

13 March 2020

The Secretariat
Basel Committee on Banking Supervision
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Doc Ref: MARKB/#277980_V1
Your ref: Designing a prudential treatment for
crypto-assets
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Via direct upload link: <https://www.bis.org/bcbs/commentupload.htm?cdpath=/bcbs/publ/d462.htm>

Dear Sirs, Madam

DESIGNING A PRUDENTIAL TREATMENT FOR CRYPTO-ASSETS

We thank you for the opportunity to comment on your discussion paper “Designing a prudential treatment for crypto-assets”, an important emerging asset class.

The Basel Committee on Banking Supervision has ensured that banks remain well regulated. A consequence of this, is the universal terminology of “disruption” being applied as an alternative solution to the regulated service offering of the banking industry. New digital banking products, developed by largely unregulated entities, can potentially pose a risk to the banking sector, including the systemic oversight obligations of regulators and supervisors.

Introducing legal and regulatory certainty around the treatment of crypto assets will enable the banking industry to actively participate in the development of use case(s) for testing purposes, that could support the advancement of new technologies and innovation through new product offerings. Expanding the focus away from distributed ledger technology to include similar technology will further support activity-based regulation, removing the technology underpin as a reference point.

We provide consolidated comments from our industry to the questions posed in your document below:

Q1. What features of crypto-assets should be considered in the context of developing any potential prudential regulatory definition?

If the objective is to create a boundary between “high risk” and other crypto-assets that would be accommodated under existing regulatory frameworks, the following features may be considered. A non-permissioned crypto asset or one with no link to other identifiable assets could be considered as high risk, requiring additional regulatory oversight when compared to a permissioned with accreditation and or validation criteria, linked to other assets.

Where there is an economic function such as a store of value could be considered high risk, when compared to an operational application e.g. the digital identity use case where DLT may be used to confirm identity and smart contracting. Where there is no identified issuer, or the legal framework does not provide for a clear definition of crypto-assets within a jurisdiction it would be considered high risk. In contrast, clear compliance legislation in effect to address AML/CTF, cybersecurity, consumer and investor protection etc. would reduce the risk.

Please describe the features and their relevance for the prudential treatment of crypto assets.

Different role players - miners, issuers, service providers, buyers, exchanges, initial coin offerings (ICO).

The markets available - the global market available to crypto role players, inclusive of the dark web increase the AML/CFT risk in the use of crypto currency.

Not limited to a singular platform - crypto can be offered as a payment across various platforms, including a swap for fiat currency.

Not restricted to a country - it is easy to use as a cross border payment and the speed of payments makes it difficult to stop an illicit transaction.

No specified minimum value - crypto has no intrinsic value, what impact will that be on the Basel solvency requirements where a financial institution decides to become a crypto market player,

Crypto currency does not have an underlying claim value, creating additional risk to the financial market – value is perceived from what the market participants view its underlying value.

Use of sophisticated technology - the technology behind the process flow to facilitate the transaction e.g. the use of DLT to build the transaction chain, but the technology is only the platform to facilitate the transaction.

Possibility of anonymous role players - the high level of possible anonymity of the parties involved increases the AML/CFT risk as KYC is not a compulsory requirement in many jurisdictions.

Validity - It is difficult to determine if it is an actual virtual asset and not counterfeit.

Possibility of amending rules - the use of protocol on how to trade cannot be enforced between market players, it should be compulsory for market participants to adhere to new rules and not create “forks”.

Not limited to a predetermined wallet - crypto can be held in a virtual wallet, or in a custody account.

Hidden messages - it is possible to hide a secondary sell in the crypto market behind a misleading message in the open view message, controls will be required to identify a secondary transaction and how to interpret messages.

The difficulty to determine the amount of crypto currency available in the market. A view of the amount of crypto currency available in the market will be required to enable the service provider to determine if the transaction is possible.

Exchange traded - it is possible for crypto currencies to trade on traditional exchanges (not crypto exchanges), will these trades on traditional exchanges be allowed, or will only trades on crypto exchanges be allowed?

Seizure of crypto assets - crypto currency can be regarded as an asset, due to the inherent risk of no determined value, will it be possible for the asset forfeiture unit to seize virtual assets?

Ease of use outside of the formal sector - as a buyer or a seller does not need to have a bank account there is a risk that parties outside of the formal financial system can use crypto currency to facilitate illicit trade which introduces a systemic risk to the country's financial system.

Transactional features - it is possible for a number of sellers to combine their transaction into one actual transaction, which creates the need to be able to identify when a transaction is a combination of multiple underlying transactions.

Q2. What are the main economic and related functions and potential sources of value of crypto-assets that are relevant in the context of developing a prudential treatment?

A potential function is valuation, for example:

- for trading purposes as an asset - valuation can be done using the same principles and processes that are currently used in evaluating exchange traded / OTC traded assets.
- used as a means of executing a smart contract – then the valuation will more likely be on the basis of cost of creation with a margin, in the same way software is currently valued.

Accounting treatment is another area that should, in principle, align with the approach to prudential treatment e.g. contract recording would be treated as software and follow the established treatment for software.

To what extent do these functions and potential sources of value affect the relative prudential risks of different crypto-assets for banks?

Crypto currency is being used increasingly in the trade payment space. The speed with which these transactions can be completed safely and securely by using DLT will benefit global trade.

The technology behind crypto currency transactions, blockchain/DLT is a secure mechanism and although technical, the transaction can be rebuilt to identify all parties to the transaction as well as the transaction flow. It is going to become important to take as many mitigation measures as possible in respect of the risks inherent to the sources of bitcoin used to match a “buy” order in the platform. Perhaps due diligence and risk rating of platforms is a potential solution

Are there other potential sources of value that are relevant in designing a prudential treatment for crypto-assets?

From an end-user perspective:

“Hard Money” characterisation: Some crypto-assets (e.g. Bitcoin with its 21m BTC cap) have a deflationary monetary policy which causes certain market participants to view them as similar to gold in terms of scarcity and being considered as a hedge to global macroeconomic factors

Novel Governance: Some crypto-assets have introduced novel governance structures into the world including the idea of Distributed Autonomous Organisations. It’s unclear whether these will be viable in the long term, yet they provide opportunity for experimentation and the development of new business ideas and models which are hard to predict

Digitally Native: The emergence in particular of Bitcoin, solved the very real computer science problem of digital scarcity and avoiding digital double-spending. Meaning the problem of infinite reproducibility of any digital file and thus not being able to have a native digital “money” as such is solved by the technologies, economics and game theoretical framework underpinning crypto-assets.

Cost Advantages: The use of numerous crypto-assets for moving value digitally across borders, obviates the use of incumbent payment networks like SWIFT, and often represent significant transactional cost savings – particularly for large value transfers (e.g. 3 months ago this 44,000 BTC // \$310m transaction was done for 32 US cents)

Near Realtime International Settlement: Where, for various reasons, cross-border payment settlement can take several days, many crypto-assets facilitate the transmission of value and an irrevocable settlement near real-time. Delays tend to be counted in hours rather than days which represents a significant value proposition relative to many existing payment rails.

Accessibility: From a pure technical and operational point of view, the often technical & difficult user experience notwithstanding, crypto-assets tend to be highly accessible to members of the public from any societal stratum. Provided there is access via a smartphone, generally the infrastructure itself is close to free, engenders no running costs for the users, is extremely cheap to use and has few hurdles (if “onramps/offramps” exist). This is why crypto-assets, like Stellar, are at the centre of big financial accessibility drives across the African continent.

Programmable Money: Digital and programmable money is a powerful concept if the evolution of the internet itself is anything to go by. An immense volume of work is now performed automatically by millions of scripts running on a vast distributed network of computers and servers – performing critical functions which drastically reduce the friction in our lives. A similar treatment of money and value exchange is inherently useful and will result in thousands of innovations which are likely to improve people’s lives and remove drudgery.

Q3. What benefits do crypto-assets provide for the banking system, and the provision of financial services more generally?

Digitally Native: Being able to interact with a digitally native money which is regulated and correctly sanctioned will be a big boon to banks and financial institutions as it will remove large reams of friction they experience in translating the digital world to the analogue one

Near Realtime Settlement: Similarly, the use of intra and inter-bank settlement crypto-assets (provided they are correctly regulated) has the potential to vastly improve numerous middle and back office functions associated with moving value within banks, between banks and across borders

Novel Uncorrelated Asset Class: It's unclear how long crypto-assets will remain as uncorrelated to most of the financial markets as they are, particularly as the size of their market grows. However, while this remains the case, they potentially provide an interesting asset class by which risks can be managed

Programmable Money: As above.

One of the benefits of crypto-assets is the ease of use to facilitate trade and trade payments. Crypto-assets are not affected by inflation but by the availability of the currency, thus the impact of global financial crises that result in the loss of fiat currency on exchanges, does not have a similar impact on crypto currency as demand and availability drives the value.

Transparency, quicker execution and greater security, depending on how the technology is used.

- Q4. What additional factors affect the risk profile of different crypto-assets which are relevant in the context of determining a prudential treatment?

Does the crypto provider follow a centralised (central service provider) or a decentralised model (no service provider) – the monitoring of centralised models is easier and should be preferred from a regulatory perspective.

The different role players in the value chain of a crypto transaction creates additional risk as not all role players are financial service providers and some fall outside the scope of regulatory scrutiny. The jurisdiction in which the crypto currency role player is registered will have an impact on the risk involved to allow the use of the currency. There is a risk in relation to the possible hacking of the technology which increases the risk that the value of the currency will be void/wiped out.

There is an economic risk that where lots of people invest in a specific crypto currency and an event e.g. hacking wipes out the value of the crypto currency, a substantial percentage of the population may become poor overnight with a downstream impact that the government will need to look after them. Where exchanges are situated in countries with poor financial controls, it will be possible for the crypto exchange to facilitate illicit transactions. There is a need to have access to the data of crypto transactions. Depending on the technology, the data may not be immediately available which can result in the flow of funds for illicit purposes. Data should be made available immediately.

Where crypto currency is used for security purposes the absence of a fixed value can have a negative impact when the client defaults.

- Q5. Do you agree with these general principles in guiding the design of a potential prudential treatment of crypto-assets?

We agree broadly with the approach, given that crypto could democratise payments and specifically in Africa drive growth and for the first time support our participation in the 4IR. The sophisticated nature of the existing banking system does however make it difficult to transition out of legacy systems and processes that still require the investment to be recovered.

Are there additional principles that should be considered?

Although it is important that a conservative approach is taken while also ensuring traditional assets are not unfairly prejudiced – it's equally important that crypto-assets are also seen with fresh eyes and regulation, where necessary, should be crafted with specificity.

The crypto-asset market has received both positive and negative reviews. Fraud and losses on the one hand need to be balanced against technological innovations and benefits to society on the other. Regulation should constructively embrace an orderly consolidation of crypto-assets into the existing financial architecture. The banking industry should not be designated as a quasi-regulator of the crypto-asset markets by making the banks responsible, because they provide services to these businesses. Proportional regulation based on the risk introduced to the financial sector must be accompanied with regulatory reporting obligations.

Activity based regulation should absorb the emergence of innovative products into existing regulation, rather than the creation of new regulations specifically designed to respond to the innovation itself.

Q6. Are there additional channels other than those listed above by which banks could be directly or indirectly exposed to crypto-assets?

Providing Tokenisation Services, whereby clients are able to dematerialise real-world assets into crypto-assets which are issued into the ecosystem.

Market Making in crypto-assets directly as well as crypto-derivatives

It is possible that a bank might not provide crypto currency services, but may offer a foreign currency account product, clients may use these CFC accounts to forward funds to exchanges to trade in crypto currencies. These transactions may be disguised and may go undetected.

A financial institution may facilitate the issuance of an ICO to the public.

Which channels could potentially be the most material for banks?

Lending to entities dealing directly with crypto-assets (e.g. crypto-asset exchanges, fund managers of crypto-asset exchange-traded funds, etc.)

Taking crypto-assets as collateral

Market Making in crypto-assets directly, as well as crypto-derivatives.

Undertaking securities financing transactions involving crypto-assets

Using crypto-assets for internal or inter-bank operational processes

Acting as a custodian or taking deposits from a reserve backing crypto-assets

How do these exposure channels vary by different types of crypto-assets?

These channels, their risk, how attractive they are, the potential legality of engaging in activity associated with them etc. is largely a function of the nature of the crypto-assets in question. In particular how they are used, how we would categorise them, how entrenched they are within the ecosystem and the regulatory and legal treatment thereof

What are the benefits and risks associated with banks' crypto-asset exposures through these different channels?

An unintended consequence of the stringent compliance requirements for banks, particularly in AML/CTF, has resulted in crypto exchange providers being unable to open or maintain bank accounts.

Q7. Are any exposure channels likely to change in response to ongoing or envisaged developments in crypto- asset markets?

Channels may change and need to be enhanced to make provision for crypto assets in the normal value chain. It's highly likely there'll be significant changes in these channels over time for several reasons. A few examples below:

- Wholesale underwriting of IEOs/ICOs likely to dry up as these come under significant regulatory pressure
- Increase in demand for Custodial Services as more institutional money flows into this space
- Increase in demand for Prime Broking services as more institutional money flows into this space
- Increase in demand for Market Making & Risk Management Capability incorporating spot & derivatives as more institutional money flows into this space
- Increase in demand for Clearing crypto-asset futures & similar crypto-asset derivatives
- The acceptance of certain crypto-collateral, particularly the Stablecoin kind could potentially increase

- Lending & Underwriting deals with crypto-asset players of various natures likely to increase in demand
- Provision for on/offramps or direct API connections to various crypto-asset related exchanges could see increased demand including the likes of the now-controversial Libra

Q8. Which risks would be the most material with respect to banks' exposures to crypto-assets?

The absence of intrinsic value for crypto currencies can have a detrimental impact on a bank's solvency should they decide to enter the crypto currency market.

The difficulty to conduct KYC on the role players presents a higher AML/CFT risk;

The difficulty to reconstruct a transaction to identify suspicious or unusual activity increases the AML/CFT risk

Are there additional risks other than those listed above which banks could be exposed to as a result of holding direct or indirect exposures to crypto-assets, or providing related services?

Although it could be included under the listed operational risk – there is definitely a risk associated with the fast-changing nature of the underlying technologies which are evolving at a pace both the regulatory environment and current banking infrastructure was never designed for

Arguably there are also risks in long-term non-participation including:

- Slowly closing off from Gen Z and Millennial clients who are expressing deep comfort with crypto-assets (US Millennials invested more in Grayscale's Bitcoin Trust than Netflix and Microsoft)
- Crypto-assets of particular types are seen currently as global macro hedges given how uncorrelated they are with any existing asset class

To what extent do these risks differ based on the type and design of crypto-assets, and how do they differ to traditional asset classes?

The most notable aspect of the risk associated in this space is the need for rapid evolution in understanding the changes and their implications. Liquidity, Market, Credit & Counterparty Credit Risks are extremely stark and can be orders of magnitude more than traditional assets – however over time this gap should close. Reputational risk and operational risk in the form of cybersecurity,

There are also risks associated with the fact that many of these assets are anonymous or pseudonymous at their core – so some crypto-assets are fundamentally immune to any kind of AML / CFT provisions. Even where anonymity isn't deeply baked-in, the use of "mixing" can often make tracing the source of funds extraordinarily difficult, which is a major AML/CFT risk.

Q9. What are your views on the illustrative example of a prudential treatment for high-risk crypto-assets?

The illustrative example and the principles underpinning it are sound. The approach is of course extremely conservative across each of the treatment sections however it's hard to argue against the provisions provided all market participants would ultimately need to adhere to them (not just large banks or financial institutions).

With the risk assessment view however, what will be the view when dealing with "stable coins"? Will it not be possible for a stable coin to increase the notational value of the underlying crypto asset?

The example is not clear – why would a crypto asset that has been bought be treated as banking book when it may also be traded? Why would a derivative be designated as having to sit in the trading book? These assets should follow the allocation as is prescribed in the in the current Basel framework.

Which crypto-assets would classify as high-risk based on the criteria set out above?

All of them except Stablecoins which have independent auditor sign-off for their reserves and operating model and permissioned private chains with highly specific use-cases which are subject to strict oversight and operational rigor.

What other features could be considered in specifying the scope for such a potential treatment?

No comment

Q10. What further supervisory measures could be considered in specifying a potential prudential treatment for crypto-assets?

It may be worth including a provision for participants of a certain size to be responsible for providing client and market thought-leadership (not just depending on regulator for education) and encouraging the fostering of communities thinking about the regulatory crypto-asset landscape.

We would recommend that compliance risk is dealt with in its own risk category.

Cryptography, cyber security, data analysis and governance expertise.

Q11. What are your views on the disclosure requirements related to banks' crypto-assets?

Only exposures to highly risky assets should be considered for disclosure and only where they are significant by the current Basel framework i.e. where disclosure would take place for another existing category of concentration risk.

Should additional information related to banks' crypto-asset exposures be disclosed?

Guidance should be provided on the treatment of the banking book / trading book split.

Q12. What are your views on the appropriate prudential treatment of these types of crypto-assets?

We agree with the two listed exceptions to this treatment, and would encourage exercising a far lighter-touch in these instances

Are there additional types of crypto-assets that would warrant a different treatment to the illustrative example outlined in this paper?

What is the regulator's expectation where the FI is dealing with crypto currencies that are not making use of DLT?

Q13. What are your views on the potential prudential treatment of specific types of crypto-assets that bear economically equivalent risks to traditional asset classes?

The general principle of equivalence is an important foundation when maintaining consistency between traditional and crypto-asset treatment. However, economic functions and risk need to be complimented with an understanding of the mechanics of crypto-assets, to reduce the duplication, or the imposition of, unnecessary regulatory concepts.

Establishing a balanced approach between new elements and the existing framework should be informed by the experiences of the global financial crisis and the need for confidence, consumer protection and the ability to manage a systemic risk. Market development needs to be balanced with safety and soundness.

To what extent could the prudential treatment of such crypto-assets build on the existing framework?

Where possible existing frameworks should be adapted to incorporate both existing and new participants to strengthen the crypto-asset ecosystem and protect clients.

Q14. What specific conditions and criteria are needed for different types of crypto-assets to be subject to a different treatment to the illustrative example discussed in this paper?

Recognising that crypto-assets can be fundamentally different in terms of cash flow, risk, etc. from any existing traditional asset, any approach should be developed from the ground up to identify if and what the differences may be.

Where crypto-assets are made available to the wider public, especially to lower income groups, there should be a disclaimer so that the persons acknowledges that they are aware of the financial risk taken by making use of a crypto currency where there is no inherent value to the crypto currency. Where the government invests or participates in a crypto offering, there should be rules on the level of investment to be made and associated risks taken. The state should be prevented from using pension funds to invest in an ICO.

Q15. Do you have other suggestions regarding the design of a prudential treatment of crypto-assets?

No comment at this stage.

We trust you will find some value in our comments.

Yours faithfully



Mark Brits
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