

# Estimating Change in Banks Intraday Liquidity Demand Due to Change in Settlement System

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Discussion of the presentation by Mehrdad Sepahvand - Central Bank of I.R. Iran

Freddy Cepeda ([fcepedlo@banrep.gov.co](mailto:fcepedlo@banrep.gov.co))

Leader Professional of FIOD

Payments Systems and Banking Operation Division

*Banco de la República (Colombia)*



# Summary

- **Iran Payment Systems**

- Before 2006: Multilateral netting system
- After 2006: RTGS SATNA

- **Objective:** Measure the increase in banks liquidity demand generated by the change in settlement system from a multilateral netting to RTGS

- **Methodology of analysis:**

- Data generator model: produce intraday flow of payments
- BoF- PSS2: (RTGS with gridlock resolution algorithm and feeding system FIFO) estimate banks intraday liquidity needs

- **Concepts:** Lower Bound, Upper Bound and Liquidity level



# Summary

## •Results:

- The movement towards RTGS increases the liquidity demand of Iranian banks in PS in around 66%

- Policies that can be used by the regulator to affect liquidity needs:

- Compulsory settlement of payments that exceeds a threshold in large-value payments systems
- Amount of credit facilities provided by Central Bank through Intraday Loan Facilities



## Questions about paper

- Results about banks liquidity demand are sensible to the data of sequence of payments generated. Are you assuming that there is a pattern of settlement that applies always?
- Given that SATNA begun operations in 2006, data obtained by generator model are similar to those recently observed?
- In data from netting system (TCH 2005) there was high concentration (5 entities with 78% of participation), maybe when you consider a RTGS scheme this participation could change and results too.



## Questions about paper

- Is possible in SATNA settle low-value payments?
- What types of institutions have access as participants to SATNA and access to liquidity facilities of Central Bank?
- Why don't you consider in your simulation with BoF-PSS2 the possibility of use optimization liquidity algorithms to reduce banks liquidity demands?



## Questions for discussion

- What should be the best data to consider when you want to measure some variables in your simulations of PS? One or many payments sequences.
- RTGS as a powerful mechanism for limiting settlement and systemic risk is not considered.
  - What should be the criteria to consider when you decide to change your settlement mechanism. Trade-offs liquidity demand, payment delay and credit risk?

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