

Comments

Association of German Banks
Basel Committee on Banking Supervision - Discussion paper -
Designing a prudential treatment for crypto-assets

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General remarks

We understand that the Basel Committee is primarily dealing with regulation of banks. However, we would like to take this opportunity to point out that there must be a uniform global framework for dealing with crypto-assets, including every case that could have consequences for financial stability, regardless of whether a bank or another company is involved. Accordingly, non-banks must also be regulated to prevent unwanted evasion into unregulated areas.

Questions

Question 1

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.

We believe the feature of most relevance for the prudential treatment of crypto-assets is the asset and risk underlying a crypto-asset. That crypto-assets are **digital** in nature, **rely on cryptography** and use distributed ledger technology is **not of great relevance**, in our view, when it comes to the question of how best to regulate them and assess their risk. While it is true that these features define the term crypto-asset, they say very little about what main risk driver lies behind a given crypto-asset and are consequently of subordinate relevance from a prudential point of view. The better approach would be to establish categories that give an indication of how much risk is associated with the crypto-asset in question and to link these categories to existing asset classes where possible.

We therefore recommend, as a first step, assigning the various types of crypto-assets to existing and, if necessary, new categories and linking them to existing or new asset classes. Only a clearly defined system of classification will enable banks and innovators to assess in a manner offering legal certainty how they should deal with a particular crypto-asset.

Most crypto-assets already correspond to existing asset classes and should be treated accordingly. Many security tokens, for example, have similar attributes to a bond, though without meeting the formal requirements of existing regulation. In such cases, existing regulation should be extended so that it also covers the new digital transmission path. In Germany, for instance, security tokens are not classed as securities because a mandatory feature of a security under German law is the existence of a physical certificate. Such formalities must not be allowed to result in comparable assets being treated differently. The underlying risk will, after all, usually be identical. The principle "same activity, same risk, same rules" needs to be applied. Naturally, banks will have to analyse whether the special features of a crypto-asset

harbour additional risks, such as operational risk, compared to its conventional counterpart. Any such risks will then also have to be considered and managed.

If, owing to its special characteristics, a crypto-asset does not resemble an existing asset class, a new asset class should be precisely defined and suitable treatment of the associated risks should be developed based on an evaluation of the asset's historical performance. Payment tokens such as Bitcoin, which are not backed by conventional assets are especially difficult to assign to an established asset class. The Basel Committee suggests classifying such assets as "high-risk" crypto-assets. Notwithstanding this possibly problematic name, we believe it would make good sense to establish a category of this kind as well as a new asset class. Not least because it would enable a distinction to be drawn between this category and stablecoin, for example, and thus provide for different treatment and allocation to different asset classes.

Particularly where the category of "high-risk" crypto-assets is concerned, additional characteristics specific to crypto-assets should also be considered so as to ensure that their prudential treatment is commensurate with the actual risk involved.

The most well-known crypto-assets in this category are Bitcoin and Ethereum, which are arguably safer than other high-risk crypto assets due to their key features. The underlying crypto economics play a central role for the value of a high-risk crypto-asset. Therefore the type of initial distribution, the number of distributed tokens, the type of consensus mechanism (proof of work or proof of stake, etc.) and the reliability of the code are key drivers for the stability, and thus the value of the high-risk crypto-asset.

Question 2

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?

We agree with the Basel Committee that it makes good sense to classify crypto-assets on the basis of their different functions. The three major categories are, as mentioned in the discussion paper, payments, securities and utility access. Within these categories, a further distinction should be made as to whether or not the crypto-asset is backed by a conventional asset.

A further criterion which should be considered in each sub-category is, as the Basel Committee correctly points out, the impact of technological features. In addition to the factors mentioned on page 6 of the discussion paper, we believe the type of initial distribution, the number of distributed tokens, the type of consensus mechanism (proof of work or proof of stake, etc.) and the reliability of the code can also affect the stability, and thus the value, of a high-risk crypto-

asset.

Question 3

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

How strongly digitalisation is changing the way we live, work and spend our money is something we are already experiencing on a daily basis today. Digital platforms are connecting both companies with consumers and companies with each other, not only nationally but also internationally. This disruptive process does not stop at the way we pay and store value. The digitalisation of the economy and daily life places new demands on digital forms of money and assets. Crypto-assets will be a key element of the digital transformation and play a major role particularly in connection with **smart contracts**. Financial transactions often require complex systems and processes for the correct **execution of contracts** e.g. the execution of the liquidation of a collateralized asset. Using "crypto-assets" could automate the execution while simultaneously improving security and transparency, dependent on the setup. The usage of smart contract capable and programmable "crypto-assets" could enable such use cases. Assuming there would be a vetted technology and helpful regulatory guidelines, smart contract setups have the potential to **decrease operational risks** within financial institutions.

Furthermore, the **transparent nature** of some "crypto-assets", due to the usage of public blockchains, has the potential to **positively impact risk scoring models**. While individual risk scoring based on transaction history currently is only possible if the financial institution has direct access to the individual's transaction history, usage of "crypto-assets" allows detailed transaction monitoring, proof of payment or proof of assets. The advantages in regard to credit risk improvements are however dependent on the usage of "crypto-assets" and do not apply equally to all individuals.

Public and private decentralized ledgers, (underlying most "crypto-assets") could significantly **improve transparency and audibility of transactions**. E.g. the public Bitcoin blockchain contains every single transaction ever executed on the blockchain, including timestamp, value and participants. The high level of transparency and standardization of transaction logging has the potential to **positively impact compliance, AML and fraud detection**, thereby improving reputation by higher rates of fast detection. However, in order to make use of this advantage, participants would have to be identifiable. Furthermore, certain algorithms may be applied for identification of simultaneous changes in the crypto-asset ownership. Especially, if participants are not identifiable, it resembles the same risk as cash transactions therefore the same risk mitigation measures as for the cash transactions should be applied.

High-risk crypto-assets, as a new asset class and investment opportunity, show **no to negative correlations with existing asset classes**. In combination with an above-average Sharpe ratio for some crypto-assets, crypto-assets might be based on past performance a new tool for portfolio diversification and reducing market risk impact on investment portfolios.

Question 4

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

Additional technical factors that should be considered when assessing the risk profile for "crypto-assets" should include but are not limited to the following:

■ **Initial distribution**

Apart from the issuer at the stage of creation, there are different distribution mechanisms to bring "crypto-assets" into circulation. The details of the initial "crypto-asset" distribution might affect market acceptance and/or moral hazard of the creators.

■ **Technological maturity**

While for some "crypto-assets" the underlying technological setup has been tested and the technology had time to mature in a productive market environment other more fledgling technologies are barely tested and might still have technological flaws, posing significant risk for the integrity of the "crypto-asset".

■ **Development team**

Most "crypto assets" are adaptable. Via "forks" the source code of a "crypto-asset" can be changed and updated. The modality, size, control and expertise of the associated development team can influence the integrity of the "crypto-asset" and should be taken into account. The level of influence of the development team can vary according to the setup of the "crypto-asset".

These and other technological risk factors should feed into the risk assessment of a crypto-asset. If the technological risk is high, the prudential treatment should be adjusted accordingly. In the case of stablecoins, for instance, one conceivable solution would be to base risk weights on the risk weight of the underlying conventional asset class. The same risk weight would only apply in the total absence of technological risk. Depending on the extent and impact of any technological risks identified, add-ons possibly culminating in full deduction from CET1 capital could then be specified.

Question 5

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?

We generally agree with the principles set out in the consultation paper, but would like to add the following comments:

- **Same risk, same activity, same treatment:** While we consider it to be reasonable to take “[...] additional risks resulting from the unique features [...] of crypto assets [...]” into account, features that mitigate pre-existing risks resulting from the unique features of crypto assets should also be taken into account. Increased transparency is one of the unique features of some “crypto assets” that can have a risk mitigating effect and should be considered for any potential prudential regulation.
- **Simplicity:** While we understand the approach to focus on so called high-risk crypto assets first, we believe that it is better to set up a holistic framework, that deals with high-risk crypto assets as well as others. Otherwise there is a risk of arbitrage. Furthermore, as pointed out earlier, relevant for the prudential treatment is the underlying risk. Institutions that are allowed to use internal models and whose models are capable of evaluating the underlying risks of crypto assets properly should be able to use those internal models to calculate the risk weights. However, prerequisite is that there is enough reliable data to be able to use internal models. Otherwise the standard approach should apply.
- **Minimum standards:** The prohibition of any category of crypto assets should be only a measure of last resort in extraordinary circumstances. Especially based on the broad definition of “crypto-assets” a prohibition should be avoided to ensure equal global participation. Also, in our view legislators of the different jurisdictions should be careful when setting up additional measures and should coordinate with other countries. We should try to prevent the creation of fragmented crypto markets from the get go. Especially since crypto assets literally know no borders, a harmonised global regulation and prudential treatment is needed.

Question 6

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?

According to our understanding no material alternative channels are missing.

While we admit that the exposure to risks stemming from crypto assets can be higher if there is a direct exposure compared to an indirect exposure, we believe that the main risk driver is the type of crypto asset and its underlying.

Broadly, channels that involve the purchase (e.g. (iii)), taking (e.g. (vi)) or holding (e.g. (ix)) of "crypto-assets" are probably having a higher material impact in terms of exposure.

Indirect channels like lending to other entities dealing with crypto-assets (vii) should have a lower impact, based on the concrete nature of the transaction and associated counterparty risk.

As mentioned above, we are of the opinion that the classification by exposure channel is not the best way to determine the risk. Even though direct exposure probably has a higher risk materiality than indirect exposure the details of the nature of the crypto-asset (type of underlying), counterparty and transaction will determine the materiality of the exposure in regards to risks.

Question 7

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

The market size for the exposure channels listed above varies significantly due to the market novelty. Changes are to be expected due to market growth, maturity and volatility.

Regulation itself might also alter markets. For example in Germany custodians of crypto assets are required to apply for a license since January 2020 due to the German implementation of the Fifth European Anti-Money Laundering Directive (Directive (EU) 2018/843). This new rule will improve the quality of counterparties that offer custody services and will guarantee that custodians comply with all AML & CFT requirements.

Question 8

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?

In our view, for direct holdings of so called "high-risk crypto-assets" the market risk is the most material risk. For stable crypto-assets, the typical risk factors of the underlying asset are the main risk drivers.

Due to the broad definition of “crypto-assets” the spectrum of volatility is extremely high since the definition includes e.g. stablecoins and a diverse range of cryptocurrencies. While the former has negligible volatility and therefore a low market risk the latter has high volatility. While some “crypto-assets” are similar or equal to already existing financial instruments, some are completely new categories. Therefore, the traditional risk profiles of the former are similar or equal to traditional financial instruments while the latter might differ substantially. The underlying technology can be an additional risk factor (as mentioned above), but due to the technological features of blockchain technology in certain areas the risk profile of some “crypto-assets” might be even lower than that of their traditional counterpart.

Question 9

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?

In principle, we welcome the distinction between “high-risk” and other crypto assets, such as stablecoins. As mentioned above, we believe that high-risk crypto-assets should be broken down further into established and less established assets.

As to the four features which the Basel Committee sees as characterising high-risk crypto-assets, we believe the first is of minor relevance. The fact that assets are recorded **digitally** on a **DLT platform** using **cryptography** is a general feature of crypto-assets and does not, in itself, indicate a high degree of risk.

The **other features** (no identified issuer, no intrinsic value, no contract between holder and issuer) **may** indicate the existence of a high-risk crypto-asset. But they need to be carefully examined on a case-by-case basis. The fact that crypto-assets are not issued by an “identified issuer” can even mitigate risk if the issuing of the crypto-asset and the details of the entire technological infrastructure and the ledger are public. The absence of centralised issuing entities is a common feature of many crypto-assets and any associated risk might be mitigated by the public nature of the assets, technology and ledger. Depending on who the issuing party is, moreover, the involvement of an “identified issuer” might sometimes even increase the risk involved.

We consider the proposed treatment appropriate for non-established and thus especially high-risk crypto-assets.

For established high-risk crypto-assets like Bitcoin, we consider aspects of the proposed treatment such as full deduction from CET1 capital too harsh. The key question is whether the crypto-asset will have any value in the event of its liquidation. It is true that the value of Bitcoin is highly volatile. But given that it has been in existence for over ten years, it must be

considered to have more value than less established crypto-assets. We would suggest evaluating recoverability with the help of historical data. Instead of a full deduction from CET1 capital, consideration could be given to assigning established high-risk crypto-assets a high risk weight of, say, 400%. This would be in line with the Basel framework where a 400% risk weight is assigned to speculative unlisted equity exposures. Any regulation of crypto-assets should, in any event, include a review clause so that the regulation can be reassessed and adjusted in a timely manner. This is absolutely essential in such a new and rapidly developing area.

It is important, however, that crypto-assets backed by a conventional asset are treated in the same way as the underlying asset with a possible add-on to reflect risks specific to crypto-assets. If, for example, the asset is a bond in the form of a token and there is no reason to doubt its effectiveness or security, this crypto-asset should be treated like a conventional bond from a risk perspective.

The possibility of crypto-assets serving as collateral should not be excluded from the outset. If the crypto-asset is backed in a legally sound way by an asset which is generally accepted as collateral, such as real estate, then the crypto-asset should be eligible to serve as collateral as well.

Basically, however, it is the categorisation called for above that will enable competent authorities and supervised entities to classify crypto-assets in a way offering legal certainty by assigning new or existing asset classes to the different categories and sub-categories. This includes an initial classification into payment, security and utility access tokens, an assessment of whether the asset can be classed as a stablecoin, and consideration of features and factors with a significant influence on the underlying risk. As a corrective, the issue of associated technological risks also needs to be considered.

Question 10

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

It is our opinion that the supervisory measures described, do not need further measures. On the contrary the described process should be more proportional and better reflect the principles set out before, especially "Same risk, same activity, same treatment". We strongly encourage to qualitatively differentiate between crypto-asset categories in regard to regulatory requirements, especially if the asset can be classified as a new type of asset (which might require stronger scrutiny) or if a traditional asset has just been digitized using blockchain technology. The latter should be treated equally to the traditional asset class they represent.

Furthermore, we encourage the Basel Committee to include thresholds based on the materiality of the exposure into a possible future regulation. Otherwise, even limited exposure to explore

and test the market will be heavily dissuaded.

Question 11

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

The disclosure should be in accordance and proportional to pre-existing disclosure regulations. The regulatory reporting requirements of the respective jurisdiction should be updated to include crypto-assets for monitoring purposes, while dedicated, additional reports should be dissuade, since they would contradict the guiding principle of "Same risk, same activity, same treatment".

Question 12

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?

Both types of crypto assets mentioned in the above warrant different prudential treatment. If the crypto asset is linked or backed by an underlying traditional asset, itself should be treated similar to the underlying asset. The additional technological risk could e.g. be covered by the institutions provisions for operational risks.

In regard to other crypto assets that might warrant a different treatment, please see our answer to Question 9. It is our opinion that the definitions in this paper should include qualitative distinctions between crypto-assets that warrant different prudential regulatory treatment.

Question 13

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?

We fully endorse the "Same risk, same activity, same treatment" principal set out in this paper. Specific crypto assets that mirror pre-existing traditional assets should be incorporated into pre-existing regulation. The specific risks related to the use of crypto-assets should be included into the operational and technological risk framework of the financial institution, while the risk mitigating benefits of crypto-assets should be also taken into account.

See also our answer to question 9.

Question 14

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?

Specific conditions and criteria related to the crypto asset might include but are not limited to:

- Category (Payment-, Security- Utility-Token)
- Underlying value (Stablecoin or not)
- Market volume and liquidity
- Quality of the underlying technology
- Methods of distribution and/or creation
- Technological features and utility
- Development team
- Flawless perseverance over specific time frame
- Market acceptance and usability

Furthermore, we strongly encourage materiality thresholds, based on the institutions balance sheet.

Question 15

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

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