BARCLAYS

TSC Inquiry into Digital Currencies and Distributed Ledger Technology

Barclays Submission

Barclays is a transatlantic consumer and wholesale bank with global reach, offering products and services across personal, corporate and investment banking, credit cards and wealth management, with a strong presence in our two home markets of the UK and the US. With over 325 years of history and expertise in banking, Barclays operates in over 40 countries and employs approximately 85,000 people. Barclays moves, lends, invests and protects money for customers and clients worldwide.

Barclays welcomes the opportunity to input into the Treasury Select Committee's inquiry into Digital Currencies. We have focused our response on the questions on which we consider Barclays is well positioned to provide insight and expertise.

How is distributed ledger technology being applied in the financial services sector, and how might it be applied in future?

In the past three years, an increasing number of banks have explored how to leverage distributed ledger technologies. This has been a journey of discovery, with technologists and product specialists educating themselves via research, experiments and industry working groups. Collaborative experiments have proved to be particularly popular, typically conducted in partnership with peer banks, fintech companies and financial market infrastructures. The learnings gained from these explorations have laid the foundations for some initiatives to progress into final testing stages in preparation for go-lives in the coming months, whilst other more radical initiatives are in research stages producing technology proofs-of-concept and candidate business cases.

There are many candidate use cases for distributed ledger technology in financial services – and this is not surprising given the variety of existing industry processes that could benefit from greater standardisation, simplification and rationalisation. Examples in investment banking include bonds, derivatives, commercial paper, repurchase agreements, foreign exchange, syndicated loans, etc.

Below are four noteworthy distributed ledger industry initiatives in which Barclays is actively providing input and guidance:

1. ISDA (a trade association for global derivatives markets) is currently developing a common set of processing and data standards that all derivatives markets participants will be able to access and build solutions upon. The aim is to enhance consistency and interoperability across firms and platforms.

2. DTCC (a provider of clearing and settlement services) intends to deploy an upgrade to its Trade Information Warehouse using a distributed ledger solution in 2019. This is being built on

Axoni's AxCore platform and aims to streamline processing and reduce costs across the industry.

3. CLS (a provider of foreign exchange settlement services) intends to deploy a new bilateral payments netting service on a distributed ledger platform in 2018. This is being built on the Hyperledger Fabric platform and aims to reduce risk and drive operational efficiencies.

4. Utility Settlement Coin (an industry project with a consortium of financial institutions) is developing a new asset-backed digital cash instrument on distributed ledger technology for use within global institutional financial markets. This is being built on Clearmatics' enhanced version of the Ethereum platform and aims to simplify and shorten the settlement lifecycle, reduce risk, and reduce costs.

In the near and medium term, we expect that financial market infrastructures will help accelerate the speed to market and industry adoption of distributed ledger solutions by leveraging their existing governance structures, member networks, etc. This is likely to include phased introductions of the technology to member banks, with access initially provided via traditional interfaces and later via new direct access to the distributed ledger.

How are governments and regulators in other countries approaching digital currencies and what lessons can the UK learn from overseas?

The question refers to digital currencies – it is not clear whether this means currencies pegged to fiat currencies, or virtual currencies/cryptocurrencies such as Bitcoin. Our analysis assumes the latter.

There have been divergent views and approaches to cryptocurrencies taken by different jurisdictions around the world. This is problematic given that cryptocurrencies typically do not respect national and jurisdictional borders, i.e. Bitcoin can be purchased all over the world but the regulatory treatment will vary.

In the UK and the EU, regulators and policymakers have not yet taken definitive actions towards cryptocurrencies, preferring instead to watch and wait to see how the market develops, and further consider their next steps. The term 'cryptocurrency' has not been fully defined in either jurisdiction, and it is challenging to regulate something that is not defined. The FCA has previously noted that cryptocurrencies, such as bitcoin, have been "an area of increasing interest for markets and regulators globally". Cryptocurrencies themselves do not fall within the FCA's regulatory remit, but the FCA have stated that "some models of use or packaging cryptocurrencies bring them within the FCA's perimeter, making the landscape complex". The FCA has also warned that firms offering services linked to cryptocurrency derivatives must meet the regulator's rules or else face sanctions. The FCA, alongside the French market regulator and the European Securities Markets Authority (ESMA), has also warned that cryptocurrencies could fall under the jurisdiction of MiFID 2.

In Asia, Japan defines cryptocurrencies as 'legal tender' and they are covered by regulation passed in April 2014, which authorises the use of virtual currency as a payment and requires licensing for virtual currency companies. Australia also has certain regulation for cryptocurrencies. AUSTRAC, the Australian Transaction Reports and Analysis Centre, recently updated its AML laws to require greater transparency and recording of cryptocurrencies. Last year, Australian senators from both major political parties announced that the Reserve Bank of Australia (RBA) should formally recognize bitcoin and other digital currencies as official forms of currency. Later that year Australia approved legislation introduced to remove the double taxation on digital currency and the Australian Taxation Office updated its guidance on GST and digital currency to address tokens and ICOs. In Singapore cryptocurrencies are defined as 'not money' – they are not currently regulated but their regulator is considering introducing guidelines.

In the US, the regulatory treatment of cryptocurrencies is complicated by there being two major regulators, the SEC and the CFTC, with each having defined cryptocurrencies differently. The SEC treats them as a security and the CFTC treats them as a commodity. A US Federal judge recently determined that cryptocurrencies are a commodity and the CFTC should therefore have jurisdiction to regulate them. While the CFTC has subsequently established a Taskforce to consider the appropriate treatment and possible regulation of cryptocurrencies, the SEC has also told a recent Senate hearing that it will consider cryptocurrencies further and may look towards regulation in future.

When discussing cryptocurrencies, it is important to consider Initial Coin Offerings (ICOs). In terms of ICOs there appears to be greater consensus with a number of jurisdictions including the US, Singapore and Hong Kong having stated they will consider each ICO on a case by case basis, but if it looks like a security and acts like a security it will be regulated as such. Indeed, Singapore has already introduced specific guidelines regarding ICOs. In the UK, the FCA has recently established a taskforce to consider appropriate measures and next steps ICOs.

Finally, we consider the terms 'virtual currency', 'digital currency' and 'cryptocurrency' to be inherently misleading. We believe that most existing instances should not be considered 'money' and we therefore prefer the term 'crypto-asset', as in practice, they are more akin to investments than legitimate currencies. This is also a perspective taken by Bank of England Governor Mark Carney in a speech earlier this year.

Is the government striking the right balance between regulating digital currencies to provide adequate protection for consumers and businesses whilst not stifling innovation?

As noted previously, cryptocurrencies are not yet defined in the UK, and as such they are currently not yet regulated. In considering possible regulation, it is important that the Government and regulators in the UK undertake sufficient analysis of cryptocurrencies before taking action. While it is crucial to provide adequate protections for consumers, it is also very important not to stifle innovation through inappropriate regulation. There are over 2000 different cryptocurrencies with various different purposes so a blanket one-size-fits-all approach is unlikely to be appropriate. A policymaker-industry roundtable to discuss cryptocurrencies and how best to regulate them may be a sensible path forward.

Until cryptocurrencies are appropriately regulated, it is difficult for industry to engage with them, given their regulatory treatment is currently unclear and firms may risk breaching regulatory rules. This in itself may actually stifle innovation, as industry take up is hampered. Appropriate regulation may therefore be a sensible next step at some stage.

To what extent could digital currencies disrupt the economy and the workings of the public sector?

With regard to DLT rather than digital currencies, we would draw the Committee's attention to a report by Lord Holmes entitled: 'Distributed Ledger Technologies for Public Good', to which Barclays was pleased to provide support. The report suggests that with Government leadership, distributed ledger technologies provide significant opportunities to transform the delivery of public services. Major areas of opportunity identified by the report include: border control, national security, taxation and benefits payments, health assurance, food standards and safety, cybersecurity and public procurement.

Are digital currencies ultimately capable of replacing traditional means of payment?

While digital currencies can be used a means of payment, and may one day be capable of replacing traditional means of payment, it may be some time before that becomes a reality. As mentioned previously, cryptocurrencies are currently approached more as investments than legitimate currencies, with users commonly seeking capital gain rather than payment utility.

A type of digital currency of utility interest to Barclays Investment Bank concerns the representation on a distributed ledger of fiat commercial bank money that is directly backed by funds at a central bank. It is possible that such an instrument, when applied to wholesale institutional markets, could facilitate risk reduction (e.g. settlement risk), improve capital efficiency, and simplify and rationalise the industry's existing complex market infrastructure.

What risks and benefits could digital currencies generate for consumers, businesses and governments?

Cryptocurrencies or crypto-tokens should be seen as being in their early stage development. They fall naturally within various frameworks such as the distributed ledger and smart contract frameworks. That framework is itself part of a larger emerging range of frameworks drawing on the other 'new technologies' (Artificial Intelligence, Internet of Things, machine learning, cognitive and quantitative computing et al.). Those frameworks are still under construction - they are in an embryonic stage. However, they promise to transform all activity - commercial or otherwise - especially that which benefits from a distributed, as opposed to a centralised, database or ledger. And they will develop through learning, experimentation and innovation. They will include a token or currency component which facilitates all the transactions conducted within them. It is therefore important that such tokens are safe and well governed. Done right, and with active leadership by

UK, these frameworks will form part of a national asset in the digital economy. That will be especially valuable post-Brexit. It is important, therefore, not to fly in fear from the token or crypto-currency construct, but instead to sponsor an approach which realises its opportunities.