

CBDC Part 6: What is Money?

WEEKLY RECAP

- Total market cap. reached \$128bn (a 3.4% increase), and 7 day trading volume rose 29.5% for top 100 crypto

THOUGHTS OF THE WEEK

The term crypto-currencies (crypto) implies similarities with established currencies issued by central banks. This in turn leads to the question of whether crypto should be regarded as money.

Metallism ties money to the value of an underlying good (typically a metal), assuming that the limited supply of metals, and the increasing cost of excavating more, act as natural inflation barriers. Bitcoin has found inspiration in metallism, incorporating similar but digital limits to the total Bitcoin supply. According to a second theory known as Chartalism, the value of money is derived from its status as legal tender issued by a national state. Functionalism, the dominant modern interpretation of money, builds further on Chartalism. According to Functionalism, money must function as 1) a means of payment, 2) a unit of account, and 3) a store of value. Means of payment means that money can realistically be used to pay a seller in return for goods. To act as a means of payment money must be a recognized measurement of value in the economy. Finally, to be a store of value money should provide price stability, and peoples' decision to spend or not spend money should not be influenced by volatility in the value of money.

Central banks are typically responsible for ensuring that money can fulfill these three core functions. An example is found in the inflation targets often set by central banks, with the goal of maintaining the storage of value functionality of money. It is the opinion of several central banks that crypto should not be considered as money, and most crypto are neither tied to the value of tradeable goods nor are they issued by national states. Crypto further struggles to fulfill some of the criteria associated with functionalism, for instance: it must be easy to ascertain the value of money, money must be widely accepted in payments, and money must be durable and exhibit price stability.

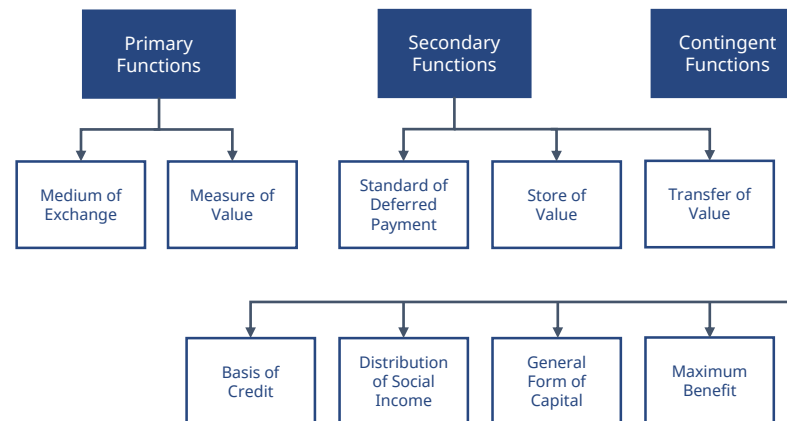
This is not to say that crypto cannot be issued by national states (some have been) or that they cannot be tied to the value of physical goods (some have been). But in order for crypto to see mass adoption as retail payment tools they must fulfill the criteria of Functionalism, and the path towards achieving price stability, sufficient price transparency, and wide recognition of crypto among buyers and seller is long and difficult. It is further unlikely that central banks would recognize money over which central banks lack the central authority to make monetary decisions (e.g. adjusting supply). Central Bank Digital Currencies (CBDC), for the purposes of establishing retail payment systems, enter the picture as noteworthy alternatives to the likes of Bitcoin and Bitcoin Cash. Proposed retail CBDCs would not only have the potential to fulfill the criteria of Functionalism, but are also poised to solve some further issues that exist in modern economies, including an over-reliance on private providers and owners of retail payment infrastructure.

TOP CRYPTO PERFORMANCE SUMMARY

Name	Price	7D%	Vol.	7D%	Mkt Cap.	% Total Mkt
BTC	\$3,810.43	3.64%	52.65bn	24.25%	66.90bn	52.41%
ETH	\$135.85	2.08%	27.27bn	21.12%	14.26bn	11.18%
XRP	\$0.30	-0.91%	4.81bn	52.73%	12.47bn	9.77%
EOS	\$3.59	25.01%	10.33bn	54.28%	3.25bn	2.55%
LTC	\$44.68	1.75%	8.21bn	22.74%	2.71bn	2.12%
BCH	\$130.27	3.92%	2.53bn	37.40%	2.30bn	1.80%
USDT	\$1.01	1.03%	49.49bn	40.41%	2.05bn	1.60%
XLM	\$0.08	5.83%	0.85bn	-13.36%	1.62bn	1.27%
TRX	\$0.02	-0.13%	1.08bn	30.09%	1.59bn	1.24%
BNB	\$10.11	9.65%	0.61bn	31.14%	1.43bn	1.12%

CHART OF THE WEEK

Expected Primary, Secondary, and Contingent Functions of Money



NETWORK FUNDAMENTALS

	BTC	ETH
Hashrate	43,777,453 TH/s (-0.2%)	149,854 GH/s (+8.0%)
# Wallet Users	33,440,889 (+0.7%)	57,291,052 (+0.6%)
Top 3 Miners	BTC.com (18%) AntPool (13%) F2Pool (9%)	Ethermine (28%) SparkPool (20%) NanoPool (13%)

TOP CRYPTO NEWS AT A GLANCE

Ethereum will undergo the Constantinople and St. Petersburg upgrades on 28 Feb 2019: The Constantinople upgrade delays the "difficulty bomb" for 12 months and decreases the block reward to 2 ETH. The St. Petersburg upgrade is meant to delete the EIP 1283 update from Ethereum's test networks.

Ontology added to Google cloud platform marketplace: The ont dev platform is used to develop smart contracts on Ontology's blockchain. The platform includes a block explorer, a smart contract integrated development environment (IDE), SmartX, and an Ontology test environment.

SK Telecom partners with Deutsche Telekom to develop a blockchain identity platform: Both firms sign a memorandum of understanding during the Mobile World Congress 2019 and the platform will be used in applications such as access control, dealings, and contracts. SK Telecom expects the platform to offer more autonomous and secure management of sensitive information.

Mizuho will launch its Yen-pegged stablecoin named J-Coin in March: J-Coin will directly link existing bank accounts with digital wallets, and no fees will be charged for transfers between bank accounts and J-Coin wallet. It will be managed by the mobile app dubbed J-Coin pay, using QR codes at checkout to complete retail payments. The price is fixed at 1 yen per unit.

Central bank of Lithuania revises its position on virtual assets and ICOs: Financial market participants (FMP) should avoid businesses associated with virtual assets. Payments received in virtual assets are prohibited. However, the central bank now allows the creation of financial funds including virtual assets sold to professional investors. FMP are not allowed to issue virtual asset loans, unless these are considered securities.

The U.S. SEC commences the consultation period on the approval of CBOE-VanEck Bitcoin ETF on 20 Feb: SEC must announce the decision within 90 days from 20 Feb.

Samsung Galaxy S10 will include cryptocurrency key storage: The Samsung Knox function offers private key storage for blockchain-enabled mobile services.

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DISCLAIMER

Abbreviations: ADA: Cardano; BCH: Bitcoin ABC; BSV: Bitcoin Satoshi Vision; bn: billion; BTC: Bitcoin; Central Bank Digital Currency: CBDC; crypto: cryptocurrencies; ETH: Ethereum; ICO: Initial Coin Offerings; Market Cap: Market Capitalization; mn: million; Trading Vol.: Trading Volume; tx: transaction(s); US\$: United States Dollars; USDT: USD Tether; XLM: Stellar Lumens; XMR: Monero; XRP: Ripple

Chart of The Week: Sources: Project Ubin Phase 2 whitepaper, Standard Kepler Research

Market Cap & Trading Vol.: Sources: Coinmarketcap, Standard Kepler Research
The horizontal axis represents the week number in 2018. For instance, W41 indicates the forty first week in 2018. W1 indicates the first week in 2019. The primary vertical axis represents total market capitalization; and the secondary vertical axis represents total trading volume.

Network Fundamentals: Sources: Blockchain.com, Blocktrail, Etherchain.org, Etherscan.io, Standard Kepler Research

Thought of The Week: Sources: Swedish Central Bank - Are Bitcoin and other crypto-assets money?, Project Jasper 1 whitepaper, Project Jasper 2 whitepaper, Project Jasper 3 whitepaper, Project Ubin 1 whitepaper, Project Ubin 2 whitepaper, Stella 1 whitepaper, Stella 2 whitepaper, Project Khokha whitepaper, Standard Kepler Research

Top Crypto News At a Glance: Sources: Blockcast.it, CCN, Coindesk, Cointelegraph, Standard Kepler Research

Top Crypto Performance Summary: Sources: Coinmarketcap, Standard Kepler Research

Week Ahead: Sources: Cryptocalendar.pro, Standard Kepler Research

Weekly Recap: Sources: Coinmarketcap, Standard Kepler Research

Past performance does not guarantee future results.

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The price of Bitcoin and other cryptocurrencies are highly volatile in nature. It is suggested that clients should perform their own due diligence and consult a fully qualified independent professional financial adviser before making any investments in cryptocurrencies.

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Unless otherwise stated, all data is as of February 25, 2019 or as of most recently available.

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