DIGITAL ASSETS

Digital assets, including cryptocurrencies, have seen explosive growth in recent years, surpassing a \$3 trillion market cap last November and up from \$14 billion just five years prior. Surveys suggest that around 16 percent of adult Americans – approximately 40 million people – have invested in, traded, or used cryptocurrencies. Over 100 countries are exploring or piloting Central Bank Digital Currencies (CBDCs), a digital form of a country's sovereign currency.

The rise in digital assets creates an opportunity to reinforce American leadership in the global financial system and at the technological frontier, but also has substantial implications for consumer protection, financial stability, national security, and climate risk. The United States must maintain technological leadership in this rapidly growing space, supporting innovation while mitigating the risks for consumers, businesses, the broader financial system, and the climate. And, it must play a leading role in international engagement and global governance of digital assets consistent with democratic values and U.S. global competitiveness.

That is why today, President Biden will sign an Executive Order outlining the first ever, whole-of-government approach to addressing the risks and harnessing the potential benefits of digital assets and their underlying technology. The Order lays out a national policy for digital assets across six key priorities: consumer and investor protection; financial stability; illicit finance; U.S. leadership in the global financial system and economic competitiveness; financial inclusion; and responsible innovation.

Specifically, the Executive Order calls for measures to:

Protect U.S. Consumers, Investors, and Businesses by directing the Department of the
Treasury and other agency partners to assess and develop policy recommendations to
address the implications of the growing digital asset sector and changes in financial
markets for consumers, investors, businesses, and equitable economic growth. The
Order also encourages regulators to ensure sufficient oversight and safeguard against
any systemic financial risks posed by digital assets.

Digital currency is a form of currency that is available only in digital or electronic form. It is also called digital money, electronic money, electronic currency, or cybercash.

KEY TAKEAWAYS

- Digital currencies are currencies that are only accessible with computers or mobile phones because they only exist in electronic form.
- Typical digital currencies do not require intermediaries and are often the cheapest method for trading currencies.
- All cryptocurrencies are digital currencies, but not all digital currencies are cryptocurrencies.
- Some of the advantages of digital currencies are that they enable seamless transfer of value and can make transaction costs cheaper.
- Some of the disadvantages of digital currencies are that they can volatile to trade and are susceptible to hacks.

Understanding Digital Currencies

Digital currencies do not have physical attributes and are available only in digital form. Transactions involving digital currencies are made using computers or electronic wallets connected to the internet or designated networks. In contrast, physical currencies, such as banknotes and minted coins, are tangible, meaning they have definite physical attributes and characteristics. Transactions involving such currencies are made possible only when their holders have physical possession of these currencies.

Digital currencies have utility similar to physical currencies. They can be used to purchase goods and pay for services. They can also find restricted use among certain online communities, such as gaming sites, gambling portals, or social networks.

Digital currencies also enable instant transactions that can be seamlessly executed across borders. For instance, it is possible for a person located in the United States to make payments in digital currency to a counterparty residing in Singapore, provided they are both connected to the same network.

Characteristics of Digital Currencies

As mentioned earlier, digital currencies only exist in digital form. They do not have a physical equivalent. Digital currencies can be centralized or decentralized. <u>Fiat currency</u>, which exists in physical form, is a centralized system of production and distribution by a central bank and government agencies. Prominent <u>cryptocurrencies</u>, such as <u>Bitcoin</u> and <u>Ethereum</u>, are examples of decentralized digital currency systems.

<u>Digital currency is a form of money that exists only electronically and is not controlled by any central authority.</u> Some people may argue that digital currency is bad because ¹²³⁴⁵:

- It has too many options and a steep learning curve.
- It is vulnerable to hacking, expensive transactions, and price volatility.
- It offers governments new ways to control and monitor citizens.
- It does not address the underlying economic issues of the unbanked population.
- It poses risks to the existing banking and credit systems.
- Digital currencies have no physical equivalent and can only be accessed in an electronic form.
- Cryptocurrency like bitcoin is only one type of digital currency; other types of electronic currencies include stablecoins and CBDCs.
- Investing in digital currency can be significantly more risky than traditional investment options like stocks and bonds.
- Your wallet could be going digital as the popularity of <u>cryptocurrencies</u> like <u>bitcoin</u> and ethereum continue to take the world by storm. Traders are investing through cryptocurrency exchanges to buy and sell decentralized coins along the <u>blockchain</u> in the hope of earning a big profit. But crypto is only one example of digital currency.
 There are other forms, like stablecoins and CBDCs.
- So what exactly is a digital currency, and how does it work? What are the risks, and who should be investing?
- What is digital currency?
- Digital currency is a type of currency that can only be accessed in an electronic form, such as through a computer or mobile phone. This money has no physical equivalent, unlike tangible forms of currency like banknotes or minted coins. But just like physical money, digital currencies can be used to purchase goods and services.

Digital currencies come in two forms:

• **Centralized currency:** Currencies issued by governments or financial institutions as part of the commercial banking system that are available to the general public.

Decentralized currency: Currencies not issued by governments or financial institutions.
 Instead, decentralized currencies operate through peer-to-peer financial networks to eliminate the middleman (aka banks) and allow lending, trading, and borrowing directly with merchants.

Types of digital currencies

Central Bank Digital Currency (CBDC)

Central bank digital currency is a type of central bank-issued currency available for use by the general public. Unlike cryptocurrencies that have a fluctuating value, CBDC's value is fixed to equate to a country's <u>fiat currency</u>. Fiat currencies are another form of government-issued legal tender not supported by a physical artifact (such as <u>gold</u>, silver, or other precious metals).

"Some crypto purists will say they hate the idea of implementing CBDCs because it means government surveillance and privacy infringement," says Amoils. "That has now become a political hot button, and it all started when Facebook's Libra announced that they were going to do this basket of currencies."

Back in 2019, Facebook announced it would create its own universal cryptocurrency called Libra (later renamed Diem). The project was <u>scrapped in 2022</u>.

Over a hundred countries are investigating the advantages of CBDCs, with Jamaica, Nigeria, and the Bahamas being some of the first countries to start issuing them.

CBDCs are believed to provide a more accessible, financially secure, and easily transferable form of currency that could benefit both consumers and businesses. They may also lower the cost of money transfers and cross-border transactions. But CBDCs could drastically affect the stability of the financial system, and require major restructuring of the economy as a whole.

"For years, this digital dollar project was an attempt to try and combine public and private sectors in order to create a better solution for possible CBDCs in the US," says Amoils.

At this time, the US Federal Reserve is <u>researching CBDCs</u> as a <u>possibility</u> but currently has no plans to implement them. On March 9, 2022, President Joe Biden signed an <u>Executive Order</u> to investigate the risks and benefits of digital assets, including CBDCs.

Cryptocurrency

Cryptocurrencies are digital assets developed by individuals and organizations instead of central banks or government institutions. Cryptocurrencies use blockchain technology to digitally record crypto transactions. Blockchains are permanent, which means that once a block (or a grouping of transactions) is recorded, it can't be reversed.

"It's immutable. It has never been hacked and it's decentralized. It's based on math and you don't have to trust any one person," says Amoils.

No single individual or organization controls the crypto blockchain. Cryptocurrencies are decentralized and run on a general system of trust, determination, and the efforts made by crypto miners to solve complex cryptographic puzzles. In fact, the lack of central authority helps protect the blockchain from hackers.

Since they are public ledgers, blockchains ensure a level of system security as the general public has access to the entire chain's history of transactions. Scams still occur, of course, just like with traditional currencies. However, crypto scams impose a more alarming threat due to lack of platform regulations, and the inability to reverse crypto transactions.

"Bitcoin has held its own," Amoils says. "Whether or not you think it has little value or you think it's digital gold, or you think everybody's building ordinals, it's an amazing asset that can morph seemingly into different narratives and is worth investing in."

According to <u>CoinMarketCap</u>, there are more than 24,808 different cryptocurrencies available for trading.

Stablecoins

Stablecoins are another form of decentralized cryptocurrency that pegs its value to real-world assets (otherwise known as reference assets), such as fiat currency or US dollar bills. Like other cryptocurrencies, stablecoins use blockchain technology. But they also uses stabilization mechanisms to maintain a fixed exchange rate.

There are three main types of stablecoins:

- Off-chain (or fiat-collateralized): These stablecoins are fully collateralized by dollardenominated assets and are backed by bank deposits and similar cash-like assets.
 Custodians are required to safe keep collateral assets until stablecoins are redeemed.
- On-chain (or crypto-collateralized): These Stablecoins are collateralized by crypto assets
 and are backed by tokens on a blockchain. These stablecoins don't require issuers or
 custodians to redeem claims.
- Algorithmic stablecoins: These are stablecoins with value that is controlled through an
 algorithm and may not be pegged to a real-world asset.

Stablecoin has come under scrutiny in the past by the International Organization of Securities Commissions (IOSCO) for its lack of regulation and potential risk to the broader financial system. On July 13, 2022, IOSCO and the Committee of Payments and Market Infrastructures

(CPMI) published the <u>final guidance on stablecoin arrangements</u> and confirmed that the <u>Principals for Financial Market Infrastructures</u> will apply to stablecoins.

Tether, USD Coin, Dai, Binance USD, Pax Gold, and TreUSD are some of the most popular stablecoins.

Pros and cons of investing in digital currency

Pros	Cons
 Faster transactions Decentralized (does not apply to all assets) Instantly receive tax refunds, foods stamps, and other benefits Cheaper and faster international transfers Fewer fees Eliminates physical manufacturing Improved privacy policies 	 Transactions could potentially become expensive Overwhelming selection of currencies Requires patience and a steep learning curve Prices and values can fluctuate Susceptible to potential hacks Irreversibility

The benefits of digital currencies include faster transactions, lower fees, and improved privacy compared to fiat money. Payment transfers for digital currencies take less time as transactions can be made directly with the participating parties. Instead of going through any intermediaries (or a middleman), transactions can often operate within the same network and are able to be

completed instantaneously. Instant transactions lower costs overall as the need for intermediaries is eliminated, which in turn eliminates the corresponding fees.

Also, blockchain technology operates on a digital ledger and can be accessed by the general public. But the blockchain doesn't record your personal data. Instead. your digital wallet is under a pseudonym. Some folks have this level of anonymity appealing as their financial dealing are protected by a level of confidentiality.

But there are some definite downsides to digital currency, as well. For starters, not everyone understands how digital currency works. To make intelligent investing decisions, you need at least a strong baseline knowledge of digital currency, how it works, and how to make smart choices. This doesn't come naturally to everyone.

Digital currencies like cryptocurrencies have a constantly fluctuating value. Unlike physical money that comes with a guaranteed value, assets like dogecoin or ethereum have a volatile value that is prone to change at a moment's notice.

How to buy and sell digital currency

Crypto and stablecoins can be bought and sold on existing crypto exchanges. Some of the <u>best</u> cryptocurrency exchanges include Coinbase, Kraken, and Gemini Investing.

Depending on which exchange you use, different coins and tokens become available. So if you want to invest in certain cryptos/stablecoins, make sure to do research on where they're offered.

CBDCs aren't currently available in the US. You can only purchase CBDCs when you reside in a country that is issuing them. Countries that are now issuing CBDCs are:

- **The Bahamas:** In October 2020, the Central Bank of Bahamas launched the <u>Sand Dollar</u>, the first CBDCs to go beyond the pilot state.
- Jamaica: The Jamaican central bank has been working with eCurrency Mint (an Ireland-based technology firm) to implement the sandbox project from May 2021 to December 2021. After this trial stage, the Jamaican Digital Exchange (<u>JAM-DEX</u>) was officially rolled out in February 2022.
- **Eastern Caribbean:** On March 31, 2021, the <u>Eastern Caribbean Central Bank</u> launched DCash for public use.
- Nigeria: In October 2021, the Central Bank of Nigeria <u>launched eNaira</u> as Africa's first digital currency.

Create your own cryptocurrency

If you're wanting to create your own cryptocurrency, there are three ways to go about doing so: You can build your own blockchain, build on top of an already existing blockchain, or modify an existing blockchain.

What you should consider before creating your own cryptocurrency

- **Purpose:** What do you want your currency to be used for? How is better than your competitors? Cryptocurrencies are used for a range of purposes, like alternative wealth storage, data verification, smart asset management, and money transfers.
- Nodes: In order to run and maintain currency transactions, you need reliable access to
 nodes (aka fast computers connected to a blockchain network to process and verify
 crypto transactions). You'll need to figure out where your nodes are hosted (such as a
 cloud or local network), gather all the necessary hardware (like GPUs, RAM, and
 processors), and pick an open-source operating system.
- **Blockchain architecture:** Is your currency centralized or decentralized? Do you want your blockchain to be public or private?

- **Tokenomics:** You'll need to decide how many tokens you're going to be initially released and how you want them to be initially distributed. Is your crypto mined or minted?
- Legal requirements: Some legal requirements need to be met before you can launch your own crypto. First, your new currency needs to be set up as a legal entity, such as Corporation or LLC. You also need to get a license from your local government and register with a certified anti-money laundering group.

Building your own blockchain

All cryptocurrencies are attached to a blockchain in order to track and record transactions and maintain a public system of accountability. By doing so, you'll tokens will be less susceptible to hacks and other fraudulent activity.

"A blockchain is just a way of keeping track of data in a better way," says Amoils. "It's like a ledger."

Building your own blockchain is no easy feat and is only recommended for folks with advanced technical knowledge and coding skills. In order to build your own blockchain, you'll need to establish a secure network, identify a consensus algorithm, choose a protocol, decide on its use case, and follow the appropriate legal regulations.

Building on top of an already existing blockchain

Creating a new cryptocurrency on top of an already-established blockchain is probably the easiest way of making your own digital tokens. Binance and ethereum are two examples of platforms that permit this. But keep in mind that this method offers significantly fewer customization opportunities, and the success of your token will be reliant on the success of the established blockchain you've built off of.

For example, if your token was created on the ethereum blockchain and that blockchain were to fail, your coins would also take a dive.

Modifying an existing blockchain

If you have coding knowledge, you may be able to modify an existing blockchain's open-source code and revise the code to your personal preferences. Like creating your own blockchain from scratch, you'll need to have solid technical knowledge and be fluent in code in order to avoid bugs.

Should you invest in digital currencies?

Digital money isn't just some simple investing trend, and it's certainly not going away anytime soon. In fact, more countries are investigating and implementing CBDCs for public use, and blockchain technology continues to branch into new avenues of the financial system.

It's certainly worth exploring if you're interested in investing in crypto or stablecoins. But beginners may feel a little out of their depth. Understanding crypto and blockchain technology can be overwhelming at first, especially if you don't have a grasp on basic market trading. In that case, you'd be better off using an <u>investment app for beginners</u> or meeting with a financial advisor for expert guidance.

Regardless of your investing knowledge, research is key to making good investment decisions. So before diving straight in, make sure to educate yourself on the current attitude of the market and investigate any possible investment options before buying.