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Investment perspectives
December 2024

Sizing bitcoin in portfolios

For investors who wish to include bitcoin in a multi-asset portfolio, we outline an approach for how to think about sizing the allocation to it.

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Summary

- Since its inception in 2009, bitcoin has boomed and helped spur the launch of a wide variety of cryptocurrencies. Over its short history, bitcoin has seen both major surges and selloffs. This volatility, plus bitcoin's unique characteristics, raises the question of what role it should play in portfolios.
- Bitcoin's value rises when its predetermined supply is met with growing demand – and demand changes based on evolving investor belief in bitcoin's potential to become more widely adopted. Case in point: The run-up to record highs after the U.S. election reflects investors upping the chance of greater adoption given President-elect Donald Trump's statements and personnel picks supportive of cryptocurrencies.
- The potential for future widespread adoption is thus central to the investment case for bitcoin. We believe it is the period leading up to largescale adoption where the biggest future return potential could lie.
- What could spur wider adoption of bitcoin? We see several factors at play. It allows for seamless and instant transactions across borders, anyone can participate in it and it's decentralized, with no direct government ability to increase or decrease supply.
- Taking all this into account, we do see a case for including bitcoin in multi-asset portfolios – provided you believe it will become more widely adopted in the future and are comfortable bearing the risk of potentially rapid price plunges. That's why investors need to balance the pros and cons when deciding whether to allocate to bitcoin.
- Investors size allocations for stocks, bonds and private market assets by considering the asset's expected returns and risk, along with how its returns correlate with the other assets in the portfolio. But they need to think about bitcoin's expected returns in a different way: it has no underlying cash flows for estimating future returns. What matters: the extent of adoption. Bitcoin may also provide a more diversified source of return: we see no intrinsic reason why bitcoin should be correlated with major risk assets over the long term given its value is driven by such distinct drivers.
- So how can investors think about a bitcoin allocation? Bitcoin cannot be compared to traditional assets. But from a portfolio construction perspective, the "magnificent 7" group of mostly mega cap tech stocks is a useful starting point. Those stocks represent single portfolio holdings that account for a comparatively large share of portfolio risk as with bitcoin. In a traditional portfolio with a mix of 60% stocks and 40% bonds, those seven stocks each account for, on average, about the same share of overall portfolio risk as a 1-2% allocation to bitcoin. We think that's a reasonable range for a bitcoin exposure. Why not more? Going beyond that would sharply increase bitcoin's share of the overall portfolio risk.
- Looking ahead, should bitcoin indeed achieve broad adoption, it could potentially also become less risky – but at that point it might no longer have a structural catalyst for further sizable price increases. The case for a long-term holding may then be less clear-cut, and investors may prefer to use it tactically to hedge against specific risks, similar to gold.

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Bitcoin's value drivers

Since its inception in 2009, bitcoin has boomed and helped spur the launch of a wide variety of cryptocurrencies. In recent weeks, bitcoin has skyrocketed close to US$2 trillion in market value. Bitcoin itself is maturing as a digital asset and becoming more accessible to investors via exchange-traded products (ETPs) and other funds that now hold over $100 billion of bitcoin, Bloomberg reports.

Bitcoin's value rises when its predetermined supply is met with growing demand – and demand changes based on evolving investor belief in bitcoin's potential to become more widely adopted. Case in point: Bitcoin soared to new record highs after Donald Trump's win in the 2024 U.S. presidential election. Since then, Trump's statements and personnel picks supportive of cryptocurrencies have reinforced hopes that wider adoption is now more likely. The predetermined supply of bitcoin – with future issuance through mining well known in advance – could also spark some hoarding of the digital currency. As with gold, bitcoin can be driven by sentiment, narratives and momentum – both up and down.

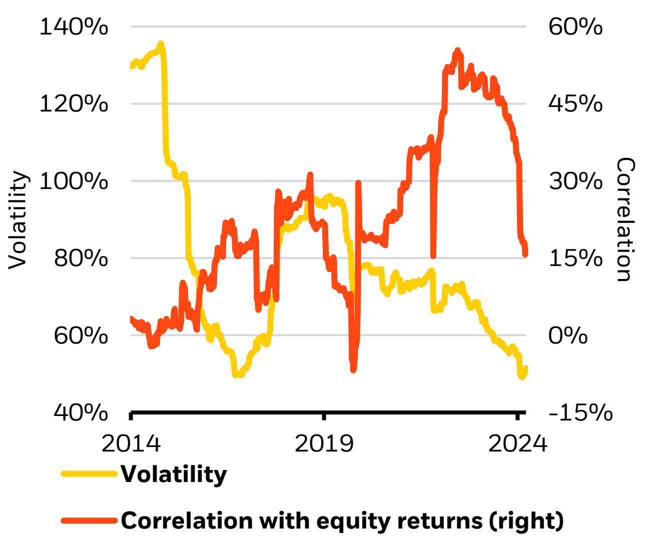
We believe the period leading up to widespread adoption could be where the biggest future return potential lies. We see several factors that could spur wider adoption of bitcoin. As a digital currency that anyone can use, it allows for seamless and instant transactions across borders. It is decentralized and governments are not able to increase or decrease its supply. In an era of geopolitical fragmentation, bitcoin's decentralized nature could make it even more valuable. Indeed, some governments have shifted some of their currency reserves away from the U.S. dollar and into gold. Others have recently made explicit use of traditional finance for political objectives. Bitcoin is also perceived to be immune from the effects of persistent government budget deficits, ever-rising debt and higher inflation eroding the value of sovereign currencies.

Since the drivers of bitcoin's value are quite different than those for traditional assets, that should make bitcoin less correlated with major risk assets over the long term. In other words, it could offer investors a more diversified source of return. The correlation between bitcoin and equity returns has typically been low in the short history we have. Yet we have seen brief periods when bitcoin's value has followed risk assets much more closely. See the left chart. This shows that investors may not be able to rely on it as reliable cushion against risk-off sentiment hitting other parts of the portfolio.

Investors should also be alert to bitcoin's risks. It may not ultimately achieve broader adoption. And it remains highly volatile and vulnerable to sharp selloffs. Over its short history, bitcoin has seen major selloffs of 70-80% from peak to bottom during its climb to record highs. See the chart on the right. Its trading is also more fractured than other assets, with most trading taking place across several exchanges or "over-the-counter" services from bespoke brokers. The possibility for its value to rise over time and its potential diversification benefits may make the case for some allocation for investors who believe it will become more widely adopted in the future, but only if they are comfortable bearing the risk of potentially rapid price plunges, in our view.

Volatile and uncorrelated

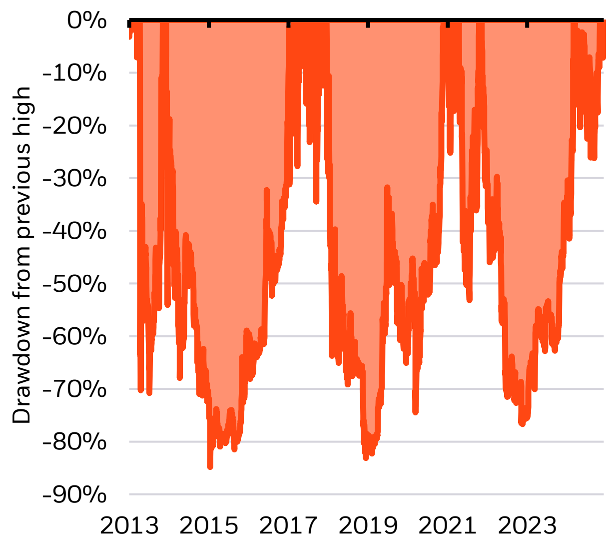
Bitcoin volatility and correlation with global equities



Past performance is not a reliable indicator of current or future results. It is not possible to invest directly in an index. Indexes are unmanaged and performance does not account for fees. Source: BlackRock Investment Institute with data from Bloomberg, December 2024. Notes: For volatility, we show the two-year rolling volatility of weekly returns. The correlation is also a two-year rolling window of bitcoin returns against the Bloomberg Developed Markets Large and Mid Cap Index of global equities.

Bitcoin busts

Bitcoin drawdowns, 2013-2024



Past performance is not a reliable indicator of current or future results. Source: BlackRock Investment Institute with data from LSEG Datastream, December 2024. Notes: The chart shows the decline in the price of bitcoin from new peaks to the bottom before its climb resumed.

Tailoring bitcoin's fit

Taking into account the balance of risks, we see a case for investors with suitable governance and risk tolerance to include bitcoin in a multi-asset portfolio. Investors size allocations for stocks, bonds and private market assets by considering the asset's expected returns and risk, along with how its returns correlate with other assets in the portfolio. But they need to think differently about bitcoin's expected returns: it has no underlying cash flows for estimating future returns. What matters: the extent of adoption. Bitcoin may also provide a more diversified source of return: we see no intrinsic reasons why bitcoin should be correlated with major assets over the long term, given its distinct value drivers.

So how can investors think about a bitcoin allocation? We take a risk budgeting approach: sizing the allocation based on how much it would contribute to total portfolio risk – measured by its long-run volatility and correlation to other assets. Bitcoin cannot be compared to traditional assets. But from a portfolio construction perspective, it has some similarities with the "magnificent 7" group of mostly mega-cap tech stocks. Their market value – averaging $2.5 trillion in December 2024 – is similar to bitcoin's. Since those seven stocks now make up about a fifth of the entire MSCI World, they provide an example of single portfolio holdings that account for a comparatively large share of portfolio risk. They differ from bitcoin in many ways, but these two factors make them a useful starting point for assessing the risk of a single holding.

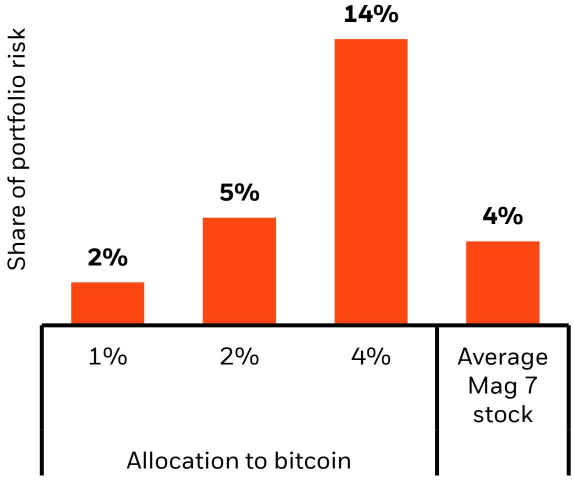
In a traditional portfolio with a mix of 60% stocks and 40% bonds, those seven stocks – if held at their current weights in the MSCI World – each account for 4% of the overall portfolio risk on average. That's about the same share a 1-2% exposure to bitcoin would represent: Even though bitcoin's correlation to other assets is relatively low, it's more volatile, making its effect on total risk contribution similar overall. A bitcoin allocation would have the advantage of providing a diverse source of risk, while an overweight to the magnificent 7 would add to existing risk and to portfolio concentration.

Why not more than 2%? A larger bitcoin allocation means its share of overall portfolio risk rises sharply. This effect is small when the allocation is small, but above 2% bitcoin's share of total portfolio risk becomes outsized compared with the average magnificent 7 stock. See the chart on the left. Bitcoin's risk contribution can spike during periods of heightened volatility or a stronger positive correlation with equity returns. See the right chart. On top of having higher average volatility over time, bitcoin has also suffered sharp selloffs. In an extreme case, should there no longer be any prospect of broad bitcoin adoption, the loss could be the entire 1-2% allocation. We think this is much less likely to happen to a magnificent 7 stock given these companies generate major cash flow and have tangible underlying assets.

The upshot? By allocating no more than 2% to bitcoin, investors would: 1) introduce a very different source of return and risk; and 2) manage risk exposure to bitcoin. We think investors who choose to allocate to bitcoin should regularly review bitcoin's changing nature and their allocation. Bitcoin is becoming more accessible to institutional investors. Wider adoption and trading could reduce its volatility and make its low correlation with equities more stable. Lower volatility would trim bitcoin's contribution to portfolio risk and allow investors to up their allocation. Yet broad adoption could also mean bitcoin loses the structural catalyst for further sizable price rises. The case for a permanent holding may then be less clear-cut and investors may prefer to use it tactically to hedge against specific risks, similar to gold.

Sizing bitcoin in portfolios

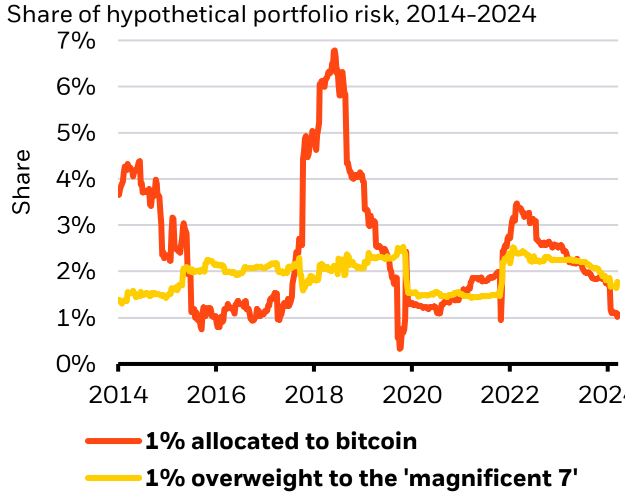
Estimated contribution to risk in a 60/40 portfolio



Past performance is not a reliable indicator of current or future results. This information is not intended as a recommendation to invest in any particular asset class or strategy or as a promise - or even estimate - of future performance. Source: BlackRock Investment Institute with data from Bloomberg, December 2024. Notes: The chart shows bitcoin's share of portfolio risk in a hypothetical 60-40 stock-bond portfolio at different allocations based on risk contribution. It also shows what share "magnificent 7" stocks (Alphabet, Amazon, Apple, Meta, Microsoft, Nvidia and Tesla) add to overall risk on average based on their current index weights. Indexes used: Bloomberg Developed Markets Large and Mid Cap for equities and the Bloomberg Global Aggregate for bonds. Risk contribution is estimated using weekly returns between May 2012 and July 2024. Reference to individual stocks is for illustrative purposes and should not be construed as investment advice or a recommendation.

A risk-based approach

Share of hypothetical portfolio risk, 2014-2024



Past performance is not a reliable indicator of current or future results. This information is not intended as a recommendation to invest in any particular asset class or strategy or as a promise - or even estimate - of future performance. Source: BlackRock Investment Institute with data from Bloomberg, December 2024. Notes: The chart shows what share of the portfolio's total risk a 1% allocation to bitcoin in a hypothetical traditional 60-40 stock-bond portfolio would add over two-year rolling windows through different periods. It also shows the same for what share a 1% overweight to the "magnificent 7" stocks on average would contribute to the overall risk in a hypothetical 60-40 stock-bond portfolio . Indexes used: Bloomberg Developed Markets Large and Mid Cap Index for equities and Bloomberg Global Aggregate index for bonds with weekly return data from May 2012 to July 2024.

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