

Competition in Crypto Staking

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Discussion by

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The paper's question: why does it matter?

- What forces impede **effective competition among intermediaries** (banks, MMMFs)?
 - Local concentration, consumer inattention, switching costs, regulation, etc.
- How will the **emergence of digitalization** affect these **frictions** and thus **competition**?
 - Will it lower frictions, intensify competition, and thus lower intermediaries' rents?

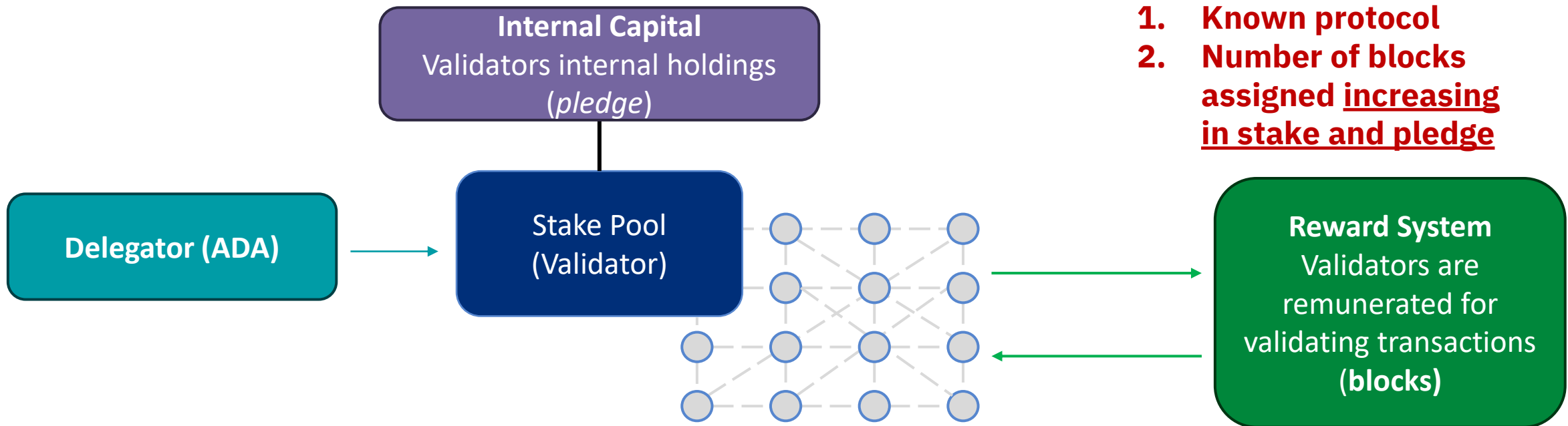
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- The “experiment”:
 - **Cardano staking markets** as a laboratory of **intermediary competition** in a **fully digital and transparent environment**
 - ✓ Near-zero switching costs and free entry
 - ✓ Observable fees and reward structure
 - **Amazing data: Full on-chain history** (5,857 pools; ~1.8M delegators) with every delegation, fee and switch **observed** at the account level

What is Staking?

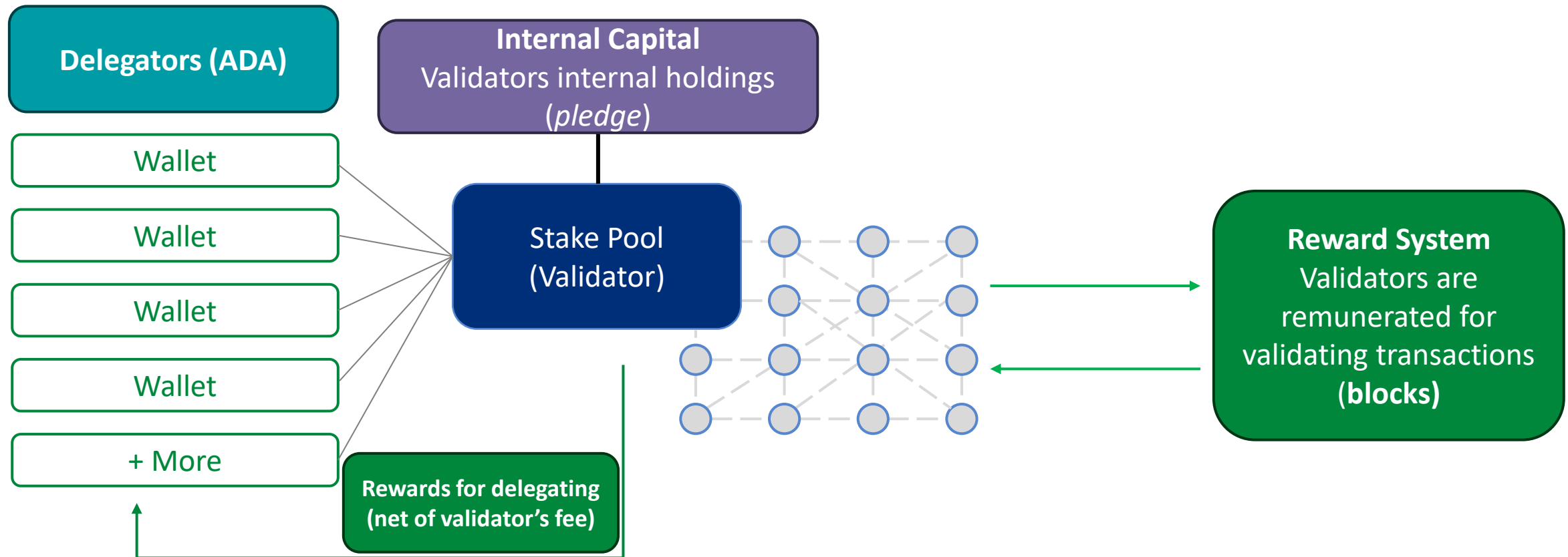
Cardano is a **delegated** proof-of-stake blockchain, where validation occurs via **capital staking**.

In words, transactions are validated by pools that are remunerated depending on their **stake**



What is Delegation?

Cardano allows token holders to **delegate** their staking rights to a validator and receive part of the rewards. This allows also **small** holders to take part in the validating process



The paper's contribution: Key results

- 1. Investors' attention remains pervasive, yet it sustains smaller rents**
 - 62.5% of delegators never switch, but fees cluster at 1–3% with little dispersion
- 2. A small attentive minority disciplines the whole market**
 - ~10% of delegators (holding ~30% of capital), actively switch between pools
 - Mobility is persistent at the delegator level
- 3. Pools react to changes in the flow of delegator capital**
 - Fees vary with outflows and inflows of delegator capital

Competitive market equilibrium

Active delegators provide a positive externality for the entire market

My comments

- **Very interesting paper** – occasion to learn a lot about blockchains, staking, etc.!
- **Two main comments**
 - **Choice of a stake pool**
 - **Comparison with other intermediation markets**

Choice of a stake pool

Can a delegator's choice be seen as a **risk-adjusted expected-yield problem**?

Large, reliable, established pools

- Lower reward volatility
- More regular block production
- Greater confidence in operational reliability

Risk of saturation: Once a pool is saturated, additional delegated stake **no longer** increases rewards, reducing returns

vs

Smaller/less saturated pools

- Lower fees
- Good technical reliability
- Spare capacity below saturation

Risk of reward (and network) volatility :
Smaller pools receive **fewer** block-production opportunities on average and thus rewards may be **more volatile** across epochs

Choice of a stake pool

More information would be useful:

- Who are the delegators?
- How does the “distribution” of inattention/attention look like and what drives it?
- What is the monetary benefit from being an attentive delegator?
- Why can the active minority discipline the whole market?

Ps: is 1-3% fee so small?

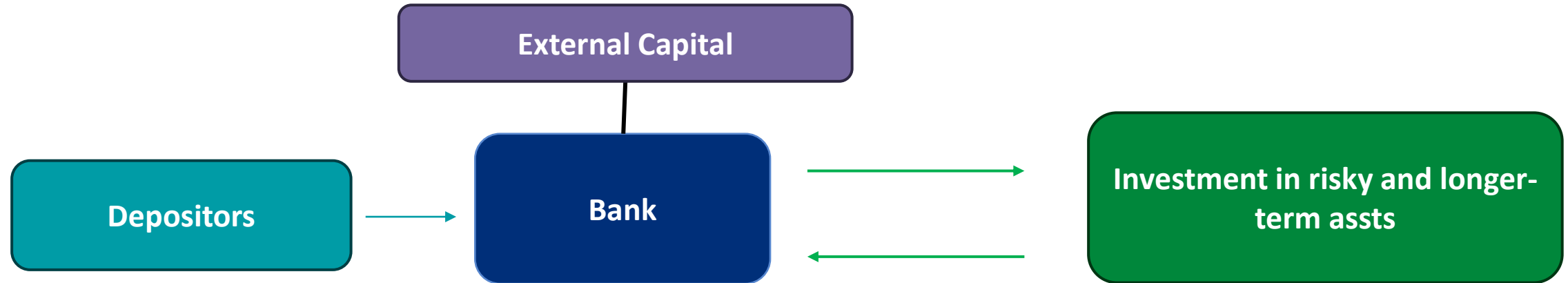
- Cardano fees are large relative to traditional MMMFs (Vanguard average 0.25%)

Comparison with other intermediaries: MMFs



MMFs compete on **relative performance**: competitive pressure pushes managers to **reach for yield** (buy riskier assets), while keeping **fees low** (La Spada et al., 2018)

Comparison with other intermediaries: Banks



- **Inattentive** depositors increase bank markups by **more than 30 bp** (Egan et al., 2025)
- Coexistence of **traditional** and **digital banks** (Zhang et al., 2026):
 - Digital banks have **higher deposit beta** and invest in **shorter-term** assets
 - Traditional banks have **lower deposit beta** and invest in **longer-term** assets

Comparison with other intermediaries (cont.)

To which extent are the paper results informative for other intermediation markets:

- Will digitalization be sufficient to remove frictions other than inattention?
- Assuming inattention will persist, will a small portion of attentive investors be enough to discipline rents across the other intermediation markets?
- Or are these rents intrinsically embedded in the business models of MMMFs/banks?
 - Risk taking, information, relationship lending, maturity transformation, etc.

Thank you!