Kalifa Review of UK Fintech




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Preface

Fintech is not a niche within financial services. Nor is it a sub-sector. It is a permanent, technological revolution, that is changing the way we do finance. Its essence is in both fast-growing fintech companies, and the investment and use of technology by our incumbent financial institutions. It's in the way we regulate previously unknown technology and set new standards. But most importantly, it's about delivering better financial outcomes for customers, especially consumers and SMEs. We want to deliver these outcomes across the UK and export them to the world.

If the UK is to retain its position as a global leader in financial services, then we must lead this technological revolution. Just as we led in previous industrial revolutions, we must do so again in this one.

Set out in this Review, is a strategy and a delivery model for us to provide leadership in fintech. If we are to succeed then it must be comprehensive, coordinated and focussed. That is why I have put forward recommendations to support fintech scaleups with the capital and skills they need to succeed. But these measures must be combined with world-leading policy and regulation. The UK has a hard-won reputation of trust when it comes to regulation and the rule of law. We must ensure that we build trust in this new wave of tech-enabled products and services.

Above all, it is about building markets for this innovation to grow into. A great product will not succeed without a strong customer base, adequate regulation, access to data, skills and capital. It is this holistic approach that I have striven for in this Review. And it must be done now. Others are waiting for our crown to slip.

Fintech is about change. It is about new firms and established ones, large companies and small and the roles of both public and private sector. At present, these elements and their well-intentioned supporters are not pulling together in a single vision. In this Review I have tried to set out what this vision consists of, but more importantly, how it can be realised. And whilst I was commissioned by Her Majesty's Treasury to do this, as you will see from the recommendations, they are the responsibility of all of us. I look forward to working with you on their implementation.

Finally I would like the thank all of the many contributors to the Review, experts in their fields, whose ideas and knowledge have done so much to shape it. In particular I thank the chapter leads and their support teams, alongside the Review Secretariat, ably provided by the teams at the City of London Corporation and Innovate Finance.

Ron Kalifa OBE

Foreword

I would like to congratulate Ron, the chapter leads, review secretariat – and all of those who contributed their knowledge and expertise – on this important report.

The UK's strengths in financial services lie in the collective expertise of our regional centres – both London and other hubs, including Manchester, Edinburgh, Cardiff, and Belfast. In addition, our abilities in this area are down to the homegrown talent we cultivate in our world-class universities; our ability to attract top quality skills and capital. And, of course, the pace, power and creativity of our innovators.

There is no doubt that there is real transformative potential to be found at the point at which financial services and technology collide. The UK has been quick to recognise this fact and it has become a global trail blazer in this area.

It was this country that launched the first Regulatory Sandbox to catapult exciting and innovative new products to market. We pioneered Open Banking, which has now taken the world by storm and we launched the Global Innovation Network to bring the international regulatory community together in order to test innovative fintech solutions.

As the sector has gone from strength to strength, leading fintech firms have become household names. Today over 70% of digitally active adults in the UK use a fintech service – well above the global average.

But we must not rest on our laurels.

That is why the Government continues to be focused on ensuring UK fintech succeeds. As part of that commitment, at last year's Budget, the Chancellor asked Ron Kalifa OBE to conduct this important review.

Our goal is simple: To ensure the UK maintains its position as the best place in the world to start and grow a fintech business.

I am hugely grateful to Ron and his team for all their hard work producing this major contribution to the future of this dynamic and hugely important industry. The Government looks forward to considering the report's recommendations in detail.

John Glen MP
Economic Secretary to the Treasury

Recommendations at a glance: 5 point plan

Policy and Regulation

- Deliver a digital finance package that creates a new regulatory framework for emerging technology
- Implement a "Scalebox" that supports firms focusing on scaling innovative technology
- Establish a Digital Economy Taskforce (DET) to ensure alignment across government
- Ensure that fintech forms an integral part of trade policy

Skills

- Retrain and upskill adults in support of UK fintech by ensuring access to short courses from high-quality education providers at low cost
- Create a new visa Stream to enhance access to Global Talent for fintech scaleups
- Build a pipeline of fintech talent by supporting fintech scaleups to offer embedded work placements to Further Education and Higher Education students and Kickstarters

Investment

- Expand R&D tax credits, Enterprise Investment Scheme and Venture Capital Trusts
- Unlock institutional capital to create a £1bn "Fintech Growth Fund" of sufficient scale to act as the catalyst in developing a world leading ecosystem
- Improve the listing environment through free float reduction, dual class shares and relaxation of pre-emption rights
- Create a global family of fintech indices to enhance sector visibility

International

- Deliver an international action plan for fintech
- Launch an international "Fintech Credential Portfolio" (FCP) to support international credibility and increase ease of doing business
- Drive international collaboration through the Centre for Finance, Innovation and Technology , and launch an International Fintech Taskforce

National connectivity

- Nurture the high growth potential of the top 10 fintech clusters
- Drive national coordination strategy through Centre for Finance, Innovation and Technology
- Accelerate the development and growth of fintech clusters through further investment, such as in R&D

Over the past decade, the UK has been quietly undergoing a fintech revolution – in jobs, innovation, improvements to people's lives and in increased opportunities in global trade.

Yet for many, the image of fintech is stuck in Shoreditch, an area of East London populated by start-ups and coffee shops catering to the mythologised young laptop entrepreneurs of "Silicon Roundabout".

A look at the record of achievement helps project the true picture. Let's quickly scroll back 10 years.

Back then, it took days to open a current account. Now you can be onboarded in minutes, and more safely and securely, leveraging regtech solutions and challenger bank innovation.

Back then, people had only a few options for managing their savings and pensions – using paper updates. Now there is more choice, pensions can be tailored to specific needs, easily amalgamated and they are online with immediate, accessible interfaces.

Back then, if you were a new business seeking SME financing, there was limited choice of providers on the high street with slow decision-making processes. Now, there is digital access to a wide array of lenders looking to leverage machine learning and AI tools, and provide immediate decisions on a new loan or refinancing opportunities.

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Consumers and businesses are rapidly changing the way they interact with financial services and the fintech sector is ideally placed to respond to this changing dynamic. This will result in the creation of new digital jobs to power our most innovative businesses, inspire a next generation of entrepreneurs, and in turn enable the growth of global champions. We must remain an ambitious partner in a sector where we are at the forefront of global thought leadership."

Charlotte Crosswell
CEO Innovate Finance

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This is a pivotal moment for the UK. There are significant opportunities offered by fintech – an area in which London already has unmatched global appeal. But for the UK to retain its position as world leader and continue to attract investment into the sector, it is vital to offer an environment which supports innovation. The Kalifa review offers a roadmap to achieving this."

Catherine McGuinness
Policy Chair, City of London Corporation

Fast forward to today. Achievements like these have contributed to making the UK envied around the globe as a hotbed of fintech activity – and its successive governments and regulators admired for building a supportive enabling environment that puts innovation at the top of the regulatory agenda.

The Financial Conduct Authority's (FCA) pro-competition mandate has helped support new fintech firms and ensure a more nurturing regulatory environment. In 2016, the FCA launched the world's first regulatory "sandbox", which was subsequently replicated abroad by regulators looking to follow the UK's lead in innovation. Similarly, the Bank of England and the FCA's 'New Bank Start-up Unit' provides additional support and advice for firms looking to gain a banking licence.

This in turn is accelerating the digital transformation of banks, asset managers, and insurers, as they strive to meet changing consumer and business demand. Big Tech is moving into this space, highlighting the value of data-led solutions in financial services. Because of the strength of our incumbent financial services sector, fintech has found extremely fertile ground. Yet it has also created opportunities to cross-pollinate into broader technology solutions, leveraging cross-cutting applications like big data, AI and quantum computing. Combined, these trends create a pivotal moment to support fintech innovation.

This catalysed the UK into becoming the fintech hub of today, coupling it with the sophisticated financial services ecosystem of London, where so-called "unicorns" such as Wise, Onfido, Checkout.com and Revolut have based themselves.

This has resulted in an impressive scorecard:

- Representing 10% of global market share[1] and £11bn in revenue[2], the UK is a dominant force in fintech.
- The total tech spend by UK financial services firms was £95bn in 2019[3].
- SMEs and corporates are all keen users of fintech. UK citizens are becoming digitally active and 71% are now using the services of at least one fintech company[4].
- Investment into UK fintech stood at $4.1bn in 2020 – more than the next 5 European countries combined[5].

"At Monzo, we're really proud to be part of an industry that is always working to change finance for the better and give consumers more options. It's why we're supportive of this Review's recommendations which would help the next generation of financial technology companies get off the ground, while enabling established companies, like Monzo, to take it to the next level."

TS Anil
CEO, Monzo

1 KPMG analysis
2 https://assets.ey.com/content/dam/ey-sites/ey-com/en_gl/topics/emeia-financial-services/ey-uk-fintech-2020-report.pdf
3 https://assets.ey.com/content/dam/ey-sites/ey-com/en_gl/topics/emeia-financial-services/ey-uk-fintech-2020-report.pdf
4 https://www.ey.com/en_uk/ey-global-fintech-adoption-index
5 https://www.innovatefinance.com/capital/#:~:text=Global%20FinTech%20investment%20reaches%20%2444,increase%20of%2014%25%20from%202019.&text=H2%202020%20saw%20a%2076,a%206%25%20increase%20from%202019.

However, the trajectory of UK fintech is at an inflection point of opportunity – and risk. While the UK's position is well established, its future is not assured.

There are three broad threats to our fintech leadership position, each of which point to three opportunities that must be grasped through immediate action to create an economy that works inclusively and sustainably for its citizens while securing the ambitions for "Global Britain".

- **Competition:** Overseas centres are seeking to emulate the UK's success. Competitor jurisdictions such as Singapore, Australia and Canada are investing heavily across many of the areas we have looked at, including capital, skills and direct support for fintechs.
- **Brexit:** Brexit has created regulatory uncertainty in specific areas relevant to fintech. Firms must navigate the immigration system for European Union talent for the first time – whilst rival jurisdictions are rolling out aggressive attempts to lure talent in.
- **Covid:** The pandemic has accelerated digital adoption globally in a way that marketing or policy never could. This is creating opportunities for jurisdictions that are quickest to diagnose what's happening and nimblest to capitalise on the opportunities for fintech.

"As we start 2021, facing economic challenges across the globe, it is essential to preserve and strengthen the UK's position as the first choice to launch and grow a fintech business. I welcome the Kalifa Review and the Government's commitment to ensuring that the UK remains a world leader in innovation and growth. As Revolut's founder I know the importance of the UK's commitment to innovation and to being the best place to start and scale a fintech. I hope the Review gives us the pathway to ensuring that the UK retains this leadership."

Nik Storonsky
Co-Founder and CEO, Revolut

The prize lies in three opportunities:

- **Jobs:** Fintech is embedded across the UK with the potential to create high income tech-based employment, becoming an engine of the "levelling up" agenda, as well as playing a part in upskilling and retraining the existing workforce. The sector's direct GVA contribution to the economy is estimated to be £13.7bn by 2030, with job creation contributing to 70% of this.[6]
- **Trade:** Enabling fintechs to achieve global scale and reach via access to international markets, and continuing to lead on regulation and standard-setting in fast-moving tech. We see fintech as a core asset for Global Britain.
- **Inclusion and Recovery:** Supporting citizens and small businesses to access more, better and cheaper financial services – and doing so in a sustainable way to help "build back better".

Building on our current position, this Review has identified a Five-Point Plan of recommendations to deliver this approach and achieve our vision:

- **Policy and Regulation** – dynamic leadership that protects consumers yet nurtures fintech activity and encourages competition
- **Skills** – ensuring fintech has a sufficient supply of domestic and international talent and the means to train and upskill our current and future workforce
- **Investment** – completing the funding ladder from start-ups right through to IPO
- **International** – a targeted approach to exports and inward investment
- **National connectivity** – leveraging the output of fintechs across the UK and facilitating connectivity amongst them

Set out below is both a strategy for the fintech sector and a delivery model to help the UK realise it. This will enable us to move from being a global leader in fintech start-ups, to the best place to scale a business, and take solutions from IP creation through to widespread adoption. That is when the full impact and opportunity of a thriving fintech sector will be realised.

"The Kalifa Review has the potential to be a seminal moment for the fintech sector in the UK. It is time to re-invigorate the sector, and I know that fellow founders want to play their part in driving growth, innovation, and in the process, an economic recovery for the whole country."

Christian Faes
Exec Chair & Co-Founder, LendInvest

6 KPMG analysis

Recommendations

Policy and Regulation

The UK has led the way globally in its policy and regulatory approach to fintech. This is exemplified in the regulatory sandbox. As businesses, technologies and solutions scale, we need to ensure the policy and regulatory approach continues to not only protect consumers but also creates an enabling environment that encourages growth and competition.

We therefore propose to:

- **Deliver a digital finance package that creates a new regulatory framework for emerging technology:** The UK must prioritise new areas for growth and cross-industry challenges such as financial inclusion, and adopt specific policy initiatives that will help create an enhanced environment for fintech, such as digital ID and data standards.
- **Implement a "Scalebox" that supports firms focusing on scaling innovative technology:** This would include enhancing the Regulatory Sandbox, making permanent the digital sandbox pilot, introducing measures to support partnering between incumbents and fintech and regtech firms, and providing additional support for regulated firms in the growth phase.
- **Establish a Digital Economy Taskforce (DET):** Multiple departments and regulators have important fintech competencies and functions. The DET would be responsible for collating this into a policy roadmap for tech and digital, in particular, the digital finance package. It would provide a 'single customer view' of the government's regulatory strategy on tech and a single touchpoint for the private sector to engage.
- **Ensure that fintech forms an integral part of trade policy:** The UK must build upon early successes and ongoing industry engagement and further develop its global trade policy in relation to fintech, ensuring a coherent and consistent approach, as well as to secure commitments in its future trade agreements that would benefit fintech.

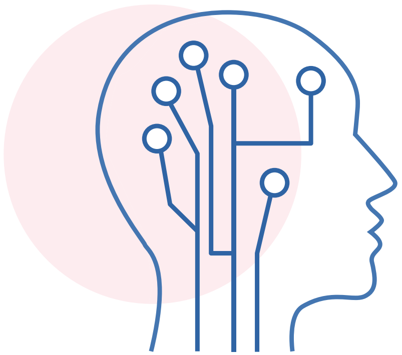
Concerning the Competition and Markets Authority (CMA), it is clear from stakeholder feedback that the CMA must adapt its approach to this complex sector in order to better balance competition and growth. There is a case for more flexibility in the assessment of mergers and investments for nascent and fast-growing markets such as fintech. Success brings scale but as some businesses thrive, others inevitably will fail. Some consolidation will therefore be critical in facilitating the growth that UK fintechs need in order to become global champions. The CMA's mandate must reflect these market dynamics.

Skills

There is a rich pool of fintech talent in the UK, supported by a world class university system and as many as 67% of the UK's fastest growing fintechs consider talent to be a high priority[7].

We therefore propose to:

- **Retrain and upskill adults to meet the needs of UK fintech by ensuring access to short courses from high-quality education providers at low cost:** It is estimated that 90% of the UK workforce will need to be reskilled by 2030[8]. Covid has intensified this challenge. Fintech has the potential to create new jobs and support effective retraining and upskilling efforts across the UK.
- **Create a new visa Stream to enhance access to Global Talent for fintech scaleups:** UK fintech thrives on recruiting and retaining talent from across the globe. Foreign talent represents c.42% of UK fintech employees. In order to remain a global leader in fintech, the UK needs to strengthen its position on immigration or risk a significant shortage in human capital.
- **Build a pipeline of fintech talent by supporting fintech scaleups to offer embedded work placements to Further Education and Higher Education students and Kickstarters:** Due to covid, around 700,000 young people have left education into an extremely difficult jobs market[9]. Fintech can provide young people with access to employment opportunities in an exciting and expanding sector. But more is needed to support students to understand these opportunities. And fintech leaders need more interaction with students throughout the curriculum.



7 Industry Survey – Innovate Finance
8 https://www.cbi.org.uk/media/5723/learning-for-life-report.pdf
9 https://www.bbc.com/news/business-53985144

Investment

Private funding has been crucial to the success of the UK as a fintech hub but more can be done to support firms at the later stages of funding.

We therefore propose to:

- **Expand R&D tax credits, Enterprise Investment Scheme (EIS) and Venture Capital Trusts (VCT):** 97% of founders have used tax-incentivised investment schemes including EIS, Seed Enterprise Investment Scheme ("SEIS") and VCT, 47% were concerned about their ability to qualify for such tax relief if their business models switched from being unregulated to regulated in the future[10].
- **Unlock institutional capital to create a £1bn "Fintech Growth Fund" of sufficient scale to act as the catalyst in developing a world leading ecosystem:** With a £2bn fintech growth capital funding gap[11] in the UK, many entrepreneurs prefer to sell rather than continue to build their promising company. There is £6 trillion[12] in UK private pension schemes alone, a small portion of which could be diverted to high growth technology opportunities like fintech. This is likely to fall within the remit and interests of the Productive Finance Working Group.
- **Improve the listing environment through free float reduction, dual class shares and relaxation of pre-emption rights:** Out of the 3,787 initial public offerings (IPOs) at the world's major stock exchanges between 2015 and 2020, the US alone accounted for 39% (via the NASDAQ and the NYSE), while the UK trailed with 4.5%[13].
- **Create a global family of fintech indices to enhance sector visibility:** Once enough UK fintech companies have listed and formed a sub-sector, a UK index could become a bellwether for all UK fintech stocks and cement the country's reputation as a listing destination.

10 Survey commissioned for the Kalifa Review

11 https://www.scaleupinstitute.org.uk/news/call-for-greater-coordination-between-private-and-public-sector-to-address-growth-capital-gap/

12 https://www.ons.gov.uk/peoplepopulationandcommunity/personalandhouseholdfinances/incomeandwealth/bulletins/pensionwealthingreatbritain/april2016tomarch2018

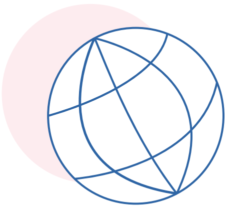
13 KPMG analysis

International

Building on the success of the UK government sponsored Fintech Bridges, and future digital trade opportunities, taking additional steps to strengthen the international operational support offered in the UK and targeted overseas markets would make a big statement about the international openness of the UK in a post-Brexit environment.

We therefore propose to:

- **Deliver an international action plan for fintech:** The action plan represents a combination of public and private sector priorities and identifies sectors and markets with the highest potential to scale and build leading positions for UK fintech companies.
- **Drive international collaboration through the Centre for Finance, Innovation and Technology (CFIT), and launch an International Fintech Taskforce:** Led by Government with the purpose of gathering fintech and industry input to achieve progress against the 'international plan for fintech'. (CFIT – see page 13)
- **Launch an international "Fintech Credential Portfolio" (FCP) to support international credibility and increase ease of doing business:** Led by CFIT, the FCP will help fintechs demonstrate an international sign of quality, resilience, trust and standing to participants in international markets.

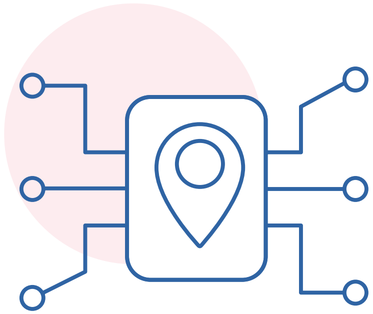


National Connectivity

There is an abundance of fintech talent spread throughout the UK, supported by the Fintech National Network[14]. To maintain the UK's position as a fintech hub we must focus on scale and supporting regional specialisms – especially the significant intellectual property being created in universities.

We therefore propose to:

- **Nurture the high growth potential of the top 10 fintech clusters:** Each cluster should produce a three-year strategy to support growth, foster specialist capabilities, and enhance national. (CFIT – see page 13)
- **Drive national coordination strategy through CFIT:** To ensure future fintech competitiveness and growth across the UK connectivity. (CFIT – see page 13)
- **Accelerate the development and growth of fintech clusters through further investment such as in R&D.**



"We warmly welcome the Kalifa Review. As the UK looks to forge its own path in the world, it is absolutely right that the Government explores how it can ensure the ongoing success of the UK fintech sector. We hope this Review will help create the right conditions for UK fintechs to grow and succeed and look forward to working with the Government and the fintech ecosystem to ensure the UK retains its position as a global centre for fintech and innovation."

Ashok Vaswani
CEO, Consumer Banking & Payments, Barclays

14 https://www.innovatefinance.com/fintechnationalnetwork/

Delivery

We need to combine the best of government and policymaking with the innovative flair of the people who have built and lead UK fintech. This means building public-private coordination to ensure strategic focus and an official government mandate to pursue it.

We therefore recommend a government-backed "Centre for Finance, Innovation and Technology" (CFIT), mandated and supported by the Government, but led by the private sector to coordinate targeted fintech policies that aim to scale the sector. CFIT will build "execution capability" against all three of the opportunities identified above:

- **Future jobs, nationwide:** Build a skills platform that will deliver short-courses from approved providers for upskilling and re-skilling and an exchange to place HE/FE students into work placements in the sector.
- **Trade and Global leadership:** Alongside DIT, support the execution of the international plan for fintech and align the UK's strengths in fintech with trade agreements and developing markets.
- **Inclusion and Recovery:** Industry wide coalitions on key issues like financial inclusion, SME lending, Open Finance and Digital ID. These would bring together banks, Big Tech, data providers, fintechs and policymakers to solve the challenges of scaling solutions and creating economic benefits.

Conclusion

Technological change has arrived in financial services and with it, an abundance of threats and opportunities. Threats to the UK's competitive position, but also opportunities to innovate and grow. Threats to consumers and labour markets, but also opportunities for job creation and supporting the development of a digitally capable citizenry. To succeed, our efforts must be comprehensive and collective.

We must hold ourselves to account in delivering the strategy outlined in this proposal. One year from today, both the public and private sector must come back to report on the progress they have made to deliver the recommendations in this Review. The Government should consider appointing a fintech 'business champion', to support fintech and deliver this strategy.

The time to act is now.

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Britain's fintech sector is admired across the globe and has a crucial role to play in supporting the economy as we look to recover from Covid-19.

"Small businesses are the backbone of our economy – many have been hit hard by the crisis. I admire the resilience of so many business owners that haven't thrown in the towel but found ways to keep their businesses going, and in many cases found new opportunities. I am proud that we could play our part by providing the necessary financing."

"The recommendations within this Review will allow us to leverage the innovative technology we have built to support even more of our customers in the future."

Christoph Rieche
CEO & co-founder, iwoca

Chapter 1

Centre for Finance, Innovation and Technology

A Review must recommend but it must also provide an implementation plan. The recommendations presented are not solely in the gift of government – public-private collaboration is essential. As such, to move at pace and maximise impact, a new kind of organisation is required to deliver the recommendations.

Scaling solutions and increasing adoption has been a recurrent theme. The Review highlights the foundational capabilities to scale successful fintechs across the UK, and how enhanced connectivity and increased collaboration could drive growth further and faster. It also highlights the need to better coordinate our collective approach to export and inward investment strategy and business development support – and then build a brand around it. Collectively this adds up to a strong pipeline of fintech companies and IP across the UK, and a huge opportunity to take them to the global marketplace. The international and national connectivity chapters both propose a new organisational approach. Aggregation and coordination are the first steps. But to create a new organisation we also must identify what is missing from the marketplace – what additionality can we create by collectivising our efforts? National connectivity is an input and international expansion is an output. But what goes on in the middle?

Solution

There are many factors that can pave the path to scale and we have focussed on five across the Review – Skills, Investment, Policy and Regulation, National Connectivity and International Competitiveness. But there is a missing organisational link required to accelerate scale – a coordinated approach to fintech market development, that builds coalitions across a value chain of economic actors. It operates pre-product development, facilitates data sharing, builds partnerships between start-ups and incumbents and creates proof of concepts that can then be scaled. By assembling actors from across the ecosystem, pain points to adopting new technology solutions can be addressed wherever they occur.

That is why we are proposing the creation of the Centre for Finance, Innovation and Technology.

CFIT will establish a set of specific deliverables.
Indicative targets include:

- Increase fintech adoption rate
- Increase percentage of SMEs making use of external finance
- Double number of UK domiciled fintech unicorns
- Increase number of fintech listings on the London Stock Exchange
- Increase number of fintech jobs
- Grow UK fintech market share

Case Study:

The Green Finance Institute

The new business activity is delivered through ‘Coalitions’ – for example the Coalition for the Energy Efficiency of Buildings: ‘the goal is to create the market for net-zero carbon, resilient buildings in the UK by accelerating capital flows towards the retrofit of existing housing stock and development of new future-proofed residential buildings. To achieve this ambitious goal, the Coalition will identify the barriers to investment and apply these findings to design, development and launch of a portfolio of scalable ‘demonstrators’ of new financial solutions to unlock investment into the sector’.

Prior to the GFI, much green finance activity was uncoordinated, unviable or sub-scale. For example, there have long been specialist green mortgage providers, but they served a very small, niche segment of the market. The Coalition assembles a large coalition of players including financial institutions, data providers, corporates, start-ups, universities and government agencies. So far it has launched demonstrator projects across 31 different areas ranging from a digital passport on building renovation, green ISAs and a toolkit to upskill financial institutions on green lending. All these were created by and for, market participants and end users.

“Operating as a compelling new brand the Institute would bring together the UK’s existing capabilities, create new business opportunities and communicate to the wider market what London’s offer is in green finance and insurance”

Green Finance Taskforce
2018

We can replicate this approach in fintech across a range of different solutions and specialisms. On the following pages are three examples.

1 A Coalition on SME Finance

Covid has highlighted the urgent need to broaden the base and nature of support for SMEs seeking finance. There is a need to both develop alternative providers beyond incumbent banks and develop nuanced solutions that better fit the specific finance needs and growth journeys of different SME typologies. This means improving our understanding of market need and product supply, and looking at new ways to scale solutions.

Coalition Structure

Addresses:

Effective financial support for SMEs will drive economic recovery. Understanding both the impact that covid has had but also the opportunities it may create to open new digital channels.

Goal:

To baseline the specific credit needs by market and product segment, assess barriers to growth, and develop proofs of concept for new products and processes that will increase the transparency and availability of SME finance.

To achieve this goal, the Coalition will deploy advanced analytics and data science to look at risk assessment and credit scoring, as well developing new data-sharing opportunities with banks to better target new products.

How this will be achieved:

Using a continuation of the digital sandbox environment, the Coalition will assemble a broad set of actors including financial institutions, fintechs, non-bank lenders, business groups and regulators.

They will use data-sprints and/or construct real, anonymised data sets on which to develop proofs of concept for new products.

Deliverables:

- New product and data partnerships between incumbents and fintechs.
- Detailed, data-lead segmentation of the market need and a solutions map.
- New proofs of concept against specific SME finance needs.

2 A Coalition on Open Finance

Open Finance could create substantial opportunities for better advice and better financial outcomes. The ability for individuals to access and share a full set of their provider-held financial data – beyond the bank transaction account data made available under Open Banking – will allow third party firms to offer advice and optimisation solutions that will save them money and help them manage their savings, investments, pensions and insurance for better overall financial health. Further detail on the principles that should underpin Open Finance can be found in Policy and regulation – recommendation 1.

Coalition Structure

Addresses:

Effective development of the future Open Finance architecture and ecosystem will provide better financial health for all UK citizens. Understanding the technology solutions, customer needs and usability issues.

Goal:

To understand the specific customer needs and opportunities by market and product segment and assess barriers to uptake and use – develop proofs of concept for new products and processes that will increase transparency and availability of Open Finance based solutions.

How this will be achieved:

To achieve this goal, the Coalition will deploy advanced analytics and data science to look at new data-sharing opportunities across fintechs, banks, insurance companies, investment managers, pension providers, financial advisors & intermediaries to better target new product and service development as well as understanding the underlying data and technology needs.

Using a continuation of the digital sandbox environment, the Coalition will assemble a broad set of actors including financial institutions, intermediaries and advisors, fintechs, industry advocates and regulators.

They will run data-sprints and/or construct real, anonymised data sets on which to develop proofs of concept for new products.

Deliverables:

- New product and data partnerships between incumbents and fintechs.
- Detailed, data-led segmentation of the market need and a solutions map.
- New proofs of concept against specific customer needs and Open Finance-driven opportunities.

3 A Coalition on Digital ID

The ability to safely and irrefutably determine an individual's identity is critical to almost every aspect of their day-to-day lives. As activity increasingly becomes remote and through digital channels, and against a background of increasingly sophisticated fraud and other criminal activity, a secure method of authentication is necessary to protect the link between an individual and their assets, rights and personal safety online.

Previous attempts to establish a universal approach to digital ID have met with limited success and now multiple alternatives are emerging in competition with each other to become the standard. The financial system will be a substantial user and beneficiary of a common ID system and fintechs and other technology providers have useful inputs that need to be taken into account in developing both the solutions for a digital ID, as well as to develop the products and journeys that best suit users. Further details on the principles that should underpin a digital ID can be found in Policy and Regulation – recommendation 1.

Coalition Structure

Addresses:

Effective development of the future digital ID architecture and ecosystem will provide more safe and secure financial transactions for all UK citizens, understanding the technology solutions, customer needs and usability issues.

Goal:

To understand the specific customer needs and opportunities by market and customer segment and assess barriers to uptake and use – develop proofs of concept for new products and processes that will increase transparency and availability of digital ID based solutions.

How this will be achieved:

- Identify key digital ID use cases – individual and corporate – in a financial context, and shortcomings in existing or proposed approaches
- Using a continuation of the digital sandbox environment, assemble a broad set of actors including fintechs, financial institutions, technology providers, data-led businesses, digital ID vendors, industry advocates and regulators.
- They will develop an aggregated view on the strengths and weaknesses of the digital ID approaches available and in development, against a set of use cases

Deliverables:

- New product and data partnerships between incumbents, technology providers and fintechs.
- Detailed, data-led segmentation of the market need and a solutions map.
- New proofs of concept against specific customer needs and digital ID-driven opportunities.

Additional Capability and responsibilities for CFIT

Alongside delivery of Coalitions to address industry challenges and scale solutions, CFIT will also have responsibility and execution capability across the following areas:

Universities, data and Research.

- **The UK's universities are significant asset when it comes to data science, R&D, IP creation and technology transfer:** They are also a vital supplier of skills and talent for high-growth tech businesses. As such CFIT will also develop a standing function to develop a central repository and capability on fintech research and analytics, leveraging our world-leading network of universities. It would include:

- **Investor Research:** A key component of the GFI was to 'promote world class investor and issuer-orientated research'. Similarly the Investment chapter in this Review identified a significant gap in investor research and analysis into the fintech sector.
- **Skills Partnerships with Universities:** The Skills Chapter identified a need for fintech work placements for university students. This would improve the standard of graduates and give fintechs affordable access to talent as they grow. CFIT can build and provide this brokerage service – first steps should be to pilot a fintech industry programme with one or two universities and a small cohort of fintech firms.
- **Retraining and upskilling:** The Skills and Talent Chapter recommended the creation of an independent Steering Committee to support the retraining and upskilling of adults in support of fintech. CFIT can lead the Steering Committee and bring together stakeholders from across fintech, financial services and providers of education (including universities, alternative providers, professional bodies) to understand the current and future skills needs. It will ensure the fintech workforce can access tailored and appropriate learning materials to keep up with the pace of change in fast-moving tech.

National Connectivity

- **Constructing and coordinating the UK National Fintech Connectivity Strategy:** CFIT will have responsibility for convening local and regional fintech leaders to develop and deliver the national strategy, working with stakeholders from across the UK to ensure national priorities draw on and support local capabilities. The Centre will embed local strategies in its approach through consultation and data-sharing.
- **Act as an information source:** CFIT will provide continuous insight, both qualitative and quantitative, with mechanisms in place to deliver liquidity of information to all. It would also conduct research to inform decision-making, sector developments, and underpin future policy decisions.
- **Accelerate cluster specialisms:** The National Connectivity Chapter highlights the potential benefits of CFIT actively encouraging and increasing collaboration between industry and academia to double down on cluster strengths, with a priority on developing real-world commercial applications.

Execute the 'International Fintech Action Plan'

CFIT will have to simultaneously support the export of British fintechs overseas whilst promoting the UK as an attractive investment/location opportunity for non-UK fintechs. As such, CFIT will:

Support DIT with the execution of the Fintech International Plan: To deliver its international plan of action, ownership will be maintained in DIT but CFIT will lead on agreed aspects of the action plan. This will likely include scaling up the UK's digital presence internationally through the creation and maintenance of a digital platform, identifying opportunities in growth markets and ensuring consistent and recognisable senior representation at major international fintech events.

Work with DIT to embed the voice of international fintech firms through the International Fintech Taskforce.
The purpose of the Taskforce will be to:

- Understand progress against the ambition of the UK's Fintech International Plan.
- Recommend activity that optimises the UK's international fintech focus.
- Act as amplifiers of the international global fintech brand and comms plan.
- Provide regular input to example subsector areas of international focus.
- Suggest and input into new initiatives that will help develop the fintech ecosystem in the UK and overseas.

Governance and Delivery

The fintech landscape is rich with organisations supporting the agenda. This is both a challenge and an opportunity. There is a need for better focus and coordination amongst these participants whilst also leveraging their unique capabilities and skills. CFIT is a new organisation with unique functions in the ecosystem. That said, it will look to leverage existing capability across the public, private and third sector through strategic partnerships to deliver different aspects of this agenda.

Case Study: LOQBOX

Company name: **LOQBOX**
FinTech vertical: **Credit Building**
Headquarters: **Bristol**
Office locations: **Remote**
Number of staff in the UK: **34**
If international, number of staff globally: **2 (in the U.S) and 16 in Asia (contractors)**
Number of staff hired in 2020: **17**

What problem is your company solving?

LOQBOX is on a mission to end financial exclusion globally by giving everyone the chance to achieve their goals, most of which cost money. For many people, their goals are unachievable because they have not had an opportunity to build a positive financial profile, they don't have sufficient savings, or they don't understand how to make the financial system work for them. We are a multi award-winning FinTech business that has already enabled hundreds of thousands of people to master their money while they save and build their credit score with the three main credit reference agencies.

How many UK jobs have you created in the last 2 years? Do you have any further plans to expand, either in the UK or overseas?

We have created 29 jobs in the UK, 2 in the US and have 16 FTE working in India. These are all incremental to end Feb 2019. LOQBOX is currently operating in the UK and the US. We have plans to expand our teams in both countries as well as enter new markets across the globe within the next 24 months.

Give us one or two examples of how your firm has made life easier for a specific customer

1. A customer opened a LOQBOX to deposit £40 per month for 12 months. At the end of the year, not only had they saved themselves £480 but they had improved their credit score such that they could refinance their existing car loan at a lower rate – leaving a saving of £1,400 in interest.

2. Another customer opened a £300 LOQBOX at the end of September 2020. By the end of December they noticed that their score had started to increase which was in line with their expectations. However, they have written to us to say that by the end of January (2021) their score had gone up 70 points (in total) since they started using LOQBOX, which they are quoted as saying "is actually amazing". This shows that a customer with no other credit liabilities and a goal of increasing their credit score can be achieved easily and the increase achieved is beyond their expectations.

Chapter 2

Policy and Regulation

The UK's fintech sector has historically led the way globally, including through the country's policy and regulatory initiatives, such as with the creation of the FCA's regulatory sandbox[15] and Innovation team[16], open banking framework[17], and the Bank of England's Real-Time Gross Settlement (RTGS)[18] renewal programme. This reflects a strong commitment from the Government and regulators to support innovation and competition in financial services. Indeed, appropriate policy and regulation, accompanied by a clear allocation of supervisory responsibilities, can promote innovation. It gives innovators in companies of all sizes a clear framework within which to work, setting high standards for business practice and giving consumers the confidence to try new services and providers. Conversely, history (including recent events) reminds us that unsafe forms of innovation, and failures of financial regulation and supervision, can have serious consequences for consumer, and investor confidence.

Current Situation

Fintech is a complex, multi-layered sector with many stakeholders across government departments, financial regulators, and other regulatory bodies, such as the Information Commissioners Office (ICO). Each of those bodies have their own statutory remits, and sometimes have differing objectives and agendas. In addition, whilst some aspects of the fintech environment are specific to that

15 https://www.fca.org.uk/firms/innovation/regulatory-sandbox
16 https://www.fca.org.uk/firms/innovation
17 https://www.openbanking.org.uk
18 https://www.bankofengland.co.uk/payment-and-settlement/rtgs-renewal-programme

are cross-cutting issues that are relevant to other economic sectors as well. Any consideration of policy and regulation for fintech therefore needs to consider the wider context and economy at large.

The UK's fintech policy should be considered strategically, holistically and consistently, in a way that best supports the fast-paced development of the industry and its ability to best serve the needs of its customers. As such, the UK needs to have a clear strategy regarding fintech and implement it effectively, and in a way that keeps pace with the rate of technological developments and other emerging opportunities.

Fintech is a fast-paced sector. Policy-makers and regulators need to keep pace with the rate of change of business and technological developments and respond to emerging risks and opportunities. It is important that the future regulatory framework does not hinder their ability to do that.

“

It's great to see the Treasury seeking to support and improve the UK's position on the world stage as a growth platform for tech companies in financial services. This review, conducted by Ron Kalifa...is a brilliant opportunity to keep modernising the regulatory environment. This should lead to even more competitive products and better services for consumers, both here in the UK and beyond the borders.”

Kristo Käärmann,
Co-founder and CEO, Wise

The opportunity

Fintech (including regtech) has the potential to deliver benefits for several aspects of financial services – including promoting competition (for the benefit of consumers), improving operational resilience, helping prevent financial crime, driving efficiency in the financial services industry, and supporting financial inclusion.

As a result, fintech can be a driver of economic growth in its own right, with the UK already the home to numerous fintech and regtech companies. With adequate policy and regulation, the UK can create an environment in which fintechs continue to be encouraged to establish and scale new businesses.

The UK is currently looking to strengthen its global trading relationships, particularly following its exit from the European Union. Fintech can itself be a key element of such relationships, and the UK should expressly include fintech in its new trade agreements, so as to allow global access both to and from UK fintechs and financial institutions.

The UK should now consider what its future framework for the regulation of financial services (including fintech) should look like. Through initiatives such as the Future Regulatory Framework[19], this opportunity is already being pursued. In this Chapter, we are proposing the creation and implementation of a new fintech policy and regulatory strategy for the UK. Our proposal has three components:

1. delivering a digital finance "Package" that creates a new regulatory framework for emerging technology;
2. implementing a "Scalebox" that supports firms focusing on innovative technology to grow; and
3. securing fintech's position as an integral part of the UK's trade policy.

19 https://www.gov.uk/government/consultations/future-regulatory-framework-frf-review-consultation

Recommendation 1:

Deliver a digital finance package that creates a new regulatory framework for emerging technology

At present, numerous stakeholders have responsibility for policy and regulation that impacts the fintech sector, including Government departments (such as HM Treasury, DIT, DCMS, DWP, Cabinet Office and BEIS), the financial regulators (the Bank of England, PRA and FCA) and other regulators such as the ICO and CMA. Some of these – including HM Treasury, DIT, the Bank of the England and FCA – have dedicated fintech teams.

The various stakeholders are subject to different mandates and each have their own objectives and policy agendas. The current vertically-focussed approach to fintech policy and regulation means that it is difficult to bring these strands together and ensure co-ordination on cross-cutting issues. If a single body existed for such purposes, this would help fintech firms during their growth phase, as they may have limited resources at their inception and would find it easier if the number of bodies they have to deal with is reduced.

Having a clear focal point in Government that deals with cross-cutting issues on digitisation and digital finance would be helpful for the fintech sector. Public leadership on such issues is crucial for the UK fintech sector to maintain its pre-eminence, as many of the benefits of innovation promised by fintech will not be realised without well-developed and implemented regulation, public policy and infrastructure. In the rest of this section, we set out how a forward-looking approach to the policy and regulatory framework could deliver for digital finance.

Recommendations

1.1 Develop a comprehensive fintech strategy

The Government should develop a comprehensive fintech strategy covering all the matters in this Chapter, as well as cross-sectoral matters that are not specific to financial services, such as data. The fintech strategy should have clear objectives, actions and timescales. There are already numerous initiatives underway and the aim should be to ensure that work remains impactful, co-ordinated and consistent.

In developing the fintech strategy, the Government should determine whether any key areas should be identified for particular support – and what the nature of that support should be. These areas of focus could be particular sub-sectors (such as regtech or cyber security) or specific topics (such as – where appropriate – those discussed in the sub-recommendations further below and, in particular, financial inclusion). In this Chapter, we have referred to these areas as “Priority Fintech Areas”.

There is a strong case for strong public infrastructure, that supports private innovation, to be included in the initial “Priority Fintech Areas”. Our contributors emphasised the crucial importance of two areas, digital identity and data standards, as foundational public infrastructure for the digital age. Private sector actors are not well-placed to develop and implement such standards and initiatives, yet the opportunities that they create are profound. The fintech strategy could consider what additional support may accelerate the development of such infrastructure, for example, cross-Government work under way on digital ID and efforts by the regulators on regtech. Similarly, fintech has demonstrated the fantastic potential of Smart Data and AI in realising the benefits of big data and data analytics. Creating a solid base for the safe and responsible use of such tools in public policy will support the scaling-up of innovations to date, both within financial services and in the economy more broadly.

Case study

Digital ID

Encouraging progress is being made to develop a trust framework for digital ID to verify individuals by the Cabinet Office, DCMS and the Digital Identity Strategy Board. In addition, work is being done by Companies House, the Bank of England and the Global LEI Foundation to establish a basis for digital ID verification of corporates. However, the fintech sector is calling for a digital ID solution which encompasses both individual and corporate IDs. Creating different regimes in respect of the two may be a missed opportunity to take a consistent approach to digital ID. Appropriate collaboration and cooperation between the relevant entities and, if necessary, financial regulators, could be driven by the Digital Economy Taskforce to ensure that these two workstreams are aligned as far as is possible.

1.2 Adopt specific policy initiatives that will help create an enhanced environment for fintech, and where appropriate, help to drive global initiatives in fintech

Specific examples of such policy initiatives, that together could comprise a digital finance package, are set out in the sub-recommendations below.

Sub-recommendations:

1.2.1 Develop and implement a data strategy

Develop and adopt common data standards

Common data standards, widely available and without undue barriers to their use, are crucial infrastructure for the digital age. The UK has made some progress in adopting common financial data standards – but there is substantial scope to increase their coverage and adoption. If common data standards can be implemented more widely, that could be a foundation for more significant improvements in digital financial services.

Delivering financial sector data standards requires strong public sector leadership. Faced with uncertainty about picking the right standard, private sector actors lack incentives to develop standards on their own, and do not always have the means to implement them uniformly. Development and adoption of standards is also costly and many firms are understandably reluctant to fund this individually or in consortia. Our contributors noted the recent Bank of England and FCA efforts to help develop data standards and were in favour of the Government doing more to support those efforts.

Create a Digital ID

The Government should establish and develop a digital ID trust framework. We found that the following principles are accepted by fintechs as being fundamental to a successful digital ID verification infrastructure:

1. Corporate ID (as well as ID for individuals) should be within the scope of the trust framework. A Corporate digital ID, for example, could have helped accurately verify companies applying under the covid business loan schemes.
2. The solution should be digital-based, rather than a digital workaround that essentially mirrors paper-based approaches.
3. The infrastructure should be attributes-based. The technology should allow for only relevant attributes (e.g. age) to be checked and without the attribute itself moving around on the system – thereby reducing the proliferation of confidential information and leading to better data security and traceability.
4. There should be no centralised pool of data. A distributed or federated model means that data is not concentrated in one "honey pot", giving increased security and privacy. It may also be of comfort to consumers.
5. The proposition should be scalable and flexible.
6. The proposition should be user-friendly and inclusive. Digital ID verification must occur quickly and seamlessly for each relevant transaction where it is used.
7. Engagement of the public is vital to their faith in and adoption of digital ID. Access to data for verification purposes should be controlled and consented to by the individual and should be limited to what is truly necessary for the data recipient to have the level of assurance that they need to transact.

In order to deliver against these objectives, the Government should:

1. collaborate with the fintech sector at all stages. The fintech sector would be an ideal place to pilot and develop digital ID and many fintechs already have digital ID initiatives underway;
2. leverage existing structures in the fintech sector: The existing regulatory sandbox and the proposed digital sandbox referred to in recommendation 2 could be successfully leveraged as the framework develops; and
3. drive the consistent provision of data by Government departments. The Government has a crucial position as both an enabler and user of a successful digital ID verification infrastructure. This means the Government using data from trusted private sector sources to better verify users of government services and also sharing citizens' data with the private sector where appropriate. More work needs to be done to identify and remove the barriers preventing such data sharing.

Recent work by the Cabinet Office, DCMS and the Digital Identity Strategy Board is welcome, particularly with regard to the establishment of a trust framework for digital ID which includes corporate IDs. Innovate Finance and UK Finance have established an industry-wide taskforce to coordinate engagement on digital ID across the financial services sector with these departments.

Prioritise Smart Data[20]

As the National Data Strategy policy paper acknowledges, data and data use give rise to opportunities. However, emerging businesses, such as fintechs, often do not have sufficient access to data to develop innovative products and to compete with established firms with large customer bases and data sets. The Government should consider a citizen-centric approach where individuals have broad rights to control, use, share, view and revoke their access to data. It follows that citizens should be able to use their data freely with and

20 Smart Data is the secure and consented sharing of customer data with authorised third-parties who then use this data to provide innovative services for the consumer or business, such as automatic switching and account management. https://www.gov.uk/government/consultations/smart-data-putting-consumers-in-control-of-their-data-and-enabling-innovation

between the different businesses they deal with and that citizens and businesses need the functionality to effectively share data across the whole data economy.

In order to address these concerns, the Government should:

a. Take a cross-sectoral approach to Smart Data. The Government needs to facilitate (or, where appropriate, mandate) the sharing of data not just within sectors (such as Open Banking), but also between sectors.[21] This is similar to the approach being taken in other jurisdictions.[22] As part of its Smart Data initiative, BEIS has brought together a cross-sector working group – which is welcome – but it focusses on only five specific existing initiatives within communications, energy and finance, and we need to ensure that the interests of the fintech community are taken into account. If firms that hold very significant amounts of data (such as large technology companies) are not brought into the fold, this could create an un-level playing field. BEIS has committed to legislating, when Parliamentary time allows, to make it possible to mandate involvement in Smart Data initiatives in other sectors and across the economy.

b. Continue to progress Open Finance as a mandatory regime and in alignment with other Smart Data initiatives. Although some of our contributors wanted more concrete evidence of successes from Open Banking, the majority agreed that Open Finance is worth pursuing within the context of the wider Smart Data project.[23] Our contributors suggested a number of principles which they considered important:

   i. Providers of financial services data should make that data available to appropriately licensed third parties on a non-discriminatory basis.

   ii. Open Finance should inter-operate with other open data initiatives in the UK. (The UK should also decide whether to align with international initiatives – such as the EU's Digital Finance Strategy.)

   iii. Implementation should be funded primarily through an annual levy on all participants – to ensure that both providers and consumers of data have a stake in the success of the initiative. There should be no charge for 'basic' access (core data and services) but firms could be allowed to charge for 'premium' services, ensuring an incentive to collaborate and innovate.

   iv. The scope should be broad (i.e. no product should be ruled out), so that consumers and businesses will eventually be able to access their financial data through a "one-stop shop" aggregator.

   v. Implementation should be phased, with access to products and functionality being developed under an agreed roadmap over an appropriate timeframe. The implementing body should have the power and flexibility to agree variations to the roadmap, if required, within certain parameters.

   vi. Users should have "write access" – i.e. be able to provide instructions to a provider via a third party as well as to access data.

   vii. The approach to implementation should be outcomes-focussed. Ideally, a set of desired outcomes should be agreed at the outset, and a methodology for measuring those outcomes put in place.

c. Any implementation should have financial inclusion at its heart, but the needs of vulnerable customers should be recognised, and addressed where possible.

21 For example, the Bank of England's proposal for an open data platform for SME finance represents the need for access to multiple sources of digital information across different sectors (in this case to build a portable credit file).

22 The EU's Data Strategy recognises the need to look at "data spaces" across multiple industries. Australia has taken an approach that encourages multiple sectors to work on open data solutions in tandem.

23 Many of the contributors have responded to the FCA's Call for Input on Open Finance and are looking forward to seeing the FCA's feedback statement in Q1 2021

d. Ensure the consistency of data protection legislation and open data models. Data protection law needs to be consistent with data portability and real time access across the economy[24]. Engagement with the ICO will be necessary to clarify how GDPR and data protection rules interface across sectors and with the need to innovate. Resource will also need to be made available for this.

Consider the regulatory implications of Artificial Intelligence (AI)

The use of AI and machine learning models by financial services institutions and fintechs offers potential efficiency gains and may improve the quality of decision-making (e.g. through use of better data). However, there can also be significant risks where AI models are involved in making decisions about consumers, including concerns regarding bias, discrimination or lack of fairness. There may be insufficient understanding of the impact of these models, which could lead to inadequate management and oversight of these issues.

The position of AI under the existing regulations should be considered further, and in particular the following steps should be considered:

a. There should be specific guidance about the application of the PRA and FCA rules. There is a lack of clarity over how the existing rules should be applied in the context of AI, particularly in relation to the following issues, as identified by our contributors:
   - governance and accountability;
   - "explainability" and customer understanding – i.e. how firms explain to their customers how decisions were reached and to what extent AI was involved;[25] and
   - the extent of human oversight or intervention required in the decision process.

b. There should be additional guidance to clarify the application of the Equality Act and the Data Protection Act, including how such legislation interrelates with relevant sector-specific regulation.

c. The Government should consider undertaking a review of the future legal and regulatory framework for AI.[26] This could include the matters set out above, and also other issues such as the role of ethics in AI models – for example: should there be regulation of models that might satisfy the requirement for "fairness" but nevertheless could lead to bias or discrimination?

24 For example, the position under the UK's version of the GDPR could be made clearer in relation to the use of Blockchain technology and whether it meets the requirements for personal data erasure. The requirement for all data to be "necessary" for the purpose for which it is collected makes it difficult for firms to experiment with personal data sets, including using AI, where the outcome of that experiment may be unclear when the data is collected.

25 There is already some ICO guidance in relation to explainability and AI: https://ico.org.uk/for-organisations/guide-to-data-protection/key-data-protection-themes/explaining-decisions-made-with-artificial-intelligence/

26 The Artificial Intelligence Public-Private Forum recently established by the Bank of the England and the FCA should be able to provide substantial support in pursuing these objectives (although it is recognised that the public policy issues posed by AI go beyond the remit of those bodies alone).

Case Study

Recordsure

Company name: **Recordsure**
FinTech vertical: **Regtech**
Headquarters: **London**
Office locations: **Leeds, Cambridge**
Number of staff in the UK: **49**
If international, number of staff globally: **4**
Number of staff hired in 2020: **12**

What problem is your company solving?

Recordsure brings intelligent insight and targeted interventions to customer conversations.

We're a RegTech to our core and have an unrivalled understanding of the language of financial services.

We help companies understand their interactions, against a backdrop of compliance and risk management, to improve customer outcomes at scale.

Our industry-leading speech and documents analytics, based on RS-built AI, enable firms to identify how well regulation and internal processes are being followed, flags risks to the business and drives good customer outcomes.

Our industry-specific solutions allow companies to move from random sampling 5% of interactions to 100% coverage and removal of blind-spots.

How many UK jobs have you created in the last 2 years? Do you have any further plans to expand, either in the UK or overseas?

Recordsure has seen over 20 new colleagues join the company in the last two years.

We are headquartered in the UK, but have created a strategic alliance with KPMG to focus on the Australian market. That relationship is a great example of our partner ecosystem, where we team with likeminded and complementary companies to take our products to new markets and sectors. Through that partnership we have seen our products deployed into two of the major Australian banks and with a third that's currently in deployment.

Our partner ecosystem will be complemented with targeted geographic expansion. We expect to establish on-the-ground presence in Australasia and North America over the next 12-18 months.

Within the UK, we will continue to invest in our R&D and product capabilities. Innovation is at the heart of what we do and we will look to retain and recruit the best possible talent.

Give us one or two examples of how your firm has made life easier for a specific customer

Through successful implementation of our product with Tier 1 Banks in both the UK and Australia, Recordsure has enabled firms to be more efficient with their review process and to achieve 100% coverage of their customer conversations.

This means that firms using Recordsure technology can be confident that every single instance of sale or advice is monitored, transcribed and analysed for process adherence, taking a true risk-based approach to supervision. We deliver high-quality, non-invasive recording solutions that complement rather than replace incumbent technologies.

Our Voice product offers over 90% transcription accuracy in financial services domain conversations, delivering greater than 85% accuracy consistently across our conversation classification and topic labelling Machine Learning models. Such accuracy is above human-only norms.

We have processed in excess of 15 million documents in the past year and, for one client, recorded and analysed over 17,000 hours of regulated advice meetings for another. As our clients normalise their processes in a post-pandemic world, these numbers are forecast to more than double in 2021.

We have introduced up to 50% efficiencies to regulated advice remediation reviews. Recordsure products are responsible for delivering greater than 99% coverage of all regulated advice conversations for our clients, with customer decline rates tracked at less than 1%.

Our products are now geared for the world of the distributed workforce. Firms using Recordsure technology have more coverage, faster processes at scale and at a cost that is lower than the human-equivalent approach.

1.2.2 Promote the digitisation of financial services

There are a number of ways in which the digitisation of financial services can be used to improve the environment for fintech, provide better services to consumers and drive efficiency in the financial sector. We have identified the main examples below.

Develop a Central Bank Digital Currency

The introduction of a Central Bank Digital Currency (CBDC) would be a significant development which could help support the adoption of new technologies (e.g. blockchain) in financial services. However, it is essential to have a clear focus and outcome when starting a CBDC project. Different considerations arise for:

a. Wholesale CBDC

The consensus seems to be that delivering a wholesale CBDC would be the "easiest" option and offer a short-term win. A wholesale CBDC, in effect, already exists through central bank reserves. The advantages of a wholesale CBDC could include atomic settlement, leading to zero exposure risk as well as increased resilience and less system downtime.

b. Retail CBDC

A retail CBDC would have a number of benefits – such as providing individuals with access to central bank money in digital form and creating a more efficient and resilient payment system. The UK would be able to take advantage of its mature payment network, and to build a more efficient and innovative structure on top of it.

There are various models for retail CBDCs. Of those options, the UK should consider adopting a hybrid model – i.e. one where the CBDC is a claim on the central bank but intermediaries on-board and handle the retail payments. This would ensure both resilience and speed, and the involvement of Payment Service Providers as intermediaries should allow greater flexibility and scope for innovation. At present, there are no functioning retail CBDCs that follow the hybrid model, so the UK would become the first jurisdiction to introduce this innovation. The Bank of England has signalled its interest in such a model through its March 2020 discussion paper 'Central Bank Digital Currency: opportunities, challenges and design'.

Irrespective of delivery models, a primary consideration for a retail CBDC is interoperability – i.e. between the CBDC and other forms of money. Without this, widespread consumer adoption is unlikely. Our contributors also felt that consumer privacy would also be a critical issue for a retail CBDC.[27] Collaboration between HM Treasury, the Bank of England and the ICO will be essential in order to ensure the development of an effective approach to the CBDC.

Support the digitisation of Financial Markets Infrastructure ("FMI")

Investment exchanges and FMIs (including central counterparties, central securities depositories and settlement systems) are critical to the management of risks within the financial system, including through their arrangements for dealing with the consequences of a default by a participant in the system. Exchanges and FMIs must be able to adapt to (and use) changing technology within an appropriate regulatory framework.

Modernisation of UK law to allow UK FMIs to process digital instruments is essential. To this end, the UK should:

a. pursue plans to fully dematerialise securities, in line with the requirements of Central Securities Depositories Regulation (CSDR). Even though the UK has now left the EU and is not obligated to implement CSDR, this approach will still have

27 Cash payments allow for anonymity and there is concern that retail CBDC could lead to increased data being held on the consumer. One option would be to follow the proof of concept developed by the European System of Central Banks, which explored allowing users to remain anonymous for low value transactions, but still maintaining AML/CTF checks for larger transactions, and ensuring that identity and transaction history were not available to central banks or the intermediaries.

benefits for digital finance in both markets. These plans should be at a pace no less advanced than that applied within the EU, and should consider shareholder rights and the role(s) of intermediaries;

b. review CSDR, Financial Collateral Regulation (FCR), and Settlement Finality Directive (SFD) legislation to allow digital technology;
c. embrace digital technology in post-trade processes;
d. review the laws providing protection to exchanges and FMIs (and the transactions affected through their systems) from adverse insolvency law judgements, in particular where the trades are affected and settled using new digital technologies;
e. consider how the trading of tokenised securities (e.g. company shares on a blockchain-based register) can be facilitated on investment exchanges – and in particular, whether and how blockchain-based ledgers can be used to record transactions in securities; and
f. consider whether the operational burdens of transaction reporting requirements under MiFID and EMIR may be alleviated by the creation of digitised systems.

Introduce a new UK regime for the regulation of cryptoassets

The UK has the potential to be a leading global centre for the issuance, clearing, settlement, trading and exchange of crypto and digital assets. The UK already has a strong position that it should capitalise on, but other jurisdictions are developing their own propositions (such as the EU's Markets in Crypto-Assets (MiCA) proposal) and the UK needs to act quickly to preserve its position. The UK should aim to be at least as broad in ambition as MiCA – but should also consider whether it can develop a bespoke regime that is more innovation-driven.

A bespoke regime for cryptoassets should adopt a functional and technology-neutral approach, in line with the principles of the current regulatory framework, as well as the concept of "same risk, same regulation", while being tailored to the risks arising from cryptoasset-related activities. It should also be flexible enough to deal with future challenges – such as how Decentralised Finance (DeFi) should be regulated.

Based on the evidence of our contributors, many crypto providers would positively welcome the opportunity to be regulated. Consumers are also likely to benefit if crypto firms become subject to enforceable regulatory standards.

In January 2021, HM Treasury published a consultation paper and call for evidence in relation to the UK's regulatory approach to cryptoassets and stablecoins.[28]

HM Treasury's proposal is that regulation of crypto would initially focus on the use of stable tokens used as a means of payment, and that those tokens will become subject to an authorisation regime. To a longer timetable, the Government will consider the case for bringing a broader set of cryptoasset markets actors or tokens into such a regime. While the proposals are still at the consultation stage, and the proposal only initially covers some cryptoassets, both the initiative and the Government's stated objective of considering the case for a wider regime are welcome.

The UK should also:

a. continue to participate in the Global Financial Innovation Network (GFIN), and where appropriate, lead the development of policy and regulation in the areas of crypto and digital assets – such as efforts to develop a global taxonomy for cryptoassets (e.g. following the work undertaken by CPMI-IOSCO or the FSB); and
b. keep the initiatives of other jurisdictions under review, so that it can adapt to other developments in what will be a very fast-moving market.

28 https://www.gov.uk/government/consultations/uk-regulatory-approach-to-cryptoassets-and-stablecoins-consultation-and-call-for-evidence

Support Environmental, Social and Governance (ESG)

ESG is a relatively new area of financial regulation which gives rise to the need to obtain and process substantial amounts of data, typically from different sources. Fintech has an important role to play, as relevant ESG data could be collected and processed efficiently using technology solutions. However, there are a number of obstacles to this, including differing data reporting standards, terminology and taxonomy requirements (which make it difficult to create comparable metrics), increasing volumes of non-standardised data, large data gaps and a lack of ownership of sustainability goals by policymakers.

To address these problems, we recommend that the UK should:

a. develop a framework to facilitate sustainability-linked investments (e.g. sovereign bond or commercial debt) which link investment returns to sustainable objectives[29];

b. facilitate uniform sustainable reporting standards and terminology – including, where appropriate, adopting internationally recognised standards[30]. There should be a common reporting template for the industry. Areas for standardisation could include reporting for climate accounting and benchmarks for how assets under management are scored for ESG factors;

c. create a centralised electronic register for ESG data;

d. the regulators should be encouraged, as part of their remits, to consider the integration of relevant ESG matters in their activities; and

e. allocate responsibility for advancing national sustainability initiatives, and co-ordinating objectives and actions across Government, to a Government department or other body – such as the Digital Economy Taskforce referred to above. To this end we note the inception of the Climate and Environmental Risk Analytics for Resilient Finance (CERAF)[31].

29 We note the Government's recent announcement that the UK will, subject to market conditions, issue its first ever Sovereign Green Bond in 2021.

30 In relation to international initiatives, we are aware of the IFRS Foundation consultation and the FCA's prominent role in co-chairing an IOSCO Sustainability Taskforce workstream

31 https://webarchive.nationalarchives.gov.uk/20200930165505/https://nerc.ukri.org/research/funded/programmes/ceraf/

1.3 Consider whether any aspects of fintech regulation may require adjustment

Alongside the digital finance package as described above, consideration should be given, including through the 'Future Regulatory Framework' initiative, to whether any aspects of existing financial regulations require adjustment. It is an opportune time to consider areas of existing regulation which have not fully kept pace with innovation. This could consider the specific implications for financial services of the cross-cutting topics set out above, while at the same time building on the numerous initiatives underway in Government and at the regulators in a consistent and coherent way. Various other initiatives underway (such as the Treasury Select Committee inquiry on the Future of Financial Services and Lord Hill's review of the UK listings regime) could consider how to facilitate future targeted and timely adjustments of regulation, lest future developments lead to evidence of regulation acting as an unjustified obstacle to innovation or competition.

The following issues may be worthy of consideration:

Payments regulation

Payments is an area of high impact and rapid growth with potential for huge expansion in terms of competition, innovation and services provided to customers. The UK is in a very strong position to take a leading role in reshaping the landscape for payments regulation in order to create an environment for fintechs to develop and thrive. This is something the UK has already started doing through Open Banking and is looking to enhance further through the calls for evidence for the Payments Landscape Review and Open Finance.

However, our contributors identified a number of problems within the existing regulatory framework that create barriers to new market entrants, hinder innovation and ultimately have a negative impact on customers. It was noted that the regulation of payments services has historically taken the form of prescriptive rules rather than principles. Recently, principles-based regulation has been extended to payments services, to sit alongside the prescriptive rules. Although a move towards principles is welcome and should help make the regime more adaptive to rapid change, there are still concerns about the scope and detail of the existing rules. In particular, some of these rules are felt to inhibit the effective operation and regulation of key aspects of payment services – such as the rules relating to Strong Customer Authentication, acquiring, and capital and liquidity.[32]

The Government and the regulators have begun considering these issues, including through HM Treasury's ongoing Payments Landscape Review. Bank of England's financial Policy Committee (FPC) shares our view that the current regulatory framework for payments will need adjustment in order to accommodate innovation in this sector. In the view of the FPC, this should reflect the financial stability risk of payments activities and whether they are part of one or more systemic payment chains.[33]

Fintech, new technologies and markets

Many of our contributors identified areas of existing financial services law that they thought should be reconsidered in order to keep pace with technological and market developments. For example, in adapting to covid, firms identified alternative approaches that could be taken to the existing rules without creating undue risk (e.g. to allow virtual working methods). Our contributors felt that regulations should be technology-neutral and that there were some aspects of regulation which are preventing certain technologies from being used. For example, each of the Central Securities Depository Regulations (for settlement) and EMIR (for clearing) omitted to include digital alternatives.

Another issue is to make sure that regulation is "right sized" according to the nature of the business in question and the

32 Capital and liquidity requirements for payments firms were cited by contributors as being an example of the need to have proportionate regulation.

33 Financial Stability Report, Bank of England, December 2019.

specific risks it presents. As the business grows, the regulatory requirements should correspondingly grow to address the additional risks that the business presents. We note that positive steps are already being taken in relation to the question of "right sizing"; for example, the Bank of England is proposing a simpler prudential regime for smaller banks and building societies.

Navigability

The PRA and FCA rules were each felt to be difficult to navigate and (in particular) to search. The PRA has discussed the challenge of the complexity of its rulebook and possible implications for barriers to growth.[34]

The rules and handbooks could be digitised and made more accessible and easily-navigable.

1.4 Use fintech to support financial inclusion and capability

Fintech is a key part of the financial inclusion agenda. Fintech firms are well equipped for speedy, short-term responses, such as that required by covid. However, our contributors highlighted many factors that can obstruct financial inclusion or are areas for improvement. In relation to credit, it was felt that: assessing credit worthiness based solely on credit ratings is inappropriate for those with minimal credit records; a cap on interest rates for high cost credit does not increase the availability of low-cost credit, and a competitive APR for high risk lending is necessarily higher than mainstream lending; and there is no established process for onward referral of rejected retail credit applicants. Contributors also felt that credit unions, who have a critical role in financial inclusion, have underdeveloped potential for partnership with fintechs.

34 https://www.bankofengland.co.uk/-/media/boe/files/speech/2019/credit-union-meets-robot-speech-by-sam-woods.pdf

To address these issues, we recommend that the Government and regulators should:

a. continue with, and expand, the financial education programme, to include financial education in schools, benefits of digital products and climate risks;

b. consider offering incentives to fintechs to focus on particular demographics or areas to improve financial inclusion. Fintechs are ideally placed to service these areas quickly, but there is currently no incentive to offer low cost credit or to target areas in need of steps to bolster financial inclusion; and

c. encourage incumbents to engage in financial inclusion and facilitate a retail lending referral scheme (e.g. an improved version of the Bank Referral Scheme for SMEs)

d. look to take steps to deal with some of the specific problems identified in the context of financial inclusion – such as whether fintech can be used to support the delivery of the Post Office Card Account or similar alternatives, and whether cashback without a purchase (which is currently prohibited under PSD2) should be allowed under the Payments Review.

Similarly, as part of the its review of credit unions announced in the Spring Budget 2020, the Government should consider how to encourage credit unions to engage with the fintech sector.

1.5 Create a new Digital Economy Taskforce framework to deliver the fintech strategy

A new taskforce should be established with a clear mandate to deliver the Government's stated objectives for fintech through executing an impactful and coherent fintech strategy, and ensuring a joined-up policy approach on cross cutting issues related to digitalisation and digital finance. In this Chapter, we have referred to the new taskforce as the "Digital Economy Taskforce". The Digital Economy Taskforce should:

a. be established and mandated by the Government;

b. have its own, clearly specified objectives, which might include:
   i. assisting in the development of the UK fintech strategy;
   ii. creating and putting into effect an implementation plan for the UK fintech strategy; and
   iii. identifying and procuring appropriate expertise from both the public sector and, where appropriate, private sector, to support these objectives;
c. be temporary in nature – i.e. it should only exist until such time as the fintech strategy has been fully developed and the Taskforce's objectives implemented;
d. be required to have regard to certain specified matters when undertaking its role – including, in particular, the promotion of financial inclusion objectives;
e. have an independent Chair, with appropriate experience across the key areas of fintech (including financial inclusion, DLT, AI, regtech and payments) with the ability to work across the Government;
f. have a core membership made up of secondees from Government departments and regulators. These should be senior individuals with authority to make commitments on behalf of their organisation; and
g. consult with specialist working groups, as required.

There are models of different departments and organisations successfully being brought together in this way to achieve a specific purpose. The current approach to preparing the UK for COP26 is an example of this.

The Digital Economy Taskforce would not substitute for, or change, existing departmental and regulatory responsibilities. It would, rather, develop the overall objectives and strategy as well as provide a way to address the key foundational and cross-cutting issues on which a successful strategy would depend.

1.6 Develop fintech expertise

The Government and regulators could improve their technical understanding of fintechs' business models and markets – particularly among supervisors and staff outside the innovation teams.

In order to assist with upskilling, consideration could be given to:

a. the creation of expert forums, in which the authorities would participate;
b. the use of reverse secondments (i.e. from fintech firms to the authorities);
c. Government and regulators providing regular training to their staff regarding fintech businesses and markets and to help encourage cross-sector insight;
d. ensuring sufficient resources and staff at the authorities, which may require additional investment and recruitment; and
e. the sharing of technology knowledge and experience within organisations.

There are already good examples of steps being taken within the Government and the regulators to improve their relevant skills and knowledge in this area, but more can still be achieved.

Recommendation 2:

Implement a "scalebox" that supports firms focussing on innovative technology to grow

The FCA's regulatory sandbox has played an instrumental role in supporting innovation and encouraging UK fintech business. The UK is a welcoming business and regulatory environment for fintechs. However, as other jurisdictions are launching their own initiatives, the UK needs to take steps to ensure that its own offering remains market-leading.

Recommendation:

Support fintech businesses and innovation through a "scalebox" arrangement under which firms focussing on innovative technology receive additional support (particularly in their growth phase and/or in relation to the Priority Fintech Areas).

Implementing recommendations:

2.1 Enhance the regulatory sandbox

The regulatory sandbox should be enhanced in the following ways:

a. by being available on a rolling basis, rather than through time-limited windows;

b. by offering support even where the proposal is not the first of a kind but is still providing and/or delivering an innovative proposition to the market; and

c. by creating a dedicated space in the regulatory sandbox for the Priority Fintech Areas, with specialist support where necessary.

The FCA's regulatory sandbox is already the busiest sandbox facility in the world, and these proposals may increase demand for it. If necessary, some reconsideration of the FCA's objectives may also be necessary to allow the FCA to operate in the manner described above.

2.2 Create a new, permanent "digital sandbox" to encourage collaboration

There is a need for broader support, beyond the limited remit of the regulatory sandbox.

The FCA and the City of London Corporation have recently collaborated in order to deliver a "digital sandbox", with the aim of supporting innovation at the "proof of concept" stage. This sandbox has concluded its pilot phase and is currently limited to three specific use cases. We anticipate – subject to the results of the pilot – that an offering of that nature, but on a broader scale, would be likely to benefit the industry as a whole.

We recommend that a permanent "digital sandbox" should be created. The digital sandbox should:

a. focus on the Priority Fintech Areas (but without excluding the possibility of supporting other areas);

b. allow digital collaboration, access to synthetic data sets, design and deployment on open source and open architecture "plug and play" at international, national and sectoral level;

c. in the short to medium term, be led by the FCA. Through its TechSprint programme and related initiatives, the FCA has extensive experience in convening the financial services industry to help solve industry-wide problems and is best-placed to further develop the design and nature of a permanent digital sandbox offering. However, there are also additional approvals that are often required within organisations to participate in projects lead by the regulator. In the medium to long term the initiative is likely to benefit from being housed within a neutral, non-regulatory body, whilst still involving the active participation of the FCA. The FCA would offer guidance, co-ordinate with other stakeholders and assist with the creation of synthetic data sets and realistic inputs;

d. allow access not only for fintechs, but for established regulated firms who have innovative technologies or products that they wish to test;

e. provide access to a broader range of tools, including professional and other business services;

f. have a high degree of transparency, where appropriate – with the results of its work potentially being available to the public or to approved observers; and

g. involve the provision of physical spaces or "hubs" for this collaboration to take place. It is important that the digital sandbox should be available to participants across the UK and geographically-spread hubs could make the digital sandbox more widely accessible.

2.3 Take steps to support partnering with fintech and regtech firms

Fintech and regtech firms and larger, incumbent financial institutions recognise the benefits that partnering with each other can provide – e.g. in helping fintechs to scale and in expanding incumbents' product lines quickly. However, the participants in our consultation suggested that levels of partnering remain low and that there are obstacles to entering partnerships, including the complex procurement processes of incumbents (driven by regulatory requirements), a concern on the part of incumbents regarding the risks (particularly given that the burden of regulatory risk is likely to fall on the incumbent) and a lack of opportunity for fintechs and regtechs to demonstrate or experiment with their solutions to eliminate incumbents' concerns about risk.

In this recommendation 2, we have suggested the introduction of a digital scalebox which should provide a forum through which incumbents and fintechs/regtechs have more opportunity to work together. However, there are also a number of other steps which can be taken to support partnering. We recommend that the Government and/or regulators consider the following:

a. encouraging regulated firms, as part of their operational risk assessment, to actively, and periodically, consider whether they are supporting their operational resilience with effective technology (including regtech). Firms could be reminded, for example, that reducing operational risks can lead to capital benefits;

b. non-regulatory financial incentives for partnering, such as tax relief;

c. providing additional support for fintechs and regtechs to inform and standardise the onboarding process – for example, through extending the Fintech Pledge[35], creating an interactive online tool to facilitate partnering and promoting the standardisation of onboarding process for fintech partners;

d. introducing an accreditation regime for unregulated service providers (i.e. the many service providers who do not require authorisation from the PRA or FCA, but whose support is essential for many financial institutions). We note, for example, the joint BEIS-DCMS recent announcement of a Digital Markets Taskforce and a code of conduct that would apply to large technology companies. It may be worth considering an accreditation regime for unregulated service providers, although it should be noted that it would not be appropriate for the financial regulators to perform such a role;[36]

e. creating clear obligations for unregulated service providers in relation to outsourcings. Although there are already detailed outsourcing rules that apply to regulated firms in relation to outsourcing, regulated firms have reported that unregulated service providers (who are not themselves subject to the jurisdiction of the PRA or FCA) are not always willing to comply with those requirements. We suggest that such providers should themselves become subject to a direct obligation to comply with the outsourcing rules when they provide services to regulated financial institutions.

2.4 Provide additional regulatory and supervisory support for regulated firms in the growth phase

UK authorities provide support for regulated firms. The PRA's New Bank Start-up Unit offers continued support for banks after authorisation, including through the New Bank Start-up Unit helpline and access to a dedicated PRA supervisor. The FCA has facilities such as the Direct Support Service, but market awareness of this service is somewhat limited. Consideration should be given to whether such support needs to be extended to other areas.

However, firms need to be confident that they understand how the rules apply to them at each stage of their growth. To this end, the PRA has already set out its proposed approach to supervising new and growing banks[37]. However, the UK regulators should consider offering additional support to regulated firms in their growth phase.

In particular, while maintaining their focus on impartiality and ensuring a level-playing field in line with their objectives, regulators could be more pro-active in promoting ongoing dialogue with individual firms on how their organisational arrangements should evolve as their businesses grow, while clarifying the different roles of regulators and regulated. This would be support of a similar manner to that which the regulators provide to firms when they are seeking authorisation or participating in the regulatory sandbox. There may also be a role for trade associations and other stakeholders in providing support to firms on compliance issues.

It is also important to recognise that the PRA and FCA do not have a "no failure" policy in relation to the firms they regulate. It is in the nature of innovative sectors that they may be subject to relatively high rates of failure, and regulated fintech firms may still fail, notwithstanding the additional assistance recommended in this Chapter.

> "The world changed in 2020 and the fintech industry experienced a further boom as a result. Companies have accelerated adoption of technology and revised how they operate to suit new working environments. Much of that focus has been on remote working and front-end digitalisation. In 2021 the regulator-driven challenge is to ensure appropriate oversight of risk and compliance across interaction channels to deliver great customer outcomes and experience. This requires firms to continue to tune and optimise their operating models and embrace and embed fintech at the heart of their strategies."

Joe Norburn
CEO, Recordsure

35 The FinTech Pledge is a pledge entered into by the UK's five largest banks to (amongst other things) provide clear guidance to technology firms on how the onboarding process works and to provide clarity to tech start-up firms on their progress through the onboarding process. This pledge could be extended to cover other types of financial institution, in addition to banks.

36 That role would be better suited to a separate body, including potentially the national co-ordinating body referred to in the National Connectivity Chapter above.

37 https://www.bankofengland.co.uk/prudential-regulation/publication/2020/new-and-growing-banks

Recommendation 3:

Secure fintech's position as an integral part of UK trade policy

Having nearly finalised the "rolling over" of EU trade agreements during 2020, the UK is currently looking to new negotiations in 2021 to deepen its global trading relationships, and is engaged in negotiations with a number of other jurisdictions to agree trade deals. In July 2020, DIT established a number of sector-specific Trade Advisory Groups ("TAGs"), whose principal purpose is to provide the blend of strategic and technical expertise required to ensure the United Kingdom's trade negotiations are able to progress at pace. The Financial Services TAG is composed of industry leaders including those from the fintech sector. Ongoing industry engagement is essential to ensure the views of businesses are represented in future agreements.

Access to international markets and customers is very important to the fintech community, particularly when it comes to raising finance. Given that a proportion of the fintech community will be impacted by the UK's departure from the European Union, the fintech community would benefit significantly if the UK was to:

a. develop a coherent and consistent global trade policy in relation to fintech and digital matters; and

b. secure commitments that would benefit fintechs in its future trade agreements and through other bilateral mechanisms.

The UK is now free to pursue a strong fintech agenda in its trade agreements, and the fact that it is negotiating several agreements at the same time means that it can pursue a coherent policy which can be put into effect globally. Alongside pursuing trade liberalisation in areas of interest to fintechs, there may also be an opportunity to expand regulatory cooperation – whether within or outside trade agreements – as it affects fintechs.

The UK regulators have already been making progress in building relationships with their counterparts in other countries with regard to fintech and financial innovation.

Similarly, the UK Government has agreed "Fintech Bridges" with Australia, China, Hong Kong, Singapore and South Korea. Each fintech bridge is unique, but they typically allow access to events, meetings and networking opportunities, referrals to streamline regulatory approval, introductions to buyers, investors, trade associations and institutions, advice and one-to-one mentoring from fintech specialists and discounted "soft-landing pads", grants or subsidies.

Trade agreements could support some of the other initiatives mentioned elsewhere in this Chapter. For example, in relation to data, the trade agreement between the USA, Mexico and Canada (USMCA) contains a commitment under which the parties agree that, to the extent that a party chooses to make government information available to the public, it shall endeavour to ensure that the information is machine-readable and open format and can be searched, retrieved, used, reused and distributed. There is also a commitment to co-operate in identifying ways to expand access to and use of such data, with a view to enhancing and generating business opportunities, especially for SMEs. The UK-Japan CEPA (which builds on the EU-Japan EPA) also contains provisions on data, notably a ban on data localisation. Access to data is extremely useful to fintechs; for example, access to large data sources is needed to allow artificial intelligence programmes to train themselves. Finally, alongside the signing of the UK-Singapore FTA, the two countries agree to begin negotiating a Digital Economy Agreement in 2021. If the UK can enter into commitments of this nature with other large economies and markets, this could be of great benefit to the fintech community.

Recommendations:

3.1 The UK should make fintech an integral part of its trade policy

3.2 The UK should continue to establish Fintech Bridges with other countries

The UK should:

a. further develop its global trade policy in relation to trade, investment and fintech, ensuring a coherent and consistent approach.

b. Thoroughly review commitments made in other agreements to access their ongoing effectiveness in meeting sector needs and establish where they could be improved; and

c. strive to include similar, or better, commitments in ongoing and future trade agreements.

Skills & Talent

The fintech industry is strategically important for the UK's economic growth and job creation. By 2030, forecasts estimate that its direct GVA contribution to the UK economy will be £13.7bn, with job creation contributing to 70% of this. Yet these positive growth projections are being threatened by a potential skills deficit. Access to qualified and suitable talent remains one of the biggest challenges for UK fintech. The barriers span both domestic skills shortages and the need to access foreign talent seamlessly.

The evidence shows that there needs to be targeted interventions to address the fintech skills gap in the UK. Recruitment data from across fintech, tech and financial services confirms that it would be wrong to assume that addressing the needs of either the tech sector or financial services sector would have any impact on UK fintech development. Fintech firms have unique talent demands. Not only do they require technology and data specialists, but in order to support successful and sustainable growth, scaling fintechs are also looking for experienced managers and financial services specific knowledge.

In 2020, 43% of job adverts from UK fintech scaleups[38] were seeking data skills, 44% technology skills and 35% business skills[39]. However, we know that the UK is lagging behind the competition for this specialised talent – ranking 24th globally when it comes to data proficiency, 23rd for technology and 19th for business[40]. It is therefore necessary that the UK considers how to strengthen its position in these areas.

> "Deep expertise in artificial intelligence, data and machine learning are in short supply within the UK."
>
> **Farzana Choudhary**
> Associate Director, People Operations, OakNorth

> "The main skill in demand is the ability to handle data and the ability to quantify and make decisions based on data."
>
> **Nicholas Taylor**
> Public Affairs Manager, Revolut

38 A fintech 'scaleup' is defined as an enterprise with average annualised growth in employees or turnover greater than 20% per annum over a three-year period
39 Fintech Review acquired data and analysis
40 https://www.coursera.org/gsi

To this effect, the Skills and Talent Chapter has focussed on recommending actions which support:

- Retraining and upskilling adults
- Enhancing access to global talent
- Growing the pipeline of domestic talent

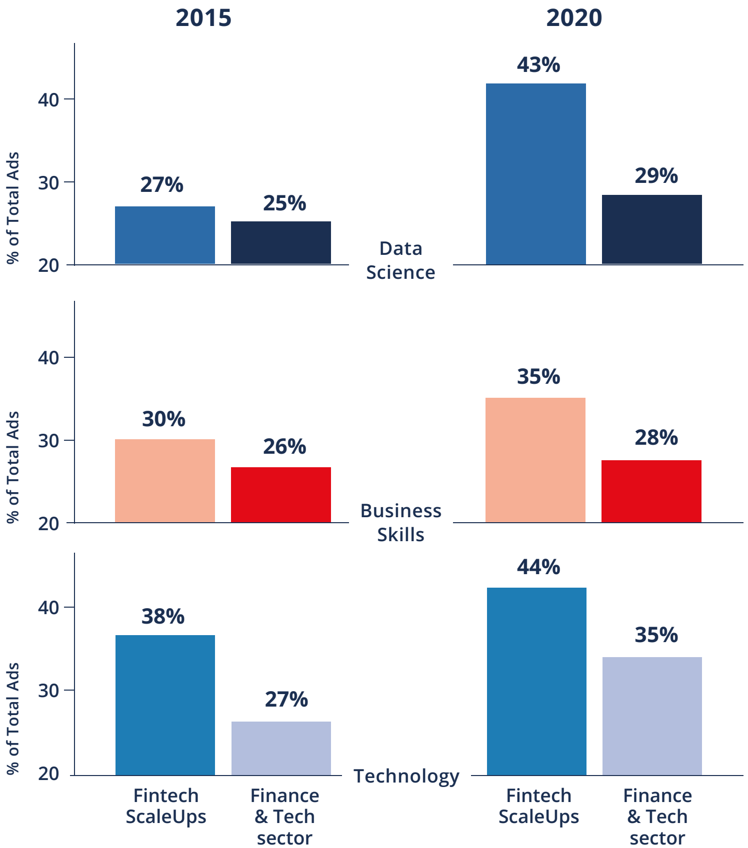
If implemented, the recommendations will together achieve the critical dual imperative of supporting a strategically important job creating industry, whilst simultaneously building the resident talent pipeline and supporting the levelling up agenda.

Retraining and upskilling

Current situation

Technology is changing the nature of work and is driving the demand for new and higher skills. It is estimated that 90% of the UK workforce will need to be reskilled by 2030[41]. Dividing this up, 5 million workers will go through a radical job change and will require "retraining", while over 25 million will require "upskilling" as their role evolves[42].

Figure 1: Comparison of the skills required across the fintech, tech and financial services industries in the UK



41 https://www.cbi.org.uk/articles/learning-for-life-funding-a-world-class-adult-education-system/
42 https://www.cbi.org.uk/articles/learning-for-life-funding-a-world-class-adult-education-system/

Covid has intensified this challenge. It has turbocharged the need to create new jobs in new sectors. And it has accelerated the need for leaders to retrain and upskill their employees. Fintech is not immune. This is an issue that effects almost everyone. Fintech firms not only need to acquire new talent, they also need to focus on retaining and future proofing their existing workforce, through further training and upskilling opportunities.

There are common challenges holding fintech firms back from investing in training. In particular, small and medium-sized businesses (SMEs) find it difficult to reskill and upskill their staff due to reduced capacity and budgets. This is an acute problem for UK fintechs where 81% of firms are made up of less than 50 people.

Those engaged in the Review cited two key challenges:

1. **Cost:** the cost of courses is considered too high, especially for executive education.
2. **Quality:** there's a lack of clarity as to which training providers are credible and which offer the right types of courses.

Policy mechanisms, such as the apprenticeship levy, have been designed to support companies overcome these challenges. However, to date fintechs have struggled to utilise the apprenticeship system, especially for existing staff. This is because the length of the programmes (minimum of one year) are considered unsuitable for the speed and pace of the sector[43].

The opportunity

Covid has put technology at the centre of our lives. As other parts of the economy retract due to the impact of the pandemic, technology remains resilient. In 2020 global fintech investment increased by 14% from 2019[44]. And this momentum has continued into 2021 – already, over $1bn of investment has been committed to UK fintech alone[45].

As it scales, the UK's fintech industry can be a major job creator, fostering new roles and supporting the retraining and upskilling of huge talent pools across the country.

Singapore is a good example of how retraining and upskilling can be addressed. The government provides a number of free or subsidised courses for citizens such as:

- Crediting employees so that they can pick up soft skills required in the workplace and can be used in conjunction with any other funding.
- Supporting employees early in their career to pick up skills which will be in demand in the future.
- Running a programme for people over the age of 40 looking to upskill or retrain by subsidising up to 90% of course fees.
- Using a recognised qualification to train, develop, assess and recognise individuals for the key competencies that companies look for in potential employees.

> "Retraining and upskilling individuals already in the workplace will be vital."
>
> **Tera Allas CBE**
> Director of Research and Economics, McKinsey & Company

> "The current apprenticeship framework is inflexible. Fintechs ... require more flexibility and fluidity."
>
> **Lord Jim Knight**

43 https://www.cbi.org.uk/articles/learning-on-the-job-improving-the-apprenticeship-levy/

44 https://www.innovatefinance.com/capital/

45 https://www.innovatefinance.com/uk-fintech-shines-brightly-amid-the-Covid -gloom/

Fintech is a growth sector. It has the potential to create new highly skilled jobs across the UK. However, its firms have limited capacity to drive effective retraining and upskilling efforts at the rate and extent to which it is needed.

Recommendation 1:

Retrain and upskill adults to meet the needs of UK fintech by ensuring access to short courses from high-quality education providers at low cost.

This should be delivered by an independent Steering Committee. The Steering Committee should be tasked with:

- Understanding the current and future skills gap.
- Communicating these needs with government and education providers.
- Endorsing and promoting appropriate courses.

It is suggested that CFIT (CFIT – see page 13) should lead the Steering Committee and that stakeholders from across fintech, financial services and providers of education including universities, alternative providers, professional bodies etc should make up its membership. The Steering Committee should meet quarterly. It should be led by an independent, respected industry leader.

It will be important that the Steering Committee leverages existing industry practices e.g. from the Scaleup Institute, Financial Services Skills Commission, Department of Education, etc.

The objective of the Steering Committee will be to ensure that the UK's fintech workforce can access appropriate and tailored educational resources to keep up with the pace of change in this fast-moving sector.

The creation of the Steering Committee will:

- Ensure UK fintech can access appropriate resources and learning materials to keep up with the pace of change in fast moving tech.
- Support formal dialogue between the fintech community, financial services and providers of education to ensure courses are meeting industry needs.
- Provide material discounts on the basis of volume.
- Pilot training programmes for new entrants into fintech (see case study).

It is recommended that while CFIT sponsors the Steering Committee , for it to be successful, attention should be paid to the following points:

- **Appointment of a respected and independent chairperson.** The chair will liaise with CFIT and members to ensure that the Steering Committee fulfils its objective.
- **Combined engagement from the fintech industry, incumbent financial institutions and providers of education.** The Steering Committee should also include stakeholders from traditional financial services firms who are experiencing new skills requirements due to disruption from tech.

Case study

Financial services (FS) to fintech Learning Pathway

Rationale:
Review data shows that the key talent need for fintech development is deep financial services domain experience and people management experience. There are two challenges to accessing these skills: (1) the big 'FS' to fintech journey for senior executives is not an easy one – the demands are very different; and (2) there is no real connectivity between the two.

Proposal:
Recommendation 1 would see FS talent effectively channelled into the fintech industry via outplacement services. FS talent would complete a Learning Pathway, funded through redeployment services.

Benefits:
Matches specific fintech need to those with significant domain experience; creates alternative career paths after 'big FS'.

Enhanced Access to Global Talent

Current situation

The UK's January 2021 immigration system marks a significant step forward in UK immigration. Taken together with the impressive innovation seen by the Home Office in managing the impact of the pandemic, the UK is presented with a unique opportunity to lead globally, with targeted and relevant immigration policy to attract and retain UK fintech.

UK fintech relies on access to highly skilled talent from across the globe to drive its growth and consequent job creation in the UK. As such, for the UK to continue to attract these job creators, and to remove any reason for them to relocate existing operations to other jurisdictions, optimal access to international talent is needed.

The gap between what fintech firms get in the UK's new immigration system, and what is needed to perform at their optimum has narrowed. However, as one gap narrows, another has widened significantly. Fintech firms must now navigate the immigration system for EU talent for the first time in 40 years – at c.28% of the non-UK workforce[46], reliance on EU talent is high. That will increase pressures already felt for the sector.

Fintech companies engaged in the Review have pointed to aggressive attempts by other markets to attract them through initiatives that make access to talent easier. For example in France (Tech Visa), Canada (Global Talent Stream) and Australia (Global Talent Programme). These options will be attractive to fintech firms, not because they offer perfect solutions, but because each offers some mitigation against either cost, administrative burdens or inflexibilities in the current system for this highly innovative talent to engage in spin-off activity.

46 https://issuu.com/innovatefinance/docs/supporting_uk_fintech_-_accessing_a_ded57ca9f07d0a

The opportunity

Fintech is currently one of the fastest-developing industries in terms of job creation. The evidence gathered from the Review shows a clear correlation between access to skills and the ability for fintech firms to scale up, and in turn create local job opportunities across all regions. Without access to highly skilled international talent, the dual imperative of supporting a strategically important, job-creating, industry whilst simultaneously building the resident talent pipeline and supporting the levelling up agenda cannot be achieved.

The international talent fintech firms is trying to attract has highly sought-after skills globally and can choose where to go. Moreover, it is no longer simply a question of attracting talent. In a post-pandemic virtual ecosystem, fintech firms can choose to hire people and locate their operations elsewhere with fewer barriers – or indeed, with incentives. The UK must be bold in these transformed times. Without adequate interventions, the UK will also face a fintech talent retention challenge.

There are examples of good practice globally, but no single jurisdiction gets this exactly right, yet. The UK's 2021 architecture is now firmly in place. With end-to-end online processing (for EU nationals currently) being delivered at record speed, and further enhancements planned over the next 5 years, the UK is perfectly poised to lead global innovation and drive flexible, expedited access to international talent to ensure that the sector's economic growth and job-creating potential is realised. The opportunities for improvement are:

1. **Practical:** access to international talent should be faster and more flexible to support the innovative, experimental talent that propels fintech growth.
2. **Perceptual:** the UK must position itself against competitive markets through deliberate brand building.

The UK should introduce measured, targeted and controlled changes to its immigration system that build on existing visa schemes to deliver innovation, flexibility and resilience.

Recommendation 2:

Create a new visa Stream to enhance access to international talent for fintech scaleups

The UK should deliver flexibility, cost efficiency and accessibility for fintech scaleups to upend global competitor markets, by introducing a bespoke 'Fintech Scaleup Stream' within existing routes such as Global Talent, and by enhancing existing routes, within the UK's 2021 immigration architecture:

1. A 'Fintech Scaleup Stream' within the Global Talent (or proposed Unsponsored) route will support scaleup growth and allow globally mobile talent with highly sought-after skills to join high potential firms, without unnecessary burdens on the firms / individuals, or impeding creative activity. Those with a job offer at the required skills level (RQF6) from a recognised UK fintech scaleup would automatically qualify for the Fintech ScaleUp Stream under either the Global Talent, or proposed Unsponsored Route, without the need for third party endorsement. This would be a world-leading offering and would position the UK as the top destination for the most globally talented in the sector.
2. Across the immigration system, (building for example on the former Inward Investment role offering in the Skilled Worker Route), the UK should actively seek to attract job creators, by introducing enhancements and 'reach out' strategies to support fintech scaleup growth. In practice, this would mean:

- A deliberate government strategy to market this bespoke visa offering and attract fintech talent to the UK, focusing in particular on talent hotspots.
- Support for fintech firms to engage with the immigration system.
- A more progressive approach to payment options for fees and charges (such as the Immigration Skills Charge), mindful of the impact on small and high growth firms, in particular.
- A strategy for ongoing engagement with the fintech sector to understand the needs of the sector and the gaps in current policy.
- Practical enhancements to the Skilled Worker Route including the prioritised roll out of end-to-end online processing to non-EU nationals, which will bring processing times below 72 hours in most cases; the ability to move roles under the same employer *without* requiring a fresh immigration application; the ability to start employment with a new employer on the issue of Certificate of Sponsorship, rather than the later grant of application for in country applicants.

"This is a very important recommendation. We have lost people in the past due to lengthy visa processes in the UK."

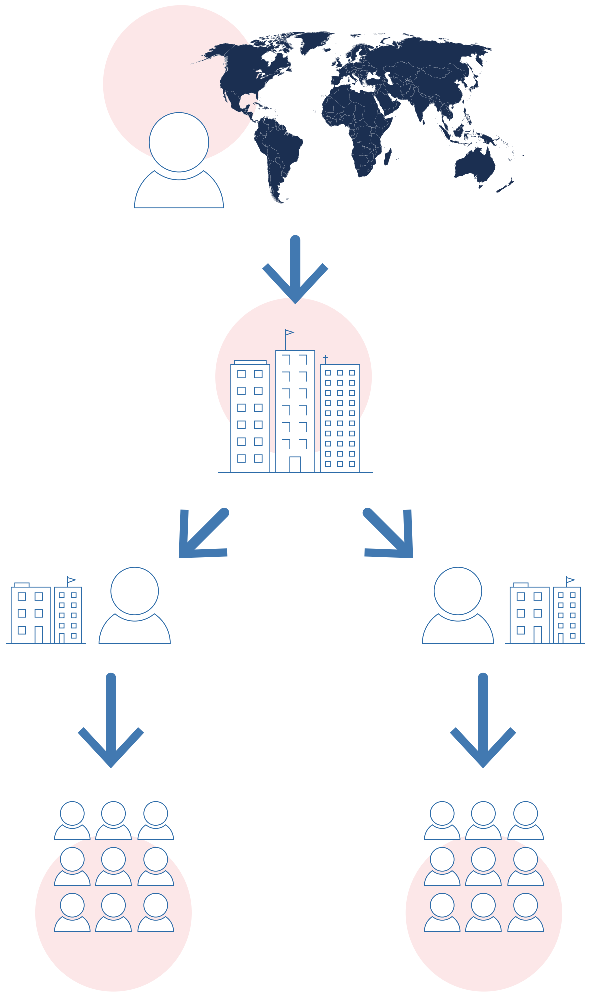
Jeff Lynn
Executive Chairman & Co-Founder, Seedrs

Implementing these two approaches will allow for continued evolution and improvement.

Brexit gives Paris, Berlin and other European fintech hubs a window to capitalise on uncertain messaging. In order to sustain its global dominance in fintech, the UK needs to strengthen its position on immigration or risk a significant shortage in human capital. The benefits of this approach include that:

- it innovates amongst competitors and is relevant in this disrupted market; and
- it delivers maximum flexibility to business, but still allows the government to flex and contract across all routes as market conditions determine.

Figure 2: Intellectual Capital, attrition and multipler effect



Underpin skills and grow the pipeline of talent

Current situation

The UK's education system provides a solid foundation, ranking 11th in the World Economic Forum's Global Competitiveness Index. Yet there appears to be a mismatch between the skills and knowledge being delivered and the needs of our society. This is an issue which spans both further education and higher education.

Further Education

Over the last decade, the UK has failed to adequately invest in further education. And there has been a decline in the take up of technical and vocational learning, from 3.1m learners to 2.1m[47]. Due to the coronavirus pandemic, around 700,000 young people in the UK have left education and are facing an extremely difficult jobs market[48]. The youth unemployment rate reached 14.2% in 2020[49]. In response, the Government is refocussing efforts on the potential for further education to embed digital skills and support the recovery. Recent announcements have included new apprenticeships and the introduction of T Levels. Both of which have been designed to be work-focussed and reflect the needs of industry. The Government has also committed to investing in young people's employment prospects through the Kickstart Programme.

Fintech firms have had some success using these programmes to develop their talent pipeline. However in order to have real impact these efforts must be scaled across the sector in a more meaningful way.

DirectID

"DirectID was very excited to apply for the Kickstarter scheme to bring onboard new employees. We did this for two reasons. The first is that as a growing firm, with projects incorporating data science, AI, machine learning, across our different teams in Finance, HR, Marketing, Sales, Customers, Product and Engineering, we are continually tested on how much can be achieved with a small team.

The second reason is that as a company we are committed to working with our local communities and young people in particular to illustrate to them not only what it is like working for a technology firm, but to show what a great sector Fintech can be to work in."

Curve

"Curve values diversity and inclusion, and we've had tremendous success with apprenticeship programmes in the UK, bringing us some valuable employees that have continued to grow and develop in their careers with us. We will continue our apprenticeship programme but to have real impact in the UK, we need it to be scaled in a more significant way."

47 https://www.gov.uk/government/speeches/education-secretary-fe-speech-with-social-market foundation?utm_source=3d8b2e7a-4bc0-47b2-822c-1fc489d8608e&utm_medium=email&utm_campaign=govuk-notifications&utm_content=immediate

48 https://www.bbc.com/news/business-53985144

49 https://commonslibrary.parliament.uk/research-briefings/sn05871/

Higher Education

Fintech leaders engaged in the Review felt that universities had failed to adapt their services and were not producing the skills required for the jobs of today or tomorrow. They also said they would choose to employ someone with work experience above anything else. Unsurprisingly then, 34% graduates are in non-graduate roles[50] and 51% of people believe that higher education did not prepare them for their career[51].

However fintech has started to make its way into academia. For example, Imperial College London, University College London, University of Exeter, University of Manchester and University of Stirling all offer dedicated fintech masters programmes. Further efforts are required to make the fintech industry more visible and accessible for students and new graduates.

"Work experience is even more important than writing a thesis."

Douglass Orr
Founder and CEO, Novastone

"For students to be more employable in the fintech environment, technical skills alone will not suffice. Firms are looking for soft skills obtained on the job. A potential solution would be to have a mandate for internships backed by the Government to ensure students develop soft skills to make them more employable."

Eric Mouilleron
Founder and CEO, Bankable

"Academia is working closer with industry, but this needs to increase through better cocreation, understanding, and collaboration in order to provide agile and growth oriented digital workforce.

"Our work centres on strong collaboration with local, national, and international fintech networks. Specifically addressing the need to inform students of the hard and soft skills required to adapt and grow in line with the rapid pace of innovation witnessed in financial services."

Dr Karen Elliott
Senior Lecturer (Associate Professor) in Enterprise and Innovation (Fintech), Newcastle University Business School

50 https://www.gov.uk/government/news/major-overhaul-of-higher-technical-education-announced

51 https://www.pearson.com/news-and-research/the-future-of-education/global-learner-survey.html

Case study

FinTech @ Alliance Manchester Business School, University of Manchester

In December 2019, the University of Manchester received a £2.5m donation from UK fintech Greensill. The donation was made with the intention of boosting the region's capacity and capability in fintech and to enable the University to drive an ambitious fintech research and training agenda. It has already resulted in more students taking on internships in fintech firms, as well as securing full-time positions in the sector upon graduating[52].

"At Alliance Manchester Business School, we're on a dual mission. We are developing cutting-edge research to support the fintech revolution. We are also dedicated to educating the next generation of analysts, managers, stakeholders, regulators, investors, and entrepreneurs."

Professor Markos Zachariadis
Greensill Professor in Fintech and Information systems, Manchester Business School, University of Manchester

The opportunity

In order to increase UK productivity, it is vital that the transition from education into the world of work improves. As it stands, productivity is only 4% higher than the level it was in 2018[53]. Across further education and higher education, there needs to be much stronger alignment with the economic and societal needs of the nation.

Opportunity exists to bring students closer to the fintech industry by embedding work placements within further and higher education courses. This will support students to accrue the technical and soft skills required by companies and build a network to land a good job. They will also support companies to get early access to talent and train them according to their needs.

More is needed to help young people understand the opportunities in fintech. And fintech leaders need more encounters with students throughout the curriculum.

Recommendation 3:

Build a pipeline of fintech talent by supporting fintech scaleups to offer embedded work placements to Further Education and Higher Education students and Kickstarters.

52 https://www.alliancembs.manchester.ac.uk/news/manchester-a-clear-choice-for-fintech-focused-mbas-/

53 https://www.gov.uk/government/speeches/education-secretary-fe-speech-with-social-market-foundation

Further Education

T Levels

The Education and Skills Funding Agency should support fintech scaleups to provide industry placements for T Level students.

Feedback during the Review indicated that hosting a 45-day T Level placement could be a challenge for a rapidly scaling fintech business. Placements should therefore be within the fintech industry, and rotated between fintech employers. Fintech placements could be offered to students enrolled on the digital business services and/ or finance T Level courses. The Government could also consider creating a fintech T Level.

Apprenticeships

The Education and Skills Funding Agency and National Apprenticeship Service should work with the fintech industry to examine whether an existing Apprenticeship Training Agency (ATA) could grow the number of fintech apprentices and/ or scope out the potential for a standalone fintech ATA.

ATAs employ the apprentice and work with companies who provide the relevant work placements. ATAs offers a more flexible approach to hosting apprentices for fintech firms. They also allow the apprentice to experience working with a number of different employers.

Kickstart Programme

The Government can drive Kickstart placements in UK fintech by piloting a fintech industry Kickstart scheme. The Pilot should use a digital service (similar to DCMS's Digital Boost) to allow firms to employ and match with Kickstarters quickly and easily.

Higher Education

Universities

The Government should support fintech scaleups to host university interns by providing the digital brokerage service to connect and place students with fintech employers.

In parallel, it is necessary to facilitate stronger connections with universities and the fintech ecosystem. This will not only promote fintech as a viable and appealing graduate destination, but in time, deepen relations between industry and academia which may supersede the need for a brokerage service.

Skills and Talent – Diversity and Inclusion (D&I) Considerations

The Review notes with concern the ongoing diversity and inclusivity challenges within UK fintech[54]. It makes three adjunct considerations on D&I to drive quantitative data to support research and enhanced performance across the sector.

Retraining and upskilling

Consideration: Those benefiting from discounted or free fintech courses must do so in a manner than supports D&I and provide evidence on request.

Enhanced access to Global Talent

Consideration: There is a lack of transparent data around D&I and UK immigration. The UK's quarterly migration statistic reporting should be modified to include diversity data to allow for clear benchmarking on industry D&I performance for overseas recruits and appropriate remediating measures.

Underpin skills and grow the pipeline of talent

Consideration: Those accessing subsidised interns or Kickstarters must agree to apply the benefits of the recommendation in a manner that supports D&I and to provide evidence on request.

54 https://assets.ey.com/content/dam/ey-sites/ey-com/en_uk/topics/banking-and-capital-markets/uk-fintech-census-2019/ey-uk-fintech-census-2019.pdf

Investment

"FinTech has played a crucial role in the UK becoming a global leader in Financial Services over the last decade. For the UK's financial services industry to continue to thrive, it is important that we are a destination for high growth financial technology companies by offering the opportunity to access capital and to build scale in the UK and beyond."

Sarah Melvin
Head of UK, BlackRock

The UK's fintech sector is growing fast, representing £11bn in revenue in 2019[55], up from £6.6bn in 2015, which now equates to 8% of the country's total financial services output. The high consumer fintech adoption rate[56], the supportive regulatory environment[57], and state aid schemes[58], have created a nurturing world-leading environment for UK fintechs to start-up, innovate, and promote competition. As a result, the UK currently accounts for approximately 9.5% of global fintech revenues.

Key to the country's success as a fintech hub has been strong access to private funding. In 2020, UK fintech raised $4.1bn in investment, more than the next five European countries combined[59]. However, while this has helped create a cluster of domestic champions, including Revolut and Monzo, few internationally-focused companies have emerged. It is important to support UK fintech growth at the early stage to reach these levels.

Other jurisdictions are being proactive in their attempts to attract companies to list. The UK is falling behind in offering fintechs access to public capital. The London Stock Exchange (LSE) is currently the second largest exchange in Europe (behind Euronext)[60] and ranks in the top 10 globally. From 2017 to

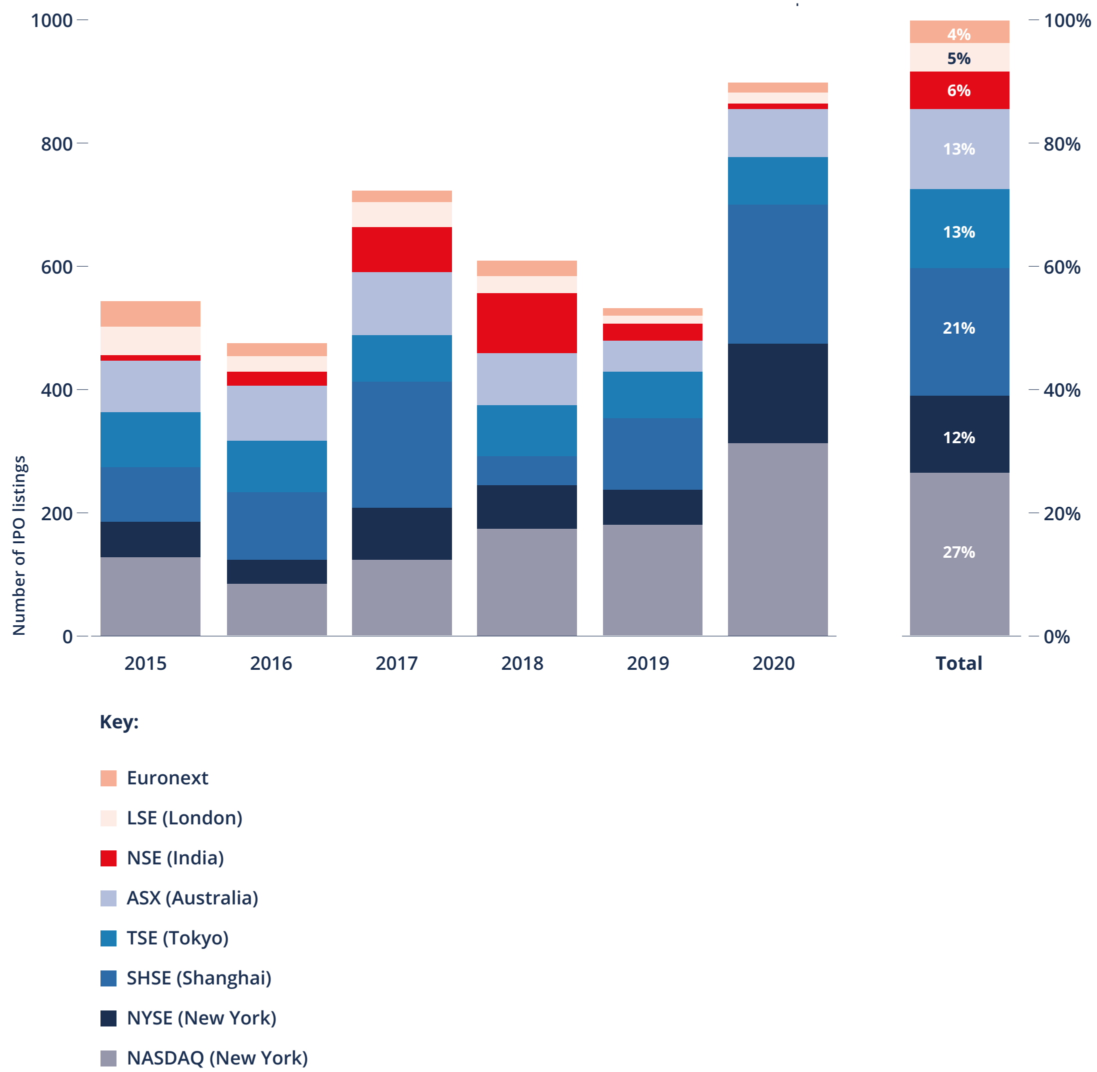
55 https://www.ey.com/en_gl/financial-services-emeia/how-fintechs-are-moving-mountains-and-moving-mainstream
56 https://www.ey.com/en_uk/ey-global-fintech-adoption-index
57 https://www.fca.org.uk/firms/innovation/digital-sandbox
58 https://www.gov.uk/guidance/venture-capital-schemes-apply-for-the-enterprise-investment-scheme
59 https://www.innovatefinance.com/capital/#:~:text=Global%20FinTech%20investment%20reaches%20%2444,increase%20of%2014%25%20from%202019.&text=H2%202020%20saw%20a%2076,a%206%25%20increase%20from%202019.
60 https://www.statista.com/statistics/693587/stock-exchanges-market-capitalization-europe/ – :~:text=Europe's biggest stock exchange is,, the Netherlands, and Portugal

mid-2019, more than £4.8bn has been raised by fintechs on London's public markets, the most in Europe, with fintechs such as WorldPay and Wise choosing the LSE as their exchange of choice. However, the LSE has seen a decline in the number of listed companies across its markets by 45% since 1997 and accounted for only 4.5% of global IPO listings between 2015 and 2020, compared with 39% in the US' NASDAQ and NYSE.

As such, it is important to act now. IPOs are thriving globally[61], driven in part by tech companies that have become indispensable to both consumers and businesses in search of digital tools amid the coronavirus pandemic and it is important that the UK seizes this opportunity[62]. With more than a third of UK fintechs surveyed in 2019 expected to undertake an IPO within the next five years[63], it is critical for the UK to bring in the necessary reforms and capitalise on this momentum, ensuring that these IPOs occur domestically.

Figure 3: IPO listings by key exchanges

Source: KPMG analysis



61 https://www.ey.com/en_gl/news/2020/10/global-ipo-activity-rebounds-sharply-hitting-historic-highs-in-q3-2020

62 https://www.cnbc.com/2020/08/05/tech-ipos-brush-aside-2020-election-concerns-coronavirus.html

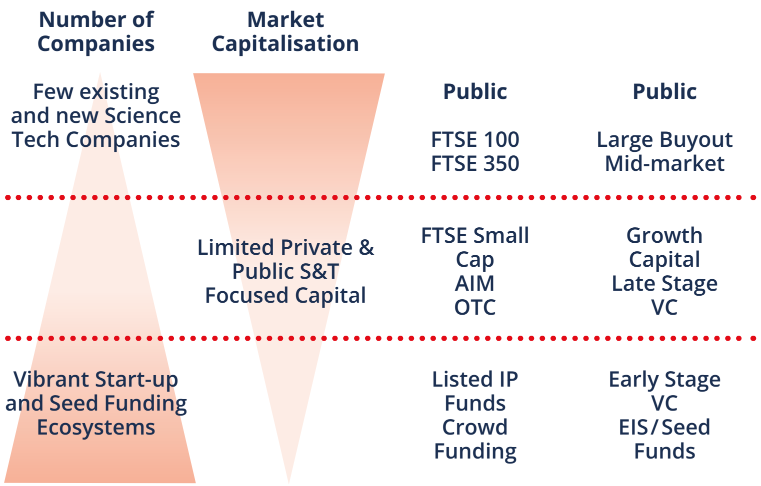
63 https://www.ey.com/en_uk/banking-capital-markets/uk-fintech-census-2019

To this effect, we have investigated the obstacles to investment during company formation and growth at three stages of development:

- Seed and start-up: Funded by state aid (e.g. EIS) and other schemes and Early Stage Venture Capital.
- Scaleup and growth stage: Funded by international Venture Capital, growth funds of Private Equity houses and Corporates.
- Maturity and expansion: Funded by Private Equity houses or Asset Managers through capital markets using both debt and equity.

Figure 4: Investors by stage of development

Source: Council for Science and Technology



By creating this knowledge ladder of domestically managed capital at all stages of company development, we can both nurture UK-born fintechs to become competitive on the global stage, and attract the best and most ambitious entrepreneurs from abroad.

R&D Tax Credits and EIS

Current situation

The UK is ranked 5th in the Global Innovation Index 2019 and in the top 10 best countries worldwide to start, locate and scale a business, and yet spends less on R&D than global competitors[64].

In addition, the current system discourages financial incumbents from effectively partnering with fintech, partially because at ownership levels above 20% the full regulatory burden of an incumbent applies to the fintech – no matter how small. UK banks are open to join forces with fintechs to develop innovative products, as seen with Barclays' fintech accelerator[65] and the recently signed Fintech Pledge[66]. UK financial services firms are eligible for R&D tax credits relating to qualifying R&D. However, unlike in the US, UK banks' technology spend related to innovation does not always qualify for significant R&D tax credits, hampering their ability to partner effectively with the fintech ecosystem.

The opportunity

Tax incentives, such as R&D tax credits and tax relief schemes can accelerate UK fintech growth by providing entrepreneurs with more reassurances that they can secure funding. There was more than £150m raised in 2018 under the EIS alone[67], giving many UK fintechs the funds necessary to scale at the early stage.

"Whilst the UK has some brilliant tax incentive schemes to encourage angel investment in early stage startups, many fintechs are excluded from the concessions available for SEIS, EIS and VCT investment. Changes are needed to ensure that fintechs can at least compete on a level playing field with other startups, in those early embryonic years of raising early stage capital."

Christian Faes
Chair & Co-Founder, LendInvest

64 https://www.gov.uk/government/publications/uk-research-and-development-roadmap/uk-research-and-development-roadmap#fn:6
65 https://home.barclays/who-we-are/innovation/barclays-accelerator/
66 https://technation.io/fintech-pledge/
67 https://www.ey.com/en_gl/financial-services-emeia/how-fintechs-are-moving-mountains-and-moving-mainstream

Expanding the Enterprise Investment Scheme and Venture Capital Trust tax reliefs and redirecting low-risk investment supported by the reliefs is expected to unlock over £7bn, per the UK Research and Development Roadmap.

Furthermore, expanding R&D tax credits could increase partnership opportunities with financial incumbents, which can help significantly accelerate fintech scaling. Expansion is already being considered under the Government's call for evidence on the scope of qualifying expenditures for R&D Tax Credits.

R&D Tax Credits and EIS Recommendations:

Broadening the application of existing UK state-aid tax incentive schemes would further encourage early stage investment, which can be surprisingly capital intensive.

Expand R&D Tax Credits to accommodate the cost of financial data sets which is critical to developing and scaling fintechs.

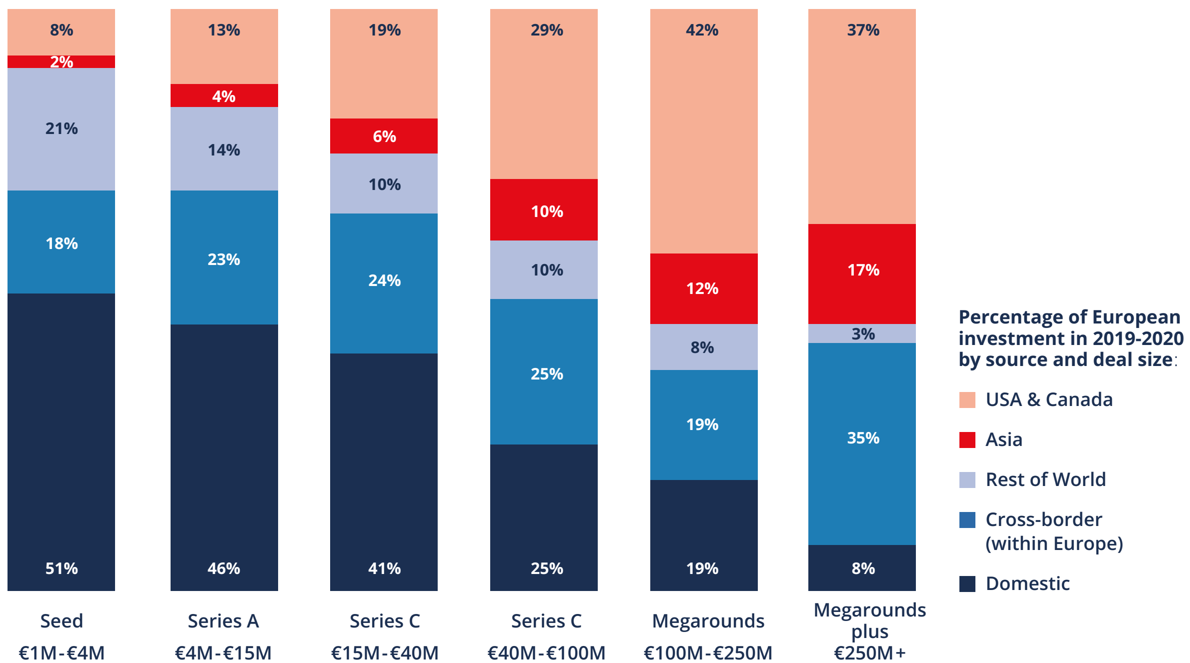
According to a survey commissioned by the Review, both founders and investors, but particularly 89% of investors, highlighted the significance of financial data sets to their business model and the level of investment required to develop these. This is because data permeates financial services, whether it is analysing payment flows, credit scoring mechanisms, understanding overall risk, and more. A tax credit relating to the costs of such data sets would provide a valuable source of cash / capital for critical investment to accelerate their R&D and successfully scale and grow.

Expand the EIS, SEIS and VCT tax reliefs to be applicable to regulated fintechs.

The same survey showed that 97% of Founders have utilised state aid schemes, including EIS, SEIS, and VCT, yet 56% highlighted that they faced a level of difficulty in accessing these schemes. 47% of Founders were concerned over the ability to qualify for tax reliefs if the business models of their company pivoted from unregulated to regulated in the future. Expanding the relief to regulated fintechs, will level the playing field for fintechs relative to other technology companies.

Figure 5: European venture capital investors are less involved in larger rounds

Source: Dealroom.co estimates



Fintech Growth Fund

Current situation

There is growing consensus that there is a private market funding gap for several high growth sectors in the UK and European market.

This was previously recognised in the 2016 Patient Capital Review[68], which led to the creation of the £2.5bn British Patient Capital[69] a year later. Whilst making good progress by using government funds to catalyse the creation of domestic VC managers, the gap is still evidenced in several more recent reviews. Importantly, UK private institutions have yet to significantly participate in fintech funding.

> "There is a huge economic and societal opportunity to be seized by backing our nation's scaleups. In fintech, as in so many other sectors, scaling businesses are innovative, productive, internationally focused and vital engines of job creation and economic recovery. But in order to seize that opportunity, as the Institute has long championed, we must take bold steps to tackle the long-standing structural problem of a lack of available growth capital. That includes leveraging institutional capital more effectively and connecting investors to the growth opportunities and clusters, such as the fintech sector, across the country."

Irene Graham OBE
CEO, ScaleUp Institute

68 https://www.gov.uk/government/publications/patient-capital-review

69 https://www.british-business-bank.co.uk/2-5bn-british-patient-capital-programme-launched-enable-long-term-investment-innovative-companies-across-uk/

Fintechs find it difficult to access the growth capital to transition beyond the start-up phase. Unregulated fintechs that wish to scale need to be capable of competing at a global level with megatechs and similar fintechs based out of other jurisdictions. They need to cater to an international market which brings with it the requirement to export early. The rate of technological development and speed of other markets to react and develop fintech products and services places particular pressure on the fintech sector. Regulated fintechs face the requirement for regulatory capital in order to become a substantial national and international business. This requirement is specific to financial institutions and creates difficulties for those smaller firms looking to develop an offer in this space.

In addition, the lack of domestic institutional capital in the fintech sector risks pushing entrepreneurs to go elsewhere for funding opportunities as they scale and mature – robbing the UK of fintech IPO activity. 53% of entrepreneurs say that their most likely exit would be to sell out to a foreign trade buyer, versus 17% to IPO or a further 16% to a UK trade buyer, per a survey commissioned by the Review. This pattern of international growth financings and/or sale to a foreign buyer is visible even among the most successful fintech companies.

The impact of this is:

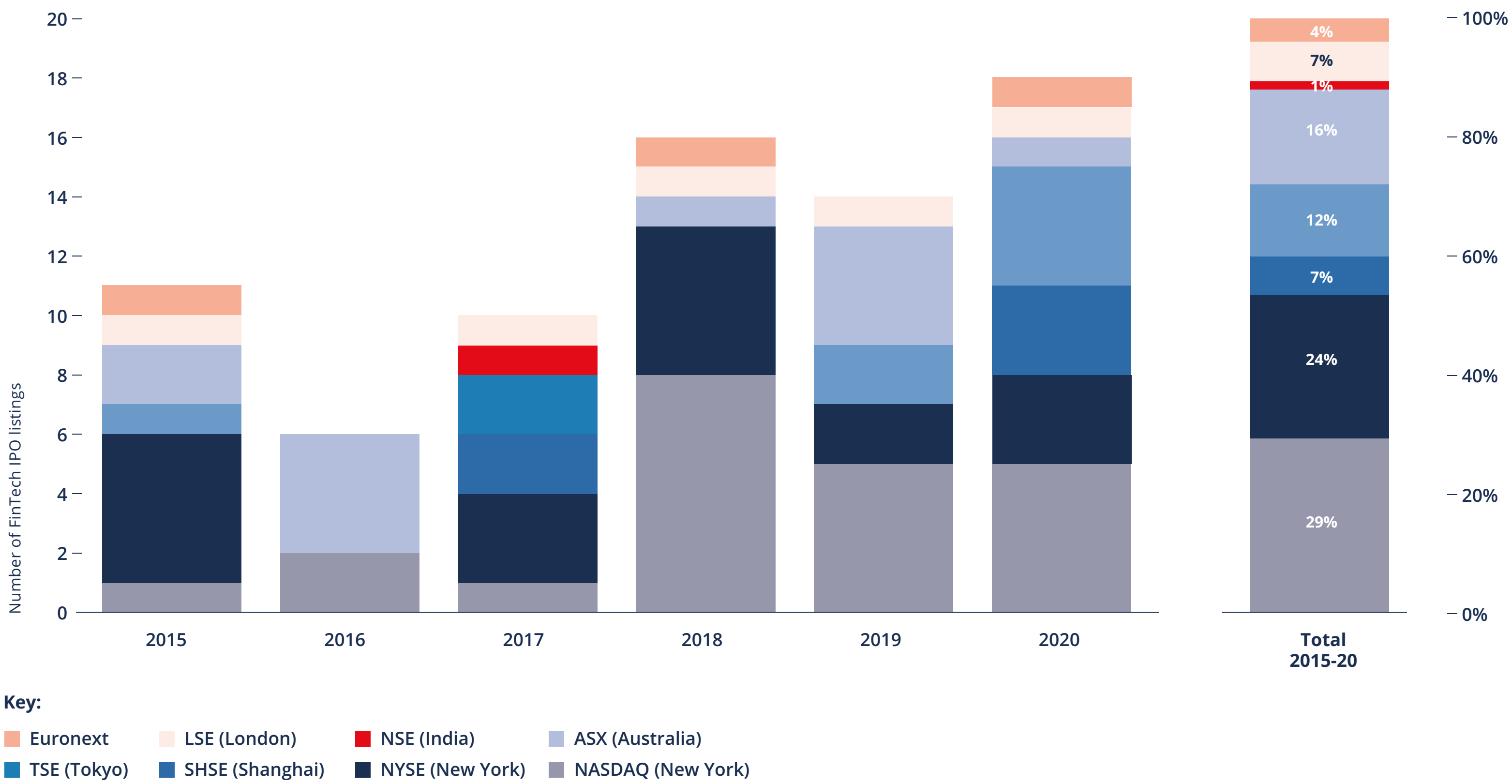
- The financial returns created by our most successful entrepreneurs go to overseas private fund managers and capital owners;
- As the best companies scale, the boards become dominated by overseas investors with significant influence and a bias for companies to exit in their jurisdictions; and
- Promising and potentially scalable companies find the struggle to fundraise for future growth so difficult and daunting that the founders and their early backers prefer to sell out than continue to build out their companies to maturity and market leadership.

As a result, the fintech sector has not yet created the level of publicly listed players that have been launched onto other markets. An analysis of the last six years of listings shows that the LSE has captured 5 out of 75 main market listings, or 6.7%, which is just under a third lower than our market share of fintech overall.

Out of 19 respondents to a survey commissioned by the Review, 74% still felt that external regulatory or government intervention would be needed to unblock participation in private growth capital by UK institutional investors, particularly DC pension schemes. A similar proportion (72%) felt that a dedicated pool of institutional capital (i.e. a Fintech Growth Fund) would be most impactful in filling this gap.

Figure 6: Fintech IPO listings by key exchanges

Source: KPMG analysis



The opportunity

At present, investment into the UK fintech sector has been led by international sources of capital. An analysis of investment into UK fintech companies demonstrates that the majority of investment over the past five years has come from non-domestic capital[70]. And these foreign investors are enjoying the proceeds: in the last 10 years, fintech investment achieved 2.7x return on average, with the largest 10 fintech companies achieving returns of 4.2x[71]. Encouraging domestic investment and in particular that of institutional capital would allow us to retain these proceeds and could also go some way towards plugging the UK pension shortfall that has reached approximately £5 trillion[72].

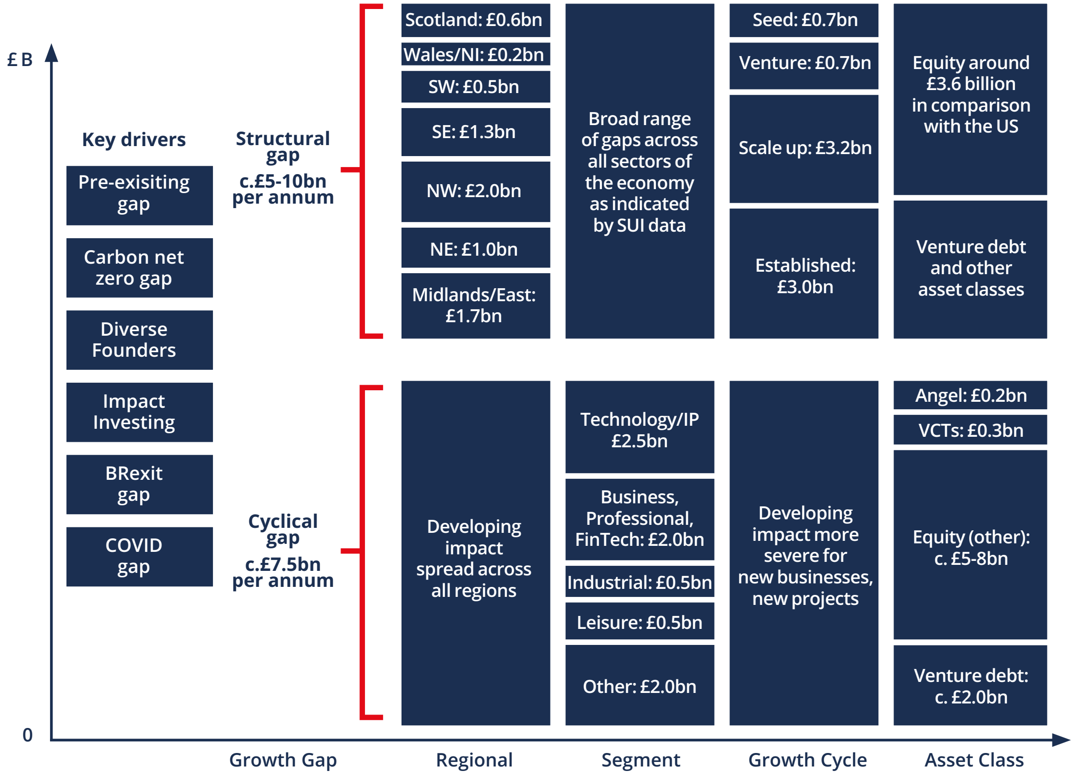
The June 2020 Growth Capital report[73] confirms in more detail that there is a Series B+ funding gap in the UK and identifies that the fintech sector in particular could be a £2bn per annum growth investment.

What is vital to understand is that the capital is already available. There is c.£1.6 trillion[74] of investments from Association of British Insurers (ABI) participants that is already exposed to large established technology assets, but has yet to translate to fintech. Moreover, a significant proportion of that investment is not held in the UK and is invested internationally.

The opportunity is clear. More domestic sources of funding backing the fintech sector would drive UK economic growth. Unlocking a fully-fledged fintech ecosystem delivers job creation, skills and talent development; overall market attractiveness; export potential; and tax revenue benefits. In 2019, it is estimated that fintech's direct contribution to the UK economy was £5.3bn[75]. It is estimated that in 2030, UK GVA contribution supported by the fintech sector (including the sectors direct and indirect contribution) may increase to £24bn[76].

Figure 7: Scaleup funding gap analysis

Source: Scale Up Institute



70 KPMG analysis of Pitchbook data – see Figure 10
71 Double Prime LLP analysis of Beauhurst data from 2010 to 2019
72 Hymans Robertson (2018), 'Who pays for the pension shortfall?'
73 https://www.scaleupinstitute.org.uk/news/call-for-greater-coordination-between-private-and-public-sector-to-address-growth-capital-gap/
74 PLSA
75 https://www.ons.gov.uk/economy/grossvalueaddedgva/datasets/nominalandrealregionalgrossvalueaddedbalancedbyindustry
76 KPMG estimate

Fintech Growth Fund Recommendation:

While some domestic institutional investors may eventually create a fund directed at fintechs, this may come too late to support the strong cohort of growth companies that have already been founded but need more private funding to scale and expand internationally.

The opportunity therefore exists for the government to use its influence and convening power to support the concept of a domestically funded growth capital investment vehicle focused on fintech. In the short-term, this will involve progressing work already underway to make certain regulatory concessions for the purpose of unlocking domestic institutional capital. Specifically, the fee cap on defined contribution (DC) pension schemes is a barrier to investment in private growth capital funds which include performance fees as part of the compensation required to attract globally competitive talent. A recent consultation by the Department for Work and Pensions has reviewed the level and measurement of the charge cap currently in place. However, the current position on performance fees needs to be reviewed in order to unlock domestic capital. There is appetite from some key asset managers and industry trade associations to explore the concept of a fintech fund and the recent announcement of HM Treasury, the Bank of England, and the FCA, convening an industry working group to facilitate investment in productive finance[77] is a positive sign.

The creation of a Fintech Growth Fund of sufficient scale to act as the catalyst in developing a world leading fintech ecosystem.

This would be a market-led, specialist £1bn Fintech Growth Fund. It would be funded by holders of domestic institutional capital and, where feasible, utilise existing regulatory concessions made applicable only to the fund, thus providing a vehicle to support growth from Series B to pre-IPO stage and the option to hold beyond. This would not only address the funding gap and achieve greater investment into the fintech sector, but also act as a pilot as to how we can incentivise the multi-trillion-pound savings pool to invest in the sectors of the future.

The fund would be modelled on the Business Growth Fund (BGF), leveraging the concepts and principles which have made the BGF successful, e.g. using the large institutions to form the nucleus of the initiative, and the use of trade bodies to act as a co-ordinating function to enable successful implementation. Whilst the BGF provides investment opportunities into growth companies, at present it cannot invest in fintechs, which was agreed by its main five bank shareholders. We believe that a specialist fintech investment team is required, who will understand the fintech business models, regulator implications and can provide operational support for scale and growth. Furthermore, the investment strategy should be determined by the investment team and not the shareholders, providing a clear investment thesis and financial return objectives.

77 https://www.bankofengland.co.uk/news/2020/november/hmt-boe-and-fca-convene-working-group-to-facilitate-investment-in-productive-finance

To attract domestic capital, the fund should be backed by regulatory concessions, many of which are already in progress and are necessary to unlock the institutional capital for any such fund:

- A successful conclusion to the on-going DC pension fee cap debate that accommodates appropriate performance incentives[78];
- HM Treasury have launched an initiative to look at Solvency II and allow longer-term strategic investments with better Matching Adjustment levels; and
- Focussed effort and attention from the Productive Finance working group, which might contribute urgency to the pace of change.

In addition, the fund should be openly supported by trading bodies, including the ABI and Pension and Lifetime Savings Association (PLSA), and national regulators, such as HM Treasury and the Bank of England.

The £1bn Fintech Growth Fund deployed over five years would fill approximately 10% of the growth funding gap (£200m p.a.) and act as a magnet for fintech entrepreneurs and co-investors, and nurture a centre of excellence for UK fintech. We expect £500m to be provided through large institutions (e.g. 10 x £50m), and the remaining £500m sourced though smaller institutions, which would represent a real step-change but is eminently achievable.

Figure 8: Fintech Growth Fund Strawman

Modelled on the Business Growth Fund	— Private investment company or Investment Trust
A Financial Services industry led initiative	— Target investors including large incumbent insurers
Supported by Government	— Regulatory concessions to incentivise participation
Private sector funded	— Large fund £1bn – with 5 x £100m plus 10 x £50m commitments from insurers and/or DB pension schemes
Domestic entity – which can attract and syndicate with international capital	— Shareholder base which wants to learn and participate in the fintech revolution globally
Creates a fintech investment skill base	— Investment team which develops the reach and skills in all sub-sectors and the regions
Publishes private fintech sector research	— Visible entity with a voice to promote UK fintech at the scale and growth stages

78 https://www.british-business-bank.co.uk/research/the-future-of-dc-pensions-enabling-access-to-venture-capital-and-growth-equity/

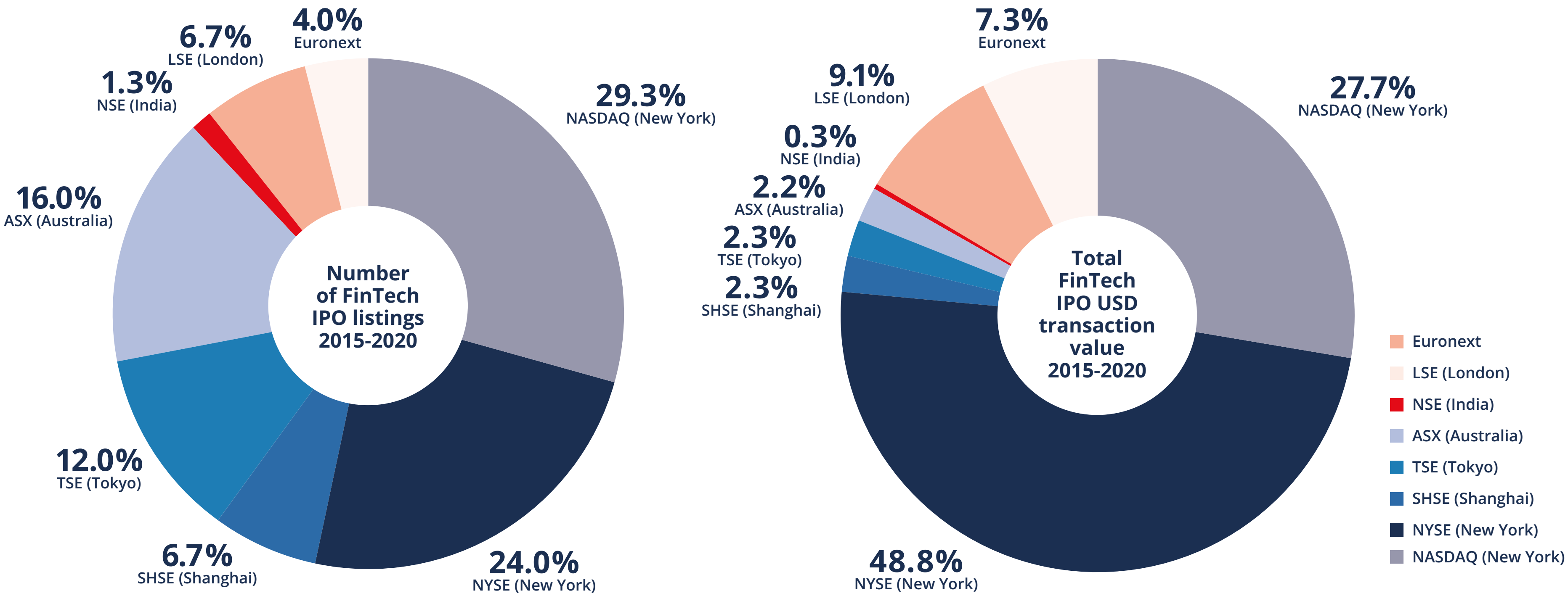
Fintech public listings

Current situation

Despite its strengths, the LSE has seen a decline in the number of listed companies across its markets by 45% since 1997 and the total IPO value on the LSE has fallen from £14.5bn in 2015 to £5.5bn in 2020. By contrast, the total IPO value on both the NYSE and the NASDAQ has increased during this same period. The UK needs to grasp the same opportunities as other fintech hubs internationally in providing maturing fintechs with public market capital and improving their access to longer-term and more cost-effective funding. Out of the 3,787 IPO listings across the world's major exchanges between 2015 and 2020, the US alone accounted for 39% via the NASDAQ and NYSE, while the LSE accounted for only 4.5%[79]. This is despite the creation of the High Growth Segment to help drive more companies towards listing, the Specialist Fund Segment and the Standard Main Market as well as maintaining a 'gold plated' Premium category.

Figure 9: Number and transaction value of fintech IPOs

Source: KPMG analysis



79 KPMG analysis

Some of this is due to structural differences between the exchanges. The UK's Premium Listing requirements, which are attractive to investors, can deter issuers especially when we consider that tech companies have the potential to list anywhere in the world. For example, the FCA Listing Rules allow for only a single share class meaning that founders floating their company will have to reconcile with ceding control. By contrast, the Hong Kong SAR, Singapore, and Shanghai, have all introduced dual listing in the past couple of years[80], making them more attractive locations.

In addition, the Premium segment requires a company to maintain at least 25% of its shares as a free float. Large companies may consider this to be too high, especially when considering the NYSE and NASDAQ impose value thresholds rather than a percentage depending on the market, meaning that the percentage can be considerably lower than 25%. The UK has previously proposed lowering the free float, but this was rejected. In 2012, the then Financial Services Authority proposed to allow companies with a free float below 25% to list in the UK so long as there was sufficient liquidity in their shares. However, this was heavily criticised by investment groups, including the National Association of Pension Funds, that feared this could negatively impact minority shareholders. Yet, eight years on and pointing to the success of the NYSE and NASDAQ, it is clear that allowing more flexible listing requirements has proved popular among companies and investors, allowing the UK's global exchange competitors to surge ahead with IPO volumes: The NASDAQ and NYSE together made up 53% of total fintech IPO listings between January 2015 and December 2020.

There could also be deeper cultural issues limiting the UK's success. Among UK-based investors, knowledge about the growth opportunities in general – and fintech specifically – is scarce, creating a lack of local support for such companies. Truly international investors and asset managers are agnostic about where a company lists as long as the exchange is well regulated and valuations are comparable. This absence of a strong domestic growth-oriented investor base has led the UK's capital environment to be less welcoming and experienced than asset managers focussed on US markets for example.

The opportunity

In short, regulatory and cultural reforms are necessary to overcome the above-mentioned shortcomings and entice UK fintechs to list at home. Market participants believe that if just five substantial and comparable fintech companies were to go public in the UK, this would be enough to generate high quality research, useful market comparables, knowledgeable investors, and most importantly, comparable valuations to NASDAQ and NYSE. At present, more than a third of privately funded UK fintechs expect to undertake an IPO within the next five years and will therefore right now be considering their listing destinations. The current leading UK fintechs, of which nine are unicorns, have largely been funded by foreign capital at their later stages of growth. Their boards are global in outlook, founder-influenced and rational. Hence, they will seek the best financial solution for their shareholders and future company strategy. Ensuring that as many of these companies stay in the UK rather than choose another listing destination is vital for the fintech sector and the UK economy. And this is in our hands.

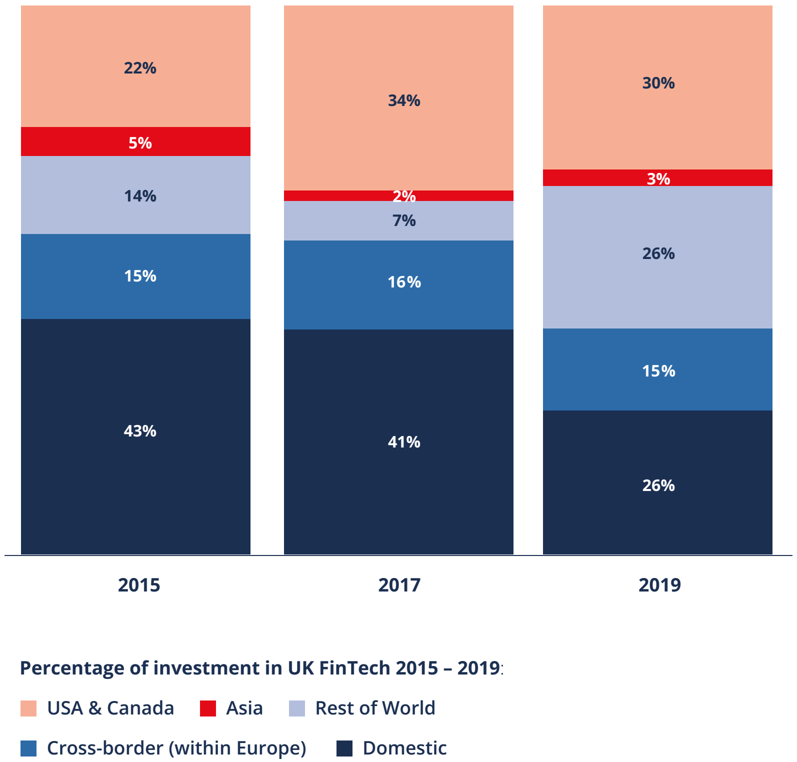
"We welcome the Fintech review findings, which highlight the great number of innovative founder-led fintech businesses in the UK. It's important that we continue to develop the UK's finance ecosystem, improving the route from private to public capital, in order to support these fantastic high-growth companies."

David Schwimmer
Chief Executive Officer, LSEG.

80 https://www.iflr.com/article/b1lmx6clj4l38j/the-revival-of-dual-class-shares

Figure 10: Domestic investment accounts for a falling proportion of total UK fintech investment

Source: Pitchbook



Beyond retaining UK-based fintechs, reforms could also make the UK listing environment attractive to foreign companies. In the EU, each of the 27 remaining members are fighting hard to keep their national successes on their own exchanges. For example, Adyen which listed on Euronext Amsterdam in 2018, is now valued at €45bn and is trading at 6x its IPO price; Allegro, which listed on Warsaw in the Poland's largest ever IPO, rose 65% on its first day of trading, to be valued at €20bn. This fragmentation of the EU listings market may yet continue, so the LSE still has the potential to maintain its lead in Europe post-Brexit. To do so, it must not only keep its UK successes, but also look to attract fintech issuers from across the globe, as it has done successfully in a number of other sectors, including Mining and Minerals.

Many of the changes recommended here have been under discussion with the FCA for some time, and they have indicated an 'open-mind' to change. There are however some legacy industry participants who are resisting change. A government-led initiative which indicates that 'Global Britain' is open for business to technology entrepreneurs and their private backers, would help to overcome those that remain unsupportive. The commissioning of Lord Hill's review on listings reflects the desire within government to ensure that the UK is a popular destination for IPOs with the necessary rules and processes in place to support those companies seeking to list on the main UK markets. The broader changes outlined in this chapter would also create a platform for other technology sectors to build their cluster of successes, so that the UK listing environment becomes one facing the future and not the past. This would in turn provide greater assurances for issuers and attract them to explore the UK's public listings, increasing supply and enhancing the UK as a listing environment to rival that of the US and China.

Case Study

Checkout.com

Company name: **Checkout.com**
Fintech vertical: **Connected Payments**
Headquarters: **London**
Office locations: **Paris, Aix en Provence, Berlin, Porto, Barcelona, Dubai, Riyadh, Mauritius, San Francisco, New York, Denver, São Paulo, Singapore, Hong Kong, Shanghai, Melbourne, Perth**
Number of staff in the UK: **600**
If international, number of staff globally: **1,000**
Number of staff hired in 2020: **500**

What problem is your company solving?

Checkout.com believes that financial complexity is a barrier to innovation which is blocking global economic prosperity. Its cloud-based Connected Payments technology makes payments seamless for businesses, empowering them to cut through this complexity and innovate, launch new products in new markets, and create outstanding customer experiences -- while driving more revenue from every transaction.

Checkout.com provides the fastest, most reliable payments in more than 150 currencies, with in-country acquiring, world-class fraud filters and reporting, through one API. It enables businesses to accept all major international credit and debit cards, as well as popular alternative and local payment methods, and offers local expertise through its 17 offices globally.

How many UK jobs have you created in the last 2 years? Do you have any further plans to expand, either in the UK or overseas?

Since the start of 2019, Checkout.com has added 450 net new jobs in the UK, doubling the size of its London team for two consecutive years, and making it one of the most prolific creators of high-skilled jobs in UK fintech. In 2020, the business made a multi-million pound investment in new state-of-the-art headquarters in London's Shoreditch, giving it further space for UK growth.

Checkout.com has big plans to continue growing globally from its UK headquarters. Its Series C fundraise in January 2021 – which made it the largest venture-backed businesses in EMEA and the fifth largest fintech globally – gives it one of the strongest balance sheets across all global fintechs. This will enable continuing strategic investments and product developments, like the Checkout.com Payouts solution which saw exponential growth over the last year. To support is ambitious plans for the future, the business intends to hire an additional 700 people across all its locations i n 2021.

Give us one or two examples of how your firm has made life easier for a specific customer

Checkout.com powers many world-leading fintechs, including Wise. Its agile payment technology gives Wise improved authorization rates, full transparency into its payment flows and best-in-class global payouts, allowing the company to cut through legacy complexity to scale its services and break new ground. Working with Checkout.com has allowed Wise to understand its payment data better and turn it into actionable insights, allowing the business to increase its approval rates by a full percentage point. With over 9 million customers and billions in transactions a month, that extra 1% adds up and has a significant impact on Wise's bottom line.

Checkout.com also powers some of the world's biggest eCommerce players. The Hut Group, which recently floated on the LSE, selected Checkout.com as its global payment provider. THG specialises in taking brands such as Nestle, PZ Cussons, Homebase, Group L'Occitane and Clorox direct to consumers. Plugging into Checkout.com's Connected Payments platform will support the global growth strategies of THG's 200+ consumer brands, providing their customers with even more payment opportunities, and helping them to unlock new revenue streams through payment optimization.

Fintech Public Listings Recommendations:

Below, we discuss potential reforms to better position London as a global go-to destination for fintech public listings and investments. In general, our focus has been on simplifying the choices for issuers and investors alike.

Reduce free float requirements on the Premium segment from 25% to 10%, for a limited time post-IPO; or put in place a minimum threshold.

Currently, a new issuer in the UK must ensure that at least 25% of their shares are at all times in 'public hands' in one or more European Economic Area Member States. The aim is to ensure that there is enough liquidity by forcing a quarter of the shares to go to smaller and non-company-related shareholders. However, this renders listing in the UK less attractive than other jurisdictions that offer greater flexibility around the percentage and/or the minimum threshold for free float. Reducing the requirement would allow founders and their private backers to retain more control and enable them to participate in the fintech's post-IPO growth in value. An alternate or parallel measure would be to increase the minimum viable size of a flotation. The NYSE and NASDAQ both have set minimum thresholds for free float of $40-60m. Increasing the threshold would ensure that there is a large enough absolute market cap to provide liquidity, mitigating concerns around needing a high free float threshold. This would also open up the possibility of setting free float percentages on a case-by-case basis – an attractive proposition for companies looking to list.

Enhanced governance rights: A golden share or dual class share structures.

At present, the UK Premium Listing Principles 3 and 4 support the 'one share, one vote' concept, so that all equity shares in a class that have been admitted to a Premium listing carry an equal number of votes on any shareholder vote. Dual-class structures involve two different classes of shares with differential voting rights. Under this structure, founders and other pre-IPO holders can keep hold of shares with enhanced voting rights, and sell a separate type of share to public shareholders. This flexibility can be particularly attractive to founders who wish to raise funds but still retain control and guard against unwelcome take-overs, particularly in the years immediately following an IPO. These structures are not possible for a Premium listing in London, though they are available on the less prestigious standard market (whose companies are excluded from the major indices) and importantly on all other major stock exchanges, such as the NYSE, NASDAQ, Euronext, Deutsche Börse, the Hong Kong Stock Exchange and the Singapore Stock Exchange. This means that UK investors and the fintech ecosystem risk losing key company listings that wish to mature gradually into Premium listed status, rather than make a giant leap.

Maintain the relaxation of pre-emption rights.

Under the current rules in the UK, a company can raise capital up to 5% of their issued share capital over a 12-month period for general corporate purposes and an additional 5% for specified acquisitions or investments. However, the Pre-Emption Group (PEG)—which issues voluntary guidelines and best practices on behalf of listed companies, investors and intermediaries—recommended on 1st April 2020 that investors, on a case-by-case basis, consider supporting placings by companies with up to 20% of their issued share capital. The recommendation was later extended to 30th November 2020.[81] Whilst this was intended as a temporary measure to help issuers raise capital faster and at a lower cost to weather the impact of covid, it has been broadly welcomed by the market and there is support from issuers for it to be continued. The experiment has demonstrated that issuers have approached the raising of additional equity capital responsibly, and the speed and ease of execution has been warmly received.

81 https://www.frc.org.uk/news/september-2020-(1)/pre-emption-group-extends-additional-flexibility-f

With the equity needs of our fintech community likely to persist for several years past the covid crisis, this seems like a permission that should
remain in place – albeit under appropriate and regular review.

Create a global family of Fintech Indices to improve understanding and enhance visibility of the sector, as well as attract index tracking hedge funds and investors. The leadership of FTSE Russell as an index provider is vital in creating the visibility of any new sub-sector as it emerges. The use of passive asset management is growing as an investment strategy. Over the past 10 years, it has doubled in the UK from 18% to 37% of market capitalisation. New segments such as the fintech sector often fall between two stools. In this case fintech falls between a financial services sector which is large, highly profitable, and well followed, but is full of legacy players with low growth and dividend paying stocks; and a technology sector where stocks are either categorised as horizontal players, such as cyber security, or a new vertical industry, such as e-commerce. These latter stocks are high growth, often loss-making, and rarely dividend paying, hence attracting higher multiples and delivering return to their investors through capital growth rather than dividends. Fintechs as a category can get lost in either of these broad indices. They follow different value creation paths as they face regional regulatory hurdles and the need to internationalise country by country. The creation of a global fintech index will start the process of carving out an understanding of this important emerging sector. Representatives from across both the fintech sector and investment community have confirmed that a fintech index could act as a positive driver for increased investment. Regional and sector indices can and will follow as the number of companies in each region grows and the unique characteristics of the sector is understood and rewarded by investors. Eventually, when enough UK fintech companies have listed and formed a sub-sector, then a UK index could become a bellwether for all UK fintech stocks and cement the leadership of the UK as a listing destination for this sub-sector.

Chapter 5

International Attractiveness and Competitiveness

Fintech as a market continues to grow internationally and in 2019 was worth c.£110bn in revenue. The global market is forecast to be worth c.£380bn revenue by 2030. As well as driving revenue itself, fintech has encouraged investment in innovation and digitisation from incumbents. Investment in innovation and technology from banks, insurers, wealth managers as well as telcos and utility companies more than matches fintech revenue[82]. This combined growth translates into increased choice and innovation for consumers, SMEs and corporates.

There is no doubt that the UK is seen as a leader in fintech. Our innovation means we are a magnet for global fintechs and investors, making up around 10% of the global market[83] (c.£11bn[84] in revenue in 2019). The ability of the UK to align its regulatory regime with innovation has been a strong foundation for fintech internationalisation and the Global Financial Innovation Network (GFIN)[85] has created a new framework for co-operation between financial services regulators and innovators. Initiatives such as the Financial Conduct Authority (FCA) Project Innovate, regulatory 'sandbox', and the Bank of England's Fintech Accelerator, Open Banking and the UK payments industry each set the benchmark for policy-led innovation globally. London ranked second as a top financial centre for professional services, government and regulatory, banking and investment management., according to the GFCI 28 Index[86].

82 Moving Mountains and Moving Mainstream, 2020
83 KPMG "Size of the Prize" analysis, undertaken for this report
84 UK FinTech: Moving mountains and moving mainstream, EY, https://www.ey.com/en_gl/financial-services-emeia/how-FinTechs-are-moving-mountains-and-moving-mainstream
85 https://www.fca.org.uk/firms/innovation/global-financial-innovation-network
86 https://www.longfinance.net/media/documents/GFCI_28_Full_Report_2020.09.25_v1.1.pdf

Assuming the UK can maintain the same level of global market share, the UK fintech sector could grow to around c.£38bn in revenue by 2030 from today. A further increased market share of an additional 2% would result in C.£46bn in revenue by 2030.

However, the UK cannot take its international fintech position for granted. Our success has set a precedent that many others have learned from when defining their approach to policy and regulation. We must take steps to maintain this leading edge.

Our international opportunity is twofold. Firstly, to attract in-bound global investment. We are fortunate that we can build from a strong base. The UK attracted $4.1bn in fintech investment in 2020. Fintech adoption by UK consumers was over 70% in 2019, compared to 46% in the USA, 58% in Australia and 67% in Singapore.[87]

Secondly, we need to support out-bound growth. UK fintechs need

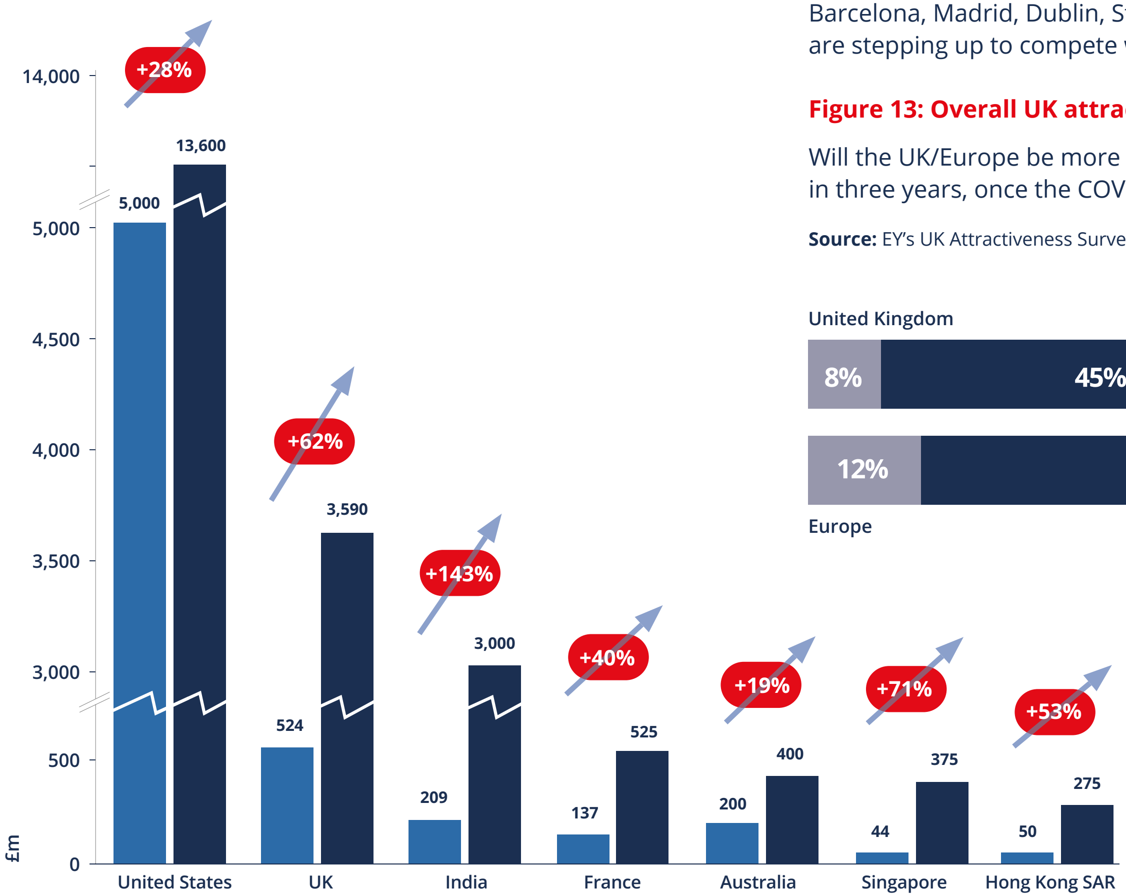
Figure 11: Leading overseas fintech practice to support International Growth

	Australia	Singapore	France	Other
Clear accountability for innovation in Financial Services in Government	Senator for Superannuation, Financial Servcies and Digital Economy (Jane Hume) **Goal:** "For Australia to be a leading digital economy by 2030" **Strategy:** Use data to drive innovation and a better deal for consumers in financial services	Chief Fintech Officer as part of Monetary Authority of Singapore (MAS) **Goal:** International hub and regional leader in fintech innovation **Strategy:** Co-ordination of regulation and development strategies to drive adoption. Drives strong brand through extensive marketing	Visibly led by President Macron **Goal:** Increaseprofile of tech entrepreneurship fintechs e.g. Le Swave, France's first innovation platform dedicated to fintech business **Strategy:** High profile ministerial support underpinned by private sector involvement	**UAE:** The UAE Innovation Strategy which aims to position the UAE as a top 10 most innovative country in the world by 2021
Focus on industry engagement	Fintech advisory Group includes fintech and industry. Topic-led, reports directly to the Senator and inputs to development of policy	Business sans Borders and the API Exchange (APIX) Fintech Hackcelerator programme, annual fintech awards and Deal Fridays	Fintech Forum, a consultative body with fintech start-ups, industry lawyers and consultancy firms	**US:** FinHub (SEC) collaboration portal
International goals and ambition	Anchor around 'digital economy' Set standards for next generation use of date in financial services and beyond Active international campaign for investments. Fintech bridge programmes	World's first 'Smart Nation' Largest fintech festival "Singapore's fintech journey is about innovation, inclusion and inspiration. Everything we do in fintech must always have a larger purpose – to improve the lives of individuals, to build a more dynamic economy, to promote a more inclusive society." – Managing Director, MAS	Aims to lead Fintech across Europe "I've noticed an increased interest in the French ecosystem from British fintech companies. Whatever happens with Brexit, many start-ups find and continue to find France an attractive place to do business" – French digital minister Active engagement from Governor of Bank of France, the State Secretary for Digital Affairs, and the Minister of Economy and Finance.	**China:** 3 year 'Fintech development plan' with the aim of making China the world leader in fintech **Hong Kong:** "The fintech strategy would be a major statement of Hong Kong's intent to be a regional, even global, fintech centre" – Hong Kong Financial Services Development Council (FSDC)

87 UK Fintech: Moving mountains and moving mainstream, EY, https://www.ey.com/en_gl/financial-services-emeia/how-fintechs-are-moving-mountains-and-moving-mainstream

Figure 12: Total VC investment by country, £m, 2015-2019[88]

Source: UK Fintech: Moving Mountains and Moving Mainstream, EY,



88 Note: Investment figures for India are 2016 to 2019

to continue to expand globally to grasp our rightful share of the £380bn revenue in 2030.[89]

Concern has been expressed by fintechs over passporting with Europe, talent, affordability and the business environment. Paris, Barcelona, Madrid, Dublin, Stockholm, Amsterdam and Warsaw are stepping up to compete with London and the UK[90].

Figure 13: Overall UK attractiveness compared to Europe

Will the UK/Europe be more or less attractive than today in three years, once the COVID-19 pandemic has passed?

Source: EY's UK Attractiveness Survey (November 2020)

89 UK FinTech: Moving mountains and moving mainstream, EY, https://www.ey.com/en_gl/financial-services-emeia/how-FinTechs-are-moving-mountains-and-moving-mainstream

90 https://www.savills.co.uk/research_articles/229130/301534-0/spotlight--european-FinTech-occupier-outlook-2020

But many UK fintechs are already operating overseas and beyond Europe and they remain ambitious for international growth; of the fintechs that were headquartered in the UK in 2019, 41% had operations outside of the UK.[91] In 2017, 87% of firms saw international expansion being highly important to their growth, and 63% were ambitious enough to identify two or more regions as being of high importance.[92]

Current situation

Without additional action, the UK risks having its market share eroded. If others succeed in achieving projected growth and the UK takes no action, this could mean a drop in market share by 2030 from 10% to 7% resulting in a 'loss' of £12bn (assuming that if we had retained market share, revenue would have been £38bn). Fintechs interviewed for this chapter have highlighted the positive impact that Singapore's strategy and support has had on their growth.

It's not just Singapore, other markets (including Australia, Hong Kong etc) are starting to provide more practical outbound and inbound support.

> "Singapore is what the UK should look towards when it comes to fintech: international fintech strategy. Singapore has a very clear strategic vision and is focused on executing that plan."
>
> **Bob Wigley**
> Chairman, UK Finance

UK out-bound

Fintech firms face several practical challenges when expanding internationally, including attracting suitable talent (53%), customer adoption (48%) and building partnerships with established players (37%)[93]. Each of these challenges is exacerbated by the fintechs potentially limited international profile, and the absence of any mechanism to formally attest to their credibility.

Whilst fintechs appreciate the assistance available (See Figure 13), and despite efforts to collaborate, overlapping mandates between entities has resulted in a lack of clarity and hurdles for businesses looking to enter the UK or expand overseas. Fintechs require easier access to the latest information and more targeted support for international expansion – specifically guidance and advice on legal and regulatory requirements, market navigation, local and cultural support, and help with recruitment were all cited as needed.

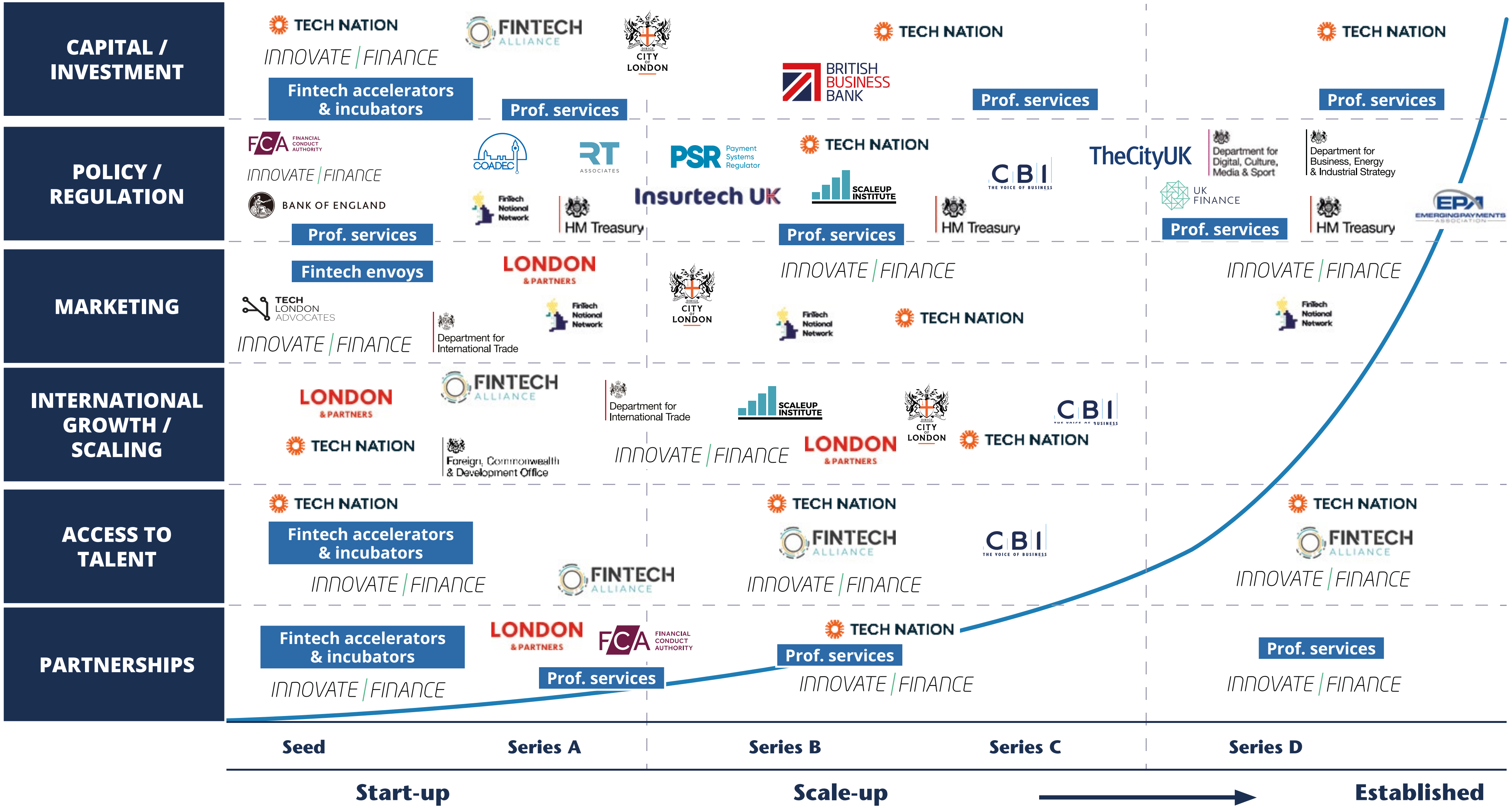
Additionally, feedback from Review participants suggest that trade missions and Fintech Bridges would benefit from being more focussed and programmatic, as well as more representative of the scale and breadth of fintech opportunities in London and across the UK[94].

> ".... having a central repository of information on each of the major markets that fintechs are looking to move to, with information on regulatory structure or key contacts of overseas regulators, trade bodies etc., could be helpful – this can be managed by a trade association with fintechs providing information."
>
> **Nick Lee**
> Head of Regulatory Affairs, OakNorth

91 EY UK FinTech Census 2019; EY analysis
92 EY UK FinTech Census 2017
93 EY UK FinTech Census 2019
94 EY interviews

Figure 14: Public and private entities currently supporting the UK fintech sector

Source: EY analysis



UK inbound

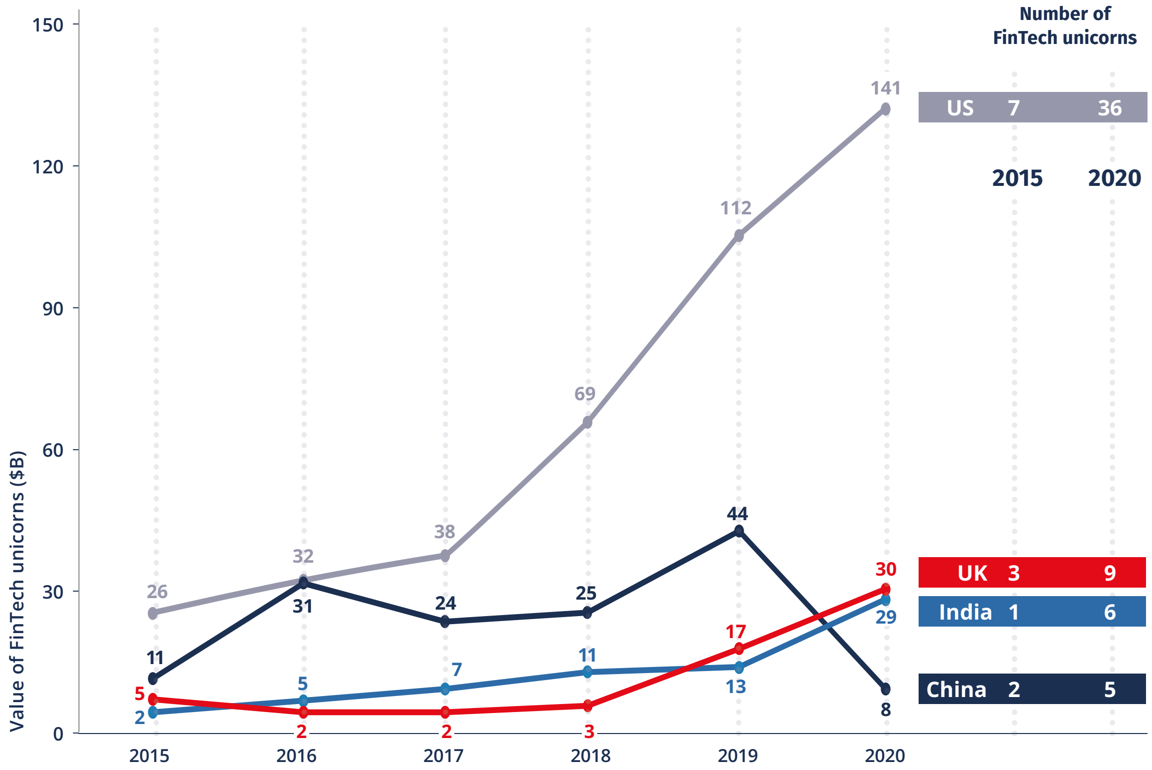
The UK increasingly needs to represent itself as a strong fintech scaleup destination as well as one for start-ups. The UK has a strong environment for start-ups however fintechs looking for scale may see the UK market as limited based on size; scaling opportunities must, by definition, include overseas expansion. Financial innovation and incubation of fintech start-ups has grown with over 186 accelerators and 205 incubators in the UK supporting start-ups with innovation and growth.[95]

There has been a shift in UK fintech investment towards later stage deals, and the UK has 9 fintech unicorns[96] (although there are others which have previously held unicorn status and have since been acquired e.g. IHS, Markit, WorldPay). The challenge is that there are still not enough fintechs at the larger end of the scale. By comparison, the US had twice as many fintech unicorns as the UK in 2015; by 2020, it had four times as many.

Furthermore, other markets are mirroring the UK's regulator's standards and importantly they are marketing their developments aggressively. There are over 50[97] regulatory sandboxes globally, and nearly 30 innovation hubs in the EU, many of which have been developed to align with FCA models and replicate its approaches.[98]

Figure 15: Value and number of fintech unicorns, 2015-2020[99]

Source: CB Insights



95 UK FinTech: Moving mountains and moving mainstream, EY, https://www.ey.com/en_gl/financial-services-emeia/how-FinTechs-are-moving-mountains-and-moving-mainstream

96 https://www.cbinsights.com/research-unicorn-companies

97 Inside the regulatory sandbox: effects on fintech funding, https://www.bis.org/publ/work901.htm

98 https://www.fca.org.uk/publication/research/the-impact-and-effectiveness-of-innovate.pdf

99 Notes: CB Insights database does not include China's Ant Group. Data accurate as of October 2020.

The opportunity

Opportunity exists to more clearly define what fintech means to the UK, set up scaling priorities and future ambition, and bolster the messaging of UK fintech to reinforce its international ambitions and strengths. This in turn will ward off increasing competition from markets like the US, China, France, and Singapore in the process.

In order to remain competitive internationally, the UK needs to increase accessibility and scale of digital and personnel resources to support fintech firms in a practical and bespoke way. While tangible support exists, for example in markets of significant importance to Financial Services (e.g. USA, APAC) there is dedicated sector resource from within the DIT network to support trade and investment and address market access needs. This needs to be deepened and formed into a unified package, that is then further sign-posted, ensuring fintech firms are aware of what exists and how to access it. This could reduce barriers to entry as well as help partners to reduce the lead time to establish their fintech relationships and conduct required due diligence.

Building on the success of many HMG initiatives – such as the Fintech Bridges – and taking additional steps to strengthen the international operational support offered in the UK and in targeted overseas markets would serve as a statement of intent for the international openness of the UK in a post-Brexit environment.

A more consistent set of messages to promote greater awareness of the UK as a fintech destination for start-ups and scaleups would foster a stronger ‘repeat’ investor mindset in the UK and attract more investors and fintechs to establish themselves in the UK.

Amplifying and celebrating the UK’s position as a world leader in fintech infrastructure and setting global standards through our world-leading regulatory environment would support innovation and growth of our professional services and legal firms and enable fintechs easy access to world class support.

A strong, internationally focused fintech industry further increases confidence and grows appetite amongst consumers and businesses for innovative, UK-supported fintech products and services. A clearly defined, ambitious international fintech agenda could result in increased market share from 10% to 12% and a £46bn fintech market by 2030, fuelling even larger financial, innovation, technology and job growth for the UK.

Case study

Gohenry

Company name: **gohenry**
FinTech vertical: **financial education**
Headquarters: **London**
Office locations: **Farnborough and Lymington in the UK and New York in the US**
Number of staff in the UK: **Over 180**
If international, number of staff globally: **Over 190**
Number of staff hired in 2020: **86**

What problem is your company solving?

gohenry was the first service of its kind when we started in 2012, we created a new category in the process and today we remain true to our original purpose – making financial education fun and true to real life to help the transition into adulthood, because kids who can't manage money become adults who can't manage money.

gohenry's mission is to make every kid good with money by providing them with the opportunity to gain experience with managing money from a young age, in a safe environment in a way that builds confidence and helps them develop a crucial life skill

We now have a global community of over 1.35 million customers.

How many UK jobs have you created in the last 2 years? Do you have any further plans to expand, either in the UK or overseas?

With this latest funding, we will accelerate our growth in the US where we first launched two years ago. We want to continue to lead the way in providing financial education and money management tools to families on both sides of the Atlantic, therefore a big focus will be on ensuring we continue to deliver a service that caters for all of our customers' financial needs. This includes innovation in product and brand awareness.

As for expansion beyond the US and UK, 100 per cent. Our mission is to make every kid good with money and there are a lot of countries to visit next.

Give us one or two examples of how your firm has made life easier for a specific customer

It's hard to choose with over 1.35 million customers! We hear stories all the time from parents and young people from all backgrounds about how gohenry has helped them either save more by setting savings goals in the app; create healthy spending habits by seeing in real time where their money has gone and how much they have left; understand the value of money by doing tasks set by their parents to earn pocket money or top-ups; and learn how money can be used for social good by donating to our partner charity, the NSPCC, through the app.

One young customer who stood out to me recently is a 14-year-old whose Business Studies class was cancelled during the first lockdown. Instead of seeing it as an opportunity for a free hour, she took it upon herself to learn business in real life and set up her own online business – with the help of her parents – selling pebbles she's painted on Etsy. She now makes an income of about £45 a month! Her earnings are paid into gohenry and she's told us how we have really helped her understand how to spend money wisely. She didn't understand anything about money before but now she can watch her money grow and make her own decisions on how to spend it (although still with her parents overall control).

She has already saved £100 on the app with a goal set of £200 and makes monthly charity donations through our app as she wanted to give something back to those more in need.

She is a real example of what we are trying to achieve with gohenry: creating a next generation of conscious consumers and helping them realise their dreams along the way.

Recommendation 1:
Fintech International Action Plan 2.0

The UK Government published a Fintech Sector Strategy in 2018 with a clear ambition to "make the UK the best place in the world to start and grow a fintech business"[100]. We have seen many actions that have supported UK fintechs international growth.

This is not about defining another strategy. Rather, work is needed to support and enhance the international growth of the UK's fintech sector. The actions required are clear and build upon some of the work underway by the Department for International Trade (DIT).

The Action Plan includes four key areas of focus with detailed plans underpinning each. It represents priorities across the entire fintech sector, each of which are a focus of either the public sector, the private sector, or both. The actions should be owned and driven by DIT, with clear delegation routes to ensure relevant input and actions from public and private stakeholders to support delivery.

1. Increase the practical and commercial support available to international fintech:

i. **Launch an international fintech portal to include:**

- A clear overview of the fintech landscape including metrics that clearly articulate the size of the market and illustrate the competitive landscape.
- Contact information such as access to local regulators (to obtain advice on the regulatory process), local fintechs who have already set-up in the country that are willing to share experiences on the set-up process, and local professional services advisors.
- Case studies of previously successful international growth initiatives.
- Key contacts with overseas embassies.
- An overview of the key local regulatory and operational requirements with a guide on the regulatory process and the process of incorporating a fintech company for each market.
- Details of financial support and grants available from private funding to government schemes or government backed loans.
- A knowledge centre which provides public and private sector resources such as white papers, thought leadership, case studies and articles across various fintech sectors.

ii. **Create a collaboration hub for international fintechs to identify partners and innovative new offerings and partnerships to include:**

- Webinar sessions from trusted local professional services firms to obtain up-to-date information on tax and legal requirements and offer contact information for firms willing to consult on regional laws and customs.
- Chat facilities and ideation opportunities.

iii. **Strengthen the concierge service for fintechs available in high priority markets:**

- Align to priority Trade Agreements including US, Singapore, Australia, Middle East, Africa as well as Europe.
- Enhance the existing Fintech Bridges with regular and high-profile ministerial engagement and examples of successful UK fintech.

100 https://www.gov.uk/government/publications/FinTech-sector-strategy

2. Build on fintech strengths prioritising alignment with Trade Agreements and scoping partnerships for Developing Markets.

The UK fintech market has built world-leading strengths in a number of key areas including but not limited to payments and remittances, regtech, blockchain, FX, B2B online lending, wealthtech and cyber security. These segments provide an opportunity for further market targeting.

i. **Map UK strengths to opportunities within new UK Trade Agreements.** Opportunity exists to both focus the proposed Fintech Branding Strategy on these target markets as well as focus trade delegations and Fintech Bridges based on key segments.

ii. **Identify opportunities in growth markets:**

India

India's growing wealthy population has increased demand for investment advisory services. In 2018, wealthtech was India's 4th largest funded sub-sector within fintech, behind payments, alternative lending and insurtech[101]. Regtech opportunities (although nascent) exist in B2B solutions e.g., to support storage of Aadhaar data Onfido partnered with SalaryDost, a digital lender to provide identity verification and CoinDCX, India's largest cryptocurrency exchange, to automate its KYC process[102].

Example evidence:

Wiserfunding entered the Indian market in 2020 with an AI backed cloud-based credit risk assessment tool for SMEs. It aims to invest $3-5m over the next 3 years[103].

Prioritise focus on:

- B2B online lending
- Wealthtech
- Regtech
- Cybersecurity

Middle East and North Africa (MENA)

Potential demand for regtech in the UAE and Saudi Arabia is encouraging businesses to adopt regtech solutions to counter money laundering[104][105]. There is a demand for financial crime and modernising compliance technology where UK fintechs could gain traction in this space. Blockchain is also strongly supported by governments and regulators; last year the UAE and Saudi authorities announced plans for a common digital currency, and recently the UAE and Bahrain have introduced new blockchain regulations to ease adoption[106]. The UK has seen traction in Islamic fintech and there is a potential opportunity for cross-collaboration.

Example evidence:

Wise launched in the UAE in April 2020.

Prioritise focus on:

- Regtech
- Blockchain

"The UAE is one of the most important remittance markets in the world, and we're delighted to be bringing the first fully online money transfers to the country."

CEO and co-founder
Wise.

101 https://www.linkedin.com/pulse/cusp-explosion-scope-wealthtech-india-sid-naithani/
102 https://www.businesswire.com/news/home/20200709005524/en/Onfido-sees-record-adoption-of-its-identity-verification-technology-announcing-264-year-over-year-US-growth
103 https://www.finextra.com/pressarticle/83560/uk-FinTech-wiserfunding-enters-india
104 https://thepaypers.com/digital-identity-security-online-fraud/uaes-fis-requested-to-use-regtech-to-follow-aml-guidelines--1242240
105 https://globalbankingregulationreview.com/FinTech/regtech-race-hots-saudi-and-uae-initiatives
106 https://www.adgm.com/documents/publications/en/adgm-mena-FinTech-venture-report-2019.pdf?la=en&hash=B4CBB631E8B671EA0F7E4135E9BE85B6

- Open Banking solutions
- Neo / Digital Banking
- Islamic Fintech

Sub-Saharan Africa (SSA)

The payments segment is most dominant in SSA, mainly due to the large unbanked population (c.66%)[107] and correlating high demand for financial inclusion with the largest opportunities in Nigeria, South Africa and Kenya. Nigeria has the largest population in SSA (and 60% unbanked) with growth opportunities for digital/ challenger banks. Some Central Banks in Africa are actively experimenting with DLT-based payment systems. SimbaPay is a UK-based digital money transfer service that allows users to deliver money using its SimbaPay app to Kenya, Uganda, Nigeria, Ghana and other countries in SSA[108].

Example evidence:

SimbaPay and Kenya's family bank have recently launched an instant payment service from East Africa to China.

Prioritise focus on:

- Payments and remittance
- Digital banking
- Blockchain

China

China is the third largest money transfer/remittance market globally (c.£36bn), creating a need for payments platforms that can enable trade across multiple currencies and the settlement of transactions internationally. It is increasing its focus on regulation and regtech solutions to lower the complexity and costs of maintaining regulatory compliance as well as protect its citizens.

Example evidence:

Greensill, the supply-chain finance provider, has recently launched operations in both the Chinese market.

Prioritise focus on:

- Payments and remittances
- Regtech
- Blockchain
- FX

3. **Increase promotion of the UK as a fintech growth country of choice via physical and digital channels:**

i. Set up and promote UK fintech via social media accounts. Leverage social media to communicate key messages on UK fintech via 'influencers' who can share the information through their own social media channels. Push 'bite-sized' messages to the market and engage with a worldwide audience. A good example is London & Partners' Global Good Newsroom which utilises WhatsApp to broadcast "tweet-sized" messages of positive news reports and events about London.

ii. **Release an annual publication and leverage interactive digital databases to showcase the UK's success stories, comparing the UK's fintech ecosystem to other key fintech markets.** The publication should create case studies of successful high-growth, UK-headquartered fintechs that have expanded overseas as well as international fintechs that have chosen the UK as a global launchpad. The publication could also serve as an interactive benchmarking study, comparing the UK to other fintech centres across key attributes such as talent,

107 https://www.penser.co.uk/article/FinTech/why-africa-is-a-budding-global-FinTech-hub/?utm_campaign=web-traffic&utm_medium=kebbie&utm_source=linked-in&utm_campaign=internal-link&utm_medium=article&utm_source=africa-regional-markets
108 FinTech in Sub-Saharan Africa—Where Does the Region Stand?

iii. capital, visas, tax, special incentives, operational support for fintechs, regulations etc. Certain publications e.g., Cambridge University's Global Fintech Hub Report could potentially be leveraged. Other countries have started promoting their start-ups in similar ways, such as France's Next40/120 programmes.

iv. **Increase the profile of the international fintech champions and advocates.** There have been several fintechs that have been selected as part of the Export Champion programme, launched by Department for International Trade (DIT), which enables businesses that share their time and experience to encourage more companies to export their services[109]. There are additionally a group of public and private sector individuals, with expertise in the sector, who willingly promote UK fintech globally and act as UK fintech champions. With additional support and access to the latest fintech plan of action, the voices of the export champions and the envoys could be amplified through a specific Fintech Export Champion programme, delegations, trade missions and conferences

v. **Enhance the use of existing delegations and trade missions to further promote fintech internationalisation and build partnership opportunities**. Trade missions would benefit from being more focused and programmatic, and more representative of the scale and breadth of fintech opportunities in London and across the UK. The UK should enhance its existing trade programmes by leveraging a wider repository of fintech firms at different stages of growth, with stronger representation across the country and with improved diversity.

vi. **Showcase successful access to investment capital.** DIT can support the overall strategy to attract international investors by showcasing UK strengths (e.g. the average early-stage funding per start-up in London is $486k, while the global average is only $284k. £2.7bn+ of fintech VC investment has been raised in London in 2020 (up to September), more than New York, Berlin and Paris[110]. International growth to be further enhanced through:

- A database of potential investors for fintechs coming to the UK or for fintechs looking to expand outside the UK
- A focused agenda to target these investors during delegations – it will be critical to look at the agenda at the sub-sector level
- Running specific initiatives to promote the UK fintech sector to this investor base

4. Launch an international fintech brand strategy, to be co-led by DIT and industry:

i. **Run campaigns to celebrate the UK's scaling success stories.** As of October 2020, the UK had the largest number of fintech unicorns in Europe with 9 firms valued at a total of $29bn (behind the US with 36 unicorns at a value of $141bn), compared to just two at the end of 2018. Showcasing examples of fintechs who have successfully scaled overseas will help attract overseas fintechs and international investment into the UK.

ii. **Professional branding**. Promote the UK as an entrepreneurial, fintech-friendly destination with modern, digitised regulatory infrastructure. Highlight examples of how the current UK regulatory and legal environment has enabled fintechs to flourish.

iii. **Showcase the UK's talent and network of universities**. The UK has a strong talent pool and a network of universities that bring new and fresh talent to the market. This provides a huge

109 https://ibsintelligence.com/ibsi-news/uk-govt-selects-gps-as-london-export-champion/

110 https://www.business.london/invest/sectors/tech/FinTech

resource pool for fintechs to source the required skill set and attract fresh talent into their organisation.

iv. **Consolidate all actions into a published set of ambitions and goals.** The Action Plan should be published and accessible on the fintech portal and be clear on UK International ambition.

Suggested targets include:

- a ***minimum*** ambition of maintaining ***10% global market share***
- a goal of ***increasing*** market share to ***12%***, resulting in ***£46bn in revenue by 2030***
- ***a doubling of UK domiciled fintech unicorns*** by 2025/2030
- wider global leadership ambition to build upon the UK's strength in regulation, professional services and digital industries and ***become the recognised global leader in scalable fintech solutions that demonstrate security, privacy and resilience by design and which deliver benefits for global consumers and SMEs.***

Enabling actions required to implement the recommendation:

- **Ownership of actions within DIT.** To deliver its international plan of action, ownership would be maintained in DIT but with private sector bodies leading agreed aspects of the action plan at DIT's discretion.
- **Allocate funding to execute the Action Plan.** Without increased focus, UK risks losing global market share and not capitalising on new expansion opportunities. Funding will be required for additional in-market presence, particularly to support identified fintech subsectors identified as having especially large growth potential. Public / private support will be important to maintain the centralised international plan of action.
- **Build a platform to house the International 'digital playbook' and 'concierge service'.** Both services could be built on a single platform that can be accessed through the UK.GOV website. It will require bringing together stakeholders across sector and geographies to consolidate all information in a single location. Where possible it is important to utilise existing content to build the platform. Prior to building, there needs to be an exercise of identifying the priority countries to which these services will be rolled out. We recommend that DIT collaborates with CFIT on this initiative.
- **Understand impact by conducting sentiment surveys.** Conduct regular sentiment surveys to understand the impact of the international plan of action to fintechs and investors regarding the UK's international offering.
- **Continue to commit senior private and public sector representatives to support overseas delegations and high-profile events.** Other markets have increased the visibility of politicians and senior business leaders at keynote events, sending a global signal of their ambition and intent.

Recommendation 2:

Drive International Collaboration through the Centre for Finance, Innovation and Technology (CFIT), which will bring together the UK's existing capabilities, offer practical support and create new digital collaboration opportunities.

This chapter recommends a central body, run by the private sector and sponsored by government to ensure that the recommendations from this report are executed, supporting the next stage of scaling for fintech firms.

The purpose of CFIT's international agenda will be to: increase the global scale and impact of UK fintech.

The mandate of the CFIT's international agenda will be driven by the international plan of action (international recommendation 1) and will have the following components:

- Deliver against the ambition of the UK's fintech international plan of action
- Enhance the UK global fintech brand and communication plan
- Drive international collaboration across government and the private sector
- Help define and support the launch of new initiatives and policy enhancements

CFIT should play a critical role in co-ordinating, corralling and connecting all those involved in driving international fintech growth for the UK. CFIT should create new digital collaboration opportunities to drive inward investment and international growth and ultimately increase the potential global scale and impact of UK fintech. CFIT should work with DIT to bring together the UK's existing capabilities, offer practical support and create new digital collaboration opportunities.

This is the job of both the private and public sectors. More co-ordination across the national and international agenda will:

- Create a strong brand for UK fintech on the international stage
- Support the positioning of the UK as an attractive investment opportunity. It will increase confidence in the strength of UK fintech overseas, providing a 'go-to' for overseas governments, investors and fintechs
- Support UK fintech exporting, working with embassies to ensure the full UK fintech offering is available globally, with focus provided into target markets
- Scale up the UK's digital presence internationally, leading market activities with innovative matchmaking, collaboration tools and digital platforms
- Ensure recognisable and consistent senior representation at major international fintech events, supported by dedicated personnel to help drive the fintech agenda in the UK and to show our intent on the global stage
- Create connections within the UK to encourage international partnerships to drive a strong scaleup story to increase market confidence
- Sponsor creation and maintenance of the digital platform and associated resources required for the UK to compete on the global fintech stage

Sub-recommendation:

2.1
Embed the voice of International Fintech firms through the International Fintech Taskforce

This chapter recommends that DIT set up a formal Taskforce to gather fintech and industry inputs on progress against the Fintech International Plan 2.0 and to provide input to the CFIT with a view to influencing industry focus and policy recommendations. **This will be known as the International Fintech Taskforce.**

It is suggested that the stakeholders who provided input to the International Chapter for the purposes of the Review provide the basis for the Taskforce. Participation may change over time as the agenda dictates.

The Taskforce would meet quarterly with topics to be agreed in advance and designed to provide pragmatic input and support delivery of the wider CFIT governance structures. It should be chaired by an independent, respected industry leader and should have appropriate governance around the rotation of this position and of the membership.

The clear objective of the Taskforce will be to drive collaboration that will lead to growth for fintechs both in the UK and overseas and attract more inward investment. It will define success through achievement of the agreed international growth objectives.

The purpose of the International Fintech Taskforce will be to:

- Understand progress against the ambition of the UK's Fintech International Plan of Action 2.0. Recommend and help deliver activity that optimises the impact of the UK's international fintech focus
- Act as social media amplifiers to the international global fintech brand and communication plan
- Provide regular input to exemplar support the growth of their respective subsector areas of international focus
- Highlight important areas which industry believe will help develop the fintech ecosystem in the UK and abroad, propose feasible delivery mechanisms and, where these are taken forward, commit to sponsoring their implementation through public-private partnership

The creation of the International Fintech Taskforce will:

- Build on the good-will and clear international ambition that has been enhanced through the Kalifa Review
- Help support the positioning of the UK as an attractive investment opportunity
- Support British fintech exporting, working with DIT and CFIT to ensure the full UK fintech offering is available globally, with focus provided into target markets
- Support recognisable and consistent senior representation at major international fintech events.
- Strengthen connections within the UK to encourage international partnerships and scaling

Enabling actions required to implement the recommendation

It is recommended that while DIT sponsors the Taskforce, for it to be successful, attention should be paid to the following points:

Appointment of a respected and independent chairperson. The chair will liaise with DIT and participants between meetings to ensure that topics for discussion are relevant, timely and actionable. This will not be a governance body.

Improve visibility of DIT's activities, and commitment to drive internationalisation. It will be critical that DIT retains the capacity to drive international ambition alongside the development of the domestic agenda.

Combined engagement from incumbent firms and fintechs within Financial Services. The Taskforce should bring together the broader Financial Services Technology sector.

Recommendation 3:

Launch an International Fintech Credential Portfolio (FCP) to support international credibility and increase ease of doing business.

Interviews with chapter participants (investors, fintechs and financial institutions) have endorsed the idea of a fintech standard for international fintech trade that captures trust, quality and credibility of a UK fintech that can be leveraged internationally. Such a standard would build trust with VCs and banks and support UK fintechs in providing credibility when marketing themselves overseas.

We recommend that the UK should launch an International FCP that will provide easy access to the credentials required to drive overseas expansion, including identity verification, digital identification, regulatory compliance and evidence of partnerships with incumbent financial institutions and backing from a recognised investor(s). This International FCP has been inspired by the support investors provide for international expansion, the simplicity of standards such as those administered by the British Standards Institute (BSI)[111] and proposals such as the Bank of England's SME Passport[112]. It is recommended that HM Treasury appoints a private sector body to design, build, launch and administer the International FCP.

The International FCP will help fintechs to provide an international sign of quality, resilience, trust and standing to participants in international markets, in order to facilitate gaining traction in these markets and supporting fintechs to scale internationally. It will provide assurance to the potential customers and partners and mitigate barriers to entry. It will in turn further ease collaboration between fintechs and larger firms in the market. It will also deliver additional benefits to fintechs in their domestic market, helping them to further enhance their profile in their home market and support scaling.

The standard will need to be established across a range of pre-defined metrics to appeal to a range of ecosystem participants (customers, suppliers/ partners, regulators, investors and prospective talent) with which a fintech interacts. These pre-defined metrics will look to leverage existing standards where they exist and could include:

- Identity verification, including digital identification, authentication and permissioning
- Additional safe and secure data such as evidence of partnerships with incumbent financial institutions and backing from a recognised investor
- Conformance to standards such as regulatory compliance and data security

With the advent of open data and API enablement, the option exists to digitally share these fintech credentials, making it easier to validate a fintech's quality standing globally. This provides an opportunity for a private sector body to run the International FCP, ideally with input and support (process and financial) from the industry.

The metrics included in the standard will be developed over time. Some metrics, such as supplier and partner accreditation, can be developed relatively quickly and with limited effort, whereas others, such as evidence of investor backing and regulatory compliance, will require greater design and should be implemented as part of a longer-term strategy.

> "Any company that deals with money, as almost all fintechs do, must earn the trust of their customers, partners and suppliers. Anything that reassures these groups is a massive help for the initial sale and ongoing relationship with those three key groups."
>
> **Jonathan Quin**
> Co-Founder and Director, World First

111 https://www.bsigroup.com/en-GB/
112 https://www.bankofengland.co.uk/paper/2020/open-data-for-sme-finance

Figure 16: Operating model for the International FCP

GOVERNANCE

Centre for Finance, Innovation and Technology (CFIT)

A dedicated standards unit run by the Private Sector to set, manage and operationalise the international standards for FinTech

FUNDING

Banks / FinTech

Trade bodies / associations / foundations

ACCREDITATION OPERATING PROCESS

Example data / focus areas

Customers
Experience; ease of integration/on-boarding; handling of customer data/identity; product and availability

Suppliers & Partners
Ease of integration/on-boarding; evidence of working with one or more major financial institutions

Regulators
Compliance with existing standards; track record of any compliance issues AML/KYC procedures

Investors
Financial metrics; reliability on information; backing of a trusted investor; leadership and governance framework

Talent & workforce
Employee health; employee support; employee relations, talent intiatives, D&I

Leverage existing standards where possible

ISO 27001 · defaqto · Which? Recommended Provider · PCI DSS Compliant · FCA Financial Conduct Authority · OPEN BANKING · FRC · Certified B Corporation · NES National Equality Standard

Data consolidation (via APIs) and accreditation process based on agreed methodology

BRONZE | **SILVER** | **GOLD**

Release data to the FinTech / concerned party

MONITORING

A third party partner to monitor and administer the standard (example activities)

- Develop/update accreditation process and methodology
- Monitor changes that may impact accreditation
- Manage data calls, data warehouse, security and confidentiality
- Develop and execute roll out plans with the governing body
- Provide ongoing reporting to the governance body

The table below sets out examples of focus areas across relevant participant groups from which data could be shared as part of the International FCP. It also includes existing accreditations that should be leveraged in the development of the International FCP.

Ecosystem participants	Illustrative focus areas for each ecosystem participant	Example existing accreditations
Customers	Experience, ease of integration/on-boarding Handling of customer data/ identity Product and functionality	ISO 27001 Cyber Essentials Payment Card Industry Data Security Standard Product accreditation (Defaqto, Which)
Suppliers & partners	Ease of integration/ on-boarding Evidence of working with one or more major financial institutions	
Regulators	Compliance with existing standards Track record of any compliance issues AML/ KYC procedures	FCA/PRA authorisation GDPR confirmation Open banking standards
Investors	Liquidity, cash flow, credit and capital Reliability on financial information Backing of a trusted investor Leadership and governance framework	Financial Reporting Council (FRC) ISA 240 B-Corp
Talent and workforce	Employee health and wellbeing Support for employees Employee relations, talent initiatives, D&I	Women in finance National equality standards

Enabling actions required to implement the recommendation

There are a number of steps required to implement the International FCP:

- **Appoint a respected private sector partner to construct, implement and administer the International FCP.** The International FCP would require a central party to develop, implement, administer and monitor it on an ongoing basis. The entity would need to work alongside existing ecosystem participants to ensure their feedback is incorporated and that it is recognised by them.
- **Receive endorsement from the Government.** The FCP would require Government endorsement to drive uptake and international recognition.
- **Develop a marketing strategy and plan.** Establishing the International FCP on a domestic and international basis will require efforts to promote usership and adoption. It is important that it is incorporated as a part of the UK's overall branding and marketing efforts (as per Recommendation 1) and there is a potential for the CFIT (as per Recommendation 2) to undertake ongoing governance of the International FCP.
- **Pilot with select metrics and/or identified geography first to test the idea.** The metrics included in the standard will need to be developed over time. Some metrics, such as supplier and partner accreditation, can be developed relatively quickly and with limited effort, whereas others, such as evidence of investor backing and regulatory compliance, will require greater design and should be implemented as part of a longer-term strategy.
- Piloting with a selected international jurisdiction, and potentially with a subset of incorporated functionality/ breadth should be considered. To do this would require building an international group to develop the required criteria across joint priorities and understand what good looks like from the industry and consumer perspective in both markets.
- Important considerations for the development and roll out of the International FCP include:
    - Building on existing standards to leverage the existing processes and procedures
    - Alignment with existing local regulations
    - It must not introduce new administrative burden and/ or costs on the fintechs and should be genuinely designed to help the fintechs scale without creating additional work. It must not stifle a fintech's ability to innovate (as certain procedures would need to be followed)
    - It should take a tailored approach to account for different attributes of a fintech (size, B2B vs B2C, sub-sectors)
    - It would require working through any legal liability/ challenges that may arise from authorising, adopting, backing or recognising the International FCP. It would also require working through confidentiality challenges where certain information is requested to not be disclosed by either the fintechs or the information providers

National Connectivity

"The growth in UK fintech has been one of the major success stories within the British economy over the last decade, Not just in London and the south-east, but across all of the regions and nations... for example in Edinburgh, where DirectID is located, we have seen the blossoming of a burgeoning sector."

"The technology, products and services that have been developed by the sector are of the highest order, and have materially changed how business and consumers interact with their money. I am confident that with the right support and investment, UK fintech will continue developing the world's best solutions for how we view and manage our money."

James Varga
CEO, DirectID

The UK fintech success story is not confined to London, but spread across the UK in 'clusters', notably where financial services and technology domain expertise, STEM skills/academia and investment capital are present.

London is a key driver in this success: the second highest ranking fintech ecosystem globally with the world's highest concentration of financial and professional services firms. The capital is a magnet to investors as London-based firms attracted 91% of the $4.1 billion of venture capital flowing to UK fintech in 2020[113].

So why not use its assets – the hyper-connected finance ecosystem; steady supply of talent; and investor interest, as a blueprint to accelerate fintech growth across the whole of the UK? With one nationwide approach, the collective excellence of UK fintech can be further amplified on the global stage.

Across the UK, there are high levels of fintech activity. 10 of these clusters are already producing high growth fintechs and show potential for growth and developing real areas of excellence.

Rather than vying to compete with one another, these clusters need to form a more collaborative web in order to strengthen connectivity. This would subsequently power fintech success across the country, and internationally, boosting the position of the UK in one of its fastest growing industries. After all, this isn't about Manchester competing with London, but Manchester competing with Barcelona, Frankfurt, or even Sydney.

113 Source: Innovate Finance, 2020 FinTech VC Investment Data.

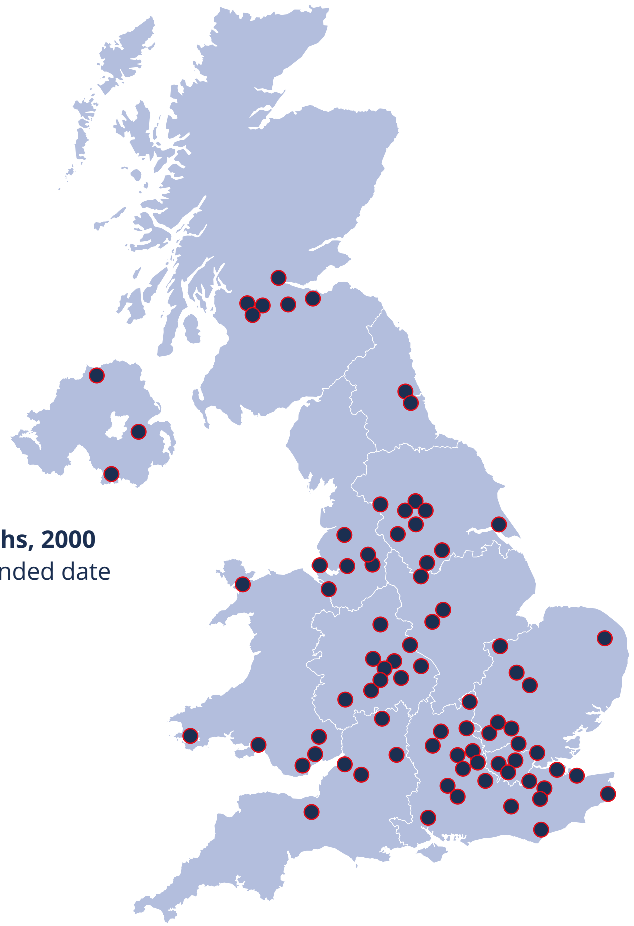
Mapping UK fintech

UK fintech has seen consistent growth in the UK since 2000 to a total of c.2,500[114] fintech companies today, with a period of stronger growth during 2011-2016, when the number of fintechs increased 16-21%[115], year on year. There are signs that the rate of growth has slowed in recent years, but there's still plenty of activity throughout the country, albeit grouped together in clusters.

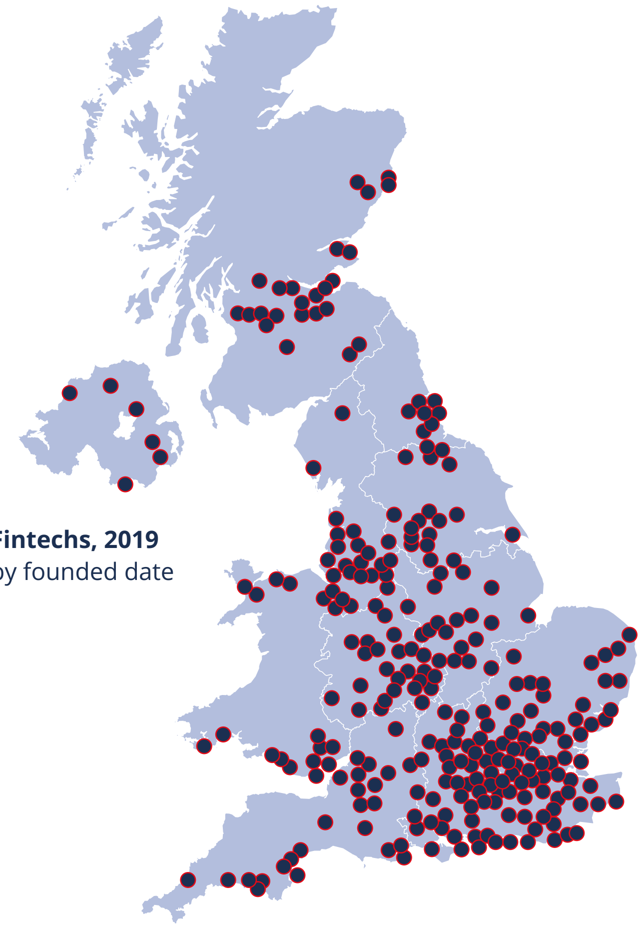
Figure 17: Geographically illustrating the number of fintechs in the UK by the founded date in the year 2000 and year 2019

Source: Deloitte fintech Database

Fintechs, 2000
by founded date



Fintechs, 2019
by founded date



114 Deloitte fintech database
115 Deloitte economic analysis

The Power of Clusters

Identification

Clusters are a worthwhile focus, as they are recognised as powerful economic and social development tools that empower innovation and show more resilience. According to The European Secretariat for Cluster Analysis, clusters have been shown to:

- Cohesively connect participants in a particular field and grow faster than the mainstream economy
- Respond to innovation opportunities quicker
- Employ more people, an average of 25% more by business and enterprises
- Pay more, on average up to 11% higher salaries
- Gain international recognition and facilitate collaboration with centres of excellence

Analysis undertaken for this Review identified 25 clusters of fintechs across the UK. They are at different stages of growth and development, with different focus areas and specialisms. However, of these 25, deeper analysis shows that 10 clusters in particular are producing high growth fintechs (c10% of fintechs achieving high-growth status) and have the most potential to grow and develop further.

These clusters are:

1. London
2. The Pennines, covering Manchester and Leeds
3. Scotland (especially the Edinburgh / Glasgow corridor)
4. Birmingham
5. Bristol & Bath
6. Newcastle & Durham
7. Cambridge
8. Reading & West of London
9. Wales (especially Cardiff & South Wales)
10. Northern Ireland

Categorisation

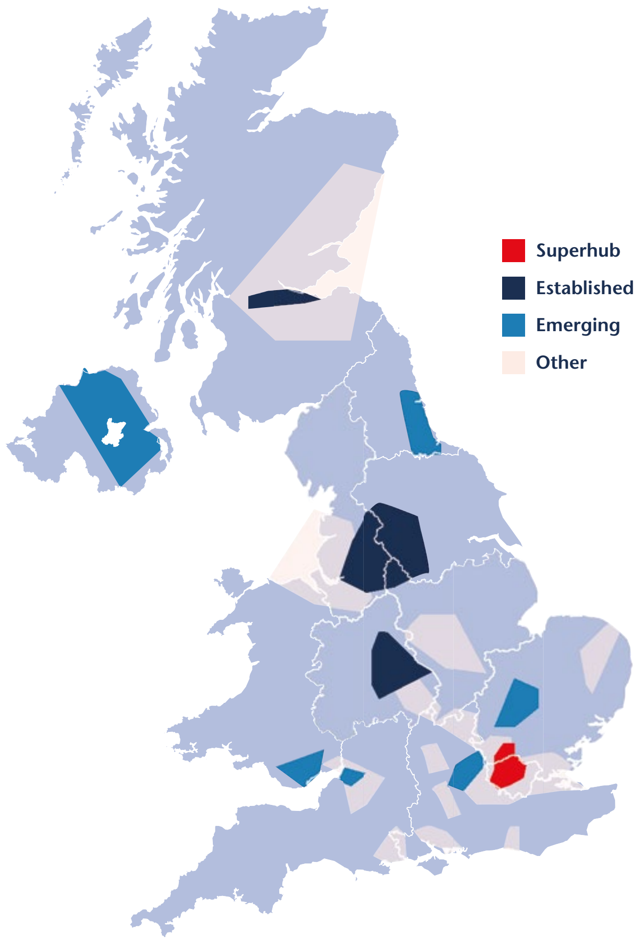
These 10 clusters have been categorised as per below:

Cluster Type	Definition
Super hub	Recognised as a global leader in fintech.
Established	Clusters that have reached a large critical mass of fintechs. A significant proportion of these are high growth.
Emerging	Clusters that have an emerging mass of fintechs with a significant proportion of high growth fintechs.
Other	Areas with fintech activity that may not yet have reached critical mass or have fewer high growth fintechs to date.

Source: UK fintech Clusters, Deloitte fintech Database 2020

Figure 18: Geographically illustrating the number of fintechs in the UK by the founded date in the years 2000 and 2019

Source: Deloitte FinTech database 2020



Super hub

London is one of the top five fintech hubs in the world. Approximately two thirds of all UK fintechs are headquartered there (Deloitte Fintech Database 2020).

As a super hub, London's success is catching. It has helped establish and support a 'doughnut' of strong fintech nodes around Greater London, the South and South East of England, in areas such as Milton Keynes, Oxford, Brighton, Southampton and Bournemouth. A number of these nodes are developing into emerging clusters in their own right, such as Reading and Cambridge.

Large and established clusters

The Pennines Modelling shows a cluster across the Pennines including Manchester, and Leeds. To date this cluster may not have received the recognition its scale deserves when looked at through this new lens. This cluster has 135 fintechs, the highest cluster count of fintech companies outside of London, with 13% of high growth fintechs nationally being headquartered here.

Scotland is another example of an established cluster between Edinburgh and Glasgow. Its status within fintech is more widely known nationally and internationally, hosting the third largest volume of fintechs within the UK. It has strong roots in financial services with many large financial institutions such as RBS and Aberdeen Standard Life choosing Scotland as its HQ. Edinburgh University supplies a rich pipeline of data skills and talent.

Birmingham also qualifies as an established cluster with a growing financial services presence, one example being HSBC's recent relocation of its UK Retail Banking Head Office from London. However, given Birmingham's size and status as the UK's second city, there is a sense that the fintech footprint there today is below potential, with greater upside to come from this cluster.

Emerging and/or specialist clusters

There are six clusters across the UK which, though smaller than their established counterparts, show great potential to grow or already feature a specialist fintech focus. These are Bristol & Bath, Newcastle & Durham, Cambridge, Reading & West of London, Wales (especially Cardiff & South Wales and Northern Ireland).

High Growth Clusters

Analysis of the ten highest growth clusters reveal a combination of core characteristics that serve as foundational building blocks for fintech success:

- proximity to financial services and technology domain expertise;
- proximity to academia, and;
- proximity to accelerators & investment.

Not all clusters exhibit the same combination of these capabilities and some leverage neighbouring ecosystems.

Financial Services and Technology domain expertise is strongly evident in the UK's most established clusters. Moreover, in almost every area with high levels of FS and Tech professionals, a fintech cluster is present. Interestingly, the number of SME technology companies, was also a strong indicator of fintechs when analysing cluster strengths.

There is a strong positive correlation between quality STEM talent and the number of fintechs. Locations that do not have a ready supply of STEM talent are much less likely to have a prevalence of fintech, with at least three Higher Education providers required for an area to be able to provide a big enough talent pool.

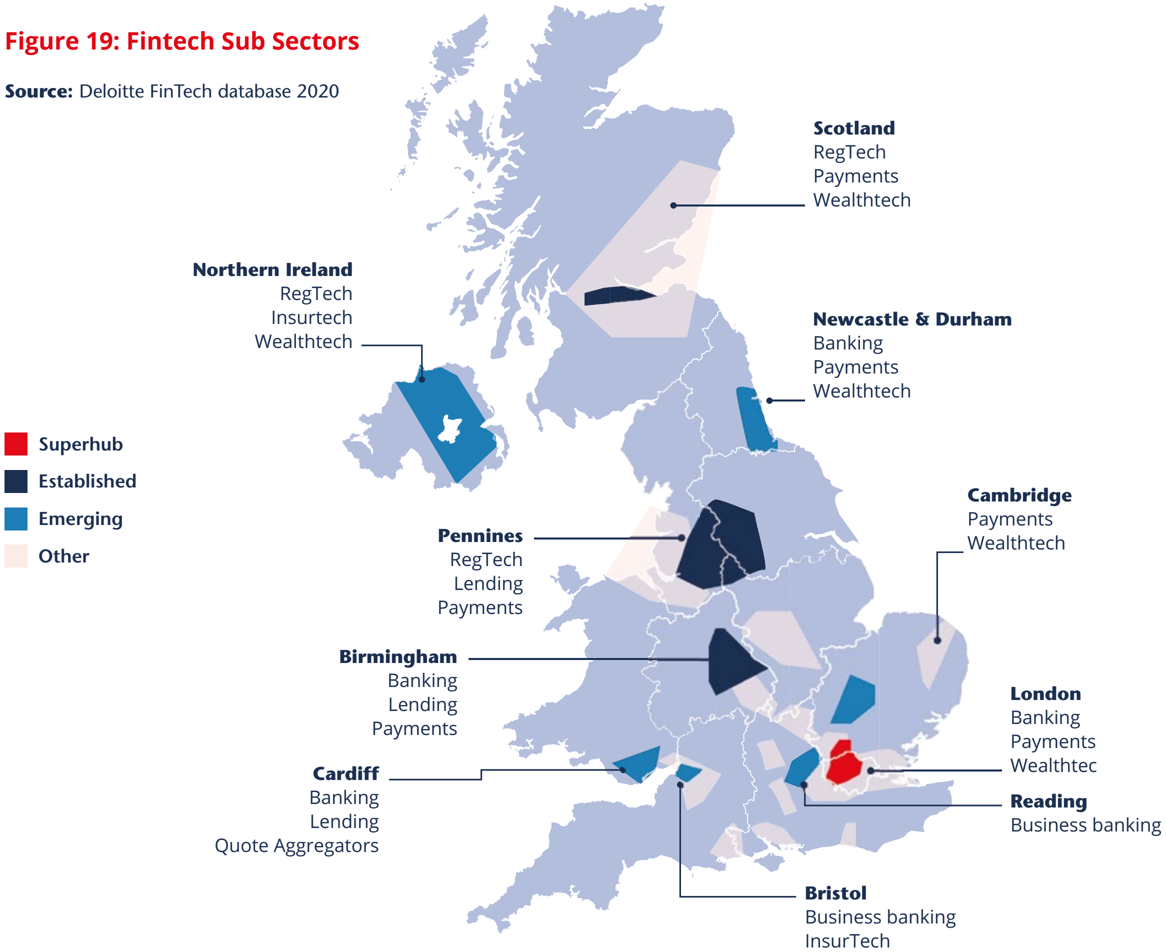
Early insight is beginning to indicate that if there are 3-4+ accelerators in an area, there is an uplift in the volume of fintech. Proximity to accelerators with a large outlay of funds is also emerging as a positive impact on fintech.

Sub-Sectors

The analysis of fintech sub-industries including Banking, insurtech, Lending, Business Banking, Payments, Quote Aggregators, and wealthtech, highlights that the UK fintech sector has a foothold in all major areas.

Figure 19: Fintech Sub Sectors

Source: Deloitte FinTech database 2020



Wealthtech and Payment Technology are clear areas of strength, accounting for more than 50% of all UK fintechs.

Wealthtech companies comprise twice as many fintechs as any other category, making up 35% of UK fintechs. This strength is driven primarily by London, where 77% of wealthtech businesses are based, alongside a strong cluster in Scotland.

Payments businesses make up 17% of UK fintechs. Around half are clustered in London but there is also a strong presence in the Pennines and Scotland.

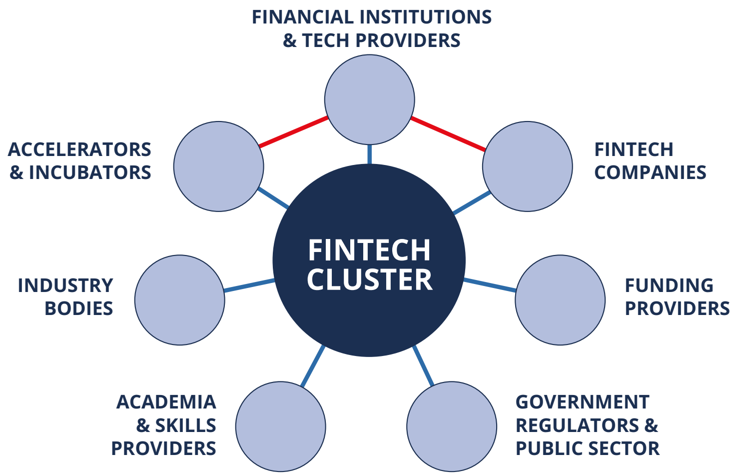
Other specialisms showing notable regional strength are Operations, particularly Newcastle & Durham and Northern Ireland, Consumer Lending in Cardiff and the Pennines, and Business Banking in the Pennines as well as Reading & West of London.

It is interesting to note how sub-categories cluster, such as Lending in Manchester, which has five times as many lending fintechs than any other region outside London, or where it was the key focus of that cluster, such as wealthtech in Cambridge, which comprises around half of all Cambridge's fintechs. Some clusters have fewer specialties because the fintechs in that area are spread more evenly across the sub-industries, such as Bristol.

Defining connectivity

Connectivity means better relationships and liquidity of information between individual fintechs – within clusters, between clusters, and with the wider fintech ecosystem. It means easy access to information, investment, skills and talent, and policy and regulatory expertise. It also means proximity to and support from established financial services and technology businesses, academia, accelerators, and commercial partners. Ultimately it means the UK reaching critical mass on the global fintech stage.

Figure 20: Fintech Cluster



All these features can be enhanced by a more strategic national coordination, backed by accurate and openly accessible national data.

> "Atom is proud to contribute to the UK's reputation as a global fintech centre of excellence. We've been on every journey that we imagined, all made possible because we believe that the UK is the best place to create banks. This review is not just timely but essential to maintain momentum in this key part of our economy and to continue to drive better – and cheaper – outcomes for all of us."
>
> **Mark Mullen**, CEO, Atom

The Opportunity

Connectivity now is critically important. The UK is currently a dominant force in fintech but cannot remain complacent as other jurisdictions such as Singapore build momentum. Although starting from a lower base and often dominated by one or two large players, Germany saw a 50% increase in investment to $1.4bn in 2020, and Sweden saw a 57% increase to over £750m[116].$1.3bn[117] .

Protecting the UK's premier position will require focusing on the highest growth clusters and strengthening national strategic coordination. As the world becomes increasingly virtual, accelerated by Covid, the removal of barriers to growth that stop fintechs scaling and succeeding becomes ever more vital.

Success breeds success and has a vital trickle-down effect. Fintechs draw on the strengths of established businesses nearby and in turn, build their own. Encouraging high growth clusters to develop encourages the clusters around them to develop too, meaning one cluster's success benefits clusters nationwide. By promoting connectivity between fintechs and clusters across the UK, we can develop a UK fintech landscape where the whole is greater than the sum of its parts.

As they scale, high growth fintechs tend to progress from early-stage, local cluster connections to virtual connectivity at the national and international level. The issue is that not every fintech in for example Bristol, wants to make regular, expensive trips to London to connect with investment, talent, partnerships, etc, and fuel their growth. They want to work with the best people, wherever they are, through virtual, more effective channels. Even in the more virtual working environment necessitated by covid, locating the right team and making those connections can be difficult.

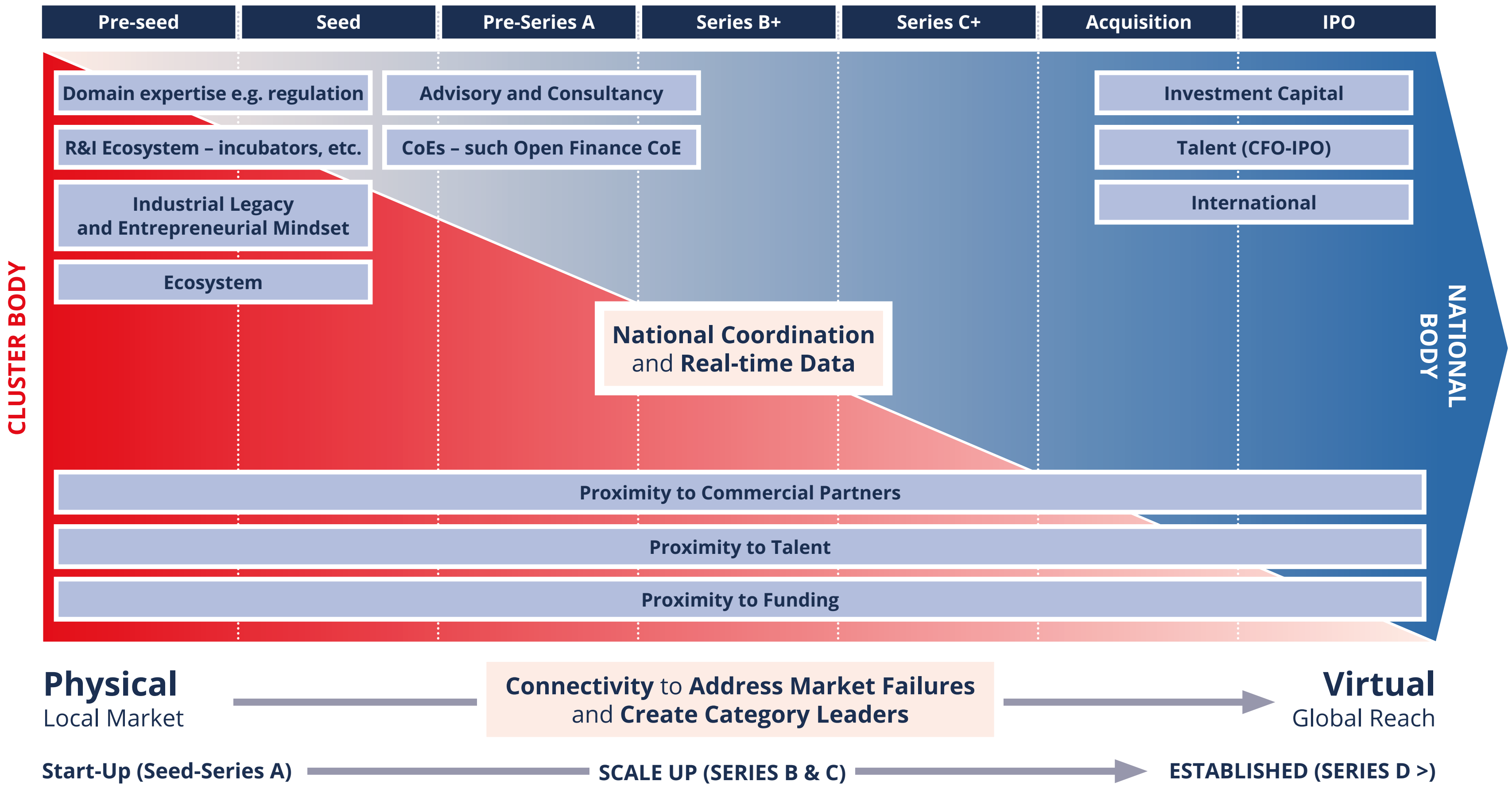
Without better connectivity, these issues will persist for UK fintechs of all sizes, hampering the ability of the industry to grow.

"We have experienced the benefit of working with academia, and have been part of many accelerators and incubators as well as involved in other initiatives as part of the Fintech Scotland wider tech community. To tie this back to growth, this has led us to get investment from Edinburgh, London and New York, as well as grant funding from Scottish Government and Nesta."

Loral Quinn
Co-founder & CEO, Sustainably

116 https://technation.io/report2020/#12-uk-investment
117 https://www.innovatefinance.com/capital/

Figure 21: National Connectivity Framework



<30

- Focus: founder led with technology contractors and a focus on building functions
- Accelerated by access to shared talent pools and dedicated, government led, start up support

<75

- Focus: building robust functions and future recruitment strategy
- Accelerated by flexible remuneration and incentives and growth opportunities aligned to the company's growth objectives

75-400

- Focus: hiring experience scale-up executives and dedicated teams. International expansion
- Accelerated by balanced growth and employee satisfaction. Support and agile immigration framework. Access to global talent

>500

- Focus: IPO and hiring M&A team, new business streams and retaining talent
- Accelerated by hiring experience senior advisors for strategic guidance. Access to specialised resources
- Adequacy & creditability of leadership important for global expansion

The number of Envoys and fintech bodies demonstrate a need, but their disparate activity is daunting to navigate for fintechs. Finding the right support at the exact moment it's needed – such as the tipping point from physical to virtual connectivity as fintechs scale – becomes a serious challenge.

Strategic national coordination, combined with accurate, openly accessible, national data will give UK fintechs access to the key ingredients that are indicative of success and growth – talent, investment, partnerships, and expertise from industry peers. Fintechs, industry bodies, entrepreneurs and SMEs are demanding better liquidity of information to support connectivity. Results from the chapter's National Connectivity Survey showed that information such as details of investors, commercial partnership opportunities and grant funding would be very valuable.

During the course of the review there has been extensive data cleansing of a number of current data sources to establish an accurate picture of UK fintech. For example, research found that over 50% of fintechs are unable to classify themselves (including the likes of Monzo, Wise, Funding Circle, Revolut, etc.) using the current Standard Industrial Codes (SIC 2007). Thus repeatable, accurate analysis on the fintech industry by the ONS, government and other interested parties is not currently possible and there is a need to establish a platform that enables liquidity of information.

Without better connectivity, these issues will persist for UK fintechs of all sizes, hampering the ability of the industry to grow. Better connectivity has the potential to uplift GVA by +60%, between £2.4 and £3.0bn, and create a +50% increase in fintech jobs.[118].

Looking more globally, it is clear that the hubs and clusters displaying the characteristics of strong national connectivity are thriving. Singapore is reaping the benefits of a coordinated approach to fintech strategy and policy, seeing year on year growth from 2016, reaching a funding record of over S$1 billion in 2019 (see Singapore case study below).

Case study

Singapore's Data Analytics Group

In 2017, the Monetary Authority of Singapore formed a Data Analytics Group (DAG)[119] to unlock insights, improve supervision and improve efficiency across the organisation – al in the aim to position itself and the financial services sector for the digital economy of the future.

The Group has three specific units:

- Data Governance and Architecture Office
- Specialist Analytics and Visualisation Office
- Supervisory Technology Office

The Supervisory Technology office works with MAS's Fintech Innovation Group to promote data analytics and capabilities within the industry.

"Better central coordination would benefit their delivery, and the ability to regularly align these objectives to outcomes supportive of a national fintech strategy."

Fintech National Network

118 Deloitte Economic Analysis

119 https://www.mas.gov.sg/news/media-releases/2017/mas-sets-up-data-analytics-group

Case study:
Singapore's national connectivity

As part of its four-year redefining journey to focus on fintech, the jurisdiction has:

- Appointed a Chief Fintech Officer, Sopnendu Mohanty, to work alongside the Monetary Authority of Singapore
- Created an investor friendly climate. As well as the low tax system, available schemes include government co-financing that matches private capital investment in start-ups dollar-for-dollar, and grants covering talent, investment and technologies such as AI.
- Coordinated industry collaboration. Singapore was a driver for the APIX platform, a 2018 initiative to help fintechs and financial institutions interrogate and test solutions together via cloud-based architecture. More than 100 fintechs from 26 countries and approximately 50 FIs from 16 countries have instant access to accelerated collaboration.

The total capital invested has grown at CAGR of 105.9% between 2016 and 2019. From 2016 to 2017, the share of deals sized over $50m rose nine-fold. This is paired with sizeable decline in the proportion of transactions under $1m, a sign of market maturity.[120]

120 https://member.fintech.global/2020/09/09/fintech-funding-in-singapore-falters-in-h1-2020-due-to-absence-of-large-deals/

The Current Reality

Fragmentation

The UK's clusters have evolved at differing speeds with different drivers, funding, organisational structures, governance, and approaches. They've used the foundational capabilities at their disposal to greater or lesser degrees. Some have grown independently in duplicative ways. This individual development reflects the different local support to fintechs across the UK. The supporting bodies which represent fintech, and help them work together, vary in nature, purpose and resources.

One example is the Birmingham-centred cluster. Though it has plenty of high growth fintechs and its fintechs are often more mature, Scotland has double the number of fintechs overall, and the Pennines has double the number of high-growth fintechs. This is surprising, as the expectation is that such a large city, with a significant presence of academic and financial institutions, would be much higher. This may suggest a disparity in how the Birmingham cluster has used local foundational capabilities and how successful it has been in fostering local connectivity in comparison to other clusters, such as Scotland.

A key difference for Scotland is that it has benefited from a local body dedicated to supporting the specific, localised needs of the Scottish cluster for some time: Fintech Scotland. As no-one knows the local fintechs like the local cluster, this empowered body has been able to develop and deliver focused strategies that consider the different needs and objectives of the local fintech ecosystem.

Currently there is no dedicated comparable body that exists to lead the cluster growth in Cambridge, Reading and until recently Birmingham. The picture in the Pennines, Bristol & Bath and Newcastle & Durham is more fragmented, as whilst they receive a range of support from either regional fintech bodies or local tech initiatives, this too could be further specialised and strengthened (either through new or enhanced existing organisations) if the successful Scottish model was replicated for each cluster.

> "The digitisation of information and the harnessing of data from multiple platforms have created the opportunity to use data analytics to understand the economy and the financial system with a depth that was not possible before. MAS is committed to building strong capabilities in data analytics to seize this opportunity"
>
> **Ravi Menon**
> MAS Manging Director

Case Study

Fintech Wales

Founded in 2019 as a not-for profit with a £40k budget from Welsh Government, Fintech Wales brings together entrepreneurs, start-ups, scaleups, large corporations, investors and higher education to meet and share ideas. Its purpose is to proactively manage, support and grow the fintech ecosystem.

Fintech Wales has secured a further £200,000 in seed funding from the Cardiff Capital Region City Deal for a 9 month programme to establish the building blocks required to grow fintech sustainability in Wales.

Case Study

Fintech Scotland

Founded in 2018 with £100k seed funding from the Scottish Enterprise and £200k from ten initial strategic partners including partners at Lloyds and HSBC. Fintech Scotland has developed the Edinburgh to Glasgow corridor into a leading European cluster focussing on Open Finance and regtech.

Starting with 26 fintech firms, today the ecosystem boasts 151, with more in the pipeline. The fintech cluster has benefited from a strong governance model which brought together entrepreneurial firms, large FS institutions, global tech companies, public sector bodies, academia and regulators – a total of 28 strategic partners.

Leadership

Local cluster leadership is an important factor in driving success, the creation of FinTech Scotland as a public/private partnership, commercially minded leadership has had a significant impact on FinTech success. At present, leadership has been stimulated through a patchwork of different ownership, governance and funding models, ranging from no or little public funding involvement and funding support, to greater levels of seed-funding as well as ongoing project resources.

The nature of the entity and governance of that entity is key, as where a public/private partnership has been created with commercially minded leadership, and a professional governance structure, the entity is more investable and funding is likely to be easier to come by. Those that are privately owned and governed will likely find it more difficult to source public funding.

But there are emerging clusters in Manchester, Leeds and Birmingham in particular, whose strength and capabilities are under-estimated. As such, this has led to an asymmetry in the organisational capacity of clusters and it is often devolved nationals with more focussed political support governance models – with both public and private involvement (accompanied by funding) – that benefit from this.

Without similar support across the rest of the UK, local leadership is more limited in its ambitions and achievements. There are a range of actions to improve this, such as local channels like LEPs (where they exist) or City Deals. Where clusters cross combined authorities or fall outside of local government administrative boundaries, there would be value in the central government facilitating an analysis of gaps and how best these can be filled to the benefit of greater targeted fintech growth.

“Additional resources, at both a national and local level would allow for greater coordination, and the ability for each hub to better showcase its businesses.”

Fintech National Network on National Connectivity

Funding innovation and excellence

The UK is known for producing category leaders, and not just in fintech. It is 3rd globally for technology Unicorns, behind the US and China, and 3rd globally for investments in critical emerging technologies such as Artificial Intelligence, Cybersecurity and Blockchain.

As shown in the data analysis, the UK currently has footholds in all the fintech sub-industries leading to areas of excellence.

There are increasing numbers of fintech unicorns and category leaders in clusters such as the Pennines, Scotland and Bristol. Other examples include Operations in Newcastle and Durham and Northern Ireland, Consumer Lending in Cardiff, Business Banking in the Reading and West of London, and wealthtech in Cambridge.

This is important as category leaders tend to experience much faster growth and receive much higher valuations from investors than companies bringing only incremental innovations to market.

Innovation funding is already a key government priority. This is set out in the Industrial Strategy, which aims to raise total public investment in research and development to £12.5 billion by 2022, and commits to boosting spending on research to 2.4% of GDP by 2027. In 2018, financial services contributed £132 billion to the economy (6.9% of total economic output).

However, there is less of a focus on creating opportunities for collaboration on fintech research and innovation, either to drive the newest approaches or see those ideas through to commercial exploitation.

Addressing this would not only attract future innovators to the UK to work on their next big product, but also incentivise stronger commitment to the UK from companies already here. Fintech businesses (especially early stage) can move their HQs to another country with little restriction, but this becomes harder and less attractive the further they are embedded within the ecosystem.

Being more aware of, and able to access, future innovation funding will ensure the development of cluster specialisms. This will allow clusters to establish centres of excellence, encourage collaboration between industry and academia, and the prioritisation of real-world commercial applications.

Part of this can be achieved through a more co-ordinated approach to innovation bids by the sector itself. For example, doing more to publicise where existing innovation and public funding streams are available for fintech collaborations, and working together to ensure these are directed to UK fintech, as we saw with the Strength in Places Fund which financed Scotland's Global Centre of Excellence for Open Finance.

There is also a case for more targeted fintech R&D funding streams being made available in the future. As such, the Review would welcome Innovate UK exploring further fintech R&D opportunities, as an important next stepping stone in building out greater sector support in the future.

Case study

Atom bank

Company name: **Atom bank**
FinTech vertical: **App-based banking (Retail and Business)**
Headquarters: **Durham, UK**
Office locations: **Durham, UK and London, UK**
Number of staff in the UK: **427**
Number of staff hired in 2020: **90**

What problem is your company solving?

Making simple things – saving money, borrowing to grow your business or borrowing to buy a house.

For all kinds of reasons banks don't make things simple and easy for customers. Banking is a whole lot more straightforward than some of the other challenges that humans overcome every day, and yet despite the volumes of digital data that we have available there is still huge effort required to fulfil even the simplest of tasks in banking.

So Atom is here to make banking simple. We'll also here to make direct banking engaging for customers because you would, wouldn't you?

Give us one or two examples of how your firm has made life easier for a specific customer

Engagement is as much about removing friction and ensuring ease as it is about how you speak to customers and what you offer them. Take our Fixed Saver for instance. We launched with a simple, exclusively in-app journey for new to bank customers that allowed an unregistered customer to open an account and deposit money in under 10 minutes wherever they and their smartphone happen to be.

Since then we've focused on reducing customer effort in mortgages, in instant and genuinely accessible savings, and right now in business banking. We launched our mortgage proposition in 2016, recording a record application to offer time of 12 seconds, with a fully digital in-app mortgage acceptance process once that offer lands with you. Our Instant Saver, built on the world leading Thought Machine platform, enables real time and fully accessible savings to be linked to any UK current account; no need to sit on large balances that pay you nothing for fear of not being able to get hold of your money when you need it.

As we've grown our business lending we've transformed the way that we ingest data and make decisions; there's more to do here but it's the way we're built that allows us to do this with ease and at speed.

Recommendations

Recommendation 1:

Nurture the high growth potential of the top 10 fintech clusters, with the proven foundational capabilities to optimise their particular areas of excellence.

Whilst this by no means seeks to disregard or discourage organic growth in wider areas, focusing efforts and available resources on these clusters is anticipated to create the strongest return at the fastest pace.

Each prioritised cluster to produce a three-year strategy to support their continued growth, foster specialist capabilities, and enhance national connectivity.

Cluster strategies should ideally:

- Be set against national baseline data.
- Be entrepreneur-focused (entrepreneur as the customer).
- Optimise identified areas of excellence and build on existing strengths.
- Secure funding to support its implementation e.g. LEPs or City Deals where these are available.
- Consider where cluster collaborations, both virtually and physically, might further support cluster goals.

Recommendation 2:

Drive national coordination strategy through CFIT (see page 15) to ensure future fintech competitiveness and growth across the UK connectivity. This will deliver national coordination, with supporting data and technology infrastructure, to ensure future fintech competitiveness and growth across the UK.

CFIT should embed a data-led approach and maintain a national fintech database, which would provide open access data and ensure an evidence-based approach to sector developments.

To assist in its establishment, CFIT's governing principles should include that it operates as a small central co-ordinating function with an Advisory Board comprising of public/private local/regional representation, government/regulator and investor representation.

Primary objectives of CFIT should include:

1. Provide strategic cohesion of UK fintech ambition through facilitating national connectivity:
   - present timely and regular research and insights into UK fintech through maintaining open, accessible sector data, to both understand, build on, promote and better co-ordinate UK fintech strengths and specialisms, both domestically and abroad.
   - work with local/regional fintech leadership to drive connectivity of domestic networks in investment, talent, partnerships and academia.
   - act as market and export knowledge hub for international opportunities.

2. Support UK fintech cluster development:

   - assist in the establishment of commercially focused and investible governance models (where gaps exist).
   - assist local leadership with development of three-year strategies through sharing of best practice and communicating national priorities.
   - identify and disseminate innovation and/or geographical funding streams available to enhance UK fintech, assisting with bids to support clusters in accelerating their strengths and specialisms.

Recommendation 3:

Accelerate the development and growth of fintech cluster excellence to take advantage of domestic opportunities and compete on global stage, through increasing research and development investment in the fintech sector.

In this regard CFIT should:

- identify and disseminate existing innovation and/or geographical funding streams available to enhance UK fintech.
- provide expert input to assist with industry-led bids to support clusters in accelerating their strengths, for example through fintech centres of Excellence, with an emphasis on commercial applications.
- liaise with Innovate UK on future plans to support fintech and professional services R&D, working together to evaluate and consider further routes for fintech innovation funding.

Annex

Members of the independent Review into UK Fintech

Governance Board:

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Charlotte Crosswell, CEO, Innovate Finance

Simon Horner, Innovation Director, City of London Corporation

Alastair Lukies CBE, Chair of Fintech Alliance

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Team:
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Cross-cutting support

Lead:
Mike Harding, Oliver Wyman

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The secretariat responsibilities of the Fintech Review were undertaken by two organisations: the City of London Corporation and Innovate Finance.

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ABI
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Anon
Apiax
Arabesque
Archaz
Archover
Arizona State University
Ascension Ventures
AskIF
Ask Inclusive Finance
Assetz Capital
Athla Capital Management
Atom Bank
Automated Intelligence
Aviva
Aviva Ventures
Baillie Gifford
Barclays
Barclays Ventures
Bankable
Bank of International Settlements (BIS)
Beauhurst
Binance
BlackRock
Blackstone
BlueFire AI
Bright Blue Hare
Bright Ideas Trust
Broadridge Financial Solutions
BT
Bud
Business Growth Fund
BVCA
Cambridge Alternative Finance
Cambridge Centre for Alternative Finance
Capital on Tap
CBI
Checkout.com
Citi Innovation Lab
Citi Ventures
Citibank
Clausematch
Clearbank
CMS
Coinbase
ComplyAdvantage
Computational Linguistics, University of Cambridge
Confused.com
Consult Hyperion
Continuous Rapid Payment Technologies
Coursera
Coalition for a Digital Economy (Coadec)
Credit Suisse
Credit Kudos
CryptoUK
Currencycloud
Curve
CurveBlock
CVC
Delio
Deloitte
Digiidnet
Digital ID & Authentication Council of Cananda
Direct ID
DLA Piper
Double Prime
DST Investors
Duality Bank
DueDil
DV Advisors
Eigen Technologies
Element22 Limited
Elfinity
Emerging Payments Association
Encompass
Ensygnia
Euroclear
Facebook
Fair4AllFinance
FDATA
Featurespace
Fidelity International Strategic Ventures
Financial Inclusion Commission
Financial Services Skills Commission
Financial Stability Board
FinTech Alliance
FinTech – Payments
Fintech Think Tank
FIS
Flex Money
Form3
Founders Intelligence
FoundersKeepers
Foxtons
Freshfields Bruckhaus Deringer
FT Partners
FTI Consulting
Funding Circle
Funding Options
Funding Xchange
Future Learn
GBG PLC
GDF
Globacap
Global Digital Finance
Global Digital Forum
Global Identity Data Intelligence for Data
Global Processing Services
Go Henry
GoCardless
Goldman Sachs
Google
Google Pay
Greensill
Hogan Lovells
Hourglass Innovations
House of Lords
HSBC
Huobi

ICO
Impact Investing Institute
Imperial College London
Incuto
Insuretech UK
International RegTech Association
Jocelyn Cunningham
iwoca
Just Group
J.P. Morgan
KiteEdge
Koine
KompliGlobal
Lacero
Lakestar
Lazard
Leeds University
Legal & General Group
Lending Crowd
LendInvest
Leveris
Lloyds Banking Group
LMAX
LocalGlobe
London & Partners
London Stock Exchange Group
LOQBOX
Maanch
Makers
Mambu
MAPS
Mastercard
Mercado Libra
McKinsey & Company
Modulr Finance
Moneyhub
Monzo
Moorwand
M-Pesa
Nationwide
NatWest
NESTA
Newcastle University
Northrow
Novastone
Nucelus Commercial Finance
Nutmeg
OakNorth
OBIE
Odgers Bernstein
Oliver Wyman
Onfido
Oomero Ltd
Open Banking Excellence
Open Banking Implementation Entity
Open Earth Foundation
Open Identity Exchange
Open University
OpenPayd
OpenWrks
OPtional
Orrick, Herrington & Sutcliffe (UK) LLP
Outlier Ventures
Oxbury
Passion Capital
Payment Sense
Paypal
Paysafe
Pearson
Penningtons Manches Cooper LL
Pension Bee
Pension Corporation
Pimfa
Pikl
Plaid
PLSA
Pre-Emption Group
PrimaryBid
Products Strategy
Profile Pensions
Project Imagine
Queen Mary's University
R3
Railsbank
Raspberry Pi
RateSetter
Recordsure
Red Sand Group
Refinitiv
RegulAItion
Regulation Innovation
Research Exchange Ltd
Responsible Risk
Revolut
Ripple
Royal Park Partners
Royal Society
RTA Associates
Salt Pay
Samsung
Sanne
Santander
Scalable Capital
ScaleUp Institute
Schroders
Seccl
Securrency
Seedrs
Serve and Protect Credit Union
Shearman and Sterling
Silicon Valley Bank
Simply Ethical
Smart Pension
Smith & Williamson
Sonovate
Standard Chartered Bank
Standard Life Aberdeen
Starling Bank
Star Global
Stork Card
Stripe
Suade Labs
Sustainably
SupraFin
SWIFT
Switchcraft
Tally Money
TheCityUK
The Investment Association
Tech London Advocates
Tech Nation
Technology strategy
techUK
Teek Taka
TES
Tether
Thales Group
The Finance Innovation Lab
The Nest
Thought Machine
Tide
Tink
TISA
Trunomi
TSB
Tumelo
UBS
UK Finance
Umazi
University of Cambridge
University of Manchester
University of Oxford
University of Strathclyde
Unum
US Department of Treasury
Venture Capital Coverage Lead
Verifiable Credentials Ltd
Visa Europe
Visible Capital
Vitality
Vocalink
Wagestream
Wealth Wizards
Wealthify
Whitechapel Think Tank
Wise
Work Finder
Worldfirst
Worldpay
Yodlee
Yoti
Z/Yen
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Financial Conduct Authority

HM Treasury

Prudential Regulation Authority

Independent Review into UK Fintech terms of reference

Context: Fintech presents a valuable opportunity to improve financial services for the benefit of consumers, businesses, and government. The UK has established a world-leading fintech ecosystem, due largely in part to strong government support, a forward leaning approach to regulation, and access to skills and capital. The government recognises now is the time to build on this success; the covid crisis has shown there is further work to be done to increase mainstream adoption of technology solutions, and to enhance the resilience of UK fintech. HM Treasury has invited Ron Kalifa OBE to lead an Independent Strategic Review of UK Fintech ('the review'). The intention of this review is to establish priority areas for industry, policy makers, and regulators to explore as part of continuing to foster an environment for the ongoing success of UK fintech.

Objectives: The review will consider how the UK can continue to foster innovation, maintain an ecosystem that supports growing firms, and promote the integration of new technologies across financial services. The review will seek to advance three objectives:

- Ensuring UK fintech has the resources to grow and succeed
- Creating the conditions for continued widespread adoption of fintech solutions to benefit businesses and individuals
- Maintaining and advancing UK fintech's global reputation for the innovation and transformation of financial services

Workstreams: The review will run five workstreams. Each workstream will ultimately make up to three recommendations; each recommendation will seek to advance one or more of the review's objectives. The five workstreams are:

- Skills and Talent: The review will make recommendations for building a robust and diverse UK workforce qualified in areas relevant to emerging financial trends, through developing a domestic skills base and addressing barriers to attracting foreign talent.
- Investment: The review will make recommendations for diversifying the UK investment landscape and addressing the challenges to attracting growth funding.
- National Connectivity: The review will make recommendations for supporting the growth of regional fintechs through improving intra-region connectivity and leveraging the strengths of other fintech hubs.
- Policy: The review will make recommendations for enabling and fostering wider adoption of innovation, including supporting cooperation between fintechs and financial institutions, whilst promoting competition.
- International Attractiveness and Competitiveness: The review will make recommendations for promoting UK solutions to overseas markets and support international exports, as well as promoting the UK as a key market to establish and grow a fintech company.

Governance: The Review will be chaired by Ron Kalifa, with Innovate Finance and the City of London Corporation providing the secretariat.

The five work streams will each be led by experienced financial services and fintech professionals. The Chair and five workstream leads – supported by the secretariat – will constitute the Governance Board, which will provide strategic direction to the review. The review is being conducted on an independent basis.

HM Treasury will attend an initial meeting of the Governance Board to initiate the review.

HM Treasury, other government departments, and regulators will not observe the workstreams or attend any subsequent Board meetings. Government and regulators may be consulted as part of the review to provide technical and policy evidence at the Board's request. The Chair will attend a monthly meeting with HM Treasury to report on development, and the review's progress against its objectives. Recommendations made by this review will be for industry, regulators and policy makers to consider. The review will be presented to HM Treasury, who will publish a response.

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