Last resort market making in gilts

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Outline

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2. Two recent episodes of illiquidity
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3. Upcoming issues:
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    iii. Likely recurrence of illiquidity episodes.
4. Contingency planning for last resort market making.
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1. Liquidity problems in government securities markets

- Market liquidity = ease of selling without disturbing price.
- Important for governments to be able to borrow easily: they need market liquidity.
- Importance of market makers, or dealers. They need capital, and 'official market makers' are nearly all regulated banks. Other dealers (e.g. hedge funds, high-frequency traders) aren't committed to participation.
- History:
  - Government borrowing usually explodes in wartime: public finances are unsustainable without drastic post-war adjustment.
  - In UK, market liquidity was inadequate in and after WW2.
  - Supplemented from early 1950s by Bank of England making markets.
  - Need to support market makers both as MMLR (continuous, early 1950s – 1986) and as supplier of capital (occasional, 1952, 1957, 1960, 1964, 1967).
  - Conflict between market making in gilts and implementing monetary policy: not satisfactorily resolved until early 1980s.
  - Risk of fiscal dominance of monetary policy (= threat to price stability as well as financial stability). Link to market liquidity.

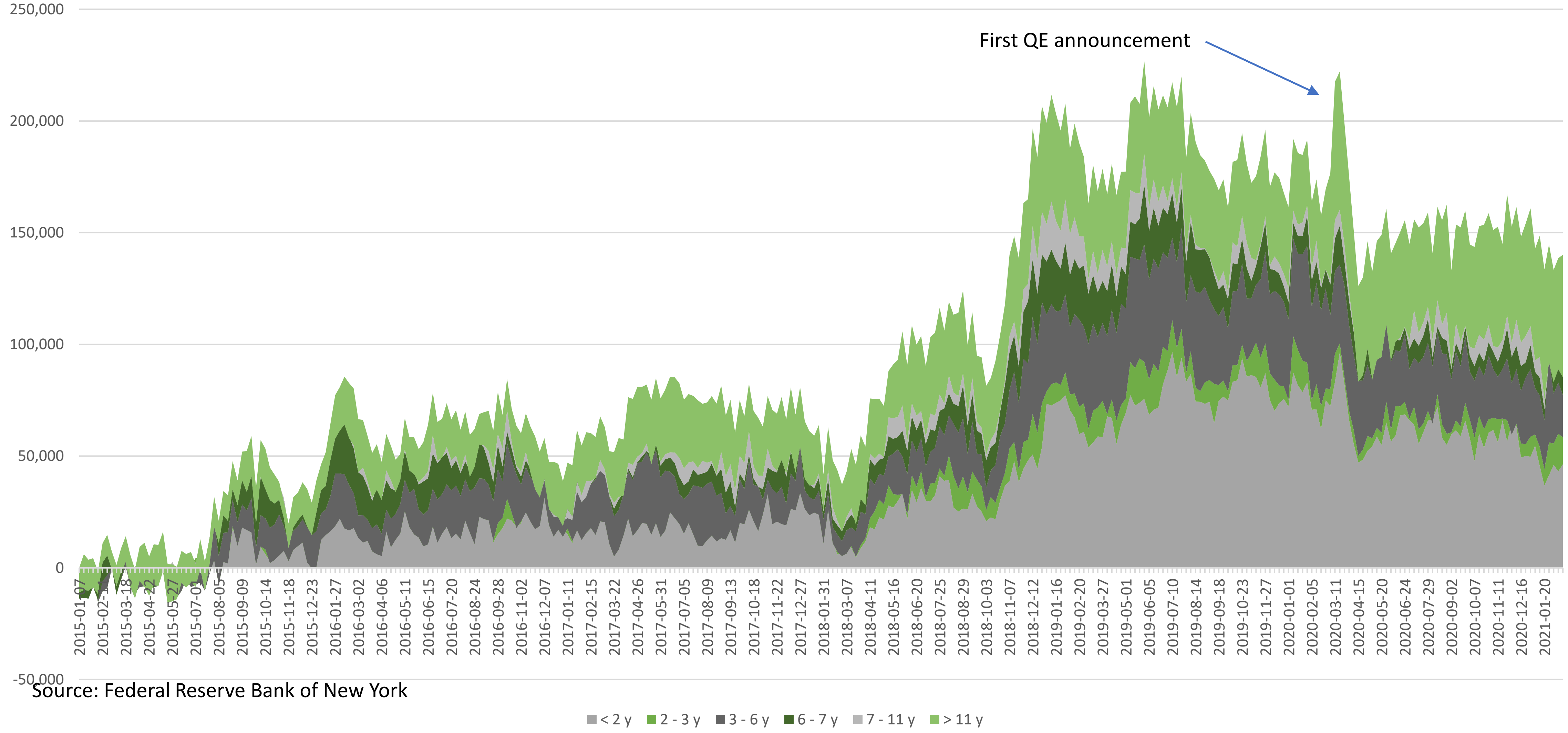
1 i Official market makers and all-to-all trading

- All-to-all trading means any investor can trade with any other. ATA trading has always been legally possible in UK, but official market makers have been protected. The real issue in the UK is the protection provided to them:
  - Exclusive access to auctions and other DMO operations.
  - Post-auction option facility.
  - Status attracts clients.
- But:
  - GEMMs say the business is unprofitable.
  - Regulatory issues: leverage ratio, interest rate exposures.
- Reasons for not protecting official market makers:
  - In good times, ATA trading promises lower costs of trading to investors, and government, and more market liquidity.
- Reasons for protecting official market makers:
  - They have to maintain monitored market making functions at all times. Can't temporarily withdraw.
  - In bad times, greater risk of market dysfunction without official MMs. How much greater depends on how committed the official market makers really are.
- Q. What are 'good' and 'bad' times? Suggested A. Bad times are when price discovery is difficult, e.g. because of uncertainty about fiscal policy (e.g. fiscal dominance?), or volume of sales. At such times, market makers must be ready to warehouse unsold bonds.
- OECD 2016 survey:
  - In practice, all or nearly all debt management agencies designated official market makers.
  - Many sovereign issuers said liquidity had deteriorated.
  - Concentration of issuance on benchmarks, syndications, regular and predictable issuance, bond exchanges, buy-backs, STRIPS, official securities lending, lending or repo facilities for official market makers
- ARIEL project in 1970s: Bank of England refused to deal in gilts on platform outside Stock Exchange because of absence of dedicated market makers.

2 i Episode 1: March 2020: onset of coronavirus

- Unwinding of large positions in US Treasury and other government securities overwhelmed capacity of market makers. Treasury markets were not as liquid as previously thought.
- Risk of sharp rise in yields and/or inability of government to issue bonds.
- Central banks, including Bank of England Monetary Policy Committee, chose to respond with much more QE (equivalent of 20% of GDP in UK). Why?
  - To maintain market liquidity, as they made clear.
  - In pursuit of the inflation target, by holding yields down. No announced yield target, but obviously the MPC thought that market-determined yields would be too high.
  - B of E and DMO prefer the role of price-takers, even if they are price makers.
- Bond sales net to market initially very small. Monetary financing of government in effect though not in intention.
- Not really MMLR because a market maker buys and sells. In 2020 – 2021 central banks bought and bought. It was an unacknowledged and loose form of yield curve control.
- In effect maturity of debt was shortened: variable-interest-rate deposits in central banks replaced fixed-interest-rate bonds.
- B of E Financial Policy Committee wasn't involved.
- Precedents – USA and UK (WW2 and after), Operation Twist (1961), Japan (QQE).
- Inflation? Yes.

USA primary dealers’ positions in US Treasury coupon-bearing securities, ex TIPS, 2015 – 2021 ($ mn)



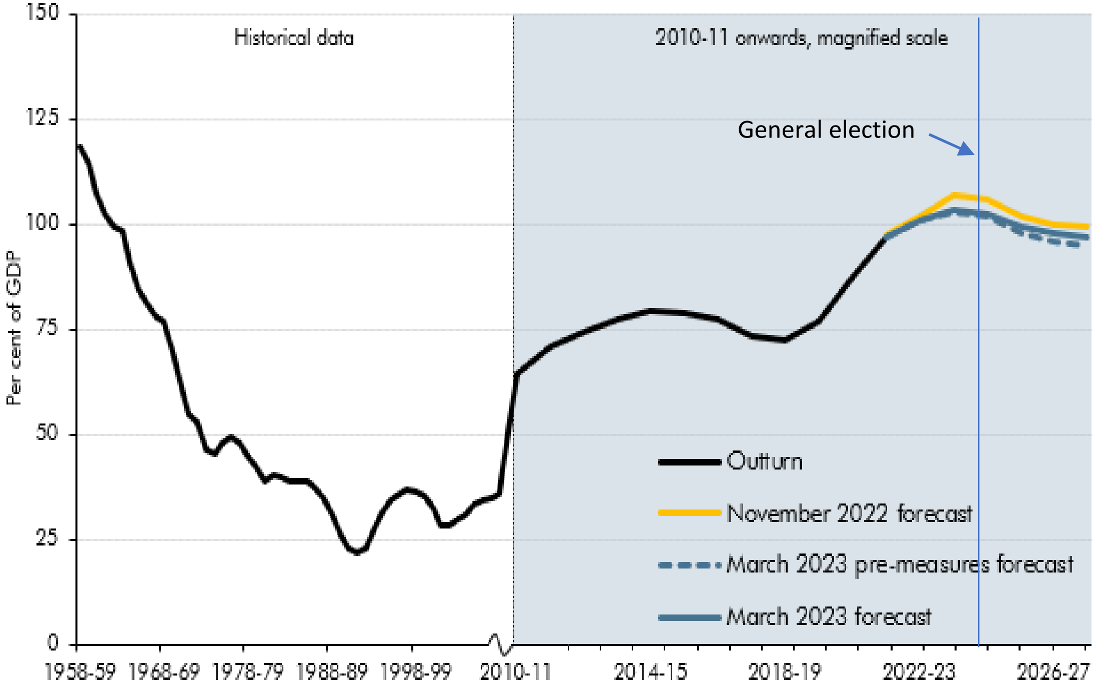
Source: Federal Reserve Bank of New York

2 ii Episode 2: Truss/Kwarteng

- Liz Truss appointed leader of Conservative party and Prime Minister by party members 6th September 2022, having promised tax cuts despite already-large budget deficit. Chancellor Kwasi Kwarteng announced tax cuts in 'fiscal event' on 23rd September. No forecast of fiscal or economic impact of tax cuts.
- Increase in risk of unsustainable public debt and fiscal dominance of monetary policy. Surge of government bond sales, especially by pension funds for liquidity reasons (LDI).
- Dealers less confident in making prices, price discovery more difficult. Adverse feedback. Market ceased to function: no bids (as in March 2020).
- B of E Financial Policy Committee noted market dysfunction and recommended B of E executive to implement market maker of last resort plan. MPC was merely informed.
- B of E acted as MMLR (announced 27th September), buying bonds each day for 13 days at reverse auctions. Total = £19.3 bn (< 1% of GDP). Same as QE. Clearly not yield curve control.
- Yields fell, partly because B of E was buying but also because Truss fired Kwarteng (14th October) and then resigned (20th October). New PM Sunak and Chancellor Hunt reversed most of 'fiscal event' (17th November).
- Bank of England replaced commercial market temporarily, taking a risk on government policy. The risk didn't crystallise, and the B of E reversed the purchases in November 2022 –January 2023, making a profit of £3.8bn.

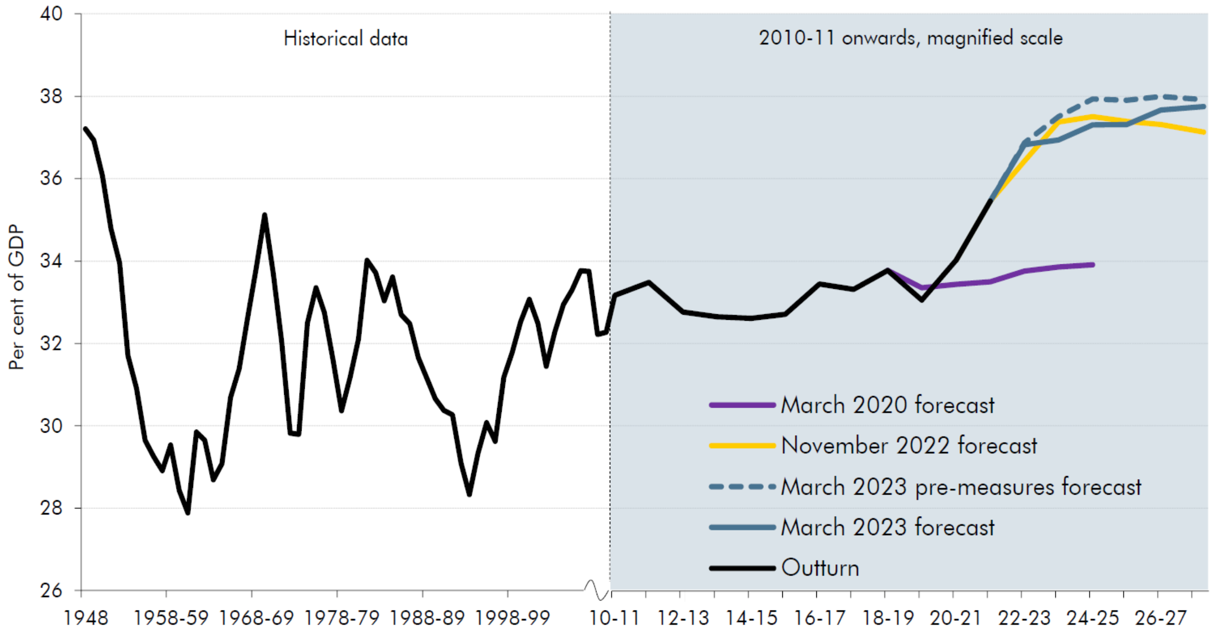
3 i Fiscal sustainability (March 2023, i.e. post Truss/Kwarteng).

Public sector net debt/GDP ratio



Source: ONS, OBR

National accounts taxes/GDP ratio



Note: We have increased the GDP denominator in forecast years for our March 2020 forecast by the upward revision to 2020-21 nominal GDP in the Quarterly National Accounts data. This is to enable like-for-like comparisons with our subsequent forecasts.
Source: ONS, OBR

- Debt/GDP and tax/GDP ratios have both been rising and are both relatively high by historical standards: debt/GDP is 101% now compared with 36% in 1997.
- Fall in debt/GDP ratio isn't forecast until after general election.
- Gilt market likely to be periodically dysfunctional – large deficits, heavy maturities, QT, debt sustainability and price discovery.

3 ii Reversing QE

- QE in the UK:
  - Nearly all asset purchases were government bonds – gilts, > 3 years when bought.
  - Total peaked at £895 bn at end of 2021: 35% of GDP.
- QE involved subordinating objectives of public debt management (cost, risk) to those of monetary policy. Not sustainable.
- Monetary policy independence is more secure if the public finances aren't sensitive to changes in short-term interest rates. QE made the public finances much more sensitive to changes in short-term interest rates. 1% rise in base rates = 0.35% increase in budget deficit relative to GDP.
- Balance sheets of 'independent' central banks should be small, for democratic accountability reasons.
- Therefore QE needs to be reversed, and is being.
- How to do it:
  - Let central bank bond holdings run off without replacement. Very slow in UK: half-life of Bank of England portfolio is > 7 years. B of E has started this, effective February 2022.
  - 'Active sales'. B of E has begun, as from November 2022.
  - Initial planned reduction in QE portfolio = £80 bn in year from Sep 2022.
  - QE means a big reduction in sales of bonds to the market. QT means a big increase.

3 iii British government bond sales 2019 - 2024

£ billion	Gross sales by government	Maturities	Net sales by government	Gross purchases by B of E (QE/QT)	Net purchases by B of E (QE/QT)	Gross purchases by market	Net purchases by market
2019/20	**137**	99	38	55	23	**81**	15
2020/21	**485**	98	388	345	326	**141**	62
2021/22	***195***	*79*	*116*	*127*	*76*	***68***	*40*
2022/23	***189***	*107*	*82*	*-16 (est)*	*-25 (est)*	***205***	*107*
2023/24	***255***	*117*	*138*	*-40 (guess)*	*-77 (guess)*	***295 (guess)***	*215 (guess)*

- Big deficit + B of E sales will lead to need for very large sales of bonds in 2023/24.
- Risk of strain on market infrastructure, especially the capacity of the market makers to warehouse bonds between auctions and the emergence of demand, and especially if government finances appear unstable.

4 i Contingency planning for MMLR - objectives

- Gilt market liquidity dried up in March 2020 (Covid) and September 2022 (fiscal policy). There is a high risk that market liquidity will dry up again. Market liquidity could become chronically inadequate, as in 1942 – 1986.
- Need for a contingency plan for MMLR (there wasn't one in September 2022).

1. Preserve liquidity for systemic holders (financial stability).
   - Banks hold government securities for liquidity.
   - Others, e.g. clearing houses, rely on liquidity of government securities,.
   - Systemic risk if liquidity vanishes.
2. Make government securities more attractive to investors.
   - Lower yield = interest savings for government.
3. Protect market makers.
   - After any shock (more or less) there will be a new equilibrium yield level, but it might be so far away from the old one that the adjustment bankrupts market makers, or puts them out of business.
   - New market makers will emerge but only slowly and cautiously. Governments need to be able to borrow in the meantime.
   - Therefore its worth spending money, or insuring the market against extreme risks, to protect market makers.
   - Need to avoid protecting incompetent market makers.

4 ii Contingency planning for MMLR - issues

- Needs to be a backstop, and not crowd out commercial market makers.
- Should it be a standing facility (as in 1950s – 1980s), or an occasional one (as in 2020 and 2022)?
  - It could not be kept secret as in 1970s and 1980s.
  - Standing facility would be more transparent, because there wouldn't need to be discretionary decisions about when to make it available, but it would need periodic reviews. Parameters would need to be adjustable in an emergency.
- MMLR operations force the central bank and government debt managers to be price makers.
  - B of E and DMO tried to avoid acknowledging this but need to accept it.
- Impossible to distinguish between acts undertaken by central banks for monetary policy purposes and for financial stability purposes.
- Which part of Bank of England makes decisions about gilt purchases – Monetary Policy Committee (March 2020), Financial Policy Committee, or B of E executive (September 2022)? Is the government consulted? Demarcation unclear.
- Risk of having to address procedural issues in an emergency (as in 2007, Northern Rock).