

CoinRoutes Presentation to SEC Division of Trading and Markets: Jan 13, 2020



Executive Summary



The market for trading Bitcoin has advanced to the point where exchange traded funds holding Bitcoin should be approved.

Using CoinRoutes software, we can prove the superiority of the underlying Bitcoin market relative to many commodities ETFs already approved. The factors compared are: transparency, liquidity, safety, and cost to invest.

Holding back approval of a Bitcoin ETF disadvantages retail clients, forcing them into higher cost & higher risk methods in order to gain exposure to the asset.



Characteristics of Investable Markets



Transparency -- Investable markets should feature displayed, executable prices from widely available platforms

Liquidity/Low Cost -- Investors should be able to buy or sell the asset for low fees and/or bid/offer spreads, with certainty, even for significant quantities of the asset.

Asset Safety -- Assets, once purchased, should be protectable from theft or loss.



Bitcoin Markets are Transparent



CoinRoutes displays a real-time montage of quotes from markets selected by our clients:

- Clients can limit quotes to regulated markets accessible to a particular geography
- Only electronically executable quotes are included

BTC-USD					
Bids			Asks		
Bid Exch	Bid Size	Bid	Ask	Ask Size	Ask Exch
itbit	2	7836	7831.98	0.002	okcoin
kraken	2.2852	7834.9	7833.18	1.157	gdax
gemini	2	7833.82	7835	0.5828	kraken
binanceus	0.7997	7833.58	7835.63	0.2	bittrex
gdax	3.3007	7833.17	7836.25	0.1662	itbit
okcoin	0.01	7831.36	7837.38	0.9845	gemini
bitstamp	0.5832	7829.28	7838.87	0.0013	binanceus
bittrex	0.039	7824.008	7839.26	1.3926	bitstamp



Bitcoin Markets are Transparent



Most publicly accessible & financially regulated markets provide feeds for their full order book via API and show their books via widely distributed user interfaces

- Unlike other markets, all regulated Bitcoin markets give away this data for free in order to promote trading
- CoinRoutes collects and processes from 8-10 Terabytes of data every day from over 40 markets to create consolidated order books for use by our trading algorithms and for our clients directly.



Bitcoin Markets are Liquid



CoinRoutes can also show the cost to buy or sell a fixed amount of Bitcoin from selected markets, including all fees.

- This query shows the cost to buy \$5 million of Bitcoin, taking roughly 1 millisecond to compute
- Coinroutes has constructed a real-time price feed based on this technology which could be broadcast by ETF listing exchanges

Summary Stats			
7857.155822 Best Price	318 Executions	636.3626 Quantity	5000000.000000 Net Consideration

Composite Order Book	
7828.230000000 First price	7872.540000000 Last price

Exchange Summary	
7848.485391 Average Price	5517.538072 Total Fees

Exchange	Quantity	Average Price	SOR Limit Price	Net Consideration
Gdax	174.881288	7845.715322	7862.270000000	1374126.905980
Gemini	84.353258	7848.336622	7866.110000000	662694.797070
Kraken	179.519811	7850.869812	7866.100000000	1410796.055095
Itbit	28.867782	7840.546402	7846.250000000	227131.370800
Okcoin	56.456400	7846.396887	7872.540000000	442979.321196
Binanceus	14.127927	7851.683350	7866.330000000	111038.937208
Bittrex	6.345671	7842.073055	7849.691000000	49887.621481
Bitstamp	91.810449	7852.967802	7870.350000000	721344.991171



Bitcoin Markets are Liquid



This shows the cost to sell \$5 million of Bitcoin:

- It was run at the same time as the previous query
- This shows that the total spread to trade \$5 million of Bitcoin is roughly \$40 per coin before fees, just under \$58 per coin with retail fees.
- This is a spread of under 0.75%, which compares quite favorably to most underlying commodities & many equity baskets.

Summary Stats			
7799.446777 Best Price	328 Executions	641.0711 Quantity	5000000.000000 Net Consideration

Composite Order Book	
7835.10000000 First price	7777.67000000 Last price

Exchange Summary				
7808.721014 Average Price	5945.445147 Total Fees			
Exchange	Quantity	Average Price	SOR Limit Price	Net Consideration
Gdax	174.510244	7810.409285	7788.19000000	1360951.938593
Gemini	127.675784	7808.130491	7784.70000000	995912.269906
Kraken	181.959183	7809.280499	7785.00000000	1419549.331972
Itbit	38.290268	7816.615779	7805.75000000	298252.761767
Okcoin	35.482600	7805.163019	7777.67000000	276947.477333
Binanceus	14.089736	7805.816912	7785.06000000	109871.917650
Bittrex	3.594160	7806.844929	7796.60100000	27988.902925
Bitstamp	65.469134	7801.856503	7780.11000000	510525.399855



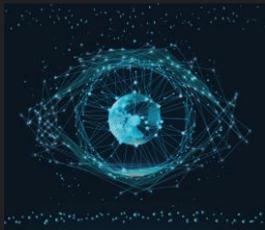
Bitcoin can be Held Safely



Investors / Issuers have several options to purchase and hold physical bitcoin:

- Exchanges -- Many offer insurance against loss & contractual custodial services
 - Note that none of the US regulated exchanges have lost client funds. All the news reports of exchange hacks resulting in losses were overseas.
- Custodians -- There are several independent custodians providing secure services to investors
- Self Custody -- Several vendors have emerged to provide solutions to investors that want to hold their own keys

Bottom Line -- An ETF Issuer COULD be in position to guarantee their Bitcoin Assets. Disclosures about how they do so & what insurance they have should, of course, be required.

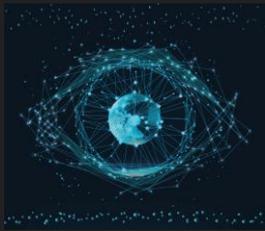


Bitcoin Futures are Safe



An ETF based on Bitcoin Futures would be as safe as commodity ETFs

- CME Bakkt (ICE) are both CFTC approved, household names, providing enough liquidity to handle a successful ETF.
- Asset safety at either venue is as certain as with Gold, Silver, Oil or other commodity ETFs



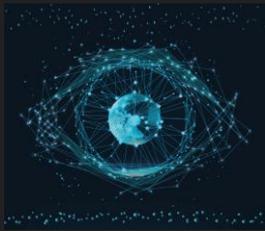
Other “Issues” are Distractions



Claims of overseas manipulation are irrelevant:

- Everyday, there are exchanges with prices higher or lower than those that are regulated in the U.S. -- Those prices are ignored.
- This chart shows how Exmo, as one example, routinely shows prices 300-400 above the U.S. regulated markets, but that does not matter.





Other “Issues” are Distractions



Claims of false volumes only matter if those volumes factor into ETF pricing

- If ETFs are priced by using executable quotes, then false volumes would not matter.
 - None of the U.S. regulated markets have been accused of false volumes
 - Pricing, such as offered by CoinRoutes relies solely on executable quotes & can be customized to include markets trusted by an ETF issuer
- If ETFs are priced based on regulated futures markets, then false volumes on overseas spot markets would not matter



Investors are being Harmed



Unsophisticated retail investors have options to invest in Bitcoin that are inferior to a Bitcoin ETF, which means that the lack of such a product harms them directly.

An ETF would likely trade inline with its NAV, for zero commissions & have a spread of 0.1% or less. That compares to current options which include:

- Greyscale Bitcoin Trust (GBTC) can be traded through any online broker, but it trades at > 20% premium to its NAV & has a 2% management fee & a spread of 0.3%
- Bitcoin spot directly via retail platforms. Fees or spreads on most retail platforms range from roughly 0.8% (for a \$1000 order) to over 1.5%. Also, note that none of these accounts feature the robust investor protections of securities brokers.