
Response to Consultation paper

RTS on the calculation and aggregation of crypto exposure

April 2025

Main messages/overarching comments

The Association for Financial Markets in Europe (AFME) welcomes the opportunity to respond to the **EBA's consultation on draft Regulatory Technical Standards (RTS) on the calculation and aggregation of crypto exposure values under Article 501d(5) of the CRR**.

AFME represents a broad array of European and global participants in the wholesale financial markets. Its members comprise pan-EU and global banks as well as key regional banks, brokers, law firms, investors and other financial market participants. We advocate stable, competitive, sustainable European financial markets that support economic growth and benefit society. AFME is the European member of the Global Financial Markets Association (GFMA) a global alliance with the Securities Industry and Financial Markets Association (SIFMA) in the US, and the Asia Securities Industry and Financial Markets Association (ASIFMA) in Asia. AFME is listed on the EU Register of Interest Representatives, registration number 65110063986-76.

While we very much appreciate the effort made by the EBA to consult on the crypto exposure value, we would like to note that the scope of some questions raised in the consultation paper should be explicitly clarified to ensure full alignment with the EBA's mandate and that certain aspects of the RTS should be further developed to fully to address crucial issues related to exposure value determination, in line with the EBA's mandate. In particular, the mandate in Art. 501d (5) explicitly requires the EBA to specify how to aggregate long and short exposures for the purposes of limit adherence referred to in Article 501d(3). This fundamental aspect is however not covered in the draft RTS. It should be clarified that banks are allowed to net gross and short positions to determine their aggregate exposure. The netting rules applied for that purpose should be in line with those used for market risk capital requirements. The Association made a number of observations and suggestions on such netting rules (see Annex 1). Additionally, we kindly suggest amending Article 3(3)(a) to include Article 220, ensuring alignment with the Basel framework and the FCCM method. More details are given under the detailed observation section below.

In addition to that, the Industry would like to highlight the need for a flexible market risk treatment of crypto assets: Basel framework stipulates that Group 2a crypto assets are subject to either the Simplified Standardised Approach or the Standardised Approach for market risk. In contrast, the draft RTS on Crypto Assets Exposures would restrict the calculation of market risk capital requirements for crypto assets solely to the Simplified Standardised Approach until the application date of the EU's FRTB framework. Instead, the EBA should provide firms the flexibility to use the current Standardised Approach (consistent with the Basel standard) in lieu of the application of FRTB.

Beyond the RTS, the Industry would like to take the opportunity of this consultation to share its views about a number of issues that would need addressing in permanent rules, i.e. level 1 text. We have laid those out in our letter to the European Commission dated 28 January 2025. They concern risk weight for Group 1b asset referenced tokens (ARTs), increase in exposure limit, exposure to digital liabilities and permissionless blockchain and Group 2 classification. Furthermore, given the rapid pace of development expected in some jurisdictions regarding the prudential treatment of crypto assets anticipated in the near future, industry would

encourage the European Commission to work closely with international peers as the understanding of the risks associated with crypto assets, and the associated prudential needs, evolve. When developing the final framework, the Commission should take a ground-up approach, engaging with industry, rather than seeking to simply formalise existing frameworks.

Detailed Observations

The mandate in Art. 501d (5) explicitly includes a specification on how to aggregate long and short exposures for the purposes of this limit. In this respect, we believe that netting should be allowed for aggregation of long and short exposures. Criteria set out in article 3 of this RTS should follow the prudential treatment and netted for group 2.

In Article 3(3)(a), reference is only made to Articles 223 to 228. However, in order to remain consistent with the Basel text and to continue using the FCCM method as outlined in the BCBS framework, it seems important to mention Article 220.

Indeed, in Article SCO60.94, it is clearly stated that *"For SFTs, banks must apply the comprehensive approach formula set out in the credit risk mitigation section of the standardized approach to credit risk (i.e., CRE22.45 to CRE22.65)." CRE22.65 directly refers to the formula for the E* 'fully adjusted exposure value' as expressed in Article 220(3):*

$$E^* = \max \left(0; \sum_i E_i - \sum_j C_j + 0,4 \cdot E_{\text{net}} + 0,6 \cdot \frac{E_{\text{gross}}}{\sqrt{N}} + \sum_k |E_k^{\text{fx}}| \cdot H_k^{\text{fx}} \right)$$

That being said, we propose the following amendment:

Article 3(3)(a) as such:

*"Institutions calculating the net exposure to the counterparty for securities financing transactions with a crypto-asset as underlying, shall apply the requirement set out in Articles **220 and** 223 to 228 of Regulation (EU) No 575/2013 as applicable for traditional assets, without recognizing the crypto-assets as eligible collateral. Institutions that lend these crypto-assets shall apply a volatility adjustment of 30% that is consistent with the volatility adjustment appropriate for other non-eligible securities laid down in Article 224(4) of Regulation (EU) No 575/2013"*

Response to the questions for consultation

Q1: Do you agree that fair-valued crypto assets within the scope of MiCAR should be included within the scope of the prudent valuation rules? If not, please explain.

The EBA mandate described in CRR 501d5 refers to those assets mentioned in 501d2(b) and (c). This means that exposures to tokenised traditional assets (such as e-money tokens, or EMTs) are outside the scope of the RTS. Accordingly, pursuant to the mandate given to the EBA, it should be clarified that the question of the application of the prudent valuation rules in the present CP arises only with regard to crypto assets mentioned in 501d2(b) and (c).

Crypto assets which are financial instruments or commodities and are valued at fair value under the applicable accounting framework, are already subject to the requirements for prudent valuation in accordance with Article 105 of Regulation (EU) No 575/2013 and Commission Delegated Regulation (EU) 2016/101. However, as also reported in the draft RTS, the IFRS recognized that a holding of cryptocurrency is not a financial asset or commodities. Having said that, we notice that changing the PV scope of application in this RTS would lead to a more complex regulation where the PV scope is defined in two different RTS. It seems reasonable to discuss the inclusion of crypto assets in PV scope within the currently ongoing revision of the RTS on prudent valuation. Accordingly, we propose to remove Article 1 from the RTS.

In addition, the rules for exposures to crypto assets are already very prudent (e.g. 1250%) and even more in the case of Europe (RW=250%). Given this conservativeness, applying an additional layer of conservatism, such as the prudent valuation adjustment (deduction from capital), seems excessive. Looking ahead, the authorities also should avoid double counting in the risk weighting of crypto asset exposures, i.e. the future Level 1 / EC Basel rules for crypto asset exposures, plus the Level 2 rule stipulating that firms hold capital for valuation uncertainty. Therefore, we would strongly recommend that the Basel framework is used as the reference for conservatism, in particular with a view to ensure a level playing field for banks.

Q2: Do you have any concern in relation to the application of the requirements specified in Article 105 CRR and Delegated Regulation (EU) 2016/101(RTS on Prudent Valuation) to crypto assets? If so, please explain.

In the context of simplification and coherence in the PruVal framework, we ask that any amendments, present or upcoming, to PruVal related to the framework for crypto assets be consolidated within Delegated Regulation 2016/101. The inclusion of crypto assets within the Prudent Valuation scope of application should ensure that both financial instruments on crypto assets and the underlying crypto asset are treated in same way, to avoid possible unbalanced exposures and consequent AVA increase.

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The cumulative application of the prudent valuation rules and the 1250% risk weight would lead to a disproportionate capital requirement (double penalty). Indeed, a 1250% risk weight is a 100% capital allocation to the asset value, equivalent to the CET1 deduction of the full value. If the Prudent value deduction (direct impact on CET1) also applies to the same cryptocurrency asset value, this would lead to a cumulative CET1 deduction superior to the asset value.

The explanatory text states that crypto-assets “give rise to significant valuation uncertainty”. This sentence is actually false in a number of important cases: for example, main crypto-currencies (e.g. Bitcoin) and listed derivatives written on crypto-currencies (e.g. Futures on Bitcoin) display significant market liquidity and small bid-ask spreads, leading to classification at level 1 in the fair value hierarchy and null Additional Valuation Adjustments (AVA). We report in Appendix 2 market evidence supporting this point. Accordingly, we suggest to avoid this undue generalization in the RTS.

Q3: Do you agree that a one-size fits all RW of 250% should apply also to CCR transactions requiring specifications on netting set treatment (Alternative A) or do you prefer using the counterparty’s RW as is standard in CCR (Alternative B)? Please briefly justify your assessment.

Alternative B should be the preferred option as it is in line with the Basel crypto and generale treatment. The counterparty credit risk on derivative/SFT transactions is on the counterparty and so should be risk weighted using the risk weight of the counterparty. A bespoke one-size-fits-all counterparty risk weight based on an underlying notional asset does not make sense and is inconsistent with the existing CCR framework. Concerns about CCR exposure to Asset Referenced Tokens should be addressed through volatility parameters in the exposure calculation. Alternative B is consistent with the existing frameworks and easier to implement for institutions.

In addition, the 250% are an addition in CRR3 that does not exist in the Basel crypto text and does not reflect the thorough analysis carried out by Basel on crypto, and should not be used for CCR. For the sake of clarity, this should also apply to crypto assets treated at 1250% in CRR3: their CCR should be associated with the counterpart’s RW, not 1250%.

Q4: Are there any credit institutions considering implementing the alternative internal model approach during the transitional period, or consider implementing it in the medium to long term? Would there be an impact for the development of the crypto-assets market in the EU, and/or for the

capitalisation and/or business activities of European credit institutions, if the use of the alternative internal models approach in the short to medium term is not permitted?

Despite the limited application of the IMA approach among EU banks, not having an option to use of the IMA will undermine the development of the crypto-assets market.

In recent years, listed crypto assets have exhibited trading volumes and volatility comparable to those of other risky assets (see Appendix 1) with a correlation dynamic that could support diversification and risk reduction (see e.g. “Bitcoin a Unique Diversifier”, Blackrock Sept. 2024). The market has matured significantly, and pricing for many crypto assets is now both feasible and increasingly reliable. Unlike the EU, other jurisdictions have not adopted such a restrictive stance. A disproportionate approach banning the usage of FRTB A-IMA for crypto-asset exposures would introduce further constraints on the development of the crypto-assets market and of business activities of European credit institutions in the EU, lowering their competitiveness with credit institutions under different jurisdictions and further discouraging the adoption of FRTB A-IMA. Noticeably, the proposed usage of FRTB A-SA, based on crypto-assets sensitivities, would leverage on the same pricing capability required by the usage of FRTB A-IMA.

Q5: Do you agree that the risk of default of the issuer is relevant in certain specific circumstances and therefore should be considered within the scope of this draft RTS during the transitional period or do you believe that the 250% RW for direct credit risk is sufficient to capture for this risk during the transitions period? Please briefly justify your assessment.

The risk of default of the issuer is relevant, but does not need to be considered as part of the 250 RW. As stated in our response to question 3, a 250% RW that applied consistently in a one-size-fits-all approach is inconsistent with the existing CCR framework and deviates from the Basel Standard. We support alignment with the Basel Standard (i.e., Alternative B), which takes into account the risk of the default of the issuer and is also consistent with the current CCR framework.

Q6: How relevant is it to incorporate this differentiation for crypto-assets exposures referred to in Article 501d (2), point (c), of the CRR at this stage? Are institutions confident that they can assess their crypto-assets exposures against the criteria set out in these draft RTS? Is there sufficient market data available to make those assessments?

We welcome the differentiation that is made to attempt to separate 2a from other crypto assets.

The referenced prudential distinction between liquid and illiquid crypto assets is essential. We consider that adequate market data is available for an assessment of liquid crypto assets.

Q7: For ARTs subject to the calculation of own fund requirements for market risk in this paragraph, do you agree that the risk of default of the issuer is relevant in certain specific circumstances and therefore should be considered within the scope of these draft RTS during the transitional period as per Article 3(4)(d) or do you believe that the 250% RW for direct credit risk is sufficient to capture for this risk during the transitions period? Please briefly justify your assessment.

Positions which include exposures to ART issuer default risk should include an assessment of the appropriate capital requirement. This should be done in line with the Basel framework for ART exposures.

Annex 1: Additional Comments or Suggestions

1) In the context of SSA & A-SA

In the context of SSA, according to Article 3.4.a, point iv, institutions shall “identify their gross long and short positions in the crypto asset separately for every market and exchange where they are traded. Institutions may offset gross long and gross short positions in a crypto asset traded in the same market or exchange”. Similarly, in the context of A-SA, Article 3(4)(b)(iii) and Article 3(4)(b)(v)(1) have similar language on market and/or exchange.

It is not precisely clear what “same market or exchange” refers to when the trades involve indirect exposure to the crypto asset through ETF/ETN or derivatives. This ambiguity should be clarified such that “market or exchange” refers to the primary risk factor of the ETF/ETN or derivative. For a crypto ETF/ETN, the primary risk factor should either be the price/reference rate of underlying crypto assets (when a look-through treatment as a collective investment undertaking is applied), or the price of the ETF/ETN itself (when look-through treatment is not applied). For a crypto derivative, the primary risk factor should be the price of its underlying asset or, when look-through is applied to the latter, the price of underlying crypto assets.

This is illustrated in the (non-exhaustive) examples below:

- (1) In the case of an ETF traded on exchange X, referencing Bitcoin traded on crypto-exchange Z (noted ETF_X(BitcoinZ)) and an ETF referencing the same bitcoin traded on crypto exchange Z but traded on a different exchange Y (noted ETF_Y(BitcoinZ)), both ETFs refer to the exact same underlying crypto-asset (and to the same underlying market price). However, in this case, the spot price of the two ETFs, ETF_X and ETF_Y, are distinct prices and thus these two positions are not identical risk factors and would not net if look-through as a CIU is not applied. If look-through is applied via the CIU rules, netting would be allowed as both reference the same Bitcoin traded on crypto exchange Z.
- (2) A derivative (e.g., an uncleared swap or an exchange-traded derivative) referencing ETF_X(bitcoin) and the ETF_X(bitcoin) are sensitive to the same risk factor for the delta risk (the ETF price). A long swap or ETD on a crypto-ETF perfectly delta-hedged with the same ETF should therefore result in a zero net delta position (as opposed to the derivative instrument having its own “market or exchange” and the ETF its own “exchange”). This type of position is common in equity trading and equity financing businesses in relation to market making and financing trades on equity securities and ETFs; the delta risk in these transactions is accepted as flat. The conclusion is the same whether CIU look-through treatment is applied or not.
- (3) Similarly, an (OTC) NDF referencing the CME Bitcoin Reference Rate, for example, would net with a (listed) Future referencing the CME Bitcoin Reference Rate that is cleared through the CME, or any other CCP. A futures contract traded on exchange X and a futures contract traded on exchange Y referencing the same underlying crypto asset reference rate would net.
- (4) A derivative on a reference rate and an ETF referencing the same reference rate would not net if CIU look-through is not applied because, for ETFs, the primary risk factor is the spot price of the ETF rather than the reference rate. If CIU look-through is applied, netting would be allowed as both instruments are based on the same reference rate.

2) In the context of A-SA

Furthermore, to avoid a punitive capital impact under the A-SA, the final rule should drop the maturity from dimension from the delta risk factor. As proposed, the capital impact of the rule would prohibit banks participating in making markets in securities or derivatives in this asset class. Even though the market has liquid products that allow banks to effectively hedge their risk on an identical reference rate or instrument (e.g., futures cleared on QCCPs to hedge an NDF traded with a client, both referring to the same reference rate),

the rules do not recognise the risk as well hedged. The capital requirements imposed would be disproportionate to the residual risk and thus the fees and spreads that can be earned on the activity is not likely to be economic for any bank to participate in providing traditional financial services for clients in securities or derivatives in this asset class. As a result, only non-banks could participate. Article 3(1)(b) and 3(1)(c) already includes a requirement on the minimum market capitalization, daily trading volume, and price observations of the crypto asset underlying the exposure. We understand that a maturity dimension may be useful to capture significant basis risks between maturities, but the minimum requirements already preclude crypto assets with larger basis risks from the beneficial treatment. Furthermore, A-SA for equity risk factors does not include a maturity dimension, whereas A-SA for commodity risk factors does include a maturity dimension. A crypto-asset is more similar to equity than commodities because crypto-assets do not incur storage costs like commodities, hence the maturity basis is not necessary for liquid crypto-assets.

If the maturity factor cannot be eliminated entirely, we recommend the following adjustments:

For the purpose of aggregating crypto asset risk positions within a bucket using a correlation parameter, the correlation parameter ρ_{kl} between two sensitivities WS_k and WS_l within the same bucket, should be set as follows:

$$\rho_{kl} = \rho_{kl}(\text{exchange}) \cdot \rho_{kl}(\text{maturity})$$

Where:

(1) $\rho_{kl}(\text{exchange})$ is equal to 1 where the two crypto assets of sensitivities k and l relate to the same market or exchange, and to 94.00% otherwise;

(2) $\rho_{kl}(\text{maturity})$ is equal to 1 if the two maturities of the sensitivities k and l are identical^{NB1} (including where there is no basis risk due to maturity mismatch^{NB2}), and to 99.00% otherwise.

NB1: As defined for crypto asset delta: 0 years, 0.25 years, 0.5 years, 1 year, 2 years, 3 years, 5 years, 10 years, 15 years, 20 years and 30 years.

[We note the BCBS standards suggest the assignment of risk factors to the specified tenors should be performed by linear interpolation or a method that is most consistent with the pricing functions used by the independent risk control function of a bank to report market risks or P&L to senior management.]

NB2: Exposures that involve maturities and do not produce basis risk due to maturity mismatch include the following non-exhaustive examples:

- A swap (with 6-month residual maturity) on an ETF where the ETF is held as a delta hedge or a swap (with 3-month residual maturity) on an index of 1-month futures versus same 1-month futures. The ETF has no maturity while the futures are rolled, and the swap references the identical ETF or the future; there is no delta risk in such a position. In addition, this outcome follows the precedent for the equity asset class where there is no maturity dimension and these types of transactions are treated as delta flat.

These changes are essential to avoid prohibitive capital impact for banks when providing traditional trading services for clients in this asset class.

Likewise, regarding the correlation parameter ρ_{kl} referred to in Article 3.4.b.xi of the RTS:

The current setting of ρ_{kl} at 94% has a disproportionately penalizing effect on the use of derivatives referencing ETFs and other liquid instruments linked to crypto-assets. For instruments meeting the criteria under Article 3.1, delta hedging within the trading book is not expected to present significant challenges, due to their high liquidity and market capitalization.

Given both the relatively low risk associated with hedging such instruments and the punitive impact of the

current correlation assumption, we would ask the EBA to consider the revision of this parameter—similar to the approach taken for other asset classes, such as carbon-related instruments.

When a bank enters into SFT or TRS transactions, the bank prices the repo rate. However, both the RTS proposal and the Basel consultation remain silent on the treatment of repo rate risk factors on crypto-asset 2(c) of article 501d. We propose a treatment equivalent to the one used for equity repo rate risk factors.

Indeed, we suggest the following clarification within the new crypto-assets asset class:

- A separate, but equivalent delta formula than the one used for equity repo rate risk factor.
- One repo rate risk factor by Crypto-asset 2 (c) (without additional dimension as maturity / market or exchange)
- Repo risk factor should only be subject to delta capital requirement and not to Vega and curvature requirements.
- Bucket Structure: RW at 1% (100% /100).
- A correlation ρ_{kl} set at 99,90 % between repo rate and other risk factors.

Annex 2: Evidence for supporting market liquidity

In this appendix we report evidence of market liquidity for the most important crypto-assets, i.e. crypto-currencies, Futures, and Exchange Traded Products (ETP).

1) Crypto-currencies

The following Table 1 and Figure 1 report evidence of market liquidity for the most important crypto-currencies. Table 1 reports historical annual volatility, average daily volume, market capitalisation for three crypto-currencies, Bitcoin, Ethereum and AAVE, selected as representative of large, medium and small capitalisation, respectively. We observe that both market capitalisation and average daily volumes are very high, and the historical volatility is relatively small. To better appreciate these characteristics, in Figure 1 we compare these crypto-currencies with the components of two US equity indexes, Russell 2000 and S&P 500, representative of small and large cap US stocks, respectively. We observe that the crypto-currency volatility is smaller than many small-cap components of Russell 2000, especially for BTC and ETH (top left chart), while the volumes are much larger (top right chart). Volumes are even higher than large-cap components of S&P 500, except for AAVE (bottom right chart), while volatilities are higher, for AAVE in particular (bottom left chart).

Crypto	260 d volatility (%)	24 h volume (\$)	Market cap (\$)
Bitcoin	44	22,511,420,952	1,658,680,071,988
Ether	60	10,751,676,643	235,095,205,142
Aave	94	212,540,495	2,638,866,242
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Table 1: liquidity evidence (historical volatility 260 days, average daily volume, market capitalisation) for three crypto-currencies (Bitcoin, Ethereum, AAVE), selected as representative of large, medium and small capitalisation, respectively. Source: Bloomberg as of 21 March 2025 17.00 CET.

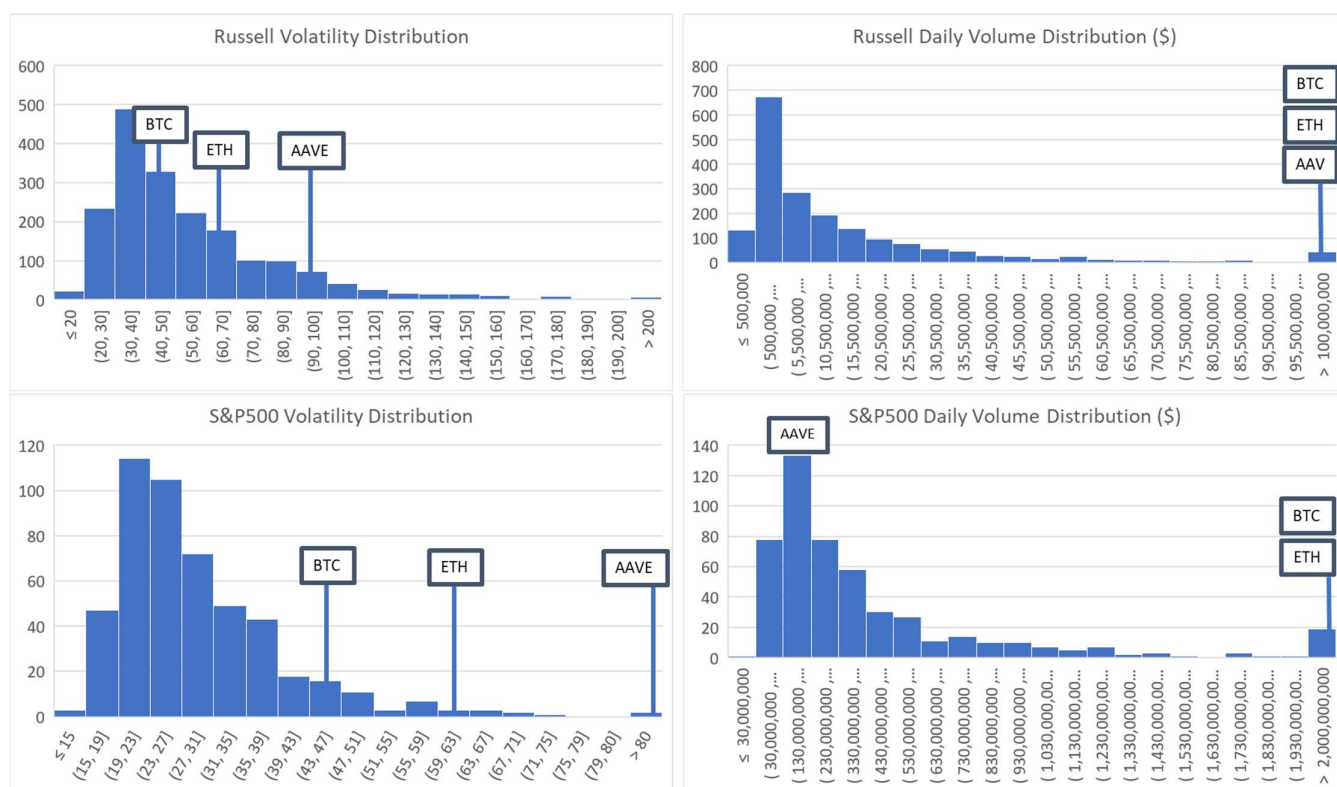


Figure 1: historical volatilities (left charts) and daily volumes (right charts) distributions of Russell 2000 (top) and S&P500 (bottom) indexes components (representative of small and large capitalization U.S. stocks, respectively). Source: Bloomberg as of 21 March 2025 17.00 CET.

2) Futures

The following Table 2 and Figure 2 report evidence of market liquidity for CME Futures on two crypto currencies (Bitcoin and Ether). The market trades essentially the first two Futures with very high volumes, small ask-bid spreads, and similar volatilities.

	Volume (avg 20 days USD)	Open interest	Price Bid	Price Ask	Price Ask-Bid	Price Ask-Bid (%)	20 days volatility
CME Bitcoin Fut Mar25	4,867,243,411	15,348	83,715	83,755	40	0.05%	64.3%
CME Bitcoin Fut Apr25	983,858,842	13,983	84,370	84,435	65	0.08%	64.5%
CME Bitcoin Fut May25	29,576,520	504	84,950	85,030	80	0.09%	64.7%
CME Bitcoin Fut Jun25	9,129,527	202	85,450	85,595	145	0.17%	64.9%
CME Ether Future Mar25	938,121,310	12,343	1,967	1,968	1	0.05%	78.2%
CME Ether Future Apr25	164,736,686	5,955	1,977	1,979	2	0.08%	79.0%
CME Ether Future May25	1,959,596	237	1,990	1,999	9	0.45%	78.7%
CME Ether Future Jun25	405,658	37	1,998	2,009	11	0.52%	78.7%

Table 2: main Futures on crypto-currencies (Bitcoin and Ether). Source: Bloomberg as of 21 March 2025 17.00 CET.

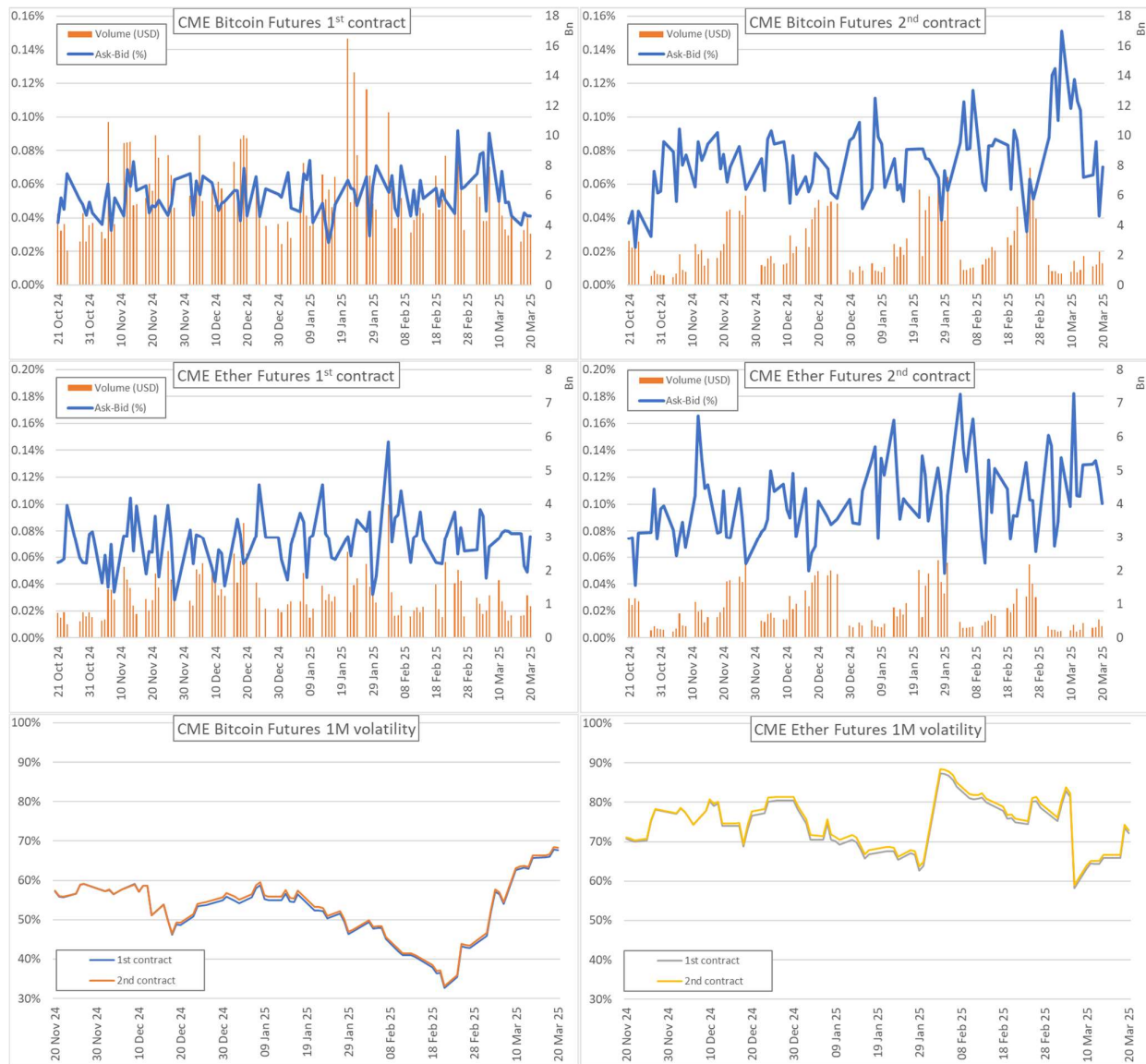


Figure 2: main Futures on crypto-currencies (Bitcoin and Ether). Source: Bloomberg data from 21 October 2024 to 20 March 2025.

To better appreciate the liquidity characteristics of Futures on crypto-currencies, we report in Figure 3 the same data for two liquid futures on equity indices (FTSE MIB and S&P/TSX Index), and we compare the average values in Table 3. We observe that both bid-ask and volumes are fairly similar with the bid-ask for FTSE MIB even larger that the others.

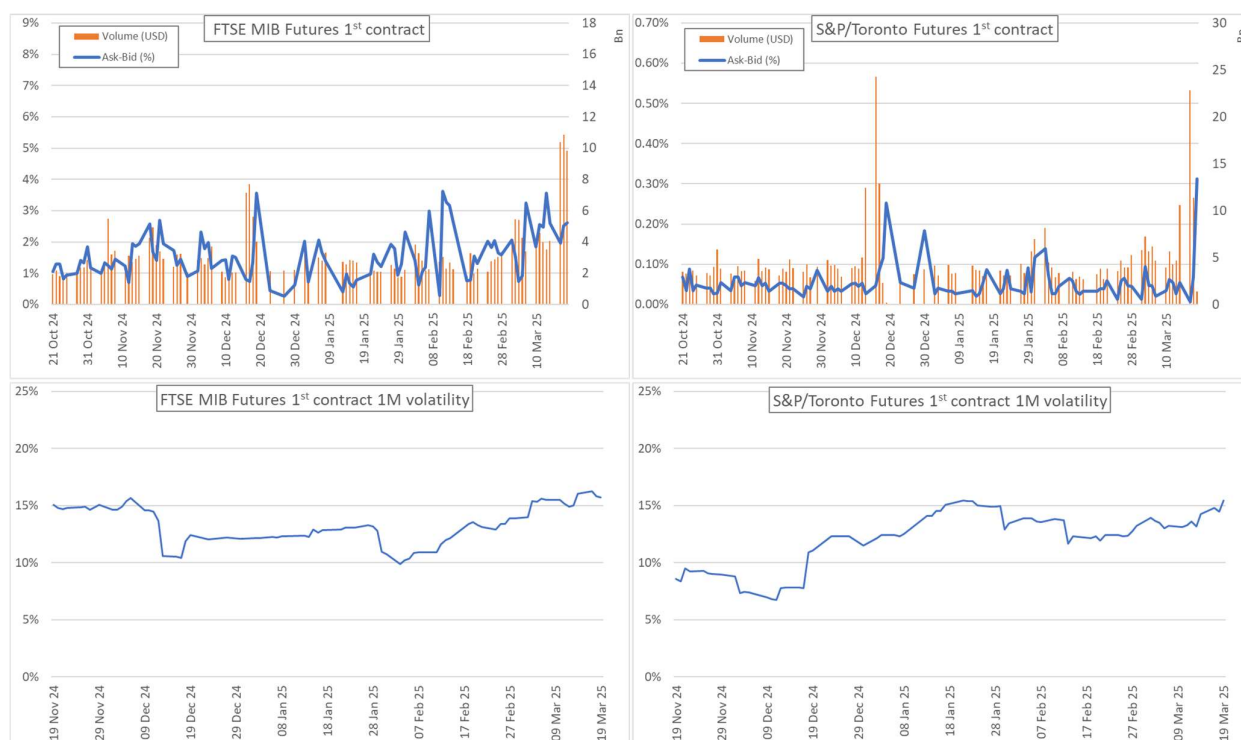


Figure 3: Futures on equity indices (FTSE MIB and S&P/TSX Index Source: Bloomberg data from 21 October 2024 to 20 March 2025.

	Bid-Ask (%)	Volume (USD)
BTC1	0.05%	6,119,319,502
BTC2	0.07%	2,572,576,770
ETH1	0.07%	1,283,727,870
ETH2	0.10%	841,473,583
FTSE MIB	1.56%	3,197,154,399
S&P/TSX	0.05%	4,581,417,051

Table 3: average bid-ask and volumes for the period from 21 October 2024 to 20 March 2025.

3) Exchange Traded Products (ETP)

The following Figure 4 reports evidence of market liquidity for main US Exchange Traded Funds (ETF) (left chart) and Exchange Traded Products (right chart). The percentage ask-bid spreads results to be quite small, with the smallest values corresponding to the largest average trading volumes. The figures also include a few ETFs on equity indices which show comparable liquidity characteristics.

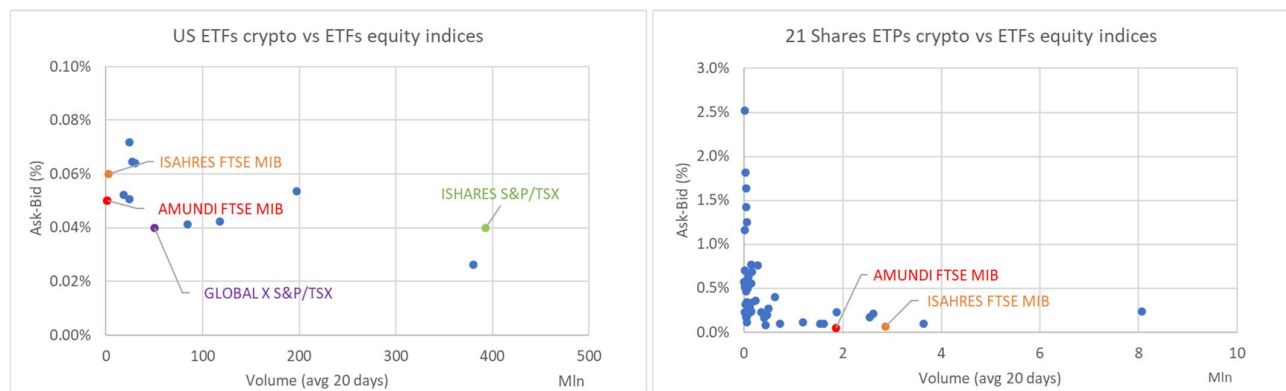


Figure 4: main ETFs/ETPs on crypto-currencies and comparison with ETFs on equity indices. Source: Bloomberg as of 21 March 2025 17.00 CET.