Setting new standards

A bull market can disguise many sins. Take the corporate bond market. On the surface, everything appears hunky dory. Issuance is at record levels, investors are desperate for yield in the zero-rate world and price performance has been great.

Things look shakier up close. It is not easy to buy and sell bonds in secondary markets. Liquidity is patchy, and many bonds have turned into museum pieces: nice to look at, but tough to take home. This is likely a structural shift.

We analyse the state of play and debate a potential liquidity driver: bond standardisation. We focus on the world’s largest corporate bond market: the $5.5 trillion investment grade (IG) US market. Our main observations:

- Investors pay a premium to hold high-volume IG bonds rather than illiquid alternatives. Individual bond trading volumes tend to plunge as new issues age and overall bid-offer spreads remain above pre-crisis levels.
- Sporadic and lumpy issuance has created a highly fragmented market, and new issues dominate trading. Any effort to improve liquidity must address issuance.
- Standardisation would involve steps such as issuing similar amounts and maturities at set times, and re-opening benchmark issues. This would cut down the jungle of bonds, create a liquid curve for top individual issuers and enable lower-cost hedging with centrally cleared derivatives.
- The obstacle: Many issuers and investors like the status quo. Issuers will have to evaluate flexibility against potentially lower costs and a simpler capital structure. Investors need to weigh new issue gains and strategies exploiting liquidity differences versus the ability to trade in size.
- Some standardisation looks unavoidable in the long run. Drivers are the advent of bond exchange traded funds (see Behind the Bond Boom of January 2013), increased electronic trading (which feeds off standardisation, and vice-versa) and (perhaps) new issuance models such as auctions.

Notes: The left chart contains some non-corporate securities such as collateralised mortgage obligations issued by entities other than US federal agencies or government sponsored enterprises. In April 2013, the position reporting structure changed to give the more detailed breakdown of corporate positions shown in the pie chart.

The opinions expressed are as of May 2013 and may change as subsequent conditions vary.
Corporate bond investors often complain it is tough to buy in size. They also worry what will happen when interest rates spike and the whole world pushes the sell button. They have a point: Trading volumes have fallen off a cliff when measured as a percentage of the market’s total outstanding debt. See the chart above.

The reasons: Yield-hungry investors who used to dismiss corporate bonds as too risky are stampeding into the market. But traditional liquidity providers such as dealers and proprietary trading desks are retreating. Drivers include risk aversion and stricter capital rules, as detailed in Got Liquidity? in September 2012.

Primary dealers’ inventories of US corporate bonds have plummeted 76% from a high of $235 billion in 2007. See the left chart on the previous page. The cupboards are bare. Dealers currently hold just 0.25% of the total IG debt outstanding, as the right pie chart shows.

Result: Dealers increasingly have to match buyers and sellers in real time – or tell investors they are on their own. Investors are hunting for alternative sources of liquidity and exploring new ways to trade. Think client-to-client trading and/or exchange-like venues with a central order book.

The rise of these new trading venues could push down transaction costs (as it has in other markets), increase liquidity and set the stage for more standardisation. It could also start chipping away at the main reason for poor liquidity: too many different but similar bonds.

Trading is fragmented across thousands of bonds of varying maturities. Companies tend to issue bonds whenever financing needs arise or opportunities present themselves. By staggering issuance schedules and diversifying across maturities, companies can minimise risks of refinancing and higher rates when credit markets are expensive (or closed, as many discovered during the financial crisis).

This flexibility may be convenient for issuers but makes life complicated for bond investors. Investors who want to buy GE or J.P. Morgan common shares have one easy choice. Bond investors must sift through thousands of issues even for the top 10 corporate issuers, as the table below shows. Most bonds are not liquid enough to be included in benchmarks such as the Barclays US Corporate Index. (The index eligible bonds, however, make up an average of 37% of the total in dollar terms. See the table’s second column.)

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**IS THIS A BULL MARKET?**

**US IG bond volume as % of outstanding debt, 2005–2013**

[Image of chart showing US IG bond volume as a percentage of outstanding debt from 2005 to 2013.]

Note: Represents 12-month rolling value of trade as a share of outstanding debt.

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**TOO MANY TREES IN THE BOND FOREST**

Bonds and shares outstanding of top US IG bond issuers

<table>
<thead>
<tr>
<th>ISSUER</th>
<th>BONDS IN BARCLAYS US CORPORATE INDEX</th>
<th>SHARE OF DOLLAR AMOUNT OUTSTANDING</th>
<th>TOTAL BONDS OUTSTANDING</th>
<th>COMMON EQUITY SECURITIES</th>
<th>PREFERRED EQUITY SECURITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE</td>
<td>44</td>
<td>31.2%</td>
<td>1,014</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>J.P. Morgan</td>
<td>32</td>
<td>34.1%</td>
<td>1,645</td>
<td>1</td>
<td>13</td>
</tr>
<tr>
<td>Goldman Sachs</td>
<td>25</td>
<td>38.4%</td>
<td>1,242</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Citigroup</td>
<td>39</td>
<td>35.8%</td>
<td>1,965</td>
<td>1</td>
<td>12</td>
</tr>
<tr>
<td>Morgan Stanley</td>
<td>29</td>
<td>40.1%</td>
<td>1,316</td>
<td>1</td>
<td>12</td>
</tr>
<tr>
<td>Bank of America</td>
<td>30</td>
<td>28.2%</td>
<td>1,544</td>
<td>1</td>
<td>39</td>
</tr>
<tr>
<td>AT&amp;T</td>
<td>29</td>
<td>62.6%</td>
<td>74</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Wal-Mart</td>
<td>26</td>
<td>71.6%</td>
<td>50</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Verizon</td>
<td>26</td>
<td>60.8%</td>
<td>71</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Wells Fargo</td>
<td>15</td>
<td>26.2%</td>
<td>274</td>
<td>1</td>
<td>8</td>
</tr>
</tbody>
</table>

Sources: Barclays and Bloomberg, May 2013. Note: Table shows issuers with the largest notional amount outstanding in the Barclays US Corporate Index.
New issuance is the lifeblood of the IG market. Total issuance has surged in recent years, as the left chart above shows. Companies have taken advantage of record-low yields to refinance their debt cheaply, and many blue chips are borrowing money to buy back their own shares (think Apple).

Annual gross supply has averaged 21% of total IG debt outstanding over the past decade, compared with just 1% for US equities, as the right chart above shows. In other words, the makeup of the corporate bond market is transformed every year. This means any effort to improve liquidity must start with issuance practices.

IG issuance tends to be sporadic — driven by borrowers’ seasonal demand and changing investor appetite. See the right chart below. It also differs by region. For example, 10-year bonds are most popular in the US market with a 37% share in 2012, according to J.P. Morgan, compared with 3-years in the Eurozone (40%) and above-10-years in the UK (62%).

US Treasury issuance is much more standardised: Similar amounts of the same maturities are auctioned each month (at roughly the same time). Suppose top IG issuers were to align maturity dates with centrally cleared swaps, and standardise issuance amounts and timing. This would lay the foundation for a liquid IG curve.

Sources: J.P. Morgan, Dealogic and World Bank. Note: Equity new issuance includes follow-on offerings. The percentage share is based on the total US equity market capitalisation.
Everybody loves new issues. Newly printed bonds change hands frequently at first, but activity drops off soon. See the chart above. Within just four weeks of issuance, trading volume has plummeted by around 50%. Within two months, annualised volume has slowed to just one time the bond’s total dollar amount.

After that, most bonds are carted off to the museum. There they are on display – but attract few visitors.

’On the run’ bonds, which are generally the issuer’s most recently issued securities, enjoy deeper markets and narrower credit spreads, as detailed on the next page. ‘Off the run’ securities, which are more seasoned and tend to trade in smaller sizes, are more costly to transact and generally trade at wider spreads.

This makes it tough for large investors to transact in size or to exit a position in a hurry. “If you buy it, you better love it,” could be the new mantra for IG investors.

MOST LIKELY TO STANDARDISE

The United States, home to the world’s largest corporate bond market, is likely to lead the way in standardisation. In most of Europe and Japan, bank lending still dominates corporate finance, as the left chart below shows. This is starting to change. Bank credit to nonfinancial firms has been declining since 2008 because banks have become more risk-averse and are delevering. See the right chart below.

Result: Companies will increasingly tap capital markets. This has already happened in emerging markets, as detailed in What’s Developing in April 2013.

Just as many developing countries leapfrogged fixed-line infrastructure and jumped straight to wireless, fledgeling corporate bond markets now have the opportunity to develop a more liquid market structure for the future.
Investors currently are willing to pay a premium for liquid IG bonds. See the chart below. The liquidity premium, which increased as dealer inventories fell after the crisis, would likely dissipate in a more standardised market. This would be good news for investors wanting to allocate to a wide spectrum of bonds or move quickly in and out of positions. Investors who exploit price differences between liquid and tough-to-trade bonds, by contrast, would need to develop new market-beating strategies (after cashing in on the initial convergence trade).

**PREMIUM LIQUIDITY**

Spread between illiquid and liquid IG bonds, 2005–2013

Bid-offer spreads on US IG corporates have remained stubbornly high at around 5 basis points, roughly the same level as a decade ago. Compare this with bid-ask quotes as low as 1 basis point in agency mortgage bonds.

Trading costs eat up around 3.5% of the overall IG spread over Treasuries, compared with 3% in 2003. See the chart on the right. In a zero-rate world, every basis point matters. IG corporates currently yield about 2.7% versus 4.1% a decade ago. This means bid-offer spreads equal 1.2% of total yield, up from 0.8% in 2003.

Remember this is the best of times. Liquidity in the corporate bond market can turn on a dime. When everybody rushed for the exits in late 2008, bid-offer spreads ballooned to more than 8% of the total spread – if there was a market at all.

The hunt for yield has also pushed down new issue concessions (the yield ‘sweetener’ issuers add to get investors to buy their new paper) to almost zero.

This is great for issuers—and gives them less incentive to give up flexibility in issuance. See the chart above. This seller’s market is unlikely to last if rates were to back up or if credit were to deteriorate.

Bond investors relying on ‘easy alpha,’ buying as much as possible of a new issue for an immediate price gain in the secondary market, are still flying high. The decline in new issue concessions has been offset by a widening premium for bonds that trade near par (newly issued bonds) and those at a premium (older issues). This reflects relative liquidity. See the top chart on the next page. If standardisation were to take hold, these investors are in trouble: There likely would be few free alpha lunches in the future.
Creating a liquid curve by more frequently re-opening issues could help boost liquidity. An original 2023 bond could be reopened in 2018 as the 5-year benchmark and in 2020 as the 3-year benchmark. Over time, large borrowers would develop a single, liquid security at each annual curve point. Liability tenders and exchanges could accelerate the process.

A concurrent step would be to standardise maturity dates. This would align corporate bonds with centrally cleared interest rate swaps and credit derivatives, making it less costly to hedge. The downside for issuers: It would concentrate refinancing risk around certain dates such as quarter ends. To mitigate this, the bonds could include an option for issuers to call the debt in the three months prior to maturity.

New issue concessions are negligible at this point, but this issuer nirvana may not last. A liquid curve could attract a steady source of demand: exchange traded products. A key cost for issuers is the issuance process itself. Underwriting fees average 43 basis points for top IG issuers. See the table on the left. A potential shift toward (cheaper) auctions of new issues would likely go hand in hand with standardisation. Previous attempts at auctions have failed, but improved technology, insatiable investor demand and dealer retrenchment could create a new catalyst.

**FEE FEST**

Top US investment grade bond issuers in 2012

<table>
<thead>
<tr>
<th>ISSUER</th>
<th>AMOUNT RAISED (SM)</th>
<th>FEES (SM)</th>
<th>SHARE OF AMOUNT RAISED</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE</td>
<td>$29,924</td>
<td>$154.3</td>
<td>0.52%</td>
</tr>
<tr>
<td>J.P. Morgan</td>
<td>$17,825</td>
<td>$89.8</td>
<td>0.5%</td>
</tr>
<tr>
<td>Abbott</td>
<td>$14,657</td>
<td>$50.5</td>
<td>0.34%</td>
</tr>
<tr>
<td>Toyota Motor</td>
<td>$13,751</td>
<td>$29.1</td>
<td>0.21%</td>
</tr>
<tr>
<td>Wells Fargo</td>
<td>$12,692</td>
<td>$70.1</td>
<td>0.55%</td>
</tr>
<tr>
<td>Goldman Sachs</td>
<td>$12,497</td>
<td>$47.6</td>
<td>0.38%</td>
</tr>
<tr>
<td>United Tech.</td>
<td>$9,753</td>
<td>$52.3</td>
<td>0.54%</td>
</tr>
<tr>
<td>Citigroup</td>
<td>$9,302</td>
<td>$33.3</td>
<td>0.36%</td>
</tr>
<tr>
<td>AT&amp;T</td>
<td>$8,992</td>
<td>$30.8</td>
<td>0.34%</td>
</tr>
<tr>
<td>Deere</td>
<td>$8,331</td>
<td>$31.5</td>
<td>0.38%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$137,724</td>
<td>$589.3</td>
<td>0.43%</td>
</tr>
</tbody>
</table>

Sources: Thomson Reuters and Freeman Consulting.

Standardisation appears a natural step, given that related markets such as CDS and agency mortgage bonds have blazed a trail. Why has it not happened yet?

Our view: The market has not demanded it because of the one-way demand for credit in the past three years. Re-openings are generally not priced at par ($100). Issuers prefer par bonds due to their more streamlined accounting treatment. Investors also like them because premium bonds carry a higher credit risk: Maximum recovery is capped at $100 in case of default. A change in the rate cycle could change this dynamic because many bond prices could drift toward par or below.

Why would issuers want to trade flexibility in issuance for potential maturity walls? The immediate answer is simple: They do not want this trade. Longer term, this may be different. Fewer bonds mean lower regulatory costs, and standardisation could lower financing costs.