Quantitative easing and bank risk taking: evidence from lending

by J. Kandrac and B. Schlusche

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\(^1\)The views expressed here are solely those of the author and should not be taken to represent those of the Bank of England.
This paper

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Questions

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• Is it possible to isolate the effect of the expansion of banks’ reserves on lending (ie, in isolation from the impact of the assets purchased)?

Why is this important

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• Could improve our understanding of QE
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- How do they do that?
  - \textbf{Problem} Bank-level reserves are endogenous to other portfolio decisions (eg, lending)
  - \textbf{Solution} Exploit a regulatory change in April 2011 that (i) strongly affected reserves distribution in the banking system and (ii) naturally provides a treatment and control group of banks
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▶ What is new?
- Quantify (identify?) the role of a novel transmission channel of QE, the "reserve channel"

Discussion of J. Kandrac and B. Schlusche: “Quantitative easing and bank risk taking: evidence from lending”
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Discussion  I’ll focus on the novel aspect of the paper, the *reserve channel of QE*

- How does it work?
- How different is it from other (more standard) channels?
Quantitative easing: channels of transmission

QE aims to reduce long-term interest rates (either broadly or in specific markets) through asset purchases by the central bank. The literature has focused on two main channels of transmission:

- **Change in expectations about future rates (Signalling channel)**
  - Provide information about the likely path of future monetary policies to market participants.

- **Change in the supply for a given asset (Portfolio balance channel)**
  - **Traditional** portfolio balance
    - Change in the relative supply of the assets purchased and thus in their prices (and their close substitutes).
  - **Duration**
    - Removal of duration risk lowers the risk premia and thus increase prices.

[Underlying assumptions for portfolio balance: bonds of different maturities are imperfect substitutes for some investors (preferred habitat) and markets are segmented (Vayanos and Vila, 2009)]
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The reserve channel of QE: how does it work?

- Use the simple example in Christensen and Krogstrup (2015)

- Agents: banks, CB, and non-banks financial firms

- To focus on reserve channel (and not on supply channel) consider purchases of short-term assets
Example: start with banks and CB only (boring)

- No change in composition and/or duration of banks’ assets
- Standard argument for why is not a good idea to do QE on short-term assets

[Assumption: short-term bills and reserves are near-perfect substitutes and that both instruments carry a near-zero interest rate]
Example: now introduce non-banks financial firms

- Banks’ assets have expanded with lower yielding securities, and their average duration has declined.
- Portfolio allocation and duration likely to be non-optimal.

[Assumption: bank deposits and short-term bills are near-perfect substitutes for non-bank financial firms]

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The reserve channel of QE: some doubts/questions

- Description in the text may be confusing
  - Reserve channel seems to work via portfolio balance (similarly to the supply channel)
  - Difference lies in the *expansion* of balance sheets, rather than change in their composition
  - Role of heterogeneity?

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  - Are new deposits considered core funding? Non-banks financial firms deposits can be ‘flighty’ (quite different from ‘grandma’ deposits)
  - What are the implications for portfolio balance?
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- Leverage
  - In the above example leverage increases
  - How would banks that target a certain level of leverage respond (ie, equity or assets)?
  - Could dampen or amplify the effect

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Empirical challenge: how to quantify the reserve channel?

- QE typically involves large-scale purchases of *long-term* assets

Two approaches in the literature
1. QE program that (i) entails a substantial increase in reserves but (ii) is achieved without acquiring any long-lived securities (Christensen and Krogstrup)
2. This paper Treatment and control group where the amount of reserves differ for reasons that are exogenous to their portfolio decisions
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- Uninsured US branches and agencies of foreign banks drew on their own affiliates outside the United States to fund their asset growth (yellow line). Any implications?

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Inter-office claims by bank nationality and FDIC status

Source: Kreicher et al (2013)
Summary

- Very interesting, neat and careful exercise

Uncovered empirically the existence of an important mechanism of transmission of QE

- Given its novelty worth explaining it in more detail

Develop the theory

- Assess the role of different assumptions
- Take into account general equilibrium effects

Important implications

- QE with short-term bonds
- Regulation may be important conduit for QE
- Exit strategy

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