Quantitative easing: Entrance and exit strategies

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Homer Jones Memorial Lecture
Federal Reserve Bank of St. Louis
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1. The conceptual basis for quantitative easing
2. The Fed’s entrance strategy
3. The Fed’s exit strategy
4. Implications for central bank independence
5. Wrapping up
1. The conceptual basis for quantitative easing
The zero lower bound on nominal interest rate

- "liquidity trap"
- \( r = i - \pi \) can’t get negative enough.

Friedman’s warning about fixing \( i \): dynamic instability

Idea: Shrink term and/or risk premiums

- \( R_j = r + \rho_j \)
- Requires imperfect substitutes or "frictions"
Specific strategies

To shrink term premiums
- Buy long-term government bonds...
  -- and sell T-bills
  -- by creating new bank reserves
- Relies on imperfect arbitrage across yield curve
- Another option: commit to keeping the overnight rate low for a long time

To shrink risk premiums
- Buy the risky asset...
  -- and sell the safe asset
  -- by creating new bank reserves
2. The Fed’s entrance strategy
The funds rate first
Early QE did *not* blow up Fed’s balance sheet...
...nor increase bank reserves much
<table>
<thead>
<tr>
<th>ASSETS</th>
<th>LIABILITIES AND NET WORTH</th>
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<tbody>
<tr>
<td>Treasury securities</td>
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<tr>
<td>Less liquid assets</td>
<td>Bank Reserves</td>
</tr>
<tr>
<td>Loans</td>
<td>Treasury deposits</td>
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### Swapping assets

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2008: Composition of the Fed’s balance sheet starts to change
### Adding Treasury deposits

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So bank reserves hardly budged
Lehman changed everything
Lehman changed everything
Lehman changed everything
Two−stages in QE entrance

**Stage I**
*Ad hoc, reactive, institution-based*
Ex: Bear, AIG,…

**Stage II**
*Systematic, thoughtful, market-based*
Ex: CPFF, MBS,…
Working on risk premiums

\[ R_i = r + \rho_i \]

↑

riskless rate
Did it work?

CP vs. T-Bill risk spread

Corporate bond vs. T-note risk spread
3. The Fed’s exit strategy
1. Phase out liquidity facilities ← gets for free
2. Normalize discount lending ← supplements 1
3. Passively shrink MBS/GSE debt ← gets for free
4. Increase interest rate on reserves ← novel
5. Offer banks “CDs” ← novel
6. Reverse repos ← conventional OMO, discretionary
7. Outright asset sales ← conventional OMO, discretionary
Offering banks CDs

Before vs. After Savings and Checking account comparison.
The mountain of reserves

![Graph showing billions of dollars over time](image-url)
## Simplified Fed balance sheet

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The market for bank reserves with a floor
The market for bank reserves with a corridor
4. Quantitative easing and central bank independence
Section 13(3) of FRA:

In unusual and exigent circumstances, the Board of Governors of the Federal Reserve System, by the affirmative vote of not less than five members, may authorize any Federal reserve bank, during such periods as the said board may determine, ... to discount for any individual, partnership, or corporation, notes, drafts, and bills of exchange when such notes, drafts, and bills of exchange are indorsed or otherwise secured to the satisfaction of the Federal Reserve bank. (emphasis added)
Fixing Section 13(3)

- Require permission of the Secretary of the Treasury (or the FSOC)
- Require prompt reporting to the two banking committees (confidential for a while)
- These ideas are in both bills.
The Fed has never had as much independence in the regulatory sphere as it has in monetary policy.

What happens when Section 13(3) actions are the Fed’s monetary policy?
5. Summing up