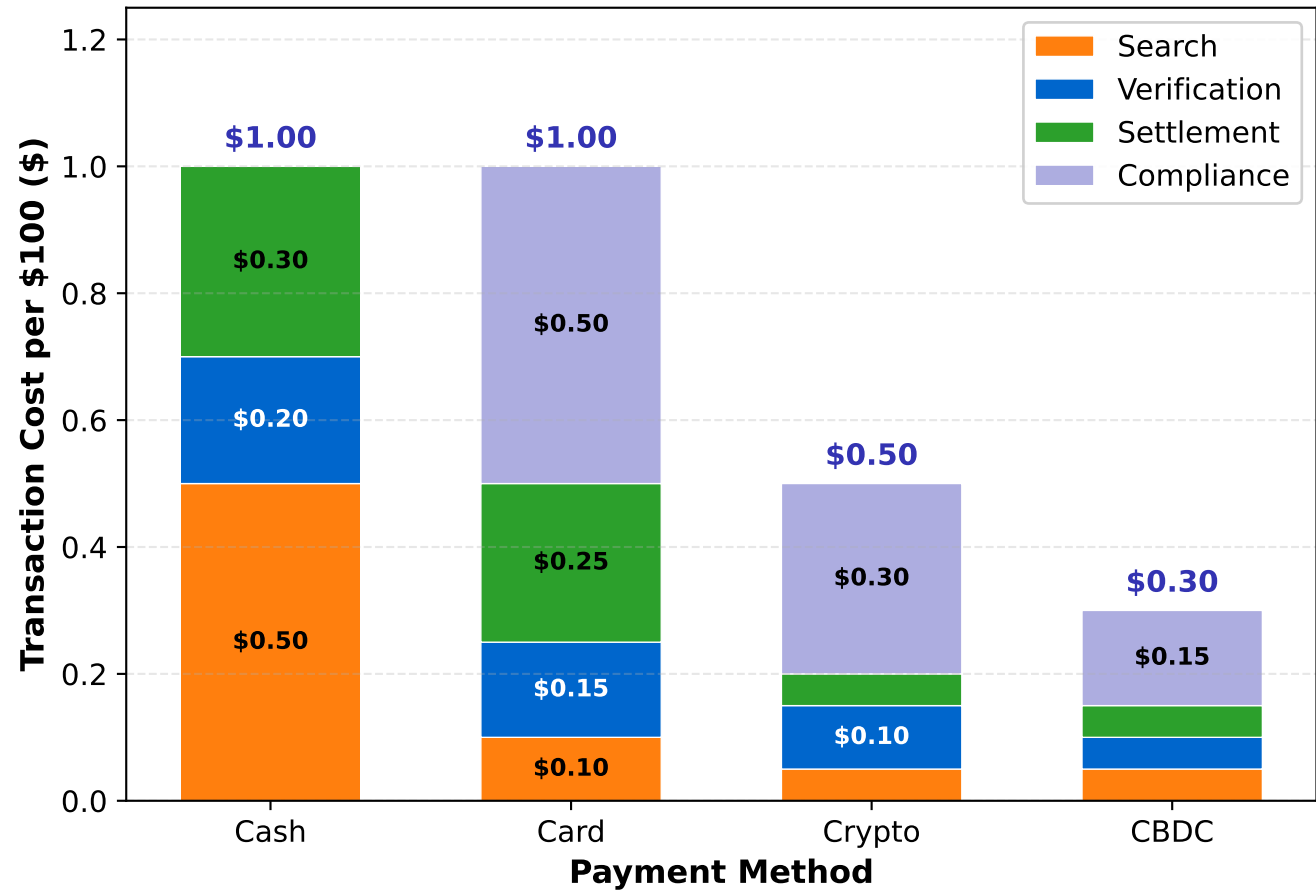# Transaction Cost Economics of Digital Finance

$$TC_{total} = TC_{search} + TC_{verify} + TC_{settle} + TC_{comply}$$ -- Coase (1937), Williamson (1985)

(a) Transaction Cost Components by Payment Method

(b) Cost Reduction Relative to Cash Baseline

Legend: Search, Verification, Settlement, Compliance

Panel (a) — Transaction Cost per $100 ($):
- Cash: $1.00 total (Search $0.50, Verification $0.20, Settlement $0.30)
- Card: $1.00 total (Search $0.10, Verification $0.15, Settlement $0.25, Compliance $0.50)
- Crypto: $0.50 total (Settlement $0.30... Verification $0.10)
- CBDC: $0.30 total (Compliance $0.15)

Panel (b) — Cost Reduction vs Cash (%):
- Cash: 0%
- Card: 0%
- Crypto: 50% (Search: 90%, Verification: 50%, Settlement: 83%, Compliance: N/A)
- CBDC: 70% (Search: 90%, Verification: 75%, Settlement: 83%, Compliance: N/A)