

Zug, 13 March 2020

Comments on the analysis and ideas set out in the Discussion paper “Designing a prudential treatment for crypto-assets”

Dear Ladies and Gentlemen,

Founded in April 2018 and headquartered in Zug, SEBA is a pioneer in the financial industry, building a progressive technological bridge between the digital and traditional asset worlds. In August 2019, SEBA received a Swiss banking and securities dealer licence – the first time a reputed, regulatory authority such as FINMA has granted a licence to a financial services provider with a focus on digital assets and crypto. SEBA enables clients to invest, safely keep, trade and borrow against traditional and digital assets, as well as issue tokens, in one place.

For SEBA it is of utmost importance to actively participate in the discussion on prudential treatment for crypto-assets. In our answers to your questions, you will also find our proposal to actively participate in a potential working group in order to discuss and work on prudential treatment for crypto assets.

The comments summarized below have been created as a joint work of the risk department (responsible for the prudential treatment of crypto assets) and the crypto currency competence centre of the Bank.

Yours sincerely

On behalf of SEBA Bank AG

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Opening remarks

Following the review of the discussion paper, we generally support the Committee's effort to regulate and provide standards in the industry. However, we have observed that the statements made on crypto-assets and Blockchain technology are not supported with clear facts and evidence. It is important to distinguish that various initiatives such as Bitcoin, Ethereum have been created to solve different issues and address a different need. They are an immature asset class with promising features to digitize the banking, finance and the broader economy, and provide undisputed benefits, including enhanced efficiency, market liquidity and risk diversification. The Committee should allow these innovations to thrive in a regulated and risk-controlled environment.

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.

There are several key aspects regarding crypto-assets, which should take into consideration, of which we will list and explain below:

- Open source software: one of the principles in Bitcoin although never explicitly explained (as it is taken as a given) is the benefits of Bitcoin being an open source project. This allows full transparency on the source code, opens contribution to ideas and improvements on the project from the public. The fact that Bitcoin for example is an open source project increases its value however; this does not guarantee the quality of code.
- Consensus mechanism: for a transaction to be processed and valid, consensus must be reached. There are a wide variety of consensus algorithms, which exist such as proof of work, proof of stake, delegated proof of stake, hybrid consensus and many others. Each consensus algorithm has varying finality promises depending the block times (sometimes referred to as confirmations). The important piece for Banks and Regulators is to understand when it is safe to accept a transaction as 'final'. The cost of attacking each network largely depends on the consensus mechanism and its associated security resources. (i.e. hashrate and staking). These resources can be quantitatively evaluated to give banks a better view of the risk.
- Decentralization/ censorship resistance/ tamper proof: zero trust based model meaning that anyone can participate in the network without having to trust a central authority but only a common consensus system, geographical/ geopolitical (no centralized providers) distribution of the participants in the network, the costs of tampering the data.
- Transparency: the ledger is available publicly which allows full access and full validation to the data of the network. In Bitcoin for example, anyone can download the entire history of the ledger which includes transaction history, flows between addresses, and much more.
- Generation of new coins: new coins are generated using a pre-defined agreement defined in the source code by the participants in the network. No single participant has the possibility to arbitrarily generate new coins.

Taking into account the above points would allow us to understand the risks of a particular crypto-asset and based on that develop a prudential risk framework. We understand a prudential risk framework as aspects which would help identify and classify the risk level of a particular crypto-asset.

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?

Crypto assets is a very broad term. It is impossible to give an overall answer to the main economic and related functions and potential sources of value of crypto-assets. Crypto assets need to be differentiated into different token types, e.g. according to the function and transferability (refer to FINMA's publication "ICO guidelines"):

- **Payment tokens** are synonymous with cryptocurrencies (e.g. BTC, ETH etc.) and have no further functions or links to other development projects. Tokens may in some cases only develop the necessary functionality and become accepted as a means of payment over a period.
- **Utility tokens** are tokens which are intended to provide digital access to an application or service

Asset tokens represent assets such as participations in real physical underlings, companies, or earnings streams, or an entitlement to dividends or interest payments. In terms of their economic function, the tokens are analogous to equities, bonds or derivatives.

The design of a prudential treatment for crypto assets has to consider the different economic functions of the tokens.

Depending on the legal base, banks must perform due-diligence and justify why they choose to support a crypto-asset. By supporting a crypto-asset, we understand that banks would offer custody of the crypto-assets as well as trading capabilities. It should be noted that Banks have different risk appetites based on their strategies and therefore the selection criteria of crypto-assets allows them to determine whether they can support a crypto-asset.

¹ <https://www.finma.ch/en/news/2018/02/20180216-mm-ico-wegleitung>

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

"Crypto never sleeps" means that the trading of crypto assets is not dependent on opening hours from exchanges. In addition, most of the crypto assets today have no central authority. The context of globalization and the nature of project such as Bitcoin fully support the combination that services must be offered 24/7, 365 days a year. Banks have the possibility to trade crypto-assets at any given time, (anywhere in the world, with little fees (usually)). The rules are agreed by the network and verified by all participants, which places an emphasis on fairness. This aspect makes the business case of tokenization extremely interesting.

Secondly, banks do not need to be dependent from third party clearing services (e.g. swift) with limited opening hours. However, banks shall carefully define internal standards and rules how they choose to support a crypto-asset project.

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

On top of the technological factors answered in question 1, there might be a lack of legal connection between the crypto asset in the form of an asset token and the underlying asset (e.g. shares) and the holder has no or insufficient legal instruments to claim the rights on the underlying asset.

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 principle, we agree with the general principles stated in the discussion paper. It is of utmost importance to continue with a principle-based regulation and not introducing a technological based regulation or an advantage/disadvantage of a specific technology.

However, the comparability of the risk of a crypto assets, specifically a crypto asset in the form of a payment token (refer to answer of question 2) with a "traditional asset" seems to be difficult considering the features of crypto-assets – as outlined in question 1.

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?

We would like to specify channel "(xiii) where permitted, taking deposits of crypto-assets, or extending loans denominated in crypto-assets". It is important to specify the deposit type of crypto assets. A crypto asset in the form of a payment token (see question 2) can be stored in a joint-wallet of the Bank or in a segregated wallet (with a dedicated address for the client). The deposit in a joint wallet is comparable with Fiat currencies and should then be treated equivalent with the economic function of Fiat currencies.

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

Inter-chain messaging: all the mentioned consensus risks are likely to be combined across 2 or more chains.

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

See answer to question 1 & 2. Besides that the highest risks are compliance risks (AML, KYC) and Cyber risks including the risk that private key get stolen.

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?

Classification of high-risk crypto-assets

The illustrative features in the discussion paper to classify high-risk crypto assets are in our view to generic. As already outlined in question 2, a further specification of crypto assets into their economic functions (payment tokens, asset tokens and utility tokens) is necessary. Based on this classification, all crypto assets in the form of payment tokens would be classified as high-risk crypto assets. Based on the features described in Q1 we are not of the opinion, that all payment tokens should be classified within the same risk category. A risk assessment according to the features outline in question 1 should be considered in order to distinguish between different risk types for crypto assets.

Illustrative example of a prudential treatment

In our view, the initial situation of the example is too simple. Different features of crypto assets are not considered in the illustrative example of a prudential treatment. According to the definition of high-risk crypto assets, we assume that all the existing crypto currencies (e.g. BTC, ETH, ETC etc.) with the form of a payment token are classified as high risk. We strongly recommend considering the features outlined in question 1 into the definition of high-risk crypto assets. The proposal of a full deduction from the CET1 capital with the current definition of high-risk crypto assets should not be applicable for all crypto currencies.

We assume that the example is only considering direct holdings of crypto assets of the Bank, meaning direct market risk of the Bank. However, depending on the business strategy a substantial part of a Bank's balance sheet may be client's deposits in crypto assets (joint wallet). If the client's crypto assets would be disclosed in the banking book, the prudential treatment should consider a net position for the banking book treatment. We assume that the market risk of a client is not subject to a deduction from CET1.

Credit risk mitigation:

The eligibility of a crypto asset to serve as financial collateral cannot be excluded a priori. E.g., an asset token, which is directly linked to a Basel III eligible collateral, should also be eligible for deduction in the form of an asset token.

Liquidity risk treatment:

The same as described above we repeat for the liquidity risk treatment. If e.g. a HQLA eligible bond is issued as an asset token and consider the principle of "same risk, same activity, same treatment", we also recommend qualifying such an asset token as HQLA eligible. It also needs to be discussed if payment tokens can be recognized as cash-inflow. It is possible to reduce the haircut due to the technological risks as outlined in question 1.

Large exposure limit

The statement of the Committee's definition of large exposure framework for crypto assets is too high level. The prudential treatment for large exposure should also differentiate between the economic features. In addition, the large exposure limits the exposure of the risk by issuer. Hence, a crypto asset cannot not always be linked to an issuer; the current prudential framework for traditional assets with an issuer cannot be leveraged for crypto assets (e.g. payment tokens).

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

We would recommend the setup of a dedicated expert unit within the Basel Committee for Banks based from the crypto and blockchain industry, academia and professionals and create working groups to discuss and design a framework for an adequate risk management of crypto-assets. Such working groups have been a success story in Switzerland² (e.g. for the improvement of the framework conditions for DLT/blockchain with the involvement of financial institutions and fintech associations. We would very much like to make ourselves available for a working group in order to discuss a potential treatment for crypto assets.

Q11: What are your views on the disclosure requirements related to banks' crypto-assets? Should additional information related to banks' crypto-asset exposures be disclosed?

Banks should disclose information within the regulatory obligations only. Crypto assets should be disclosed according to the same standard as for other asset classes.

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 are also of the opinion that other types of crypto assets need a different prudential treatment than the illustrative example above for high-risk crypto assets. However, as already described before, the differentiation between "high risk crypto assets" and "other types of crypto assets" is too simple and not sustainable. In our view, a prudential treatment needs the classification of the economic function (payment tokens, asset tokens and utility tokens) and a risk assessment of the key aspects described in question 1.

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

For us the most important question is how we can compare the risks of traditional asset classes with the risk of crypto assets. The existing risk framework for traditional asset classes cannot be leveraged for crypto-assets simply because of the nature and design of crypto assets. For further understanding of certain risks, please refer to the answer of question 1.

² Blockchain/ICO working group consults sector on its work, media release from the Federal Council:
<https://www.admin.ch/gov/en/start/documentation/media-releases.msg-id-72001.html>

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?

We refer to our answers to questions 12 and 13.

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

We refer to our answers to questions 12 and 13.