BANK OF ENGLAND
PRUDENTIAL REGULATION
AUTHORITY

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Dear CEO

Existing or planned exposure to cryptoassets

In 2018 I wrote to the CEOs of banks, insurance companies, and designated investment firms to remind them of relevant obligations under PRA Rules, and to communicate the PRA's expectations regarding firms' exposures to cryptoassets.[1]

Since then, the crypto industry has experienced rapid growth and innovation. The term 'crypto' or 'cryptoasset' encompasses an expanding range of items and activities, from a multitude of outright cryptoassets (including stablecoins), and increasingly financial products linked to crypto performance, including exchange traded funds and crypto derivatives.

Cryptoasset technology is creating new financial assets, and new means of intermediation. The underlying technologies behind cryptoassets have the potential to improve the efficiency and resilience of the financial system over time, including through lower transaction costs, higher payment system interoperability, and more choice for users. Those benefits can only be realised, and innovation be sustainable, if it is undertaken safely, and accompanied by effective public policy frameworks that mitigate risks and maintain broader trust and integrity in the financial system.

The Financial Policy Committee is publishing today, in its Financial Stability in Focus report, its assessment of the role that cryptoassets and associated markets currently play in the United Kingdom and globally.[2] The Bank of England is also publishing a summary of responses to its Discussion Paper on New Forms of Digital Money.[3] The Financial Conduct Authority is also issuing a statement to highlight certain risks such as financial crime and custody risks related to crypto activities. This letter complements these publications by setting out how the prudential framework applies to ensure that

1 June 2018: https://www.bankofengland.co.uk/prudential-regulation/letter/2018/existing-or-planned-exposure-to-crypto-assets
2 March 2022: https://www.bankofengland.co.uk/financial-stability-in-focus/2022/march-2022
3 March 2022: https://www.bankofengland.co.uk/paper/2022/responses-to-the-bank-of-englands-discussion-paper-on-new-forms-of-digital-money

firms engaging in crypto activity manage the risks in a way that supports the firm's safety and soundness.

While firms have taken limited exposure to cryptoassets to date, we are aware of increased interest from banks and designated investment firms (hereafter 'firms'), to whom this letter is addressed, in entering various crypto markets. This includes taking exposures either as agent or principal, increased credit exposures to crypto directly or to crypto entities, or providing operational services such as custody arrangements. Many of these markets are new and untested. They have limited history, different risk profiles, can be characterised by very high volatility, and have market participants and structures that can be significantly different from the other markets in which firms participate. Firms should consider how or whether the characteristics of these markets are sufficiently captured in their risk management framework. While the regulatory framework provides a structure to consider such risks, the methodologies and calibrations will likely need to be adjusted, in some cases substantially, to ensure that firms are appropriately and prudently considering and capitalising the risks.

The Basel Committee on Banking Supervision (BCBS) and other international bodies are considering the risks of banks participating in crypto activities.[4] However, that work has yet to complete, and there remains a need for the PRA to ensure firms are appropriately and consistently taking account of the risks in the interim. This letter is intended to ensure that where firms do have exposures, they understand our expectations around risk management and measurement against the existing prudential framework. Firms should not take this as an endorsement of their business plans in respect of cryptoassets, nor as an indication on the likely outcome of international policy discussions. It is entirely possible that the international bodies will conclude with stricter international requirements than permissible under the current framework. The long-term business case for participating in crypto activities may be affected by these international discussions, and ultimately future domestic policy. Therefore, in your business planning and development of risk management approaches, you should not assume that the existing prudential requirements highlighted here will persist long-term.

More broadly, the Bank of England has previously set out early thinking on factors which could translate a price correction in crypto markets into a financial stability risk, including interconnectedness, leverage, and liquidity.[5]

Given the limited existing exposures by firms, and pending international regulatory updates, this letter aims to highlight aspects of the existing framework that we would expect firms to consider when measuring and mitigating risks resulting from crypto activities. While no one part of the current framework fully captures crypto risks, a combination of strong risk controls, operational risk assessments, robust new product approval processes, Pillar 1, Pillar 2, and ongoing monitoring arrangements has the potential to provide firms with an appropriate interim treatment. Firms will need to use all aspects of the prudential framework, and consider the risks from first principles, to

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4 June 2021: https://www.bis.org/bcbs/publ/d519.pdf
5 October 2021: https://www.bankofengland.co.uk/speech/2021/october/jon-cunliffe-swifts-sibos-2021

ensure that risks are appropriately considered, and mitigated and/or capitalised as needed. The PRA will continue to monitor any expansion of firms' crypto-related activities.

1. Strong Risk Controls

First, as set out in my 2018 letter, I remind you of your firm's responsibilities under the PRA's Fundamental Rules 3, 5 and 7 to: (i) act in a prudent manner; (ii) have effective risk strategies and risk management systems; and (iii) deal with regulators in an open and co-operative way, and disclose appropriately anything relating to your firm of which we would reasonably expect notice.

As I noted in 2018, for firms operating in these areas, crypto risks should be considered fully by the board and the highest levels of executive management. In particular, an individual approved by the PRA to perform an appropriate Senior Management Function (SMF) should be actively involved in reviewing and signing off on the risk assessment framework for any planned business direct exposure to cryptoassets and/or entities heavily exposed to cryptoassets. Given the expansion in crypto activities being contemplated by firms, we are also undertaking a survey of firms' current and planned exposures over 2022.

Firms will likely need to adapt existing risk management strategies and risk management systems to suit the different risk profile of many crypto activities. In particular, financial, prudential, operational, and reputational frameworks may need adjustment to reflect crypto activity risks. For instance, some activities may require more frequent monitoring, greater uncertainty factored into modelling or valuation, or lower risk tolerance levels than might typically be applied. Firms may also need to rely to a greater extent on proxies, and make more material assumptions about relationships between differing exposures. Given these uncertainties, firms should also consider the use of stress tests to provide greater confidence that risks are being captured.

2. Prudential Framework

The PRA expects firms to consider the full prudential framework when assessing and mitigating risks and exposures to cryptoassets, including the PRA Fundamental Rules outlined above, Pillar 1, the Internal Capital Adequacy Assessment Process (ICAAP) and related Pillar 2 capital considerations. We would also expect firms to discuss the proposed prudential treatment of cryptoasset exposures with their supervisors.

3. Pillar 1

The PRA Rulebook and onshored Capital Requirements Regulation (CRR) contain a number of requirements to measure and mitigate risks relevant to crypto activities. However, in some areas these measures are not well calibrated to the risks seen with some cryptoassets. This is widely recognised, and as noted above, currently being considered by BCBS.

While the full Pillar 1 framework is applicable to crypto activities, the PRA is of the view that there is merit in reminding firms of the requirements for specific risks or activities. In particular, participation in market-making or direct holdings will likely expose firms to market risk and counterparty credit risk. However, other activities, such as provision of custodial services (entailing operational risk), or credit exposures to crypto firms or crypto collateral, should also be considered in the Pillar 1 framework where relevant.

In many cases, direct holding of cryptoassets will be classified as an intangible asset under applicable accounting frameworks. Intangible assets are deducted from Common Equity Tier 1 (CET1) under Article 36(1)(b) of the CRR, and the amount of deduction determined under Article 37. In most cases this is likely to result in a full deduction of any direct holdings from CET1.

Market Risk

The PRA rules on market risk state that:

- where a firm has a position in a financial instrument for which no treatment has been specified in the CRR, it must calculate its own funds requirement for that position by applying the most appropriate rules relating to positions that are specified in the CRR, if doing so is prudent and appropriate, and if the position is sufficiently similar to those covered by the relevant rules; and
- if there are no appropriate treatments the firm must calculate an own funds requirement of an appropriate percentage of the current value of the position. An appropriate percentage is either 100%, or a percentage that takes into account the characteristics of the position.[6]

As noted in the 2018 letter, the classification will depend on the precise features of the asset. But in most cases, cryptoassets (or financial assets with crypto-underlying) are unlikely to be sufficiently similar to existing asset classes. We would expect firms to take into account and reflect the extreme volatility and/or limited price history of these assets in determining an appropriate capital requirement. For the vast majority of cryptoassets, particularly unbacked crypto, this suggests an appropriate capital requirement of 100% of the current value of the firm's position.

In estimating exposures, the diversification and hedging framework adopted by firms should be conservative, and reflect the potential for such relationships to deteriorate in times of stress. In particular, offsets between exposures which reference different crypto underlyings is unlikely to be prudent in times of stress. Pending further guidance from BCBS, firms may wish to look to the existing structures to inform appropriate risk management techniques. For instance, firms may look to the commodity framework to inform appropriate diversification and hedging methodologies. Similarly, firms may look to the commodity framework in CRR Articles 357 and 358 to determine the current value of positions arising from derivatives referencing crypto assets.

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6 September 2021: Market Risk Part of the PRA Rulebook: https://www.prarulebook.co.uk/rulebook/Content/Part/211442/09-01-2022

Some activities will also require firms to prudently value positions, including considering the potential for greater uncertainty around price validation or the price formation process.

Counterparty Credit Risk

In January 2022, the PRA implemented the standardised approach to counterparty credit risk (SA-CCR). Under Article 277, firms are required to map each transaction to one of the identified risk categories on the basis of the primary risk driver.[7] The primary risk driver is an identifiable factor which drives the risk. Traditional examples might be an interest rate, foreign exchange rate, or commodity price. While the exact risk driver will depend on the activity, in many cases for crypto activities the primary risk driver is unlikely to be one of the more traditional categories in Article 277. For example, for most exposures to crypto that is not backed by underlying traditional assets the primary risk driver will be the price of the crypto itself. Most counterparty credit risk crypto exposures are therefore likely to be more appropriately mapped to the 'other risks' category for SA-CCR purposes.

The 'other risks' category limits diversification or hedging recognition. Notably, diversification and hedging only applies in cases where the primary or most material risk driver is identical. In most instances, where the exposures are to different crypto underlyings, the exposures will not have identical risk drivers. That is, hedging or diversification benefits across different cryptos would not typically be recognised in SA-CCR.

Firms should consider whether the standardised approach captures the full counterparty credit risks associated with many cryptoassets. For instance, volatility is reflected in the supervisory factor, set at a regulatory minimum of 8% for the 'other risks' category. We would expect firms to consider the appropriateness of specific components of the standardised approach, and where necessary, ensure the risk is captured in an appropriate part of the framework.

Reporting of SA-CCR exposures, including breakdown by 'other risks' category, will commence in March 2022. Firm supervisors will be monitoring the drivers of these exposures.

4. Pillar 2

The PRA's Pillar 2 Framework is designed to address risks not adequately captured by the Pillar 1 Framework. As noted in the 2018 letter, firms should set out their consideration of risks relating to crypto-exposures in their ICAAP.

Depending on activities, firms should separately assess their activities for at least market risk, credit risk, counterparty credit risk and operational risk. Firms should also consider

7 January 2021: https://www.prarulebook.co.uk/rulebook/Content/Chapter/403331/09-01-2022

the extent to which products, market participants, or legal structures expose the firm to risks not generally considered in their existing Pillar 2 assessments.

Operational risks are particularly relevant to certain crypto-related activities. For instance, some activities will expose firms to greater levels of fraud or cyber risks. To the extent that firms outsource their crypto activities (eg custody of crypto keys), firms should have a detailed understanding of their residual liability. Firms may have additional potential exposure where customers believe they will step in if their outsourced provider fails. Firms should consider their ability (both legal and operational) to access and gain control of relevant assets in the event of third-party service provider failures.

We will be taking a closer look at those disclosures and processes for firms that have exposures to cryptoassets.

5. Next Steps

As noted above, discussions are ongoing internationally on the prudential treatment of cryptoassets. It is likely that the long-term treatment will differ from that under the current framework. As the long-term framework is developed, the PRA will consult where this results in proposed changes to the regulatory framework.

As highlighted above, we are also launching a survey of firms covering existing crypto exposures and future plans for 2022. We would be grateful if we could receive this information by 3 June 2022.

Kind regards

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