

# The Bitcoin Checkpoint

**Market structure has changed forever**  
and this time it's measurably different

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**“Bitcoin seems  
to be a very  
promising idea.”**

**Hal Finney**

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# **\_Contents**

<b>Introduction</b>	<b>5</b>
<b>Executive Summary</b>	<b>6</b>
<b>Price Performance</b>	<b>9</b>
<b>Supply Dynamics</b>	<b>21</b>
<b>Capital Flows &amp; Sentiment</b>	<b>29</b>
<b>Sell-side Pressure &amp; Dips</b>	<b>39</b>
<b>The Extraordinary ETFs</b>	<b>47</b>
<b>Derivatives &amp; Leverage</b>	<b>55</b>
<b>Concluding Thoughts</b>	<b>60</b>

# new norm

**Bitcoin is undeniably a global macro asset**  
and now everybody knows it



# Introduction

## Bitcoin is an idea whose time has come

Over its 911,000+ block lifespan, it has captivated the minds of HODLers and critics alike, and is arguably the most loved, hated, feared, and revered asset in human history.

We're extremely fortunate in the Bitcoin industry to have access to a wide range of market data covering an ever growing number of market sectors. As analysts we can now construct our views of the sentiment and positioning of market participants using information sourced from spot markets, derivatives contracts, ETFs flows, corporate balance sheets, and of course, the immutable Bitcoin ledger itself.

The Bitcoin ledger can be distilled into onchain data, offering a unique lens into the capital flows, holding time, and aggregate profit and loss held by Bitcoiners. The positioning and leverage in futures and options contracts can then be compared against the volumes traded in spot markets, and the capital flowing in and out of exchanges and ETFs.

This cycle in particular, we have even seen the emergence of accumulation strategies by sovereign and corporate entities, adding yet another layer to the supply and demand balance.

**As Bitcoin matures as an asset class, so too does the diverse set of market information we can draw upon to gauge shifts in the sentiment, conviction, and behaviour of its investor base.**

The combination of Bitcoin's long-term promise, and its intrinsic middle finger to the fiat status quo has historically created explosive price advances, gut-wrenching downtrends, and an all too infamous volatility profile.

It has attracted a religious base of 'don't care, never-selling' holders, and cyclical waves of speculators, traders and arbitrageurs seeking to capture their slice of the orange pie.

We can now visualise and observe the intersection between the incentives, and the behaviour of speculators, investors and believers like never before.

More often than not, the data describing leveraged futures traders longing the top moves in concert with the profitable sale of coins acquired by self-sovereign Bitcoiners in the prior bear market. When options traders are the most bearish, the highest conviction holders can be seen stacking sats, HODLing through unrealised losses which would have equity investors crying for a bail-out.

The triumphant wins during bull markets, the deep despair during bear markets, and the ever growing pool of believers is being immutably captured in every block.

**What this suite of Bitcoin market data offers us, is a first-of-its-kind record of what it looks like when an asset monetises, and a read on the raw human emotions that accompany our collective adoption of Bitcoin as money.**

This report has been designed to give both Bitcoiners, and Bitcoin critics alike, a snapshot into this rich data history. We will showcase how we see the Bitcoin market operating under the hood, and across many market sectors. Big charts, concise insights, and a bit of nuance for all the data nerds like us.

Welcome to the Bitcoin Checkpoint, which is proudly brought to you by the teams at **Checkonchain** and **Unchained**.



**James Check**

Co-Founder & Bitcoin Analyst, Checkonchain.

[@\\_checkmatey\\_](#)

# Executive Summary

**In this report, we analyse how the Bitcoin market structure has changed throughout the 2023-25 bull cycle, and the reasons we believe market structure has changed forever.**

We are fortunate to have a wealth of Bitcoin market data at our fingertips from which we can draw conclusions, parallels, and find confluence in the story the market is trying to tell us.

## Price Performance

This bull cycle has been defined by a slow and steady grind higher, with the shallowest drawdown profile to date, a historically low volatility profile, and regular multi-month periods of sideways choppy price action. We lovingly refer to these frustrating sideways periods as 'chopsolidation', and we are of the view they are a product of the dramatic shifts we are seeing in the investor base and financial instruments which increasingly dominate the supply and demand balance.

## Supply Dynamics

The Bitcoin supply remains disproportionately held by Long-Term Holders, who still account for more than 50% of the invested wealth, despite them having sold and distributed many tens of billions of dollars worth of BTC in any given month. More than a third of the circulating supply now has a cost basis higher than \$75k, which is one of many data-points demonstrating what we believe is a convincing repricing of Bitcoin to higher price altitudes.

More often than not, the information we extract from onchain data, is mirrored by flows in and out of the ETFs, which aligns with positioning in futures markets, and is also reflected by the pricing of option contracts. For this report, each chapter explores a different component of the Bitcoin market, and the summary below offers a shortlist of key insights we view as important take-home insights.

## Capital Flows & Sentiment

Whilst the Bitcoin price has hit three significant new all-time highs, we are yet to see evidence of a classic euphoric blow-off top, and Long-Term Holders are still sitting on some \$1.3 Trillion in unrealised profit. The Realised Cap has also recently crossed over \$1 Trillion, which is our preferred measure of the total wealth Bitcoin investors have entrusted to the protocol. This is a remarkable milestone, and a genuine vote of confidence.

## Sell-side Pressure & Dips

The resilience and conviction of Bitcoin holders has been tested several times this cycle, most notably in the 2024 'chopsolidation', and then again in Q2-2025 during the 'tariff tantrum'. In both of those instances, almost 100% of Short-Term Holder supply was underwater, and yet the bears were unable to break the spirit of the bulls.

# “It might make sense to get some in case it catches on.”

Satoshi Nakamoto

## The Extraordinary ETFs

The launch of the Bitcoin ETFs in Jan'24 will go down in our mind as one of the landmark events in Bitcoin market history, and they broke almost every noteworthy ETF record there is. IBIT in particular has seen its AUM dominance skyrocket since Nov'24, reaching to over 57.5%, which can be linked directly to when the options markets went live.

## Derivatives & Leverage

Options are now the dominant derivatives instrument by open interest, being over \$90 Billion in size, and eclipsing the futures markets at \$80 Billion. As we unpick the derivatives landscape, it reveals an increasingly complex and sophisticated market, where volatility capture and premium arbitrage strategies are having an ever growing influence on both the ETF and spot markets.

We view the regular periods of chop/consolidation in the Bitcoin price as a phase where Bitcoin proves to investors that it belongs at the new price altitude.

**Meanwhile, the compression of volatility is reaching historical lows, and if we know anything about Bitcoin, it loves to shock a market that has been lulled to sleep.**

chop  
chop

## **The era of Chopsolidation**

A stair-stepping bull market

# 01. Price Performance

## A structured, stair-stepping market.

This Bitcoin cycle has traded in a very different manner to the prior ones, with many observing a more structured 'stair-stepping' uptrend, punctuated by powerful rallies, and lengthy sideways consolidations. We lovingly refer to these sideways periods of consolidation as 'chopsolidation'.

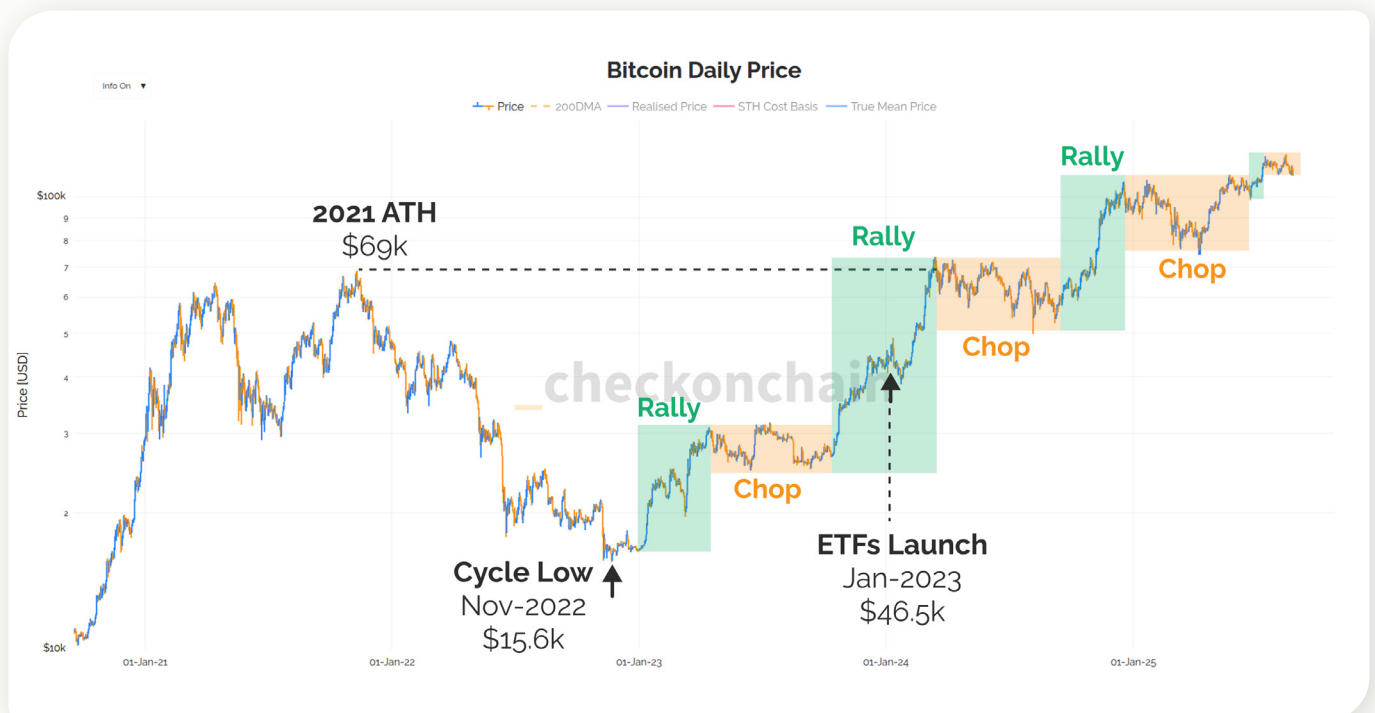
Our definition of 'chopsolidation' is; a period where you could go on vacation for six months (or more), and the price will be exactly where you left it, but the road to get there has been an infuriating process of choppy price action, with countless long and short traders having liquidated their accounts along the way.

**These semi-regular periods of chopsolidation are an important signal that the Bitcoin market is maturing and evolving, as volatility capture strategies proliferate, and institutional interest becomes an increasingly dominant feature.**

What we have seen during these periods of chopsolidation are immense volumes of BTC changing hands, with notable examples being when the German Government liquidated ~48k BTC in a three week period in Aug'24, and when an ancient whale liquidated ~80k BTC in Jul'25. In both instances, the Bitcoin price barely flinched, trading down a few percentage points, and recovering soon after.

**To date, these chopsolidation phases mostly display the characteristics of a typical Bitcoin bull market dip, but have had a hint of bear market sentiment sprinkled throughout.**

As such, they are an important dynamic to study, and it is our view they have helped investors to gradually acclimate to new price altitudes. As we will see in the supply dynamics chapter, these choppy price ranges have also proven to be zones of significant, institutional sized demand, with billions of dollars worth of coins changing hands on a regular basis.



## The 4yr cycle is nearing its expiration date.

One of the most popular debates of this cycle has been whether the classic four-year halving cycle is likely to play out in the same way it has in the past. Whether we compare the 2023+ cycle since the Nov'21 all-time-high at \$69k, or from the Nov'22 cycle low at \$15.6k, we're likely around one quarter away from finding out.

**Both of the last two bull cycles have found their ultimate market peak in the fourth quarter of the calendar year, and the way this cycle is tracking, we're close to seeing if that pattern is destined to repeat once more.**

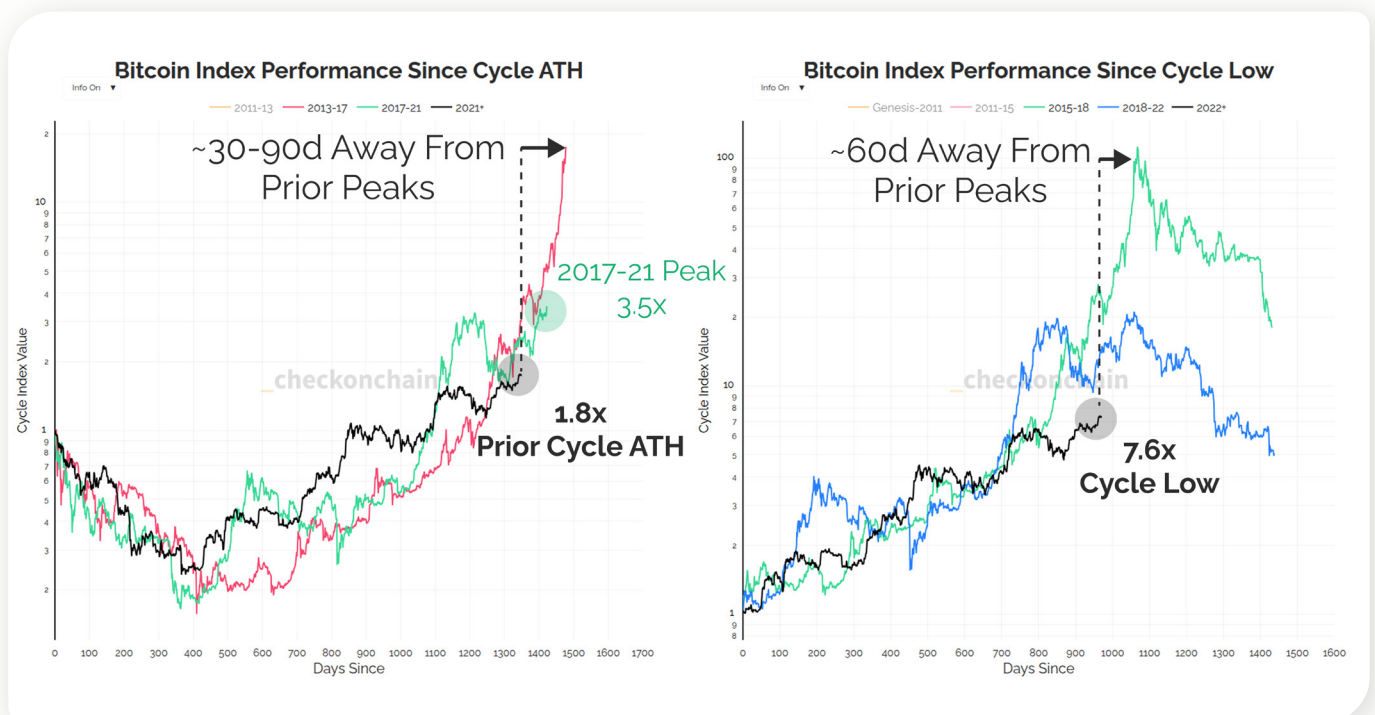
The current ATH Bitcoin price of \$124k is around 1.8x higher than the 2021 peak of \$69k. In order to put the 'diminishing returns' argument to bed,

the price would need to surpass \$240k, hitting a 3.5x multiple from the prior cycle high.

Similarly, the 2020-21 cycle achieved a remarkable 19.8x return off the \$3.2k bottom set in Dec'18. This cycle has thus far traded 7.6x off the \$15.6k bear market lows set in the wake of FTX collapsing, and the market would need to clear \$300k in order to match prior return profile.

**Interestingly, whether we index to \$240k or \$300k, neither feels completely outside the realm of possibility now that Bitcoin is trading north of \$100k. It was much harder to envision such heights in the pits of the 2022 bear market.**

The question is, will it do so on the classic 4yr cycle timeline, or is Bitcoin now walking to the beat of a new drum?



We prefer to view Bitcoin cycles indexed to the prior cycle low and high, rather than to the date of the last halving. The reason is we believe this better captures the emotional journey investors go through as the market transitions from a nasty bear market, into a bullish and constructive one. It takes time for investors to recover from serious downtrends, and to eventually develop the bullet-proof euphoric confidence we often see around market peaks.

It is also worth noting how remarkable it is that this cycle has behaved so similarly to the prior two, despite being orders of magnitude larger in size and scale.

## Year-on-year returns have exceeded +100%.

On a rolling year-on-year (YoY) basis, the Bitcoin price has consistently achieved a 100%+ return profile since Nov'23. The YoY returns have now been positive for over 820-days, which is a longer duration than the 2016-17 bull run, and is approaching the ~900-day stretch before the 2019-21 cycle peaked.

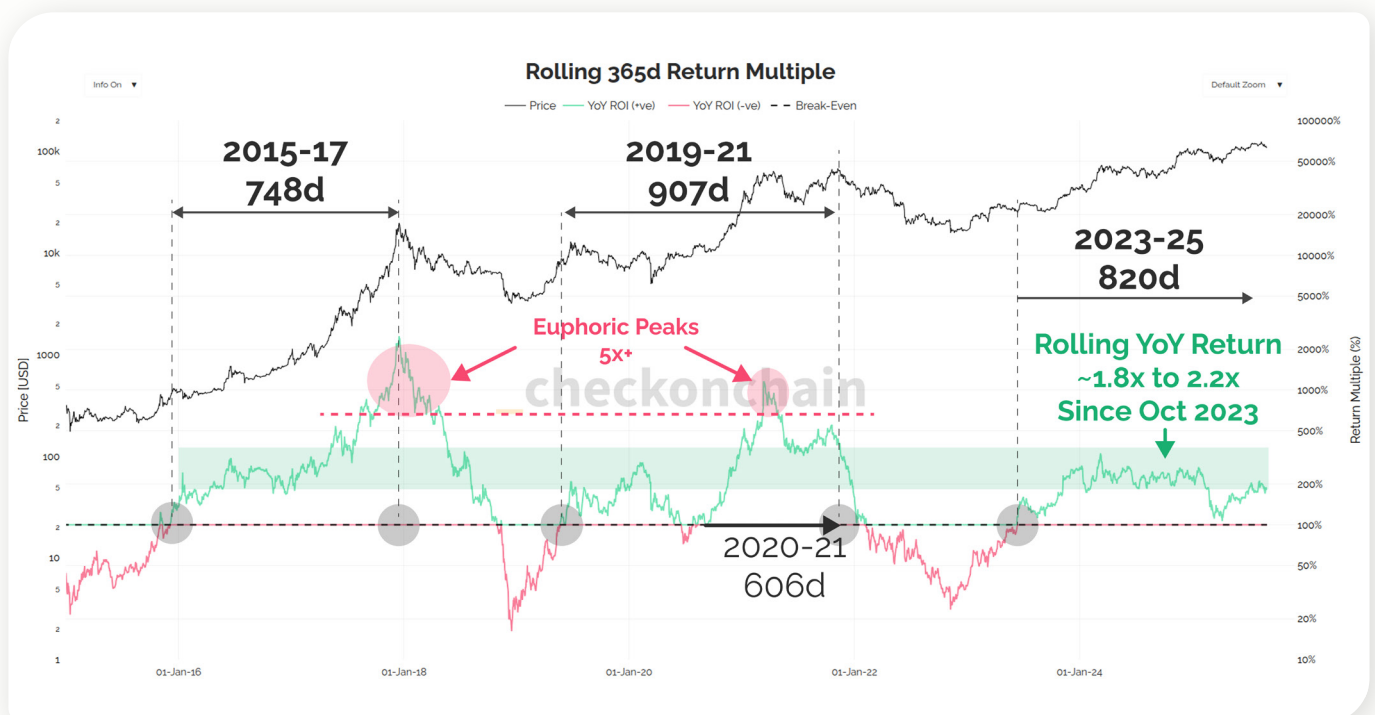
Of note, this cycle has not seen what would generally be considered to be a powerful, yet unstable euphoric blow off top, where YoY returns have run far in excess of 5x in both of the previous cycles.

**What is most remarkable is how Bitcoin's return profile continues to share similarities with the earlier phases of both prior bull cycles, such as in 2016 and in 2019-20.**

This comes despite Bitcoin currently having a market cap which is orders of magnitude larger, noting the 2016 bull run started with a market cap of just \$3 Billion, and at the bottom of the Mar'20 sell-off it was \$70 Billion (compared with a market cap of \$320 Billion in late 2022).

As Bitcoin gets larger in size, miners and existing holders can exert larger fiat denominated sell-side pressure, necessitating increasing large pools of capital to arrive on the demand side.

**The fact Bitcoin's return profile is comparable to prior cycles, whilst being orders of magnitude larger, speaks volumes about the confidence it has earned, and the size of the pools of capital who are now entrusting their savings to it.**



This YoY return profile compares the BTC price on each date, to the price 365-days earlier. Instances where the YoY return multiple is 200% for example, indicates that the price is up 2x compared to the year prior.



## The shallowest bull market drawdown profile to date.

One of the most notable changes to Bitcoin's performance since 2023, is the comparatively shallow drawdown profile of the prevailing uptrend. The market has experienced two approximately -32% pullbacks in Aug'24 and Apr'25, both of which occurred alongside a correction in broader markets due to the Japanese yen-carry-trade upwind, and the tariff tantrum, respectively.

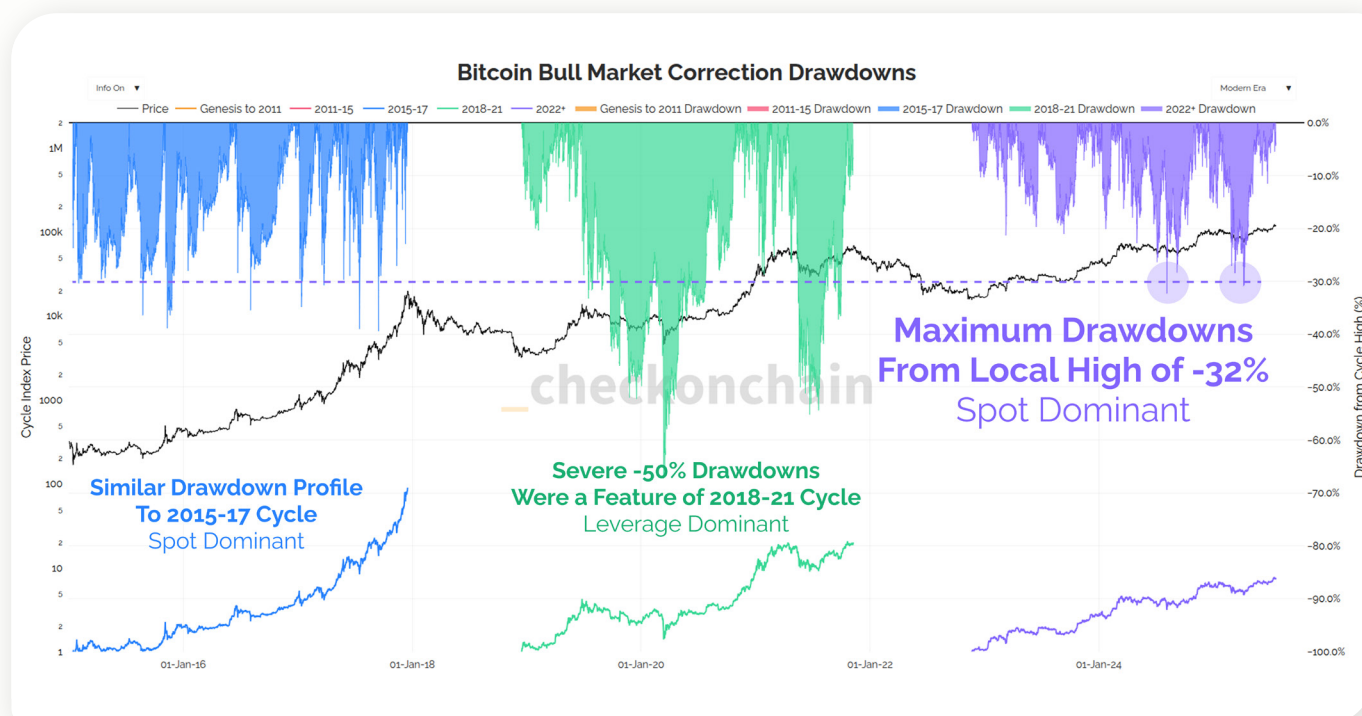
**In our view, the similarity between the drawdown profile of this cycle, and the 2016-17 bull run, points to a market where the demand profile has been heavily dominated by spot accumulation (including via the ETFs since 2024).**

In the 2016-17 bull run, derivatives markets were a very small component of the market, and Bitcoin was experiencing its first 'household

name' adoption cycle, driven primarily by retail speculators. Today, the spot bid is coming from a combination of long-term Bitcoiners in spot markets, institutions and retirement accounts via the ETFs, and Bitcoin Treasury Companies like Strategy and MetaPlanet.

**It is our view that the 2023-25 bull cycle has been primarily a spot driven market. The comparatively shallow drawdown profile since 2023 has likely made it considerably easier for investors who were previously deterred by downside volatility, to allocate meaningful capital, and hold onto their BTC position.**

It is worth noting that derivatives and leverage have certainly expanded in terms of their dominance within market structure since Apr'25, and we will cover these dynamics in more detail in **Chapter 6**.



This chart models the maximum drawdown from the local high of each bull run. The starting point is manually defined as the low of the prior bear market, and downside price performance is then compared to the local high of the prevailing uptrend (not the all-time-high of the prior cycle).



## Realised volatility compresses to historic lows.

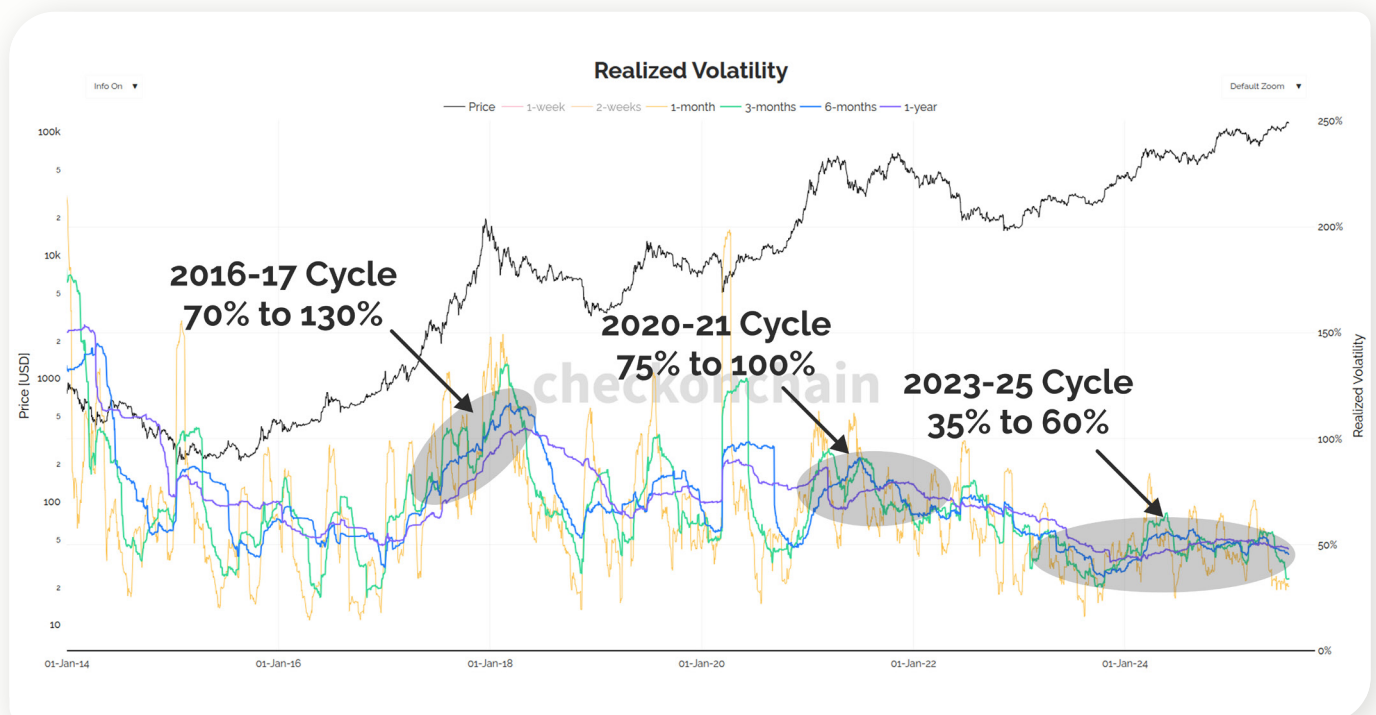
Another significant change we have seen in this cycle is the dramatic compression of Bitcoin's volatility profile. Historically, BTC has traded much more like a commodity, where volatility expands during bull runs, and compresses during bear markets, as speculative interest wanes. Conversely, equity markets tend to trade higher on low realised volatility, but experience sharp volatile spikes during sell-offs.

Since 2023, Bitcoin's realised volatility has traded in a remarkably stable range between 35% and 60%, which is around half as high as in 2021, and a third compared to 2017.

As institutional interest in Bitcoin expands, so too does the capacity for sophisticated volatility capture strategies, such as cash and carry basis trades (long spot, short futures), and the writing of options contracts to extract volatility premium.

The spot ETFs have created a new vehicle for Wall Street to obtain spot exposure to Bitcoin, as well as construct structured products like covered call strategies using Bitcoin ETFs as the underlying instrument.

**The compression of Bitcoin's volatility profile has come as a surprise for many long-term Bitcoiners, however has arguably eased the pressure experienced by new institutional entities, who are more sensitive to the effects of volatility on their portfolios.**



If there was one metric by which we had to argue that 'this time is different', the realised volatility profile since 2023 would be our pick. That is not to say that lower volatility alone means the 4y Bitcoin cycles are over, but instead it speaks to a dramatic change in market structure, the complexity of it, and the types of investors who are now active and dominant within Bitcoin markets.

## Bitcoin investors are compensated for downside risk.

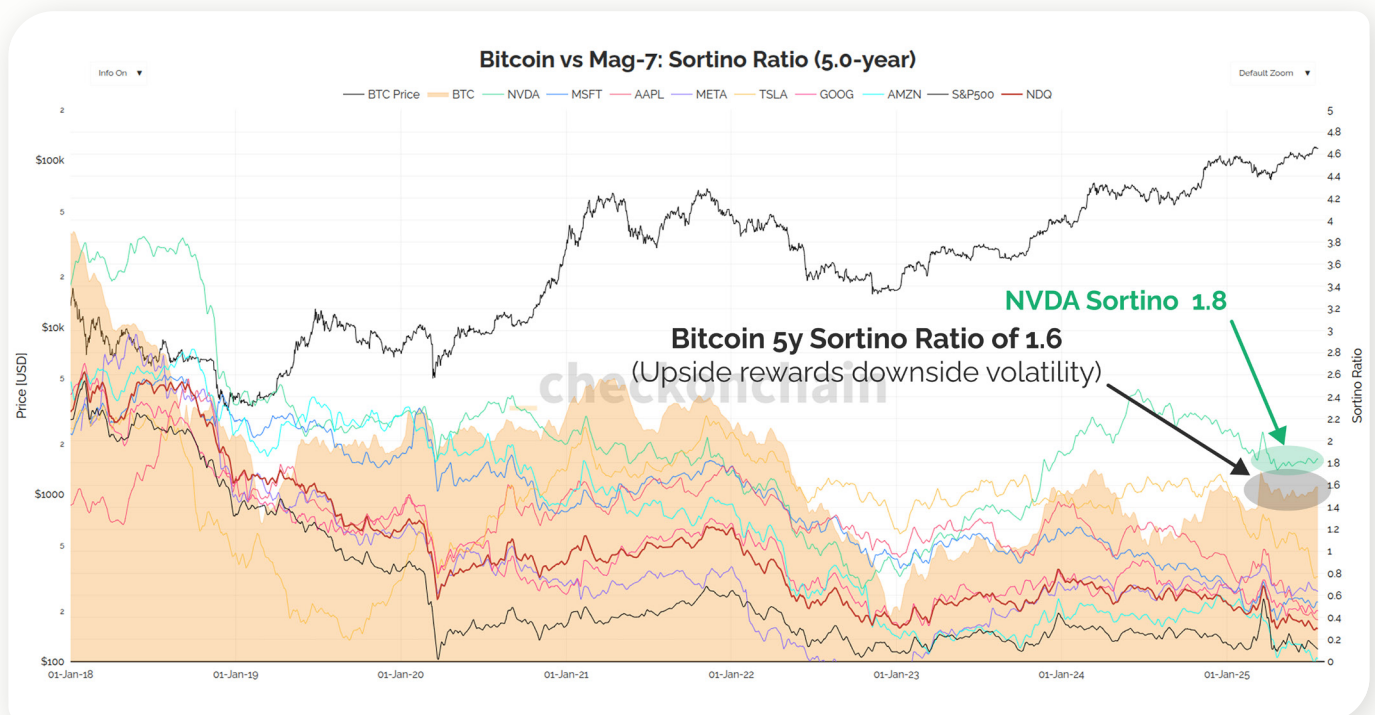
One of the most enduring arguments against a Bitcoin allocation has been the risk of downside volatility, coupled with fears around the infamous -75%+ bear market declines. However, as institutions start running the numbers, it quickly emerges that Bitcoin continues to post an extremely favourable risk-adjusted returns, which competes directly with, and generally outpaces many of the best performing Mag-7 tech stocks over multiple years.

**Given upside volatility is a desired outcome, we'd argue that the Sortino Ratio is a far better measure of risk-adjusted performance compared to the classic Sharpe Ratio, in that it only considers downside volatility as the unit of 'risk'.**

When we take a 5yr time horizon, Bitcoin's Sortino Ratio has consistently traded at higher levels than the major US stock indices, as well as six of the seven stocks in the Mag-7 (NVIDIA being the outlier).

Today, the 5y Sortino Ratio for Bitcoin is 1.6, which suggests that Bitcoin's upside performance has compensated investors 1.6 times for the downside risk they have taken on.

**In recent years, the only asset of comparable size which is competitive with Bitcoin is NVIDIA (NVDA), which is now the largest market cap stock in the world at a market cap of over \$4 Trillion, and sits at the epicentre of the AI boom.**



The Sortino Ratio ignores volatility to the upside, and only considers risk as volatility during sell-off events. We have opted for a 5yr window to avoid a variety of odd base effects which emerge when we look at Bitcoin's historic 4yr cycles, providing a more stable and realistic comparison of long-term performance between these assets

## Bitcoin enters the top 10 global assets by market cap.

Bitcoin is a small fish that has now swum into the very large pond that is global wealth. Despite having a market cap of over \$2 Trillion, Bitcoin still represents less than a tenth of the precious metals market, and less than 0.2% of the global asset base.

At the same time, Bitcoin is now positioned well within the top 10 individual assets by market cap, being of a size equivalent to the Silver market, and surpassed by a handful of the largest companies in the world, and its sound money big brother, gold.

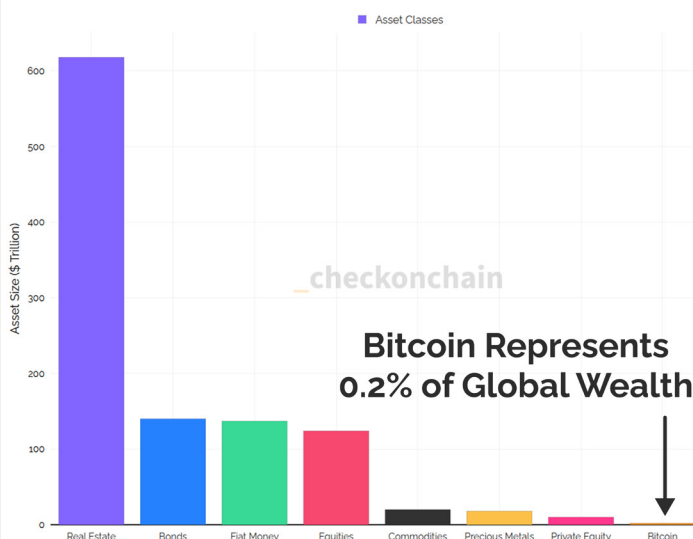
**At the start of 2023, at the tail end of the bear market, Bitcoin had a market cap of around \$320 Billion, and ranked ~26th in terms of global assets by market cap. In just under two years, it surpassed a \$2 Trillion market cap, and by Jan'25, Bitcoin had firmly entered the top 10 largest global assets.**

Bitcoin has often been referred to as a 'Veblen good', whereby it becomes increasingly desirable as the price and value rises. As a monetary asset, the larger Bitcoin becomes, and the wider the ownership of it, the more value it is capable of transferring, settling, and storing significant value.

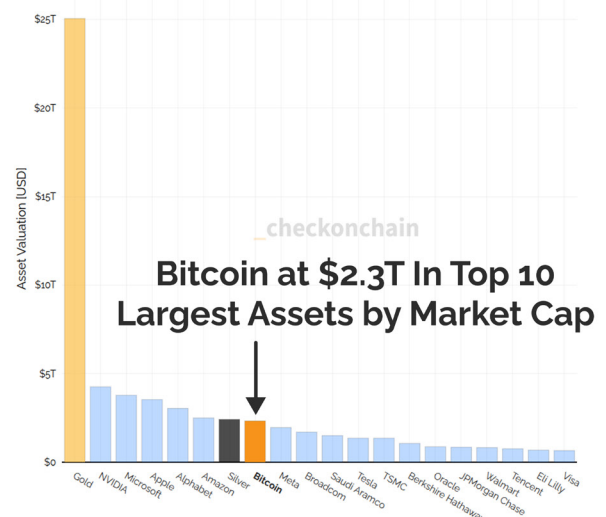
As more people entrust Bitcoin with their hard earned savings, the market cap rises, which creates more capacity for larger entities to allocate their savings and investing capital.

In our opinion, Bitcoin is both a Veblen good, and a monetary asset, and as a result, it sees its monetary properties improve the larger and more liquid its markets get. This in turn creates a positively reinforcing loop as it grows in size.

Global Asset Classes



Top 20 Global Assets by Market Cap



## Sound money offers protection from fiat debasement.

Many investors view Bitcoin as an effective tool to protect themselves from the debasement of fiat currencies, and is widely considered to be a sound money asset. The oldest and most widely recognised sound money asset is gold, and we view the performance of fiat currencies relative to gold as an effective long term benchmark for inflation and debasement.

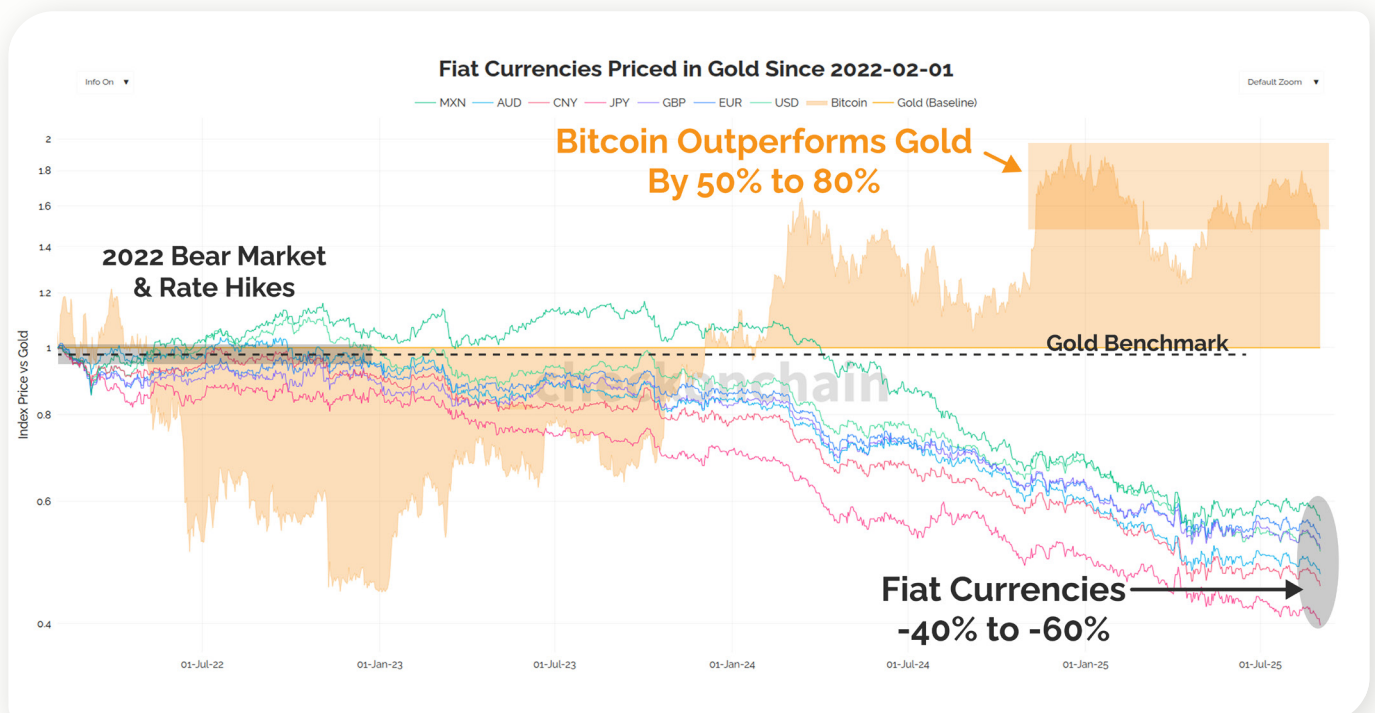
February 2022 was an important moment in history, where the United States government seized approximately \$300B worth of Russia's sovereign reserves, which were held in US Treasury bonds. This event sent a signal that the global reserve savings asset, which sits near the base of the financial system, now carried counter-party risk. Any sovereign nation state which felt it may end up on the wrong side of the

United States, was now acutely aware that they needed a new vehicle to store their nation's capital.

**When we index a set of major fiat currencies relative to gold since Feb-2022, we can see a widespread loss of confidence, with their value falling from 40% to over 60% since then.**

Comparatively, Bitcoin is one of very few major assets which has outperformed gold over that time, seeing its value appreciate over 80% in gold terms since Feb-2022. Importantly, this comparison includes the bulk of the nasty 2022 bear market, which saw BTC prices plunge to \$15.6k, and bottom out -55% below the Nov-2021 ATH (in gold terms).

**By comparing performance since a major geopolitical event, rather than a cherry-picked price peak or trough, we can better understand how sound money assets have behaved during a period of structural change in the macro landscape.**



Sound money is a term assigned to an asset or currency which has the properties required to maintain, protect, and grow purchasing power over time. Critically, for an asset to attain and retain sound money status, it must provide a consistent assurance that its properties will not degrade over time, and it is resistant to the human desire to tinker with its supply to achieve political goals.

### One of the few to out-compete gold.

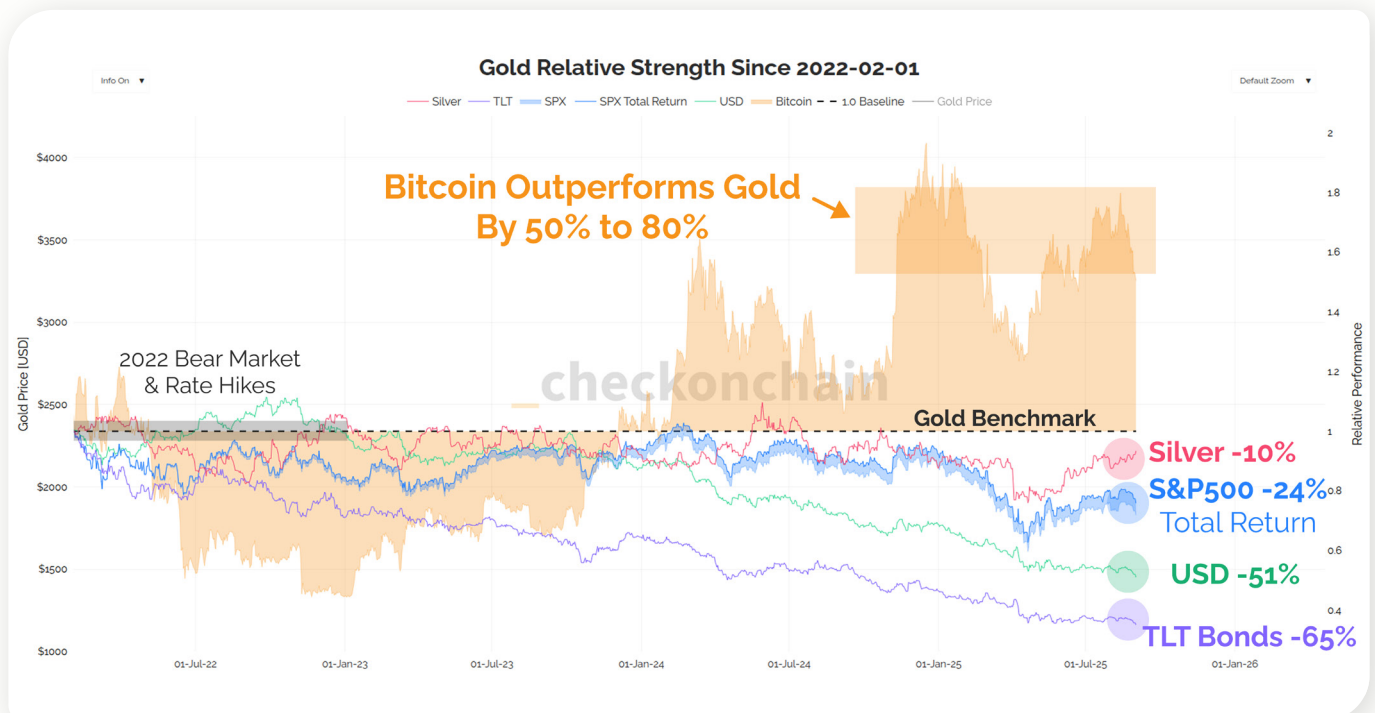
The out-performance of sound money assets like Gold and Bitcoin is not limited only to a comparison with fiat currencies. When we price equities, silver, and US government long-duration bonds in gold terms, a similar picture emerges.

Gold and equities tend to trade inversely to one another over cycles, being approximately one to two decades in length. In our view, the 2020's appear to be the start of an era where sound money assets like Gold are re-asserting their dominance.

**Since Feb-2022, in gold terms, US long duration bonds have depreciated by -65%, the value of the US Dollar has been cut in half, and the S&P500 total return index has lost nearly a quarter of its value.**

The investing world is a relative place, and Bitcoin is an asset which has now earned a place on every Bloomberg Terminal watch-list. As more investors, analysts, and firms run the numbers on how capital is rotating, and which sectors are looking after their money the best, sound money assets like Gold and Bitcoin are becoming increasingly in favour.

**With the world refreshing its idea of which assets are suitable stores-of-value, it is our view that everyone from individuals, to corporations, to sovereign nation states, will continue to see Bitcoin as having an important role in their asset mix.**



**Fun Fact:** We started developing the original set of these charts a few months prior to publication. When the time came to refresh them for the final issue, we found that we had to mark down the US Dollar by an additional -5%, Equities -3%, and long-duration bonds -2% vs gold. The performance of all three continues to roll over compared to a shiny yellow metal.



### It's all one trade.

Bitcoin has historically traded as an uncorrelated asset, experiencing temporary periods where it is highly correlated to gold and/or equities, and other periods where it is inversely correlated. However, since 2023, Bitcoin has displayed an abnormally high and persistent correlation with both gold and equities.

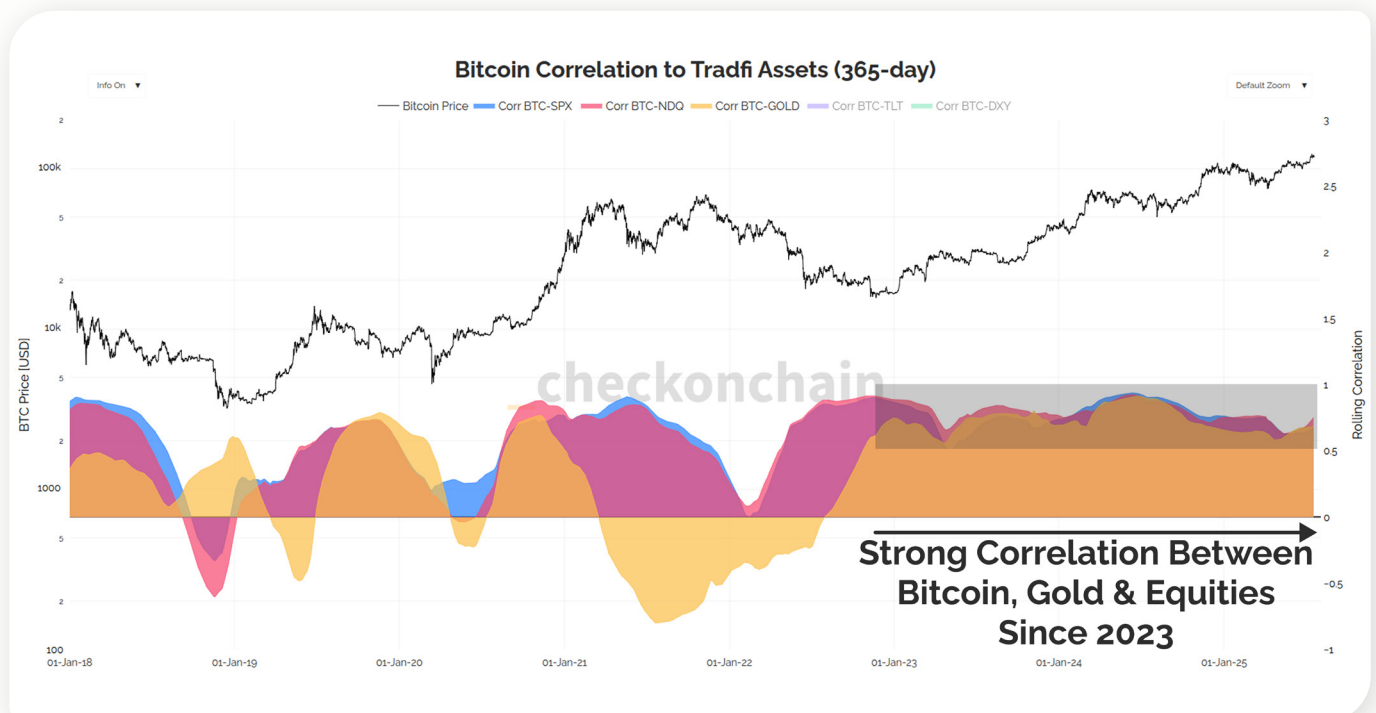
**We believe this is linked to the idea that 'it's all one trade', where Bitcoin isn't necessarily 'correlated' to stocks and gold. Instead, all assets are correlated to the loss of purchasing power of the denominator, being the fiat currency these assets are priced in.**

As investors become increasingly aware of the heightened levels of government debt, and

the sheer magnitude of current and future obligations, the most likely outcome is the production of more and more units of fiat currency. Monetary austerity was tried in 2022 as central banks hiked rates, and fiscal austerity briefly attempted in the first half of 2025.

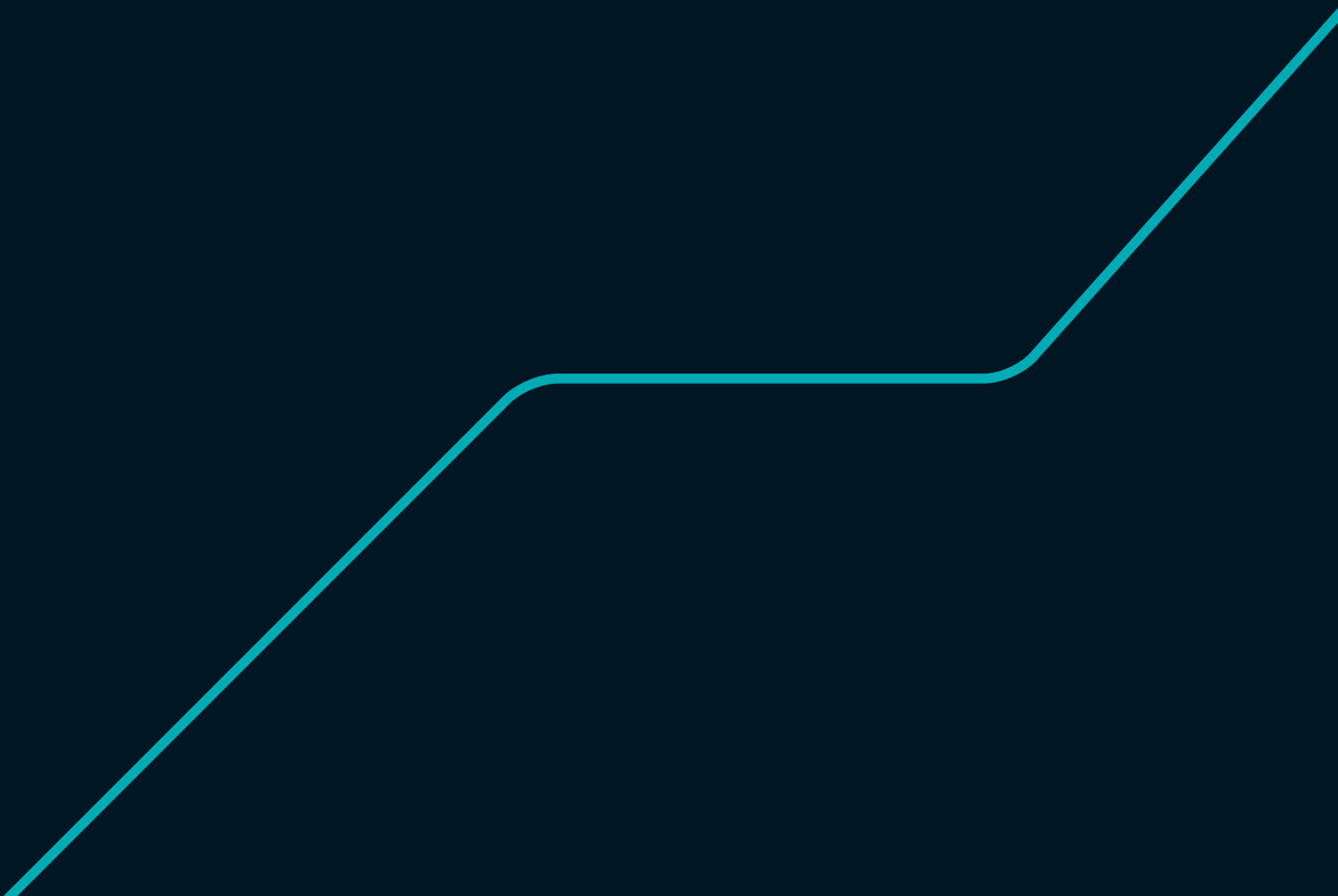
**In both instances, the experiments in austerity quickly reached their terminal velocity, whether via a banking crisis in 2023, or the falling out between the richest man on earth, and the President of the United States.**

The objective now is to 'grow our way out of it', which in our opinion is a euphemism for spend, print, and debase our way out via financial repression. Investors are seeking assets to hide in, and Bitcoin is one of the fastest horses in that race.



**“I anticipate the rise of bitcoin as collateral, denominator and means of settlement for all kinds of contracts.”**

**Tamás Blummer**



# big money

**Institutional capital has arrived**  
and it's changing the way Bitcoin trades



## 02. Supply Dynamics

### An increasingly dynamic supply mix.

As Bitcoin matures as an asset, the ownership structure has naturally become increasingly diverse and complex in terms of the size and type of entities who hold it. In the early years (pre-2013), Bitcoin was held primarily by individuals and miners. Given the nascent wallet technology at the time, and low valuation of the coins, a fairly large proportion of the supply (~8.9%) from this era is presumed to be lost (coins which have not transacted since the first traded price in July'10).

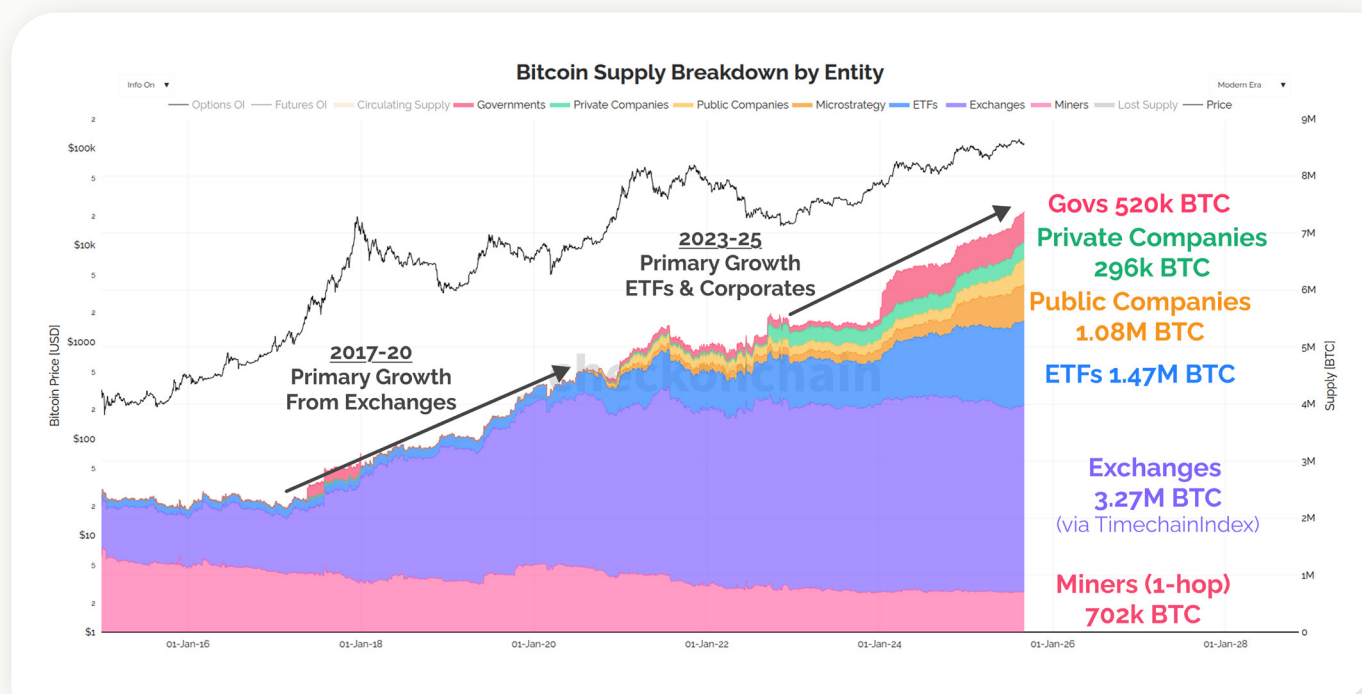
**Particularly after the 2017 bull run, spot and derivatives exchanges became the dominant venue for Bitcoin trade. Exchanges in aggregate now custody a very large proportion of the Bitcoin supply, with best estimates putting holdings at around 3.27M BTC (16.5%) today.**

As the world watched Bitcoin's price skyrocket in response to the multiple-trillions of dollars

that governments and central banks injected into financial markets in 2020-21, awareness grew of Bitcoin's potency as a debasement hedge. Strategy was the first public company to popularise the idea of adding Bitcoin to the balance sheet, and after the success of the US spot ETFs going live in 2024, this trend has only accelerated.

As of today, Bitcoin ETFs globally have absorbed over 1.47M BTC (7.4%), with the lion's share (~1.31M BTC, 89% dominance) being held in US spot ETFs. Public companies hold over 1.08M BTC (5.5%), and private companies another 296k BTC (1.5%) according to [BitcoinTreasuries.net](#). Government entities are also in possession of around 520k BTC.

**In aggregate, large labelled entities, to the best of our estimating capacity, account for 7.34M BTC, equivalent to 37.0% of the circulating Bitcoin supply.**



The process of labelling Bitcoin UTXOs is no easy task, requiring data scientists to analyse onchain behaviour, and combine with meta-data to achieve a best estimate. We've used several datasets here, notably from TimechainIndex.com and BitcoinTreasuries.net, amongst others, and processed it to avoid double-counting supply as far as is reasonably possible.

## 2.56M Bitcoin are held in ETFs and corporate treasuries.

This cycle has seen the emergence of two significant and largely new sources of buy side demand; the spot Bitcoin ETFs, and Bitcoin Treasury Companies. Historically, the custody arrangements required to take a position in spot Bitcoin have been key challenges, particularly for institutional investors. Both of these vehicles have worked on lowering the barrier for entry, enabling investors to obtain Bitcoin exposure via assets traded within traditional brokerage platforms.

**In total, global spot Bitcoin ETFs have now taken in over 1.47M BTC (with ~89% US dominance), and publicly traded treasury companies hold over 1.00M BTC (with Strategy dominance at ~63%).**

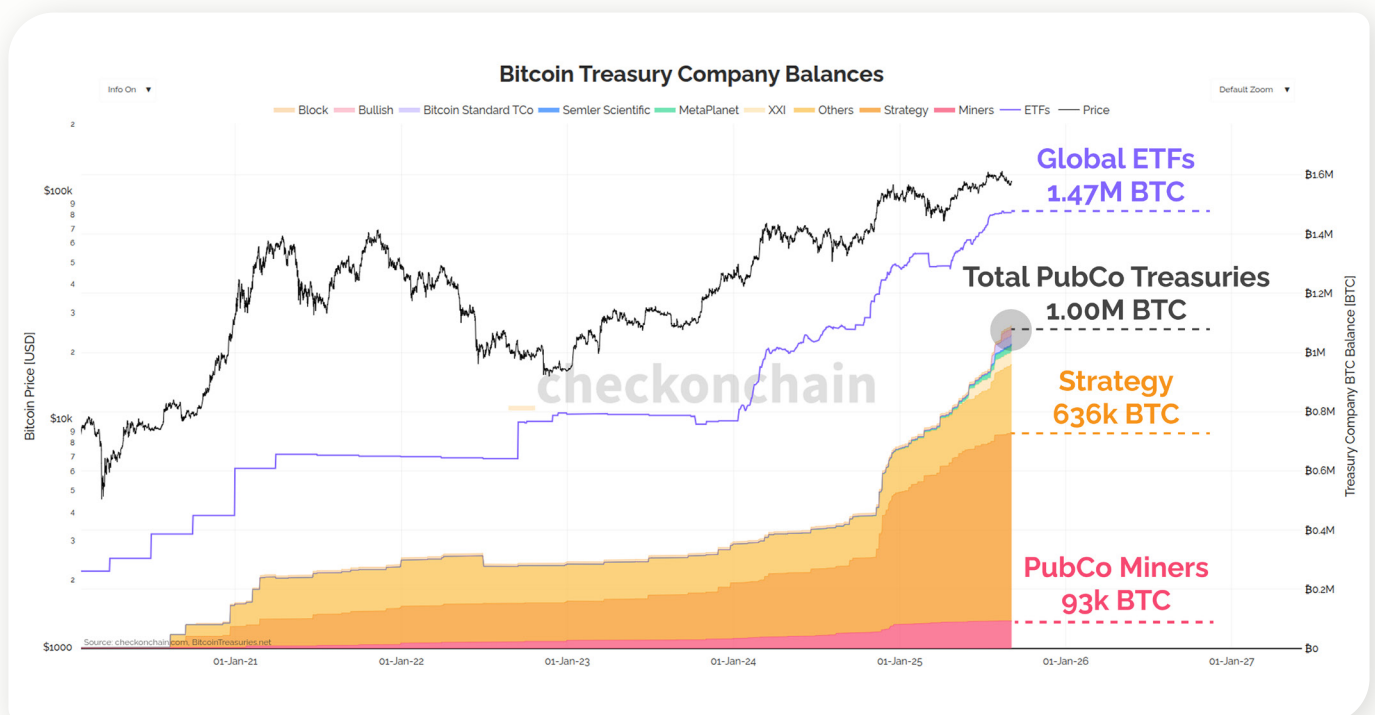
In USD terms, the total assets under management within the ETFs has eclipsed \$146 Billion. When we compare this to the \$386 Billion held within gold ETFs (as of July'25 according to [World Gold Council](#)), Bitcoin is already 38% of the way to gold parity by this metric (compared to ~10% on a market cap basis).

Publicly traded Bitcoin treasury companies have been another significant source of BTC demand, with many following the accumulation playbook pioneered by Michael Saylor via Strategy.

Strategy currently holds over 636k BTC on its balance sheet, providing \$74 Billion worth of collateral. In 2025, the company has started leveraging this collateral to issue an array of yield-bearing preferred stocks, with the proceeds of capital raises being used to accumulate even more Bitcoin.

**Many have likened the Strategy playbook to a sort of 'speculative attack', where fiat denominated liabilities are issued today, in order to accumulate a hard asset with a history of strong appreciation relative to that fiat currency.**

No matter which way we cut it, the rate at which BTC is being accumulated by these entities is breathtaking, and we're likely only watching the opening chapter



### Long-Term Holders are still at the helm.

We can also analyse the Bitcoin supply using the heuristics of coin-age, being the time since a unit of Bitcoin was last transacted onchain. A popular and useful way to bifurcate the Bitcoin supply, is to consider coins as either Long-Term Holders, or Short-Term Holders, where the industry standard age-threshold is 155-days.

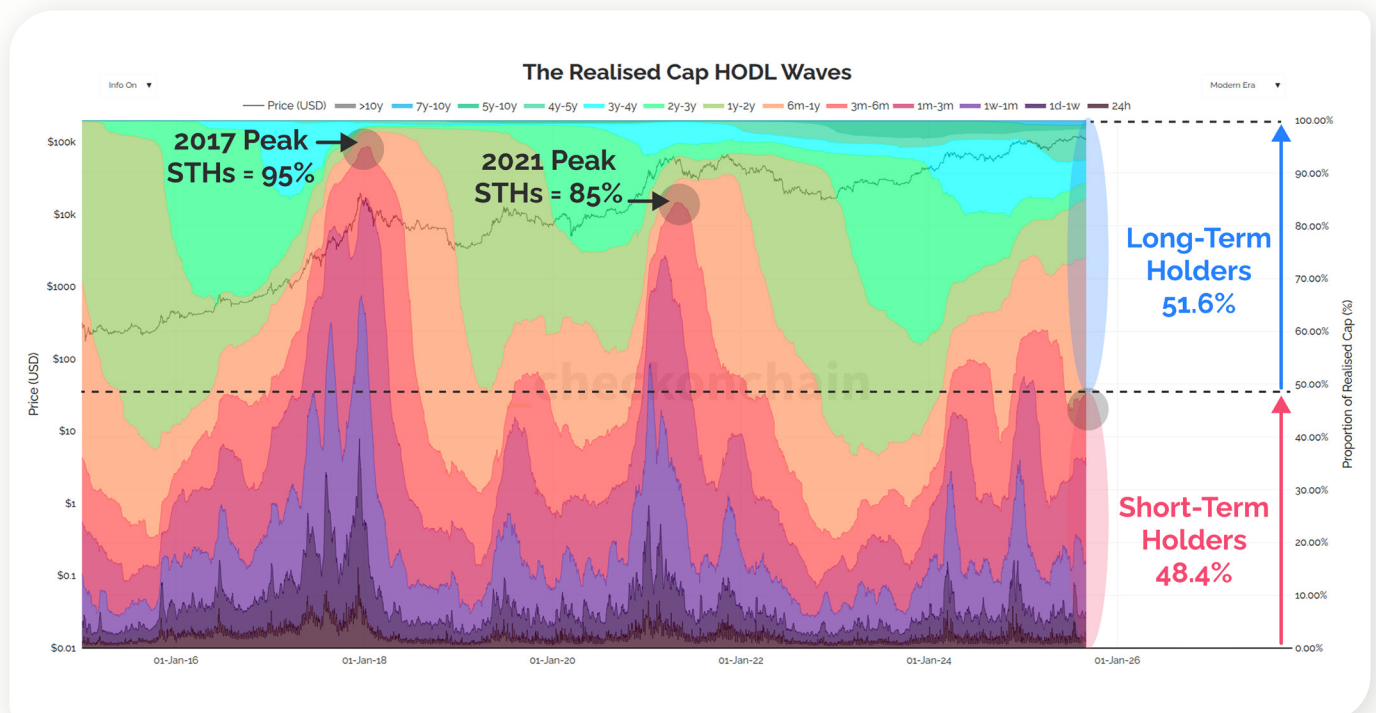
**Once a coin has been held for around 155-days, we classify it as Long-Term Holder supply, and we consistently see this pool of coins grow during bear markets, and following lengthy periods of heavy accumulation.**

Conversely, during bull markets, these long-term holders tend to become more active sellers as the price rises, oftentimes moving coins into exchanges or OTC desks for distribution.

When we value each coin at the USD price when it last moved, we can visualise the age bands of USD denominated wealth stored in Bitcoin via the Realised Cap HODL waves chart below.

**At prior bull market peaks, Long-Term Holders had offloaded a super-majority (85%) of their holdings. However today, despite Bitcoin having traded 7x off the cycle lows, Long-Term Holders still account for over half (51.6%) of the wealth held in BTC.**

This cycle has been unique in that the new cohort of buyers, including large scale institutions, public companies, and those coming in via the ETFs, are displaying a higher propensity to 'buy-and-hold' than we have seen from buyers in prior bull runs.



When we study Bitcoin holding patterns, we find there is a power-law relationship between coin-age (investor holding time), and the probability that a coin is spent that day. [Glassnode](#) found that for every ten-fold increase in the holding time of a coin, there is a ten-fold reduction in the probability of being spent.

## Bitcoin remains an asset held by long-term holders.

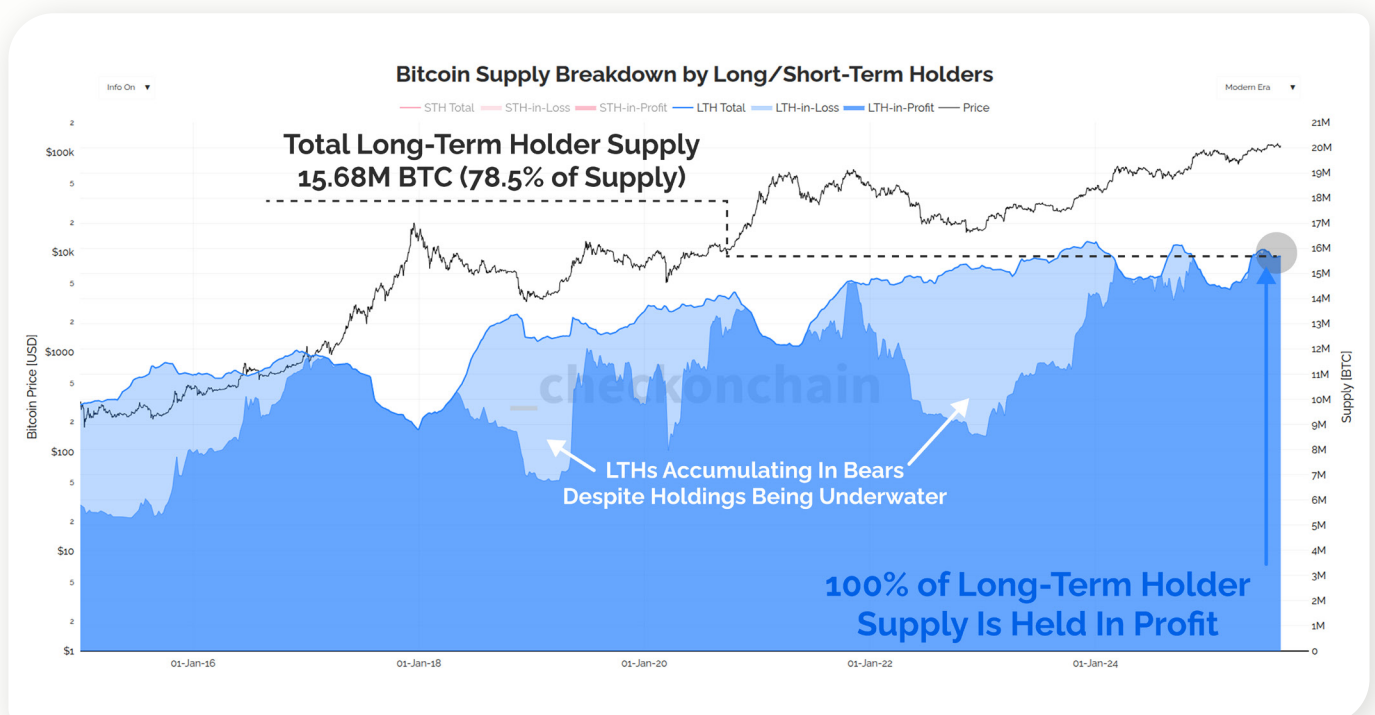
Isolating the Bitcoin supply for Long-Term Holders, we can see that it displays a cyclical pattern of gradual accumulation during bear markets, and concentrated periods of 'U-shaped' decline during bulls. Historically, this has described the pattern of high conviction Bitcoiners who gradually stack sats, and work to establish a macro price floor when sentiment is at its worst.

These tenured Bitcoiners have the patience, foresight and conviction to accumulate BTC during the bad times, even though a large volume of their holdings are underwater at the time. This cohort then waits for much higher prices before ramping up distribution, which typically occurs whenever the price approaches, or breaks out to new all-time-highs.

As it stands today, Long-Term Holder supply accounts for 15.68M BTC, a remarkable 78.5% of the circulating supply, of which all of it is currently held 'in-profit' (i.e. the onchain acquisition price is below the most recently broken ATH of \$110k).

We have seen two major waves of Long-Term Holder distribution this cycle, first after the ETFs launched, in the Q1'24 run-up to \$73k, and then again in Q4'24 as the Bitcoin price first reached above \$100k. In both of those instances, a multi-month period of chop/solidation followed, and Long-Term Holder supply recovered towards the highs.

This cycle has been unique in that rather than seeing one protracted sell-side event which eventually capped bullish momentum, we have seen multiple waves of sell-side, followed by significant periods of re-accumulation.



One of the super-powers of onchain analysis, is that we can look not only at coin-age as a heuristic to profile the holder base, but we can also assess the average cost basis, and profitability relative to the spot price. Long-Term Holders who are sitting on significant unrealised profits tend to behave differently to the price insensitive buyers who accumulate during a bear, who weather major drawdowns, and hold growing volumes of coins below their acquisition price.

### New investors arrived in two demand waves.

Utilising Newton's third law, every action has an equal and opposite reaction. In the context of the Bitcoin supply, this means that Long-Term Holder sell-side pressure is being balanced by new demand flowing in to absorb it. For every unit of Bitcoin which is sold, another investor has brought in fresh capital to acquire it.

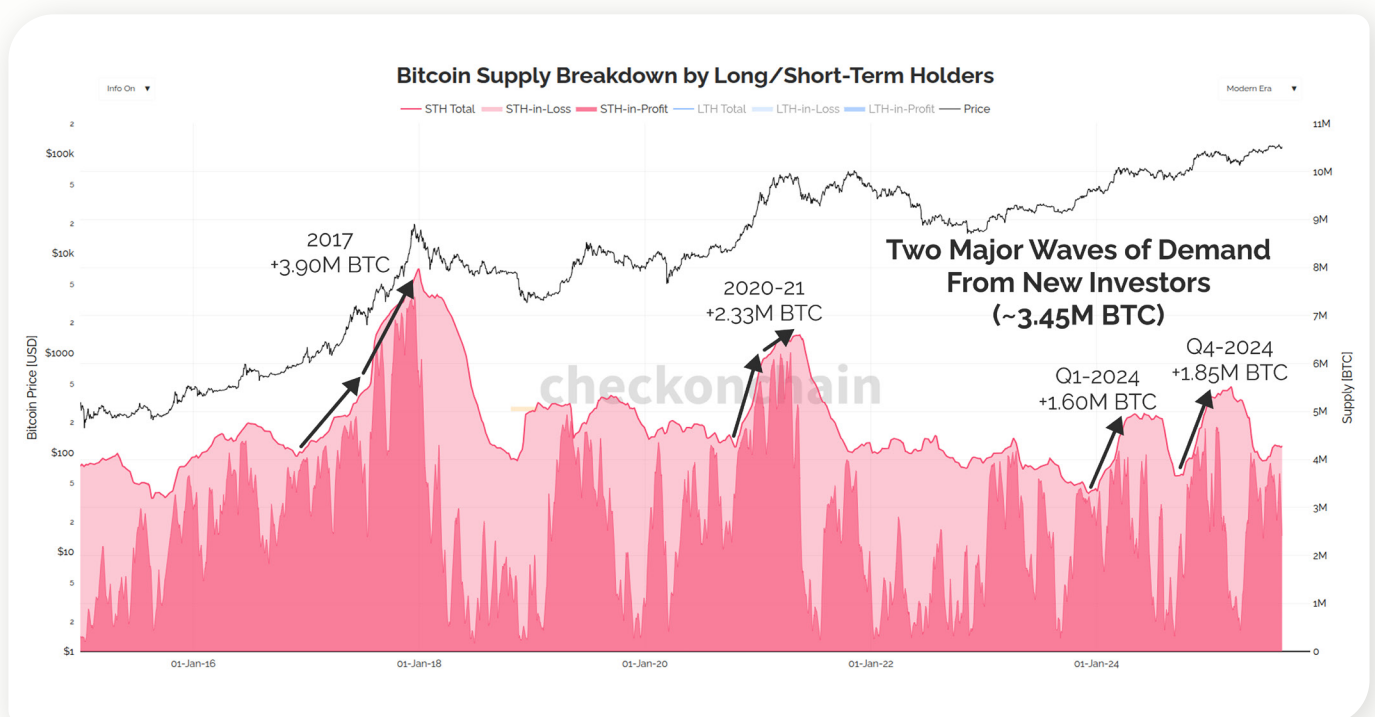
This is where the Short-Term Holder cohort becomes of particular interest, and we can see the two waves of new buyers acquiring coins at increasingly high prices.

**If we sum the total Bitcoin volume distributed by Long-Term Holders, and thus acquired by Short-Term Holders, this cycle has already seen 3.45M BTC changing hands, which is approaching the 2016-17 bull run in scale.**

Importantly, the Bitcoin price this cycle is two to three orders of magnitude higher than it was back then. This reinforces the sheer scale of the capital inflows which Bitcoin is attracting this cycle. Like Long-Term Holders, we can see the proportion of Short-Term Holders who are 'in-profit' vs 'in-loss', which becomes of particular interest during corrections and drawdowns.

Whilst the drawdowns since 2023 have been shallower than prior cycles, they have taken much longer to play out, often 6-months or more. This exposes new Bitcoin investors to a form of 'time-pain', which tends to be experienced as frustration, and boredom.

**In both of the price corrections experienced in 2024 & 2025, a super-majority (90%+) of new buyers were underwater on their holdings, however this has as yet been insufficient to break the spirit of the bulls.**





## Over one third of the supply has been acquired above \$75k.

As the bull market progresses, coins which were once accumulated at price points of \$100, \$1k, and \$10k, are sold and 'revalued' to higher price points of \$50k, \$75k, and above \$100k. One Long-Term Holder's profit taking is another Short-Term Holder's latest acquisition cost basis.

When we profile the onchain acquisition price of the Bitcoin supply, we can identify price zones where large scale demand absorbed sell-side pressure. This takes the form of dense 'supply clusters', where a large pool of investor cost bases are located.

**To date, over 34.5% of the BTC supply has now been acquired at a cost basis exceeding \$75k, which was only reached in Nov'21 during the second ATH break of this cycle. Around 11.5% of the supply already has a cost basis above \$110k.**

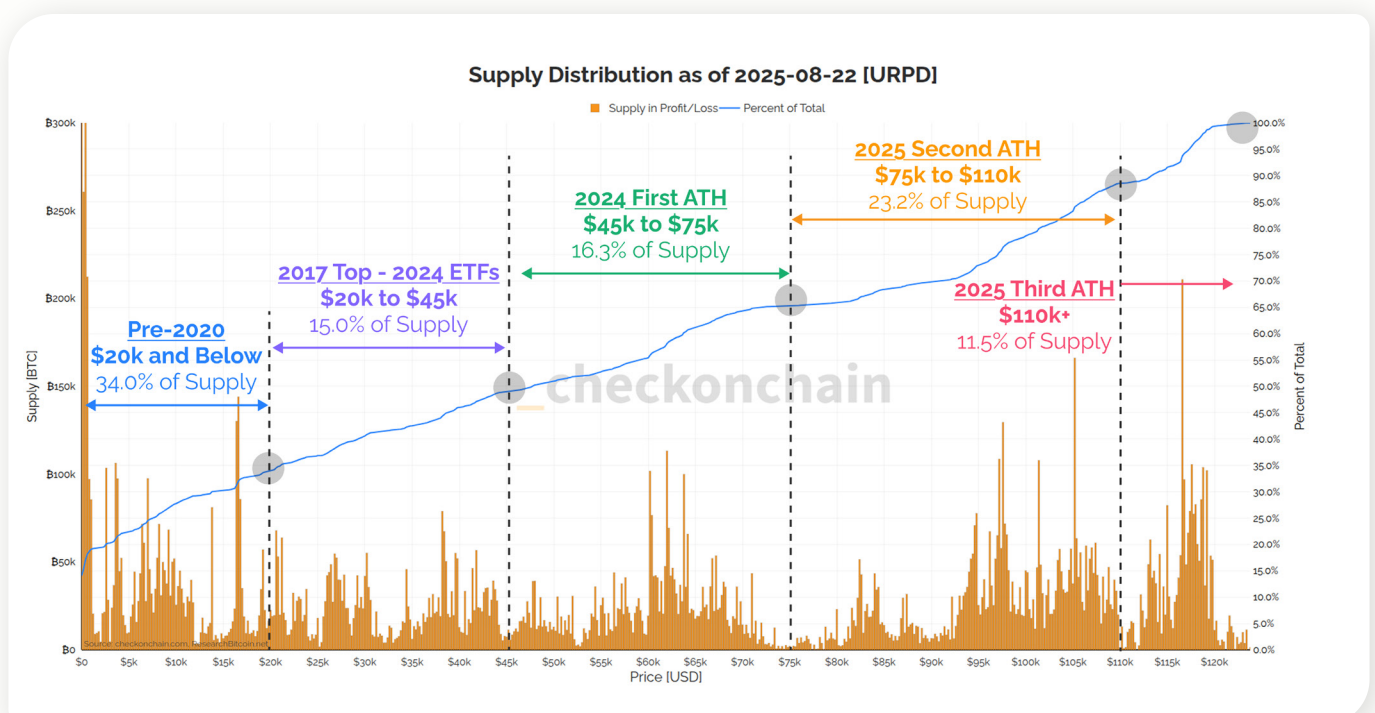
Whilst the chart below shows the supply distribution in BTC terms, coins acquired at \$100k can be argued to have 10x the financial weight of those acquired at \$10k.

When we value each coin at the price when it last moved onchain (think the 'stored USD value'), the numbers are even more incredible:

- **34.7% of the supply (6.91M BTC) has a cost basis over \$75k**, accounting for 70.0% of the stored value.
- **28.0% of the supply (5.57M BTC) has a cost basis over \$95k**, accounting for 67.5% of the stored value.
- **11.5% of the supply (2.29M BTC) has a cost basis over \$110k**, accounting for 11.1% of the stored value.

This Bitcoin cycle has certainly felt 'slower' for many tenured Bitcoiners, who are used to the high octane volatility of the past. It's important however, to remember how significantly different the market size is today.

**The sheer volume of coins being acquired at \$75k+ prices is remarkable in our view, and it demonstrates the markets collective confidence that Bitcoin has earned its place as a multi-trillion dollar asset.**



## Massive coin volumes change hands during chopsolidation.

As coins are bought and sold throughout each market cycle, the distribution of coins relative to their acquisition price is in a constant state of flux. The heatmap below helps us visualise changes in the density of these cost basis clusters, with hotter colours denoting larger pools of BTC acquired in that price zone.

**Many of the buyers who accumulated Bitcoin in late 2022, and hammered out a cycle floor when the bear market was at its most dire, still HODL today.**

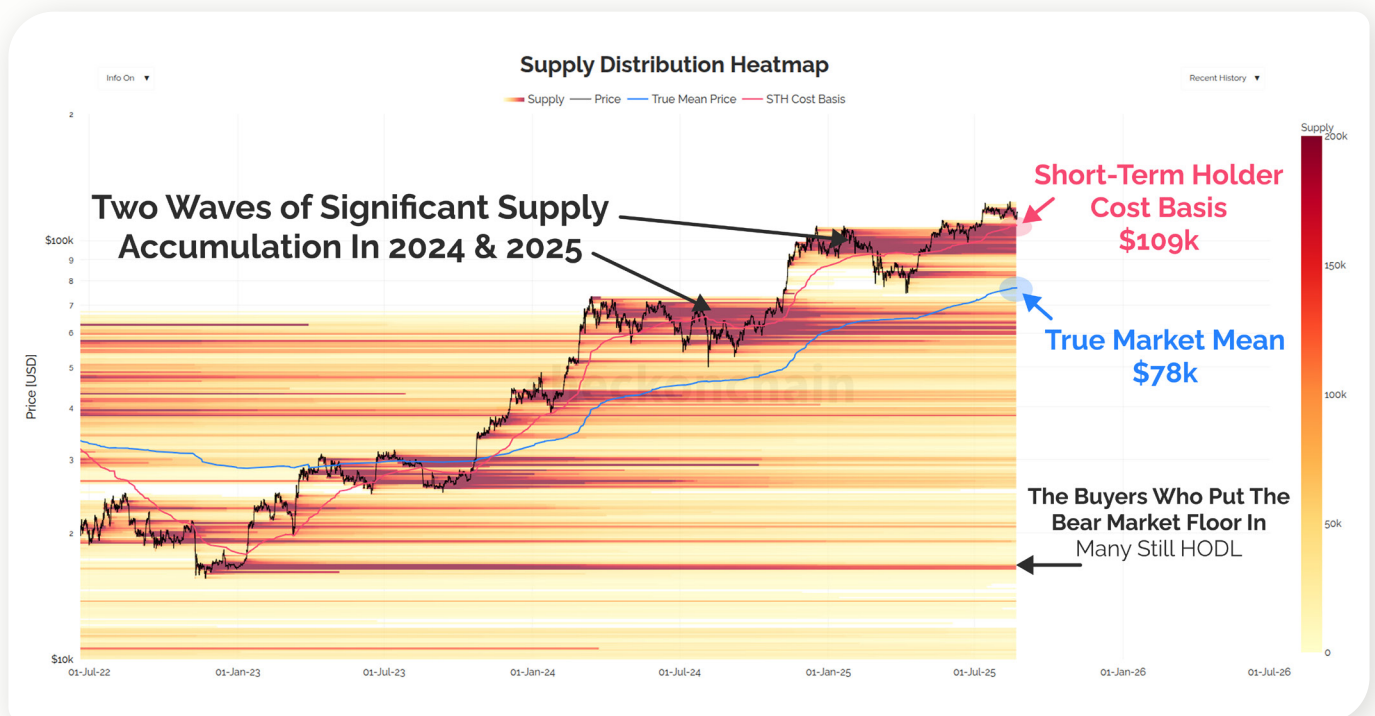
We have overlaid an important onchain price model called the True Market Mean, shown in blue. This price model reflects the average onchain cost basis for active investors, and filters out presumably lost, and long dormant supply (see [Cointime Economics](#) for details). This price model has shown to be one of the better anchors

for analysing Bitcoin mean reversion, as it trades through the middle of the Bitcoin price.

Notice how the True Market Mean slowly migrates up through and stabilises within each of the dense supply clusters over time. As coins change hands within these multi-month periods of chopsolidation, this signals that a new 'mean' has been established, and sufficient demand entered the market to justify the price range in the eyes of the market.

**The 2024 chopsolidation between \$50k and \$70k is an important one, in that it showed that Bitcoin earned its spot as a \$1 Trillion asset (~\$50k price). Every dip was swiftly bought, and a tremendous volume of coins changed hands in this zone to prove the point.**

Today, the market is working on establishing an equivalent level of conviction for Bitcoin as a \$2 Trillion asset (~\$100k price). The question which immediately follows, is how many more trillions?



This heatmap shows the density of BTC units acquired at each pricestamp as measured from the Bitcoin UTXO set. The hotter colours indicate where a large volume of coins have a cost basis concentrated in a specific price zone, whilst yellow colours indicate a zone where fewer coins have transacted.

# even flow

**Investors have entrusted Bitcoin with \$1T+**

We're yet to see evidence of a blow-off top



## 03. Capital Flows & Sentiment

### Our collective cost basis provides a guide for sentiment.

For the majority of investors, their behaviour patterns, sentiment, and decisions to buy, hold, or sell, are usually a function of where the price is trading relative to their cost basis.

Whether consciously, or unconsciously, our collective market mood swings will be positive whenever there is a growing 'wealth effect', and can sour quickly when our most recent buys were completed just moments before a nasty red price candle.

When we pricestamp every coin in the supply, we can distill the average cost basis of various market cohorts. This helps us establish a framework for thinking about the sentiment which is currently being experienced by the average Bitcoiner.

**When the Bitcoin price is within a brutal bear market, it has historically traded below both the True Market Mean (blue), and then the Realised Price (purple).**

These models reflect the average acquisition price for active investors, and the entire supply, respectively. Said another way, when the

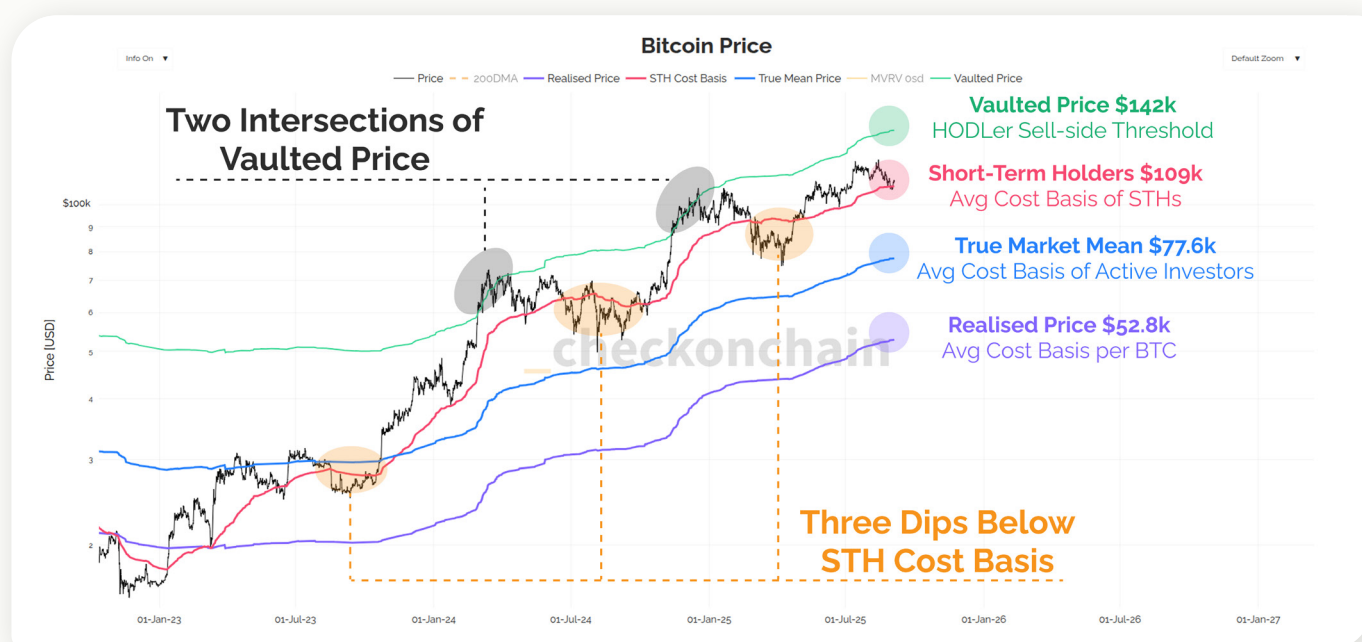
price is so low, that even the average long-term Bitcoiner is meaningfully underwater, there are decent odds there are no speculators left, and we're close to slaying the bear.

The brave souls who accumulate BTC in the pits of the bear, when the narrative was that Bitcoin had died once again, eventually hit a level of profitability in bull markets where they start taking chips off the table.

The Bitcoin price has tagged the Vaulted Price (green) twice this cycle, which represents a price level where we historically see significant volumes of long-dormant Long-Term Holder supply start coming back to market (and this time has been no different).

The final key model we watch closely is the Short-Term Holder cost basis (red), which is an excellent gauge for near-term sentiment. Given it reflects the average acquisition price for the pool of recent buyers, whenever price trades up to -20% below it, it tends to signal a local wash-out of the fast money speculators.

**We have seen three such wash-out events in this cycle to date, and at the time of writing, the market is testing whether there is appetite for a fourth.**



### A new, mature, and stable cycle structure.

Sticking with the theme of the Short-Term Holder cost basis, an interesting regime shift is visible in the way price has oscillated around it since 2023. This metric is called STH-MVRV, and it is best thought of as describing the unrealised profit multiple being enjoyed (or regretted) by new Bitcoin buyers. When it trades at 1.0, it means the average Short-Term Holder is at their break-even cost basis.

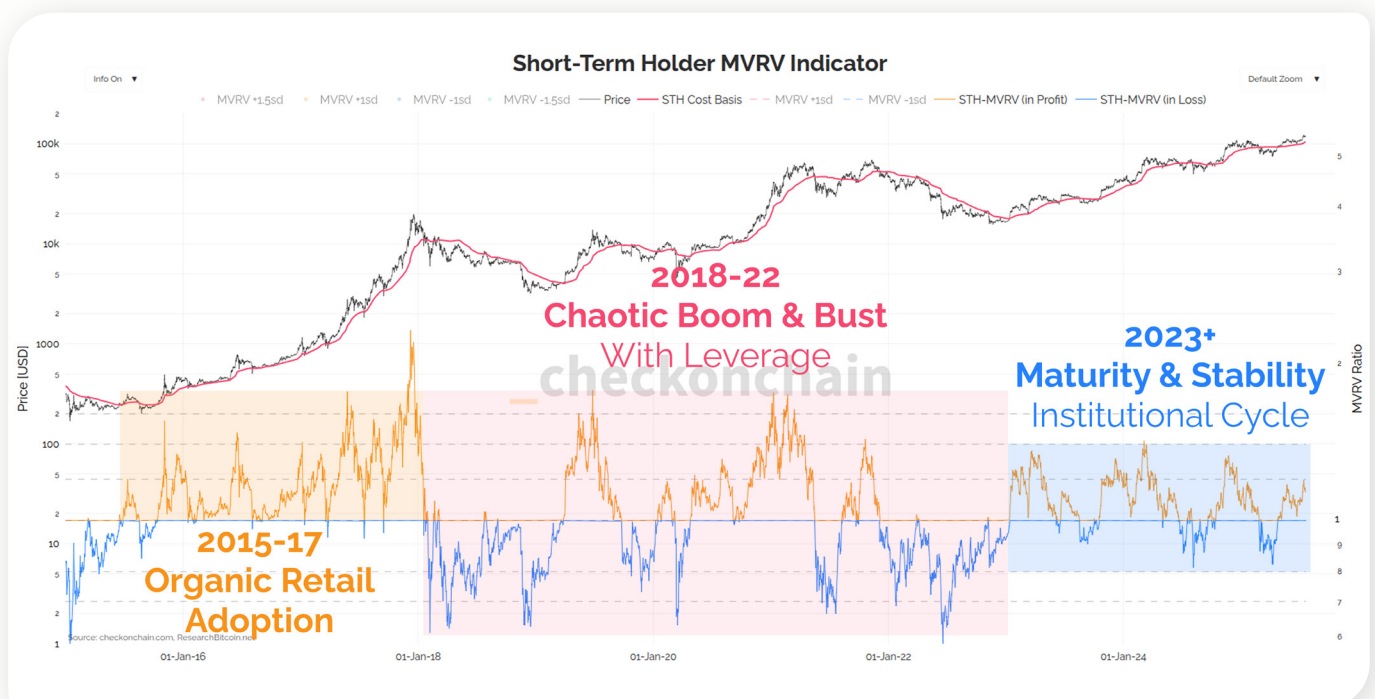
In the 2016-17 bull market, Bitcoin was primarily traded in spot exchanges, and it was largely owned and traded by retail sized individuals. Throughout this spot driven cycle, the STH cost basis consistently acted as support, all dips were bought, and highly profitable spikes to the upside motivated an increasing number of sellers.

**Notice how the 2023+ cycle is trading in a very similar manner, albeit with deeper and longer undercuts of the Short-Term Holder**

**break-even level. The drawdowns have not been as deep, but the 'time pain' experienced has caused a more widespread feeling of malaise, as chopolidation does its job.**

Contrast both of these cycles to the leverage and liquidity fuelled madness that was the 2018-22 period. Irrespective of the mean reversion model (technical or onchain) we look at, we can see this chaotic boom-bust, high amplitude oscillation around the mean. This interim period was where Bitcoin had become a household name, but had not yet proven itself in the minds of the majority. Regulations were hostile, 100x leverage was everywhere, and the market was best characterised as the wild west.

**The clarity of the regime shift which has occurred since 2023 is stark, and speaks to a Bitcoin market with a new pool of institutional investor interest, and a level of trust that Bitcoin is going to be here for many years to come.**



MVRV stands for Market Value to Realised Value. Simply put, it is a ratio of the price, to the average cost basis of some cohort of investors. The higher it is above 1.0, the more unrealised profit investors are holding, and vice versa for unrealised losses when it is below 1.0.

### Bitcoin now stores over \$1 Trillion in saved wealth.

For evidence that Bitcoin has now earned the trust of serious capital, look no further than the Realised Cap, which has just surpassed the \$1 Trillion threshold.

In our opinion, this metric is the ultimate measure of Bitcoin's success as a store-of-value. The Realised Cap can be thought of as the 'onchain market cap', and instead of valuing every coin at the last traded price, we value each coin at the price when it last transacted onchain.

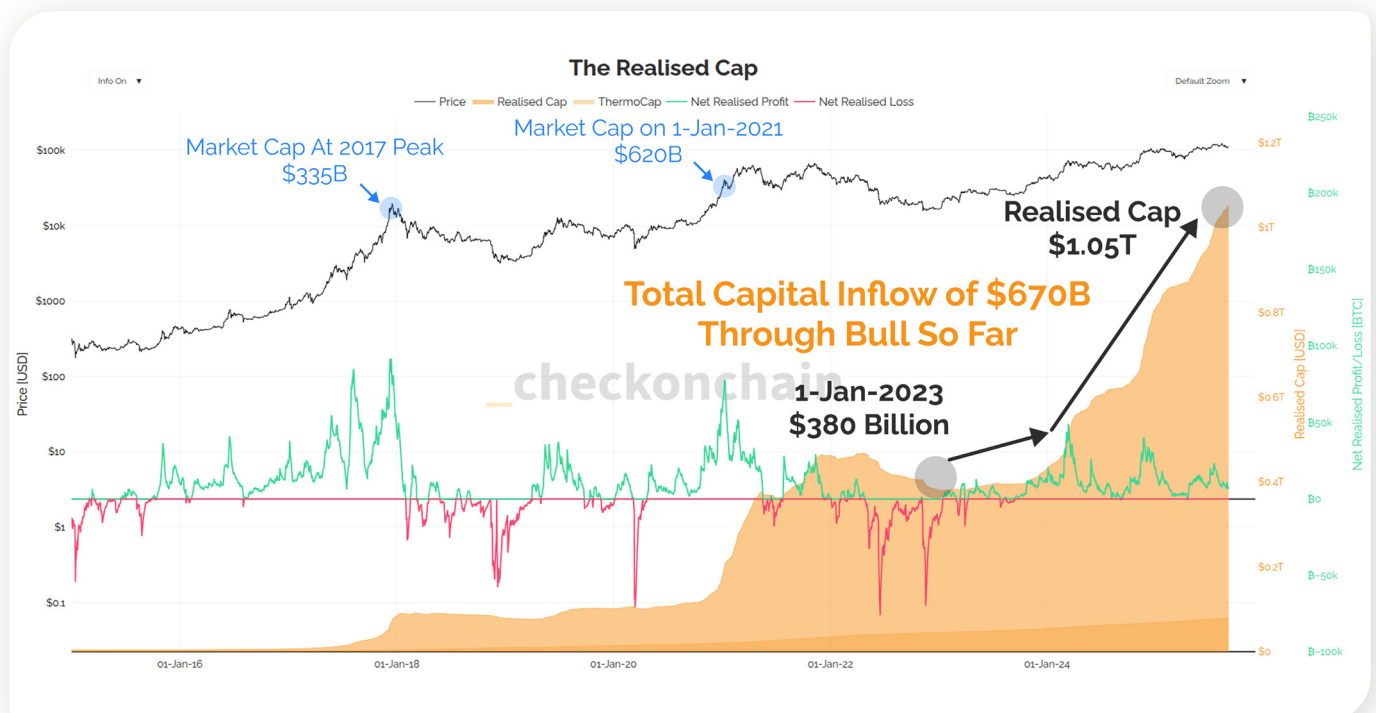
If an investor acquires 2 BTC at \$10k back in 2019, they have effectively 'saved' or 'stored' \$20k worth of their hard earned savings in Bitcoin. If they sell those coins during the bull market at a new price of \$100k (total of \$200k), the new buyer has necessarily injected \$180k in fresh new capital.

**As a result, uptrends in the Realised Cap signify we have capital inflows, as profits are taken by existing holders, and Newton's third law tells us that new demand is bringing in more capital to absorb it.**

The Realised Cap ended the 2022 bear market at around \$380B, and has since increased by 176%, reflecting a net capital inflow of more than \$670B over the last 32-months.

**Bitcoiners, over the 16+ years where Bitcoin blocks have been produced, have now collectively entrusted Bitcoin with more than \$1 Trillion worth of their hard earned savings.**

The Realised Cap is how Bitcoiners measure our collective Proof-of-Work as investors and savers.



### Capital inflows reach multiple-tens of billions per month.

The Realised Cap provides us with an upper bound estimate for total capital flows moving in and out of Bitcoin. From this, we can start to think about the magnitude, direction, and sources of demand which are entering, or exiting their Bitcoin positions over time.

Generally speaking, the Bitcoin market sees its most significant capital inflows when the market is constructive, and price is trending higher during bull markets. Long-term investors gradually take profits and sell into strength, whilst pools of new demand come online as awareness of Bitcoin's positive price performance grows.

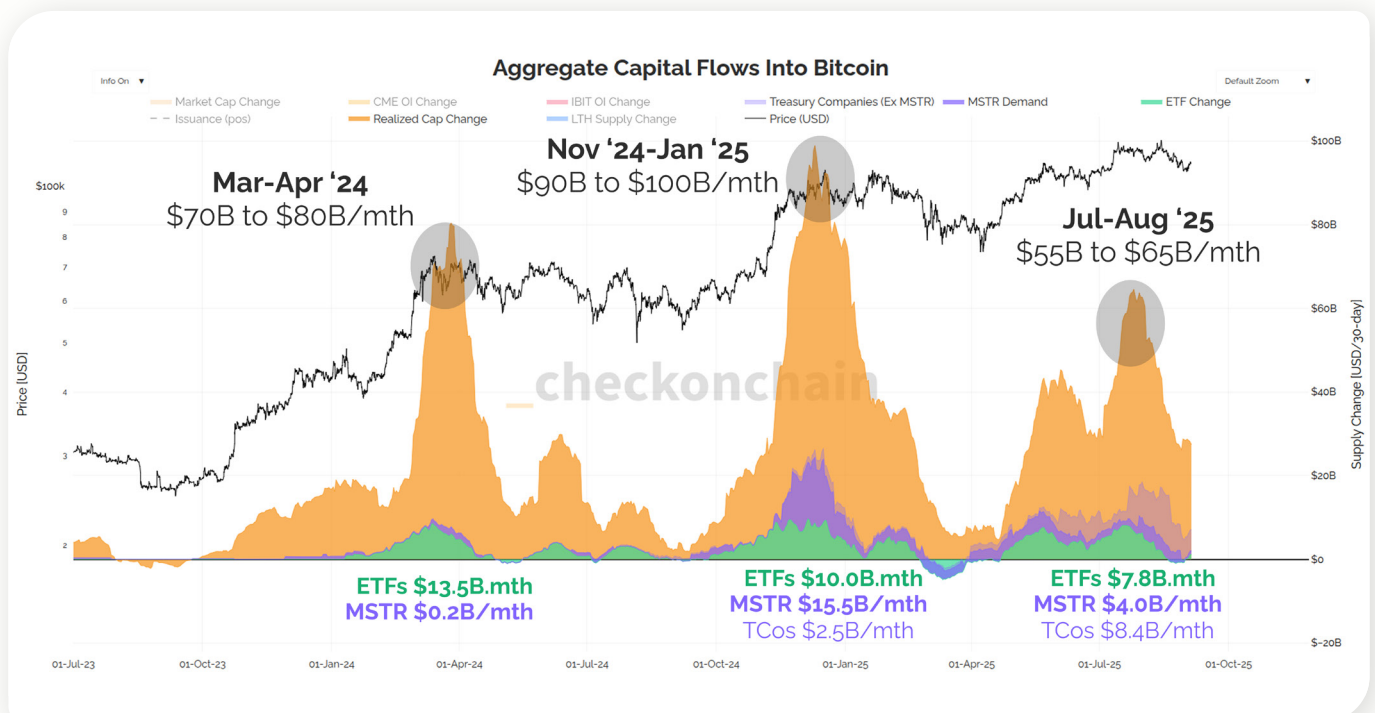
This highlights the delicate supply and demand balance of markets, where capital inflows are necessary to achieve higher prices, but it also creates the incentive for more and more profit taking, which will eventually overwhelm the buy-side.

**On a 30-day change basis, we have seen three major waves of capital inflows this cycle, with the Realised Cap increasing by between \$55 Billion and up to \$100 Billion per month.**

When we overlay the inflow volumes for ETFs (green) and Treasury Companies (purple), we can see these vehicles typically account for somewhere between 25% and 35% of the demand profile, whilst the existing spot markets account for the remainder. This idea also counters two popular narratives; first that Strategy is certainly not the only buyer of Bitcoin, and second, that 'profit taking' cannot be explained as purely long-term investors rotating into ETFs (the ETF flows simply aren't large enough).

**The signal here, at least to our eye, is that the Bitcoin market is now of a size where it can comfortably absorb many tens of billions of USD worth of sell-side over the course of a month and yet bull market keeps marching higher.**

Imagine telling that story to yourself in the pits of the 2022 bear market, you wouldn't believe it.



## HODLers are sitting on \$1.3 Trillion in unrealised profit.

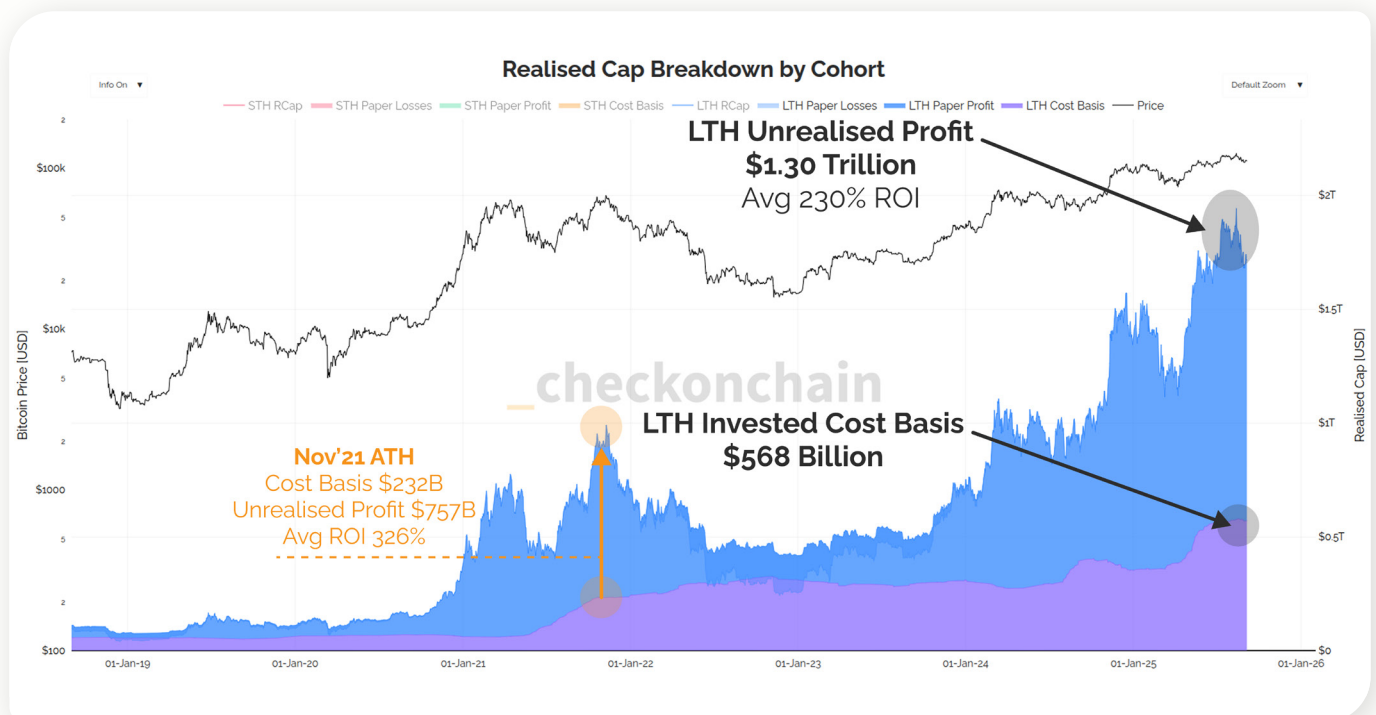
One of the primary motivators for Long-term Bitcoin holders to sell, naturally, is the tremendous unrealised profit their portfolio enjoys during bull markets. The other side of that coin, is when investors are sitting on very large unrealised profits, it can act as a positive buffer for sentiment, as their sat stacking behaviour keeps being rewarded.

Out of the \$1 Trillion in value stored in the Realised Cap, Long-term Holders account for more than half of it, with an aggregate invested cost basis of \$568 Billion (purple). As the spot price fluctuates relative to each investor's

cost basis, the magnitude of unrealised profit or loss they hold will increase or decrease accordingly.

**Long-Term Holders have invested \$568 Billion in Bitcoin, and at current spot prices, are sitting on an extraordinary \$1.30 Trillion worth of unrealised profit, shedding light on why investor conviction has been so resilient this cycle.**

Despite multiple months of boring, sideways, and choppy price action, Long-Term Holders still have a very good thing going for them, and the average investor is sitting on a +230% return. If we compare this to the Nov'21 ATH, the average Long-Term Holder was sitting on a return of 326%, and this was ultimately a sufficient incentive for sell-side to over-saturate demand.



Analysis of unrealised profit and loss using onchain data provides insight into the incentives of investors. We calculate it by comparing the cost basis of every coin in the supply, to the current spot price. When we then apply our Long/Short-Term Holder cohorts to those coins, it provides insight into how profitable (or unprofitable) various sub-sets of the Bitcoin market are.



### The waves of accumulation demand keep coming.

The pool of coins we classify as Short-Term Holders tends to account for between 20% to 35% of the circulating supply. Given this represents the coins that have moved within the last 155-days, the pricestamp we assign to those coins will more closely follow the spot price. As a result, Short-Term Holders can often account for a very significant proportion of the invested wealth measured by the Realised Cap, and this is especially true during bull markets.

**In aggregate, the invested cost basis of Short-Term Holders (orange) has hit a new all-time-high of over \$500 Billion, first in early Mar'25, and it is approaching that ATH level again today.**

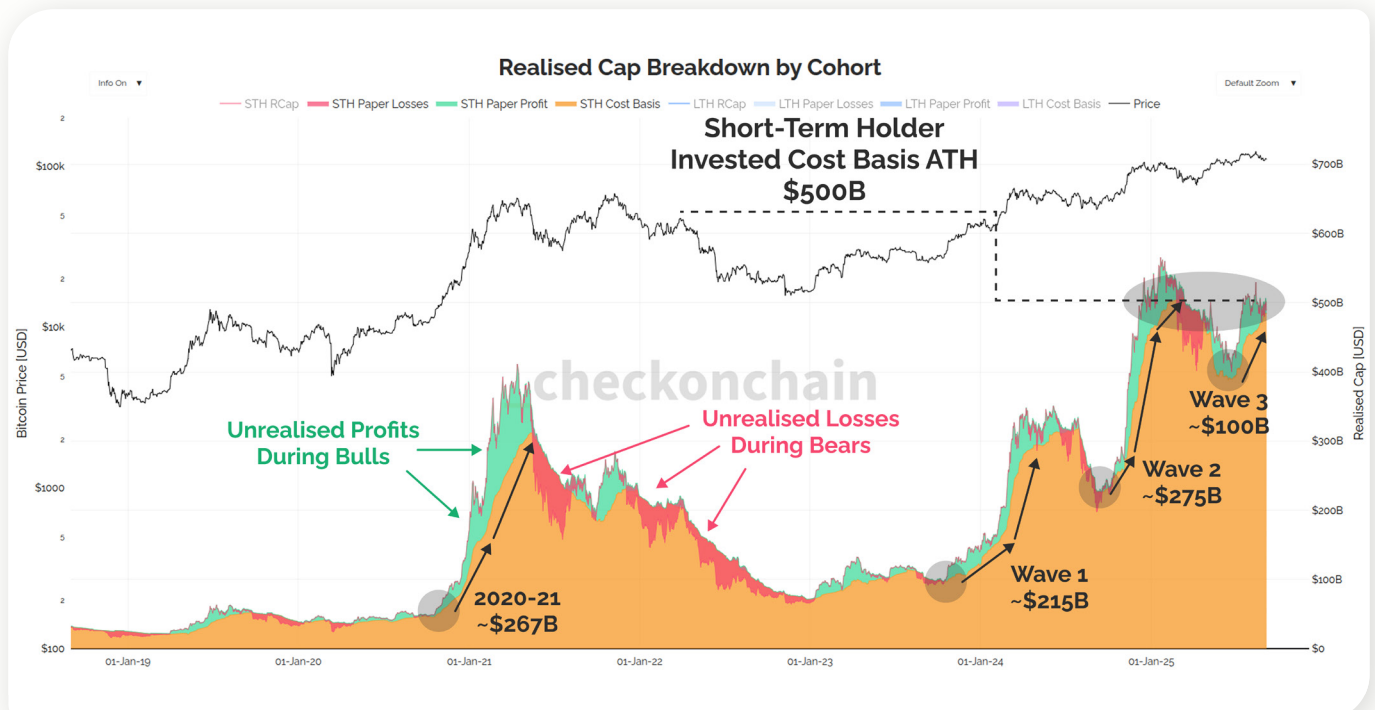
Analysis of Short-Term Holder capital flows provides a view into the waves of fresh demand coming into the Bitcoin network. We can clearly see the declines during bear markets, as most new buyers quickly find themselves underwater, and holding ever growing unrealised losses.

These environments flush out speculators and fast money, leaving only the high conviction holders to slowly accumulate, and hammer out a cycle floor.

In bull markets, investor awareness of Bitcoin increases, and this creates waves of fresh demand brought in by an appreciating Bitcoin price. Historically, Bitcoin bull markets have been characterised by one big relentless surge of demand, with only brief, short-duration corrections and pauses on the scale of a month or two.

**This cycle, we have seen at least three waves of fresh demand, each seeing the total invested value held by Short-Term Holders swell by up to \$275 Billion. As the market 'chopsolidates' after each wave, it allows both new buyers, and existing holders to acclimatise to the new price altitude.**

In our view, these periodic cool downs in investor sentiment have reduced the risk of the market reaching an unsustainable level of euphoria, and has allowed for phases of re-accumulation by investors sharing a long time horizon for Bitcoin.



### Regular chopolidation keeps overheated conditions at bay.

Investor sentiment can be modelled by analysing how far the spot price has deviated away from the aggregate cost basis. Using onchain data, we can estimate the average acquisition price for every unit of BTC in the supply. This yields a price model which we call the Realised Price (purple), which is currently trading at \$58k.

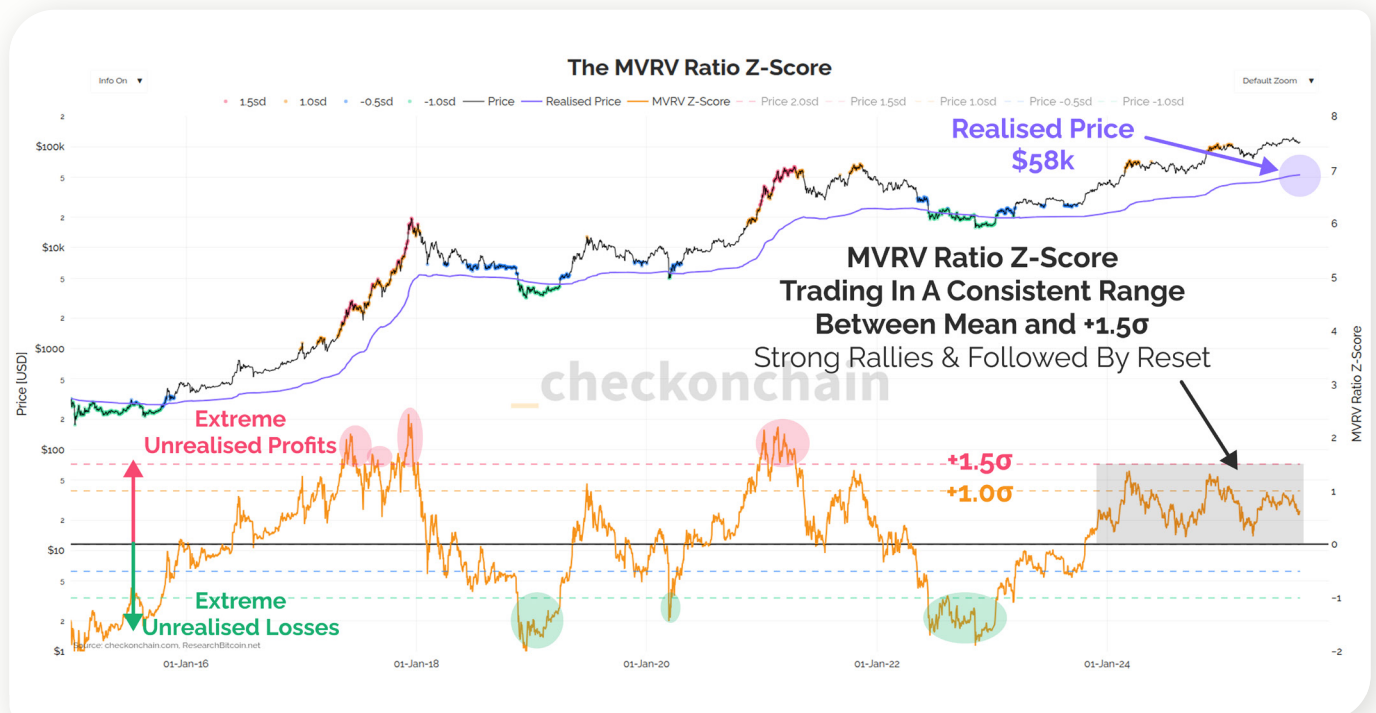
Over the course of bull and bear markets, coins are repriced to a new cost basis whenever they change hands, this causes the Realised Price to climb during bulls, and decline during bears. The further the spot price deviates above or below this aggregate cost basis, the more extreme the unrealised profit or loss held by investors becomes.

**We can model extremes in investor sentiment by assessing how far the spot price is above, or below the Realised Price.**

This oscillator is called the MVRV Z-Score, and it tracks the magnitude of unrealised profit (high values), or unrealised loss (low values) held in aggregate.

Deep bear markets often see the spot price trade at deeply negative MVRV-Z levels, signifying a statistically large proportion of the market is underwater. At this point, a majority of the price sensitive speculators have been washed out, leaving only the high conviction HODLers in the market. Conversely, powerful bull markets see investors holding massive unrealised profits, which motivates larger and larger profit taking volumes as the price rises.

**This cycle has seen a notably more controlled, with a stable sideways pattern emerging in the MVRV-Z indicator. We have seen three local peaks so far, with each briefly hitting the +1 $\sigma$  threshold, before cooling back down to the long-term mean as the market consolidates for several months.**



The Z-Score transformation we use here allows us to see how far the spot price has moved relative to the average cost basis within a statistical framework (measured in 'standard deviations', denoted by the  $\sigma$  symbol). This normalisation technique is very useful when analysing mean reversion behaviour, and allows a direct comparison between various mean reverting oscillators and indicators.

### Bitcoin is yet to enter the euphoric right tail this cycle.

In the previous MVRV-Z chart, you may have noticed that previous bull markets have peaked above the  $+1.5\sigma$  level, highlighted in red. These are periods where the average investor is sitting on extremely large unrealised profits, which inevitably creates a larger pool of investors who are willing to take profit, and capitalise on the bull market strength.

The chart below shows the distribution of MVRV-Z values at the end of each day. This allows us to visualise what could be considered 'normal', and compare that to levels we would consider 'extreme tail events'. This cycle has hit three local price peaks so far, first at \$73k in Mar'24, then at \$110k in Jan'25, and most recently at \$124k in Aug'25.

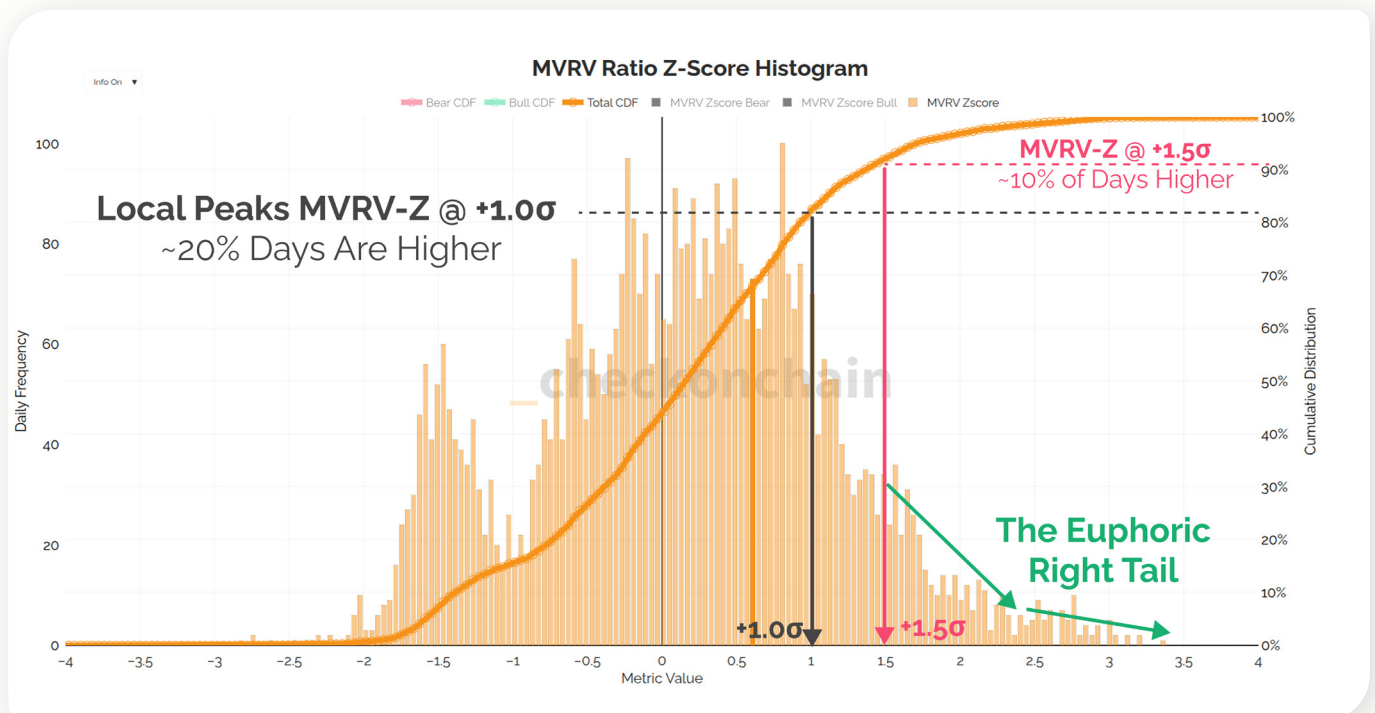
**All three of these market peaks saw MVRV-Z trading above the  $+1\sigma$  threshold,**

**which is a level that surpassed on approximately ~20% of all trading days.**

These extreme upside events are characteristic of powerful bull market up-trends, but from a statistical standpoint, are less likely to occur. We can see that reaching the  $+1.5\sigma$  threshold is even less common, with only 10% of trading days reaching such elevated MVRV-Z values.

**This is one of our preferred approaches for thinking about what defines an unsustainable price level. The 'euphoric right tail' of events occur when the spot price has run too far above the Realised Price, which in turn creates a growing incentive for investors to take profit, and lock in large unrealised gains.**

We could argue based on this study, that the prevailing Bitcoin cycle has not entered the unsustainable euphoric right tail of events....yet.

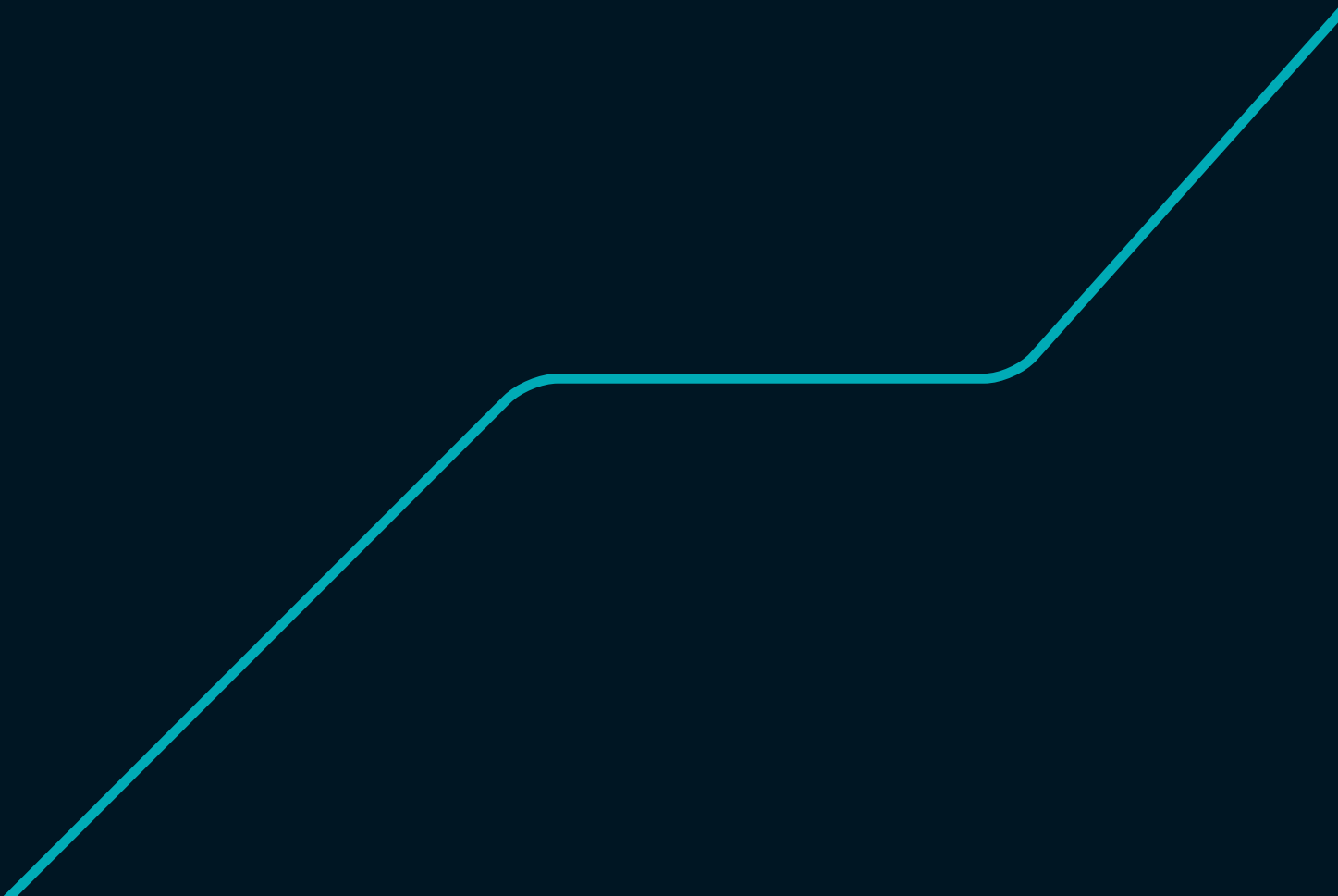


This chart is called a histogram, and it shows the daily closing values of the MVRV-Z oscillator since 2012. We have curtailed the years prior to 2012 as Bitcoin was too small back then for that data to be relevant today. The 'S-curve' is called the cumulative distribution function (CDF), and shows the cumulative percent of all days which have a lower MVRV-Z value. This helps us to think about probabilities, and how likely the market is to reach (and stay) at certain deviations from the mean.



**“HODLers of Last  
Resort fear nothing.”**

Trace Mayer



# no fear

**Bitcoin handles heavy sell-side with ease**

Bears fail to break the spirit of the bulls

## 04. Sell-side Pressure & Dips

### A typical bull market structure since 2023.

Every Bitcoin transaction and HODLed coin, carries with it a fingerprint describing the type of investor or entity who owns it. We can estimate its cost basis, assess unrealised and realised profit and loss, and determine how long the coin was held in between spends.

Our aggregate behaviour in markets is also remarkably consistent, and generally speaking, markets exhibit a combination of herd mentality by the majority, sprinkled with a minority acting in a very strategic 'smart-money' manner. This is irrespective of the period in history, or the asset being traded. At the core of our decision framework, sits the hundred thousand year old hardware located between our ears, coupled with our natural emotional response to fear, greed profit and loss.

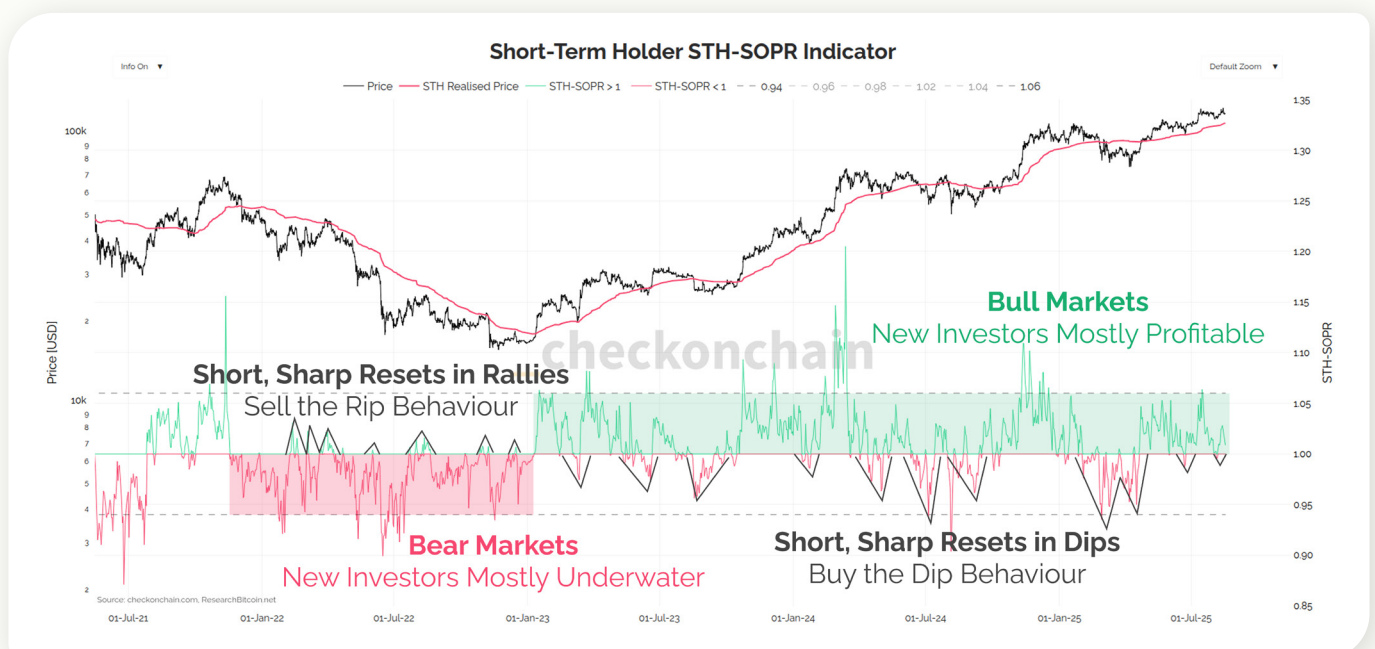
**For the first time in history, we have an asset that records every decision we make associated with it, recorded into an immutable ledger. This allows us to analyse the behaviour of human psychology within a market context like never before.**

The chart below shows the sibling metric to MVRV, which instead of describing the average unrealised profit or loss, describes the average

realised profit or loss by coins which are spent onchain. SOPR tells us a story about the decisions we make when we move our coins, and typical bull market behaviour has three main characteristics:

1. **SOPR is generally above 1.0** in bull markets, signalling that the average coin is transacting at a price higher than its original cost basis, and is thus 'realising a profit'. It is difficult to have a sustainable bull market when people are taking losses all the time.
2. **When SOPR gets too high, it generally puts a pause on the up-trend**, since lots of investors are locking in increasingly large volumes of profit. When the sell-side pressure grows too large, it tends to overwhelm the inflowing demand.
3. **Short, sharp 'V-shaped' undercuts of the break-even level of 1.0**, which signals local top buyers have been flushed out in fear; but sentiment hasn't deteriorated into the sustained 'get me out at any price' losses we see during bear markets.

**The Short-Term Holder variant of SOPR is the most responsive in our opinion, and the bull cycle to date has continued to trade in this typical bull market structure since 2023.**



### Sell-side pressure at price peaks exceed \$3.5B/day.

Markets are all about probabilities, and often require investors to hold two (or more) competing ideas in mind at the same time. In this instance, bull markets are environments where investors consistently lock in profits. However, too much profit taking can oversaturate demand, and we regularly see large profit volumes onchain aligning with meaningful peaks in the Bitcoin price.

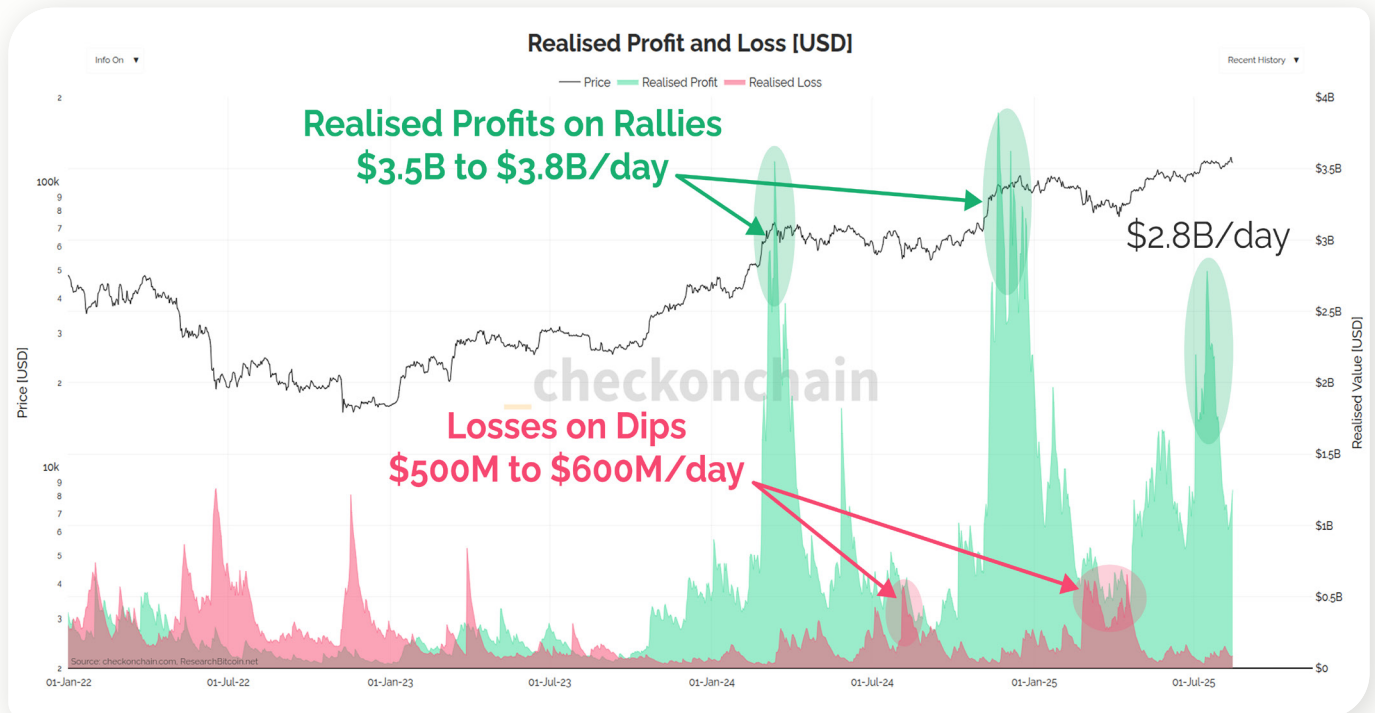
**Profit taking by existing holders is a normal characteristic of bull markets, and we consider it to be a useful indicator for modelling the sell-side pressure that demand must overcome.**

Aligned with the three demand waves we mentioned in **Chapter 3**, each was met with significant upticks in realised profit onchain,

as existing holders sold their coins into strength. Near each of these price peaks, the magnitude of realised profit exceeded \$2 Billion per day, which is around twice the scale seen in the 2021 bull run.

Similarly, we can measure when coins that were originally acquired near these local price peaks start to panic and transact at a lower price, and thus lock in a realised loss. In both the 2024 and 2025 corrections, realised loss volumes reached between \$500M and \$600M per day, as fear motivated local top buyers to capitulate near the local lows.

**Realised profit and loss dynamics provide us with a unique lens into both the sell-side pressure coming from existing Bitcoin holders, but also a gauge on the demand required to absorb it, and keep the trend moving in a favourable direction.**



Realised profit and loss is calculated by comparing the price at which a coin was acquired (UTXO created) to the price when it was spent onchain (UTXO destroyed). Throughout Bitcoin's history, we have consistently seen the largest realised profit volumes near local and global peaks. We also see the largest losses when investors capitulate during dips, and in the darkest days of bear markets.

### Long-term holders distribute 30k+ BTC/day during rallies.

Whilst the characterisation of Long-Term Holders is generally interpreted as a cohort of high conviction, 'never-sell-your-Bitcoin' Bitcoiners... the reality is, they do sell in every cycle. The coins which were accumulated in the deepest depths of the bear market, and held for many years, are also the ones which are sitting on the largest unrealised profit.

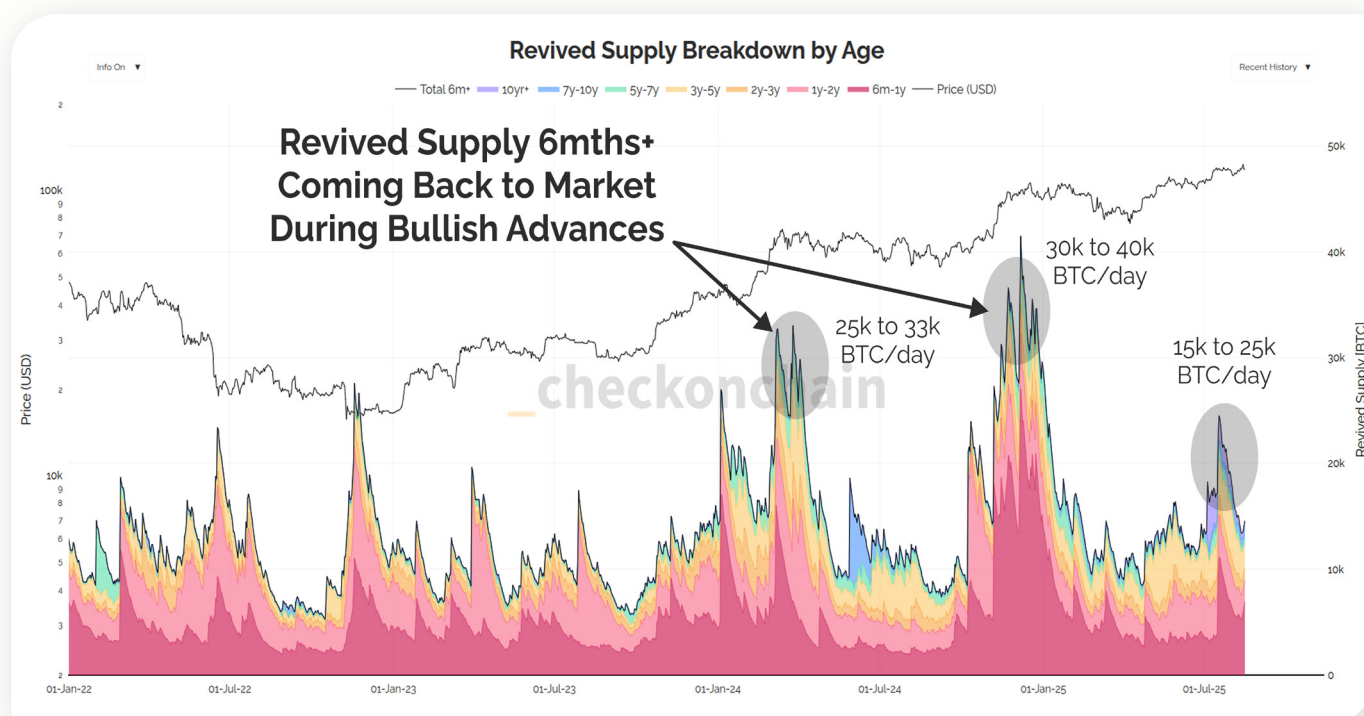
Like heavy realised profit volumes, we also see an uptick in Revived Supply near major price peaks. Revived Supply is a metric that shows the onchain transaction volume, broken down into age bands categorising how long those coins were held. The bulk of the Long-Term Holder coins that locked in profits are those aged between 6 to 24-months (pink), however we also see meaningful upticks of multi-year (yellow to blue), and sometimes even decade old supply (purple) coming back to market.

**Near each of the three major price peaks in this cycle, existing holders have exerted an average sell-side pressure of between 10k and 40k BTC per day during bullish advances.**

To give a sense of scale, over 108k BTC worth of Long-Term Holder supply was revived in a single day in Dec'24. At the current issuance rate of 450 BTC/day, that one day is equivalent to 8-months of newly mined supply.

For many Bitcoiners, the idea of investors selling their coins seems nonsensical, because the idea is they are giving up on future price appreciation potential. However, the reality as we see it, is that the empirical evidence shows us that significant volumes of old coins, locking in large realised profits, always come back to life during bulls.

**It is our view that distribution and sell-side pressure within the Bitcoin supply has long been dominated by existing holders, and not by miners.**



## Heavy coinday destruction as old coins return to market.

Arguably the oldest onchain metric ever devised is 'Bitcoindays destroyed', which was first coined on the [BitcoinTalk forums back in 2011](#). This metric is now known as Coindays Destroyed (CDD), and can be thought of as the volume of 'holding time' which is expended when coins transact onchain.

For example, if an investor acquired 10 BTC in 2020, and then disposed of it exactly two years later, it would have destroyed 7,300 Coindays (10 BTC x 730-days). As the Bitcoin network gets older, there is a natural accumulation of more coindays within the system which we must account for. The metric below is called the [Value Days Destroyed](#) metric, and it is one of the better tools designed to model both the volume of CDD, the USD value of it, and with adjustments to account for aggregate coinday accumulation over time.

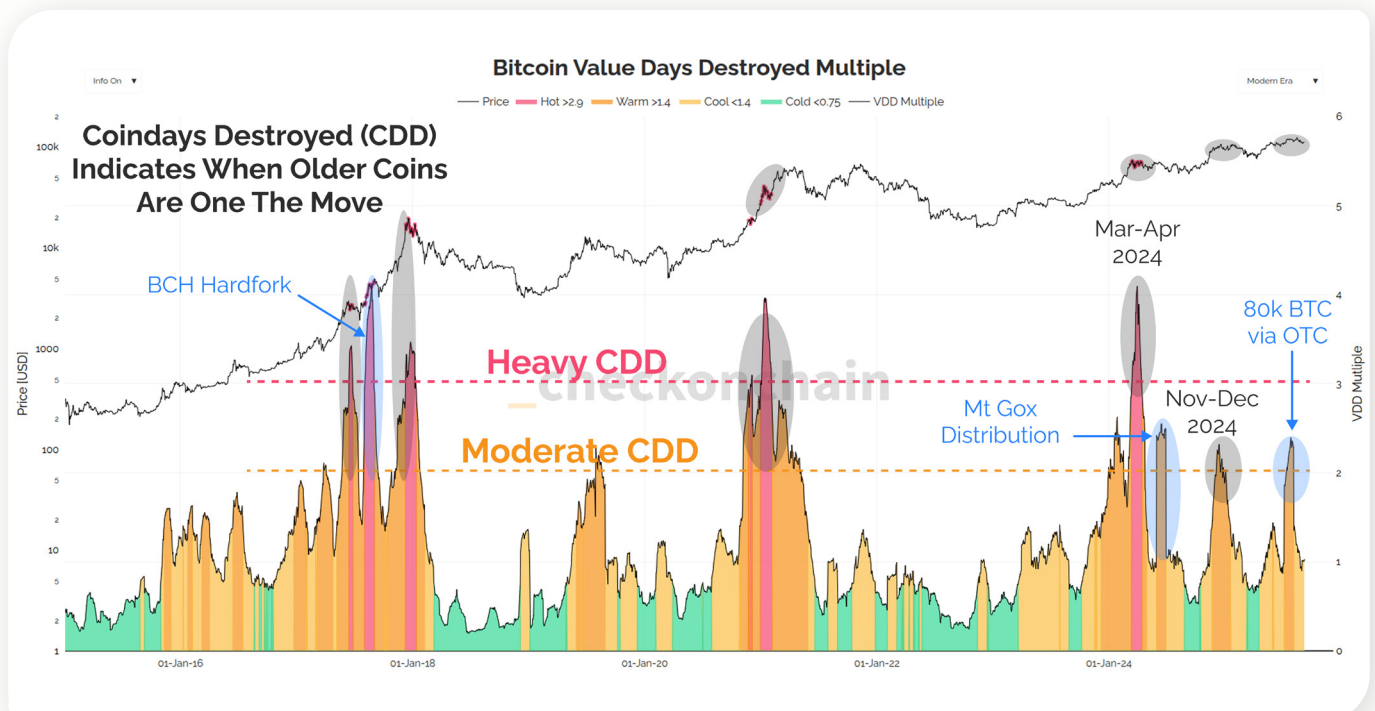
**Bull markets are historically when the largest volumes of Coindays are destroyed, and similar to realised profit, and revived supply, provide confirmation that long-held coins are back on the move.**

To date, we have seen several significant spikes in CDD, associated with both Long-Term Holder profit taking, but also some unique events where very large pools of old coins have transacted:

- In June'24, the Mt Gox Trustee finally distributed around 141k BTC to creditors, resolving an eleven year long legal battle, and being one of the largest CDD events to date.
- In July'24, an ancient whale transferred over 80k BTC to Galaxy Digital for sale. These coins were acquired back in 2011, and this spend created the largest single CDD value on record.

When we analyse the Bitcoin onchain volume through the lens of realised profit, revived supply, and coindays destroyed, we can achieve a clearer picture of the sell-side dynamics during bull markets.

The truth is, HODLers really do sell, but the real signal is how much new demand is flowing in to absorb it.





### Unrealised losses on dips remain historically mild.

In the same way we can gauge positive sentiment using unrealised profit, so too can we assess the financial stress felt by Bitcoin investors during bears and dips using unrealised losses. Whenever the Bitcoin price pulls meaningfully back from all-time-highs, a pool of investors find themselves having acquired coins at what now seems like an expensive price.

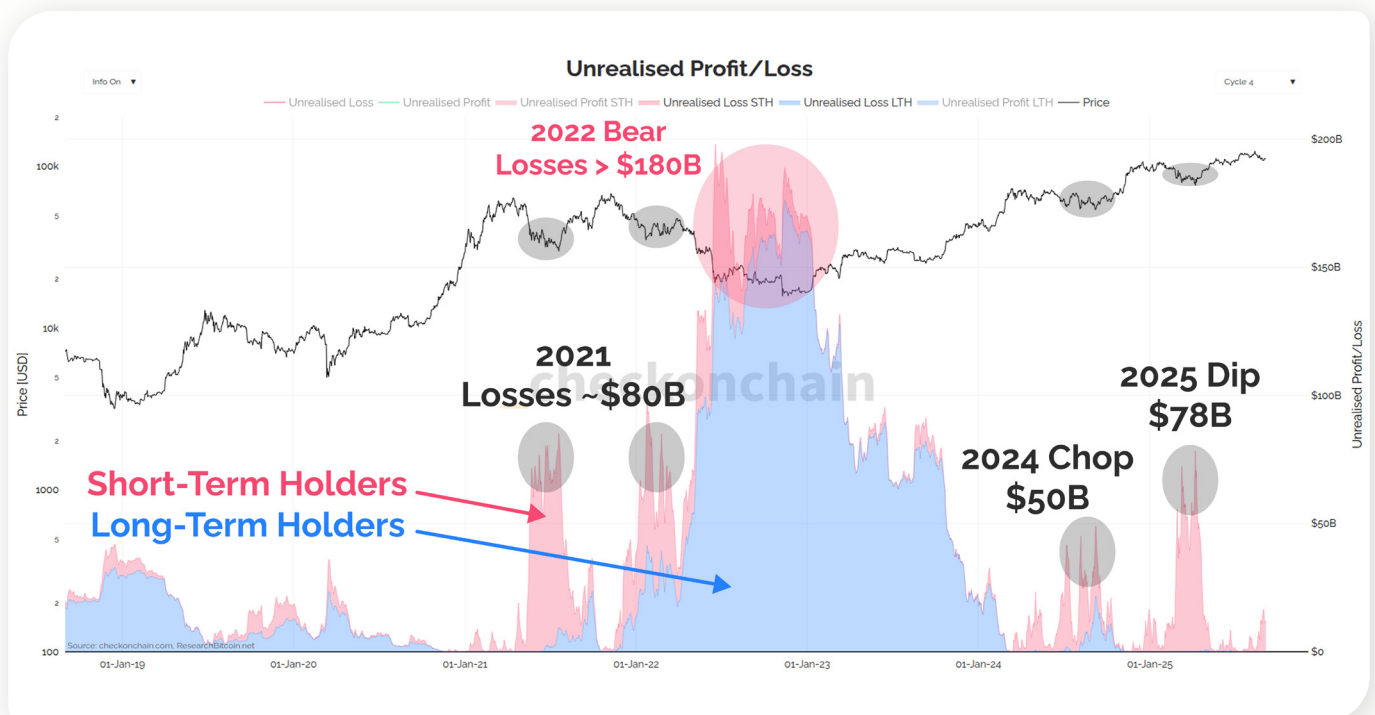
Every Bitcoiner knows that invariably, whenever they stack sats, the market is destined to trade below their acquisition price over the days, weeks, and months ahead. The volatility of the Bitcoin price is part of doing business, and over time, tenured holders become increasingly desensitised to it.

**The flip side to this, is that there is always a sub-set of the Bitcoin market who are more price sensitive, and the difference in mood created by a -5% dip, compared to a -30% dip, can be stark.**

The chart below shows the USD denominated value of unrealised losses held across the Bitcoin supply. As the spot price trades below the cost basis of more and more coins, the total amount of unrealised loss in the system can swell. At some stage, the losses can grow so large that it sours sentiment, and causes investors to think twice before they allocate again (which softens demand).

**During both of the price corrections in 2024 and 2025, aggregate unrealised losses swelled to \$50B and \$78B, respectively. Both of these events are of a comparable magnitude to the two sell-off events in the 2021 bull.**

However, what we can also notice is that this cycle has largely seen unrealised losses limited to the Short-Term Holder cohort (red), whilst the bear market in 2022 left no Bitcoin holder spared from the damage. Even Long-Term Holders took on losses, and this is one of the factors that helps us distinguish a run-of-the-mill dip during bull markets, from a more serious and protracted bear.





### Corrections put a quarter of all supply 'in-loss'.

The last day of the bull is also the first day of the next bear market. Every bear market tends to start with a sell-off event that breaks the spirit of the bulls, and often leaves a significant number of recent buyers trapped holding expensive coins. Whilst it can be very challenging to distinguish between a typical bull market dip, and the start of the next bear market, onchain data does offer us a unique lens to visualise how the former can devolve into the latter.

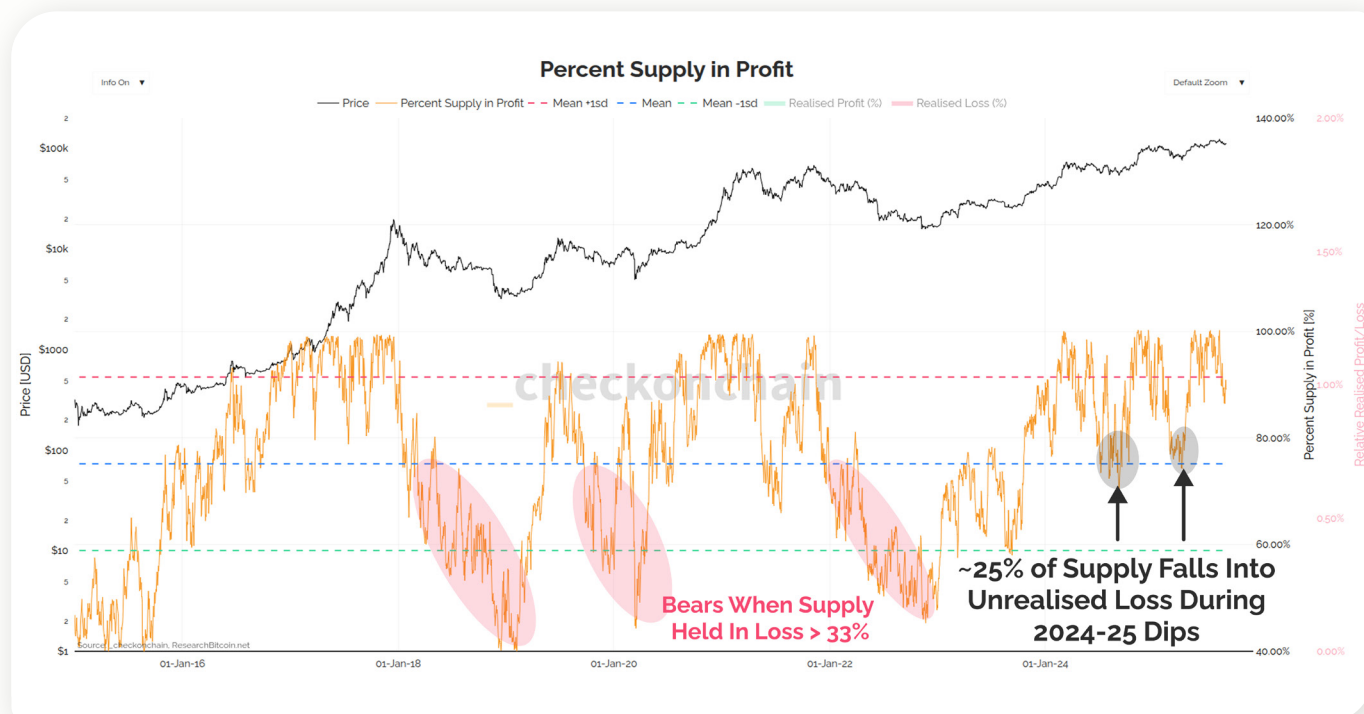
**A framework we use for thinking about bear markets is called 'Top Heaviness', and bears generally start when too many people have acquired too many coins, at too high of a price (hence making the supply distribution 'top heavy').**

As Bitcoiners, we tend to have a higher tolerance for volatility, and a financial pain threshold which

would make gold-bugs and equity-bulls cry. When we look at the proportion of the Bitcoin supply which was acquired below the current spot price, we consider those coins to be 'in-profit', and the rest to be 'in-loss'. This is a binary distinction, where a coin can only be in one bucket, or the other (even if the price is only 1-cent above or below the cost basis).

**When we assess percent of supply which is held 'in-profit', we can see that both the 2024 and 2025 dips found their ultimate low with around 75% of the supply in profit (and thus 25% was 'in-loss').**

Bear markets of the past have seen considerably more damage inflicted, with cycle floors being hammered out when more than two-thirds of the supply is held 'in-loss'. It takes a particular level of grit, conviction, and psychological resilience for Bitcoiners to hold through such a brutal event.



An interesting idea which we have recently thought about, is what happens if we no longer experience the severe 75%+ bear market drawdowns seen in prior cycles? If that is the case, it is likely that the Bitcoiners who survived those brutal bear markets have experienced a once in a lifetime character building exercise. To develop and maintain conviction in an asset under those conditions is no easy feat, and we hope you cherish the life-experience, and the resilience you needed to survive it for many years to come.

### The bears have failed to break the spirit of the bulls.

It is one thing to buy a slug of Bitcoin, and see the price trade -5% or even -10% below your cost basis. It is psychologically something very different when those numbers expand to -20% or more, and this is especially true as the Bitcoin holder base attracts investors from traditional markets. In equities, a portfolio which is down 20% results in a call to the local central bank seeking a bail-out.

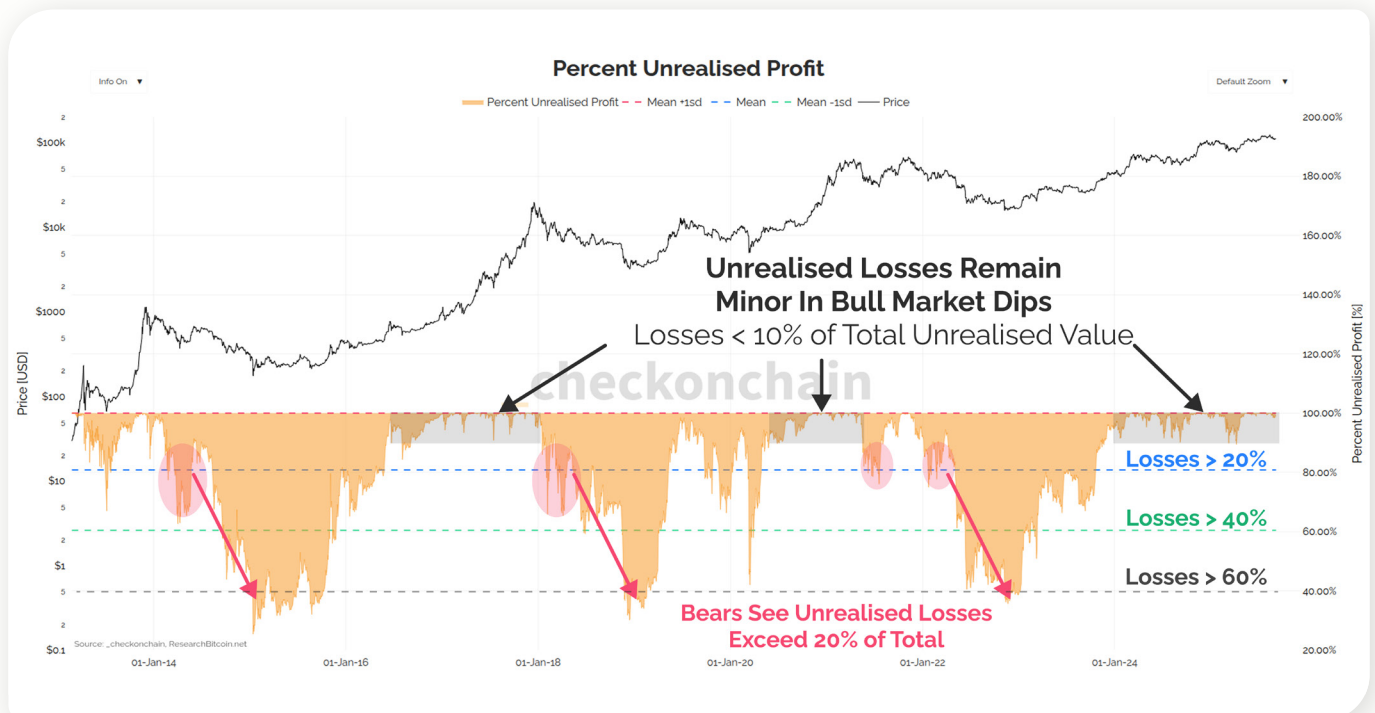
In the world of Bitcoin, unrealised losses during bear markets can be considerable, and the chart below shows the magnitude of unrealised losses (orange) relative to the Bitcoin market cap.

**In bear markets, unrealised losses generally exceed 20% of the market cap in the early phase, but quickly deteriorate to bottom out with losses equivalent to 60% of the market cap or more.**

When we look at corrections during bull markets however, we can see a very different loss profile. There will always be a group of investors who buy near the local top, however the price correction that follows has to be particularly nasty to challenge the bulls enough such that they think twice before buying the next dip. It is not uncommon for corrections to find their lows with ~10% of the market cap held as losses, and this has been the case so far this cycle.

**Since the cycle low was established in Jan-2023, unrealised losses are yet to exceed ~10% of the market cap, and as a result, the bulls have so far failed to inflict enough financial damage to extinguish the spirit of the bulls.**

If we return to our 'Top Heaviness' framework for distinguishing a dip from a bear, we have so far not seen a condition where too many people, have bought too many coins, at too high of a price. The Bitcoin bull is dead, long live the Bitcoin bull.



# top dog

**The most successful ETF launch in history**

There is no second best

## 05. The Extraordinary ETFs

### Total AUM of US spot ETFs exceeds \$150B.

The launch of the spot Bitcoin ETFs in the US on 11-Jan-2024 will no doubt go down as one of the most important market events in Bitcoin history. The set of eleven ETFs broke numerous records, making it undeniably the most successful ETF launch in history.

Some example records set were:

- The ETFs experienced a record \$4.6B in trade volume on the first day.
- Cumulative inflows totalled \$36.2B in the first year, which beat the previous record of \$23B set by the QQQ ETF in 1999.
- IBIT was the fastest ETF to hit \$50B in AUM taking just 227 trading days, breaking the previous record of 1,323-days set by IEMG in 2013. It took GLD, the largest gold ETF, 808 trading days to hit \$50B in AUM.

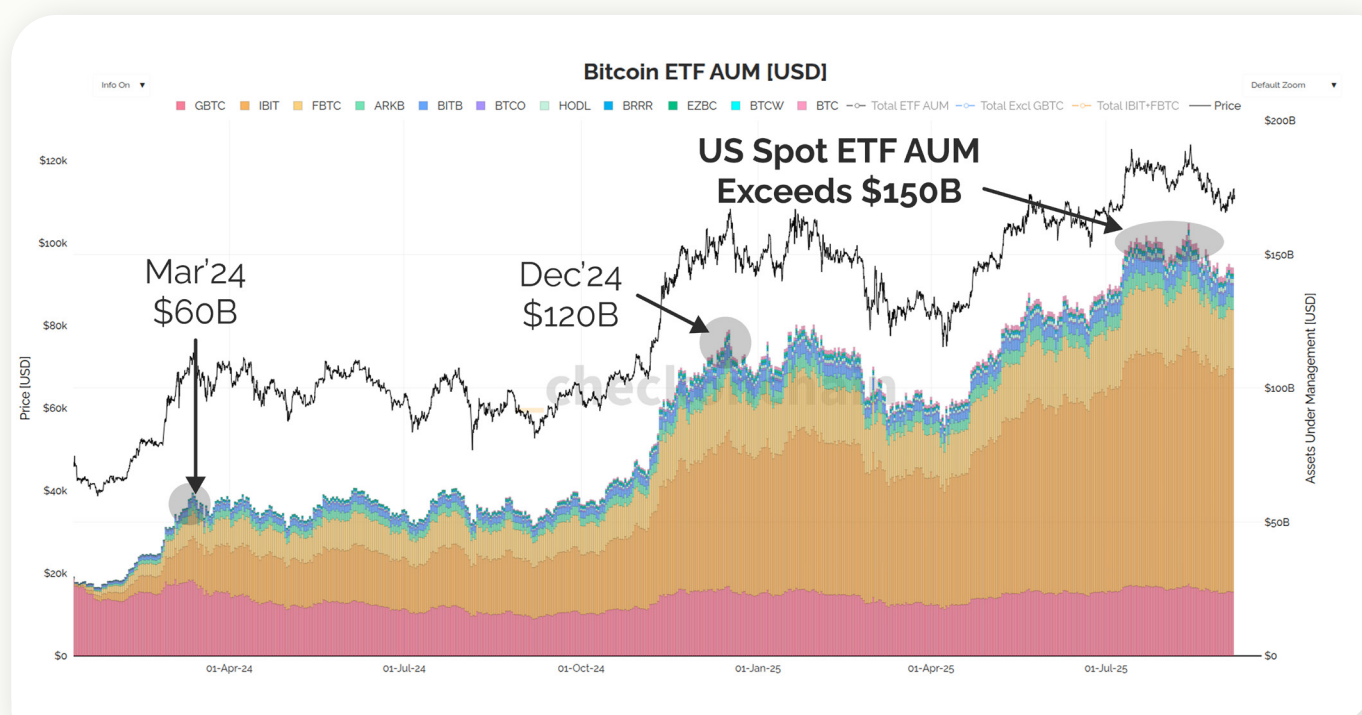
**Whilst there would be some merit in inflation adjusting some of these records, the reality is, the Bitcoin ETFs would simply blitz the records**

**'a little less'. It is difficult to imagine another asset coming along which is likely to challenge Bitcoin for these titles anytime soon.**

The ETFs have acted to break down one of the biggest and longest running challenges that institutions and traditional investors faced regarding Bitcoin; Bitcoin's commodity status, and the custody arrangements required to take possession of it. What the ETFs have introduced is a traditional wrapper such that Bitcoin exposure can be obtained via the same brokerage rails as any other exchange traded asset.

In total, the assets under management (AUM) within the US Bitcoin ETFs hit \$150B in Aug'25. The AUM has more than doubled from \$60B to \$120B between the first Bitcoin price ATH Mar'24 (\$73k), and the second in Dec'24 (\$110k).

**In total, the US spot ETFs now hold over 1.307 Million BTC, which is equivalent to ~6.5% of the circulating Bitcoin supply. Looking globally, ETFs outside the US also hold an additional 165k BTC, bringing the total to around 1.47 Million BTC (~7.3% of supply).**



### Cumulative ETF inflows exceed \$55B over 20-months.

When the US ETFs initially launched, there were very significant outflows from the Grayscale GBTC product, which to date have totalled over \$23.9 Billion. This due to a combination of factors, including the comparatively high 2.0% fee, arbitrage trades during conversion from a closed end fund, and investors who were 'trapped' due to the large discount to NAV that GBTC traded at through 2022-23.

If we were to ignore the total outflows from GBTC, the rest of the ETF complex has taken in just shy of \$80 Billion in net capital inflows, with IBIT commanding the lion's share at \$58.8 Billion.

**The suite of US Bitcoin ETFs (incl GBTC) have taken in a net capital inflow of over \$55 Billion to date, and are yet to see any periods of sustained and significant outflows.**

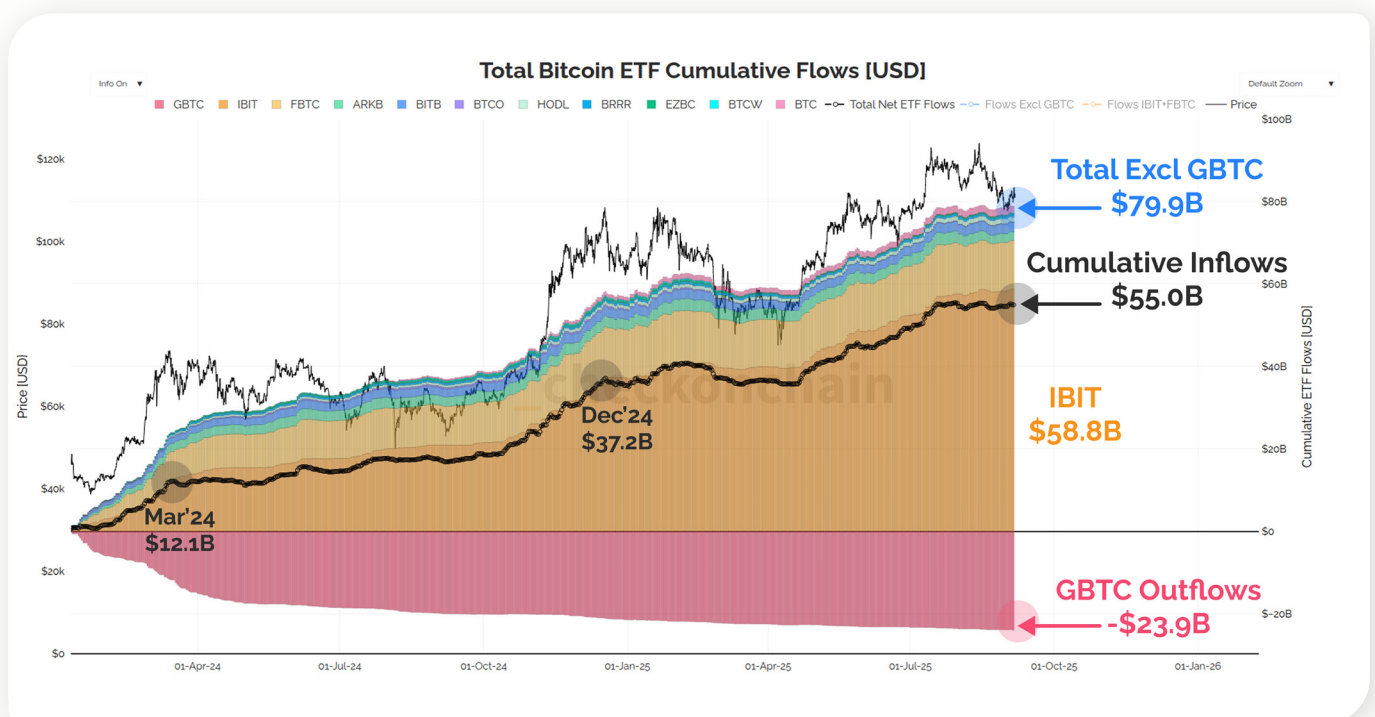
When the ETFs first launched, many financial analysts believed the institutions and investors who were allocating to the Bitcoin ETFs were

purely looking for an 'orange coloured casino chip', and would exit at the first sign of a -10% pullback. What has occurred in reality is quite the opposite, where ETF inflows tend to recover quickly after price dips and outflow periods, suggesting no meaningful loss of confidence.

When we analyse the breakdown of ETF holders, there also appears to be a large dominance in holdings by individuals, whom we estimate account for around 70% to 80% of the allocation.

**According to the analysis of SEC 13F filing documents by TimechainIndex, as of Q2-2025, institutional holdings of Bitcoin ETFs account for around \$32.3 Billion out of the ~\$150B in AUM, (around 21.5% of the total).**

The spread of portfolio allocation to these ETFs ranges from fractions of a percent for the multi-billion to trillion AUM firms, to 100% in some cases, where being long Bitcoin is clearly the firm's designated strategy, (and is often paired with derivatives exposure).



### Average ETF inflow weeks exceed outflows by 2.3x.

From a flows perspective, The ETF complex consistently sees between hundreds of millions to billions of dollars flowing in on a weekly basis. There have been three significant waves of inflows in Q1'24, Q4'24, and again in Q2'25, both of which aligned with significant upwards moves in the Bitcoin price.

On the flip-side, and excluding the initial outflows from GBTC after conversion, there have been comparatively few periods of significant outflows. The largest weekly outflow to date occurred in Mar'24 during the 'tariff tantrum', where approximately \$2.39 Billion worth of Bitcoin exited the ETF complex.

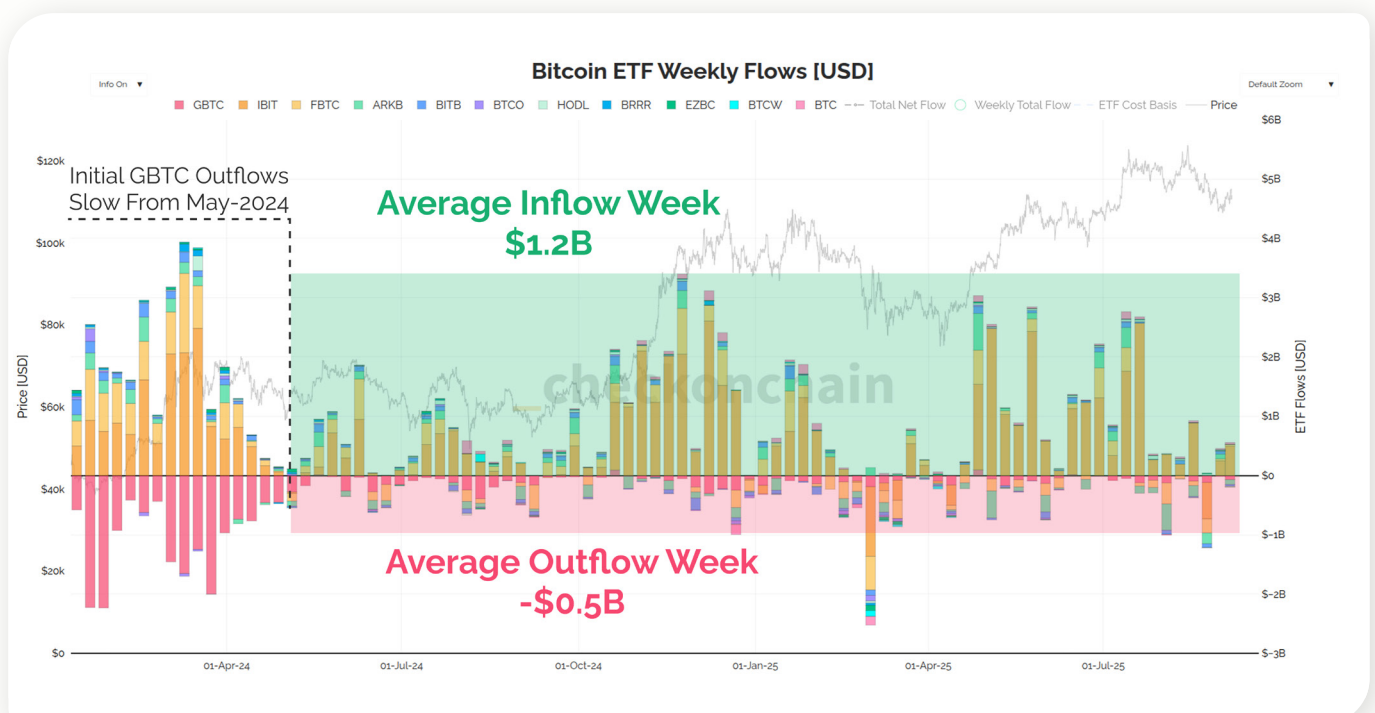
**Since May'24, the average weekly inflow has been around \$1.2 Billion, compared to an average outflow week of \$500 Million. The average ETF inflow is 2.4x larger than the average weekly outflow.**

The ETFs are also heavily traded instruments, and since Oct'24, have consistently exceeded \$10 Billion in weekly trade volume, with numerous weeks in excess of \$20 Billion.

IBIT once again commands around 75% market share in trade volume terms, and the ETFs trade already around 50% of the volume we typically see in Bitcoin spot markets. This consistently high volume provides investors with a solid base of liquidity for entering and exiting their positions, which is often a necessary precursor for taking a position in the first place.

In our view, these represent just another set of data-points showing how clear the vote of confidence in Bitcoin is coming from holders of these instruments. In many ways, the lack of any sustained period of outflows is reminiscent of the investor behaviour we have seen in onchain metrics like SOPR. We are seeing 'short, sharp' event-based outflows, which are quickly followed by a return to constructive sentiment, and buy-side pressure.

**Analysis of the ETF flows in our view puts to rest the arguments coming from many traditional market commentators, who claimed the ETFs would be little more than an 'orange poker chip'. What we are actually seeing, is genuine demand for Bitcoin exposure, coming from small and large institutions and individuals alike.**





### The average ETF inflow cost basis is around \$80k.

We're very spoiled in the world of Bitcoin onchain data, in that we have a remarkable degree of clarity into the average cost basis for various cohorts of investors. For the ETFs, we cannot accurately determine the true average cost basis for investors, since we cannot see all of the exchange trades and accounts. However, we can estimate an average inflow cost basis, by looking at the average price of coins which enter or exit the ETF custody.

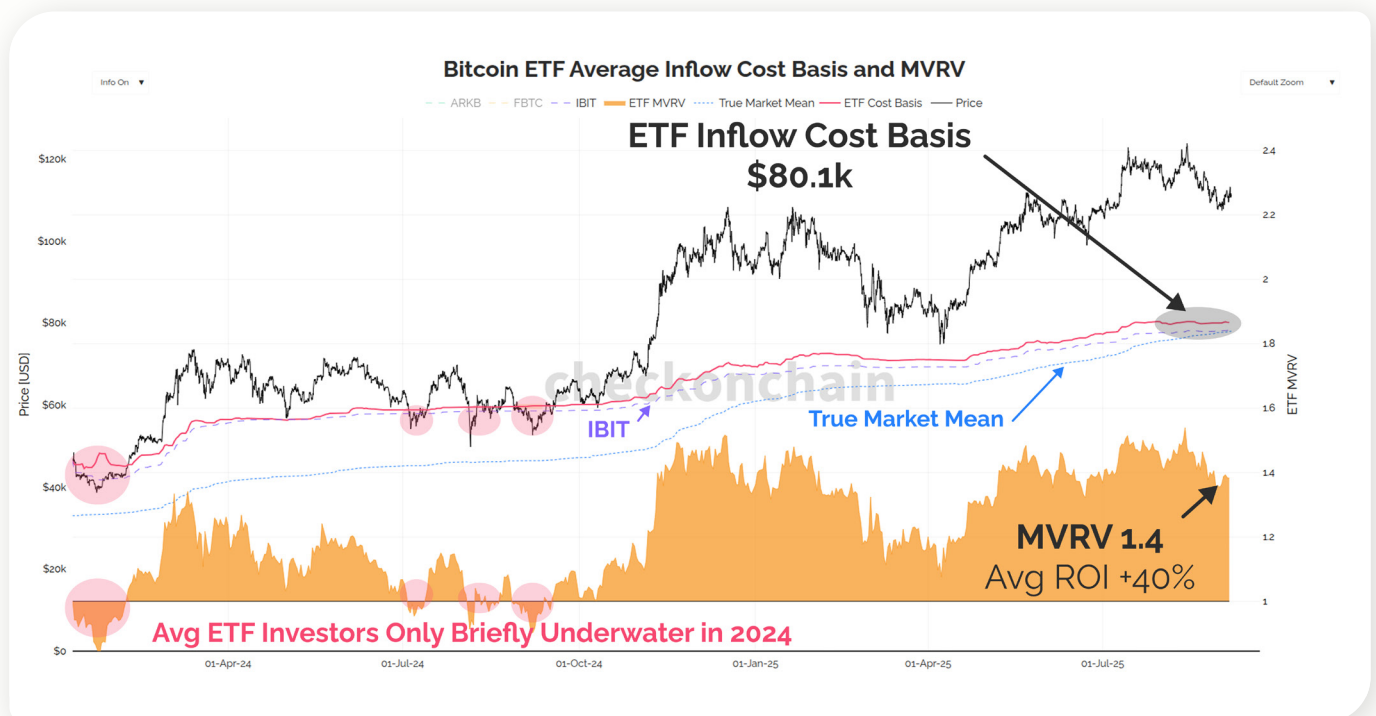
**The average inflow cost basis for all of the ETFs, and for IBIT specifically, are both located at approximately \$80k. This lines up almost exactly with the True Market Mean (\$78k), which is the average onchain cost basis for active investors.**

Many Bitcoin investors, whether in spot markets, or via the ETFs, are accustomed to a dollar-cost-average (DCA) strategy. Strategy, which is an entity that consistently accumulates Bitcoin,

has an average cost basis located around \$74k. We now have a neat alignment between the ETF inflow cost basis (\$80k), the True Market Mean (\$78k), and even Strategy's cost basis (\$74k). In our view this price zone is a useful data-point, as it provides us with an idea of how much profit (or loss) the average DCA investor is in. It also provides a solid anchor for how sentiment may shift as price moves away from, or towards this price range.

From this, we can derive a sort of 'ETF MVRV', being an oscillator showing the average profit or loss that ETF investors are in relative to this estimated cost basis. There have only been a handful of times when this price level was breached back in 2024, and each one ultimately attracted enough demand to establish a local price low.

**As it stands today, we estimate the average DCA ETF investor is currently sitting on a positive return of around 40% with spot Bitcoin prices trading around \$110k.**





### BlackRock's IBIT takes the lead after options launch.

The evolution of market dominance within the US ETF complex is a story of two halves.

Initially, the significant outflows from the GBTC product were more than offset by oftentimes billions of dollars per day flowing into the other instruments. IBIT and FBTC emerged as the clear winners, and by the end of Oct'24, IBIT had attained a market share of 42.7%, FBTC had 18.5%, and GBTC had declined from 100% to 25.1%. By this time, the ETFs had taken in \$24.2 Billion in cumulative inflows, and the total AUM had reached \$72 Billion.

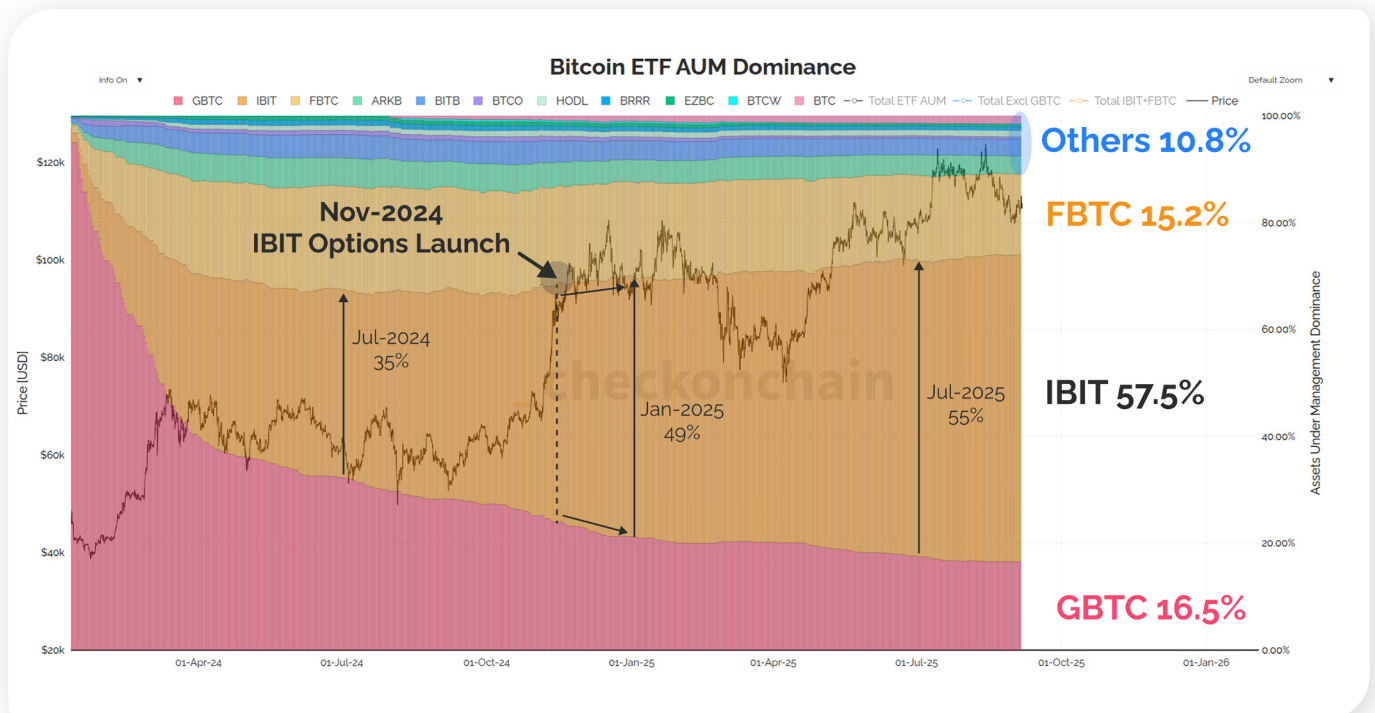
However, as November rolled around, options contracts on top of the ETFs finally launched, and the market's preference for IBIT went into overdrive. The cumulative inflows into all ETFs excluding IBIT have been more or less flat since Nov'24, whilst IBIT has continued to receive an additional \$32.8 Billion in inflows, pushing its AUM dominance from 49.0% to 57.5%.

**Since options contracts started trading in Nov'24, IBIT has become the primary source of ETF demand, and the total open interest in IBIT options has swelled to over \$32 Billion.**

Our latest estimate is that there are approximately 40-cents worth of options open interest for every dollar of Bitcoin held within the IBIT ETF. Options trade volume consistently hits \$4B to \$5B per day, and IBIT options now rivals Deribit, previous market leader in the options space, for size across all dimensions. Options also tend to be a winner take all market, which is evidenced by options on FBTC, the second largest ETF by AUM, being 25x smaller than IBIT, with around \$1.3B in open interest.

**In our view, the launch of options on top of the spot ETFs is thus far an under-discussed, but highly important change in Bitcoin's recent market structure.**

We expect the growth in options will continue to play an increasingly significant role in how Bitcoin's volatility profile evolves on the road ahead.



## ETFs are increasingly used in volatility capture strategies.

It is important to recognise that not every buyer of the ETF is seeking long directional exposure to Bitcoin. Analysis of the SEC 13F filings for institutional holdings by TimechainIndex shows that many of these entities couple their spot ETF holdings with some set of futures or options exposure. This may be to express a specific directional or arbitrage strategy, or purely for the hedging of risk or volatility.

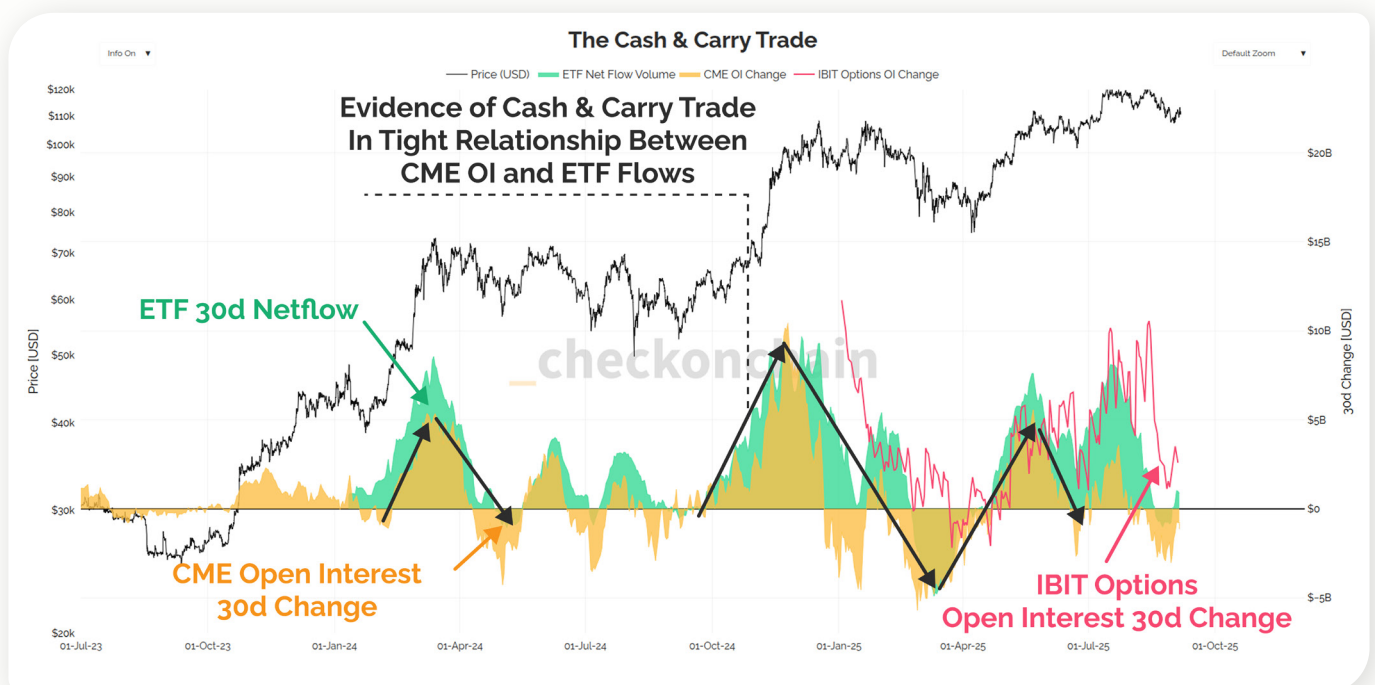
The chart below shows the 30-day change in three important metrics (all in USD) associated with the ETFs; netflows across all ETFs (green), the change in CME futures open interest (yellow), and the change in IBIT options open interest (red).

Whilst the tight relationship between all three traces does not indicate the three are perfectly linked, it does demonstrate that volatility capture strategies, and cash and carry basis trades are a key component of Bitcoin ETF demand.

Prior to the IBIT options going live in Nov'24, CME futures contracts traded at a fairly consistent 8% to 12% premium to the spot price. This enabled traders to perform a cash and carry basis trade, using any of the spot ETFs as the long side, and then shorting the CME futures to capture the premium.

That relationship between CME open interest and ETF flows was particularly strong until mid-2025, at which point the open interest in IBIT options started to more closely follow ETF netflow volumes. Whether Bitcoin derivatives are used to hedge risk, perform covered call strategies, or construct structured products, we expect further proliferation of these financial instruments, which will have an ever growing impact on the way Bitcoin markets trade moving forwards.

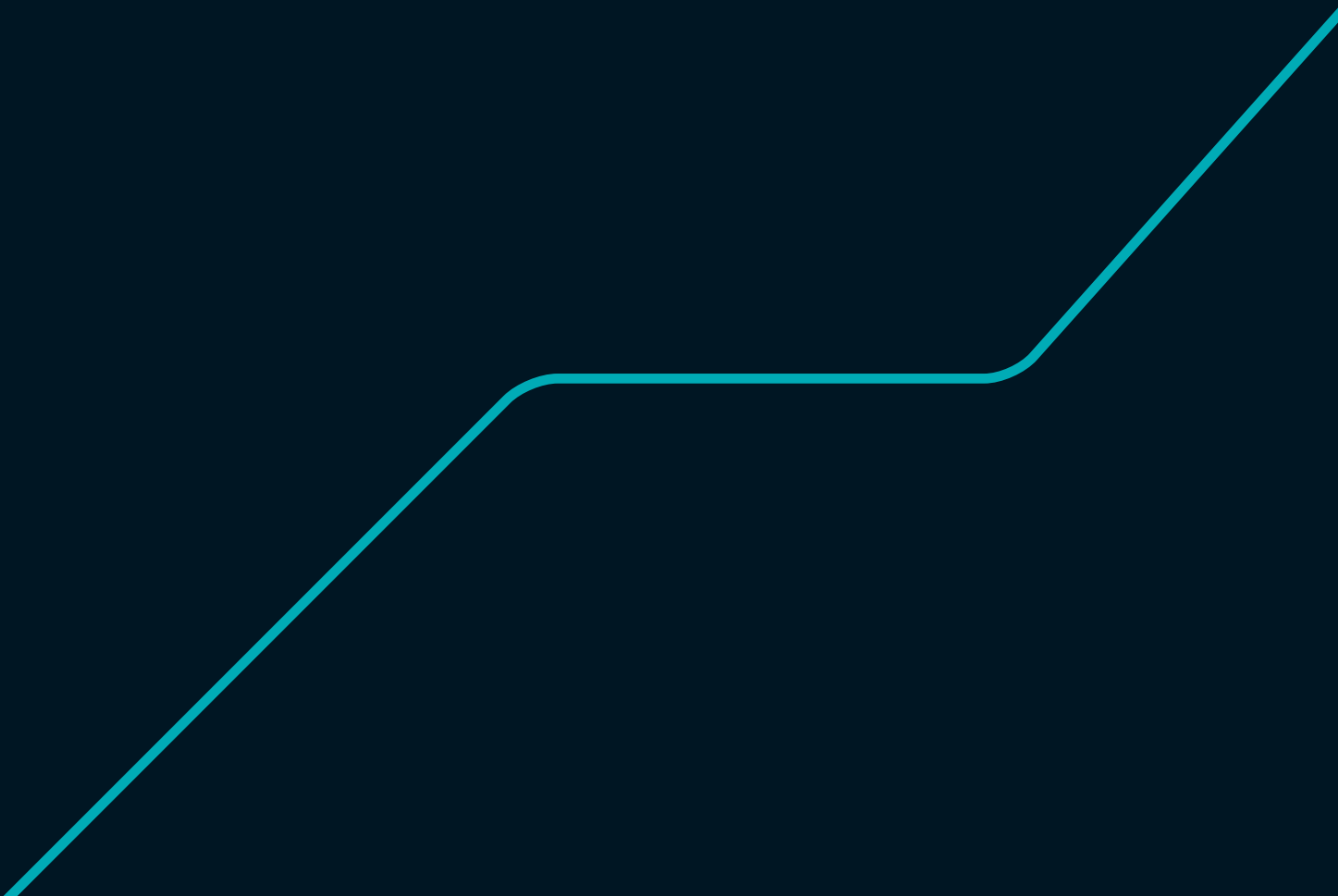
**The Bitcoin volatility profile has changed meaningfully this cycle, and it is our view that the rapid expansion of derivatives utilising the Bitcoin ETFs as the underlying is a key driver in this reshaping process.**



A cash and carry trade is an arbitrage position where the trader goes long spot, and shorts a futures contract which is trading at a premium to the spot price. Since they are both long and short simultaneously, they are not impacted by Bitcoin price fluctuations, and instead capture this premium as the spot price converges onto the futures price on the date of contract expiration.

**“Bitcoin will remain,  
in my opinion, a  
relentless anomaly  
that refuses to go  
away.”**

Andreas Antonopoulos



# short vol

**Bitcoin financial instruments proliferate**

Wall Street attempts to tame a wild horse

## 06. Derivatives & Leverage

### Futures open interest explodes to new ATH of \$87B.

The market for Bitcoin financial derivatives is frankly enormous, and until very recently, the landscape was dominated by futures contracts. The futures market consistently trades between \$80B to \$120B per day, making it 100x larger than the spot and ETF markets.

In terms of open interest, this cycle has seen the size of the futures market more than triple the heights seen in 2021, hitting a new ATH of ~\$87 Billion in notional open interest. A key development this cycle has been the growth of the CME Group contracts, which have now overtaken Binance as the market leader by open interest.

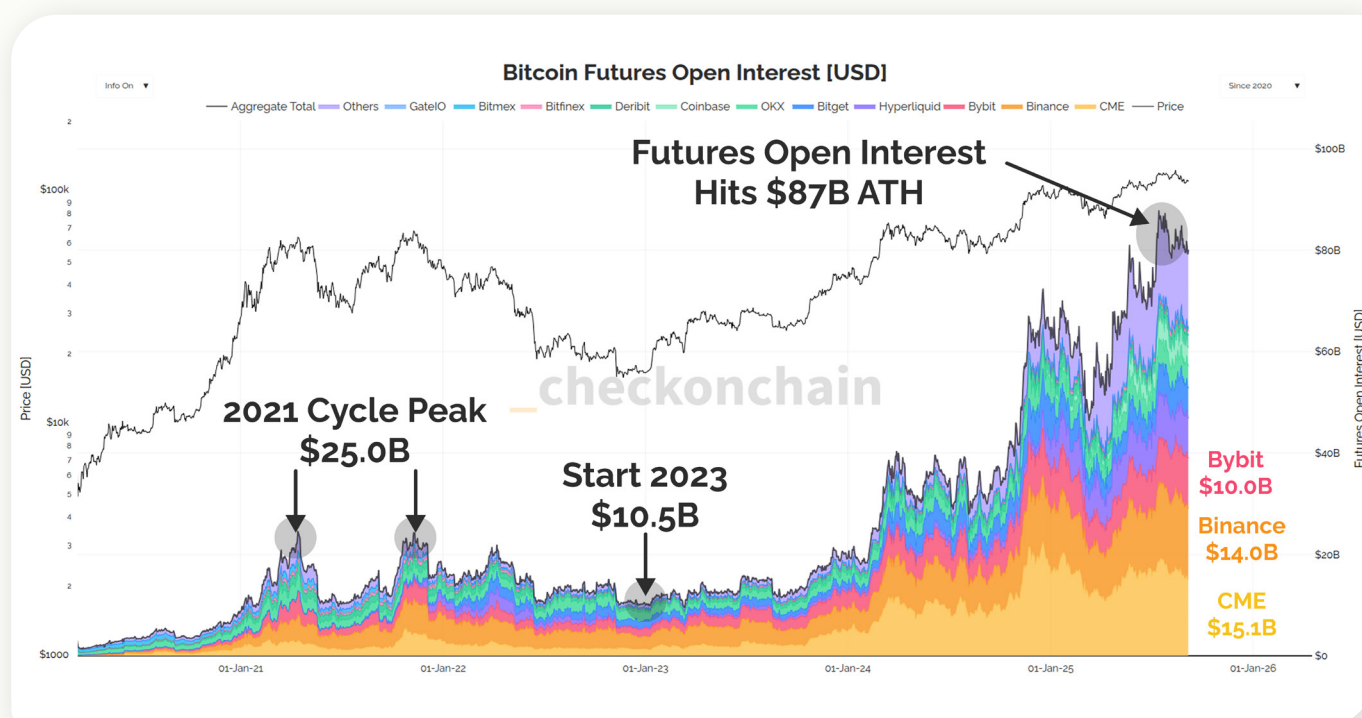
**Over \$15.1B worth of futures open interest are currently open via the regulated CME Group exchange, which represents an approximately 19.1% market share, whilst Binance has 17.6% market share.**

**This contrasts to the end of the 2022 bear market, where Binance dominance was 28.6%, and CME was just 11.0%.**

Whilst futures open interest and leverage has set multiple new highs this cycle, the underlying collateral used as margin is also a mirror image to the 2021 cycle. Back then, over 80% of futures positions used Bitcoin or other volatile crypto-assets as collateral, creating significant market fragility, and convexity to the downside.

Today, the margin ratio has flipped, with more than 80% of futures positions using fiat or stablecoins as collateral, which greatly reduces the negative convexity during price drawdowns.

**Whilst the size of the futures market is much larger than it was in the previous cycle, the underlying structure of the market is considerably healthier. There is limited volatility in the collateral being used as margin, and a much greater dominance of professional traders using regulated US exchanges.**



## Funding rates compress as futures markets mature.

The perpetual future is an innovation which was born out of the Bitcoin industry, and it was originally developed by BitMEX as a way to keep Bitcoin denominated futures contracts pegged to the spot index. These futures contracts utilise a funding rate, which is effectively an interest rate paid every 8-hours by long-side traders to the short-side, whenever the futures price trades above the spot index (and vice versa if below).

The more demand from traders for leveraged exposure to Bitcoin, the higher the futures price tends to trade above the spot index, which in turn creates a larger funding rate. This creates a growing incentive for short-side liquidity to arbitrage via a cash and carry trade, where they long spot, and short the perpetual futures contract to collect the funding premium.

**This cycle, we have seen funding rates at market local peaks hit annualised rates of between 15% and 50%. This is considerably lower than the wild 100%+ funding rates seen during the euphoric bull run in Q1 to Q2 of 2021.**

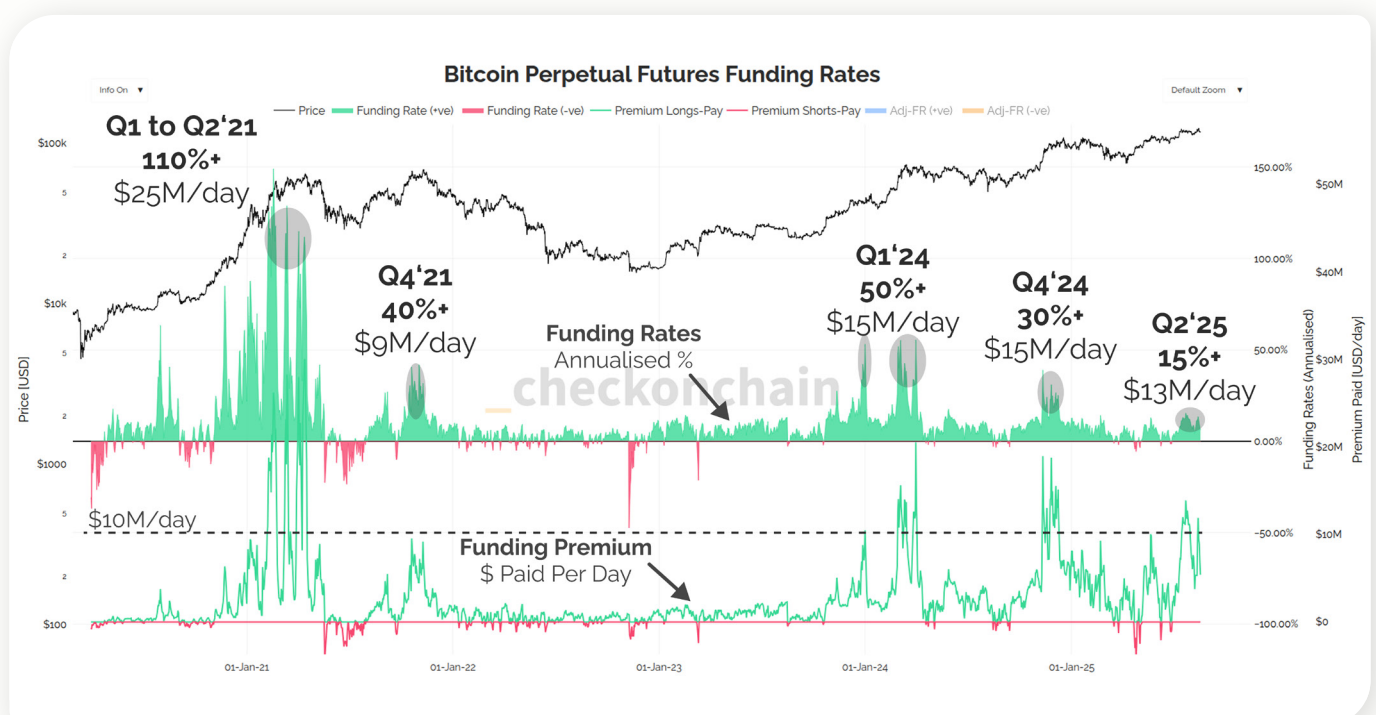
The leverage-fuelled mania we saw in 2021 was powered by Bitcoin futures contracts, many of

which applied up to 100x leverage, and which used Bitcoin as margin collateral. The unwind in May'21 resulted in a price drop of more than 50% over a few weeks, and caused a deleveraging of over 60% of futures open interest.

This cycle we have not seen any deleveraging events of a comparable scale, and funding rates have been comparatively tame. Given overall futures open interest is much higher today, we prefer to compare the total USD value paid in funding interest each day, which we call the 'funding premium'. By this measure, we can see that even though funding rates are lower by historical standards, those interest rates are applied to a much larger pool of open interest, resulting in a comparable funding premium of ~\$15M/day near price peaks.

**It is our view that the Bitcoin futures market has matured significantly since the last cycle. It is our sense that there is a much larger pool of sophisticated traders performing cash and carry style arbitrage to collect these premiums.**

Combined with the more stable fiat denominated collateral, this has reduced the propensity for perpetual futures markets to run excessively hot for too long, and has avoided any catastrophic deleveraging events so far.





## Options become the dominant derivative instrument.

Until very recently, the futures have always represented 60% or more of the global open interest in Bitcoin derivatives markets. However, since 2023, we have seen open interest in Deribit options (with 90%+ market share until very recently) expand at a rapid rate. Between Jan '23 and Nov'24, options open interest increased more than five fold, reaching over \$30 Billion, and trading around \$10 Billion in volume per day.

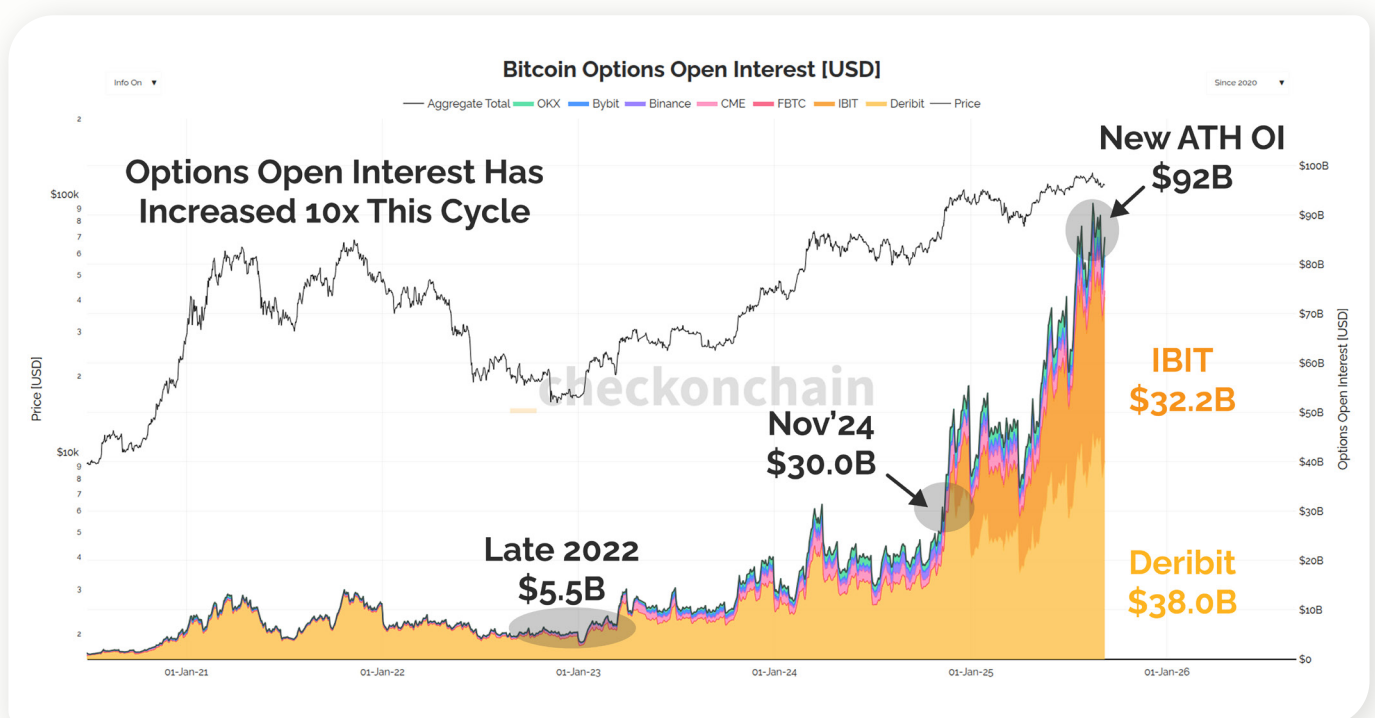
With the launch of IBIT options in Nov'24, this trend has only accelerated, with global options open interest blasting to a new ATH of \$92 Billion in Aug'25. In the span of less than 10-months, IBIT options now account for around 38% of open interest, and 46% of daily trade volume, and have eaten meaningfully into the market share of all competitors.

**Over the span of just 45-days after launch in Nov'24, IBIT options had already reached \$11.5 Billion in open interest, and now command a 30%+ market share.**

As we have established across several verticals already, this cycle has been punctuated by the rapid growth of regulated, institutional Bitcoin instruments such as CME Group futures, and IBIT options contracts. The previous 'crypto-native' market leaders like Binance and Deribit remain very large, however their dominance, market share, and thus influence over market structure has decreased significantly since 2023.

**If we had to put our finger on just one change in Bitcoin market structure which has had the largest impact on the volatility profile of the asset, the growing influence of regulated derivatives instruments is our obvious first choice.**

The Bitcoin market has become increasingly sophisticated, and stable, and the market structure supporting it continues to financially mature in leaps and bounds.



## Aggregate leverage ratio reaches new ATHs.

When we take a global look at Bitcoin derivatives markets, it becomes clear that the pace of open interest growth is now accelerating relative to the Bitcoin market cap. In the chart below, we have stacked the open interest of three different derivatives sectors to get a view of the global market size; futures (orange), options excluding the ETFs (green), and options for IBIT and FBTC (red).

**In total, aggregate open interest across these three sectors has recently hit a new ATH of \$178 Billion in Aug'25, which is more than a ten-fold increase since the start of 2023.**

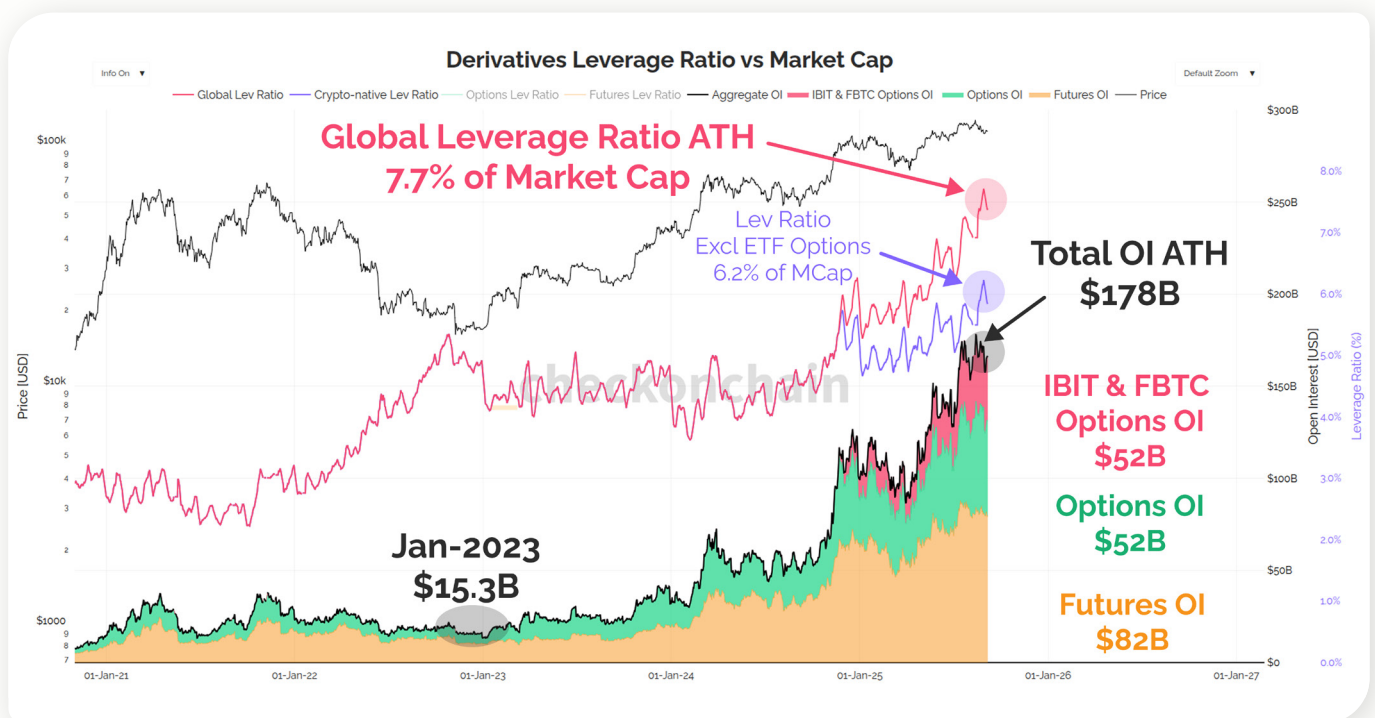
It is not unexpected to see the derivatives market increase in size as Bitcoin becomes more widely adopted and traded by institutional investors and traders. Prior to the IBIT options going live in Nov'24, the 'leverage ratio' had maintained a fairly steady range, with aggregate open interest being between 4% and 5% of the Bitcoin market cap.

Even when we exclude the IBIT and FBTC options markets, the leverage ratio for crypto-native exchanges (purple) has started climbing, and has reached a new ATH of 6.2% of the Bitcoin market cap.

In our view, there has been a marked uptick in speculative activity, and demand for leveraged exposure to Bitcoin in 2025, which is partly to account for this elevated leverage ratio.

**With the introduction of options using spot ETFs as the underlying, we have now seen aggregate leverage growing at an even faster rate, pushing the global leverage ratio to a record high, equivalent to 7.7% of the Bitcoin market cap.**

The Bitcoin derivatives market has been an important part of market structure for several years now, and was a key factor in shaping price performance during the previous 2020-22 cycle. However, it is becoming increasingly obvious that that was only the opening chapter, and all evidence is pointing to an increasingly dynamic interplay between futures, options, spot, and ETF markets. which must be accounted for by Bitcoin analysts



### The Bitcoin market has been lulled to sleep.

As the size of derivatives markets swell, and more leverage enters the market, the Bitcoin volatility profile has continued compressing. The periods of chopolidation, and the boring sideways price action have lulled the market to sleep.

Both implied and realised volatility are currently trading near historical lows, and options markets are pricing in implied volatility of less than 50% across all time-frames from 1-month out to 6-months. This has only been seen once in history, during the middle of 2023.

**The Bitcoin market has been lulled to sleep, and expectations for volatility on the road ahead are near historical lows. Either Bitcoin has become an orange coloured stablecoin, or volatility is mis-priced.**

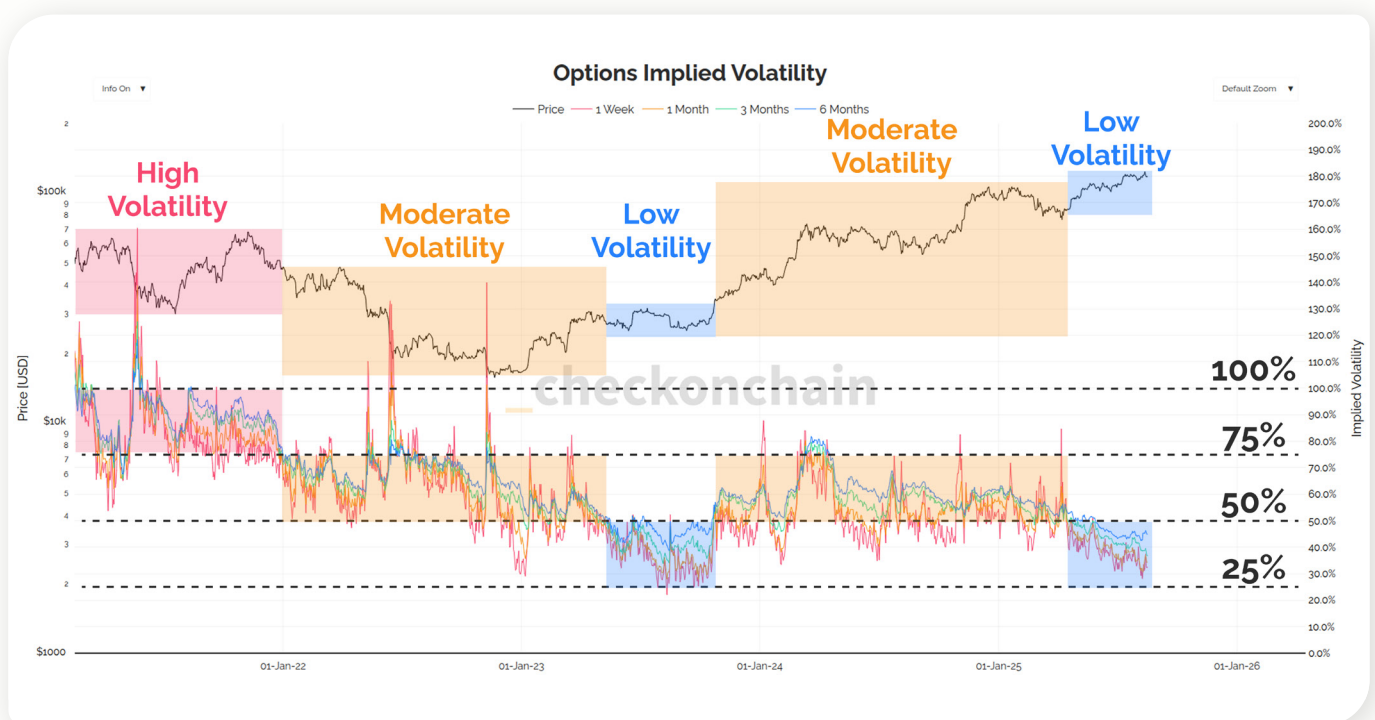
Whilst the compression of volatility as Bitcoin gets larger is arguably an expected result, it still remains one of the most unique assets in history, and it is our opinion we are some distance away from it reaching its full market potential.

Bitcoin is the first and only asset which is of a scale suitable for institutions to park significant sums of capital within, whilst also having a fixed supply, a religious holder-base and an infamous reputation for high volatility moves.

Given the extraordinary growth of the options market for IBIT, it is our expectation that strategies seeking to capture volatility premium, and structured products using derivatives will continue to be engineered, and come to market. The question is, will they be able to correctly position themselves for an asset that has a knack for surprising us?

**Like many of the insights we have covered in this report, we believe the starting chapter of the modern Bitcoin market has only just begun.**

We also believe Bitcoin has a particularly potent skill, where it takes complacent traders who believe they have tamed a wild horse, and expect it to behave the way they want, out to the woodshed, and it often does so in style.



# Concluding Thoughts

**This report has been an exploration of what we believe is the early innings of a modern, and notably more mature Bitcoin market. The way the price trades is different, the investor base is evolving, and the underlying market structure has changed forever.**

It is increasingly obvious now that the institutions are here, and the sheer volume of sell-side pressure which has been more than offset by fresh demand, is breathtaking. Bitcoin markets are now so liquid they can absorb several billions of dollars of both buy and sell-side volume, and the price barely flinches.

We believe the regular periods of boring sideways chopsolidation have acted to build up investor conviction, and instill significant confidence that Bitcoin belongs at an increasingly high price tag. Significant volumes of coins have already changed hands at a \$1 Trillion, and then a \$2 Trillion market cap, leaving us with the question of how many more Trillions are we heading towards?

It now feels normal to look at a six-figure Bitcoin price, and we can't imagine ourselves believing that sentence even a few years ago.

The constituents of the Bitcoin supply are also becoming increasingly complex, requiring analysis of ETFs, spot exchanges, public and private companies, sovereign nation states, and of course, the individual Bitcoiners who know

Bitcoin best. We have unparalleled insight into the holdings and fingerprints of the coins held within these buckets, and can model the swings in sentiment as price moves above and below their respective cost basis levels.

ETF flows need to be compared with changes in futures open interest, and spot trade volumes will increasingly be affected by the writers of call and put options who find themselves on the wrong side of the boat. Volatility capture strategies and structured products will seek to monetise Bitcoin's volatility profile, and Bitcoin has a unique way of throwing over-confident traders off the horse.

For us as Bitcoin analysts, watching Bitcoin grow up continues to be one of the most intellectually stimulating events in the world right now. One thing we are pretty confident in, is by the time everyone becomes comfortable with the new normal, the second chapter will start being written.

**And it is no doubt going to be full of surprises.**

# About Checkonchain

At Checkonchain, we view ourselves as your Bitcoin personal trainer, and our mission is to help you prepare for, and successfully navigate the volatility of the Bitcoin market. We believe that a solid understanding of why markets move the way they do helps you plan ahead and make better decisions with confidence.

We approach our analysis from a unique perspective grounded in Bitcoin's on-chain data.

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# checkonchain

**Checkonchain** provide investors straightforward, data-driven Bitcoin market analysis from a unique perspective grounded in onchain data. Our mission is to help you prepare for, and successfully navigate the volatility of the market, helping you anticipate shifts and make confident, informed decisions in this ever-changing environment.

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## Questions or Enquiries?

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