

Discussion of “Determinants of tiering in payment systems” (Soren Korsgaard)

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Summary

- Many payment systems are tiered:
 - Fedwire (low; many direct, few indirect)
 - CHAPS (high; few direct, many indirect)
 - TARGET2 (medium)

- Paper provides a model of tiering
 - For system participants, it may be more (efficient) to use services of direct settlement member:
 - lower liquidity need
 - no fixed cost membership of payment system
 - no infrastructural changes back office.

Model set-up

Small banks

- k small, heterogeneous banks
- Minimize private costs of participation in payment system
- Choose either to use services of large bank or connect directly to system

Large banks

- 1 large bank
- Offers clearing services to small banks
- Market power determines mark-up

System owner

- Faces costs associated with production of payments
- Sets transaction prices to minimize social cost function

Conclusions

- Tiering patterns reflects : efficiency, internalisation, credit risk and spillover, delay costs, etc.
- Model provides interesting tools for thinking about effects of above mentioned factors
- Some suggestive empirical evidence:
 - Higher degree of tiering in net settlement systems and systems with higher costs of delay (e.g. CLS).
 - In Danish systems, credit risk considerations seem likely to be the more important determinant of (low degree of) tiering.

Remarks

Tiering yes/no has 2 perspectives:

1) Commercial bank: What is cheapest option?

- Other reason to be direct:
 - Other direct banks do not get insight in your business.

2) Central bank/authority:

- Good to know what the main driver of commercial bank is to choose to be indirect (taking into account CPSS/IOSCO *Principle 19*: "An FMI should identify, monitor, and manage the material risks to the FMI arising from tiered participation arrangements.").
- If CB wants more/less participation it can change the rules of participation, change price structure, etc.
- CB might want direct participation as (systemically relevant) banks can be monitored using RTGS data (Heijmans & Heuver 2011).

Questions

- What is the risk of system differences between currencies → globalisation?
- What is your expectation for the near future for CHAPS, LVTS Canada, EU, Fedwire, Kronos? (perhaps new standard?)