Executive Summary

Beyond its core value propositions—scarcity, decentralization, security, among others—this report makes the case for four domains that support further Bitcoin adoption in the U.S.:

1. On-chain transparency: Bitcoin is a transparent, open-source, cryptographically verifiable asset which, via the use of on-chain analysis, guarantees resistance against nefarious economic actors in the network.
2. Efficient price discovery: Bitcoin's price has always followed its inherent economic forces of supply and demand, as opposed to what is loosely deemed as "market manipulation." Furthermore, these fundamental forces are analyzable via on-chain data.
3. Need for innovative financial instruments: A Bitcoin ETF is crucial to incentivizing U.S. market share of its total circulating supply, keeping America, as well as its citizens and investors, the leading world actor in the future of Bitcoin.
4. Bitcoin has matured: Bitcoin has developed enough market efficiency, historical resistance, and regulatory robustness to allow for further growth and adoption of Bitcoin via these new financial instruments.

VALKYRIE

BITCOIN: AN ASSET MATURE

The Future of Bitcoin in the United States

February, 2022

For Informational Purposes Only

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01. *Bitcoin: Coming of Age and the Path Forward*

Bitcoin: Coming of Age and the Path Forward

In 2022, over 13 years since its launch, Bitcoin has grown into an asset of crucial macroeconomic and social significance, its growth and relevance driven in recent years especially by the following factors:

- A bear market in 2018 and 2019, where long-term holders and buyers supported price above the skeptics' expectations.

- During that same period, an infrastructural trend, where Bitcoin saw a major uptick in regulated exchanges, funds, lenders, and on-ramps, as well as the necessary technology and liquidity for custodians and new institutional money to on-board into the asset.

- Finally, starting in 2020, the rise of the "inflationary hedge" narrative, which has incentivized major investors, corporations, financial institutions, and nation-states to embrace, accumulate, and actively manage Bitcoin.

What is Bitcoin's path forward?

What is the best future for Bitcoin in the United States?

Beyond its core value propositions—scarcity, decentralization, security, among others—this report makes the case for four domains that support further Bitcoin adoption in the U.S.:

1. **On-chain transparency**: Bitcoin is a transparent, open-source, cryptographically verifiable asset which, via the use of on-chain analysis, guarantees resistance against nefarious economic actors in the network.

2. **Efficient price discovery**: Bitcoin's price has always followed its inherent economic forces of supply and demand, as opposed to what is loosely deemed as "market manipulation." Furthermore, these fundamental forces are analyzable via on-chain data.

3. **Need for innovative financial instruments**: A Bitcoin ETF is crucial to incentivizing U.S. market share of its total circulating supply, keeping America, as well as its citizens and investors, the leading world actor in the future of Bitcoin.

4. **Bitcoin has matured**: Bitcoin has developed enough market efficiency, historical resistance, and regulatory robustness to allow for further growth and adoption of Bitcoin via these new financial instruments.

The future of Bitcoin adoption in the United States is the ETF model.

02. *On-Chain Transparency: Bitcoin as a Verifiable Asset*

A. Bitcoin’s Elegant Accounting System

B. Bitcoin’s Data Science: A Window Into Asset Events

Bitcoin's main value proposition is contingent on one of its core features: transparency.

Bitcoin’s cryptographic transparency is what guarantees its security, scarcity, decentralization, and robustness as a bearer asset.

On-chain data and analysis, in all its different types and use cases, is what allows for the ability to:

- Maintain the security of the network, where independent nodes validate proof-of-work-based transactions.
- Make the history of Bitcoin as an ownership ledger fully permanent—and accessible at a low cost by setting a full Bitcoin node.
- Analyze the fundamental forces of supply and demand that drive the growth, adoption, and price discovery of Bitcoin.

Bitcoin is the most transparent financial asset traded in the world today, its protocol based on:

- **Programmed issuance**, where monetary supply is pre-scheduled and predictable, as opposed to malleable and prone to economic error.
- **Immutable accounting**, where ownership is cryptographically secured and allocated, as opposed to corruptible and prone to human error.
- **Public auditing**, where issuance and transactions are verified by free widespread observance, as opposed to appointed, enclosed third parties.

Bitcoin's Elegant Accounting System

Bitcoin ownership amongst its network participants relies on its public, cryptographically-validated accounting system: the unspent transaction output (UTXO). Simply put, UTXOs are the cryptographic database storing the final, remainder balance in each address after transactions occur.

By this elementary process, two core data points are stored in perpetuity on the network's longest validated chain:

1. The timestamps of all transactions between addresses via the block number where the transaction occurred—or transaction time.

2. The quantity of coins left on each address after each block of transactions—or address supply.

These components form the core of fact-checking and visualizing Bitcoin's economic history in an immutable manner, free from human error or corrupted bookkeeping.

Bitcoin's Data Science: A Window Into Asset Events

On-chain data serves as a window into Bitcoin’s inherent supply and demand, where all network observants can monitor exogenous economical factors being priced into the Bitcoin economy in real time. The range of information contained in the network’s open-source transaction ledger includes, yet is not limited to:

- The cryptographic security of the network via miner’s hashes per second.
- The programmatic monetary policy of the network via its verifiable circulating supply and daily issuance.
- The transaction value and velocity of Bitcoin as an economic asset via the number of bitcoins being sent from one address to another.
- The aggregate behavior of holders via the length of time bitcoins remain unmoved in their allocated addresses.
- The detection of nefarious economic activity by market counterparties, following their transactional behavior over time (e.g., the PlusToken Ponzi scheme events in China, which will be explored in chapter 3, “Bitcoin in Historical Context”).

As a growing financial asset, Bitcoin's history, and the on-chain transparency through which this history can be evaluated, is what provides support for further regulatory acceptance and economic adoption in the United States.

03. *Bitcoin in Historical Context*

A. Bitcoin's Price Follows the Fundamentals

B. 2017: A Bubble Burst

C. 2018: The Bear Market

D. 2019: The PlusToken Era

E. 2020: Institutional Adoption

F. 2021: Early Nation-State Adoption

G. The Future of Bitcoin is Verifiable

Bitcoin's Price Follows the Fundamentals

Once on-chain data has been established as an essential feature for maintaining Bitcoin's transparency, its use is crucial to prove that Bitcoin's price follows fundamental economic forces of supply and demand, as opposed to what is usually deemed by skeptics as "market manipulation." Most importantly, these economic flows can be accessed by all at little cost, either by setting up a full node for data mining or outsourcing this process to reputable on-chain data providers.

In this section, we will explore how, from 2017 to now, Bitcoin's price history is fully reliant on market events impacting the underlying inner economics of the network, observable to all, while making the case for the following:

- Bitcoin's price is subject to market turmoil as much, yet not more, as traditional assets.
- Bitcoin has proven robust against economic attacks, including those of foreign nation-states.
- Bitcoin is increasingly mature in its path toward adoption, regulation, liquidity, and infrastructure.
- Bitcoin is the most transparent asset traded today, via the information provided by on-chain data.

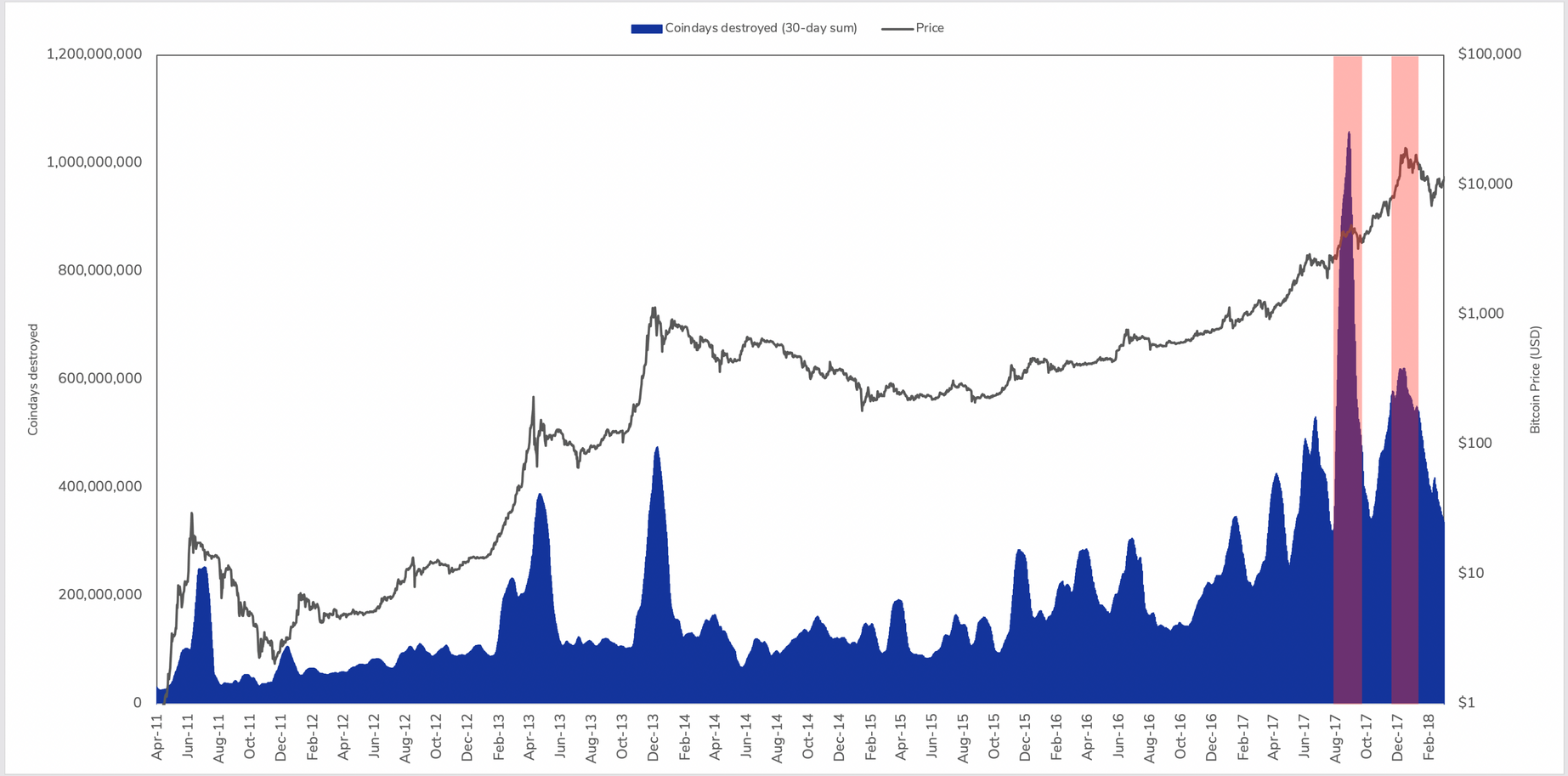
2017: A Bubble Bust

Q4

Period characterized by:

Markets and adoption	The last, most exuberant stage of the 2017 cryptocurrency bubble, as price sees a 380% increase from October to December, driven in part by the speculative ICO boom.
Infrastructure	The CME and CBOE Bitcoin, cash-settled futures contracts debut in December.
On-chain	Major profit-taking and selling behavior in Bitcoin's on-chain inner economics, with transaction fees at all-time highs as the network migrates into SegWit scaling solution.

Bitcoin Coindays Destroyed



- Coindays destroyed is a metric that multiplies the coins moved at any given day times the number of days each of those coins remained unmoved. A high number of coindays destroyed implies that holders are moving their bitcoins in order to sell.

- In late 2017, coindays destroyed reached all-time highs in August (in great part due to the Bitcoin Cash fork that incentivized coin movement yet not major selling activity), as well as a secondary high in December, suggesting by this time that massive selling behavior was taking effect given the parabolic rise in price.

Chart by Valkyrie (January, 2022) | Data by CryptoQuant | Live chart

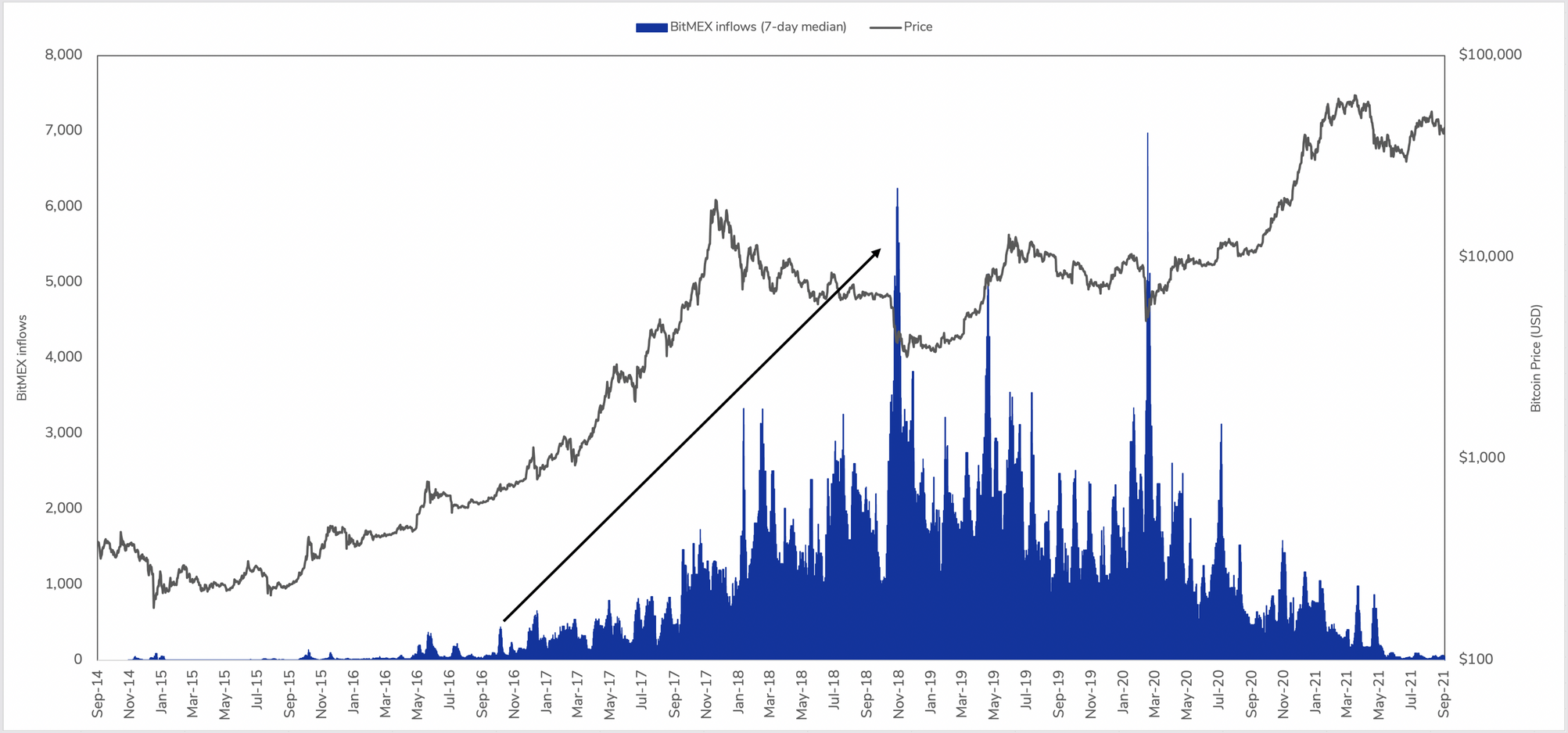
2018: The Bear Market

Q1 and Q2

Period characterized by:

Markets and adoption	Backed by Goldman Sachs, Circle acquires Poloniex exchange. Peter Thiel's firm, Founders Fund, discloses Bitcoin position.
Infrastructure	The emergence of derivatives futures contracts in off-shore, unregulated entities—specifically BitMEX, where derivatives trading volume outpaced spot volume for the first time and where bitcoin inflows stood at historical highs. Robinhood introduces crypto trading platform.
On-chain	Bitcoin's monthly volatility dropping by 63%, while holding behavior on-chain rises before selling behavior reactivates in September of that year (as seen in "Average Dormancy" chart two slides next.).

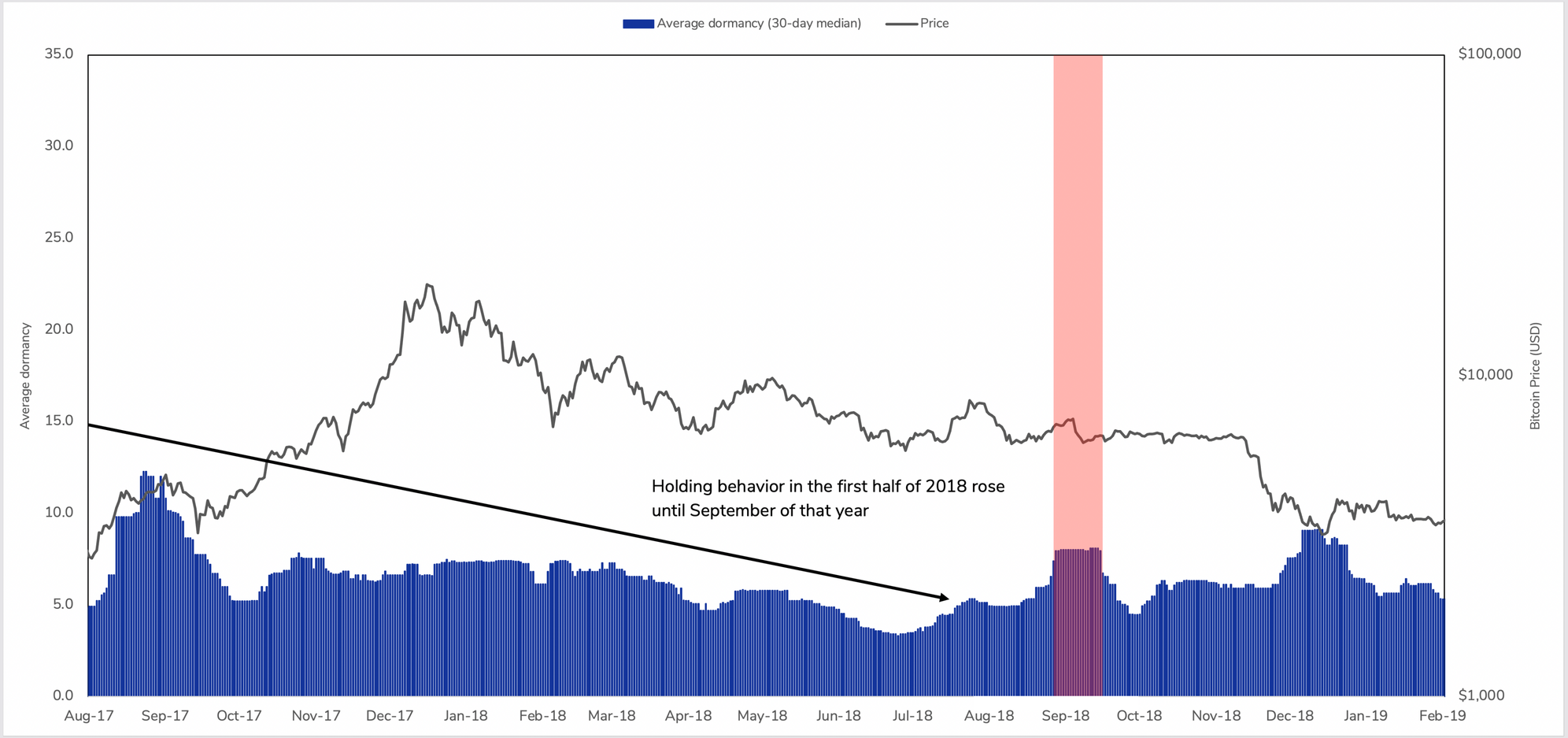
Bitcoin BitMEX Inflows



- The inflows above account for the coins flowing into all addresses owned by the BitMEX off-shore derivatives exchange.
- Since late 2017, supply inflow into this exchange peaked toward mid-2018, denoting the proliferation of Bitcoin derivatives trading in the only place where this was available: off-shore jurisdictions.

Chart by Valkyrie (January, 2022) | Data by CryptoQuant | Live chart

Bitcoin Average Dormancy



- Average dormancy is the ratio between the number of coindays destroyed and transaction volume, therefore showing the average time the coins transacted that day remained unmoved. High dormancy suggests that old holders who purchased at lower prices are likely selling their positions.

- During the first half of 2018, average dormancy saw a sustained drop from 7.2 days in late December of 2017, to 3.5 days in late June, 2018. It was until September of 2018 that dormancy regained upward momentum, setting up the final capitulation at the end of that year.

Chart by Valkyrie (January, 2022) | Data by CryptoQuant | Live chart

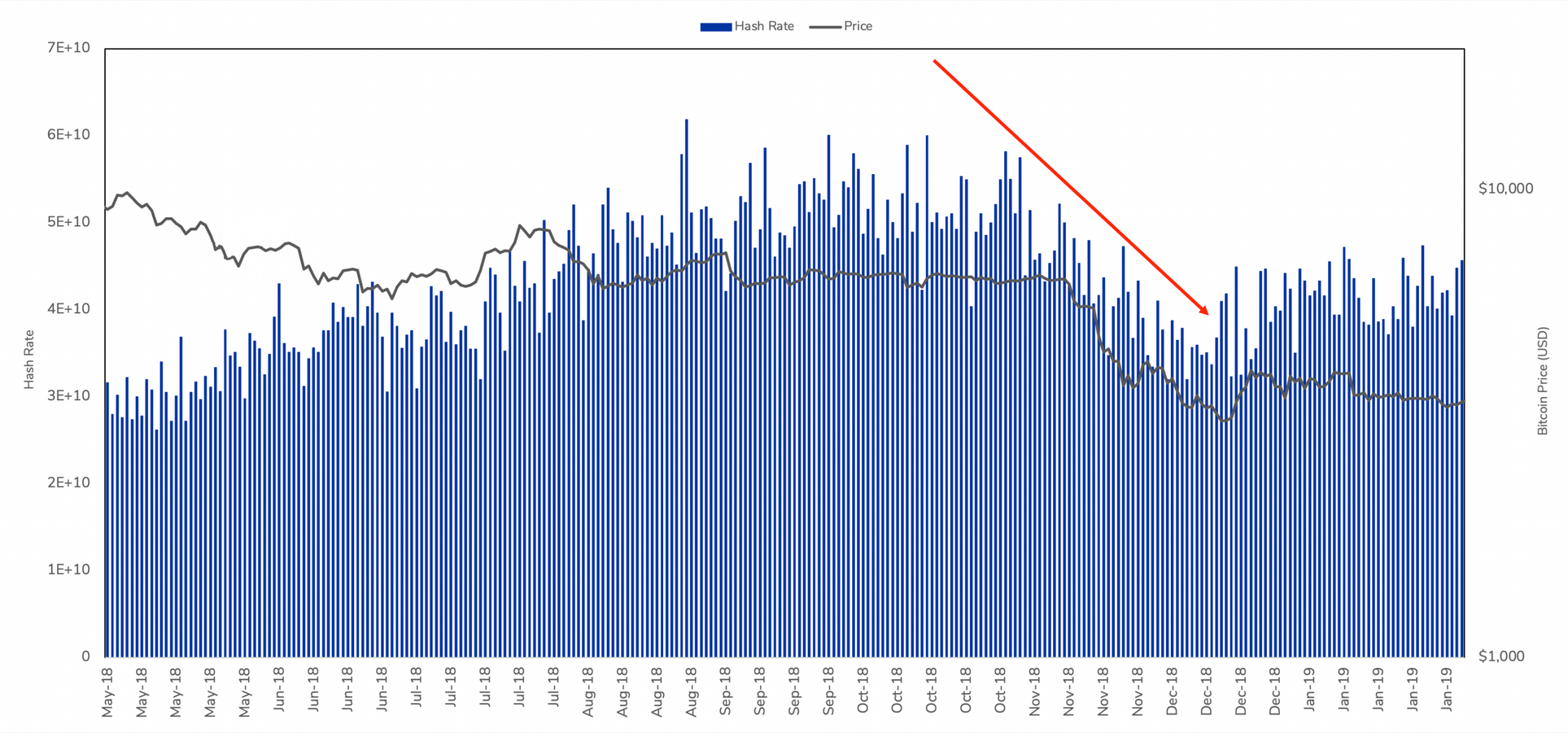
2018: The Bear Market

Q3 and Q4

Period characterized by:

Markets and adoption	Harvard, MIT, Stanford, and Yale endowments assume exposure into crypto-specific funds. The Bitcoin market finds a global bottom at ~$3,100 USD in December, after a capitulation event set off in part by miners.
Infrastructure	Square allows Bitcoin purchases in the U.S. The Lightning Network's base infrastructure first emerges as Bitcoin's second-layer scaling solution. BitGo receives regulatory approval as a qualified crypto custodian.
On-chain	The Bitcoin "Hash Wars," in which the Bitcoin Cash-Bitcoin SV fork sets off selling pressure coming from miners and speculators. Bitcoin hash rate drops nearly 50%.

Bitcoin Hash Rate



- Hash rate estimates the hashes per second produced by the miners participating in the Bitcoin network. It serves as a measurement of network security.

- From August to December, 2018, Bitcoin hash rate saw a drop of nearly 50%, as miner interest divested off BTC and its forks. Bitcoin price also saw a correlated drop of 52% during this period. Both hash rate and price recovered into new all-time highs by 2019 and 2020, respectively.

Chart by Valkyrie (January, 2022) | Data by CryptoQuant | Live chart

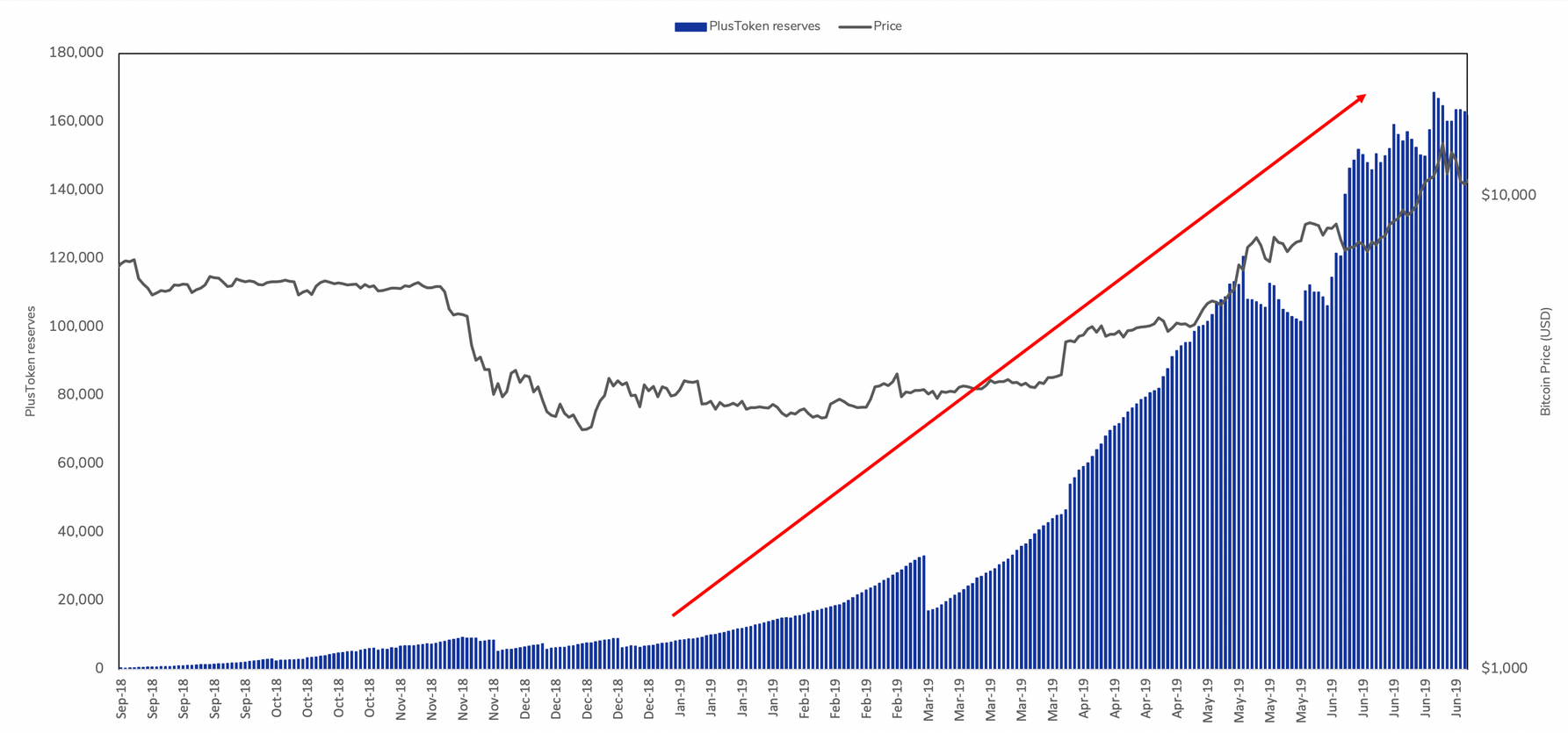
2019: The PlusToken Era

Q1 and Q2

Period characterized by:

Markets and adoption	A +300% price increase within a period of six months, in part produced by the artificial demand caused by the Chinese PlusToken Ponzi scheme.
Infrastructure	Fidelity leads the way in increased institutional adoption and infrastructure, by launching custody solutions to initial customers.
On-chain	The first stage of PlusToken, a major Ponzi scheme out of China—in which nearly 2% of Bitcoin total circulating supply was concentrated into nefarious addresses.

Bitcoin PlusToken Supply (Phase 1)



- The PlusToken reserves above measure the Bitcoin supply held in the addresses owned by the homonymous Chinese Ponzi scheme over time.
- PlusToken saw a major uptick in supply in early 2019, to reach above at least 160k bitcoins by June, 2019. During this period, price went from little over $3,000 USD to little under $14,000 USD, suggesting that such price increase was caused in part due to the artificial demand generated by PlusToken.
- As this was developing live, prominent on-chain analysts were able to detect this nefarious activity and inform the public about it.

Chart by Valkyrie (January, 2022) | Data by CryptoQuant and ErgoBTC | Live chart

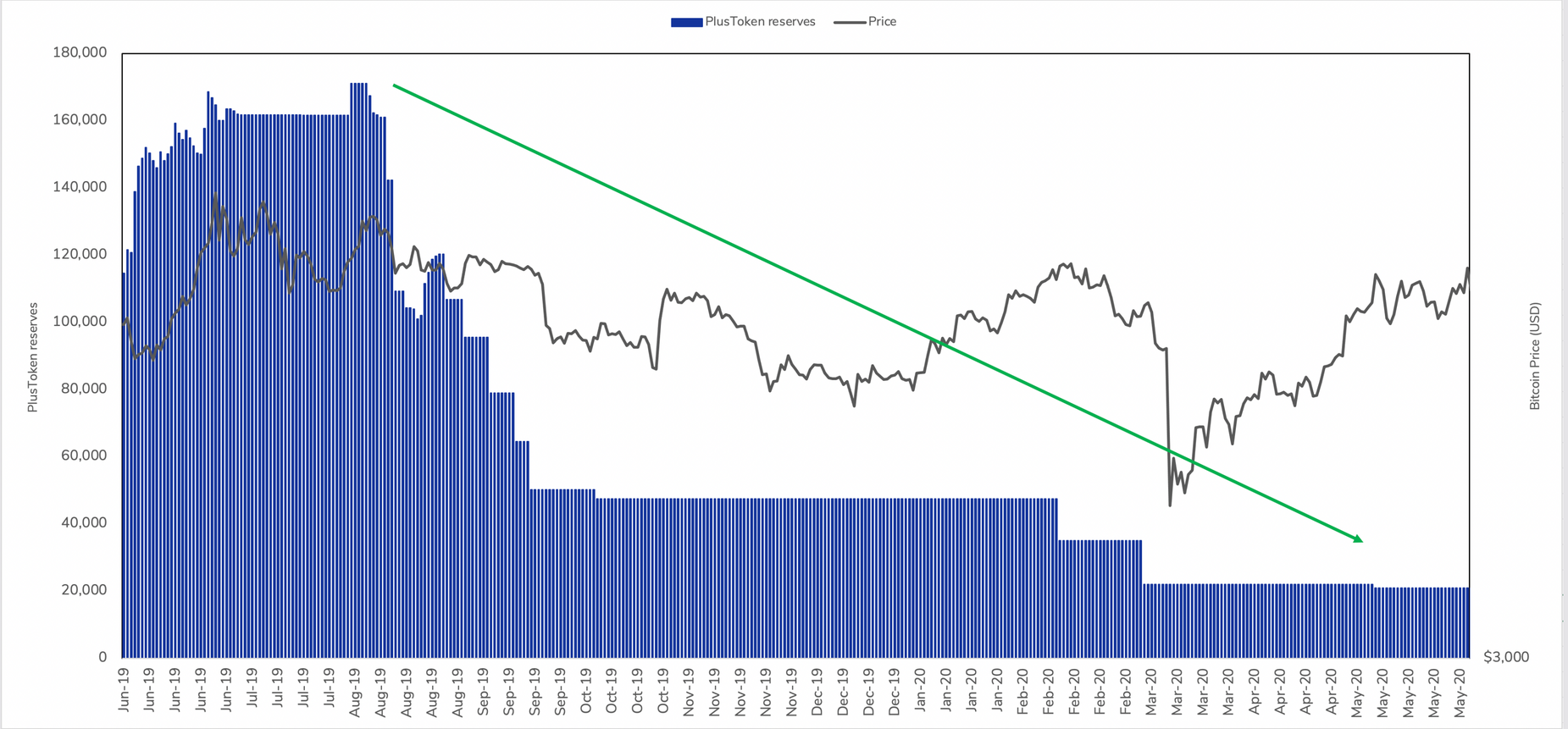
2019: The PlusToken Era

Q3 and Q4

Period characterized by:

Markets and adoption	Regulation towards crypto assets increases as the SEC, CFTC, and FinCEn issue statement warning of KYC/AML obligations, and the IRS publishes its Crypto Tax Guidance.
Infrastructure	Bakkt launches regulated, physically-settled Bitcoin futures for the first time.
On-chain	The second stage of PlusToken, where the Bitcoin reserves held by this Ponzi scheme began being sold into the open market in July. This sell-off sets out a 54% correction in price.

Bitcoin PlusToken Supply (Phase 2)



- As seen above, the PlusToken reserves peaked in August, 2019, at an estimate of 171k BTC, while price developed a major top.
- From August to December, 2019, PlusToken reserves diminished to less than 50k BTC, as this supply stack was being sold into the open market after government confiscation. Price dropped to little over $6,000 USD during this period.
- This stands as the first major indirect liquidity attack toward Bitcoin by a nation-state holding a significant portion of its supply. Bitcoin survived this attack to reach a new all-time high in price by December, 2020.

Chart by Valkyrie (January, 2022) | Data by CryptoQuant and ErgoBTC | Live chart

2020: Institutional Adoption

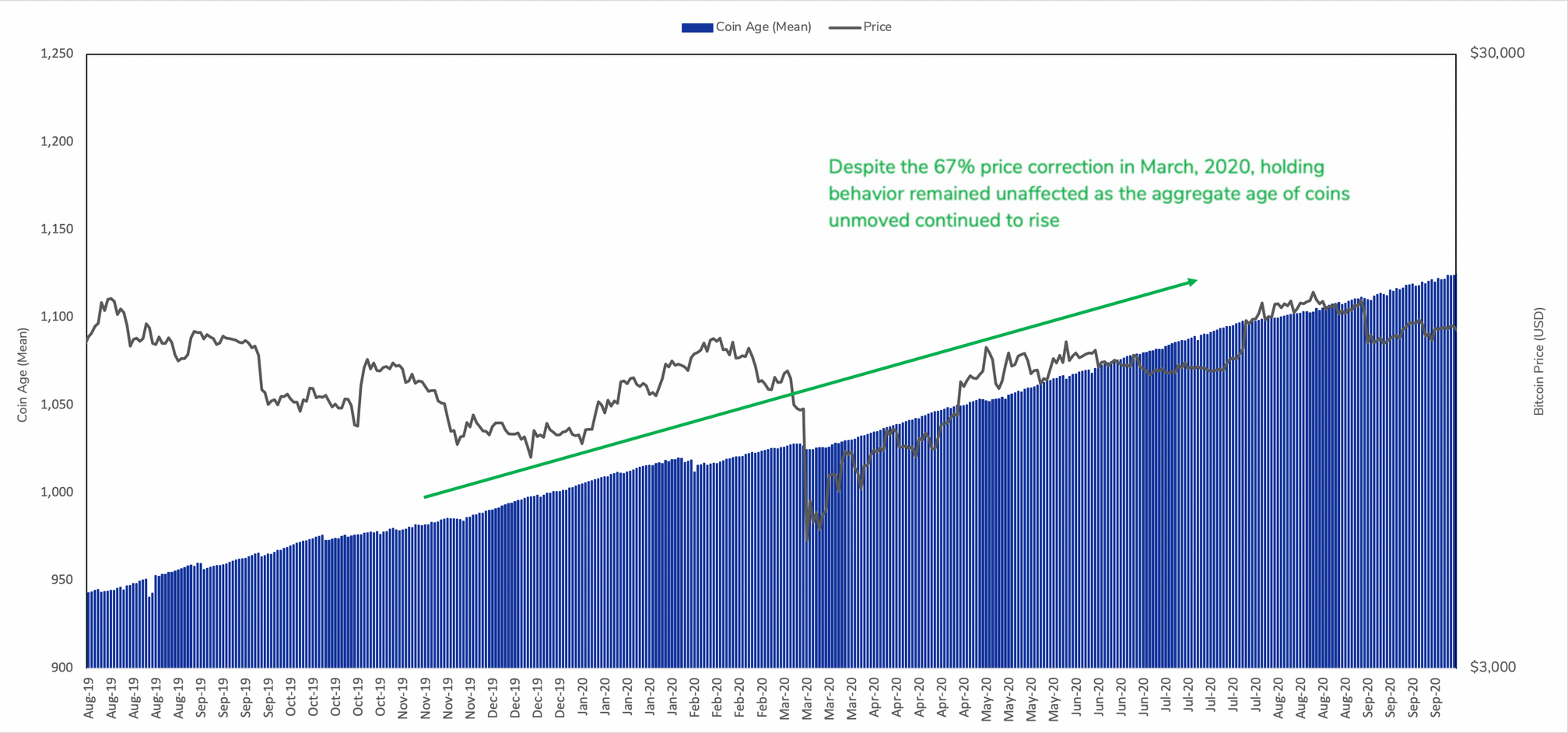
Q1 and Q2

Period characterized by:

Markets and adoption	After a price recovery since the end of 2020, Bitcoin joins the widespread multi-asset crash in March, caused by the spread of COVID-19 worldwide. This sets up the emergence of the “hedge against inflation” narrative amongst major financial institutions and corporations after the U.S. government’s ~18% increase in USD monetary supply*. Major investors begin taking significant Bitcoin exposures, mainly led by Paul Tudor Jones.
Infrastructure	Bitcoin infrastructure further increases when JPMorgan extends banking services to Coinbase and Gemini Trust, and BitGo launches prime brokerage business.
On-chain	Bitcoin supply begins a major shift into illiquidity, where bitcoins become increasingly unmoved, denoting strong holding behavior by institutional new money.

* *Data by FRED, "M2" | Source link*

Bitcoin Coin Age (Mean)



- Coin age measures the average number of days all Bitcoin UTXOs have remained unmoved.
- During the first half of 2020, despite a 67% drop in price due to the COVID-19 panic, the age of unmoved bitcoins continued to rise almost with no interruptions, suggesting strong holder activity.

Chart by Valkyrie (January, 2022) | Data by CryptoQuant | Live chart

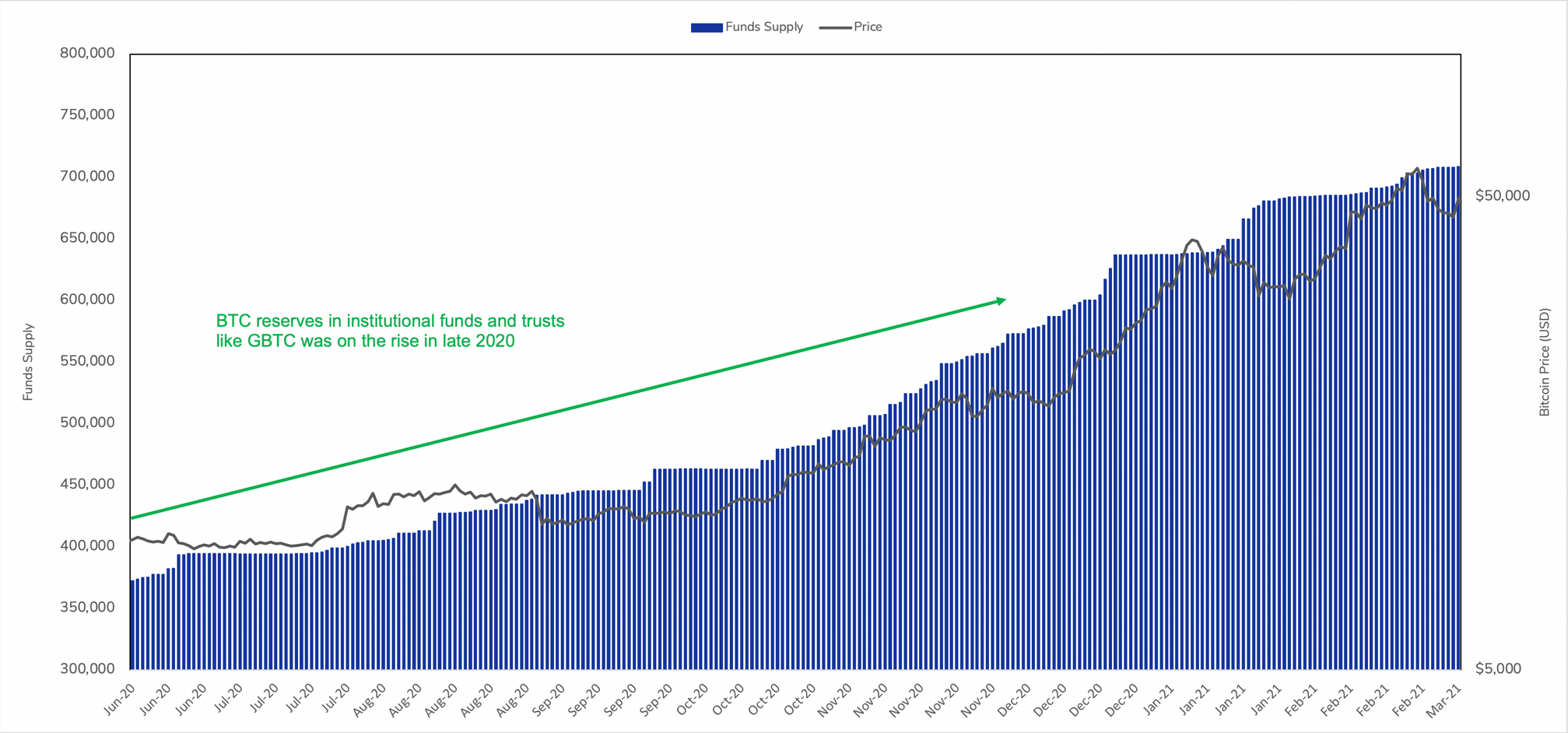
2020: Institutional Adoption

Q3 and Q4

Period characterized by:

Markets and adoption	Bitcoin is deemed money in U.S. Federal Court under the Money Transmitters Act. Microstrategy buys Bitcoin and leads the way in its adoption into corporate treasury reserves. U.S. authorities crack down on BitMEX's founders, further incentivizing an already established trend by off-shore derivatives exchanges to adopt KYC/AML practices. JPMorgan launches digital asset business unit. MassMutual assumes Bitcoin exposure.
Infrastructure	Bitcoin's institutional and corporate adoption accelerates, as seen on several infrastructural fronts: Visa unveils roadmap into Bitcoin and crypto integration, CME Bitcoin futures open interest hits 1 billion USD, Paypal and Venmo introduce crypto buying and selling on their platforms.
On-chain	Bitcoin's accumulation by large institutional investors continues, as the net number of large-position addresses, especially in institutional financial products, continues to rise.

Bitcoin Funds Supply



- Funds supply accounts for the supply held in addresses owned my major institutional financial products, including GBTC, QBTC.U, BTCQ.U, BTCC.U, and BTCE.
- In the second half of 2020, supply held in institutional-grade funds increased at a stable rate from mid to late 2020, seeing a 58% increase from early September to late December and further confirming increased institutional adoption.

Chart by Valkyrie (January, 2022) | Data by CryptoQuant | Live chart

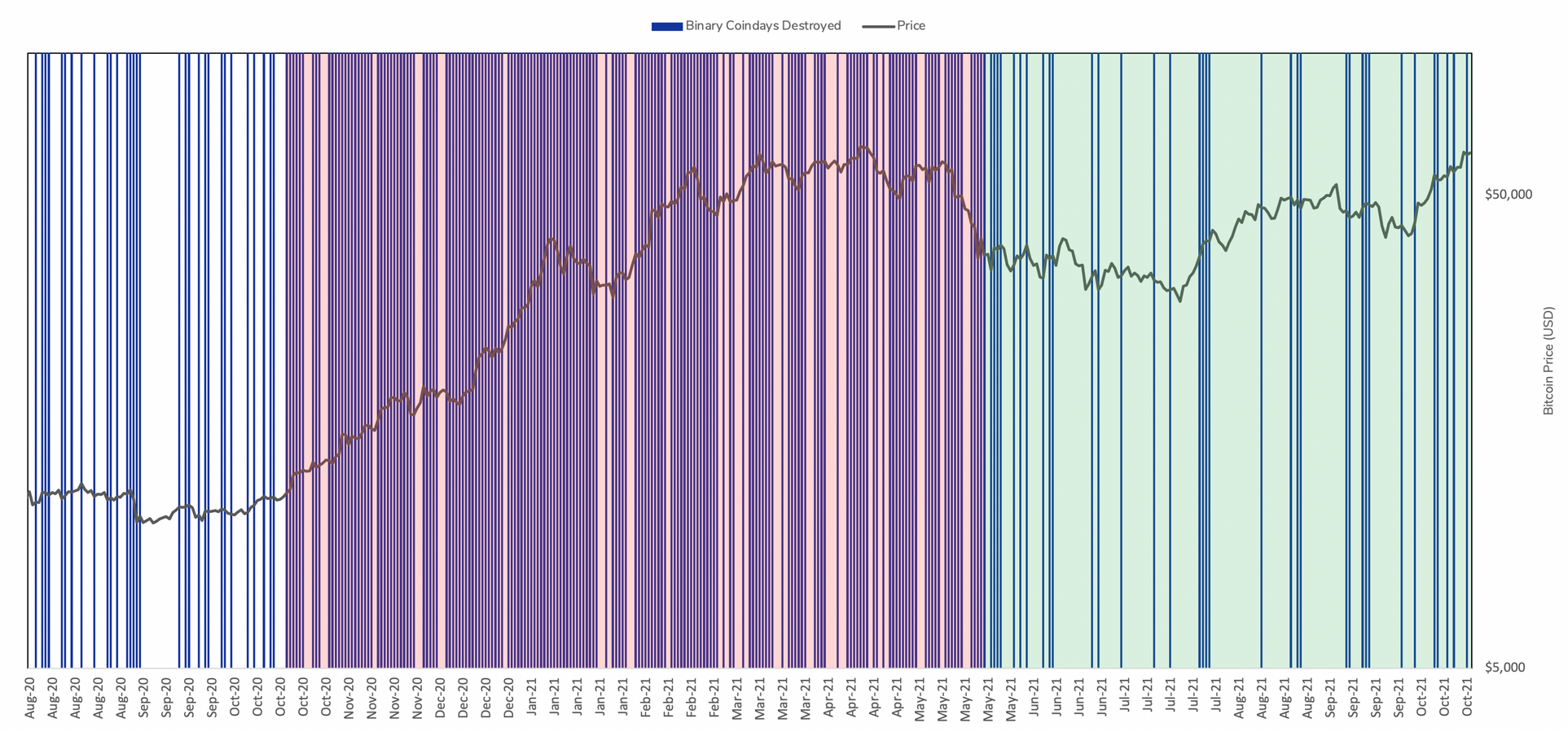
2021: Institutional Adoption

Q1 and Q2

Period characterized by:

Markets and adoption	Paypal provides U.S.-based users with the functionality to trade Bitcoin. BlackRock files for Bitcoin investment and Morgan Stanley files for increased Bitcoin exposure to institutional funds. Corporate adoption further increases by the entrance of other major actors into the Bitcoin space, mainly Tesla and Square, each assuming Bitcoin reserves on their balance sheets. Coinbase IPO undergoes direct listing.
Infrastructure	Canadian Bitcoin ETFs BTCC, EBIT, BTCX, and BTCQ begin trading with strong inflows. Further advances in Bitcoin adoption and infrastructure, such as: Visa enabling Bitcoin purchases, and Paxos receiving a Federal Bank Charter. First Bitcoin Futures-linked ETFs are launched in the United States.
On-chain	Price peaks at ~$64,700 USD after a prolonged period of on-chain selling behavior by large holders. Buying behavior is renewed on-chain after a +50% price correction.

Bitcoin Binary Coindays Destroyed



- Binary coindays destroyed shows only two values: 1 or 0, blue or blank in the chart above, respectively. 1 accounts for whenever coindays destroyed stands above its historical average, and 0 accounts for when they stand below it. An abundance of 1s denotes a prolonged period of selling behavior, and vice versa.

- After a prolonged period of active binary coindays destroyed from late 2020 to mid 2021, coindays destroyed returned mostly to below its historical average after a 53% price correction in May, 2021, suggesting Bitcoin being held as opposed to sold.

Chart by Valkyrie (January, 2022) | Data by CryptoQuant | Live chart

2021: Early Nation-State Adoption

Q3 and Q4

Period characterized by:

Markets and adoption	El Salvador becomes the first nation-state in the world to institute Bitcoin as legal tender. Months later, it becomes the first country to hold Bitcoin on its central bank balance sheet. Miami's Mayor activates Bitcoin across the city. Twitter enables tipping with Bitcoin. Fidelity to accept Bitcoin collateral on cash loans for institutions.
Infrastructure	First Bitcoin Futures-linked ETFs are launched. Taproot upgrade is implemented on the Bitcoin network with the objective of improving transaction efficiency and scalability, as well as improved ability to support smart contracts. Miners from China migrate to new countries that support mining operations.
On-chain	Price of bitcoin reaches its 2021 high at ~$69,000, before closing the year at ~$46,200. Hash rate recovers and advances to record highs after the mining migration from China, further decentralizing the network.

The Future of Bitcoin Is Verifiable

Just as its past, the future of Bitcoin is plainly transparent, as its economic activity can be monitored and analyzed by all. This will allow for:

- Investor protection via the detection of nefarious economic actors in the network, as seen by analysts worldwide while the PlusToken events were unfolding in 2019.
- A well-educated and informed public and regulatory base, where observants and investors have access to a wide range of cryptographically factual data when studying Bitcoin and the impact exogenous events have on its economic network.
- Monitoring the best path for the U.S. to achieve market share dominance when setting up incentives to capture out of Bitcoin's total circulating supply.
- Confirming that Bitcoin's price discovery is fully based on simple supply and demand forces, as opposed to market manipulation by concentrated actors.

04. The Importance of a Bitcoin ETF

A. Market Efficiency and Infrastructural Robustness

B. Why Does the U.S. Need a Bitcoin ETF?

C. Trusts, Funds, and Lenders

D. Derivative Exchanges

E. ETFs as Alternative

Market Efficiency and Infrastructural Robustness

The creation of several turn-key institutional grade custodians has been vital to the maturity of Bitcoin investment to help address regulatory, security, and operational challenges. The evolution of custodial platforms since 2018 has also introduced the concept of insurance to help transform institutional interest into actual institutional investments.

GEMINI

coinbase

Fidelity DIGITAL ASSETS

copper

Fireblocks

ANCHORAGE

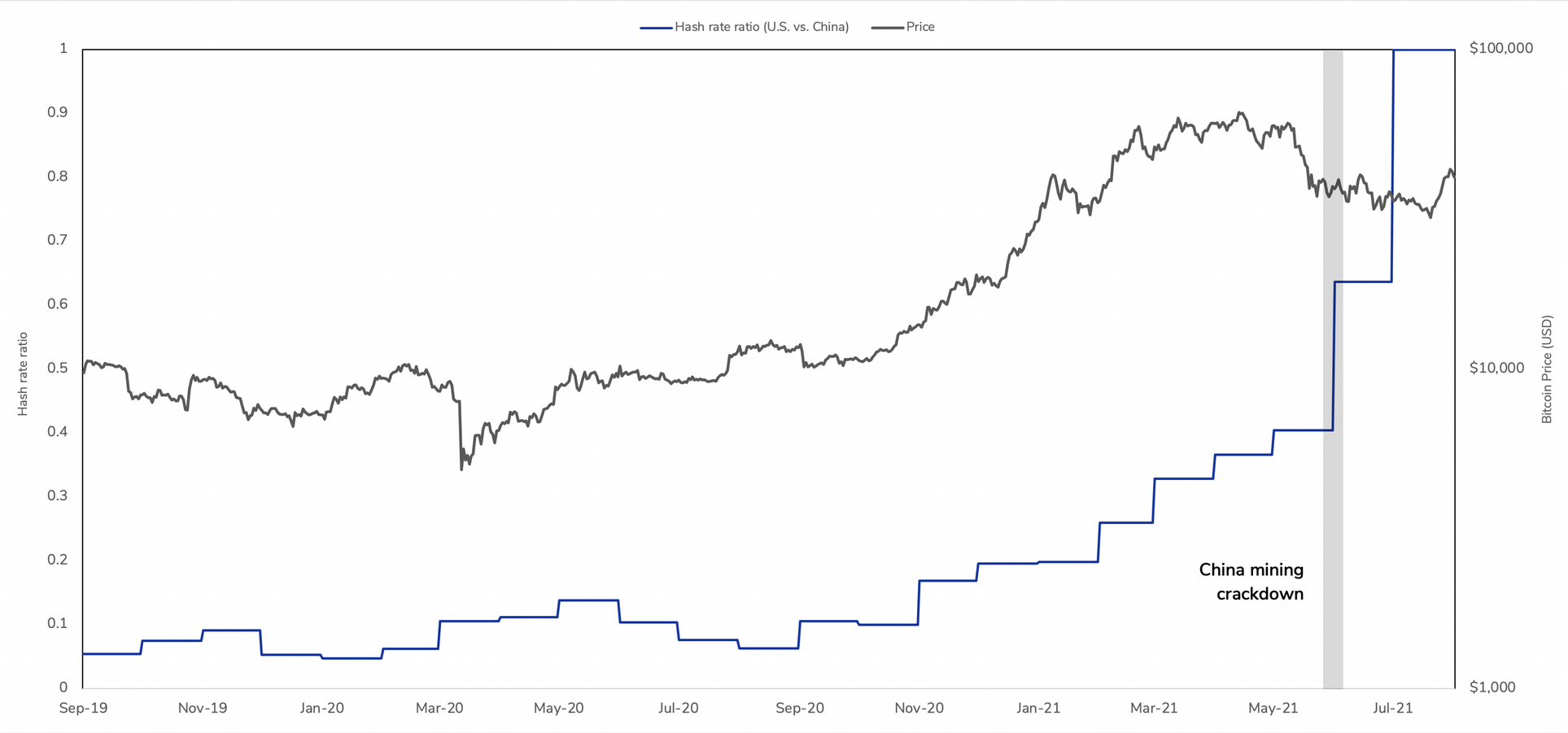
The number of exchanges with AML/KYC and trading policies in place to protect investors has continued to grow. Constituent Exchanges of the CF Benchmarks Bitcoin Reference Rate have served as a part of a reliable index for Bitcoin Futures at the CME since late 2017:

Bitstamp coinbase GEMINI itBit by PAXOS kraken

Additionally, many off-shore exchanges that previously offered anonymous trading practices have moved towards KYC policies:

BINANCE BitMEX Deribit

Global Hash Rate Share Ratio (U.S. vs. China)

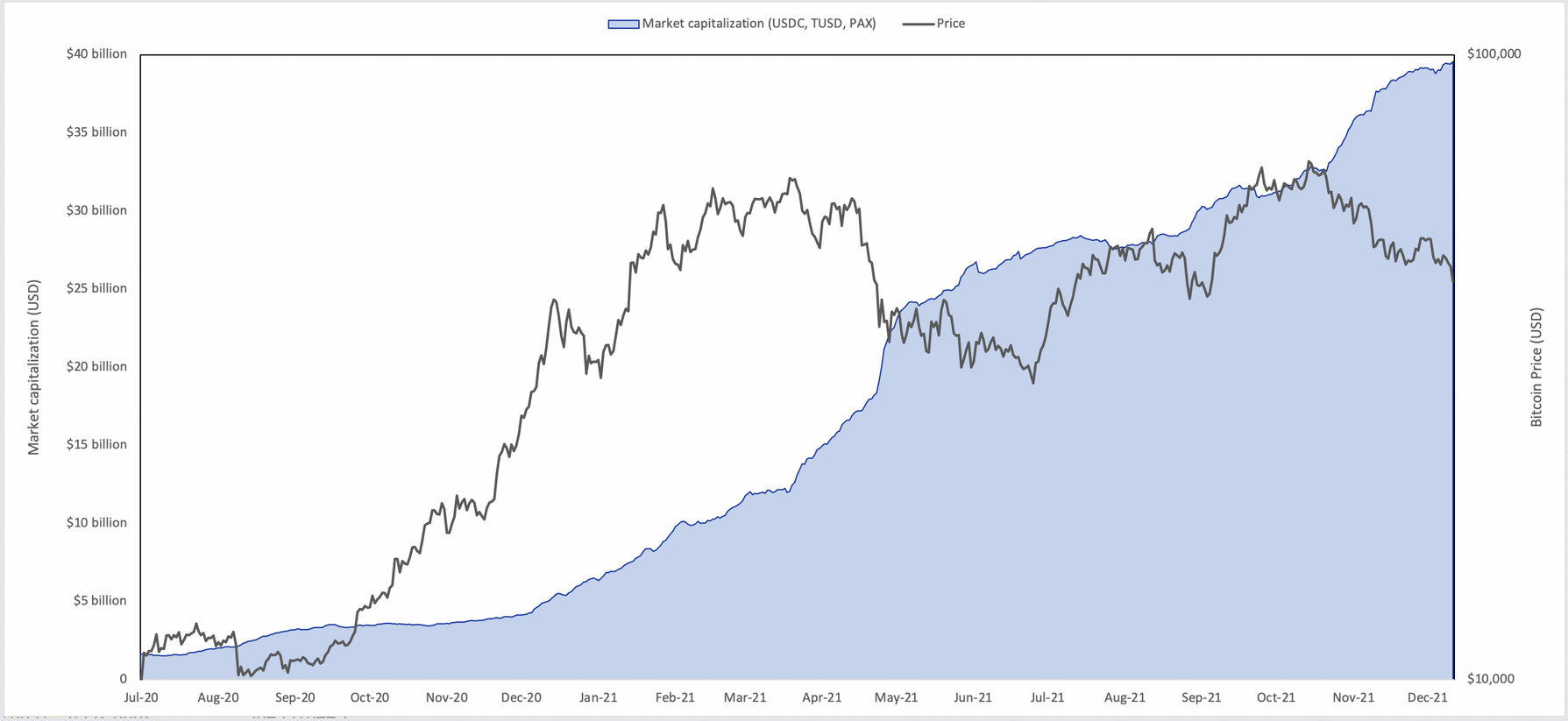


- Since September 2020, the hash rate ratio of the U.S. compared to China has seen a tenfold increase.
- China's recent Bitcoin mining ban has lost this nation-state the global dominance it maintained due to cheap electricity production.
- Consequently, the share of global hash rate in the U.S. rose to over 35%, whereas China fell to 0% from over 75%.

Chart by Valkyrie (January, 2022) | Data by Cambridge Center for Alternative Finance (CCAF), "Cambridge Bitcoin Electricity Consumption Index (CBECI)" | Source link

The Rise of Stablecoins

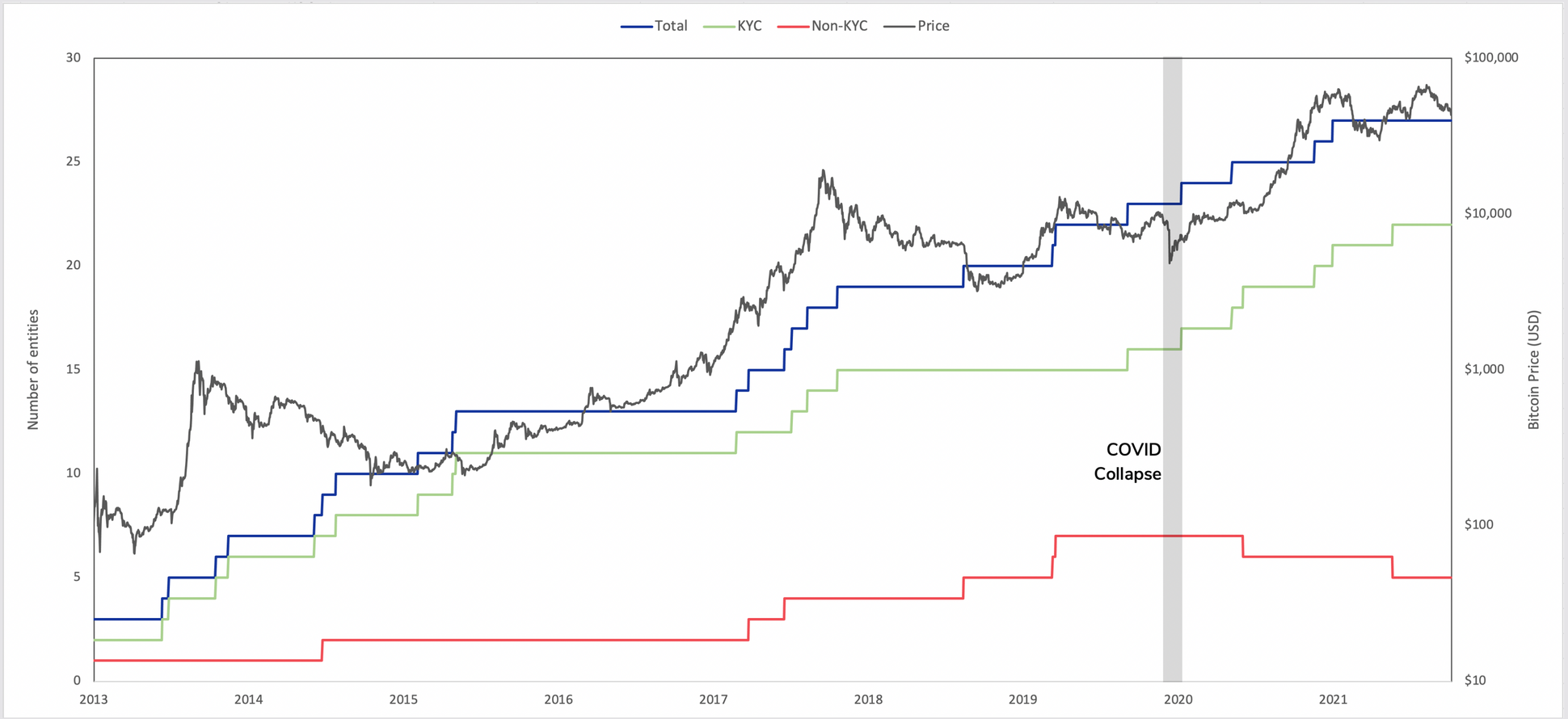
Regulated stablecoins have provided the overall crypto ecosystem with alternatives to Bitcoin as an on-ramp to the overall crypto ecosystem. Stablecoins have emerged as a simple mechanism to provide an opportunity for off-ramping, stability, and simple peer-to-peer transactions without using Bitcoin as an intermediary when speculating for alternative cryptocurrencies.



- Taking into consideration only USDC, TUSD, and PAX, there has been an over 2,700% increase in regulated stablecoin market capitalization from July, 2020 to December, 2021.

Chart by Valkyrie (January, 2022) | Data by CryptoQuant | Live chart

Number of Entities



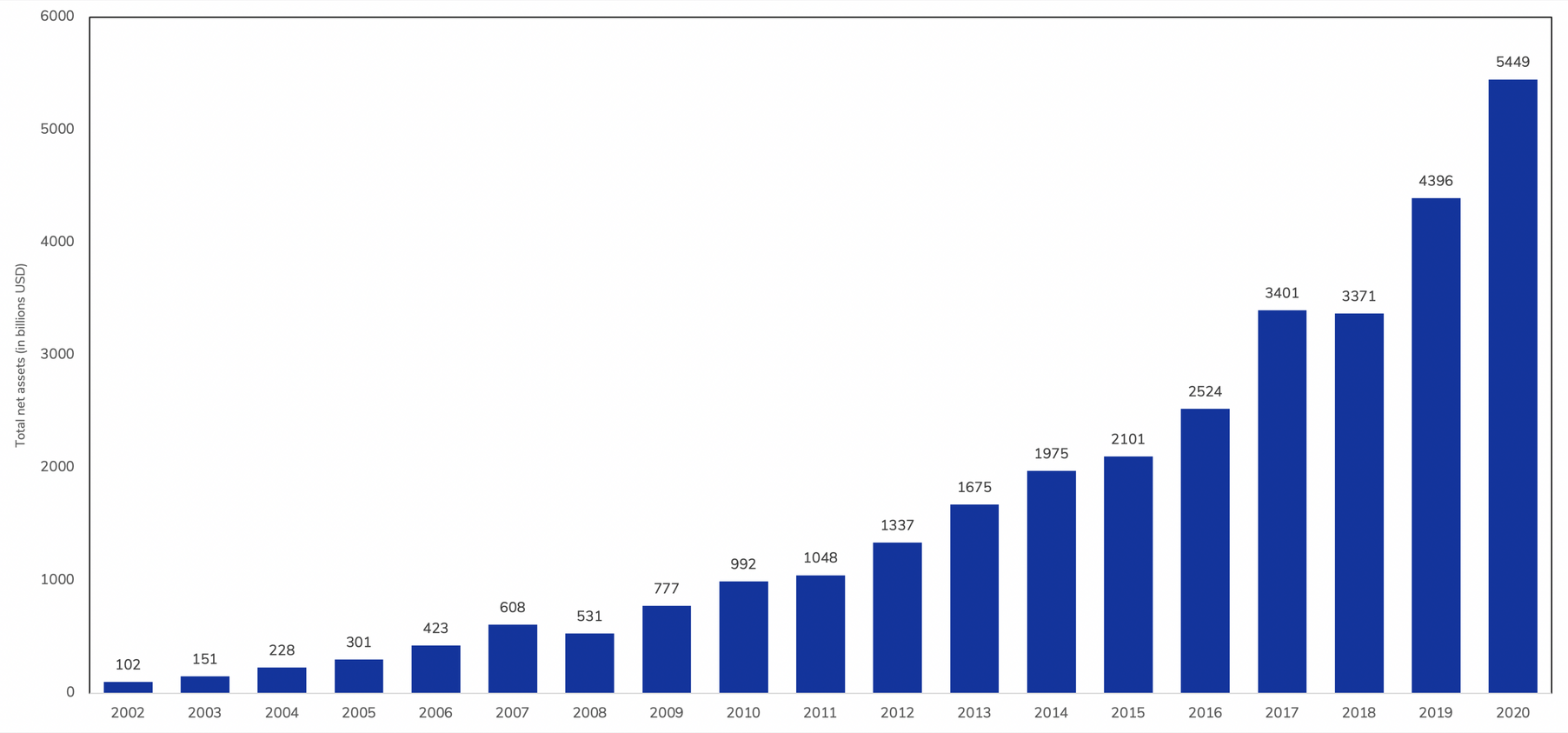
- There has been a steady increase in KYC entities from 2013 to 2021, while non-KYC entities have experienced limited or no growth since early 2020.
- These trends accelerated even further after the March, 2020, COVID-19 crash.

Chart by Valkyrie (January, 2022) | Data by CryptoQuant | Live chart

The U.S. and Emerging Bitcoin ETFs

Exchange Traded Funds

Total Net Assets of U.S. ETFs 2002 to 2020



- ETFs have continued an exponential growth trend for the past 20 years, serving as one of the primary instruments in the modern financial world.
- Global ETF assets surpassed $9 trillion in 2020, while the U.S. alone topped $5.449 trillion

Chart by Valkyrie (October, 2021) | Data by Statista, "Total net assets of U.S. ETFs (2002-2020)" | Source link

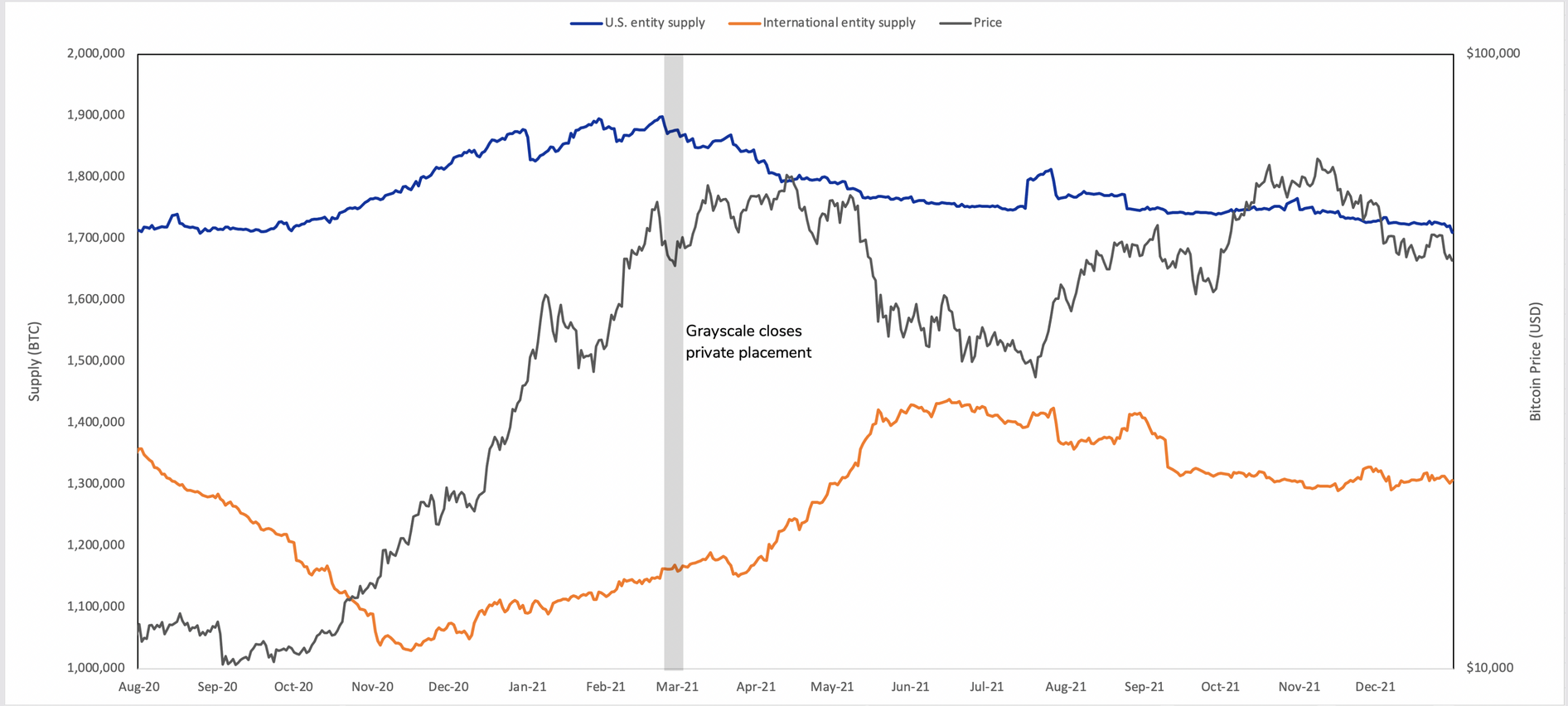
Bitcoin ETFs present strong potential as a mechanism to facilitate further institutional adoption of the asset, by enticing market capture for U.S. citizens and institutions, providing:

- Market efficiency, liquidity, and tighter settlement systems, as opposed to the complicated premium/discounts to NAV when gaining exposure via trusts.

- Ease of access to regulated financial instruments, as opposed to off-shore derivative exchanges without KYC/AML policies.

	ETF	TRUSTS	OFF-SHORE DERIVATIVES EXCHANGES
Efficiency	X		X
Ease of access	X	X	

Bitcoin Geographical Supply Distribution by Entities



- In the chart above, "U.S." accounts for Coinbase, Gemini, Bittrex, Gate.io, Poloniex, Kraken, GBTC, and Blockfi; and "International" accounts for BitStamp, bitFlyer, Bithumb, Coinone, Korbit, QBTC, BTCC.U, BTCQ.U, BTCE, as well as Binance, Huobi, OKEx, Bitfinex, FTX, Bybit, Kucoin, and BitMEX.

- As seen above, during 2021, U.S. entities have seen a significant drop in supply compared to international entities, especially since GBTC suspended new inflows in February. This helps confirm the relevance of financial instruments towards bringing new Bitcoin supply into U.S. shores.

Chart by Valkyrie (January, 2022) | Data by CryptoQuant | Live chart

Bitcoin Entity Supply Ratio (U.S. vs. International)

- The market share between entities in the U.S. and the rest of the world dropped by 61% from December, 2020, to July, 2021, caused mainly by a diminished U.S. institutional adoption and, most significantly, GBTC pausing inflows into its trust from March, 2021, onwards.

Chart by Valkyrie (January, 2022) | Data by CryptoQuant | Live chart

Trusts, Funds, and Lenders

Trusts, Funds, and Lenders

Trust products have been the main strategy for investors to gain exposure to Bitcoin in the United States apart from holding the underlying asset.

PROS

- **Easy access**: Up-listed trusts are available on most of the common stock brokerage platforms.
- **Traditional investment vehicle**: Trusts are a familiar structure for investors as well as financial and tax advisors.
- **Market capture**: The most significant amount of Bitcoin held in regulated products in the U.S. is allocated in trust structures.

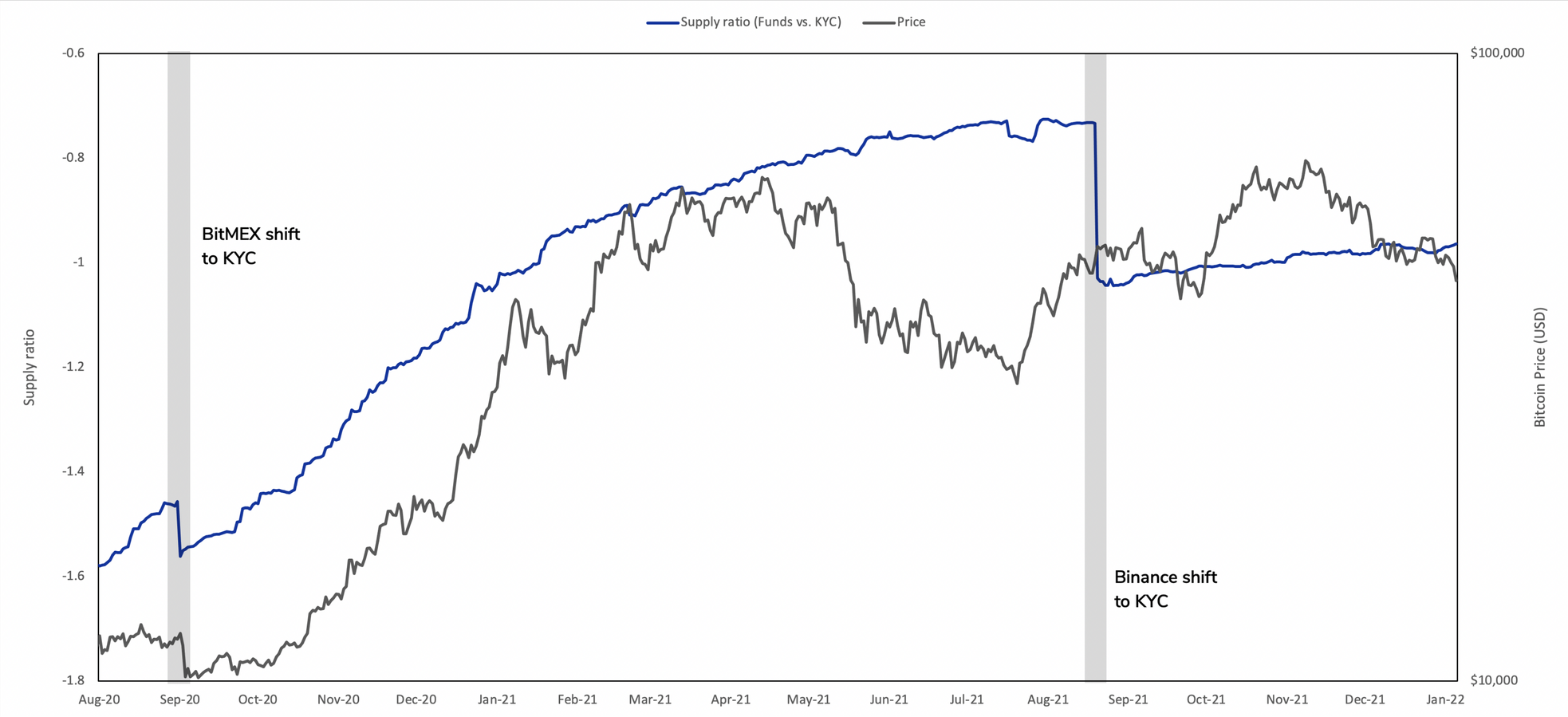
CONS

- **Lock-up periods:** Trusts generally have a prolonged lock-up period before shares can be redeemed, creating inefficiencies for investors, as well as creating crowded trades via artificially generated arbitrage opportunities.

- **Restricted access:** There are many fund structures that are not allowed to access crypto exposure with the current market products, while many trusts are only accesible by accredited investors.

- **Premium/discount to NAV:** The potential for shares in a trust to fluctuate and trades significantly above or below the Net Asset Value (NAV) is the most inefficient aspect of the trust structure.

Bitcoin Supply Ratio (Funds vs. KYC Exchanges)

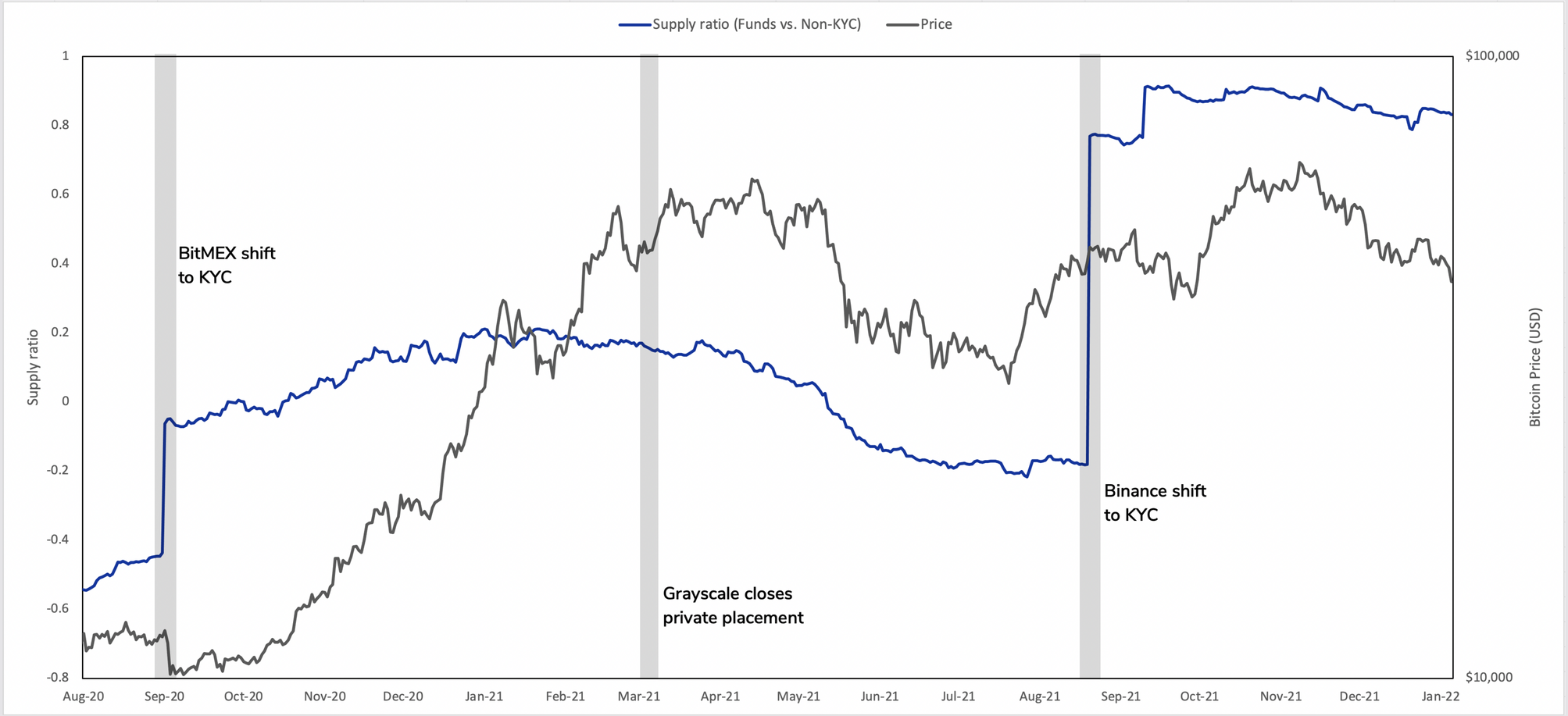


- Funds have outpaced KYC exchanges in BTC supply capture, suggesting regulated financial instruments are better mechanisms for market share capture compared to spot exchanges. This also suggests an increased interest by institutional and retail actors to hold their bitcoins off trading platforms when compared to financial instruments.

- Funds grew faster than KYC exchanges by 32% from September, 2020, until November, 2021; despite BitMEX and Binance migrating to KYC policies.

Chart by Valkyrie (January, 2022) | Data by CryptoQuant | Live chart

Bitcoin Supply Ratio (Funds vs. Non-KYC Exchanges)



- Considering only the time between when BitMEX and Binance shifted into full KYC policies, the Bitcoin supply was trending towards non-KYC exchanges, especially from the day that GBTC suspended new inflows. This suggests that financial instruments are crucial for amounting BTC market share into regulated entities

Chart by Valkyrie (January, 2022) | Data by CryptoQuant | Live chart

Derivative Exchanges

Derivative Exchanges

Off-shore derivative exchanges, such as BitMex, Deribit, FTX, ByBit, and Binance offer inventive trading instruments to provide market efficiency to users outside the United States:

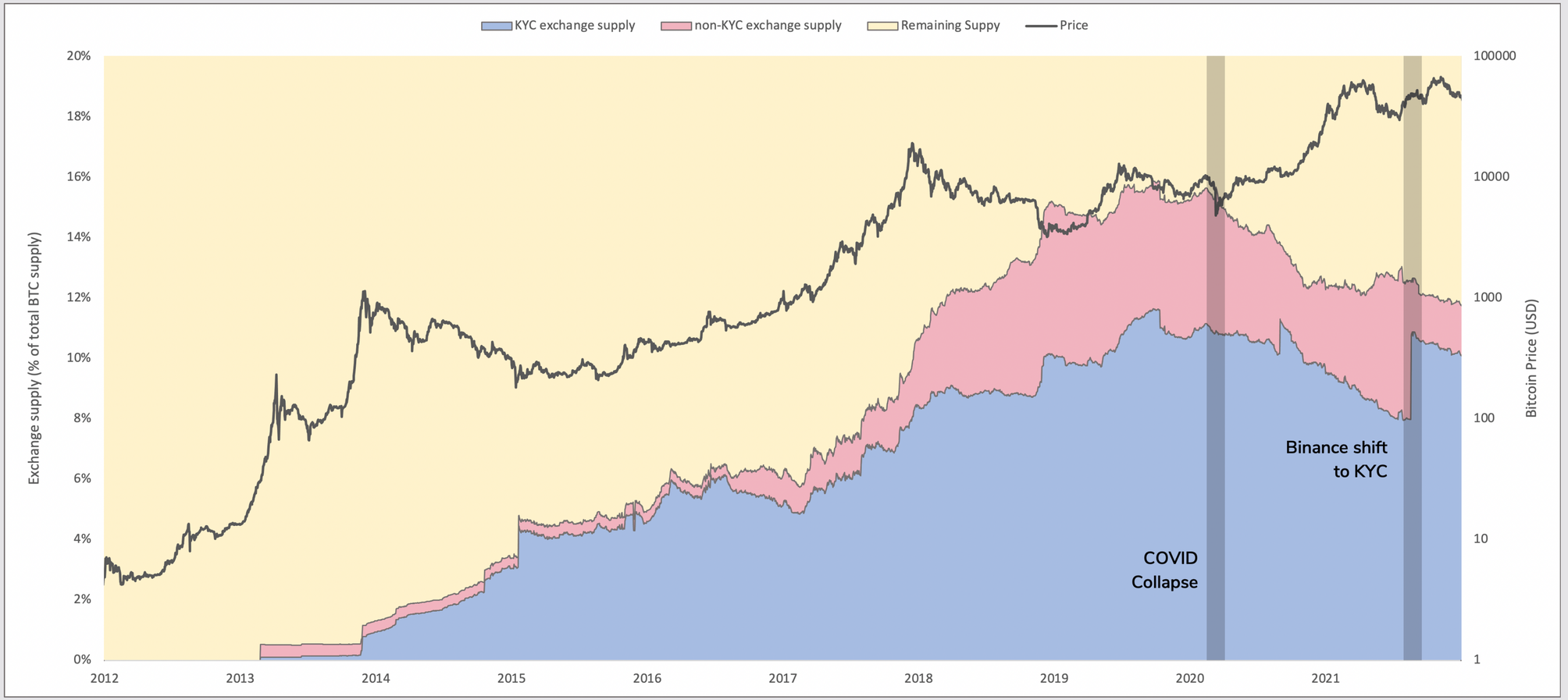
PROS

- **Perpetual futures contracts:** Derivative contracts without an expiration have attracted both retail and institutional traders to utilize the most innovative levered products available. The position can be open indefinitely, where contract-to-spot delta is kept in check via an efficient funding rate mechanism.
- **Sufficient liquidity:** Off-shore derivatives, settled in Bitcoin, have emerged as the most efficient trading tool for Bitcoin active managers. This has attracted a disproportionate amount of trading activity on these platforms.
- **Tight settlement system:** A liquidation price per contract is established, which eliminates the need for margin calls.

CONS

- **Restricted access:** It is difficult or impossible for U.S. investors and institutions to access off-shore derivative platforms.
- **Loss of market share:** Bitcoin as an asset is moving off-shore towards more efficient products, making oversight and regulation more difficult.
- **Lack of regulation:** Exchanges located outside the U.S. increase the difficulty for regulatory oversight to ensure investor protection.
- **Technical barrier:** Efficient off-shore futures products are geared towards professional traders and fund managers, not individual retail investors looking for Bitcoin exposure.

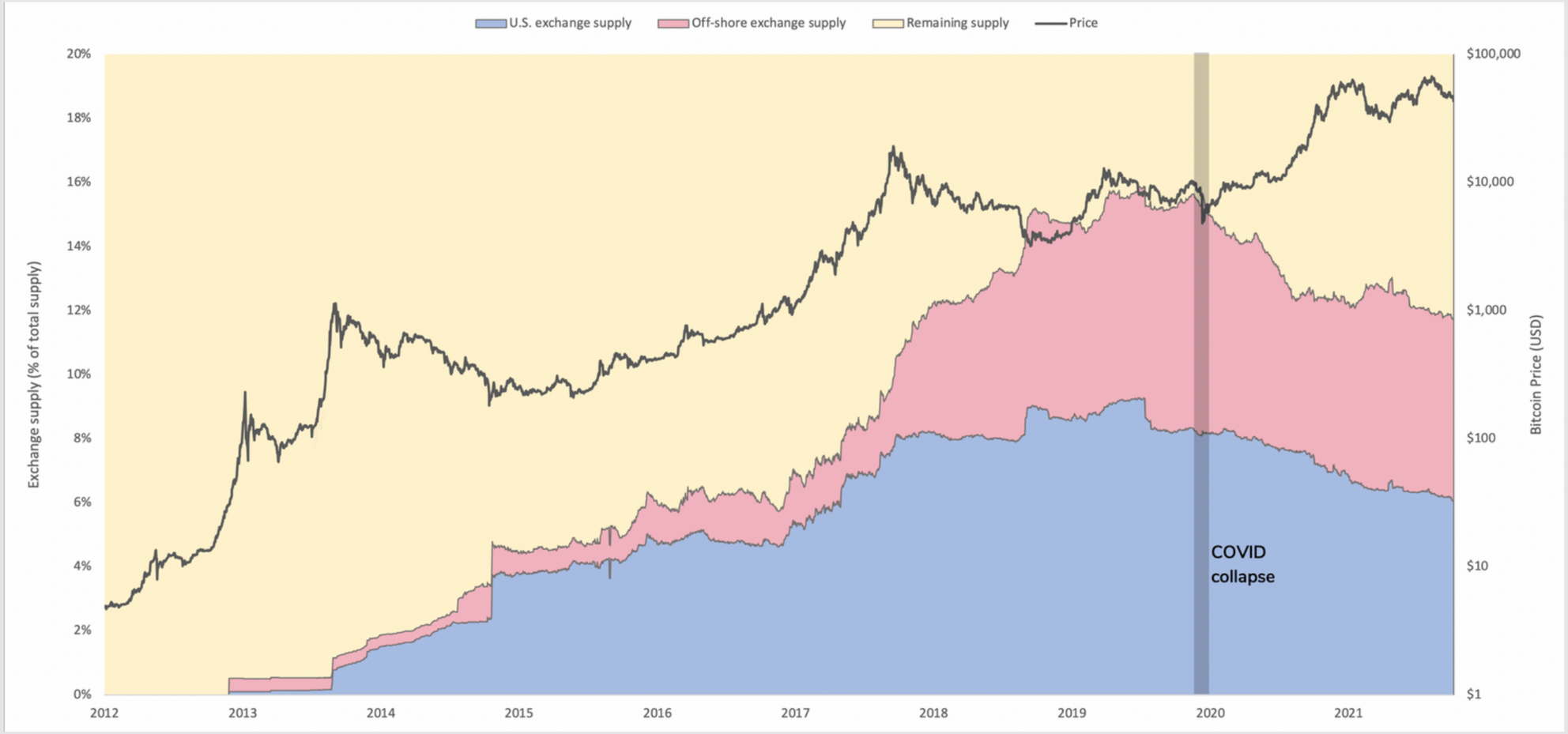
Bitcoin Supply in KYC and Non-KYC Exchanges



- Since the March, 2020, COVID-19 price crash, the combination of increased long-term demand for BTC and professional grade custodial options has led to diminished BTC reserves on all exchanges.

Chart by Valkyrie (January, 2022) | Data by CryptoQuant | Live chart

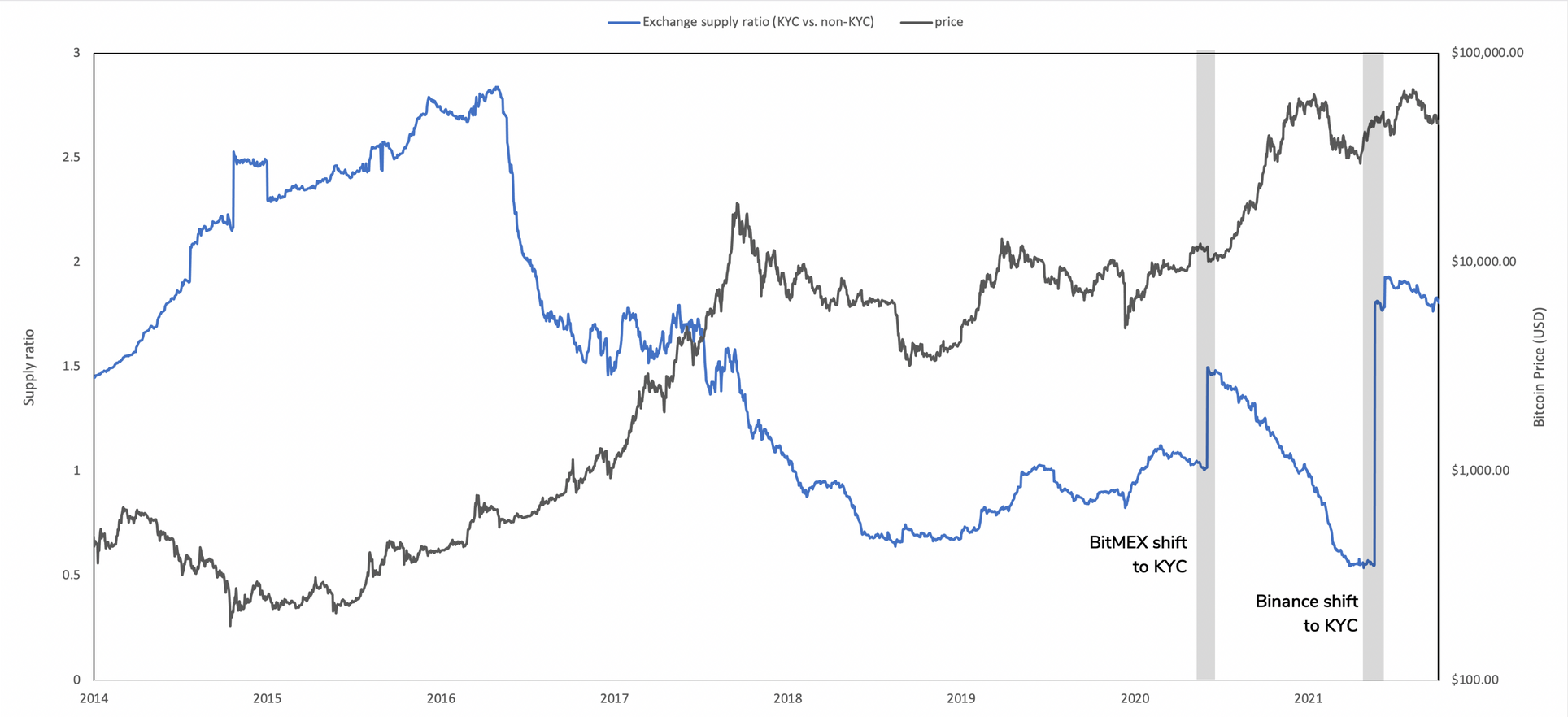
Bitcoin Supply in U.S. and Off-Shore Exchanges



- Similarly, the supply of Bitcoin held by exchanges both on- and off-shore has declined since the onset of COVID-19.

Chart by Valkyrie (January, 2022) | Data by CryptoQuant | Live chart

Bitcoin Exchange Supply Ratio (KYC vs. Non-KYC)



- The quantity of bitcoin held by KYC exchanges has steadily decreased when compared to non-KYC balances since 2016. Even after BitMEX shifted to KYC policies, KYC supply hit new lows compared to non-KYC supply in May, 2021, to then shift upwards once again only after Binance embraced KYC as well.

- The chart above suggests that the only increases we have seen in favor of KYC exchanges outpacing non-KYC exchanges has been solely reliant on the fact that exchanges like Bitmex and Binance have shifted towards KYC, as opposed to seeing proportional organic supply growth in KYC entities.

Chart by Valkyrie (January, 2022) | Data by CryptoQuant | Live chart

Bitcoin Exchange Supply Ratio (U.S. vs. Off-Shore)

- In addition, U.S. regulated exchanges are losing market share to off-shore exchanges consistently since 2015, a trend that becomes even steeper in 2017 with the proliferation of off-shore derivatives exchanges.

Chart by Valkyrie (January, 2022) | Data by CryptoQuant | Live chart

Bitcoin Exchange Volume Ratio (Spot vs. Derivatives)

- The sophistication of off-shore derivative products has led to an explosion in derivative trading volume compared to spot volume since 2016.
- This trend has not relinquished since off-shore derivative products emerged on the market, suggesting that other U.S.-based, regulated financial products may be a better alternative to bring BTC onto U.S. shores and trading volume onto its platforms.

Chart by Valkyrie (January, 2022) | Data by CryptoQuant | Live chart

ETFs as Alternative

ETFs as Alternative

Further ETF adoption and regulatory acceptance offers advantages beyond wider availability to investors:

- **Authorized participants**: ETFs work with third parties that are constantly trading and seeking arbitrage to keep the fund trading close to NAV.
- **Flexibility**: An ETF is an ideal wrapper for Bitcoin as it can easily be held, managed, and traded within IRAs and 401k's on nearly any trading platform, with lower fees.
- **Potential tax advantages**: Mutual funds often pass capital gains on to investors for the duration of holding the product, whereas ETFs can be more tax efficient as holders only incur capital gains taxes upon the sales of shares in the ETF.
- **Liquidity**: Shares can be bought and sold at any time as opposed to being redeemed once per day or being subject to lengthy lock-up periods.

A U.S.-regulated Bitcoin ETF could continue to strengthen the market efficiency and robustness of the asset. An ETF amends the incentives for U.S. traders and active managers to safely gain exposure into BTC, further increasing the U.S.'s market share of Bitcoin's total circulating supply.

- **Ease of access**: A Bitcoin ETF allows retail investors to gain Bitcoin exposure with products listed and supported by familiar brokerages.
- **Market efficiency**: ETFs trade close to the value of the underlying asset by providing reliable exposure, while leaving the time horizon of the investment up to the user.
- **Market share incentive**: The U.S. can entice Bitcoin market share with ETFs, by driving the trading and management of Bitcoin into domestic and regulated products.

05. *Bitcoin: A Network Adopted*

Bitcoin: A Network Adopted

When assessing Bitcoin's on-chain past and ideally ETF-incentivized future in the United States, the following logical sequence can be concluded:

1. Bitcoin's on-chain transparency gives informational assurances and protections to regulators and the public at large to monitor its economic intricacies.

2. In the path toward Bitcoin's growth, it is crucial for the United States to bring Bitcoin supply to its shores, by incentivizing its adoption amongst investors and citizens.

3. The best path towards this is innovative, regulated financial instruments that are both efficient and accessible.

On-chain transparency protects and informs the U.S. public adopting Bitcoin; the ETF model provides the most efficient and safest means to do so in the future.

In early 2022, over 13 years since launch, Bitcoin has the historical and economic robustness to provide the public with the means to be well informed when adopting the asset, while having the tools available to do so in a safe, vetted, and liquid manner.

Credits

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