

US Monetary Policy and Foreign Bond Yields

Simon Gilchrist, Vivian Yue and Egon Zakrajšek
Discussion by Jonathan Wright

November 13, 2014

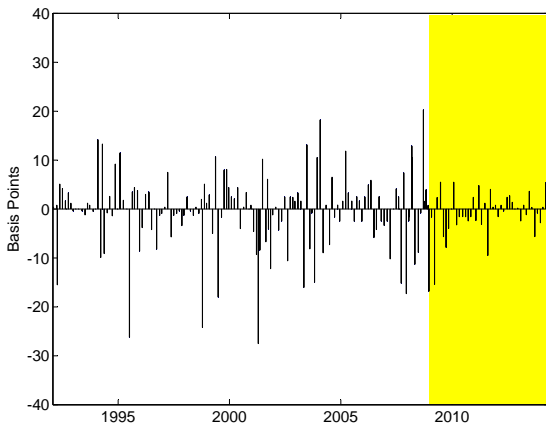
Findings of the paper

- US monetary policy surprises have generally less than 1-1 effect on foreign LC yield curves.
- US monetary policy surprises have generally at least 1-1 effect on foreign \$ yield curves.
- CMP easings steepen foreign yield curves.
- UMP easings flatten foreign yield curves.

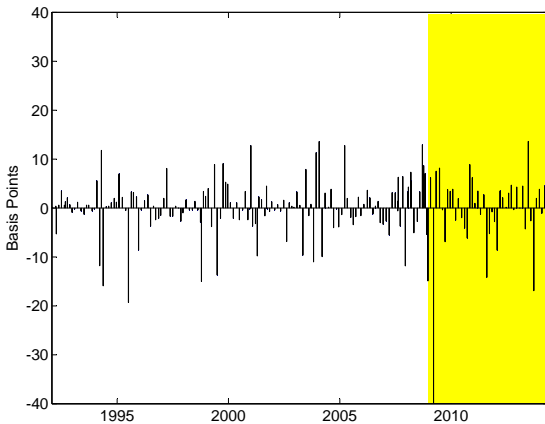
Measuring monetary policy shocks

- Hunger for way of measuring monetary policy surprises that applies to pre-ZLB and ZLB eras.
 - ▶ FOMC-day changes in two-year yields.
 - This paper and Gertler and Karadi (2013).
 - ▶ FOMC-day changes in some estimated shadow rate (Wu and Xia (2013)).
- Two-year yield is itself influenced by ZLB (Swanson and Williams (2014)).

Monetary policy surps from 2-year yields



Monetary policy surps from 10-year yields



Cross-country differences in pass-through

- UMP pass-through from US ten-year yields:
 - ▶ Australia: 0.76
 - ▶ Germany: 0.41
 - ▶ Japan: 0.12

Cross-country differences in pass-through

- UMP pass-through from US ten-year yields:
 - ▶ Australia: 0.76
 - ▶ Germany: 0.41
 - ▶ Japan: 0.12
- Might consider pooled regression:

$$\Delta y_{it} = \beta_0 MPS_t^{US} + \beta_1 X_i * MPS_t^{US} + \varepsilon_{it}.$$

Comparison of LC and \$ Yield Curves

- Paper looks at effects of US monetary policy surprises on foreign LC and \$ yields.
- Could also look at effect on exchange rate.
- Can compare jump in exchange rate with jump in interest differentials.

Comparison of LC and \$ Yield Curves

- UMP shock raises \$ foreign yields by 1.3%
- Duration of bonds is 5.6 years
- UMP shock appreciates \$ by 3.7% (OITP)
- If risk premia unchanged, LC yields should rise 0.6%.

How does UMP work?

- Clear that unconventional monetary policy affects own-country term structures.
- Easings lower very long-term forward rates.

How does UMP work?

- Clear that unconventional monetary policy affects own-country term structures.
- Easings lower very long-term forward rates.
- Explanations for this that don't involve term premia are far-fetched.

How does UMP work?

- Clear that unconventional monetary policy affects own-country term structures.
- Easings lower very long-term forward rates.
- Explanations for this that don't involve term premia are far-fetched.
- Explanations for cross-country effects are far-fetched².

Case Study: 3/18/2009 FOMC Announcement

- Lowered 10-year ZC yield by 52 bps.
- Lowered 10-year forward rate by 35 bps.

Far-fetched

- UMP lowering **domestic** yields must be:
 - ▶ Lower expected inflation.
 - ▶ Lower expected deviation of real rates from neutral.
 - ▶ Lower long-run r-star.
 - ▶ Lower term premia.

Far-fetched

- UMP lowering **domestic** yields must be:
 - ▶ Lower expected inflation.
 - Wrong sign!
 - ▶ Lower expected deviation of real rates from neutral.
 - Lasts for 10+ years.
 - ▶ Lower long-run r-star.
 - ▶ Lower term premia.

Far-fetched²

- Non term-premium explanations for cross-country effects are even more of a stretch.
- e.g. Committing foreign central banks to accommodative policy ten-years hence.

Implications for Monetary Policy Spillovers

- Monetary policy actions have unintended consequences on foreign financial conditions.
- Paper speaks to one dimension: US monetary policy effects on foreign term structure.

Implications for Monetary Policy Spillovers

- Monetary policy actions have unintended consequences on foreign financial conditions.
- Paper speaks to one dimension: US monetary policy effects on foreign term structure.
- But we can also ask about effects of
 - ▶ US monetary policy on exchange rate.
 - ▶ Foreign monetary policy on US yields.
 - ▶ Foreign monetary policy on exchange rate.

Implications for Monetary Policy Spillovers

- General results:
 - ▶ US monetary easing surprises depreciate dollar.
 - ▶ Foreign monetary easing surprises depreciate foreign currency.
 - ▶ Foreign monetary easing surprises have small pass-through to US rates.

Implications for Monetary Policy Spillovers

- Fed moving towards tightening while ECB and BoJ easing more.

Implications for Monetary Policy Spillovers

- Fed moving towards tightening while ECB and BoJ easing more.
- Fed spillover on ECB and BoJ is ambiguous.

Implications for Monetary Policy Spillovers

- Fed moving towards tightening while ECB and BoJ easing more.
- Fed spillover on ECB and BoJ is ambiguous.
- ECB and BoJ spillover on Fed is not.

Implications for Monetary Policy Spillovers

- Event studies provide laboratory for effects of monetary policy.

Implications for Monetary Policy Spillovers

- Event studies provide laboratory for effects of monetary policy.
- Global fixed income market is \$55 trillion.
- Actions of any central bank are tiny.
- Finance theory: Effects should be negligible.
- But paper has shown that US monetary policy moves global fixed income markets.