AUGMENTING A TRADITIONAL 60/40 STOCK-BOND PORTFOLIO WITH BITCOIN: A BRIEF TAKE

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Initial considerations

A global 60/40 stock-bond portfolio mix could benefit from the marginal allocation to this portfolio of Bitcoin (BTC) to further augment investor risk-adjusted returns, here measured by the Sharpe Ratio. If the historical BTC Sharpe Ratio is higher than that of a traditional 60/40 stock-bond portfolio, then additions of BTC to the traditional portfolio model in incremental amounts should improve the overall performance (as measured by Sharpe Ratio) of an investment portfolio that contains all three assets.

The argument can be further made that the entire 60/40 stock-bond portfolio can be wholly replaced by a sole BTC holding as this provides a superior Sharpe Ratio overall. However, this line of argument ignores the fact that BTC holds significant idiosyncratic risk that certain investor types may be entirely uncomfortable with.

However, the diversification effects of adding BTC to a 60/40 stock-bond portfolio might help reduce the impact of the idiosyncratic risk that comes with solely holding BTC in a portfolio while at the same time providing the benefits of the more robust returns of BTC. This reality ought to be captured by the higher Sharpe Ratio of a modified three-asset portfolio that adds BTC to the traditional 60/40 stock-bond portfolio when compared to that of only a traditional 60/40 stock-bond portfolio.

That said, it is not a given that a portfolio formed solely of a BTC holding will exhibit a higher Sharpe Ratio to that of a well-diversified three-asset portfolio (stocks, bond and BTC) as this will be determined by how much the fall in returns caused by moving away from a BTC-centric portfolio towards a three-asset portfolio will be offset by the corresponding fall in portfolio risk.

Put differently, moving from a 60/40 stock-bond portfolio to one that adds BTC may mean that the increase in returns (brought about by participation of BTC in the modified portfolio) far outpaces the increase in portfolio risk, due to the positive effects of diversification, such that ultimately the Sharpe Ratio exhibited by the modified three-asset portfolio betters that of a sole-asset BTC portfolio.

Other considerations

Risk-adjusted returns vs Portfolio volatility

The attraction of a traditional 60/40 stock-bond portfolio comes from its ease of implementation and attractive pattern of performance that offers robust returns during bull market periods and protection in periods of market volatility. Adding BTC to this traditional model opens up the possibility of increased expected returns without increasing portfolio risk by a higher proportion.

The challenge for an investor seeking to add BTC to this traditional model is, therefore, how to balance risk and return in the most optimum fashion by capturing the full benefit of increased expected returns without increasing portfolio risk by a higher proportion. This is best captured in the Sharpe Ratio.

Correlation

Correlation levels between BTC and traditional assets, specifically stocks and bonds in this instance, are key to achieving superior performance with a three-asset model that adds BTC to a traditional 60/40 stock-bond portfolio. A low positive or low negative correlation are more desirable compared to either a high positive or high negative correlation. A high negative correlation is especially detrimental to overall portfolio performance as returns of the constituent portfolio assets would cancel each other out.

Were the traditional asset duo of stocks and bonds to exhibit higher correlation with BTC than expected, both asset classes would move in tandem regardless of market conditions. Therefore, the three-asset portfolio would not necessarily be as well buffered from adverse market conditions as the investor might be hoping for and risk-adjusted returns would show little or no superiority to those of a traditional 60/40 stock-bond portfolio.

As a result, by integrating uncorrelated and non-traditional assets into a traditional portfolio, a portfolio manager may be able to achieve a greater diversification benefit and enhanced returns than when holding a traditional 60/40 portfolio. However, the skill of the portfolio manager will still remain pertinent in ensuring that the investment outcomes match the objectives and risk tolerance of their client(s).

Volatility

In the above modified three-asset portfolio, the diversification effects would clearly be better were the selected asset classes to prove of little correlation, while added to the fact that the magnitudes of their volatilities are typically different, even opposing, during varied market cycles.

In particular, matching offsetting volatility magnitudes can be especially beneficial to smoothing out a portfolio's performance across market cycles.

Diversification

Diversification across asset class can help to even out returns, especially in bear markets as an overconcentration on one asset class can lead to a near total loss in returns. A relatively small allocation to BTC can help to hedge the risk of several traditional financial assets especially where low correlations can be observed. Where such diversification incorporates added dispersion by region, style and size, the benefits are even greater.

Specifically, inclusion of BTC in a traditional portfolio can play a variety of roles in bull market periods not limited to that of diversifier, returns-multiplier and inflation hedge. In times of market turmoil, BTC may play the role of safe haven due to its deflationary component especially for investors pursuing a HODL strategy.

Liquidity

Both the crypto market valued at $2.62 trillion (21 May 2024) and the BTC market specifically, valued at $1.4 trillion (21 May 2024) are far much smaller than either the global stock market or global bond market. Although BTC and other cryptos trade 24 hours a day around the globe, they remain less liquid than traditional asset classes. The volatility inherent in BTC pricing to date is evidence of this relative illiquidity.

Further, transacting in BTC or exchanging it for cash comes with fees and/or time delays. Thus, including BTC in a traditional 60/40 stock-bond portfolio comes with an added illiquidity and transaction cost premium which needs to be taken into account by the portfolio manager.

Investor objectives and risk appetite

Although the inclusion of BTC in a traditional 60/40 stock-bond portfolio may not be suitable for some investors, particularly moderate- and low-risk investors, such inclusion however does demonstrate how adding alternative or non-traditional assets to a portfolio can deliver outcomes that may be more aligned with the goals of a section of investors, namely better diversification and enhanced return at a manageable risk level.

Delivering alpha

While a 60/40 stock-bond portfolio mix brings return balance to the table, thereby helping to avoid extreme portfolio value gyrations brought about by holding a sole-asset stock portfolio, adding BTC to the mix has the benefit of augmenting this balance with enhanced risk-adjusted returns as evidenced in BTC's superior Sharpe Ratio.

It is, therefore, quite easy to see why a multi-asset portfolio containing these three assets would outperform a benchmark index like the S&P 500 to deliver alpha.

Multi-asset investment approach

An 'Alt Thinking' fund manager would find it profitable to add to his strategy (or one of his strategies) an asset with inflation-protection qualities. The deflationary qualities of BTC fit this mould perfectly.

Clearly, this strategy that aims to diversify assets across class (specifically to include alternatives and other high-risk assets) can bring with it the potential for return-enhancement and alpha generation by spreading out risk within the portfolio.

Threshold allocation

While allocating incremental amounts of BTC to a traditional portfolio may bring with it enhanced returns, significant exposure will invariably introduce greater volatility to this modified portfolio. Critical to the investor is establishing at what point the increase in risk outpaces the increased rate of return from additions of BTC, thereby making further increments redundant to portfolio performance. Investors need to avoid the pitfall of paying an unduly high cost in risk to gain added return.

Resources

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