



University
of Basel

Center for
Innovative Finance



Bitcoin, Blockchain and Cryptoassets

Transaction Overview

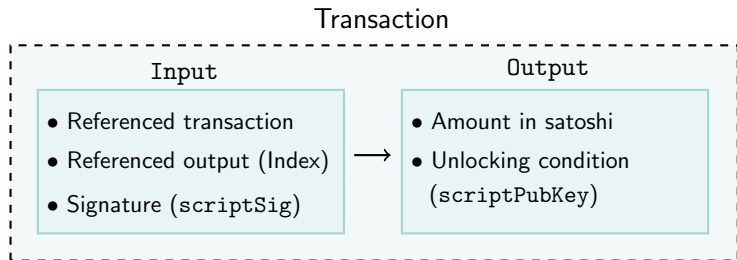
Prof. Dr. Fabian Schär
University of Basel

Release Ver.: (Local Release)
Version Hash: (None)
Version Date: (None)

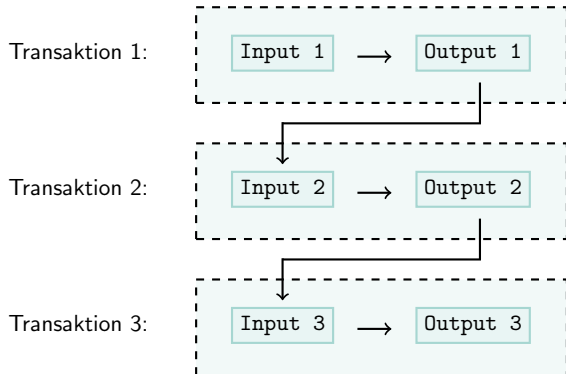
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Structure of a Transaction



UTXO model

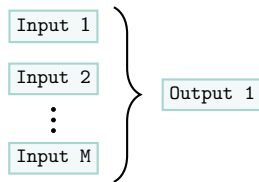


Output 3 is an unspent transaction output or UTXO.

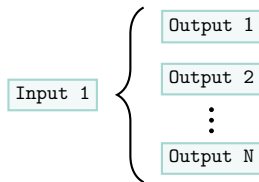
Transaction Types



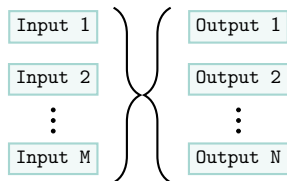
forwarding



aggregating

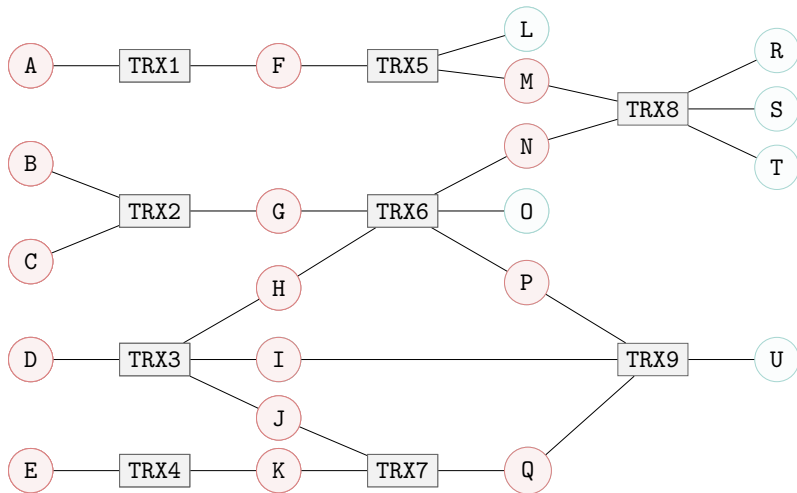


splitting



combined (m to n)

Example: Transaction Hierarchy



Input \neq Output ?

If the input value does not correspond to the output value, there are the following two possibilities:

- Output Value $>$ Input Value \rightarrow Transaction invalid
- Output Value $<$ Input Value \rightarrow Miner gets difference

A higher fee usually results in faster confirmation / block inclusion.