IM 450-01 Issues in IM: Blockchain, Cryptocurrency, NFTs

Spring 2022

Class 8—February 15

Cybercurrency:

What is it and how does it work?



Cybercurrency: What is it and how does it work?

Cryptocurrency refers to a type of digital asset that uses distributed ledger, or blockchain, technology to enable a secure transaction. (Hardle, Harvey, and Reule, "Understanding Cryptocurrencies," August 2019). https://www.wiwi.huberlin.de/de/forschung/irtg/results/discussion-papers/discussion-papers-2017-1/irtg1792dp2018-044-1.pdf

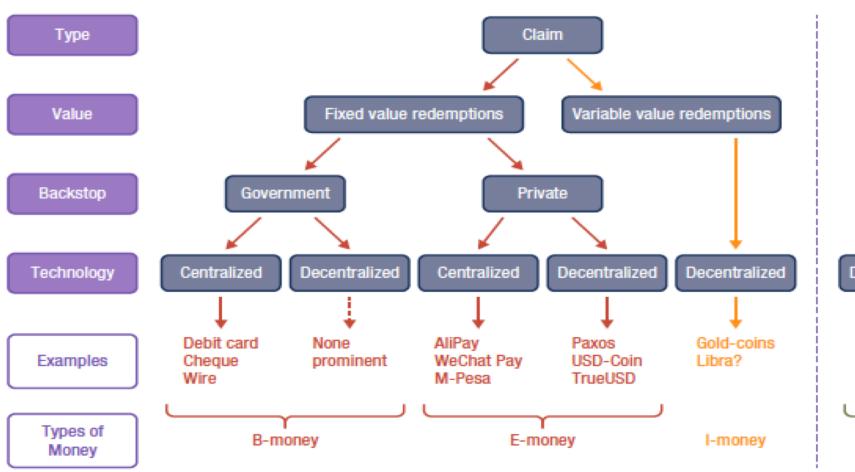
Cybercurrency: What is it and how does it work? Taxonomy of Digital Money

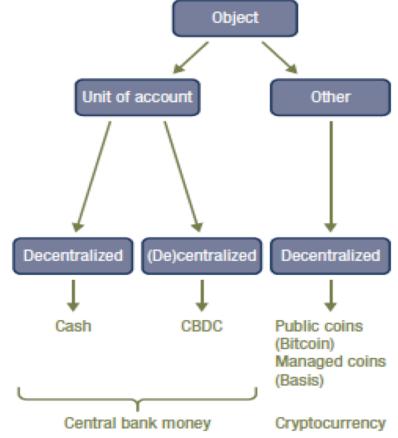
Five Different Means of Payment:

- (1) central bank money;
- (2) crypto-currency;
- (3) b-money, which currently is issued by banks;
- (4) electronic money, or e-money, offered by new private sector providers;
- (5) i-money, short for investment.

Taxonomy of Digital Money

Figure 1. Money Trees





Source: IMF Staff.

Note: CBDC = central bank digital currency.

Adrian and Mancini-Griffoli, 2019.

Crypto-Currencies before Bitcoin?

- "Were There Cryptocurrencies Before Bitcoin?" Nathan Reiff, *Investopedia*, Updated August 26, 2021.
- < https://www.investopedia.com/tech/were-there-cryptocurrencies-bitcoin/ >
- "A Quick History of Cryptocurrencies BBTC Before Bitcoin," Ken Griffith, Bitcoin Magazine, April 16, 2014.
- < https://bitcoinmagazine.com/business/quick-history-cryptocurrencies-bbtc-bitcoin-1397682630>
- "Top 4 Cryptocurrency Projects Created Before Bitcoin." JP Buntinx, The Merkle.com December 20, 2016.
- < https://themerkle.com/top-4-cryptocurrency-projects-created-ahead-of-bitcoin/ >
- "A Look at How Second Life's Linden Dollars Helped Kickstart Bitcoin's Value." Jamie Redman, Bitcoin.com, January 14, 2021.
- < https://news.bitcoin.com/a-look-at-how-second-lifes-linden-dollars-helped-kickstart-bitcoins-value/>

Crypto-Currencies before Bitcoin

- David Chaum's electronic coins (USA, circa 1983)
- Chaum in the Netherlands, DigiCash (circa late 1980s)
- Russia, WebMoney, off-shoot of DigiCash (circa 1990s)
- PayPal (originally mostly for e-Bay--USA circa 1990s to present)
- Linden Lab's (Second Life) Linden (USA circa 2003 present)
- Nevis' e-gold (USA circa late 1990s-early 2000s)
- Wei Dai's B-Money, (USA, 1998)
- Hashcash (USA circa mid-1990s)
- Nick Szabo's Bit Gold (USA 2005)

Cybercurrency: What is it and how does it work?

"Cryptocurrency explained"
https://www.youtube.com/watch?v=Mvrq8hLjcRk

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"How is One Cryptocurrency Different From Another?"
https://www.youtube.com/watch?v=MJIR3I8qeus
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"From Bitcoin mining to ATMs, Illinois is positioning itself as a center for the booming cryptocurrency industry," Robert Channick, *Chicago Tribune*, Jun 18, 2021.

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< https://www.chicagotribune.com/business/ct-biz-cryptocurrency-illinois-bitcoin-mining-atm-20210618-j4hg5xjkmnamtkdaoukggt6v3y-story.html>
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https://www.governing.com/finance/illinois-could-become-new-hub-of-the-cryptocurrency-industry>

We could save this for our jobs day, but it's "local" and helps whet our interest so we'll have a look at it today.

"Going for Broke in Cryptoland," David Segal NYT, Aug. 5, 2021 (Updated Nov. 2, 2021).

https://www.nytimes.com/2021/08/05/business/hype-coins-cryptocurrency.html

Cybercurrency: What is it and how does it work?

http://ledger.pitt.edu/ojs/ledger

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Q&A? Cryptocurrency: What is it and how does it work?