The Grayscale GBTC Premium (February 2021).

On the 8th of January 2021 in a note distributed to clients titled "Flows & Liquidity" J.P.Morgan published the following view: *"The approval of a bitcoin ETF in the US this year would likely be negative for bitcoin in the near term"*. Their main premises are as follows:

- There is optimism around the prospect of the SEC approving a bitcoin ETF in the US.
- This will introduce competition for the Grayscale GBTC Trust which at the moment offers the only way for some institutional investors in the U.S. to get Bitcoin exposure. • Historically GBTC shares have been trading at a premium to the GBTC Trust NAV (**GBTC Premium**).This new competition will likely lead to a cascade of GBTC outflows and a collapse of the GBTC Premium.
- Given the flow and signalling importance of GBTC, this GBTC Premium collapse will likely have negative near term implications for Bitcoin.

Unfortunately there was no evidence or claim by JPM that their view was based on quantitative analysis or research. We think it should because the above premises cannot be accepted as unproblematic or generally held beliefs.

The JPM views attracted interest from a wider audience and were also presented by www.coindesk.com on the 8th of January 2021.

We disagree with the JPM assessment. We believe instead that should competing ETFs be approved by the SEC the overall flow in these products and GBTC Trust alike will be a far more important factor for Bitcoin returns than a collapsing premium. In order to assess the validity of the JPM claims as well as our own we conducted quantitative analysis using historical data on the GBTC premium, the number of issued GBTC shares and Bitcoin returns over the last 5 years, or the entire history of listed GBTC shares.

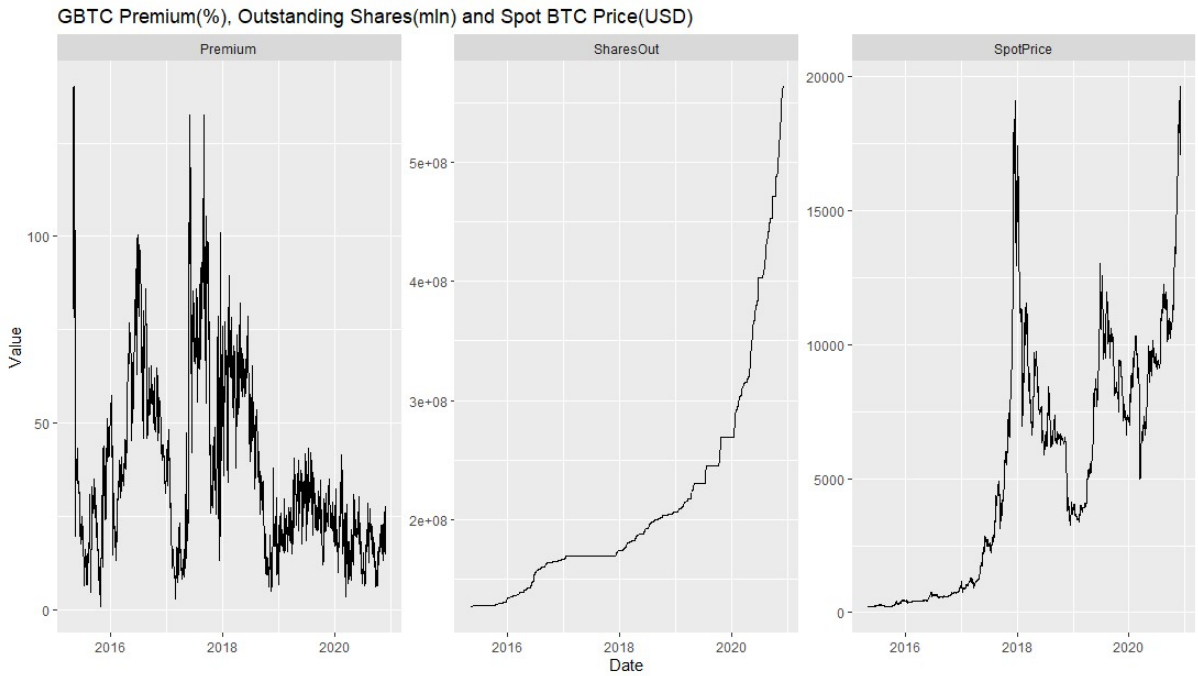
Here are our findings:

- We found no evidence suggesting that a decrease in the GBTC premium to NAV will lead to negative short term returns in Bitcoin. Instead we found evidence of the opposite, namely a decrease in the GBTC Premium tends to be followed by short term gains in Bitcoin.
- As far as trading in listed GBTC Trust shares is concerned there are two major sources of share supply: That originating from shareholders subscribing to new Grayscale issues who are subject to a lock-in period ("Delayed Effect") and that originating from existing shareholders who are no longer restricted by the lock-in ("Immediate Effect"). We found no evidence that supply originating from the "new" shareholders affects the premium in any meaningful way.
- We found, instead, evidence that supply originating from existing or "old" shareholders is negatively affecting the premium (effectively "front running" or discounting the effect the "new" shareholders will eventually have). The fact that the

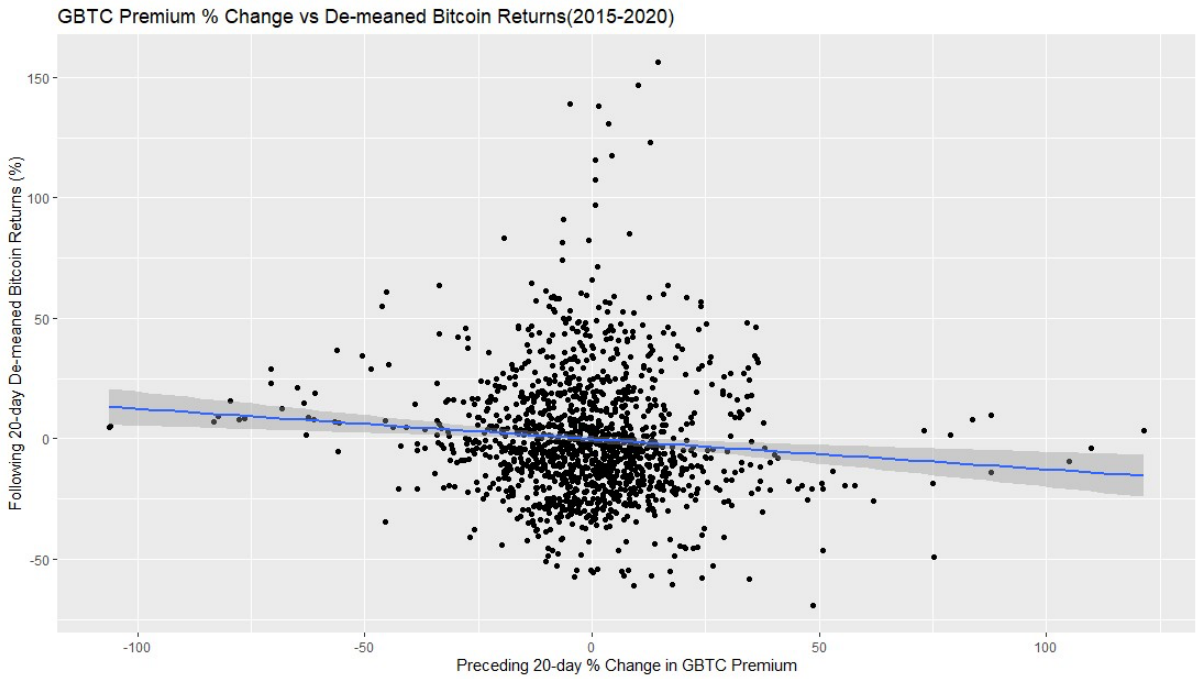
"old" shareholders hold the majority of listed shares amplifies their relative importance.

- It is understood that some of the accredited investors subscribing for new shares are Arbitrageurs who try to monetise the premium. However, our analysis above suggests that whatever downward pressure may come from arbitrageurs on the GBTC premium likely takes place almost immediately and not at the end of the lock-in period.
- The intermittent issuance of new GBTC shares throughout the history of the Trust creates a rather complex supply/demand dynamic whereby very low new supply of shares leads to demand outstripping supply and the GBTC Premium increasing and very high new supply, on the other end, leads to supply outstripping demand and the premium decreasing. The observed reduction in the GBTC premium appears to be the result of increased issuance by Grayscale particularly the last year or so with Grayscale effectively meeting most if not all of the demand for GBTC-like products.
- It is therefore our view that should Grayscale continue issuing shares and the premium decreasing then by the time the SEC approves new Bitcoin ETFs that competition will either capture a small percentage of existing Grayscale investors or brand new inflow into these products. Neither of these should be bad for Bitcoin.

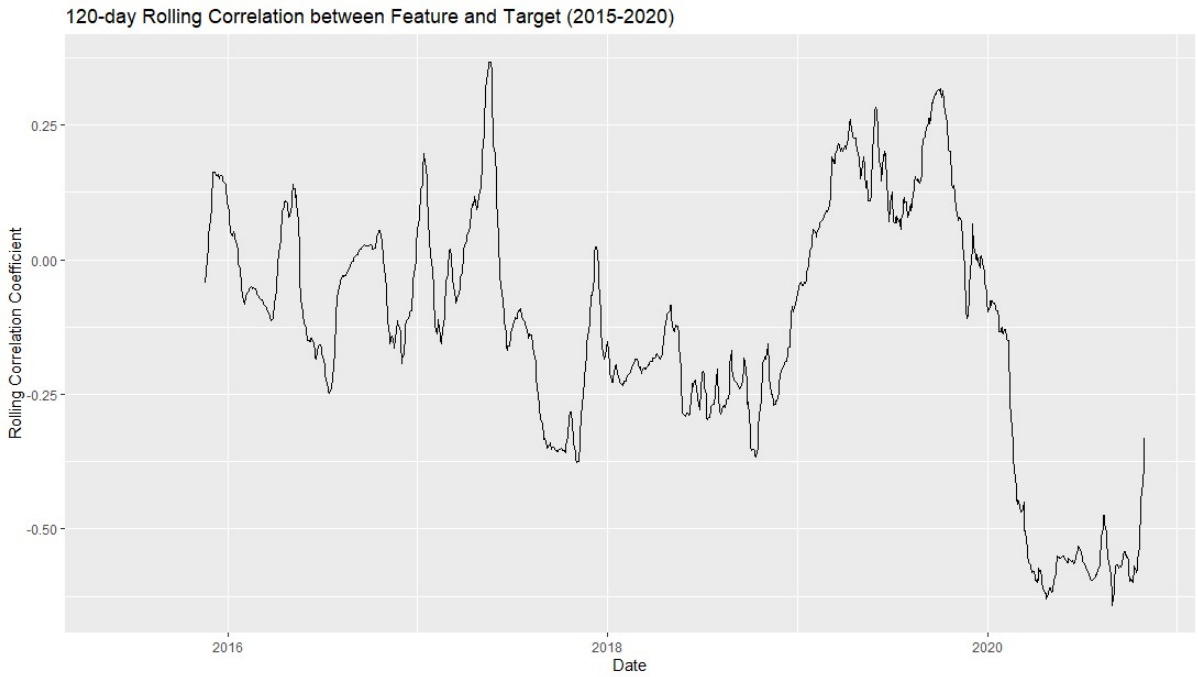
Some Plots from our Research Note:



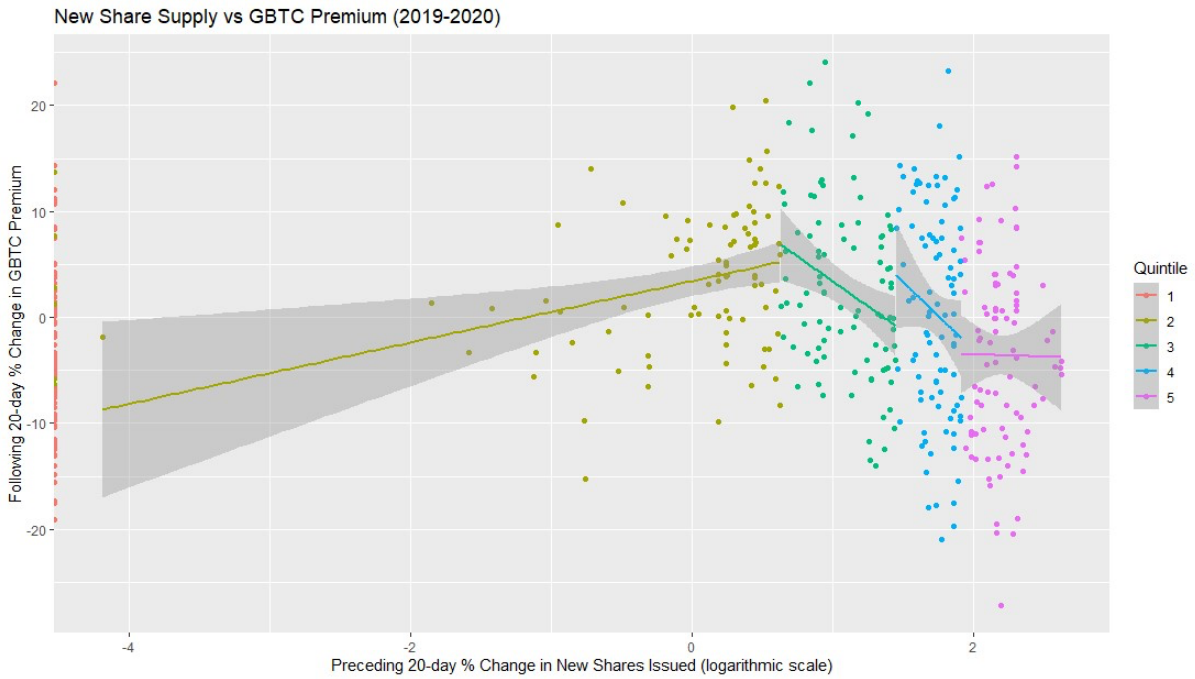
The source of our data was Grayscale and Yahoo Finance. Our sample covers the period from March 2015 to November 2021.



On average, the percent change in the GBTC premium over the last 20 days is followed by above average and positive returns in Bitcoin over the next 20 days. This is not what we expect to see if there was historical evidence supporting the JPM claim.



The above graph shows the rolling correlation between the percent change in the GBTC premium over the last 20 days(Feature) versus the percent change in the price of Bitcoin over the subsequent 20 days(Target). Although the relationship is noisy we do see, once again, a negative relationship between the GBTC premium and the price of Bitcoin.



If we split the GBTC new share issuance into five equal groups (quintiles) with the lowest 20% of new share supply in group 1 and the top 20% of new share supply in group 5 and plot against the percent change in the GBTC premium over a period of 20 days after the new shares were issued we get the above plot. It suggests a relatively complex supply/demand dynamic whereby issuing few new shares leads to demand outstripping supply and the GBTC premium increasing while issuing a lot of new shares leads to a decrease in the premium.