

CCPs and Systemic Risk

- discussion points -

Søren Korsgaard

Danmarks Nationalbank

9th Payment and Settlement System Simulation Seminar

Brief summary

- Aim: To answer policy-relevant CCP-question
- In order to do so: Create flexible simulation tool
- Method
 - ▶ Structure: Network of participants, liability matrix, payment vector, equity vector
 - ▶ Algorithm: Eisenberg and Noe (2001)
 - ▶ Introduce CCP, vary CCP (default) rules
- Study of contagion, dependence on CCP rules, ...

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Early stages. Is more flexibility possible?

- Can time dimension be introduced? Stochastic characteristics of underlying assets?
- Possible policy implications
 - ▶ Different prescriptions for equity and derivatives markets? For OTC and non-OTC?
- How can risk factors such as volatility and liquidity be incorporated?
 - ▶ Perhaps by letting payments vector and/or liabilities matrix depend on asset price dynamics

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Further flexibility

- Current CCP “ingredients”
 - ▶ membership
 - ▶ netting
 - ▶ default fund
- Important issue
 - ▶ Structure of “default waterfall”
- More ingredients
 - ▶ Relative split between self-insurance [margins] and co-insurance [default fund]
 - ▶ Haircuts. Interesting for procycality.

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More policy questions

- Interesting, though possibly outside scope of the model
 - ▶ Differentiation between members
 - ▶ Access to central bank liquidity
 - ▶ [...]