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BOBBY B. LYLE SCHOOL OF ENGINEERING

February 14, 2022

Ms. Vanessa Countryman
Secretary
Securities and Exchange Commission
100 F Street NE
Washington, D.C. 20549-0609

RE: Notice of Filing of Proposed Rule Change to List and Trade Shares of Grayscale Bitcoin Trust (GBTC) under NYSE Arca Rule 8.201-E
File No.: SR-NYSEArca-2021-90
Release No.: 34-93504

Dear Ms. Countryman:

I am writing to support the proposal by NYSE Arca to list shares of Grayscale Bitcoin Trust as an exchange traded product. The reasons are identified below as to the robustness of the bitcoin mining network, which in turn stabilizes the price of bitcoin and the electrical grid of Texas.

Robustness of Bitcoin Mining Network. The growth of the Bitcoin hash rate to an all-time high of nearly 250 EH/s (as of 2/13/22) is a remarkable number that points to the extremely stable outlook of Bitcoin long term. In fact, contrast this to the dip to below 70 EH/s in July of 2021, when China banned the mining of Bitcoin. Due to the strong incentives brought by the mining reward, the hash rate has migrated west and dispersed Bitcoin miners geographically to locations with cheap, renewable energy (to avoid future shutdowns). This shows that the Bitcoin mining network has been resilient in the face of a major obstacle to the livelihood of the blockchain. The figure below shows the precipitous decline the hash rate because of the China ban, the mining migration to other parts of the world, and the network reaching an all-time high in February of 2022. Later, I discuss the impact that this plays on the stability of Bitcoin.



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Hash Rate All-Time High



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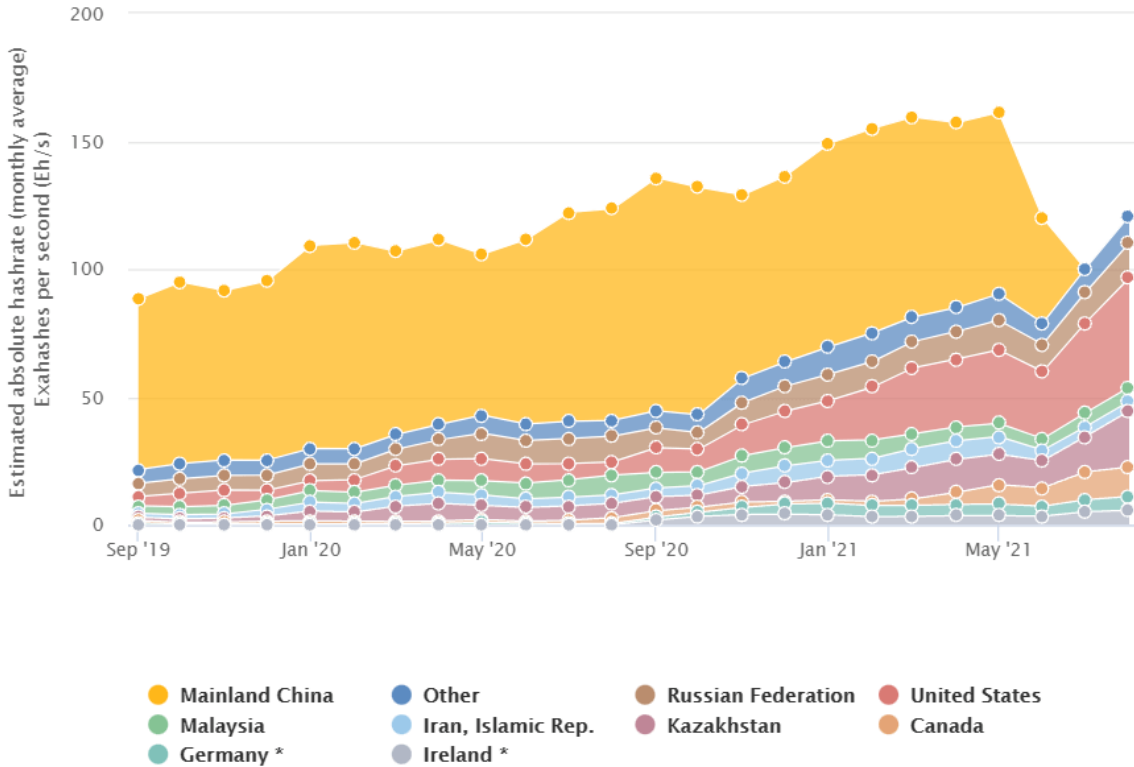
Credit: Glassnode (February 2022)

Stability of the Texas Electrical Grid. In return, this growth has stabilized the energy grid of these locations. In fact, on 2/3/22, Texas-based miners helped by reducing mining capacity by 99% to ensure that the state would not be faced with blackouts that occurred in similar weather just one year prior (<https://www.cnbc.com/2022/02/03/winter-storm-descends-on-texas-bitcoin-miners-shut-off-to-protect-ercot.html>).

Impact of Mining Network on Bitcoin Security and Stability. As you are aware, a majority attack can be achieved on the bitcoin network only when a single person or group of people gains control of over 50% of the blockchain's hashing power. In the chart below, you can see that the China ban dispersed hashing power across the globe and decentralized the control of the Bitcoin mining network. In turn, the possibility of a majority attack has become infinitesimal (considering that even within the same, nodes are operated by a plethora of companies and individuals).



Evolution of network hashrate



Credit: University of Cambridge

Macroeconomic Instability. It should be noted that Bitcoin’s price has recently been highly correlated with technology stocks. Hence, the price volatility of late has been somewhat due to the macroeconomic uncertainty due to the COVID-19 pandemic, supply chain shocks, and resulting inflation concerns. At some point, it is my belief that Bitcoin will decorrelate with stocks and be a risk-off asset. However, until that occurs, it should be noted that stocks are the backing of many exchange-traded products (ETP) that are currently regulated by the SEC. Hence, this should not detract Bitcoin from being the backing of a particular spot ETP.

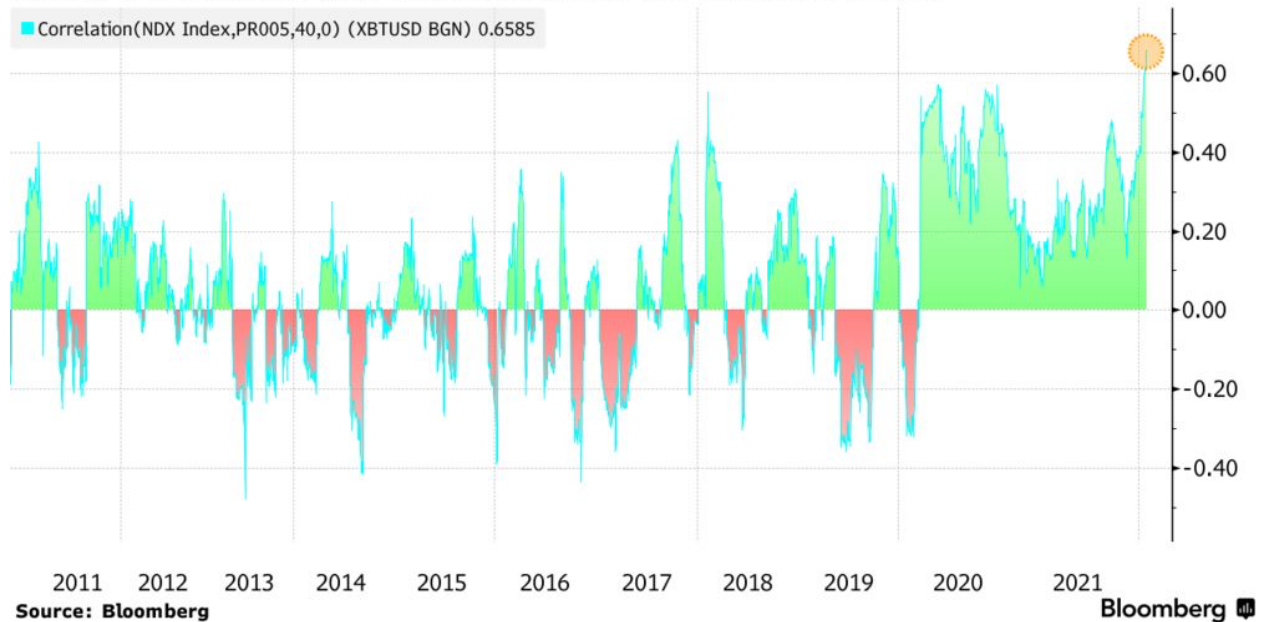


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Tied at the Hip

Bitcoin's correlation with U.S. tech stocks has reached a record



Bitcoin Unlike other Cryptocurrencies. Lastly, the nature of the Bitcoin mining network, the proof-of-work property of solving the hash problems, and the majority-vote property further stabilize the currency in the sense that changes to the protocol cannot easily occur. In other words, a minority cannot decide a change to the protocol for the network at-large. This means that no one person or small set of people have control over the money supply or the terms of its use. Therefore, the unchanging nature of Bitcoin and limit on its supply allows it to have salability across time, making it a tremendous store of value. Bitcoin should not be confused with any other currency that does not have the global network of miners with extremely high levels of hash rate power that is geographically dispersed and a fixed supply of 21 million coins.

In summary, due to the robustness of the global mining network, a spot ETP that is based on Bitcoin should be pursued for the benefit of U.S. individual and institutional investors.

Sincerely,

Joseph D. Camp, Ph.D.
Professor
Electrical and Computer Engineering
Southern Methodist University