

Spot ETFs in Crypto Markets

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Key Takeaways

- ◆ Spot Bitcoin (“BTC”) Exchange-traded funds (“ETFs”) have accumulated over 938.7K BTC (~US\$63.3B), and when including other similar funds, this figure comprises 5.2% of Bitcoin’s total supply. With net flows exceeding 312.5K BTC (~US\$18.9B), and positive flows in 24 of 40 weeks, these ETFs are driving sustained market demand, removing an average of ~1.1K BTC per day.
- ◆ Spot BTC ETF net inflows have outperformed early Gold ETFs, surpassing ~US\$18.9B in under a year versus ~US\$1.5B for Gold. Over 1,200 institutions are now invested in these ETFs, compared to just 95 in the first year of Gold ETFs.
- ◆ While BTC ETFs have thrived, Ethereum (“ETH”) ETFs have seen weaker demand, with 43.7K ETH (~US\$103.1M) in outflows and negative flows in 8 of 11 weeks. BTC ETFs have a much greater impact on their respective markets, normalized by spot trading volume.
- ◆ Non-institutional investors account for ~80% of BTC ETF demand, while the number of institutional investors has increased by ~30% since Q1. Investment advisors saw the most significant growth, with holdings increasing by 44.2% to 71.8K BTC. Though fully expanding BTC ETF access across broker-dealers, banks, and advisors may take several years, this gradual process is expected to drive broader adoption over the medium term.
- ◆ Broader market themes point to spot BTC ETFs emerging as a key market indicator and among the fastest-growing ETFs. BlackRock’s IBIT and Fidelity’s FBTC ranked in the top 10 assets under management (“AUM”) of 2,000 ETF launches this decade. Bitcoin’s correlation with the S&P 500 has risen since early 2024, indicating a growing convergence with traditional finance (“TradFi”) and reflecting shifting investor sentiment toward Bitcoin as both a risk-on asset and a hedge against macroeconomic uncertainty.
- ◆ With spot BTC ETFs now making up an average of 26.4% of BTC spot volume (peaking at 62.6%), they are driving second-order effects like increased Bitcoin dominance, improved market efficiency, and reduced volatility. While still early, this liquidity and validation are supporting broader adoption, drawing more venture capital interest, market inclusion and expanding the on-chain footprint. Tokenized real-world assets (“RWAs”) are emerging as one of the next steps and a key pathway for institutions to gain on-chain exposure.
- ◆ Strong demand is driving the expansion of crypto ETF products across global markets, while options, potential staking yield inclusion, and new asset ETFs

remain in early phases. Collectively, these developments aim to boost liquidity and adoption, but evolving regulatory frameworks will be key in shaping the success of these innovations.

- ◆ Looking ahead, macroeconomic conditions and policy are increasingly shaping crypto markets, making macro indicators crucial as they impact flow dynamics, institutional buy-in, and future scope of products like crypto ETFs. Though, sustained growth will require capital inflows beyond BTC ETFs, emphasizing the need to track crypto market catalysts as well. As blockchain-native products expand, they are likely to encourage on-chain adoption and draw more investment into BTC, ETH, and the wider crypto ecosystem.

Spot ETFs: How Have They Fared So Far?

The approval of U.S. spot exchange-traded funds (“ETFs”) in crypto markets has been one of the most pivotal developments in the first half of this year. **Global ETFs, now valued at an impressive US\$10T⁽¹⁾**, have long offered investors a regulated, accessible method to invest in equities, bonds, commodities, currencies, and real estate. The advent of spot Bitcoin (“BTC”) and Ethereum (“ETH”) ETFs represents a major milestone, introducing **digital assets under the traditional ETF wrapper**. This familiar structure enables investors to gain exposure to crypto in a regulated way, bypassing the complexities of direct ownership.

By expanding access to crypto, these ETFs open the door for retail and institutional investors alike, while broadening distribution across more investment channels. For traditional finance (“TradFi”) investors, spot crypto ETFs have long been viewed as a gateway to allocate digital assets within portfolios. Since their launch, these ETFs have not only attracted a broader investor base, but have also introduced new institutional demand, and increased market participation, ultimately contributing to greater stability, diversity, and depth across crypto markets - characteristics not seen in previous cycles.

Perhaps the most significant impact of these spot ETFs is the validation they bring to digital assets like BTC in TradFi. For many, they represent an initial entry point into the crypto ecosystem, with the potential to drive engagement with networks such as Ethereum, BNB Chain, Solana, as well as products across Decentralized Finance (“DeFi”), stablecoins, and beyond. Moreover, Bitcoin’s endorsement by major asset managers, such as BlackRock, Fidelity, and Grayscale, may trigger a domino effect, encouraging new investors to explore the wider crypto space. Such second-order effects could yield far-reaching implications, potentially emerging as some of the most consequential outcomes of spot ETFs.

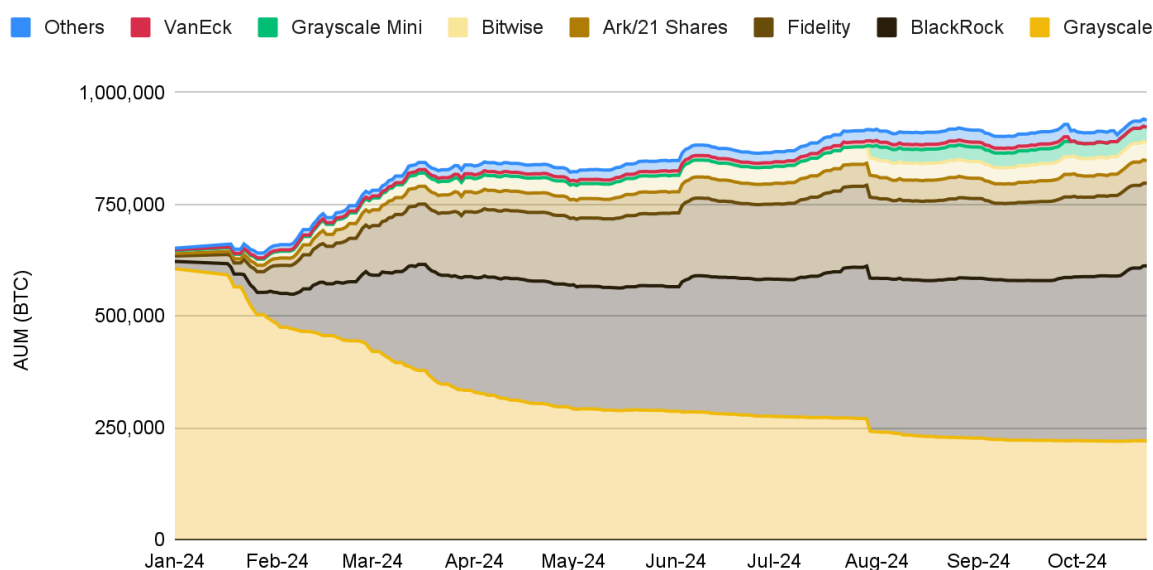
In this report, we assess the impact of spot ETFs on crypto markets. We start by reviewing their initial performance and capital flows, then delve into their broader market effects, including secondary impacts, and conclude with a forward-looking perspective. While the primary focus is on spot BTC ETFs due to more extensive data, we will also address developments in spot ETH ETFs.

Tracking Spot ETF Metrics

The Big Picture

The introduction of spot BTC ETFs has certainly transformed crypto market dynamics by influencing both the assets under management (“AUM”) and trading volumes. Since their debut, spot BTC ETFs have been fast-growing, amassing over 938.7K BTC (~US\$63.3B in AUM) within a year. This rapid growth highlights the significance of these ETFs in spurring increased interest and demand in BTC.

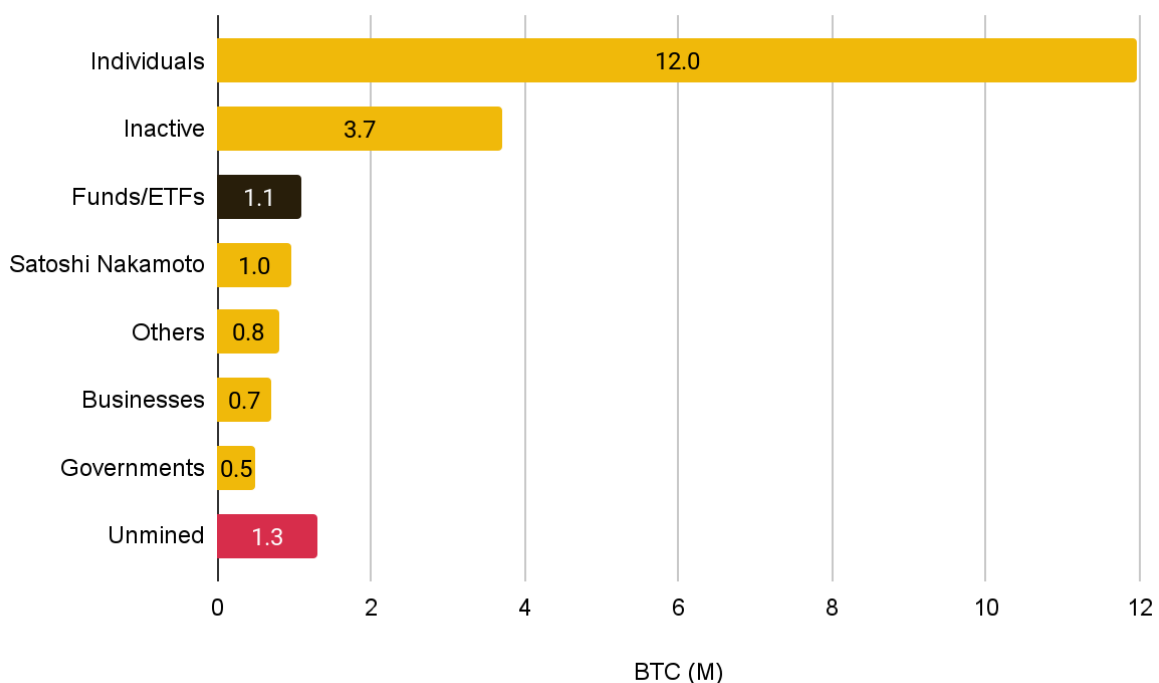
Figure 1: In under a year, spot BTC ETFs have accumulated over 938.7K BTC (~US\$63.3B in AUM)



Source: Glassnode, Binance Research, as of October 22, 2024

Notably, when compared to other BTC ownership channels, the combined AUM of U.S. spot BTC ETFs positions them among the **largest holders of Bitcoin**, representing ~4.5% of the total circulating supply. When including other similar BTC fund products, this figure reaches ~1.1M BTC, or 5.2% of the total supply. This significant concentration of Bitcoin managed by these funds underscores their growing role as a key access point to BTC in the market.

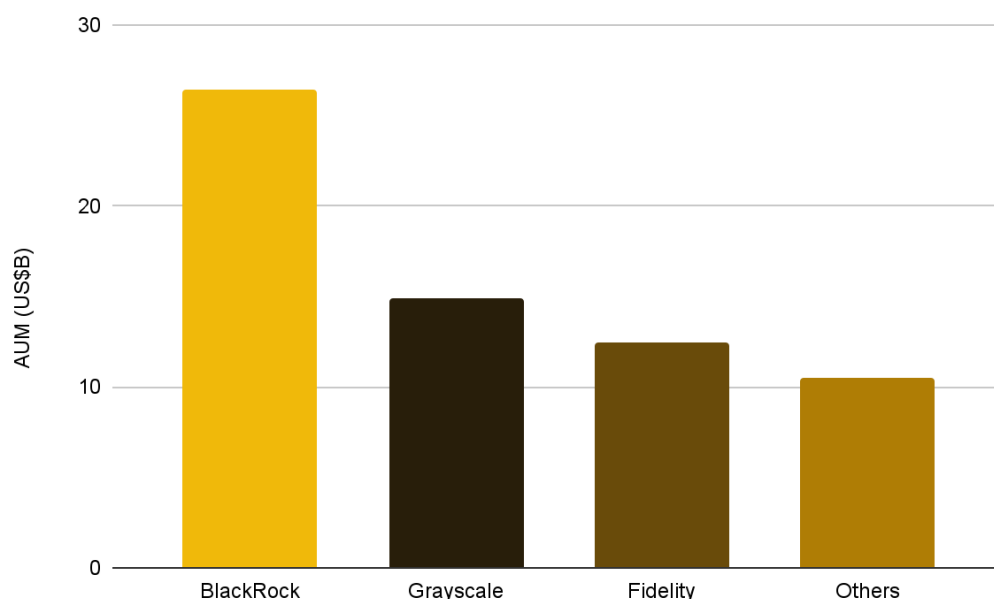
Figure 2: ETFs and similar funds have risen to become the third-largest holder of BTC, now accounting for ~5.2% of Bitcoin's total circulating supply



Source: Bitwise, bitcointreasuries.net, Binance Research, as of August 27, 2024

Among the leading ETF providers, several have amassed substantial trading volumes and AUM. **BlackRock's iShares Bitcoin Trust (IBIT) leads the market** and represents a significant portion of overall ETF inflows to date, **surpassing 391.5K BTC (~US\$26.4B in AUM)**. Meanwhile, Grayscale's GBTC, despite consistent outflows, remains the second largest holder of BTC due to its significant initial reserves, followed by Fidelity Wise Origin Bitcoin Fund (FBTC). Together, these three firms account for ~84% of the market. Although all spot BTC ETFs share the same core objective, certain factors - such as branding, accessibility, fees, choice of custodian, and initial promotional offers - may help explain why investors favor some funds over others.

Figure 3: ETFs from BlackRock, Grayscale, and Fidelity account for ~84% of the U.S. spot BTC market

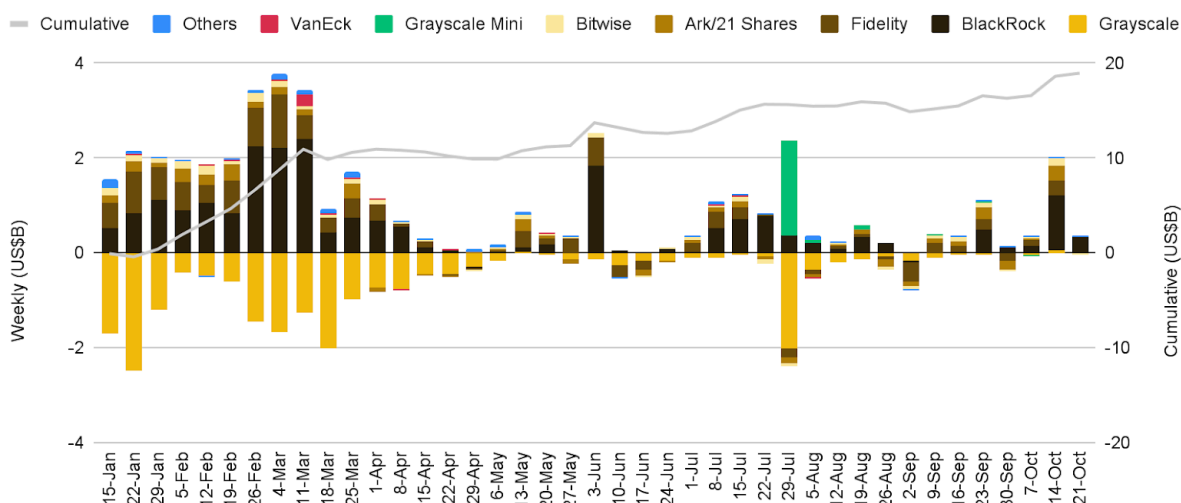


Source: Glassnode, SoSoValue, Binance Research, as of October 22, 2024

While a large portion of ETF accumulation occurred in the initial months, there has generally been a steady, healthy intake throughout the year, indicating sustained investor interest. Specifically, **24 out of 40 weeks (or 9 out of 10 months) saw positive flows**, with the value of inflows in these weeks typically exceeding the smaller values observed during outflow weeks.

Weekly inflows into spot BTC ETFs have ranged from an **average of ~US\$1B to highs of US\$2.4B**. Although inflows have slowed since their peak in late March - suggesting possible stabilization or even a shift in investor sentiment - net inflows to spot BTC ETFs have surpassed 312.5K BTC (~US\$18.9B).

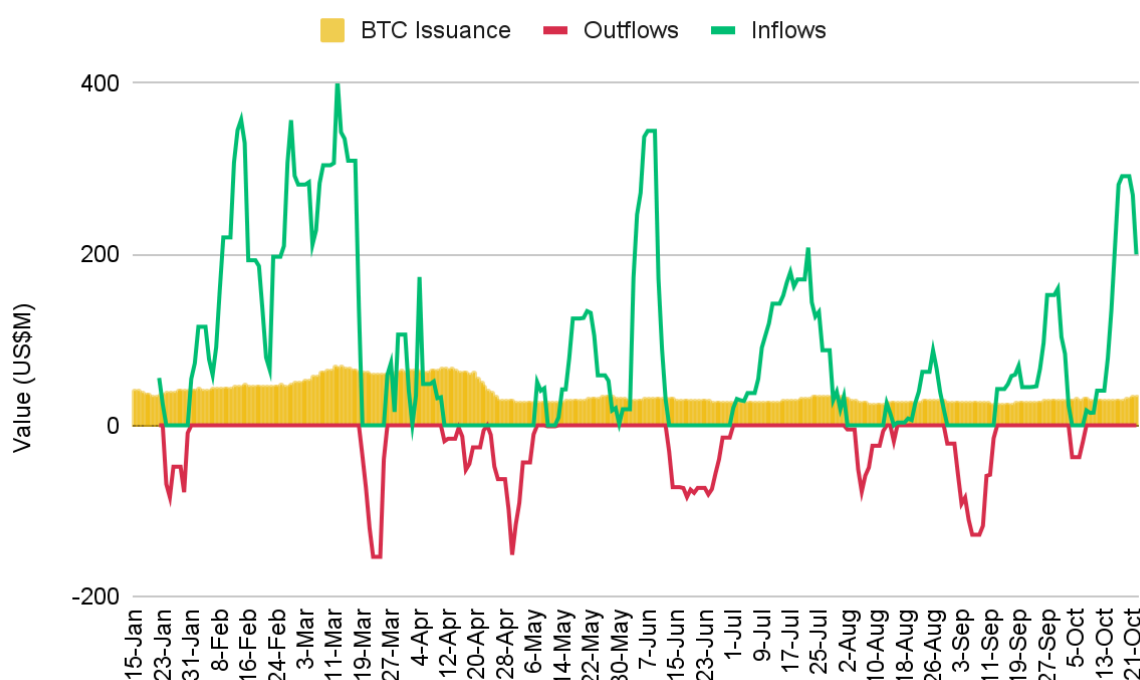
Figure 4: Spot BTC ETFs have attracted over US\$18.9B in cumulative flows to date



Source: Glassnode, Binance Research, as of October 22, 2024

Additionally, spot ETFs have introduced a substantial new source of demand for Bitcoin, while the available supply remains constrained by miners' rewards. Comparing ETF inflows to new BTC issuance reveals that **demand from spot BTC ETFs has regularly outpaced the supply**, highlighting the positive demand shock these ETFs bring to the BTC market. On average, spot ETFs have collectively removed approximately 1.1K BTC per day from the market. This **supply-demand imbalance** has intensified further since the Bitcoin Halving in April, which **reduced miners' rewards by 50%**.

Figure 5: Strong ETF demand has removed an average of ~1.1K BTC per day from the market



Data reflects a 7-day moving average

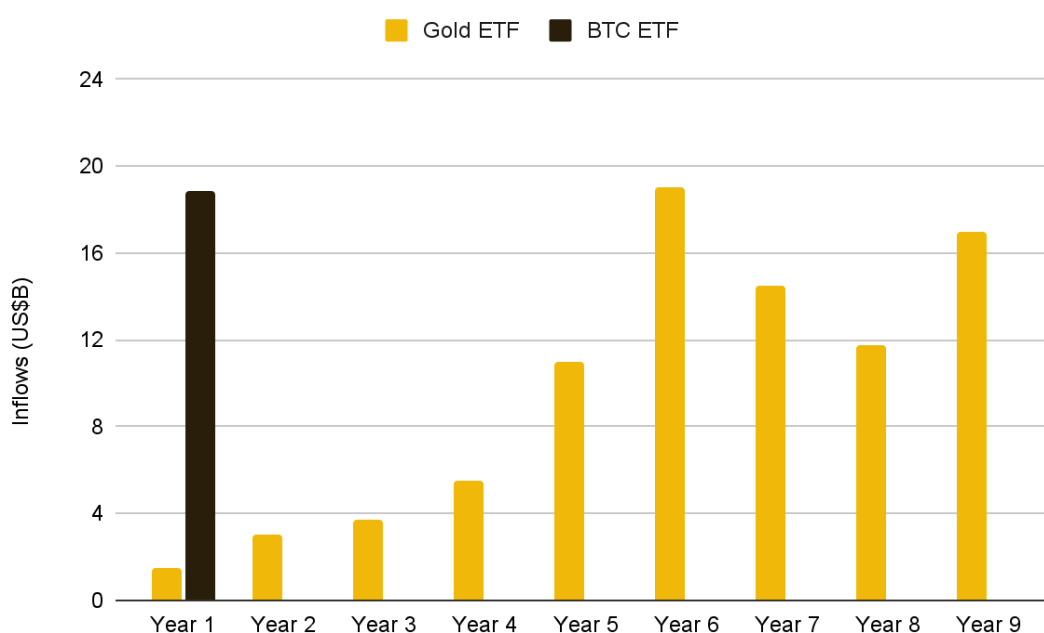
Source: Glassnode, Binance Research, as of October 22, 2024

Expectations vs. Reality

While 10 months is a relatively short period to assess spot crypto ETFs comprehensively, we can still compare pre-launch expectations with post-launch realities to gauge progress.

Comparisons to the Gold ETF market reveal that **BTC ETF flows have outpaced the early performance of the first Gold ETF** launched in November 2004. Today, the Gold ETF market stands at ~US\$130.9B⁽²⁾, while the U.S. spot BTC ETF market has already reached around US\$63.3B - nearly half of Gold ETFs' market size in under a year. Notably, the Gold ETF launch, which was considered highly successful, saw net inflows around US\$1.5B in its first year, yet spot BTC ETF flows have already surpassed US\$18.9B, and the year isn't even over. Furthermore, the **initial 13F filings for Gold ETFs included only 95 institutional investors⁽³⁾, a stark contrast to the more than 1,200 now invested in spot BTC ETFs**. While these are remarkable achievements, it's important to recognize the significant time differences between the launches. The market environment, time value of money and other variables impacting uptake were vastly different, making direct comparisons less straightforward.

Figure 6: BTC ETF flows are significantly outpacing the initial levels seen with the first Gold ETF



Source: Bitwise, Farside, ETF.com, Binance Research, as of October 17, 2024

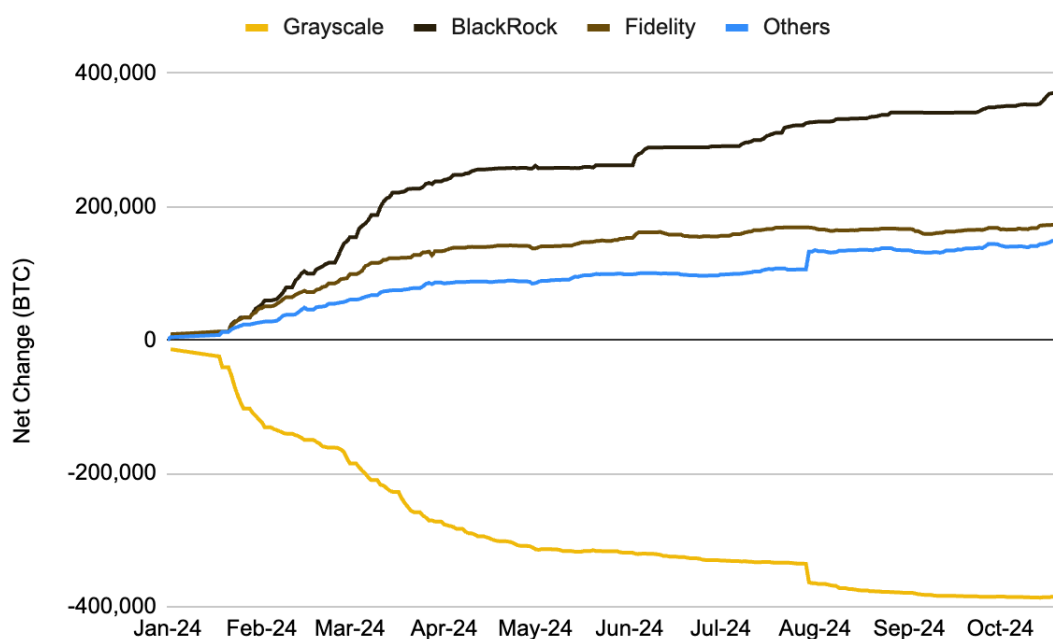
Pre-launch projections for Bitcoin ETFs also offer context for their current performance. Galaxy Digital⁽⁴⁾, for instance, conservatively projected inflows of US\$14B in the first year post-launch, growing to US\$27B by the second year and US\$39B by the third. **With net inflows already at US\$18.9B, Bitcoin ETFs have so far exceeded these initial estimates.**

However, it's worth considering that these inflows may not entirely reflect new capital. A portion likely comes from a reshuffling of existing positions, with some capital moving into

ETFs as investors adjust holdings rather than introducing fresh funds. Much of this accumulation also occurred earlier in the year, with flows slowing substantially since March. Given that these are conservative estimates, the slowdown suggests the spot crypto ETF market may not yet be as robust as expected. Key challenges include rising outflows and limited major institutional investment, signaling that the BTC ETF market might need more time to develop fully.

Outflows have been driven largely by **macroeconomic factors affecting risk-on assets**, along with **product-specific factors related to Grayscale's GBTC**. These include the removal of redemption frictions, which allowed long-term holders to exit; arbitrage investors exiting as the GBTC discount disappeared following ETF approval; and high fees pushing investors toward lower-cost ETFs. While initial GBTC outflows were offset by inflows into other ETFs, recent data shows a slowdown in demand for some of the strongest flow-gatherers, such as BlackRock's IBIT and Fidelity's FBIT. Fortunately, the **rate of GBTC-related outflows has also been decreasing**, as seen in the Grayscale outflow curve's flattening gradient.

Figure 7: Although GBTC has driven the largest net outflows among BTC ETFs, this impact is gradually decreasing



Source: Glassnode, Binance Research, as of October 22, 2024

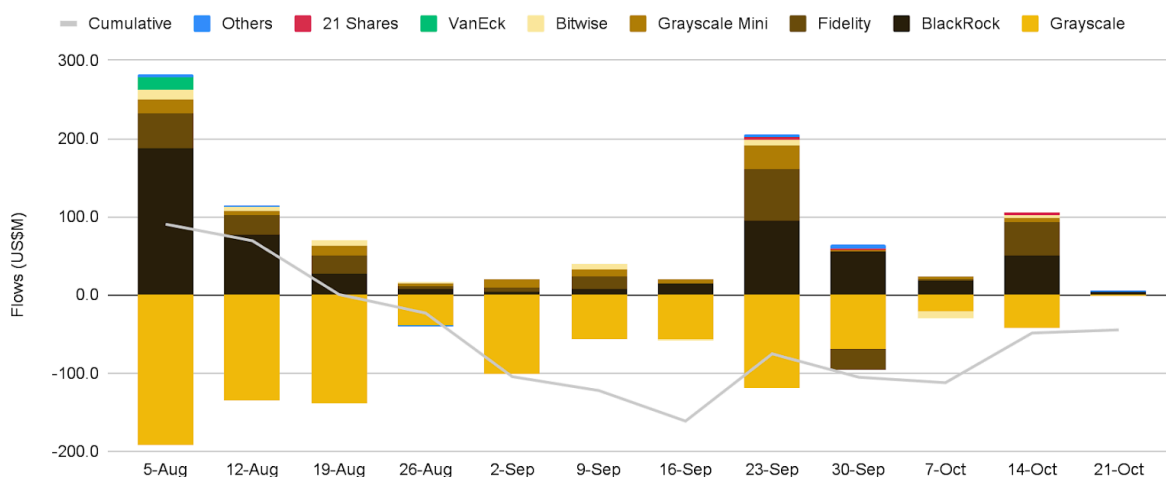
Overall, it was always expected that initial enthusiasm would attract capital quickly to these ETFs but that **demand would eventually normalize**. Inflows were never predicted to continue rising linearly, as various factors influence market dynamics. A period of slowed demand and occasional outflows was anticipated, especially as the market adjusts and stabilizes. With the unwinding of the GBTC trade overhang largely behind us, the good news is that any positive market catalysts could now have a stronger impact on net flows going forward.

Spot BTC vs. Spot ETH: A Comparison

The successful approval and launch of spot ETH ETFs in late July marked an important milestone for crypto markets. Investors now have accessible options for the two largest digital assets - Bitcoin and Ethereum - which together represent **over US\$1.6T and about 70% of the crypto market**⁽⁵⁾. However, demand for ETH ETFs has been relatively muted, with most funds still awaiting significant net-positive inflows. So far, ETH ETFs have seen 21.2K ETH (~US\$44.7M) in outflows, with **negative flows in 8 out of 11 weeks (or 3 consecutive months)**. As a result, their **total AUM, currently around 2.7M ETH (~US\$7.2B)**, has been trending downward since inception.

Redemption activity from Grayscale's Ethereum Trust (ETHE), coupled with insufficient inflows from other ETH ETFs (unlike with spot BTC ETFs), has been a primary factor behind this trend. Many investors previously locked into the ETHE product capitalized on the new ETF structure to redeem shares. ETHE's higher fees of 2.5% - considerably above the near-zero fees of newer ETFs - added further incentive for these redemptions. Additional factors include a lack of market catalysts, Ethereum's role as a utility asset rather than a store of value, and relatively low demand for ETH futures ETFs. Compounding these issues, the **launch of ETH ETFs coincided with a period of weak market performance**, which tempered early inflows.

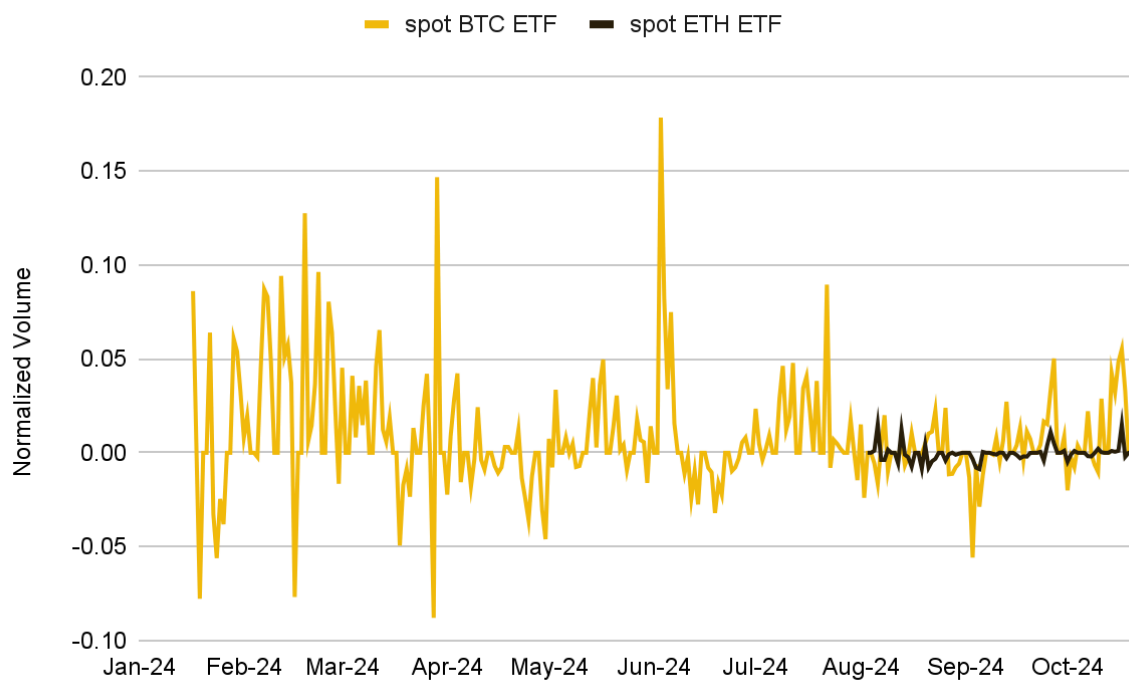
Figure 8: Net flows for ETH ETFs are negative, with cumulative outflows of ~US\$44.7M



Source: Glassnode, Binance Research, as of October 22, 2024

When comparing the market impact of BTC and ETH ETFs, normalizing ETF net flows by spot trading volumes reveals that BTC ETFs have a significantly greater influence on the Bitcoin market than ETH ETFs do on Ethereum. As illustrated in the figure below, **BTC ETFs have ranged around $\pm 8\%$ of Bitcoin's spot volume**, whereas **ETH ETFs represent only about $\pm 1\%$ of Ethereum's spot volume**. This indicates that, even after adjusting for spot volume, investor demand for BTC ETFs is markedly higher than for ETH ETFs.

Figure 9: The impact of ETH ETFs on the Ethereum spot market is considerably smaller than that of BTC ETFs on the Bitcoin spot market



Source: Glassnode, Binance Research, as of October 22, 2024

Nonetheless, much like the early performance of BTC ETFs, which encountered its fair share of flow volatility, ETH ETFs may also experience similar fluctuations as they find their footing in the market. However, while BTC ETFs demonstrated resilience with inflows rebounding after periods of outflows, it remains to be seen whether ETH ETFs will attract sustained investor demand over time.

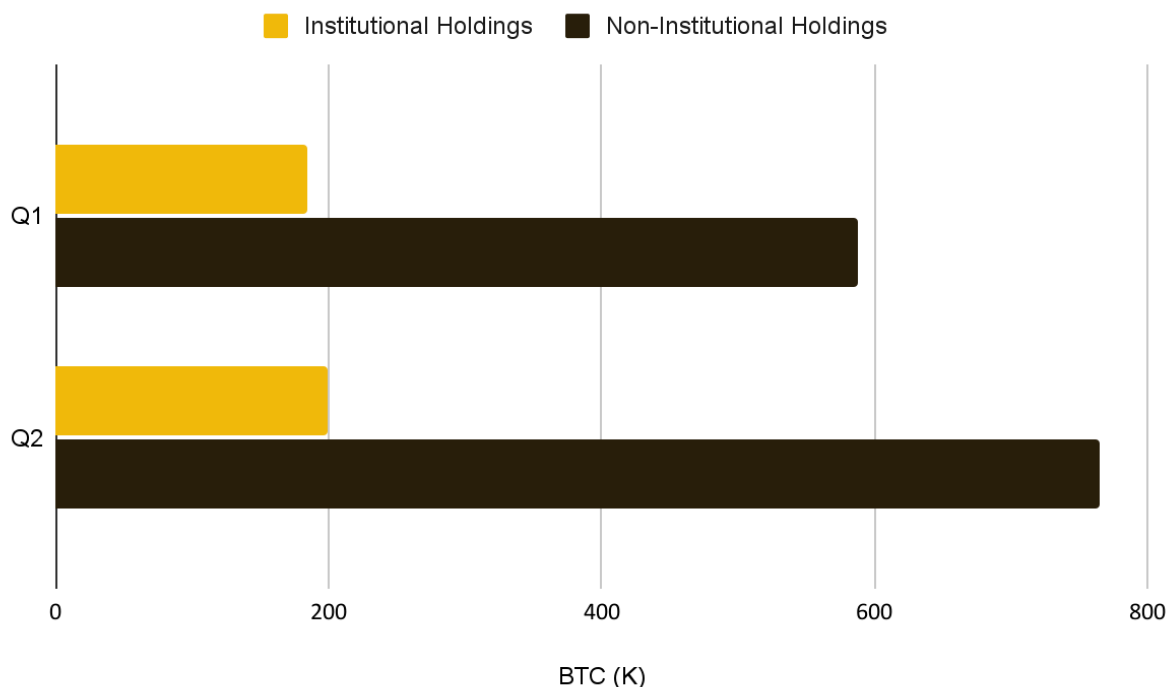
Analyzing Buying Patterns

Analyzing the profiles of primary buyers is essential to understanding demand for the new spot BTC ETFs. Recent data from Q2 13F filings indicates that non-institutional investors⁽⁶⁾, rather than institutions, make up a large portion of total AUM for spot BTC ETFs. BlackRock further corroborated this, noting that around 80% of BTC ETF purchases were likely made via self-directed online accounts⁽⁷⁾. This isn't surprising given Bitcoin's historically strong retail investor base and the availability of these ETFs on retail-friendly platforms.

“About 80% of bitcoin ETF purchases have likely been coming from self-directed investors who have made their own allocation, often through an online brokerage account”

Non-institutional investors currently drive most of the demand for spot BTC ETFs, with holdings up by **~176.2K BTC since Q1**. While this growth is promising, not all capital flowing into these new ETFs necessarily reflects fresh investment into the crypto space. Instead, a notable portion of this buying behavior likely represents a rotation from digital wallets⁽⁸⁾, previously held by retail investors with exchanges or retail brokers, to spot BTC ETFs, which offer added convenience and regulatory protections. This suggests that spot ETFs are serving dual roles: not only onboarding new investors but also attracting existing investors who prefer the regulated structure of ETFs over other, more complex options, such as direct on-chain holdings or illiquid, high-fee alternatives like Grayscale's BTC Trust.

Figure 10: Non-institutional holdings account for ~80% of spot BTC ETF AUM



Source: Bloomberg, 21Shares, Binance Research, as of October 10, 2024

While current buying patterns suggest that institutional demand has been slower to materialize, it has still shown modest growth, with **holdings up ~14.4K BTC since Q1**. A more notable indicator is the **~30% rise in the number of institutional investors**, with Q2 13F filings showing an **increase from the mid-900s to over 1,200**. This growth is encouraging and highlights the resilience of institutional interest, as both new and established investors continued adding BTC exposure even during periods of price declines, indicating sustained confidence among this investor class.

Taking a closer look, the top holders of these ETFs include a **diverse group spanning investment advisors, hedge funds, and banks**. Investment advisors, in particular, have seen the most significant growth in holdings, with over 71.8K BTC - a 44.2% increase from Q1. Interestingly, even if we consider only the investment advisor category within the largest BTC ETF, IBIT, their inflows alone would still rank it as **one of the fastest-growing ETFs launched this year**. This suggests that institutional categories are adopting BTC ETFs at a reasonable pace, even if their contributions are currently overshadowed by non-institutional demand.

Another encouraging sign is the **entry of major banks and pension funds**, such as Morgan Stanley, Goldman Sachs, and the State of Wisconsin Investment Board. The involvement of these household institutions not only enhances legitimacy but also **helps integrate digital assets like Bitcoin further into mainstream finance** and investment portfolios, driving adoption and market maturation.

Figure 11: Institutional demand for spot BTC ETFs is growing, with investment advisors as the largest investors, followed by hedge funds

Investor Type	AUM		# Investors	
	BTC (K)	QoQ (%)	Count	QoQ (%)
Investment Advisor	71.8	44.2	999	29.6
Hedge Fund	61.1	-7.4	137	28.0
Market Maker	27.9	6.3	12	71.4
Other	27.5	-10.5	6	50.0
Brokerage	5.5	-3.5	26	73.3
Pension Fund	1.7	-23.7	2	100.0
Private Equity	1.2	8.0	8	14.3
Bank	1.1	16.1	52	36.9
Holding Company	0.4	-70.3	11	22.2
Trust	0.4	248.9	6	50.0
Family Office/Trust	0.1	128.8	7	133.3
Insurance Company	0.03	-9.4	3	0.0
Venture Capital	0.02	-5.8	1	0.0
Corporation	0.02	63.4	1	0.0

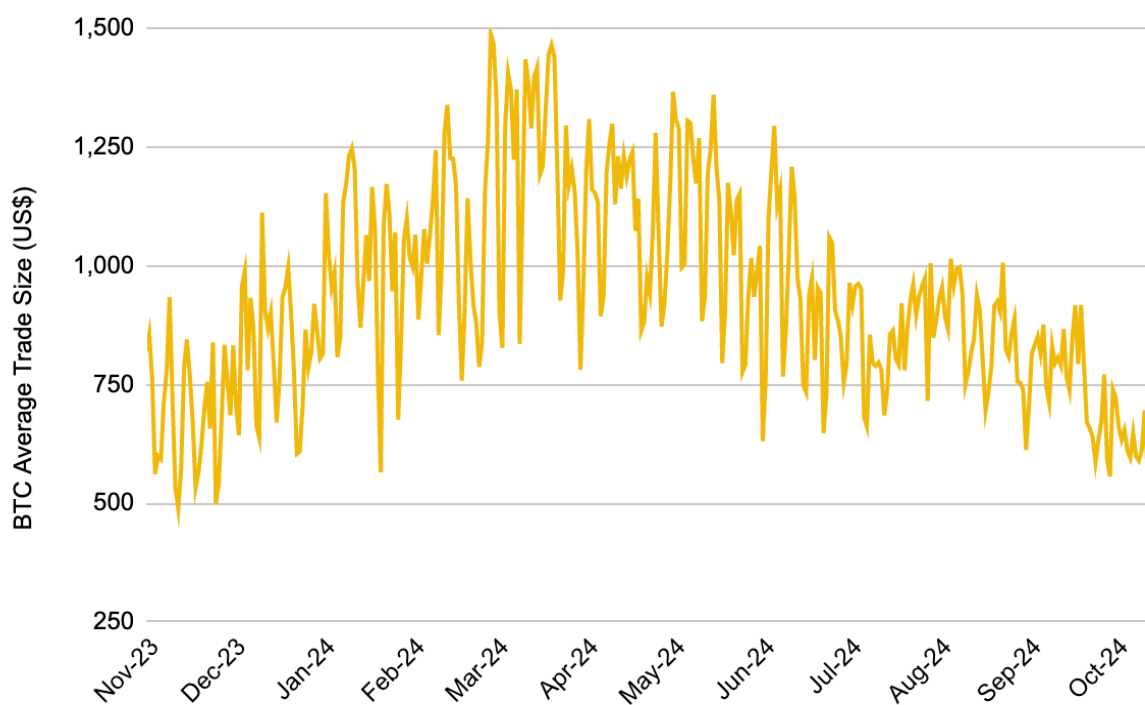
Source: Bloomberg, 21Shares, Binance Research, as of October 10, 2024

Yet, many institutions are still to enter the market, and those that have remain reserved in capital deployment. Bitcoin's average trade size across 33 exchanges - which typically increases with greater institutional participation - initially **rose to US\$1.5K in March** but has since **reverted to pre-ETF launch levels**. Although institutions are expected to drive trade sizes higher over time, there hasn't been a material change over the year, likely due to volatile market conditions and global liquidity uncertainties.

This cautious approach aligns with how TradFi institutions typically engage with new markets like crypto. Despite ETFs being available for over 10 months, some banks still restrict access to crypto products. For example, Morgan Stanley only recently began offering spot BTC ETFs to select clients who meet specific wealth and risk tolerance

requirements⁽⁹⁾. Nevertheless, interest in spot BTC ETFs is growing steadily, and access across broker-dealers, banks, and investment advisors is on the up. As more institutions integrate these products into their offerings, broader adoption is expected to accelerate over the coming years, positioning spot ETFs as a key investment vehicle in portfolios.

Figure 12: BTC average trade size initially rose but has since returned to pre-ETF levels



Source: Kaiko, Binance Research, as of October 17, 2024

Ongoing educational efforts, targeted marketing, and improved trading and on-chain tools are expected to support institutional onboarding, with stronger flows anticipated as investors grow more comfortable with digital assets. As the incremental impact of each new flow diminishes, institutional capital will be essential to bring the higher trade sizes and liquidity required to propel crypto markets forward.

Shifting the focus from institutional vs. non-institutional demand, a closer look at investor profiles provides additional insights into the potential trajectory of crypto ETF demand. According to a Charles Schwab survey, **cryptocurrencies are the preferred ETF asset class among millennials** and rank second only to equities among Gen X, though they continue to lag among Boomers.

Moreover, **45% of ETF investors plan to allocate to cryptocurrencies via ETFs** in the coming year, **up from 38% the year before**⁽¹⁰⁾. Such interest positions crypto ETFs as the second most preferred asset class after equities, surpassing demand for bonds and alternative assets. This rising appeal reflects a shifting perception of digital assets relative to traditional ones, though it remains to be seen whether these buyer preferences will

translate into concrete demand as global liquidity improves and rate cuts boost the appetite for risk-on assets.

Figure 13: Millennials exhibit the strongest demand for crypto ETFs, while Boomer investors show comparatively lower interest

ETF Type	ETF Investor*		
	Millennial	Gen X	Boomer
Cryptocurrencies	62%	44%	15%
U.S. Equity	48%	56%	65%
Bonds/Fixed Income	47%	42%	42%
Real Assets	46%	37%	31%
International Equity	28%	28%	24%
Alternatives	25%	17%	11%

*ETF investors were asked, 'Which asset classes do you plan to invest in over the next year via ETFs?'

Source: Charles Schwabs, Binance Research, as of October 10, 2024

A Broader View of the Market

Themes at Play

Fastest-Growing ETFs

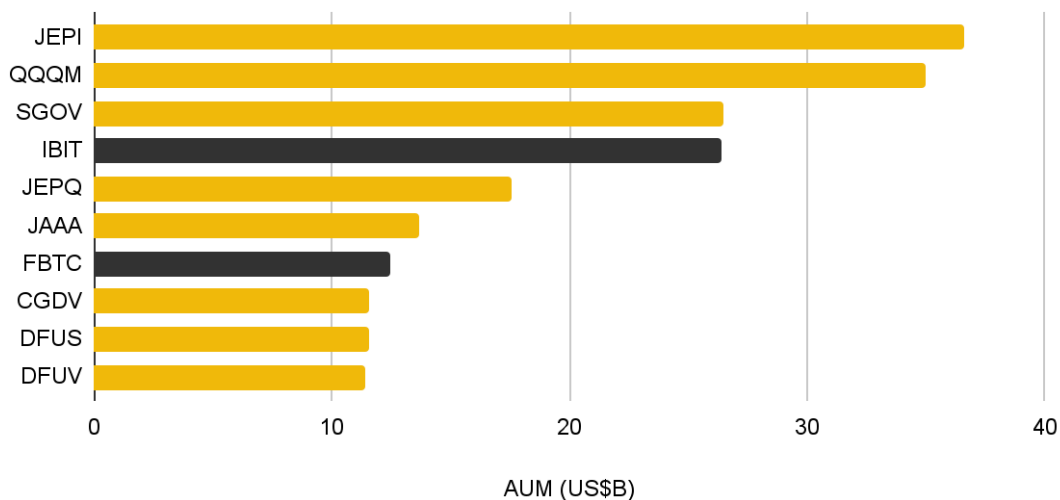
BlackRock CEO Larry Fink recently claimed their BTC ETF, IBIT, to be one of the fastest-growing ETFs - and data appears to support this⁽¹¹⁾. Spot BTC ETFs saw billions in inflows within the first few weeks of trading, a notable achievement by ETF standards. Most BTC ETFs, excluding Grayscale's GBTC, experienced consecutive inflows, with BlackRock's IBIT leading with a **remarkable 71-day streak**, placing it among the top 10 of all time⁽¹²⁾.

"IBIT is the fastest-growing ETF in the history of ETFs"

Broadening our view to the U.S. ETF market, we see equally impressive results. **Among the 525 U.S. ETFs launched in 2024, 13 of the top 25 by inflows are Bitcoin- or Ethereum-related.** Leading the list are four spot BTC ETFs: BlackRock's IBIT, followed by Fidelity's FBTC, ARK 21Shares' ARKB, and Bitwise's BITB⁽¹³⁾.

Zooming out further to ETFs launched this decade, both BlackRock's IBIT and Fidelity's FBTC rank in the top 10 by inflows out of over 2,000 ETFs - an extraordinary feat considering they launched only this year. These numbers underscore the rapid success of spot BTC ETFs and highlight the growing mainstream adoption and investor interest in Bitcoin as an asset class⁽¹⁴⁾.

Figure 14: Out of 2,000 ETF launches this decade, BlackRock's IBIT and Fidelity's FBTC have already secured top 10 rankings in AUM within less than a year



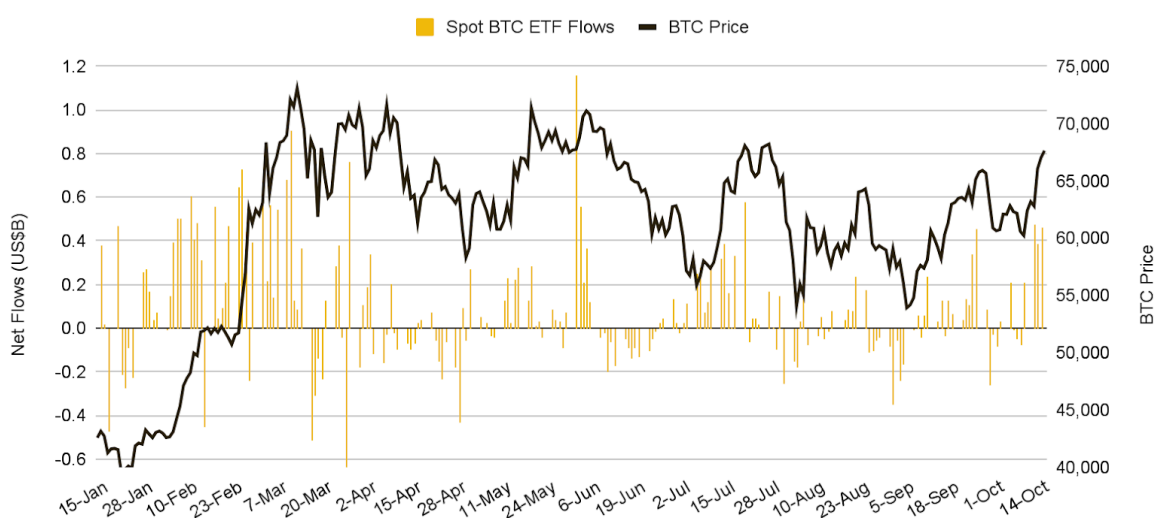
Source: Bloomberg, Binance Research, as of October 22, 2024

A New Indicator Emerges

ETF flows have emerged as a key market indicator in crypto markets, showing a **bidirectional relationship** where changes in one often reflect or drive shifts in the other⁽¹⁵⁾. Inflows and outflows in these ETFs are typically linked to price movements, and their influence on price discovery is notable, as they reduce available supply and can significantly sway market trends due to their substantial presence.

Beyond price dynamics, ETF flows offer valuable insights into the behavior of a market segment that previously had limited exposure to crypto. As a **signal of institutional adoption**, they bring positive market sentiment, particularly given the large-scale capital associated with these investments.

Figure 15: Spot BTC ETF flows, with their growing market presence, have emerged as a notable indicator



Source: Glassnode, Binance Research, as of October 17, 2024

Currently, spot BTC ETFs make up nearly 5% of Bitcoin’s market cap, and their influence on the market will ultimately depend on the proportion of the market they come to represent. While monitoring ETF flows provides essential insights and short-term trends, it’s important to contextualize them within the larger crypto market. **ETF flows are just one component among many factors that influence overall market conditions.**

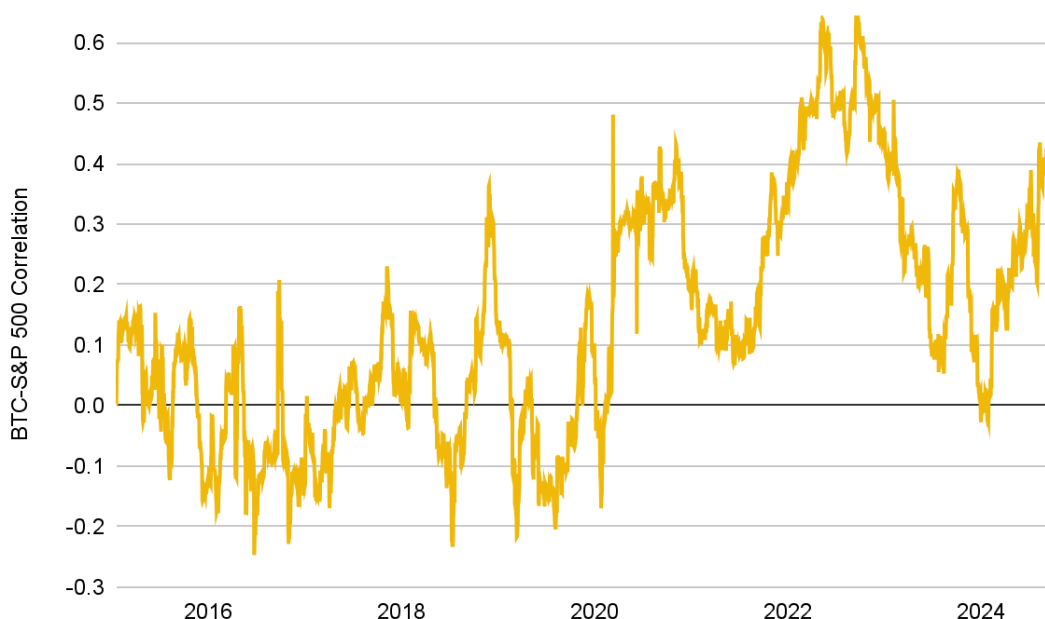
Convergence with TradFi

For a long time, crypto maintained a **relatively weak relationship with traditional equity indices** like the S&P 500 and Nasdaq Composite, reinforcing Bitcoin's appeal as a hedge against traditional market volatility. Recently, however, this narrative appears to be shifting, with crypto's correlation to U.S. equities reaching all-time highs⁽¹⁶⁾. This shift reflects evolving investor sentiment, with Bitcoin now being viewed as both a **risk-on investment** and a potential **hedge against macroeconomic uncertainties**.

Spot ETFs have contributed to this convergence by bridging crypto and TradFi markets. Over the past year, inflows and outflows have increasingly mirrored **cyclical sentiment shifts** and **rebalancing trends** seen in TradFi markets. The introduction of spot ETFs has provided a major new access point, driving greater institutional participation. These developments, along with shifting macroeconomic conditions, are reshaping Bitcoin's market dynamics and making factors like interest rates and inflation more crucial to monitor.

Interestingly, this increased correlation first emerged in a high-interest-rate environment with constrained global liquidity, resurfacing following the launch of spot BTC ETFs and as markets began to anticipate rate cuts. Although Bitcoin has seen temporary spikes in correlation - particularly during sudden shifts in U.S. dollar real interest rates or liquidity - these instances have typically been short-lived. Whether these trends will persist in the long run remains to be seen. Nevertheless, if Bitcoin's correlation with traditional markets deepens, it may lose some of its effectiveness as an independent hedge and portfolio diversifier, which is key to its role as an alternative asset class.

Figure 16: The correlation between Bitcoin and the S&P 500 is nearing all-time highs as risk-on appetite increases



Source: Coin Metrics, Binance Research, as of October 17, 2024

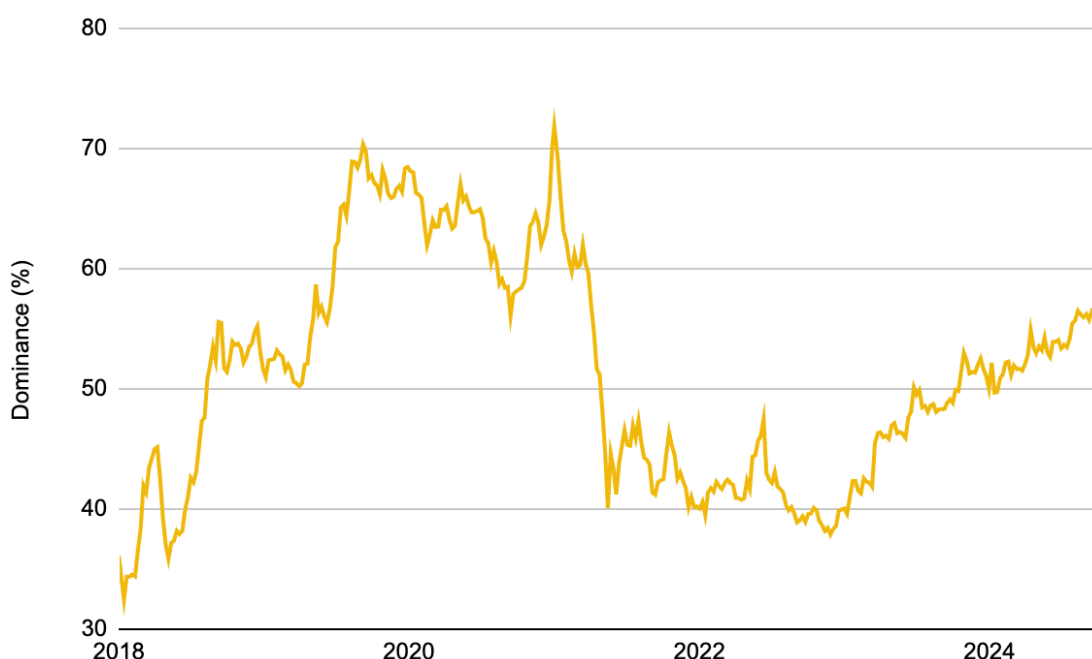
Second-Order Effects of ETF Flows

Beyond direct capital inflows, one of the most anticipated impacts of crypto ETFs has been the wider-reaching consequences they bring. Capital infusions, along with the added legitimacy of the ETF wrapper, tend to trickle down across markets, influencing overall health and driving the adoption of associated assets. For Bitcoin, this is particularly significant given its central role as a **key denominator in crypto markets**. While much is still unfolding, and the full extent of these second-order effects typically takes time to materialize, early indications suggest meaningful changes are underway.

Bitcoin Dominance

Spot BTC ETFs have positively affected Bitcoin dominance⁽¹⁷⁾, with their flows signaling stronger demand for BTC compared to altcoins, which continue to carry higher risk premiums. Bitcoin dominance began rising in late 2023 following initial news of a spot BTC ETF and has accelerated since the launch. While various factors - including interest rates - affect this trend, the introduction of spot ETFs, as a new investment vehicle, has renewed market confidence in Bitcoin's status as a resilient, investable asset. By offering greater trading opportunities and improved market transparency, these ETFs have created a positive value effect.

Figure 17: Renewed confidence from ETFs has contributed to Bitcoin dominance reaching its highest level in 3.5 years, approaching levels not seen since April 2021

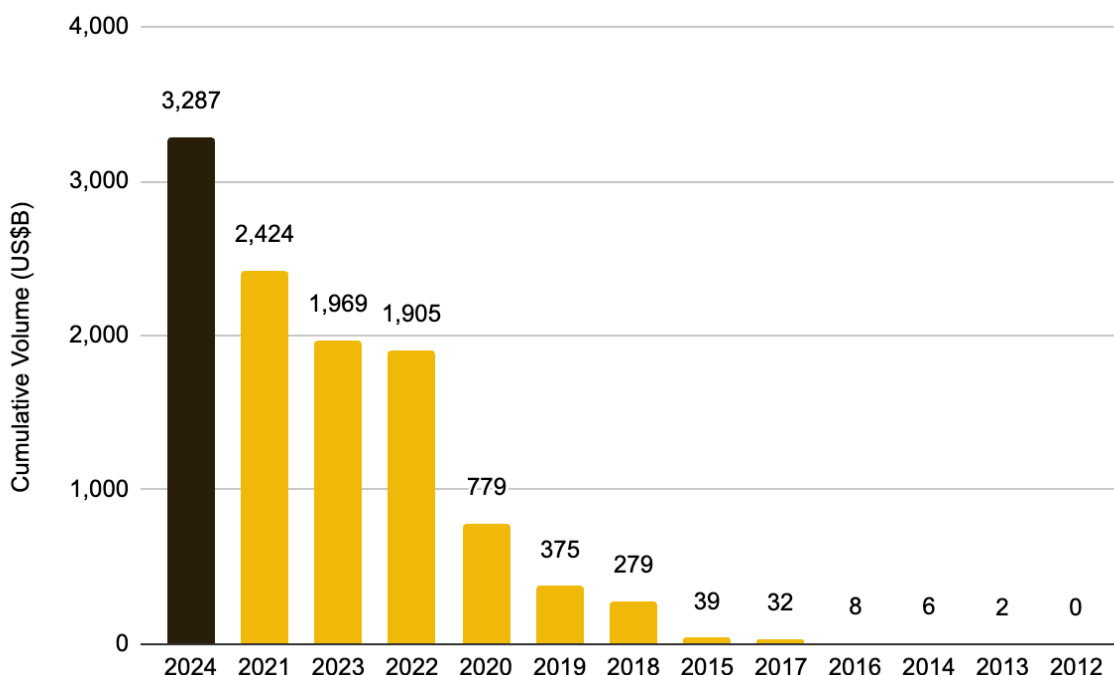


Source: Coinmarketcap, Binance Research, as of October 10, 2024

Greater Market Efficiency

- ◆ **Trade Volume:** Since the launch of spot ETFs, BTC trade volumes have seen a significant uptick across both spot and derivatives markets, with open interest rising notably as well. In fact, cumulative BTC spot trading volumes in 2024 have already hit record levels within the first 10 months, with **daily spot BTC volumes up by over 66.9% compared to last year.**

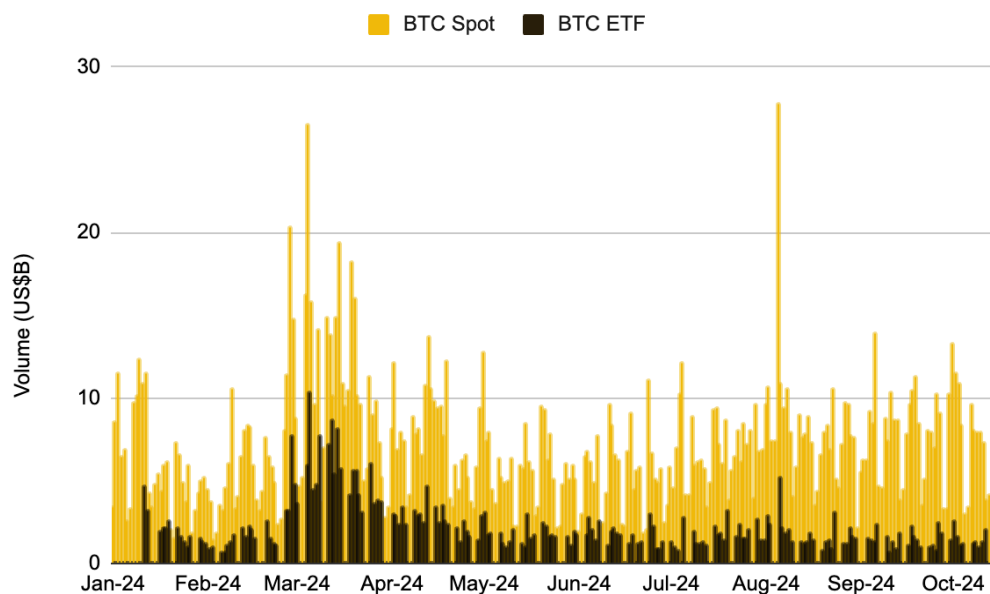
Figure 18: Bitcoin spot trading volumes have been reaching some of their highest levels since the launch of spot ETFs, making 2024 a record year



Source: Kaiko, Binance Research, as of October 17, 2024

While a favorable macro backdrop, including anticipated U.S. rate cuts, has played a role, the **sizable daily average volumes of US\$2.3B** in spot ETFs have also driven growth. Spot BTC ETFs now capture a notable share of BTC trading volume, approaching levels seen on some centralized and decentralized exchanges. The rise in volumes reflects the notable impact of these ETFs on boosting Bitcoin's market liquidity.

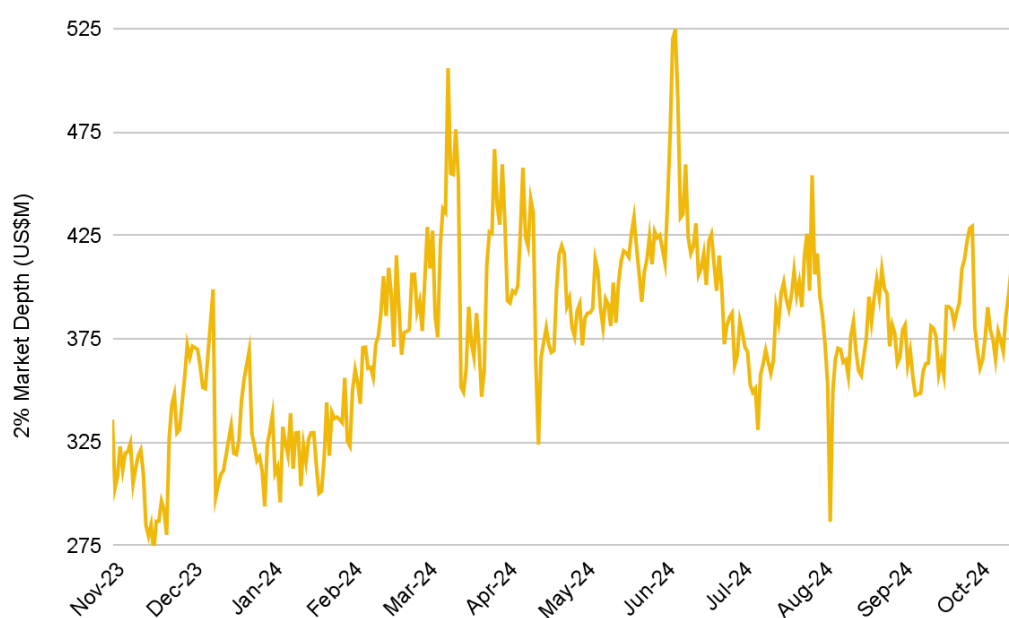
Figure 19: ETFs represent a notable portion of BTC spot volume, averaging 26.4% and reaching peaks as high as 62.6%



Source: Glassnode, SoSoValue, Binance Research, as of October 16, 2024

- ◆ **Market Depth:** With the increase in trading activity driving greater market liquidity, BTC's market depth and its capacity to handle larger orders have also improved. ETF trading further improves this by increasing liquidity throughout the trading day, as liquidity providers and market makers for ETFs actively participate in spot markets. Evidence of this is already visible, with Bitcoin's 2% market depth - a measure of buy and sell orders within 2% of BTC's price - showing steady increases across exchanges.

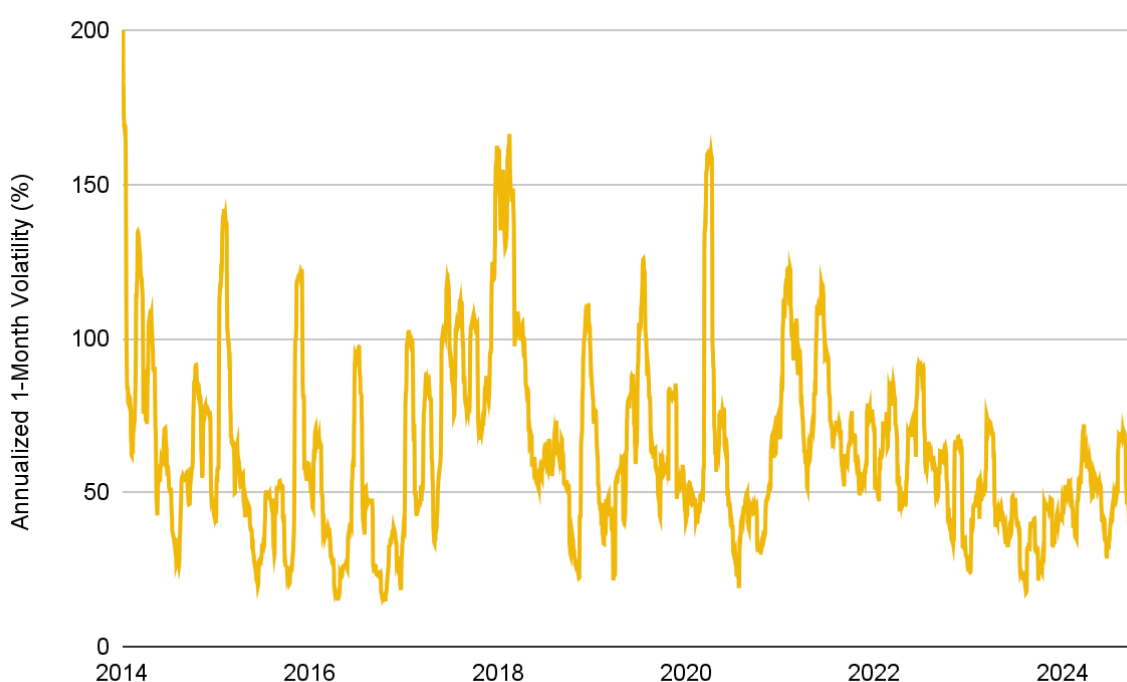
Figure 20: The increased liquidity from spot ETFs has improved BTC market depth



Source: Kaiko, Binance Research, as of October 17, 2024

- ◆ **Volatility:** ETF flows have also influenced broader market dynamics by attracting institutional investors who were previously cautious of Bitcoin's inherent volatility. This influx suggests the potential for reduced volatility, especially as liquidity strengthens over time. Although some volatility persists, recent data shows a sustained decline, with BTC's annualized 1-month volatility hitting historically low ranges on several occasions this year, even as market activity has increased. This trend indicates that ETF-driven liquidity may gradually continue to reduce volatility, though it remains to be seen how this holds across varied market conditions.

Figure 21: Volatility in Bitcoin markets has been on a downward trajectory, indicating signs of a market that is gradually maturing



Source: Glassnode, Binance Research, as of October 10, 2024

From ETFs to Wider Use

Spot crypto ETFs have introduced a new category of investors, shifting the focus **from the logistical challenges of accessing crypto to the value of digital assets themselves.**

These ETFs act as a gateway to deeper engagement in the broader market, with early signs of expansion into other sectors and use cases. As their value grows, they boost the legitimacy of the crypto industry, paving the way for greater inclusion and adoption of crypto products.

- ◆ **Venture Capital:** Some TradFi firms are expanding their presence in the digital asset space by launching targeted venture funds, with many viewing this as a natural next step. A notable example is VanEck, a US\$115B asset manager, which,

after introducing its spot BTC ETF, has launched a ventures unit⁽¹⁸⁾. This unit has raised US\$30M to invest in early-stage startups operating at the intersection of fintech, crypto, and artificial intelligence, with a particular focus on tokenization and stablecoin platforms within the crypto space.

- ◆ **Market Inclusion:** While some institutions were already trading cryptocurrencies prior to spot BTC ETFs, participation remains concentrated among select firms. **The use of crypto in more complex financial products**, such as derivatives, alternative fund types, and private credit, is gradually emerging but remains in its early stages. Their growth and institutional foothold will depend on maturing markets, particularly through increased inflows and liquidity, before digital assets like BTC can be integrated into more advanced financial structures.

Bitcoin collateralization in private credit is one example, where BTC, or a mix of assets, serves as collateral for structured lending products. The use of BTC and spot BTC ETFs for re-hypothecation is likely to increase, especially as the AUM of over ~US\$63.3B grows further, making idle capital inefficient. Early signs of institutional appetite include Lend processing billions in Bitcoin-backed loans during the first half of 2024, largely for institutional clients⁽¹⁹⁾. TradFi incumbents like Cantor Fitzgerald are also entering the space, with plans to launch a BTC financing platform⁽²⁰⁾.

- ◆ **On-chain Footprint:** While it's still early, and significant movements from ETF flows to on-chain adoption have yet to occur, the groundwork is certainly being laid. At present, the direct on-chain footprint of ETF flows primarily stems from custody services and its effect on on-chain BTC/ETH transaction volumes. The potential to use spot ETF liquidity as collateral in on-chain money markets also exists, though it has yet to fully materialize.

On the custody front, The Bank of New York (“BNY”) recently became the first major bank to receive SEC non-objection for offering digital asset custody services⁽²¹⁾, extending beyond just BTC and ETH ETFs. If BNY Mellon begins providing BTC ETF custody services, it could pave the way for other large banks. Additionally, while custody for spot crypto ETFs brings value, the custody of tokenized real-world assets (“RWAs”) may present an even greater opportunity, potentially serving as the next natural step.

However, there is a case to be made that spot ETFs could also extend the timeline for direct on-chain adoption⁽²²⁾. Some of the inflows may represent a shift from existing digital wallets to regulated brokerage accounts, with investors opting for off-chain ETF holdings that offer regulated and easier access to digital assets. To counter this, advancements in on-chain tools - such as **DeFi, BTCfi, payments, and tokenization** - will be crucial to converting spot ETF holders into active on-chain participants.

- ◆ **Tokenization:** The most prominent next step impact of ETFs appears to be in the tokenization use case, potentially offering institutions a more direct path to on-chain exposure, complementing the effects of spot ETFs. Evidence of this is growing, as TradFi firms increasingly recognize the advantages of blockchain technology in tokenizing assets like stocks and Treasury bills, making trading faster and cheaper, while opening new revenue streams.

“ETFs are step one in the technological revolution in the financial markets. Step two is going to be the tokenization of every financial asset.”

- **Tokenized Funds:** BlackRock CEO Larry Fink has suggested that spot crypto ETFs could act as a **stepping stone toward the tokenization of financial assets**⁽²³⁾. Although still in its early stages, the path from ETF approvals to tokenized product adoption - projected to reach a **market size between US\$4T and US\$30T by 2030**⁽²⁴⁾ - could unfold in the medium to long term. BlackRock and Franklin Templeton, both major crypto ETF issuers and key players in on-chain tokenized treasury funds, are well-positioned to push this forward. Interest is also growing from others, with Legal & General expressing intent to enter the space, and Fidelity announcing its first tokenized money market fund, set to compete with BlackRock’s BUIDL fund, the **largest tokenized U.S. Treasuries fund at ~US\$540M**, and Franklin Templeton’s FOBX at **~US\$410M**⁽²⁵⁾. As these products grow, their integration into broader crypto markets - like being used as collateral in derivatives - should also rise.
- **Tokenized Infrastructure:** To support broader tokenized asset offerings, interest in tokenization infrastructure and services is also expanding across TradFi, with **over 30 major institutions actively working on tokenization related initiatives**⁽²⁶⁾. Visa, for instance, has introduced the Visa Tokenized Asset Platform (“VTAP”), enabling banks to issue fiat-backed tokens on Ethereum⁽²⁷⁾. VTAP uses smart contracts to facilitate the exchange of RWAs.

Additionally, banks are preparing to trial crypto transactions on the Swift network⁽²⁸⁾, with pilots beginning next year to settle digital assets and currencies. More recently, Singapore’s DBS Bank introduced DBS Token Services, a blockchain-based platform designed to enhance liquidity management and streamline institutional operations⁽²⁹⁾. While these developments are promising, widespread adoption will likely depend on the continued evolution of tokenization platforms and regulatory clarity before tokenized assets become a mainstream feature in institutional portfolios.

For further insights into the tokenization of RWAs and the technology driving it, refer to our recent report, [RWAs: A Safe Haven for On-Chain Yields?](#)

Expanding Scope of ETF Products

Spot ETFs in Global Markets

Interest in spot ETFs has spread globally, with Hong Kong approving spot BTC and ETH ETFs in April. However, trading volumes in Hong Kong remain relatively low compared to those in the U.S., likely due to Hong Kong's smaller market size and differing market conditions at the time of launch. **Total AUM for these ETFs currently stands at US\$329.1M⁽³⁰⁾**, driven mainly by initial accumulation at launch with limited growth since.

In Europe, crypto exchange-traded products (ETPs) have been available for many years, offering a broader range of crypto assets. Functionally similar to U.S. spot ETFs, these ETPs have become more popular as demand for regulated crypto investment options rises. Over the past 12 months, total AUM for European crypto ETPs has **grown by approximately 144.2%, increasing from US\$5.2B to over US\$12.7B⁽³¹⁾**.

Options on Spot ETFs

A recent development on September 20 saw the SEC approve listing options on BlackRock's IBIT spot ETF on Nasdaq⁽³²⁾. This was followed by SEC approval on October 18 for the trading and listing of options for the 11 spot BTC ETF providers on both the New York Stock Exchange ("NYSE") and the Chicago Board Options Exchange ("CBOE")⁽³³⁾. Importantly, while the SEC approval marks a significant milestone, the Options Clearing Corporation ("OCC") and Commodities Futures Trading Commission ("CFTC") must also grant approvals before these options are officially listed.

Options give investors **additional tools for hedging or speculating on Bitcoin**, which is expected to attract more liquidity and broaden investor participation in the crypto space⁽³⁴⁾. Institutions, in particular, often prefer such sophisticated risk-management tools, and the availability of options may further draw institutional investors to spot BTC ETFs. Moreover, unlike futures, options generally appeal to investors with longer-term outlooks, which could bring more stable, long-term capital into crypto markets.

The introduction of options could also make institutional lenders more comfortable with lending against ETF collateral, as options markets provide clearer pricing for the risk associated with margin lending. This may boost credit availability across the crypto ecosystem, potentially reducing borrowing costs and enabling more leveraged trades and

investment flows within crypto markets. At the same time, options may contribute to moderating volatility in Bitcoin, as rising open interest creates a balanced buyer and seller presence, enhancing liquidity and market depth and thereby reducing market volatility.

The evolution of crypto markets appears to be moving toward traditional financial structures in a bid to attract more institutional capital. New sophisticated products, such as leveraged and inverse crypto ETFs, offer investors diverse ways to engage with crypto price movements. We're also seeing the emergence of **hybrid crypto index ETFs**, which combine BTC with other popular digital assets like ETH⁽³⁵⁾ or even commodities like Gold⁽³⁶⁾ to offer broader market exposure. **Regulatory framework developments will play a crucial role in shaping these innovations.**

Inclusion of Staking Yield

Ethereum's wide range of applications, including DeFi, makes its spot ETF an attractive diversification option for investors looking to expand their crypto holdings beyond Bitcoin. A unique feature of Ethereum is its **native staking rewards**, which provide additional yield for holders. Incorporating these staking rewards into spot ETH ETFs could unlock even greater demand, enhancing the product's appeal to investors.

Holding non-staked ETH incurs opportunity costs, such as missing out on (i) inflationary rewards for validators, (ii) priority fees, and (iii) Miner Extractable Value ("MEV") revenue passed to validators through relayers. Integrating staking into ETH ETFs would offer investors access to additional income streams, while also mitigating dilution, thereby enhancing the ETF's competitiveness in the market.

While it remains uncertain whether staking will eventually be integrated into U.S. ETFs, some ETPs outside the U.S., such as those in Canada, already offer additional yield through staking. A recent example comes from VanEck, which introduced staking rewards for its Solana exchange-traded note ("ETN") in the EU.

New Asset ETFs

ETF sponsors have recently filed applications for ETFs tied to other digital assets, including Solana's SOL and Ripple's XRP. VanEck became the first U.S. asset manager to file for a spot SOL ETF, quickly followed by 21 Shares, while Bitwise led the way with a spot XRP ETF, soon followed by Canary Capital. In a more recent development, Canary Capital became the first to file for a spot Litecoin ETF⁽³⁷⁾. However, market reaction has remained muted, likely due to **skepticism about these ETFs' approval prospects**⁽³⁸⁾.

Challenges such as limited derivative market size, minimal institutional buy-in, and regulatory uncertainty suggest that the process for these new asset ETFs will likely be both lengthy and complex. The market may also await the broader success and acceptance of Ethereum ETFs as a precedent before considering further digital asset ETFs. However, with election season approaching, potential shifts in administration and regulatory perspectives could impact the trajectory of these newer asset ETFs.

Macro Indicators in Focus

Macroeconomic conditions and policy are playing an increasingly influential role in crypto markets. The integration of more TradFi players into crypto through ETFs has amplified the correlation between crypto and TradFi markets, making macro indicators essential to monitor. These indicators will likely impact factors such as flow dynamics, levels of institutional buy-in, and the future scope of products like crypto ETFs. Below are some key events to watch in the near term.

- ◆ **U.S. Presidential Election: Political interest in crypto** has grown significantly this year. Former President Donald Trump has voiced strong support for digital assets, speaking at the Bitcoin conference in August, where he floated ideas like creating a ‘Bitcoin reserve’ from forfeited assets and clarifying crypto regulations within 100 days. Democratic candidate Kamala Harris has also shifted to a more favorable stance, expressing support for digital asset innovation, though her policy details remain vague, focusing mainly on general innovation and investor protection.

With the election only days away, historical trends suggest that market volatility may persist until the election results are known. The outcome is expected to impact fiscal policy and digital asset regulation in the U.S., **shaping the direction of crypto ETF products** in the world’s largest economy.

- ◆ **Global Monetary Policy:** In a major policy shift, the U.S. Federal Reserve (“Fed”) recently **cut interest rates by 50 basis points**, with signals of at least two more cuts by year-end. This marks the first rate cut since March 2020, with further adjustments likely to depend on labor market and inflation data over the next 12 months. The Fed’s remaining meetings this year, **scheduled for November 7 and December 18**, will be key to watch. Meanwhile, the Bank of Japan (“BOJ”), which is navigating the removal of long-standing negative rates, is another central bank to monitor. The BOJ’s late July rate hike caused the Yen to appreciate, which led to the unwinding of carry trades and triggered market disruptions⁽³⁹⁾. As a result, the BOJ now faces the delicate task of tightening policy without causing further instability in the markets.

With both the Fed and BOJ influencing global liquidity conditions, looser monetary policy from the Fed has boosted risk-on sentiment, while the BOJ’s shift towards tightening introduces some added complexity. Historically, **lower interest rates in the U.S. have reduced opportunity costs**, spurring greater demand for alternative assets. In the current environment, this dynamic could similarly drive increased demand for spot BTC ETFs, as investors turn to assets like Bitcoin. Hence, these

central bank moves are likely to have a **continued impact on inflows into spot crypto ETFs**, making these developments important to monitor.

Catalysts in the Crypto Market

Crypto markets have typically been driven by **strong reactions to catalysts and emerging narratives**. However, long-term growth will require sectors like DeFi, tokenization, and stablecoins to achieve product-market fit. Tracking growth in these areas is important because they create new opportunities for investor participation. Tokenization, for example, offers a direct path to on-chain exposure, further complementing the inflows generated by spot ETFs.

While spot ETFs have provided an entry point for many investors, they represent only one piece of the broader market. Sustained growth in the crypto space will require **capital to flow into a variety of sectors** beyond Bitcoin. To bring in larger institutional investments, the market will likely need to shift toward **fundamentals-driven growth**, which provides investors clearer data for decision-making. As blockchain-native products expand, they will not only encourage on-chain adoption but also draw more investment into BTC, ETH, and the wider crypto ecosystem.

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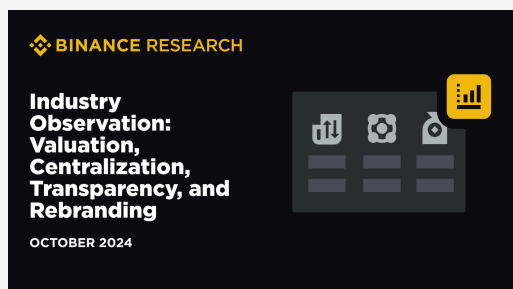
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An overview of the various stablecoin regulation and frameworks around the world



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