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INTERNATIONAL
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TREASURY COMMITTEE
INQUIRY INTO THE CRYPTOASSET INDUSTRY
Memorandum from the International Regulatory Strategy Group (IRSG)
Submitted by the Office of the City Remembrancer

- The remit of the International Regulatory Strategy Group (IRSG), a joint venture between the City of London Corporation and TheCityUK, is to provide a cross-sectoral voice to shape the development of a globally coherent regulatory framework that will facilitate open and competitive cross-border financial services. The group supports a positive approach towards cryptoassets, whilst being mindful of risks. Moves for the UK to build **a robust regulatory regime for crypto assets** in collaboration with industry are to be welcomed.

- There is accelerating momentum behind the use of crypto technologies in finance, with cryptoassets[1] rapidly increasing in popularity. Research published by the FCA last year estimated ownership of cryptocurrencies was up to around 2.3 million individuals globally, up from around 1.9 million in 2020 – with 78% of adults having heard of cryptocurrencies before[2] . The total market capitalisation of stablecoins has grown from $2.6 billion at the start of 2019, to $20 billion in September 2020 – with global trading volumes estimated at $198 billion in April 2021.[3]

- The importance of clarity as to what is meant by "crypto assets" should be noted. The present focus, and main area of current use of distributed ledger technology (DLT) which supports crypto assets is in relation to currencies. The IRSG believes it is important to recall that blockchain is just one use of such technology and then that DLT potentially lends itself to use well beyond currencies, including in a wide range of financial services and instruments. As the present focus is on the potential opportunities and challenges in relation to cryptocurrencies and payments, it is important to remember that the issues may be quite different when it comes to the use of crypto technology in relation to other assets. [4]

- Together with London's status as a global financial hub, **the UK has the capital and expertise for investors** with an interest in the opportunities presented by the greater automation and digitalisation of financial services. Achieving the right balance between fostering the right regulatory environment for crypto assets to thrive, while protecting the interest of consumers, will require careful planning and adequate

[1] For clarity, it is worth reiterating the differentiation made by FCA between regulated and unregulated tokens, in relation to cryptoassets. 'Unregulated' refers to any token that does not meet the definition of e-money, or provide the same rights as other specified investments under the RAO. By 'regulated' the FCA means security tokens, i.e. those tokens which are specified investments, excluding e-money tokens are within the FSMA perimeter. E-money tokens are within the FSMA perimeter if issued by a credit institution, a credit union or a municipal bank, and are also regulated under the EMRs. As found on PS19/22: Guidance on Cryptoassets (fca.org.uk).

[2] '*Research Note: Cryptoasset consumer research 2021'*, (June 2021), available at: https://www.fca.org.uk/publications/research/research-note-cryptoasset-consumer-research-2021.

[3] Market Wrap: Stablecoin Market Cap 'Goes Parabolic' – CoinDesk and Top Stablecoins by Market Capitalization – CoinGecko.

[4] The major focus of this note is on crypto currencies.

engagement with industry. Both outcomes can be achieved without compromising innovation nor consumer protection.

- The IRSG is keen to support the Treasury Select Committee in its inquiry into the role of cryptoassets in the UK and is happy to provide further detail on any of the topics raised below.

To what extent are cryptoassets when used as digital currencies (such as Stablecoin) likely to replace traditional currencies?

1. It is envisaged that stablecoins may in the future co-exist with traditional currencies, rather than entirely replacing the latter.[5]

   UK Government plans for the regulation of stablecoins would provide common and standardised approaches to the their use as digital currencies. The Financial Services and Markets (FSM) Bill sets out provisions that bring stablecoins under existing payments and banking regulation, and once in place it will enable the transformation of payment systems. There is real drive for the UK to lead in this space – innovation linked to payments could make a real difference for consumers in the UK.
2. While significant attention has been given to the role of stablecoins as a new, more efficient means of payment, it should be noted that it is unlikely that all the transactions in the economy would be conducted with stablecoin or Central Bank Digital Currencies (CBDCs, which in turn would imply the full disintermediation of the retail banking sector. **Instead it is envisioned that stablecoins or CBDCs will co-exist with traditional forms of money, and indeed that stablecoins and CBDCs should not be the only acceptable tokenised settlement solutions.** For example tokenised commercial bank money may be more appropriate in certain use cases
3. It is noteworthy that despite positive rhetoric around stablecoins and their reliability (as they are pegged to a fiat currency, or other commodity), there have been harmful crashes in the stablecoin market, such as that of algorithmic stablecoin Terra, or concerns raised about the fiat-backed Tether and the funds (or lack thereof) used to back up the stablecoin. [6]
4. **Regulators will need to insist that stablecoins are backed by high-quality assets, and ideally by fiat currency, if a positive transition from traditional currency to stablecoins is to be achieved**. The IRSG would welcome regulators' perspective on where they see value in a CBDC being used, versus a stablecoin (e.g. whether a centrally issued CBDC might offer better value than a privately issued stablecoin).

[5] Bank of England are currently considering a central bank digital currency (CBDC) because the way people are choosing to pay for things is changing. According to BoE, "any UK CBDC would work alongside - not replace - cash and bank deposits. We will continue to provide cash for as long as the public still want it."
As found on UK central bank digital currency | Bank of England.

[6] Fiat-backed stablecoins and collateralised stablecoins are more stable than algorithmic stablecoins – their stability is reliant upon the entity maintaining significant reserves coupled with compliance with both auditors and regulators to prove transparency of these reserves. Different types of stablecoins (e.g. asset back, algorithmic, etc.) may have differing levels of reliability and that each type should be assessed holistically.

What opportunities and risks would the introduction of a Bank of England Digital Currency bring?

5. The IRSG recently published the report *The Use of Central Bank Digital Currencies (CBDCs) in Wholesale Markets*.[7] The report notes that the use of CBDCs can achieve many benefits, mainly linked to increased accessibility, increased efficiency in payments, and better record keeping.

    a. On **accessibility** – CBDCs could improve access to digital payments, acting as a gateway to wider access to financial services. [8]

    b. On **increased efficiency** – CBDCs could offer digital methods of payments that are quicker, more efficient, and cheaper.

    c. On **better record keeping** – CBDCs provide the opportunity to record all transactions, which would improve record keeping and enable a more efficient and data driven financial system. [9]

6. A key benefit of CBDCs is that they are a liability of a central bank which makes them fundamentally different from privately issued cryptocurrencies. A CBDC would fulfil the **three properties of a currency (medium of exchange, unit of account, store of value) which other crypto currencies do not given their volatile nature.**

7. **The IRSG believes multiple solutions may be available for digital forms of settlement, depending on needs and use cases, as long as appropriately regulated. Any potential wholesale CBDC (wCBDC) should seek to solve specific problems and consider what design principles are needed to reach settlement outcomes.** Core wCBDC design principles relate to access, interoperability, legal and prudential treatment, risk management, programmability and privacy. Any public solution must consider the cost and time to implementation as well as the problem to be solved when building a settlement solution to achieve desired outcomes. Different and appropriately regulated digital forms of private money may serve different purposes and be applied to different use cases. Those could be in some cases (e.g. market not systemic) an appropriate alternative to wCBDC for settlement. For example, the IRSG would also support digital commercial bank money or blockchain based deposits being investigated further as an alternative to stablecoins.

8. Finally, CBDCs have the potential to create efficiencies in wholesale markets, but it is important that the use of CBDCs does not introduce unnecessary risk and legal uncertainty. Financial markets have developed over many years relying on legal concepts and institutions that have been tested over time and are subject to regulatory discipline and regulatory reform where new risks are identified. The efficiency of financial markets is therefore to a large extent **based on the trust that market participants place on the practical and legal arrangements that have been put in**

[7] The Use of Central Bank Digital Currencies (CBDCs) in Wholesale Markets (irsg.co.uk).
[8] Digital assets are bearer assets and wallet providers often charge large transaction fees. CBDCs would increase competition in this space and hopefully improve both the servicing and cost of such an offering.
[9] As found on The Use of Central Bank Digital Currencies (CBDCs) in Wholesale Markets (irsg.co.uk), p. 6.

place. The introduction of a new set of arrangements such as CBDCs, distributed ledger technology and smart contracts **represents a big shift from traditional arrangements making their adoption in established financial markets a higher risk proposition as a result of the lack of certainty in the legal and regulatory analysis** of such new arrangements.[10]

What impact could the use of crypto-assets have on social inclusion?

9. The social inclusion argument linked to crypto requires further detailed work. To note, the below refers specifically to crypto currencies, rather than wider crypto assets.

   Crypto advocates claim that the increased use of such assets will foster financial inclusion by providing a wider range of consumers with increased access to financial services. At the heart of this argument is the claim that in order to use crypto currency all a person needs is internet access and a device. But currently consumers generally still require a bank account to exchange crypto currency. In order to purchase crypto on a legitimate crypto exchange, customers must deposit funds in an online account from a debit card or bank account. Similarly, at this point in time such assets are used widely as means of payment, which means that customers selling their crypto in exchange of traditional money will need a bank account to deposit the money. In addition, crypto currencies are still too volatile and speculative in nature to be considered a gateway to bolster financial inclusion. At this point in time, cryptoassets are largely a fringe assets class which sit adjacent to traditional markets, hence the friction between these. As the markets become more closely intertwined, the potential for social inclusion could increase.
10. According to the FCA, 1.3 m people in the UK are unbanked. [11] In the long term, regulation may be able to tackle the lack of clarity and volatility that is associated with crypto currencies, thereby making such currencies a valuable tool to foster financial inclusion for those consumers who are excluded from traditional financial services.

Are the Government and regulators suitably equipped to grasp the opportunities presented by cryptoassets, whilst at the same time mitigating against the risks?

11. While significant work is being undertaken by government and regulators to grasp the opportunities presented by crypto assets, further work is needed to enhance the UK's offering to firms developing and using crypto technology, a key step being achieving legal and regulatory certainty to advance the adoption of new technologies in financial markets.

12. To date, UK work on crypto has been led by regulators. It is their job to focus on the risks linked to these assets, however this has meant that external messaging on crypto has focused on risks to consumers, and issues that have arisen in relation to crypto currencies generating negative connotations with crypto technologies. Mitigating risk must be at the forefront of the regulators' agenda, however innovations and the

[10] As found on The Use of Central Bank Digital Currencies (CBDCs) in Wholesale Markets (irsg.co.uk), p. 13.
[11] Written evidence - Financial Conduct Authority (parliament.uk).

potential of this technology should also be explored in parallel, with recognition that the issues in relation to crypto currencies may be very different from those arising elsewhere in financial services. Recently proposed bespoke crypto provisions within the Financial Services and Markets Bill will help ensure firms using and developing crypto technology can operate within an adequate regulatory framework.

13. In relation to data, cryptoassets provide a unique opportunity for the UK Data Regulators Cooperation Forum to demonstrate a joined up policy approach and the opportunity to architect a coherent regulatory framework for cryptoassets. The nature of the blockchain, particularly its borderless nature, transparency and immutability when it comes to data, raises many questions as to how data privacy issues will be addressed, such as correction/deletion of data, how the role of controller and processor are determined, the movement of data across borders, and confidentiality. The other significant element to be addressed is a coherent international regulatory approach given the borderless nature of cryptoassets.

14. Government and regulators are encouraged to continue their engagement with industry, to ensure opportunities for organisations dealing with crypto are safeguarded. Moreover, adequate focus should be placed on **upskilling staff within government and regulators to be able to keep up with digital innovation,** including crypto. There is a strong drive within industry to upskill in this space, and it is recommended that regulators follow suit.

How can distributed ledger technology be applied in the financial services sector?

15. New technologies (including DLTs and smart contracts) have the potential to increase the efficiency and reduce the costs of financial transactions for market participants. DLT is resilient, allows transparency and eliminates (in some cases) the need for expensive manually intensive reconciliation processes.

16. A core benefit of DLTs is providing a single and unique method for representation of a transaction. Developing shared workflows that operate on the basis of a common representation of a transaction allow market participants to have access to a shared, reliable representation of a transaction at any time, removing barriers to data sharing.

17. One benefit of distributed ledger technology from an investment perspective is for AML and fraud prevention. By storing customer data on decentralized blocks, blockchain technology can make it easier and safer to share information between financial institutions in real-time, although this needs to be reconciled with privacy obligations as mentioned above.

18. Emerging distributed ledger ecosystems are acting as a catalyst for the digitalisation of the asset management value chain by providing the necessary operational and market infrastructure to allow asset managers to service clients in a more efficient and transparent way. DLTs can also facilitate the tokenisation of assets/funds, representing a fundamental shift in the way in which asset managers currently create and distribute products. Additionally, DLTs have the potential to democratise investment in real assets via fractional trading, providing individual (as well as institutional) investors with greater transferability and control over their assets.

19. Another potential benefit is having client settlement flows taking place directly on the distributed ledger. This will allow custodians and financial market infrastructures to reduce the reconciliation workload with their clients and participants. This increased level of transparency could facilitate the identification of end investors, ease the registry management for issuers and contribute to policy objectives such as sanctions compliance. Furthermore, CBDC and security tokens can be transferred across different blockchain platforms because of their simplicity, which makes them ideal for cross-border uses.[12]

20. DLT securities market infrastructure has the potential to reduce counterparty and settlement risk through atomic settlement, which allows for the instantaneous transfer of cash and securities. There is still a live debate on whether the benefits of such a system would outweigh potential disbenefits, including: an absence of trade netting, lack of redundancy, fragmentation of market liquidity in vertical siloes.[13]

21. Any mooted transition to a new market architecture must be undertaken while weighing the costs and benefits, and with appropriate oversight of implications for financial stability and consumer protection. **Projects such as those envisioned to be undertaken in the 'FMI Sandbox', with the addition of beta testing, can help shed light on viable use cases for DLT. Parliament will have an important role in scrutinising such change.**

What work has the Government (and its associated bodies) done to understand, prepare for and encourage changes that may be brought about by increased adoption of cryptoassets?

22. There is clearly significant interest from Government on understanding and preparing for the implications of increased adoption of cryptoassets. This includes a wide range of consultations, changes to regulation via the FSM Bill, ongoing BoE work exploring the use of CBDC and regular engagement with industry have shown Government is pushing to ensure the UK is a global hub for crypto.

23. The FCA 'Crypto Sprints' that took place earlier in the year were an effective method of engagement with industry which has highlighted challenges shared by different actors in the financial services sector. A common theme highlighted was an imbalance of information between consumers and service providers, and challenges faced by consumers to fully understand the risks involved.[14] Events such as the sprints can ensure adequate space is given to industry to flag issues and solutions.

24. Increased sandbox flexibility introduced by the FSM Bill is to be welcomed. This new provision will allow firms to test new technologies and enable FMI (financial markets infrastructure) entities to innovate, within the scope of the activities they have been authorised to carry out in the sandbox. The IRSG welcomes this reform as it aims to foster innovation and allow a more flexible stance in relation to 'beta testing' (testing

[12] As found on Letter (isda.org) p. 1.
[13] Why it matters when trades settle | The Economist.
[14] CryptoSprint outputs | FCA.

undertaken outside the organisation) - particularly for DLT and digital asset-enabled market participants.[15]

25. More can be done to improve regulatory cooperation across financial and privacy issues to ensure that the policy and regulatory approach is informed and addresses the myriad of potential regulatory issues, including privacy, which cryptoassets raise.

How might the Government's processes – for instance the tax system - adapt should cryptoassets be adopted more widely?

26. HMRC published a consultation earlier this year looking to expand the list of "investment transactions'" which are allowed to benefit from the investment management exemption (IME) to include cryptoassets. HMRC is currently seeking feedback on the definition of cryptoassets to be used as well as the likely types of funds which will benefit from the inclusion of cryptoassets on the list.

27. This consultation is a good first step towards achieving clarity in the tax space in relation to cryptoassets. There will be a number of changes to regulation needed to ensure the tax system is able to cope with the fast-paced change in this space. **Tax rules should, as much as possible, be consistently applied to similar financial instruments or similar activities. There is a risk of loopholes and arbitrage arising in relation to crypto of which regulators and government should be mindful.**

How effective have the regulatory measures introduced by the Government - for instance around advertising and money laundering - been in increasing consumer protection around cryptoassets?

28. The use of anti-money laundering regulation as applied to crypto has generated some concern within industry. Forcing crypto into ill-fitting existing regulation that was not designed for this new technology risks hindering its adoption by the market and risks the UK's capacity to become a global centre for this sector. New, crypto-asset specific regulation will be required to ensure that public policy outcomes (such as consumer protection, for example) are achieved in a way that reflects the characteristics of these assets.[16]

29. Additional powers have been given to regulators in relation to stablecoins via the FSM Bill such as enabling FCA, Bank of England and Payment Systems Regulator to include stablecoins within their remit. Part of this new provision

[15] As found on The best place in the world to start and grow crypto-enabled finance: are UK plans relevant, competitive, and achievable? - Innovate Finance – The Voice of Global FinTech.
[16] To note, while crucial that the UK develop ad-hoc crypto regulation, it is important that the UK framework is coherent with international standards and the frameworks of other leading jurisdictions (e.g. EU's MiCA).

includes a new legal definition of "digital settlement asset", specifically focused on stablecoins used for payments. It does not cover wider cryptoassets, including those primarily used as a means of investment – the Government is expected to consult on these later in 2022. **The IRSG welcomes this opportunity for regulators to strengthen bespoke crypto regulatory proposals, following consultation with industry.**

30. In relation to advertising, the IRSG welcomes the FCA demands of clearer and more prominent risk warnings from companies marketing high-risk investments. The IRSG notes the stronger rules are aimed at tackling misleading adverts that have the potential to cause consumer harm, but the new guidelines will not apply to crypto promotions. Given investment in crypto currencies qualify as high-risk investment, **it is expected that these assets will be included in the new advertisement provisions once Government confirms it is in the regulator's remit to do so.**

Is the Government striking the right balance between regulating cryptoassets to provide adequate protection for consumers and businesses and not stifling innovation?

31. The IRSG is supportive of the interest shown by Government in crypto assets. There is not a conflict between regulation and stifling innovation. Regulation needs to be adequate, but a proportionate and outcome-based regulatory framework should encourage more firms to invest in this space, by providing certainty to both customers and suppliers.

32. The IRSG is confident that provisions introduced by the FSM Bill, such as the increased flexibility provided by the regulatory sandboxes, will ensure firms are able to test their product in a real environment involving real users, which takes away risks of harming UK consumers while allowing innovation to thrive. An effective regulatory framework would improve standards of market infrastructures, participants, issuance, transparency, reporting etc.. Alight to this, consistently applying regulation and guidance will be crucial, as a risk persists that unregulated, or lightly regulated, firms and providers may be able to forge ahead with offerings and solutions.

33. As IOSCO has noted, "some DeFi [decentralised finance] projects have sought to create fully decentralized systems. Currently, however, claims about decentralization for many projects may not hold up to scrutiny of the technical reality of what can be changed in the system, who can be involved in the decisions, and who actually is involved."[17]

34. As the regulatory frameworks for financial institutions and infrastructures hinge on the accountability of entities and their senior managers, it may not be appropriate to accommodate systems that are not administered through an accountable governance structure. For example, it does not at present seem possible for a public blockchain model to meet all the regulatory requirements to run post-trade activities.

[17] As found on OR01/2022 IOSCO Decentralized Finance Report, p.8.

KYC[18] checks on parties, privacy, confidentiality and scrutiny controls on transactions require a centralized approach on user access and management.

How are Governments and regulators in other countries approaching cryptoassets, and what lessons can the UK learn from overseas?

35. There are opportunities for the UK to learn from overseas in its approach to crypto assets. The European Council and the European Parliament reached a provisional agreement on the markets in cryptoassets (MiCA) proposal. The proposal covers issuers of unbacked cryptoassets, and stablecoins, as well as the trading venues and wallets where cryptoassets are held. Among others, below are some of the requirements which MiCA has seen introduced:
    - Cryptoasset service providers covered by MiCA will have to **respect strong requirements to protect consumers wallets and become liable in case they lose investors' cryptoassets**.
    - Actors in the cryptoassets market will be required to **declare information on their environmental and climate footprint**.
    - Crypto transfers will be **subject to EU anti-money laundering rules**, in line with international standards.
36. These provisions are an effective first step to address issues linked to volatility, consumer harm, and the environment.
37. In parallel, the US regulators have been pushed to act, research, and create structures surrounding digital assets. The Fed "is encouraged to continue research and report" on its work to potentially create a CBDC.[19] The IRSG will continue to monitor work of other jurisdictions to ensure the UK can continue learning from positive outcomes abroad.

The environmental and resource intensity of using cryptoasset technology.

38. According to the World Economic Forum "by design, the bitcoin network consumes a large amount of power in order to incentivize the distribution, and decentralisation needed to secure the network and make it economically difficult to take over more than half of the network's nodes." In practice, Bitcoin alone uses more energy than 185 countries and is comparable to the annual energy consumption of Norway.[20] Nonetheless, recent studies have shown miners are increasingly turning to more sustainable sources of renewable energy[21] – "on average 39% of proof-of-work mining is powered by renewable energy, primarily hydroelectric energy. Understanding the

[18] Know Your Customer.
[19] Congress Has Introduced 50 Digital Asset Bills Impacting Regulation, Blockchain, And CBDC Policy (forbes.com).
[20] Crypto Energy Consumption | Moneysupermarket.
[21] A recent example of shift to more sustainable consensus mechanisms is Ethereum, the blockchain that underpins the world's second-largest crypto token ether. The Ethereum blockchain is merging with a separate blockchain, changing the way it processes transactions and how new ether tokens are minted. The system, known as "proof-of-stake," will allegedly reduce the Ethereum blockchain's energy consumption by 99.9%. As found on: Explainer: Understanding Ethereum's major 'proof of stake' upgrade (nbcnews.com)

energy source of mining is important because electricity costs account for the majority of hashers' operational expenditures - albeit with some variability across world regions - and hashers have long competed on accessing the cheapest energy source". **Policy makers should encourage implementation of energy efficient consensus mechanisms, as well as encourage innovation in this space.**

39. As per MICA, the IRSG supports a provision looking at actors in the cryptoassets market **to declare information on their environmental and climate footprint**.

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