

Discussion of "**Duration risk versus local supply channel in Treasury yields: Evidence from the Federal Reserve's Asset Purchase Announcements**" by Cahill, D'Amico, Li, and Sears

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Disclaimer: Not necessarily the views of ECB or Eurosystem.

This paper

- asks "how have LSAP1&2 announcements lowered yields?"
- event-study analysis contains a careful specification of local supply and duration risk channel.
- carefully considers the expected (from survey) and surprise components of announcements.
- looks at yield impact across the complete maturity spectrum, based on high frequency and disaggregated (CUSIP level) data.
- promising paper.

My plan:

Review, then comments.

Main empirical results

≈ 0.1 bps / bn: average effect of Fed purchase program announcements during 2009-12 on 10-year nominal Treasury yields.

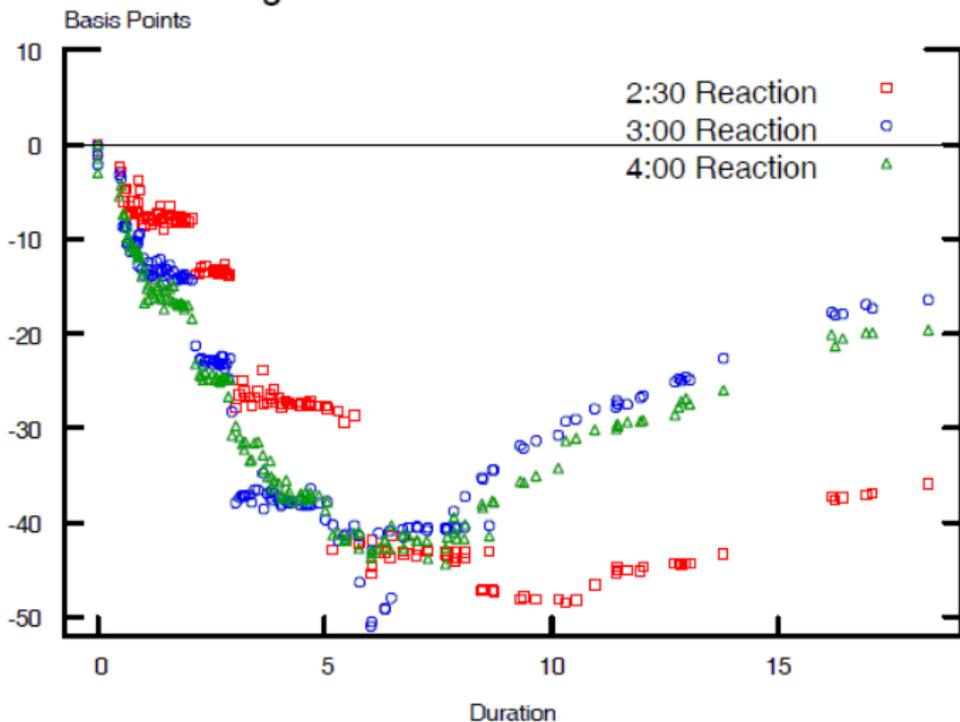
"50-50": average duration risk effect (0.05 bps/bn) and local supply effect (0.04 bps/bn) are roughly similarly important.

Effectiveness of these two channels roughly unchanged during 2009-12, thus irrespective of market functioning.

A surprise purchase of a bond lowers yields by approximately as much as a surprise sale raises the yield. Exit.

Event study, visual evidence

Figure 1. LSAP 1 Announcement



A growing literature on yield impact and channels

LSAP/US

D 'Amico, English, L-Salido, Nelson (EJ, 2012)

Impact / bn

-0.12 bps

D 'Amico, King (JFE, 2013)

-0.12 bps

this paper

-0.09 bps

Krishnamurthy, Vissing-Jorgensen (BI, 2012).

Gagnon, Raskin, Remache, Sack (IJCB, 2011).

-0.3 bps

Hamilton, Wu (JMCB, 2012).

Wright (WP, 2012).

QE/ UK

Joyce, Tong (EJ, 2012)

-0.5 bps

Benerjee, Latto, McLaren, Daros (2012)

-0.5 bps

SMP/euro area

Ghysels, Idier, Manganelli, Vergote (wp, 2013).

-1.9 bps (IT); -3.5 bps (ES)

Eser, Schwaab (wp, 2013)

-1.5 bps (IT); -4/-6 bps (ES)

Comment: Two channels

The decomposition of price impact is conditional on the two channels being the only ones that are relevant.

Reasonable?

FOMC statement may contain info & signal....

- that recession is even worse/expected inflation \downarrow (affecting long rates more than short rates)? [inflation swaps?]
- that the central bank is willing to finance the fiscal deficit (AA, default risk premium)? [CDS?]
- that future mp rates will be low for longer ('signalling channel' of Bauer & Rudebusch, K&VJ)? [Fed funds futures?]
- that affects uncertainty/volatility/dealer inventory market risk, irrespective of duration risk? [RV, implied vol]

Comment: Liquidity effects

Liquidity effects are discussed in the text, but are not in the regression.
Duffie, Garleanu, Pederssen (2005, 2007): yields ↓ because of liquidity ↑
/ liquidity risk ↓

However, K&VJ (2011) suggest that the opposite is true regarding *price* of liquidity.

Comment: Possible to control for changes in liquidity at CUSIP level?

Comment: Duration risk

Previous literature (K&VJ, 2011): DR not important.

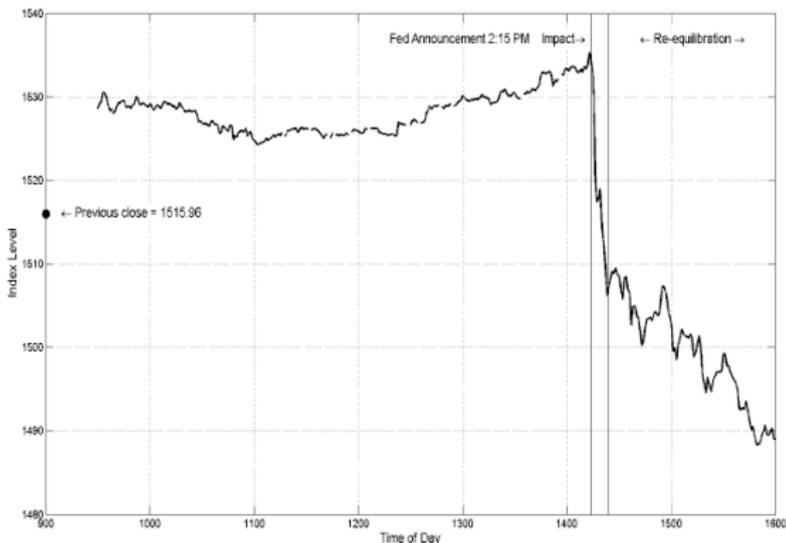
In a standard market microstructure model (e.g., Stoll (1985), Glosten and Milgrom (1985)), the dealer cares about inventory market risk.

Inventory market risk depends as much on tv uncertainty/volatility σ_t , as on 'overall duration' in the market? Not considered in Vayanos and Vila (2009)

Comment: Additional evidence that dealers price bonds more aggressively due to less market risk?

Event window: digesting news may take some time

Figure 1: Intraday Behavior of the Forward Value of the S&P Index on Dec. 11, 2007



Birru and Figlewski (2010), "The impact of the Federal Reserve's interest rate target announcement on stock prices: A closer look at how the market impounds new information".

Some takeaways for European setting

- - 0.1 bps / bn is a lower bound for the effectiveness of purchases in debt markets smaller, less liquid, and significantly more credit risky than the U.S. treasuries. Relates to SMP studies.
- "... these two channels are always operating and are not exceptional mechanisms elicited by the disruption of normal market functioning or the deterioration of market sentiment".
- "The results .. signifying the importance of the purchase program's design and the accompanying communication strategy".
- Buying and selling bonds has roughly a symmetric impact (exit). Compares to SMP studies and Beetsma, De Jong, Guiliodori, Widijanto (wp, 2013).

Conclusion

promising paper.

tentative lessons for European policy effectiveness.

still some open questions regarding the decomposition into priced risk channels.