Writing Smart Contracts
11 Empirics

Peter H. Gruber

Supported by the Algorand Foundation

Starting point

Lots of public information

- Transactions
- Holdings (= added transactions)
- Smart Contract code

Research questions

- Macro level: evaluating an entire level-1 chain
- Project level: evaluating a token
- Micro level: payments and network of an individual address

Resources

- Statistics on https://algoexplorer.io/top-statistics
- API-access to blockchain
- Set up own *indexer*

Macro analysis – Algorand

Key metrics

- Token supply, market cap
- Total accounts, large accounts
- Daily transactions
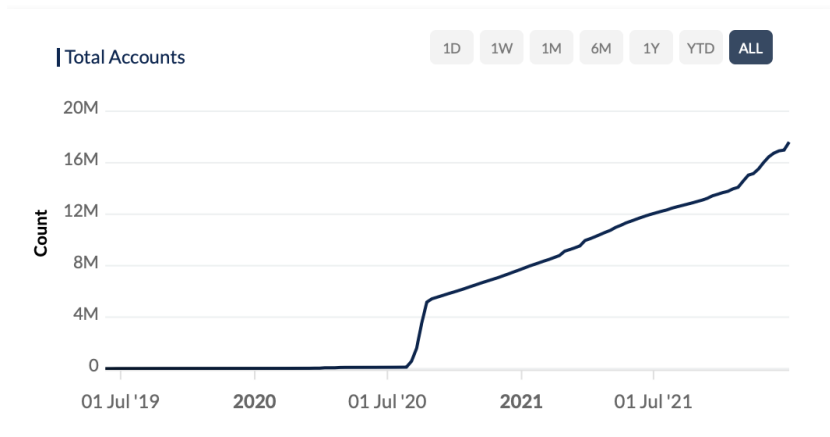- Token velocity

Financial metrics

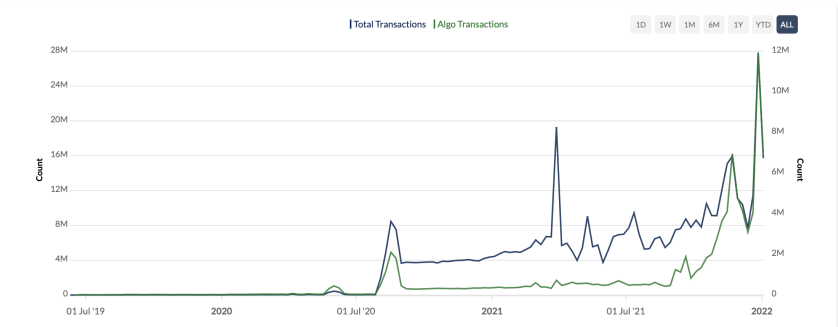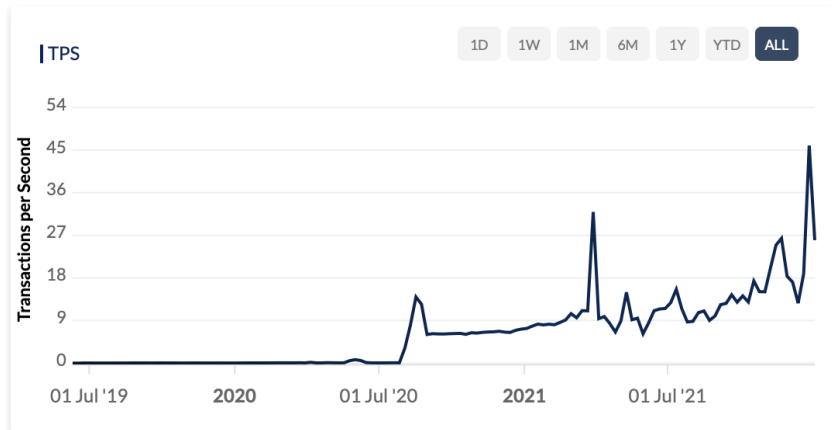- Realized cap and realized price

Recent numbers, see https://algoexplorer.io/top-statistics

Supply

Accounts

Transactions

TPS

Holdings and distribution

Held by Algorand
https://www.algorand.com/transparency

Held by Exchanges
exchanges.py

Held by largest accounts
https://algoexplorer.io/top-accounts
https://algoexplorer.io/top-statistics $\rightarrow$ Accounts