How Does a Benchmark Benefit Bitcoin ETF Investors?

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Why Benchmark?

In financial markets, price benchmarks are used extensively for a variety of purposes, from settling derivatives transactions, to determining Net Asset Value (NAV) for investment funds, including ETFs. When examining any benchmark the first thing to understand is why we benchmark the price of any asset or an asset class. In the case of ETFs the primary purpose of a benchmark is to determine the cash value of the investments held by the ETF so a Net Asset Value (NAV) can be calculated. This facilitates a number of processes that are crucial to the operation of an ETF and serve its investors

1. ***Shares to be created and redeemed at NAV;*** a consistent and reliable NAV strike across time allows Authorised Participants (APs) to provide reliable secondary market liquidity, resulting in tight spreads for investors that buy or sell the shares
2. ***Measuring the efficacy of the ETF structure and operational skill of the ETF manager***; where the chosen benchmark is suitable for the purpose of striking NAV for an ETF then the ETF should track this closely- where tracking error becomes evident then it is symptomatic of either poor structure (ie. poor choice of benchmark) or a deficiency of skills on behalf of the manager

To be able to fulfil the above two objectives a benchmark must fulfil **the three Rs**; be ***representative*** of the underlying market, be ***resistant to manipulation*** and be ***replicable*** by market participants- especially APs.

Benchmarking the Price of Bitcoin for Bitcoin ETFs

The need to benchmark price applies to Bitcoin as much as any other investable asset, and single asset ETFs still require benchmarks as much as any portfolio ETF like SPY. Indeed, gold ETFs offer a parallel, the majority of which are benchmarked to the LBMA Gold Price.

Spot Bitcoin, and indeed all crypto assets, are traded in a distributed market structure on hundreds of platforms that are commonly referred to as “cryptocurrency exchanges'' that operate 24/7, 365 days a year (it is important to note that they are not Exchanges by regulatory definition and thus not subject to capital markets regulations in any major jurisdiction). This is distinct from equities that are traded on Stock Exchanges (NYSE, Nasdaq, etc.) - often any given stock is traded on only one or two exchanges - and fixed income instruments, that are now mostly traded on venues (MarketAxess, Bloomberg, MTS, etc.) or “over the counter” through regulated broker dealers on an 8 am - 5 pm, working days only basis. Given that ETFs trade on equity market infrastructure there is a need to synchronize any benchmark for Bitcoin with the traditional U.S. market close, so that Bitcoin ETFs can strike NAV in keeping with ETF regulatory requirements. Hence the BRRNY is published at 1600 New York Time.

The distributed market structure for Bitcoin is more akin to that of physical commodities like gold and copper, which are predominantly traded OTC, through hundreds of brokers around the world in transactions that are not subject to capital markets regulation. Given the distributed market structure for spot Bitcoin trading, and the fact that cryptocurrency exchanges list multiple crosses i.e., Bitcoin-USD, Bitcoin-EUR; and that Bitcoin-stablecoins, exhibit varied pricing for given market pairs, like Bitcoin-USD, establishing a benchmark price that fulfils the three Rs is imperative, and allows investors to invest in Bitcoin ETFs without undue risk whilst enjoying the benefits of the ETF structure for their Bitcoin exposure.

CF Benchmarks has evidenced how the CME CF BRRNY fulfils the Rs in an exhaustive paper published here:
blog.cfbenchmarks.com/suitability-analysis-of-the-cme-cf-bitcoin-reference-rate-new-york-variant-as-a-basis-for-regulated-financial-products-february-2024-update/

In brief summary of that paper, CF Benchmarks does the following to ensure the BRRNY meets the three Rs:

- Applies stringent Constituent Exchange criteria, incorporating the Bitcoin-USD markets only, of cryptocurrency exchanges, to establish representativeness and promote resistance to manipulation, resulting in utilisation of the 6 BTC-USD markets operated by the below cryptocurrency exchanges:
    - Bitstamp
    - Coinbase
    - Gemini
    - itBit
    - Kraken
    - LMAX Digital

  It is important to note that this has meant the CME CF BRRNY has NEVER Incorporated FTX.com, FTX.US, Binance.com or Binance.US as Constituent Exchanges in its entire calculation history

- Utilises a methodology that is highly resistant to manipulation whilst ensuring it remains representative of the Bitcoin-USD market that synchronises with the traditional market close in the U.S. of 1600 NY Time

- Makes its methodology, governance policies and processes 100% public and transparent to ensure confident replication of the BRRNY

This means investors in ETFs benchmarked to the BRRNY can benefit from ***ETF shares being created and redeemed at NAV*** and thus can use the ETF tracking error to the BRRNY as a means to measure the ***efficacy of the ETF structure and operational skill of the ETF manager***, thereby making an informed decision as to which spot Bitcoin ETF to be invested in.

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