A Preliminary Look at Dealer-to-Customer Markets on October 15, 2014

THE EVOLVING STRUCTURE OF THE U.S. TREASURY MARKET
October 20-21, 2015
Two important components of the Treasury market were not covered in the public report
- Dealer-to-Customer (DtC) market
- Interest rate swaps and swaptions

Limited information available on DtC market activity
- Request for Quote (RFQ) data (TradeWeb, Bloomberg)
- Sample Voice data (Ad-hoc survey of select large dealers)

Swaps/swaptions trades reported to swap data repositories (SDRs)
- Participant level transaction & position data reported to CFTC
Evidence from Survey of Large Dealers
Average Trading Volume by Platform for Large Dealers

- Ad-hoc survey of select large dealers estimated to represent about half of DtC volume
- DtC represents a significant share of volume for large dealers
  - Significant variation in volume shares over time and across dealers
  - Voice trading volume significantly greater than RFQ on most days
  - DtC volume rose by ~50% on 10/15 while IDB volume rose by 210%
  - Voice trading as a share of DtC volume declined slightly on 10/15

Source: Ad-hoc survey of select large dealers
Note: Pie chart represents an average and is not representative of any one dealer
Approximate Intraday DtC Trading Volumes on 10/15

- DtC trading volumes were modest relative to IDB volumes and reasonably balanced during the event window
  - No evidence of single large trade or sequence of large trades leading up to or during event window
  - Intra-day pattern represents an estimate as voice data limited to survey respondents

% of daily volume

On-the-Run DtC Volumes

- Buy
- Sell

Off-the-Run DtC Volumes

- Buy
- Sell

Source: Cash RFQ Platforms, Ad-hoc survey of select large dealers
Note: 5-minute intraday buckets, 8:00 – 15:00 ET; Event window grey shaded
**RFQ Trading Statistics**

- RFQ data analyzed from TradeWeb and Bloomberg represents the vast majority of US Treasury RFQ volume
  - 10/15 not an outlier in terms of RFQ volume

### RFQ Platforms Volume Statistics

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<td></td>
<td>3,120</td>
<td>21,951</td>
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<td>5,059</td>
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### Daily RFQ Treasury Volume

- $ billions

Source: Cash RFQ Platforms
RFQ Platform Volume by Firm Type

- Significant dealer concentration of RFQ volume
- Diversity of client flows greater on 10/15

### Dealer Volume Share

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<th>Control Days</th>
<th>10/15/2014</th>
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<tr>
<td>Top 10 Dealers</td>
<td>76.2%</td>
<td>73.9%</td>
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<tr>
<td>Other Dealers</td>
<td>23.8%</td>
<td>26.1%</td>
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### Customer RFQ Volume Share

- **Control Days**
- **10/15/2014**

Source: Cash RFQ Platforms
Note: Other includes Corporates, Pension Funds, Sovereign Wealth Funds, Private Equity, Foreign Governments, and Other
RFQ Platform Trade Pricing

On-the-Run 10-Year RFQ Pricing

$ per 100 par

Source: Cash RFQ and IDB Platforms
Note: IDB quote mid point; RFQ transaction prices

10-Year RFQ-IDB Spread

Source: Cash RFQ and IDB Platforms
Note: 80% confidence interval, based on rolling 20 trades; time axis spaced in activity time
RFQ Platform Quoting Behavior

**Non-Responsiveness**
- % of Requests Not Responded To
- Source: Cash RFQ Platforms

**Dealer Quoting Behavior**
- % of Quotes 3+ ticks from best quote
- Source: Cash RFQ Platforms

**% of Requests Without Response**
- Source: Cash RFQ Platforms

**% of Quotes 3+ ticks from best**
- Source: Cash RFQ Platforms
Summary of Preliminary DtC Analysis

- DtC market is a significant share of the overall Treasury market
- Dominated by the largest dealers
- Voice remains an important mode of trading in DtC segment
- No outsized trading volume observed during the event window on 10/15
- RFQ pricing generally remained tight through the period of peak volatility
  - Temporary widening in RFQ market mirrors widening of dealer quotes in IDB & Futures noted in the Joint Staff Report
- Some evidence of dealer pullback in RFQ market during event window
  - Increase in non-competitive quoting
  - Increased non-response rate
- Overall, preliminary evidence supports that the DtC market tracked IDB & Futures markets on 10/15 and that the event was not driven by DtC flows