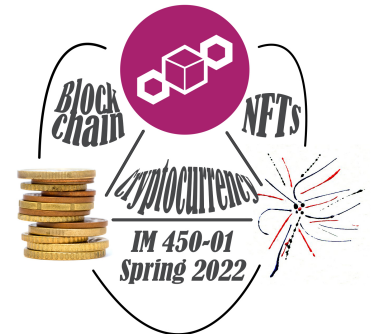


IM 450-01 Issues in IM: *Blockchain, Cryptocurrency, NFTs*

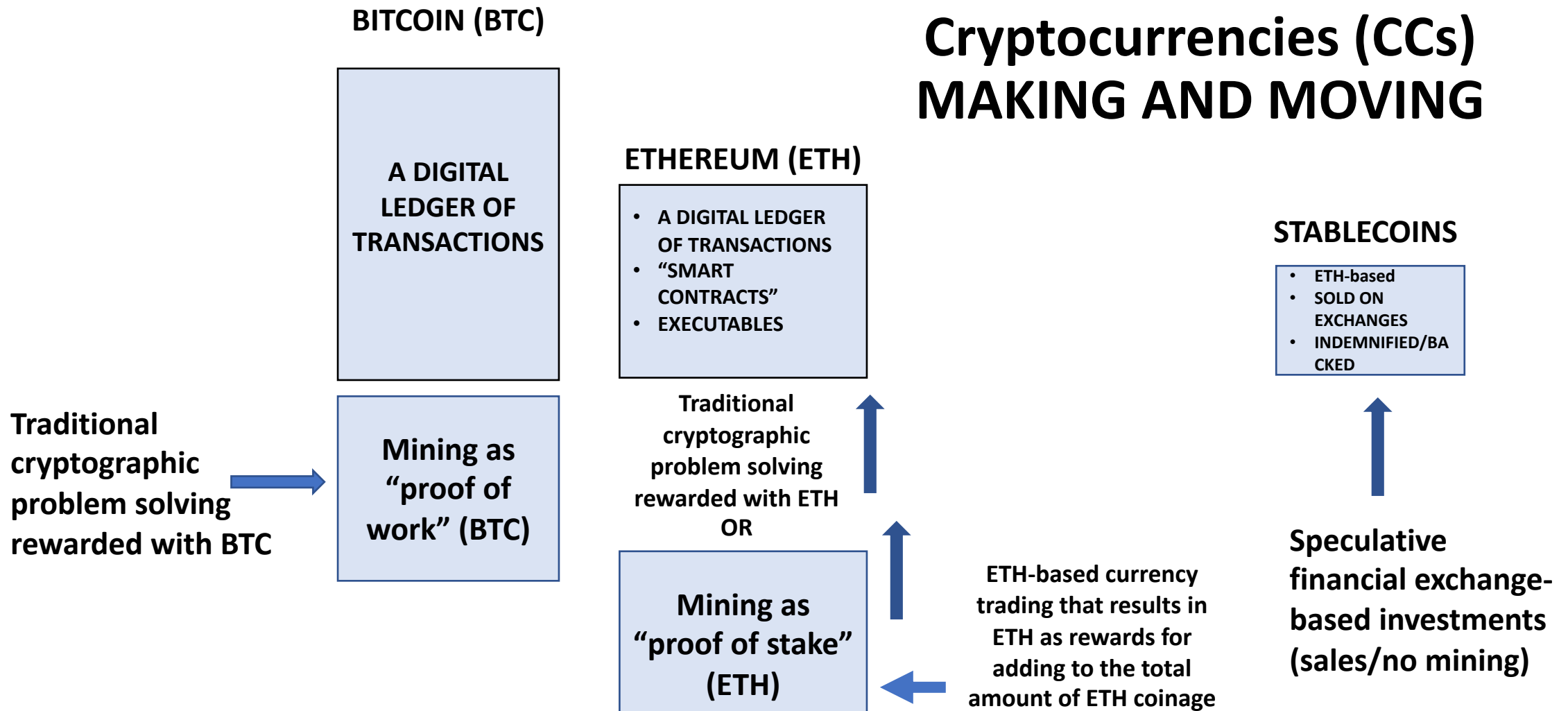
Spring 2022

Class 9—February 17

**Cybercurrency:
Types/versions**



Pre-Orientation to Cryptocurrencies (CCs) MAKING AND MOVING



Cryptocurrency Exchanges:

Buy/Sell the Underlying CC

Divide/Subdivide the Underlying CC

“Mint” coinage representing fractional portions of CCs

Hopefully, the Exchange rightly owned the underlying CC
Exchanges often don’t work directly on the underlying blockchain so are open to attack/hacking/fraud.

Cybercurrency: Types/versions

7 classes of crypto-currency

- 1. Transaction mechanisms (Bitcoin, Litecoin);**
- 2. Distributed computation tokens--with transactions, contracts, executables (Ethereum, Tezos, EOS, and DFINITY);**
- 3. Utility token--a programmable blockchain asset (Golem, Sia, and FileCoin).**
- 4. Security token--a token that represents stocks, bonds, derivatives, or other financial assets (a new security token offering is an STO);**
- 5. Fungible tokens (ERC-20);**
- 6. Non-Fungible tokens (ERC-721, Dharma, Cryptokitties, and Decentraland;**

Cybercurrency: Types/versions

7 classes of crypto-currency

7. Stablecoins (4 kinds)

- a) collateralized with currency (tether--USDT, Circle's USDC, LBXPeg, Candy, and C-Cs issued by national banks;**
- b) collateralized with real assets (gold, etc.—DGX, TCX, SRC);**
- c) cryptocurrency collateralized (DAI);**
- d) Uncollateralized (basecoin)—these are just barely stablecoin**

“Understanding Cryptocurrencies,” Wolfgang Karl Härdle, Campbell R. Harvey, Raphael C. G. Reule. IRTG 1792 Discussion Paper 2018-44.

https://ies.keio.ac.jp/upload/20191125econo_Wolfbang_wp.pdf

“Types of Cryptocurrency,”

Nicholas Rossolillo, Jan 11, 2022 *The Motley Fool*.



COINS

- Built into a blockchain (native to its own blockchain technology)
- Requires significant resources and skills to create
- Mostly distributed through mining
- Used to store or transfer money
- Valid with any merchant who uses the currency.

vs.



TOKENS

- Built on top of an existing blockchain
- Relatively easy to create
- Mostly distributed through ICOs (Initial Coin Offerings)
- Valid with one merchant
- Variety of uses (e.g., security, asset representation)

| Coin | Total Market Value* |
|--|---------------------|
| Bitcoin (CRYPTO:BTC) | \$826 billion |
| Ethereum (CRYPTO:ETH) | \$390 billion |
| Binance Coin (CRYPTO:BNB) | \$79.5 billion |
| Cardano (CRYPTO:ADA) | \$66.3 billion |
| Dogecoin (CRYPTO:DOGE) | \$63.4 billion |
| Tether (CRYPTO:USDT) | \$58.2 billion |
| XRP (CRYPTO:XRP) | \$51.8 billion |
| Polkadot (CRYPTO:DOT) | \$30.5 billion |
| Internet Computer (CRYPTO:ICP) | \$25.6 billion |
| Bitcoin Cash (CRYPTO:BCH) | \$20.1 billion |

“Types of Cryptocurrency”

1. Bitcoin

- **Bitcoin** is regarded as the first decentralized cryptocurrency using blockchain technology to facilitate payments and digital transactions. Instead of using a central bank to control the supply of money in an economy (like the Federal Reserve in tandem with the U.S. Department of the Treasury) or third parties to verify transactions (such as your local bank, credit card issuer, and the merchant's bank), Bitcoin's blockchain acts as a public ledger of all transactions in the history of Bitcoin. That ledger allows a party to prove they own the Bitcoin they're trying to use and can help prevent fraud and other unapproved tampering of the currency. A decentralized currency can also make peer-to-peer money transfers (like those between parties in two different countries) faster and less-expensive than traditional currency exchanges involving a third-party institution.

2. Ether (Ethereum)

- Ether is the token used to facilitate transactions on the Ethereum network. **Ethereum** is a platform that uses blockchain technology to enable the creation of smart contracts and other decentralized applications (meaning the software doesn't have to be distributed on app exchanges like Apple's ([NASDAQ:AAPL](#)) App Store or Alphabet's ([NASDAQ:GOOGL](#))([NASDAQ:GOOG](#)) Google Play Store, where they might have to give a 30% cut of any revenue to the tech giants). Thus, Ethereum is both a cryptocurrency (the actual coins are measured in units called Ether) and a software development sandbox.

3. Binance Coin

- Binance Coin is available on the Binance cryptocurrency exchange platform (along with other digital coins that are available for trading). Binance Coin can be used as a type of currency, but it also facilitates tokens that can be used to pay fees on the Binance exchange and to power Binance's DEX (decentralized exchange) for building apps.

“Types of Cryptocurrency”

4. XRP (Ripple)

- **XRP is a digital currency based on the digital payments platform RippleNet, built by the company Ripple. It was designed for financial institutions to scale digital payments across the globe and reduce transaction costs associated with typical cross-border funds transfers. Short-term lines of credit can also be extended using XRP.**

5. Tether

- **Tether is what's known as a stablecoin, a currency tied to a fiat currency -- in this case, the U.S. dollar. The idea behind Tether is to combine the benefits of a cryptocurrency (such as no need for financial intermediaries) with the stability of a currency issued by a sovereign government (versus the wild price fluctuations inherent with many cryptos).**

6. Dogecoin

- **Originally made as a joke poking fun of rampant speculation on cryptocurrencies, Dogecoin has skyrocketed in value, thanks to support from the likes of Tesla ([NASDAQ:TSLA](https://www.nasdaq.com/symbol/tsla)) CEO Elon Musk and investor and Dallas Mavericks owner Mark Cuban. It features a meme of a Shiba Inu dog as a "mascot" and was made to be used a form of digital payment like Bitcoin. However, [Dogecoin](https://www.dogecoin.com/) makes it quicker and easier for payments to be recorded, but it also has no limit on how many coins can be created over time (unlike Bitcoin, which was designed with a cap on how many coins there can be).**

Q &A: Types?

- "[With so many cryptocurrencies, why do any of them have value?](https://www.cbc.ca/lite/story/1.6303785)"
 - <https://www.cbc.ca/lite/story/1.6303785>
- "[Deciding whether to invest in Bitcoin? Here are the other big names in crypto](https://www.cnn.com/2021/11/13/investing/bitcoin-ethereum-crypto-guide/index.html)"
 - <https://www.cnn.com/2021/11/13/investing/bitcoin-ethereum-crypto-guide/index.html>
- "[Cryptocurrency Prices](https://crypto.com/price?page=1)"
 - <https://crypto.com/price?page=1>

On Crypto-currency

18

8 am

Level 3 Material 4