



Australian Securities and Investment Commission

[REDACTED]
[REDACTED]
[REDACTED]

By email: [REDACTED]

27 July 2021

Dear Sir/Madam,

Consultation Paper 343 Submission - ETFS Management (AUS) Limited (“ETFS”), 21Shares AG and Baker & McKenzie

ETFS, 21Shares and Baker & McKenzie appreciate the opportunity to comment on the proposals of ASIC in CP 343.

ETFS is the issuer of 17 ASX-quoted ETPs with A\$4bn in assets under management. We have extensive experience in issuing innovative ETPs both in Australia and offshore, including our pioneering work in developing the market for physically backed commodity ETPs.

21 Shares AG is a Swiss company registered in Zug, Switzerland with offices in Zurich and New York. They issued the world’s first physically backed Bitcoin, Ethereum and Crypto Index ETPs and currently have 15 crypto-asset ETPs on issue across Europe. 21 Shares brings extensive first-hand expertise in managing crypto-asset ETPs and insights from offshore regulatory regimes to our submission.

Baker & McKenzie advises on the establishment and operation of all types of managed investment vehicles for wholesale and retail markets, including listed vehicles on ASX and Chi-X. Baker & McKenzie is the leading practice in relation to exchange traded products, including acting on the first actively managed fund portfolio listed on an exchange anywhere world-wide, the issuance of the ASX traded single bond products, the first exchange traded gold product and the first MINIs warrants and deferred purchase agreement (DPA) style ASX quoted products.

We are supportive of the consultation process and firmly of the opinion that crypto-asset ETPs will be a valuable addition to the retail investment landscape in Australia. They offer a regulated framework to safeguard and protect the interests of an investment community that is currently highly active in unregulated markets. Where appropriate to be considered as an ETP underlying asset, we demonstrate that crypto markets are liquid, efficient and homogeneous, with readily observable pricing sources.

We recognise that crypto-assets present unique complications with regards to custody, risk management, licensing and regulation. We outline what we consider to be best practise across these areas and offer practical suggestions. We believe that a principles-based approach best suits a market that is both disparate and quickly evolving, as opposed to a rigid rules-based framework.

Please see our responses to the consultation items below. Should you require any further information, feel free to contact me on [REDACTED]

Yours sincerely,

[REDACTED]

Evan Metcalf
Head of Product

ETFS Management (AUS) Limited

B1Q1: Do you consider that crypto-asset ETPs should be available to retail investors through licensed Australian markets? Please provide details, including data on investor demand where available.

Yes, we believe that offering crypto-asset ETPs via a regulated wrapper is a valuable addition to the retail investment landscape in Australia for several reasons:

- i. An estimated 2.9 million Australians already trade crypto-assets through unregulated exchanges, with very low barriers to entry due to the plethora of user-friendly websites and trading apps readily available.¹ The consumers have very limited regulatory protection and may not easily be able to make informed choices as to the integrity of their chosen trading venue, the security of their assets and what risks they are exposed to.
- ii. Investing in crypto-assets via unregulated exchanges and holding crypto assets with unregulated custodians exposes consumers to a range of risks that many may not fully appreciate with limited, if any, disclosure.
- iii. Licensed products provide retail investors with access to a robust regulatory and compliance framework for oversight of product issuance, trading, valuation and distribution.
- iv. Licensed products provide retail investors with the benefits of institutional-grade custody and security arrangements and the operational expertise and resources of product issuers and professional fund administrators.

We understand that there is immense demand from both retail and intermediary/institutional investors for ETPs over crypto-assets in Australia. Globally, retail investors are the major buyers of crypto assets both directly (through crypto exchanges) and through regulated offshore ETPs.

The growth and demand from retail investors in current markets can be shown by several indicators. In a JP Morgan report released for Q1 2021, bitcoin retail investors accounted for 52.05% of bitcoin flows, up from 40.12% in Q4 of 2020.²

Coinbase uses Monthly-Transacting-Users (MTU) as a key metric to determine the involvement of retail users that actively participate in revenue and non-revenue generating transactions. Q1 2021 reported 6.1 million MTUs significantly higher than earlier predictions, with a 118% increase from Q4 2020 (2.8 million MTUs). The forecast MTU outlook for the remainder of 2021 is expected to continue to grow with crypto market capitalization whilst accounting for crypto asset price volatility.³

Cryptocurrency exchanges in Australia in 2021 had a market size of \$29.2M, measured by revenue, with a 62.2% annualised market growth between 2016-2021, far outperforming other Australian industries. The 312 crypto exchanges registered with AUSTRAC demonstrate high demand, a maturing spot market for crypto-assets and established pricing mechanisms with the Australian dollar.


Australian investors are increasingly seeking cryptocurrency market updates and information with the intention to invest in Bitcoin and the long tail of crypto-assets. CoinGecko, a digital currency price and

¹ <https://www.news.com.au/finance/money/investing/millions-of-australians-trading-cryptocurrency-on-their-phones/news-story/12a2a34238dfd1b3591864aa9ac15f5c>

² <https://www.coindesk.com/bitcoin-retail-flows-jpmorgan>

³ <https://investor.coinbase.com/news/news-details/2021/Coinbase-Announces-First-Quarter-2021-Estimated-Results-and-Full-Year-2021-Outlook/default.aspx>
<https://finledger.com/2021/04/06/coinbase-releases-q1-earnings-and-2021-outlook-ahead-of-direct-listing/>

information data platform now ranks amongst the top 5 finance websites in Australia as you can see on the table below. Coingecko helps its users quantitatively evaluate and rank crypto-assets, this is a testament to the fact that crypto is becoming an important industry akin to tech stocks in the Australian market.

	Domain (6,722)	Traffic Share ↓	Rank
1	 fool.com.au	3.60% 	#22,029
2	 intuit.com	2.50% 	#199
3	 xe.com	2.30% 	#2,204
4	 moneysmart.gov.au	1.82% 	#49,376
5	 coingecko.com	1.80% 	#1,040

Additional analysis of crypto-asset demand in the Australian market is presented in Appendix 1.

With regards to the ETP market, we see crypto-asset ETPs as being analogous to ETPs over physical commodities such as gold, which provide both retail and institutional investors with a simple and cost-effective way to access physical gold without the need for direct custody agreements, insurance arrangements, transportation, etc. Globally, holdings in gold ETFs currently total US\$180 billion, representing around 6% of the total market value of gold worldwide that can be attributed to investment purposes. Bitcoin market capitalisation currently stands at approximately US\$700 billion. At a similar up-take rate to gold, that places the potential global market for bitcoin ETPs in the region approximately US\$40 billion, not accounting for the potential of significant prices moves over time.

B1Q2: Do you consider that crypto-asset ETPs should be cleared and settled through licensed Australian clearing and settlement facilities? Please provide details.

Yes, we believe that crypto-asset ETPs should be cleared and settled through licensed facilities. Clearing and settlement facilities provide an important element of market efficiency. Structurally, there should be no difference between clearing a crypto-asset ETP and any other physically backed ETP in the Australian market.

However, it is important to consider that services such as central clearing are reliant on specific liquidity requirements and risk metrics to perform their functions. Counterparty risk with assets with enhanced volatility is a key consideration. The liquidity and volatility profile of crypto assets are not substantially dissimilar from other small cap equities which do benefit from access to central clearing and settlement facilities.

Additional analysis on crypto-asset liquidity is presented in Appendix 2.

B1Q3: If you are a clearing participant, would you be willing to clear crypto-asset ETPs? Please provide your reasons.

N/A

B1Q4: If you are a trading participant, would you be willing to trade crypto-asset ETPs? Please provide your reasons.

While ETFS is not itself a trading participant, we have held detailed discussions with several trading participants, mainly ETP market makers, who are willing to trade crypto-asset ETPs and who are actively doing so in offshore jurisdictions.

To carry out market making operations for crypto-asset ETPs a trading participant requires ready access to either the underlying crypto-asset or liquid derivatives providing exposure to the underlying crypto-asset. The willingness of major institutions, both domestic and global, to undertake this activity adds evidence to the increasing levels of pricing transparency and robustness that are further detailed in B3Q3 below.

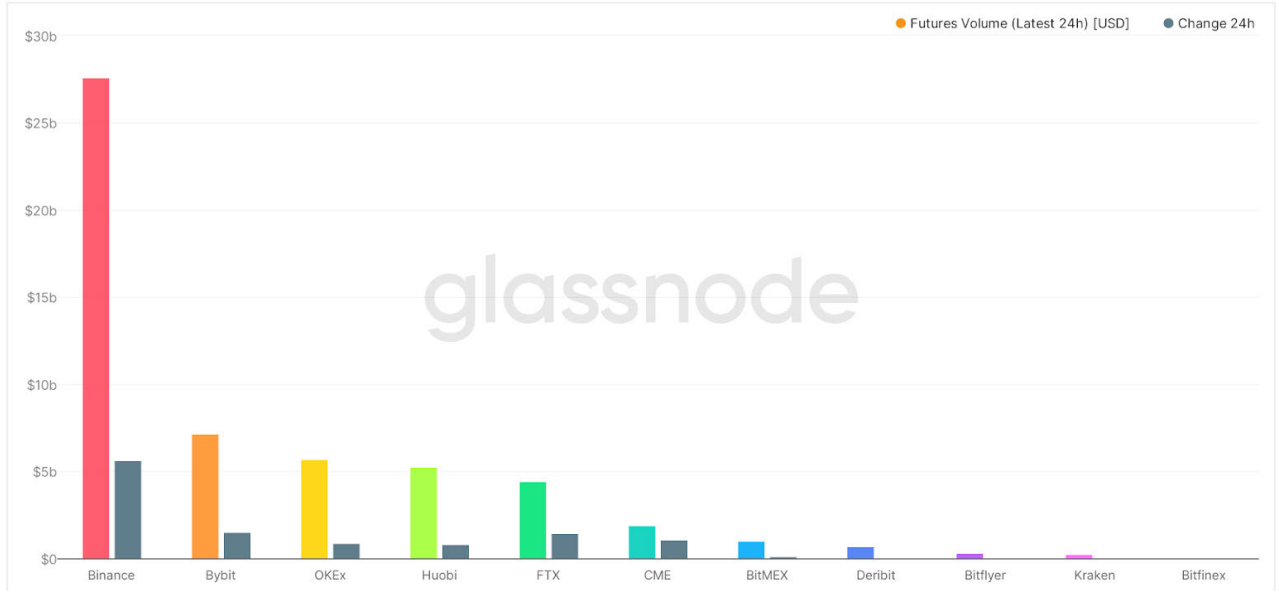
B1Q5: Do you agree with our approach to determining whether certain crypto-assets are appropriate underlying assets for ETPs on Australian markets? If not, why not?

Overall, this framework captures most of the salient points in terms of crypto market construction and is largely in-line with existing global frameworks. In particular, the reliance on institutional adoption, availability of service providers and a mature spot market are common features in assessing eligibility for listing on European regulated markets.

However, one element to note is B1(d) and the considerations around regulated derivatives markets. The majority of crypto-linked derivatives and futures trading occurs outside of the regulated markets on platforms such as Binance and FTX. These platforms provide most of the institutional hedging capacity to the crypto market. By relying solely on regulated future markets for the accepting a crypto asset as an underlying, the Australian market would exclude the vast majority of the largest crypto assets as well as potentially restrict the hedging capacity of market participants.

CME, which is by far the largest regulated derivatives market for crypto assets globally, only represents 3.54% of the total market for derivatives on BTC. On Ethereum, the only other asset with regulated derivatives, CME represents only 1.9% of the market. Excluding more than 96% of the futures market and excluding the options market for crypto assets all together is not representative of the overall state of the development of the asset class or current market conditions.

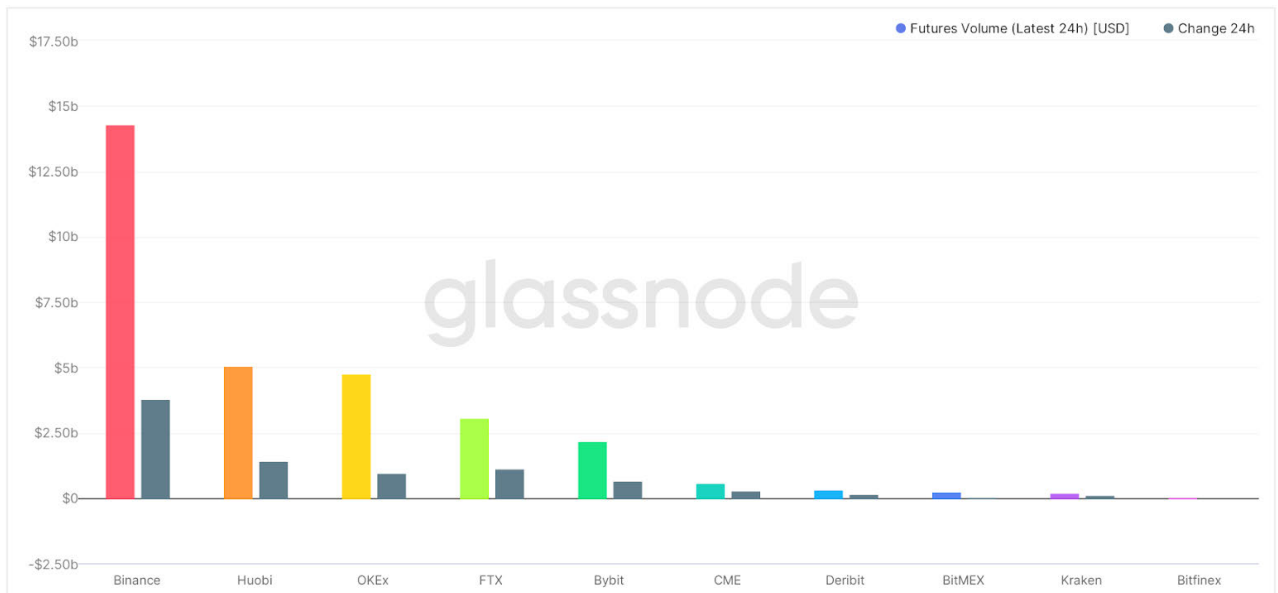
Bitcoin: Futures Volume (Latest 24h)



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Ethereum: Futures Volume (Latest 24h)



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B1Q6: Do you have any suggestions for additions or modifications to the factors in proposal B1? Please provide details.

Aside from the considerations regarding the derivatives market, the current framework omits any considerations for tokenized assets or tokenized securities. It is possible in the crypto market to create tokenized versions of traditional assets such as gold, other commodities, currencies or equities. This type of asset is not addressed in the current proposed framework as either eligible underlying for an ETP or as excluded from the framework. This is particularly problematic in light of section B1d where these assets would not have their own distinct futures or derivatives market but may have large and established futures markets for their existing underlying.

B1Q7: Do you have any suggestions for alternative mechanisms or principles that could achieve a similar outcome to the approach set out in proposal B1? Please provide details.

As discussed in B1Q5 and B1Q6, we would suggest consideration of unregulated derivatives market liquidity and underlying asset liquidity, where applicable, as potentially relevant factors in determining the suitability of a crypto-asset to act as the underlying asset for an ETP.

B2Q1: Do you agree that a new category of permissible underlying assets ought to be established by market operators for crypto-assets? If not, why not?

Yes, we agree that a new category of permissible underlying asset ought to be established by market operators for crypto-assets. As ASIC notes in INFO 225, under Australian law crypto-assets may be categorised as various types of financial product depending on all the rights and features of the crypto-asset, or the crypto-asset may not be a financial product at all.

Further, the broad range of available crypto-assets include significant differences in purpose, function, liquidity, market capitalisation, and availability on regulated trading venues (including derivatives markets). By establishing a new category of permissible underlying asset for crypto-assets, market operators would remove any uncertainty associated with the categorisation and suitability of crypto-assets and would be able to provide a clear rules framework for the operation of crypto-asset ETPs.

B3Q1: Do you agree with the good practices in proposal B3 with respect to the pricing mechanisms of underlying crypto-assets? If not, why not?

Yes, we agree with the good practices in proposal B3 with respect to the pricing mechanisms of underlying crypto-assets. Given the large number of trading venues applicable to crypto-assets (as opposed to other publicly traded securities for which there are typically only one or two venues), we consider that it would be best practice to price crypto-assets ETF by reference to an index which captures a substantial proportion of total trading activity in the crypto-asset.

As noted by ASIC, the index should be resistant to manipulation and consistent with recognised index selection principles, such as the IOSCO principles for financial benchmarks, the EU Benchmarks Regulation, or other internationally recognised index selection principles.

B3Q2: Are there any practical problems associated with this approach? If so, please provide details.

The key practical consideration is the concept of Fair-Market Value. While much of the crypto-asset market relies on VWAP pricing, this may not be consistent with generally accepted accounting standards or fair market value standards from the equities market. Using execution prices with sufficient controls and oversight regarding potential market manipulation (including but not limited to a comparison to VWAP pricing) may provide a more tangible price source than relying solely on a composite index.

However, an execution price taken as a sole price point without broader market surveillance or using a single exchange to price the relevant market given the fragmented state of the market would be inappropriate in this context.

B3Q3: Do you think crypto-assets can be priced to a robust and transparent standard? Please explain your views.

Yes. There are a variety of robust pricing methodologies which can successfully be applied to the crypto market.

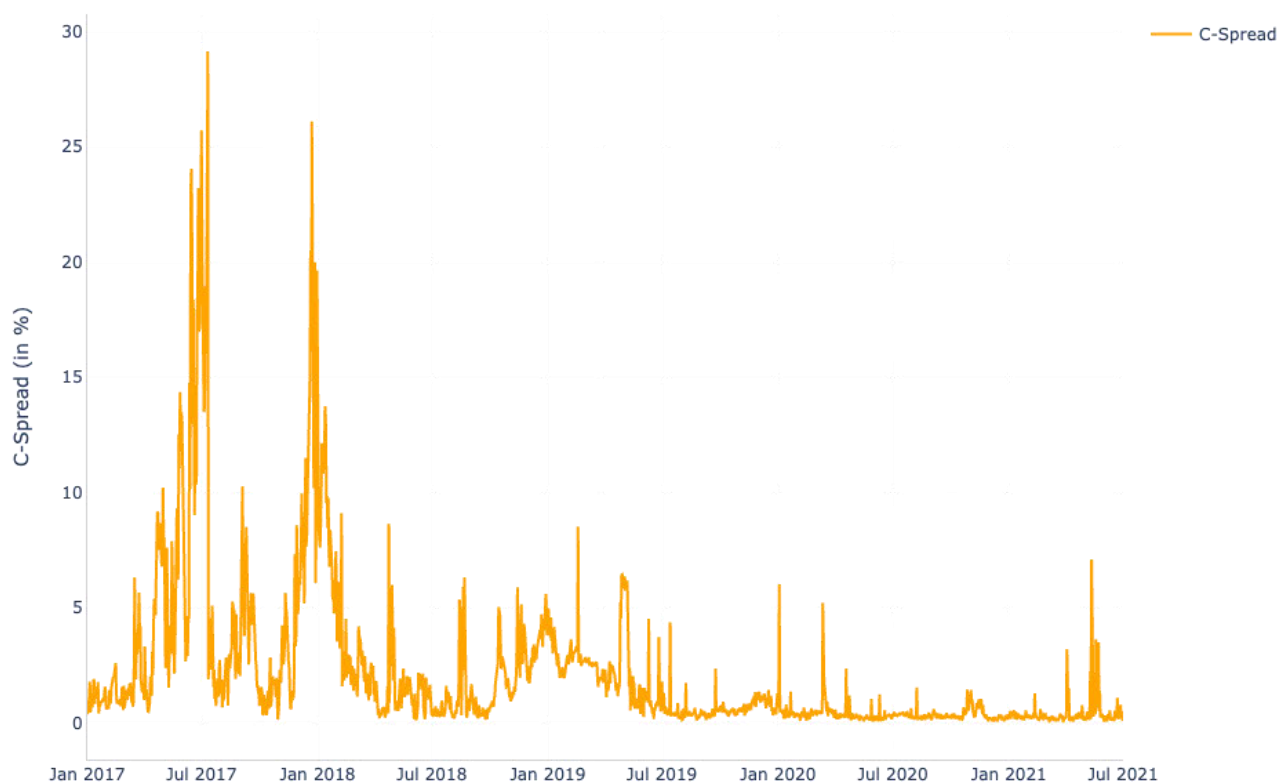
The crypto market has matured significantly in recent years and many of the initial concerns about crypto pricing have been resolved. This is clear not just through the evolution in pricing methodologies as described above but also in the fundamentals of the market.

Initially, a significant portion of the concerns around crypto pricing stemmed from a lack of consistent pricing across markets. However, C-spreads in bitcoin have been declining consistently over the past several years. We obtain the daily bitcoin price series from several popular centralised exchanges and calculate the largest cross-exchange percentage spread (labelled as %C-Spread) by deducting the highest or maximum price (P) at time t from the lowest or minimum, and dividing by the lowest across all exchanges (i). Formally, this is expressed as:

$$\%C - Spread_t = \frac{\max(P_{i,t}) - \min(P_{i,t})}{\min(P_{i,t})}$$

Our results show a clear and sharp decline in the %C-Spread, indicating that the Bitcoin market has become more efficient as cross-exchange prices have converged over time.

C-Spread of Bitcoin Prices in Percent (%) across Exchanges From January 1, 2017 to July 1, 2021

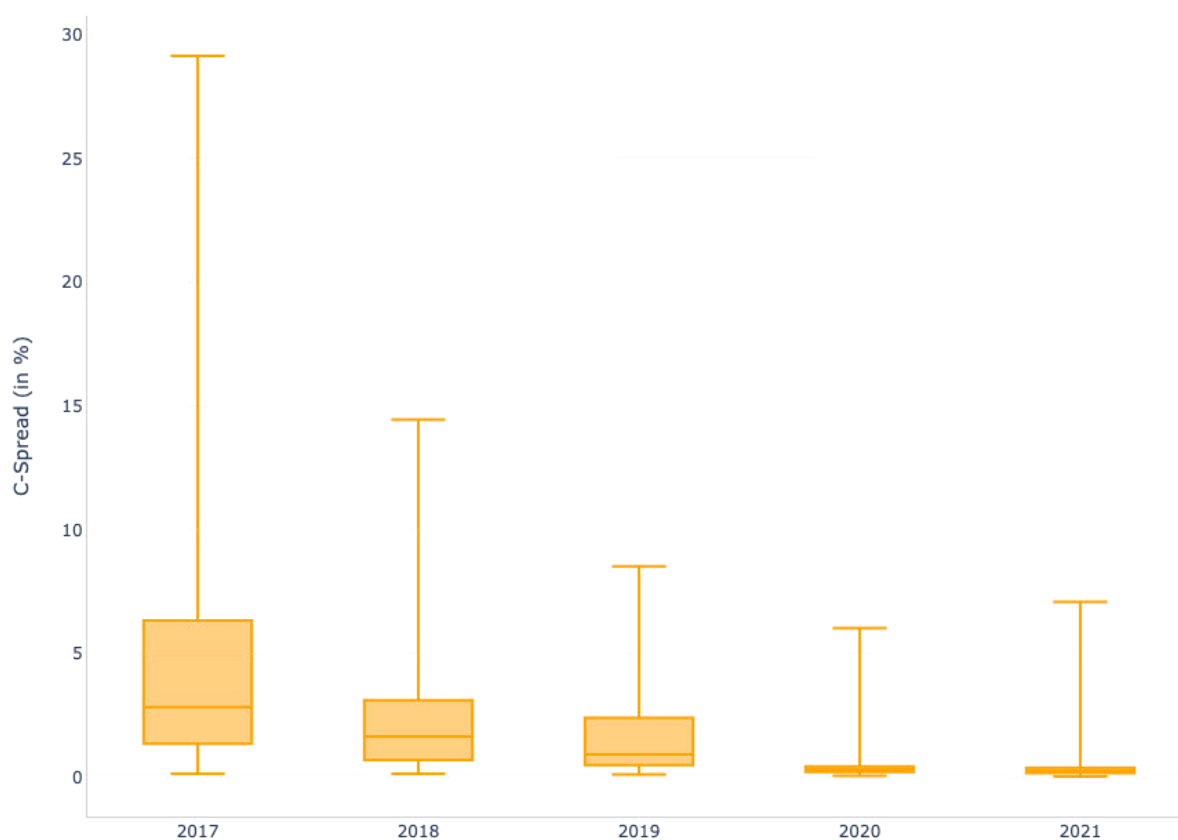


Source: 21 Shares. All rights reserved.

In addition, the magnitude of outlier %C-spreads has also declined over time. This boxplot shows that, not only did the median value of the %C-Spread decline over time, but also the extreme outlier values. For instance, the maximum %C-Spread for 2017, 2018, 2019, 2020, and 2021 are 29.14%, 14.45%, 8.54%, 6.04%, and 7.1%, respectively.

The market has experienced a 38% year-on-year decline in the annual median %C-Spread indicating a greater degree of Bitcoin price convergence across exchanges and a more efficient market.

Boxplot of C-Spread (in %) of Bitcoin across Exchanges From January 1, 2017 to July 1, 2021

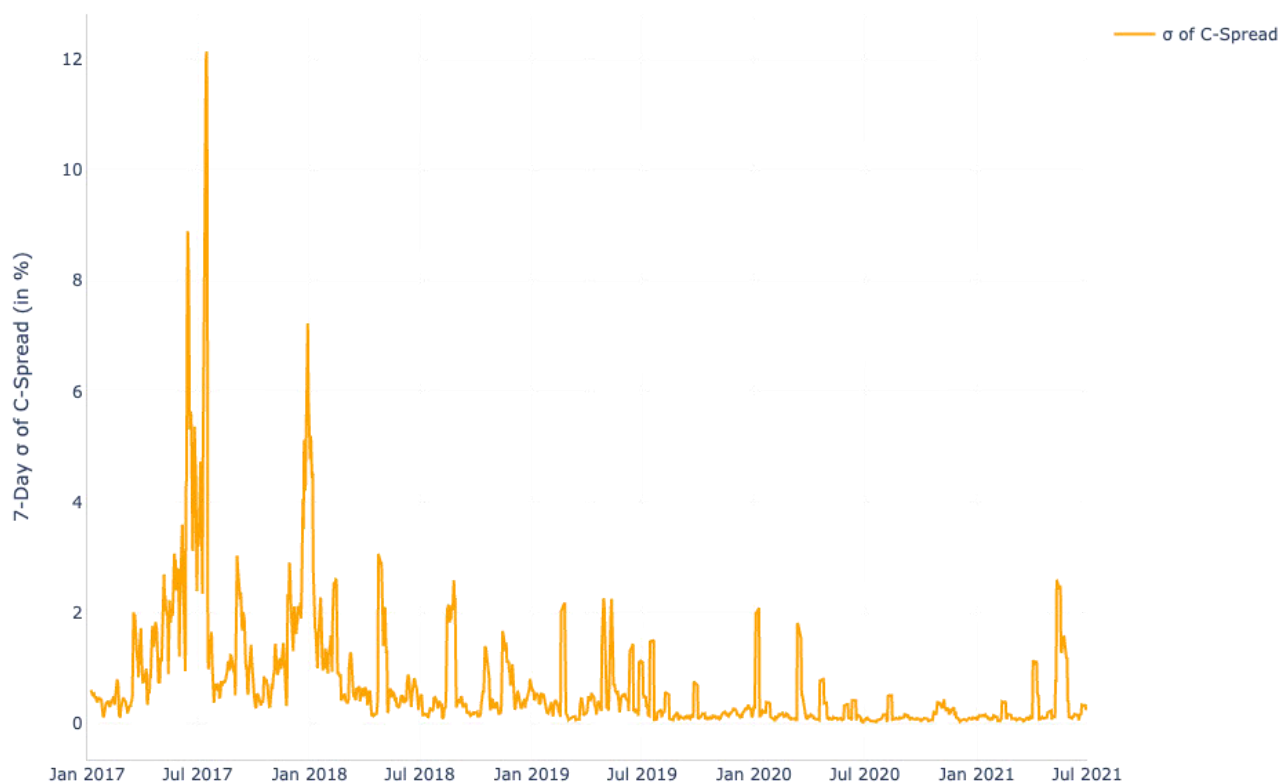


Source: 21 Shares. All rights reserved.

Finally, the dispersion (σ) of bitcoin prices has also declined over the same period. This chart shows the 7-day rolling standard deviation of the %C-Spread from January 1, 2017 to July 1, 2021. We find that the dispersion in bitcoin prices across all exchanges has decreased over time, indicating that prices on all the considered exchanges converge towards the intrinsic average much more efficiently. This suggests that the market has become better at quickly reaching a consensus price for bitcoin.

As the pricing of the crypto market becomes increasingly efficient, pricing methodologies become more accurate and should be less cause for concern amongst investors. The clustering of prices across a variety of sources within the primary market points towards robust price discovery mechanisms and efficient arbitrage.

7-Day Standard Deviation (σ) of C-Spread across Exchanges From January 1, 2017 to July 1, 2021



Source:21 Shares. All rights reserved.

Based on the state of the market, it is therefore possible to rely on traditional pricing methodologies (VWAP, FMV etc) to price crypto assets. This is especially simple in the case of physically replicating ETPs which rely on entitlements. Crypto-linked ETPs in other markets use multiple valuation methodologies to ensure transparent pricing of our products. These include:

1. Publication of a crypto entitlement - allows investors to clearly understand the amount of underlying asset exposure they are acquiring.
2. Publication of iNAV - every 15s based on the published entitlements
3. Publication of an official NAV using a variety of price sources or methodologies
4. On-Exchange pricing through market makers

B3Q4: Do you consider that a more robust and transparent pricing standard is achievable in relation to crypto-assets? For example, by using quoted derivatives on a regulated market. Please explain and provide example where possible.

No, pricing on derivatives are quite similar to those of the spot market but only represent a small sub-segment of the market.

As Bitcoin gains popularity among investors, several traditional financial exchanges have supported this growth by offering products that aim to mimic the performance of bitcoin. On the derivatives side, the CME is recognized as the leading regulated market for bitcoin futures trading. Equity markets in Europe have also been expanding and supporting a rapidly growing bitcoin and crypto ETP product suite.

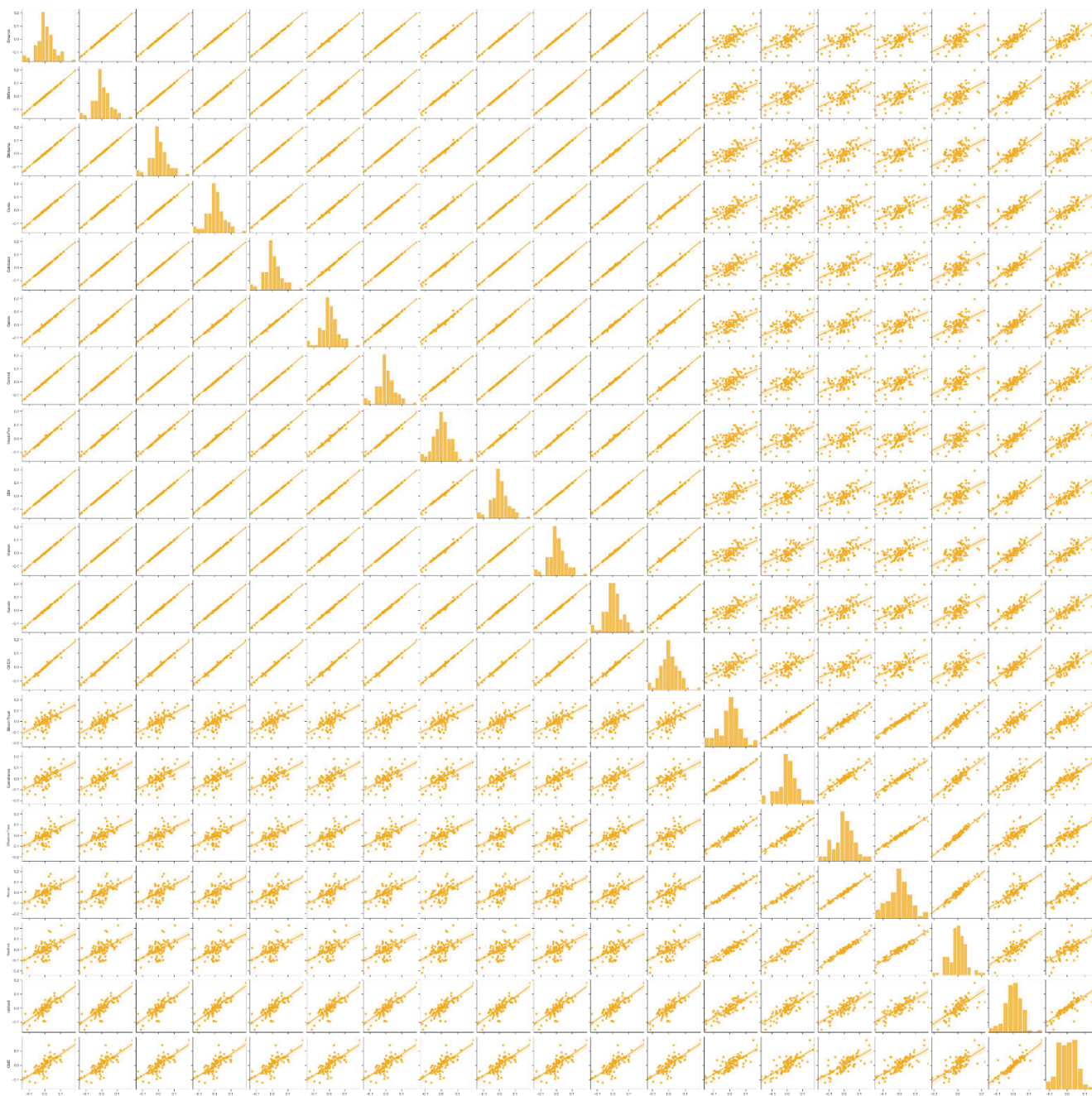
In markets that are globally and efficiently integrated, one would expect changes in prices of an asset across all markets to be highly correlated. The rationale behind this is that quick and efficient arbitrageurs would capture potentially profitable opportunities, consequently converging prices to the average intrinsic value very rapidly.

Bitcoin markets exhibit a high degree of correlation. Using daily Bitcoin prices from centralized exchanges, ETP providers, and the CME, we calculate the correlation of returns across these markets and find a high degree of correlation.

We report correlations between 57% and 99%, with the latter found mainly across centralized exchanges due to their higher level of interconnectedness. The lower correlations pertain mainly to the ETPs as these are relatively newer products.

As investors and arbitrageurs capture the mispricing opportunities between these markets, we can expect to see much correlation between all markets.

Pairwise Correlation of Bitcoin Returns across Centralized Exchanges, ETPs, and the CME



Source: 21 Shares. All rights reserved.

This relationship holds true during periods of extreme price volatility. This implies that no single bitcoin market can deviate significantly from the consensus, such that the market is sufficiently large and has an inherent unique resistance to manipulation.

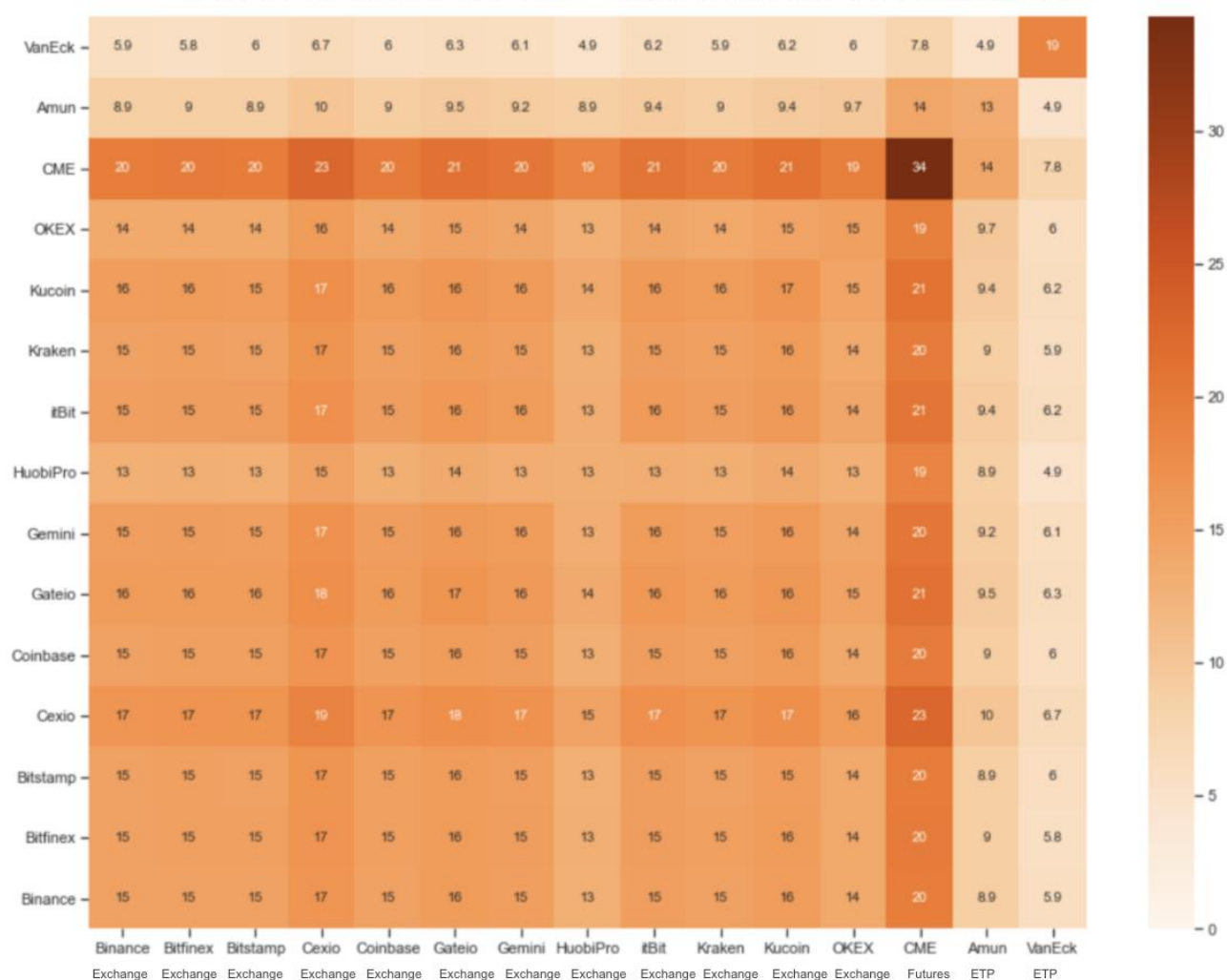
We introduce a statistical comoment called cokurtosis, which measures to what extent two random variables change together. If two return series exhibit a high degree of cokurtosis, this means that they tend to undergo extreme positive and negative changes simultaneously.

Using hourly bitcoin returns across centralised exchanges, ETPs, and the CME, we calculate the cokurtosis across these markets. A cokurtosis value larger than +3 or less than -3 is considered statistically significant.

This table shows that the level of cokurtosis is positive and very high between all market combinations, which suggests that bitcoin markets tend to move very similarly especially for extreme price deviations.

Our results present evidence of a robust global bitcoin market that quickly reacts in a unanimous manner to extreme price movements across both the spot markets, futures and ETP markets.

Cokurtosis of Bitcoin Returns across Centralized Exchanges, ETPs, and the CME



Source: 21 Shares. All rights reserved.

B4Q1: Are there any other good practice expectations in INFO 230 that need to be clarified or modified to accommodate crypto-asset ETPs?

We do not consider that there are any other good practice expectations in INFO 230 that need to be clarified or modified to accommodate crypto-asset ETPs.

C1Q1: Do you agree with our proposed good practices in relation to the custody of crypto-assets? If not, why not? Please provide any suggestions for good practice in the custody of crypto-assets.

Yes, we agree with the proposed good practices.

In addition to the requirements listed, several crypto custodians have achieved higher levels of oversight. For example, Coinbase Custody operates as a New York Trust Company, as a fiduciary under New York Banking Law and as qualified custodian under the Investment Advisers Act. The custodian has appropriate licensing and perform KYC/AML everywhere they operate and have hired relevant staff to ensure ongoing monitoring and compliance.

C1Q2: Are there any practical problems associated with this approach? If so, please provide details.

No. We believe that this structure can be implemented successfully. These requirements are largely met by custodians acting on behalf of ETPs in the European market.

Safely securing digital forms of value presents distinct challenges relative to securing analog assets. For example, Coinbase has pioneered industry-leading standards for managing private cryptographic keys and use sophisticated cybersecurity technologies such as multi-party computation to safeguard a wide range of crypto assets. They leverage data and machine learning to proactively identify and prevent potential exploits. Their second line of defense is their industry-leading insurance policy to protect both online and offline assets across all products — which they believe to be the largest hot wallet crime program in the insurance market. Coinbase Custody was one of the first crypto custodians to be issued with both SOC 1 Type 2 and SOC 2 Type 2 reports.

C1Q3: Do you consider there should be any modifications to the set of good practices? Please provide details.

No.

C1Q4: Do you consider that crypto-assets can be held in custody, safely and securely? Please provide your reasons.

Yes, we believe crypto-assets can be held in custody safely and securely. The following paragraphs outline the best practise procedures of Coinbase Custody to demonstrate some elements that should form the basis of a safe and secure custody service.

Crypto-assets stored in Coinbase cold storage are resistant to physical theft, digital theft, and malicious actions by individuals or small parties. Private keys are stored in encrypted shards in secure vaults, in secure facilities. The individuals with access to the hard copy, paper shards do not have access to the HSMs which can decrypt the shards. A minimum (m) of total (n) shards are needed at the same time. This means there is significant coordination needed to bring a private key online. Private keys are only brought online at the last possible moment. A wallet is always redeemed from cold storage at 100%. Any amount not required to be redeemed is put into a NEW wallet with a new private key. This means the useful lifetime for any private key is a very short window, and one time only.

This combination of timing, multiple actor interactions, and physical distribution provides robust protection from theft or misuse and it can easily be monitored, audited, and managed in a transparent manner.

Their cold storage withdrawal process has secured billions in crypto over 8+ years with no loss of funds, but past performance does not indicate future performance.

As for operational practices and controls, there are several distinct stages involving client interaction and multiple segregated groups of Coinbase employees:

1) Initiation: Client initiates a withdrawal through the user interface or via API. Client is required to meet "Consensus" by having a set number of Approvers on the account approve the transaction with their Yubikey HSM (i.e., U2F authentication). User roles and Consensus settings can be customized to meet any unique operational requirements that a client may have.

2) Authorization: Once Consensus has been reached, Coinbase Client Services is notified. Coinbase verifies a variety of signals to understand risk-levels of the transaction, and as necessary, organises a video call authorisation for the transaction. During the video authorisation, Coinbase Client Services verifies relevant transaction information and ensures that predefined duress signals have not been made, recording the call for recordkeeping.

3) Execution: Once the transaction has been authorised, two distinct groups of Coinbase employees are involved in execution: 1) Librarians: responsible for uploading encrypted shards from secure processing facility. 2) Sages: responsible for decrypting shards in order to process the transaction. They require annual, enhanced background checks for all personnel performing high-trust functions. After processing, any remaining funds are rolled to a new, offline cold storage address.

C1Q5: Do you have any suggestions for alternative mechanisms or principles that could replace some or all of the good practices set out in proposal C1? Please provide details.

Yes, in addition to the above multi-signatory custody should be required. The actual wallet private keys should be sharded, each shard should be encrypted. The per-shard decryption key should be stored on an offline-HSM. The encrypted shard should be stored in paper form. This adds a separation between the party who possesses the shard and the party who can reconstitute the wallet's private key - it reduces the ability of an individual or small group of malicious actors to surreptitiously steal a wallet's private key.

C1Q6: Should similar requirements to proposal C12 also be imposed through a market operator's regulatory framework for ETPs? If so, please provide reasons and how it could work in practice.

No, we believe that these requirements imposed at the custodial level are sufficient.

C2Q1: Do you agree with our proposed good practices in relation to risk management systems for REs that hold crypto assets? If not, why not?

Yes, we agree with the proposal that REs involved in trading crypto-assets should do so on legally compliant and regulated venues and comply with all KYC and AML/CTF obligations in a manner consistent with the transacting of other asset classes.

We also agree that REs should ensure that authorised participants meet prescribed standards including transacting on approved exchanges or delivering newly-mined crypto-assets, where the ETP operates on an in specie delivery basis.

C2Q2: Are there any other regulations (other than KYC and AML/CTF) that should form part of an appropriate baseline level of regulation for crypto-asset trading platforms used by REs and connected service providers? Please provide details

No, we have not identified any additional regulations that should form part of a REs risk management systems.

C2Q3: Are there any practical problems associated with this approach? If so, please provide details.

There are open questions as to how exactly "legally compliant and regulated crypto-asset trading platforms" are defined.

C2Q4: Are there any other matters related to holding crypto-assets that ought to be recognised in the risk management systems of REs and highlighted through ASIC good practice information? Please provide details of any specific proposals.

No, we believe crypto-assets should be well captured under existing risk management systems and regulations.

C2Q5: Should similar requirements to proposal C2 also be imposed through a market operator's regulatory framework for ETPs? If so, please provide reasons and outline how it could work in practice.

Yes, we believe that a consistent principles-based approach should be taken across the regulatory framework encompassing both REs and market operators. Market operators should have the ability to determine appropriate risk management practises of an RE, which may vary depending upon the features of the ETP in question.

C3Q1: Do you agree with our proposed expectations regarding disclosure obligations for registered managed investment schemes that hold crypto-assets? If not, please explain why not.

Overall, this proposal addresses all the relevant points in describing disclosure requirements. However, there are a couple of elements included in the risk and disclosure requirements which may go beyond the necessary scope. These are outlined in C3Q2 below.

C3Q2: Are there any practical problems associated with this approach? If so, please provide details.

- 1) Inclusion of details regarding cryptography in the disclosure may go beyond the scope of standard disclosure documentation for large crypto assets and lead to increased investor confusion given the complexity of the cryptography involved. These cryptographic standards are subject to change and may be different across different blockchains.
- 2) Custodial risk should include a clear understanding of the counterparty risk involved. Ownership of private keys provides the entity with control over the assets. Custody in this case is quite similar to gold in a vault where you may face significant counterparty risk against the institution providing these services. Additionally, insurance plays a significant role in mitigating those risks and should be adequately described as part of a comprehensive description of custodial risk.
- 3) Environmental risk associated with these products is a complex topic and can change substantially over the course of an investment life cycle. The source of power used for proof of work, the efficiency of the mining machines and the location of the mining systems used for validation may have significant impacts. Quantifying this risk is a complex task that is currently in its infancy. As a result, this may be a difficult risk to describe in any regulatory filings. Without sufficient data to describe this issue, it may be misleading (either under or over stated as a risk) and subject to change should any of the contributing factors to the environmental footprint of the blockchain shift. There are a number of efforts to reduce the impact through technical means such as transitioning to using “Proof of Stake” — which Ethereum is doing — or by increasingly using renewable energies which may already make up over 70% of bitcoin’s energy mix.

C3Q3: Are there any additional categories of risks that ought to be specified by ASIC as good practice for disclosure in relation to managed investment schemes that hold crypto-assets?

We believe that good product governance involves the clear and accurate presentation of all relevant risks for a particular product and that a mandated approach to defining specific risks may not be appropriate across an asset class with a diverse range of features and over time as crypto-assets evolve.

C4Q1: Are there any aspects of the DDO regime that need to be clarified for investment products that invest in, or provide exposure to, crypto-assets?

There are no aspects of the design and distribution obligations (DDO) regime which require clarification specifically in relation to financial products that invest in or otherwise provide exposure to crypto-assets.

While aspects of the DDO regime should be clarified further to assist issuers and distributors to meet their DDO, for example what constitutes a 'significant dealing' which is not consistent with a target market determination requiring notification by the distributor pursuant to section 994F of the Corporations Act 2001, there is no aspect of the DDO regime which is required to be clarified specifically in relation to financial products that invest in or otherwise provide exposure to crypto-assets.

Part 7.8A of the Corporations Act and RG 274 in their current state make clear which financial products are caught by the DDO regime. In this regard, the DDO regime applies broadly to financial products provided to retail investors and does not, and in our opinion does not need to, distinguish between investment products that invest in or provide exposure to crypto-assets or financial products that invest in or otherwise provide exposure to other kinds of assets.

D1Q1: Do you agree that crypto-assets are capable of being appropriate assets for listed investment entities on Australian markets? If not, why not?

Yes, we agree that crypto-assets are capable of being appropriate assets for listed investment entities on Australian markets.

Under the ASX Listing Rules, a listed investment entity is required to have a structure and operations that are appropriate for a listed entity. Provided that the listed investment entity can demonstrate that, in respect of crypto-assets:

- i. it has appropriate custody arrangements (such as those described in proposal C1);
- ii. only deals with crypto-asset trading counterparties that are subject to appropriate AML controls (such as those described in proposal C2); and
- iii. values crypto-assets using an appropriately robust and transparent pricing standard (such as those described in proposal C3), then, assuming the listed investment entity otherwise has a structure and operations that are appropriate for a listed entity, we consider that crypto-assets would be appropriate assets for the listed investment entity on Australian markets.

D1Q2: Do you agree with our proposed expectations for LICs and LITs that invest in crypto-assets to ensure equivalent standards are applied by market operators? If not, why not?

Yes, we agree that market operators should apply equivalent standards to LICs and LITs that invest in crypto-assets to those that are applied to ETPs that invest in crypto-assets. Failure to do so would likely result in 'regulatory arbitrage' and unfairly advantage/disadvantage entities operating in the respective fields.

D1Q3: Are there any practical problems associated with this approach? If so, please provide details.

No, assuming the ASX and Chi-X Operating Rules are appropriately amended to facilitate ETPs holding crypto-assets.

D1Q4: Are there additional standards which ought to apply via market operators to LICs or LITs that invest in crypto-assets? If so, what are these expectations and why should they apply?

No, we do not believe there is a need for any additional standards for operators of LICs and LITs in addition to the proposed standards for ETPs.

D1Q5: Should LICs and LITs only be able to invest significant funds in crypto-assets if this is either set out in their investment mandate or with member approval? If not, why not?

Yes, subject to the ASX Listing Rules, we consider that LICs and LITs should be permitted to make any investment authorised by their investment mandate or members, including in crypto-assets.

D1Q6: For the purposes of this proposal, we consider a material investment is where an entity invests or plans to invest more than 5% of its funds in crypto-assets. Should another materiality threshold apply?

No, we consider that 5% is an appropriate materiality threshold (assuming the threshold applies at all times and not, for example, only at the time of initial investment, such that if the investment in crypto-assets grows to exceed 5% the investment must be rebalanced down to 5%).

E1Q1: Do you agree with our proposal to establish a new asset kind that will cover crypto-assets?

Yes, we agree with ASIC's proposal to establish a new asset kind that will cover crypto-assets for AFS licensing purposes.

As it currently stands, it is generally accepted that none of the available asset kinds would cover direct holdings in crypto-assets that are not financial products. For example, we do not consider that bitcoin is either a "financial asset" or a "derivative" for AFS licensing purposes.

E1Q2: Do you consider that crypto-assets may be captured by the existing asset kinds? If so, please explain.

Yes, we consider that specific crypto-assets may be captured by the existing asset kinds where the particular features of the crypto-asset cause it to do so, however, some specific crypto-assets are not captured by the existing asset kinds and therefore we consider that crypto-assets as a whole are not captured by the existing asset kinds.

The existing asset kinds include, among other things, a "financial asset" or a "derivative". Pursuant to ASIC Pro Forma 209 for financial services licence conditions:

- a) derivatives are as defined in section 761D of the Corporations Act (and including "managed investment warrants" and excluding "foreign exchange contracts"; and
- b) financial asset means cash, cheques, orders for payment of money, bills of exchange, promissory notes, securities, deposit products and interests in managed investment schemes (including where the managed investment scheme invests in direct real property or mortgages) but does not include a derivative.

As mentioned in our response to B2Q1, under Australian law it is possible that specific crypto-assets could be financial products, such as securities, derivatives, or interests in managed investment schemes. Where this is the case, we consider that these specific crypto-assets would be derivatives or financial assets for the purposes of the existing asset kinds.

We do not consider that bitcoin or ether are captured by the existing asset kinds, as we consider that neither of these crypto-assets is a financial product or otherwise one of the existing asset kinds.

E2Q1: Do you agree with our approach to restrict the crypto-assets a registered managed investment scheme is authorised to hold (e.g. to bitcoin or ether)?

We do not agree that ASIC's approach should be to restrict the crypto-assets a registered managed investment scheme is authorised to hold to specific crypto-assets such as bitcoin or ether. We advocate a principles-based approach that can adapt more readily to a quickly evolving market.

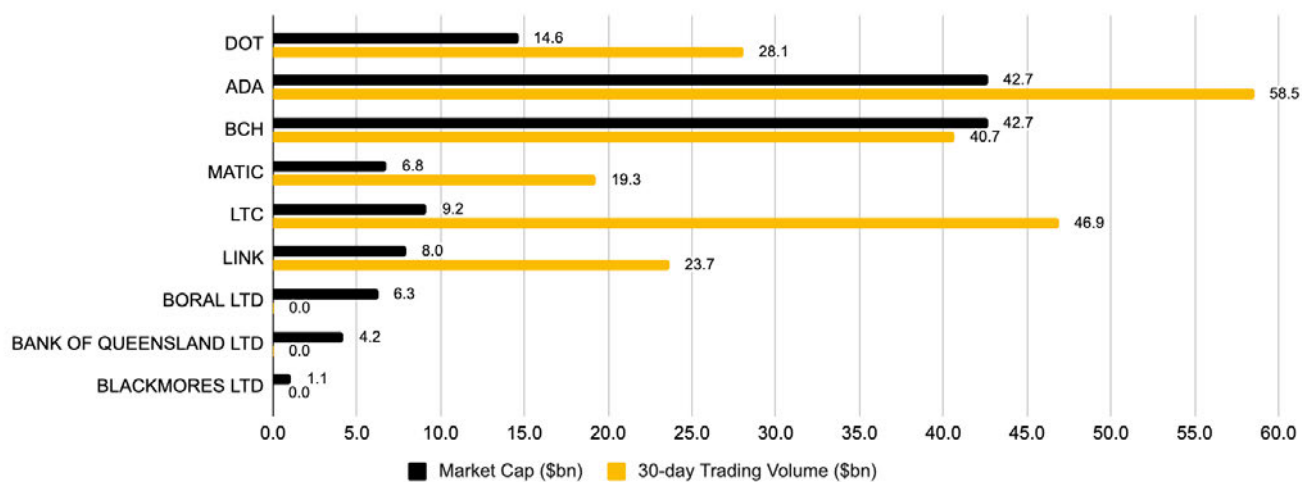
While a specific whitelist of approved crypto-assets can achieve short-term objectives, we consider that as the crypto-asset market matures and AFS licensees and market operators gain further experience and expertise in crypto-assets, it should be ASIC's goal to move towards a regulatory framework which provides for an unrestricted crypto-asset authorisation. Ultimately, market operators should be able to determine which crypto-assets are suitable for an ETP/LIC/LIT, and for issuers of to determine which crypto-assets are suitable for their investors. In this scenario we consider that ASIC's focus should be on regulating crypto-asset authorisations at the Responsible Manager level and by reference to the obligations and conditions applying to AFS licensees.

Given that the market for crypto assets is now considerably larger and more robust than in previous years, we believe that this approach is overly restrictive longer-term. There are many additional assets that already meet the criteria laid out in section B1. These include a wide range of crypto assets such as Bitcoin Cash, Polkadot and Cardano.

Each of these underlyings has considerably more trading volume than many of the small cap stocks that are already allowed to form part of the holdings of a registered managed investment scheme.

These assets have robust infrastructure, demonstrable institutional demand, a robust spot market and a considerable derivatives market. They are also the reference asset for exchange traded products on regulated markets in Europe. The chart below compares the market capitalisation and 30-day average daily trading volume of crypto-assets (Polkadot, Cardano, Bitcoin Cash, MaticNetwork, Litecoin and Chainlink) to small-cap Australian shares currently held by major ETFs (Boral, Bank of Queensland and Blackmores).

Market Cap and Trading Volume (30 days)



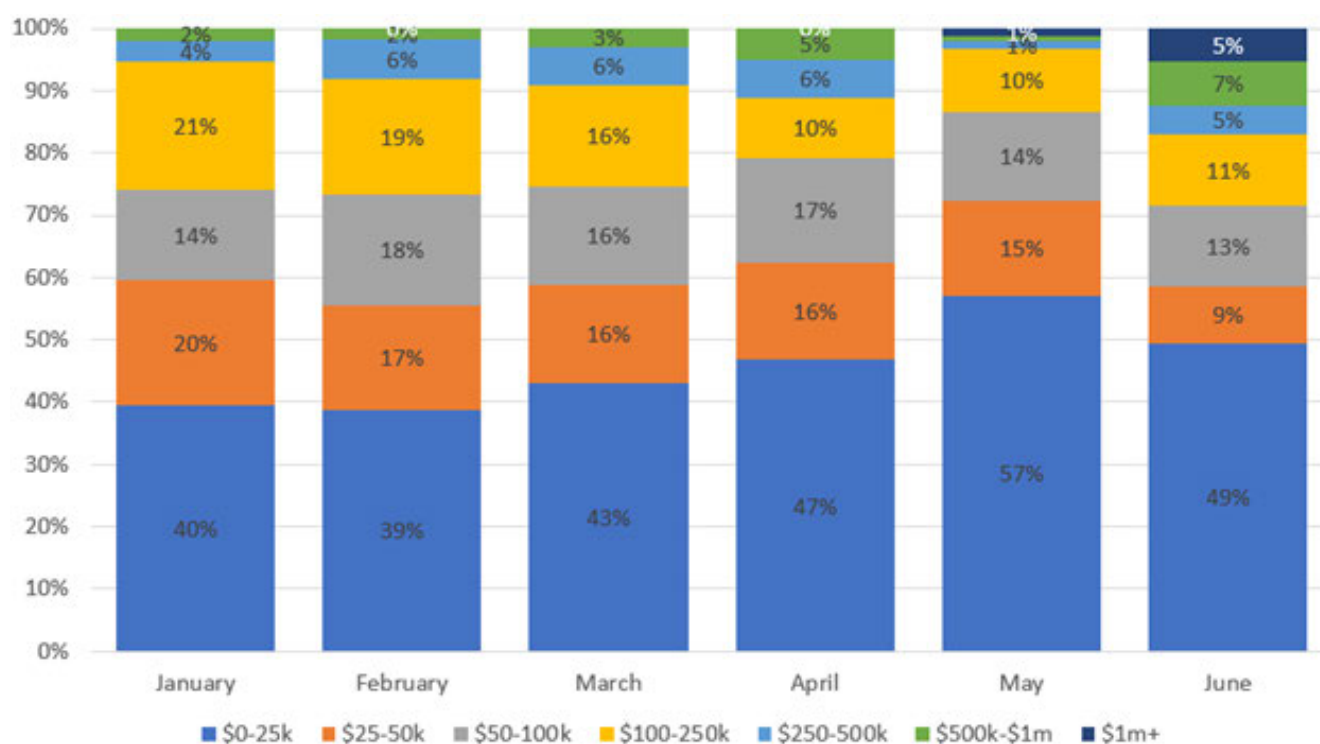
E2Q2: Do you consider there are any other aspects of the AFS licencing regime that need to be clarified or modified to accommodate investment products that invest in, or provide exposure to, crypto-assets?

No.

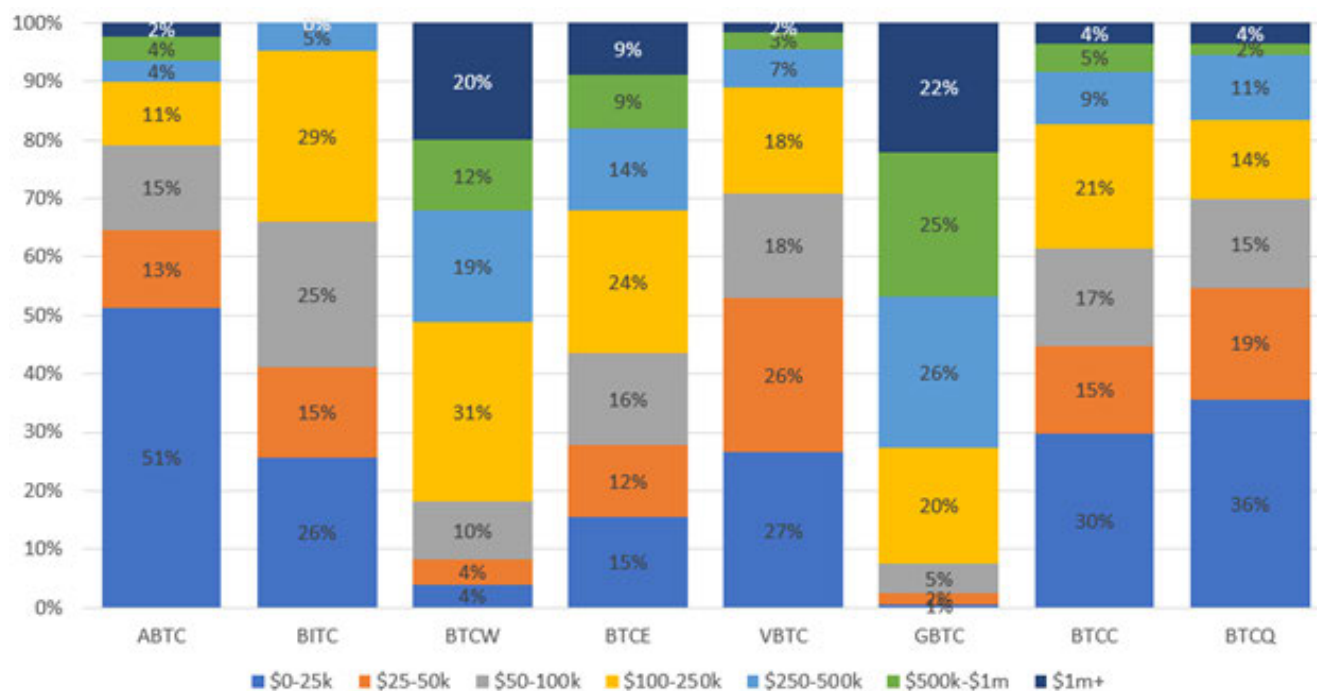
Appendix 1: Crypto-asset usage analysis to support B1Q1

While specific data with regards to the trading of exchange traded products can be difficult to obtain in terms of the average size of holdings given reliance on 3rd party brokers, some conclusions can be drawn from the order flow data see on exchanges. While there are a significant number of large trades in the orderbook there is also considerable volume in the sub-\$500 per trade range, which is consistent with retail activity. Evidence from European ETP issuer 21Shares, who have issued listed crypto-asset products since 2018 confirms a strong retail interest in more regulated product structures.

Assuming institutional investors prefer fiat exchanges such as Coinbase over Binance, the ratio of BTC-USD to BTC-USDT can be used as an indicator of institutional inflow. A strong reversal of this ratio was seen in January 2021, marking the reduction of institutional investment and the rise of retail investment this year despite a growth in average trade sizes from \$1.3k to \$2.5k on Coinbase. This is a clear indication of the increase in purchasing power of an average retail investor.



Size of trades all crypto assets 2021. 21 Shares. All rights reserved.



Size of trades BTC 2021. 21 Shares. All rights reserved.

In addition, to the data laid out above, more traditional financial market participants appear to be embracing cryptocurrency: large insurance companies,⁴ asset managers,⁵ university endowments⁶, pension funds,⁷ and even historically bitcoin sceptical fund managers⁸ are allocating to bitcoin.

⁴ On December 10, 2020, Massachusetts Mutual Life Insurance Company (MassMutual) announced that it had purchased \$100 million in bitcoin for its general investment account. See MassMutual Press Release “Institutional Bitcoin provider NYDIG announces minority stake purchase by MassMutual” (December 10, 2020) available at: <https://www.massmutual.com/about-us/news-and-press-releases/press-releases/2020/12/institutional-bitcoin-provider-nydig-announces-minority-stake-purchase-by-massmutual>.

⁵ See e.g., “BlackRock’s Rick Rieder says the world’s largest asset manager has ‘started to dabble’ in bitcoin” (February 17, 2021) available at: <https://www.cnbc.com/2021/02/17/blackrock-has-started-to-dabble-in-bitcoin-says-rick-rieder.html> and “Guggenheim’s Scott Miner says Bitcoin Should Be Worth \$400,000” (December 16, 2020) available at: <https://www.bloomberg.com/news/articles/2020-12-16/guggenheim-s-scott-miner-says-bitcoin-should-be-worth-400-000>.

⁶ See e.g., “Harvard and Yale Endowments Among Those Reportedly Buying Crypto” (January 25, 2021) available at: <https://www.bloomberg.com/news/articles/2021-01-26/harvard-and-yale-endowments-among-those-reportedly-buying-crypto>.

⁷ See e.g., “Virginia Police Department Reveals Why its Pension Fund is Betting on Bitcoin” (February 14, 2019) available at: <https://finance.yahoo.com/news/virginia-police-department-reveals-why-194558505.html>.

⁸ See e.g., “Bridgewater: Our Thoughts on Bitcoin” (January 28, 2021) available at: <https://www.bridgewater.com/research-and-insights/our-thoughts-on-bitcoin> and “Paul Tudor Jones says he likes bitcoin even more now, rally still in the ‘first inning’” (October 22, 2020) available at: <https://www.cnbc.com/2020/10/22/paul-tudor-jones-says-he-likes-bitcoin-even-more-now-rally-still-in-the-first-inning.html>.

Established companies like Tesla, Inc.,⁹ MicroStrategy Incorporated,¹⁰ and Square, Inc.,¹¹ among others, have recently announced substantial investments in bitcoin in amounts as large as \$1.5 billion (Tesla) and \$425 million (MicroStrategy). These patterns would suggest that there is increasing main-stream adoption of crypto assets among institutional investors as well as retail.

⁹ See Form 10-K submitted by Tesla, Inc. for the fiscal year ended December 31, 2020 at 23:
https://www.sec.gov/ix?doc=/Archives/edgar/data/1318605/000156459021004599/tsla-10k_20201231.htm

¹⁰ See Form 10-Q submitted by MicroStrategy Incorporated for the quarterly period ended September 30, 2020 at 8:
https://www.sec.gov/ix?doc=/Archives/edgar/data/1050446/000156459020047995/mstr-10q_20200930.htm

¹¹ See Form 10-Q submitted by Square, Inc. for the quarterly period ended September 30, 2020 at 51:
<https://www.sec.gov/ix?doc=/Archives/edgar/data/1512673/000151267320000012/sq-20200930.htm>

Appendix 2: Liquidity analysis to support B1Q2

We look at the liquidity profile available in the crypto markets. We have used a sample period of analysis that spans from January 1, 2020 to July 1, 2021 and used daily frequency data for individual cryptocurrencies (BTC, ETH) and equities from different exchanges across the US, Europe and Australia (XNTK, XLE, PSCT, MRNA, SQ, SIM, G24, AVST, ADE, ALU, CDA, TNE, LNK, DDR, HSN, IRI, PME, IEL, HUB).

We also compared indices based on cryptocurrencies (HODL, made up of BTC, ETH, XRP, LTC, BCH), and equities (HODL, S&P 500, SMI PR, FTSE 100 and S&P/ASX 200). In general, we find that the distribution of daily returns is similar between the two asset classes. In addition, the series of returns between the two asset classes have a long term cointegration equilibrium. Regarding the liquidity of the individual assets, we use the daily traded volume from the top centralized exchanges (Binance, Bitfinex, Bitstamp, Cexio, Coinbase, Gateio, Gemini, HuobiPro, itBit, Kraken, Kucoin, OKEX) which make up around 30% of total traded volume in the market.

We compare the dollar traded volume of the top crypto exchanges to the traded volume of the individual equity assets mentioned above. We find that the traded volume for BTC exceeds those of the equities considered. As for ETH, it is much larger than the smaller cap stocks and in line with the volumes of the mid-cap stocks.

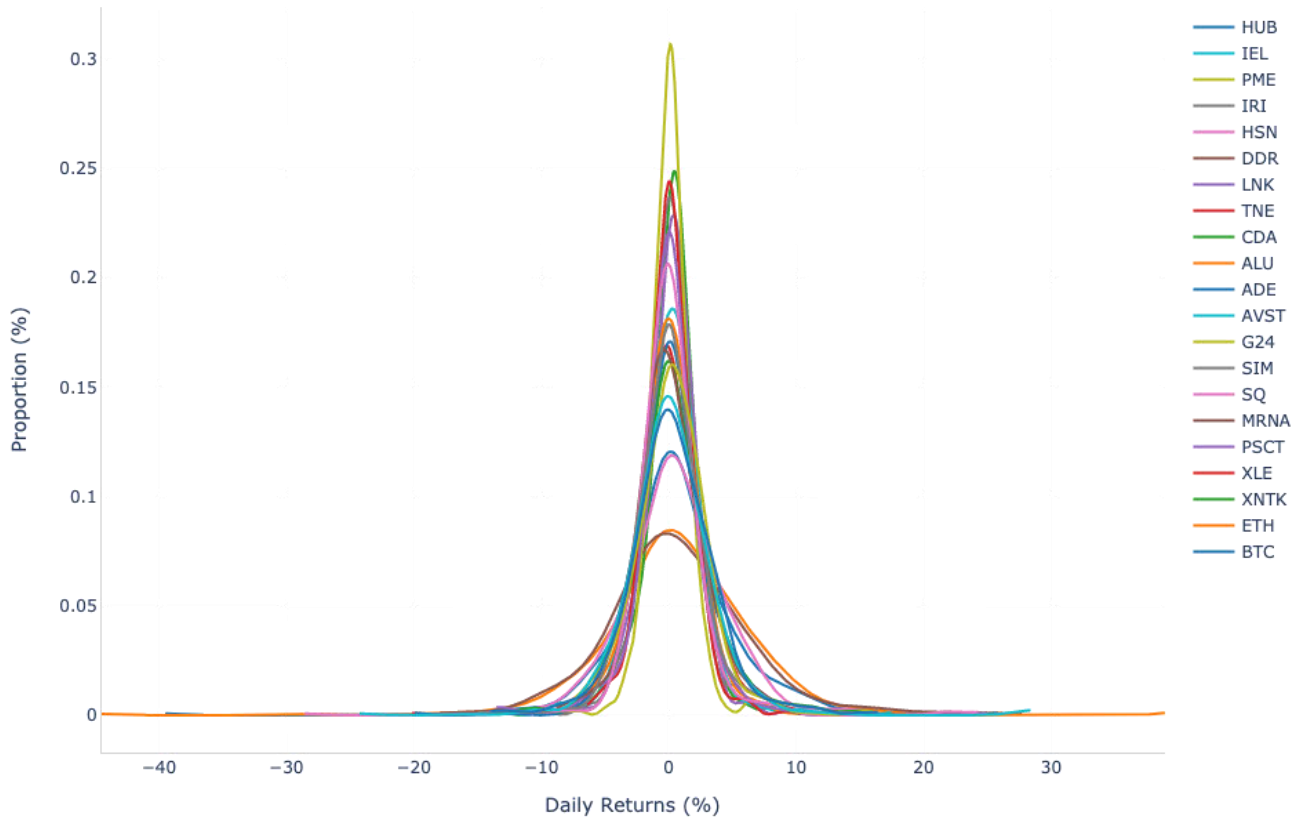
Our analysis shows that the largest cryptocurrencies are similar to equities listed on the top global exchanges in terms of both distribution of returns as well as liquidity.

Daily Returns of Crypto and Equity Assets from January 1, 2020 to July 1, 2021



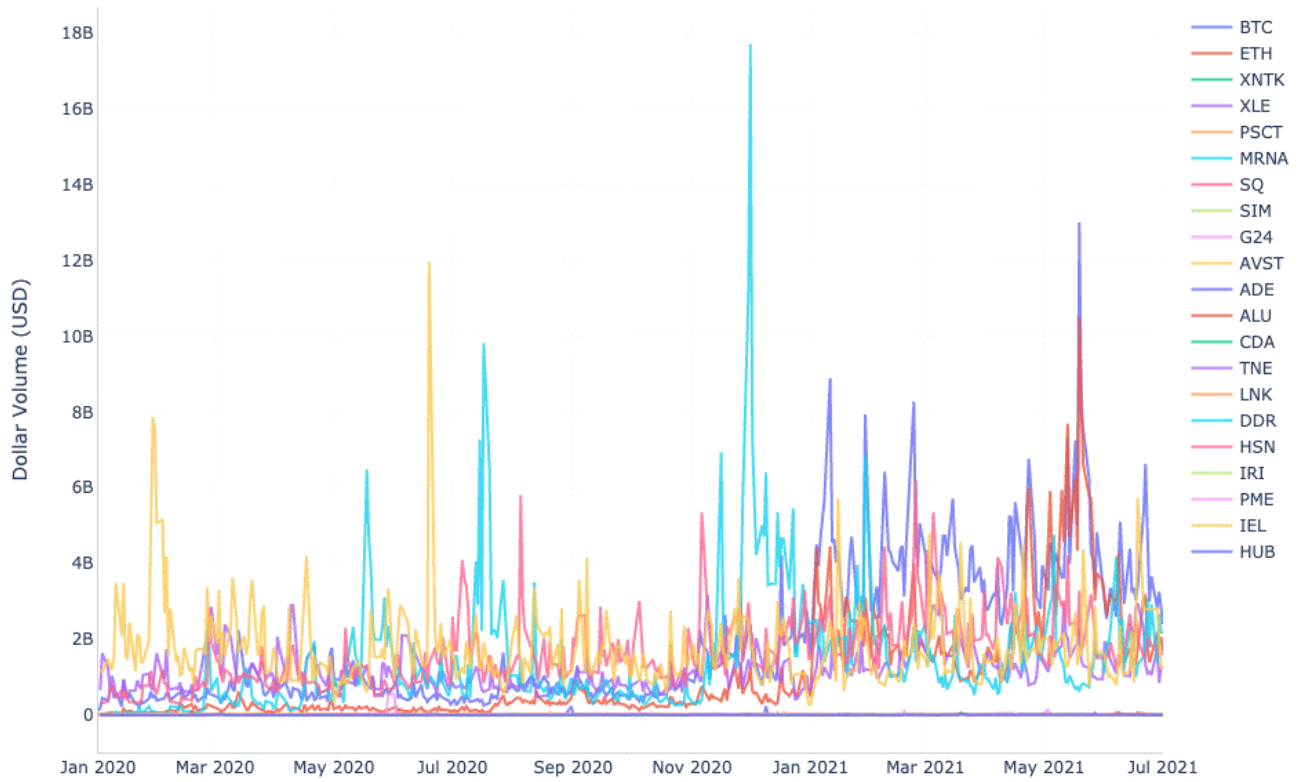
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Distribution of Daily Returns of Crypto and Equity Assets from January 1, 2020 to July 1, 2021



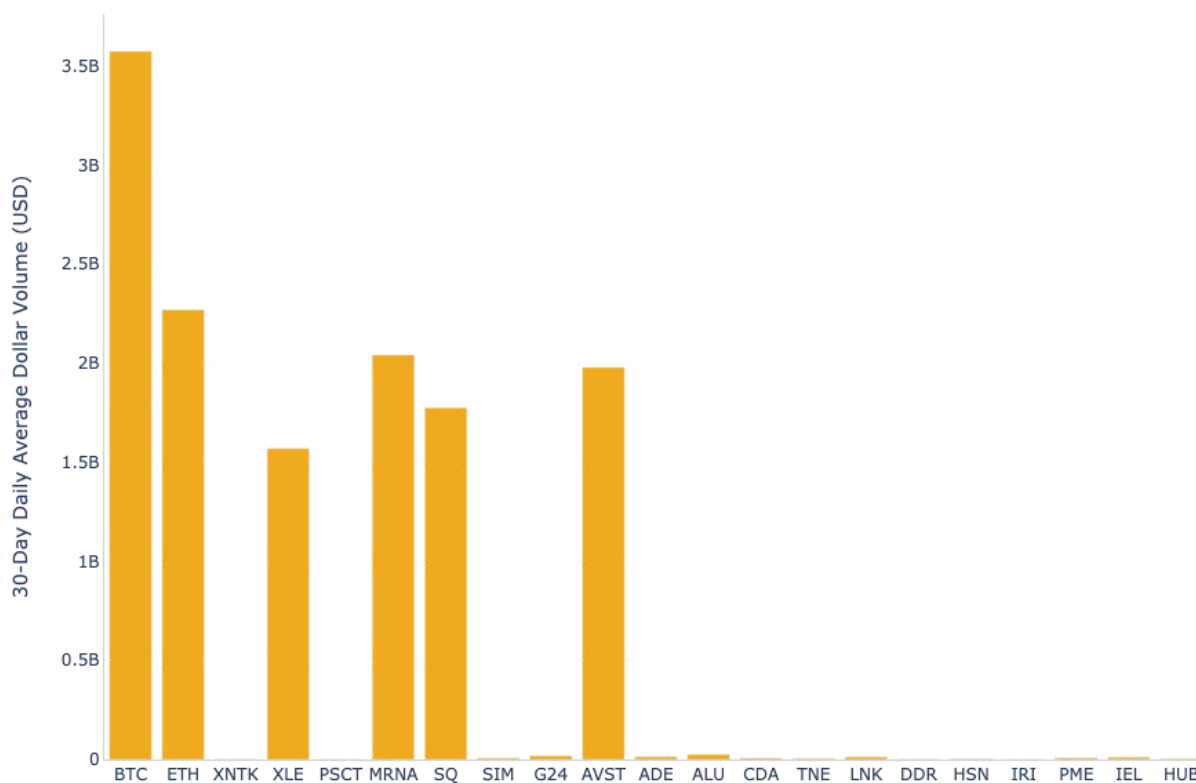
Source:21 Shares. All rights reserved.

Daily Dollar Volume Traded of Crypto and Equity Assets from January 1, 2020 to July 1, 2021



Source:21 Shares. All rights reserved.

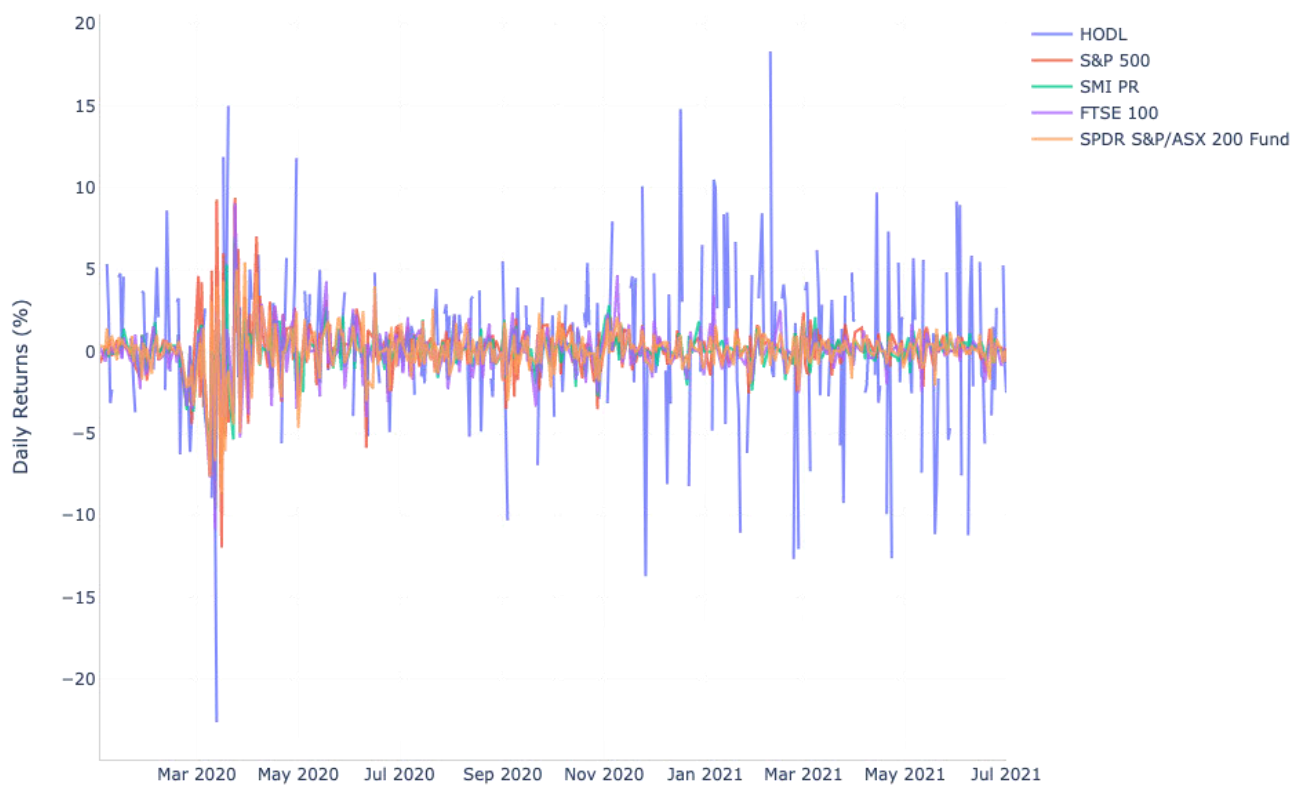
30-Day Daily Average Dollar Volume Traded of Crypto and Equity Assets as of July 1, 2021



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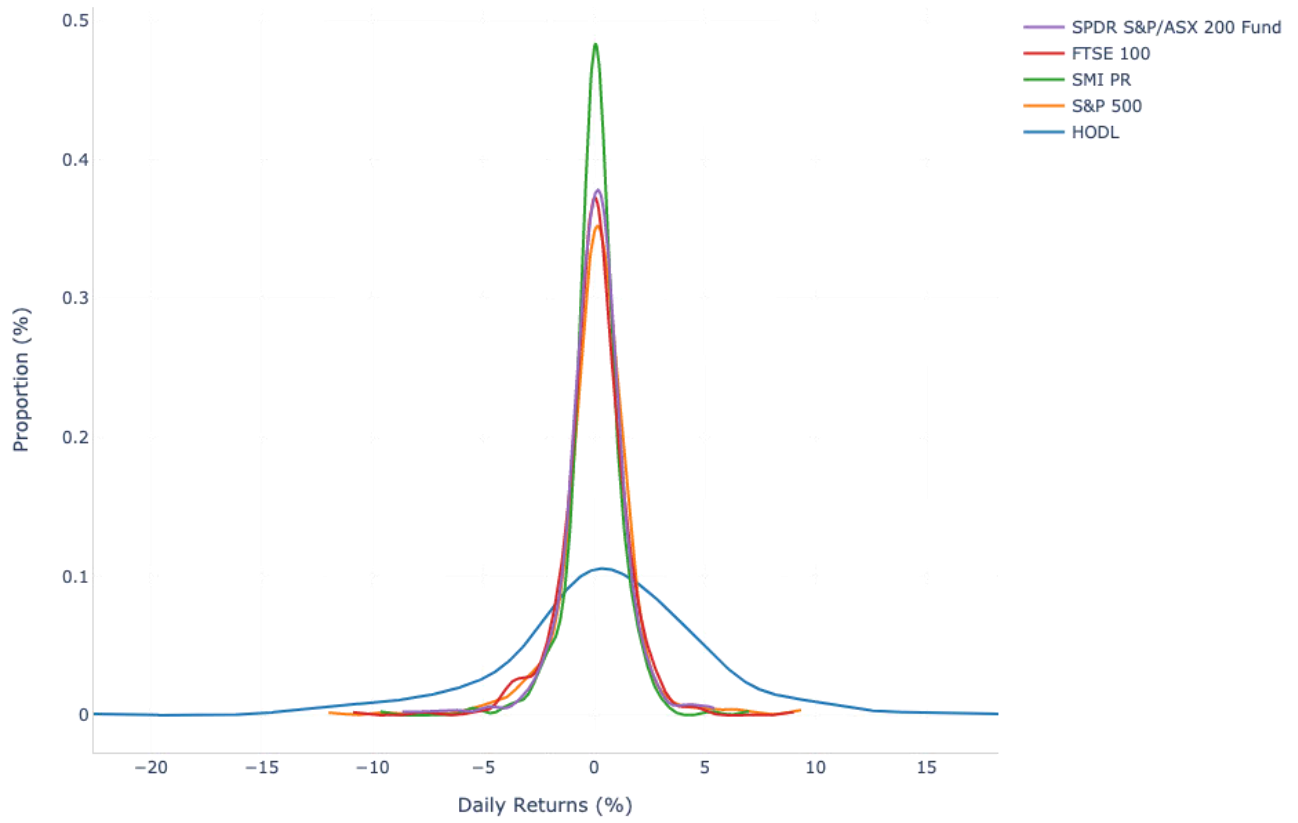
In order to comprehensively understand the liquidity profile available between the crypto and equity markets, we have prepared an analysis focusing on the indices of these markets, respectively, in order to allow you to measure what kind of margining and settlement netting is required to mitigate counterparty risk as much as possible.

Daily Returns of Crypto and Equity Indices from January 1, 2020 to July 1, 2021



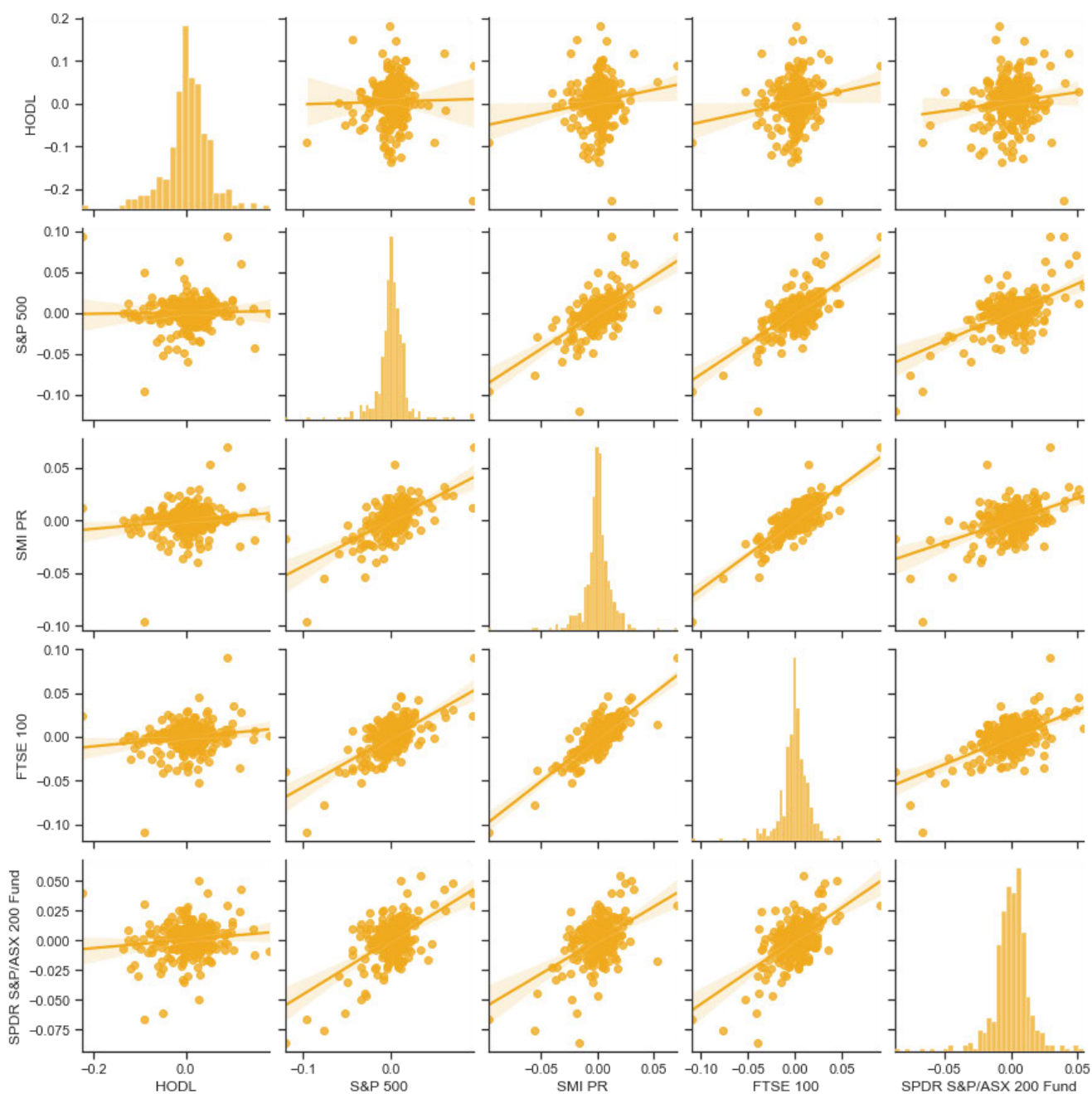
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Distribution of Daily Returns of Crypto and Equity Indices from January 1, 2020 to July 1, 2021



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Pairwise Correlation of Daily Returns of Crypto and Equity Indices



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We hope with this analysis you can harmonize certain aspects of the settlement cycle and settlement discipline to provide a set of common requirements for ETP issuers operating crypto products such as those proposed.

This analysis will help provide the following mechanisms regarding monitoring of the underlying assets, VaR margin model for the ETP, margin specific model in interoperable markets to cover inter CCP risk, risk adjusted collateral criteria if lending norm exists together with a legal framework to incorporate crypto products, such as ETPs for clearing members.

As the cryptocurrency industry continues to develop and mature, it is only natural that insurer appetite for cryptocurrencies and other digital asset-related risks will continue to broaden as underwriters become more familiar and comfortable with these evolving exposures.

It is important to note the dependence on collateralised securities in ETP products. Since the structures are fully collateralised at all times, it is easy to obtain prices in very liquid crypto markets for the underlying assets of the ETPs. A comparative investigation into various analytical methodologies reveals that the most effective means of alleviating liquidity risk is to apply quantitative analysis within a stochastic (versus deterministic) framework using crypto– gaining the same kinds of benefits that have been seen over the years in areas such as equity market which is what we have been demonstrating in these cases.
