circumstances of any recipient. The material is not intended to provide, and should not be relied on for, accounting, legal or tax advice.

Information herein is believed to be reliable but Schroders does not represent or warrant its completeness or accuracy. No responsibility or liability is accepted by Schroders, its officers, employees or agents for errors of fact or opinion or for any loss arising from use of all or any part of the information in this document. No reliance should be placed on the views and information in the document when taking individual investment and/or strategic decisions. Schroders has no obligation to notify any recipient should any information contained herein change or subsequently become inaccurate. Unless otherwise authorised by Schroders, any reproduction of all or part of the information in this document is prohibited.

Any data contained in this document has been obtained from sources we consider to be reliable. Schroders has not independently verified or validated such data and it should be independently verified before further publication or use. Schroders does not represent or warrant the accuracy or completeness of any such data.

All investing involves risk including the possible loss of principal.

Third party data are owned or licensed by the data provider and may not be reproduced or extracted and used for any other purpose without the data provider's consent. Third party data are provided without any warranties of any kind. The data provider and issuer of the document shall have no liability in connection with the third party data. [www.schroders.com](http://www.schroders.com) contains additional disclaimers which apply to the third party data.

Past performance is not a guide to future performance and may not be repeated. The value of investments and the income from them may go down as well as up and investors may not get back the amounts originally invested. Exchange rate changes may cause the value of any overseas investments to rise or fall. This document may contain 'forward-looking' information, such as forecasts or projections. Please note that any such information is not a guarantee of any future performance and there is no assurance that any forecast or projection will be realised.

**European Union/European Economic Area:** Issued by Schroder Investment Management Limited, 1 London Wall Place, London, EC2Y 5AU. Registered Number 1893220 England. Authorised and regulated by the Financial Conduct Authority.

**Note to Readers in Australia:** Issued by Schroder Investment Management Australia Limited, Level 20, Angel Place, 123 Pitt Street, Sydney NSW 2000 Australia. ABN 22 000 443 274, AFSL 226473.

**Note to Readers in Canada:** Schroder Investment Management North America Inc., 7 Bryant Park, New York, NY 10018-3706. NRD Number 12130. Registered as a Portfolio Manager with the Ontario Securities Commission, Alberta Securities Commission, the British Columbia Securities Commission, the Manitoba Securities Commission, the Nova Scotia Securities Commission, the Saskatchewan Securities Commission and the (Quebec) Autorite des Marches Financiers.

**Note to Readers in Hong Kong:** Schroder Investment Management (Hong Kong) Limited, Level 33, Two Pacific Place 88 Queensway, Hong Kong. Central Entity Number (CE No.) ACJ591. Regulated by the Securities and Futures Commission.

**Note to Readers in Indonesia:** PT Schroder Investment Management Indonesia, Indonesia Stock Exchange Building Tower 1, 30th Floor, Jalan Jend. Sudirman Kav 52-53 Jakarta 12190 Indonesia. Registered / Company Number by Bapepam Chairman's Decree No: KEP-04/PM/MI/1997 dated April 25, 1997 on the investment management activities and Regulated by Otoritas Jasa Keuangan ('OJK'), formerly the Capital Market and Financial Institution Supervisory Agency ('Bapepam dan LK').

**Note to Readers in Japan:** Schroder Investment Management (Japan) Limited, 21st Floor, Marunouchi Trust Tower Main, 1-8-3 Marunouchi, Chiyoda-Ku, Tokyo 100-0005, Japan. Registered as a Financial Instruments Business Operator regulated by the Financial Services Agency of Japan. Kanto Local Finance Bureau (FIBO) No. 90.

**Note to Readers in People's Republic of China:** Schroder Investment Management (Shanghai) Co., Ltd., RM1101 11/F Shanghai IFC Phase (HSBC Building) 8 Century Avenue, Pudong, Shanghai, China, AMAC registration NO. P1066560. Regulated by Asset Management Association of China.

**Note to Readers in Singapore:** Schroder Investment Management (Singapore) Ltd, 138 Market Street #23-01, CapitaGreen, Singapore 048946. Company Registration No. 199201080H. Regulated by the Monetary Authority of Singapore.

**Note to Readers in South Korea:** Schroders Korea Limited, 26th Floor, 136, Sejong-daero, (Taepyeongno 1-ga, Seoul Finance Center), Jung-gu, Seoul 100-768, South Korea. Registered and regulated by Financial Supervisory Service of Korea.

**Note to Readers in Switzerland:** Schroder Investment Management (Switzerland) AG, Central 2, CH-8001 Zürich, Postfach 1820, CH-8021 Zürich, Switzerland. Enterprise identification number (UID) CHE-101.447.114, reference number CH02039235704. Authorised and regulated by the Swiss Financial Market Supervisory Authority (FINMA).

**Note to Readers in Taiwan:** Schroder Investment Management (Taiwan) Limited, 9F, 108, Sec.5, Hsin-Yi Road, Hsin-YI District, Taipei 11047 Taiwan, R.O.C. Registered as a Securities Investment Trust Enterprise regulated by the Securities and Futures Bureau, Financial Supervisory Commission, R.O.C.

**Note to Readers in the United Arab Emirates:** Schroder Investment Management Limited, 1st Floor, Gate Village Six, Dubai International Financial Centre, PO Box 506612 Dubai, United Arab Emirates. Registered Number 1893220 England. Authorised and regulated by the Financial Conduct Authority.

462809