Green Bond Pricing in the Primary Market: Q4 2016 snapshot

Initial findings indicate that there is over-subscription and tighter pricing of USD and EUR denominated green bonds in the primary market.

- **USD and EUR bonds are pricing better than expectations**
- **Final pricing is tighter than price talk**
- **80% of bonds demonstrated tighter spreads after 7 days**

Since the first corporate green bond was issued in 2013, there have been anecdotes of green bonds pricing tighter than similar vanilla bonds.

This study presents an initial analysis of a sample of green bonds issued in Q4 2016 to explore how they are received in the primary market. It is the first report in a series of reports that we aim to produce on this topic quarterly. We included green bonds:

- with an issue size > USD200mn
- denominated in EUR or USD, and
- issued from 1 Oct - 31 Dec 2016.

A total of 19 bonds fitted these parameters of which 15 were selected on the basis of data availability. Bonds cover a variety of sectors and credit ratings.

**Why are we seeing a greenium?**

The majority of green bonds and all those included in this study are pari passu with other debt of the same rank, so we would not expect them to be more expensive than vanilla bonds. A green premium is therefore somewhat of an anomaly.

Our belief is that pricing is better than expected primarily because there is unmet demand for green debt. The demand is driven largely by investors with a green mandate but also by regular investors interested in green bonds as an easy way to gain exposure to the green theme.

**Findings at issuance**

1. **Final pricing is consistently lower than initial price talk**

Before a bond is issued, managers estimate the price at which they will be able to sell the bond based on their assessment of market conditions. Price talk information was available for all bonds in our sample, and we know where all the bonds were priced. EIB and MuniFin (both Quasi Governments) priced exactly as expected. The other 13 bonds in our sample achieved better pricing than anticipated, 6 of them by between 20% and 25%. Rabobank achieved an improvement of over 30% with its first green bond (5-year, EUR).

2. **Oversubscription is common**

Order books are compiled by selling managers based on interest from investors. We found information for 11 of the 15 bonds in our sample. The order books were oversubscribed for all of them.

Bonds are always oversubscribed to some degree, so we have also calculated how many times each bond was covered, and found:

- 4 bonds were up to 1.5x oversubscribed,
- 4 bonds were 1.5x - 2.5x oversubscribed,
- 3 bonds were > 2.5x oversubscribed,

Rabobank demand was said to have reached 4 times the final book size. Few days prior to the 2016 US election, Bank of America launched a green bond that was oversubscribed by 3x.

**Asset classes**

<table>
<thead>
<tr>
<th>Asset classes</th>
<th>USD</th>
<th>EUR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporate</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Quasi Government</td>
<td>2</td>
<td>2</td>
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</tbody>
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**Oversubscription is the norm**

![Oversubscription chart]

![Asset classes chart]
Findings post issuance

1. Pricing tightens after 7 days
7 days post announcement date, 12 out of 15 bonds in our sample were tighter. The spread change varied from +0.87bps for Tennet, to -14.22bps for Poland. The Polish bond was the first green sovereign and was extremely well received by the market.

2. Pricing tightens after 28 days
28 days post announcement date, 12 out of 15 bonds were tighter. 9 bonds had tightened between 0 to 15 bps. The largest difference was the BAML bond which tightened by more than 50 basis points. Meanwhile, the MTR bond was 5bps wider.

3. Most bonds performed better than their corresponding index
We compared the spread of each bond to ‘the market’ by matching each bond with an iBoxx vanilla bond benchmark. We have chosen standard iBoxx bond indices, partitioned by: currency, asset class, credit rating, and time to maturity. While we acknowledge that this is not a precise match, we believe indices give decent representation of market behaviour.

7 days post announcement: 14 out of 15 bonds in our sample had moved more favourably than their index: tightening more aggressively, widening by a smaller magnitude, or going in a different direction.

28 days post announcement: 11 out of 15 bonds in our sample had moved more favourably than their corresponding index. Overall, the individual bonds showed better performance on a % change basis than their pair indices 7 and 28 days post announcement.

The context
The analysis above suggests that EUR and USD green bonds are pricing tighter than expectations in the primary market.

However, the time period analysed (Q4 16) was also a strong period for the bond market and a time of global political and financial market uncertainty. This and the small data set available means that it is difficult to identify where a true pricing benefit is present.

As the market grows and evolves, we will be able to gather additional evidence which may or may not support our initial findings. We will be publishing more research on this topic during 2017.