Best practice framework
- Euro area government bond markets

ECB Bond Market Contact Group, 21st October 2014

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Best practice framework: US

Treasury Market Practices Group

What is it?
- Group of Market Professionals
- Variety of firms & functions
- Sponsored by the Fed
- www.newyorkfed.org/tmpg

TMPG “recognises importance of maintaining integrity and efficiency of US Treasury, Agency Debt & Mortgage-Backed Securities”

- Reduce market disruptions
- Reduce “episodes of protracted settlement failure”
- Buttress overall market integrity

What best practices does TMPG recommend?

1. Promoting liquidity and transparency
2. Maintaining a robust control environment
3. Managing large positions with care
4. Promoting efficient market clearing

“Vigorous, well-informed & assertive internal control program”
Timely clearing to avoid market congestion. In lower rate environment, a “fails charge” should apply

Promote market making, Quote to trade, not to create market distortions
“Avoid strategies that exacerbate settlement failure”

Focus on UST: Contents

Market Value & Turnover  Secondary Market Structure  Primary Market Structure  Post trade Settlement Structure

“Quotes from TMPG Apr 14”
## UST Market Value & Turnover

US Treasury outstanding debt is smaller yet turnover is larger

<table>
<thead>
<tr>
<th>Debt outstanding</th>
<th>Avg Daily Turnover</th>
<th>Annual Debt turnover</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eurogovts ex-bills</td>
<td>$7tn (€5.4tn)*</td>
<td>$104bn (€80 b)^</td>
</tr>
<tr>
<td>US Govts ex-bills</td>
<td>$5.9tn (€4.5tn)*</td>
<td>$193 bn^</td>
</tr>
</tbody>
</table>

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*ECB monthly bulletin: excl bills, FRNs, zeros
**Federal Reserve Bank of New York, Municipal Securities Rulemaking Board, FINRA TRACE

^ Market estimate derived from assumption that e-volume is 40%
UST Secondary Market…

- Efficient hedge for all trading
  - Volume distributed ~equally across 2 major platforms
  - High frequency unofficial market makers also access cash broker markets
  - Technology more sophisticated through broader use of algos (for example); possible due to concentrated points of liquidity

On-The-Runs

- Highly transparent & non-ambiguous benchmarks: 2, 3, 5, 7, 10, 30 year
- Trade on price in 32nds
- Volumes across OTRs & OffTRs are roughly similar
- Fewer concentrated points breeds liquidity and creates deeper markets across the curve

Off-The-Runs

- All other UST coupons are “Off-The-Runs”
- Trade as a spread to OTRs

Futures

- Efficient hedge for both OTRs and OffTRs alike: CTD 2y, 5y, 7y, 16y, 26y
- Liquidity on each point is deep especially at long end
- US 10yr note future volume is ~2x Bund futures; UST long futures volumes are ~25x Buxl futures
- Futures complement liquidity in cash market

Brokers

- Efficient hedge for all trading
- Volume distributed ~equally across 2 major platforms
- High frequency unofficial market makers also access cash broker markets
- Technology more sophisticated through broader use of algos (for example); possible due to concentrated points of liquidity

- > EU: some confusion, no harmonisation
- > Reduction in arbitrage?
- > Benefit to liquidity in non-benchmarks?
- > Europe: limited hedging NL, BE,…
- > Lacking in Europe; visibly so in times of stress
- > Europe: DE exchange futures & basis substitute cash markets
- > Europe: don’t consider brokers for hedging DE
UST Primary Market…

...has greater transparency, lower risks and lower running costs

One issuer

- One auction system
- One issuance calendar

- Reduces complexity
- Reduces technology costs

Primary Dealer Targets

- No market share targets

- Promotes real interest
- Lowers probability of post auction price swings as dealers race to flatten positions

Client Orders

- Client orders entered into main auction system either:
  (i) directly by client (e.g. central banks)
  (ii) indirectly via dealers on behalf of clients

- Dealers can also enter orders directly

- No separate system required by dealers
- Less opportunity for discounts
- Minimises over-bidding
- Less scope for pre-auction adverse price movements
- Greater transparency

Issuance Practice

- Issuance concentrated on fewer instruments

- Promotes deeper liquidity

![Typical outstanding Issue Size of typical UST & DE benchmarks ($bn)](chart)

<table>
<thead>
<tr>
<th>Year</th>
<th>UST</th>
<th>DE</th>
</tr>
</thead>
<tbody>
<tr>
<td>2yr</td>
<td>20</td>
<td>15</td>
</tr>
<tr>
<td>3yr</td>
<td>18</td>
<td>12</td>
</tr>
<tr>
<td>5yr</td>
<td>16</td>
<td>10</td>
</tr>
<tr>
<td>7yr</td>
<td>14</td>
<td>8</td>
</tr>
<tr>
<td>10yr</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td>30yr</td>
<td>2</td>
<td>1</td>
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</table>

![Treasury auction participation, %)](chart)

<table>
<thead>
<tr>
<th>Year</th>
<th>Indirect</th>
<th>Direct</th>
<th>Dealer</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>50%</td>
<td>60%</td>
<td>90%</td>
</tr>
<tr>
<td>2005</td>
<td>45%</td>
<td>55%</td>
<td>85%</td>
</tr>
<tr>
<td>2006</td>
<td>40%</td>
<td>60%</td>
<td>80%</td>
</tr>
<tr>
<td>2007</td>
<td>35%</td>
<td>65%</td>
<td>75%</td>
</tr>
<tr>
<td>2008</td>
<td>30%</td>
<td>70%</td>
<td>70%</td>
</tr>
<tr>
<td>2009</td>
<td>25%</td>
<td>75%</td>
<td>65%</td>
</tr>
<tr>
<td>2010</td>
<td>20%</td>
<td>80%</td>
<td>60%</td>
</tr>
<tr>
<td>2011</td>
<td>15%</td>
<td>85%</td>
<td>55%</td>
</tr>
<tr>
<td>2012</td>
<td>10%</td>
<td>90%</td>
<td>50%</td>
</tr>
<tr>
<td>2013</td>
<td>5%</td>
<td>95%</td>
<td>45%</td>
</tr>
</tbody>
</table>

Average 12-month 10year UST participation

- Indirect: 45%
- Direct: 17%
- Dealer: 37%

For institutional use only
UST Post-Trade Settlement Structure…

-> …less settlement risk, less complex, greater certainty to cover short positions

One Settlement System

- Facilitates possibility of T+1

Compare Europe:
- Multiple domestic depositaries that are not incentivised to enable freer movement of collateral

Fails

- TMPG introduced a charge of 300bp preserving the integrity of the market
- Furthermore, Fed can lend bonds to banks

Compare Europe
- No common penalty system
  • Compare Europe: ECB leaves banks to control liquidity

Max Post Trade Settlement Size

- Compulsory break-up of trades to maximum $50MM clips

Compare Europe
- Asset Managers & Hedge Funds reluctant
Discussion Items

Possible to consider a European “TMPG”?

- UST best practice framework is more difficult to implement in Europe given greater restrictions but not unachievable.

- Possible & achievable aspects to consider to improve liquidity, transparency and efficiency in European bond markets:
  - Centralisation
    - Centralising information and statistics e.g. auction calendar
  - Issuance
    - Reviewing auction procedures to minimise over-bidding & discounting
  - Settlement
    - Maximising post-trade settlement size
    - Implementing a harmonised fails charge

- ECB could create a “TMPG-Like” Group or the scope of the current ECB Bond Contact Group could be extended?
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