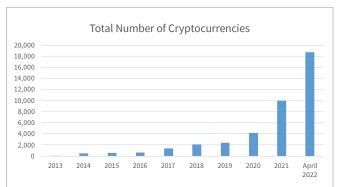
Cryptocurrency Primer

A quick guide on cryptocurrency application and risks

WHAT ARE CRYPTOCURRENCIES?

Cryptocurrencies represent digital units that are utilized to facilitate online transactions without the need for a central intermediary to process. The transactions are digitally recorded on a public ledger. As of April 2022, per CoinMarketCap, more than 18,500 cryptocurrencies, also known as coins or tokens, have been launched as there are minimal barriers to launching new coins. While almost all cryptocurrencies have no intrinsic value, the two most popular cryptocurrencies, Bitcoin and Ether, have a combined market value of over \$1.2 trillion.*



Source: CoinMarketCap

WHAT IS BITCOIN?

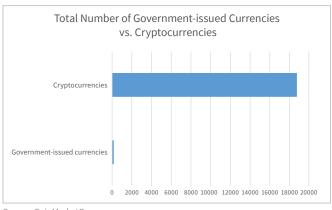
Bitcoin, launched in 2009, is the most widely known cryptocurrency and its market capitalization surpasses that of all other cryptocurrencies. Additionally, Bitcoin's invention coincided with that of the blockchain (described later), which was required to facilitate transactions. The supply of Bitcoin is finite (currently capped at 21 million coins) and designed to become increasingly constrained over time.

WHAT IS ETHEREUM?

Ethereum is the most frequently used open source blockchain network (described later). The primary use case for Ethereum is the built-in functionality to create so-called "smart" contracts that can be executed without an intermediary. A simple example is a life insurance "smart" contract. When someone with a life insurance policy passes away, the notarized death certificate would be the input trigger for the contract to release the payment to the named beneficiaries. Ether, which is currently the second largest cryptocurrency by market capitalization, is the native cryptocurrency built into the Ethereum network. Ether is the cryptocurrency that is utilized to facilitate Ethereum smart contracts.

HOW DO CRYPTOCURRENCIES COMPARE TO TRADITIONAL CURRENCIES OR INVESTMENTS?

Unlike traditional, government-issued currencies, cryptocurrencies are not sponsored by a government authority, are largely unregulated and confer no claims against any assets. Moreover, due to price volatility and transaction costs, cryptocurrencies are rarely used to conduct typical financial transactions. Consequently, cryptocurrencies are not widely accepted mediums of exchange despite the small number of companies that accept them as forms of payment.



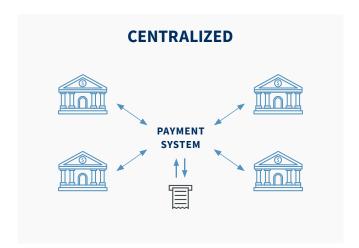
Source: CoinMarketCap

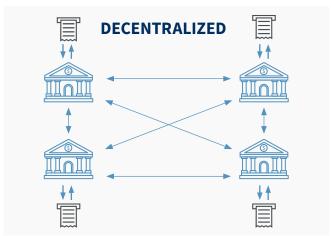
Given the lack of utility as payment mechanisms, the majority of the interest in cryptocurrencies has been for their use as speculative investment vehicles, largely based on the perception that their value will increase due to codified supply limitations and/or excitement regarding the potential application of blockchain technology.

WHAT IS BLOCKCHAIN TECHNOLOGY?

Blockchain is the technology that underpins cryptocurrencies, but its application is not limited to just cryptocurrencies. A blockchain is a digital ledger of transactions that is duplicated and distributed across the entire network of computer systems on the blockchain. Once a transaction is agreed upon between users, the majority of computers in the network must verify that the transaction is valid before the transaction can be added to the digital ledger. Blockchain technology is designed to operate without the need for a central authority or clearinghouse. Additionally, the records that are created are irreversible and, therefore, cannot be duplicated or changed.

As its name suggests, blockchain can be described as blocks of information that are pieced together with digital signatures to form a chain of encrypted records. Beyond facilitating cryptocurrency speculation, the commercial application of blockchain technology can span a number of industries. For example, the blockchain can be utilized in supply chain management for tracking inventory and improving logistics.





HOW DO YOU BUY AND SELL CRYPTOCURRENCIES?

The buying and selling of cryptocurrencies is different than the buying and selling of more conventional instruments such as stocks or bonds. Many cryptocurrencies are bought and sold directly on cryptocurrency exchanges without an intermediary. There is no overarching best execution requirement and, in fact, cryptocurrencies often trade simultaneously at different prices on different exchanges. Cryptocurrency transactions can also involve noteworthy fees. Cryptocurrencies are stored in digital wallets that can either be connected or disconnected from the internet. While internet-connected (hot) wallets can offer a convenient way to access cryptocurrencies, they are subject to cybersecurity risks. Unlike traditional stock exchanges, most cryptocurrency exchanges also act as custodians.

WHAT ARE THE BENEFITS AND CONSIDERATIONS OF TRANSACTING WITH CRYPTOCURRENCIES?

The major benefit of transacting with cryptocurrencies is the use of a decentralized platform, which enables cross-border transactions and the ability to transact 24 hours a day, seven days a week. In some cases, cryptocurrencies can offer a certain degree of anonymity but, given that each transaction is recorded on a blockchain, such anonymity is limited. It is important to note that the infrastructure and business adoption to support these transactions is still in the early stages. From an investment perspective, the primary benefit to cryptocurrencies is that, as the market continues to develop, there has been an increase in the value of many cryptocurrencies. However, going forward, there may not be a correlation between increased blockchain adoption and the market value of cryptocurrencies.

WHAT ARE THE BIGGEST RISKS ASSOCIATED WITH SPECULATING IN CRYPTOCURRENCIES?

Many cryptocurrencies do not have any intrinsic economic value nor do they generate cash flows such as interest payments or dividends. Currently, the primary rationale for investing in cryptocurrencies is speculation that the market for cryptocurrencies will grow and that prices will rise. Additional risks include, but are not limited to:

- Absence of regulatory oversight or investor protections Cryptocurrencies are not regulated by any government agency or central bank.
- **Cybersecurity risk** Cryptocurrencies are bought, sold and stored online, which makes all parties in the cryptocurrency value chain vulnerable to cyberattacks and breaches.
- **Custody and clearing** Many of the custody and clearing standards used to trade securities have not been implemented by cryptocurrency exchanges.
- Concentrated ownership A large number of cryptocurrencies are controlled by early adopters who are unlikely to sell, which contributes to price volatility.

CAN I BUY CRYPTOCURRENCIES AT RAYMOND JAMES?

At this time, Raymond James does not offer the ability to buy or sell cryptocurrencies. However, we continue to monitor the maturity of the space and the potential risks and benefits to investors.

Prior to making an investment decision, please consult with your financial advisor about your individual situation. The prominent underlying risk of using Bitcoin as a medium of exchange is that it is not authorized or regulated by any central bank. Bitcoin issuers are not registered with the SEC, and the Bitcoin marketplace is currently unregulated. Bitcoin and other cryptocurrencies are very speculative investments and involve a high degree of risk. Investors must have the financial ability, sophistication/experience and willingness to bear the risks of an investment, and a potential total loss of their investment. Securities that have been classified as Bitcoin-related cannot be purchased or deposited in Raymond James client accounts

REGULATORY BACKGROUND | Financial Industry Regulatory Authority ("FINRA") and the Securities and Exchange Commission ("SEC") have issued multiple warnings to investors regarding the risks associated with Bitcoin and other cryptocurrency. New products and/or technology, such as Bitcoin and other cryptocurrency, are typically considered high-risk investment opportunities as they commonly are targeted by fraudsters who manipulate the market with artificial promotional scams. As of April 2022, the SEC has rejected more than 15 applications from fund companies seeking to create and list a spot-price bitcoin exchange traded fund ("ETF") due to the highly unregulated nature and lack of investor protections in the cryptocurrency marketplace. The biggest risk factors surrounding Bitcoin (and other cryptocurrency) issuers include that they are not registered with the SEC (or local country regulator) and can be exploited by criminals for money laundering/terrorist financing making the source of funds difficult to follow and verify.

RJF CRYPTOCURRENCY SECURITY DEFINITION | Approved cryptocurrency-related securities are defined as any security that is associated with a company and/or issuer that is:

- 1. Affiliated with a U.S. federally regulated cryptocurrency business operation;
- 2. Listed on a U.S.-recognized exchange (e.g., NYSE or Nasdaq); and
- 3. Subject to RJF Securities Review Group (SRG) approval.

Prohibited cryptocurrency-related securities are defined as any security that is associated with a company and/or issuer that is affiliated with one or more of, but not limited to, the following non-U.S. federally regulated cryptocurrency business objectives:

- 1. Indexed to the underlying price movement of a cryptocurrency;
- 2. Cryptocurrency mining;
- 3. Cryptocurrency escrow services; and/or
- 4. Cryptocurrency exchange or payment services.

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