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COINDESK ASSET DATA COVERAGE: ASSET SELECTION METHODOLOGY

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OBJECTIVE

To select the digital assets most critical to cryptocurrency markets and offer in-depth and useful information about them.

CoinDesk will do this through "asset pages," accessible through coindesk.com, which display charts and metrics that can give investors insight into critical market components. These asset pages will feature price charts as well as relevant trading and on-chain metrics, to help investors get an overview of the assets' principal differentiating characteristics, and a definitive view of the market that includes both leading and up-and-coming crypto assets.

They will also support a deeper understanding of CoinDesk reporting that refers to these assets, by being referenced from within articles. And the charts and visualizations displayed on the asset pages could illustrate and inspire coverage from the markets team, as well as other verticals at CoinDesk.

Rather than attempt to cover the whole crypto asset market, CoinDesk will build asset pages for those assets it deems most relevant to market behavior. Below we explain the methodology for the selection.

METHODOLOGY

The exchanges

To ensure broad market representation while limiting our selection to market-critical assets with enough verifiable trading volume to allow for sizable fund participation, we gathered data from eight leading cryptocurrency exchanges.

By "verifiable trading volume," we mean reported volume that we are confident does not include any fake trades or manipulation. Several studies have been done on this issue, from reputable research desks, most notably from Bitwise Asset Management, Digital Asset Research and The Block.

- "[Presentation to the U.S. Securities and Exchange Commission](#)," Bitwise Asset Management, March 2019.
- "[Introducing 'The Block 22', an extension of 12 other exchanges on top of 'Bitwise 10'](#)," The Block, December 2019.
- "[Defining cryptocurrency exchange integrity](#)," Digital Asset Research, November 2019

Each study came up with a limited list of exchanges that are least likely to show fake volumes:

Table 1: Results of recent studies listing crypto exchanges with verifiable trade data

BITWISE (Mar-19)	DIGITAL ASSET RESEARCH (Nov-19)	THE BLOCK (Dec-19)
Binance	Bitfinex	Binance
Bitfinex	Bitflyer	Bitfinex
Coinbase	Bitstamp	Coinbase
Kraken	Coinbase Pro	Kraken
Bitstamp	Gemini	Bitstamp
bitFlyer	itBit	bitFlyer
Gemini	Kraken	Gemini
itBit	Liquid	itBit
Bittrex	Poloniex	Bittrex
Poloniex		Poloniex
		LMAX Digital
		Bitbank
		Coincheck
		Zaif
		FTX
		GOPAX
		Binance US
		Korbit
		Bitso
		Luno
		Indodax
		CEX.IO

The studies arrived at these lists by examining trading patterns for a wide list of exchanges, watching out for signs of predictability and regularity, such as a steady stream of trades all the same size, or alternating buy and sell orders (real trading is much more chaotic and unpredictable). Some exchanges have significant verifiable volume mixed in with suspicious volume – since it is difficult to separate the two, these exchanges are not on the lists.

It should be noted that The Block's list is much longer than the other two, since they included small exchanges, whereas Bitwise and Digital Asset Research focused on relatively large ones.

To be extra sure of our selected exchange universe, we used trading figures from exchanges that appear on *all three* lists. This gave us eight exchanges to work with.

Table 2: Crypto exchanges with verifiable trade data confirmed by all 3 recent studies

BITWISE (Mar-19)	DIGITAL ASSET RESEARCH (Nov-19)	THE BLOCK (Dec-19)
Binance	Bitfinex	Binance
Bitfinex	Bitflyer	Bitfinex
Coinbase	Bitstamp	Coinbase
Kraken	Coinbase Pro	Kraken
Bitstamp	Gemini	Bitstamp
bitFlyer	itBit	bitFlyer
Gemini	Kraken	Gemini
itBit	Liquid	itBit
Bittrex	Poloniex	Bittrex
Poloniex		Poloniex
		LMAX Digital
		Bitbank
		Coincheck
		Zaif
		FTX
		GOPAX
		Binance US
		Korbit
		Bitso
		Luno
		Indodax
		CEX.IO

While we will rely on these eight exchanges to select assets, we will draw from a broader list of crypto exchanges when pulling in price and volume data for data feeds, news coverage and analysis.

Notably absent exchanges from CoinDesk's list include Binance, Huobi and OKEx. While they may provide substantial amounts of information for price discovery, they have not met the criteria to be included on all three lists, given the difficulty in verifying the absence of fake trading volumes.

This list will be revised periodically in line with market developments.

Top 20

We aggregated the dollar volume traded on these exchanges for the previous two quarters (Q1 2020 and Q4 2019).

The assets on these exchanges were then ordered according to aggregate dollar volume for the previous two quarters, and a list was compiled of the top 20.

We chose 20 as a cut-off point as we believe it represents enough market activity to give a broad insight into market composition, trends and behavior. In the case of Q4 2019 + Q1 2020 figures, the top 20 assets comprise more than 99% of the trading volume of the selected exchanges, a level which we believe adequately reflects market characteristics.

Many interesting assets will be left out, but we believe that maintaining objective criteria helps us to focus our efforts on information that will be of most use to investors of all types.

This list will be revised on a quarterly basis, always including the top 20 assets in terms of trading volume for the previous two consecutive quarters. We believe that extending the time frame filter eliminates the possibility that a smaller asset could "manipulate" its way into the top 20 list.

On at least two exchanges

Another filter applied to the asset list is that each asset must be traded on at least two spot exchanges (not necessarily limited to the eight exchanges chosen for the asset selection methodology).

One of the most important ways cryptocurrency markets keep prices and values in check is through arbitrage. Unlike, say, equity markets where a stock is listed on only one exchange, cryptocurrencies can theoretically be available on hundreds of exchanges. This means that if one exchange experiences an attempt to push prices around on a currency, arbitrageurs can take opposite positions on other exchanges, eventually returning the price to one more in-line with the overall market. This can only be possible if the asset is on at least two exchanges.

THE ASSETS

As we mentioned in the previous section, we decided to focus on the top 20 assets in terms of trading volume on our selected range of exchanges: Bitfinex, Bitflyer, Bitstamp, Coinbase Pro, Gemini, itBit, Kraken and Poloniex.

Fig. 1: Verified exchanges by number of assets listed
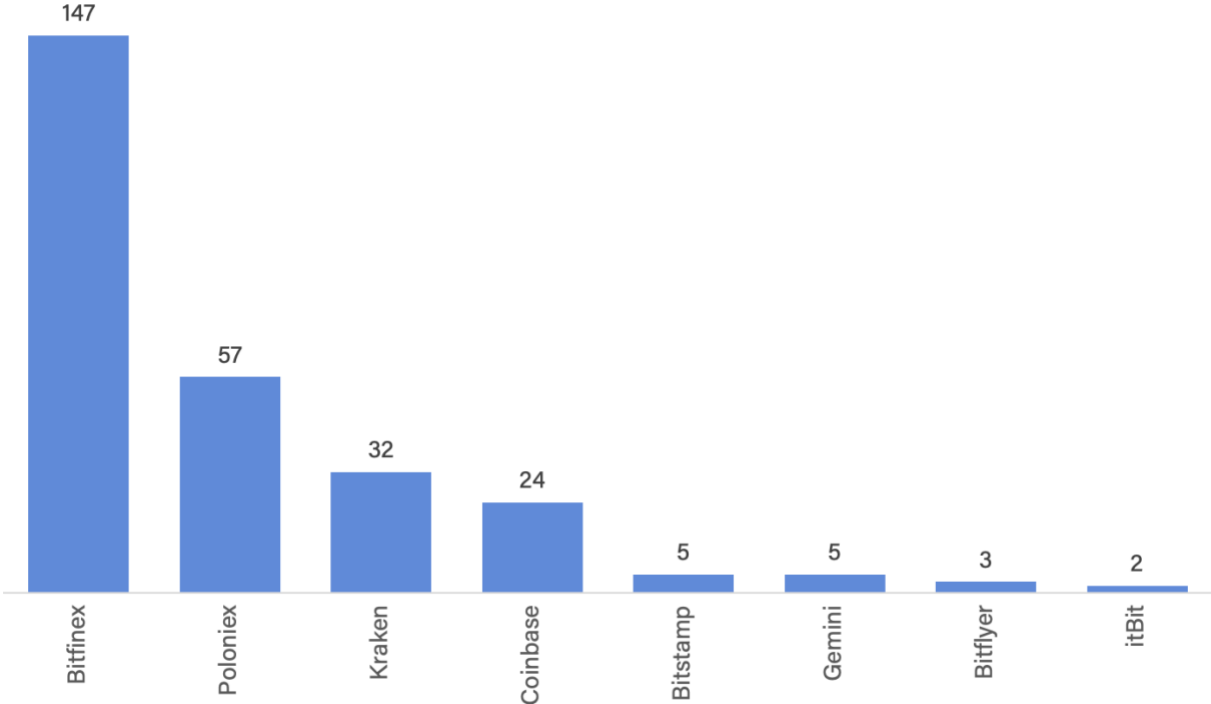
Source: *Nomics*

This count includes stablecoins. Although they generally do not fluctuate widely in price, they have other metrics that are of interest to investors, such as issuance and transaction volume.

The assets to be included initially are:

Table 3: CoinDesk 20 asset list, Q2 2020

TICKER	ASSET	19Q4 + 20Q1 VOLUME ($)
BTC	Bitcoin	88,031,825,166
ETH	Ethereum	20287260648
USDT	Tether	9,441,277,737
XRP	Ripple	8,781,876,625
BCH	Bitcoin Cash	5,093,963,830
LTC	Litecoin	4,654,295,270
USDC	USD Coin	3,787,367,522
XTZ	Tezos	2,007,007,169
EOS	Eos	1,996,541,313
LINK	Chainlink	1,851,493,388
BSV	Bitcoin SV	1,367,692,516
ETC	Ethereum Classic	1,154,494,525
TRX	Tron	715,300,963
XLM	Stellar	691,128,577
DASH	Dash	649,300,429
DAI	Multi-Collateral Dai	506,199,900
ZEC	Zcash	454,189,235
XMR	Monero	395,358,140
ZRX	0x	344,162,357
BAT	Basic Attention Token	286,120,024

Source: Nomics

This list will be revised on a quarterly basis.
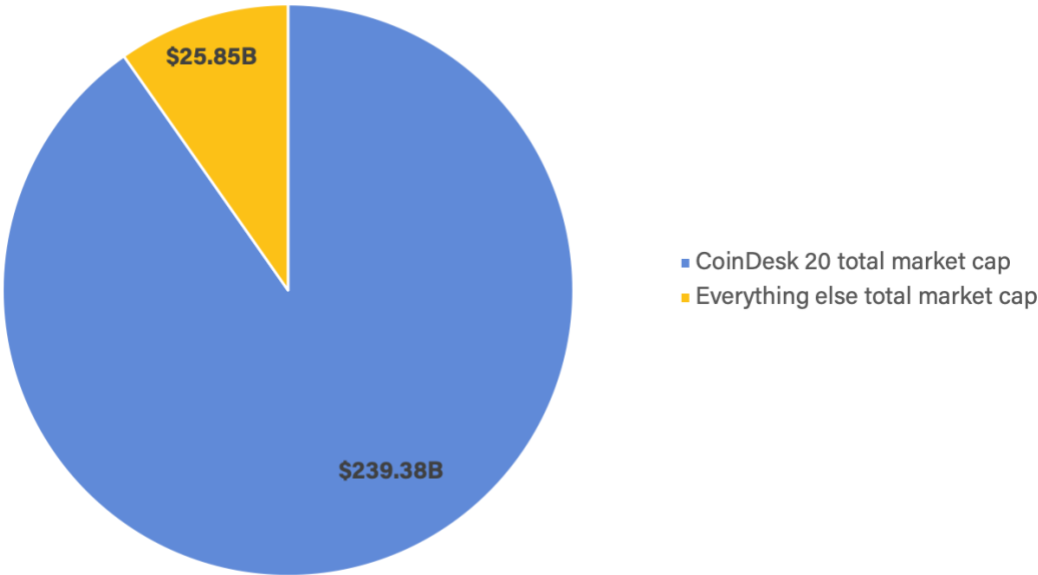
Volume, not market cap

Most indices and lists focus on market capitalization. While looking at market cap is an essential part of understanding the cryptocurrency market, we believe that trading volume is a better indicator of assets' importance to the market.

Furthermore, while trading can be manipulated, it is easier to manipulate the market cap of smaller tokens. For example, the vast majority of a currency may be in the hands of one or a few owners.

Circulating supply may be relatively small. A modest buy on one exchange could shoot up total market cap even though the market may not truly value the asset the same way.

For the sake of comparison, we compared the market cap of the selected list of assets on the morning of June 17, 2020 to the overall market cap for digital assets, using figures from Messari. The top 20 assets in terms of verifiable trading volume comprise 90.2% of reported market cap.

Fig. 2: Reported market cap, June 17, 2020

Source: Messari, CoinDesk Research

So, our list of selected assets represents a significant majority of market cap. However, we believe that focusing the selection criteria on market volume gives a more realistic and less manipulable gauge of market impact.

While we will use trade volume criteria to decide which assets make our coverage list, we will monitor the relative weight in market capitalization that our selected list accounts for, to ensure that we are also covering the bulk of the market using that method.

CONCLUSION

With this methodology, we believe that we can develop data, analysis and news coverage that offer investors insight and a comprehensive overview of the assets that matter most to the crypto market.

Rather than attempt to cover all 5,000+ listed crypto assets (5,145 as of 2/25/20, according to CoinMarketCap), we believe that following the criteria explained above and focusing on the selected initial list of 20, we can efficiently represent the meaningful bulk of the marketplace. We can also provide investors with a useful introduction to crypto assets beyond bitcoin and ether. Although this list represents less than 0.4% of the tokens in existence, it accounts for more than 99% of trading volume on exchanges for which there is consensus about the reliability of their data, and over 90% of the overall market capitalization of the sector.

The selected assets make up the bulk of trading activity and market cap and include a broad range of use cases and technologies.

By following the numbers and charts along with CoinDesk editorial coverage, investors and observers will be able to gain a deeper understanding of how crypto markets work and will be able to follow the evolution of both leading and up-and-coming crypto assets.