

## Simplified Overview of Digital Asset Investment

Digital Assets may be divided into several categories, based on operation, purpose and legal treatment. Although these categories are divided based upon language used, there is little definitional uniformity in the marketplace, and meaning may be difficult to discern to newcomers. This simplified overview attempts to provide some working definitions, and a description of how investors may gain exposure to the asset types.

### **General Glossary**

***Digital Asset*** is intended as an omnibus definition that covers several types of intangible, digital assets.

***Virtual Currency*** was the term used by the Financial Crimes Enforcement Network (FinCEN), a bureau of the Department of Treasury that issued the first significant regulatory guidance on bitcoin and similar “convertible Virtual Currencies” that could be used as a money substitute. From a pure, definitional perspective, Virtual Currencies include both centrally administered payment assets (e.g., Liberty Reserve credits or video game currency), Cryptocurrencies (e.g., bitcoin) and other Crypto Assets, in that they are digital representations of value that may be transferred, but are not legal tender. As a result of FinCEN’s choice of definition in their 2013 guidance, bitcoin, litecoin and other early Cryptocurrencies were often simply defined as Virtual Currency.

***Crypto Asset*** is a more recently adopted term that limits the definition of Digital Assets to those that are secured with cryptography. This typically means Digital Assets that are either the native asset (i.e., the primary unit and transfer mechanism) of a decentralized, cryptographically secured network or a token issued on top of such networks.

***Cryptocurrency*** is typically defined as the native asset of a decentralized, cryptographically secured network. Cryptocurrency may be used as a form of digital cash, in that it is capable of being possessed (through the use of public-private key cryptography), transferred (through digital signatures) and valued (to the extent that primary or secondary markets entertain such value). Although Cryptocurrencies may be used as a medium of exchange, store of value or unit of account, limited adoption and volatile pricing makes these three characteristics of money difficult for most cryptocurrencies, even bitcoin.

Cryptocurrencies include bitcoin (the native asset of the Bitcoin network), litecoin (the native asset of the Litecoin network), and ether (the native asset of the Ethereum network). As of September 14, the website CoinMarketCap.com tracked nearly 886 Cryptocurrencies that have had secondary market trading.

***Tokens*** are a form of Crypto Asset that typically is created using a “smart contract” to issue a Digital Asset on top of a Cryptocurrency network. Tokens are secured by the Cryptocurrency network, but are not the native asset of the network and may be designed to have a variety of functions. Tokens are often created and issued or distributed in connection with a business process known as a token sale or “ICO”. Examples of tokens include the Stablecoin Tether (issued to represent a 1:1 USD proxy), 0x (a token that facilitates decentralized exchange access and trading) and REP (a token that facilitates decentralized prediction markets on the Augur network). As of September 14, the website CoinMarketCap.com tracked 1,074 Tokens that have had secondary market trading.

***Utility Token*** is a Token designed to be used to engage on and/or access a tokenized network. Utility tokens are typically sold to the public in primary market sales (often ICOs), followed by secondary market activity. Utility Tokens typically do not feature an economic or voting interest in an issuer. Instead, proponents often argue that Utility Tokens are intended as transferrable, tokenized licenses that are sold and purchased for direct use on platforms, rather than as an investment. With the exception of state law in Wyoming and regulatory guidance or legislation in jurisdictions including Switzerland, Singapore and Malta, there is little if any direct precedent for recognizing Utility Tokens as a legal construct. The concept of ***Consumer Token*** is a similar approach which is gaining some industry level support.

**Crypto Security** or **Security Token** is a term used for a Token that is designed to have features similar to a traditional investment contract. These features may resemble those found in equity, debt or other instruments that have governance or economic rights. Examples of Crypto Securities include tokenized private and public equity offerings (e.g., Overstock preferred shares offered on a blockchain) and recent blockchain based debt issuances.

**Stablecoin** is a term used for a Cryptocurrency or Token that is designed to feature a relatively stable value for primary and secondary market purchases and sales. The most popular form of Stablecoin is Tether, a Token issued by an affiliate of the Digital Asset Exchange Bitfinex that is purportedly backed by USD on a 1:1 basis. Several projects are also seeking to develop decentralized Stablecoins that rely on complicated algorithms to automatically rebalance activities to retain a stable value (e.g., Basis and MakerDAO).

### **Simple Asset Classification of Digital Assets**

Digital Assets are far from a uniform new asset class. To the contrary, the various ways that Digital Assets may be generated, issued, sold and used has resulted in a hodgepodge of potential regulatory frameworks and risk profiles.

The most familiar Digital Assets are bitcoin and ether, the native assets of the Bitcoin and Ethereum networks, respectively. These Cryptocurrencies share some characteristics and are generally regarded as commodity-like assets, or even commodity money. Although truer for bitcoin than ether, Cryptocurrencies are generally introduced, administered and transferred on a decentralized, distributed network that is not formally controlled by a central party. In the case of bitcoin, there is a fixed “money” supply, and both are capable of being possessed and transferred to third parties. Both bitcoin and ether are fungible and divisible, and have been used as a medium of exchange, although price volatility and complex tax treatment have limited their use in typical commercial transactions. Similarly, price volatility has hampered, but not eliminated use of bitcoin and ether as a store of value. Cryptocurrencies typically do not have an issuer, and do not carry economic or voting rights.

Utility Tokens are unique from Cryptocurrencies in that they often involve reliance upon a smaller subset of individuals to drive token or network value. In the case of most ICOs, this group will be the parties who have sold (or coordinated the sale) of tokens to the public, with the intention that proceeds be used for continuing development of software, accessed platforms or the network ecosystem. Utility Tokens may have a variety of uses that grant them characteristics including medium of exchange or access license. Typically, Utility Tokens do not carry economic or voting rights in respect of the issuer, and an investment in Utility Tokens typically involves little contractual rights. Nevertheless, the Securities and Exchange Commission generally regards ICOs as subject to regulation under Securities Laws.

Security Tokens typically are Tokens that carry economic or voting rights to an issuer and are regulated as securities. Unlike traditional securities, most Security Tokens are custodied directly by the holder, rather than through a central depository or issuer ledger.

Tokens generally may be used to digitize and make transferrable a variety of assets, value and information. For example, non-fungible tokens may be generated to represent particular assets and collectibles, or rights thereto.

### **Obtaining Direct Exposure to Digital Assets**

Parties can directly purchase or acquire Cryptocurrencies in the following ways:

- Direct purchase in a peer-to-peer transaction, through an OTC Desk, through a direct seller, through a centralized Digital Asset Exchange or Dark Pool, or through a Decentralized Exchange (which shares features of a peer-to-peer transaction and a Digital Asset Exchange).
- As consideration for goods and/or services (e.g., receiving asset management fees in bitcoin; selling real estate for bitcoin; selling one token for ether in an ICO).

- By “mining” or renting “cloud mining” contracts (Digital Asset networks typically reward parties that participate in transaction verification with transaction fees and new Digital Assets).

For Tokens, direct exposure typically is obtained through direct purchase or as consideration for goods and/or services (including, often, signing up for services through the Token issuer).

Generally, speaking, investment professionals will be concerned with “direct purchase” transactions. The direct purchase venues may loosely be described as follows:

- Reasonably well-regulated US Crypto Exchanges (e.g., Coinbase Pro, Gemini). These trading platforms match user bids and asks on order books with trading pairs that feature fiat currency and larger commodity-like Cryptocurrencies (e.g., bitcoin and ether). These trading platforms are regulated as money service businesses (MSBs) and money transmitters (MTs), but not as securities or commodities exchanges.
- Somewhat regulated US Altcoin Exchanges (typically not offering fiat trading pairs and dealing with smaller Crypto Assets)(e.g., Bittrex, Poloniex). These exchanges match user bids and asks on order books with trading pairs that feature larger commodity-like Cryptocurrencies as well as smaller Crypto Assets, including those that were issued in primary ICOs (e.g., 0x, ONT, REP and EOS). These exchanges are regulated as MSBs and, in some states, MTs, but not as securities or commodities exchanges. In addition, to the extent that tokens traded include securities, an exchange may be required to register as an alternative trading system (ATS, discussed further below).
- Somewhat regulated International Crypto Exchanges (e.g., Bitstamp, Binance). These exchanges tend to share characteristics of well-regulated US Crypto Exchanges and US Altcoin Exchanges, but often are subject to less onerous regulatory regimes, depending on their jurisdictions of operation.
- Largely unregulated Crypto Exchanges. These exchanges typically lack reliable fiat banking relationships, but deal with broad categories of Digital Assets. They operate in jurisdictions that do not require or do not strictly enforce licensing or regulatory requirements.
- Alternative Trading Systems. A relatively new forum for trading Crypto Securities, an ATS is a type of broker dealer that provides a trading platform. An ATS is regulated by the SEC and FINRA.
- Direct sellers (e.g., Coinbase, Circle, Xapo, Robinhood). These platforms will allow users to directly buy or sell Digital Assets (typically larger commodity-like cryptocurrencies) against the platform’s own reserves of Digital Assets and/or fiat currency. In the US, they are regulated as MSBs and MTs, and sometimes as broker dealers.
- OTC Desks (e.g., Cumberland, Genesis Trading). These proprietary desks transact directly with large counterparties to purchase and sell Digital Assets in exchange for fiat cash or other Digital Assets. Some OTC Desks are part of regulated MSBs and MTs (e.g., itBit) and broker dealers (Genesis).
- Token Issuers. Investors may also directly purchase Tokens pursuant to an ICO or subsequent sale from an issuer’s Token treasury. A discussion of the application of securities laws to ICOs is beyond the scope of this overview.
- Decentralized Exchanges. These platforms operate on a protocol that allows purchasers and sellers to broadcast bid/ask interest in a bulletin board format. The protocols then allow for a trustless peer-to-peer exchange that directly clears through a process known as an “atomic swap”. Decentralized Exchange platforms such as those operated on the 0x or Airswap protocols generally are not regulated. Typically, Decentralized Exchanges feature trading only in ether and Ethereum-based tokens.

A party obtaining direct exposure to Digital Assets will have to either self-custody the Digital Assets or engage a third party custodian. Custody of a Digital Asset is accomplished by securing a “private key”

which can be used to sign transactions from a wallet, as well as recovery “seed” codes that may restore access to a wallet.

Loss of private keys and recovery seed codes may result in a permanent loss of the Digital Assets, as keys generally may not be regenerated by outside parties. Similarly, theft or exposure of a private key may result in irreversible transactions from a wallet.

For third party custodians, there is no FDIC or SPIC insurance for Digital Asset deposits. As a result, there is significant counterparty risk depending on the structure and operation of the custodian. For example, Exchanges act as a custodian of user Digital Assets, and carry significant counterparty risk due to their operational complexity and multiple points of failure.

### **Obtaining Indirect Exposure to Digital Assets**

Parties seeking to obtain indirect exposure to Digital Assets have several current or potential options, including Private Funds, Exchange Traded Vehicles and Derivatives.

#### *Private Funds*

For US and international investors, Private Funds have been an investing option that emerged in 2013 and experienced a major boom in 2017. Structured as either Venture Capital Funds (long investment horizon without Investment Adviser registration), Commodity/Currency Funds (active investment structure without Investment Adviser registration) or Hedge Funds (active investment structure with Investment Adviser registration at certain thresholds), “Crypto Funds” were estimated to hold in excess of \$5B in assets at the end of 2017.

While strategies for Private Funds vary, the most well-known is GBTC, a 10 figure fund that holds bitcoin and is listed OTC on the pink sheets. Other fund strategies include active technical trading, “value”, indexing and ICO investment theses. Investors may use Private Funds to obtain exposure to Cryptocurrencies and Tokens.

#### *Exchange-Traded Vehicles*

For US investors, exchange-traded vehicles generally are not available at this time, despite significant media coverage of proposed exchange-traded vehicles. These vehicles are often all referred to as ETFs, although the alphabet soup of acronyms is more distinct than a single term. A brief synopsis of these products is as follows:

- Exchange-Traded Commodities (*ETCs*). As with GLD for gold, single purpose, asset backed trusts have been proposed for bitcoin and ether. ETC operations are generally limited to holding the underlying asset and paying expenses. They are registered with the SEC under the Securities Act of 1933 on form S-1. The Securities and Exchange Commission and its Division of Trading and Markets have each acted to reject 19b-4 listing applications for bitcoin ETCs.
- Exchange-Traded Commodity Pools (*Futures ETCs*). As with USO for oil, several issuers have proposed exchange-traded commodity pools tracking the price of bitcoin. Futures ETCs trade futures for indirect exposure to the designated commodity prices. They are registered with the SEC under the Securities Act of 1933 on form S-1, and with the National Futures Association under the Commodities Exchange Act. The Division of Trading and Markets has requested the withdrawal of 19b-4 listing applications for bitcoin Futures ETCs.
- Exchange-Traded Fund (*Futures ETFs*). Exchange-traded vehicles for bitcoin futures have also been proposed as traditional ETFs under a managed futures strategy. In the managed futures strategy, the Futures ETF invests in a wholly-owned subsidiary created to trade the futures. A Futures ETF is registered with the SEC under the Securities Act of 1933 and Investment Company Act of 1940 on Form N-1A. The SEC’s Division of Investment Management has requested the withdrawal of registration statements for bitcoin Futures ETFs.

- Exchange-Traded Notes (*ETNs*). Exchange-traded notes are debt obligations of an issuer that track a specified index or pricing metric. Traditionally, ETNs are only issued and registered in the US by large bank institutions. In Europe, a few non-bank issuers have registered and listed for trade bitcoin based ETNs. One such ETN has been listed in OTC pink sheet markets in the US, although trading in the vehicle was recently suspended by the SEC.

Currently, there are no US based Exchange-Traded Vehicles principally focused on Digital Asset exposure. There are a handful of “blockchain technology” oriented exchange-traded funds, an OTC listed Private Fund (GBTC) and a handful of vehicles that have obtained minimal exposure to the price of bitcoin; however, greater investment access might be granted by the eventual listing of a true ETC, Futures ETCF, Futures ETF or ETN. Generally, proposals for these products have been limited to bitcoin and ether.

#### *Derivatives*

Investors may also obtain indirect exposure to Digital Assets through derivative instruments. Specifically, cash-settled bitcoin futures contracts have been listed by both the CBOE Global Markets and CME Group. In addition, a NYSE affiliate has proposed a physically-settled bitcoin futures contract.

Swap and option transactions are also available on various platforms, including bitcoin-focused SEF platform LedgerX. Internationally, broader categories of derivative instruments are available; however, the bulk of these instruments are not approved for sale to US investors.