Discussion of: "Monetary Stimulus and Bank Lending"

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[1]Disclaimer: The views expressed in this presentation are those of the author and do not necessarily reflect the views of other members of the research staff or the Board of Governors.

Overview

1. Question: How did quantitative easing impact bank lending
2. Finding: During periods of elevated Fed MBS purchases, banks with greater MBS holdings:
    - Increased their mortgage market share
    - Reduced commercial lending
3. Interpretation: QE caused mortgage lending to crowd out commercial lending

Strengths

- Convincingly demonstrate that MBS holding banks have lower supply of commercial credit in quarters with high MBS purchases:
  - State-quarter FE to control for demand at bank level
  - Borrower-quarter FE to control for demand at loan level
- Demonstrate real effects on financially constrained firms
- Diverse data sources provide full view of C&I loan market
  - Call reports heavily weights smaller banks
  - Dealscan captures larger banks

Discussion Overview

1. What is the mechanism?
   - Quickly sold mortgages unlikely to cause balance sheet constraints
2. Does $log(1 + MBS\ Purchases)$ measure QE intensity?
   - Most variation comes from whether there was a purchase, not the purchase amount
   - Independent variable looks like a post-Lehman dummy
3. Is this a general effect of MBS purchases?
   - Results may be caused by idiosyncratic conditions US mortgage market
   - Own servicer benefits in HARP and decline in corespondent lending may have concentrated the willingness to refinance loans in the large servicers

Mechanism 1: Portfolio Constraints

QE could ease portfolio constraints:

- Net worth rises when MBS prices rise
- Portfolio Rebalancing: Less MBS/mortgage debt on portfolio

Loans do need to be held on portfolio briefly, but can be sold quickly enough that this is unlikely to drive the results:

- ≈39 days between origination and sale (Rosen, 2010)
- Risk weights: Mortgage: 50%, Commercial loan: 100%
- $130 billion in mortgage originations can only crowd out $28.2 billion in C&I Lending for 90 days

Mechanism 2: Capacity Constraints

Are employees working on mortgages at the expense of commercial loans?

- "500 [Bank of America] employees who were doing credit card collections...are being retrained to do fulfillment"-*American Banker February 08, 2012*

Commercial and mortgage loan officers aren't close substitutes:

- Commercial loan officers earn twice as much (Glassdoor.com)
- Quickenloans Mortgage Loan Officer job description:
  - What you don't need: "Lending experience or a finance degree. We'll teach you everything you need to know."
  - What you'll get: "15 weeks of really fantastic Mortgage Banker training"

Event studies find different results

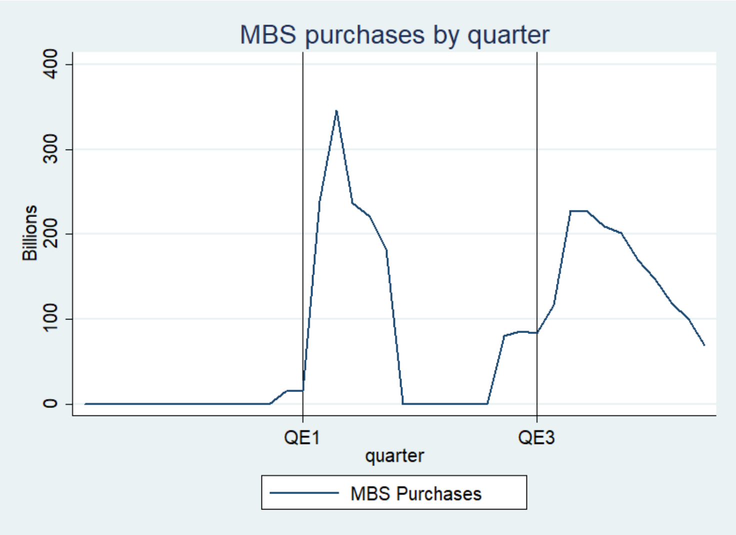
Rodnyanksky & Darmouni (2017), and Luck & Zimmermann (2017) find that banks increased C&I lending after QE3 (QE1 had either no effect or a smaller effect)

- Event study: Call Report data (RD & LZ)
- Within firm estimation: Dealscan (RD), Stress test data (LZ)
- Within county: small business lending data (LZ)

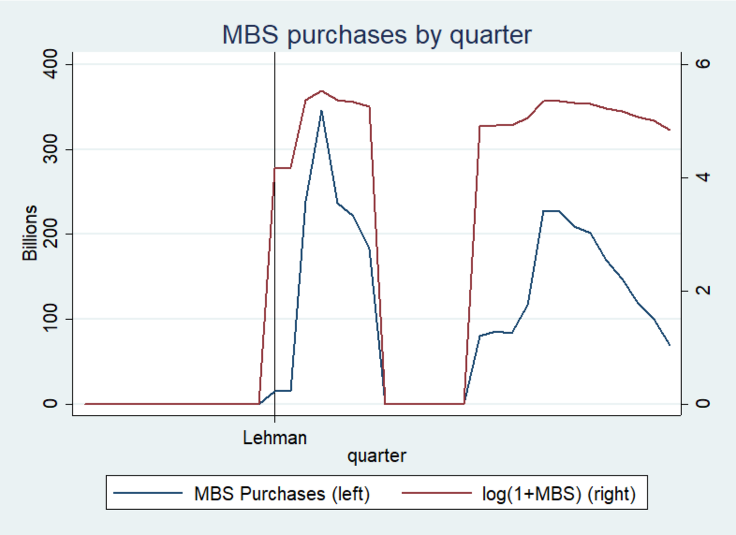
Primary differences in this paper:

- Continuous measure of QE, instead of event study
- Different Sample: 2005:Q3 to 2014:Q3 instead of windows around QE announcement

Continuous measure of QE intensity



Impact of log transform



Possible Confounders

Much of the variation is pre-Lehman (2005:Q3-2008:Q2) vs. post-Lehman (2008:Q4-2014:Q3)

Treated banks likely hit harder by the crisis:

- MBS holding banks had larger charge-offs in crisis, leading to higher spreads and smaller loans (Santos, 2011)
- Securitizing banks got stuck holding mortgages when ABCP market shutdown (Purnanandam, 2011)
- Run on repo collateralized by MBS (Gorton & Metrick 2010, Krishnamurthy el al, 2014)
- Risk of having earlier originations put-back (McCoy & Wachter, 2016)

External Validity

Mortgage lending before the crisis

- Large banks had pool purchase contracts with GSEs and volume based discounts, giving advantage in securitizing
- Smaller lenders would often originate mortgages, and sell loan and servicing rights to aggregators, who would sell to GSEs

After crisis:

- Aggregators pulled back from correspondent lending due to put-back concerns
  - Retail Origination Share: 2006:27%, 2012:60%
- Home Affordable Refinance Program (Mar 2009) and HARP 2.0 (Dec 2011) allow high LTV refinances for GSE mortgages
  - Preferential treatment for current servicer

Conclusion

Interesting finding on a very important topic, however more work needs to be done to establish what drives the results

- Some direct evidence (even anecdotal) on crowding out would increase confidence in the proposed channel
- MBS Purchases (100s of billions) may better capture variation in intensity
- More focus on the mechanism needed to assess whether this crowding out is likely to matter outside the particular episode