

CONSULTATION SUBMISSION

This Consultation Submission (“**Consultation Submission**”) by the Policy & Advocacy Committee of the Canadian Blockchain Consortium (the “**CBC**” and “**PAC**”) is provided in response to the Office of the Superintendent of Financial Institution (“**OSFI**”)’s request for industry views on public disclosure of exposures to crypto-assets, in parallel with the Basel Committee on Banking Supervision (“**BCBS**” or “**Basel**”)’s consultation on disclosure of crypto-asset exposures for internationally active banks. A copy of this Consultation Submission has also been shared with the BCBS to assist on any modifications to the proposed framework.

PAC understands that this present consultation request also extends from OSFI’s former public consultation on regulatory capital and liquidity treatment of crypto-asset exposures in the fall of 2023.¹ The general takeaways from this Consultation Submission are summarized below:²

- The focus on disclosure of Group 1a cryptoasset holdings is ineffective, as the vast majority of cryptoassets will not qualify as such within the proposed BCBS framework;
- Low exposure requirements for bank holdings of Group 2 cryptoassets will stunt Canadian reporting entity participation in the crypto-industry, and further directly conflict with other Canadian regulatory approval frameworks for cryptoasset industry participation;
- The scope of disclosure needs to be clarified, and certain key terms require further regulatory definition;
- Clarification between OSFI reporting entities (ex. banks vs. trusts vs. pension funds, etc.) will need to be added to OSFI-specific requirements from the BCBS framework;
- Certain risk assessment standards require additional guidance; and
- As detailed further herein, a comparison of public disclosure obligations to other speculative financial instruments held by Canadian banks indicate an unbalanced approach that may over-regulate and freeze Canadian reporting entity participation in the global crypto-industry. This requires correction and/or regulatory explanation.

PAC kindly welcomes any further feedback or questions from OSFI or BCBS. **Please direct any comments to the Chair (Tamie Dolny) and Co-Chair (Anish Kamboj) of PAC via LinkedIn.**

Question 1: What, if any, technical aspects of the BCBS disclosure tables and templates should be amended for banks and insurers in the Canadian context?

As noted on page 1 by BCBS, the following templates will constitute the structure of proposed disclosure requirements: Table CAEA, Template CAE1, Template CAE2 and Template CAE3. Comments on potential modifications to each table are proposed below in short form.

Table CAEA:

- **Overall:** As a first point of feedback, the scope of application must refer to a percentage minimum exposure to cryptoassets/cryptoliabilities, as otherwise this absence will over-broaden disclosure requirements.

¹ Please refer to: <<https://www.osfi-bsif.gc.ca/Eng/osfi-bsif/med/Pages/crypto-bnk-ins-nr.aspx>>

² PAC also recommends issuing further valuation guidance for reporting entities with direct or indirect exposure to non-fungible tokens, as discussed briefly herein.

- **Part (a):** Under (a), BCBS has recommended qualitative disclosure obligations for banks acting as intermediaries for the redemption of Group 1b cryptoassets (functionally, qualifying “**Asset-Backed Stablecoins**”) as described in [SCO60.36]. There are two issues with this section: (i) over-emphasis on qualitative disclosure of Asset-Backed Stablecoins; and (ii) underlying issues with risk-assessment of Asset-Backed Stablecoins in the BCBS framework.
 - **The Need For Qualitative Descriptions of Asset-Backed Stablecoin vs. Other Stablecoin Types Is Unclear:** [SCO60.36] appears to be loosely structured around the “member” and “non-member holder” concept of Asset-Backed Stablecoins such as Paxos, where PAX can be accumulated in two mechanisms: (a) purchase through swaps for other cryptocurrencies (“non-member holders”); or (b) purchase with USD through an official Paxos account (“member holders”).³ However, in light of the other stablecoins (algorithmic or crypto-backed) which BCBS relegates to Group 2 cryptoassets under [SCO60.6(2)], this section needs to be revised to contemplate all stablecoin forms. The unusual emphasis on the sole need for disclosure of Asset-Backed Stablecoins should be modified or otherwise explained, as the vast majority of stablecoins are not offered on market through the risk mechanism seen in PAX. Accordingly, the phrase: “acting as an intermediary in the redemption of cryptoasset [sic]” needs to be defined further and corrected. It is unclear why Asset-Backed Stablecoins have been made subject to more stringent qualitative disclosure obligations by BCBS than other forms of Stablecoins, when Group 2 cryptoassets pose the majority of the risk to reporting entities. As detailed further below, PAC takes the position that BCBS’ exposure requirement to Group 2 cryptoassets would functionally freeze out Canadian bank investment or participation in the vast majority of cryptoasset products.
 - **Group 1b Cryptoasset Risk Assessment Requires Further Guidance For Industry Support:** Group 1b cryptoassets are also already subject to the below BCBS guidance [*emphasis added*]:⁴

Banks that have banking book exposures to Group 1b cryptoassets must analyse their specific structures and identify all risks that could result in a loss. Each credit risk must be separately capitalised by banks using the credit risk standards set out in [CRE]. Paragraphs [SCO60.32] to [SCO60.39] below describe various ways in which credit risks may arise from banks’ exposures to Group 1b cryptoassets and the capital requirements that would apply in each case. The list is not exhaustive, and it is the responsibility of banks to comprehensively assess and document the full range of risks arising from each of its exposures to Group 1b cryptoassets.

Regarding the emphasis, PAC recommends that BCBS/OSFI consider issuing a more fulsome list of the above. Without an exhaustive list of guidance, reporting obligations will be too onerous on industry and will likely add to a continued freeze on bank investment in Group 1b cryptoassets, whether as intermediaries or holders of Asset-Backed Stablecoins. In addition, BCBS’ guidance at [SCO60.34]⁵

³ Please refer to: <<https://paxos.com/stablecoin-terms-conditions/>>

⁴ Please refer to: <<https://www.bis.org/bcbs/publ/d545.pdf>> at 60.31.

⁵ *ibid.*

which considers whether “secured claims” could exist by banks against stablecoin providers or intermediary redeemers is unlikely to apply to the vast majority of the stablecoin industry, as noted above. In reality, stablecoins are not regularly redeemed by one body or entity such as a stablecoin provider against whom the banks would have a secured claim; instead, stablecoin holders would redeem stablecoins through use of exchanges or direct peer-to-peer trades. The more general risk is not “if the entity that performs the redemption function [...] fails”,⁶ but instead if whether the stablecoin provider collapses and the Stablecoin is ‘de-pegged’.⁷ Clarification is required on this.

- **Part (c):** A materiality threshold needs to be established for (c), as well as for the qualitative disclosure obligations generally (as noted above).
- **Part (f):** The emphasis on qualitative disclosure of Group 1 cryptoassets, as seen in (f), is unclear given the purpose of Table CAEA to provide a broad overview of risk exposure relating to all held cryptoassets. Group 1 cryptoassets are functionally the least ‘speculative’ cryptoassets on market, as instead Group 2 cryptoassets are the assets which fail to meet [SCO60.8] to [SCO60.19] conditions under the proposed BCBS framework. The below revisions should accordingly be contemplated:
 - o **Group 2 Cryptoasset Risk Should Be Detailed:** At hand, Group 1 cryptoassets appear to generally be designed to include, *inter alia*, tokenized traditional debt instruments and a limited pool of regulated Asset-Backed Stablecoins. Given the high standard under the BCBS guidelines, cryptoassets which are likely to meet the Group 1 cryptoasset BCBS standards are very uncommon. As stated at [SCO60.9], Group 1 cryptoassets must “pose the same level of credit and market risk as the traditional (non-tokenised) form of the asset.”⁸ Very few Group 1a cryptoassets exist in the present online market that can fully meet the Group 1 cryptoasset structure, as the requirement that “there must be no feature of the cryptoasset that could prevent obligations to the bank being paid in full when due as compared with a [traditional asset]” and the obligation to confer the same level of legal rights as traditional ownership, such as insolvency claims, are unusual. Instead, a qualitative overview of Group 2 cryptoasset risk faced by traditional financial institutions would be of more assistance to readers.
 - An example of the difficulty of application to real-world crypto-financing can be seen in the potential upstart growth of tokenizing traditional invoice financing or factoring arrangements. Ordinarily, the majority of factoring agreements would be registered as security interests (such as under the provisions of the *Ontario Personal Property Security Act*⁹) against clients to claim security interests in accounts receivables (and accordingly, claims may be protected as secured in the case of insolvencies). Tokenized factoring agreements or invoice financing arrangements would not meet the high BCBS framework for Group 1a cryptoassets as they would pose a higher level of credit and market risk as non-tokenized forms of the loans under [SCO60.9(2)] without registered security interests. Accordingly,

⁶ *Ibid.*

⁷ As an example, please refer to the algorithmic stablecoin collapse of UST/Luna: <https://www.chainalysis.com/blog/how-terrausd-collapsed/>.

⁸ *Supra* note 4.

⁹ R.S.O. 1990, c.P.10 (the “PPSA”).

these crypto-loans, which would pose a significant market risk to banks (and would be of interest to retail creditors) would not meet the stringent standard to qualify as Group 1 cryptoassets. Risk related to cryptoasset exposure, under the current BCBS framework, would likely be accumulated in Group 2 cryptoassets.

- **Limited Group 2 Exposure Is In Conflict With Canadian Regulatory Approval of Banks As Registered Dealers:** Under the Basel Framework, “[a] bank’s total exposure to Group 2 cryptoassets must not exceed 2% of the bank’s Tier 1 capital and should generally be lower than 1%”. While the 1% exposure limit somewhat explains why Group 2 cryptoassets are not isolated out in Table CAEA (due to their proposed low monetary value), the BCBS framework somewhat contradicts existing Canadian bank participation in the crypto-industry. In Canada, certain banks have been approved as dealers, and others have publicly announced their interest in partnerships within the crypto-industry to offer custodial and non-custodial services to retail consumers. The 1% exposure requirement under the Basel framework would sharply limit the growth of Canadian banks into this space.
 - PAC notes to OSFI that this standard may cause: (i) a freeze on crypto-services to Canadian retail consumers by Canadian banks who are already approved by Canadian regulators to offer non-custodial crypto-services to consumers; (ii) disincentivize banks from partnering with crypto-asset providers to participate in the crypto-industry; and (iii) an increase in the relegation of crypto-asset exposure to indirect holders to reduce balance sheet exposure. It is also unclear how Canadian banks who presently allow customers to trade across non-custodial and custodial crypto-exchange frameworks, as well as banks who enable (or are contemplating) partnerships with crypto-custodians, will be able to meet these standards.
 - OSFI should be aware that this Group 2 cryptoasset exposure obligation may need to be modified for existing Canadian dealers who also qualify as banks. PAC recommends that a qualitative analysis of Group 2 cryptoassets be included as a potential (g) for Canadian banking operations, in light of Canadian bank interest in the crypto-industry, as well as an expansion of the exposure limit due to Canadian bank participation in offering crypto-services to retail consumers. Alternately, existing Canadian regulatory approval for Canadian banks as dealers to offer crypto-services to retail consumers should be contemplated as a mitigating factor by OSFI under this section, or Group 2 cryptoassets should be redefined and recategorized appropriately by OSFI.
 - **Annex 2 Response:** In light of the above, the usefulness of the additional classification conditions to Table CAEA is low, given that very few cryptoassets will even qualify as Group 1 cryptoassets.
- **Overarching Structure Needs Clarification:** As a final comment, Table CAEA is extremely broad. OSFI will likely need to distinguish between requirements for, where relevant, Canadian banks, Canadian insurers and Canadian trust companies. Instead of a ‘flexible’ format of submissions, simplification should be given such that reporting entities would produce a template response containing their: operational risk assessment relating to activity sets, risk identification, exposure monitoring practices and risk mitigation efforts

relating to both Group 1 and Group 2 cryptoassets, with final signature provided by senior management. This would reduce the reporting obligations on entities and would provide clarity from Canadian regulators, in light of the likely extensive requirements that are being proposed in the new Basel framework. PAC recommends that OSFI consider creating simplified templates for industry use.

Template CAE1

- **Canadian Modifications:** As noted above, the Group 2 exposure limit of both direct and indirect holdings needs to be modified given the ongoing Canadian regulatory approval of Canadian banks to act as dealers to retail consumers. An expanded exposure limit should be again considered.
- **Expanded Definition of “Under Custody”:** It is unclear from the Basel framework how “cryptoassets under custody” via column (g) are defined. As stated on page 7, this refers to “market value of cryptoassets that the bank holds in custody for clients at the end of the reporting period”. This is somewhat vague and may cause industry confusion. BCBS and OSFI should consider a clearer definition of this column, as well as whether disclosure of storage is necessary, such as if assets are in hot/cold storage, with domestic or international third parties, or self-custodied.
- **Expanded Definition of Cryptoassets:** As an additional point of consideration, OSFI should consider issuing a guidance sheet to Canadian industry to clarify how valuation and reporting of non-fungible tokens (“**NFTs**”), should occur, assuming they fall under Group 2 cryptoassets. The description of market risk (ex. long vs. short exposure) of NFTs requires additional comprehensive guidance from regulators. The emergence of fractional NFT holdings should be contemplated therein as well.

Template CAE2 and Template CAE3

As noted above, the vast majority of tokenized financial instruments will not be able to qualify as Group 1a cryptoassets, and the vast majority of stablecoins will not be able to qualify as Asset-Backed Stablecoins under Basel’s Group 1b cryptoasset framework. Accordingly, OSFI and BCBS should be aware that liquidity exposure and accounting classification frameworks under these two templates will likely be (if any) relegated to Group 2 categories under both of these templates. Accordingly, “Exposure to cryptoassets or cryptoliabilities” should also be expanded into direct and/or indirect categories akin to Template CAE1 for these sections, as due to the significant Basel standards, many banks are likely to only participate in the crypto-industry through indirect holdings. The “Exposure Amounts” column from (a) to (d) in the summary chart at Template CAE3 should also be clarified as direct or indirect. Definitions should be considered.

Question #2: What key considerations should OSFI factor in to ensure proportionality of disclosure?

The proportionality of disclosure being requested by BCBS for cryptoassets in comparison to disclosure obligations of other speculative products is unbalanced. These sweeping requirements will likely freeze investment in cryptoassets by reporting entities, particularly due to the exposure limit on Group 2 cryptoassets (which, as discussed above, the majority of cryptoassets will fall). As an example of this overarching discrepancy, PAC has provided for the reader a comparative overview of disclosure obligations for Canadian bank investment in non-

bank financial intermediaries or products (“**shadow bank**” or “**shadow bank products**”, respectively), which have been connected in significant academic discourse to the 2007-2008 financial crisis. The existing public disclosure obligations for these exempt entity products are much less significant than the proposed BCBS amendments relating to cryptoassets and cryptoliabilities, despite the billion-dollar investments by Canadian banks into the space.

In light of this unbalanced approach, PAC recommends to BCBS and OSFI that either more stringent disclosure obligations be applied to bank exposure to domestic and international shadow bank products, or alternately that cryptoasset reporting be toned down to match existing disclosure frameworks for speculative products.

To begin with a historical overview,¹⁰ the size of Canada’s shadow banking system peaked during the beginning of the financial crisis in mid-2007 and fell by almost a third four years later in 2011.¹¹ The overall industry has since rebounded to almost \$0.4 trillion CAD larger since that crisis as of 2019. Shadow banking products have been alleged to have played a large roll in the acceleration of the solvency crisis in 2007-2008, although the risk was alleviated in Canada due to the drastic intervention of traditional Canadian financial institutions, as:¹²

[I]n the early part of the crisis, the stock of money market funds increased rapidly from \$50.7 billion in July 2007 to \$74.0 billion in August 2008 [...] [t]he story might have been different – potentially involving contagion – had not the National Bank of Canada (2007) announced that it would acquire all asset-backed commercial paper currently held in National Bank and Altamira public mutual funds following the freeze in parts of the Canadian market for such paper. In the fourth quarter of fiscal year 2007, the National Bank took a \$365 million after-tax charge and compensation adjustment related to its holdings of asset-backed commercial paper, including what it had acquired from these public mutual funds.

Furthermore, the historical solvency concerns of commercial paper significantly led to the ABCP crisis, although Canadian conduits largely did not include U.S. sub-prime mortgage assets that collapsed the U.S. financial markets. Instead, in the Canadian ABCP market, holders were unaware that most ABCP was backed by leveraged and senior collateralized debt obligations (CDOs). Canada’s ABCP market had frozen by August of 2007,¹³ and under existing credit default swap arrangements, certain financial institutions had notified the relevant responding trusts that the posting of additional collateral was required to support their obligations. If “that process had been allowed to unfold, the value associated with the [trusts] could have collapsed entirely; the ‘secured parties’ would have taken the pledged collateral, potentially leaving nothing for the ABCP Noteholders.”¹⁴

Disclosure obligations of two significant shadow banking products held by Canadian reporting entities will be reviewed below and contrasted to the cryptoasset/cryptoliability disclosure framework. First, a repurchase agreement (“**Repo Agreement**”) is defined by OSFI as

¹⁰ Certain paragraphs below were excerpted from an upcoming paper by authors T. Dolny and S. Tanvir. Authors have provided permission for use of research.

¹¹ David Longworth, “Combatting the Dangers Lurking in the Shadows: The Macroprudential Regulation of Shadow Banking” (September 2019), online (pdf): *C.D. Howe Institute* <https://www.cdhowe.org/sites/default/files/attachments/research_papers/mixed/Commentary_361.pdf> at Table 1.

¹² David Longworth, “Combatting the Dangers Lurking in the Shadows: The Macroprudential Regulation of Shadow Banking” (September 2019), online (pdf): *C.D. Howe Institute* <https://www.cdhowe.org/sites/default/files/attachments/research_papers/mixed/Commentary_361.pdf> at 10.

¹³ Jeffrey Carhart & Jay Hoffman, “Canada’s Asset Backed Commercial Paper Restructuring: 2007—2009” (2009) 25 BFLR 1 at 1.

¹⁴ *Ibid* at 41.

a “transaction that involves the sale of a security or other asset with the simultaneous commitment by the seller that after a stated period of time, the seller will repurchase the asset from the original buyer at a predetermined price.” Second, a reverse repurchase agreement (“**Reverse Repo Agreement**”) consists of “the purchase of a security or other asset with the simultaneous commitment by the buyer that after a stated period of time, the buyer will resell the asset to the original seller at a predetermined price.”¹⁵ The Canadian repo market has been previously identified by the Bank of Canada as a core funding market within Canada, more specifically as a funding and liquidity source for financial institutions and cash markets, respectively.¹⁶ A daily average of \$237 billion CAD in Canadian-denominated assets were on repo in 2014.¹⁷ Significantly, OSFI issues guidelines on repo relating to balance-sheet reporting requirements.¹⁸

Presently, Repo Agreement and Reverse Repo Agreements are delineated for Canadian banks in public disclosure under consolidated monthly balance sheets in two simple line items:

1. **Section 1 – Assets - #3, Loans, (vii);** and
2. **Section 2 – Liabilities - #6, Other liabilities, (g).**

Given the complexity and financial size of repo market products held by traditional banking institutions in Canada, these are very minimal reporting obligations for assets and liabilities stemming from these two shadow banking products under the monthly balance disclosures. As an example, across all regulated banks as at October 31, 2023, assets reported as Reverse Repo Agreements totalled \$979 billion CAD and \$719 billion in foreign currency holdings alone. There are also no defined exposure limits on bank participation specific to these two sub-classes of products.

Furthermore, there are no isolated qualitative reporting obligations for entities holding shadow banking products akin to the obligations being suggested for cryptoasset holdings. Instead, repo transactions are generally subject to the Basel framework of counterparty credit risk and market risk tables, and are included in calculations for leverage ratios and securities financing transaction exposures; however, there are no clear Basel Framework standards for qualitative reporting *specific* to exempt-market shadow banking products. Repo Agreements and Reverse Repo Agreements are instead merged into the existing disclosure structures. Functionally, this buries the reporting data for shadow banking products within existing disclosure frameworks. This is significantly different for what is being proposed for crypto-industry assets, despite the wholly unregulated and exempt market nature of shadow banking products.

In light of the above historical context and industry size, isolating out disclosure obligations for cryptoassets but failing to separately isolate out disclosure obligations for shadow banking products for Canadian reporting entities is difficult to reconcile. PAC requests that an explanation be provided to industry for the discrepancy in isolated reporting standards between shadow banking products and cryptoassets, or alternately, that the reporting standards be corrected and

¹⁵ Please refer to: <<https://www.osfi-bsif.gc.ca/eng/docs/dti30e00.pdf>> at 3.

¹⁶ Jean-Sébastien Fontaine, Jack Selody & Carolyn Wilkins, “Developments and Issues in the Canadian Market for Asset-Backed Commercial Paper” (December 2009), online (pdf): *Bank of Canada Financial System Review* <<https://www.bankofcanada.ca/wp-content/uploads/2012/01/fsr-1209-fontaine.pdf>> at 41-46.

¹⁷ Corey Garriott & Kyle Gray, “Canadian Repo Market Ecology” (March 2016), online (pdf): <<https://www.bankofcanada.ca/wp-content/uploads/2016/03/sdp2016-8.pdf>> at 1.

¹⁸ Office of the Superintendent of Financial Institutions, online: *OSFI* <<https://www.osfi-bsif.gc.ca/Eng/Pages/default.aspx>>.

made uniform.

Question #3: What other considerations raised by the BCBS consultation should we keep in mind in developing Canadian disclosure expectations?

PAC has prepared the following list of additional factors for OSFI to contemplate when developing Canadian disclosure obligations:

1. **Canada's Existing Regulatory Framework:** As identified above, the regulatory framework in Canada enables the approval of Canadian banks to act as dealers of cryptoassets to retail consumers. This should be deemed a mitigating factor in light of BCBS' strict exposure limit on Group 2 cryptoassets; the regulatory capital and liquidity treatment of cryptoasset exposures needs to be tailored to Canadian industry expectations as the vast majority of cryptoasset subcategories will not be able to qualify for Group 1 cryptoasset inclusion under BCBS' structure.
2. **Canada's Existing Disclosure Requirements For Speculative Products:** Canada does not currently require banks to disclose assets and liabilities of shadow banking products to the level expected of cryptoassets and cryptoliabilities. OSFI should consider whether this is balanced and fair.
3. **Reporting Entity Types:** OSFI should consider whether reporting entity distinction needs to be made between other entities that it regulates, such as trusts or pension funds. At present, the BCBS framework is directed at banks, but will need to be modified for other subcategories.
4. **Freeze on Canadian Industry:** The implementation of the BCBS guidelines on capital and liquidity of cryptoasset exposures will freeze Canadian reporting entity participation in Group 2 cryptoassets. In addition, PAC respectfully submits that the OSFI blueprint for transformation ought to be followed and supported to integrate Canada's burgeoning cryptoindustry with traditional financial institution investment, such that the following principles are maximized:
 - a. *Public Interest:* Strengthening public confidence in the Canadian financial system by eliminating contradictions in treatment of various forms of financial products;
 - b. *Industry Growth:* Accelerate industry growth and integration with the Canadian crypto-community to ensure that traditional financial institutions are not 'cut off' from innovation and investment opportunities; and
 - c. *Risk Tolerance:* Balancing key risks to the Canadian financial sector with the prioritization of stakeholders' anticipated risk appetites.

As noted above, PAC welcomes further comments or feedback from OSFI or BCBS, which can be directed to Tamie Dolny and Anish Kamboj via LinkedIn.