

### Discussion

He Send, She Send: Analyzing Reactivity in a Payment System

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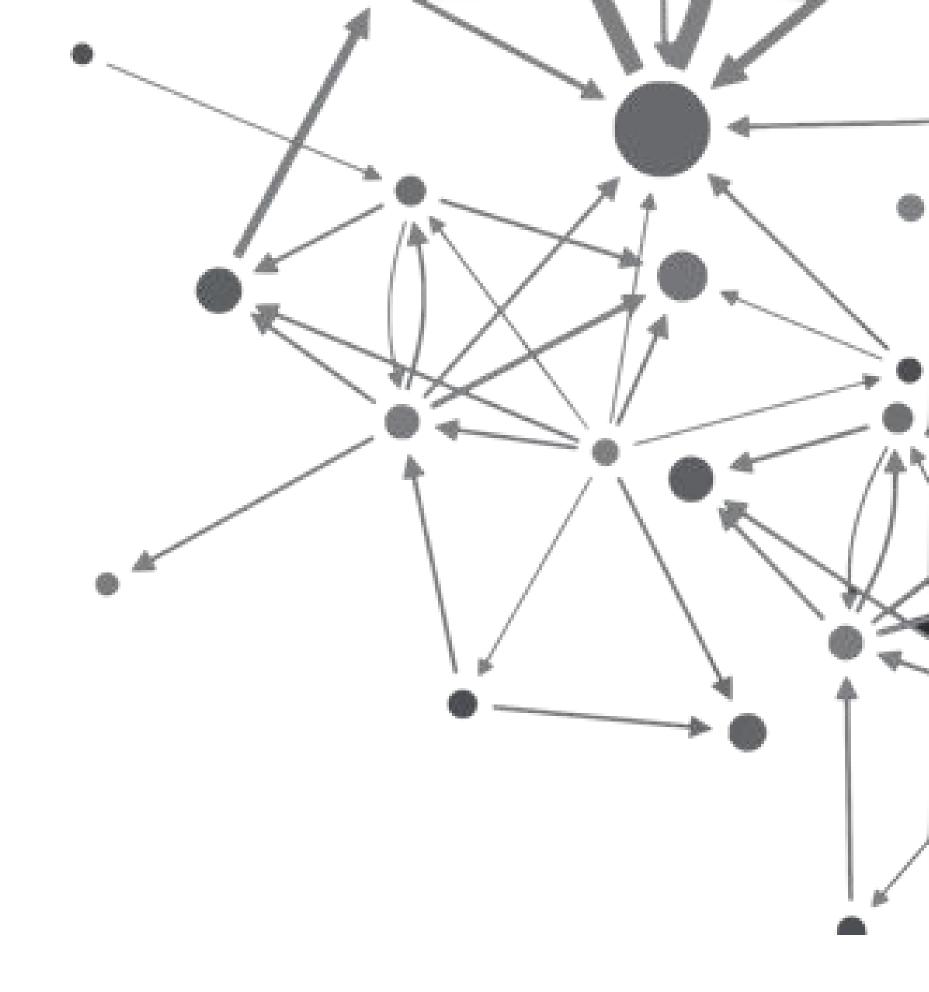




Play on "He Said, She Said"

Original meaning: Dialogue

Current meaning: Conflict

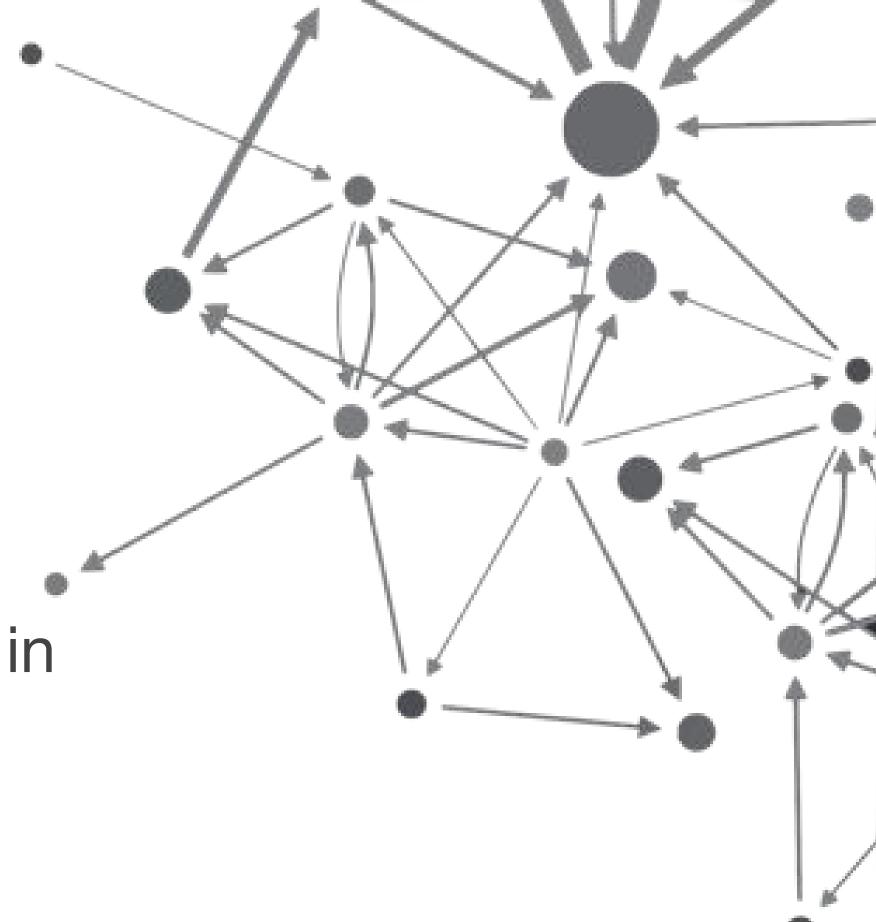




Need to understand bank behavior in a payment system to be able to endogenize it.

This behavior may have material impact on results in most simulation questions, eg for:

- Design of new systems
- Monitoring of outliers and anomalies (liquidity, solvency, financial crime)
- Stress testing FMIs
- Policy & change analysis





#### **Theory**

Angelini (1998)

Bech and Garratt (2003)

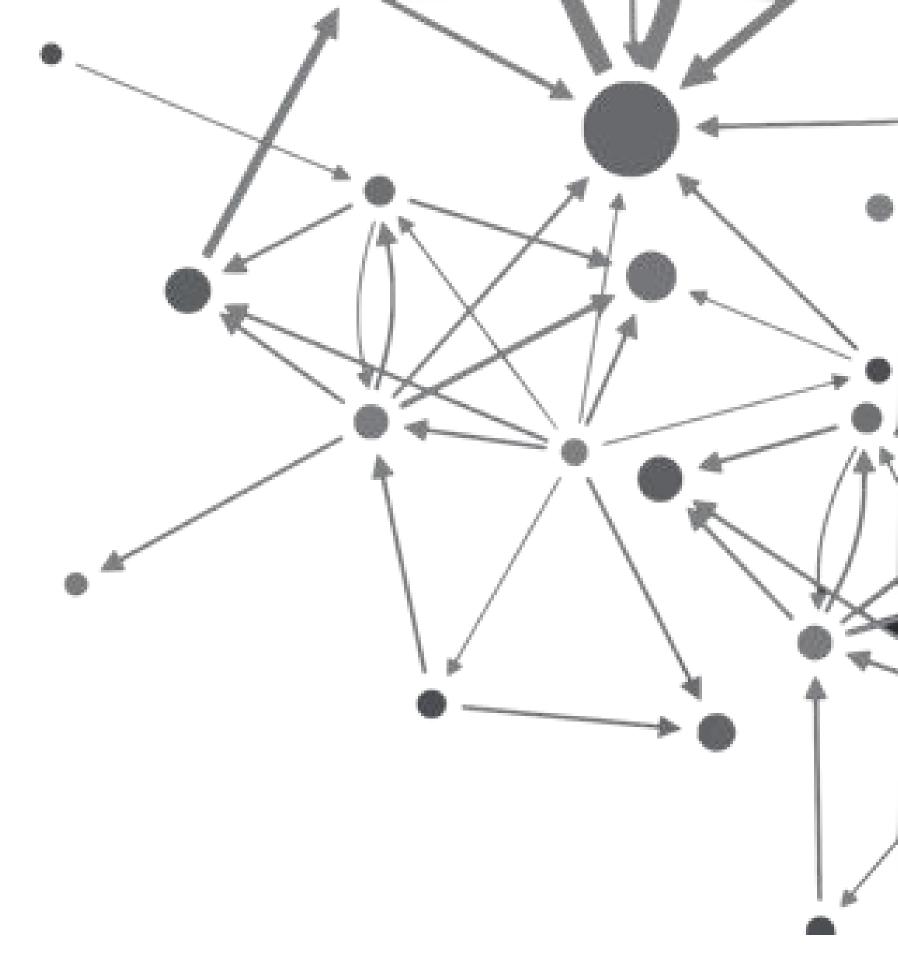
Martin and McAndrews (2008)

#### **Empirics**

McAndrews and Rajan (2000)

McAndrews and Potter (2002)

Merrouche and Schanz (2009)

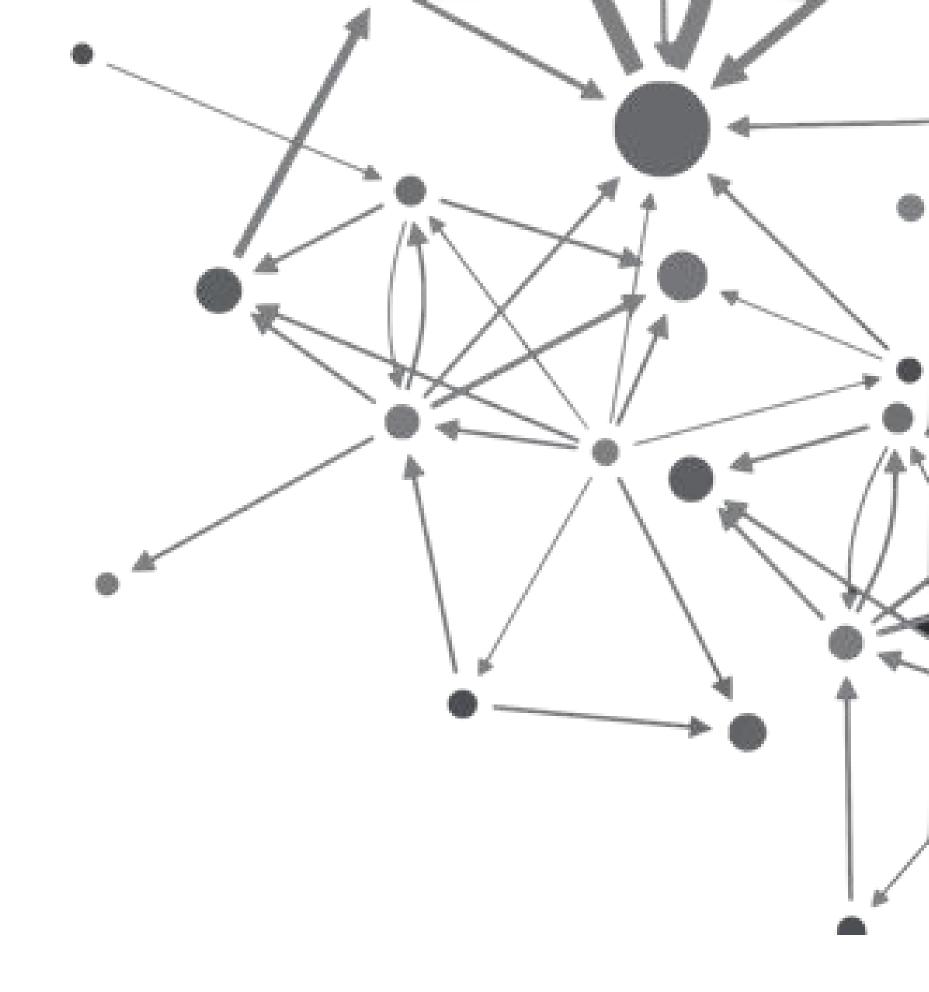




## Research Questions

# How does bilateral dependency in payments affect to the whole Payment System?

- 1. How to measure bilateral dependency?
- 2. How strong is bilateral dependency?
- 3. How to interpret the measure and what assumptions were used (eg on *t, lag, etc*)?
- 4. What bank (node) and bilateral (link) characteristics explain magnitude of bilateral dependency?
- 5. How to measure "payment system as a whole"?
- 6. How to operationalize this in an ABM?





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