What's happening with Bitcoin?

Special report

Bitcoin is a potentially transformative technology whose impacts may extend beyond its use as an investment. For its most ardent advocates, a belief that Bitcoin will change society is close to an article of faith. Conversely, there are many decided nonbelievers who view the current enthusiasm for Bitcoin as a speculative phenomenon. The financial world is starkly divided on this issue.

Please note that RBC Wealth Management does not currently provide any recommendations or solutions related to Bitcoin or other cryptocurrency assets. The following is our effort to summarize and clarify the many questions about what Bitcoin is and how it may be relevant to investors today, and is for information purposes only. In our view, any investment in Bitcoin should be considered speculative and volatile, meaning that investors should be prepared to lose all of their investment.

What is happening with the price of Bitcoin?

From September 30, 2020 to mid-January 2021, the price of Bitcoin surged from $10,707 to $38,766, or 260%. Bitcoin's price then dropped briefly by 23% in the course of January 2021, before continuing its upward climb.

Why is this happening?

Over this period, a number of developments have given Bitcoin momentum. Most meaningfully, several highly visible fund managers and technology business leaders have made significant public purchases of Bitcoin. This has led to growing expectation about other firms that may follow, signaling the potential for increased institutional acceptance of an asset that has up to this point largely been held and traded by individual investors.

Over the same period, several payments processors including PayPal, Square, Visa, and MasterCard have announced plans to make Bitcoin accessible as a means of payment across a network of millions of vendors. By enabling consumers to buy, hold, and spend Bitcoin, this would address many of its perceived shortcomings and make it accessible to a much broader population.

New heights

Bitcoin price in U.S. dollars

Source - RBC Wealth Management, Bloomberg; data through 2/9/21

Priced (in USD) as of 2/9/21 market close, ET (unless otherwise stated). Produced: Feb. 10, 2021 9:00 pm ET; Disseminated: Feb. 10, 2021 9:02 pm ET
For important disclosures, required non-U.S. analyst disclosures, and authors' contact information, see page 5.

These headlines have received a lot of attention on social media and from Bitcoin boosters, resulting in a flood of new investors into this space, in part driven by speculation that others will follow and drive further gains.

How does Bitcoin stack up?

Despite the original objectives of its creators, Bitcoin has not yet lived up to its potential as a currency used for everyday transactions. This is largely because of its volatility: over the past five years, as shown in the exhibit below, its daily price change was more than 5% on 270 occasions, and there have been at least 20 occasions when the price has moved up or down 8% or more in one day in the past 24 months alone. It is possible that volatility may decrease in time if Bitcoin achieves broader acceptance, aided by the efforts of the payment processors and the potential for ongoing innovation.

Proponents of Bitcoin are increasingly focused on its potential to serve as a store of value. A key reason is that there will only ever be 21 million Bitcoins issued, making it a potential hedge against inflation and resistant to control by central banks. The COVID-19 pandemic over the past year has been a major catalyst for this way of thinking. In order to manage the fallout of the pandemic, government expenditures as a percentage of GDP are approaching the all-time highs reached during World War II, and central banks are funding this burst of spending by printing money at a rate unparalleled in modern history. In the near term, economic damage related to the pandemic may keep inflation low. But over a longer time frame, this kind of policy has been associated with inflation, and serves as a catalyst for investors to seek out assets which they expect will hold their value.

That sounds a lot like gold—how do they compare?

Indeed, the same scarcity of supply that makes Bitcoin attractive as a store of value forms the basis for investing in gold. Relative to gold, Bitcoin has some innovative advantages: it is easier to transact, transport, and store; it is very easy to subdivide into smaller pieces; and it may soon be used to fund day-to-day expenses.

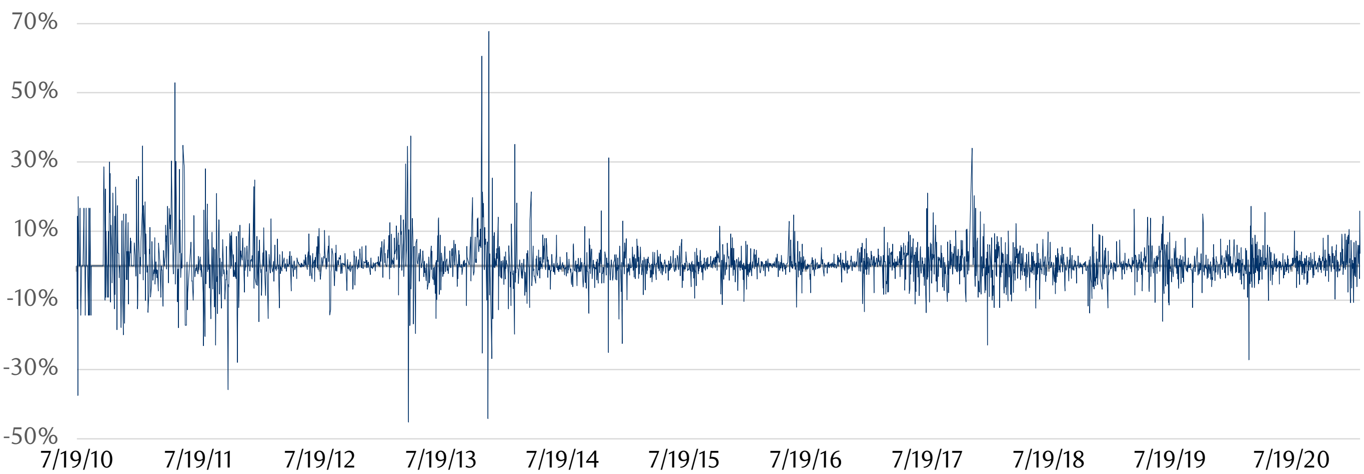
There are also some notable differences. Unlike gold, Bitcoin is intangible and does not exist in physical form. It has existed for just over a decade, and so does not have the benefit of thousands of years in which society has become conditioned to accept it as a store of value and a means of exchange. What might drive greater acceptance of Bitcoin? One view is that younger generations are much more comfortable with the concept of a digital asset; perhaps more so than with gold. These generations stand to inherit or generate substantial wealth in the coming years.

Finally, as a finished tangible product, gold exists even if new gold does not get mined. Bitcoin's existence depends on the support of Bitcoin miners and on the existence of computer networks and electricity.

We think the range of possible outcomes for Bitcoin is much wider than for gold. Bloomberg, Forbes, and other financial news sources have reported some market participants believe that, working off a base that is roughly one-tenth the size of the gold market (even after its tremendous price appreciation), Bitcoin's price could rise by several multiples should gold bugs migrate to the digital currency en masse. Conversely, should the enthusiasm driving recent headlines subside and Bitcoin experience a reversal in momentum, we believe it's difficult for analysts to come up with a rationale for any one valuation of Bitcoin outside of momentum. While this may be true for

A daily variation of 10% either way is not unusual

Daily percentage change in the price of Bitcoin



Source - RBC Wealth Management, Bloomberg; data through 2/9/21 gold as well, it is arguably a more significant challenge for Bitcoin given its shorter history, smaller base, and substantially greater price moves.

How many other crypto assets are there, and where does Bitcoin fit in?

Another key risk for most cryptocurrencies is substitution. While the amount of Bitcoin is limited, there is no limit to the number of cryptocurrencies that might replace it, and more than 8,000 alternatives currently exist. Not all cryptocurrencies aim to meet the same objectives as Bitcoin, but some do, and they may have attributes that represent significant improvements over the original. However, Bitcoin has become the de facto gold standard of cryptocurrencies, eclipsing all others combined in terms of value and boasting more than 130 million holders and over 10,000 nodes (the miners and systems that keep the Bitcoin blockchain running), making it unlikely, in our view, that Bitcoin will disappear.

What are the implications of investor behavior?

Many early Bitcoin investors are ardent in their commitment and unlikely to sell for quick profits. Moreover, increased institutional investor participation may have a moderating effect on volatility over time. However, we note that there is a substantial population of Bitcoin investors who are attracted to the lure of quick profits and driven by "FOMO"—the fear of missing out. Their behavior is highly influenced by social media, and they are likely a key source of Bitcoin's volatility. This is unlikely to change in the near term, in our view.

How do you view Bitcoin?

In our view, Bitcoin is a young and relatively small asset class that, despite increasing momentum, has spent much of its life fighting for broad acceptance while exhibiting uniquely elevated levels of price appreciation and volatility. Because the total supply of Bitcoin is fixed at 21 million digital coins, widespread adoption by the broader investing population could cause its value to increase appreciably, while any apparent reversal in that momentum, or the appearance of a widely accepted substitute cryptocurrency, could cause material depreciation. It is possible that both situations could occur at different points in the future, and as a result, Bitcoin's trajectory may be anything but linear. Finally, we have very little to go on in terms of objectively quantifying the value of Bitcoin, and a more orthodox investment thesis will likely take time to emerge.

We believe there remains a significant speculative element to the Bitcoin investment proposition. To put it another way, there is significant risk to such an investment, and investors should only risk that portion of their portfolio they are prepared to lose. We believe many portfolio managers would make an allocation of no more than a few percent of a high risk investor's portfolio.

On the other hand, a worst-case inflationary outcome in developed economies could spur a scramble for so-called hard assets (those with finite availability), which could prove a catalyst for Bitcoin.

What are other considerations?

Security is often mentioned as a key risk. While the Bitcoin network has never been hacked and its decentralized nature makes doing so very difficult, there is some risk related to storage. Bitcoin is stored in a digital wallet secured by a 64-character private key (essentially a long PIN number) which may be stored on a USB drive, committed to memory, written on a piece of paper, stored in a mobile phone, or entrusted to an online custodian—and therefore lends itself to being lost by theft, hack, forgetfulness, or misplacement. That said, innovations like the entry of the payment processors and increasing regulation of Bitcoin exchanges have made investors increasingly confident. Fund managers and their cryptocurrency custodians are developing systems for safeguarding Bitcoin wallets that rival Bitcoin's original coding in their sophistication, such that individual investors seeking Bitcoin exposure may choose to do so in a fund-style vehicle.

Regulation is both a potential risk and a potential support. Government policies that make it difficult or illegal to access Bitcoin could be very detrimental. Given the nascent stage of the cryptocurrency world, there have been some allegations of abuse, such as the case with Ripple, which dropped 70% after the U.S. Securities and Exchange Commission filed an action against Ripple Labs Inc. alleging the raising of more than $1.3 billion through ongoing unregistered digital asset securities offerings. The company behind Tether, a "stablecoin" that is pegged in value to the U.S. dollar, faced a class action lawsuit when it was unable to provide satisfactory assurances that holdings were backed by sufficient hard currency. In our view, while increased regulation may offend some of the original Bitcoin enthusiasts, it may do much to increase the confidence of investors in accessing this market.

ESG (environmental, social, and governance) considerations also affect Bitcoin.

- The amount of electricity used in Bitcoin mining (i.e., to perform the intensive computation needed to create new Bitcoins) is a widely cited concern by investors focused on sustainability and climate change. A 2018 article in The Economist highlighted the fact that the amount of electricity consumed by Bitcoin at that time was equivalent to a medium-sized economy such as Ireland. While data is portable, electricity is not. Accordingly, Bitcoin miners have been locating in areas where electricity production exceeds local demand and prices are lower, giving them an edge over other miners and also mitigating the climate impact to some degree. Other cryptocurrencies are less energy-intensive, and future innovations may moderate Bitcoin's energy impact, but it is likely to remain an issue for the foreseeable future.

- Is there reputational risk in holding Bitcoin? Early in its development, Bitcoin was seen as a means of funding criminal activity and disposing of the proceeds—as reflected in recent remarks by high-profile figures including U.S. Treasury Secretary Janet Yellen. For a clearer perspective on the possible size of this issue, a 2020 study on the state of cryptocurrency crime by blockchain analysis company Chainalysis found that illicit activity comprised approximately 1.1% of overall Bitcoin flows between 2017 and 2019.

Central banks have begun launching their own digital currencies, bringing many of the benefits of blockchain and crypto assets, while remaining firmly under the control of sovereign monetary authorities.

Finally, the broader outlook for crypto assets is much bigger than just Bitcoin. Ether, the second-largest digital currency at approximately $200 billion in value, provides an insight into the possible potential. It exists on the Ethereum blockchain, which itself serves as the base infrastructure for many other independent digital currencies, and also allows for the tokenization of contracts—which could be anything from concert tickets, to art, to shares in public corporations. For example, common shares in a company could be turned into digital assets that can be transacted directly between buyer and seller and stored on the blockchain, bypassing the broker, the stock exchange, and the custodian. This could be done in real time across borders and time zones, 24/7, with immediacy and low cost.

More recently, there has been a wave of new efforts in a new segment of the crypto space referred to as DeFi (Decentralized Finance) which aims to develop a financial infrastructure of lending, borrowing, and leveraging products and services that operates in a decentralized manner.

The possibilities of cryptocurrency technology are wide-ranging, and in the eyes of many of its advocates, we may be in the early days of the next great stage in technological evolution, much as the Internet was in the mid-1990s, and the social media and platform companies in the early 2000s.

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