



Discussion on "Testing information Diffusion in the Decentralized Unsecured Market for Euro Funds" by Edoardo Rainone

#### Mikael Juselius

The views presented here are mine and do not necessarily reflect those of the Bank of Finland.

# Paper overview

- Does diffusion of private information matter for interbank rates and when?
- Intuition: Each time a bank trades with another in the interbank market, it gets a signal of the counterparty's private information. This signal affects the rate on its future deals with other banks
- Uses a spatial autoregressive model applied to the unsecured market for euro funds
- Finding: diffusion of private information matters
  - Particularly during episodes of financial distress and heightened aggregate uncertainty

#### **General comments**

- Main contributions: an application of existing models to an interesting and potentially important economic problem, as well as some nice results, but...
- ...the paper focuses more on technique
  - Economic intuition and relevance in the background
- Who is the intended audience?
  - a) Econometricians? Perhaps, then the econometric procedure takes center stage and the application is a sideshow. But the audience and influence may be small...
  - b) Economists? In my view, yes, but the paper is more written for (a)
- In the following, I will share my own intuition from reading the paper

## **Economic motivation and importance?**

- Paper lacks a clear economic motivation
- Intro: "...uncontrolled market rates prevent a smooth [policy] rate transmission..."
  - Flavor of this statement: information diffusion is bad
  - Why have an interbank market in the first place? Key reason: obtain information on banks' private assessments of each other. But if so, do we not gain a lot of information when diffusion is high?
  - Alternative title: "When do banks become worried about other banks?"
  - The paper offers a method of getting this information

## **Motivation continued**

- Intro: "has sizable implications for both average market rates and rates volatility"
  - Why not plot the additional price component coming from diffusion mechanism alongside the fundamental component over time etc.? The spatial autoregressive coefficient in itself is less interesting...
- Intro: "The financial stability of the system may also be threatened"
  - Signal or cause? If signal, then diffusion is benign; if cause, its bad

### **Econometric model and intuition**

- The econometric model is not directly derived from an economic model
  - This is fine, but it also means that assumptions are somewhat arbitrary
  - Spell out the intuition of the econometric model and its assumptions

#### Model intuition

- The rate on a loan from one bank to another is determined by (i) fundamentals (public information), (iii) the specific characteristics of the two banks, and (iii) the rates that the lending bank has received on its own loans from other banks (signals of private information)
- But since this pricing function applies to all banks, the rates on previous loans to the lending banks will also matter and so on
- Hence, the private information reflected in bilateral loan rates will be autoregressively diffused into equilibrium prices

### **Model continued**

- Key assumption 1: Information flow from borrowing to lending
  - Some robustness tests vis-à-vis other information flows
  - But the timing (within the maintenance period) seems to matter for this
- Key assumption 2: the information diffusion from past loans is the same across all banks
  - Could signals from certain banks be more valuable than from others?

# Some miscellaneous suggestions on reader friendliness

- Both general and application-specific notation
  - This is cumbersome and difficult to follow
  - Why not write the notation and text solely in terms of the application? (eg rates instead of prices etc.)
- Merge sections 2, 3, and 6 and simplify the notation
- Section 4 is really the data section
  - Too little information on the loans and banks data
  - Spend more time on motivating the choices of variables for firm characteristics
- Section 5 on preliminary evidence is way too long
  - A paragraph in the run-up to the main results in section 7, with the "Moran's I" formula chucked in an Appendix
- Section 6.1 in an Appendix, with just the intuition in the text
- Way too many long footnotes...

Mikael Juselius