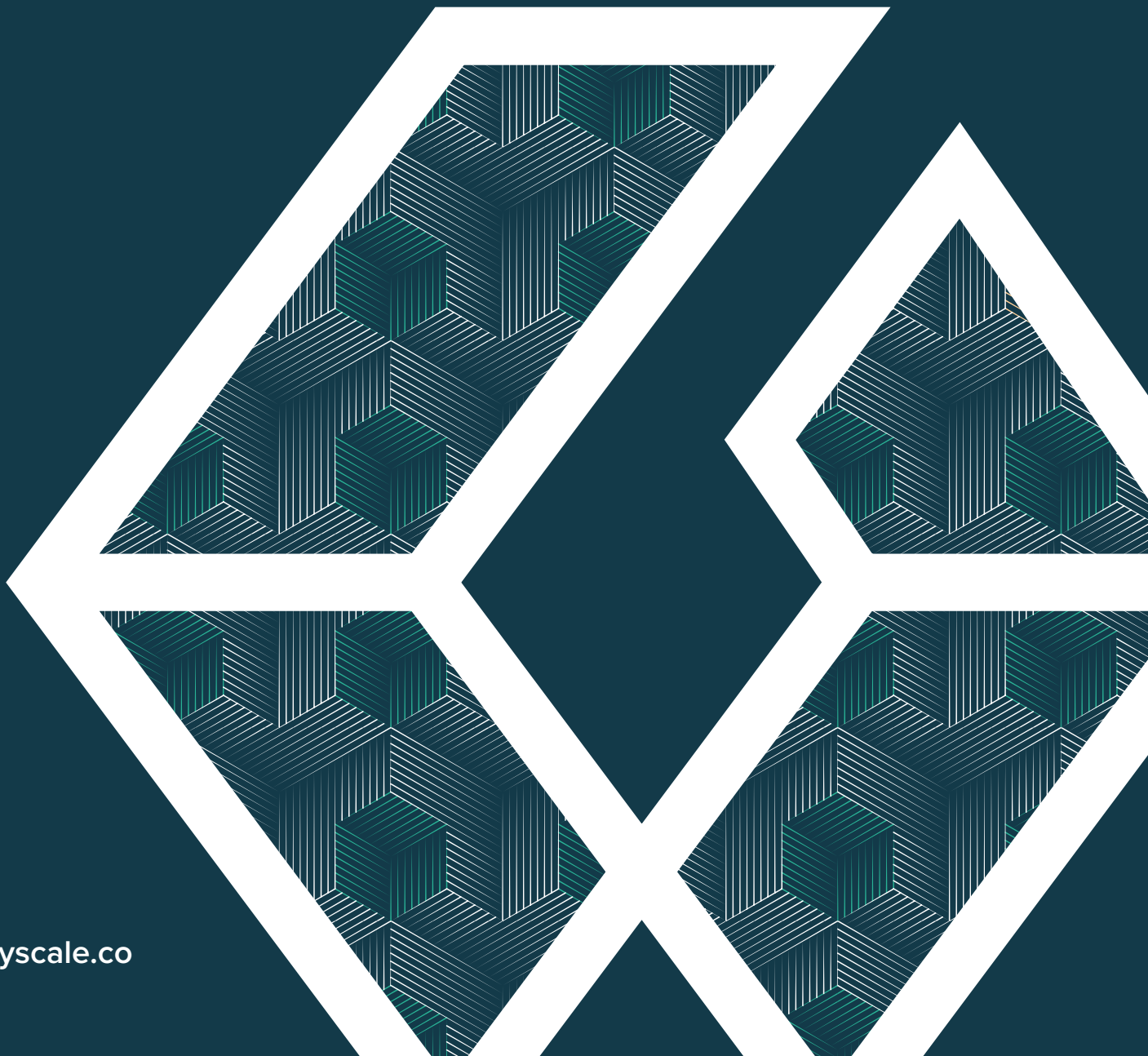


Valuing Bitcoin



Valuing Bitcoin

"It's an insurance policy in case inflation comes back again as it did in the 1970s. I would say that if that's a sensible thing to do, then, certainly to have 1 to 2% of your assets in Bitcoin makes great sense here." – Bill Miller¹

We believe that professional investors should feel confident navigating a conversation around Bitcoin. As this asset continues to pervade advisory conversations and investment committee meetings, the unique qualities Bitcoin possesses can make valuation a daunting task.

This report is intended to help investors visualize why Bitcoin may be more important than ever; we explore Bitcoin's value indicators, delineate its substantial supply/demand imbalance, and extrapolate how these factors may create a tailwind for Bitcoin's adoption and price. This analysis indicates that the current Bitcoin market structure parallels that of early 2016 before it began its historic bull run.

Why is Bitcoin important today?

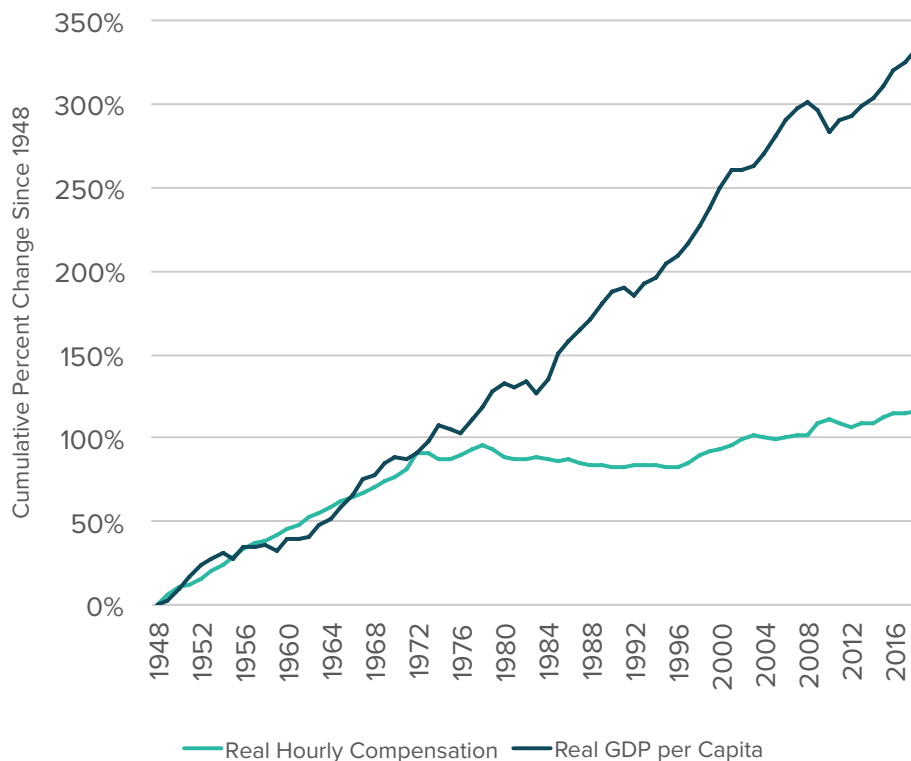
To understand Bitcoin's role today, it's worth exploring the monetary history of the last 50 years. We believe demand for a scarce monetary asset like Bitcoin grows as global monetary inflation accelerates.

In 1971, the United States abandoned the gold standard causing asset prices to balloon, while wages stagnated. Figure 1 illustrates this phenomenon through the dislocation of real GDP growth and real wage growth. This widening gap has necessitated further expansionary economic policies – policies that are now commonplace to counter the downward pressure on economic demand.

1. Legendary Investor Bill Miller Makes the Case for Bitcoin (BTC) Rise to \$300,000." The Daily Hodl, July 8, 2020. <https://dailyhodl.com/2020/07/08/legendary-investor-bill-miller-makes-the-case-for-bitcoin-btc-rise-to-300000>



FIGURE 1: REAL GDP GROWTH & REAL WAGE GROWTH²



Over the last half century, loose monetary policy incited the market to take on debt to purchase assets. In 2008, amidst the Great Recession, some of that debt was forced to unwind. Quantitative Easing (QE) was implemented to mitigate the debt spiral and support the economy, but in doing so, further exacerbated the problem. Stated another way, loose monetary policies resulted in money being funneled into financial assets instead of the general economy or main street as intended, increasing the disconnect between the equity market and the economy. As illustrated in Figure 2, U.S. debt to GDP has nearly doubled since 2008, and the velocity of M2 monetary supply, the rate at which money moves around, declined as newly distributed money made its way into financial assets rather than into the economy.

2. Source: Grayscale, Federal Reserve Bank of Saint Louis, Economic Policy Institute, United States Census Bureau



FIGURE 2: U.S. DEBT TO GDP VS M2 VELOCITY³
1965-2020



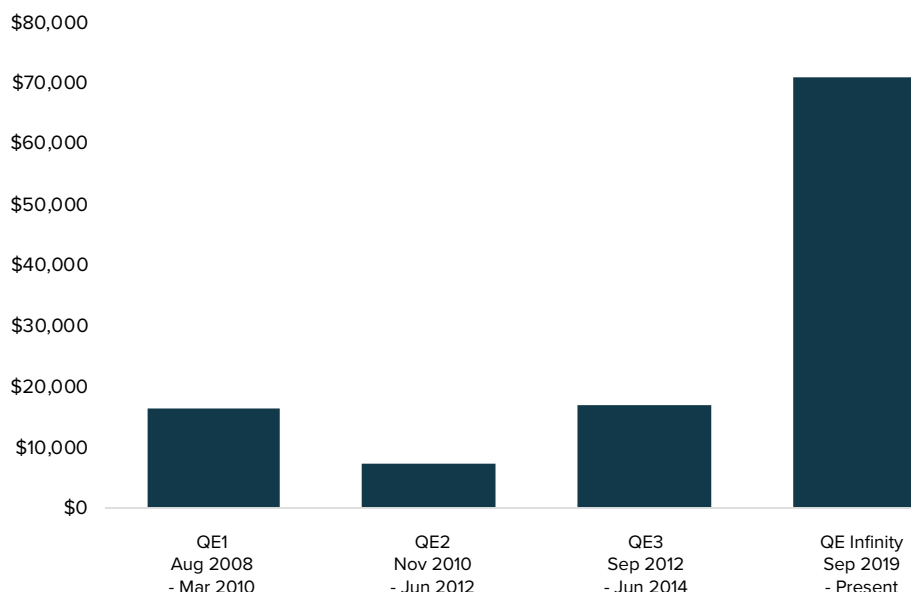
Starting in 2008, QE expanded the Federal Reserve's balance sheet from under \$1 trillion to over \$4 trillion by 2014. As the economy showed signs of strength, the Fed planned to reverse this expansion. However, as the Fed attempted to shrink its balance sheet in 2018, the market responded unfavorably with the S&P 500 dropping approximately 20% in just three months. It would appear that QE cannot be reversed without cratering the financial markets it is intended to support.

As illustrated by Figure 3, the Federal Reserve is currently printing more and faster than ever, dubbed "QE Infinity." While the US dollar remains structurally strong relative to other currencies, the ongoing QE measures have attracted the attention of investors who may be wary of monetary inflation.



3. Source: Grayscale, Bloomberg

FIGURE 3: **BALANCE SHEET EXPANSION PER WEEK (\$ MILLIONS)**⁴
August 2008 - August 2020



Amidst unprecedented monetary and fiscal stimulus, investors are searching for ways to protect against an ever-expanding monetary supply. Because of Bitcoin's unique qualities – such as its verifiable scarcity and a supply that can't be controlled by a central authority – we believe it can be leveraged as a store of value and as a way to escape this great monetary inflation.

How can we think about Bitcoin's value?

Investors may agree that a scarce, digital form of money makes sense in the current environment, but may still struggle to assign a fair value to Bitcoin. Since Bitcoin is not a cash generating asset, investors can't apply a standard discounted cash flow analysis to model its present value. In many ways, valuing Bitcoin is similar to how some value gold. Instead of depending on cash flows, we can use relative valuation and supply/demand analysis to value Bitcoin as an investment. **Of course, these metrics rely on historical data, and historical performance is not indicative of future results.**

⁴ Source: Grayscale, Bloomberg



Relative Valuation

Because of Bitcoin’s scarcity, a quality built into the protocol, a straightforward way to think about its value is through its relative position to other stores of value.

In May 2020, famed investor Paul Tudor Jones wrote a letter to investors that included his investment case for Bitcoin.⁵ With concerns of monetary inflation in mind, he and his team scored different stores of value based on purchasing power, trustworthiness, liquidity, and portability. The analysis examined financial assets, cash, gold, and Bitcoin.

FIGURE 4: PAUL TUDOR JONES STORE OF VALUE SCORING⁵ AS OF AUGUST 4, 2020

	Purchasing Power*	Trust*	Liquidity*	Portability*	Total Score	Market Capitalization (\$ millions)
Financial Assets	90	65	60	60	71	\$266,917,000
Cash	5	60	90	80	54	\$39,000,000
Gold	70	85	45	30	62	\$11,938,404
Bitcoin	50	5	50	80	43	\$207,283

*Scores were constructed from Jones’ descriptions.

Jones suggested that while Bitcoin ranked lowest among the stores of value, its score implied a far higher market capitalization than it currently has. To quote Jones:

What was surprising to me was not that Bitcoin came in last, but that it scored as high as it did. Bitcoin had an overall score nearly 60% of that of financial assets but has a market cap that is 1/1200th of that. It scores 66% of gold as a store of value, but has a market cap that is 1/60th of gold’s outstanding value. Something appears wrong here and my guess is it is the price of Bitcoin.

Jones’ framing helps illustrate the sheer size of the addressable market for Bitcoin, but there are still significant challenges for Bitcoin to reach the scale of adoption, trust, and regulatory certainty afforded to the other assets in this analysis.

5. Source: “May 2020 BVI Letter - Macro Outlook.” Scribd. Scribd. May 7, 2020. <https://www.scribd.com/document/460382154/May-2020-BVI-Letter-Macro-Outlook>.



Supply and Demand

At the core of many valuation and pricing exercises is the balance between supply and demand. While Bitcoin doesn't have cash flows, the public blockchain that underpins Bitcoin allows investors to analyze supply and demand shifts on the network to estimate price accordingly. Bitcoin's supply is set – there will only ever be 21M Bitcoin – however, not all Bitcoin have been mined and not all Bitcoin are actively used or traded.

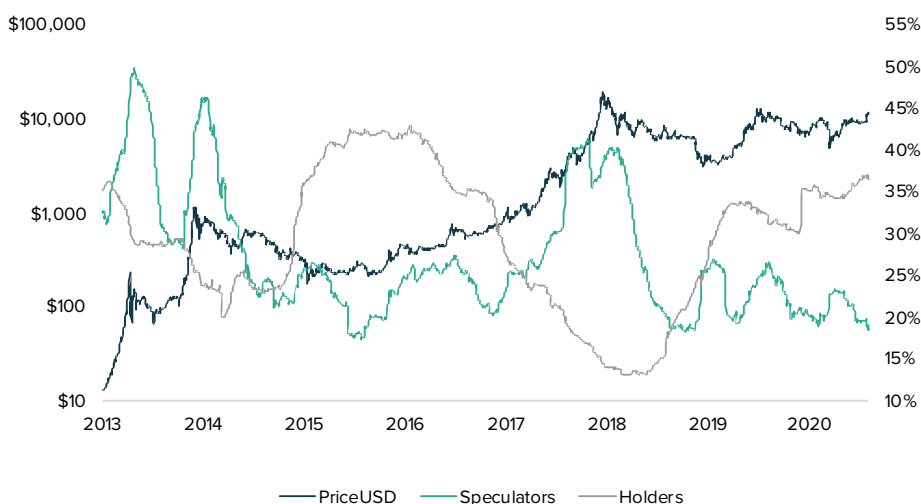
The following are a number of blockchain-based metrics that can demonstrate shifts in the market structure. Currently, these metrics indicate a supply shortage relative to growing demand for Bitcoin. However, significant activity occurs off-chain which may decrease the efficacy of these metrics.

Supply-Based Metrics

Active Coins

We can identify coins by age to understand the aggregate Bitcoin market structure. In the below chart, coins that have not moved for one to three years are labeled as belonging to a Holder. Coins that have moved in the last 90 days are labeled as belonging to a Speculator. An increase in Holder coins signifies accumulation (likely a bullish indicator), whereas an increase in Speculator coins signifies distribution (likely a bearish indicator). This chart looks potentially promising for Bitcoin, as there are a growing number of Holders relative to a small number of Speculators in the market. Notice the similar structure to that of early 2016.

FIGURE 5: **HOLDER VS SPECULATOR INDEX**⁶
JANUARY 1, 2013 - AUGUST 1, 2020

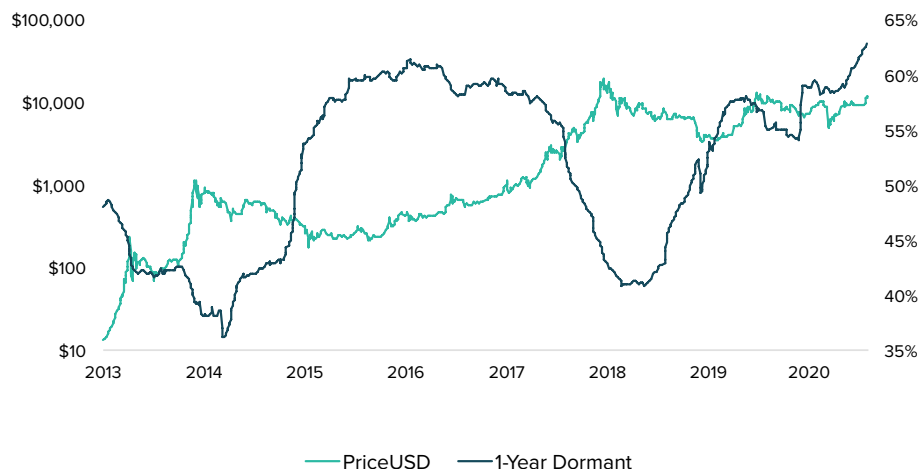


6. Source: Grayscale, Coin Metrics



It's also worth noting that the Bitcoin blockchain reveals that there has never been a higher level of Bitcoin owned for more than one year. This metric indicates a strong conviction in Bitcoin by its current investor base. While this is a supply-side metric, it also demonstrates the demand for Bitcoin's use case as a store of value — rather than trading, it appears investors are interested in holding Bitcoin despite its volatility.

FIGURE 6: **BITCOIN HELD FOR OVER A YEAR**⁷
JANUARY 1, 2013 - AUGUST 1, 2020



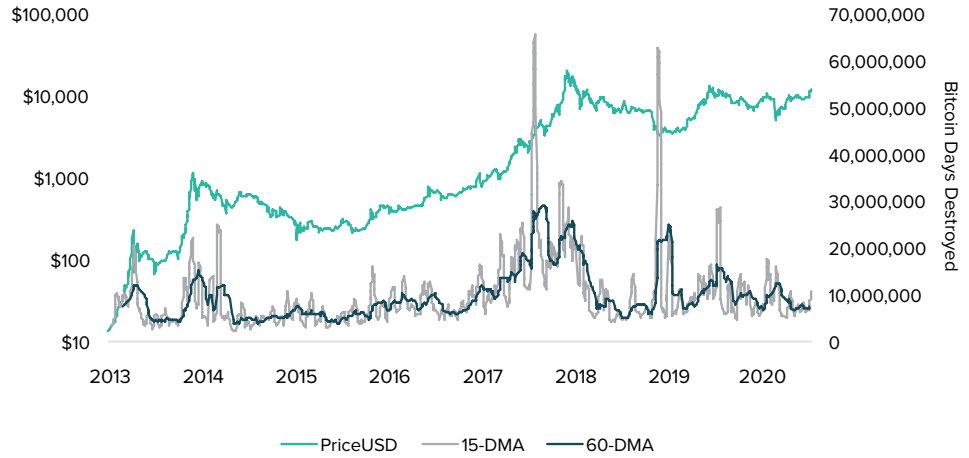
Bitcoin Days Destroyed (BDD)

Investors may also look at Bitcoin days destroyed (BDD), a metric that measures the aggregate age of all coins moved on a given day. For example, if John sends Grace a Bitcoin and Grace holds that coin for 10 days before spending it, she has destroyed 10 Bitcoin days. BDD allows analysts to identify large shifts in the supply of old coins. A high BDD is notable because long-term holders are signalling a bullish or bearish bias to the market. Historically, BDD has spiked near the market tops, as investors sell their long-term holdings or near market bottoms as investors capitulate as the final indication of supply exhaustion. To clearly illustrate this relationship, Figure 7 uses 15-day and 60-day moving averages of BDD.

7. Source: Grayscale, Coin Metrics

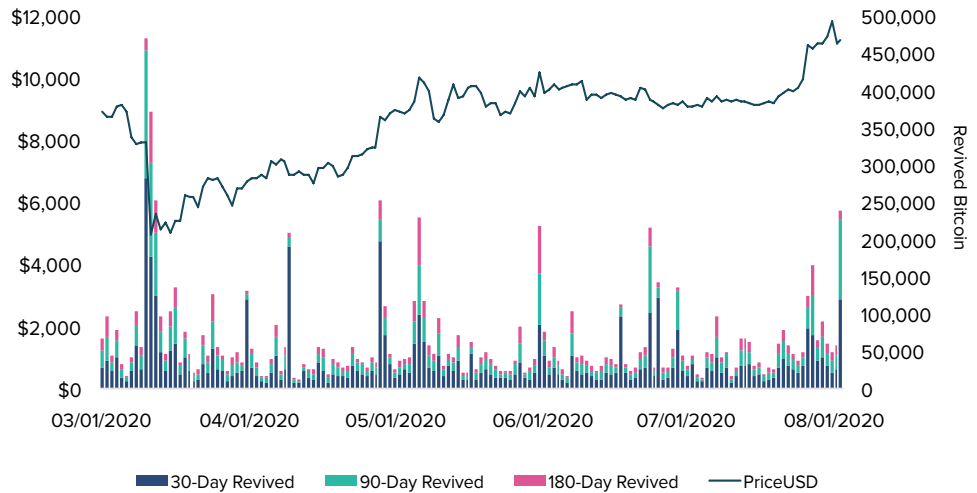


FIGURE 7: BITCOIN DAYS DESTROYED⁸
 JANUARY 1, 2013 - AUGUST 1, 2020



BDD can be further segmented into age tiers to give investors more detailed signals on shorter timeframes. Figure 8 shows the supply from the 30-day, 90-day, and 180-day age tiers of coins that were previously dormant and now "revived." The spike in short-term revived supply clearly signalled a bottoming of the Bitcoin price as experienced in March 2020.

FIGURE 8: BITCOIN SHORT TERM REVIVED SUPPLY⁹
 MARCH 1, 2020 - AUGUST 1, 2020



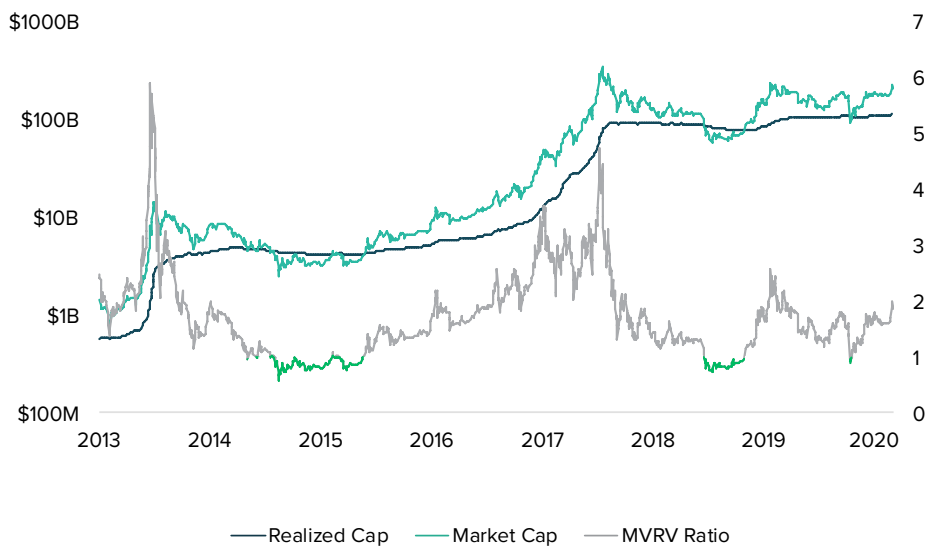
8. Source: Grayscale, Coin Metrics
 9. Source: Grayscale, Coin Metrics



Realized Capitalization¹⁰

A measure of the aggregate cost basis of all Bitcoin ever moved, known as realized capitalization, is calculated by taking the price of each Bitcoin at its last on-chain movement. For example, in calculating realized capitalization, coins that were last moved in 2012 will contribute far less to Bitcoin's aggregate market capitalization since they were less expensive than coins that moved in 2020. This method allows analysts to de-emphasize coins that may be lost, such as those which have become inaccessible to investors who lost the private keys to their Bitcoin wallets. In some ways, this reading is a more accurate representation of Bitcoin's market capitalization because it takes into account the last price of all traded coins rather than just the most recently traded coins. It also has historically acted as a support zone for Bitcoin's market capitalization. MVRV, which is the ratio between the market capitalization and the realized capitalization, has historically signalled a buying opportunity when the reading is near 1.¹¹

FIGURE 9: **REALIZED CAPITALIZATION**¹²
JANUARY 1, 2013 - AUGUST 1, 2020



10. Source: Coin Metrics. "Introducing Realized Capitalization." Coin Metrics, December 14, 2018. <https://coinmetrics.io/realized-capitalization/>.

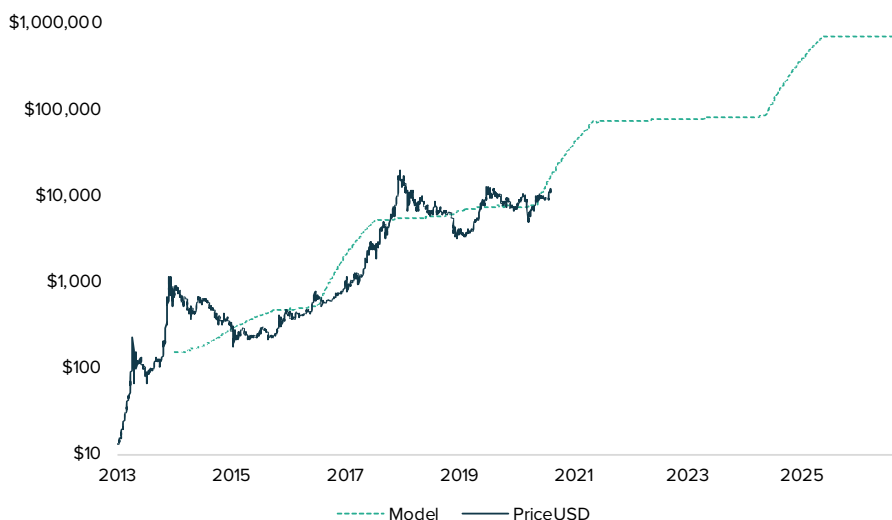
11. Source: Puell, David. "Bitcoin Market-Value-to-Realized-Value (MVRV) Ratio." Medium. Medium, October 1, 2018. <https://medium.com/@kenoshaking/bitcoin-market-value-to-realized-value-mvr-ratio-3ebc914dbae>.

12. Source: Grayscale, Coin Metrics

Stock-to-Flow Model

The investment community often employs the stock-to-flow ratio as a measure of scarcity for commodities. It is calculated by dividing the existing supply of a commodity by that commodity's annual production growth. Commodities with high stock-to-flow ratios such as Bitcoin, gold, and silver have historically been utilized as stores of value. Figure 10 shows a popular model that uses Bitcoin's historical relationship between price and stock-to-flow to estimate a future price.¹³ While it's true that price has followed this stock-to-flow model with high correlation, the relationship may be spurious and does not take into account the requisite demand for price appreciation.

FIGURE 10: **STOCK-TO-FLOW MODEL**¹⁴
JANUARY 1, 2013 - AUGUST 1, 2020



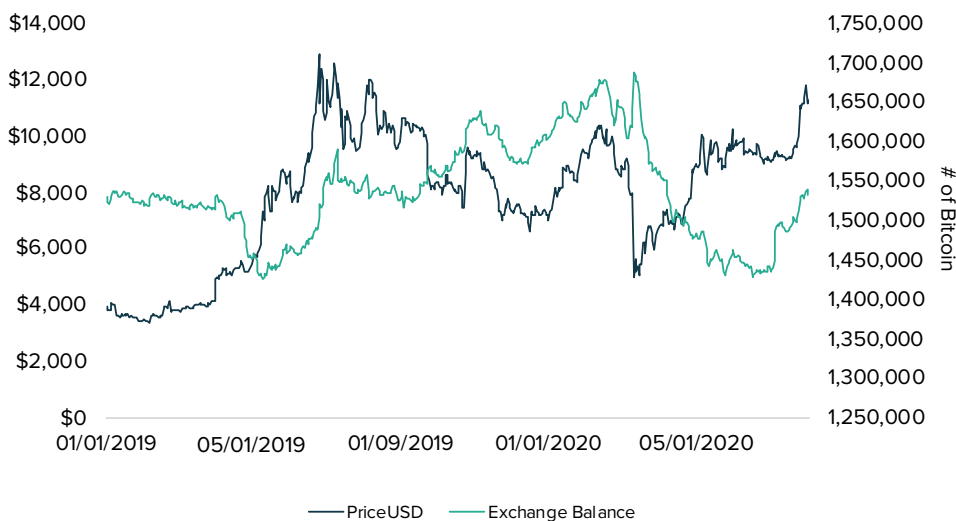
Bitcoin Held on Exchanges

While some Bitcoin is traded through CME futures or OTC markets, another way to trade Bitcoin is through a collection of digital asset exchanges. Consequently, investors can measure the amount of Bitcoin held on these exchanges to determine the amount of supply that may be looking for liquidity. A large amount of exchange supply may be bearish and a low supply may be bullish. In July, exchange balances were nearly the lowest since May 2019, and price surged accordingly. Recently, exchange balances have increased indicating some investors may be looking to sell.

13. Source: PlanB. "Modeling Bitcoin Value with Scarcity." Medium. Medium, March 22, 2019. <https://medium.com/@100trillionUSD/modeling-bitcoins-value-with-scarcity-91fa0fc03e25>
14. Source: Grayscale, Coin Metrics



FIGURE 11: **BITCOIN HELD ON EXCHANGES**¹⁵
JANUARY 1, 2019 - AUGUST 1, 2020



Demand-Based Metrics

Bitcoin is being adopted by Visa, Square, and PayPal as well as traditional businesses in financial services.¹⁶ In addition to this empirical evidence of growing demand for Bitcoin, investors can also observe growth of demand directly on the Bitcoin blockchain. Popular methods include analysis of daily active addresses, trends of wealthy addresses, and miner profitability.

Daily Active Addresses (DAA)

Daily active addresses (DAA) is a measure of the total number of unique addresses that participate in a Bitcoin transaction on a given day. The daily active addresses metric doesn't properly encompass all users, but it nonetheless gives investors a view of network growth. Investors generally want to see increased activity correspond with price. Figure 12 below shows that the DAA metric is at its highest level since 2017. This spike in activity may be indicative of increased adoption and the beginnings of a new market cycle.

15. Source: Grayscale, Coin Metrics. Full exchange analysis of Bitfinex, Bitmex, Binance, Bitstamp, Bittrex, Huobi, Poloniex, Gemini, Kraken.

16. "Advancing Our Approach to Digital Currency," Visa, July 21, 2020, <https://usa.visa.com/visa-everywhere/blog/bdp/2020/07/21/advancing-our-approach-1595302085970.html>, Pollock, Darryn.; "Bitcoin Paying Off For Square's Cash App Raking In \$178 Million." Forbes. Forbes Magazine, February 29, 2020, <https://www.forbes.com/sites/darrynpollock/2020/02/29/bitcoin-paying-off-for-squares-cash-app-raking-in-178-million/>, Allison, Ian.; "PayPal, Venmo to Roll Out Crypto Buying and Selling: Sources." CoinDesk. CoinDesk, June 22, 2020, <https://www.coindesk.com/paypal-venmo-to-roll-out-crypto-buying-and-selling>.



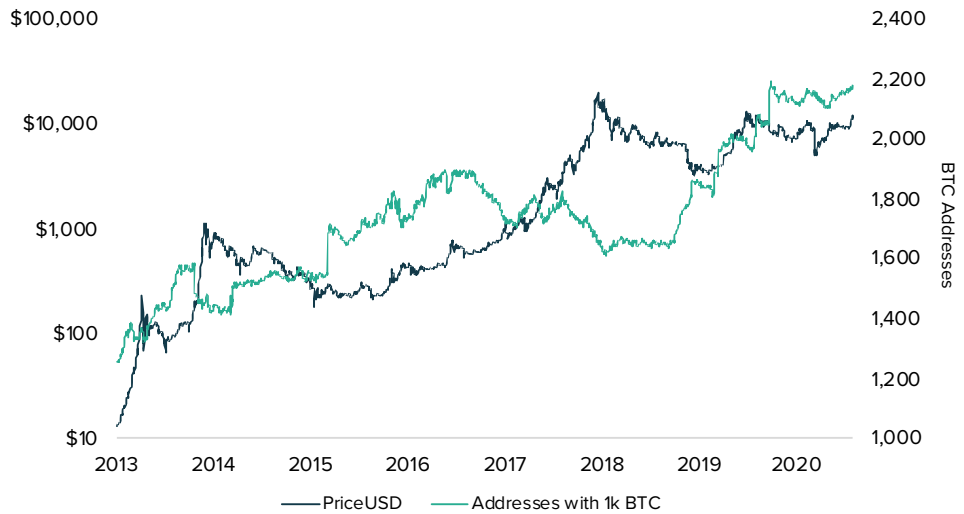
FIGURE 12: **DAILY ACTIVE ADDRESSES**¹⁷
JANUARY 1, 2013 - AUGUST 1, 2020



Whale Index

"Whale" Index, which counts the number of unique Bitcoin addresses with balances over 1,000 Bitcoin (approx \$11 million as of July 30, 2020), is sitting near all-time highs as shown below in Figure 16. An address can be thought of as an account or wallet, but we note that users can have multiple addresses; therefore, a single individual can be the owner of multiple addresses in the Whale Index. The figure below illustrates an increasing number of addresses with large amounts of Bitcoin, a trend that signifies accumulation.

FIGURE 13: **WHALE INDEX**¹⁸
JANUARY 1, 2013 - AUGUST 1, 2020



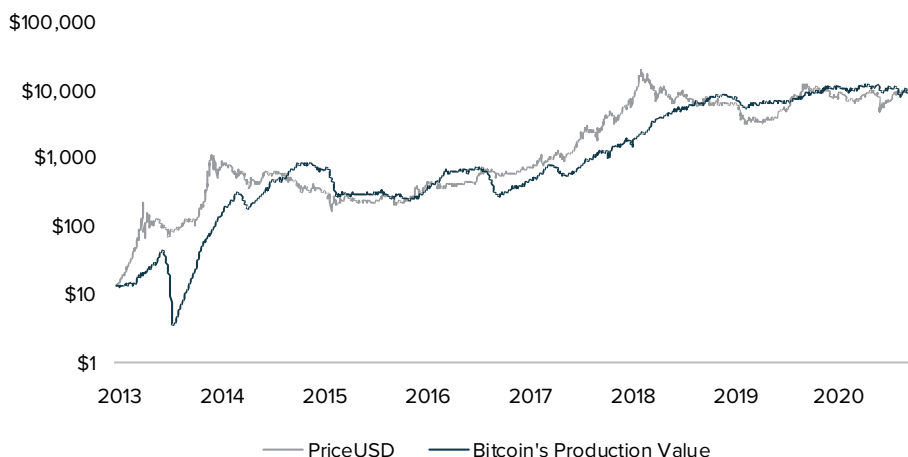
17. Source: Grayscale, Coin Metrics
18. Source: Grayscale, Coin Metrics



Bitcoin's Production Value

The Bitcoin network's electricity consumption can be used to calculate the production cost per Bitcoin. Simply put, mining is the process of converting electricity into Bitcoin. The prices of commodities tend to oscillate around production cost, so this measure can be extended to indicate somewhat of a price floor for Bitcoin.¹⁹ The relationship between price and production cost is important because it gives us clues about miner profitability, a critical input to the Bitcoin value analysis. As the Bitcoin price increases, profitability tends to increase, which entices miners to expend more energy. Conversely, when profitability decreases, inefficient miners are often forced to sell their Bitcoin and shut down their mining equipment. This allows more efficient, well-capitalized miners to accumulate more Bitcoin rather than assume the role of being the market's natural seller. Because these miners are better capitalized, they may have the flexibility to hold Bitcoin in hopes of price appreciation.

FIGURE 14: **BITCOIN'S PRODUCTION VALUE**²⁰
JANUARY 1, 2013 - AUGUST 1, 2020



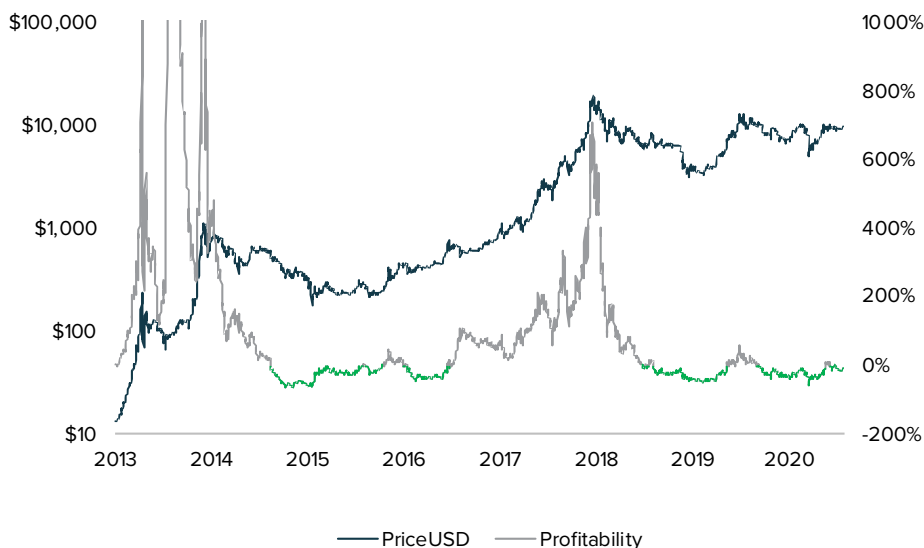
Taking the ratio between Bitcoin's price and its production cost can provide clues to price floors in Bitcoin market cycles. Long periods of low or negative profitability benefit the most efficient miners and improve the market structure by flushing out unstable participants. In Figure 15, the green coloring indicates periods of potentially unprofitable mining, historically good buying opportunities.

19. Edwards, Charles. "Bitcoin Value-Energy Equivalence." Medium. Capriole, December 19, 2019. <https://medium.com/capriole/bitcoin-value-energy-equivalence-6d00d1baa34a>.

20. Source: Grayscale, Coin Metrics



FIGURE 15: **MINER PROFITABILITY RATIO**²¹
JANUARY 1, 2013 - AUGUST 1, 2020



Conclusion

The current economic environment presents a compelling opportunity to explore how Bitcoin can be part of a resilient portfolio. However, many investors are challenged to find a reliable methodology to ascribe Bitcoin's value. This report outlines how investors can use relative valuation and blockchain metrics for supply and demand to estimate fair value. However, with more Bitcoin transactions occurring off-chain, these metrics may become less effective.

As demand for stores of value grows during this regime of monetary inflation, Bitcoin may be well-positioned given that it is a scarce digital asset. The plethora of blockchain metrics covered in this report indicate that the current market structure is reminiscent of early 2016, the period that preceded Bitcoin's historic bull run. Bitcoin continues to command global investor attention, there is scant supply to meet growing demand, and the infrastructure is now in place to satisfy that demand. With the techniques outlined in this report, investors can now measure Bitcoin's network growth and more confidently assess its value.

21. Source: Grayscale, Coin Metrics



About Grayscale Investments®

Grayscale Investments is the world's largest digital currency asset manager, with more than \$5.8 Billion in assets under management as of August 10, 2020. Through its family of 10 investment products, Grayscale provides access and exposure to the digital currency asset class in the form of a traditional security without the challenges of buying, storing, and safekeeping digital currencies directly. With a proven track record and unrivaled experience, Grayscale's products operate within existing regulatory frameworks, creating secure and compliant exposure for investors.

For more information, please visit www.grayscale.co and follow [@Grayscale](https://twitter.com/Grayscale).



Important Disclosures & Other Information

©Grayscale Investments, LLC. All content is original and has been researched and produced by Grayscale Investments, LLC (“Grayscale”) unless otherwise stated herein. No part of this content may be reproduced in any form, or referred to in any other publication, without the express consent of Grayscale.

This report is for informational purposes only and does not constitute an offer to sell or the solicitation of an offer to buy any security in any jurisdiction where such an offer or solicitation would be illegal. There is not enough information contained in this report to make an investment decision and any information contained herein should not be used as a basis for this purpose. This report does not constitute a recommendation or take into account the particular investment objectives, financial situations, or needs of investors. Investors are not to construe the contents of this report as legal, tax or investment advice, and should consult their own advisors concerning an investment in digital assets. The price and value of assets referred to in this research and the income from them may fluctuate. Past performance is not indicative of the future performance of any assets referred to herein. Fluctuations in exchange rates could have adverse effects on the value or price of, or income derived from, certain investments.

Investors should be aware that Grayscale is the sponsor of Grayscale Bitcoin Trust (BTC), Grayscale Bitcoin Cash Trust (BCH), Grayscale Ethereum Trust (ETH), Grayscale Ethereum Classic Trust (ETC), Grayscale Litecoin Trust (LTC), Grayscale Horizen Trust (ZEN), Grayscale Stellar Lumens Trust (XLM), Grayscale XRP Trust (XRP) and Grayscale Zcash Trust (ZEC) (each, a “Trust”) and the manager of Grayscale Digital Large Cap Fund LLC (the “Fund”). The Trusts and the Fund are collectively referred to herein as the “Products”. Any Product currently offering Share creations is referred to herein as an “Offered Product”. Information provided about an Offered Product is not intended to be, nor should it be construed or used as investment, tax or legal advice, and prospective investors should consult their own advisors concerning an investment in such Offered Product. This report does not constitute an offer to sell or the solicitation of an offer to buy interests in any of the Products. Any offer or solicitation of an investment in a Product may be made only by delivery of such Product’s confidential offering documents (the “Offering Documents”) to qualified accredited investors (as defined under Rule 501(a) of Regulation D of the U.S. Securities Act of 1933, as amended), which contain material information not contained herein and which supersede the information provided herein in its entirety.

The Products are private investment vehicles. Shares of Grayscale Bitcoin Trust (BTC) and Grayscale Digital Large Cap Fund, which are only offered on a periodic basis, are publicly quoted under the symbols: GBTC and GDLC, respectively. Except for Grayscale Bitcoin Trust (BTC), the Products are not subject to the same regulatory requirements as exchange traded funds or mutual funds, including the requirement to provide certain periodic and standardized pricing and valuation information to investors. The Products are not registered with the Securities and Exchange Commission (the “SEC”) (except for Grayscale Bitcoin Trust (BTC)), any state securities laws, or the U.S. Investment Company Act of 1940, as amended. There are substantial risks in investing in one or more Products. Any interests in each Product described herein have not been recommended by any U.S. federal or state, or non-U.S., securities commission or regulatory authority, including the SEC. Furthermore, the foregoing authorities have not confirmed the accuracy or determined the adequacy of this document. Any representation to the contrary is a criminal offense.

Certain of the statements contained herein may be statements of future expectations and other forward-looking statements that are based on Grayscale’s views and assumptions and involve known and unknown risks and uncertainties that could cause actual results, performance or events to differ materially from those expressed or implied in such statements. In addition to statements that are forward-looking by reason of context, the words “may, will, should, could, can, expects, plans, intends, anticipates, believes, estimates, predicts, potential, projected, or continue” and similar expressions identify forward-looking statements. Grayscale assumes no obligation to update any forward-looking statements contained herein and you should not place undue reliance on such statements, which speak



only as of the date hereof. Although Grayscale has taken reasonable care to ensure that the information contained herein is accurate, no representation or warranty (including liability towards third parties), expressed or implied, is made by Grayscale as to its accuracy, reliability or completeness. You should not make any investment decisions based on these estimates and forward-looking statements.

Certain Risk Factors

Each Product is a private, unregistered investment vehicle and not subject to the same regulatory requirements as exchange traded funds or mutual funds, including the requirement to provide certain periodic and standardized pricing and valuation information to investors. There are substantial risks in investing in a Product or in digital assets directly, including but not limited to:

- **PRICE VOLATILITY**
Digital assets have historically experienced significant intraday and long-term price swings. In addition, none of the Products currently operates a redemption program and may halt creations from time to time or, in the case of Grayscale Bitcoin Trust (BTC) and Grayscale Digital Large Cap Fund, periodically. There can be no assurance that the value of the common units of fractional undivided beneficial interest (“Shares”) of any Product will approximate the value of the digital assets held by such Product and such Shares may trade at a substantial premium over or discount to the value of the digital assets held by such Product. At this time, none of the Products is operating a redemption program and therefore Shares are not redeemable by any Product. Subject to receipt of regulatory approval from the SEC and approval by Grayscale, in its sole discretion, any Product may in the future operate a redemption program. Because none of the Products believes that the SEC would, at this time, entertain an application for the waiver of rules needed in order to operate an ongoing redemption program, none of the Products currently has any intention of seeking regulatory approval from the SEC to operate an ongoing redemption program.
- **MARKET ADOPTION**
It is possible that digital assets generally or any digital asset in particular will never be broadly adopted by either the retail or commercial marketplace, in which case, one or more digital assets may lose most, if not all, of its value.
- **GOVERNMENT REGULATION**
The regulatory framework of digital assets remains unclear and application of existing regulations and/or future restrictions by federal and state authorities may have a significant impact on the value of digital assets.
- **SECURITY**
While each Product has implemented security measures for the safe storage of its digital assets, there have been significant incidents of digital asset theft and digital assets remains a potential target for hackers. Digital assets that are lost or stolen cannot be replaced, as transactions are irrevocable.
- **TAX TREATMENT OF VIRTUAL CURRENCY**
For U.S. federal income tax purposes, Digital Large Cap Fund will be a passive foreign investment company (a “PFIC”) and, in certain circumstances, may be a controlled foreign corporation (a “CFC”). Digital Large Cap Fund will make available a PFIC Annual Information Statement that will include information required to permit each eligible shareholder to make a “qualified electing fund” election (a “QEF Election”) with respect to Digital Large Cap Fund. Each of the other Products intends to take the position that it is a grantor trust for U.S. federal income tax purposes. Assuming that a Product is properly treated as a grantor trust, Shareholders of that Product generally will be treated as if they directly owned their respective pro rata shares of the underlying assets held in the Product, directly received their respective pro rata shares of the Product’s income and directly incurred their respective pro rata shares of the Product’s expenses. Most state and local tax authorities follow U.S. income tax rules in this regard. Prospective investors should discuss the tax consequences of an investment in a Product with their tax advisors.



- **NO SHAREHOLDER CONTROL**
Grayscale, as sponsor of each Trust and the manager of the Fund, has total authority over the Trusts and the Fund and shareholders' rights are extremely limited.
- **LACK OF LIQUIDITY AND TRANSFER RESTRICTIONS**
An investment in a Product will be illiquid and there will be significant restrictions on transferring interests in such Product. The Products are not registered with the SEC, any state securities laws, or the U.S. Investment Company Act of 1940, as amended, and the Shares of each Product are being offered in a private placement pursuant to Rule 506(c) under Regulation D of the Securities Act of 1933, as amended (the "Securities Act"). As a result, the Shares of each Product are restricted Shares and are subject to a one-year holding period in accordance with Rule 144 under the Securities Act. In addition, none of the Products currently operates a redemption program. Because of the one-year holding period and the lack of an ongoing redemption program, Shares should not be purchased by any investor who is not willing and able to bear the risk of investment and lack of liquidity for at least one year. No assurances are given that after the one year holding period, there will be any market for the resale of Shares of any Product, or, if there is such a market, as to the price at such Shares may be sold into such a market.
- **POTENTIAL RELIANCE ON THIRD-PARTY MANAGEMENT; CONFLICTS OF INTEREST**
Products and their sponsors or managers and advisors may rely on the trading expertise and experience of third-party sponsors, managers or advisors, the identity of which may not be fully disclosed to investors. The Products and their sponsors or managers and advisors and agents may be subject to various conflicts of interest.
- **FEES AND EXPENSES**
Each Product's fees and expenses (which may be substantial regardless of any returns on investment) will offset each Product's trading profits.

Additional General Disclosures

Investors must have the financial ability, sophistication/experience and willingness to bear the risks of an investment. This document is intended for those with an in-depth understanding of the high risk nature of investments in digital assets and these investments may not be suitable for you. This document may not be distributed in either excerpts or in its entirety beyond its intended audience and the Products and Grayscale will not be held responsible if this document is used or is distributed beyond its initial recipient or if it is used for any unintended purpose.

The Products and Grayscale do not: make recommendations to purchase or sell specific securities; provide investment advisory services; or conduct a general retail business. None of the Products or Grayscale, its affiliates, nor any of its directors, officers, employees or agents shall have any liability, howsoever arising, for any error or incompleteness of fact or opinion in it or lack of care in its preparation or publication, provided that this shall not exclude liability to the extent that this is impermissible under applicable securities laws.

The logos, graphics, icons, trademarks, service marks and headers for each Product and Grayscale appearing herein are service marks, trademarks (whether registered or not) and/or trade dress of Grayscale Investments, LLC. (the "Marks"). All other trademarks, company names, logos, service marks and/or trade dress mentioned, displayed, cited or otherwise indicated herein ("Third Party Marks") are the sole property of their respective owners. The Marks or the Third Party Marks may not be copied, downloaded, displayed, used as metatags, misused, or otherwise exploited in any manner without the prior express written permission of the relevant Product and Grayscale or the owner of such Third Party Mark.

The above summary is not a complete list of the risks and other important disclosures involved in investing in any Product or digital assets and is subject to the more complete disclosures contained in each Product's Offering Documents, which must be reviewed carefully.





General Inquiries:

info@grayscale.co

Address: 250 Park Ave S 5th floor, New York, NY 10003

Phone: (212) 668-1427

@GrayscaleInvest