# Modelling payment systems as a risk assessment tool

## Discussion of papers by F.Renault/W.E.Beyeler/K.Soramäki/ R.J.Glass/M.Bech and D.Mills/S.Husain

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*Disclaimer: The views expressed are those of the discussant and do not necessarily reflect those of the European Central Bank.*

# R/B/S/G/B: possible extensions

**Simulate additional scenarios:**

- Operational outage of global banks
- Outage for more then one banks

**Alter some assumptions:**

- Time dimension
- Asymmetric systems
- Mix between PvP and non-PvP

# R/B/S/G/B: research and policy

**"Lucas critique" (Robert): micro-foundations**

- Banks make strategic choices
- Liquidity level is not exogenous

→ Focus on banks' risk-management

**"Lucas critique" (Yvon): policy implications**

- Responsibility beyond domestic system
- International oversight cooperation
- Influence on liquidity levels as catalyst and operator
  - Encourage sound liquidity management
  - Provide facilities that prevent or limit effects of "liquidity sink"

# M/H: possible extensions

**Review current assumptions:**

- Description of the first design variant
- Cost of delay

**Further develop the model:**

- Focus on cost functions and equilibrium outcomes
- Additional dimensions of banks' behaviour
- More than two banks?
- Comparison with statistical data or simulation results

# M/H: research and policy

**New developments in securities settlement systems:**

- Distinction between DvP Models still up-to-date?
- TARGET2-Securities: integrated model with cash accounts that are separated but interlinked with RTGS system

**Implications for central banks:**

- Review operational involvement?
- Review costs structure for intraday liquidity?
- Provide information/transparency
- Encourage co-ordination among banks