Securities lender of last resort: On the causal effects of CBs' securities lending facilities

Greppmair and Jank

Discussion
Jean-David Sigaux (ECB)

Selective summary

- **Research question**: What is the impact of CBs' programs of securities lending?

- **Empirical strategy**: Exploit heterogenous exposures to (exogenous) increase in CBs' securities lending

- **Main finding #1** : The change in policy led to a <u>supply shock</u> on the securities lending markets
  - Lower specialness by 1 bps (i.e. a 13% decrease)
  - Higher securities borrowing volume by 68%

- **Main finding #2**: The change in policy decreased bid-ask spreads
  - Lower bid-ask spreads by 0.6 bps (i.e. a 5% decrease)
  - => Focus of the discussion

Big picture question

- **Big picture question : Does securities lending have an impact on market liquidity?**

- **"Market makers decrease bid-ask spread…"**

  - **"…when they can borrow easily the securities" [Direct impact]**
    - Straightforward to test
    - Not trivial, and may go in the opposite direction [See in 2 slides]
    - => A promising avenue for the paper!

  - **"…when short-sellers are able to incorporate negative information" [Indirect impact]**
    - Complicated to test
    - Clearly true, based on previous literature
    - => A less promising avenue for the paper

Why should the paper address the big picture question?

- **It's a key question**
  - Monetary policy has large impacts on money markets
  - In turn, money markets impact securities lending
  - If securities lending impacts liquidity, it is another mechanism where monetary policy impacts market liquidity

- **The authors have a better technology than the literature**
  - The literature has used *Quantitative easing* as an impact to specialness
    - But *quantitative easing* also impacts outstanding tradable volumes
    - So, with *quantitative easing*, one cannot attribute change in liquidity to specialness
  - The authors have an exogenous shock on securities lending => Much better identification

- **This paper has encouraging first results on bid-ask spreads**

Not trivial that specialness impacts liquidity

- ## At t=0

  - **Suppose that Bid Price = 99.75 EUR; Ask price = 100.25 EUR**
  - To facilitate the interpretation, suppose that dealers' inventory at t= 0 is null
  - When dealer buys (sells) a security, she lends (borrows) it in the Repo market and earns (pays) the specialness

- ## At t=1, "specialness" decreases by 10 cents

  Dealers' charges full decrease in revenue

  Dealers' passes on full decrease in cost

  - **Bid Price = 99.75 EUR - 10 cents ; Ask price = 100.25 EUR - 10 cents**
  - **=> No change in Bid-ask spread**

- ## Conclusion: In principle, security lending should not impact liquidity

A decrease in specialness may even decrease liquidity

- **With dealers' market power, security lending may <u>negatively</u> impact liquidity**

  Dealers' charges full decrease in revenue   Dealers' passes on only part of the decrease in cost

  - **Bid Price = 99.75 EUR - 10 cents ; Ask price = 100.25 EUR – 5 cents**
  - **=> Bid-ask spread increases from 50 to 55 cents!**

- **"Since the repo market is crucial for market makers in the cash market, improvements of repo market liquidity may spill over to the cash market." (page 7)**

For ↘ specialness to ↗ liquidity, one needs the right asymmetry

‖‖

- **E.g. one could suppose that short-sellers have market power**

  Short-seller passes on <mark>only part</mark> of the decrease in cost

  - **Bid Price = 99.75 EUR <mark>- 5 cents</mark> ; Ask price = 100.25 EUR – 10 cents**
  - Therefore: Bid-ask spread = <mark>45 cents</mark>
  - => Bid-ask spread decreases

- **With traders' market power, security lending <u>positively</u> impacts liquidity**

- **(Not very realistic model, though)**

Other remarks – The authors should spell out the shock

- **Policy change (For security lending against collateral):**
  - Lending fee = Max (10bps / 5bps, Market fee), before / after the policy change

- **Unclear that the policy change decreased the cost of borrowing**
  - E.g. If market fee = 15bps, there is no shock

- **That leads to a conundrum**
  - For the policy to result in a price shock, market fee should sometimes be < 5bps
  - But if market fee < 5bps, why not borrowing from the market instead?

- **Potential solutions to the conundrum: Market breakdown or Adverse selection**
  1. Market breakdown: CB lending works only when markets are not properly functioning
  2. Adverse selection: CB lending attracts counterparties that can only borrow at high market fees

Other remarks – The authors only tested one part of the shock

- **The authors use secured money market data to test the policy change**
  - i.e. security borrowing against cash collateral

- **Yet, the policy change affected also security borrowing against security collateral**

- **<u>Nice to have</u>: Test the policy change on these security-against-security transactions**
  - Use data from Markit (formerly DataExplorer)

Conclusion

- **Nice paper with a neat identification**

- **Suggestion: re-focus the paper to answer a key question:**
  - **"Does specialness have a direct impact on liquidity?"**

- **The authors have an advantage to answer it, compared to the literature**

- **Some effort needed to**
  - develop a conceptual framework that generates sensible predictions regarding market liquidity
  - explain / exploit the conditions that lead an entity to borrow securities from the CB (instead of the market)

- **Looking forward to the next version!**