Professional Risk-Managers' International Association (PRMIA), Russian Chapter (Moscow, Russia)
https://prmia.org/Public/Network/Chapter_Websites/Russia.aspx
Contact details: Russia@prmia.org

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Basel Committee on Banking Supervision
Email: baselcommittee@bis.org

Dear Ladies/Gentlemen,

On behalf of The Russian Chapter of The Professional Risk-Managers' International Association (PRMIA) we would like to thank The Basel Committee on Banking Supervision for the opportunity to deliver our opinion on the Discussion Paper 'Designing a prudential treatment for crypto-assets' issued on December 12, 2019.

In order to deliver a fair and representative opinion of the Russian community we held a roundtable with the Bank of Russia's representatives, banking industry and digital assets professionals on February 1, 2020 at the Perm Winter School (http://permwinterschool.ru). It was attended by over 150 participants both from the industry and academia.

The proposed conservative approach to crypto-assets exposure regulation was generally favored by the banking industry representatives. Our key message is that given the innovative nature, fast evolution and growing diversity of crypto-assets, it is necessary to conduct additional qualitative and quantitative studies to benchmark crypto-assets to other asset classes in order to provide adequate judgement of their relative risk profile and calibrate risk weights under existing standardised approach of Basel 2.5 and FRTB.

Please find attached additional detailed comments below.

We hope our feedback would be helpful for shaping the future regulation of crypto-assets.

Yours sincerely,
Ivliev Sergey
Lobanov Alexey

General Comments

Q1. What features of crypto-assets should be considered in the context of developing any potential prudential regulatory definition? Please describe the features and their relevance for the prudential treatment of crypto-assets.

The important features that should be considered more in depth are governance, decentralization and cryptoeconomics. On the technical level, crypto-assets may use very similar underlying protocols, but substantially differ on the governance maturity and degree of decentralization. For example, there were over 30 forks of Bitcoin source code with minor or no modifications of the code base, but with substantially different characteristics and risk profile (market cap, adoption, volatility, survival, etc).

Governance maturity depends on the size of the community, governance rituals, decision making process of network upgrades. Decentralization metrics can include the diversity of the development community (e.g. Gini-coefficient of number of commits to the source code by distinct developers), diversity of the nodes releases (e.g. Gini-coefficient of number of distinct versions of the active nodes), wealth distribution, consensus decentralization (e.g. number and distribution of independent miners/validators).

Another unique feature of crypto-assets is the immutability, or finality, of payment and settlement transactions. Unlike transactions in conventional financial markets, erroneous or failed trades generally cannot be cancelled or undone and their results may only be offset by subsequent transactions. Moreover, the execution of trades in crypto-asset markets, for instance, by means of smart contracts, is often fully automated and almost unstoppable.

Lastly, cryptoeconomics / tokenomics is an important factor of the valuation and long term risk profile of all public cryptocurrencies and many smart contracts. Such “monetary policy” includes the coin/token generation, velocity and utilization (burn) rules. For example, there is a difference between deflationary supply of Bitcoin with programmed scarcity and inflationary economics of Ethereum with unlimited supply in the long term.

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? To what extent do these functions and potential sources of value affect the relative prudential risks of different crypto-assets for banks? Are there other potential sources of value that are relevant in designing a prudential treatment for crypto-assets?

Unlike asset-backed tokens collateralized by existing assets, cryptocurrencies are a novel form of value, that is based on the network effect, adoption and social scalability. Bitcoin derives its value from the fact that it is used as a means of value transfer: over the last 3 years, $1 bln is moved daily on average. Other important use cases include smart contracts and decentralized applications, utility tokens and tokenized loyalty programs, non-fungible tokens and digital collectibles. Possible comprehensive classification is provided in Appendix A.

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

Public permissionless blockchains such as Bitcoin and Etherum have provided a blueprint for creation of secure decentralized systems for real-time payments with direct ownership and immediate atomic settlement. Such crypto-assets may simultaneously act as a means of payment and financial instrument. In the future world, we will be able to hold tokens of value in our mobile phones and pay at the point of sales with any token, while the merchant will receive the token of his choice and conversion will be made on the fly. Banks as regulated financial institutions can play an important role in providing custody for collateral, origination and settlement services, as well as act as buy-side participants in crypto-asset markets.

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

An important factor that is missing is governance. Poorly governed blockchains pose high risk to the holders of the coin, who not only experience market volatility but are also exposed to the issuer risk.

Q5. Do you agree with these general principles in guiding the design of a potential prudential treatment of crypto-assets? Are there additional principles that should be considered?

In general, we agree with the proposed principles. In reality, they may be hard to apply due to the specific nature of the cryptocurrencies and crypto-assets (e.g. direct ownership of the asset with the private key) and unique attack surface (e.g. 51% attack, selfish mining, attack on oracles, etc.).

Q6. Are there additional channels other than those listed above by which banks could be directly or indirectly exposed to crypto-assets? Which channels could potentially be the most material for banks? How do these exposure channels vary by different types of crypto-assets? What are the benefits and risks associated with banks' crypto-asset exposures through these different channels?

In addition to mentioned channels, staking services in the Proof-of-Stake blockchains can be a significant part of crypto-assets services and revenue generated by the custodian function.

Q8. Which risks would be the most material with respect to banks' exposures to crypto-assets? 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? To what extent do these Designing a prudential treatment for crypto-assets 11 risks differ based on the type and design of crypto-assets, and how do they differ to traditional asset classes?

Key management risk is by far the most critical operational risk for crypto-assets, followed by market risk and risks of 51% attack. The mapping of risks to the classification of crypto-assets is provided in Appendix A.

Q9. What are your views on the illustrative example of a prudential treatment for high-risk crypto-assets? Which crypto-assets would classify as high-risk based on the criteria set out

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

The overly conservative treatment for what is called high-risk crypto-assets can be justified at the current state of development. As regards market risk, we believe that crypto-assets should be treated as a new separate asset class with reasonably conservative risk weights. We think that, given the innovative nature, fast evolution and growing diversity of crypto-assets, it is necessary to conduct additional qualitative and quantitative studies benchmarking crypto-assets to other asset classes in order to provide adequate judgement of their relative risk profile and calibrate risk weights under the existing standardised approach of Basel 2.5 and FRTB.

Q12. What are your views on the appropriate prudential treatment of these types of crypto-assets? Are there additional types of crypto-assets that would warrant a different treatment to the illustrative example outlined in this paper?

We welcome the prudential approach to differentiate treatment of CBDC, stablecoins (fiat-backed and crypto-assets backed) and other asset-backed tokens as they clearly present a different risk profile compared to cryptocurrencies.

Appendix A. Classification and key risks of the crypto-assets

Crypto-asset type	Characteristics	Use cases / *Examples*	Closest asset class	Key risks
Cryptocurrencies	Native coin of the public blockchain, critical security element of the protocol's consensus and cryptoeconomics. In many cases is not anyone's liability, when sufficiently decentralized.	p2p payments / *Bitcoin, Ripple, Bitcoin Cash, Dash*	*Commodity*, if sufficiently decentralized and adopted; otherwise – *venture equity*	OpRisk (cyber, 51% attack, etc.), Market risk +Credit risk of the issuer if not decentralized.
		Private payments / *ZCash, Monero, Grin, Beam*		+Compliance risk (AML/CFT)
		Smart contracts platforms / *Ethereum, EOS, Tezos*		+Additional OpRisk due to larger attack surface
Tokens	Digital assets issued on the public blockchain that represent the ownership and various rights (service access or use, governance, claim on underlying asset, and so on). In many cases is someone's liability. In some cases, can be a native coin of a public blockchain, but not critical element for its security (*e.g. BNB, Libra*).	Utility tokens / *MakerDAO, Kyber, Uniswap*		+Additional OpRisk of service failure
		Crypto-assets collateralized algorithmic stablecoins / *Dai, BitUSD*	No direct analogs (not considered e-money or means of payment due to the decentralized nature of issuance)	+ Additional OpRisk due to larger attack surface – Less market risk due to price stabilization mechanisms and excessive collateral
		Fiat collateralized stablecoins / *Tether, USDC, PAX*	*e-money*	+ Credit risk of the issuer and custodian of the collateral

		Asset-backed tokens / *DigixGold, WBTC*	*ETFs, tracker certificates, derivatives* (depending on the nature of the collateral and contract structuring)	+ Market risk of the asset used for collateral + Compliance risk (can be considered a security in some jurisdictions)
		Security tokens / *Smart containers, Bitbond, BCAP*	Equity, participation certificates, fixed income	Issuer risk, custodian risk, platform risk
Private crypto-assets	Digital assets issued on private or permissioned blockchains. In most cases distributed and settled between financial institutions and qualified investors	Central bank issued digital currencies (CBDC)	Central bank money	Platform risk
		Private security tokens	Securities	Issuer risk, custodian risk, platform risk
Non-fungible tokens	Digital collectibles, issued as non-fungible tokens on the public blockchains	Collectibles / *Cryptokitties, Decentraland*	No direct analogs	Issuer risk