BITCOIN INVESTMENT THESIS

AN ASPIRATIONAL STORE OF VALUE

JULY 2020, RIA BHUTORIA, DIRECTOR OF RESEARCH

Fidelity DIGITAL ASSETS℠

INTRODUCTION

At Fidelity Digital Assets, we have conversations with investors at distinct stages in their digital asset journey – investors who are proactively working on their investment thesis, seeking validation of their thesis or have yet to embark on the process. In response to the range of investors in different stages, we are compiling a series of reports to examine the perspectives that are driving interest and investment in bitcoin today and those that may evolve and gain traction in the future. In doing so, we hope to help investors establish a comprehensive evidence-based thesis and understanding, especially as bitcoin becomes increasingly integrated with traditional markets and portfolios.

> "Bitcoin is the most significant innovation in finance since the Medicis invented double-entry accounting."
>
> BRIAN KELLY, BKCM

Bitcoin is many things to many people – why people choose to own hold bitcoin depends on their circumstances and views of what bitcoin is today and what it could become in the future[i]. These views have been the subject of misunderstanding, confusion and debate. Historically, such debates have revolved around whether bitcoin, the native asset, is a store of value, medium of exchange, alternative asset, all of the above, or none of the above. Additionally, it is still undetermined whether the underlying blockchain is best used to facilitate wholesale clearing and settlement, consumer payments or the anchoring and timestamping of arbitrary data.

The truth is, as the ecosystem matures, Bitcoin may simultaneously serve many functions – either

foundationally or through incremental layers. One of the beautiful things about Bitcoin is that its success is not predicated on serving a singular purpose.

In this piece, we will focus on the view that Bitcoin is an aspirational store of value. We explore the inherent characteristics that position Bitcoin to fulfill this role in the future, consider whether it is being used in this way today, and discuss factors that may drive greater demand for such utility.

In conducting research for this report, we interviewed a few of the top investors and thinkers in the industry and incorporated their investment perspectives. A special thank you to Brian Kelly, Brian Estes, John Vincent, Benson Durham, Roberto Perli, Dan Morehead, John Pfeffer and Nic Carter for sharing their thoughts on the topic.

KEY HIGHLIGHTS

- Many investors consider bitcoin to be an aspirational store of value in that it has the properties of a store of value but has yet to be widely accepted as such.

- The silver lining of bitcoin's volatility, at least in the early days, is that it is a catalyst that attracts attention, development and innovation.

- Scarcity is the key characteristic cited in reference to a good store of value as it is essential for protecting against the depreciation of real value in the long run. One of bitcoin's most novel innovations is its unforgeable digital scarcity.

- Bitcoin's scarcity was coded into the protocol when it was created. The independence of the monetary policy is enforced by the decentralized network of computers supporting the network and proof-of-work.

- The unknown consequences of record low interest rates, unprecedented levels of global monetary and fiscal stimulus and deglobalization are all adding fuel to the fire of awareness and adoption.

- Longer-term drivers include "slow and steady" inflation and the great wealth transfer to a millennial demographic that has a favorable opinion on digital assets.

AN ASPIRATIONAL STORE OF VALUE

Bitcoin can be described as an aspirational store of value – creating value as it matures into a store of value. An analogy is that investing in bitcoin today is akin to investing in Facebook when it had 50 million users with the potential to grow to the more than 2 billion users it has today. This is driven by the idea that bitcoin offers asymmetric upside. If bitcoin is widely adopted by retail and institutional investors as a store of value, the upside may be substantial relative to the initial upfront investment. Today, bitcoin is relatively nascent and has narrow base demand compared to a global store of wealth such as gold. Stakeholder perception of its value and potential is also still evolving. However, the rationale of investors for establishing exposure now is that it will be a much larger market if it is widely used as a store of value in the future.

> "It might make sense just to get some in case it catches on. If enough people think the same way, that becomes a self-fulfilling prophecy."
>
> SATOSHI NAKAMOTO

One of the key arguments against bitcoin as a store of value today is its volatility. Bitcoin holders counter with the idea that the trajectory of a new asset from negligible awareness and adoption to a global store of value is unlikely to be linear. A different perspective is that many participants initially learn about bitcoin because of its volatility. As new participants conduct further study, perceptions often shift to focus less on short-term performance and more on the long-term value proposition.

Upward volatility also attracts investment, development and innovation. Cycles in the industry start with an increase in the price of digital assets like bitcoin, leading to new attention through discussion in news and social media, leading to an inflow of talent culminating in new products, projects and infrastructure and a maturation of the industry relative to the previous cycle.

Bitcoin's volatility may always remain elevated relative to traditional assets as volatility is a side effect of bitcoin's perfectly inelastic supply and of a borderless, relatively intervention-free market. Over time, volatility should continue to decline relative to current levels as narratives converge, base demand rises, activity on institutional platforms expands and sophisticated investment trading and investment products emerge.

> "Because bitcoin is a liquid market open 24 hours a day, 7 days a week, when people need liquidity, bitcoin is there to clear those trades. It clears properly and offers a pure market all the time but is also accompanied by higher volatility. You have to be willing to pay that price to own such an asset."
>
> BRIAN ESTES, OFF THE CHAIN CAPITAL

Bitcoin's potential as a store of value can be framed by comparing it to other investable assets that investors use to store value, as shown in the table below. To achieve considerable status, more investors need to become knowledgeable about bitcoin's inherent properties and determine that the benefits of storing at least some value in bitcoin are superior to the opportunity costs of storing value in a different medium. In the sections below, we discuss the leading factors that investors are considering when making an investment in bitcoin.

Asset	Market value	Bitcoin Share
Bitcoin	$172 billion	—
Facebook	$684 billion	25.1%
Gold	$11 trillion	1.6%
Stock Markets	$89 trillion	0.2%
Global Debt	$253 trillion	0.1%
Global Real Estate	$281 trillion	0.1%

Source: Messari (Jul 2020), Yahoo Finance (Jul 2020), Visual Capitalist (May 2020)

WHAT MAKES BITCOIN APPEALING AS A POTENTIAL STORE OF VALUE

Bitcoin's digital scarcity

A robust store of value asset retains purchasing power over long periods of time. An emerging store of value grows purchasing power until it stabilizes. The key characteristics that are cited in reference to good stores of value are scarcity, portability, durability and divisibility. The most important of these attributes is arguably scarcity, which is essential for protecting against the depreciation of real value in the long run. Scarcity means there is a limited quantity of the asset in question, more cannot be easily created, and it is impossible to counterfeit.

One of bitcoin's most novel innovations is its unforgeable digital scarcity. Investors believe this property is foundational in understanding and appreciating bitcoin. Before bitcoin, multiple innovators made important contributions in the quest to achieve digital scarcity, but were unsuccessful in enforcing it. Computer data has always been ephemeral and shareable, at least as far back as Larry Tesler's invention of copy, cut and paste functionality in the early 1970s. In more modern times, copying and sharing files has become a ubiquitous and integral feature of the internet.

> "Most people in the world don't yet see bitcoin as digital gold. As soon as people see it in a different way, the price will adjust"
>
> JOHN PFEFFER, PFEFFER CAPITAL LP

Despite efforts at limiting the sharing of certain types of files (e.g. the development of Digital Rights Management (DRM) technology to track files and make them difficult to copy), creating unforgeable digital scarcity had remained elusive until 2009 when Bitcoin went live. In inventing Bitcoin, Satoshi Nakamoto borrowed concepts from prior efforts but also addressed previously unsolved problems, such as the double spending problem, using a clever combination of computing, cryptography, game

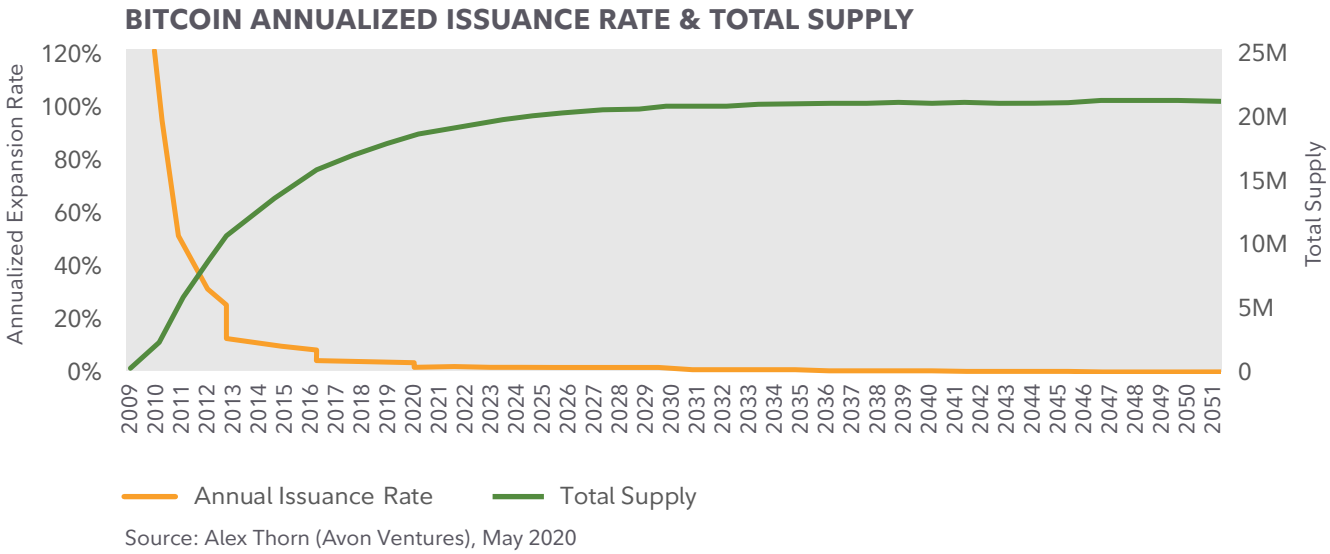
theory and incentives to establish a decentralized protocol that enforces a fixed issuance schedule.

The bitcoin supply is perfectly inelastic and is not susceptible to supply shocks. Supply does not respond to changes in production capacity (i.e. greater hash power) in response to heightened demand driving prices higher. Even gold, which has been used as a store of value for millennia, is not immune to supply shocks. While the ability for increased production in response to an increase in demand is limited, gold is not perfectly inelastic.

Rising prices both motivate existing bitcoin mining operations to become more efficient and attract new mining operations, but the increased hash power supporting the network cannot affect supply. Bitcoin accomplishes this through its difficulty adjustment. The hash rate supporting bitcoin rises as miners join the network or as existing miners upgrade their mining hardware to more efficient versions. Simultaneously, the difficulty of mining also rises (or falls) to ensure that block production occurs every ten minutes, on average. The adjustment mathematically regulates the supply of bitcoin.

> "You don't need to be a PhD to understand that the number of dollars just doubled whereas the BTC supply just halved."
>
> JOHN VINCENT, WAKEM CAPITAL MANAGEMENT

Bitcoin is released approximately every ten minutes via block rewards paid to miners. This block reward halves every 210,000 blocks until the amount of bitcoin in circulation reaches 21 million. This fixed total supply is hard coded into the protocol and cannot be changed[ii]. The third halving occurred in May 2020, resulting in a 50% decline in the block reward from 12.5 to 6.25 and a reduction in the rate of annual issuance from over 3.5% to under 2% - an interesting juxtaposition at a time when central banks globally started to unleash unprecedented and unlimited levels of monetary stimulus, which we expand on below.

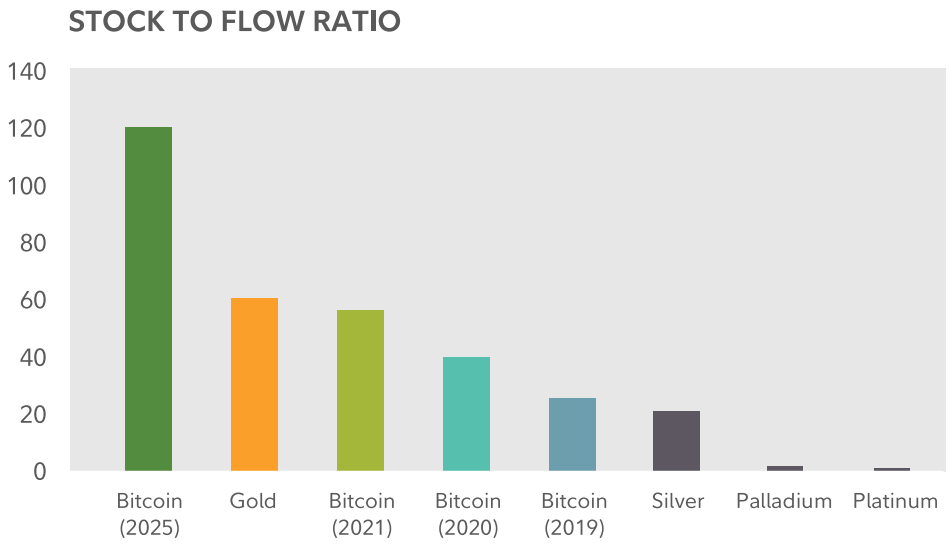


Source: Alex Thorn (Avon Ventures), May 2020

The stock-to-flow ratio (stock divided by flow) is a metric commonly used to quantify the scarcity, or hardness, of commodities. Stock is the existing supply of a commodity less the portion of supply that has been consumed or destroyed. Flow is the annual incremental production of new units. Together, the stock-to-flow ratio measures how many years of production are required to achieve the existing level of stock.

Commodities with a stock that is difficult to double due to a low rate of production relative to existing supply have historically served as superior stores of value. Such commodities are largely used for investment purposes, and occasionally industrial uses. On the other hand, consumable commodities that are susceptible to large increases in supply, are less effective in storing value.

In the Bitcoin Standard, Saifedean Ammous adapted stock-to-flow to compare bitcoin to commodities used for investment and consumption and the use of the metric has since expanded and even given rise to models based on the ratio. Gold, the most resilient store of value through the ages, has the highest stock-to-flow ratio, followed by bitcoin (today) and silver. Following the recent halving (May 2020), the gap between the gold and bitcoin ratio compressed. Bitcoin's stock-to-flow will eclipse that of gold following the next halving (2024).



Source: PlanB (March 2019), Coin Metrics (April 2020)
Note: A Goldman Sachs report from 2015 estimated that the last of gold from known reserves will be mined by ~2035 and the last of platinum will be mined by ~2055. The last bitcoin will be mined around 2140[iii].

An anonymous personality, PlanB, also developed a valuation model based on the stock-to-flow ratio. Proponents of the stock-to-flow model suggest that there is a statistically significant relationship between bitcoin's market value and its scarcity as measured by the ratio. Critics of the model contend that the model does not capture demand, a more important driver of market value. While the significance of the model is out of the scope of this piece, we explore why demand for a scarce digital asset could rise[iv].

Decentralized checks and balances

Bitcoin's monetary policy was established when it was created. Its credibility is enforced in part by decentralization and proof-of-work mining. Bitcoin has a leaderless network of decentralized full nodes (computers running bitcoin software), in which every node stores the ledger of transactions and performs transaction verification independently, checking that rules are being followed. Because of this redundancy, there is no central point of failure. Full nodes that *verify* transactions are distinct from miners who expend energy to *process* transactions and mint bitcoin. Unlike mining, transaction verification does not require significant resources in the form of hardware or electricity. Thus, any

computer can join the distributed network to store and verify bitcoin transactions. Today tens of thousands of nodes perform this function.

The two main types of transactions include coinbase transactions that programmatically issue new bitcoins per the supply schedule and peer-to-peer payment or settlement transactions between users of the network. A transaction that does not follow consensus rules (e.g. attempts to create new coins or attempts to double spend previously spent bitcoin) will be rejected by the decentralized network of computers.

> "The nature of Bitcoin is such that once version 0.1 was released, the core design was set in stone for the rest of its lifetime."
>
> SATOSHI NAKAMOTO

In addition to preventing transactions that don't follow consensus rules, the level of decentralization that exists in the bitcoin network protects core properties such as the 21 million fixed supply by making it virtually impossible to change. No central party has sole discretion over bitcoin's monetary policy. Rather, such a change would require significant social coordination among stakeholders (e.g. users, miners and those running full nodes). Most stakeholders believe bitcoin has value because of its digital scarcity, resulting in negligible support for such a change.

Proof-of-work

Proof-of-work is an important design element that enforces bitcoin's fixed supply by making transactions irreversible. Proof-of-work provides evidence that a significant amount of computational work has taken place, though verifying that work took place is quick and easy relative to the effort and time it took to conduct the work. In order to create a block of transactions, miners perform hash operations over and over again to find a solution to a computationally intensive cryptographic problem, in a guess and check process known as proof-of-work. The process is computationally intensive in that it requires the use of specialized hardware (with a high fixed upfront cost) and electricity (an ongoing operating cost). These real-world sunk costs and the block reward that miners

are awarded for processing transactions serve as the incentive for miners to perform transaction processing and do so honestly.

> "One of the main value propositions for a store of value is in being something that doesn't change qualitatively (aka immutability)."
>
> JIMMY SONG, BITCOIN EDUCATOR[v]

Additionally, proof-of-work makes it prohibitively difficult and expensive for a malicious actor to rewrite or reverse transactions, making transactions immutable, in effect. The immutability of a block of transactions rises as the number of confirmations increases – in other words, as the number of subsequent blocks increases. A block that is buried under one hundred subsequent blocks is more immutable than a block that is buried under ten blocks because undoing it would require reversing one hundred blocks worth of transactions versus just ten. As a refresher, miners group transactions together to create blocks. A transaction is akin to an entry in a database and a block is akin to a page of entries in the database. Each block refers to the previous block such that blocks are linked together to form a chain. Thus, it is not possible to rewrite a block that is buried under one hundred subsequent blocks without rewriting each of those blocks.

Bitcoin's monetary policy was established at the outset. Stakeholders have faith in the policy because the network is decentralized. No centralized party can make changes to core properties and force those changes upon stakeholders. Transactions are immutable, making it computationally and economically impractical to attempt to undo transactions and rewrite the ledger.

DEMAND DRIVERS

Investors believe that the next wave of awareness and adoption could be driven by external factors such as unprecedented levels of intervention by central banks and governments, record low interest rates, increasing fiat money supply, deglobalization and the potential for ensuing inflation, all of which have been accelerated by the pandemic and economic shutdown.

Longer-term tailwinds that could fuel adoption include the use of bitcoin to preserve wealth amidst "slow and steady" inflation and the looming generational wealth transfer to millennials, who view bitcoin more favorably than other demographics.

NEAR- TO MEDIUM- TERM CATALYST

Monetary and fiscal stimulus

To offset demand destruction resulting from the global shut down in response to the pandemic, central banks and governments have responded with never-before-seen levels of monetary and fiscal stimulus

> "The FOMC was very worried about disinflation when they cut down to 1% in the early 2000s. Some even argue that this policy stance lead to reach-for-yield (RFY) even then, primarily through the housing bubble but also pretty buoyant risky asset prices, etc.
>
> Many commentators worried about QE-> debasement -> inflation. Yet as we now know, banks did not loan out the huge increase in reserves created by central bank asset purchases (that's how money gets created in our fractional reserve system of course), amid weak business/household loan demand, consistent in turn with the anemic recovery that seems to follow asset price busts. There are [also] some structural forces nudging CPI inflation that one could list."
>
> J. BENSON DURHAM AND ROBERTO PERLI, CORNERSTONE MACRO

to manage the impact of an economic downturn, stimulate the economy and placate markets. As many as 285 stimulus measures have been announced in a matter of eight months including zero or near zero interest rates, increasing money supply through unprecedented levels of quantitative easing and a range of lending facilities.

Even before the world entered the current health and economic crises, investors were forecasting the use of more direct forms of liquidity growth by central banks and governments to spur inflation that has been stubbornly low for a variety of reasons.

> "In no small way, unconventional policy measures are supposed to generate some asset-price inflation by lowering risk aversion and ultimately increasing the flow of credit to households and business."
>
> J. BENSON DURHAM AND ROBERTO PERLI, CORNERSTONE MACRO

Central banks and governments have implemented expansionary policies to counteract the deflationary pressures created by global lockdowns. Time will tell whether and how quickly the gradual re-opening of the global economy will spur consumer spending, how central banks and governments will react and what the impact on consumer price inflation will be. The impact on demand for fixed supply assets is less clear if inflation or expectations of inflation fall. However, the increase in money supply may translate to an increase in the price of risky or scarce assets regardless.

If the combination of policy decisions succeeds in offsetting deflationary pressures and creates inflation, or if inflation stays suppressed, but nominal yields stay low or go lower, investors may turn to "an asset that maintains its real value – an asset that cannot be printed"[vi] to recalibrate a diversified portfolio. Traditionally, in these situations, investors have turned to fixed supply assets such as real estate, dividend yielding stocks, and precious metals. This time around, investors could turn to a new

type of fixed supply asset as protection against potential inflation or low interest rates, but with significant growth potential – bitcoin.

> "It's really asymmetric. Bitcoin is a once in a generation type trade."
>
> DAN MOREHEAD, PANTERA CAPITAL

Deglobalization

Globalization is one of the structural forces that has historically kept the price of goods and services low in the face of inflationary pressures. While globalization had been slowing following the financial crisis (based on trade flows, globalization peaked in 2008), pandemic induced restrictions and lockdowns have exposed the risk of reliance on global supply chains and have added momentum to at least partial deglobalization. According to the EU's internal market commissioner, Thierry Breton, "The question posed by this crisis is that we may have gone too far in globalization."[vii] The World Trade Organization has forecasted a 13% to 32% decline in world trade in 2020 due to the pandemic.[viii] Deliberate actions by governments and policymakers to restrict trade and reduce dependence on global supply chains could further accelerate deglobalization, placing incremental upward pressure on the cost and price of goods and services, lifting some of the downward pressure on inflation from globalization.

> "In a world that craves new safe assets, there may be a growing role for bitcoin."
>
> PAUL TUDOR JONES, LORENZO GIORGIANNI, TUDOR INVESTMENTS[ix]

Current interest in bitcoin's store of value properties

Tudor Investment Corporation's decision to allocate to bitcoin in the Tudor BVI fund is evidence that unprecedented levels of monetary growth is driving institutional interest in bitcoin's store of value properties. Paul Tudor Jones, founder and Chief Investment Officer, and Lorenzo Giorgianni,

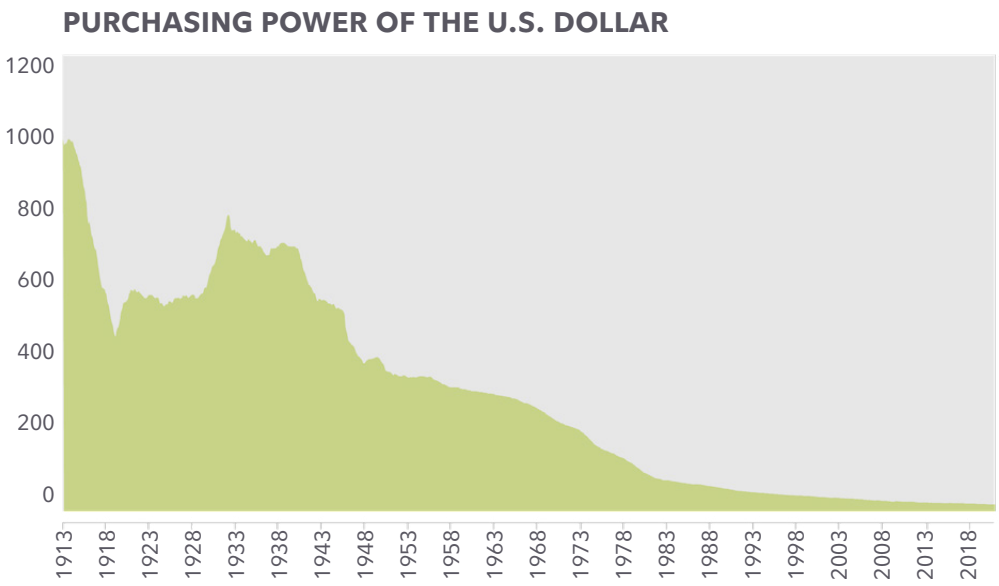
Head of Global Research articulated the rationale for investing in bitcoin in their May 2020 investor letter, "The Great Monetary Inflation." The Tudor Investments team scored financial assets, fiat cash, gold and bitcoin based on four characteristics that define store of value assets – purchasing power, trustworthiness, liquidity, portability. Bitcoin's score was 60% of the score of financial assets, but 1/1200th of the market cap of financial assets and it was 66% of the score of gold, but 1/60th of the market cap, concluding, "Something appears to be wrong here and my guess is that it's the price of Bitcoin." While many have expressed the same reasoning, this was seen as a watershed moment, given the thesis and investment was from a traditional hedge fund manager/ legendary macro investor (Paul Tudor Jones) and former Deputy Director of the Strategy, Policy and Review Department at the IMF (Lorenzo Giorgianni)[ix].

> "You quietly over some period of time accumulate a position and then just never look at it again and hope that that insurance under the mattress never has to come due. But, if it does, it will protect you."
>
> CHAMATH PALIHAPITIYA[x]

LONGER-TERM CATALYSTS

Long-term wealth preservation

A store of value asset isn't important only in high inflation environments. Even "low and steady" inflation erodes the purchasing power of the most stable fiat currencies over a long enough time period. This drives people to invest in financial assets in order to preserve or grow their wealth over longer timeframes. Proponents of the narrative that bitcoin is a potential store of value contend that base demand will grow as more people recognize it as a long-term wealth preservation tool.



Source: St. Louis Fed, April 2020

Great wealth transfer

A report released by Coldwell Banker in October 2019 shared data around the transfer of $68 trillion in wealth to millennials, estimated to be one of the most substantial transfers of wealth historically. The study also found that there are almost 620,000 millennial millionaires in the United States, about 2% of the population of millionaires in the U.S. The millennial demographic (those born between 1981 to 1996) is more open to novel, digitally native alternatives versus legacy products and services and more comfortable holding new types of investments.

This open-mindedness has been shaped in part by the 2008 financial crisis. Entering the workforce at such an inopportune time instilled a level of skepticism towards the traditional banking system. According to WEF's 2017 Global Shapers Survey, 45% of the 30,000 millennials surveyed said they disagree with the statement that they trust banks to be fair and honest.[xiii] Edelman's October 2018 survey of affluent millennials (those aged 24-38 with $50K in investable assets or $100K in individual or joint income) found that 77% of affluent millennials believe "the whole financial system is designed to favor the rich and powerful" and that "it's just a matter of time before the bad behavior of the financial industry leads us into another global financial crisis."[xiv]

There is also evidence that the millennial demographic's affinity to hold bitcoin relative to legacy stores of value such as gold is high. According to Nate Geraci, president of investment advisor, ETF Store, anecdotally, about 90% of their millennial clients said they prefer bitcoin to gold[xv] - "It's a landslide." According to a November 2019 Millennials and the Future of Money report by Edelman, 63% of "crypto users" said crypto is a better investment than gold in a volatile economy.[xvi]

CONCLUSION

Bitcoin's inherent properties have given rise to the perspective that bitcoin has the potential to be a store of value, with complementary and interdependent components – the decentralized settlement network (Bitcoin) and its digitally scarce native asset (bitcoin). Equally important is the consideration of demand for bitcoin's unique features – there is no long-term value to create or store if there is no sustained demand for these properties.

> "Bitcoin has enough critical mass that it will be around for the long haul."
>
> NIC CARTER OF CASTLE ISLAND VENTURES AND COIN METRICS

External forces that are accelerating interest and investment in bitcoin include unprecedented levels and exotic forms of monetary and fiscal stimulus globally with unknown consequences. This is exacerbating the concerns that Bitcoin was designed to address and is leading more investors and users towards bitcoin as an "insurance policy" that may provide protection against the unknown consequences. Simultaneously, the massive transfer of wealth from the older generation to a younger demographic is a more gradual but important long-term tailwind, as younger people view bitcoin more favorably. This is an important catalyst for bitcoin adoption as they inherit and grow their wealth.

While bitcoin is not guaranteed to succeed as a store of value, should sustainable long-term demand for the use case not materialize, the tailwinds mentioned above should drive incremental demand

for a novel asset with unique properties. Additionally, as we will examine in future parts in our bitcoin investment thesis series, Bitcoin's strength is that it has properties that allow it to serve multiple functions, further hardening the likelihood of its success as measured by growth in value.

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[i] We refer to the Bitcoin network, protocol and system as a whole as "Bitcoin." We refer to the system's unit of account, BTC, as "bitcoin."

[ii] Without overwhelming support from node operators, who have been loathe to provide it.

[iii] Myra P. Saefong. "In 20 year, the world may run out of mineable gold." March 2015. https://www.marketwatch.com/story/in-20-years-the-world-may-run-out-of-minable-gold-2015-03-30

[iv] PlanB. Modeling Bitcoin Value with Scarcity." March 2019. https://medium.com/@100trillionUSD/modeling-bitcoins-value-with-scarcity-91fa0fc03e25

[v] Jimmy Song. "Why Bitcoin is Different." April 2018. https://medium.com/@jimmysong/why-bitcoin-is-different-e17b813fd947

[vi] Rick Rieder. "The monetary policy endgame." September 2019. https://www.blackrockblog.com/2019/09/05/monetary-policy-endgame/

[vii] Douglas A. Irwin. "The pandemic adds to the deglobalization trend." April 2020. https://www.piie.com/blogs/realtime-economic-issues-watch/pandemic-adds-momentum-deglobalization-trend

[viii] World Trade Organization. "Trade set to plunge as COVID-19 pandemic upends global economy." April 2020. https://www.wto.org/english/news_e/pres20_e/pr855_e.htm

[ix] Paul Tudor Jones, Lorenzo Giorgianni. "The Great Monetary Inflation." May 2020 https://www.scribd.com/document/460382154/May-2020-BVI-Letter-Macro-Outlook

[x] Michael Sheetz. "Warren Buffett is 'completely wrong and outdated' on bitcoin, Chamath Palihapitiya says." February 2020. https://www.cnbc.com/2020/02/26/palihapitiya-warren-buffett-is-completely-wrong-outdated-on-bitcoin.html

[xi] Coldwell Banker. "A Look at Wealth 2019: Millennial Millionaires." October 2019. https://blog.coldwellbankerluxury.com/a-look-at-wealth-millennial-millionaires/

[xii] Michael Dimock. "Defining Generations: Where Millennials end and Generation Z Begins." January 2019. https://www.pewresearch.org/fact-tank/2019/01/17/where-millennials-end-and-generation-z-begins/

[xiii] Kate Rooney. "After the crisis, a new generation puts its trust in tech over traditional banks." September 2018. https://www.cnbc.com/2018/09/14/a-new-generation-puts-its-trust-in-tech-over-traditional-banks.html

[xiv] Edelman. "Millennials with Money." October 2018. https://www.edelman.com/research/2018-millennials-with-money

[xv] Bloomberg. "In the ETF Crosshairs: U.S-China Trade War, Bitcoin ETF Delay & Concealed ETF Structures." May 2019. https://www.bloomberg.com/news/videos/2019-05-23/in-the-etf-crosshairs-u-s-china-trade-war-bitcoin-etf-delay-concealed-etf-structures-video

[xvi] Edelman. "Millennials and the Future of Money." November 2019. https://www.edelman.com/research/2019-millennials-with-money