

Navigating the Bitcoin Halving

Insights into Crypto and Global Financial Dynamics



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Since its establishment, CoinEx has steadfastly adhered to a "user-first" service principle. With the sincere intention of nurturing an equitable, respectful and secure crypto trading environment, CoinEx enables individuals with varying levels of experience to effortlessly access the world of cryptocurrency by offering easy-to-use products.

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The team provide users with professional market insights by tracking market trends, analyzing project white papers and technical documents, evaluating project teams and development prospects, etc. Our reports cover macro markets, blockchain technology, digital assets, DeFi, NFTs, and other fields in the various forms of research publication.

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About the Report

The Bitcoin halving is a key feature of the Bitcoin protocol. To understand its historical context, we must trace back to Bitcoin's beginnings.

Bitcoin, proposed by Satoshi Nakamoto in 2008 and launched in 2009, aimed to establish a currency independent of traditional financial systems, with a maximum supply of 21 million. Bitcoins are released through mining, which verifies and records transactions, rewarding miners with new Bitcoins.

The Bitcoin halving occurs approximately every 4 years or every 210,000 blocks, where the reward for mining a new block is halved (the current block reward is 6.25 Bitcoins). This gradually reduces the rate of new Bitcoins until the cap is reached around 2140.

There have been three halving events to date, with the fourth expected on April 19, 2024. The past halving events happened on January 28, 2012, July 09, 2016, and May 11, 2020.

These events often attract market attention and can positively impact Bitcoin prices in the short-term, though their long-term effects are influenced by various factors, including market demand and macroeconomic conditions.

This report focuses on the impact of Bitcoin halving on the crypto market and its relationship with the global financial market, assessing the potential and risks of Bitcoin as an emerging asset class.

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Do Your Own Research.

01. Bitcoin Halving Impact on Cryptocurrency Markets

The Bitcoin halving has varying degrees of impact on investors, traders, and miners.

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Asset Allocation

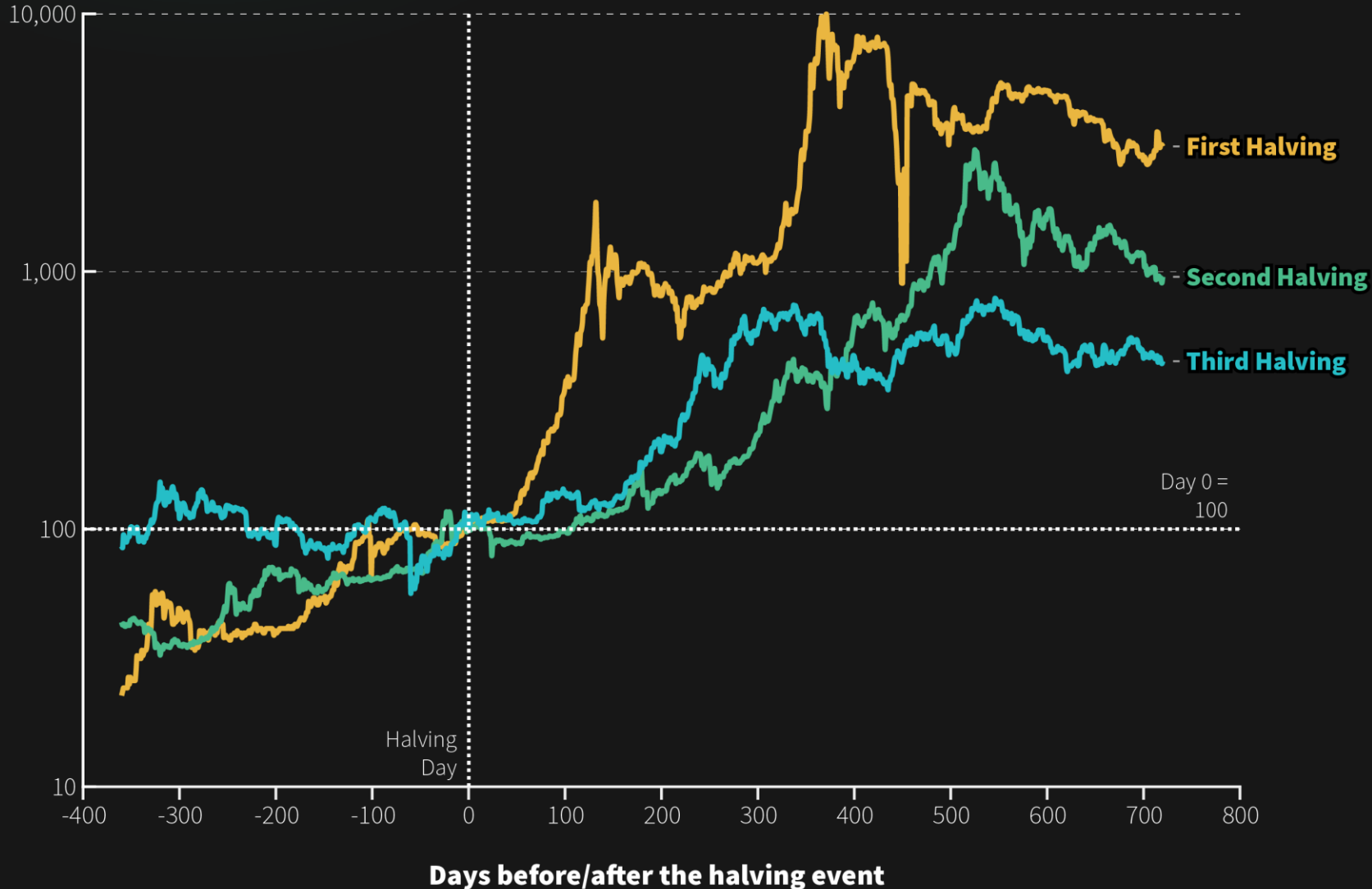
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Investors | Bitcoin Past Performance Before and After Halving Events

Price Index (Log Scale)



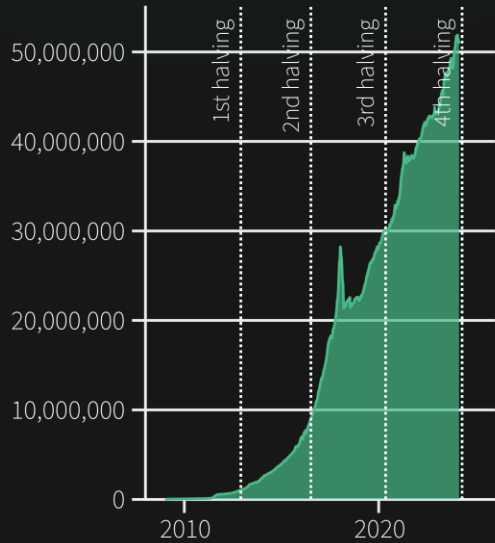
Be patient and avoid greed. Based on past halving events, while Bitcoin reaches a new all-time high each time after the halving, we have observed that it takes longer to achieve a new all-time high, with a lower multiple.

Time to reach ATH and Multiples:

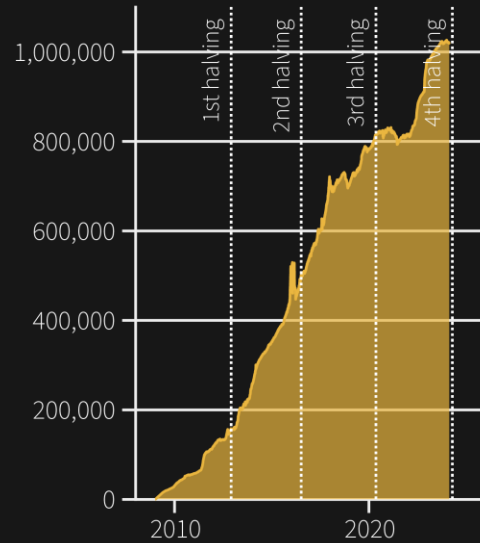
Halving	Days	Multiples
First	371	100X
Second	525	29X
Third	546	7X

Investors | Addresses With Different Balance of Bitcoin

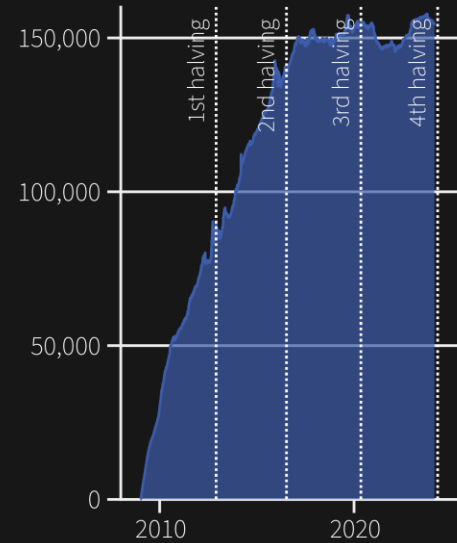
Non-zero



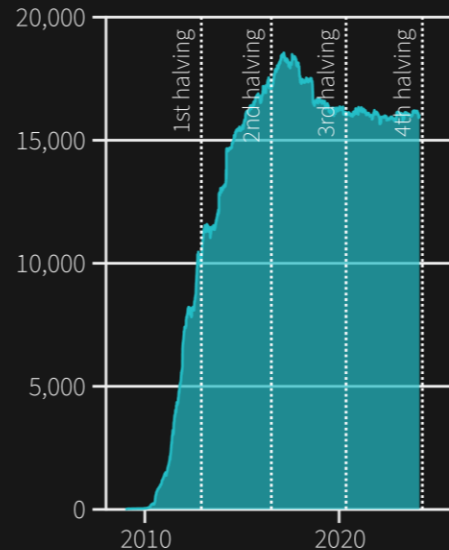
≥1 BTC



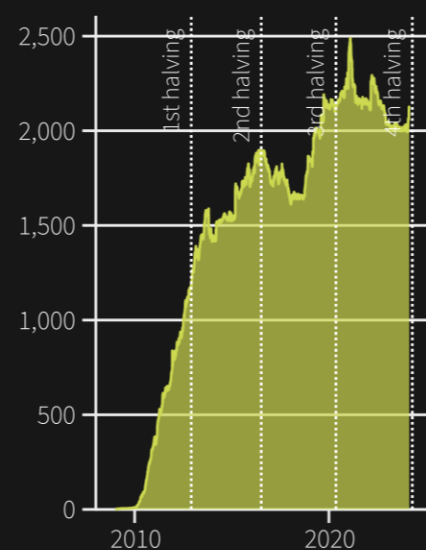
≥10 BTC



≥100 BTC



≥1,000 BTC



Non-zero balance wallets have crossed the 50 million bar. Wallets with greater than 1 Bitcoin have also exceeded 1 million. These types of wallets reflect the overall crypto adoption over time (including the halving events).

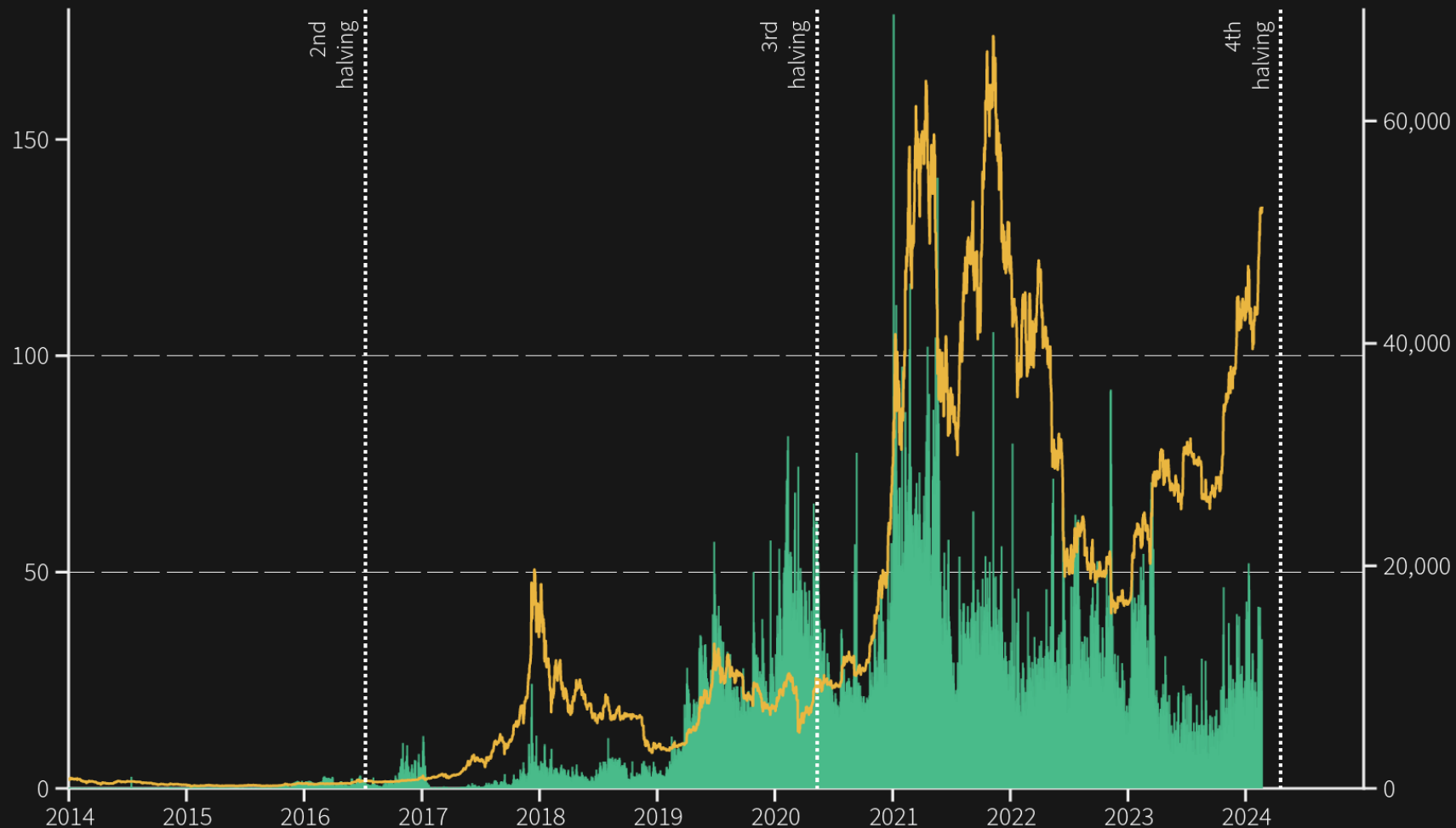
On the other hand, the number of whales (with balance of over 100 or 1,000 Bitcoins) has decreased since the last halving.

Source: CoinEx Research, Glassnode;
Data as of 20 February 2024

Traders | Changes in Bitcoin Spot Trading Volume

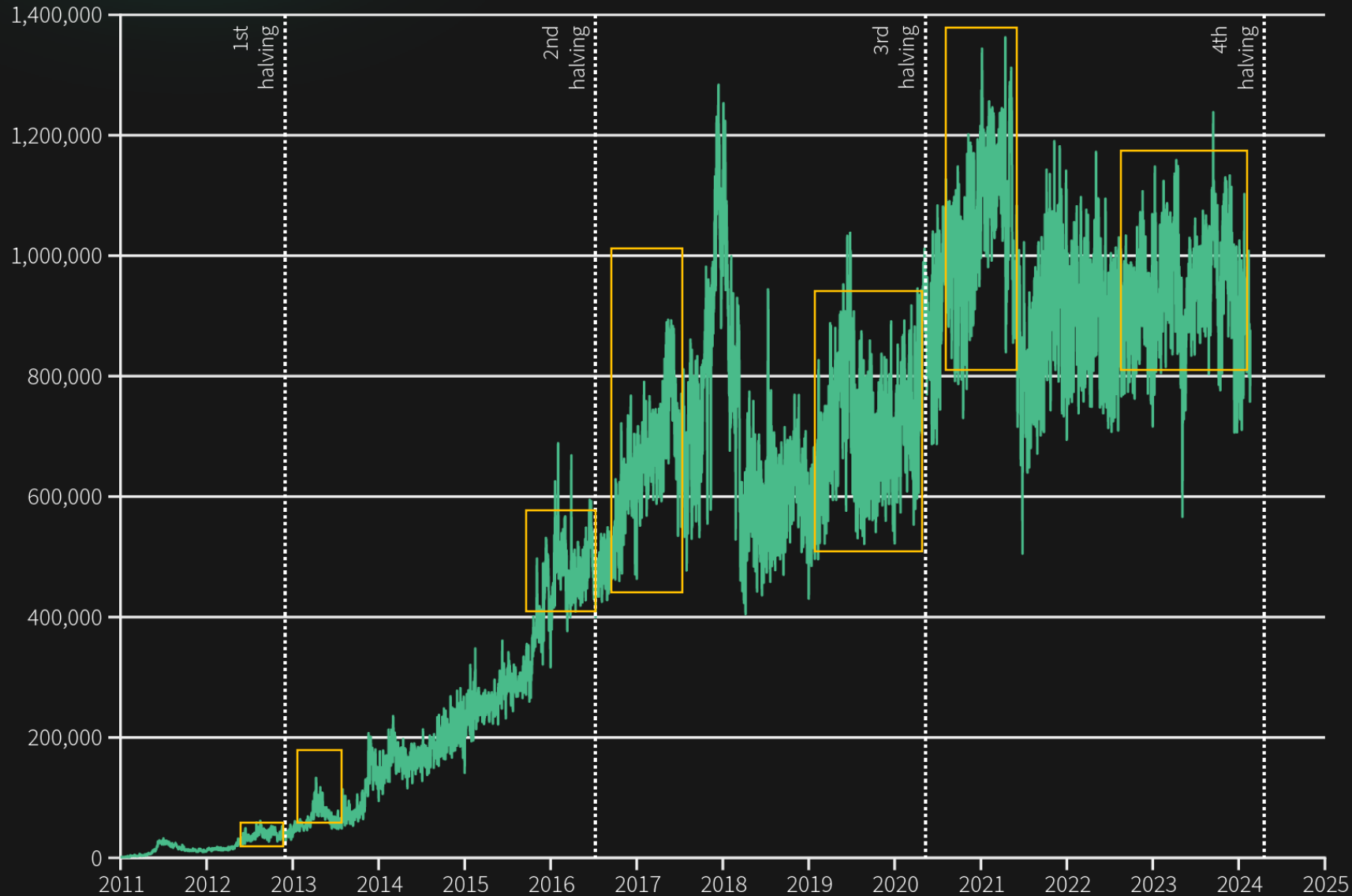
● Price ● Spot Trading Volume

In US\$ billion



The average daily spot trading volume was around US\$25 billion in the past week, a level still far from the previous bull run. While the spot trading volume has gradually climbed up from the last bear market, the price of Bitcoin is not too far from the last all-time-high.

V-shapes of price movement and trading volume are slowly forming. It is expected to see more trading activity on the grounds of the upcoming halving event and rising crypto adoption.

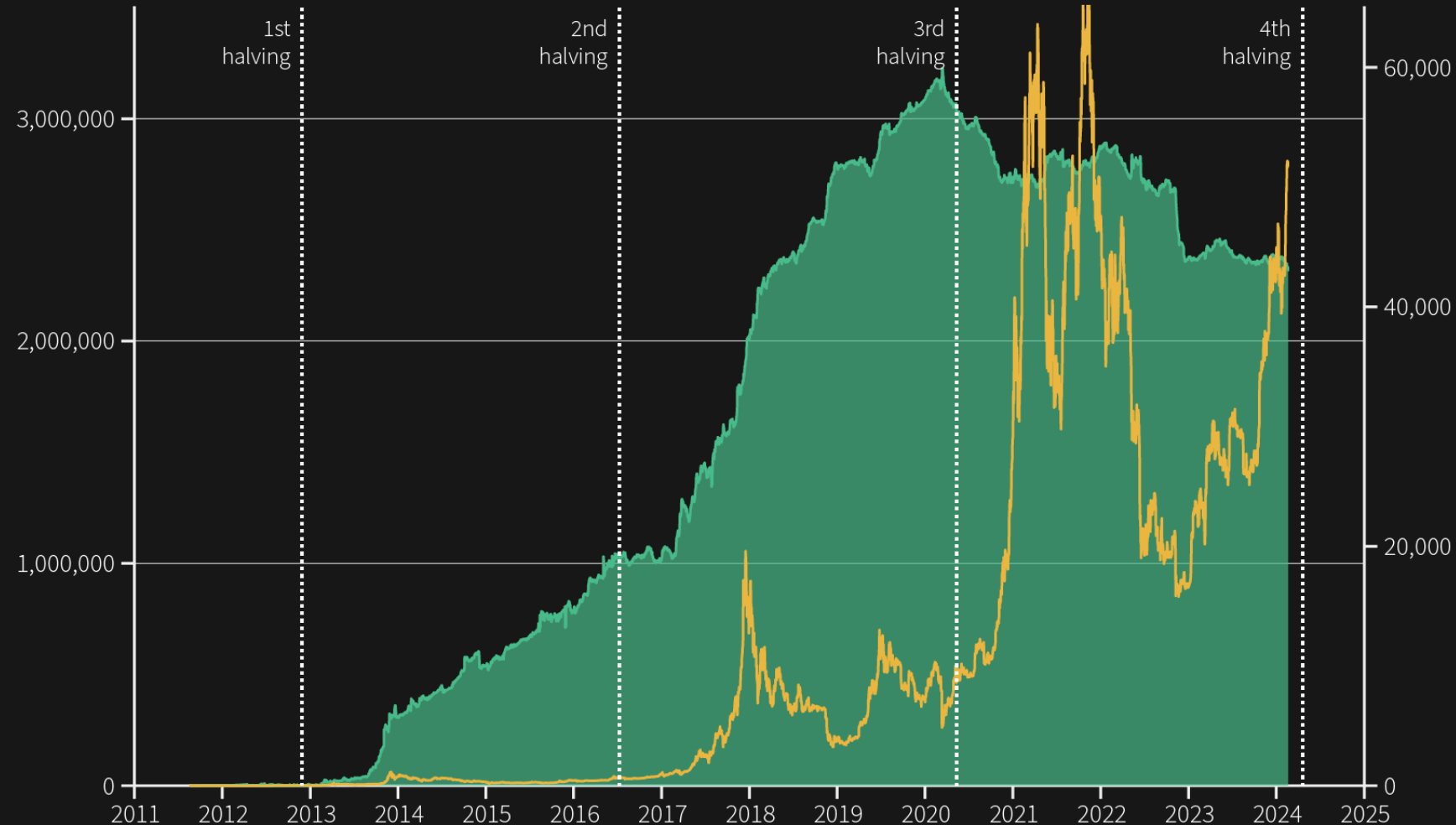


Bitcoin Halving typically brings new narratives to the Bitcoin ecosystem, and injects fresh activity from users. Historically, prior to each halving, the number of active Bitcoin addresses tends to remain stable within a certain range, then experiences a surge following the actual halving event.

This time, the narrative is centered around Bitcoin's Layer 2. Before and after the halving event, a plethora of related projects are expected to be officially launched, which should also contribute to a new wave of user growth for the overall Bitcoin ecosystem.

● BTC Price ● Exchange Balance

BTC Balance on Exchange



Balance on exchange has often been seen as an important on-chain metric. A higher balance signals that traders deposit Bitcoins to the exchange, leading to the potential of a sell-off, and vice versa.

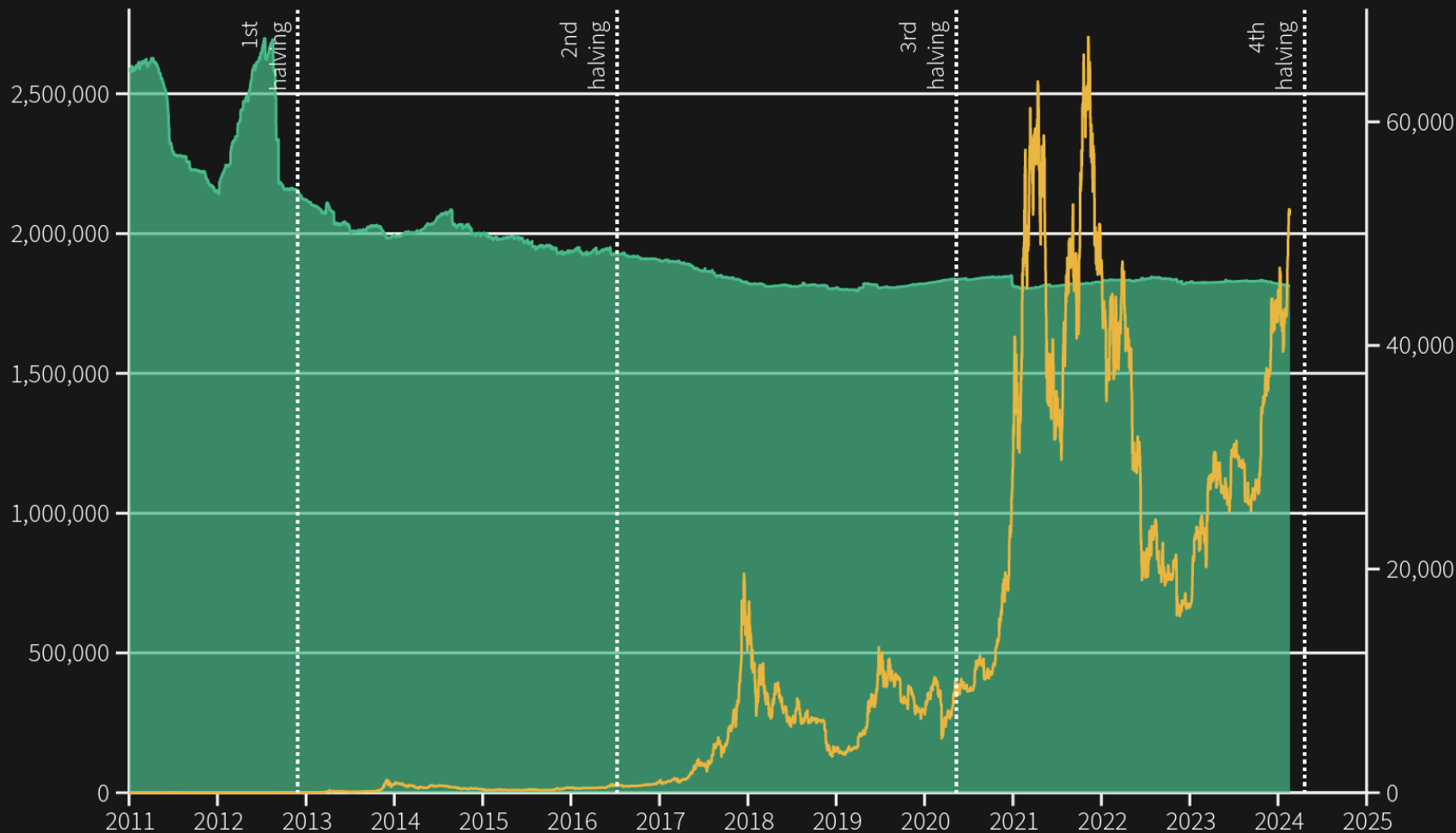
In the face of the upcoming halving event, the balance on exchange has come to a new low since the last halving event. The latest balance is 2.31 million Bitcoins, which amounts to 11.02% of total supply.

Miners | Miners Balance – Miners Survival Challenges

● Bitcoin Price ● Miner Balance

BTC Balance

Price (In US\$)



Apart from the halving during the bull market period in May 2020, we have consistently observed a rapid depletion of Bitcoin balances in miners' wallets before each halving.

This is primarily due to the steep decline in miners' earnings resulting from the halving. Mining companies and farms require large capital to upgrade mining machines and equipment in order to mine Bitcoin faster and more efficiently than others after halving. Faced with the financial pressure, they tend to raise short-term funds by selling their Bitcoins or engage in leveraged operations.

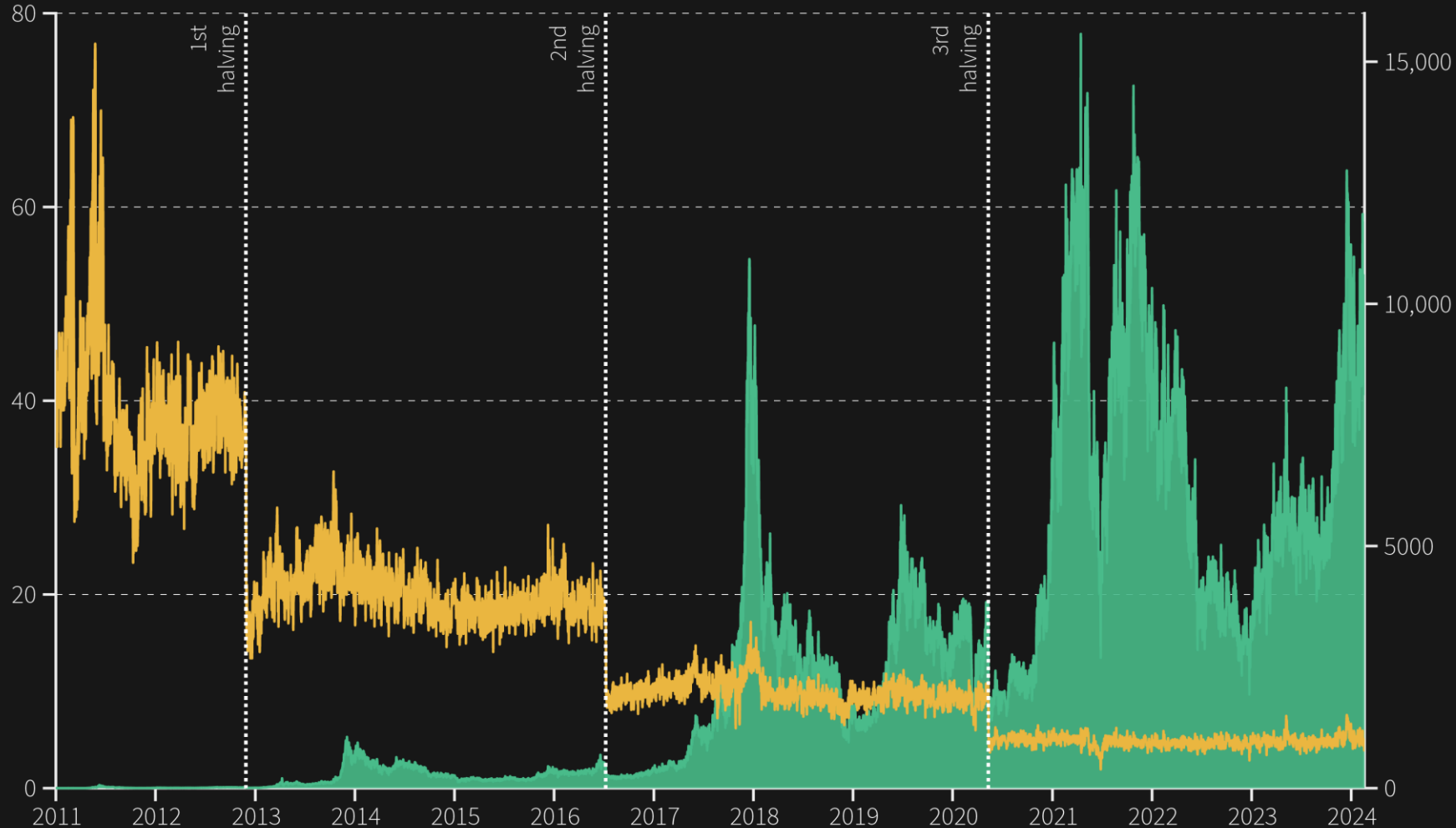
The upcoming halving event seems to be no exception. **Starting from the 4Q2023, Bitcoin miners began selling Bitcoins continuously, and the current balance has dropped to its lowest points since June 2021.**

Miners | Miners Revenue

● Revenue in BTC ● Revenue in US\$ million

Revenue in US\$ million

Revenue in BTC



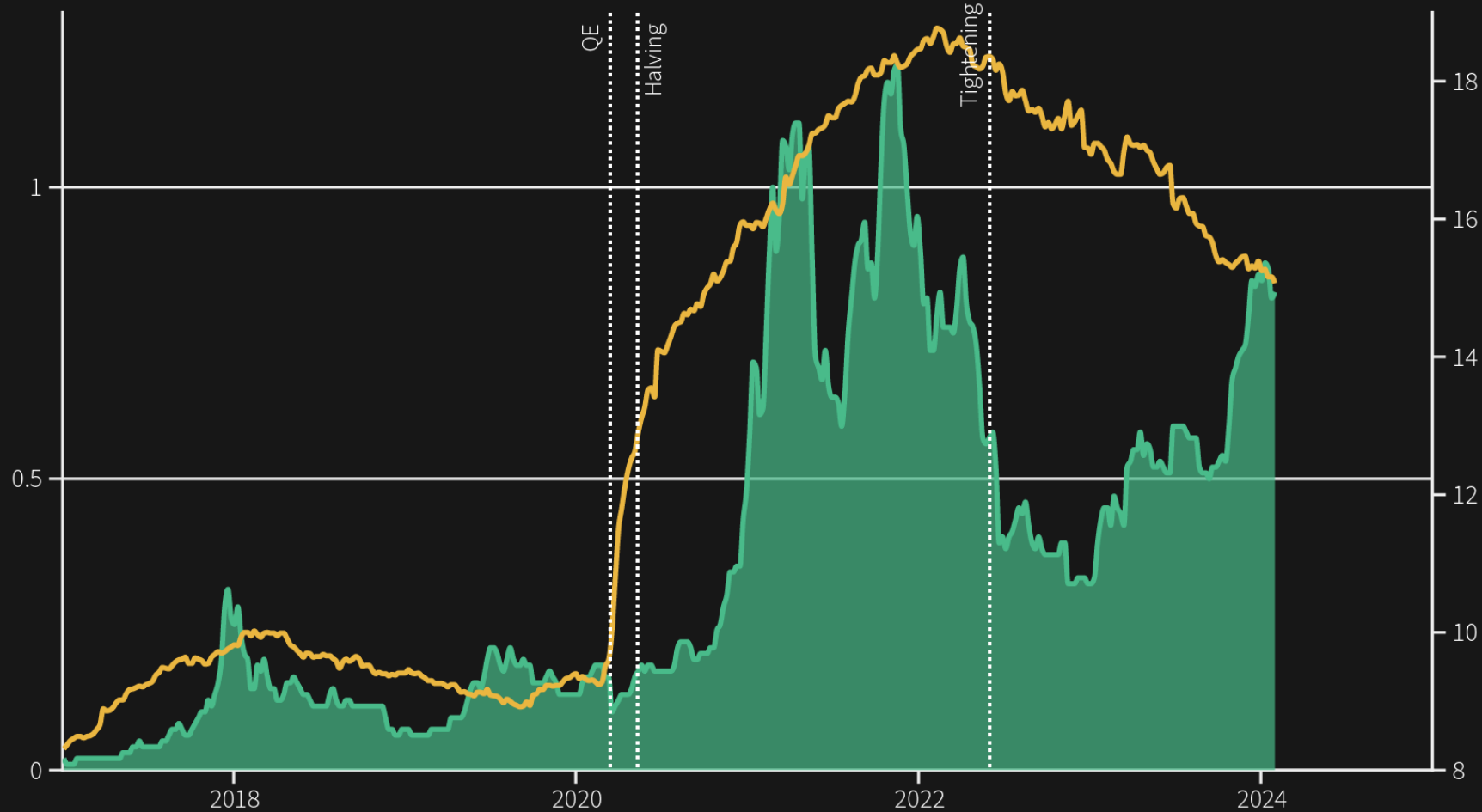
Despite the block reward reduction as a consequence of the halving events, miners' total revenue largely relies on the Bitcoin price performance.

Currently, the total revenue of miners has recovered significantly from the last bear market.

Macro | Bitcoin Market Cap vs. Central Bank Assets

- Fed + ECB Assets
- BTC Market Cap

In US\$ trillion



In US\$ trillion

Is Bitcoin an inflationary hedge? This is a common question among investors.

Global liquidity, as indicated by the assets of global central banks and as a cause of inflation, seems to correlate with the market capitalization or price performance of Bitcoin.

Macro | Historical Asset Class Return

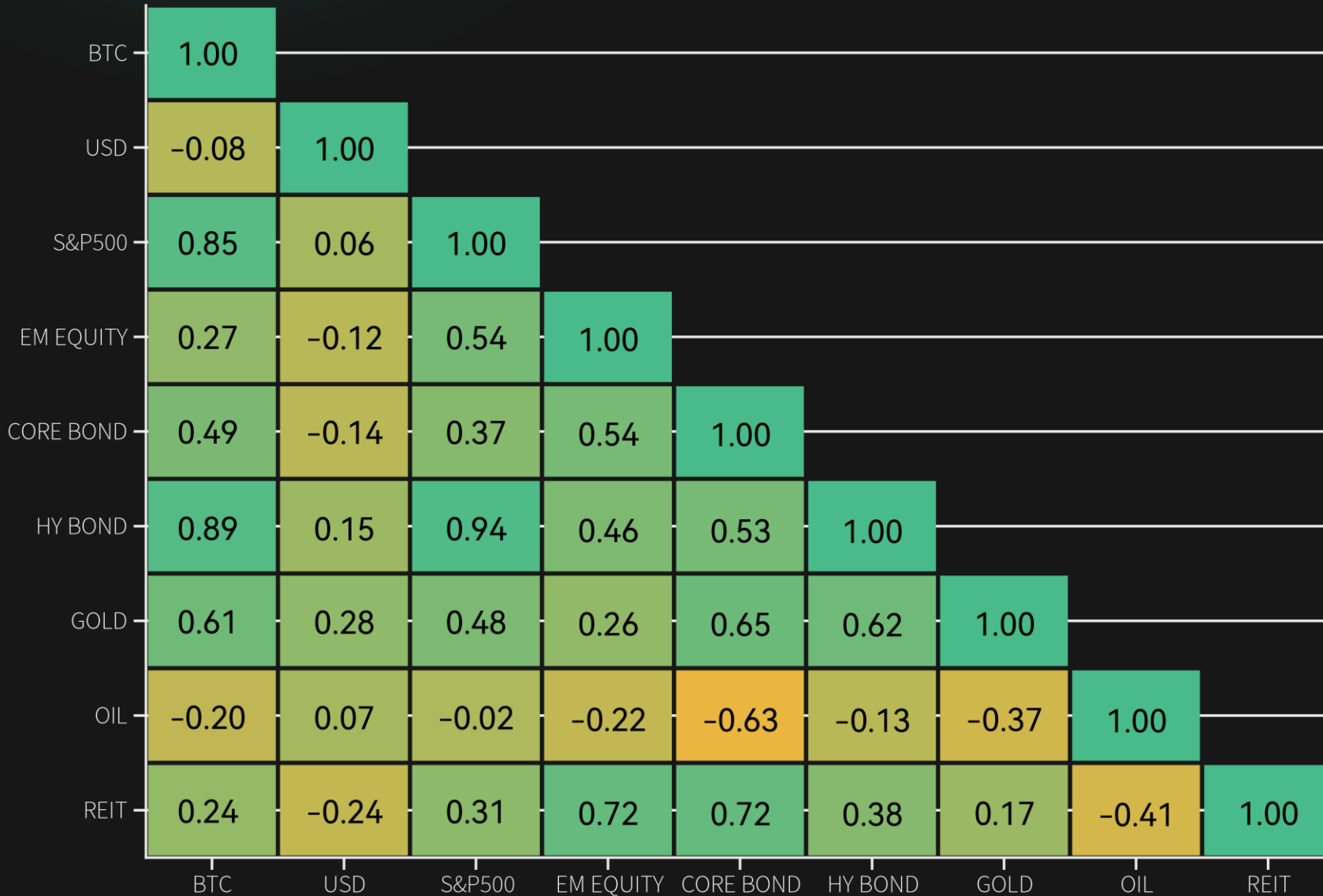


2008	2009	2010	2011	Halving 2012	2013	2014	2015	Halving 2016	2017	2018	2019	Halving 2020	2021	2022	2023
Fixed Income 5.2%	EM Equity 79.0%	Gold 29.5%	Gold 9.6%	BTC 186.2%	BTC 5,317.8%	S&P500 13.7%	BTC 34.0%	BTC 124.9%	BTC 1,336.0%	Cash 1.8%	BTC 92.4%	BTC 302.8%	BTC 59.8%	Cash 1.5%	BTC 155.1%
Gold 5.1%	HY 59.4%	EM Equity 19.2%	Fixed Income 7.8%	HY 19.6%	S&P500 32.4%	Fixed Income 6.0%	S&P500 1.4%	HY 14.3%	EM Equity 37.8%	Fixed Income 0.0%	S&P500 31.5%	Gold 25.0%	S&P500 28.7%	Gold -0.6%	S&P500 26.3%
Cash 1.8%	S&P500 26.5%	S&P500 15.1%	HY 3.1%	EM Equity 19.6%	HY 7.3%	HY 0.0%	Fixed Income 0.5%	S&P500 12.0%	S&P500 21.8%	Gold -1.8%	EM Equity 18.9%	EM Equity 18.7%	HY 1.0%	HY -12.7%	HY 14.3%
HY -26.9%	Gold 23.9%	HY 14.8%	S&P500 2.1%	S&P500 16.0%	Cash 0.1%	Cash 0.0%	Cash 0.0%	EM Equity 11.6%	Gold 12.9%	HY -4.1%	Gold 18.0%	S&P500 18.4%	Cash 0.0%	S&P500 -18.1%	Gold 12.8%
S&P500 -37.0%	Fixed Income 5.2%	Fixed Income 6.5%	Cash 0.1%	Gold 6.9%	Fixed Income -2.0%	EM Equity -1.8%	HY -2.7%	Gold 8.3%	HY 10.4%	S&P500 -4.4%	HY 12.6%	Fixed Income 7.5%	Fixed Income -1.5%	EM Equity -19.7%	EM Equity 10.3%
EM Equity -53.2%	Cash 0.1%	Cash 0.1%	EM Equity -18.2%	Fixed Income 4.2%	EM Equity -2.3%	Gold -2.1%	Gold -10.6%	Fixed Income 2.6%	Fixed Income 3.5%	EM Equity -14.2%	Fixed Income 8.7%	HY 7.0%	EM Equity -2.2%	Fixed Income -19.7%	Fixed Income 5.5%
				Cash 0.1%	Gold -28.3%	BTC -56.1%	EM Equity -14.6%	Cash 0.3%	Cash 0.8%	BTC -73.1%	Cash 2.2%	Cash 0.5%	Gold -4.0%	BTC -64.3%	Cash 5.1%

The historical returns by asset class from 2012 to 2023 demonstrate that Bitcoin has emerged as the best performer in 9 out of the 12 years. Despite outperformance, especially in the halving year and the subsequent year, we have observed a pattern where Bitcoin became the worst-performing asset class in the second year following the halving events, including 2014, 2018 and 2022.

Source: CoinEx Research, CoinMarketCap, Bloomberg, MSCI, J.P. Morgan Asset Management.
 Fixed Income: Bloomberg US Aggregate, HY: Bloomberg Global High Yield Index,
 EM Equity: MSCI EME, Gold: iShares Gold Trust, Cash: Bloomberg 1-3m Treasury

Macro | Bitcoin 1-Year Correlation Matrix

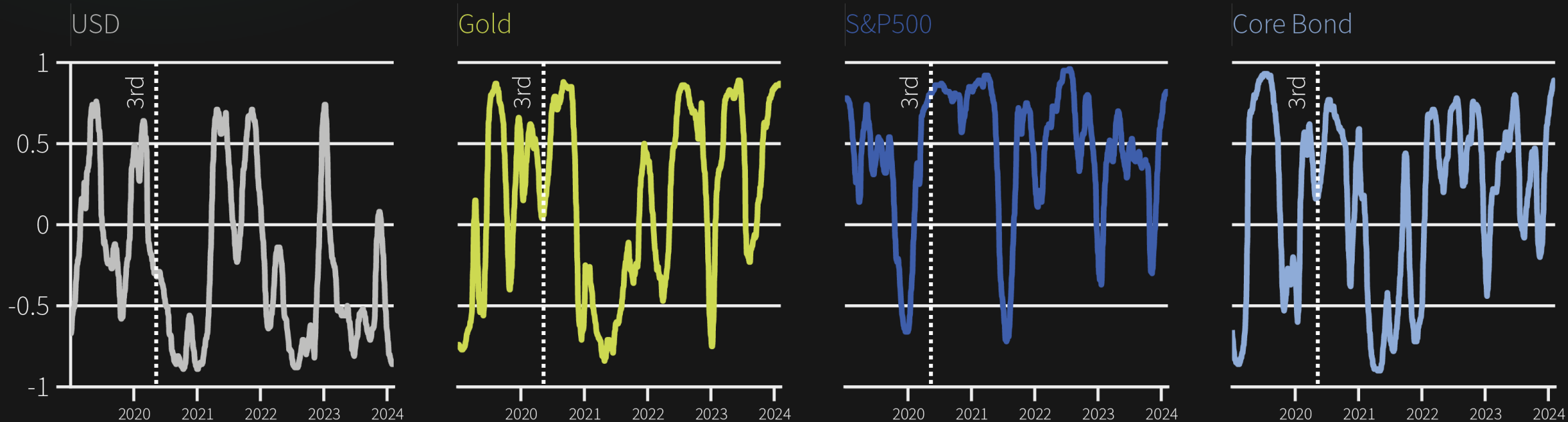


Over the 1-year time period, the price movements of Bitcoin and S&P500 tend to show a high correlation, with a level of 0.85.

On the other hand, Bitcoin has a slightly negative correlation with the U.S. Dollar and crude oil price.

Source: CoinEx Research, CoinMarketCap, Yahoo Finance; Data as of 08 February 2024; USD: U.S. Dollar Index, Gold: XAU, EM Equity: iShares MSCI Emerging Markets, Core Bond: iShares Core U.S. Aggregate Bond, HY Bond: SPDR Bloomberg High Yield Bond, Gold: XAU, Oil: Crude Oil, REIT: FTSE Nareit All Equities REIT

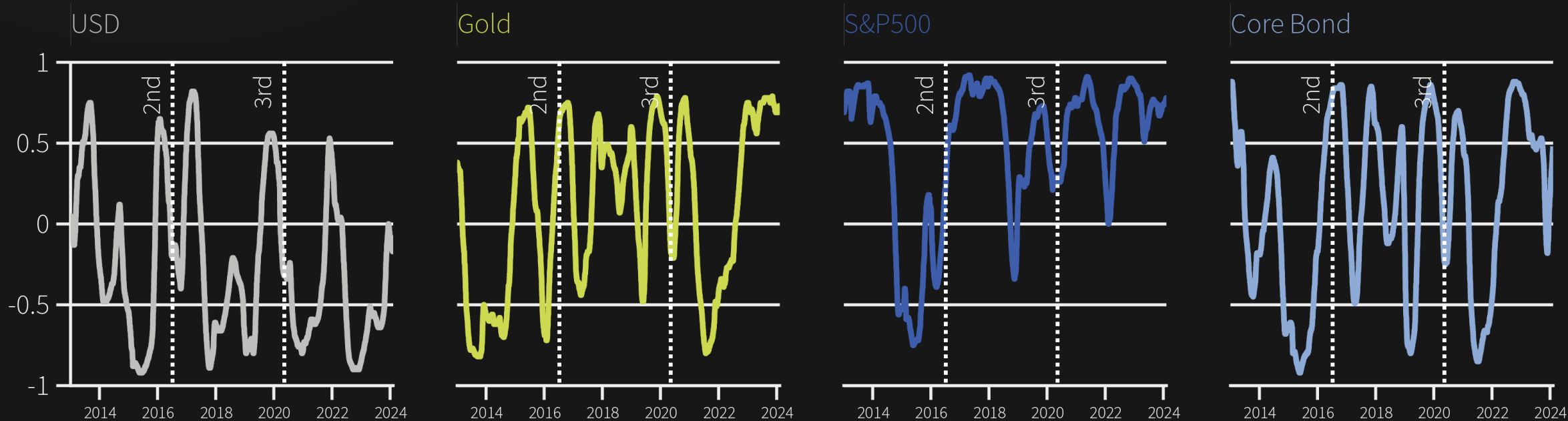
Macro | Bitcoin: Rolling 90-Day Correlation



Stepping into the end of 2023 and the beginning of 2024, the rolling 90-day correlations between Bitcoin and a few key asset classes (Gold, S&P500 and Core Bond) have all climbed to a high level of close to 1.0.

Source: CoinEx Research, CoinMarketCap, Yahoo Finance;
Data as of 08 February 2024:
USD: U.S. Dollar Index, Gold: XAU, Core Bond: iShares Core U.S. Aggregate Bond

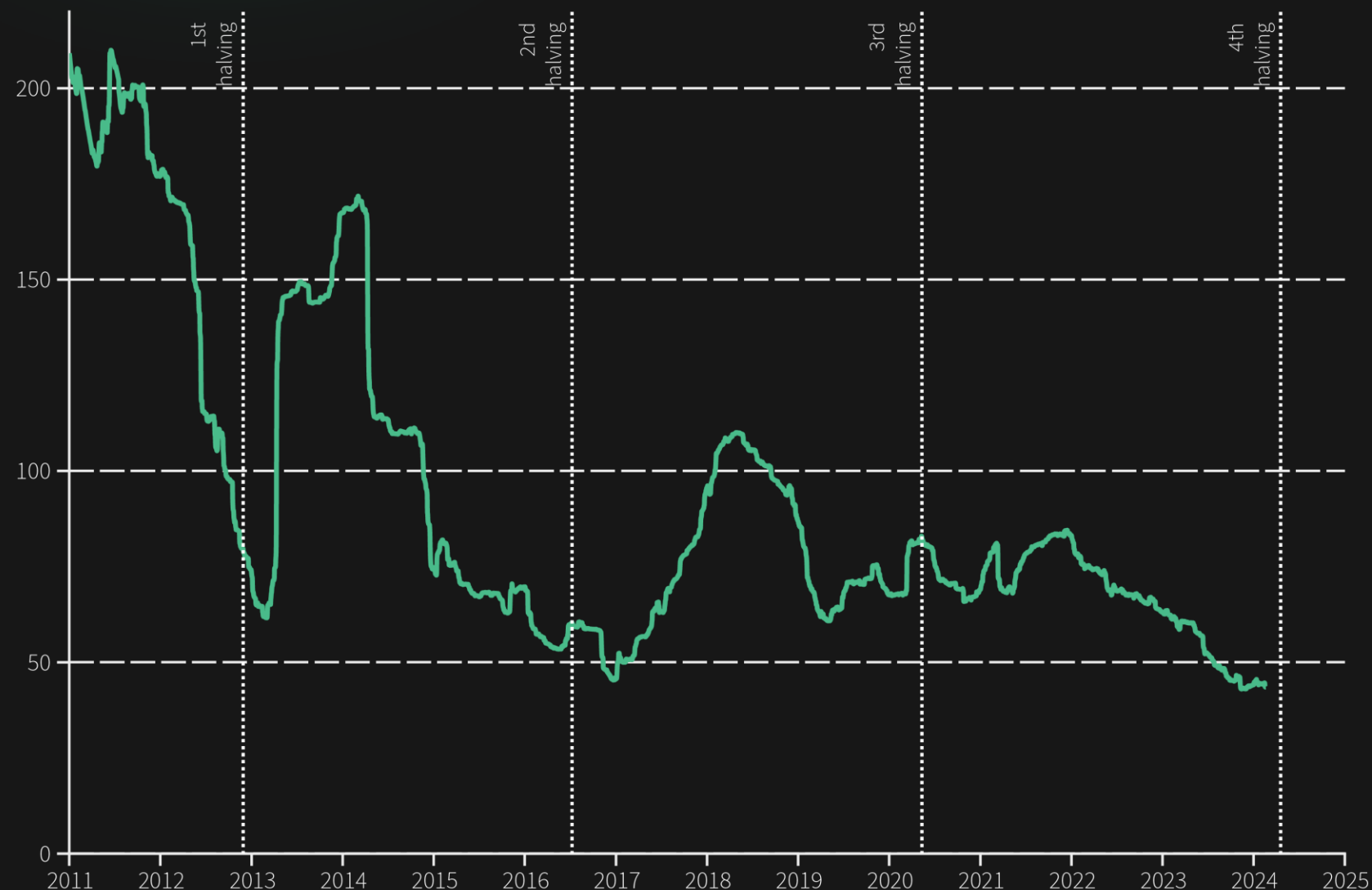
Macro | Bitcoin: Rolling 1-Year Correlation



Here is a longer view of Bitcoin's rolling 1-year correlation with other asset classes. **The correlation between Bitcoin and the U.S. Dollar has climbed from the negative bound to almost zero.**

Source: CoinEx Research, CoinMarketCap, Yahoo Finance;
Data as of 08 February 2024:
USD: U.S. Dollar Index, Gold: XAU, Core Bond: iShares Core U.S. Aggregate Bond

Annualized Volatility %

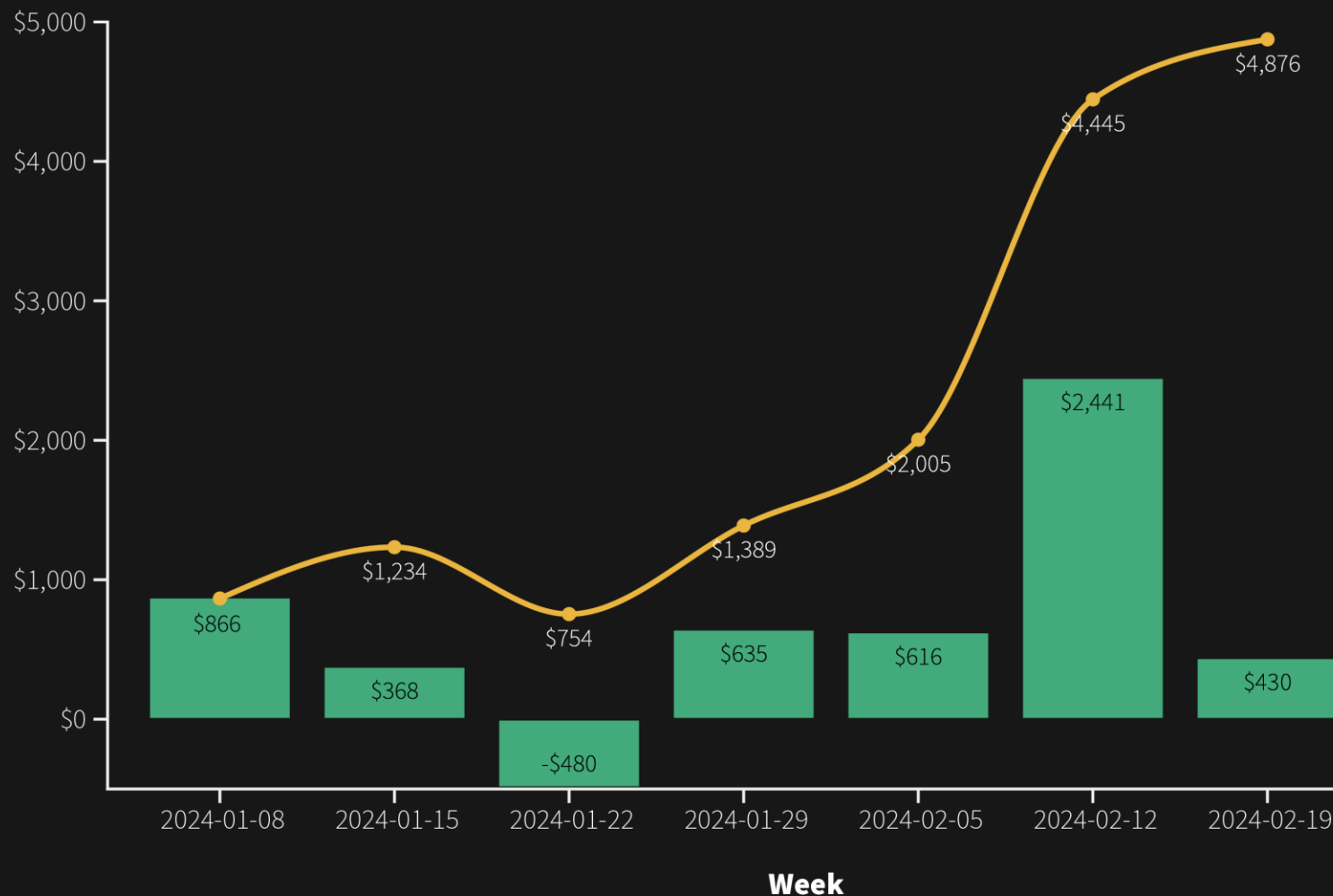


It is true that Bitcoin has been a volatile asset class, as compared to equities or fixed income. However, it is noted that the 1-year annualized volatility of Bitcoin has seen a clear downward trend, attributed to the increasing adoption of Bitcoin by institutional investors. The Bitcoin market is set to become more efficient and exhibit lower volatility.

Capital Flows | Bitcoin ETFs Net Inflow

● Cumulative ● Weekly Net Inflow

In US\$ million



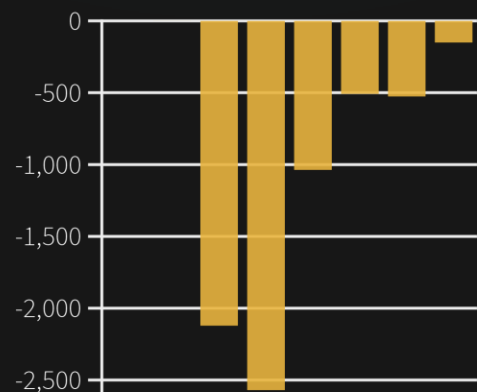
Since the listing of the Bitcoin spot ETFs on the U.S. exchange on January 11, the 10 different Bitcoin ETFs launched have attracted a net inflow of over US\$4.87 billion in just over a month, with Grayscale's GBTC being an exception and experiencing continuous outflows.

Source: CoinEx Research, ETF.com; Data as of 21 February 2024

Capital Flows | Bitcoin ETFs Net Inflow

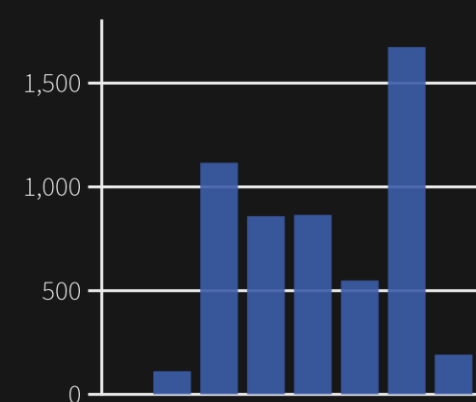
GBTC

In US\$ million



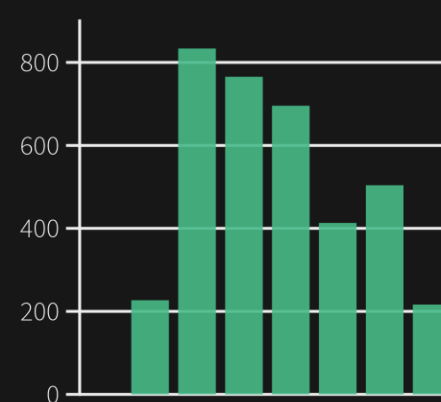
IBIT

In US\$ million



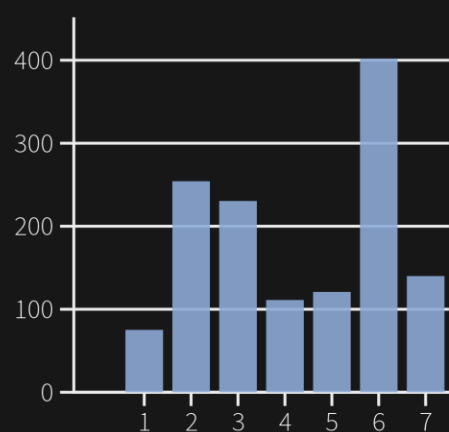
FBTC

In US\$ million



ARKB

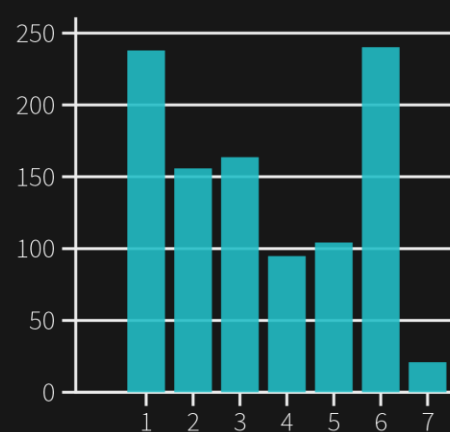
In US\$ million



Week

BITB

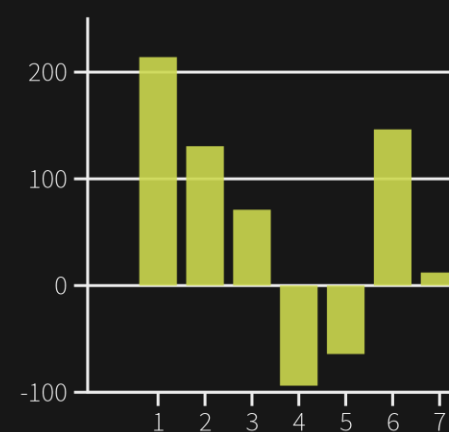
In US\$ million



Week

Others

In US\$ million



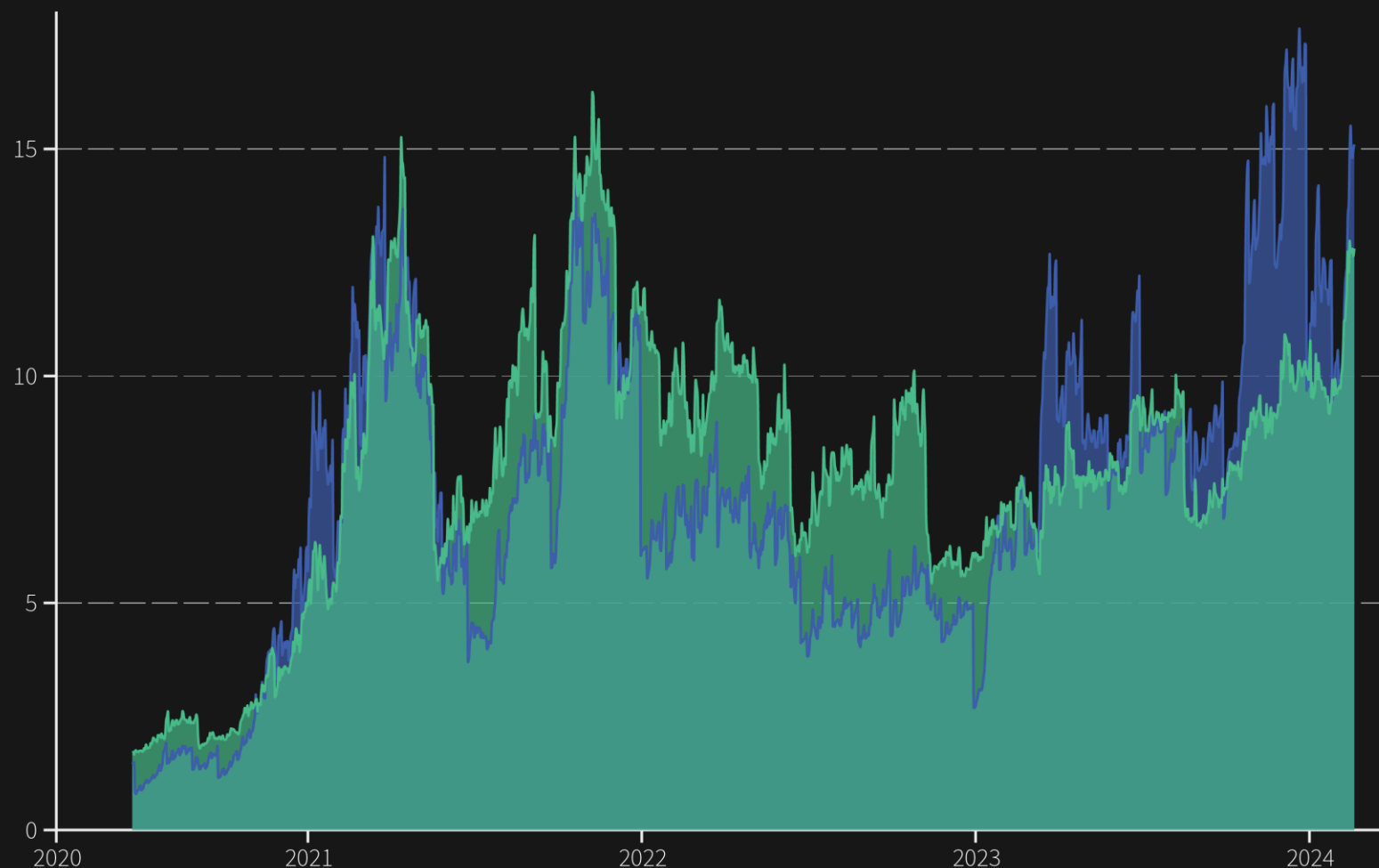
Week

Except for Grayscale which experiences a significant outflows, other Bitcoin ETFs continue to attract inflow, other Bitcoin ETFs continue to attract inflows. Notably, the iShares Bitcoin Trust (IBIT) issued by BlackRock, and Fidelity Wise Origin Bitcoin Fund (FBTC) launched by Fidelity.

Capital Flows | Open Interest of Options vs. Futures Perpetual

● Options Open Interest ● Futures Perpetual Open Interest

Option Interest in US\$ billion



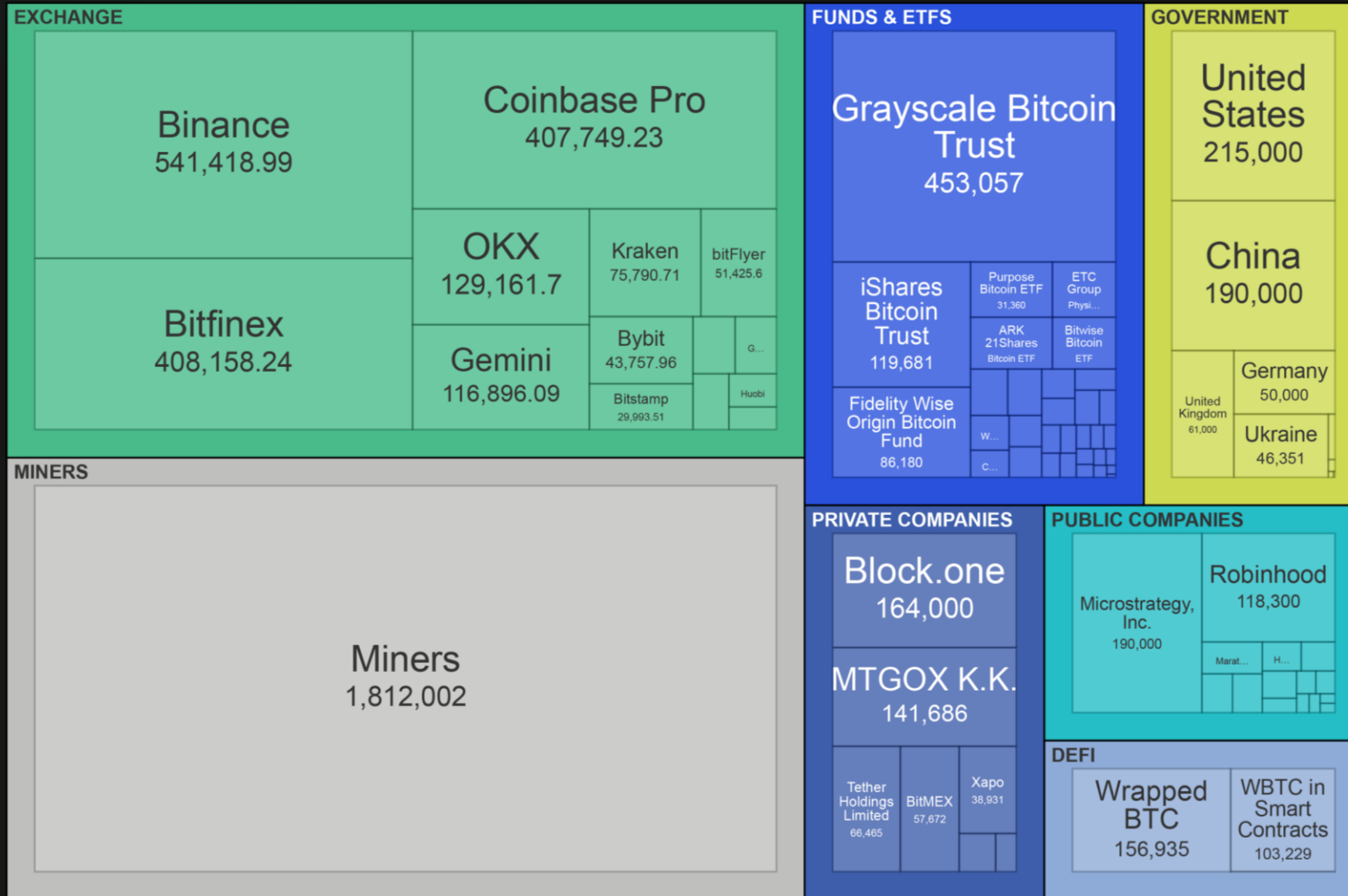
Source: CoinEx Research, Glassnode; Data as of 20 February 2024

Derivative products are often utilized by both investors and speculators to gain exposure to the crypto space or to carry out hedging strategies.

While futures perpetual contracts have been the most popular products in the past few years, it is observed that options have gained significant traction in the market. In fact, **the open interest of options has consistently outsized that of futures perpetual since 2Q2023.**

Derivative market activities are expected to see a positive trend, on the grounds of the upcoming halving event and the rising crypto adoption not only by retail investors but also institutional funds.

Capital Flows | An Overview of Bitcoin Ownership by Entities



Overall, about 30% of the total Bitcoin supply has now been identified.

Among these, exchanges like Binance, Bitfinex, and Coinbase hold over 1.8 million Bitcoins combined, accounting for over 8.8% of the total Bitcoin supply.

Public companies hold about 385,000 Bitcoins in total, with MicroStrategy holding 190,000 Bitcoins, making up 0.9% of the total supply.

Institutional funds have also accumulated a large number of Bitcoins, totaling over 850,000, with Grayscale Bitcoin Trust being the largest holder with over 450,000 Bitcoins.

Source: CoinEx Research, Bitcoin Treasuries, BitInfoCharts, Coinglass.
 Note: There may be some overlap between some groups: Illustrative purpose only;
 Data as of 21 February 2024

Asset Allocation | If Bitcoin Becomes the Next Strategic Asset Class

Global market capitalization (in US\$ trillion)



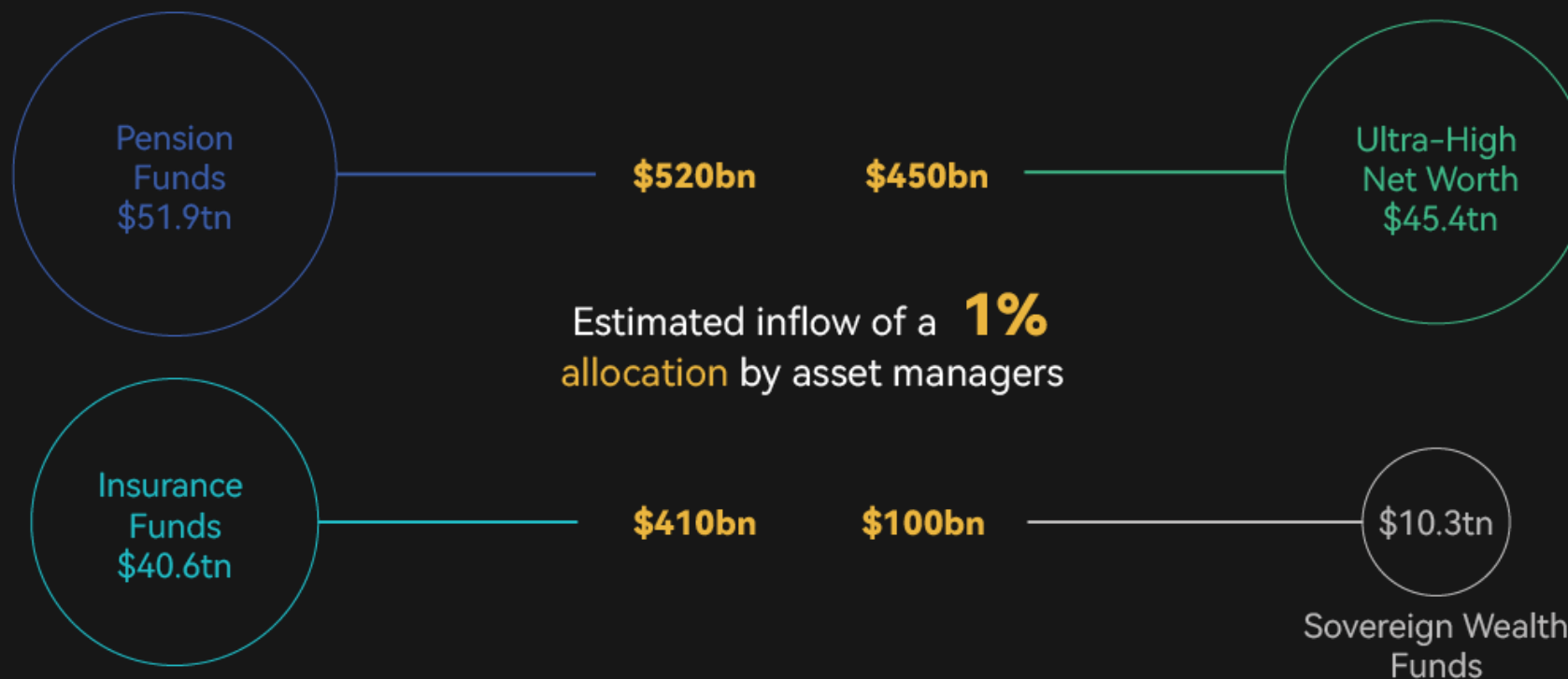
The market capitalization of Bitcoin is just 1/13 of Gold, which is the strategic asset class for traditional investors to diversify portfolio risk.

With the approval of spot Bitcoin ETFs, it is expected that more institutional funds will enter this emerging asset class.

Source: CoinEx Research, CoinMarketCap, Sifma, 8marketcap;
Bitcoin and Gold data as of 19 February 2024
Global Equity and Global Fixed Income data as of October 2023

Asset Allocation | How Much Inflow Could Go Into Bitcoin?

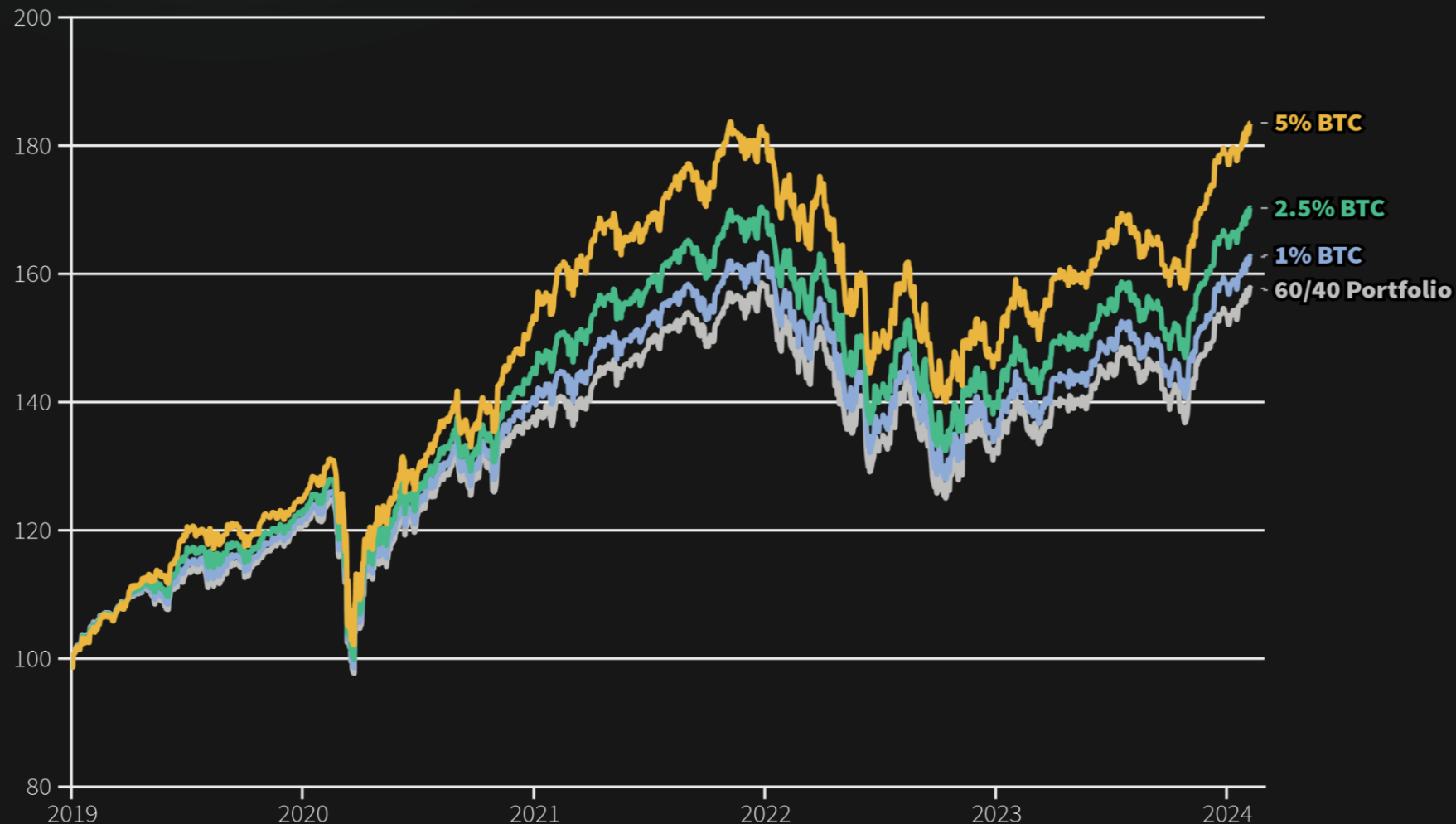
Estimated Global Asset Size owned by Asset Managers (in US\$ trillion)



Let's take a look at the global asset managers. Even a 1% allocation to Bitcoin by them could bring over \$1 trillion of funds into the asset class, while the market capitalization of Bitcoin stands at only \$1 trillion.

However, it should be noted that mandates and regulatory concerns remain roadblocks to crypto adoption, so the above merely serves as an illustration of the potential market.

Equity Curve (Indexed)



Our research team carried out a backtest on the performance of a traditional 60/40 portfolio compared with multiple scenarios of Bitcoin allocation. The results clearly indicated that adding Bitcoin, even with a single-digit allocation, would greatly enhance not only the equity curve but more importantly, the portfolio's risk-adjusted return.

The detailed analysis is outlined in the next table.

Source: CoinEx Research, CoinMarketCap, Yahoo Finance;

Data as of 08 February 2024; No Rebalancing is involved.

Note: 60/40 Portfolio – 60% S&P500 Index, 40% - iShares Core U.S. Aggregate Bond.

	Sharpe Ratio	Annualized Return %	Annualized Volatility %	Max Drawdown %
100% Equity	0.70	17.08%	21.15%	-33.92%
100% Bond	-0.19	0.95%	6.54%	-18.43%
60/40 Portfolio	0.61	10.34%	13.34%	-21.18%
Adding 1% BTC	0.66	11.02%	13.44%	-21.85%
Adding 2.5% BTC	0.72	12.05%	13.65%	-22.16%
Adding 5.0% BTC	0.82	13.80%	14.14%	-23.79%
100% BTC	1.51	104.47%	67.72%	-76.64%

Risk diversification is key to portfolio management. In fact, backtest results reveal that even a 1% allocation to Bitcoin could enhance the risk-adjusted return, or the Sharpe ratio, of the portfolio.

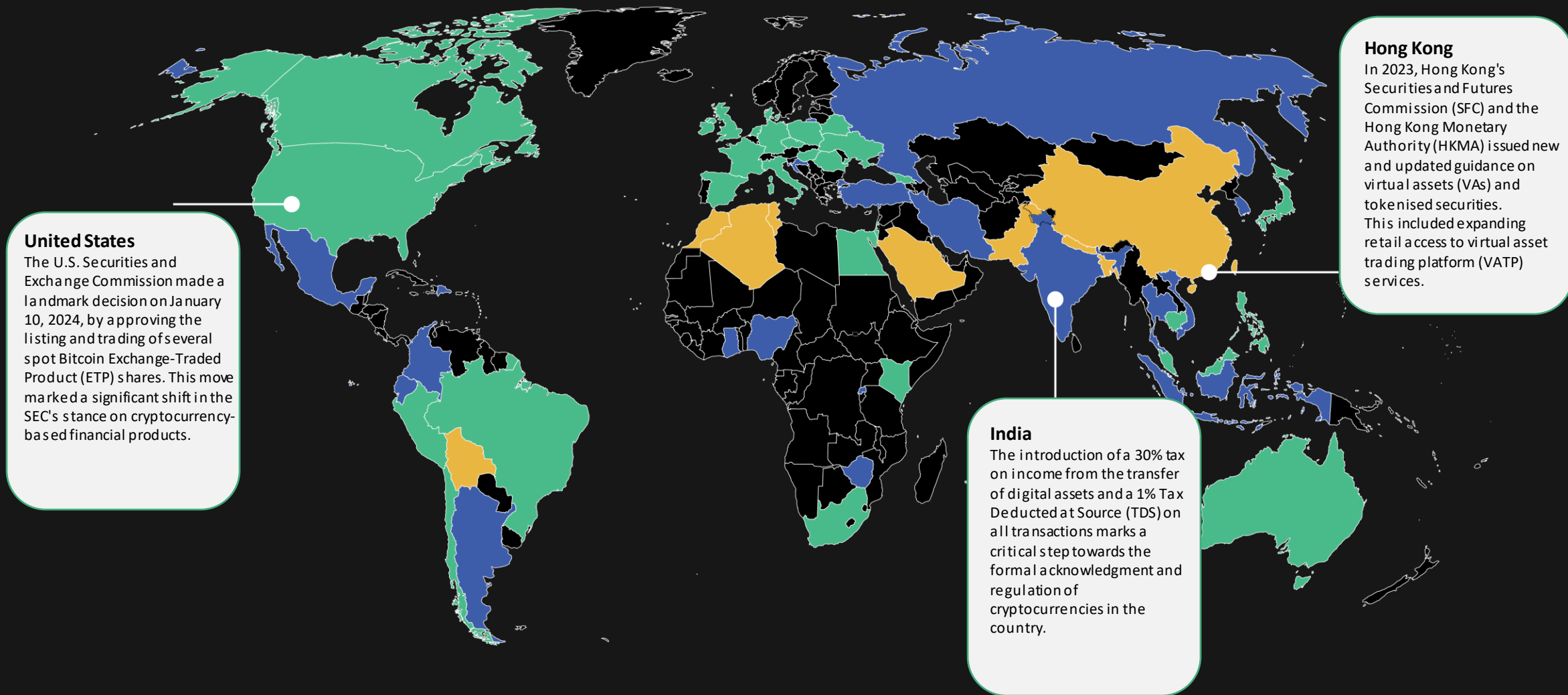
A 5% allocation to Bitcoin results in a further optimization of the Sharpe ratio, but the impact on the portfolio's volatility and the maximum drawdown is still minimal.

Source: CoinEx Research, CoinMarketCap, Yahoo Finance;

Data as of 08 February 2024; No Rebalancing is involved.

Note: 60/40 Portfolio – 60% S&P500 Index, 40% - iShares Core U.S. Aggregate Bond.

● Legal ● Partial Ban ● General Ban



Conclusion

The impact of Bitcoin on both the crypto and global financial markets is multifaceted and significant. Historical patterns show that halving events often garner increased market attention and Bitcoin's price typically achieves new highs, although the pace and growth multiplier of these increases have been slowing. The rise in wallets with non-zero balances and decrease in whale numbers suggest growing cryptocurrency adoption. Moreover, halving events tend to spark new narratives, boost user engagement, and precede the launch of related projects, fueling growth in the Bitcoin ecosystem.

Regarding global financial markets, Bitcoin's performance is increasingly linked to global liquidity, its correlation with other asset classes, and institutional investor adoption. Despite regulatory challenges, Bitcoin is slowly being acknowledged and invested by more institutional funds.

Against this backdrop, Bitcoin's future development is poised to attract heightened interest. With shifts in global central banks and market liquidity recovery, Bitcoin is expected to usher in more positive developments after the halving.

THANKS :)

