

de Andoain/Heider/Hoerova: “Excess liquidity and interbank market functioning under stress: Evidence from TARGET2 transactions”

Discussion by Kim Abildgren



General assessment and outline of discussion

- A very interesting paper of high relevance in relation to assessment of the functioning of the euro area money market, monetary transmission and monetary policy implementation in stress and non-stress periods.
- Based on unique transaction-level data for the euro area money market derived from Target2 payment data.
- Outline of the discussion:
 - Brief review of the approach and main findings of the paper.
 - Suggestions regarding data description *etc.*
 - Scope for further research on the Target2 data.

Data

- Interbank transactions on uncollateralised overnight loans 2008-2013 derived from TARGET2 payment flows using a Furfine-type algorithm



Main findings

- Low stress markets
 - Higher supply of central-bank liquidity (excess liquidity) leads to lower money market interest rates (spread to the ECB deposit rate) and vice versa.
 - Higher supply of central-bank liquidity leads to lower money-market turnover of loans.
- High stress markets
 - No simple relationship between excess liquidity and changes in money market interest rates.
 - Might reflect concern about counterparty risks as well as liquidity hoarding as insurance against negative shocks to own liquidity needs.

Suggestions regarding data description *etc.*

- Comment on the reliability of overnight loan transactions in the euro area identified via the Furfine-type algorithm.
 - The precision of the algorithm has recently been a major topic in relation to US payment data.
 - However, as reported in the final MaRs Report the algorithm seems to work fairly well for the euro area, at least for overnight transactions as used in the paper.
- “The key to identification is that in between central bank market operations, which happen once a week, the amount of excess liquidity is fixed...” (page 2, see also page 6)
- Might deserve a comment on the marginal lending facility (the insignificant use of the facility in the sample period).

Scope for further research on the Target2 data - 1

- Combine Furfine-type data with bank-level accounting information to analyse the importance of bank-specific characteristics on trading volumes and interest rates.
- Are banks with a low solvency ratio, high loan impairment charge ratios or banks that later exit by default paying higher interest rates in the overnight market than other banks? (i.e. analysis of credit-risk premiums in the money market)
- Are banks with a decline in their liquidity buffer relative to the statutory requirement reducing their supply of interbank loans?
- Are banks with an increase in their liquidity buffer increasing their supply of interbank loans?
- Were small banks (measured by e.g. the balance-sheet total) paying a premium on uncollateralised overnight loans during the crisis? Even after control for the banks' economic performance?

Scope for further research on the Target2 data - 2

- Combine Furfine-type payment data with bank-level information on the use of the monetary-policy instruments.
 - Are banks with a low level of excess central-bank liquidity paying higher interest rates on loans than other banks?
 - Are banks with a high level of excess liquidity charging lower interest rates on loans than other banks?
 - Is the level of the overnight interest rate higher when the total outstanding amount of excess central-bank liquidity is concentrated on relatively few monetary-policy counterparties?
 - What was the impact on the money market microstructure during the crisis of changes in the width of the interest-rate corridor (determined by the rates on the standing facilities) or changes in the collateral base for monetary-policy loans?
 - What was the impact of a negative rate on the standing deposit facility on the money market microstructure?

Scope for further research on the Target2 data - 3

- The impact on government guarantee schemes vis-à-vis the banking sector on individual banks' access to the interbank market and the interest rate they pay.
 - Did the guarantees lower the interest rate paid by banks in financial distress?
 - Did the guarantees facilitate access to the money market for banks in financial distress?
- Are systemically important financial institutions (SIFIs) paying lower interest rates in the money market than other banks? Even after control for the banks' economic performance?

Scope for further research on the Target2 data - 4

- Interconnectedness in the interbank market (measured e.g. by the number of counterparties, other quantitative measures of interconnectedness, network charts, *etc.*)
 - The impact on trading networks of bank failures. Can structural breaks in interconnectedness measures be detected?
 - Were announcements of “bad news” for individual banks expected in the market, for instance indicated by reduced exposure vis-à-vis the banks in question prior to the announcement?
 - The impact of other specific events on the network structure.
 - Are interbank network structures time or regime dependent?
 - Are there cyclical patterns in the degree of interconnectedness and thereby systemic risks?