



BITCOIN AND CRYPTO UPDATE

University of Adelaide, MBA Alumni Webinar

June 2020

RYAN KRIS.

TODAY'S WEBINAR

1. Crypto Economy
2. Bitcoin - post-halving
3. Stablecoins
4. Infrastructure & Institutions
5. Trends

Keep in contact!

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BDO DIGITAL ASSET SERVICES

We provide services for businesses planning to use, or currently transacting with crypto, and those developing products using cryptoassets and blockchain technology.

Audit & Assurance



Financial

AML/CTF Independent assurance and reviews
Process controls review and assurance reports
Financial statement external audit services
AFSL compliance engagements



Asset Ownership

Asset backing audits
Proof of ownership and reserve
Blockchain analysis for accurate and complete reporting data



Smart Contract

Security audits for smart contract code base. Reviews to identify and eliminate bugs and vulnerabilities
Pre and post deployment analysis



Strategy

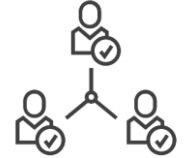
Services for discovery and capture of blockchain use cases.
Digital product design, prototype and product build.
Finance and capital raising to support new initiatives.

Advisory



Security

Cyber security health checks, security architecture and roadmaps. Threat risk assessment. Penetration testing and vulnerability assessment. Incident Response Planning



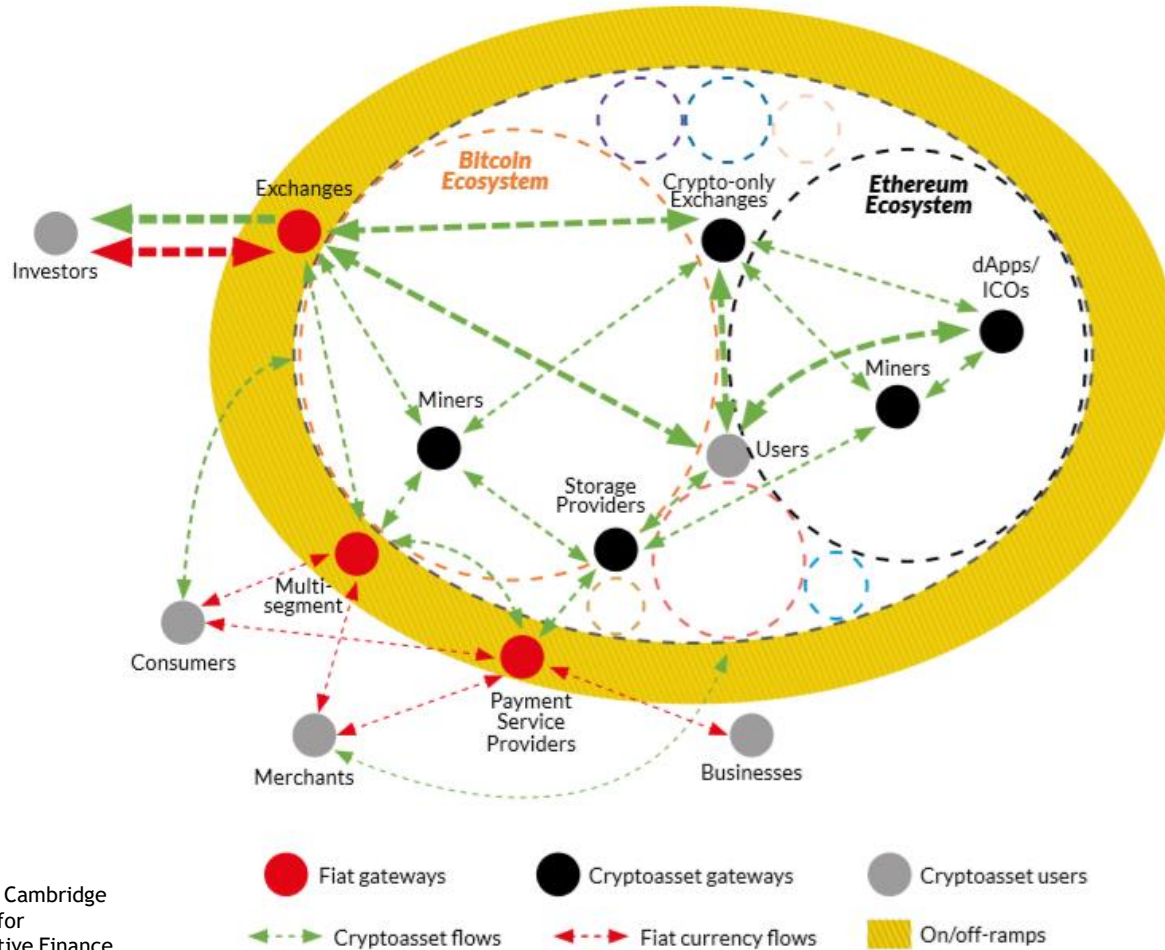
Risk

IT risk and control system audits. Risk management and assessments when using crypto. SOC2 reporting and internal control frameworks development



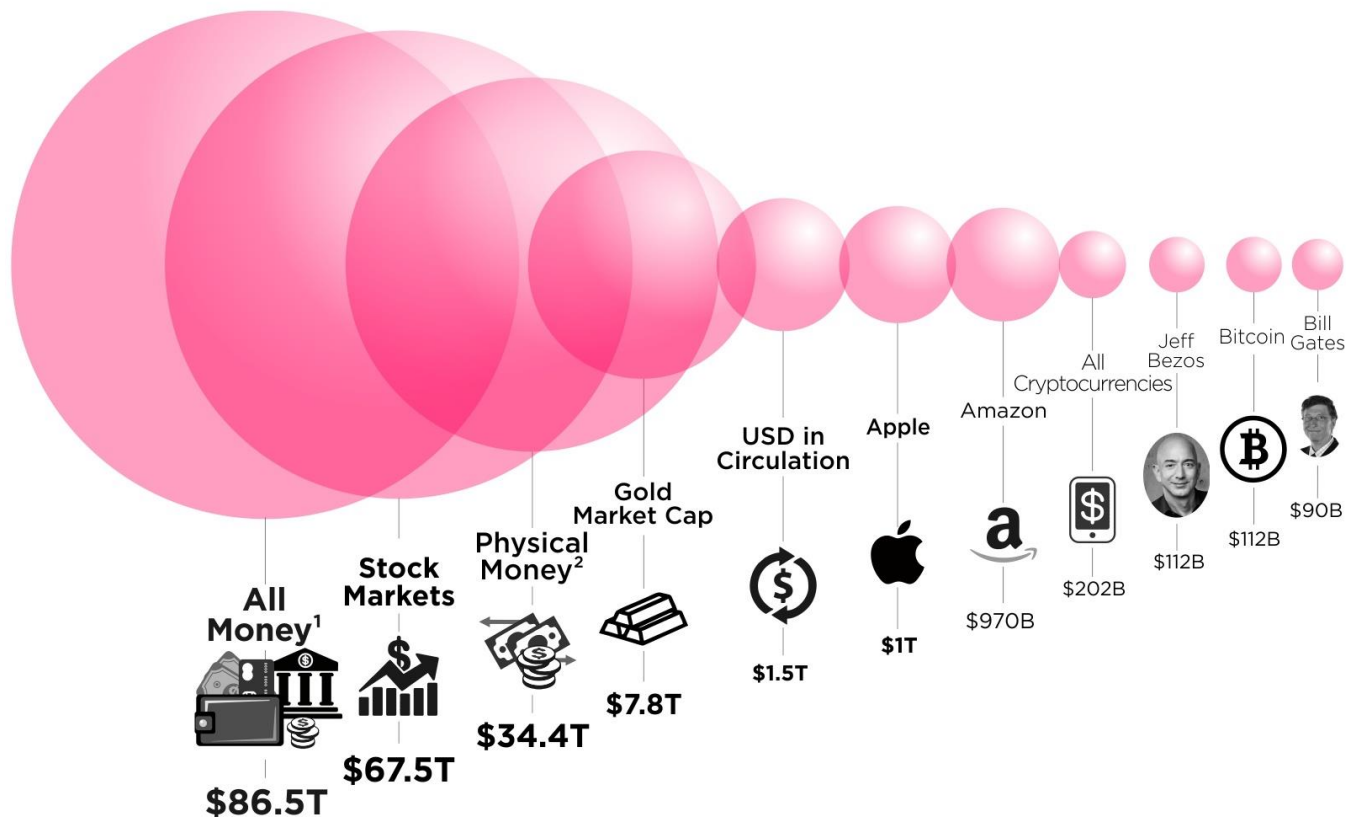
CRYPTO ECONOMY

Cryptoasset Ecosystem



Source: Cambridge
Centre for
Alternative Finance

Putting the World's Money into Perspective



* All figures are shown as of latest available data on September 17th, 2018

Article & Sources:

<https://howmuch.net/articles/worlds-money-in-perspective-2018>
<https://coinmarketcap.com>
<https://www.forbes.com>
<https://www.federalreserve.gov>
<https://www.cia.gov>

¹ All Money = money in any form including bank or other deposits as well as notes and coins.

² Physical Money = money in forms that can be used as a medium of exchange, generally notes, coins, and certain balances held by banks.

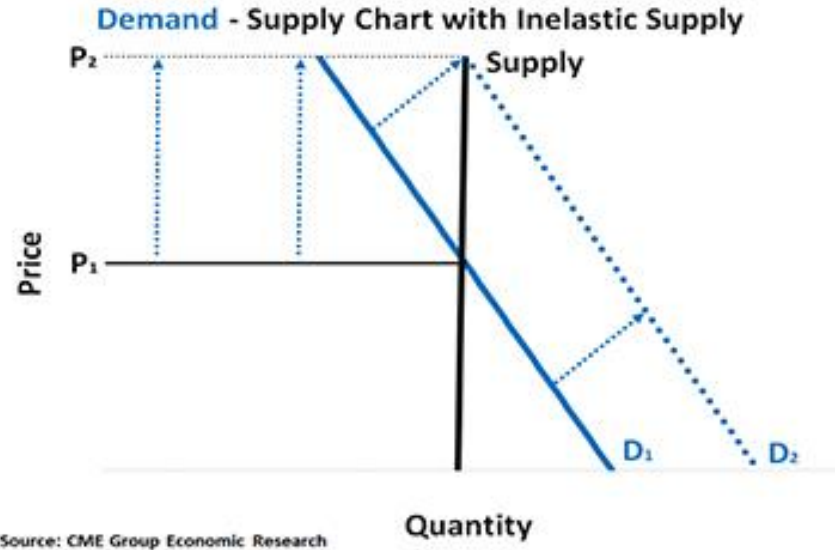
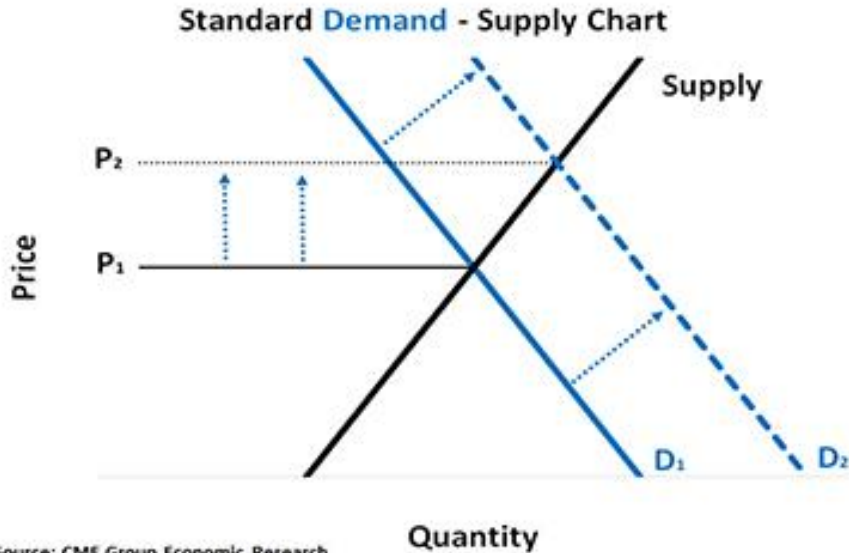


BITCOIN POST-HALVING

Bitcoin supply schedule



BITCOIN ECONOMICS RECAP



WHAT IS BITCOIN'S VALUE?

Signalling

Bitcoin Price Models

Various price models for Bitcoin.

Bitcoin NVT Ratio

Bitcoin's PE ratio. Detects when Bitcoin is overvalued or undervalued.

Bitcoin NVT Signal

NVT Ratio optimised to be more responsive, useful as a long-range trading indicator.

Bitcoin VWAP Ratio

A useful signal for local and global market tops and bottoms using volume weighted average price.

Bitcoin RVT Ratio

A variation of MVRV Ratio using on-chain volume as a key metric to find the market

Investment Related

Bitcoin Risk-Adjusted Returns

Compares Bitcoin ROI, adjusted for its risk, to other assets.

Bitcoin Valuations

A collection of useful valuation metrics on Bitcoin.

Bitcoin HODL Waves

A cross sectional view of Bitcoin HODLers over time, shows demand and supply from new and old HODLers.

Bitcoin HODL Capitalisation

A visualisation of Bitcoin's capitalisation stratified by investor HODL duration.

Bitcoin vs Gold

Compare the investment performance of Bitcoin vs Gold

Monetary Properties

Bitcoin Volatility

Bitcoin volatility trend, compares to FOREX, also traded volume.

Bitcoin Volatility vs Other Asset Classes

Compares Bitcoin volatility to other asset classes.

Bitcoin Money Supply vs USD

Is Bitcoin trending towards a world reserve currency?

Bitcoin Inflation Rate

Track the historic inflation annual rate of Bitcoin's money supply.

Bitcoin Monetary Velocity

Is Bitcoin trending towards payments or savings/investments?

Network Properties

Bitcoin Network Properties

Tracks Bitcoin's utility value, security, and valuation over time.

Bitcoin Segwit Adoption

Track the adoption of Segwit.

Bitcoin Network Throughput

Bitcoin's throughput in transactions, payments, and USD value per second.

Bitcoin Congestion

User-centric metrics tracking network congestion, e.g. payment fees, confirm times.

Bitcoin Hash Price

Price per hash tracks the Bitcoin's mining hardware capabilities over time.

Bitcoin: Price, USD

Bitcoin has formed a local peak within 1.5 years of both historical block reward halvings.



BTC, STILL THE BEST PERFORMING MACRO ASSET

skew.		Macro Assets Current Year Returns (%)		
Asset	MtD	QtD	YtD	
BTC	1.93%	50.10%	34.21%	
GOLD	-0.47%	7.04%	12.78%	
SPX	2.58%	20.83%	-3.34%	
DOLLAR	0%	-1.16%	5.72%	
WTI	2.28%	151.70%	-42.50%	

CRYPTO FEAR & GREED



Crypto Fear & Greed Index Over Time

This is a plot of the Fear & Greed Index over time, where a value of 0 means "Extreme Fear" while a value of 100 represents "Extreme Greed".



A road paved with gold

The uphill climb to trillions

(\$ in billions)



Data Compiled: Mar. 16, 2020.

Source: Messari, World Gold Council.

Note: Market values calculated by multiplying per ounce gold price at year end by 32,150.75 (conversion to metric tonnes), then multiplying the product by the amount of tonnes per category.

1. Also includes in 16 national monetary institutions and national monetary authorities.

2. Includes gold used in fabrication other than of gold jewelry (industrial applications) and gold which cannot be accurately accounted for.

WHY ALLOCATE TO CRYPTOCURRENCY?

Bitcoin risk - reward

”At the end of the day, the best profit-maximizing strategy is to own the fastest horse. Just own the best performer and not get wed to an intellectual side that might leave you weeping in the performance dust because you thought you were smarter than the market. If I am forced to forecast, my bet is it will be Bitcoin.” - Paul Tudor Jones, May 2020.

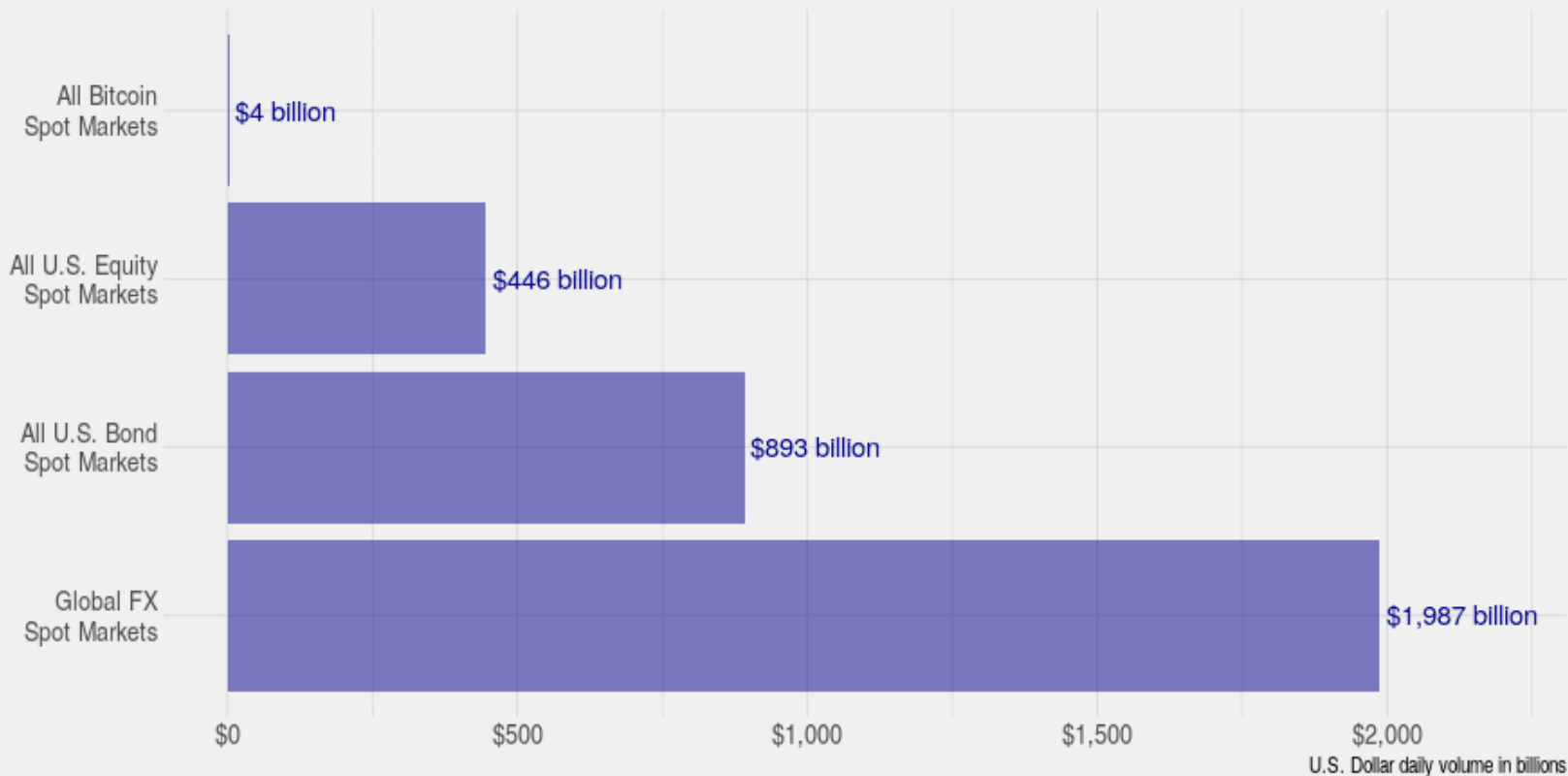
Addition of BTC to hypothetical portfolio

August 13, 2019



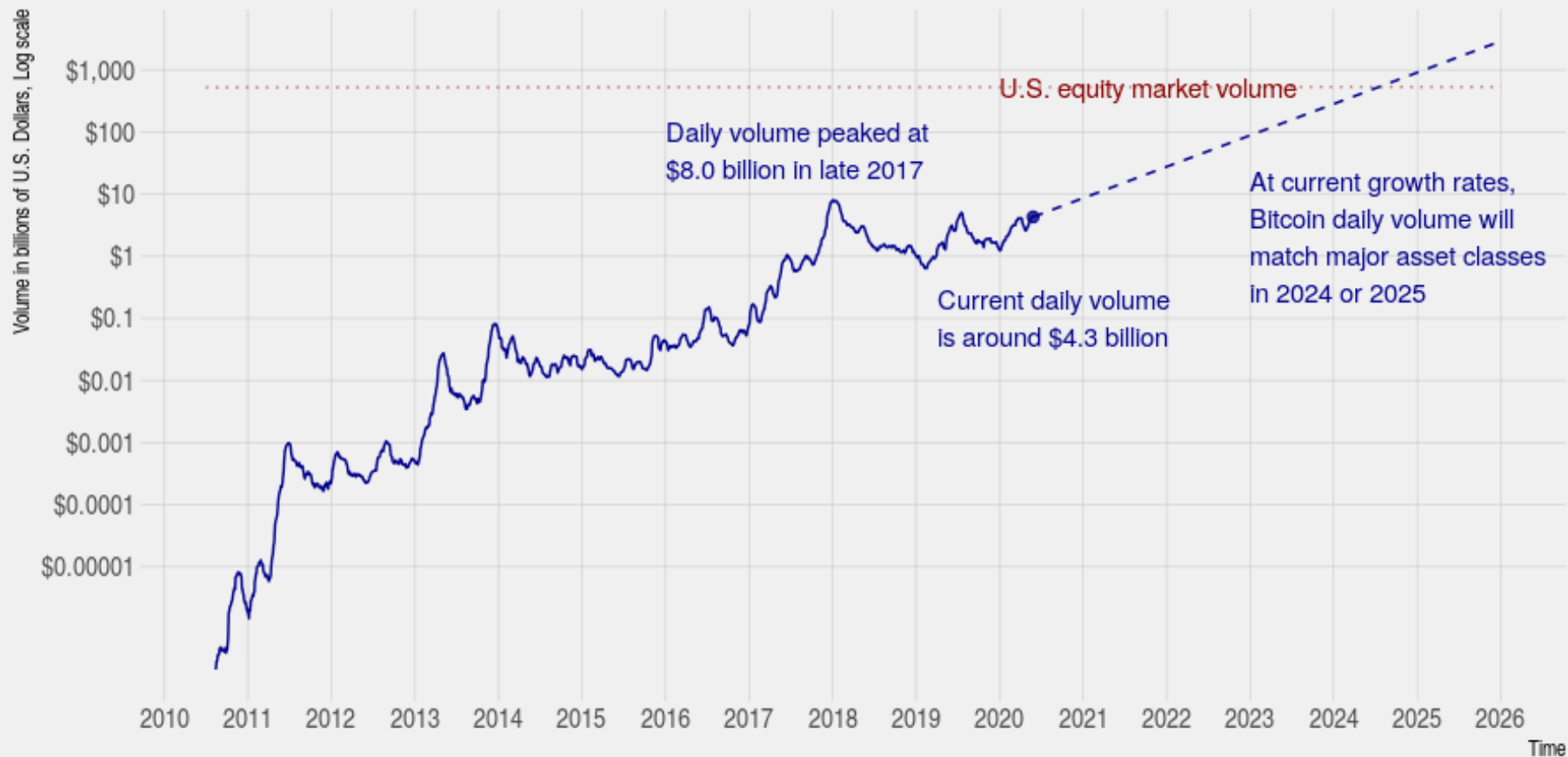
Bitcoin's Volume is Still Small Relative to Major Asset Classes

Average notional U.S. Dollar daily volume in billions



Bitcoin Spot Volume Will Match Major Asset Classes if Growth Continues

Bitcoin spot market U.S. dollar daily volume in billions from major exchanges, 28-day moving average





STABLECOINS

2020 stablecoin growth

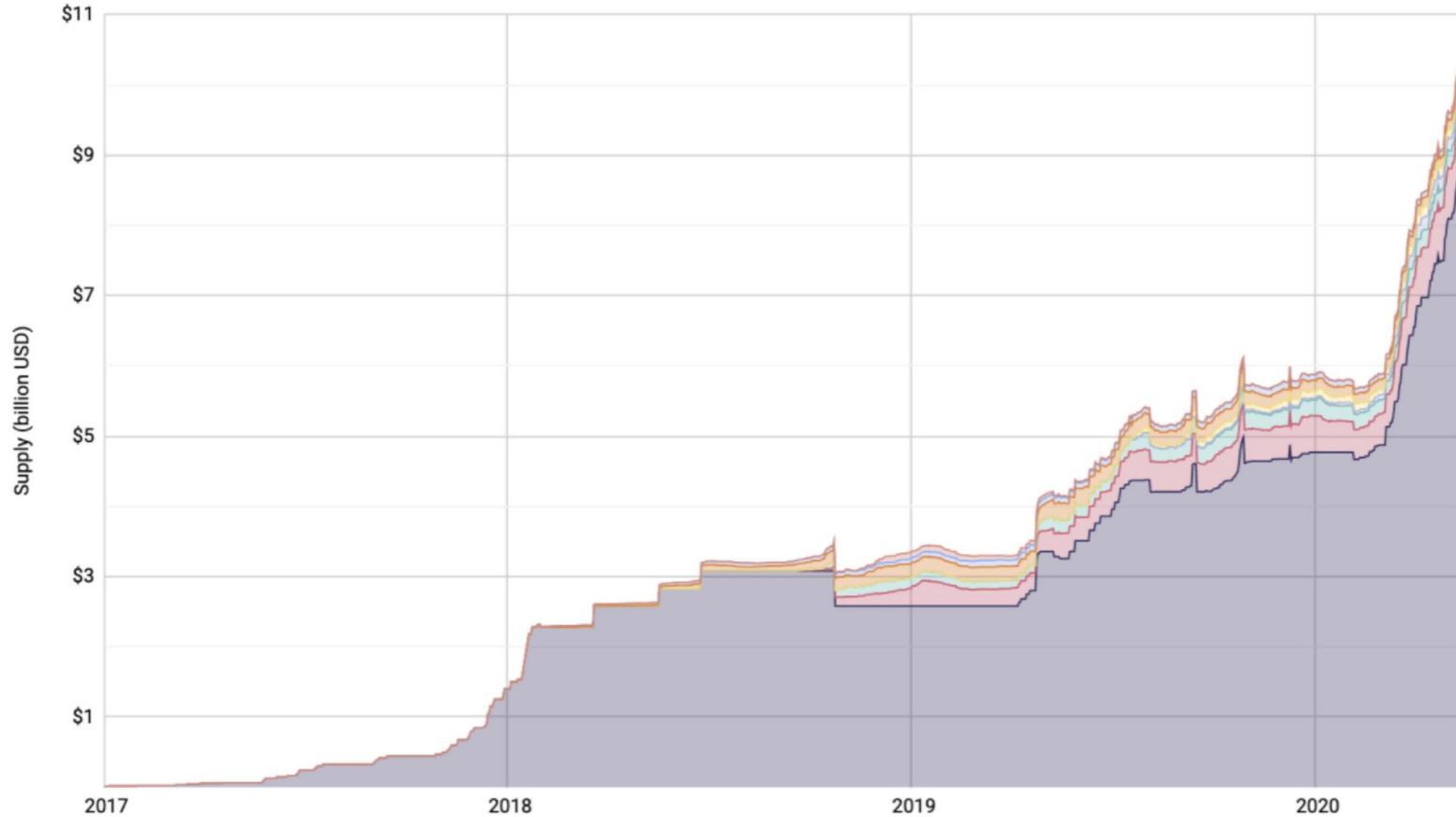
BUSD is by far the fastest growing stablecoin; however, USDT remains the primary driver of total stablecoin growth

Stablecoin	Market Capitalization (\$MM)	YTD Growth (\$MM)	YTD Growth (%)
 tether	\$8,106	\$3,754	71%
 USD Coin	\$706	\$192	37%
 PAXOS STANDARD	\$245	\$30	13%
 BUSD	\$181	\$150	485%
 HUSD	\$149	\$35	36%
 TrueUSD*	\$134	(\$20)	(13%)
 DAI	\$93	\$52	123%
 GEMINI dollar	\$6	\$2	53%



THE BLOCK

Total stablecoin supply surpasses \$10 billion after growing 70% since February



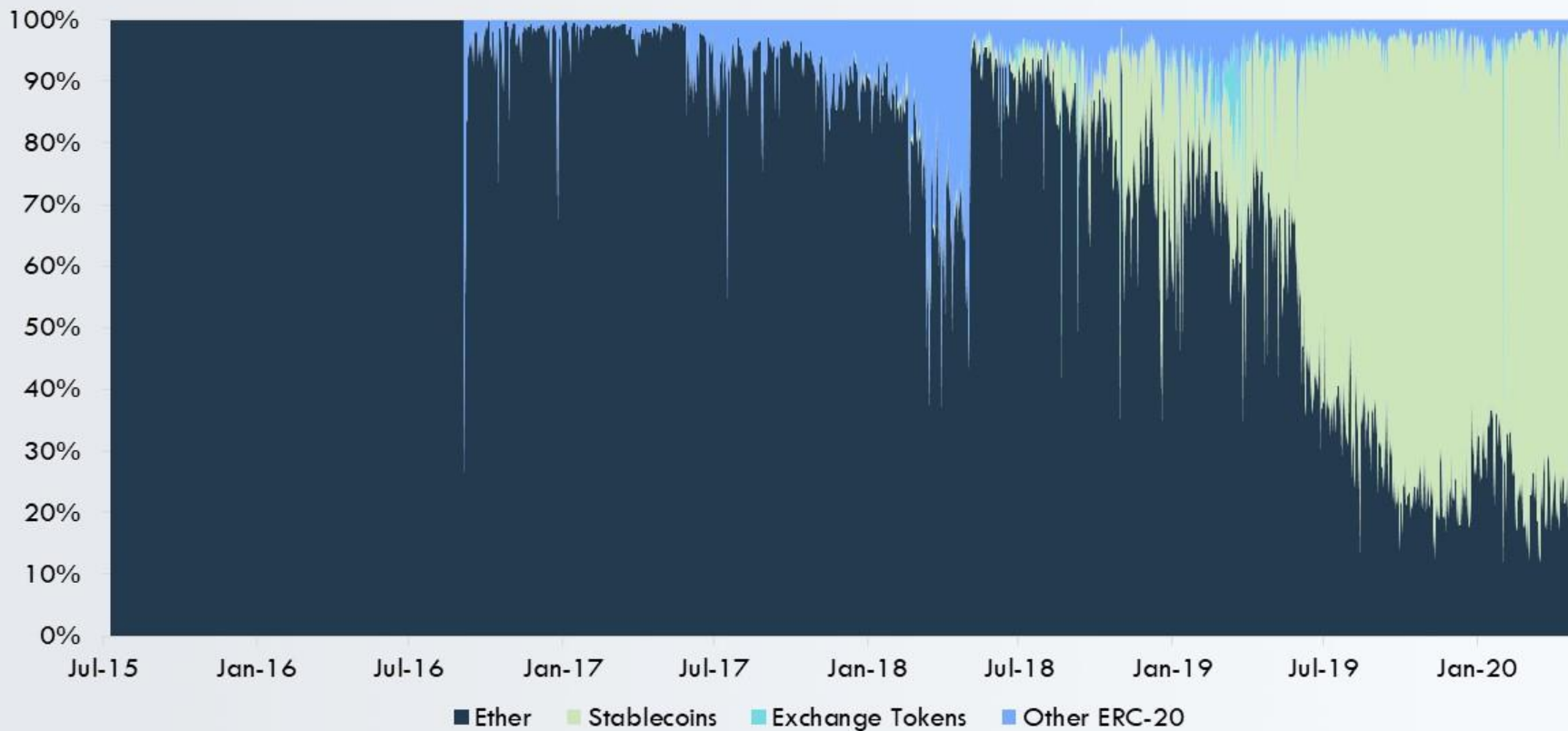
- Gemini dollar (0.1%)
- Dai + Sai (1.0%)
- TrueUSD (1.3%)
- HUSD (1.2%)
- Binance USD (1.8%)
- PAX (2.4%)
- USDC (7.2%)
- Tether (85.1%)

STABLECOIN GROWTH, WHY?

1. Increase in the amount of investors holding stablecoins as “dry powder” in anticipation of a new bull run.
2. [Others have proposed](#) that it’s a reaction to a shortage of U.S. dollars, or a general rush to safety.
3. [Another theory](#) is that Asian OTC traders are pouring money into stablecoins as an onramp to crypto markets.

Daily settlement value

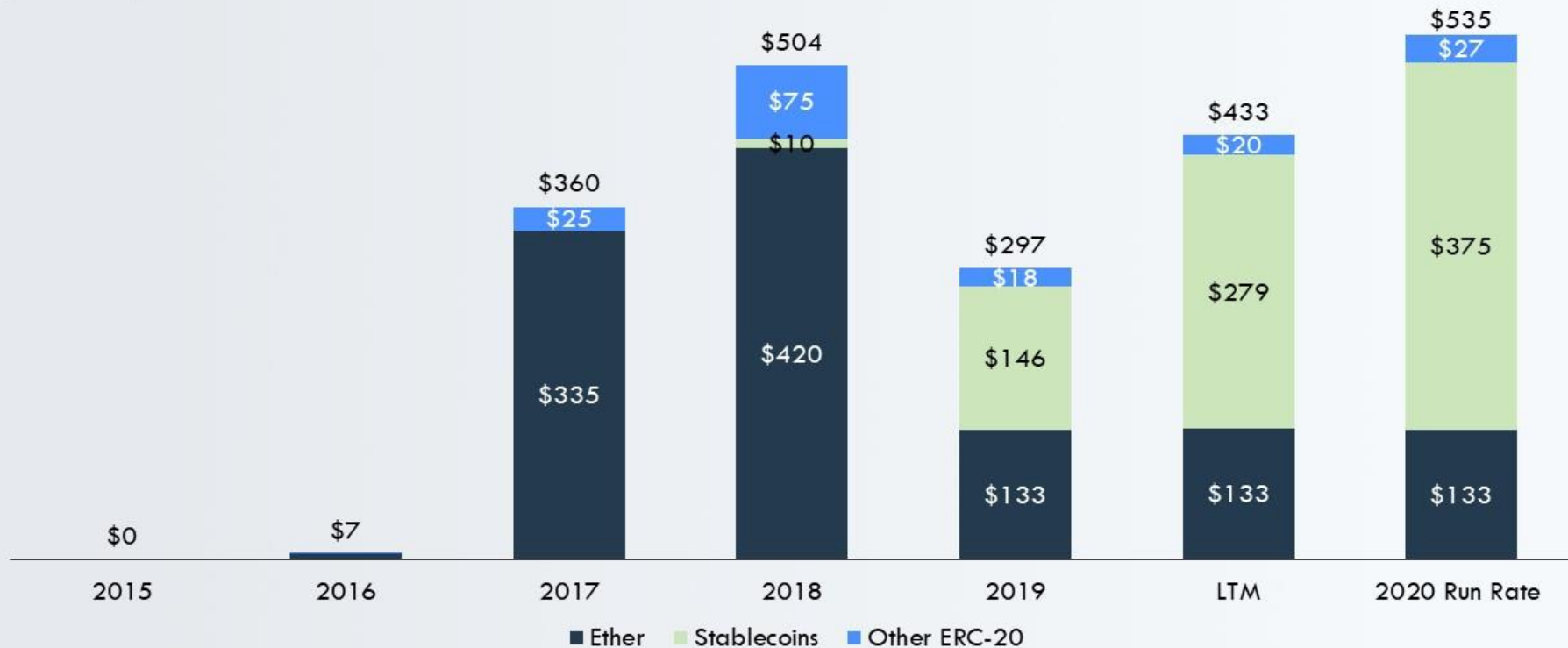
Due to stablecoins, there is now far more value settled in ERC-20 assets than Ether



Annual settlement value

Due to stablecoins, Ethereum is on pace to settle more than \$530 billion in value this year

(\$ in billions)



Ethereum vs Bitcoin daily settlement value

Due to the rise of stablecoins on Ethereum, Ethereum now settles a similar amount of value to Bitcoin daily

(\$ in billions)



As of May. 25, 2020

Note: Ethereum includes all significant ERC-20 tokens on Ethereum. Bitcoin includes USDT issued on Omni

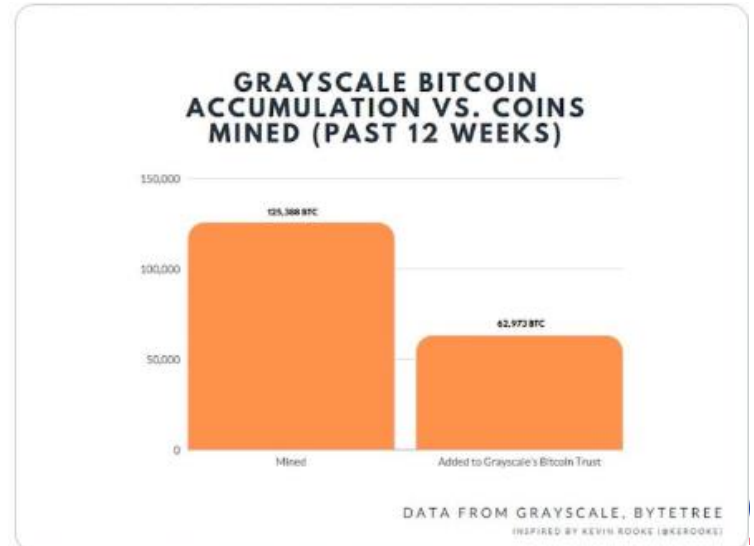
Source: Messari, CoinMetrics



INFRASTRUCTURE & INSTITUTIONS

ARE THE INSTITUTIONS COMING?

- Crypto lenders, like Nexo, provide ‘Earn Interest’ services on crypto, debunking Goldman Sachs’ claim that Bitcoin and gold cannot generate cash flow.
- While Goldman Sachs warns against BTC’s volatility of 76%, they endorse the far more volatile Tesla (116%).
- Strong investment in flightier, innovation-centered assets, like cryptocurrencies, will always require good risk management.
- Grayscale's Bitcoin Trust bought in 62,972 BTC over the past 12 weeks. Over that same time frame, 125,368 coins were mined.



AGREE OR DISAGREE?

YAY?

June 9th, \$2 trillion asset manager **Fidelity Investments** released its second annual survey of institutional investors on digital assets.

The found 36% of institutional respondents have some sort of exposure to the crypto market.

The reasons why Wall Street sees promise in this market. They are as follows:

- Cryptocurrencies are largely uncorrelated with other asset classes
- Cryptocurrencies and blockchains are “an innovative technology play”
- Digital assets have "high potential upside"

NAY?

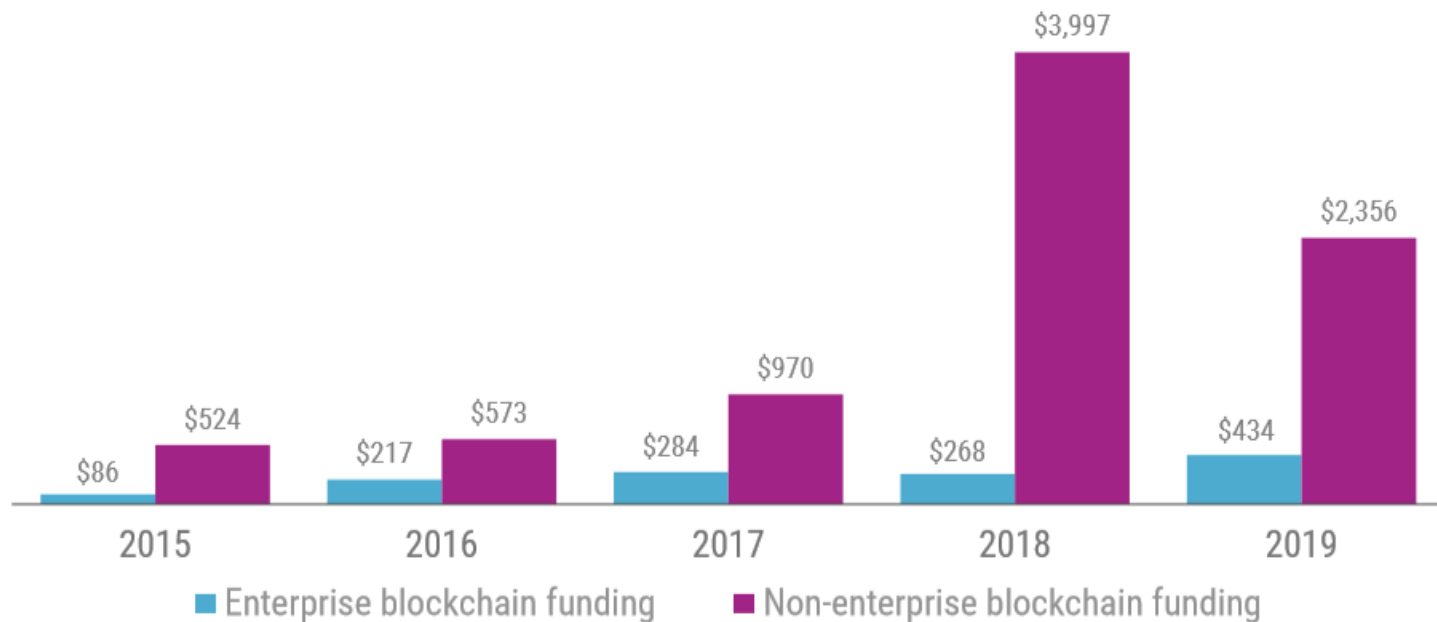
Goldman Sachs recently begged to differ.

In a client call conducted on May 27th, the analysts said that they don't think Bitcoin has a place in a balanced portfolio. They argued that digital assets don't provide diversification benefits, don't rally due to inflation, and don't produce cash flow like equities.

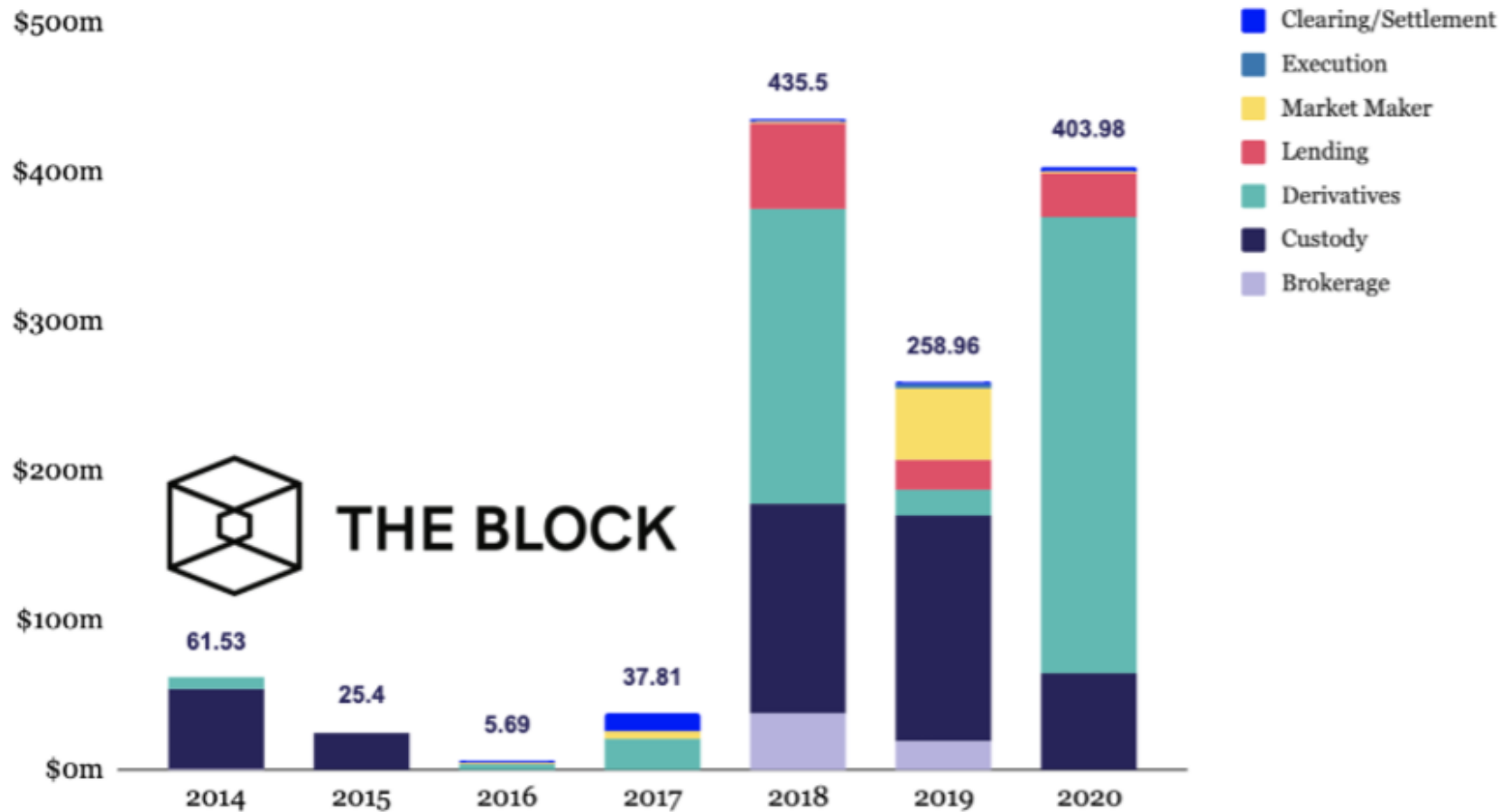
"We don't recommend gold on a strategic or tactical basis for clients' investment portfolios. We don't recommend bitcoin on a strategic or tactical basis," was the presenters' conclusion on BTC.

Funding to cryptocurrency companies has dwarfed funding to enterprise blockchain...

Annual VC-backed deals and financing, 2015 – 2019 (\$M)







Investment in firms providing Institutional Infrastructure for Digital Assets (YoY)



Source: The Block

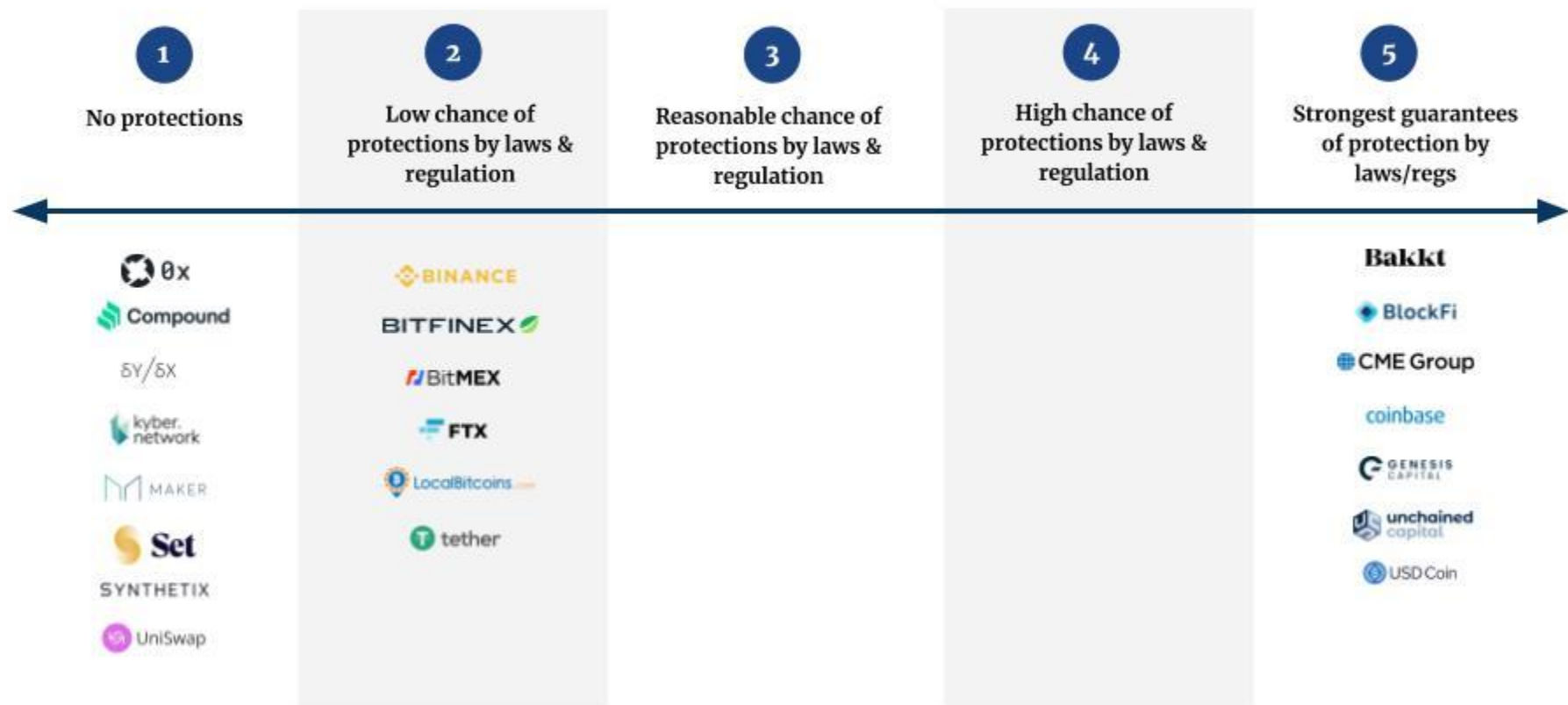
Convergence - The race to become a full service crypto financial institution

The lines between service providers are blurring as firms dip their toes into ancillary offerings outside their primary business

Company	Spot Trading	Derivatives Trading	Lending	Custody	Staking	Payments	Capital Raising	Institutional Trading
coinbase	✓	✗	✗	✓	✓	✓	✗	✓
 BINANCE	✓	✓	✓	✗	✓	✓	✓	✗
Bakkt	✗	✓	✗	✓	✗	✓	✗	✓
 FTX	✓	✓	✗	✗	✗	✗	✗	✗
 BlockFi	✓	✗	✓	✗	✗	✓	✗	✗
COINLIST	✓	✗	✓	✗	✓	✗	✓	✗
 BitGo	✗	✗	✓	✓	✓	✗	✗	✓
Genesis <small>A Digital Currency Group Company</small>	✗	✗	✓	✓	✗	✗	✗	✓



THE LEGAL & REGULATORY TRUST SPECTRUM





TRENDS















OPEN FINANCE VS TRADITIONAL FINANCE

Function	Traditional	Crypto	DeFi
Trading	Commsec	Ind Reserve / BTC Markets	Uniswap
Lending	CBA, Westpac	BlockFi / Celsius	Compound
Stablecoins	AUD	Tether, USD Coin	DAI
Derivatives	IG	Bitmex	Synthetix DyDx
Investing	Clover	Bitwise	Set Protocol

Closed by default
High liquidity
User experience
Fiat on-ramp
Speed

Open by default
Global
Non-custodial
Programmable
Permissionless

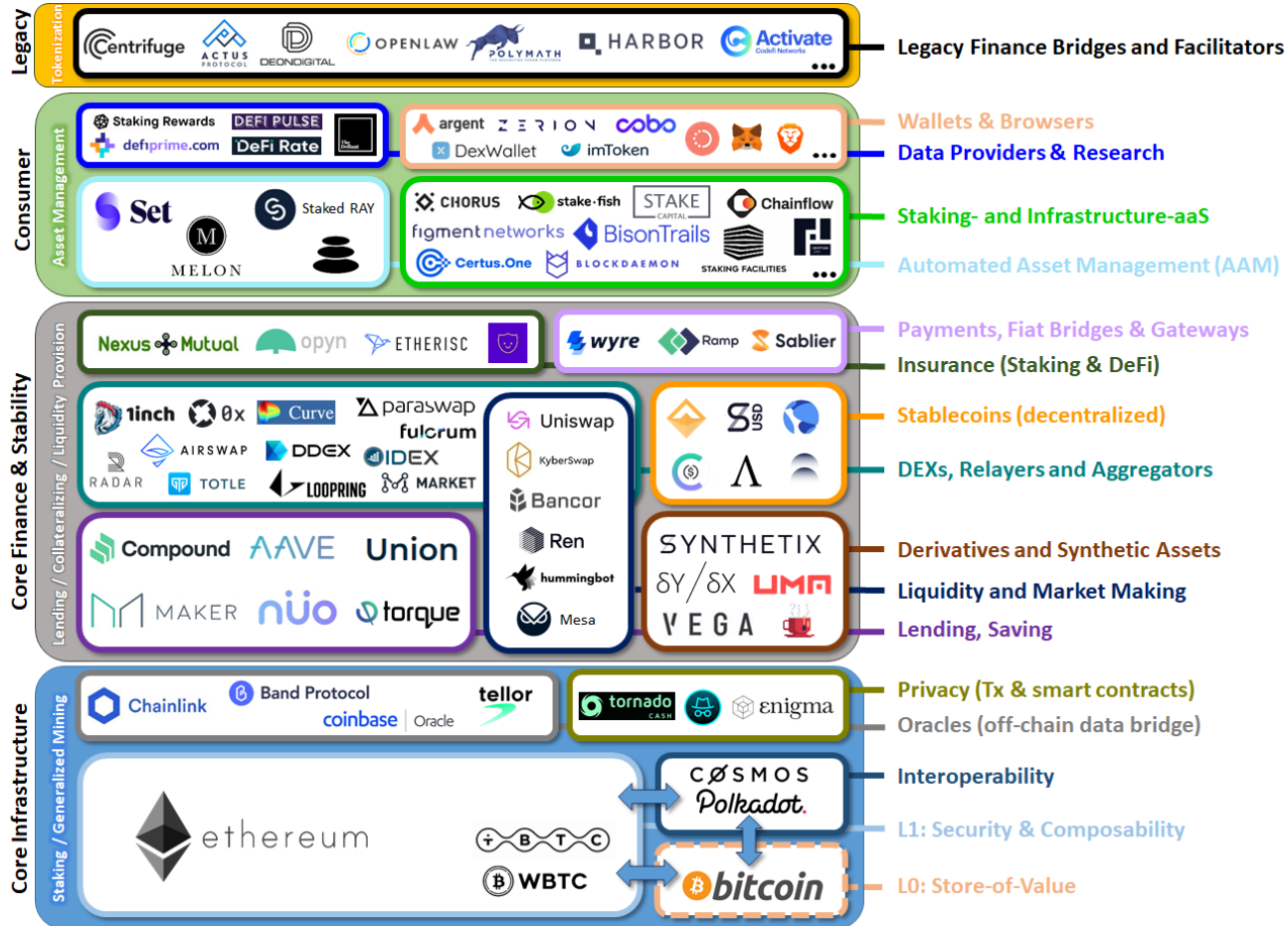
INTEREST ON CRYPTO

Platform	 USDC	 DAI	 ETH	 BTC
USD Price	\$1.00	\$1.01	\$232.83	\$9,461.12
24h change	—	—	< +0.1%	+1.3%
 Nuo**	10.18%	1.89%	0.43%	•
 BlockFi	8.60%	•	4.50%	3.20%
 Celsius	8.34%	8.34%	3.75%	3.95%
 Hodlnaut	8.30%	•	•	6.20%
 Nexo	8.00%	8.00%	•	•
 Ledn	7.50%	•	•	4.10%
 Crypto.com	6.00%	•	6.00%	6.00%
 Poloniex	4.85%	•	0.11%	2.63%
 Idle Finance	3.59%	6.51%	•	•
 Aave	3.52%	3.64%	0.13%	•

Source: Loanscan



Decentralized Finance (DeFi) Stack: Product & Application View

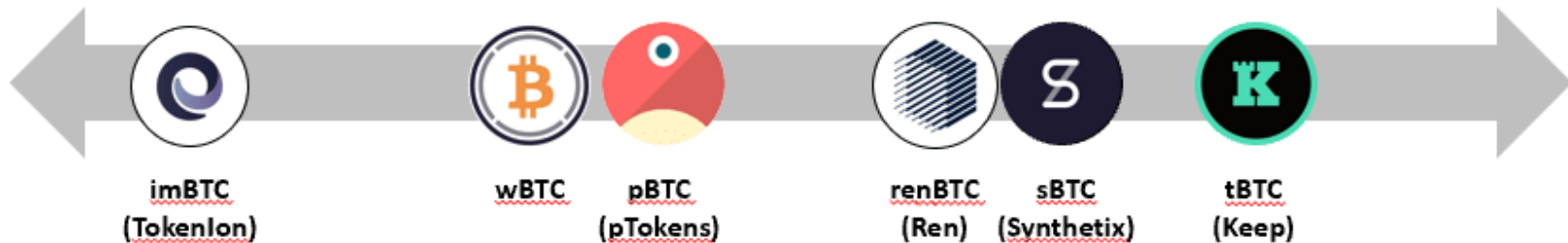


Source: StakingRewards

BTC ON ETHEREUM

Less Decentralized

More Decentralized



Source: The Defiant

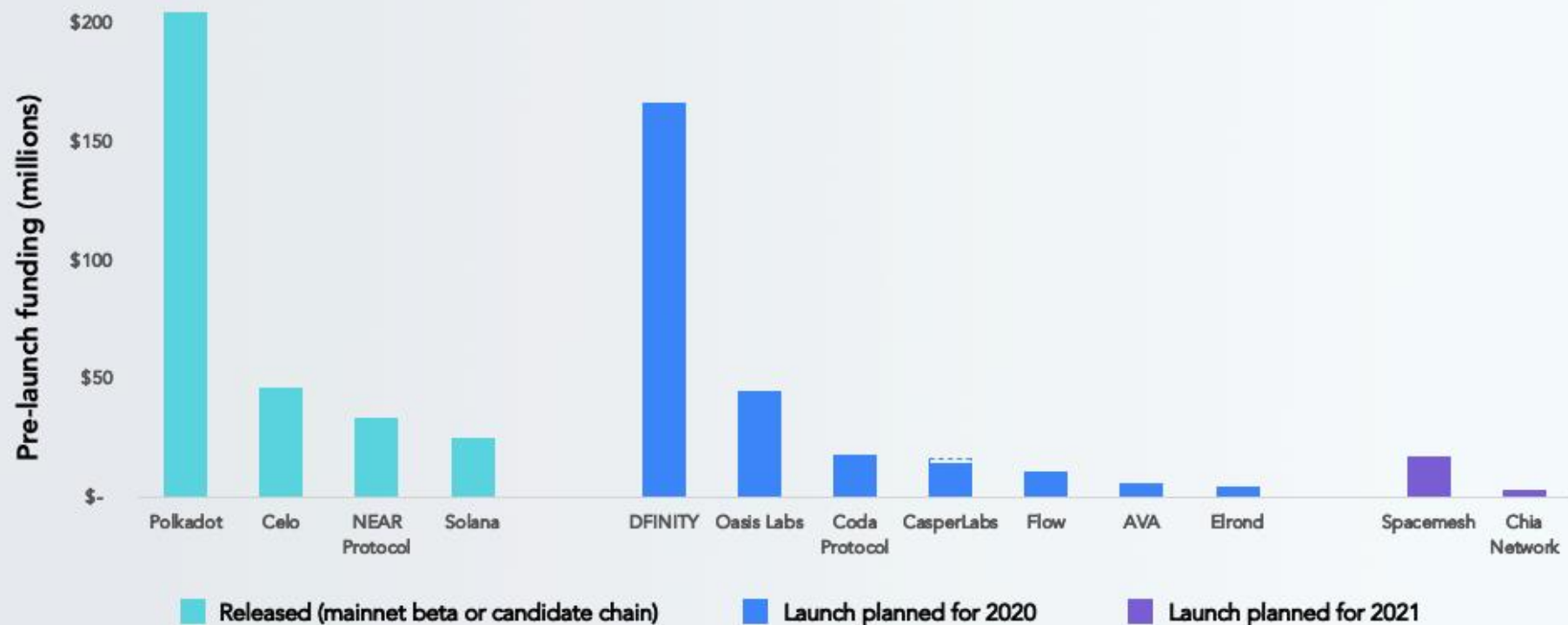
DEFI BUGS, HACKS & PROTOCOL RISK

Exploit	Year	Amount
bZx Exploit 2	2020	\$650k
bZx Exploit 1	2020	\$350k
Compound V1	2019	None, vulnerability was disclosed and fixed before it was exploited.
0x v2.0	2019	None, vulnerability was disclosed and fixed before it was exploited.
Bancor	2018	\$23M
Parity Self Destruct	2017	\$150M
Parity Multisig	2017	\$72M
The DAO	2016	\$50M

Source: DeFi: Dependency Hell Meets Finance

“Ethereum Friends” with recent or future launch dates

Even with Telegram bowing out, the Smart Contract Platform sector is becoming increasingly saturated



As of May 27, 2020

Note: CasperLabs completed a token sale that aimed to raise \$3 million (no details disclosed as of now)

Source: Messari, CoinDesk, Delphi Digital

