



EXCHANGE REVIEW

DECEMBER 2019



Abstract

CryptoCompare's Exchange Review aims to capture the key developments within the cryptocurrency exchange market. Our review focuses on analyses that relate to exchange volumes, which include those related to crypto derivatives trading, market segmentation by exchange fee models, and crypto to crypto vs fiat to crypto volumes.

We also conduct an analysis of bitcoin trading into various fiats and stablecoins, an additional overview of top crypto exchange rankings by spot trading volume, as well as a focus on how volumes have developed historically for the top trans-fee mining and decentralized exchanges.

CryptoCompare's Exchange Review is conducted on a monthly basis and caters to both the crypto-enthusiast interested in a broad overview of the crypto exchange market, as well as investors, analysts and regulators interested in more specific analyses.

For questions related to our research or any potential requests, feel free to contact our research department at research@cryptocompare.com.

View the interactive Exchange Review Dashboard:

Exchange Review **Dashboard**

For those interested in accessing CryptoCompare's data for their own purposes, including cryptocurrency trade data, order book data, blockchain data, social data or historical data across thousands of cryptocurrencies and 200+ exchanges, please take a look at CryptoCompare's API here: <https://min-api.cryptocompare.com>

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Executive Summary

Macro Analysis and Market Segmentation

- Exchange Benchmarking Analysis** – Based on [CryptoCompare's Exchange Benchmark](#) grading methodology, on aggregate, volume from Top-tier exchanges (AA-B) decreased 26.26% while volume from Low-tier exchanges (C-F) decreased 19.9%. Aggregate Top-tier exchange volume still only represents 27.4% of the total market.
- Trade Data Analysis** - Exchanges Bitforex, HitBTC and EXX showed the largest trade sizes relative to other top exchanges at an average of 1.91, 1.3 and 0.98 BTC respectively on BTC/USDT markets. Exchanges Bibox and Liquid (BTC/JPY market) saw the highest average trade count per day in December at 347k and 319k trades per day respectively.
- Predominant Fee Type** - Exchanges that charge taker fees represented 73% of total exchange volume in December, while those that implement trans-fee mining (TFM) represented 25%. Fee-charging exchanges traded a total of 318.75 billion USD in December (down 18.2% since November), while those that implement TFM traded 108.87 billion USD (down 30.6% since November). The remaining volume represented trading by exchanges that predominantly charge no trading fees, at 4.16 billion USD.
- Derivatives (Institutional Products)** - Regulated bitcoin derivatives product volumes are still dominated by CME, whose total trading volumes are down 6.2% since November at 3.96 billion USD. CME's bitcoin futures product volumes decreased from a total of 4.22 billion USD traded in November to a total of 3.96 billion USD traded in December. Meanwhile, Grayscale's bitcoin trust product (GBTC), decreased in terms of total trading volume with 394.72 million USD traded in December (down 19.6% since November).
- Derivatives Trading (Crypto Exchanges)** – During the month of December, OKEx represented the majority of daily derivatives volumes trading at \$3.32Bn per day (35.8% market share) followed by Huobi (2.7Bn, 29.16%), BitMEX (\$1.9 Bn, 19.7%) and Binance (\$797 Mn, 11.4%). Smaller exchanges Deribit, and CryptoFacilities (FCA-regulated) represented (\$200.3Mn, 2.1%) and (\$34.8Mn, 0.38%) of the market respectively.

Top Products

In December, the most traded products by total monthly volume were BitMEX's BTC perpetual future (\$53.1 Bn) and Huobi's Quarterly BTC Future (\$42.4 Bn), followed by Binance's BTC perpetual future at \$29.4 Bn. On average, these three products traded \$1.7Bn, \$1.3Bn and \$948Mn per day in December.

BTC Perpetuals

In December, BitMEX and Binance represented most of the BTC perpetual futures market volume at \$1.7 Bn (40%) and \$947 Mn (22.5%) per day respectively on average. In terms of total monthly volume, BitMEX traded \$53.1 Bn (down 20% since November while Binance traded a total of \$29.3 Bn (down 8.9%).

ETH Perpetuals

BitMEX represents the majority of ETH perpetual futures volumes at 44% of the total market (\$3.6 Bn in monthly volume). This is now followed by Binance and OKEx at \$1.9 Bn and \$1.7 Bn respectively.

- Fiat Capabilities** - Trading volume from exchanges that offer only crypto pairs represented 78.8% (\$340.29 Bn) of total trading volume in December, while fiat to crypto exchanges represented 21.0% (\$91.5 Bn). This is similar in proportion to the previous two months.

- 7 **Bitcoin to Fiat Volumes** - In December, 70% of all Bitcoin trading into fiat was made up of the US Dollar. BTC to USD volumes decreased, from 922,000 BTC in November to 835,000 BTC in December (down 9.0%). Meanwhile, BTC trading into JPY represented 715,000 BTC in December (down 11.0% since November), while BTC trading into EUR represented 222,000 BTC (down 3.0% since November). In December, JPY, EUR, KRW and PLN made up 95% of total trading from Bitcoin into fiat.
- 8 **Bitcoin to Stablecoin Volumes** – BTC trading into USDT totalled 7.76 million BTC (down 19.95% since November). In December, BTC trading into USDT represented 76.19% of total volume (traded into fiat or stablecoin). USDT continues to be the most popular stablecoin for trading with Bitcoin, followed by USDC, PAX and TUSD.

Exchange Volumes

1. **Top Crypto to Crypto Exchange Volumes** – Bitforex was the top crypto to crypto exchange by total volume in December at 35.64 billion USD (up 5.37% since November). This was followed by CoinBene and LBank at 27.3 billion USD (down 11.57%) and 25.58 billion USD (down 9.83%) respectively.
2. **Top Fiat to Crypto Exchange Volumes** - P2PB2B was the top fiat exchange by total volume in December at 27.54 billion USD (down 11.09% since November). This was followed by Coinsbit and Bithumb at 23.26 billion USD (up 42.04%) and 5.06 billion USD (down 31.86%) respectively.
3. **Trans-Fee Mining Exchanges** – Bitforex was the top TFM exchange by total volume in December at 35.64 billion USD (up 5.37%), followed by CoinBene at 27.3 billion USD (down 11.57%) and Bibox at 18.26 billion USD (up 38.87%).
4. **Decentralized Exchanges** - IDEX was the largest DEX in December trading a total of 8.02 million USD (up 12.75%), followed by DDEX and BitSquare trading 3.66 million USD (down 73.66%) and 2.82 million USD (down 14.44%) respectively. DEXs represent only a small fraction of global spot exchange volume (0.01%), trading a monthly total of 17.63 million USD in December.

December Exchange News

COMPANY	STORY	DATE
Bakkt	Expanding the Bakkt Bitcoin Product Complex	Dec 9
Kraken	Earn a 6% Return Staking Tezos, Available on Kraken	Dec 11
Binance	Binance Announces Latin American Fiat Gateway	Dec 12
Gemini	State Street and Gemini Launch Digital Asset Pilot	Dec 17
Kraken	Kraken OTC Acquires Circle Trade	Dec 17
Binance	Binance Futures Launches BCH/USDT Contracts with 75x Max Leverage	Dec 19
Binance	Binance Announces Strategic Investment in Cryptocurrency Derivatives Exchange FTX	Dec 20
OKEx	OKEx rolls out bitcoin options trading for select clients	Dec 26

December Exchange News

December closed off an impressive year for crypto exchanges, marked by a massive step forward in the maturity of the digital asset space. As a result, we've seen far greater professionalisation of the products and services offered by major exchanges, greater competition among the trading venues and increased maturity among market participants. The final month of the year showed no signs of slowing progress with several important announcements. Let's look at some of the key themes from the month.

Fiat on-ramps

The ability to onboard fiat currencies into the crypto markets has long been a major source of friction. However, exchanges have been rolling out new gateways to address the time, cost and security implications of transferring funds. Most active in this area has been Binance, which has continued to pursue its recent strategy of opening up crypto trading to emerging markets. The exchange announced the launch of a fiat gateway for Latin America, which allows users in the region to buy crypto with the Argentine Peso and the Brazilian Real, along with a strategic partnership with peer-to-peer marketplace Paxful to increase payment options in other world currencies.

In other news, Kraken announced that it would be supporting the Swiss Franc – historically seen as a 'safe haven' currency due to its relative stability – as the sixth currency pair available to buy and sell crypto on the site. Additionally, Bitfinex announced it would begin accepting direct payments in credit and debit cards for crypto purchases.

Altcoin futures

The month saw several announcements around leveraged trading of major altcoin pairs. The availability of leverage on altcoins has been constrained in the past due to the volatility and often lack of liquidity, which creates the risk of a market collapse. Traders of MATIC on Binance, who were able to trade with 5X margin, experienced this recently following a dramatic run-up. Undeterred, Binance announced it would be allowing up to 75X leverage on trading on Bitcoin Cash (BCH) futures. Similarly, OKEX announced the launch of futures contracts for major alts including LTC, XRP and ETC with up to 50X leverage.

Exchange partnerships and integrations

As competition among exchanges for market share intensifies, exchanges have been pursuing aggressive business development strategies. Most notably, Binance announced a significant investment in up-and-coming trading platform FTX. The move has immediately seen FTX's own FTT token become available for trading on the Binance platform.

Gemini, long positioned as a reliable venue for US-based institutions, announced a partnership with State Street to launch a pilot digital asset custody service, which includes custody for cryptocurrency and tokenized securities. Kraken announced the acquisition of Circle Trade's OTC desk in order to offer deeper liquidity to large investors.

Options trading

The month saw progress in the range of products being offered for more sophisticated investors. Options, a major hedging strategy in more traditional markets, have been eagerly anticipated in crypto for a long time. Bakkt has taken a lead in this by offering monthly Bitcoin options contracts to its users, while OKEX is rolling out the service for select users ahead of a public launch in January.

Staking services

Staking was one of the strong themes across 2019, as more cryptoassets offer staking rewards to holders. Crypto exchanges have been capitalising on this feature by offering a fee-free way for users to stake without the need for separate custody services. Kraken announced staking for Tezos (XTZ) with a 6% yield, while Poloniex – recently acquired by TRON founder Justin Sun – announced staking for TRX tokens with as much as 50% yield.

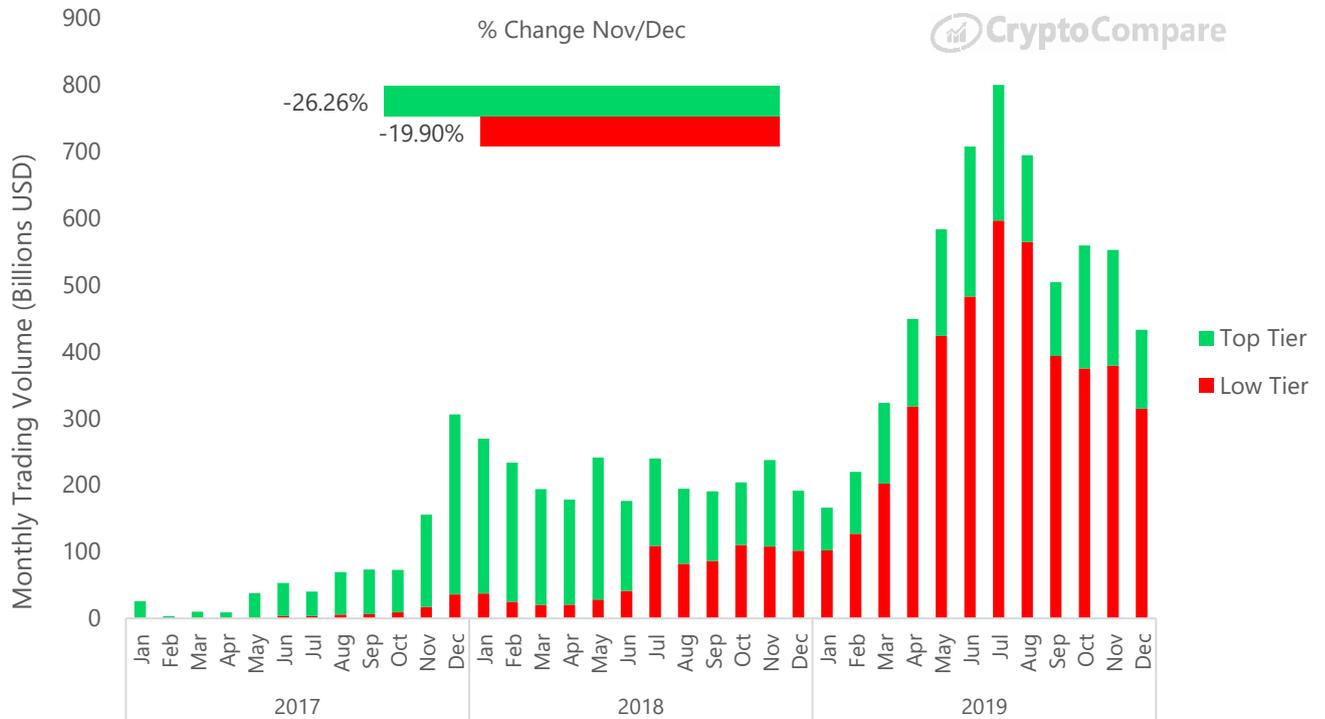
Exchange Benchmarking Analysis

CryptoCompare's Exchange Benchmark aims to serve investors, regulators and crypto enthusiasts by scoring exchanges in terms of transparency, operational quality, regulatory standing, data provision, management team, and their ability to monitor trades and illicit activity effectively. Rather than drawing attention specifically to bad actors, we instead highlight those that behave in a manner that is conducive to maintaining an efficient and fair market, ensuring greater safety of investors. We have hence introduced the notion of "Top-tier" vs "Lower-tier" volumes.

Explore the Exchange Benchmark [here](#)

1 Aggregate Monthly Exchange Volumes

Figure 1 Aggregate Monthly Volume by Tier

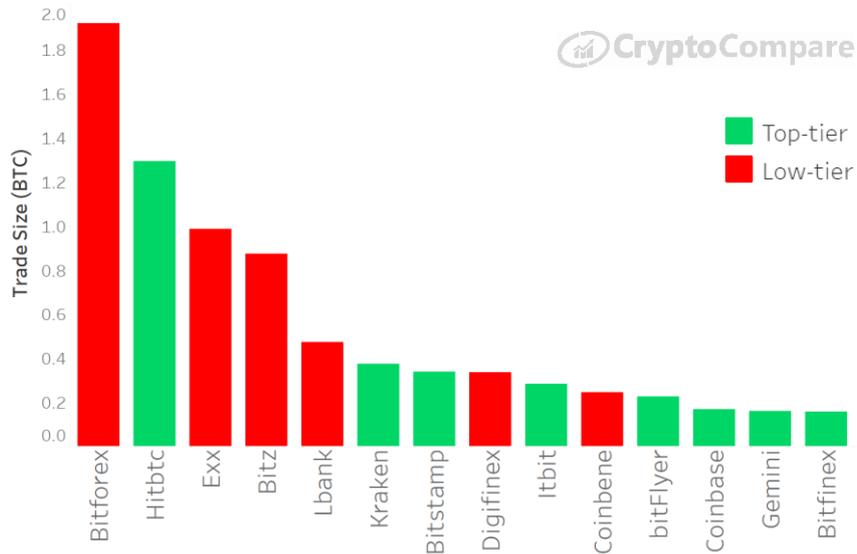


On aggregate, volume from Top-tier exchanges (AA-B) decreased 26.26% while volume from Low-tier exchanges (C-F) decreased 19.9%.

Aggregate Top-tier exchange volume still only represents 27.4% of the total market.

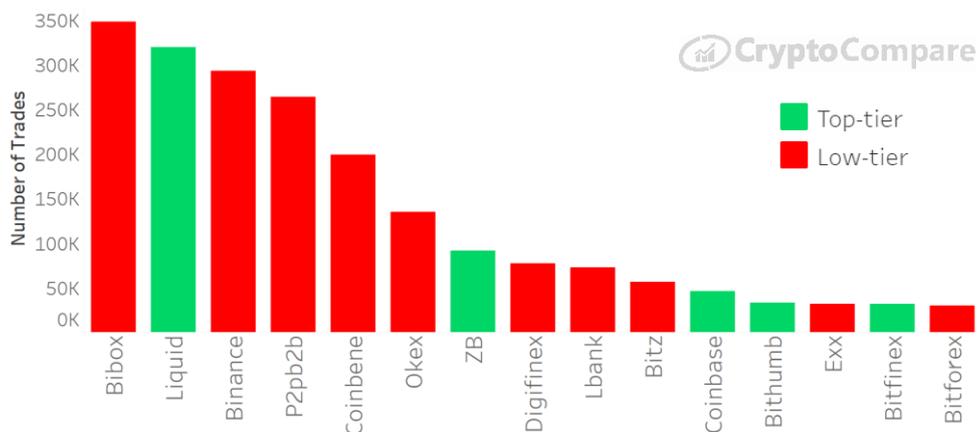
2 Trade Data Analysis by Tier Level

Figure 2 - Average Daily Trade Size (BTC) in December vs Tier Level – BTC Markets¹



Exchanges Bitforex, HitBTC and EXX had the largest trade sizes relative to other top exchanges at an average of 1.91, 1.3 and 0.98 BTC respectively.

Figure 3 - Average Daily Trade Count in December vs Tier Level - BTC Markets²



Exchanges Bibox and Liquid saw the highest average trade count per day in December at 347k and 319k trades per day respectively.

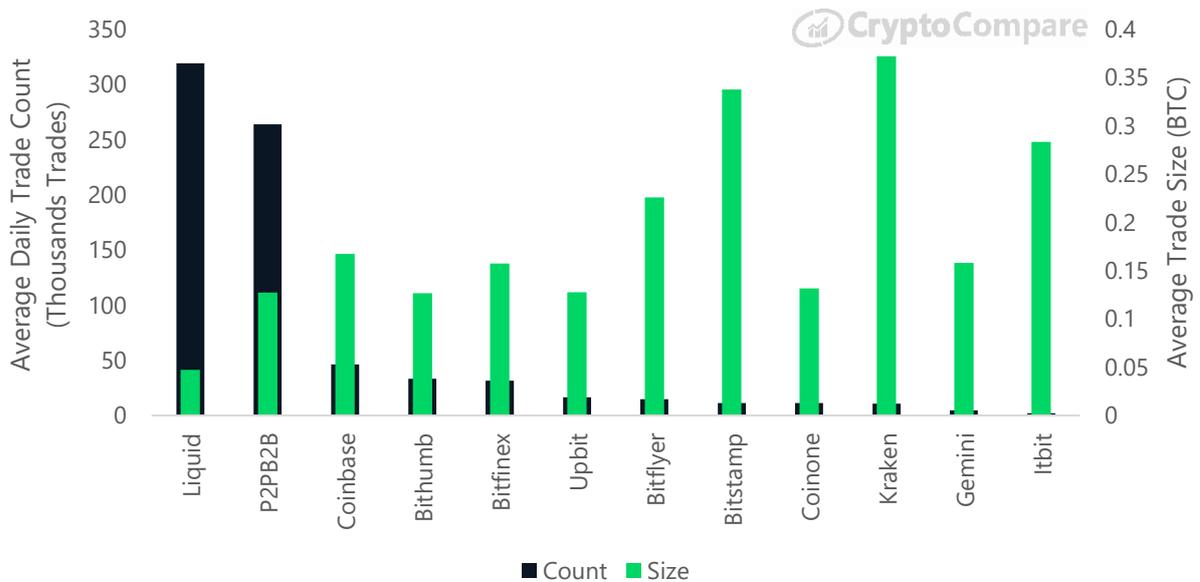
¹ Average daily trade size was calculated based on the daily average trade size for market, and then averaged over the course of a month of December. Markets vary for each exchange and include: BTC/USD, BTC/USDT, BTC/KRW, and BTC/JPY

² Average daily trade count was calculated based on the trade count per day, average over the month. Same markets as above.

Trade Data Analysis – Top Exchanges

1 Trade Count and Size

Figure 4 - Trade Count and Size - Top Crypto to Fiat Exchanges by Volume in December

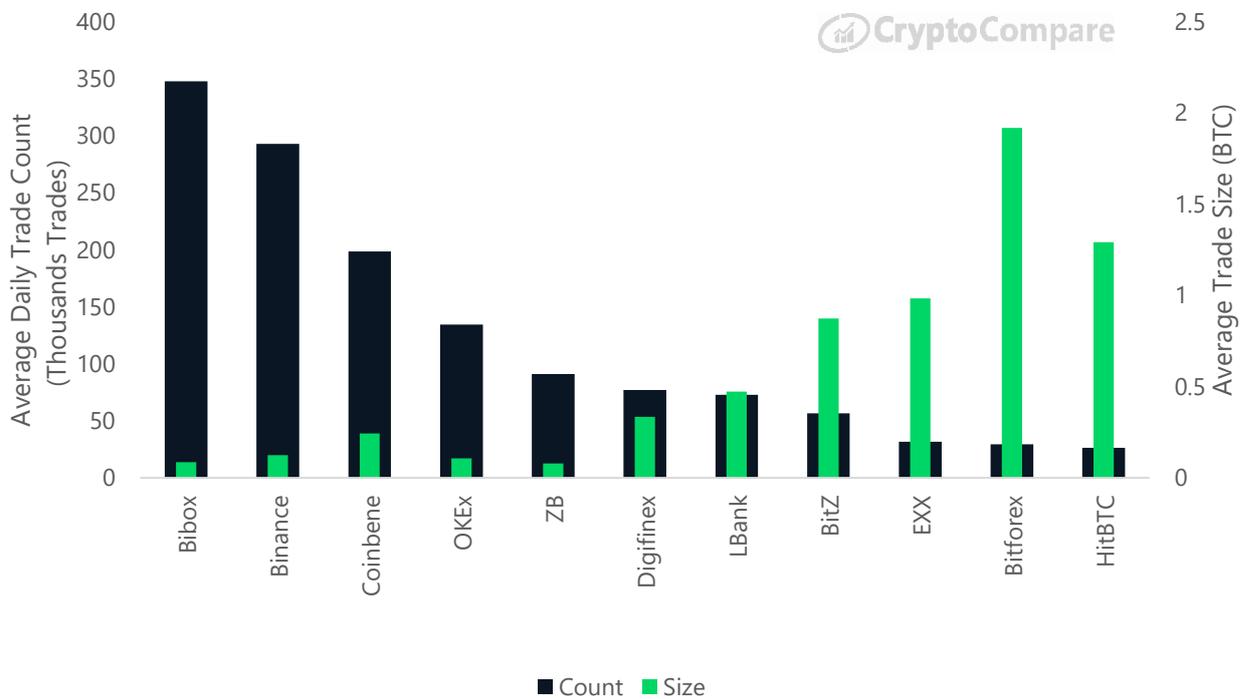


*Note, the above chart analyses data from bitcoin trading into the most relevant fiat currency for each exchange. For example, Liquid's numbers refer to its BTC-JPY market while those of Coinbase refer to its BTC-USD market etc.

Among the top fiat exchanges, Liquid had the largest average daily trade count (320k trades) combined with a low average trade size (0.04 BTC).

Exchanges P2PB2B, Coinbase and Bithumb followed with fewer trades per day (263.9k, 46k and 33k respectively) combined with higher trade sizes (0.12, 0.16, 0.12 BTC respectively).

Figure 5 - Trade Count and Size - Top Crypto to Crypto Exchanges by Volume in December



*Note, the above chart analyses data from bitcoin trading into USDT for each exchange.

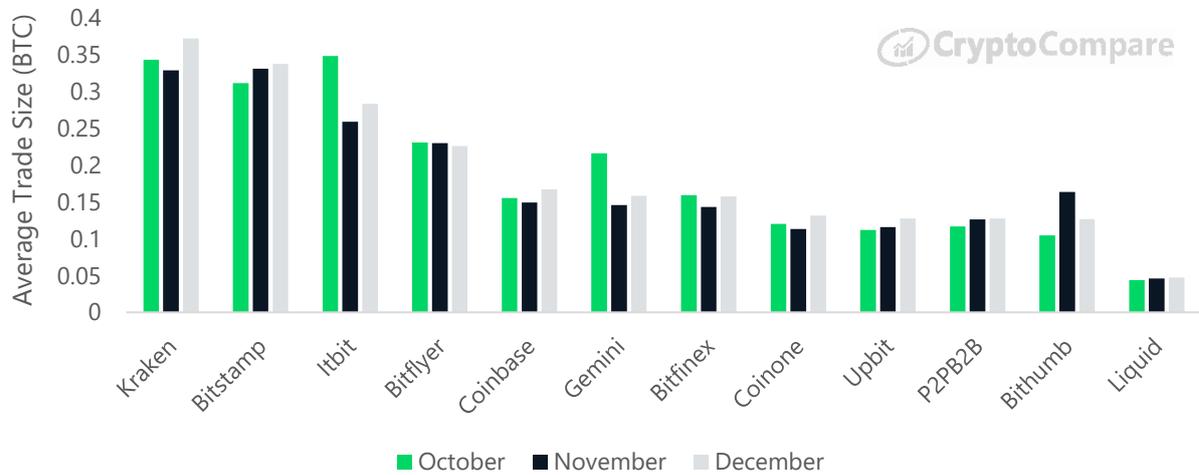
Among the top crypto exchanges, Bibox had the largest average daily trade count (347k trades) combined with a low average trade size (0.177 BTC).

This was followed by Binance (292k trades and 0.12BTC) and Coinbene (198k trades and 0.24BTC).

BitForex showed significantly larger trade sizes relative to the same group at 1.92 BTC, with 29.5k trades per day on average. HitBTC, as well as trans-fee mining exchange EXX also showed relatively high average trade sizes at 1.29 BTC and 0.98 BTC per trade respectively.

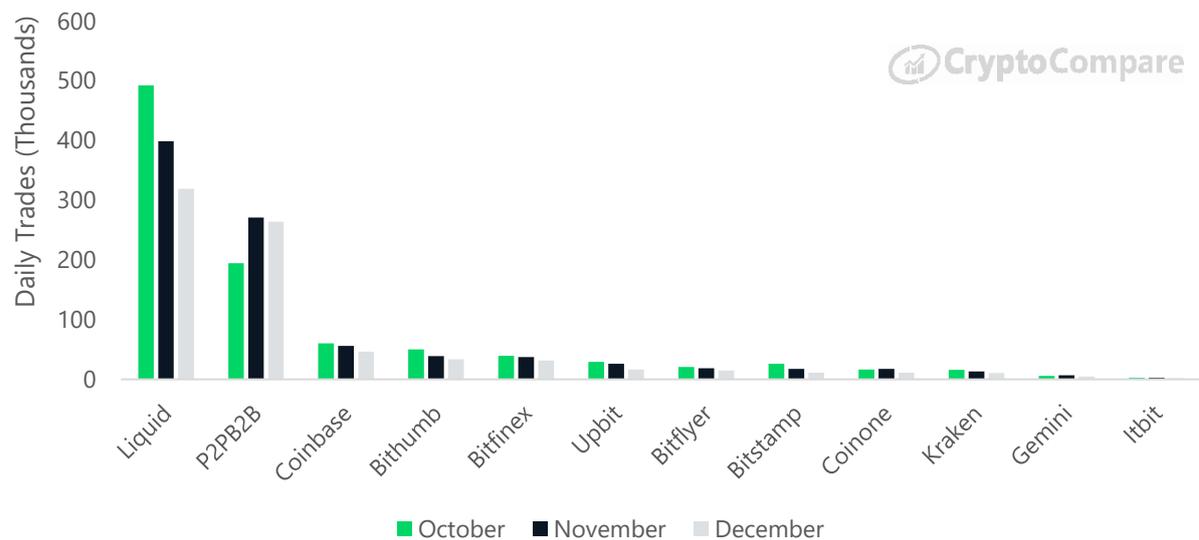
2 Historical Trade Count and Size

Figure 6 – Historical Average Trade Size (BTC) – Crypto to Fiat Exchanges



Exchanges Kraken, Bitstamp and ItBit had the highest average trade sizes in December among the top fiat exchanges by volume. Meanwhile, exchanges Bithumb and Liquid had the lowest trade sizes.

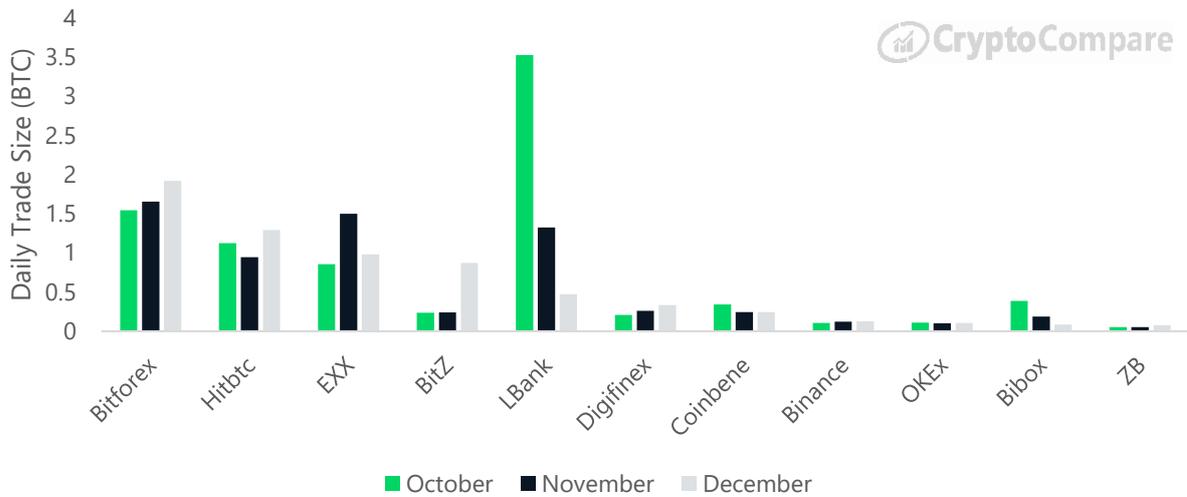
Figure 7 – Historical Daily Average Trade Count – Crypto to Fiat Exchanges



Liquid has consistently maintained the top spot in terms of trade count over the last three months for its BTC-JPY market, with the number of trades since November decreasing 24%.

Liquid has seen an average of 1.2 times more trades than the next largest exchange in terms of trade count (P2PB2B) in December.

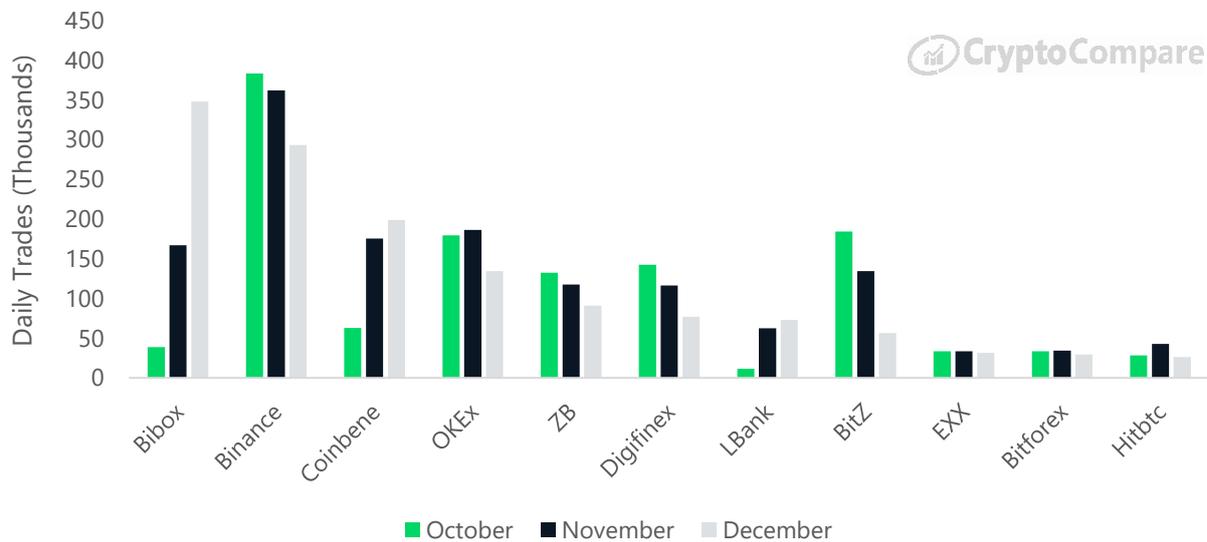
Figure 8 - Historical Average Trade Size (BTC) – Crypto to Crypto Exchanges



Exchanges BitForex, Hitbtc and EXX had the highest average trade sizes in December among the largest crypto exchanges by volume. Meanwhile, exchanges OKEx, Bibox and ZB have consistently maintained low trade sizes.

Since November, LBank has seen a sharp decrease of 64% since November in its average trade size.

Figure 9 - Historical Daily Average Trade Count – Crypto to Crypto Exchanges



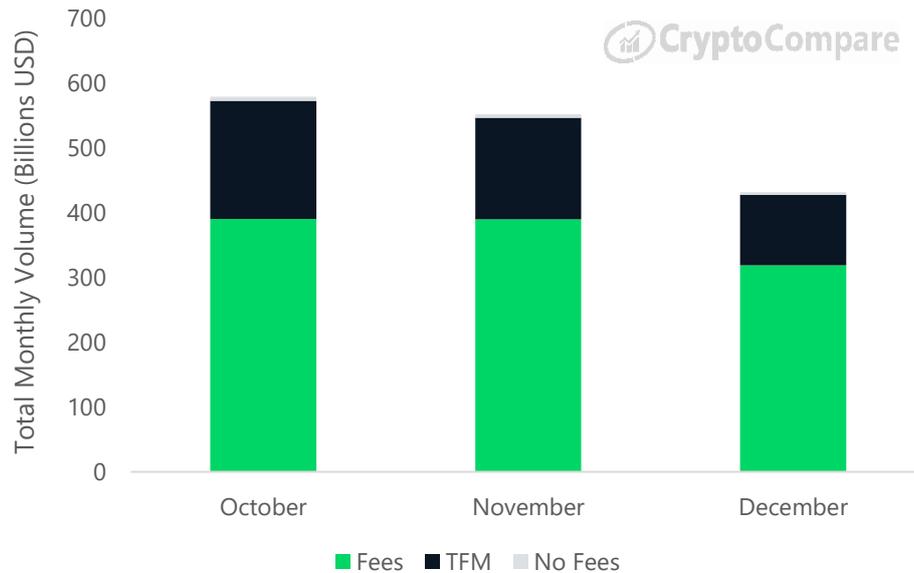
*Data in above chart represents BTC-USDT markets

Bibox, Binance and Coinbene showed the highest trade count over the last three months.

Macro Analysis and Market Segmentation

1 Segmentation by Fee-Type

Figure 10 - Total Monthly Trading Volume by Predominant Fee Type

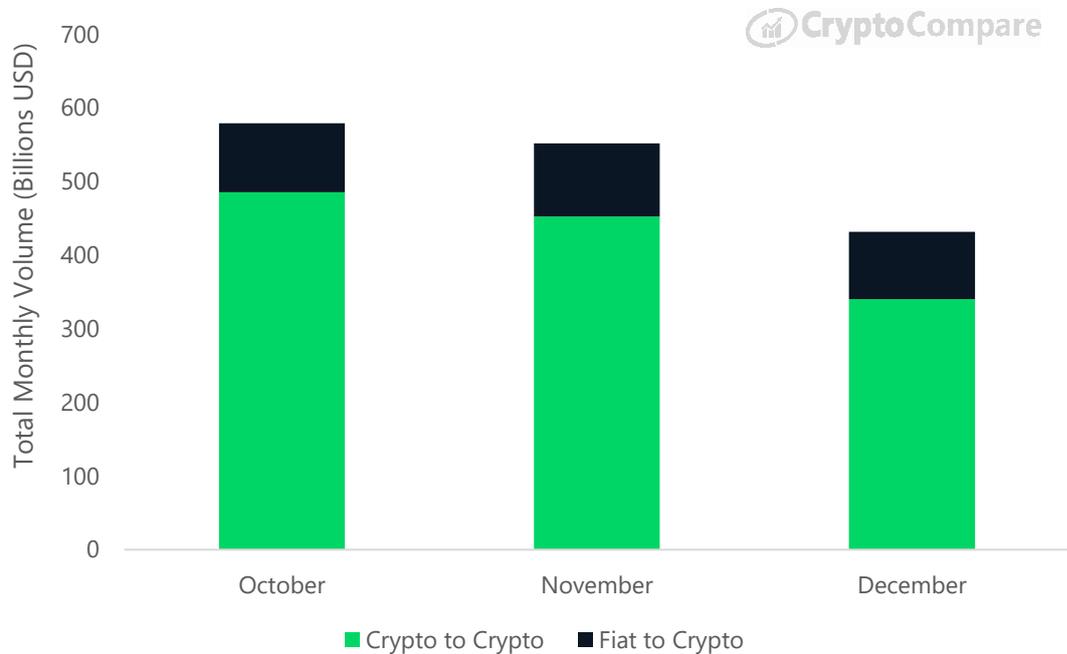


Exchanges that charge taker fees represented 73% of total exchange volume in December, while those that implement trans-fee mining (TFM) represented 25%.

Fee-charging exchanges traded a total of 318.75 billion USD in December (down 18.2% since November), while those that implement TFM traded 108.87 billion USD (down 30.6% since November). The remaining volume represented trading by exchanges that predominantly charge no trading fees, at 4.16 billion USD.

2 Segmentation by Fiat Pair Trading Capability

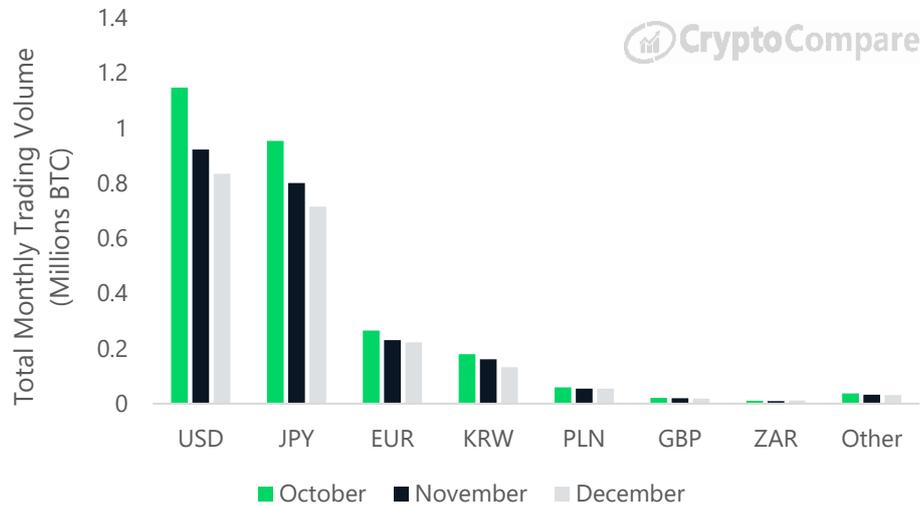
Figure 11 - Monthly Total Volume: Crypto to Crypto vs Fiat to Crypto Exchanges



Trading volume from exchanges that offer only crypto pairs represented 78.8% (340.29 billion USD) of total trading volume in December, while fiat to crypto exchanges represented 21.0% (91.5 billion USD). This is similar in proportion to the previous two months.

3 Bitcoin to Fiat Volumes

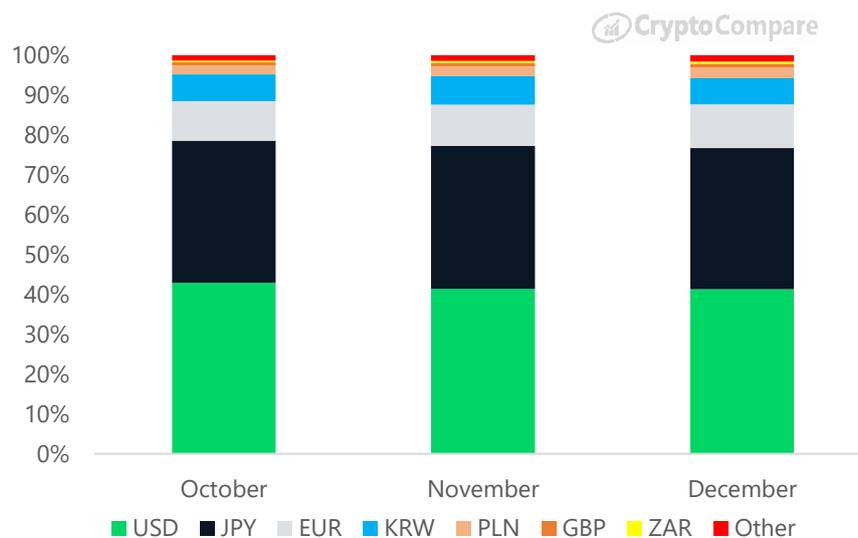
Figure 12 - Historical Monthly Bitcoin Trading Volume into Fiat



In December, 70% of all Bitcoin trading into fiat was made up of the US Dollar. BTC to USD volumes decreased, from 922,000 BTC in November to 835,000 BTC in December (down 9.0%).

Meanwhile, BTC trading into JPY represented 715,000 BTC in December (down 11.0% since November), while BTC trading into EUR represented 222,000 BTC (down 3.0% since November).

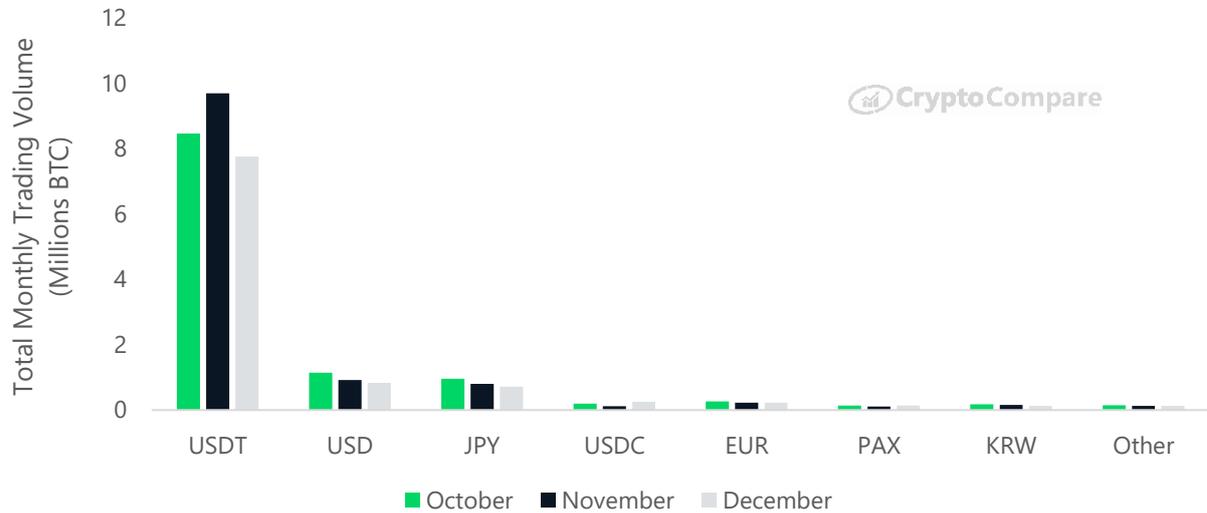
Figure 13 - Monthly Proportion of Total Monthly Bitcoin Trading into Fiat



In December, JPY, EUR, KRW and PLN made up 95% of total trading from Bitcoin into fiat.

4 Bitcoin to Stablecoin Volumes

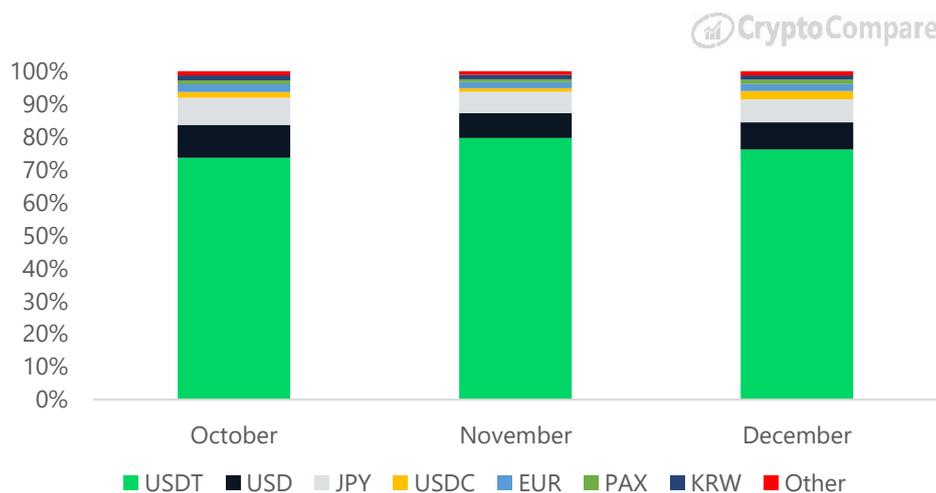
Figure 14 - Historical Monthly Bitcoin Trading into Fiat or Stablecoins



BTC trading into USDT totalled 7.76 million BTC (down 19.95% since November).

USDT continues to be the most popular stablecoin for trading with Bitcoin, followed by USDC, PAX and TUSD

Figure 15 - Proportion of Total Monthly Bitcoin trading into Fiat or Stablecoins

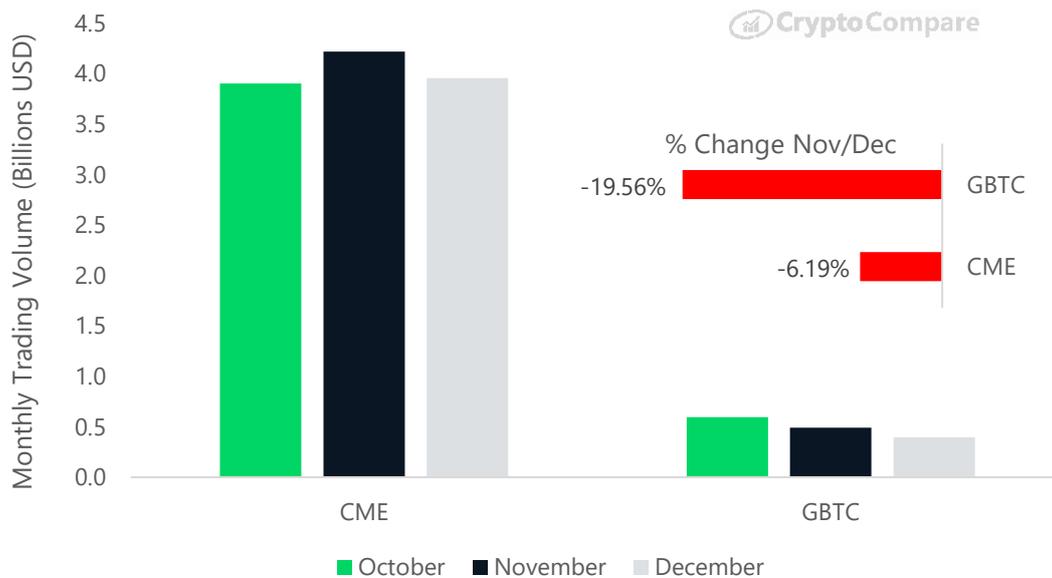


In December, BTC trading into USDT represented 76.19% of total volume (traded into fiat or stablecoin).

December Overview – Derivatives Products

1 Bitcoin Derivatives Monthly Volume: Institutional Products

Figure 16 - Total Monthly Bitcoin Institutional Product Volumes

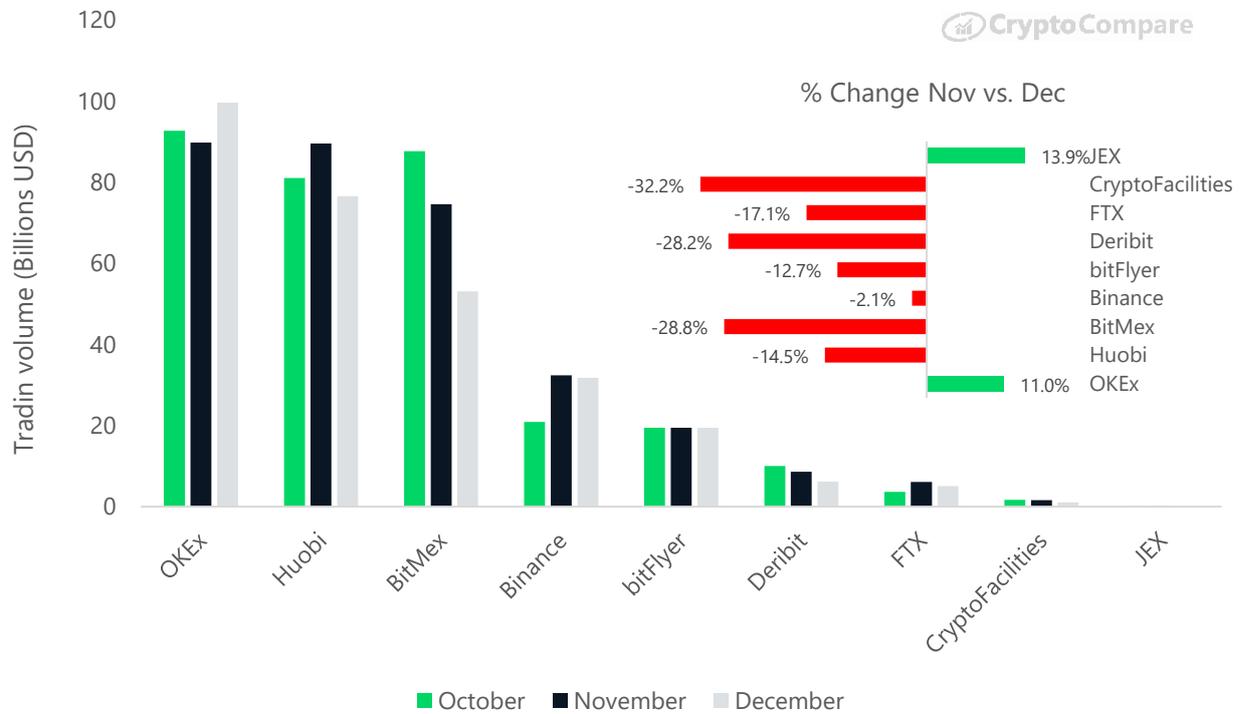


Regulated bitcoin derivatives product volumes are still dominated by CME, whose total trading volumes are down 6.2% since November at 3.96 billion USD.

CME’s bitcoin futures product volumes decreased from a total of 4.22 billion USD traded in November to a total of 3.96 billion USD traded in December. Meanwhile, Grayscale’s bitcoin trust product (GBTC), decreased in terms of total trading volume with 394.72 million USD traded in December (down 19.6% since November).

2 Bitcoin Derivatives Monthly Volume: Crypto Exchanges

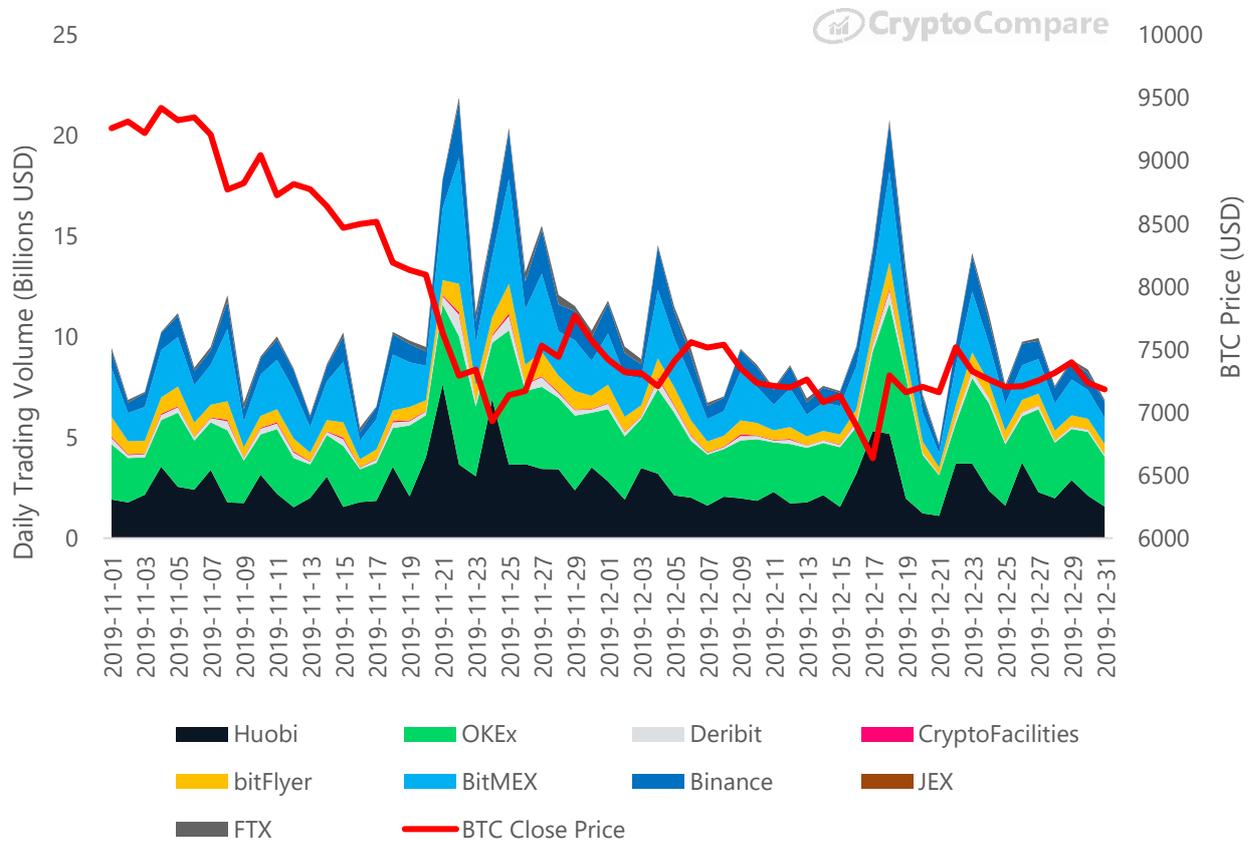
Figure 17 - Total monthly derivatives exchange volumes



OKEx was the top derivatives exchange in December, trading at total of \$99.6 Bn (up 11% since November). This was followed by Huobi and BitMEX with trading volumes at \$76.5 Bn (down 14.5% since last month) and \$53.1 Bn (down 28.8%) respectively.

3 Derivatives Exchange Volumes in December - Overview

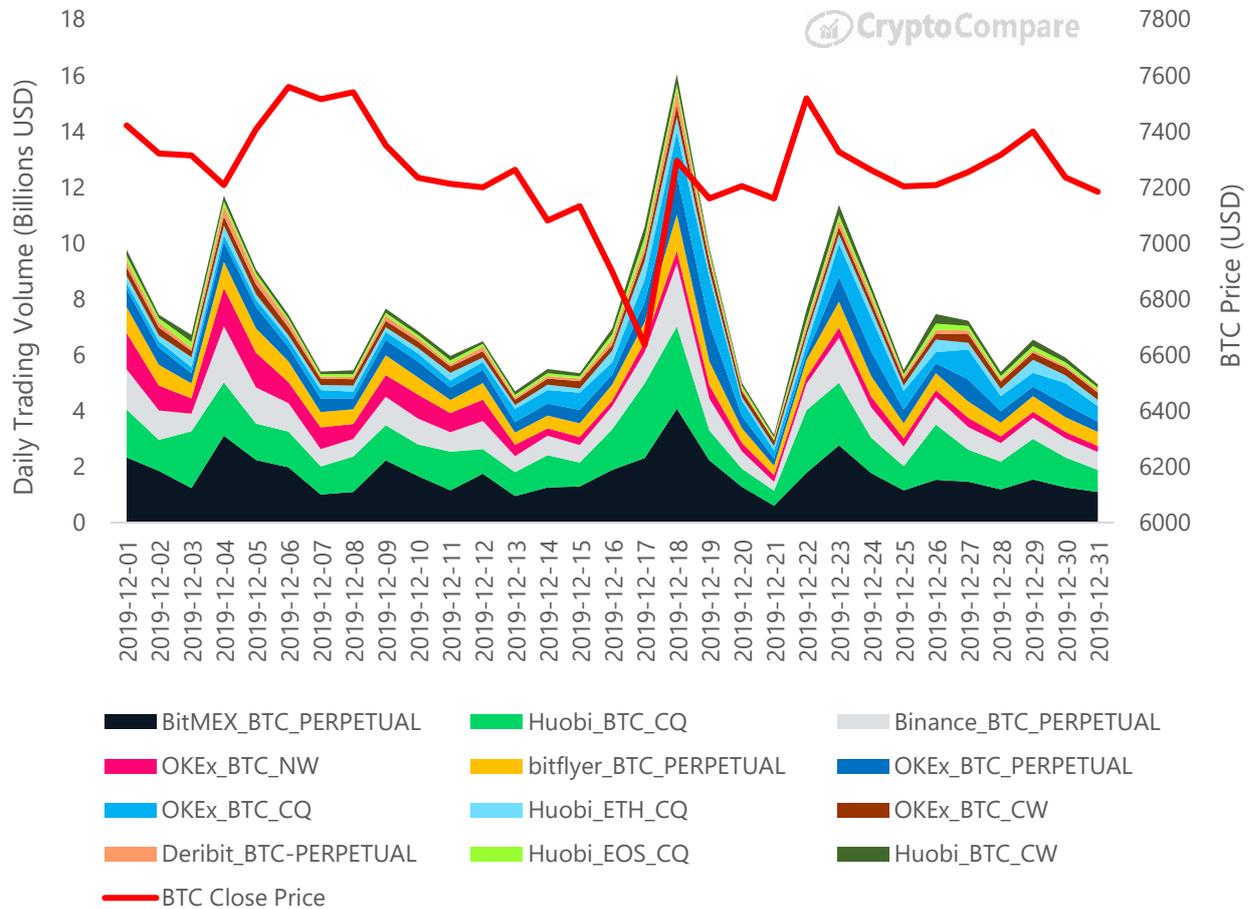
Figure 18 - Total Derivatives Exchange Volume



During the month of December, OKEx represented the majority of daily derivatives volumes - trading at \$3.32Bn per day (35.8% market share) followed by Huobi (2.7Bn, 29.16%), BitMEX (\$1.9 Bn, 19.7%) and Binance (\$797 Mn, 11.4%).

Smaller exchanges Deribit and CryptoFacilities (FCA-regulated) represented (\$200.3Mn, 2.1%) and (\$34.8Mn, 0.38%) of the market respectively.

Figure 19 - Top Products for December³



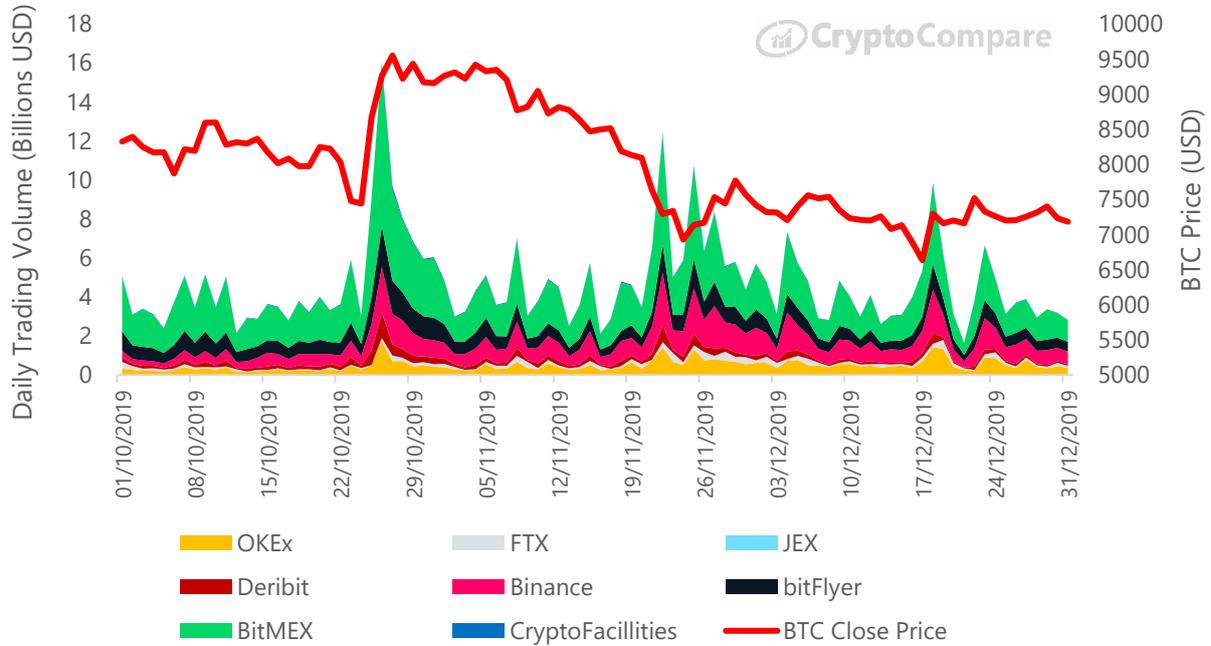
In December, the most traded products by total monthly volume were BitMEX’s BTC perpetual future (\$53.1 Bn) and Huobi’s Quarterly BTC Future (\$42.4 Bn), followed by Binance’s BTC perpetual future at \$29.4 Bn.

On average, these three products traded \$1.7Bn, \$1.3Bn and \$948Mn per day in December.

³ Note: Letters CQ, CW, NW refer to futures expiring in the current quarter, the current week, and the next week respectively.

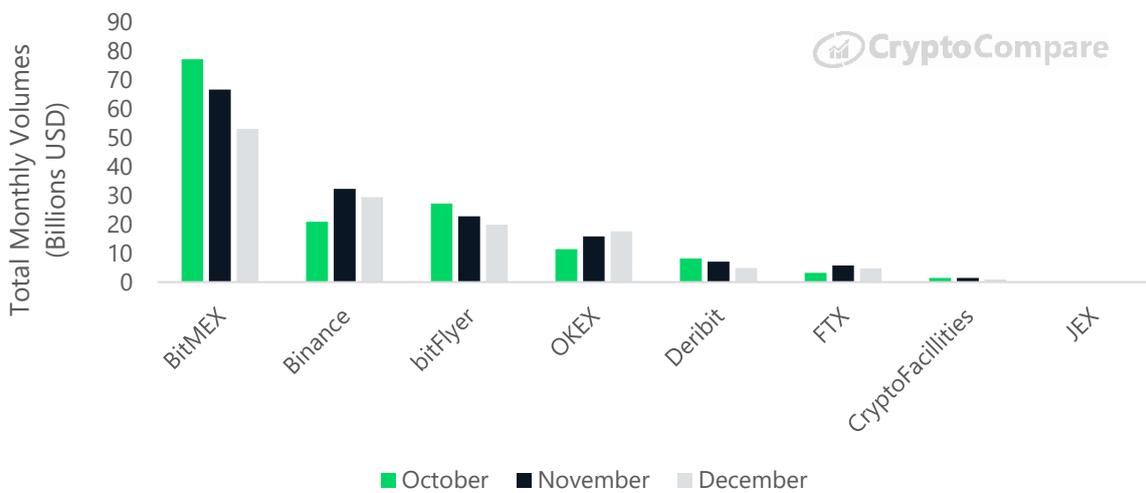
4 Derivatives Exchange Volumes in December – Perpetual Futures Products

Figure 20 - BTC Perpetual Futures Product Volumes – 3 Month Period



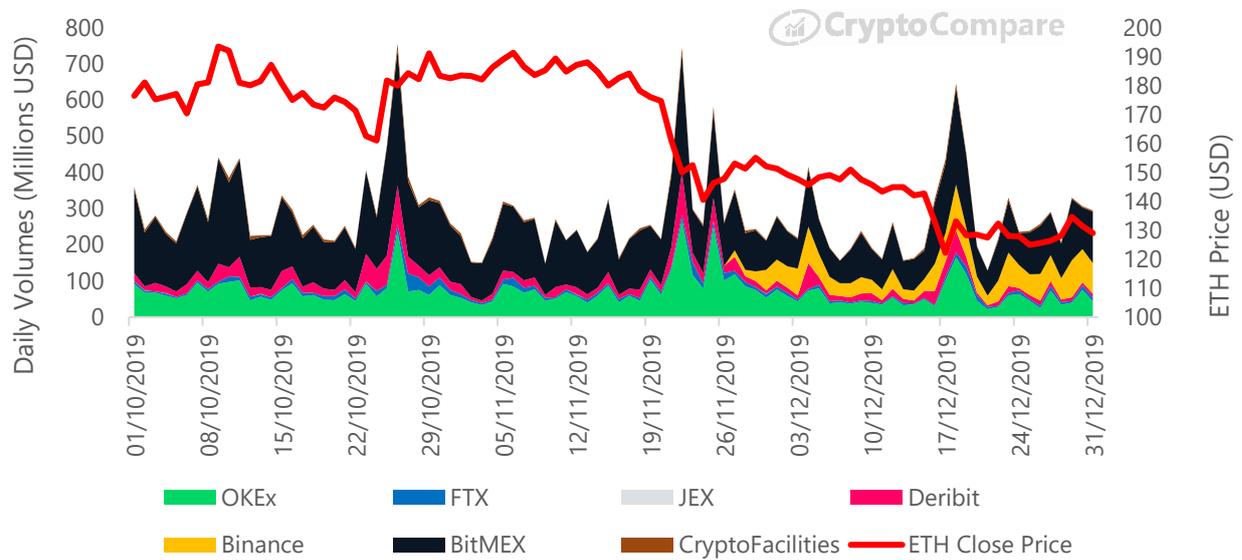
BitMEX and Binance represent most of the BTC perpetual futures market volume at \$1.7 Bn (40%) and \$947 Mn (22.5%) per day respectively on average.

Figure 21 - BTC Monthly Perpetual Futures Product Volumes



In terms of total monthly volume, BitMEX traded \$53.1 Bn (down 20% since November) while Binance traded a total of \$29.3 Bn (down 8.9%).

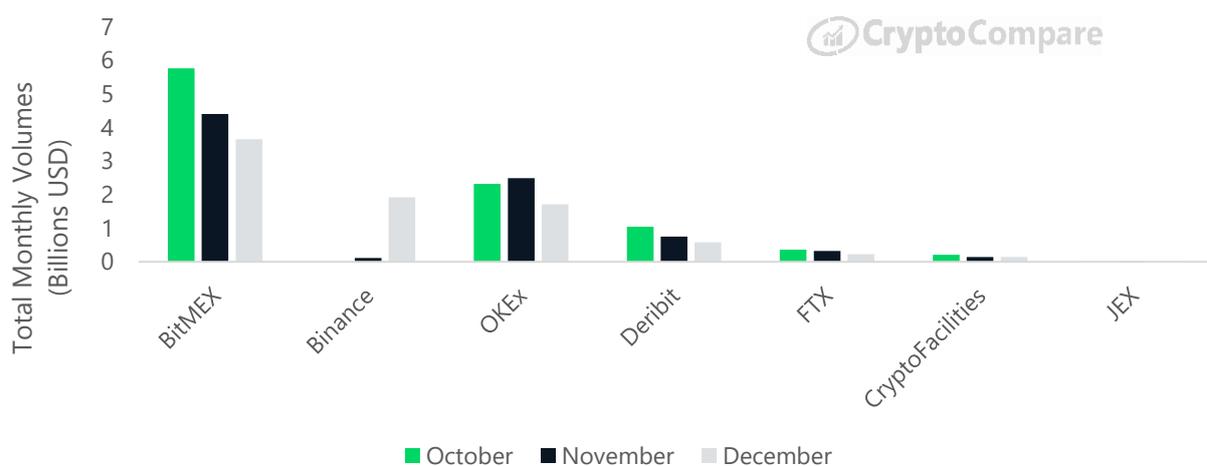
Figure 22 - ETH Daily Perpetual Futures Product Volumes



BitMEX and Binance represent the majority of the ETH perpetual futures market volume at \$117.7 Mn (44%) and \$61.8 Mn (23%) per day respectively on average.

Binance, since launching its futures products in September has already become a major derivatives player.

Figure 23 - ETH Daily Perpetual Futures Product Volumes



BitMEX represents the majority of ETH perpetual futures volumes at 44% of the total market (3.6 Billion USD in monthly volume). This is now followed by Binance and OKEx at 1.9 Billion USD and 1.7 Billion USD respectively.

5 Exchange Volume Rankings

Table 1 - Top 10 Crypto to Crypto Exchanges by Average Daily Volume in December

	AVG DAILY VOLUME (USD)	TOTAL MONTHLY VOLUME (USD)	PAIRS	COINS	GRADE*
Bitforex	1,149,589,029	35,637,259,905	251	140	C
CoinBene	880,564,957	27,297,513,656	255	204	D
LBank	825,029,133	25,575,903,122	166	118	C
RightBTC	768,008,395	23,808,260,236	123	45	D
ZB	746,887,175	23,153,502,422	192	68	D
Binance	719,754,386	22,312,385,956	661	199	A
Bibox	589,078,302	18,261,427,361	293	124	C
BCEX	567,692,035	17,598,453,075	64	41	D
OKEx	557,709,217	17,288,985,725	671	222	A
EXX	517,644,166	16,046,969,135	127	66	C

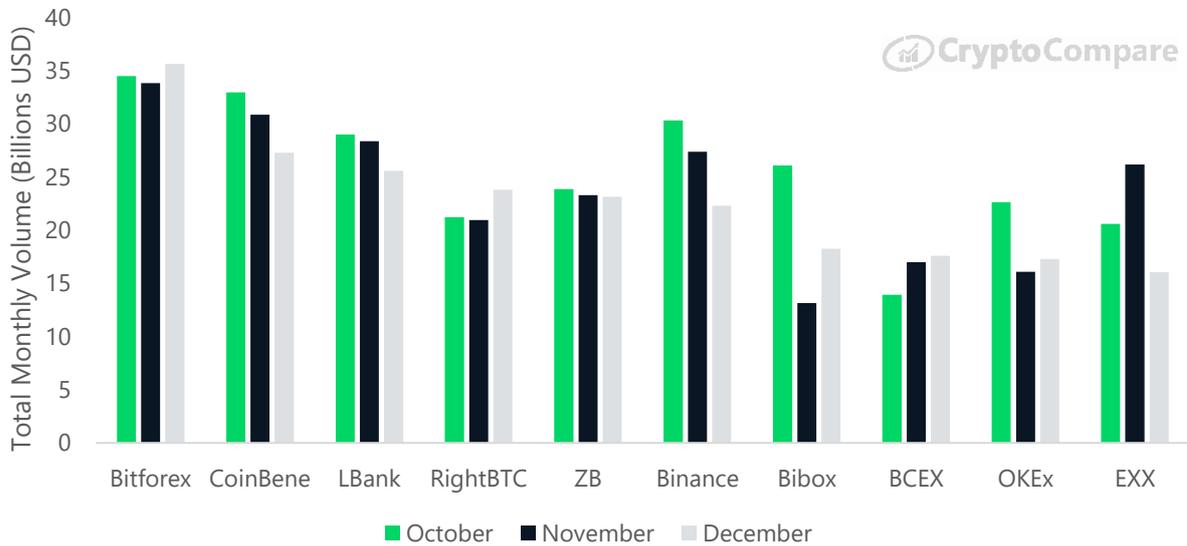
Table 2 - Top 10 Crypto to Fiat Exchanges by Average Daily Volume in December

	AVG DAILY VOLUME (USD)	TOTAL MONTHLY VOLUME (USD)	PAIRS	COINS	DOMINANT FIAT CURRENCY	GRADE*
P2PB2B	888,534,168	27,544,559,196	328	112	USD	C
Coinsbit	750,196,194	23,256,082,003	69	20	USD	C
Bithumb	163,213,618	5,059,622,169	99	99	KRW	C
Liquid	129,567,698	4,016,598,637	344	111	JPY	A
Huobi Korea	128,697,937	3,989,636,035	397	172	KRW	B
ExtStock	128,416,417	3,980,908,931	11	4	USD	D
Coinbase	113,316,028	3,512,796,870	59	25	USD	AA
STEX	104,208,133	3,230,452,112	233	159	USD	E
Kraken	81,338,660	2,521,498,443	150	36	USD	A
Bitfinex	69,177,525	2,144,503,283	406	147	USD	A

*Please see the [Exchange Benchmarking Report](#) for more information on grading

6 Top Exchanges by Total Monthly Volume

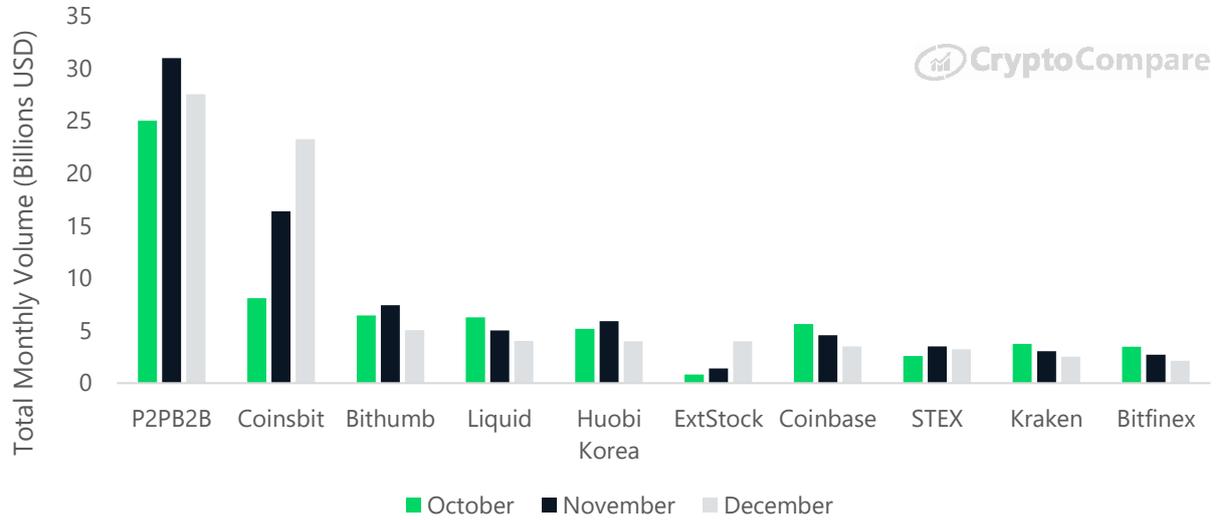
Figure 24 - Historical Monthly Volume - Top Crypto to Crypto Exchanges



Bitforex was the top crypto to crypto exchange by total volume in December at 35.64 billion USD (up 5.37% since November). This was followed by CoinBene and LBank at 27.3 billion USD (down 11.57%) and 25.58 billion USD (down 9.83%) respectively.

7 Top Fiat to Crypto Exchanges by Total Monthly Volume

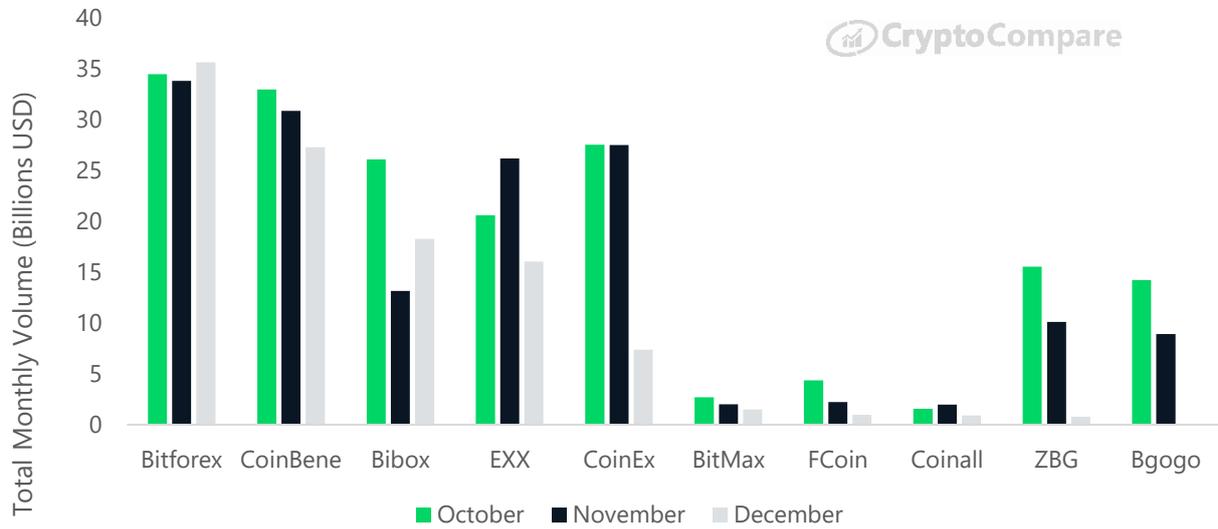
Figure 25 - Historical Monthly Volume - Top Fiat to Crypto Exchanges



P2PB2B was the top fiat exchange by total volume in December at 27.54 billion USD (down 11.09% since November). This was followed by Coinsbit and Bithumb at 23.26 billion USD (up 42.04%) and 5.06 billion USD (down 31.86%) respectively.

8 Transaction Fee Mining Exchange Volume

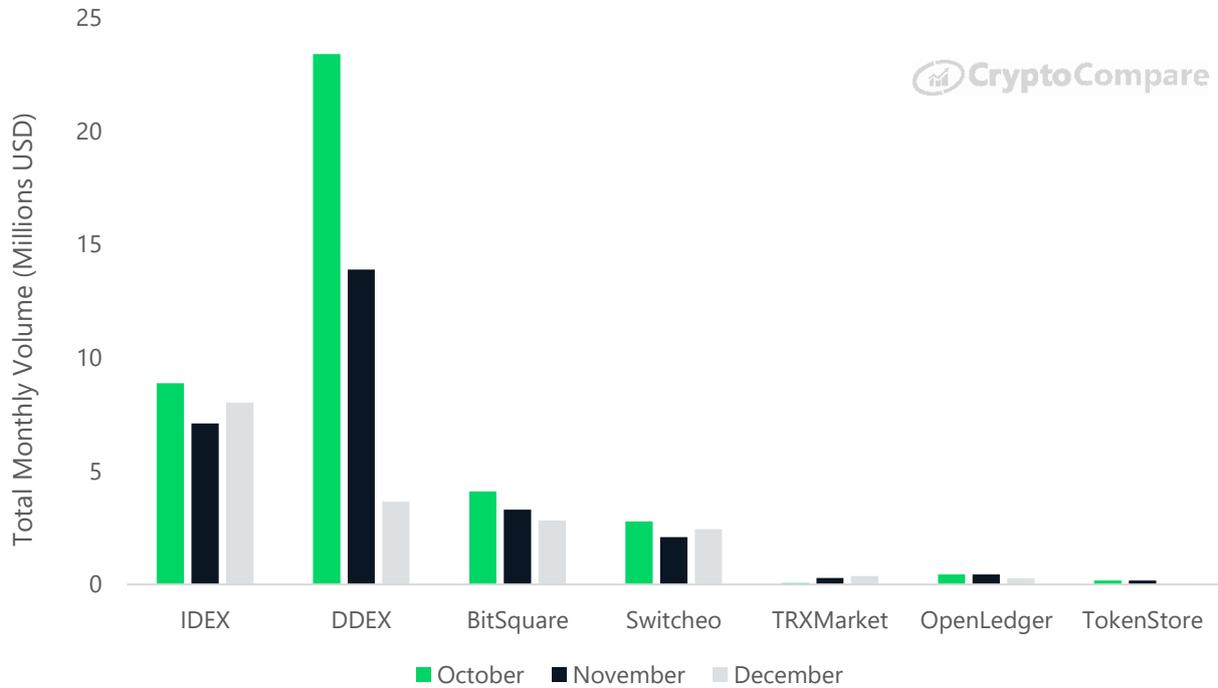
Figure 26 - Historical Monthly Volume - Top Transaction-Fee Mining Exchanges



Bitforex was the top TFM exchange by total volume in December at 35.64 billion USD (up 5.37%), followed by CoinBene at 27.3 billion USD (down 11.57%) and Bibox at 18.26 billion USD (up 38.87%).

9 Decentralized Exchange Volume

Figure 27 - Historical Monthly Volume - Top Decentralized Exchanges



IDEX was the largest DEX in December trading a total of 8.02 million USD (up 12.75%), followed by DDEX and BitSquare trading 3.66 million USD (down 73.66%) and 2.82 million USD (down 14.44%) respectively.

DEXs represent only a small fraction of global spot exchange volume (0.01%), trading a monthly total of 17.63 million USD in December.