

Discussion of

“Frictions in the Interbank money market and the Demand for Reserves: Lessons from the Financial Crisis”

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The paper

- Paper models (corridor position of) O/N-rate as a function of
 - Daily excess liquidity
 - Transaction costs
 - Credit risk
 - Several dummies
- Paper finds that
 - Increased excess liquidity reduces O/N-rate;
 - Transaction costs brings O/N-rate closer to mid-point and reduces risk of exceeding corridor;
 - Credit risk increases O/N-rate;

Comment I: to model O/N rate before August 2007, it is particularly important to consider expectations of accumulated liquidity, not daily liquidity

- Gaspar et al (2004):

$$r_t = E_t(r_{t+1}) + \pi_t$$

Where π_t is compensation for risk of using standing facilities already on day t.

- In case π_t is zero on all but the last day, T, of the maintenance period:

$$r_t = E_t(r_T) = P_t(\text{deficit}) \cdot r_{MLF} + P_t(\text{surplus}) \cdot r_{DF}$$

Deficit if accumulated liquidity supply < reserve requirements

Surplus if accumulated liquidity supply > reserve requirements

Comment 1: to model O/N rate before August 2007, it is particularly important to consider expectations of accumulated liquidity, not daily liquidity

- What matters is **expected accumulated** liquidity conditions
- Several papers, e.g. Würtz (2003), show that, before the crisis:
 - Expectations about net use of standing facilities on last day of the maintenance period give rise to the main liquidity effect
 - daily liquidity insignificant => **change measure for excess liquidity**

Comment 2: After August 2007, daily liquidity starts playing a role

- π_t is no longer zero until last day of the maintenance period
- Funding liquidity risk \Rightarrow preference for “frontloading”
- \Rightarrow daily excess liquidity is significant

Comment 2: After August 2007, daily liquidity starts playing a role, **but...**

- At any point in time, the effect of daily liquidity depends on liquidity position on previous days, and expected future availability => **change measure for excess liquidity to account for accumulated position**
- Demand varies strongly in the course of a maintenance period => **one could allow parameters to vary across an MP(?)**
- Liquidity supply is highly endogenous to the O/N-rate:
 - August 2007 to October 2008: non-neutral OMO allotments
 - since October 2008: fixed rate full allotment
 - => **use instruments or reduce sample to days with no OMOs**

Comment 3: introducing reasonable heterogeneity of banks would bring into question the theoretical conclusions

- Banks have **different initial endowment of liquidity**
 - some banks will have negative marginal utility out of trading =>
 - different equilibrium O/N-rate than assumed in paper =>
 - What happens to proposition I (on effect of transaction costs)?

Comment 3: introducing reasonable heterogeneity of banks would bring into question the theoretical conclusions

- **Some banks do **not** have access to standing facilities =>**
 - notably in times of frictions (e.g. high transaction costs) the corridor does not bind O/N rate (contrary to proposition 1)
- **Banks have different degrees of credit risks**
 - assume credit risk increases excessively for some banks =>
 - they can no longer borrow in the market and borrows from the central bank instead =>
 - excess liquidity increases and there is less average credit risk underlying the (remaining) average market transactions =>
 - The O/N-rate does not increase but declines (contrary to proposition 2)

Comment 4: Do not measure transaction costs from the spread between 1 week overnight index swap (OIS) and realised EONIA

- Cashflow on an OIS is the realised average path of EONIA =>
 - Transaction costs equally priced into EONIA and OIS
 - Difference between OIS and realised EONIA reflects new information (uncertainty/volatility) or patterns which are averaged out in the one week OIS;
- Probably, the transaction cost measure applied by the paper (based on one week OIS) is very significant in explaining EONIA, because

$$r_t = E_t(r_{t+1}) \approx OIS_t$$

- Alternative: use bid/ask spread