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

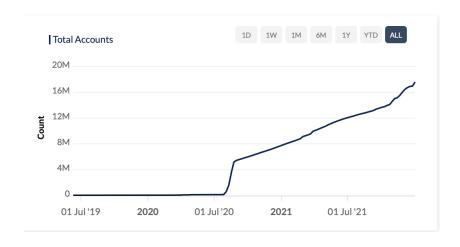
Recent numbers, see https://algoexplorer.io/top-statistics

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Supply

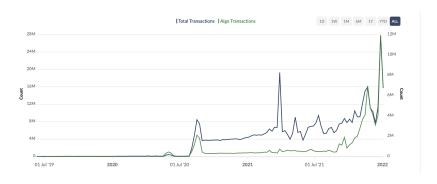


Accounts



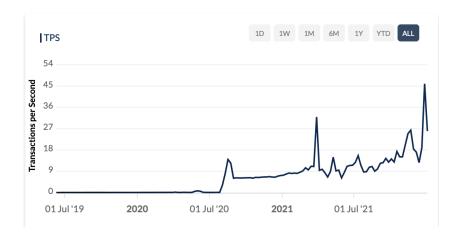
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Transactions



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TPS



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Holdings and distribution

Held by Algorand

https://www.algorand.com/transparency

Held by Exchanges

exchanges.py (in folder 11 code)

Held by largest accounts

https://algoexplorer.io/top-accounts https://algoexplorer.io/top-statistics → Accounts

Governance

https://governance.algorand.foundation/governance-period-5 https://www.algorandstats.com/governance-period-5