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Bitcoin in multi-asset portfolios

Adding bitcoin to a global 60/40 portfolio improves the risk-return profile

WisdomTree Market Insights



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Executive summary

- 1.** Fifteen years on from its inception, bitcoin has carved out a notable 1.3% share of the global market portfolio¹— a clear signal of its arrival as a mainstream financial asset.
- 2.** Its powerful combination of strong historical returns, low correlation with traditional assets, and asymmetric upside makes bitcoin a high conviction addition to any diversified multi-asset portfolio.
- 3.** The data is compelling: even a modest allocation to bitcoin can meaningfully enhance returns with only a marginal increase in risk, resulting in a superior risk-adjusted performance.
- 4.** Bitcoin's volatility is undeniable. But when positioned prudently and actively rebalanced, its influence on portfolio drawdowns remains limited while the potential for outsized gains can significantly elevate overall performance.

Bitcoin is no longer a fringe experiment. After weathering over 15 years of scrutiny and scepticism, it is now forcing a rethink across institutional circles. The arrival of institutional grade exchange-traded products (ETPs) in key markets — many with management expense ratios (MERs) below 30 basis points (bps) — has moved bitcoin into the financial mainstream.

It is no longer about whether bitcoin could belong in portfolios. For multi-asset allocators, the real question is: how can you still justify leaving it out?

Cryptocurrencies in the market portfolio: a 1.3% allocation is the neutral baseline

The market portfolio represents the global, market-cap-weighted mix of all investable assets — essentially, the benchmark for a truly diversified investor. For most, it serves as the 'neutral' allocation from which active over or underweights are made based on strategic and tactical views.

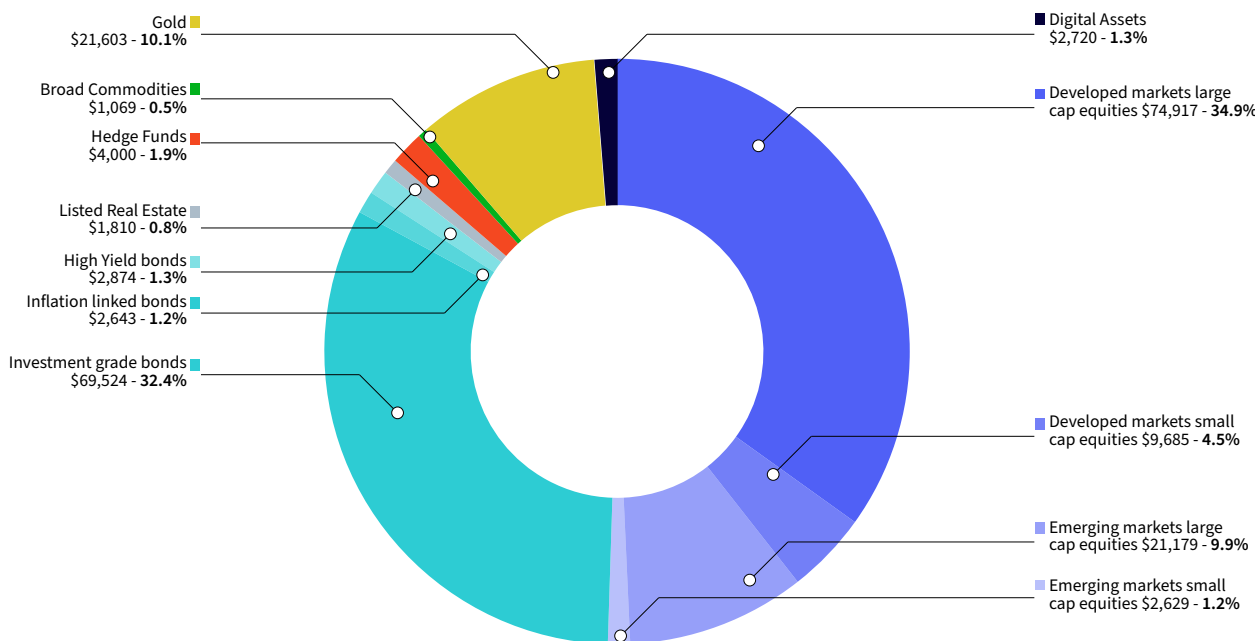
At a high level, the global market portfolio today consists of approximately 51% equities, 35% bonds, and 14% alternatives — a modern echo of the traditional 60/40 portfolio. But dig deeper, and a striking detail emerges: cryptocurrencies currently account for around 1.3% of the total market portfolio.

That means a truly neutral investor — someone simply tracking global market weights — would allocate 1.3% to crypto. Choosing zero exposure is not neutrality. It is an active underweight, a bet that digital assets will shrink in relevance or vanish altogether. That is not a conservative

¹ Bloomberg, WisdomTree. As of 31 March 2025.

view; it is a bold, directional call. And in today’s evolving financial landscape, that kind of positioning deserves to be scrutinised.

Figure 1: The market portfolio



Source: Bloomberg, WisdomTree. As of 31 March 2025. Market caps are shown in billions of US dollars. You cannot invest directly in an index. Historical performance is not an indication of future performance and any investment may go down in value.

Cryptocurrencies as a distinct asset class: bitcoin’s exceptional growth profile

With over 15 years of existence, bitcoin has evolved into a sufficiently mature asset to merit historical analysis. While the early years are less instructive due to limited market depth and liquidity, the past eleven years provide a meaningful dataset to evaluate its performance within a broader asset allocation context.

When comparing annual returns across major asset classes, bitcoin’s performance is hard to ignore. In eight of the past eleven calendar years, it claimed the title of top-performing asset — often by a wide margin over traditional assets. In the remaining three years, it ranked as the worst performer, underscoring bitcoin’s signature volatility and asymmetric return profile.

So far this year, bitcoin sits at the bottom of the leaderboard among major assets, following a sharp pullback after its powerful rally into early 2025. But the year is still young and history suggests that bitcoin’s fortunes can pivot rapidly.

Figure 2: Asset classes ranked by calendar year performance

2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
REITS (15.9%)	Bitcoin (36.2%)	Bitcoin (120.3%)	Bitcoin (1403.2%)	Treasuries (-0.4%)	Bitcoin (94.8%)	Bitcoin (305.1%)	Bitcoin (59.8%)	Commodities (16.1%)	Bitcoin (152.9%)	Bitcoin (123.5%)	Gold (19.4%)
Infrastructure (7.4%)	REITS (0.1%)	High Yield (14.3%)	Equities (24.0%)	Gold (-0.9%)	Equities (26.6%)	Gold (24.6%)	REITS (27.2%)	Gold (0.4%)	Equities (22.2%)	Gold (25.5%)	Infrastructure (9.8%)
Equities (4.2%)	Small Caps (-1.0%)	Commodities (11.8%)	Small Caps (23.8%)	IG Bonds (-1.2%)	Small Caps (24.7%)	Small Caps (16.3%)	Commodities (27.1%)	Infrastructure (-4.7%)	Small Caps (16.8%)	Equities (17.5%)	Commodities (8.9%)
Corporates (2.9%)	Equities (-2.4%)	Small Caps (11.6%)	Gold (12.7%)	Corporates (-3.2%)	REITS (23.1%)	Equities (16.3%)	Equities (18.5%)	High Yield (-12.7%)	Gold (14.6%)	Infrastructure (16.5%)	Corporates (2.8%)
Small Caps (1.8%)	High Yield (-2.7%)	Gold (8.1%)	REITS (11.4%)	High Yield (-4.1%)	Infrastructure (21.6%)	Corporates (10.0%)	Small Caps (16.1%)	IG Bonds (-16.2%)	High Yield (14.0%)	High Yield (9.2%)	IG Bonds (2.6%)
IG Bonds (0.6%)	IG Bonds (-3.2%)	Infrastructure (8.0%)	High Yield (10.4%)	REITS (-4.7%)	Gold (18.4%)	Treasuries (9.5%)	Infrastructure (6.3%)	Corporates (-17.0%)	REITS (10.9%)	Small Caps (7.7%)	Treasuries (2.6%)
Gold (0.1%)	Treasuries (-3.3%)	Equities (7.9%)	Infrastructure (9.8%)	Infrastructure (-5.3%)	High Yield (12.6%)	IG Bonds (9.2%)	High Yield (1.0%)	Treasuries (-17.5%)	Corporates (9.2%)	Commodities (5.4%)	REITS (1.9%)
High Yield (0.0%)	Corporates (-3.6%)	REITS (5.0%)	Corporates (8.9%)	Equities (-9.4%)	Corporates (10.7%)	High Yield (7.0%)	Corporates (-3.2%)	Equities (-18.4%)	IG Bonds (5.7%)	REITS (2.0%)	High Yield (1.8%)
Treasuries (-0.8%)	Infrastructure (-6.2%)	Corporates (3.7%)	IG Bonds (7.4%)	Commodities (-11.2%)	Commodities (7.7%)	Infrastructure (0.1%)	Gold (-4.3%)	Small Caps (-18.7%)	Treasuries (4.2%)	Corporates (0.7%)	Equities (-1.3%)
Commodities (-17.0%)	Gold (-12.1%)	IG Bonds (2.1%)	Treasuries (7.3%)	Small Caps (-14.4%)	IG Bonds (6.8%)	Commodities (-3.1%)	IG Bonds (-4.7%)	REITS (-24.4%)	Infrastructure (3.4%)	IG Bonds (-1.7%)	Small Caps (-4.0%)
Bitcoin (-57.5%)	Commodities (-24.7%)	Treasuries (1.7%)	Commodities (1.7%)	Bitcoin (-74.3%)	Treasuries (5.6%)	REITS (-8.2%)	Treasuries (-6.6%)	Bitcoin (-64.2%)	Commodities (-7.9%)	Treasuries (-3.6%)	Bitcoin (-12.1%)

Source: Bloomberg, WisdomTree. From 31 December 2013 to 31 March 2025 in US dollars. You cannot invest directly in an index. Historical performance is not an indication of future performance and any investment may go down in value.

Cryptocurrencies: a standout asset class for risk-on diversification

Performance matters but in a well-constructed multi-asset portfolio, diversification matters more. What drives an asset’s value in asset allocation is not just its returns, but how those returns move in relation to the rest of the portfolio.

This is where digital assets stand out. Thanks to their unconventional origin and unique ecosystem, cryptocurrencies do not behave like traditional financial instruments — and neither do their participants. Users and developers often act outside the norms of typical market behaviour. While this unpredictability has been a barrier to institutional adoption, it is also precisely what makes them so valuable from a diversification standpoint.

As shown in Figure 3, bitcoin’s monthly USD return correlations remain distinctly low versus a wide range of traditional exposures — equities, bonds, commodities, and alternatives. Most traditional assets classes show meaningful correlation to at least one other asset class. Bitcoin does not. Its correlation with equities, for example, consistently stays below 25%, and is lower than the correlation between commodities and equities.

Figure 3: Bitcoin correlation to remaining asset classes is exceptionally low

	Equities	Small Caps	All Fixed Income	IG Bonds	Treasuries	Corporates	High Yield	Commodities	Gold	Infrastructure	REITS	Legend
Bitcoin	19%	22%	11%	10%	10%	11%	17%	13%	7%	15%	13%	1.0
Equities		95%	35%	31%	22%	48%	79%	42%	18%	80%	79%	0.9
Small Caps			37%	33%	24%	50%	81%	44%	20%	78%	83%	0.8
All Fixed Income				100%	98%	95%	60%	15%	54%	47%	54%	0.7
IG Bonds					99%	93%	56%	13%	54%	43%	51%	0.6
Treasuries						87%	46%	9%	55%	36%	43%	0.5
Corporates							75%	18%	47%	57%	65%	0.4
High Yield								39%	31%	73%	78%	0.3
Commodities									34%	39%	34%	0.2
Gold										29%	30%	0.1
Infrastructure											83%	-

Source: Bloomberg, WisdomTree. From 31 December 2013 to 31 March 2025 in US dollars. Correlation based on weekly returns. You cannot invest directly in an index. Historical performance is not an indication of future performance and any investment may go down in value.

It’s worth emphasizing that bitcoin’s growing adoption has not meaningfully altered its correlation profile. Even over the past two years when institutional participation and broader market integration have accelerated, bitcoin’s weekly return correlations with traditional asset classes have remained low, typically hovering around or below 20%.

This persistent decorrelation, combined with bitcoin’s asymmetric return potential, reinforces its case as a powerful addition to the alternatives sleeve in any strategic asset allocation. It is not just a high-growth asset — it is one that truly moves differently.

The impact of adding just 1% of bitcoin to a classic multi-asset portfolio

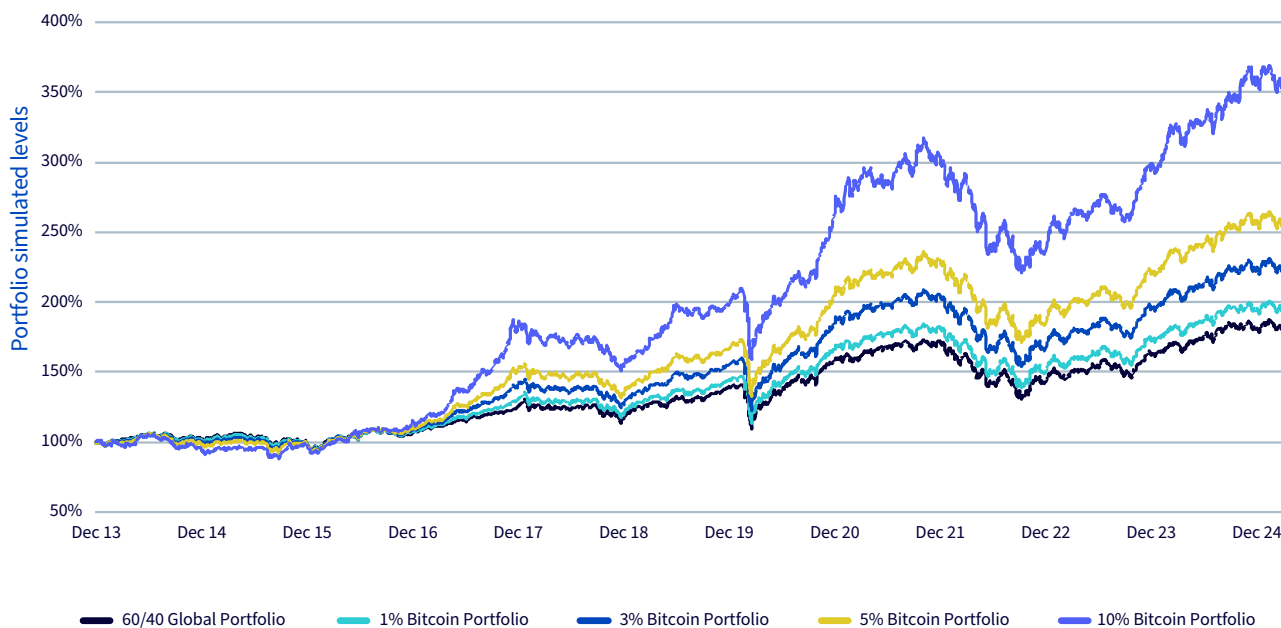
Even modest bitcoin allocations can materially influence portfolio outcomes. The analysis focuses on illustrative constant-mix portfolios that are rebalanced monthly. The baseline is a traditional 60/40 Global Portfolio, with 60% allocated to global equities (via the MSCI ACWI Net Total Return Index, including emerging markets) and 40% to global bonds (via the Bloomberg Barclays Mutiverse Total Return Index, covering treasuries, investment grade corporates, and high yield).

Bitcoin is then introduced at incremental levels: 1%, 3%, 5%, and 10%, by proportionally trimming the original 60/40 exposure. All simulations are run in US dollars and are intended for illustrative purposes.

Figure 4 highlights the cumulative historical performance of these portfolios. As expected, higher bitcoin allocations lead to stronger returns. But the scale of improvement is noteworthy:

- + A 1% bitcoin allocation boosted returns by 0.65% over the standard 60/40 mix.
- + A 5% allocation drove an impressive 3.25% outperformance.

Figure 4: Historical performance of example portfolios, including increasing proportions of bitcoin



	60/40 Global Portfolio	1% Bitcoin Portfolio	3% Bitcoin Portfolio	5% Bitcoin Portfolio	10% Bitcoin Portfolio	MSCI AC World	Bloomberg Multiverse	Bitcoin
Annualised return	5.41%	6.06%	7.36%	8.66%	11.85%	8.43%	0.58%	51.91%
Volatility	8.76%	8.83%	9.12%	9.59%	11.38%	13.89%	5.03%	66.73%
Sharpe ratio	0.43	0.50	0.62	0.73	0.89	0.49	-0.21	0.75
Information ratio		0.97	0.96	0.96	0.96			
Beta	70%	71%	73%	75%	81%	100%	24%	182%
Max drawdown	-24.4%	-24.9%	-26.1%	-27.3%	-30.2%	-33.7%	-25.3%	-83.1%
Up capture	67.9%	70.4%	75.4%	80.2%	92.1%	100.0%	18.8%	241.2%
Down capture	69.5%	69.3%	69.0%	68.7%	68.3%	100.0%	24.9%	97.8%

Source: Bloomberg, WisdomTree. From 31 December 2013 to 31 March 2025 in US dollars. Based on daily returns. The 60/40 Global Portfolio is composed of 60% MSCI AC World and 40% Bloomberg Multiverse. You cannot invest directly in an index. Historical performance is not an indication of future performance and any investment may go down in value. For illustrative purposes only.

The statistics table also reveals several interesting takeaways that warrant closer examination:

- + Volatility increases were surprisingly modest. Despite bitcoin’s reputation for high volatility, its impact at low allocation levels is minimal. The 1% Bitcoin Portfolio, for example, saw volatility rise by just 7 basis points — a negligible trade-off given the return enhancement.

- + Drawdown impact remained constrained. Even during market stress, the downside risks from small bitcoin allocation were limited. The maximum drawdown for the 1% Bitcoin Portfolio increased by just 0.5%, suggesting that bitcoin's high volatility does not fully translate into portfolio-level vulnerability.

These results challenge the perception that bitcoin meaningfully compromises portfolio risk metrics at low allocations. The data instead points to a compelling asymmetry: minor increase in risk, with potentially outsized return benefits.

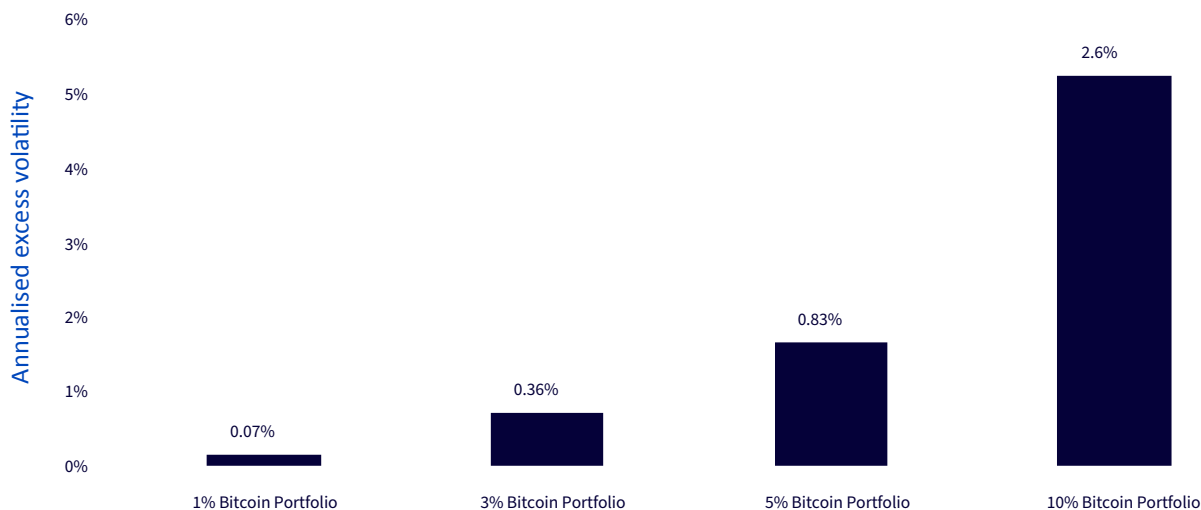
Adding bitcoin significantly enhanced historical risk-adjusted returns

While bitcoin's outperformance over the period is well-documented, it's often dismissed due to its high volatility. But that view overlooks a critical factor: bitcoin's low correlation with traditional assets. This diversification effect dramatically reduces the impact of its volatility at the portfolio level.

Take the 1% Bitcoin Portfolio — it delivered stronger returns with only 7 bps of additional volatility. Even at 5% allocation, volatility rose by just 83 bps. That's a far cry from what you would expect if bitcoin's volatility of nearly 67% flowed directly through to the portfolio. Based on simple maths, we would expect a 1% allocation to add 67 bps and 5% allocation to add 335 bps. The actual increase is significantly lower.

This underlines the power of diversification: even a highly volatile asset such as bitcoin can enhance a portfolio's Sharpe ratio when its correlation is low enough. The result? Stronger returns with only marginally higher risk — a compelling proposition for forward-thinking allocators.

Figure 5: Annualised excess volatility of the example bitcoin portfolios versus the 60/40 Portfolio



Source: Bloomberg, WisdomTree. From 31 December 2013 to 31 March 2025 in US dollars. Based on daily returns. The 60/40 Global Portfolio is composed of 60% MSCI AC World and 40% Bloomberg Multiverse. **You cannot invest directly in an index. Historical performance is not an indication of future performance and any investment may go down in value. For illustrative purposes only.**

When weighed against the performance uplift, the risk-adjusted benefits of adding bitcoin are even more compelling. The risk/return efficiency of the portfolio improves markedly, with the Sharpe ratio rising across all bitcoin-tilted portfolios.

In addition, in the 1% Bitcoin Portfolio we see 7 bps of additional risk and 65 bps of additional return relative to the 60/40 Global Portfolio, resulting in an information ratio of 0.97.

That is a standout outcome — one that most active managers struggle to deliver over time. In other words, for a fraction of additional risk, investors can unlock institutional-grade performance enhancement through disciplined bitcoin allocation.

Bitcoin: an asymmetric asset with an asymmetric portfolio impact

While volatility and tracking error are useful metrics, they are far from the full picture. Many investors are ultimately more concerned with downside-focused risk measures, such as drawdowns and value at risk, when evaluating new exposures.

Figure 6 compares the one-year rolling relative performance of a 3% Bitcoin Portfolio versus the 60/40 Global Portfolio. Green zones represent periods where bitcoin added value and red zones show periods of underperformance.

The results are telling as the green zones dominate, reflecting bitcoin’s strong contribution

during bull markets. Meanwhile, the red zones are comparatively narrow and shallow. This reinforces the core insight: bitcoin’s historical return profile is highly asymmetric.

Yes, bitcoin can experience steep drawdowns losing up to 70-80% in extreme periods. But with disciplined sizing, the impact on the overall portfolio remains muted. In contrast, when bitcoin rallies, it can deliver sizeable contributions to portfolio performance.

Figure 6: 3% Bitcoin Portfolio relative one-year rolling performance versus the 60/40 Portfolio



Source: Bloomberg, WisdomTree. From 31 December 2013 to 31 March 2025 in US dollars. Based on daily returns. The 60/40 Global Portfolio is composed of 60% MSCI AC World and 40% Bloomberg Multiverse. You cannot invest directly in an index. Historical performance is not an indication of future performance and any investment may go down in value.

Digging into the numbers, the 3% Bitcoin Portfolio outperformed the traditional 60/40 Global Portfolio in 75.7% of all rolling one-year periods. That is a powerful hit rate.

Looking at the extremes highlights bitcoin’s asymmetric contribution even further:

- + In the top 5% of outperformance periods, the 3% Bitcoin Portfolio beat the 60/40 Global Portfolio by 9.0%.
- + In the worst 5% of periods, the underperformance was limited to just 2.1%.

This stark contrast underscores bitcoin’s asymmetric impact: limited downside drag, but explosive upside potential.

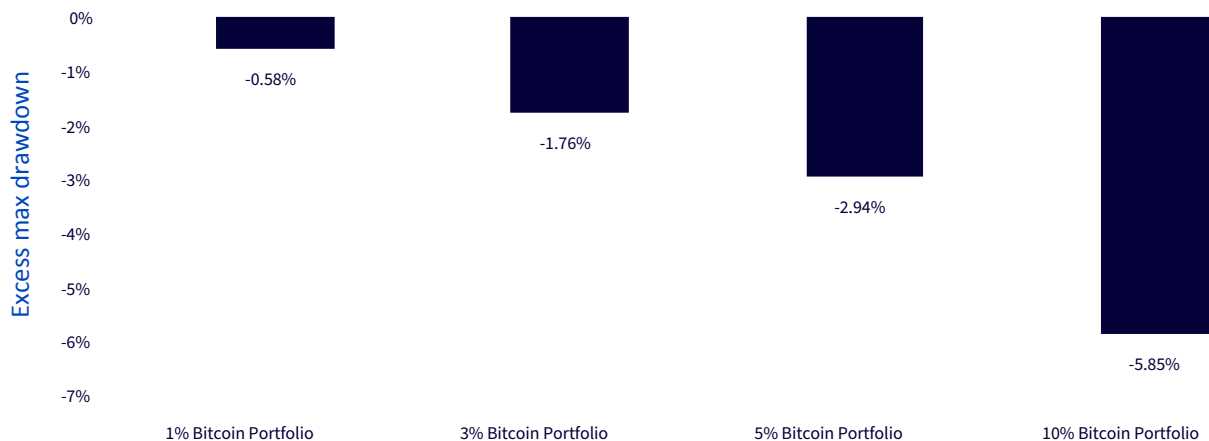
Limited portfolio downside despite bitcoin’s deep drawdowns

Focusing purely on the downside, Figure 7 exhibits the impact of bitcoin allocation during the worst periods for the asset:

- + 2014 and up to 14 January 2015 — bitcoin lost 75.5%

- + 18 December 2017 to 14 December 2018 — bitcoin lost 83.1%
- + 10 November 2021 to 21 November 2022 — bitcoin lost 72.8%

Figure 7: Relative drawdown during periods of intense pressure on bitcoin



Source: Bloomberg, WisdomTree. From 31 December 2013 to 31 March 2025 in US dollars. Based on daily returns. The 60/40 Global Portfolio is composed of 60% MSCI AC World and 40% Bloomberg Multiverse. **You cannot invest directly in an index. Historical performance is not an indication of future performance and any investment may go down in value. For illustrative purposes only.**

Despite these drastic asset-level losses, the 1% Bitcoin Portfolio experienced drawdowns of less than 0.6% during the same periods which is remarkably contained.

Yes, bitcoin adds risk, but significantly less than its volatility would suggest when properly sized. Historically, the performance upside has far outweighed the incremental downside, enhancing the overall risk-return profile of multi-asset portfolios.

Rebalancing frequency impacts the relative risk created when adding bitcoin

Given bitcoin’s high volatility, operational factors — especially rebalancing frequency — can materially affect portfolio behaviour. Infrequent rebalancing allows bitcoin’s allocation to drift significantly, particularly during bull runs, amplifying portfolio risk far beyond the initial sizing.

For example, failing to rebalance the 1% Bitcoin Portfolio frequently would have led to substantial bitcoin overweighting. Had the portfolio only been rebalanced annually, the bitcoin allocation would have ballooned to 14.4% by late 2017, transforming a marginal position into a major risk driver.

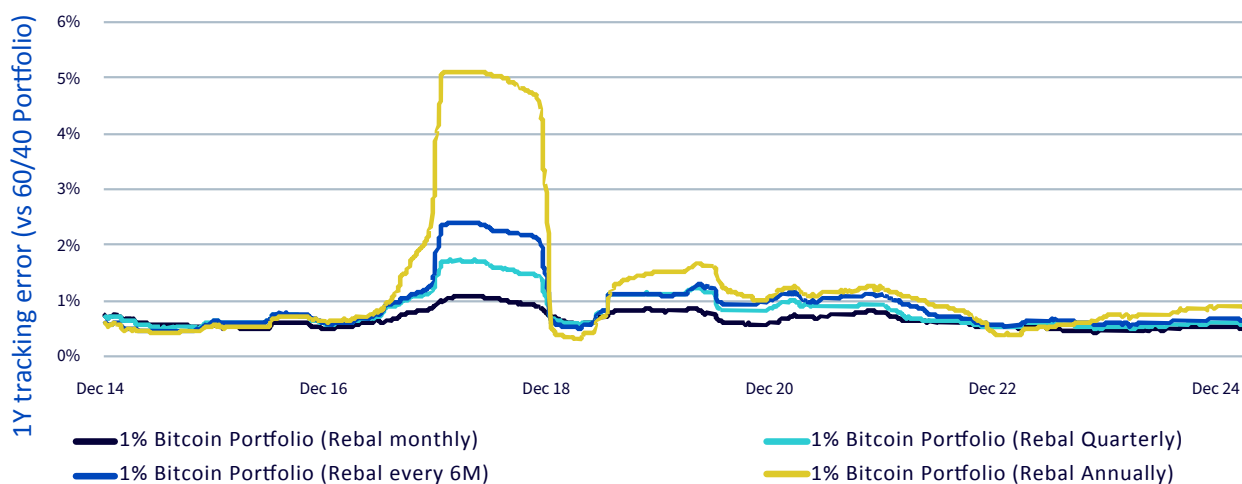
Figure 8 quantifies this effect by showing the one-year tracking error of the 1% Bitcoin Portfolio versus the 60/40 Global Portfolio:

- + With monthly rebalancing, tracking error remains contained, staying below 1.1%.

- + With annual rebalancing, it can spike to 5%, due entirely to the allocation drifting during bitcoin rallies.

The message is clear: disciplined, frequent rebalancing is essential to maintaining control over portfolio risk while capturing bitcoin’s upside. Letting the position drift can turn a diversifier into a dominant and volatile exposure.

Figure 8: Impact of rebalancing frequency on the relative risk of bitcoin portfolios over time



Source: Bloomberg, WisdomTree. From 31 December 2013 to 31 March 2025 in US dollars. Based on daily returns. The 60/40 Global Portfolio is composed of 60% MSCI AC World and 40% Bloomberg Multiverse. You cannot invest directly in an index. Historical performance is not an indication of future performance and any investment may go down in value. For illustrative purposes only.

Given the extreme volatility and wide price swings typical of cryptocurrency markets, infrequent rebalancing is likely suboptimal for most investors. A more disciplined, systematic approach is essential to manage risk and capture upside effectively:

- + Bitcoin’s sharp price movements create opportunities for active risk management. These conditions tend to favour rebalancing strategies, such as a constant mix approach, that systematically take profits during rallies and reinvest during downturns.
- + Systematic profit-taking helps lock in gains and reallocate excess returns from bitcoin into lower-risk segments of the portfolio, maintaining balance while preserving upside.

In short, regular rebalancing is not just a risk-control mechanism; it’s a return optimisation tool in the context of highly volatile assets such as bitcoin.

Appendix

Figure 9: Assets used in our analyses

Short name	Long name	Bloomberg ticker
Digital assets	MarketVector Digital Assets 100	MVDA
Bitcoin	Bitcoin	XBTUSD
Equities	MSCI All Country World net TR	NDUEACWF
Small caps	MSCI All Country World Small Cap net TR	M1WDSC
All fixed income	Bloomberg Multiverse TR	LF93TRUU
IG bonds	Bloomberg Global Aggregate TR	LEGATRUU
Treasuries	Bloomberg Global Aggregate Treasuries TR	LGTRTRUU
Corporates	Bloomberg Global Aggregate Corporates TR	LGDRTRUU
High yield	Bloomberg Global High Yield TR	LG30TRUU
Commodities	Bloomberg Commodity TR	BCOMTR
Gold	LBMA Gold Price PM USD	GOLDLNPM
Infrastructure	MSCI World Infrastructure net TR	M1WO0INF
REITS	FTSE EPRA NARIET Developed TR	RUGL

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