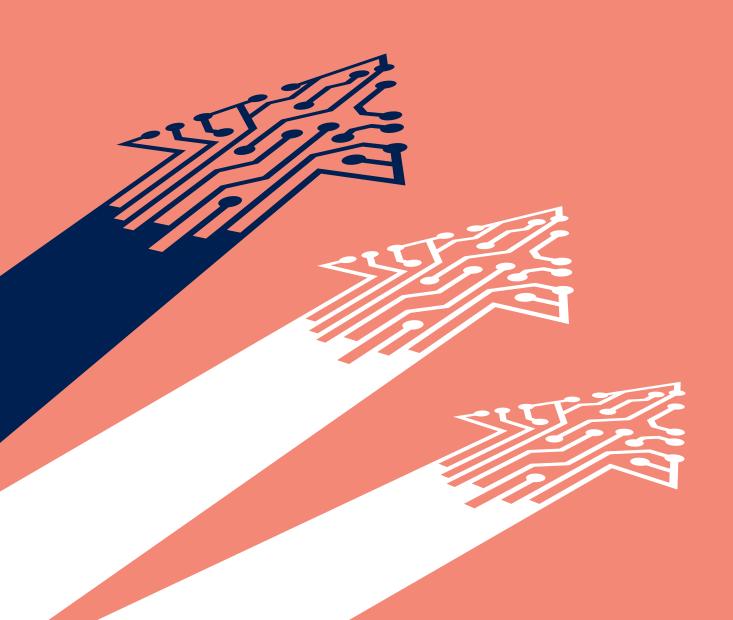


INVESTING FOR THE FUTURE: THREE POTENTIAL PATHS FOR A TECH-POWERED UK FUND INDUSTRY

July 2022



ABOUT THE INVESTMENT ASSOCIATION (IA):

The IA champions UK investment management, supporting British savers, investors and businesses. Our 270 members manage £9.4 trillion of assets and the investment management industry supports 114,000 jobs across the UK.

Our mission is to make investment better. Better for clients, so they achieve their financial goals. Better for companies, so they get the capital they need to grow. And better for the economy, so everyone prospers.

Our purpose is to ensure investment managers are in the best possible position to:

••••••

- Build people's resilience to financial adversity
- Help people achieve their financial aspirations
- Enable people to maintain a decent standard of living as they grow older
- Contribute to economic growth through the efficient allocation of capital

The money our members manage is in a wide variety of investment vehicles including authorised investment funds, pension funds and stocks and shares ISAs.

The UK is the second largest investment management centre in the world, after the US and manages over a third (37%) of all assets managed in Europe.

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FOR OVER 150 YEARS, COLLECTIVE INVESTMENT SCHEMES HAVE PROVIDED MILLIONS OF PEOPLE IN THE UK AND ACROSS THE WORLD WITH DIVERSIFIED ACCESS TO GLOBAL MARKETS, HELPING THEM TO SAVE EFFECTIVELY AND PRODUCTIVELY FOR THE FUTURE. AS TECHNOLOGY AND INVESTOR BEHAVIOUR EVOLVE, THIS PAPER EXPLORES WHERE THE INVESTMENT FUNDS INDUSTRY MAY HEAD NEXT. WILL THE FUND CONTINUE ITS INCREMENTAL ADAPTATION TO THE CHALLENGES AND OPPORTUNITIES OF TODAY'S WORLD? WILL A MORE INNOVATIVE EVOLUTION TAKE PLACE TO CONNECT BETTER WITH CUSTOMERS? OR, ALTERNATIVELY, WILL IT TRANSFORM INTO A DIFFERENT KIND OF PRODUCT ALTOGETHER?



EXECUTIVE SUMMARY

Investment funds provide an opportunity to do something collectively that would be more expensive or difficult to do individually. UK funds now manage £1.4 trillion on behalf of investors as part of the wider UK investment management industry, which is responsible for almost £10trn. Over the decades, the fund has evolved to meet the modernising drivers of investor behaviour and technological change. Fund 1.0, characterised predominantly by a focus on active management through individual security and wider asset allocation, has given way to Fund 2.0,

which has seen technology facilitate the emergence and significant evolution of both indexation and the Exchange Traded Fund (ETF).

As technological change accelerates dramatically in the era of blockchain and distributed ledger technology, this paper looks at three potential scenarios of what lies ahead. We ask whether the investment fund of the future – Investment Fund 3.0 – will become a more efficient version of Investment Fund 2.0, or if the concept of the fund itself may be transformed.

FIGURE 1: EVOLUTION OF THE INVESTMENT FUND

INVESTMENT FUND 1.0

The many flavours of the collective investment fund up until c.1980s, which were based upon the requirements and limitations of the 'analogue' world.

INVESTMENT FUND 2.0

The period from c.1980s to date has seen greater product innovation, such as indexation and the advance of ETFs, taking advantage of the emergence of the digital era to meet more diverse investor needs.

THREE SCENARIOS FOR INVESTMENT FUND 3.0

Business-as-usual enhancement

Innovative evolution

Transformative change

A more efficient version of today

A new connection with the customer through a different operational and investment architecture

Hyper customisation, potentially more participatory, where individual preferences shape portfolios

SCENARIO ONE: Business-as-usual enhancement

The first scenario extrapolates the enhancements of recent times into the future and produces a more efficient version of today's fund. In this baseline view which underpins the others, the industry continues its modernisation agenda, facilitating speed, scale and efficiency, utilising new technologies and adopting tokenisation to enable fund shares and underlying asset classes to be traded more effectively. Consumers will benefit from incremental improvements to customer experience and be able to interact in a more informed manner with their providers.

SCENARIO TWO: Innovative evolution

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The second scenario builds upon these enhancements and sees an evolution of greater significance, which results in an adaptation of fund operations and product delivery to suit new investor appetites and expectations. The conventional collective investing model develops through increasing numbers and diversity of thematic and specialist investment building blocks to help construct overall portfolios which are much more tailored to investor preferences. The extent of tokenisation in this view broadens market access much more significantly in areas such as private companies, infrastructure and native digital assets.

SCENARIO THREE: Transformative change



At the more radical end, the third scenario imagines a transformative shift where a much more interactive and participatory experience for investors is facilitated via hyper-customisation, and where risk and return exposure is tailored by customers at individual stock and securities level, rather than at the fund level. As in the second scenario, this includes investible assets outside of the current mainstream, such as infrastructure and native digital assets. This level of customisation is achieved through changing the relationship between the customer and their portfolio, increasing participation and altering the nature of delegation to a professional investment manager.

CONCLUSIONS

We may be on the verge of an era of much greater participation and engagement by some consumers, especially younger cohorts. However, it is entirely possible, and even likely, that many customers will still wish to delegate decisions to trusted third parties and rely on more-established collective mechanisms.

Regardless of the exact trajectory, the investment management industry has a significant role to play in continuing to meet investor objectives, as well as changing societal expectations. In all likelihood, we will see a combination of all three scenarios, with the industry's centre of gravity determined by the extent to which incumbents and new entrants drive innovation over the next decade. Some elements of change – particularly the modernisation of product and service delivery and capital markets infrastructures – are inevitable. They will likely bring significant long-term benefits in terms of operational efficiency and lower costs, with direct implications for the customer delivery experience, costs and diversity of asset classes available.

Firms clearly have a responsibility to determine their own position on this journey. At the same time, the policy and regulatory environment really matters. We therefore identify three areas in which a close partnership between regulators and industry can work to boost the overall competitiveness of the UK funds industry at a critical time:

1. Innovation:

- Establishing the framework for tokenised funds to operate in the UK.
- Creating a decentralised finance (DeFi) taskforce to assess the overall policy implications for the UK fund industry.
- Retaining the important stance of 'same activity, same regulation'.
- Considering establishing regulated routes for native digital asset exposure.
- Approaching DeFi reforms in an open-minded way.

2. Regulatory perimeter:

- Defining the 'rules of the road' for cryptoassets.
- Monitoring closely the unregulated arena for emerging developments.
- Ensuring that investment firms are not exposed to the costs of failing stablecoin firms.

3. Regulatory change:

- Addressing the advice gap by facilitating better support for consumers.
- Completing UK Funds Regime Working Group reform implementation.
- Enabling next generation digital information provision and disclosure to investors.

Innovation can also be leveraged to support and evolve the UK's international reputation as a world-leading financial centre. In an age of investment management, where the sector is ever more important to its customers and the wider economy, the industry is about to undergo an exciting next stage of development.



THE FUNCTION AND EVOLUTION OF THE INVESTMENT FUND OVER TIME

A COLLECTIVE INVESTMENT FUND IS, IN ESSENCE, A RELATIVELY SIMPLE CONCEPT, AND HAS WELL SERVED INVESTORS AND INVESTEE COMPANIES. THERE HAS BEEN MUCH INNOVATION IN THE OPERATING AND INVESTING INFRASTRUCTURE RECENTLY WHICH HAS CHANGED ASPECTS OF THE FUND INTO A MORE MODERN VERSION THAT WE TERM FUND 2.0. HOWEVER, WE SEE THE CORE PRINCIPLES OF WHAT DEFINES THE FUND AS BROADLY UNCHANGED THROUGH THIS EVOLUTION. LOOKING AHEAD TO FUND 3.0, A COMBINATION OF SIGNIFICANT TECHNOLOGICAL ADVANCE AND POTENTIAL CHANGES IN CONSUMER EXPECTATIONS AND NEEDS WILL DETERMINE WHETHER CHANGE IS INCREMENTAL OR TRANSFORMATIONAL.

ORIGINS & INVESTMENT FUND 1.0

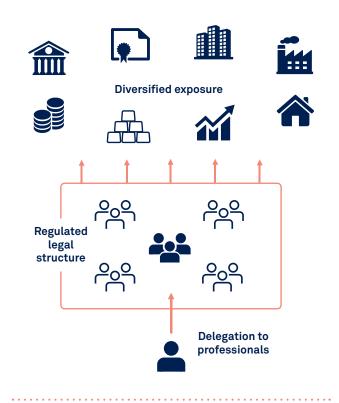
The benefits of collective investing through funds have been long understood and valued. Investment funds have performed an essential purpose since the industrial revolution, providing a vital service to long-term savers while acting as an important conduit of long-term capital to companies and economies around the world.

Starting via an investment trust back in 1868 (that is still active)¹, the principles of collective investing have remained true despite product evolution over time. In essence, a fund – whether open-ended, closedended, actively managed or replicating an index – is a combination of three key elements:

- **1. Diversified exposure** to a given basket of stocks, bonds, property or other asset classes or capital market instruments.
- 2. Delegation of stock selection and risk management to professionals (in the case of indexing, professional construction of an approach to deliver a given index exposure).
- **3. A regulated delivery and legal structure** which helps to safeguard the assets as well as ensure high standards of governance, transparency and accountability.

These aspects allow the industry to offer expertise, economies of scale and strong asset protection to millions of customers in the UK and around the world. They have remained broadly unchanged, even as product innovation has accelerated over time.

FIGURE 2: THE ELEMENTS MAKING UP INVESTMENT FUNDS



INVESTMENT FUND 2.0

Mutual funds soon overtook investment trusts as the most common investment product, and this remains true, despite the valuable role played by investment trusts in the UK retail market. Today, the UK is at the centre of global investment management², managing almost £10 trillion for clients around the world and serving around three-quarters of UK households in some form. UK investment funds account for £1.4 trillion of these assets via over 4,000 funds currently available, with a significant range of choice for investors to find an appropriate investment strategy to suit their needs.

However, important innovations in product delivery have taken place in the last forty years which have dramatically increased customer choice and provided alternative ways to access collective investing. First, through the 1970s and particularly in the 1980s and 1990s, indexation began to offer an additional route to gain market exposure alongside the traditional actively managed fund. The emergence of Exchange Traded Funds (ETFs) opened up intra-day valuation and the ability to buy and sell shares continuously during market hours. ETFs have widened the investment opportunity set across asset classes as well as investment themes. While focused primarily on index investing, they are increasingly used by some active fund managers as a route to provide services to investors.

In addition to technological advances that drive fund-level innovation, the emergence of investment platforms has had a major impact on the way in which distributors, professional advisers / asset allocators and consumers access funds. This, in turn, has helped to facilitate innovation and competition in the market. For example, managed portfolios have provided greater customisation for advisers and their customers, as well as intensifying the commercial competition over the role of asset allocators, which may be performed at fund level itself or further downstream.

Recent years have also seen a more demanding and complex set of investor requirements. Digitalisation has allowed firms to distribute their products via online platforms, with a growing need for them to establish a greater direct connection with their customer base through online portals and social media channels. Demographic changes, including longer average life expectancy and less secure retirement funding mean that investors are – or should – be more interested in how their personal long-term needs are to be financed. The UK has recently passed 'Peak DB', with the proportion of people paying into defined contribution pension schemes now being greater than those paying into defined benefit schemes (26% v 23%)³.

We all have to step back and say that a daily priced fund model in the context of artificial intelligence, tech changes and quantum computing does not feel very 21st century. One way or another that model needs to move on, both in the sense of having more flexibility in terms of illiquidity and, on the flip side, a daily pricing point does not necessarily feel real time in terms of how markets on the other end work.

Industry Leader, IA Annual Survey 2020-21

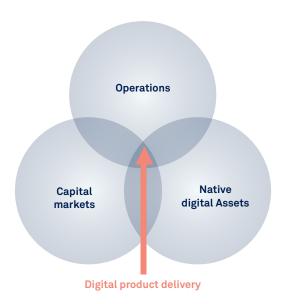
TOWARDS INVESTMENT FUND 3.0

Taken together, our view is that the developments outlined above have strengthened rather than fundamentally altered the investment fund industry. Looking ahead, we see signs that this could be about to change and our three scenarios consider different interactions between technology and potential changes in investor expectations and behaviour, coupled with the possibility of digital disrupters driving those interactions further and faster.

Technological change

In terms of technological advance, we identify three areas that are likely to drive change: operations, capital markets and native digital assets. The interaction of these will shape how digital product delivery evolves.

FIGURE 3: EMERGING FACTORS PRECIPITATING CHANGE



A key element of the change expected in the coming years will involve the greater use of DeFi in altering the roles of existing parties. We will look in the next part of the paper at how a shift from centralisation to decentralisation in key areas of delivery may play out amidst a wide range of different potential uses of distributed ledger technology (DLT). Ultimately, there is likely to be both significant commercial conflict and collaboration between the established market and disruptors.

The funds industry is firmly part of the TradFi category but can see the benefits of DLT in becoming more efficient and serving customers more effectively. The delivery of the fundamental principles behind collective investing can be enhanced through aspects of DeFi. However, questions around the significance of ownership and control in this new world remain open.

Tokenisation could have a radical effect and quickly make an impact by triggering substantial change in efficiency in investment management and the realignment of stakeholder roles. Tokenisation can be applied in many ways across the industry, including in the operation of the funds⁵ through the tokenisation of the fund structure as well as the operation of capital markets.

DECENTRALISED FINANCE

DeFi – as opposed to CeFi (centralised finance) or TradFi (traditional finance) – is the provision of financial services on distributed ledger technology (DLT), operating without centralised intermediaries or institutions. DeFi facilitates alternatives to traditional service providers and market structures, which offers the potential for innovation and the creation of new services for improving efficiency in financial markets.⁶

TOKENISATION

Tokenisation is the process of converting an underlying asset, be it tangible or intangible, into a digital 'token' to act as its proxy. The ownership rights of the asset are digitised. It is possible to tokenise a wide range of assets, from traditional financial assets like cash, equities and bonds to real assets like property, commodities and works of art. It is also possible to tokenise shares or units in investment funds.

FIGURE 4: FEATURES OF TOKENISATION

Quicker settlement	Transactions can settle instantaneously ('atomic settlement') – assuming that that was desirable and means of payment was available
Improved transparency of transactions	The chain records all aspects of the transaction in an immutable way which offers immediate and ongoing reporting
Lower counterparty risk	A reduction in the numbers of intermediaries involved in the value chain offers direct access and reduced risks
Fractional ownership	Democratised investment through lower minimum lot sizes or partial ownership of solitary assets such as a commercial property
Diversification of asset classes	Increased access to private markets and other investments currently only available to institutions or high net worth individuals, through lowering minimum investment levels and secondary markets
Greater liquidity	While not actually increasing underlying liquidity, secondary markets offer greater opportunity to trade assets that otherwise may not be tradeable

Investor behaviour

Outside a small, engaged minority, retail investment has long been characterised by a very strong degree of delegation of investment choices to a manager, often with the help of a professional financial adviser. In DC pensions schemes, we have seen significant inertia reflected in an extremely successful roll-out of automatic enrolment accompanied by acceptance of the suggested default pension investment arrangement. This continues to be the case, but there is a strong possibility that the funds industry will not be immune to wider shifts characterising social and economic behaviour. Some of these behaviours could be characterised as a gradual shift from 'deference' to 'reference'. In other words, people are still looking for sources of leadership and authority, but in a different place, and perhaps closer to their own specific networks or reflecting their own values. This suggests that another model could be one where the 'fund manager' may face increasing competition to remain relevant and connected to individual investors. Portfolio construction could become much more decentralised - or indeed more concentrated - as new influencers emerge. These may still be the brands of today, or they may be new brands.

The extent of the shift in attitudes may be more fundamental. Millennials view the traditional roles of capitalism and the state differently to older generations⁷, which raises questions for firms of all shapes and sizes as to how to cater for a future world. Over the next twenty to thirty years, an estimated £5.5 trillion is likely to be transferred between the generations through inheritance⁸. These recipients may seek guidance from different sources than previous generations. By extension, over time, the industry's existing function and licence to operate may be based on less secure foundations than we have experienced to date. The emerging risk for incumbents is that if the industry fails to adapt, it risks losing control of the investment agenda to alternatives or new entrant disruptors.

In this regard, recent anecdotal evidence suggests that investment funds may not yet be doing enough to satisfy a range of consumers, most notably these under-35s, who are looking elsewhere for their investment experience. The pandemic also created a unique set of circumstances that provided a number of different variations on the traditional view and understanding of investment.

PANDEMIC INVESTMENT TRENDS

A number of pandemic-related trends thrived under the unprecedented circumstances⁹. Whether and to what extent they become permanent features of the investment landscape remains to be seen, but in our view the underlying drivers should not be underestimated.

Direct investing

- One in ten Gen Z's (18-23) started investing during the pandemic¹⁰
- This is partly down to the greater time that UK consumers had during the pandemic¹¹ and more disposable income due to the lack of other spending opportunities¹²

Day trading

- UK investors registered with low-cost investment brokerages in unprecedented numbers during the lockdown¹³, though this trend has largely ended now¹⁴
- Several exceptionally high trading days were recorded in 2020 as 'amateur' traders treated the markets like a 'game', which tested platforms' IT resilience^{15,16}
- As the name suggests, day traders have a shorter holding period than a professional would take, and their long-term returns tend to lag as a result¹⁷

Alternative investing

• Surges in investment in cryptocurrency such as bitcoin and others¹⁸

 New investors have been more likely to buy higher risk products that are less well understood, such as crowdfunding or foreign exchange¹⁹

Follow-me

- 'Meme stock' investors piled in and out of shares in BlackBerry, AMC, Nokia, and GameStop in a circular trading style designed to 'pump and dump'. Predominantly US-driven, although some stocks saw heavy UK activity too²⁰
- This activity originated and was co-ordinated via the online Reddit feed WallStreetBets²¹ which advocated taking positions to support companies under pressure from hedge fund shorting²²
- Influencers here as well as on Instagram and TikTok²³ advocated certain trading strategies, often supported by lavish photographs of their trading success^{24, 25}

Identity investing

- Term coined to describe 'the newest breed of traders' who 'buy stocks simply because they are fans'
- Used to explain the popularity of stocks such as electric car-maker Tesla among young people – 'they are investing because of who they are and how it makes them feel'²⁶
- These investors want to achieve sustainable realworld outcomes through their investments – the environmental, social and governance (ESG) investment trend comes from a similar motivation

Some of these trends overlap and interoperate significantly. But there is one thing that, collectively, these trends are pointing away from, and that is collective investing. It is at odds with some of the objectives of the investment industry in terms of its short-term outlook and shunning of professional investment expertise.

The following parts of the paper look into three potential scenarios for Investment Fund 3.0, where the key drivers of technological change and investor behaviour will influence change to varying extents.

SCENARIO 1: **BUSINESS-AS-USUAL ENHANCEMENT**

THE FIRST SCENARIO OF THE FUTURE EXTRAPOLATES FORWARD THE ENHANCEMENTS OF RECENT TIMES AND PRODUCES A MORE EFFICIENT VERSION OF TODAY'S FUND. IN THIS BASELINE VIEW WHICH UNDERPINS THE OTHERS THAT FOLLOW, THE INDUSTRY CONTINUES ITS MODERNISATION AGENDA, FACILITATING SPEED, SCALE AND EFFICIENCY, UTILISING NEW TECHNOLOGIES AND ADOPTING TOKENISATION TO ENABLE FUND SHARES AND UNDERLYING ASSET CLASSES TO BE TRADED MORE EFFECTIVELY. CONSUMERS WILL BENEFIT FROM INCREMENTAL IMPROVEMENTS TO CUSTOMER EXPERIENCE AND BE ABLE TO INTERACT IN A MORE INFORMED MANNER WITH THEIR PROVIDERS.

SCENARIO ONE: BUSINESS-AS-USUAL ENHANCEMENT	A MORE EFFICIENT VERSION OF TODAY
Fund product set	Collective investment scheme operating on a modernised delivery infrastructure platform, facilitating speed, scale and efficiency.
Investment experience	Increasing tokenisation of fund shares/units and underlying asset classes.
Core Role of Technology	Fundamentally about efficiency and seamless customer experience.

CORE MODERNISATION

The infrastructure underlying the UK fund industry has not always kept pace with other industries. However, the effect of the recent pandemic on customer interactions and the trend for increased service delivery via digital channels has been striking, and it has been well reported that the shift to working and consuming services from home sped up the adoption²⁷ of digital technologies by several years²⁸. In 2021, the UK FinTech sector leapt forward with 217% investment growth²⁹, and progress that was anticipated to occur decades in the future was instead achieved in a matter of months.

Consumers have high expectations around customer service and digital access, alongside a desire for much quicker service delivery. The rapid development of technology and the internet / Web3 will only increase the level of expectation of consumers. We expect that firms will keep up the quickened pace and enhance servicing capabilities and promote digital-first interactions.

Alongside this, we have seen improvements in the adoption of tech to eliminate manual or unscalable processes. As an example, tech suppliers have recently developed additional messaging capabilities between firms seeking to facilitate the transfer of a consumer's fund between themselves, that were previously handled via email or faxes³⁰.

In addition, technology is able to enhance client reporting and anti-money laundering processes. These are areas where challenges have been encountered across the industry and technology is able to assist through either creating more bespoke reporting, utilising the growing datasets available, or digitising existing manual processes. In particular, the current rules around the disclosure of fund information to investors are antiquated and the IA has long advocated for the ability to use digital avenues for providing information and disclosure to investors across all instances to improve accessibility and understanding. Firms have greater technical ability to communicate

and report in more dynamic ways, providing investors with more accessible and relevant information. Dynamic digital disclosure could allow consumers to find more granular detail that is customised or of interest to them because not all content is provided on static pages; they can drill into the areas that they want to with different layers of information and have more choice about what aspects to research further.

Looking ahead, there are other areas where funds could benefit from enhanced operational flexibility in core fund operations – notably through the Direct2Funds initiative³¹. As originally included in the recommendations from the UK Funds Regime Working Group report, enabling investors to transact directly with the fund, rather than via the authorised fund manager (AFM) could make fund transactions more efficient and eliminate the investor's counterparty risk to the AFM. The proposals for implementing such a direct dealing mechanism are currently being progressed, alongside some of the other recommendations from the report³², such as new fund structures like the Long-Term Asset Fund (LTAF).



TOKENISATION

As well as these modernisation changes, the emergence of tokenisation provides the ability for further efficiency in both the delivery of funds to investors, and in the assets the fund may invest in.

Tokenised funds

Many fund domiciles across the globe are now offering tokenised, or digital, investment funds; others are in the process of facilitating them. These funds are administered on a distributed ledger, so-called 'on-chain'. While the name may suggest that the underlying investment strategy is crypto-focused, this is not the case. The tokenisation of the fund shares and use of DLT is irrelevant to the content and objective of an investment strategy.

From the investor's point of view, the difference between investing in an on-chain fund is not materially different from investing in a traditional or off-chain fund; the key difference will be that the investor receives tokens rather than shares. The investor should benefit from resultant cost efficiencies, which both the firms offering and administering the fund realise through a transformed back-office infrastructure.

The key element of the proposition is the removal of the reliance on a centralised record-keeping system, replaced by the shared and distributed records provided by the chain. Figure 5 shows a fund containing two share classes, one operating off-chain and the second on-chain. A mixed model such as the one illustrated may be an interim step until all-class funds operate on DLT in the longer-term.

TOKENISED FUND

A tokenised fund, which may also be known as a digital fund, a BTF (blockchain-traded fund) or an on-chain fund, is one where shares or units in the fund are digitally represented and can be traded and recorded on a distributed ledger. It uses code to mimic the functionalities of a traditional fund and replaces shares or units with tokens. For more, see our dedicated webpage³³.

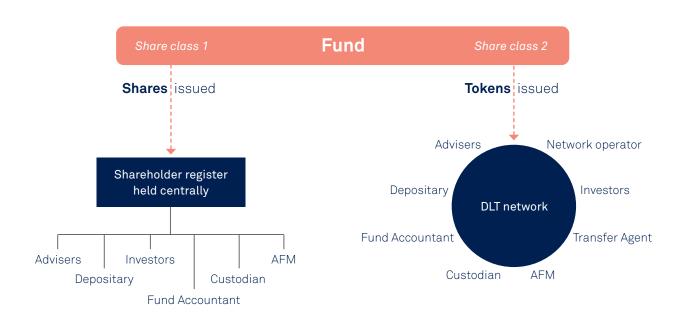


FIGURE 5: A FUND CONTAINING BOTH AN OFF- AND ON-CHAIN SHARE CLASS

The decentralised, shared register eliminates the need for participants to carry out the significant level of reconciliations that currently take place within the industry. The various parties, such as the transfer agent, depositary and platform investors each have live and direct access to the register and can validate their own transactions with other parties to reflect changes in ownership or the issuance of new tokens.

Other benefits of tokenised funds include lower servicing effort, reduced order execution costs through the removal of messaging, and potentially quicker settlement (subject to the liquidity of the underlying portfolio – which we discuss later). If using a private permissioned chain, investor access can be restricted to those having supplied sufficient KYC and AML verification upheld at network level rather than duplicated across the multiple manufacturers. Additional data such as detail of the underlying portfolio or mandate, or ESG data can be embedded into the token itself.

technologies have the potential to produce efficiencies in various parts of the financial system. We are already engaging successfully with these innovations.³⁴

Charles Randall,
Former Chair of the FCA

Tokenised share classes of existing funds already exist, most notably in the US^{35,36} and Luxembourg³⁷ and there are many other initiatives underway in all major fund domiciles. The UK is no exception, and after a few false starts it appears likely that fund tokens will be made available by a small number of investment firms in the UK in the near future.

To enable this, policy change may be necessary. Other jurisdictions have managed this with relative ease, but the UK environment may be more challenging. Some claritive changes may be needed to the OEIC Regulations and FCA COLL handbook in areas such as the composition of the shareholder register, and how changes to historic records are managed on a decentralised register. Further thought may also be needed on the evolving roles of existing fund stakeholders and how these are reflected in rules. According to the current framework, given the likely need for issuance of e-money tokens on the network to facilitate settlement, firms would also need to register as 'cryptoasset providers' with the FCA. Some forbearance would seem appropriate for pre-existing regulated fund firms simply wanting to provide a slicker service for investors.

Aside from these policy angles, critical to the overall success of tokenised funds will be the timescales under which the potential benefits can be achieved. The cost savings, while not significant in the scheme of total fund costs, will need to be realised within the medium term. As with any initiative of this size and scope, the major benefits in reshaping the existing functional divides between stakeholders will take time to achieve and will depend on an effective deployment and industry clarity of purpose. Nevertheless, tokenised funds seem likely to be a near-term fund infrastructure enhancement.

Tokenisation of assets

As well as the fund structure itself, the underlying assets within the fund's portfolio are likely to become tokenised over time. In this first scenario, we estimate that the deployment of this will be fairly limited and at a reduced pace relative to its potential.

Rather than issuing stock on a centralised exchange with a single CSD, tokens representing share ownership in companies could be issued on a public or permissioned blockchain, with investors accessing markets and trading through multiple decentralised exchanges³⁸ unconstrained by fixed market hours. This also applies to fixed income, or so-called 'blockchain bonds', and so the benefits of shorter time to market, increased scalability, and lower issuance costs may be possible for the mainstream asset classes. It is expected that the tokenisation of these traditional assets will increase transparency and liquidity³⁹.

WHY TOKENISE A TRADITIONAL ASSET?

The benefits of tokenisation largely depend on the type of asset / asset class. For stocks and bonds, the benefits are contained within the first half of our list of benefits in figure 4 on page 11, such as quicker settlement, improved transparency of transactions, and lower counterparty risk. The latter half apply more to illiquid assets such as property or infrastructure, particularly in splitting ownership of a property into multiple pieces and in creating transparent secondary markets for liquidity.

Current clearing and settlement processes involve verification by a centralised body, which can be time consuming and costly. Digital issuance offers the possibility of disintermediating many of the parties in the chain, such as CSDs, custodians and paying agents. It should be possible to settle large volumes of transactions using DLT faster and more cheaply.

To some extent, this is already here, having been proven in real issuance in recent years, through entities such as the International Bank for Reconstruction and Development, the European Investment Bank and SIX Digital Exchange. Having demonstrated this technologically, but also in compliance with existing rules is important, because it provides certainty for both issuers and investors⁴⁰. However, due to the scale of the existing infrastructure, and the vast value of assets in existence, this will not be realised overnight and we are looking at a significantly longer timeframe for this than in some of the other areas we have identified.

Digitisation within and across asset classes will be complex and it is important that it is carried out effectively to maximise its benefits. Some firms have entered into agreements with tech providers to look in detail at asset tokenisation and permissioned blockchains, and of using stablecoins in order to further reduce friction in the process. Industry stakeholders will need to assess whether it will be able to collectively agree upon widespread adoption of a shared network, and of standardisation across firms and jurisdictions within process and regulation⁴¹. They will also need to be able to manage an extended transitional period where traditional and digital assets will co-exist.

This comes at a time when there is demand for quicker settlement, which may prove to be a driver for quicker adoption. The creation of the first securities exchange facility offering T+0 settlement⁴² potentially shows us the future. On established exchanges, reductions in settlement cycles have been made in recent years,

most recently in India⁴³, and others are planned such as in the US in 2024⁴⁴, but these reductions appear to be producing incremental changes rather than embracing the possibilities of atomic (immediate) settlement that emerging tech can provide.

Quicker settlement in underlying assets will, in time, facilitate less friction between investors' cash and investments portfolios. As an indication of what this may mean in the future, it is already possible to make debit card payments and cash withdrawals from an 'invested' funds portfolio, without waiting for settlement clearance or transferring cash between cash and investment providers⁴⁵.

We can already see how a more efficient version of today will look, with many initiatives under way or able to be deployed fairly soon. The question we consider in the next section is whether this is the best that the industry can achieve or whether further innovations can take place to further evolve – or indeed transform – instead.



SCENARIO 2: INNOVATIVE EVOLUTION

OUR SECOND SCENARIO BUILDS UPON THE ENHANCEMENTS OF THE FIRST, SEEING AN EVOLUTION OF GREATER SIGNIFICANCE, WHICH RESULTS IN AN ADAPTATION OF FUND OPERATIONS AND PRODUCT DELIVERY TO SUIT NEW INVESTOR APPETITES AND EXPECTATIONS. THE CONVENTIONAL COLLECTIVE INVESTING MODEL DEVELOPS THROUGH INCREASING NUMBERS AND DIVERSITY OF THEMATIC AND SPECIALIST INVESTMENT BUILDING BLOCKS TO HELP CONSTRUCT OVERALL PORTFOLIOS WHICH ARE MUCH MORE TAILORED TO INVESTOR PREFERENCES. THE EXTENT OF TOKENISATION IN THIS SCENARIO BROADENS MARKET ACCESS MUCH MORE SIGNIFICANTLY IN AREAS SUCH AS PRIVATE COMPANIES, INFRASTRUCTURE AND NATIVE DIGITAL ASSETS.

SCENARIO TWO: INNOVATIVE EVOLUTION	A NEW CONNECTION WITH THE CUSTOMER THROUGH A DIFFERENT OPERATIONAL AND INVESTMENT ARCHITECTURE
Fund product set	Conventional collective model with increasing number of thematic building blocks to help build much more tailored portfolios.
Investment experience	Full tokenisation of fund shares/units and underlying asset classes significantly broadening market access in areas such as private companies, infrastructure and native digital assets.
Core Role of Technology	Changes the nature of the players, the investment opportunity set itself and inter-connections between different parts of financial services.

CUSTOMER-FOCUSED INNOVATION

As outlined in the description of Investment Fund 2.0 earlier, the ETF market has pointed the way towards greater choice and customisation, as well as a different approach to fund access and liquidity. The direction of this market offers some clues to the potential next stage of industry evolution which forms the central plank of scenario two: more tailored portfolios can be used to develop a new connection with the customer through different operational and investment architecture.

Historically, an element of investment customisation has been delivered at portfolio level by advisors via highlevel asset allocation, deployment of model portfolios or risk-rated funds of funds. The building blocks for this customisation are becoming more flexible. ETFs are increasingly used by institutions and investment advisors as building blocks to construct overall portfolios. While still operating for collective rather than individual investment, these provide flexible and multiple thematic approaches for some personalisation for investors. These types of products could provide greater customisation to the retail market than existing fund options.

Looking ahead, this customisation may go further still:

- Funds might be able to play a different role via a 'building block' mechanism that would enable a consumer to package together a series of mini baskets of stocks to build the kind of portfolio they would like. These mini baskets could contain a very small number of stocks, perhaps 5-10, from a similar market category or strategy type that could then be blended with others and weighted appropriately. The building blocks could be funds themselves. The investor can either devise the required blend themselves or ask an advisor or wealth manager to do that for them.
- The number of model portfolios available in the market may significantly increase and evolve. These portfolios tend to be constructed of funds at present, with ETFs and investment trusts sometimes overlooked, but this may change in future as tokenisation facilitates fractional shares to make initial trading and ongoing rebalancing easier.

MODEL PORTFOLIOS

Model portfolios are able to provide appropriately constructed services for different client segments. Model portfolios have been a feature of the advised and discretionary-managed marketplace for many years, for example through '1-7' scale risk-rated fund of funds, which appeal to investors who want a portfolio to match their risk tolerance without analysing the underlying investments in detail. Some fund managers also manufacture ranges that explicitly target different levels of risk.

These possibilities highlight the reality that all scenarios in this paper are likely to see a continuation – and potential intensification – of competition for control of asset allocation and portfolio construction between multiple parties in the delivery chain, from fund managers through to Discretionary Fund Managers (DFMs) and advisers. While growth and competition in this area should ultimately be beneficial for customers, the regulatory environment remains uneven between different types of investment offering, and this will need to be addressed in all scenarios to ensure the market works most effectively under the 'same activity, same regulation' principle.

technological disruption or adaptation is going to be around client engagement. Everyone has been talking about digital delivery for years, and we have accelerated our investment in the digital experience. I actually think the clients have enjoyed it and that trend is going to continue.⁴⁶ 11

Senior IA member comment, IA Annual Survey 2020-21



Consumer Engagement

To complement this greater range of choice, data-sharing initiatives such as open finance in the UK may help investors identify products that can meet their personal objectives. It is intended that this will enable an individual to share information on their banking accounts (savings and credit), insurance and investments with other financial institutions or third parties. Building on the functionality of open banking, they will also be able to gain additional insights on their overall financial 'health' as well as those on spending habits and cashflow planning.

The advice market is not currently helping as many consumers as it could if greater competition were to drive a wider range of services aimed at a broader consumer base. Ensuring that more customers can benefit from either financial advice or at least better support, such as less formal advice, or personalised guidance services will be key to future customer service.

Open finance can help as it widens the available sources of financial advice, facilitates better guidance and informs more tailored product sales to best address the consumer's financial needs. Investment firms who are part of wider financial services groups, or those with extensive retail customer distribution capability are well placed to better serve consumers via personalised services.

Finally, investors are increasingly seeking the ability to have their views and preferences reflected in the funds voting approach. Enhancing shareholder democracy is a live debate⁴⁷ and the IA is supportive of the principle that good stewardship can contribute to sustainable value creation. This so far has predominantly been through funds giving clients the ability to utilise different voting policies or to signal their voting preferences through surveys or apps. There remain legal, operational, timing and logistical challenges, but different technologies are making some solutions available. While the innovation is currently focused on institutional clients in response to demand from some clients and policymakers, the innovation could in future be rolled out more broadly to all types of consumers, enabling them a greater say over the stewardship activities of the fund over the companies the fund invests in.

BROADENING THE INVESTMENT UNIVERSE

Illiquid assets

Our baseline scenario projected that tokenisation could make the trading and ownership of mainstream assets more efficient. Theoretically, even greater benefits are possible when converting illiquid assets, such as real estate, shipping and freight, or infrastructure projects into digital assets. In this way, tokenisation has the ability to standardise and level the playing field between asset classes in regard to access and the representation of ownership.

The tokenisation of illiquids can potentially open up alternative investments, which tend to have high entry points, to a wider range of investors, as well as increase their underlying liquidity by splitting the immovables into smaller lots that are easier to trade on a secondary market. This could build on the new LTAF⁴⁸ structure which aims to expand the range of options available to certain groups of investors, in particular DC pension and, subject to future consultation, certain retail investors. The illiquid nature of these assets has traditionally precluded their use in portfolios built around the operational model of daily pricing and open-ended investment vehicles. In beginning to open up these currently harder-to-access markets, using notice periods at this stage, it is hoped that the LTAF will be the first step in a wholesale democratisation of private markets, offering consumers a more diverse range of asset classes and helping to align returns to longer life expectancy.

NATIVE DIGITAL ASSETS

A digital asset is a digital representation of value or contractual rights that can be transferred, stored or traded electronically, and which may (though not necessarily) utilise cryptography, distributed ledger technology, or similar technology. Different jurisdictions employ slightly different terminology, but generally the terms 'token' and 'cryptoasset' are used interchangeably.

A 'native' digital asset is one that originated or is solely available within the digital world (for example a stablecoin or cryptocurrency), as opposed to a digitised traditional asset (a tokenised company share).

Native digital assets

Many assets that only exist digitally – native digital assets – are currently seen as illegitimate for inclusion in portfolios, and cryptocurrencies in particular are likely to remain controversial as a number of Governments, Central Banks and regulators push back against decentralised and unregulated initiatives. Nevertheless, once the investment architecture has opened up to tokenised mainstream, and then alternative assets, there may be a place for some digitally native assets in some circumstances.

HM Treasury has defined the categories of digital asset that fall into and outside of the regulatory perimeter for the UK in its taxonomy⁴⁹ (see box).

Regulated assets

Within the perimeter, and as outlined earlier, fund tokens may well be classified under the taxonomy as digital assets in the future – as security tokens – and it is certainly true that many assets that already make up the investible universe will fall within these regulated categories as digitisation takes full effect.

UK CATEGORISATION OF DIGITAL ASSETS

The UK categorises digital assets as follows, with the first two categories (soon to be joined by the third⁵⁰) within the UK's regulatory perimeter and therefore subject to FCA regulation.

- 1 E-money tokens are digital payment instruments that store value, can be redeemed at par value, at any time and offer holders a direct claim on the issuer.
- **2 Security tokens** have characteristics akin to specified investments, like a share or a debt instrument. Broadly, these are likely to be tokenised, digital forms of traditional securities.
- **3 Stablecoins** are a cryptographically secured digital representation of monetary value which is stabilised by reference to one or more fiat currencies and/or is issued and used as a means of making payment transactions.
- 4 Unregulated tokens are separate from the three regulated categories above and include utility tokens, which are used to buy a service or access a DLT platform and exchange tokens which are primarily used as a means of exchange (including cryptocurrencies such as bitcoin).

Indeed, the first native security tokens to be issued on a stock exchange, representing bonds and structured products, were deployed earlier this year⁵¹, and other kinds of digital assets could be introduced to the funds industry over time, either from this investment perspective, or alternatively as an enabler of operational effectiveness, such as a central bank digital currency (CBDC). Although the path to the introduction of a digital Pound is uncertain and subject to lively debate⁵², such an innovation could be operationally useful in a number of ways, such as in the development of tokenised funds, encouraging trustworthy central bank settlement.

CENTRAL BANK DIGITAL CURRENCY (CBDCS)

A CBDC is money that a central bank can produce in digital form (i.e., not physical money like notes and coins). A CBDC is different from a cryptocurrency as it is issued by a central bank and regulated. Several Caribbean states have already launched CBDCs, India is in the process of doing so, and many other jurisdictions are currently considering introducing them including the UK⁵³, EU⁵⁴ and US⁵⁵.

The ability to pre-define uses for CBDC payments (programmable money) could also be helpful in directing money from HMRC into tax-wrapped products such as Lifetime ISAs, JISAs or pensions, or to ensure it was only received by the intended beneficiary. For now, though, CBDCs are at too nascent a stage for a detailed analysis in our sector. It will be important, as in other areas of technological and DeFi development, that the industry keeps up to date as things progress.

Non-Fungible Tokens (NFTs) have grown in popularity in consumer markets recently. Due to the array of assets that could be represented by the tokens, many are unregulated. Of relevance to us within the regulated arena, they may have a dual utility, perhaps as a new investment product structure itself (as we will look at in scenario three), or as an investible asset. It is certainly foreseeable that NFTs of say, an artwork, a building or an entire infrastructure development could form part of a fund's portfolio in relatively short order as a unique security token.

NON-FUNGIBLE TOKENS (NFTs)

An NFT is a unique cryptographic token that cannot be replicated. NFTs can represent real-world items like artwork, music, buildings or individuals' identities. Tokenising these tangible assets makes buying, selling, and trading them more efficient, as well as facilitating royalty payments to the original artists or creators. While mainly confined to the unregulated arena to date, HM Treasury says that the Royal Mint will be issuing an NFT shortly⁵⁶.

Unregulated assets

Activity outside of the perimeter can potentially have an effect on market stability and there is also the possibility of consumer harm, so regulators will want to continue to monitor and warn on these risks. There is also the possibility of mainstream firms being affected as new firms enter the perimeter, pushing Financial Services Compensation Scheme (FSCS) levies higher.

One high-profile part of the digital landscape that is currently highly contested – and uncertain – is the role and future of cryptocurrencies. This reflects what is clearly a much wider debate and, to some extent, conflict over the power of the official sector and future of fiat currencies. The outcome of that debate is too early to call, but clearly could be transformational for the global economy and relationship between citizen and state. Our analysis focuses for now on the operational implications of a decentralised delivery infrastructure, rather than the future of crypto. However, regardless of that future, regulators and industry do need to establish a clear way forward with respect to investibility.

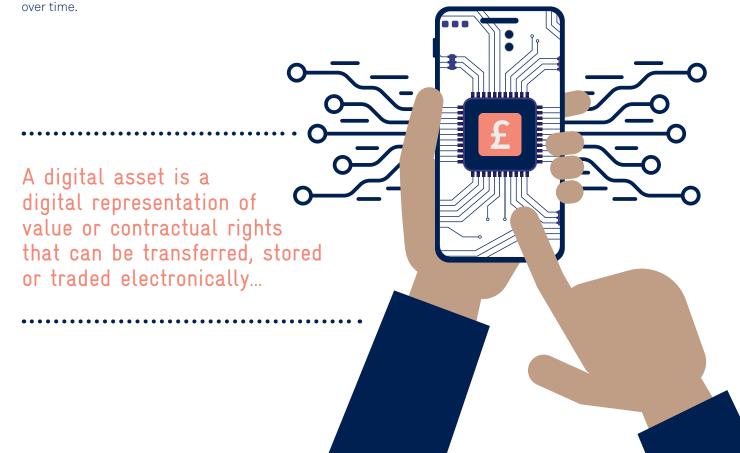
Cryptocurrencies are firmly in the unregulated category in the UK, and regulators globally are currently considering their options in whether and how to regulate cryptocurrency. There has been a recent tendency for increasing numbers of consumers to obtain exposure to one or more cryptocurrencies in spite of the UK authorities' messaging to the public on the inherent risks. Around 2.3 million UK consumers held cryptocurrency in 2021 with a median value of £300⁵⁷. A declining proportion of these viewed it as a 'gamble' (38% versus 47% in 2020), although recent market conditions may reverse this through 2022. Whatever their motivation, these consumers are not aligned with the view of the regulatory regime.

Investment firms are grappling, like regulators, with this new asset class, particularly where huge demand has been demonstrated in recent product launches – the ProShares Bitcoin Futures ETF for instance, offering a proxy exposure, raised \$1billion in just two days⁵⁸.

There is also a distinction to be drawn between such proxy products and direct exposure to the cryptocurrency itself. Increasingly, even investments in mainstream companies are being complicated by an exposure to crypto activity in one guise or another, such as Tesla (which has previously accepted bitcoin as a form of payment and also invested in it). We expect this permeation into the mainstream system to increase

For the time being at least, direct exposure is something that can be problematic for TradFi entities and their products. Indeed, some view the prevalent use of the term 'investment' itself as potentially misleading, given that the vast majority of cryptocurrencies are unbacked⁵⁹. Potentially, over time, as policy makers establish a framework for regulating these digitally native assets, there may be room for the value of professional investment expertise to demonstrate the ways of extracting value from a volatile asset class as part of a diversified wider investment strategy. UCITS and other retail-facing investment funds are not currently permitted to hold many native digital assets.

From product options – building blocks and managed portfolios – to new asset classes – alternative and digitally native – the industry has the potential to evolve more quickly and build new operational and investment architecture to connect with customers. But there is more that can be achieved, and better ways to gain loyalty from the next generation of investors.



SCENARIO 3: TRANSFORMATIVE CHANGE

THE THIRD VIEW IMAGINES A TRANSFORMATIVE SHIFT WHERE A MUCH MORE INTERACTIVE AND PARTICIPATORY EXPERIENCE FOR INVESTORS IS FACILITATED VIA HYPER-CUSTOMISATION, AND WHERE RISK AND RETURN EXPOSURE IS TAILORED BY CUSTOMERS AT INDIVIDUAL STOCK AND SECURITIES LEVEL, RATHER THAN AT THE FUND LEVEL. THIS LEVEL OF CUSTOMISATION IS ACHIEVED THROUGH CHANGING THE RELATIONSHIP BETWEEN THE CUSTOMER AND THEIR PORTFOLIO, INCREASING PARTICIPATION AND ALTERING THE NATURE OF DELEGATION TO A PROFESSIONAL INVESTMENT MANAGER.

SCENARIO THREE: TRANSFORMATIVE CHANGE	HYPER-CUSTOMISATION, POTENTIALLY MORE PARTICIPATORY, WHERE INDIVIDUAL PREFERENCES SHAPE PORTFOLIOS
Fund product set	New investment model where risk and return exposure increasingly tailored at individual stock and securities level. Potential for more participation in areas such as company voting.
Investment experience	The customised portfolio, constituted as an NFT, contains tokenised underlying asset classes in broad areas such as private companies & infrastructure but particularly native digital assets.
Core Role of Technology	Changes the relationship between customer and portfolio, increasing participation and altering the nature of delegation.

We stated at the outset that a fund is a combination of three key elements – diversified exposure, delegation of stock selection and risk management, and a regulated legal structure. This will probably hold true, even if the nature of diversification and delegation may change significantly. However, the concept of 'our fund', expressing the collective nature of the investment, could increasingly become the concept of 'my cohort's fund' where small groups of like-minded individuals manage their money more locally via a Decentralised Autonomous Organisation (DAO)60, or 'my fund' in a world of hyper customisation. Reflecting this shift, delegation to a conventional fund may be replaced by a different concept of delegation whereby the fund manager or financial adviser is still a key 'influencer', but in which the portfolio is more tailored.

DECENTRALISED AUTONOMOUS ORGANISATIONS (DAOS)

A chain-based corporate structure, governed by a native token. The token holders have the voting rights on all matters, which are carried by majority in place of a corporate leader or traditional management structures. DAOs typically use transparent smart contracts to automatically execute actions programmed by computer code, based on majority decisions.

INVESTMENT FUND 3.0 AS HYPER-CUSTOMISATION

Bespoke investment services have been commonplace for investors of sufficient size for many years. Institutional clients have been able to tailor their portfolios via segregated mandates and ultra-high net worth customers have been able to manage their investment affairs through discretionary portfolio management services which invest directly on their behalf. Technology increasingly allows this to be provided to a larger part of the mass market too.

MASS-MARKET INDIVIDUAL ACCOUNTS

A mass-market individual account would be a portfolio of assets directly owned by an individual and managed by a professional investment firm. In the US, the similar concept of separately managed accounts (SMAs) are generally targeted toward fairly wealthy retail investors, but reductions in costs mean that a mainstream mass retail market version is likely in the future.

They would offer more customisation in investment strategy, approach, and management style than mutual funds do as there is only one investor to cater for, rather than the many investors within a fund. They also offer direct ownership of the underlying securities, conferring voting rights.

In the US, high-net-worth investors have been served by separately managed accounts. For UK retail consumers, however, cost and taxation issues on the product manufacturer side – as well as low appetite for direct stock investment on the demand side – have prevented this product innovation from taking off.

A truly customised product would provide the consumer with the maximum ability for personalised options and the freedom to devise their portfolio in the way they want, with choices available right down to individual stock level. Such a portfolio can either be devised from the bottom up and be built upon over time as more capital becomes available, or by using direct indexing, which enables adjustments to existing indices to cater to an individual's preferences⁶¹. The number of indexes available has increased substantially in recent years, providing additional optionality.

DIRECT INDEXING

In direct indexing⁶², the end investor owns a personalised portfolio of stocks rather than holding shares or units in a mutual fund. Typically held via a SMA, the investor is presented with a list of investible assets via a standard index, such as the S&P 500, but crucially is able to edit this list to their preferences. They may remove or replace one of more lines for whatever reason, perhaps to reduce exposure to a company already held within another product, or one they work for, or for ESG-related concerns, or any other type of preference.

Direct indexing makes portfolio construction easier by starting with a diversified list of assets via an index, which can then be adjusted as preferred. The investment manager or broker then executes the trades and is responsible for ongoing rebalancing and periodic portfolio reviews.

This method of investment is growing in popularity⁶³ and it is estimated that AUM held via this method has more than tripled over five years. It is predicted that it could reach ~\$1.5tn by 2025⁶⁴, at the expense of fund assets.

Using direct indexing via a mass-market individual account or other SMA-like model, an investment manager would play a secondary role to a wealth manager and merely provide the index, or a basket of stocks to choose from, and possibly execution services. Alternatively, investment management models may morph to accommodate a different product and skill set, as we are starting to see with some M&A activity. A number of investment firms have made recent acquisitions in this sector to boost their customisation capabilities, with some firms running what could be described as a 'parallel motorway' approach to development, looking at both the traditional model and the potential for radical transformation.

Customisation provides a greater degree of participation and control to the end consumer in a nimbler way; the product can be made available to them much more quickly than a new fund can, with an investment objective and time horizon set and adjusted by the consumer as they require. This can help consumers model their investments against their long-term goals and needs for retirement. Customisation will hopefully, over time, drive better experience and understanding in consumers of the underlying assets they invest in.

Customisation has the potential to substantially alter the distribution chain for consumer investment delivery. Non-fungible tokens (NFTs) could provide an appropriate structure, specifically built for the investor and therefore non-transferable, with the underlying assets housed within it. Some level of financial advice will be required, but the product could be delivered direct to consumer (D2C), via platforms or wealth managers, depending on their features. It is possible that the D2C model will regain primacy again following a trend of a decade of intermediated sales.

Hyper-customisation represents a significant change and firms looking to deploy it will want to carefully consider its limits. The benefits to consumers of using an investment manager in their traditional form would be diluted, with more limited access to value-add services such as research, stewardship, or company engagement. The investor, or their wealth manager, would be responsible for all investment decisions, suitability assessments, tax reporting and ongoing rebalancing needs given that they would hold the underlying assets directly, rather than a share of a fund.

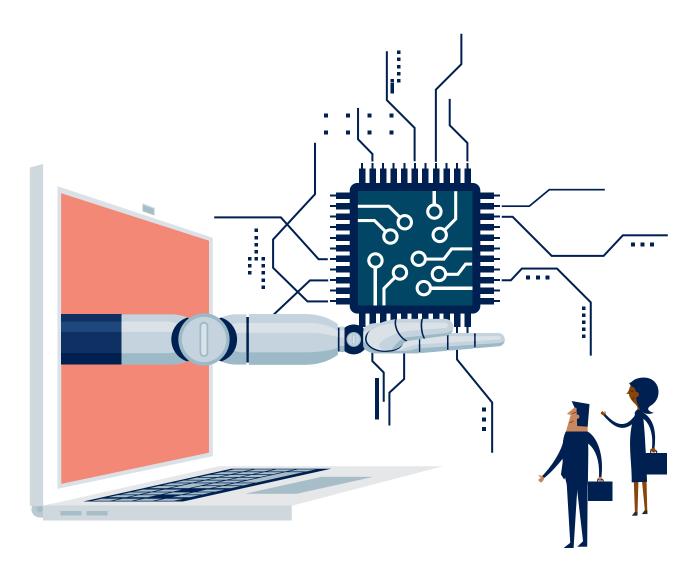
understand customer personalisation and customisation. There is a lot we can learn from popular takeaway and grocery delivery apps that are designed to offer great customer experience. Mass customisation is something of a Holy Grail for us as an industry. 55

Senior Industry comment, IA Annual Survey 2020-21

The loss of stewardship opportunities will reduce firms' abilities to influence investee companies in vital areas such as ESG and corporate governance. There may also be implications for market volatility should investors become more active via a 'day trading' mindset. For firms, an increased and potentially infinite number of portfolios may make the maintenance of effective riskmonitoring structures difficult to manage, though new technology may be able to provide solutions for these challenges in due course.

Firms will also want to consider the relative appetite for customisation in the UK and the prospect of it translating seamlessly across into the UK. The most likely route, via direct indexing, is popular in the US, where a direct stock investment culture and education already exists, alongside broker networks for low-cost execution and custody, and a favourable

tax environment⁶⁷. But these are not necessarily characteristics that are in place in the UK and this may limit take-up, even via advised channels. It is of critical importance to how the UK investment industry develops and enables customers to withstand economic shocks in the future for the industry to foster an effective long-term savings and investment culture⁶⁸ where there is a greater sense of personal responsibility for achieving financial goals. Mirroring challenges with the conventional product set, the associated knowledge and confidence necessary for a customised investment strategy may be lacking at present, and so increased efforts on financial and investing literacy are needed.



CONCLUSIONS: IMPLICATIONS FOR INDUSTRY AND POLICYMAKERS

Investment funds have well served UK retail consumers and capital markets for a significant period of time and will continue to do so. However, consumers will likely demand ever-increasing innovation. In our most radical scenario, we may be on the verge of an era of much greater participation and engagement by some consumers, especially younger cohorts. At the same time, it is entirely possible, and even likely, that many customers will still wish to delegate decisions to trusted third parties and rely on more-established collective mechanisms. A range of behavioural evidence, including the logic that has so successfully driven automatic enrolment in the UK pension system with high participation in default arrangements, suggests that a strong degree of delegation will still take place on investment matters.

Regardless of the exact trajectory, the investment management industry has a significant role to play in continuing to meet investor objectives, as well as changing societal expectations. In all likelihood, we will see a combination of all three scenarios, with the industry's centre of gravity determined by the extent to which incumbents and new entrants drive innovation over the next decade. Some elements of change – particularly the modernisation of product and service delivery and capital markets infrastructures – are inevitable. They will likely bring significant long-term benefits in terms of operational efficiency and lower costs, with direct implications for the customer delivery experience, costs and diversity of asset classes available

ROLE OF THE FUNDS INDUSTRY

Reaching Investment Fund 3.0 under Scenario One (Business as Usual Enhancement) is in progress via a range of ongoing initiatives. The industry recognises that back-office modernisation needs to be completed rapidly, and there is increasing recognition that fund tokenisation has the potential to accelerate and transform the efficiency of the delivery process. Core industry actions include:

- Complete back-office transformation to eliminate manual processing, including adoption of tokenised funds.
- Roll-out digital information provision and disclosure to investors as far as possible, working with regulators to extend the scope and effectiveness of digital disclosure.
- Continue to promote investor education and engagement, particularly where new products, asset classes or depth of choices become available. Enhancing the financial and investing literacy of the UK population remains a priority for the industry.
- Work with regulators to develop and complete the implementation of the UK Funds Regime reforms such as LTAF and Direct2Fund and identify further enhancements as necessary.
- Ensure the level of knowledge and experience within firms keeps pace with developments in the DeFi arena.

The way we regulate needs to be dynamic. We shouldn't be thinking of regulation as a static, rigid thing. Instead, we should be thinking in terms of regulatory 'code', like computer code which we refine and rewrite when we need to; tailored and proportionate, yes, but also nimble and tech-neutral. 59

John Glen, Economic Secretary to the Treasury

ROLE OF POLICYMAKERS AND REGULATORS

Going faster or further than this will take concerted efforts. A major factor in the pace and scale of the potential developments highlighted in this paper will be the shape of the regulatory and broader policy environment. Any level of regulatory uncertainty has a direct impact on firms' ability to plan and invest, and clarity of approach from regulators is vital for confidence.

We should recognise that we are potentially on the brink of wholesale changes to the financial services infrastructure; at its core DeFi intends to fundamentally disrupt the existing framework of financial services delivery. Alongside industry, regulators and policymakers are seeking to understand the risks and opportunities posed by this and how products and services will be provided in future, and how to ensure this is conducted in a responsible way, with consumer protection at its heart. The process of regulation itself may need to evolve as innovation accelerates.

We set out below a range of actions in three areas that, taken together, will create an environment in which regulation can better support innovation, while always ensuring that upholding consumer protection is at the heart of the process. While information is in many ways more available than ever, technological change also has the potential to create an environment in which retail investors are, as IOSCO puts it, 'less informed, but more exposed'70. The investment management industry is keen to work with regulators to ensure that this is not the case.

1. Innovation:

- Work at pace to establish the framework for tokenised funds to operate in the UK.
- Establish a **DeFi taskforce** to assess the overall policy implications for the UK fund industry from the opportunities identified in this paper.
- Retain the stance of 'same activity, same regulation'.
 This already applies to the debate around tech and new market developments but should also feature for competing investment products and services in the retail market.

- Consider establishing **regulated routes for native digital asset exposure** in some cases; the eligibility of cryptoassets within UCITS and domestic funds should be considered for well-diversified portfolios.
- Approach DeFi reforms in an open-minded way, recognising that that existing industry functional divides may not be relevant if tech provides more efficient ways of achieving the same outcomes.

2. Regulatory perimeter:

- Define the **'rules of the road' for cryptoassets**, to mitigate the risk of material consumer loss and harm.
- Closely monitor the unregulated arena for emerging developments that may threaten financial stability and cause consumer harm.
- Ensure that investment firms are not exposed to the costs of failing stablecoin firms – or other crypto firms as the regulatory perimeter is expanded – through the FSCS.

3. Regulatory change:

- Address the advice gap by facilitating better support, such as less formal advice or personalised guidance services.
- Complete UK Funds Regime Working Group reform implementation.
- In partnership with industry, enable next generation digital information provision and disclosure to investors across all instances (KIIDs, reporting etc).

Close partnership between regulators and industry in all these areas can also work to boost the overall competitiveness of the UK funds industry at a critical time. Domestic innovation can also be leveraged to support and evolve the UK's international reputation as a world-leading financial centre. In an age of investment management, where the sector is ever more important to its customers and the wider economy, the industry is about to undergo an exciting next stage of development.

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The Investment Association

Camomile Court, 23 Camomile Street, London, EC3A 7LL

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