Can Unlimited Liquidity Provision Help to Avoid a Credit Crunch? Evidence from the Eurosystem’s LTROs

Discussion by Frederic Boissay (ECB)

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The views expressed in this discussions are my own and not those of the ECB or Eurosystem
Summary of the paper – Objectives

- Did the two LTROs have an effect on the supply of credit to French firms?

- Address two identification issues:
  - Disentangle credit supply and credit demand $\rightarrow$ firm fixed effects
  - Endogenous in-take of LTRO funding by banks $\rightarrow$ bank balance sheets

- Understand the transmission channels:
  - To which type of firms?
  - Through which type of banks?

- Effort to quantify aggregate effects
Summary of the paper – Results

- LTROs had a positive impact on the supply of credit:
  - To large firms, and to firms with many banks
  - Through capital-rich banks

- The first LTRO (December 2011) had a bigger impact than the second LTRO (March 2012)

- Overall, the net effect on firms was positive:
  - Firms did not substitute credit across banks
  - Back-of-the-envelop calculations suggest that every EUR–billion of funding resulted in a EUR107 million increase in loans to NFCs
Comment 1: Better understand the transmission channels of the LTROs

- Since October 2008, the Eurosystem has been implementing a FRFA policy: banks have their bids fully satisfied and can roll over “unlimited” funding.

- Not so obvious why LTROs would have had an effect *above and beyond the FRFA MROs*: What is the specificity of LTROs?

- LTROs improve the “quality” of funding over FRFA MROs:
  - Safer funding: less uncertainty as to rolling over Eurosystem funding
  - Cheaper funding: interests paid out at the end and not compounded
  - LTROs helps bank comply with new liquidity regulation (?)
Comment 2: Specification

• Main specification in the paper focuses on the intensive margin only (i.e. on the degree of loan roll–over):

\[
\log (L_{f,g,2012}) - \log (L_{f,g,2011}) = \alpha_f + \beta \frac{LTRO_g}{Assets_{g,2011}} + \gamma BS_{g,2011} + \varepsilon_{f,g}
\]

• Why not look at both intensive and extensive margins?

\[
\frac{L_{f,g,2012} - L_{f,g,2011}}{L_{g,2011}} = \alpha_f + \beta \frac{LTRO_g}{Assets_{g,2011}} + \gamma BS_{g,2011} + \varepsilon_{f,g}
\]

\[
\frac{L_{f,g,2012} - L_{f,g,2011}}{Assets_{g,2011}} = \alpha_f + \beta \frac{LTRO_g}{Assets_{g,2011}} + \gamma BS_{g,2011} + \varepsilon_{f,g}
\]
Comment 2: Specification

- Why not look at $LTRO_g + MRO_g$?

\[
\frac{L_{f,g,2012} - L_{f,g,2011}}{Assets_{g,2011}} = \alpha_f + \beta \frac{LTRO_g + MRO_{g,after}}{Assets_{g,2011}} + \gamma BS_{g,2011} + \varepsilon_{f,g}
\]

- Funding quality versus funding quantity

\[
\frac{L_{f,g,2012} - L_{f,g,2011}}{Assets_{g,2011}} = \alpha_f + \beta_M \frac{MRO_{g,before} - MRO_{g,after}}{Assets_{g,2011}} + \\
\beta_L \frac{LTRO_g + MRO_{g,after}}{Assets_{g,2011}} + \gamma BS_{g,2011} + \varepsilon_{f,g}
\]

MRO replaced by LTRO (quality effect)
Comment 3: Some results are hard to explain

- The first LTRO had a positive effect but not the second one. Is it really a “stigma” effect?

- LTRO–banks gave more credit to large firms that have short relationships with many banks. Could it reflect an increase in syndicated loans?

- LTRO–banks gave more credit but reduced credit lines
  - It looks like the banks with the most credit line exposures in Sept 2011 went to the LTRO in anticipation of those credit lines being drawn
### Comment 4: Endogeneity of LTRO in–takes

<table>
<thead>
<tr>
<th></th>
<th>Total Credit (1)</th>
<th>Total Credit (2)</th>
<th>Total Credit (3)</th>
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<td>0.62***</td>
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<td>(0.36)</td>
<td>(0.47)</td>
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<td>Bank Size</td>
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<tr>
<td>Bank Liquid Assets</td>
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<td>Bank Capital</td>
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<td>Bank Interbank Liabilities</td>
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<td>Bank ECB Dependence</td>
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<td>Bank Bond Rollover</td>
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<td>ECB MRO User</td>
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<td>Foreign Bank</td>
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<td>Public Bank</td>
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<tr>
<td>Firm fixed effects</td>
<td>No</td>
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<td>Yes</td>
</tr>
</tbody>
</table>
Comment 4: Endogeneity of LTRO in–takes

- Instrument $LTRO_g$

- Rule out reverse causality by checking that LTRO in–takes are independent of banks’ ex ante loan portfolio characteristics, e.g.:
  - Banks’ ex ante exposures to credit lines
  - Banks’ ex ante loan portfolio quality (e.g. borrower size, profitability, rating)
Comment 5: Aggregate effects

- The estimations and back-of-the-envelop calculations are based on a particular sub-sample of (relatively large?) firms: those with bank loans in both 2011 and 2012
  - Small firms may be missing and the effects are hardly significant for small firms
  - Large firms are also the most likely to have direct access to markets and there may be a substitution between bank financing and bonds
    ⇒ The effects may be over-estimated
Conclusion

- Difficult task
- Some more robustness checks needed
- Very nice paper