Block by Block:

Building Up the UK as a Global Cryptoasset Centre

2022
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Executive summary

The UK has long hosted one of the world’s leading financial centres. Now the UK has the opportunity to build on this foundation to make the most of the next wave of global financial innovation by developing its cryptoasset sector.

A thriving cryptoasset sector will benefit the UK economically by connecting financial and commercial actors more efficiently. It will offer cheaper, faster, and more secure payments for SMEs and retail users, especially cross-border. It can promote wider economic and social benefits and further enhance the UK’s reputation on the world stage.

As the UK develops its approach to cryptoassets, policymakers should keep top of mind the diversity of the cryptoasset industry. Different parts of the ecosystem perform different economic functions, are built on different technologies, and present different benefit-to-risk profiles. One core distinction is between consumer-facing and business-facing cryptoasset service providers which present different opportunities and risk respectively.
To make the most of the opportunities afforded by a dynamic and growing cryptoasset sector, the UK needs to champion three things:

- An overarching and nuanced regulatory framework which treats the different actors of the cryptoasset space according to their own risk profiles.
- An increase in regulatory resources and inter-agency coordination to ensure the public sector can respond to industry developments in a timely way.
- A commitment to public education that develops policymakers’ and the wider public’s understanding of the sector’s benefits and risks in line with its development that contributes to a more balanced discourse.

Recognising that the global race to attract cryptoasset businesses to domestic shores has become fierce, the UK has come a long way on each of these three points. But there is still some way to go. Other jurisdictions have already put in place regulatory frameworks that will help them become attractive centres for the cryptoasset industry, including Singapore, Dubai, and, most recently, the EU. Using these different regimes as a guide, the UK should craft its own bespoke regulatory framework to empower its cryptoasset industry.

In 2022, Ripple conducted a series of qualitative consultations with well-known industry experts and observers of these topics. This White Paper is based on their comment and the extensive literature around cryptoasset policy. It represents Ripple’s view of the state of UK cryptoasset policy and what the UK should do now to make the most of this opportunity to develop into a world-leading cryptoasset centre.
Block by Block

Building global cryptoasset excellence on top of UK financial expertise

The UK hosts one of the world’s leading financial centres. It benefits from a large number of highly skilled experts, deep financial markets, and trusted regulation. Over the past decades, through a combination of industry innovation, regulatory coordination, sustained investment and political vision, the UK has led global innovation in the financial sector. We have seen this through the UK’s development of offshore ‘eurodollar’ markets in the 1950s, radical opening of its financial markets during the 1980s, and serving as a leading player in the new fintech industry that now spreads the benefits of financial innovation across society. Today, the UK has the opportunity to build on these foundations to make the most of the next wave of global financial innovation by developing its cryptoasset sector.

In early 2022, the then Chancellor and Economic Secretary provided strong political leadership on their ambition to turn the UK into a preeminent global hub for the cryptoasset industry. This vision to build on the UK’s long experience as a leading financial centre is the natural extension of the government’s long-standing promotion of innovation and growth in the economy as a whole. As the 2021 ‘Kalifa Review’ stated, the UK is well placed to seize the opportunity presented by fintech and benefit from it for the long-term.

A thriving cryptoasset sector will drive the UK economy by connecting financial and commercial actors more efficiently and by offering cheaper, faster, and more secure payments for SMEs and retail users, especially with respect to cross-border payments. It is already developing new businesses and industries that propel skills growth and jobs in the UK. This endeavour can be done in a sustainable way that protects consumers - given the right regulatory framework and public environment.

Notes
1. Interview with Dr. Garrick Hileman (2022)
We believe there are three measures the UK needs to take to sustain its ambitions as a major financial, technological and investment hub:

- Finalise a clear regulatory framework that distinguishes between different types of cryptoasset activity, as led by their respective risk profiles. Such a framework will provide certainty and support to crypto businesses as they grow, in parallel to building trust among the wider public.
- Empower regulators through enhanced resources and coordination between government agencies to manage the novel demands of a fast-growing, innovative sector and potential introduction of a landmark Central Bank Digital Currency (CBDC).
- Drive collaboration between industry and policymakers as part of an active, joint effort to improve public education around crypto and new forms of finance.

These proposed measures showcase what is required for the cryptoasset industry to grow in the UK in a responsible way. The introduction of robust and well-informed guardrails will protect consumers and market integrity while boosting industry confidence in the UK’s innovation-friendly approach to financial services. Additionally, an emphasis on policymaker and public education will increase collaboration between the private and public sector, ensuring better decision-making. Actioning these measures will further embed the UK’s reputation as a competitive and welcoming steward of financial services, enabling further growth, success and influence on the global stage.
Four points about the cryptoasset sector and blockchains

1. The FINANCIAL use cases for cryptoassets are not fundamentally different from traditional finance
   a. Blockchain implementation simply comprises a different technological basis to undertake the same financial tasks of recording transactions.
   b. The uplift of technology provided by cryptoassets for financial services is broadly similar to that of moving from metal, to paper, to electronic forms of financial services. Similar activity is underpinned by new technology with the potential to enhance trust resulting in a better service.

2. The cryptoasset sector is DIVERSE
   a. The overall ecosystem involves a wide range of different actors with different business models and different uses of cryptoasset technologies. This includes the retail activity that many people think of, and which captures most of the headlines. But it also includes market-facing cryptoasset businesses who improve the ‘plumbing’ of the financial system.
   b. An industry is developing around these different actors, akin to the financial services and technology industries. In practice, this means new enterprises, jobs, and connections.

3. There are MULTIPLE ‘blockchains’ all designed with different objectives and based on different characteristics
   a. Bitcoin is the most famous but it is far from the only one.
   b. Blockchains (‘Distributed Ledger Technology’, DLT), and the tokens that operate on them, are all designed, and optimised for different things. For example, Ethereum is optimised for smart contracts, while the XRP Ledger is optimised for, among other things, cross-border payments.
   c. Each blockchain has a varying environmental impact that is based on the way it mines tokens and validates transactions.
4. **Blockchain and DLT is a new TECHNOLOGY - not a product, company or service**

   a. Decentralised Ledger Technology (DLT) uses a decentralised database managed by multiple participants across multiple nodes (i.e. independent computers) to improve visibility and coordination for certain activities. Blockchain is a type of DLT. Together they represent a new technological basis to drive a new ‘industrial revolution’ in the underlying ability to digitise and improve real-world activities.

   b. Not all DLTs are designed for cryptoassets that are bought and sold. Many enterprises use blockchains for the specific task they want to offer, without the customer (business or consumer) ever needing to touch them.

   c. DLT/Blockchains can be used for multiple reasons across the whole economy – it is not only part of the financial system. For example, DLTs can be used to transfer real-world assets without financial intermediation, such as land registry documents, to improve certainty and remove execution risk.

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**Adding to the Chain**

**What the UK needs to do now to keep building up**

**A clear and differentiated regulatory framework**

The single biggest requirement to develop the UK’s cryptoasset sector is finalising a regulatory framework that can provide certainty for businesses looking to grow and that can differentiate according to different risk-profiles in order to protect consumers and the integrity of the market.

The UK has had a good start at creating this framework. In October 2018, the UK Cryptoassets Taskforce published a report that set out the UK’s policy and regulatory approach to cryptoassets and DLT establishing its assessment of the risks and benefits of the sector, as well as a broad roadmap for regulation in the UK.\(^4\) There followed the FCA’s Final Guidance published in 2019, where the regulator established that cryptoasset firms aiming to do business in the UK would require authorisation according to the specific design of a given token.\(^5\) These were progressive steps towards regulation that the industry wanted and needs. Additionally, the FCA’s approach to delineating between the different types of cryptoassets is the right one.

“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.”

2020 Budget, commissioning the Kalifa Review
But to confirm its progress, a first-class UK framework now needs to be finalised and implemented. Providing a comprehensive and nuanced regulatory structure that governs cryptoassets will give a level of comfort currently lacking to industry. Many companies are reported as being hesitant to innovate and expand in the UK due to the lack of regulatory certainty about how their businesses will be treated. Mixed messages from respected public institutions are adding to this problem, with negative comments about cryptoassets leading to greater uncertainty and unwillingness by industry to invest further in the UK.

The UK’s future crypto regulatory foundation needs to consider the different risks posed by different types of cryptoasset companies. At a minimum, this should treat cryptoassets according to their intrinsic structure, the rights attached to the tokens and how they are used in practice. And it should delineate clearly between consumer-facing and solely business-supporting propositions. Similarly, cryptoasset companies should be treated differently according to the level of interconnection with the rest of the economy and hence potential risk they pose more widely. This type of risk-based approach will help provide appropriate guide rails to industry looking to grow their business within the UK while simultaneously protecting consumers and market integrity.

In a welcome move, the FCA recognised some of these points while explaining its understanding of the existing regulatory perimeter, notably that tokens should be treated according to their design and intent. The upcoming Financial Services and Markets Bill’s proposals for cryptoassets follows this approach, suggesting that it will become UK best regulatory practice. However, cryptoasset businesses need this to be embedded within a stable, more comprehensive framework to form a solid basis for ongoing innovation.

The future framework should be based on the idea of ‘same risk, same regulation’ and delineate between consumer-facing crypto businesses - which present a unique set of risks - and those that are fundamentally business-to-business (B2B). This approach would follow naturally from the Financial Services and Markets Bill’s proposed inclusion of cryptoassets as a Regulated Activity.

Notes
6. https://www.telegraph.co.uk/technology/2022/02/12/london-risks-falling-behind-eu-rivals-crypto/
This dynamic, pro-business approach to regulating cryptoassets can in turn be complemented by a successfully implemented digital pound or CBDC, which can act as a publicly-provided infrastructure on which the private sector could innovate and scale new technologies, services and business models alongside traditional financial actors. Ultimately, this partnership can drive a more resilient financial system with improved access to finance for consumers domestically and enhanced aid internationally.11

**Empowering the regulator and enhancing harmonisation**

Developing and, more importantly, supervising this vision for a coherent and nuanced framework will require UK regulators to be better resourced and coordinated among themselves.

UK policymakers across the major institutions have been at the forefront of the UK’s efforts to understand this new sector since the very beginning, and have played a leading role in the international public-sector analysis and response to crypto developments.12 The Bank of England was a pioneer in this field with its Fintech Hub, while the FCA is a leader in innovative regulatory development, for example through its existing Regulatory Sandbox, planned Distributed Ledger Technology (DLT) Sandbox, and its repeated “CryptoSprints.”13

Whatever challenges the UK faces in developing as a global centre for crypto, it must be acknowledged that the UK regulators are impressively open to innovation, well-versed in their subjects, and continue to make good-faith efforts to provide the right public-sector response to breakneck industry innovation. As the Bank of England’s Deputy Governor, Sir Jon Cunliffe, put it: “the technological innovation we have seen in crypto markets offers at least the possibility of a major transformation in financial market infrastructure.”15

UK regulators are therefore going in the right direction to support the growth of the cryptoasset sector, but there remain considerable gains to be made by entrusting regulators with further resources and ensuring that all parts of the public sector work together to support its growth.

**Notes**

   government-sets-out-plan-to-make-uk-a-global-cryptoasset-technology-hub
14. Interview with Bianca Guimaraes-Chadwick & David Shamash (2022)
On resources

The cryptoasset sector provides unique challenges to regulators as it is a developing industry with a host of new firms requiring authorisation and supervision, while remaining inseparable from traditional finance. Consequently, institutions need dedicated and technically adept staff to deal with developments on both fronts. Recognising the additional cost this will entail, these institutions must be encouraged to increase headcount in spite of a challenging macroeconomic environment. Doing so will bolster UK economic growth through support of a growing industry and improved financial efficiency.

On coordination

At times there is also a lack of coordination between different regulators (and the government) that can breed confusion and lead to inefficiencies. There are already a number of frameworks and fora for regulatory coordination, but these should consider the ultimate end-message that ‘UK PLC’ is giving to industry by the combined effect of regulatory initiatives. Improved coordination between institutions might also help the resourcing issue, for example if different public bodies could pool staff on a given topic/policy development to come to a single, coordinated position.

Public education

There is still an urgent need to improve education in the cryptoasset space across all levels of society, where even some prominent MPs have recently treated the cryptoasset industry as a punchline and political football. The result has been a perpetuation of harmful stereotypes and a stymieing of progress in developing the UK’s cryptoasset sector. For example, 66% of the top 50 trending online news stories over the last 12 months have focused on alarming industry risks. By comparison, just 14% of trending articles focus on the sector’s potential benefits, and are not without caveats.

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17. Talkwalker landscape analysis conducted by APCO Worldwide
While prejudicial attitudes will likely continue to persist, industry growth means it will be more important than ever that the UK develop a fact-based, constructive conversation around cryptoassets. Unhelpful comments made publicly and based on an underdeveloped understanding of the sector make industry feel little understood and poorly valued which in turn hampers growth and investment. Overall, this can create an attitude of defensiveness, which undermines the collaboration between the public and private sectors that is necessary to grow the UK’s cryptoasset industry.

There are some welcome measures to combat this, for example the All-Party Parliamentary Group on Crypto and Digital Assets. These need to be strengthened and increased. Both industry and policymakers need to make a concerted effort to improve public education through joint events across the country, highlighting how developments can help individuals and businesses in their daily lives, as well as through more technical “teach-ins” of policymakers and other public voices on new, relevant cryptoasset propositions. Although there will always be a certain amount of political disagreement, finalising an appropriate regulatory framework that offers market certainty and consumer protection will build trust and will empower cryptoasset and blockchain-based businesses to thrive.

The UK can best support this industry by making sure the public and policymakers understand how the cryptoasset sector works, what its benefits are to the UK, and how regulation has been or can be designed to manage it.

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International comparisons

How other countries are doing

The UK is one of many countries in the world looking to develop their cryptoasset industries. Through flexibility and openness, the UK can benefit by integrating suitable parts of other jurisdictions’ initiatives into its framework, several of which are highlighted below. This will ensure it embeds global best practice into its cryptoasset regulation and supports ongoing international openness and future interoperability.

Singapore

Singapore has established a holistic framework covering cryptoassets that takes a risk-based approach for regulating cryptoasset activities. Cryptoassets are treated as a regulated product such as digital payment tokens (DPTs) under the Payment Services Act, capital markets products under the Securities and Futures Act, or else an unregulated digital token that is strictly used for utility purposes. The Monetary Authority of Singapore (MAS) determines the structure and characteristics of the cryptoasset, including the rights attached to it, to determine how it should be regulated. Similarly to the FCA, this approach provides a distinction between types of cryptoasset based on its intended function(s) and tailors the regulation attached to it appropriately. This regulatory clarity has led Singapore to becoming a leading hub for cryptoasset companies in its region.

Dubai

Dubai has developed a regime to regulate virtual assets with a new, dedicated regulator. This focus on providing the necessary regulatory resources to oversee its regime will help Dubai attract business by offering close cooperation between the private and public sectors as firms locate and grow in Dubai. The regulation differentiates between different types of virtual assets based on the activities undertaken with it, specifically those that confer rights and obligations akin to a security or derivative. Other types of virtual assets remain out of scope of legislation. Such a clear regulatory perimeter in the cryptoasset space supports responsible innovation in the sector, in line with the hub’s ambitions to attract investment and talent to its shores.

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European Union

Lastly, the EU has just achieved a major agreement with its Markets in Crypto Assets Regulation (MiCA), which will harmonise supervision of the sector at scale. This establishes a uniform set of rules across all 27 EU Member States on cryptoasset service provider (CASP) authorisation, licensing and operating requirements. The text covers all aspects of issuing and trading cryptoassets, including transparency, disclosure, authorisation and supervision of transactions. The outcome is that this Regulation will provide certainty to cryptoasset businesses operating across the EU. Some areas of MiCA still need to be developed while others have been left for further regulatory intervention. Nonetheless, the EU has put down a marker globally for clear, detailed regulation via a comprehensive policy framework through MiCA. This will stand cryptoasset businesses in good stead to grow throughout the EU and sets a global policy benchmark.

Lessons for the UK

This survey of international jurisdictions shows an emerging global consensus on best-practice in regulating the cryptoasset sector, comprising:

• A comprehensive, risk-based framework for cryptoasset regulation;
• Distinction between different types of cryptoasset based on function, leading to a clear regulatory perimeter; and
• Well-resourced regulatory authorities.

While every jurisdiction has its own institutional framework and legislative tradition that will determine the specific form of its eventual cryptoasset regulatory framework, this comparison points to the emerging key elements for a successful regime.

Notes
Concluding remarks

Why crypto will benefit the UK and its reputation as an innovation centre on the world stage

Cryptoassets and blockchain-based technologies offer significant benefits to the UK that are both economic and social. To make the most of this opportunity the UK should redouble its efforts to regulate in a sensible and proportionate manner, in order to safeguard legitimate businesses and the significant opportunities that they present.

Economically, cryptoassets and blockchain-based technologies have the potential to make financial transactions cheaper, faster and more secure. By providing new ways for financial actors such as banks and fintechs to connect with each other, new technology can remove many of the frictions that make traditional finance expensive and inefficient. On top of this, the cryptoasset sector is also developing a whole new industry, feeding on the UK’s traditional strengths in finance, technology, and a skilled workforce. This means there are new firms, with new business models, developing entirely new propositions. All of this invigorates the UK financial sector, creates new jobs and will contribute to the UK’s economic growth.

Socially, these new technologies can improve financial inclusion across the country. Despite attempts to improve participation in the UK, as of 2020, an estimated 1.2 million people remained ‘unbanked’ and unable to access the full range of basic financial services, such as savings, loans, mortgages and other forms of credit. They similarly face difficulties establishing credit history, accessing peer-to-peer (P2P) lending, and being able to send cross-border payments in an efficient and cost-effective manner. Digital assets, including CBDCs should the UK decide to launch one, will assist in each of these three areas and can help to materially extend financial health to individuals and demographics that have lost faith in the traditional financial system over the last 15 years.

“Young people in capital cities wanted to be able to transfer money home to their parents. Transferring money to your parents in Africa is a huge deal... If they can save a little money in doing that, if they can reduce the transaction fees in doing that, if they don’t have to drive home and deliver it in cash all the time, which is a big transaction fee, that’s a big deal.”
Cathal Long, Research Fellow at ODI (Overseas Development Institute)

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23. Interview with Cathal Long (2022)
Although there are understandable concerns about the environmental impact of cryptoassets, industry has the ability to reduce its collective environmental impact. Indeed, there is an emerging consensus among industry representatives and climate advocacy organisations that blockchain can be an important, transformative technology with respect to helping global carbon markets modernise and scale to accelerate progress towards globally agreed climate goals. By way of example, in 2020 Energy Web (EW) and the Rocky Mountain Institute (RMI) committed alongside different parts of industry to decarbonise public blockchains — starting with the XRP Ledger, the first major global blockchain to do so.24

This report has outlined the current opportunity for the UK to leverage blockchain technology as a means to grow its economy and solidify the UK’s reputation as being “open for business”. The UK has signalled its interest and openness to developing its cryptoasset sector and taken some important steps in this direction. But there is some way to go and other jurisdictions have to some extent pulled ahead.

Now is the time for the UK to finalise a comprehensive, nuanced regulatory framework based on the function of a given cryptoasset and the risk-profile of the crypto-asset company. Industry stands ready to support the public sector in finalising this regulatory regime for the economic and social benefit of the UK.

Notes
Appendix

About Ripple

Ripple is a crypto solutions company that transforms how the world moves, manages and tokenizes value. Ripple’s business solutions are faster, more transparent, and more cost effective—solving inefficiencies that have long defined the status quo. And together with partners and the larger developer community, we identify use cases where crypto technology will inspire new business models and create opportunity for more people. With every solution, we’re realizing a more sustainable global economy and planet—increasing access to inclusive and scalable financial systems while leveraging carbon neutral blockchain technology and a green digital asset, XRP. This is how we deliver on our mission to build crypto solutions for a world without economic borders.

Ripple provides one frictionless experience for businesses to send money globally using the power of blockchain technology. By joining Ripple’s growing, global network RippleNet, financial institutions can process their customers’ payments anywhere in the world instantly, reliably, cost-effectively, and with end-to-end visibility anywhere in the world. Banks and payment providers can use the digital asset XRP to further reduce their costs and access new markets, all done in compliance with AML/BSA regulations.

As one of the world’s most innovative crypto and blockchain technology companies, Ripple has a growing business in the UK, currently employing around 60 individuals in our UK offices with plans to expand that footprint.