PRUDENTIAL TREATMENT OF CRYPTOASSET EXPOSURES

Basel Committee on Banking Supervision Second Consultative Document

BNP Paribas would like first to thank the Basel Committee for the organisation of this second consultation and for this new opportunity to contribute to its reflection on the prudential treatment of banks' cryptoasset exposures. We appreciate the iterative approach adopted, which reflects BCBS' willingness to develop a robust but workable framework, allowing banks to participate to some extent in these innovative markets in cryptoassets while controlling the risks associated with them.

We commend in that regard numerous tangible points of improvement in the current consultative document compared with the previous one, as a result of stakeholders' observations being taken into consideration. These progress relate in particular to the recognition of some cryptoassets as HQLAs, the treatment of group 1a cryptoassets and cryptoliabilities as their equivalent non-tokenised traditional assets under the LCR and NSFR, the introduction of a second threshold to the basis risk test, the possible introduction of an alternative requirement to the basis risk and redemption risk tests, the increased granularity within group 2, the partial recognition of hedging for those classified 2a and finally the de-linkage of the prudential treatment from the intangible accounting classification.

We do believe however that some specific aspects of the revised proposals could be further improved, while still maintaining a sound approach. The main changes we would like to suggest are as follows. The guiding principle of these proposals is to contribute to the set-up of a framework that would guarantee the highest level of quality for group 1 cryptoassets, i.e. which commercial banks could fully control "end-to-end" or based on blockchains rated and/or complying with payment and settlement infrastructure standards recognized at international level.

Classification condition 1

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1. Tokenised traditional assets - Claims on banks

It should be more precisely written in the new chapter SCO60 that all tokenised traditional bank assets and liabilities, and not only tokenised bank deposits, do fall into group 1a. In particular, it should be stated explicitly that tokenised commercial bank money belongs to this group 1a. For this purpose, some definitions in the framework should be clarified, notably to avoid any confusion between tokenised commercial bank money (group 1a) and asset backed stablecoins (group 1b, even when issued by banks), the main point being that the term "stablecoin" should not be used for commercial bank money tokens or tokenised deposits.

2. Cryptoassets that have a stabilisation mechanism - Basis risk test

The new basis risk test proposed by the BCBS in its second consultation on the prudential treatment of cryptoasset exposures is a positive step forward regarding the cliff effect issue raised by many respondents to the BCBS' 2021 consultation. However, in line with the BCBS' iterative approach, we would like to submit an alternative basis risk test that goes further in that direction (i.e. avoid the cliff effect), being even more progressive.

In Credit risk

$$basis_{avg} = \frac{1}{1Y} \sum_{i \leq IY} Max\{0; Diff_{bp}\}$$
$$RW_{addon} = Max\{0; basis_{avg} - [2bp]\} \cdot [100\%]$$

The total risk weight (of the pegged instrument and the add-on) shall be capped at 1250%, as a result the cap is reached for:

$$basis_{avg}^{max} = [2bp] + \frac{1}{[100\%]}(1250\% - RW_{peg})$$
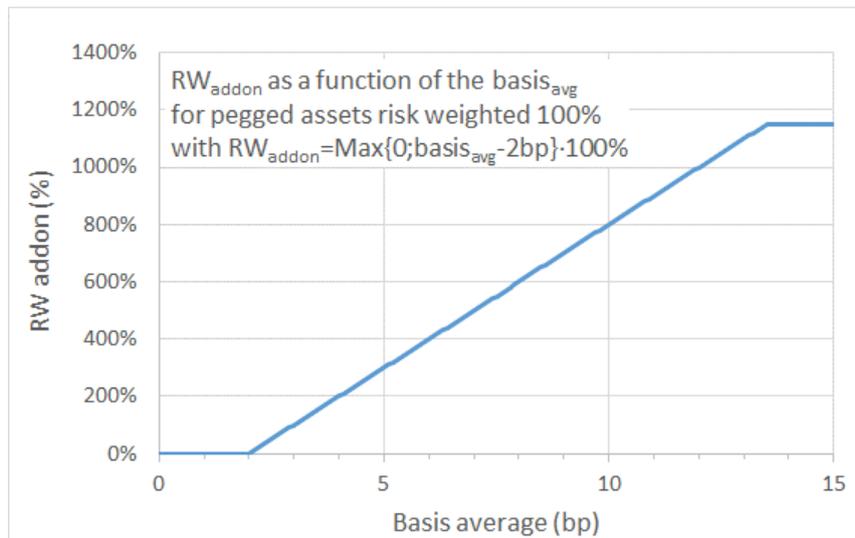
Above that threshold the stablecoin is risk weighted at 1250%, i.e. we are reaching the level at which a group 2b cryptoasset is capitalised [SCO60.89].

In Market risk

We suggest that the stablecoin may remain in the market risk framework as if an exposure to the pegged instrument consistently with SCO60.48(2) and SCO60.54(2). To account for the difference between the peg and the stablecoin value risk, an additional capital charge applies. This capital add-on is equal to the credit risk weight add-on as calculated for Credit risk (see above) multiplied by 8% times the net exposure in the stablecoin. The credit risk weight add-on is capped to 1250% minus 12.5 times the applicable FRTB-SA supervisory risk weight.

Examples

Example of USD pegged stablecoin		Basis_{Avg}	No Diff>10bp	No Diff>20bp	RW_{addon}
True USD	TUSD-USD	1,24	7	0	0%
USD coin	USDC-USD	1,37	4	0	0%
Tether	USDT-USD	1,93	26	2	0%
Binance USD	BUSD-USD	2,32	25	0	32%
DAI	DAI-USD	3,63	26	13	163%
Pax dollar USD	USDP-USD	5,91	78	34	391%
USDD	USDD-USD	42,96	156	137	1150%
Neutrino USD	USDN-USD	184,22	362	362	1150%

RW$_{addon}$ as a function of the basis$_{avg}$ for pegged assets risk weighted 100% with RW$_{addon}$=Max{0;basis$_{avg}$-2bp}·100%

Stablecoins that reach the average basis leading to a total 1250% risk weight will be considered as of group 2b for other purposes (collateral eligibility, etc.).

3. Stablecoin issued by supervised and regulated entities – alternative to the basis risk and redemption risk tests

We believe that the idea raised by the BCBS in article 60.17 of the proposal that issuance by a prudentially regulated and supervised entity could be considered as an alternative requirement to the basis risk and redemption risk tests is very interesting.

In our view, this alternative requirement should not be a replacement of the basis risk and redemption risk tests but should coexist with them.

Considering that it would be difficult to define the adequate level of regulation and supervision to be required, we believe that the application of this requirement should be restricted to commercial banks. It would recognize that exposures to stablecoins issued by commercial banks are lower risk than those issued by non-banks, given the level of prudential requirements applicable to them.

To sum up, the application of these alternative criteria would mean that a stablecoin would be recognised as group 1b cryptoassets either :

- when the basis risk test and the redemption risk tests are met ;
or
- when it is issued by a prudentially supervised and regulated bank.

Cryptoassets based on permissionless blockchains - classification conditions 3 and 4

It is stated in the consultative document that "as currently specified, it is highly unlikely that any cryptoassets based on permissionless blockchains will be able to meet the classification conditions to be included in group 1." The Committee therefore asks for feedback on "(1) what modifications to the classification conditions would be required to permit the inclusion in group 1 of cryptoassets that use permissionless blockchains; (2) the risk such modifications would raise; and (3) ways to mitigate such risks."

We share the view that the classification conditions, as currently drafted, would lead to the exclusion of the cryptoassets based on public/permissionless blockchains.

The third classification condition in particular is very broad and implies that banks bear all the responsibility of "any material risks" associated with the network infrastructures, no matter if they operate them or not. As it stands, the condition could only be met in the case of infrastructures operated by legal entities, i.e. private blockchains. In those cases, banks could be committed to effective ongoing risk management to mitigate risks posed by cryptoassets they issue and by the private DLT networks they operate or in which they participate. On the contrary, in the cases of tokens based on public blockchains, banks would be materially unable to bear the whole responsibility because these blockchains, which are fully decentralized, are maintained by a large number of players, which means that there is no single counterparty identifiable and no contractualisation or "Service-Level Agreement" (SLA).

The fourth condition also appears inapplicable to public blockchains, in particular as it provides that all node validators should be either regulated and supervised or subject to risk management standards. Except for some professional validators, it would be impossible given their very high number (basically everybody can become a node operator) and the fact that they are located throughout the world, in very different jurisdictions.

We do believe, nevertheless, that cryptoassets based on these public blockchains should be eligible to group 1, first because banks and their customers should benefit from the innovations linked to these blockchains and then because there are answers to the questions raised by decentralisation, in terms of resilience, cybersecurity and liabilities…

A first response would be to require that these blockchains comply with some international payment and settlement standards, such as CPMI and IOSCO PFMI standards, adapted to their characteristics. In public blockchains, it is the set-up of the protocol that determines the solidity of the infrastructure and its resilience against fraud and cyber-security risks. The resilience of blockchains is not the same from one to another, as they can have very different characteristics and exposures to risks from one to another. However, although these protocols provide financial market infrastructures (FMIs), they operate today in an unregulated space. We believe therefore that distributed Financial Market Infrastructures (dFMIs), i.e. FMIs based on blockchain protocols, should be regulated or should fulfil specific criteria similarly to traditional FMIs. If such rules exist, decentralised organisations will have to comply with them to be able to provide FMI services.

Combined with the application of these standards, or at least as an alternative solution, an independent rating of these public infrastructures could be put in place. This rating would be based on the solidity and the governance of the protocol (i.e. its capacity to maintain a reliable, immutable ledger, its way to deal with upgrades (forks), the solidity of the consensus mechanism, the number of miners (to mitigate the 51% risk), its way to deal with attacks from hackers). Such a rating system would prevent banks from selecting blockchains on the basis of disparate and unequal criteria, varying from one to another.

It should also be made compulsory for the players relying on public blockchains to put in place business continuity plans targeting in particular the safeguarding of the ownership of the cryptoassets. In this respect, these plans should provide for the establishment of external data recording systems, i.e. back-up systems stored for example in the cloud or within any technological means outside the blockchain/DLT.

Last but not least, we believe that cryptoassets based on public blockchains should be permissioned thanks to smart contracts to be eligible to group 1. When token issuers use public blockchains, depending on the programmability of the token, the tokens can be permissioned thanks to smart

contracts (e.g. ERC1400 token on Ethereum). Such standards allow the role of a "controller", i.e. an actor that can control access, freeze, reverse or destroy cryptoassets or block transactions, allowing for example KYC/AML/CTF checks. Public blockchains meeting those requirements are highly customizable. They offer the ability to limit access to the token to identified participants and set different access levels for each participant.

Infrastructure risk add-on

We question the overall relevance of the new infrastructure risk add-on for group 1 cryptoassets. Indeed :

- infrastructure risks are already and transversally covered under the Basel framework ;
- there should not be new add-on each time a new technology emerges ;
- we believe it is contradictory with the general "same activity, same risk, same treatment" principle, acknowledged by the BCBS, especially for assets belonging to group 1a (tokenised traditional assets) ;
- in some jurisdictions, legal frameworks have been designed to experiment the tokenisation of traditional assets within a safe and controlled environment, thanks to clear safeguards. This is the case for example in Europe with the DLT Pilot Regime. The infrastructure risk add-on could constitute a disincentive and jeopardize these regulated experiments ;
- indeed, and even beyond these experiments, the add-on would act as a deterrent for tokenised traditional assets, simply by making them more costly, that is to say uncompetitive compared to the traditional assets themselves.
- furthermore, such an add-on, applied indistinctly, would ignore the fact that DLT can contribute on the contrary to reducing certain risks, notably by:

  - increasing data accuracy and transparency ;
  - reducing the risk of external fraud ;
  - eliminating the risk of errors and the need for manual reconciliations ;
  - minimizing the risk of disputes ;
  - improving the identification of investors and hence better monitoring vs. AML-FT risks.

In any case, if the BCBS confirms its willingness to implement such an infrastructure risk add-on despite the above considerations, then the add-on should not apply to group 1a cryptoassets backed by the "full faith and credit of" a prudentially regulated and supervised commercial bank, as proposed by the Committee for group 1a cryptoassets backed by central banks or sovereign entities, for the same reasons.

Liquidity

1. Treatment as high-quality liquid assets (HQLA)

We very much welcome that the BCBS considers that group 1a cryptoassets should be eligible for HQLA as long as they are tokenised versions of traditional assets that themselves qualify as HQLA and if the tokenised assets themselves meet the HQLA eligibility criteria.

According to the same line of reasoning, we believe that group 1b cryptoassets should also be eligible for HQLA, provided that they are issued by regulated and supervised banks and are backed by unencumbered HQLAs.

2. Application of the LCR and NSFR frameworks

It is stated in SCO60.106 and 60.110 that liquidity treatment of "cryptoasset exposures, including assets, liabilities and contingent exposures, should generally follow a treatment that is consistent with existing approaches for traditional exposures with economically equivalent risks". In contradiction with this principle, 60.112 (2) b does not allow the same LCR treatment for tokenised retail deposits than that applied of traditional retail deposits.

In line with the principle laid down in SCHO60.106 and 60.110, we believe that all tokenised traditional bank assets and liabilities, included in group 1a, should obtain LCR/NSFR equivalent treatment to corresponding traditional balance sheet items, especially as banks are regulated and supervised entities and will only use infrastructures that pass the regulatory requirements and their own risk management requirements. In accordance with this principle, tokenised retail deposits should be treated as traditional retail deposits.