I am grateful to Amy Lee, Irina Mnohoghitnei, Tom Smith and Oliver Thew for their assistance in preparing these remarks, and to colleagues in the Fintech Hub and across the Bank for helpful comments and suggestions.
Introduction

Thank you for the opportunity to be here today and open the second day of this important global summit speaking on behalf of the Bank of England, as the Deputy Governor with responsibility for fintech.

In the past ten years, growth in the digital economy, new technologies and an increased ability to capture and analyse large amounts of data have spurred a new wave of innovation by financial institutions. And that wave of innovation will intensify in the coming years. Fintech is enabling new players and business models to enter the market. This is increasing competition, helping meet unfulfilled customer needs, reducing inefficiencies and changing the way institutions provide – and consumers and businesses use – financial services. It could transform the structure of the financial sector, with implications for customers, firms and regulators. ¹

Given our range of responsibilities, it is essential that the Bank of England keeps on top of this wave and understands and adapts to its implications. As you heard from the Bank’s Governor, Mark Carney, yesterday, the Bank’s strategy is to enable innovation and empower competition, while ensuring monetary and financial stability.² In practice the Bank is embracing fintech, and working to do as much as we can to ensure that it develops in ways that maximise the opportunities and minimise the risks for society, and that as such are entirely consistent with the defining theme of this year’s summit – “the value and purpose that fintech has to society”.

The Fintech Hub one year on

The vehicle we use to do all this is our Fintech Hub, which we launched one year ago.³ This team, which grew out of our award-winning Fintech Accelerator, sits at the heart of the Bank and leads our fintech strategy by bringing together expertise from all of Bank’s business areas. They have engaged extensively with the fintech sector to understand developments and apply these to support the next wave of innovation in finance.

Examples of their work this year include: collaborating with HMT and the FCA to set out the UK’s approach to cryptoassets and distributed ledger technology in financial services⁴; examining challenges in cross-border payments with colleagues from the Bank of Canada and Monetary Authority of Singapore⁵; exploring how

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financial services might evolve over the next decade as part of the Bank’s Future of Finance project⁶; and analysing everything from the potential role of BigTechs in financial services to the implications of Open Banking and PSD2.

But instead of looking back, I want to stay faithful to the spirit of today’s session and look forward to the contributions the Bank can make to the future of finance. Fintech is one of the Bank’s seven strategic priorities for 2019. In particular I’ll discuss three key areas of Fintech Hub focus in 2019: payments; unbundling; and artificial intelligence.⁷

**Payments**

The first area I’ll focus on is payments. While the Bank is not nearly as old as the Guildhall, this year we are celebrating 325 years as the UK’s central bank; that includes 325 years of providing foundational payments services.

Payments have become increasingly digital in recent years, and there are now hundreds of alternative payment methods⁸ available; recent years have seen a significant diversification of payment companies with new entrants to the market, such as e-money institutions and technology companies – which is why the subject is of interest to the Fintech Hub. This diversification is bringing about an “unbundling” of financial activity – that is to say, breaking the financial services activity and value chain into its component pieces.

The shift towards digital payments can enable competition and ultimately benefit consumers, and the Bank, given its role at the heart of the financial system, is in a unique position to support that. As the Governor said yesterday, this includes updating our own hard and soft infrastructure to provide a platform for private innovation to serve the digital economy. I’ll give three examples of what this means in practice.

First, the Bank is renewing its Real Time Gross Settlement service (RTGS), the UK’s core payments infrastructure – Victoria Cleland, our Executive Director for Banking, Payments and Innovation, spoke about this at a roundtable discussion here yesterday. Our goal is to deliver a materially stronger, more resilient, flexible and innovative sterling settlement system, with the ability to support a diverse range of payment technologies such as those built on distributed ledger technology.⁹

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⁶ This project, led by Huw van Steenis, is looking at how financial services might evolve over the next decade, and what this means for individuals, businesses and financial service providers. For more information see the project webpage at https://www.bankofengland.co.uk/research/future-finance.


Second, as well as renewing RTGS, we, alongside Pay.UK, are moving UK payment systems onto the ISO 20022 messaging standard.\textsuperscript{10} That should bring many benefits, including better interoperability between payment systems, lower entry costs and the possibility of innovative data services to users. We are also working closely with our international peers to promote the harmonisation of ISO20022 globally, which could increase efficiencies and facilitate easier and so cheaper cross-border payments.

And third, as the Governor highlighted yesterday, we are opening up direct RTGS access to a broader range of firms. Five non-bank payment service providers now hold accounts in RTGS, and have seen benefits including faster transaction times and lower reduced individual transaction costs, and around twenty further firms are exploring the possibility of joining.

\textit{Unbundling}

The evolution of payment systems is just one example of unbundling, the second area that I’m going to focus on today. Emerging business models can unbundle traditional financial services activities into individual core functions such as settling payments, performing maturity transformation and allocating capital.

We are already seeing the benefits of unbundling – established and challenger banks alike are deploying sophisticated mobile apps that allow consumers to manage their finances, initiate payments and help with budgeting. Insurance startups are responding to the growth of the gig economy by offering highly personalised/tailored insurance products that combine traditional home and/or motor insurance with business coverage for temporary use.

But while fintech could help increase competition in financial services, some of these new solutions might also lead to the migration of activity outside the perimeter of prudential regulation. So it is important that we analyse the implications of any such migrations for financial stability as well as the impact on, and strategic response of, the banks and insurers that we supervise through the PRA. This will be an important area of work for the Fintech Hub, working with supervisory colleagues in the PRA, in the coming months.

\textit{AI}

The third area I’ll touch on, artificial intelligence, is an example of how a general-purpose technology is reshaping our world, with the potential to revolutionise the nature of both work and commerce. This will affect all aspects of the Bank’s mission, from the future behaviour of the labour market, through its effects on employment, productivity and wages, to the future nature of finance, through its effects on customer service, trading and risk management.

\textsuperscript{10} I set this out in more detail in my speech “Setting Standards”, available at https://www.bankofengland.co.uk/speech/2018/dave-ramsden-remarks-at-iso-20022-conference.
Finance is amongst the first sectors to deploy AI at scale. Deloitte estimates that financial services executives expect cognitive-related technologies to become mainstream in the next 2-5 years. And the Global Association of Risk Professionals expect up to 80% of financial services firms to use it. The technology has the potential to increase efficiency across the financial sector, including leaner, faster and more responsive operations.

The Fintech Hub together with the FCA have just conducted the first survey of regulated firms’ applications of AI. The survey aims to establish a consistent picture of the state of deployment and readiness within financial services. This includes understanding how advanced firms are in their deployment of AI and what specific business lines they are applying it to. Deepening our understanding will help us work out where policy can support the safe and productive deployment of AI in finance.

**Conclusion**

My time today only allows me to give a partial picture of the Bank’s work on fintech. Even so, I hope the examples I have given have illustrated the breadth and depth of our commitment to enabling innovation, empowering competition and embracing fintech in a safe and effective way, as well as the role of the Bank’s Fintech Hub in driving that.

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