Monetary Policy Alternatives at the Zero Bound

Aim: Test the effectiveness of policy options at the zero bound

Why? If effective tools exist, the inflation target can be set lower.
Policy Options

- Communications
- Quantitative Easing
- Changes to the Composition of a central bank’s balance sheet
Methods Applied

- Event studies – i.e., looking at the response of yields to policy
- Macro-finance model – No-arbitrage vector autoregression model
US Results - Communications

- Statements matter, not just policy actions.
- Dovish lowered, Hawkish raised year ahead expectations by 12 basis points on average.
- Five-year yields indirectly affected by one-year yields.
- Statements with future policy implications matter more (16 basis points).
US Results - Conditioning

- Policy expectations also react to macroeconomic news the FOMC flags in policy statements
- Model confirms event study but variability was different.
US Results – Composition

Changes

Aim

- Test whether assets are sufficiently imperfect so as to change yields

Events

- 1. Paydown in 99/00
- 2. Foreign Purchases of US Treasury Securities 03/04
- 3. Deflation Scare 03
US Results – Composition
Changes

Overall results: Changes (expected or actual) in supply matter to the yield curve
Japanese results

- Similar approach, yet different approach of central banks (statements) and different data.
- Findings: No significant relationship between BoJ statements and year-ahead yields.
- Statements indicating quantitative easing led to a 5 basis point decline in five-year yields.
- Quantitative easing provided a positive impetus to the stock market.
Japanese Results

Macro-finance model: Estimates the Zero Interest Rate Policy and Quantitative Easing led to a fall in long-term yields as there was a greater deviation between predicted and actual yields.
Figure 11. Yield Curve on Zero-Coupon Japanese Government Bonds before and after Bank of Japan Policy Announcements

Source: Authors' calculations based on data from the sources listed in figure 10.
General Conclusions

- Non-standard policies may be effective
- Shaping expectations through communications is viable as long as credibility is maintained
- But, stay away from the zero bound and be pre-emptive about deflationary risks
Criticisms

Ben Friedman
- Composition study is actually a study of statements
- No evidence effects would be different away from zero bound

Svensson
- Should focus on future price expectations
- Effects are small
Importance

- Bernanke has the power
- So, what he says matters and the Fed will maintain an inflation buffer, and act to prevent deflation