

September 9, 2021

Secretariat of the Basel Committee
on Banking Supervision (BCBS)
Bank for International Settlements
CH-4002 Basel, Switzerland

Dear Basel Committee members:

Re: CBA¹ Comments on BCBS Consultative Document Prudential treatment of cryptoasset exposures

We welcome the opportunity to provide feedback on the BCBS's consultative document *Prudential treatment of cryptoasset exposures* ("consultative document").

We acknowledge the Committee's view that the growth of cryptoassets and related services has the potential to raise financial stability concerns and increase risks faced by banks. We support a holistic risk-based approach to cryptoassets that provides regulatory clarity and promotes confidence and stability in financial markets while also enabling innovation. However, we would like to point out that our comments to the Committee do not represent an endorsement of cryptoassets themselves.

Due to the evolving nature of the market, we agree that policy development should commence and be an iterative process, involving more than one consultation. As such, we believe that foundational principles for effective prudential measurement and risk management of cryptoassets are needed at this stage versus more restrictive guidance. To this end, we agree with the Committee's three general principles of (1) same risk, same activity, same treatment, (2) simplicity, and (3) minimum standards.

In this letter, we highlight key issues with respect to the BCBS's proposed framework with additional comments and requests for clarification included in the attached appendix. Our top priorities/recommendations centre on the following:

1. **Scope of framework** – We request clarification on the prudential treatment of different cryptoasset use cases under the proposed framework. For example, we believe that cryptoasset Exchange-Traded Funds (ETFs), futures, swaps, and options should be

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evaluated based on the current Basel III framework, with potentially different haircuts than traditional ETFs being considered, if determined necessary. We believe banks are already reflecting cryptoasset ETFs under the existing Basel III framework with adequate capital considered assigned to these trades.

2. **Categories of Cryptoassets** – We believe cryptoassets in Group 2 that have proven to be highly liquid, transparent, and redeemable with a history of trading on a robust ledger infrastructure should receive preferential risk weight treatment that is lower than 1250%.
3. **Classification conditions** – For Group 1b cryptoassets, we recommend replacing the classification requirement of no more than a 10 bp price deviation from the value of the underlying traditional asset more than three times over a one-year period for the stabilization mechanism to be considered effective with a condition that stablecoins be readily redeemable. We believe that classification conditions focused on the availability of fixed and liquid benchmarks should be more important than price deviation in determining the Group 1b cryptoasset category.
4. **Additional Capital requirements for Group 1 cryptoassets** - We do not believe that a Pillar 1 add-on operational risk capital charge is necessary for Group 1a or Group 1b cryptoassets. We also suggest that the Foundation Internal Ratings-Based (F-IRB) approach be available as an alternative to the proposed capital methodology for credit risk of Equity Investments in Funds for Group 1b cryptoassets given the lesser complexity and simpler underlying operational requirements of F-IRB.
5. **Capital requirements for Group 2 cryptoassets** - We believe that netting of long and short positions should be permitted for exposures which reference the same underlying cryptoasset.

Scope of framework

We recommend that the BCBS consider how banks are using cryptoassets and the risks associated with different products and services to clarify the scope of the proposed framework and provide further differentiation under a risk-based approach. For instance, the BCBS should recognize that ETFs typically trade on traditional equity exchanges (e.g., TSX, NYSE, etc.) and thus should consider the soundness of these exchanges on which ETFs trade and the maximum loss concept that would apply before proposing any additional new capital requirements. We believe the application of this proposal to existing listed products such as cryptoasset ETFs, futures, swaps, and options would be onerous and unnecessary. Any area of further conservatism on ETFs required by the Committee could be dealt with through additional haircuts, under the existing Basel III framework, if determined necessary.

Categories of cryptoassets

We support the suggested categories of Group 1a and Group 1b cryptoassets although we would welcome any further guidance in relation to specific types of cryptoassets eligible for these categories. We believe there would be value in having an industry-wide taxonomy of cryptoassets, inclusive of Group 2 cryptoassets as well, for consistent application. This is particularly important given the global nature of the cryptoasset market and the need for international coordination.

We suggest sub-dividing Group 2 cryptoassets in a similar manner as Group 1 (e.g., Group 2a and 2b) to identify those cryptoassets that have proven to be highly liquid, transparent, and redeemable with a history of trading on a robust ledger infrastructure. We do not believe that highly liquid and established cryptoassets with large market capitalizations such as Bitcoin and Ethereum should receive the same treatment as illiquid and newly minted coins/tokens given their recognized asset basis, liquidity, and futures listing. This would help pave the way for more robust risk management and use of traditional asset-based approaches to market risk, credit risk, and capital management by taking advantage of available market data and risk-based methodologies. Moreover, as highlighted above, we believe that Group 2 cryptoasset products (e.g. Bitcoin ETF) that do not represent direct holdings of banks should be subject to the current Basel III capital requirements.

Classification conditions

We are concerned that cryptoassets are required to meet all of the proposed classification conditions in order to qualify for Group 1 treatment. We find that certain classification conditions are onerous to meet and will result in very few cryptoassets qualifying for Group 1 treatment which could push more cryptoasset activity outside of the regulated banking sector, if banks are subject to higher capital requirements.

For example, classification condition #1, as it pertains to stablecoins, requires that banks must monitor the difference in value between the cryptoasset and the underlying traditional asset on a daily basis. Furthermore, the difference in value must not exceed 10bp of the value of the underlying traditional asset more than three times over a one-year period for the stabilization mechanism to be considered effective. We disagree in principle with this condition as it is not consistent with existing traditional asset classes and derivatives which regularly have large fluctuations from “fair value”. Moreover, banks routinely manage other market risks in highly correlated markets (e.g., equity futures vs. cash equities). We also note that the construction and design of stablecoins is important (e.g., are they fully backed by the assets that they purport to represent or track). We suggest that the ability to readily and frequently subscribe and redeem stablecoins either in kind or for cash relative to fixed and liquid benchmarks should be more important than price deviation in determining the group category.

Classification condition #3 requires that the network be designed and operated to sufficiently

mitigate and manage any material risks. We request clarity on the definition of networks as this is a broad concept. We also note that private blockchains will have a central party (or group of parties) responsible for governance and controls and these entities should be regulated to ensure the robustness of controls throughout the entire structure. As only one type of participant, banks should not be expected to oversee the entire cryptoasset ecosystem. Since networks are still evolving, governance and controls may also not be fully in place. Banks will exercise caution and conduct their own risk management and due diligence regardless of the type of cryptoasset. Therefore, we do not believe that risk management should drive classification decisions.

Similarly, we do not believe that classification condition #4 is necessary which requires banks to ensure that entities that execute redemptions, transfers, and settlement finality of the cryptoasset are regulated and supervised. Banks will conduct their own due diligence and ensure they are dealing with reputable parties. The transfer and settlement finality of on-chain stablecoin assets would also be determined by the blockchain itself. These are not entities, but the technology stack as a whole.

Capital requirements for Group 1a & Group 1b cryptoassets

We believe that the capital requirements for Group 1a cryptoassets should be equivalent to those of traditional assets. We do not believe that a Pillar 1 add-on operational risk capital charge is necessary for Group 1a or Group 1b cryptoassets. Under the general principle of "same risk, same activity, same treatment", the management of operational risk for cryptoasset exposures would be no different than that of traditional assets. The Committee should rely on existing Basel operational risk principles and resiliency guidelines already in place. Moreover, we note that the Standardized Approach for Operational risk is already applied at a granular level and underlying risk types (e.g., fraud, cyber, AML) are incorporated into the capital calculation. In addition, stress testing of banks portfolios would reflect the impact of any shocks and operational failures.

We believe the proposed use of the Equity Investments in Funds framework for credit risk for cryptoassets with a stabilization mechanism backed by a pool of traditional assets would be operationally challenging. The use of this framework is already operationally challenging for existing funds due to difficulties with applying the look through approach and data requirements. We suggest that the F-IRB approach be permitted as an alternative. We also disagree with limiting credit risk mitigation to Group 1a cryptoassets only as this does not recognize the stabilization benefits of Group 1b cryptoassets.

Capital requirements for Group 2 cryptoassets

While we acknowledge the Committee's view of having a simple and conservative treatment for Group 2 cryptoassets, we recommend granularity within the Group 2 category as noted above.

We do not believe the same 1250% risk weight should apply to all Group 2 cryptoassets. We support a lower risk weight for highly liquid and well-established Group 2a cryptoassets. Alternatively, we request that the BCBS consider the deduction of the exposure from capital. We also recommend continued separation of the trading and banking book as a single measure of market and credit risk may result in excessive capital in certain cases (e.g., trading of crypto ETFs hedged with crypto futures entails no credit risk).

Furthermore, we believe that recognition of hedging for exposures in both the trading and banking book should be considered and allowed. For example, if a bank is holding a long Bitcoin ETF position hedged with an equivalent short Bitcoin futures position, we believe that exposure should be netted before applying the appropriate risk weight. Otherwise, the level of capital to support provision of liquidity in both the ETF and related derivative financing markets will be overly costly and will not reflect the hedged nature of the market risk. For market making activities, we suggest the exposure be treated on a net basis.

We believe that exposures in any form (e.g., ETFs, Futures, Closed End Funds, etc.) which reference the same underlying cryptoasset should be provided some hedging/netting benefits against one another. However, a netting approach should include an appropriate basis risk/specific risk to capture the possible mismatch in pricing/execution between the different types of assets (e.g. ETFs, Futures, Closed End Funds, etc.).

We agree with the Committee that different cryptoassets should not be cross-netted. Replacement cost netting should be permitted within eligible and enforceable netting sets but should not be allowed between different cryptoassets. We also believe that ETF positions where the underlying asset comprises a futures contract on a crypto asset for which the institution has an equivalent hedge, should be out of scope of this requirement.

We also express concern with the punitive treatment under the comprehensive approach for SFTs and margin loans with Group 2 cryptoassets receiving no recognition as eligible forms of collateral.

Responsibilities of banks and supervisors

We expect that banks will manage cryptoasset exposures using the same rigorous governance and controls they would for traditional assets which themselves have evolved to more electronic/digital forms over time due to the impact of technology. Since we envision the cryptoasset holdings for many banks will fall under Group 2, we suggest further clarity in guidance for supervisors related to Group 2 cryptoassets.

Disclosure

We believe the proposed disclosure requirements for cryptoassets are comprehensive and should provide investors with sufficient information to make informed decisions.

Thank you for considering our comments. We would be pleased to discuss any questions that you may have at your convenience.

Sincerely,

A handwritten signature in black ink, appearing to read "Dawn Hamel". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

CC OSFI:

- Amar Munipalle, Senior Director, Capital Division
- Brian Rumas, Managing Director, Bank Capital, Capital Division
- Paul Melaschenko, Director, Bank Capital, Capital Division
- Matthew Gordon, Capital Specialist, Capital Division

CBA comments on BCBS Consultative Document Prudential treatment of cryptoasset exposures

CBA Members' Comments and Requests for Clarification

OVERALL COMMENTS

We note that the current guidance reflects the fact that cryptoassets are not yet mainstream nor is there sufficient guidance on how to account for these assets. We suggest the Committee ensure continued alignment with any IASB guidance given the basis of our capital reporting starts with assets as booked on our Balance Sheets.

INTRODUCTION (pages 5 – 7)

Q1. What are your views on the Committee's general principles?

We agree with the Committee's three general principles. We find they are logical, well articulated, and clear. We also have the following observations:

- We agree with the concept of “technology neutrality” in relation to all cryptoassets.
 - Public vs. Permissioned blockchain issued assets: Irrespective of the underlying infrastructure of the asset issuance, we believe the capital treatment should be consistent otherwise the rules deviate from the principle of technology neutrality.
- Blockchain technology development could help build a more stable and reliable network for transactions, clearing, and settlements, especially globally. Tokenized products will enrich the financial markets and provide investors with more options to gain exposures.
- Given the rapidly evolving nature of the cryptoasset class, we are supportive of starting with a simple framework that can be built upon in the future as required.
- Initially, we encourage leveraging current rules, principles, and regulation for existing assets that are highly similar and comparable in nature to the cryptoassets discussed.
- As this sector develops, we think certain capital frameworks may achieve better outcomes as market liquidity and transparency evolve. We suggest the Committee remain open to this as the technology progresses.

CBA Members' Comments and Requests for Clarification

- We caution that supervisors lack of familiarity with cryptoassets could result in adoption approaches that put banks at a competitive disadvantage in meeting clients' needs in this alternative asset area, thereby pushing client activity to non-regulated entities. Thus, we think this guidance is similarly helpful for supervisors.

1. GENERAL APPROACH FOR MINIMUM RISK-BASED CAPITAL REQUIREMENTS (pages 7 - 8)

1.1 CLASSIFICATION CONDITIONS (pages 8 - 10)

Q2. What are your views on the Committee's approach to classify cryptoassets through a set of classification conditions? Do you think these conditions and the resulting categories of cryptoassets (Group 1a, 1b and 2) are appropriate? Which existing cryptoassets would likely meet the Group 1 classification conditions? (page 10)

We are concerned with the requirement that cryptoassets must meet all of the classification conditions in order to qualify for group 1 treatment. We also have some concerns with certain classification conditions as highlighted in our attached letter. We believe that very few cryptoassets will qualify for group 1 treatment under the proposed framework. We are supportive of categorizing cryptoassets but we suggest sub-division of group 2 cryptoassets and clarifying the scope of the proposed framework. Additional comments and suggestions are provided below.

- We note that the European Investment Bank (EIB) digital bond, for example, may not meet group 1a requirements related to liquidity and basis risk.
- The stablecoin space largely does not facilitate lookthrough and, with the 10bp tracking test, it is doubtful that Circle or Tether or DAI would ever qualify as a group 1b.
- There should be clear metrics around asset base, liquidity, adoption, usage, and lineage that allows for these assets to graduate into different categories as they evolve (e.g., move from group 2 to group 1a or group 1b).
- Any framework and classification system should be dynamic/evolving rather than rigid.

CBA Members' Comments and Requests for Clarification

Q3. What are your views on the classification conditions? Are there any elements of these conditions that should be added, clarified or removed in order to:

- ensure full transferability, settlement finality, and/or redeemability;
- limit regulatory arbitrage, cliff effects and market fragmentation; and
- take account of new and emerging cryptoassets? (page 10)

Please refer to our attached letter with some additional comments provided below.

- We believe a long-term perspective may also need to be considered as a possible classification condition given the infancy of cryptoasset activities.
- Classification condition #4 which requires that entities that execute redemptions, transfers, or settlement finality of the cryptoasset be regulated and supervised is fully understandable from a risk perspective but may limit product offerings from banks.
- We request clarification on what “limit regulatory arbitrage” refers to.
- Consideration should be given to on and off ramps. How do these distributed ledgers interact with traditional platforms and technology.
- For Group 1 cryptoassets, classification condition #3 only applies if it's a private blockchain/distributed ledger. A private blockchain by definition will have a central party/or group of parties responsible for governance and central systems and processes that influence the inherent risk of the network and hence systemic risk. Given this, there should be consideration to expand roles and responsibilities from banks and supervisors to include central parties responsible for governance.

Q4. For the first classification condition, is there an alternative methodology to assess the effectiveness of the stabilisation mechanism of Group 1b cryptoassets? Would this proposed methodology be consistent with ensuring the effectiveness of the stabilisation mechanism while also being practical? (page 10)

The key component that supports market stability and trading closely to fair value is a robust creation/redemption mechanism. We believe the redemption mechanism is more important than price deviation in assessing the effectiveness of the stabilization mechanism.

The 10bp deviation is not very clear. Is it real time monitoring or is there a valuation time/window daily? Crypto assets can trade 24/7, but traditional assets may have fixed trading windows. It will be purely supply/demand that drives the price when traditional asset markets are closed. Price range should be used as a secondary check only.

CBA Members' Comments and Requests for Clarification

Additional consideration should also be given to group 1b cryptoassets based on the percentage allocation towards traditional assets.

The Committee should also consider the integrity of the blockchain that underpins the stablecoin. Blockchains like Ethereum have been adequately tested so far, and the majority of stablecoins exist on it today. However, Ethereum is expected to undergo some major protocol upgrades by the end of this year or early next year. Protocol upgrades may lead to system instability which could lead to instability in the asset to maintain its peg. Other blockchains like Tron and Stellar also feature stablecoins and should be subject to technical stability reviews as well.

Another option would be to leverage the Exchange Traded Funds (ETF) regulatory framework for assessing the stabilization mechanism of group 1b cryptoassets. For example, NI 81-102 Investment Funds (Canada) and the Investment Company Act of 1940 (US) in relation to “liquid alternatives” including ETFs with reference to the following:

- Creation and redemption mechanism. Crypto ETFs accept Cash and In-Kind creation and redemption orders.
- Holding details. Crypto ETFs disclose their holding details daily, which includes crypto assets positions, cash positions, slippage on executions, costs, etc.
- Designated brokers and Market Makers make sure Crypto ETFs are trading near fair values all the time.
- They use benchmark indexes to calculate closing fair values. Benchmark indexes are calculated using weighted average price from a few exchanges based on formulas, which provide a sound basis.

Q5. For the third classification condition, (i) would risk governance and risk control practices for Group 1 and Group 2 cryptoassets differ; and (ii) are there alternatives to the required risk governance and risk control practices that would ensure that material risks of the network are sufficiently mitigated and managed? (page 10)

We envision that risk governance and risk control practices would be the same for both Group 1 and 2 cryptoassets. Banks will likely only engage with networks demonstrating sound governance practices, such as existing clearing houses or other networks they have comfort with based on their due diligence.

A broader array of service providers across the crypto eco-system (not just banks) should be regulated to ensure robustness of controls throughout the entire market structure regardless of the asset type. For example, in addition to banks, regulation should include crypto exchanges, brokers, custodians and other infrastructure players with requirements similar to traditional asset markets. This will make the entire crypto market more stable and transparent.

CBA Members' Comments and Requests for Clarification

Cryptoasset networks do not employ clearing houses in the traditional sense, and some of them have programmatic governance that is relatively fixed. In other words, Bitcoin only functions to transact in Bitcoin. Its 'rules' are embedded in its code, and there is no room for interpretation or flexibility. We could evaluate certain blockchain networks for the integrity in their protocol rules as part of a risk evaluation.

Some other digital assets (such as DeFi governance tokens) may vary in governance structure. There is also risk variance in group 2 as not all cryptoassets and blockchains are created equal.

Group 1 cryptoasset controls will fall within the purview of the participants and the network operator. By definition, Group 2 will be a public blockchain, which will inherently have built in controls. Group 2 cryptoassets may have less operational risk given their instantaneous acknowledgement platforms.

Stablecoins should have transparent and evaluated governance structures in place since they are operated by centralized entities.

Regardless of which group a cryptoasset is allocated to, a detailed report of the technology used, rules, and a detailed prospectus should be disclosed to the public. There should also be a detailed outline of the responsibilities and regulatory requirements of the exchanges supporting all cryptoasset categories.

The "sufficiency" condition is open to interpretation regarding the "materiality" of risks; it would be beneficial to receive clearer guidance.

Q6. For the fourth classification condition, (i) to what extent would the regulation and supervision of entities that execute redemptions, transfers, or settlement finality of the cryptoasset reduce risk in cryptoasset exposures held by banks; (ii) which entities should/should not be in scope of regulation or supervision? For instance, are there entities involved in the transfer and settlement systems of cryptoassets (such as nodes, operators and/or validators) that should be excluded from the condition of required regulation and supervision? (page 10)

We do not believe classification condition #4 should be required. Banks will naturally engage with more regulated entities from a risk management perspective.

To bring legitimacy, safety, and transparency to the crypto market, a broader set of participants across the crypto market infrastructure (i.e. custody, exchanges, brokers, ledgers/nodes) should be subject to regulation in the same way as similar participants in the equity and fixed income markets. It is impractical to expect banks as one type of participant to oversee the eco-system. Normalizing regulation across all market participants would pave the way for more transparent and liquid markets, better risk management, and more accurate capital treatment.

CBA Members' Comments and Requests for Clarification

The nodes, operators, and validators are more or less agnostic (depending on the blockchain) to the happenings on chain, so evaluating them would not be required if we are already conducting a full blockchain integrity evaluation.

The stablecoin redemption mechanisms should be transparent and considered. If the stablecoin issuer makes it difficult to redeem stablecoin for fiat dollars, this can diminish the value of the stablecoin itself.

We also believe there is an opportunity to leverage rules and frameworks that have been utilized and tested successfully in the ETF market.

Similar to ETFs, it makes sense for there to be designated Market Makers that subscribe and redeem for the underlying assets. To ensure the integrity of the market, the Market Making entities should meet similar regulatory requirements and capital as traditional ETF Market Makers.

End users buying the crypto asset outright should require less oversight and supervision than market makers.

For cryptoassets holding traditional assets, rules and requirements should be designed around when the traditional market is open given it is a subset timeframe.

Any regulatory guidance for banks on how to view specialist custodians and exchanges would also be welcome.

1.2 RESPONSIBILITIES FOR DETERMINING AND MONITORING COMPLIANCE WITH THE CLASSIFICATION CONDITIONS (pages 10 -11)

Q7. Do you consider the responsibilities of banks and supervisors to be clear and appropriate? Are there any other responsibilities for banks or supervisors that the Committee should consider? (page 11)

The responsibilities of banks are generally clear and would reflect their existing risk management practices. We fully expect to have in place appropriate risk management policies, procedures, governance, human and IT capacities to evaluate the risks of engaging in crypto assets on an ongoing basis. We have some additional suggestions below for consideration.

- Approved tools and approaches proposed by the Committee could be helpful to assessing risk on an ongoing basis. Much of the risk evaluation is technical in nature and thus clear guidance would be beneficial.
- Qualification of the issuers, custodians, exchanges, etc. Historical records could be used to measure their credibility.

CBA Members' Comments and Requests for Clarification

- Given the number of banks that may be providing views on classification, there should be an outline for how banks suggestions are weighted based on measurable factors like balance sheet, activity in the sector, credit score etc. This also highlights the benefit of having an independent ratings/classification committee which then receives consensus from a consortium of eligible banks in the classification process.
- The guidance currently places significant responsibility on individual banks for classification monitoring and verification. There should be flexibility to allow for third party assessments and market consensus to support consistency in assessment and treatment of assets between banks.
- We suggest establishing a broadly representative committee from both the bank and regulatory communities to work together to determine how different cryptoassets should be categorized.
- Alternatively, there could be a layer between the banks and the supervisors – similar to the role that the traditional exchanges provide. For example, for concentration limits (derivatives) the exchange outlines the requirements based on their view and analysis of liquidity. They do give each bank the ability to outline and demonstrate specific reasons for exemptions, but the responsibility is shared.
- Clarifying the responsibilities of other market participants (custody, exchanges, brokers) would help make the responsibilities of banks and supervisors more clear. The market framework will begin to look more traditional.
- Relying on internal assessments of liquidity can lead to a higher variability in regulatory capital across banks. We suggest the definition of liquidity horizon be standardized for cryptoassets, and that it be aligned as much as possible with the future Basel 3 revisions and FRTB regulations.

2. CAPITAL REQUIREMENTS FOR GROUP 1 CRYPTOASSETS (page 11)

Q8. Are there ways in which the increased operational risk relating to cryptoassets (relative to traditional assets) can be measured? How should a pillar 1 add-on be designed to capture additional operational risks arising from exposures to cryptoassets? (page 11)

Please refer to our comments in the attached letter. We also provide additional thoughts below.

CBA Members' Comments and Requests for Clarification

We believe any add-on should be a Pillar 2 discussion item and not a Pillar 1 capital charge. We agree with the Committee that calibrating an operational risk charge would be a significant challenge.

Additional Operational Risk measurement should only be required for cryptoassets stored within an individual bank's IT environment (e.g., assets physically retained within bank hardware).

Operational risk may decline with an effectively designed network that has multiple validators while keeping transactional privacy in check.

A traditional asset and digital asset should be viewed, traded, and priced the same. There should be mechanisms in place to eliminate the possibility of arbitrage. A Group 1a cryptoasset trading at a significant premium or discount to its intrinsic value may indicate the presence of idiosyncratic risks including operational risk.

Inclusion of 10 years of historical losses in the operational risk capital calculation for A-IRB banks (and for SA banks under Basel III reforms) already provides necessary incentives for banks to establish a strong risk culture and manage their operational risk loss profile.

Additionally, operational risk may not be a significant concern for synthetic exposure to cryptoassets (e.g., the operational risk of a crypto ETF may not differ from the operational risk of an equity ETF and a crypto future may not differ in operational risk from an equity or interest rate future).

2.1 GROUP 1A CRYPTOASSETS – TOKENIZED TRADITIONAL ASSETS (pages 12 - 13)

Q9. Are there further aspects of the credit risk and market risk requirements that could benefit from additional guidance on how they should apply to Group 1a cryptoassets? (page 13)

We are supportive of the Committee's suggested treatment of Group 1a cryptoassets as equivalent to a traditional asset for the purpose of calculating minimum capital requirements for credit and market risk if they pose the same level of credit and market risk as traditional (non-tokenised) assets. We do not believe a Pillar 1 add-on for group 1 cryptoassets is necessary.

As long as the subscription/redemption mechanism is robust and Market Makers have passed reasonable eligibility criteria to support the product then requirements should be similar to the underlying asset.

We question the need to limit credit risk mitigation to only Standardized Approach eligible collateral for IRB banks. This fails to recognize classification criteria #2 which ensure legal certainty of ownership.

CBA Members' Comments and Requests for Clarification

We suggest openness to group 1b cryptoassets and a subset of Group 2 being considered for credit risk mitigation assuming enforceability, liquidity, redeemability, and transparency can be established. Also, additional clarity would be helpful regarding credit risk mitigation treatment for a banking book loan secured by crypto assets. There should be recognition that these loans may be eligible for secured treatment assuming they are collateralized by highly liquid, transparent, and enforceable group 1b (or group 2) cryptoassets.

There should be consideration given to the fact that traditionally we have a bifurcated settlement process – assets to cash. With digital assets there is the possibility of having atomic settlement with finality immediately. This will reduce risk.

2.2 GROUP 1B CRYPTOASSETS: CRYPTOASSETS WITH STABILIZATION MECHANISMS (pages 13 – 16)

Top of page 16: *Even if there is no legal obligation for a bank to purchase cryptoassets from non-member holders, banks and supervisors should consider whether in practice the member bank would be obliged to step-in and purchase them in order to satisfy the expectations of non-member holders and protect the bank's reputation. Where such step-in risk exists, banks should include within risk-weighted assets the amount specified above (ie the amount that applies where legally binding commitments have been made). Exceptions would only be made if it is clear that such step-in risk does not exist.*

Aside from the securitization framework, there is no requirement to hold capital for step-in risk on any other products/assets. It is also not clear how step-in risk would be assessed in relation to cryptoassets. As a result, we do not believe that step-in risk capital should be a requirement for cryptoassets either.

2.3 TREATMENT OF BANKRUPTCY REMOTE VEHICLES FOR CRYPTOASSETS WITH UNDERLYING POOL OF ASSETS (page 17)

We are in agreement with the suggested approach for bankruptcy remote vehicles.

2.4 EQUITY INVESTMENT IN FUNDS APPROACH FOR CREDIT RISK FOR CRYPTOASSETS WITH A STABILIZATION MECHANISM BACKED BY A POOL OF ASSETS (page 17)

CBA Members' Comments and Requests for Clarification

Q10. Do you have any views on the Committee's current thinking on the capital requirements for Group 1b cryptoassets? (page 17)

We believe the recommendation to use the Equity Investments in Funds (EIF) approach for cryptoassets with a stabilisation mechanism fully collateralised by a pool of traditional assets is operationally challenging. The EIF Look-through and Mandate-based approaches require a significant level of detail which may not be captured for cryptoassets by banks. This will result in many banks defaulting to the 1250% risk weighting under the fall-back approach due to cost/benefit considerations. We suggest allowing banks to use the Foundation IRB approach as an alternative rather than mandating use of EIF for Group 1b assets.

We believe offsetting positions in cryptoassets underlying holdings should be considered for netting purposes from the perspective of capital requirements.

Group 1b assets are very similar in nature to an ETF and should receive similar treatment. Example 2 page 11 is effectively an ETF work flow example. We should leverage the ETF rules currently in place.

Q11. What further aspects of the credit risk and market risk requirements could benefit from additional guidance on how they should apply to Group 1b cryptoassets? (page 17)

The restriction of credit risk mitigation to Group 1a only does not recognize the stabilization benefits of Group 1b cryptoassets and will result in Group 1b assets being penalized. More guidance on permitted hedging would also be helpful including how to manage the carrying cost of collateral (e.g., storage, cash flows, decay, insurance, etc). Normally insurance is purchased on physical collateral which allows for more favourable risk weighting treatment. How would insurance work in the tokenized world?

3. CAPITAL REQUIREMENTS FOR GROUP 2 CRYPTOASSETS (pages 17 – 19)

We request clarification on the calculation of the exposure measure of cryptoasset derivatives to be used for RWA and Leverage ratio calculations within the suggested RWA formula for cyptoassets.

Section 3, bullet 1 suggests that the exposure is taken as the maximum loss value:

A risk weight of 1250% (explained further below) is applied to the greater of the absolute value of the aggregate long positions and the absolute value of the aggregate short positions to which the bank is exposed. That is:

$RWA = RW \times \max [abs (long), abs (short)]$.

CBA Members' Comments and Requests for Clarification

Separately, **Section 3, bullet 5** outlines the calculation of CCR exposure:

.....the exposure will be the Replacement Cost (RC) plus the Potential Future Exposure (PFE), where the PFE is to be calculated as 50% of the gross notional amount.

Could the BCBS please clarify whether the intent is to calculate CCR RWA, using the suggested CCR EAD calculation, in addition to the punitive 1250% risk weight on the maximum loss value? Further, how should the maximum possible loss on the derivative be calculated? Should this consider the EAD or MTM on the derivative? Which value should be used in the Leverage exposure measure?

According to the **last paragraph of Section 3**:

....In applicable cases, the capital add-on would be calibrated by requiring banks to calculate aggregate capital requirements under the Committee's revised market risk framework (applying a 100% risk weight for delta, vega, and curvature) and Basic CVA risk framework (BA-CVA) and to use this amount if the result is higher than the requirement based on a 1250% risk weight.

Could the BCBS please clarify the treatment under the BA-CVA framework. And given that the FRTB framework is using the same sensitivities as the SA-CVA framework, is FRTB intended to capture the risk through the SA-CVA calculation?

Q12. Do you think the proposed capital treatment of Group 2 cryptoassets, including the application of a 1250% risk weight instead of deducting the asset from capital (for the reasons explained above), appropriately reflects the unique risks inherent in these assets? (page 19)

Risk weight: We believe the Committee should continue its efforts to sub-divide Group 2 cryptoassets to allow for lower risk weighting for deep and well established cryptoassets. Considerations should include market depth and breadth, market capitalization, and history. Alternatively, we request that the BCBS consider the deduction of the exposure from capital.

Trading Book/Banking Book: The requirement to fully fund more well-established group 2 crypto assets out of a bank's own equity appears harsh given the market is adopting these assets which may become part of the mainstream in the future.

The requirement to report the calculated RWA as part of the bank's credit risk-weighted assets will be operationally challenging as banks manage their books first based on the trading or banking book classification. This will add an unnecessary level of additional complexity to the reporting process which could instead be better addressed by requiring disclosure of cryptoassets in the banking or trading book.

Counterparty Credit Risk: We believe the counterparty credit risk treatment for derivative exposures involving Group 2 cryptoassets is quite punitive. We also note that the Committee's proposal to calculate PFE as 50% of gross notional is operationally cumbersome to implement under

CBA Members' Comments and Requests for Clarification

the SA-CCR framework. We seek more information about how the Committee made the determination that a 50% PFE factor for derivative EAD is needed. We would also like to gain more insight as to why there is no consideration of the maturity factor reflected in PFE to differentiate between long and short dated transactions within the SA-CCR framework.

Comprehensive approach: We believe more technical guidance is still needed under the comprehensive approach under the Basel III reforms guidelines for hedging activities in the banking book. This discussion in relation to crypto assets further highlights this issue.

Funds: We disagree with applying the same treatment to Funds of Group 2 Cryptoassets (i.e. Group 2 cryptoasset ETFs). Doing so would ignore the pricing and liquidity transparency provided by securities listed on recognized exchanges. Instead, we suggest that Funds of Group 2 Cryptoassets be treated similar to Level 3 instruments / non-main index equities (25% haircut, eligible in Comprehensive Approach), as this would more appropriately recognize the price and liquidity transparency as well as the reduced execution and settlement risk (compared to underlying cryptoassets). Moreover, liquidity concerns (if any) would be accounted for via a MPOR adjustment.

How would a basket of assets be considered if it contained one cryptoasset - would the entire basket be subject to cryptoasset treatment?

Q13. Are there alternative approaches that the Committee should consider that are simple, conservative and easy to implement? For exposures in the trading book, would it be appropriate to permit recognition of hedging via the application of a modified version of the standardised approach to market risk? (page 19)

Please refer to our comments above as well as our attached letter.

Hedging: We believe that recognition of hedging for exposures in both the trading and banking book should be considered and allowed. This will ensure the actual amount of risk under the credit and market risk frameworks is reflected for capital purposes.

The lack of offset for market risks is excessively punitive and inconsistent with the treatment of other asset classes. Offsets (for the same cryptoasset) for market risk purposes should be allowed, with the net open positions subject to the higher capital requirement.

Counterparty credit risk: We question why the punitive risk-weight for low counterparty credit risk exposures like sovereigns or central clearing counterparties should be applied as the volatility of the underlying asset is mitigated by the low probability of default of the counterparty.

For Counterparty credit risk, we suggest openness to risk-based models and netting between traditional assets and cryptoassets that fall into Group 1b or a Group 2 subset if enforceability, transparency, and liquidity of the asset can be established.

CBA Members' Comments and Requests for Clarification

4. OTHER REGULATORY REQUIREMENTS (pages 19 – 20)

Q14. Do you have any views on the Committee's current thinking regarding the leverage ratio, large exposures framework and liquidity ratio requirements? Are there further aspects of these requirements that could benefit from additional guidance? (page 20)

Leverage ratio: We are in agreement with the Committee that the current Leverage ratio requirements are sufficient to capture cryptoassets. Given the expected lack of material holdings by banks in the near future, we do not recommend any specific requirements for cryptoassets in the leverage ratio framework.

Large Exposures framework: We are in agreement with the Committee that the treatment of cryptoassets should follow the same principles as other exposures under the Large Exposures framework. We would request clarification on the intent of the Large Exposure requirements as it would appear that all counterparties with exposure to Group 1 cryptoassets (via default risk of the redeemer) are intended to be linked for Large Exposure measurement purposes.

Liquidity ratio requirements: We appreciate that the Committee will continue to investigate the prospect of recognizing as HQLA those crypto assets that are deemed to be equivalent to traditional assets that themselves qualify for inclusion in HQLA, as well as the need for adjustments in order to adequately capture the cash flow risks arising from exposures to crypto assets or any assets and liabilities payable in, denominated in or linked to cryptoassets. We provide some suggestions below related to the liquidity ratio requirements.

- For Group 1 cryptoassets, the Committee currently proposes to treat everything as level 3 with openness to investigate look throughs. We believe that Group 1 cryptoassets should receive the same liquidity classification as the underlying traditional reference asset assuming that price divergence is capped at 10bps and redemption of cryptos into traditional assets is one of the defining characteristics of the Group 1 category.
- For Group 2 cryptoassets, we request clarification on what "0% inflow and 100% RSF" means. It would also be helpful to understand what liquidity risk factors an ETF on bitcoin or reverse repos on a Group 2 asset would receive as well as clarification on the derivative and SFT treatment. We would propose the following:
- ETFs on Group 2 cryptos should attract an 85% RSF on the basis it's an "exchange-traded equity":

CBA Members' Comments and Requests for Clarification

- | | |
|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 85% | <ul style="list-style-type: none"> • Cash, securities or other assets posted as initial margin for derivative contracts and cash or other assets provided to contribute to the default fund of a CCP • Other unencumbered performing loans with risk weights greater than 35% under the Standardised Approach for credit risk and residual maturities of one year or more, excluding loans to financial institutions • Unencumbered reverse mortgages that would qualify for a 50%, 75%, or 100% risk weight under the Standardised Approach for credit risk • Unencumbered securities that are not in default and do not qualify as HQLA with a remaining maturity of one year or more and exchange-traded equities |
| 10% | <ul style="list-style-type: none"> • Unencumbered loans to financial institutions with residual maturities of less than six months, where the loan is secured against non-Level 1 assets, and where the institution has the ability to freely rehypothecate the received collateral for the life of the loan |

- The LCR inflow on Group 2 reverse repos should be 100% as per the “other collateral” category:

Maturing secured lending transactions backed by the following asset category	Inflow rate (if collateral is not used to cover short positions)	Inflow rate (if collateral is used to cover short positions)
Level 1 assets	0%	0%
Level 2A assets	15%	0%
Level 2B – eligible RMBS	25%	0%
Other Level 2B assets	50%	0%
Margin lending backed by all other collateral	50%	0%
Other collateral	100%	0%

CBA Members' Comments and Requests for Clarification

- Similarly, a >30day repo collateralized with a Group 2 cryptoasset should receive 0% outflow.

Asset Liability Management: We suggest that additional guidance be provided by the Committee on Asset Liability Management for banks given the following:

- Crypto deposits (especially non maturity) would not be able to be invested for term unless it was done at a risk-free rate associated to the crypto (which is not liquid)
 - There is a basis risk between Crypto and the CAD funding/investments which would not be eligible for hedge accounting. Thus, this volatile basis would reside in ALM Profit & Loss.
- From a cash management perspective, how will our ledger tie into the Central bank (Bank of Canada) or the Repo market? How will the basis risk associated with crypto be allowed from a financial planning perspective?
- How will our ledger tie into the central bank Fx lines if liquidity is needed?

5. SUPERVISORY REVIEW AND ADJUSTMENTS TO PILLAR 1 REQUIREMENTS (pages 20 – 22)

5.1 RESPONSIBILITIES OF BANKS (pages 20 – 21)

Q15. Do you have any views on the responsibilities of banks? Are there any other responsibilities or aspects that should be covered by banks for the purposes of the supervisory review? (page 21)

We believe the suggested guidance on responsibilities of banks is likely reflective of the risk management practices banks will undertake on their own and share with their supervisor. We recommend that the responsibilities of banks remain general principles which would allow for future growth in risk management practices for cryptoassets as usage and understanding evolves. We would suggest clarifying the concept of indirect exposures which is introduced in this section and could be broadly interpreted.

We expect banks will manage cryptoasset exposures using the same governance and controls they would for traditional assets. Banks already have anti money laundering & anti-terrorist financing risk, cyber risk, and operational risk infrastructures in place that would manage any similar risks arising from cryptoasset activities.

If designed effectively, the overall IT risk of a cryptoasset network can also be minimized. For example, points of default and Distributed Denial-of-Service (DDoS) attacks actually decrease given multiple nodes and multiple similar copies of the ledger. It is more difficult for a bad actor to take

CBA Members' Comments and Requests for Clarification

down the entire network because they will have to attack multiple nodes at once. This will depend, though, on the overall network design which is not created by banks. Other than service accessibility, monitoring by banks of the risks attributable to the underlying technology is onerous and likely highly inaccessible. As a comparison, this is similar to banks being responsible for the function and stability of basic infrastructure/tools such as Microsoft Office. Consideration should be given to supervising and reviewing the network operators.

Other than having discussion on business strategy related to crypto assets, we do not believe there is a need for constant communication with our regulator as to actual and planned cryptoasset exposures. We feel that the disclosure and planning templates shared with our supervisor would be more than sufficient to provide insight into our crypto activities. Supervisors can also tailor any specific jurisdictional requirements they may require.

5.2 RESPONSIBILITIES OF SUPERVISORS (pages 21 – 22)

Q16. Do you have any views on the responsibilities of supervisors? Are there any other responses that could be considered by supervisors when conducting supervisory review? (page 22)

Since we envision the cryptoasset holdings for many banks will fall under Group 2, we suggest further clarity in guidance for supervisors related to Group 2 cryptoassets. In addition, we recommend the Committee highlight the need for subject matter expertise in both capital and crypto assets for supervisors in this area to ensure appropriate thoroughness in review.

Technical suggestions on how a bank should mitigate risk would also be appreciated to ensure consistency across the industry.

Because cryptoassets are still relatively new, and there are unique cases with evolving technology, we also suggest that supervisors have the ability to provide guidance and advice on processes on a case-by-case basis.

5.3 ADJUSTMENTS TO MINIMUM PILLAR 1 CAPITAL REQUIREMENTS (page 22)

Q17. Do you have any views on the adjustments to minimum Pillar 1 capital requirements to capture additional credit and/or market risk? Are there any other potential modifications that supervisors may need to consider? (page 22)

CBA Members' Comments and Requests for Clarification

We believe that the proposed capital treatment for group 2 cryptoassets is overly conservative, with a risk weight of 1250% and where netting of offsetting positions is not permitted. As a result, we do not believe there should be a requirement for any Pillar 1 capital add-ons.

We are in agreement with the Committee's suggestion to limit the use of specific parameter models for IRB banks given the lack of data history. We suggest instead allowing the use of the Foundation IRB approach which still allows banks to reflect the probability of default.

6. DISCLOSURE REQUIREMENTS OF CRYPTOASSETS (page 23)

Q18. Do you have any views on the potential design of disclosure requirements? (page 23)

We believe the proposed disclosure requirements are comprehensive and should provide investors with sufficient information to make informed decisions. We suggest following a similar approach to existing disclosures around the banking book and trading book as required under Pillar 3. Classification by Group 1 and 2 would likely be needed to align cryptoasset rules with disclosure templates.

Similar to Section 5.1, this section introduces requirements for disclosure of "indirect" exposure amounts. We request clarification on the definition of an indirect exposure.

ANNEX 1: DEFINITIONS (page 24)

ANNEX 2: TREATMENT OF DERIVATIVES REFERENCING GROUP 2 CRYPTOASSETS (page 25)

Given banks cryptoasset activities are likely trading book related, we suggest that the use of two separate methodologies may be appropriate to ensure accurate measurement of market risk. As the Committee notes, the market risk framework appropriately applies conservative shocks to the underlying derivatives to determine the potential loss on the derivative. As such, we believe the attempt to be trading book/banking book neutral by use of the suggested RWA formula is not leveraging the sound market risk capital framework the Committee already has in place.