Auctions of Government Securities

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Some terminology

- **Bonds** or **gilts** (UK) are securities with maturity of more than one year that pay a predetermined interest rate (coupon).
- **T-bill**: Maturity less than one year, no coupon.
- **Conventional gilt**: Fixed coupon.
- **Index-linked gilt**: Coupon depends on (RPI) inflation rate.
Background for UK debt issuance

- Government debt originated in 1694
- Gilt auctions introduced in 1987 (post “Big Bang”)
- 1995 Debt Management Review concluded: “Auctions will constitute the primary means of conventional gilt issuance”
- Auctions for index-linked gilts re-introduced in Nov 1998
Pre-auction issuance: Tap

- Ad-hoc “mini-auction”
- Timing at discretion of Bank of England
- Bank issued bonds into rising markets

Increased market uncertainty and an increased risk premium
Reasons to move to auctions

- Risk premium may outweigh gains from tapping into rising markets
- Big Bang: Change in relationship with banks
- Policy change towards transparency, predictability, accountability
Further changes announced in Debt Management Review

- Annual issuance programme, incl. auction timetable and maturity structure of issuance
- Formal consultation meetings with market participants

Openness, predictability and transparency
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Auction types for gilts

Conventional gilts
  Competitive price auction: pay bid (Winner's curse)

Index-linked gilts
  Uniform price auction: pay lowest successful bid (Underpricing)
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Auctions for conventionals

- 69% of debt stock are conventionals
- 95% of trades in secondary market
- Hedging instruments available
- Benchmark bonds: 5yr, 10yr, 30yr
Hence, competitive price format
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Auctions for index-linked gilts

- 25% of debt stock in index-linked gilts
- Less than 5% of trades are in linkers
- No hedging instruments
- No benchmarks
- Formerly subset of primary dealers

Hence, uniform price format & smaller size
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Auction format in other countries

- Discriminatory:
  Australia, Austria, France, Sweden

- Uniform price:
  Finland, Mexico, USA
Participation

• Competitive bids from primary dealers (GEMMs)
  – 17 GEMMs for conventional gilts
  – 17 GEMMs for index-linked gilts

• Non-competitive bids
  – From GEMMs depending on previous bidding (10% of total stock)
  – From public: “Approved group”
Role of GEMMs

- Bid in auctions (privilege and obligation)
- Expected to take at least 2.5% of stock (3-month rolling window)
- Place bids for others without commission
- Market making
- Discuss market developments with DMO
- Daily end-of-day gilts prices
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USA and Germany

- Both moved to electronic auctions
- No technical necessity for primary dealers
- Participation open to any financial institution
- Supervised by financial authority
Pre-emption/Short squeeze

- One bidder takes the entire auction. Primary dealers with short positions have to buy from this bidder at higher price.
- Salomon Brothers in May 1991 2-year treasury auction. Settled for $27.8m.
In UK

- Max. allocation in auction
  25% in an conventional auction
  40% in index-linked auction
  but WI-position taken into account
- Pre- and post-auction trade reporting
- Repo-facility and tap-issuance if market is short-squeezed
Price floor/quantity restriction

• “The DMO reserves the right not to allot all of the stock on offer.”

• Only in exceptional circumstances, e.g. uncovered auction in Sept 2002.

• Finland: Treasury determines supply only after observing bids. A number of auctions cancelled because bids not deemed sufficiently high.

• Russia: CBR cancelled auction for same reason.
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Timing

• Building up of bond in market to ensure liquidity

Coordination

• Bonds are not identical across countries
• No coordination on auction calendar or any other issue
Do auctions distract from trading?

Daily trading volumes for US treasury bonds.

De-mean and de-volatise with moving average.

Regress log(volume) on lags and dummies for auction dates.
## Auctions of Government Securities

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<th>10yr</th>
<th>30yr</th>
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Further information

- www.dmo.gov.uk