The Yield Curve Impact of Government Debt Issuance Surprises and Implications for QT

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* *The views expressed here are mine and do not reflect those of the Banque de France or the Eurosystem.*

What do we (still do not) know about QT?

Lagarde (Press conference Q&A, 11/9/2025) : *"The fact that we are not reinvesting and that we are letting our portfolio on a run-off mode is proceeding smoothly. We had telegraphed it very carefully.* ***It was anticipated, it was predictable,*** *and I think that everyone who cares about those issues knows exactly how this proceeds and what* ***very limited impact it has.***"

Bailey (Reuters 3/9/25): "*… repeated previous remarks that the BoE viewed the impact of QT on yields as low but would* ***look "very seriously" at the "interaction" between higher long-dated gilt yields and its sales programme***."

- QE effects well studied; QT still uncertain.
- QT transmission weaker than QE (smaller signaling & liquidity effects).
- QT works *mainly* via portfolio balance channel (local supply & duration).
- Event studies suggest small yield effects — but evidence still limited.

This paper novel approach

- **Study how UK yields react to *surprises in gov't debt issuance.***
- Main hypothesis: Debt issuance is a good proxy for QT effects.
  - Both increase net bond supply.
  - Effects mainly through porfolio rebalance channel.
- 4-steps:
  - Estimate supply surprises at the gilt level using high-frequency yield responses around DMO auctions (2006-2023; 424 announcements).
  - Construct local supply (scarcity) vs. duration risk (aggregate bond holding risk) shocks from supply surprises.
  - Estimate yield curve elasticities to both local supply and duration risk shocks and interact them with maturity buckets and stress conditions.
  - Use these elasticities to simulate the yield effects of the 2022/23 BoE first annual QT programme (£ 80bn).

Main findings and Policy implications

- Yields respond through **both local supply & duration channels**
- Local supply effects strongest at **short & long maturities** (preferred habitat investors)
- QT programme 2022/23 estimated effect:
  - Normal stress: +20 bps on 10y
  - High stress: up to 5× larger
- Passive unwind ≈ Active sales (if DMO refinances consistently)
- **Policy implications**:
  - QT effects are state-dependent
  - Communication crucial: avoid market stress amplification
  - QT is not "QE in reverse" — effects muted, but not negligible

Discussion of 1st step

- High-frequency yield surprises are generally found to be weak instruments. More evidence on the relevance of your instruments in equation 1 would be welcome, e.g.:
  1. Provide narrative evidence on a few episodes of large shocks (e.g., looking at news).
  2. Perform a « placebo test » that allows you to compare your high-frequency yield surprises with high-frequency changes during non-DMO auction days (see Annex for a possible design).
  3. Identify and use only « significant » surprises (see for instance the method proposed in Istrefi, Odendahl, Sestieri, BdF WP 2025, which conditions on the pre-event intraday variance of yields before the event).

- Table 1: only two maturities of yield surprises are (weakly) significant (10Y and 15Y). This is somewhat at odds with your overall finding that the local supply channel is strong at short and long maturities but insignificant at intermediate ones.

Discussion of 2nd step

- Supply and duration shocks are comuted during a period when the BoE implemented several QE programs (2009-2022). You should discuss how QE can potentially interfere/influence your estimates.
  - Numerator: are supply surprises more or less price sensitive during periods of active QE?
  - Denominator: QE impacts your free float estimates, hence potentially your supply and duration shocks.

- QT operates exclusively in the secondary market, whereas DMO market auctions are *mostly* conducted in the primary market.
  - Are participants the same across the curve?
  - How comparable in this respects are your DMO-driven estimates of supply and duration risk shocks to potential QT-driven ones?

Additional comments on main results

- Impact equivalence of active vs. passive QT is surprising (see also Bailey quote).
  - Is the result generalizable, or driven by specific design assumptions? Counterfactual simulations with alternative refinancing/sales strategies could be informative.
- QT effects seem on the upper bound of the literature.
  - How much this is due to your *strong* assumption that information on the 2022/23 QT programme was *fully unanticipated* till Sept 2022? More discussion about how your results compare to others would be useful.
- Your case study is based on two BoE announcements (28/09/22 and 18/10/22) where the signaling channel might be as important as the portfolio one.
- UK gilt market/BoE QT have some specific features (preferred-habitat investors/targeted maturities). How generalizable are results to US/EA QT?

Conclusion

- **A very interesting, original and well executed paper!**
- **Main appeal**: sidesteps scarcity of QT events! Based on plausible hypotheses.
- **Main caveat**: issuance ↔ QT analogy plausible but imperfect (fiscal vs monetary motives; signaling might still be important at specific times).

Annex

« Placebo test » design

Example of a simulation algorithm for *non-DMO event days*:

- Let Dn denote the set of “non-DMO event” trading dates, i.e. dates on which we do not have an event in your database.
- For j = 1, ..., J, do the following steps:
  1. Draw N random days, with replacement, from Dn;
  2. Draw N random times, with replacement, that are within the trading hours;
  3. Compute the yield changes for each of the N date+time combinations and store them as $\{s_{j,n}\}$ for n=1:N;
  4. Compute $S_j = g(\{s_{j,n}\}\ n=1:N)$ where g( ) can represent the median, the mean or quantiles of $\{s_{j,n}\}$ for n=1:N;
  5. After J iterations, you obtain a set of draws, $\{S^N{}_j\}$ for j=1:J, of your statistic of interest on non-event days. You can use those statistics to compute percentiles of yield changes occurring on non-event days and compare them to asset price changes around DMO issuances.