

ARGUS ECONOMIC COMMENTARY

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A Cryptocurrency Primer

In recent years, a hot -- and at times controversial -topic in the financial community has been cryptocurrency supported by blockchain technology. Cryptocurrencies first emerged in 2009 as a new technology, and offer some potential advantages to traditional currencies while creating new trading opportunities. Still, there are major risks as well.

Blockchain and Mining

Cryptocurrencies are supported by a technology known as blockchain, which is a tamper-resistant leger of transactions that outlines the ever-changing ownership of the underlying currency. Cryptocurrency is able to eliminate the middlemen in transactions through the blockchain as it records each transaction and stores the information in blocks. Blockchain technology is what has made cryptocurrency viable as it prevents individuals from making copies of their holdings and using them for multiple transactions, an issue that has prevented previous attempts at creating a digital currency.

Many cryptocurrencies, such as Bitcoin, are created through a complex and energy-intensive process known as "mining." Mining involves a process of validating and updating transactions to the digital ledger, or blockchain. Crypto mining prevents the double use of coins as it is both remarkably expensive and inefficient to submit false transactions to the ledger, while being remarkably easy for other parties to verify the correct transactions. The crypto miners reward for correctly solving the complex algorithms required to upload transactions are new coins that get generated after solving the algorithm. Given this process, a malicious actor would need to control more than 50% of the entire mining network in order to record false transactions successfully, while overcoming extremely high physical hardware and energy demands. There are over 2 million

cryptocurrencies in circulation, ranging from micro-cap to mega-cap, with some rising to valuations worth hundreds of billions of dollars.

Crypto Pros

Crypto offers several advantages as an alternative investment, which gives it certain unique benefits that traditional currencies do not offer. Inflation protection is one such advantage for many cryptocurrencies, with Bitcoin (as an example) having a hard cap of only 21 million coins that will ever reach circulation. With nearly 19.8 million coins currently in circulation, Bitcoin is programmed to halve the pace of its mining rewards every four years, making it a more-attractive investment in times of high inflation. The price of Bitcoin historically has risen following each halving cycle, this as prices must keep up with the high energy costs required to maintain the ledger and in order for it to remain worthwhile for miners (as the rewards become increasingly smaller).

Crypto transaction speeds also offer an advantage over traditional currencies. Indeed, transferring a cryptocurrency can be accomplished within minutes rather than the several days needed by most U.S. financial institutions to process a transaction. As well, given the elimination of third-party vendors to validate transactions, transactions costs can be significantly lower than is the case with traditional methods of sending currencies, particularly when transferred overseas or as a large value transfer.

Volatility has become associated with crypto given the swings in the price of Bitcoin, Ethereum, and other cryptocurrencies, with prices often rising and falling more than 50% over the span of just a few months. While this volatility has made crypto a popular short-term trading asset for traders looking to

(continued on next page)

ECONOMIC & MARKET COMMENTARY (CONT.)

make significant gains amid the large swings in pricing, other investors have held firm, utilizing what has become known as a "HODL" mentality as they "Hold On for Dear Life."

Crypto Cons

Despite the potential upside of investing in cryptocurrencies, there are also serious risks. User risk is one of the major issues seen with crypto, as entire balances can become lost if an investor losses a password or pass phrase associated with an account. This issue has reached such a high level that some early investors have been known to purchase waste dumps where they knew hard drives containing valuable holdings had been erroneously discarded. It is estimated that one-fifth of all Bitcoins are permanently lost due to the loss of passwords. As well, there is no way to rescind a transaction after it has been recorded.

The manipulation of crypto markets also remains a large risk with cryptocurrencies, as there have been several instances of unethical practices. This is a particular issue as regulation remains a looming question in the crypto community, with plenty of grey areas surrounding crypto legislation in the U.S. and sudden shifts in regulation that dramatically impacted the way that crypto is bought and sold. Given the limited regulation, some large account holders, known as whales, have engaged in pump-and-dump schemes that have artificially caused the price of certain cryptocurrencies to skyrocket or plunge.

Liquidity can also be an issue in crypto, especially with lesser-known coins that hold limited demand. While liquidity has improved over the past few years across the crypto market, particularly for the largest coins such as Bitcoin and Ethereum, it remains an important factor to be considered.

The Future for Crypto

Looking at crypto as a currency alternative is an interesting exercise as the issue is relatively complicated. Bitcoin, for example, has largely been described as a "digital gold," offering its best use-case as a means to settle transactions. Rival Ethereum is largely considered closer to a "digital oil," serving to power an ecosystem of digital contracts.

There are many different types of crypto currencies across the market. Besides Bitcoin, stablecoins could make a convincing case for serving in the place of traditional currency. Stablecoins are cryptocurrencies that are backed by another asset, such as a currency, commodity, or financial instrument. Stablecoins are not as volatile as non-backed cryptocurrencies and have increased traction across various markets. European fund giant DWS has announced plans to launch the first euro-backed stablecoin in 2025, which we think demonstrates the potential of these coins. Still, stablecoin issuer Paxos was under SEC investigation for their USD-backed stablecoin due to speculation about possible violations of securities laws. The SEC decided it

will not be continuing action in the case, but the event does highlight the issue of stability for the asset.

Blockchain technology may also see an increase in its number of use cases. As the world becomes increasingly data-driven, blockchain may be able to help with data and information management. Healthcare is thought to be an industry that could benefit from blockchain technology, with opportunities surrounding the security of patient data, transparency and traceability in the supply chain, and a reduction in the risk of data breaches. Blockchain may also find use in the financial industry as it has the potential to streamline banking and lending services, reduce counterparty risk, and decrease issuance and settlement times.

While classifying crypto as an alternative asset class offers the potential for major upside, there remains uncertainty. One of the biggest concerns is regulation. In many countries, crypto is already becoming increasingly regulated -- but in the U.S., lawmakers have been slow to respond, forcing companies to rely on legal battles as they fight to establish greater clarity in the market. Furthermore, many states have adopted their own laws on cryptocurrencies, creating barriers for some would-be market participants.

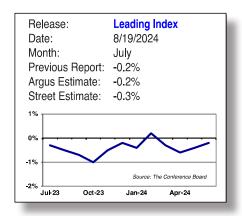
Conclusion

Despite these risks, there remains optimism over the growth of cryptocurrencies, and that has fueled a significant rise in the price of Bitcoin and Ethereum over the past 12 months. Global conflicts and geopolitical tensions have led some to believe that cryptocurrencies offer a potential hedge against instability in currency fluctuations and financial markets. Amid the rapid rise in inflation in Venezuela and Argentina, El Salvador has adopted Bitcoin as an official legal tender. Additionally, former U.S. president and current presidential candidate Donald Trump has suggested that the U.S. should establish a Bitcoin strategic reserve. Within the financial world, BlackRock CEO and co-founder Larry Fink has described Bitcoin as "digital gold," offering some legitimacy to it being used as a hedge against currency fluctuations. According to Mr. Fink, "It is a legitimate financial instrument that allows you to have maybe uncorrelated, non-correlated returns." BlackRock has launched a Bitcoin ETF, which saw \$4 billion in net inflows in the second quarter, and, more recently, an Ethereum ETF.

Crypto seems to be gaining traction within the investment community and seems to hold promise in regards to growth. Despite recent excitement around crypto, there are still some factors that can be cause for concern -- such as a lack of regulation, a lack of fundamentals for valuation, and other potential pitfalls. Yet even with these concerns, the future of crypto still appears to be bright as the asset appears to be gaining increasing traction.

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ECONOMIC TRADING CALENDAR







Previous Week's Releases and Next Week's Releases on next page.

ECONOMIC TRADING CALENDAR (CONT.)

Previous Week's Releases

			Previous	Argus	Street	
Date	Release	Month	Report	Estimate	Estimate	Actual
13-Aug	PPI Final Demand	July	2.7%	1.8%	NA	2.2%
	PPI ex-Food & Energy	July	3.0%	2.4%	NA	2.4%
14-Aug	Consumer Price Index	July	3.0%	3.0%	NA	NA
	CPI ex-Food & Energy	July	3.3%	3.3%	NA	NA
15-Aug	Industrial Production	July	1.6%	0.3%	NA	NA
	Capacity Utilization	July	78.8%	78.6%	78.6%	NA
	Retail Sales	July	2.3%	2.4%	NA	NA
	Retail Sales ex-autos	July	3.4%	1.8%	NA	NA
	Business Inventories	June	1.6%	1.3%	NA	NA
	Import Price Index	July	1.6%	1.2%	NA	NA
16-Aug	Housing Starts	July	1,353K	1,300K	1,373K	NA
	U. of Michigan Sentiment	August	66.4	63.0	NA	NA

Next Week's Releases

Date	Release	Month	Previous Report	Argus Estimate	Street Estimate	Actual
26-Aug	Durable Goods Orders	July	-11.2%	NA	NA	NA
27-Aug	Consumer Confidence	July	100.30	NA	NA	NA
29 -A ug	GDP Annualized QoQ	2Q "2nd est."	2.8%	NA	NA	NA
	GDP Price Index	2Q "2nd est."	2.3%	NA	NA	NA
30-Aug	PCE Deflator	July	2.5%	NA	NA	NA
	PCE Core Deflator	July	2.6%	NA	NA	NA
	Personal Income	July	4.5%	NA	NA	NA
	Personal Spending	July	5.2%	NA	NA	NA

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