Acuiti Special Report:

Institutional Adoption of Digital Asset Trading

In association with:

Bitstamp CME Group

acuiti management intelligence

Crypto markets set for institutional growth

The emergence of digital assets such as Bitcoin has brought trading opportunities and a new ecosystem of trading venues, digital asset market makers, hedge funds, custody providers and more. However, despite low volatility across international derivatives markets in 2018/19, firms trading traditional instruments have been reluctant to embrace the world of digital assets.

Bitcoin has proven to be more than just a fad, recovering from multiple iterations of declines and proving the doubters wrong again and again. At its highs of over $19,000 in Dec 2017, it had an average 24-hour volume of over $13bn. And, despite the price of Bitcoin having dropped by more than 50% from its highs, the average daily notional traded in Dec 2019 was over $20bn.

Bitcoin has been joined by a host of other established digital currencies and the institutional infrastructure is growing around them. CME and ICE (Bakkt) offer trading in Bitcoin derivatives and Eurex is reported to be considering launching Bitcoin, Ethereum and Ripple contracts. Elsewhere, over 100 venues have launched to trade cryptocurrencies, including the specialist crypto exchange Bitstamp aimed at institutional trading.

To understand what is holding back institutional adoption of digital asset trading, Acuiti surveyed senior executives from the buyside, sellside and proprietary trading groups specialised in traditional derivatives trading, clearing and execution. We supplemented that research with a survey of trading firms with a core focus on digital asset trading, most of which were incorporated to trade digital assets.

This study provides a range of perspectives on current levels of adoption, what needs to change for the digital asset ecosystem to fully mature and what lessons can be learned from firms that trade a wide range of digital assets.

Terminology in this report

CRYPTO TRADING FIRMS: Institutions whose core focus is trading digital assets. These covered proprietary trading groups, hedge funds or asset managers.

TRADITIONAL TRADING FIRMS: Institutions whose core focus is trading traditional asset classes. These covered proprietary trading groups, hedge funds or asset managers.

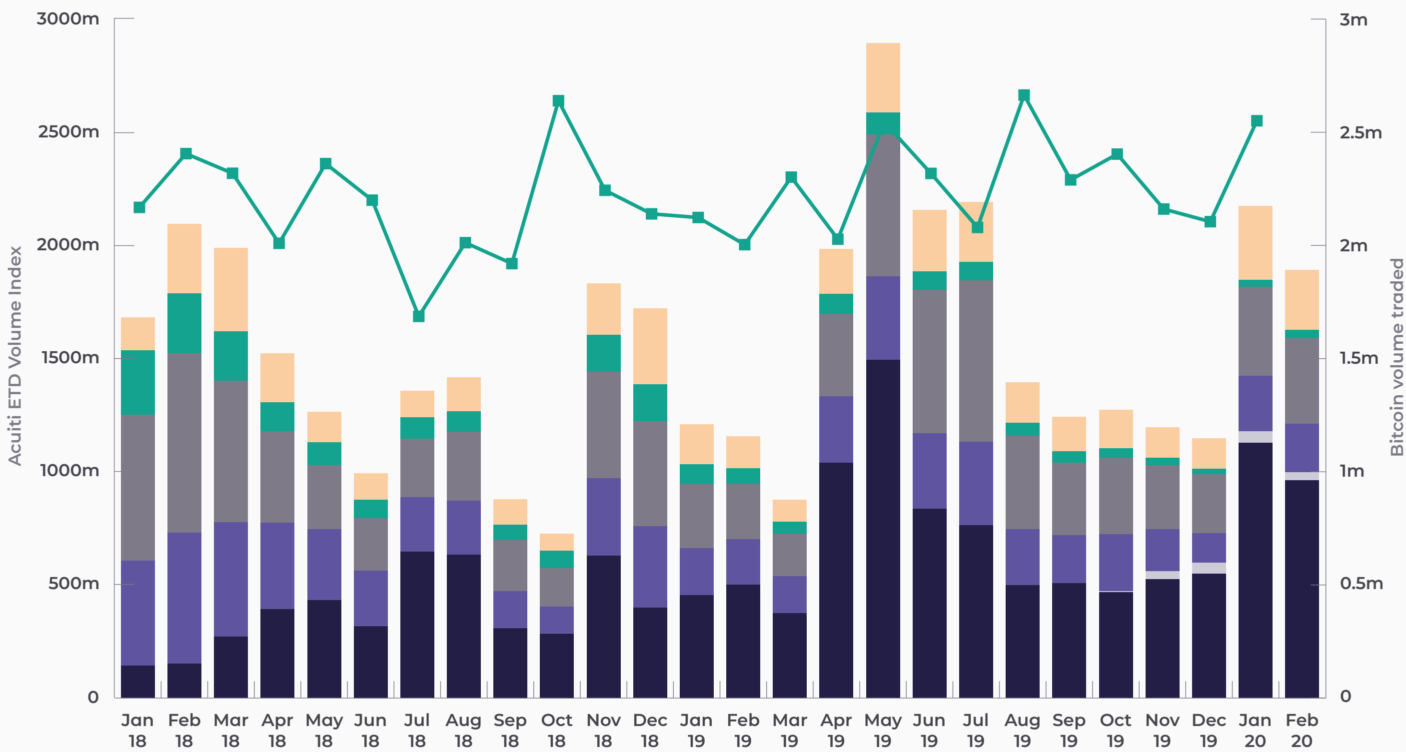
SERVICE PROVIDERS: Institutions providing clearing or execution services. These were typically banks, non-bank FCMs and brokers/inter-dealer brokers.

FIGURE 1 (BELOW): The Acuiti ETD Volume Index and Bitcoin lots/units traded

KEY:

- CME*
- Coinbase
- Bakkt*
- Gemini
- Bitstamp
- Kraken
- Acuiti ETD Volume Index

* Equivalent Bitcoin volume - based on Bitcoin futures volume



Sources: Acuiti Insight Report, data.bitcointy.org, CME

Adoption rates among traditional institutions

Our survey found that there was a greater adoption of digital assets among sellside service providers (26%) than traditional trading firms (17%). Adoption was defined as trading or enabling the trading and clearing of at least one digital asset spot or derivatives instrument.

However, adoption rates among the service providers was limited to CME or Bakkt. Trading firms had generally adopted a wider range of exchanges and instruments. APAC had the highest adoption rates with 57% of APAC service providers surveyed providing execution or clearing services for digital assets. We found demand from clients also higher in APAC compared with Europe and North America.

In all markets we surveyed, demand from clients outstripped the willingness of service providers to offer or expand coverage of digital assets. Among the three regions, adoption lagged demand the most in North America with only 52% of demand being met as clients seek to expand digital asset trading. Figure 2 shows the levels of demand for digital asset services from trading firms against the adoption rate of digital assets from service providers and shows that in the US in particularly, demand from trading firms significantly outstrips the rate of access offered by service providers.

Regulating digital assets

When it comes to Digital Assets, regulation has generally lagged market evolution. The explosion of specialist crypto venues has been fuelled by the fact that Bitcoin is not regulated as it is generally not considered a security. KYC and AML requirements vary significantly between jurisdictions. However, exchanges that want to attract institutional flow have sought regulation. Some venues. such as Bitstamp, have obtained a license that regulates them within the EU as a payment institution and obtained the BitLicense in the US. Traditional exchanges such as CME have an advantage with gaining traditional institutional flow into Digital Asset products since they are regulated by the CFTC for derivatives.

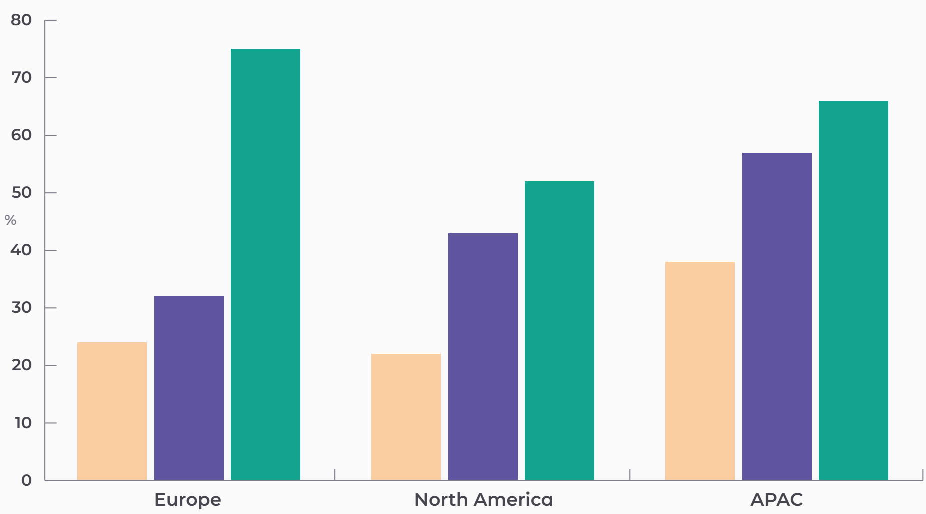
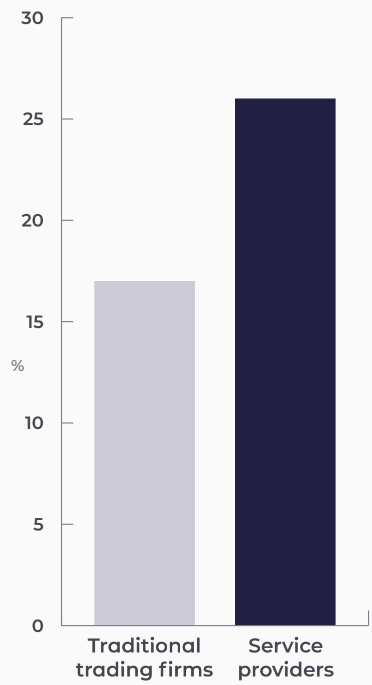


FIGURE 2 (ABOVE):
Adoption rate among service providers relative to demand from clients to enter or expand trading

KEY:

- Adoption rate
- Demand to broaden digital asset scope
- Adoption rate relative to demand (higher values signify demand being met)

FIGURE 3 (BELOW):
Adoption rate of digital assets (% of respondents that traded or offered trading in digital assets)



What's holding back institutional adoption of digital assets?

All respondents were asked to choose their top three concerns from *Fear of reputational damage*, *High volatility in digital assets*, *Concerns over custody*, *High margin requirements/pre-margining requirements*, *No transparent price formation*, *Concerns over AML & KYC of exchanges*, *Counterparty risk with exchange* and *Security of exchange/Fears over hacking*. Service providers also had the option of selecting *Limited client demand*.

Concerns of trading institutions

The biggest concerns among all trading institutions surveyed (including those who are yet to trade digital assets) was *Security of exchange/Fears over hacking*, and this concern was largely voiced by traditional trading firms.

Custody is a particular concern among traditional trading firms that are not yet trading digital assets. *High margin requirements/pre-margining requirements* is one of the top three concerns of traditional trading firms but did not feature as a concern among crypto trading firms.

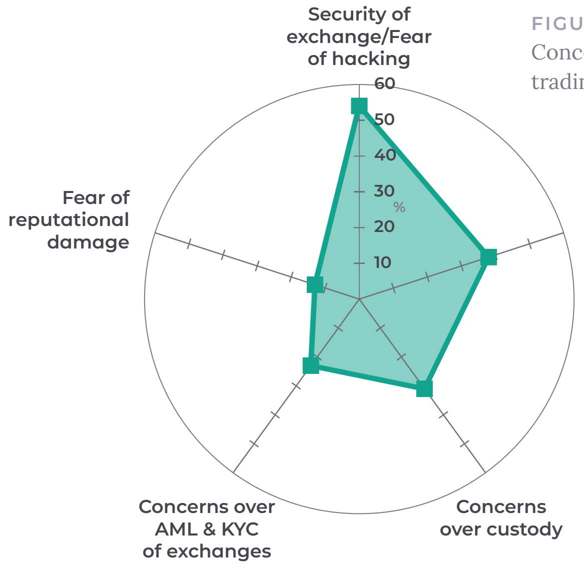


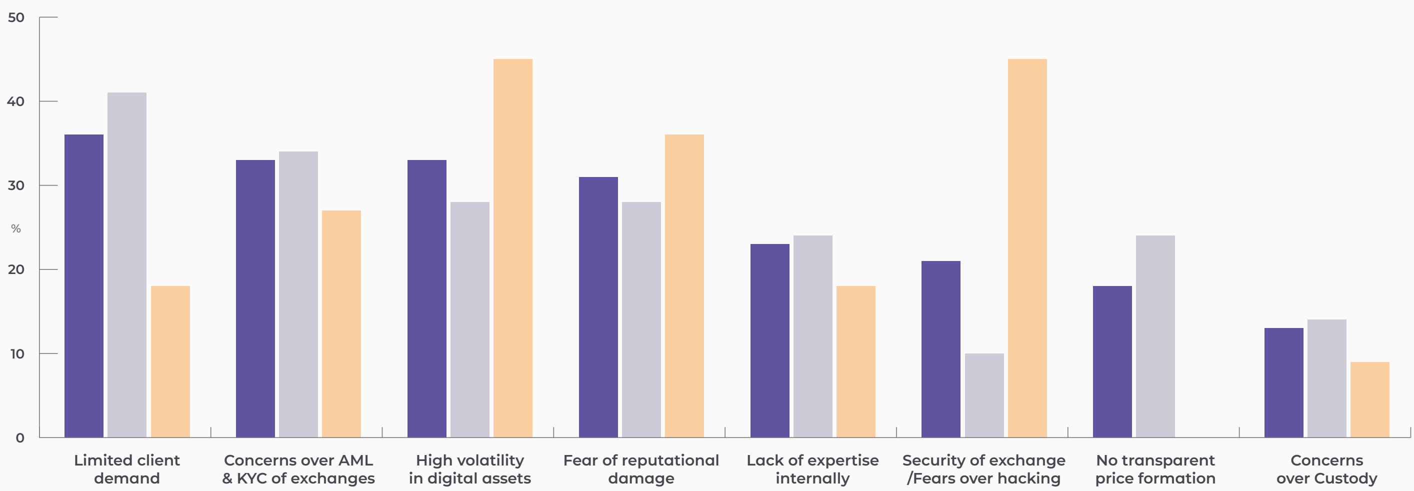
FIGURE 4: Concerns of trading institutions

Concerns of service providers

The main concerns of service providers were notably different from trading institutions. *Limited client demand* drove the hesitancy from brokers to expand crypto coverage. For banks and non-bank FCMs, *Concerns over AML & KYC of exchanges* and *Fear of reputational damage* were the major reasons for not offering digital assets or a reluctance to expand offerings to non-traditional venues. *High volatility in digital assets* and *Lack of expertise internally*, which hardly featured for trading institutions, were cited as concerns across sellside respondents. Those sellside firms that don't currently provide services for digital assets and which either had no client demand or were uncertain of it, stated *Lack of expertise internally* as their top reason for not offering crypto access.

FIGURE 5: Concerns of service providers

KEY:
All
Not offering digital assets
Offering digital assets



Sellside firms providing services for digital assets that took the survey were exclusively offering CME and/or Bakkt - CME nearly twice as common as Bakkt. *The Security of exchange/Fears over hacking* was the largest concern for clearing providers that reported high client demand but were reluctant to expand their digital asset offerings outside CME and Bakkt.

The findings strongly suggest that in the short to medium term, the institutional market will on the whole grow in-line with the expansion of offerings by existing institutional exchanges. This is complemented by the fact that sellside service providers most commonly cited the need for greater regulatory clarity when asked what needed to change to grow institutional participation in digital assets. While several specialist crypto markets operate under some form of regulatory regime, none to date is regulated as an exchange or trading venue by UK or US markets authorities.

There is, however, a growing trend towards specialist crypto only venues seeking recognition, for example a registration in the EU as a payment institution, an e-money licence in the UK or obtaining the BitLicense in the US, a set of regulations for virtual currencies put forward by the New York State Department of Financial Services (NYDFS).

Today's landscape of digital assets trading

The specialist crypto trading firms surveyed have nearly all been trading digital assets for over two years. Whilst there was a larger variation among the traditional trading firms that were trading crypto, the majority had been trading for under one year and nearly all had set up a dedicated desk for digital assets. Market making was the most common strategy for both crypto trading firms and traditional trading firms, while trading OTC was more common for crypto trading firms.

All of the crypto trading firms surveyed were trading a broad range of spot cryptocurrencies and nearly half were trading Bitcoin derivatives. Of the traditional trading firms surveyed that traded digital assets, 57% were trading Bitcoin derivatives and 29% traded Ethereum derivatives.

To understand the trading preferences of those who are trading digital assets, we asked questions relating to their predominant reasons for selecting an exchange and a digital asset, their favoured currency pairs, which exchanges they are currently trading and which of those are optimal for their strategy. In addition we asked which exchanges they are looking to trade on in the near future, and which digital assets they are currently trading.

Digital asset exchanges

Participants of the survey were asked for their predominant reasons for selecting an exchange to trade digital assets among the choices of: *User interface and user experience*, *Ease of connectivity*, *Integrity and security*, *Liquidity*, *Digital asset custody/Cold storage*, *Supported by my clearing provider*, *Speed and performance*, *Fee structure*, *Listed digital assets*, *Reliability of uptime*, *Regulation by an approved body*, *Customer service*.

The most important factor for selecting an exchange among both traditional and crypto trading firms was *Liquidity* followed by *Integrity and security*. Whilst *Speed and performance* was important for traditional trading firms, it did not feature as a top consideration for crypto trading firms. Overall, both *Ease of connectivity* and *Fee structure* were joint third.

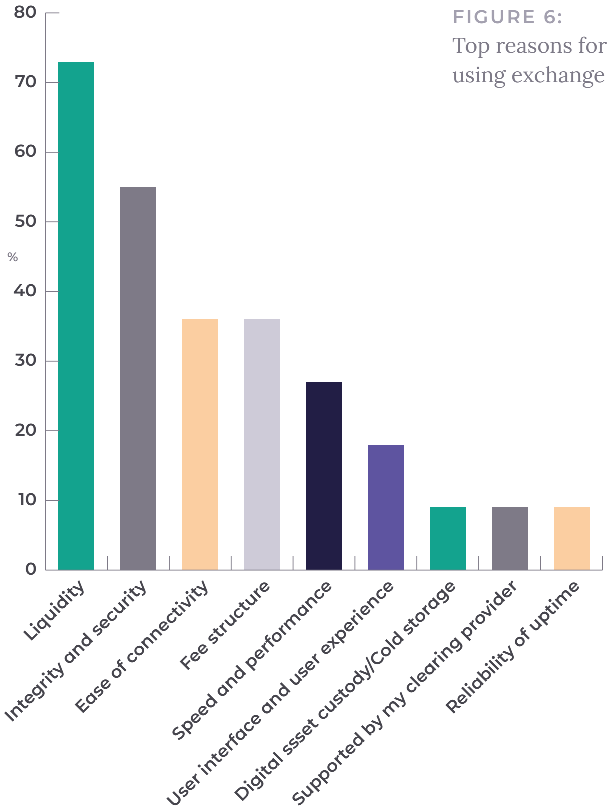


FIGURE 6:
Top reasons for using exchange

If respondents were trading on multiple venues, they were asked to rank them in terms of which exchanges offered an optimal environment for their trading strategy. For respondents trading ten or more exchanges, the chart below shows the most commonly cited venues in the top three in terms of the optimal environment for that respondent's trading strategy (out of the top 30 venues).

Our survey found that traditional trading firms trading digital assets were very likely to be expanding their digital coverage with Huobi being the most common venue respondents were planning to start trading on. Other venues that respondents were looking to join were Deribit, ErisX and LMAX Digital.

The most commonly traded venues were

1. Coinbase
2. Binance, Deribit
3. BitMEX
4. Kraken
5. Bitstamp, CME
6. OKEx

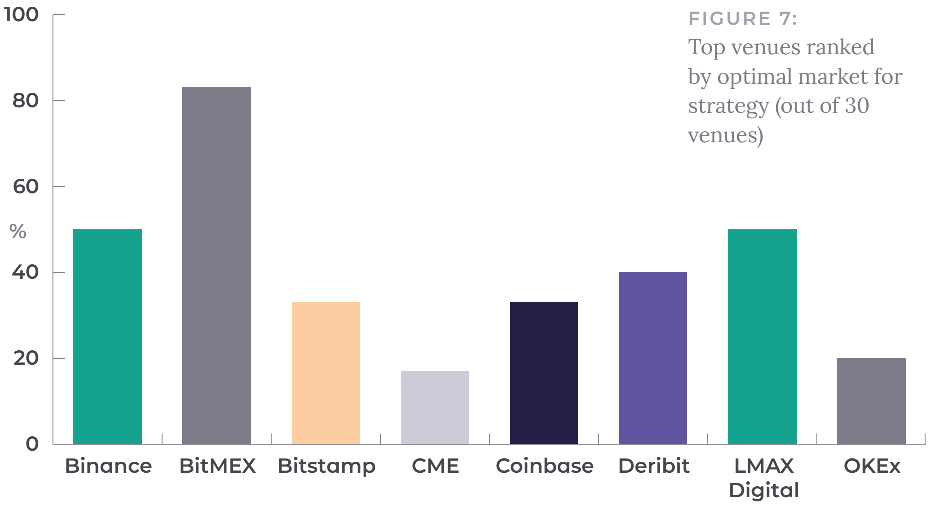


FIGURE 7:
Top venues ranked by optimal market for strategy (out of 30 venues)

Traditional trading firms were twice as likely as specialist crypto trading firms to be looking to expand the number of venues they were trading on reflecting the relative immaturity of the traditional market with regards to adoptions rates but also the opportunity for growth. Notably, 57% of traditional trading firms looking to expand their digital assets adoption were considering trading on specialist crypto venues.

Digital asset instrument preferences

When considering which digital asset to trade, respondents were asked to select three of their primary considerations out of *Liquidity*, *Volatility*, *Market Cap*, *Hosted on favoured exchanges*, *Belief in product*, *Arbitrage opportunities*, *Backed with real assets*, *Regulations to trade digital asset*.

The top three considerations were *Liquidity*, *Volatility* and *Arbitrage opportunities*. Surprisingly, *Arbitrage opportunities* was driven into the top three purely by traditional trading firms but not from crypto trading firms. This is linked with the priority of *Speed and performance* for traditional trading firms, suggesting a different trading dynamic from the crypto trading firms.

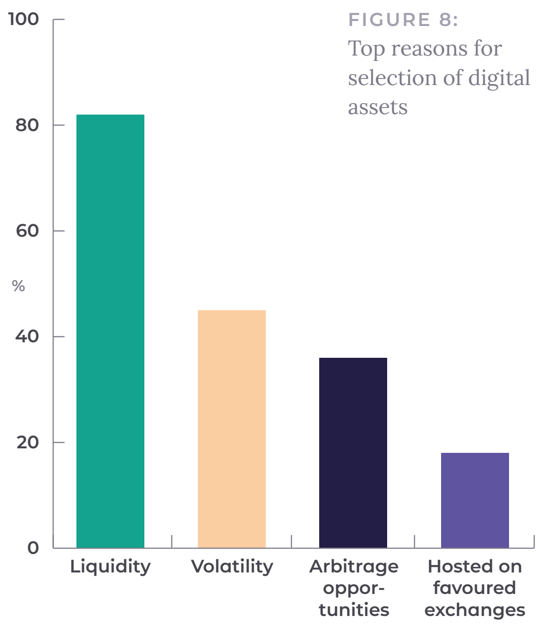


FIGURE 8:
Top reasons for selection of digital assets

Digital currencies

Respondents who trade digital assets selected their preferred currency pairs. The top five are shown in Figure 9. BTC/USD feature in each trading firm's preferred currencies and was followed by ETH/USD. Despite XRP being ranked as the 8th most popular digital asset, XRP/USD was ranked 5th.

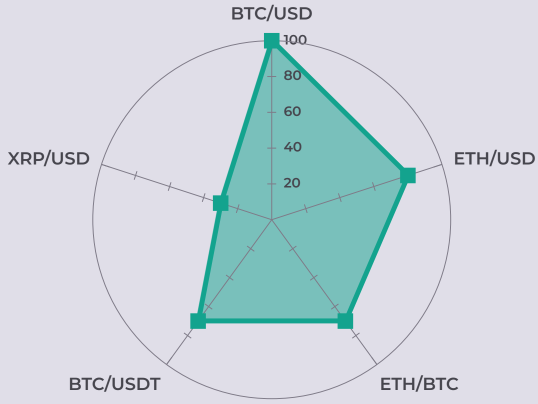


FIGURE 9:
Preferred currency pairs

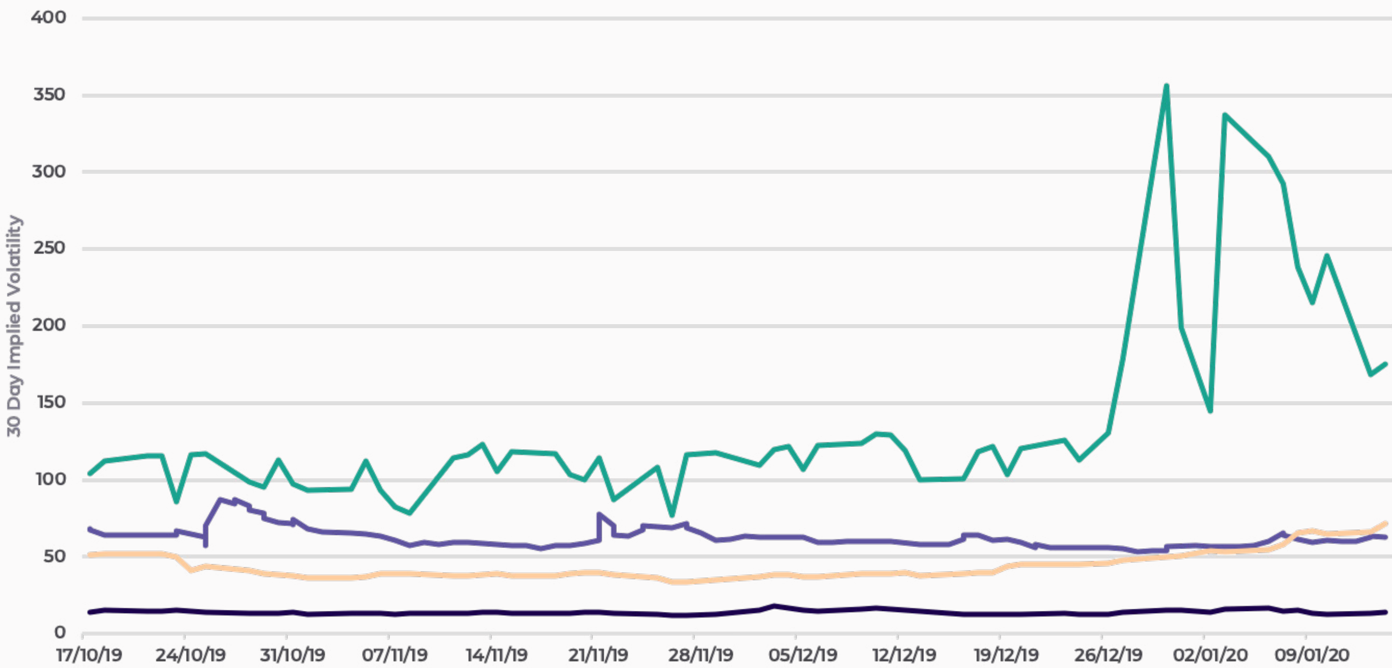


FIGURE 10:
Implied volatilty of Bitcoin compared to selected traditional assets

KEY:
Lilis Energy
Tesla
Bitcoin
VIX

Sources: marketcompare, yahoo! finance, skew.

The question of whether digital assets are relatively more or less profitable than traditional asset classes considering their comparative size was asked to traditional trading firms who trade digital assets and to specialist crypto trading firms that also trade traditional assets. 43% of traditional trading firms reported digital assets trading to be less profitable, contrasting sharply with specialist crypto trading firms, none of which reported digital asset trading to be less profitable.

There was a significant correlation between profitability and the number of exchanges that a firm traded on. Firms trading on ten or more exchanges found digital assets more profitable, in stark contrast to those trading on fewer exchanges with 60% citing lower profitability. For service providers offering digital assets, 20% said they were more profitable than traditional assets while 40% said it was less profitable.

What does the future hold?

Our survey suggests the digital assets market is on the cusp of significant growth from traditional trading firms. Current adoption rates are relatively low with less than a fifth of traditional firms surveyed trading digital assets. However, of those traditional trading firms who made a decision not to trade digital assets, 97% will consider the opportunity again in the next two years or less and 45% were planning to revisit the idea in six months or less.

To realise the potential of the market and meet the growing demand, greater adoption from sellside service providers is required. One of the key findings of our study was that firms trading on multiple digital assets exchanges were more profitable than those trading one or two. To enable wider-spread adoption, clearing firms and other service providers will have to expand their offerings to include a range of markets.

However, most sellside firms are understandably reluctant to offer access to a market unregulated by their home authorities. The precursor to expansion therefore is likely to be the catch-up of regulatory frameworks in the US and EU to encompass digital asset exchanges and create more regulated markets.

This will grow the overall pie to the benefit of all participants. The future of digital asset trading is likely to be fragmented with opportunities created by market structure as much as market movement. CME and the traditional derivatives markets will sit alongside regulated digital assets exchanges creating a vibrant and dynamic market for trading.

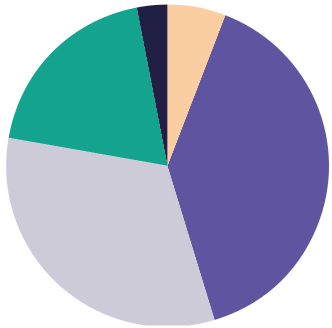


FIGURE 10:
When respondents who decided not to trade digital assets will reconsider the decision

KEY (WITHIN):
- 3 months
- 2 years
- 6 months
- Never
- 1 year

> "At Bitstamp, we're providing institutional participants with a basket of liquidity and custody services structured around the highest standards of compliance and bringing crypto closer to retail clients indirectly – by allowing retail finance companies, such as banks, the ability to offer crypto exposure through their existing platforms without actually touching the assets themselves. We call that crypto as-a-service," says Chris Aruliah, VP of Banking Relations, Bitstamp

Methodology: Acuiti survey 86 senior executives across the sellside, proprietary trading firms and the buyside. Respondents from non-bank FCMs, proprietary trading firms and the buyside tended to be C-suite while for banks and brokers, most respondents were heads of function at managing director level. To generate the exchange rankings, all responses where a firm was trading ten or more exchanges were included and the percentage was then calculated for each exchange that featured in a respondents top three when asked to consider which exchange was most optimal for their trading strategy.

Methodology for Fig 1: Acuiti Derivatives Volume Index is the exchange traded volumes over selected major indices worldwide. 1 Bitcoin future contract is equal to 5 lots on CME and 1 lot on Bakkt. This has been converted in the graph so that it is comparable with volumes on other exchanges.

Methodology for Fig 2: Adoption rate relative to demand = Adoption rate %/Demand %

CME Bitcoin Futures and Options Reach New Milestones

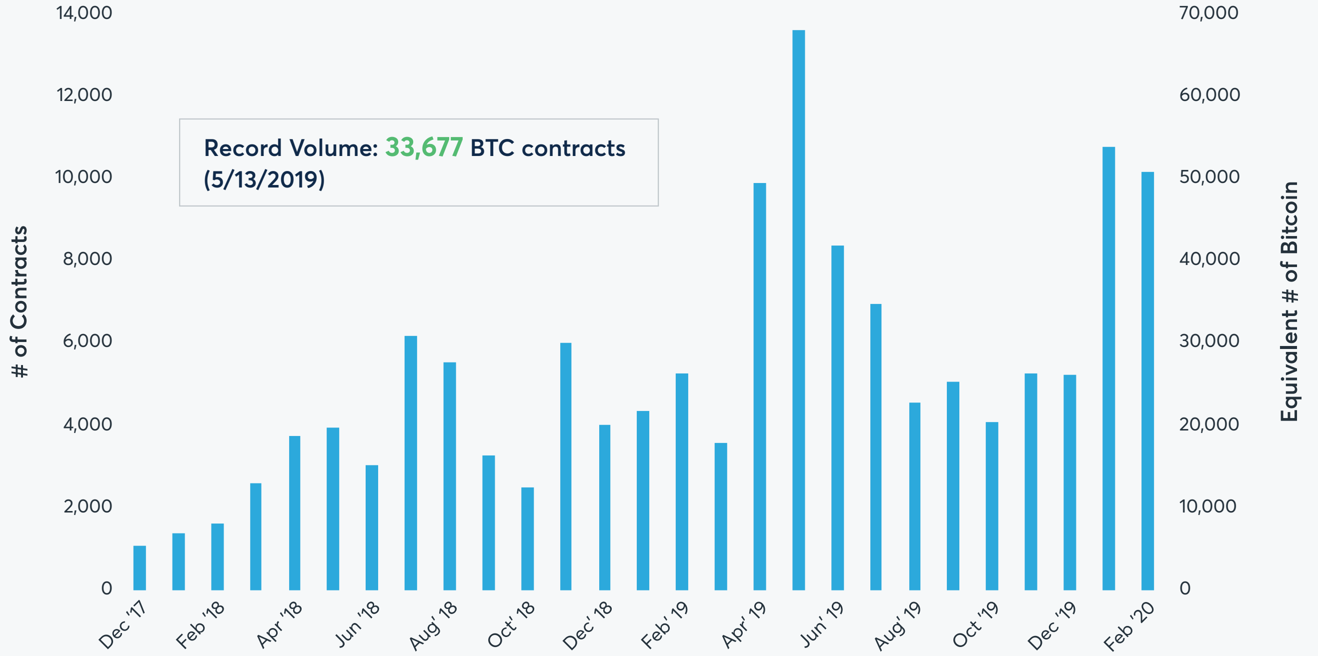
BY TIM MCCOURT, MANAGING DIRECTOR AND GLOBAL HEAD OF EQUITY PRODUCTS AND ALTERNATIVE INVESTMENTS

Since we launched CME Bitcoin futures in December 2017, a wide range of market participants have rapidly adopted our futures contracts for their hedging and trading needs. Our Bitcoin futures are now one of the most liquid, listed bitcoin derivatives available globally. We've seen strong participation from institutional investors, physical bitcoin traders and other clients who value the transparency, price discovery and risk transfer that only a regulated marketplace like CME Group can offer. In fact, in the survey from this whitepaper, market participants said liquidity, integrity and security were the most important factors in selecting an exchange.

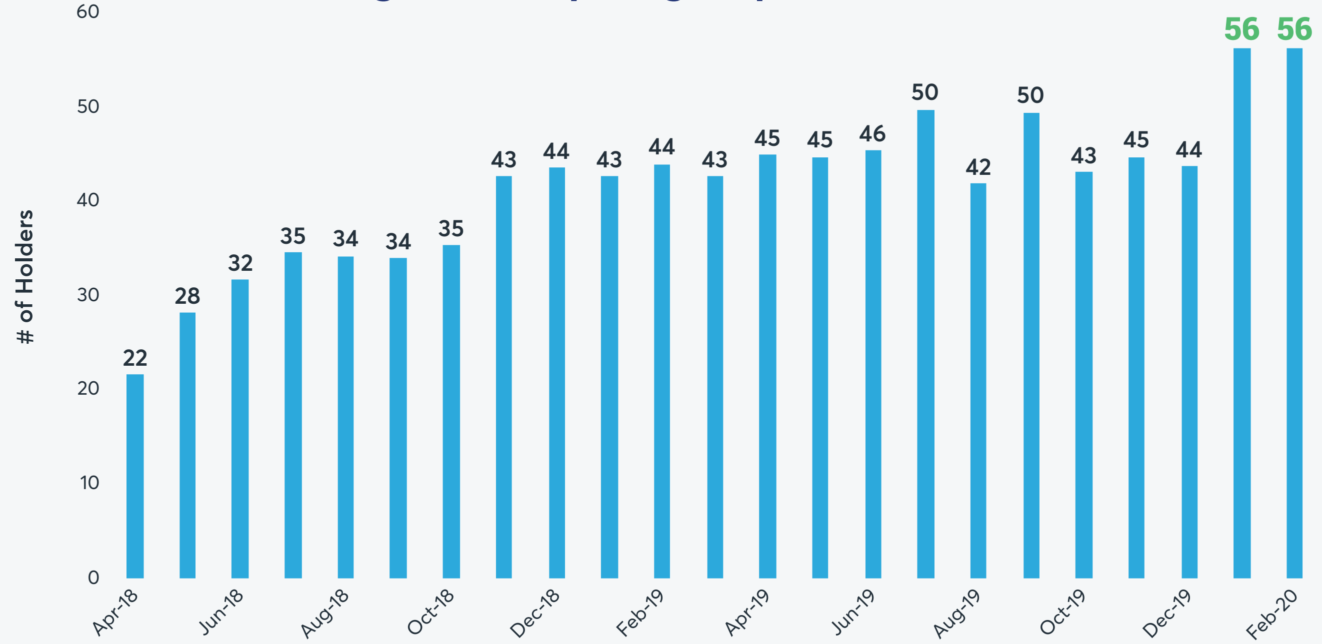
Increased liquidity and participation in our Bitcoin futures markets means clients can more efficiently get in and out of positions when they need to. Our markets offer clients strong liquidity nearly 24 hours a day, with half of all trades coming from outside the US during 2019. Nearly 4,000 individual accounts have traded our futures since launch, including approximately 1,600 new accounts in 2019, which suggests a variety of participants are using our markets to trade or hedge bitcoin price risk.

Through February 2020 YTD, nearly 10,500 Bitcoin futures contracts (representing 52,360 equivalent bitcoin) traded daily at CME Group – 119% higher than the 2019 average daily volume during the same period. Average daily open interest grew to 5,627 contracts (representing 28,135 equivalent bitcoin) in February, up 37% from 2019 open interest. The average number of large open interest holders (firms holding at least twenty-five open positions) also increased to 56 in both January and February, a sign that institutional interest continues to build.

CME Bitcoin Futures Average Daily Volume by Month



CME Bitcoin Futures
Average Monthly Large Open Interest Holders



Our recently launched options on CME Bitcoin futures build on the robust, liquid underlying futures market that has developed over the last two years. Over the first month of trading, over 600 CME Bitcoin options contracts (3,000 equivalent bitcoin) were traded.

Looking ahead, we'll continue working with clients to ensure we offer the right tools and flexibility they need to trade and hedge their bitcoin price risk.

To learn more about CME Bitcoin futures and options, please visit cmegroup.com/bitcoin

CME Group

Bitstamp is where crypto enters the world of finance

As the world's longest-running cryptocurrency exchange, Bitstamp provides a secure and transparent trading venue to four million individuals and institutions worldwide.

Bitstamp supports trading of Bitcoin, Ethereum, XRP, Litecoin and Bitcoin Cash paired with USD, EUR and BTC

2019 Total Volume: **$39 B**

Daily trades: **51,000**

Average daily volume: **$106 M**

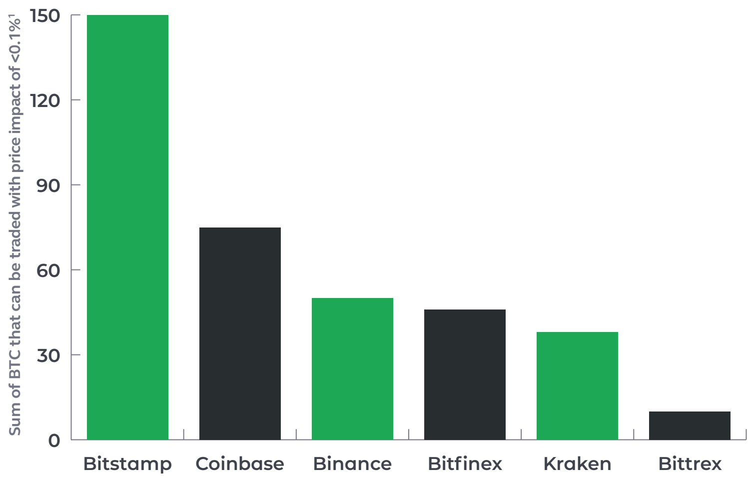
Enabling institutional adoption through deep liquidity and authoritative price

With liquidity consistently being recognized as the #1 factor institutional traders consider when choosing which markets to enter, Bitstamp has proven to be one of the top trading venues for large and sophisticated players, due to their deep order books, low spreads and ability to match large orders without destabilizing price.

But liquidity is not the only topic that needs to be addressed to bring cryptocurrency markets closer to traditional finance. Bitstamp has proven to be one of only 10 crypto exchanges that "demonstrated the integrity of pricing, volumes, valuations and infrastructure to be deemed as 'trustworthy' for investors."[2] As the world's longest-running bitcoin exchange, Bitstamp recognized early on that the long-term maturation of crypto markets can only be achieved through greater customer protection, transparency and market integrity.

That's what led the Bitcoin pioneer to become the first crypto exchange to receive a payment institution license in the EU, demonstrating their commitment to building towards market maturity through compliant operations.

Today, Bitstamp features licensed entities in the EU and US and offers its global client base a trading venue with 100% real volumes, accurate pricing, highly reliable infrastructure and liquidity especially suited for institutional traders.



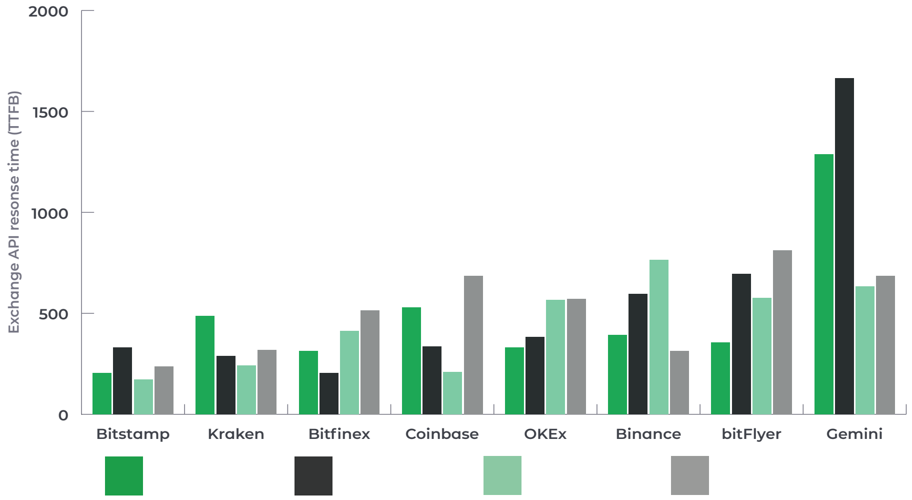
1 Crypto Integrity: True liquidity and price discovery in crypto space, Apr 2019
2 Digital Asset Research: Quarterly analysis for trading venues, Nov 2019

Trade on markets that never close

Get in touch:
partners@bitstamp.net

Bridging the technology gap between crypto and traditional finance markets

Bitstamp is leading the charge when it comes to bringing exchange infrastructure in crypto on par with traditional finance. The Bitcoin pioneer's APIs have the fastest response times in crypto[3] and the underlying infrastructure has proven its reliability with almost uninterupted operations throughout the 2017/18 crypto rush. Combine that with robust banking rails, including the option for select clients to settle payments 24/7/365, and the result is a fast, reliable and stable trading venue.

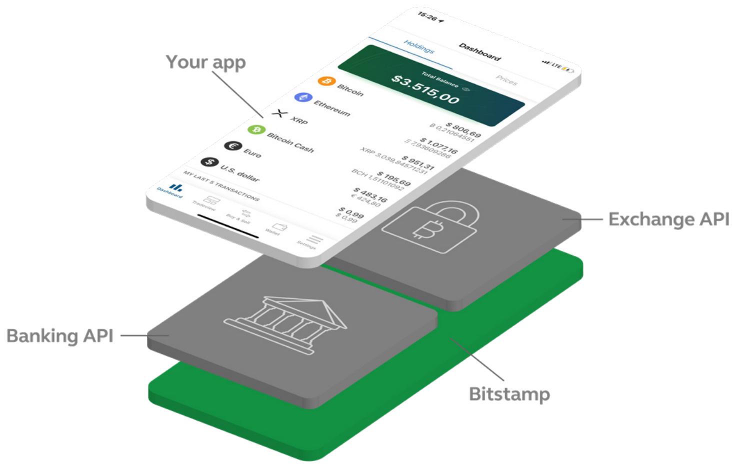


3 CryptoCompare: Exchange Benchmark

Banks and brokers expanding their offerings with Crypto as a Service

For financial service providers not yet active on digital asset markets, offering crypto exposure to their clients has become as simple as buying a service. All businesses need to do is create the crypto user experience on their platforms, while Bitstamp takes care of everything else.

Instant liquidity, order matching and custody are all provided by Bitstamp. The CaaS system is designed for fully automated and compliant operations, with implementations adapted to the exact operational demands of each partner.



Create your own products with Crypto as a Service

Get in touch:
partners@bitstamp.net

Institutional Adoption of
Digital Asset Trading

March 2020

acuiti.io