INTERNATIONAL CAPITAL MARKET ASSOCIATION
MARKET UPDATE, NOVEMBER 2016

Brexit and implications for the capital markets

ICMA continues to work with our members focusing on the implications of the vote on the capital markets, and created a "resource hub" on our website where members can conveniently source relevant Brexit-related papers from ICMA, the authorities and other bodies such as UK and Continental law firms.

ICMA has completed a thorough review to identify any immediate changes which might be required as a result of the referendum (none at this time) and will keep them under review to ensure they are amended as and when needed in consultation with members.

There are two abiding themes coming from members with business both in the UK and the rest of the EU:

- they wish to continue their business with as little disruption as possible; and
- They would like to minimise the uncertainty so that they are able to plan for the future.

Against this backdrop many are reviewing their business models. They are assessing where they already hold licences in the EU27, what activities these cover, what additional licences or authorisations they might need, and what operational changes would be required to undertake the range of business across the EU27 that they currently undertake. They are also considering how the EU27 authorisations might impact access to the UK.

If capital market integration between the UK, the euro area and its other neighbours both within and outside the EU can continue to be maintained after the UK leaves the EU, the result will be a single capital market in Europe much larger in size than if it were to be fragmented. Both the UK and the EU27 have a mutual interest in maintaining capital market integration. Avoiding fragmentation is one of the key issues arising from Brexit for the international capital markets.

Secondary corporate bond market liquidity

In July 2016, ICMA published *Remaking the Corporate Bond Markets*, its second study into the state and evolution of the European investment grade corporate bond secondary market. The study concludes that, in general, liquidity conditions continue to become constrained, as market participants find it more challenging both to provide and source liquidity. Isolating and quantifying contributing factors is difficult at best. However, market participants primarily attribute this deterioration to the confluence of various regulatory initiatives (most notably the increased cost of capital for market makers) and the impact of monetary policy. The study also notes that, while overall liquidity continues to decline, most visibly manifested as a lack of immediacy when executing orders, the story is more nuanced. For instance, the levels of market liquidity available differs from client to client (with large, Tier 1 clients enjoying better liquidity than their smaller cohort), across markets (eg euro-denominated versus sterling-denominated bonds), and across the credit curve (eg "single-A" names versus "cross-over" credits). Furthermore, the ICMA study highlights the growing concern among corporate issuers

themselves, who worry that the liquidity currently enjoyed in the primary markets will be unsustainable if secondary market liquidity continues to erode, particularly once the ECB ends its Corporate Sector Purchase Programme.
In August 2016, IOSCO published the report, *Examination of Liquidity of the Secondary Corporate Bond Markets.* Similar to what prompted ICMA's earlier study in 2014, the IOSCO study was initiated in response to growing concerns from market stakeholders of deteriorating corporate bond market liquidity. IOSCO notes that this perceived deterioration is mostly attributed to changes in market structure, such as the diminished capacity of traditional intermediaries to make markets, and that many stakeholders argue that to some extent these changes are being driven by new regulation. The report concludes that: "[by] examining many different metrics in aggregate, IOSCO was able to see a more complete picture of market liquidity emerge. Based on the totality of information collected and analyzed, IOSCO did not find substantial evidence showing that liquidity in the secondary corporate bond markets has deteriorated markedly from historic norms for non-crisis periods.

ICMA was pleased to provide, in consultation with the members of its Secondary Market Practices Committee, a number of constructive and targeted recommendations designed to expand and enrich IOSCO's analysis. The full response can be found on ICMA's website.

There are a number of reasons why IOSCO's conclusions are likely to differ from those of the ICMA studies, as well as general market participant feedback. Not only is sourcing reliable and consistent data across various jurisdictions challenging, but where analysis is subsequently based on merging these different data sets, particularly across different currencies, markets, or jurisdictions, deriving any meaningful conclusions is open to question. Corporate bond markets across different jurisdictions have very different characteristics in terms of market structure, participant composition, and liquidity dynamics. Therefore, as much as possible, analysis should be based on specific markets and within the same jurisdictions, to ensure consistency of analysis and relevance of any conclusions.

The integrity of market data being used is also of critical importance. For instance, IOSCO, along with a number of other recent studies published by market authorities, cite narrowing bid-ask spreads in the US and European markets as an indicator of improved liquidity. While bid-ask spreads represent a useful proxy for liquidity in terms of the cost of transacting in a particular bond, ICMA members have flagged two main concerns related to the use of bid-ask spreads in any analysis. The first (acknowledged in IOSCO's report) is the fact that, in the European markets at least, prices quoted on screens are rarely executable. The feedback from ICMA buy-side members would suggest that the bid-ask spreads posted on European trading platforms are at best indications for where small sizes might be traded, and at worst completely meaningless. Often dealer runs that feed onto platforms are not updated on a regular basis (thus best prices are often likely to be "stale"), while quotes also have a "last look" option, which allows the dealers to adjust or pull their prices when a counterparty tries to execute on them. In conducting its own analysis of European corporate bond market liquidity and efficiency, the consistent message from ICMA's members was that nothing can or should be inferred from either the number of dealer quotes available nor the width of the posted bid-ask spread.

The second issue with bid-ask spreads identified by ICMA's members is that, even if one assumes that they are a relatively reliable indication of where markets will clear, if one views the trend in nominal bid-ask spreads (which, as the report points out, appear to have narrowed in both the

US and Europe) relative to the underlying yields of the bonds, one finds that in real terms bid-ask spreads have actually widened. In other words, a 1bp bid-ask spread as a measure of the "round-trip cost" for transacting in a bond yielding 1% is significantly wider than a 1.5bp bid-ask spread for a bond yielding 3%. Therefore, a time-series analysis of relative bid-ask spreads across jurisdictions might be a far more informative liquidity metric.

Finally, something that has been highlighted by a number of ICMA's buy-side member firms is that perhaps the most important indicator of liquidity is not so much what has traded, but rather what could not be traded. They point to the fact that any post-trade data will always give the impression of liquidity, since it represents something that actually traded. But this does not take account of orders that could not be filled, because there was no other side to the trade, the price was too far from the perceived fair value, or the price that they tried to execute on was not honoured.

As one fund manager explained to ICMA, if he sells 10 million of a 50 million order, say on the same day, in two clips, moving the market price less than one standard deviation, then the 10 million trade will be recorded, and any subsequent analysis will suggest that the market was indeed liquid for 10 million bonds, at that time. What the analysis will not reveal is that two weeks later he might still be looking for a bid for the remaining 40 million. Thus, "dropped trades" and unfilled orders are far more revealing variables for determining and measuring liquidity, as opposed to what actually did trade.

GDP-linked bonds: a new design for sovereign debt markets

Government debt linked to domestic economic growth is not a new idea. Indeed, the concept has been promoted since the 1980s by a number of economists as well as the official sector including the IMF and United Nations.

Today one legacy of the global financial crisis is that it has left a high ratio of public debt to GDP around the world. Sovereign borrowers that have excessive debt combined with weak economic performance face potential costly and disruptive restructurings or default, which in the recent experience with Argentina and Greece have had potential global financial systemic implications. At the same time, a challenge and goal for policy makers is for more stable capital flows for both developed and emerging countries which can also be disruptive and a contributing cause of a sovereign debt crisis.

A model set of terms and conditions, or "term sheet", for GDP-linked sovereign bonds has been drafted and is nearing final form, could help address these risks and concerns. This work is being completed by an *ad hoc* working group consisting of investment managers, lawyers and economists from the Bank of England, together with support from ICMA and other trade associations.

- The basic concept of GDP-linked government bonds is for their coupons and principal payments to be indexed to nominal GDP and in so doing allow both the burden of servicing interest payments and repayment of principal to adjust with the sovereign's ability to pay.

- The major market and social welfare benefit of this is to reduce the risk of sovereign debt crises and disruptive defaults during a recession or downturn. In this regard, often GDP-linked bonds are seen as a form of holding equity in a sovereign, whose entire return will vary with economic performance instead of on a fixed basis.
- In theory, GDP-linked bonds can be designed to reduce the default risk premium by allowing the debt servicing burden to be reduced in times of fiscal duress. On the other hand, for investors, particularly those who believe a particular sovereign may be on its return to prosperity, GDP-linked bonds offer returns that can later outperform corresponding conventional bonds.
- Over a longer period of time of continued issuance, GDP-linked debt as well as other forms of state-contingent debt could work to de-risk sovereign balance sheets.

A number of issues to be overcome, however, have thus far made borrowers hesitant to offer these instruments. Among others, the revision and quality of GDP data as well the market's desire for there to be near-term diversification, liquidity and representation in recognised indices need to be addressed for there to be adequate market acceptance. The new *London Term Sheet* provides responses to address these and other issues raised in the past with the concept of bonds linked to growth. Members of ICMA's Asset Management and Investors Council (AMIC) are right now reviewing and providing comments on this new design and ICMA intends to very soon more widely consult with its members in this regard.

See Financial Stability Paper 39: Sovereign GDP-linked bonds: James Benford, Thomas Best and Mark Joy, with contributions from other central banks

Green Bond Principles

Voluntary principles for green finance as embodied by the Green Bond Principles (GBP) were endorsed in the September 2016 G20 communiqué. The GBP also featured prominently in a new report prepared for the G20 Green Finance Study Group (GFSG) on green bonds, cementing its standing as the overarching guidelines for the green bond market. It also confirmed the GBP community as a partner of choice for developmental initiatives in the green bond market, as the market continued to grow and broaden its appeal in markets and public policy circles. The GBP membership now stands at 121, complemented by 74 observers.

ICMA is an official member of China's Green Finance Committee under the auspices of the People's Bank of China, as well as the Green Finance Study Group under the G20.

The September 2016 G20 communiqué illustrates growing G20 support for green finance. It includes support for voluntary principles and international collaboration, which are exemplified by the GBP, as well as attention to impact, which is supported by the GBP recommendations on impact reporting.

The GBP's relevance is also highlighted in a new report on *Green Bonds: Country Experiences, Barriers and Options,* contributed to the G20 through the GFSG. The lead authors of this report were the Green Finance Committee of China Society for Finance and Banking, the Climate Bond Initiative, OECD and ICMA. The report assesses an array of barriers to scaling up the green bond market as well as identifying emerging options for progress.

The GBP Secretariat has just completed the launch of the GBP Resource Centre, containing new standardized disclosures from issuers and external reviewers.

The GBP ExCom demonstrated its responsiveness to market needs by developing two disclosure templates – an information template designed for issuers' self-disclosure of GBP alignment, and an external review form. The GBP Secretariat is aggregating online such templates, as well as many external reviews, now that a significant range of market participants have started to use these formats.

The annual GBP public consultation is scheduled to run in 4Q 2016, and will build on the productive initiative to establish a range of working groups in 2015-16, each dedicated to a key theme in market development and delivering a range of updates to the GBP's latest June 2016 edition.

Any parties interested in giving feedback to this forthcoming consultation who are not yet a member or observer are invited to complete the application form on the ICMA website www.icmagroup.org and send it to the GBP Secretariat at greenbonds@icmagroup.org.

Silk Road Bonds

In 2013, a "Belt and Road" development strategy was announced by the Government in China, the key objective of which is to provide much needed infrastructure along major economic corridors within Asia and extending to the Middle East, Africa and Europe, thereby promoting economic growth and improving living standards. Of course, developing infrastructure requires raising significant amounts of finance, which is difficult in countries with less developed financial markets, where connectivity with the international capital market is underdeveloped.

On 8 September 2016, ICMA and Dagong Global Credit Rating Group (Dagong) jointly hosted a conference – Belt and Road Summit: Financing Through Silk Road Bonds – in Hong Kong, at which the concept and challenges of "Silk Road Bonds" were explored. Silk Road Bonds are intended to be an internationally recognised asset class, appealing to investors due to highly sought-after yield and diversification benefits, while capable of being scaled to provide the volume of funding required for "Belt and Road" infrastructure.

Infrastructure financing in Asia

The *ASIFMA-ICMA Guide to Infrastructure Financing in Asia* (the Asian Guide), produced jointly by an ASIFMA Infrastructure Working Group together with ICMA, was released in August 2016. The Asian Guide is largely based on the European version of the *Guide to Infrastructure Financing*, produced by an AFME/ICMA Infrastructure Working Group in June 2015, but is targeted at the Asian market and, as such, benefits from local input from banks, investors, law firms, rating agencies and other market participants.
Mindful that Asia Pacific infrastructure investments are long-term investments which require consistent and transparent regulatory policy from regulators and public sector authorities, the

Asian Guide is designed to provide practical guidance and information on raising debt finance through banks and the capital markets for funding the immense amount of infrastructure required in Asia, taking account of planning and procurement issues on the transaction process. The Asian Guide also highlights how local initiatives from, for instance, the Asian Infrastructure Investment Bank, the International Finance Corporation, the Asian Development Bank and the Credit Guarantee and Investment Facility can help infrastructure projects through funding, credit enhancement and/or guarantees.

Market Abuse Regulation: primary markets

The roll-out of the EU Market Abuse Regulation (MAR) at the beginning of July has had a tangible effect on how banks and other market participants engage with, and do business in, the capital markets in a number of areas. One aspect of MAR which has had a significant impact – perhaps greater than initially anticipated – has been the new rules it imposes in relation to market soundings in the context of securities offerings.

Under the new rules, for transactions involving issuers with EU listed securities, discussions that banks or issuers have with investors prior to announcement of a transaction which are designed to "gauge the interest" of the investor in the potential transaction will need to be recorded in detail – either literally, through voice recording, or through detailed written notes taken during the interaction.

The rules impose obligations not only on investment banks, but also on buy-side investors and on issuers. Buy-side investors have an obligation to record any in-scope meetings that they attend; and issuers have the same obligations where they seek to engage with investors directly. The rules also apply globally; issuers who are not incorporated in Europe can come within the scope of the rules simply by having securities listed on a European exchange, or traded on a European MTF platform.

As is often the case with new regulation, there have been some interpretative challenges around the new rules which have raised questions about how certain practices which are currently market standard in offerings of debt securities should be treated going forward. As a consequence, law firms and banks are revisiting constructs that are fundamental to any deal process and that have been settled practice for years. One example is in relation to deal announcements: how much information should be included in a transaction announcement in order for it to be viewed as such under the new regulation? These discussions are taking place on a transaction by transaction basis, and ultimately introduce complexity into deal execution processes where it did not exist previously. This naturally has a knock-on effect on the ability to execute syndicated offerings quickly and efficiently. If markets were to become volatile, with windows of opportunity presenting themselves only for short periods of time, this added complexity could mean the difference between issuers being able to launch and price new offerings of securities and having to wait, or simply deciding not to proceed at all.

Several months into the new regime, ICMA continues to work to facilitate market consensus around MAR's soundings regime that preserves smooth and swift execution of new Eurobond issues.

In the meantime, ESMA published on 13 July its final report on MAR guidelines, including guidelines for persons receiving market soundings. These sounding guidelines *inter alia* envisage regulators and investors "must make every effort to comply" and that sounded investors will co-sign minutes of any otherwise unrecorded sounding (or draft their own minutes) and keep records of their own assessments as to whether sounded information constitutes inside information or not.

Leverage Ratio

On 3 August 2016, the EBA published its report on the impact assessment and calibration of the Leverage Ratio (LR), recommending the introduction of a LR minimum requirement in the EU to mitigate the risk of excessive leverage. The EBA's analysis suggests that the potential impact of introducing a LR requirement of 3% on the provision of financing by credit institutions would be relatively moderate, while overall it should lead to more stable credit institutions; and this will inform the work of the European Commission on potential legislative proposals, currently anticipated for publication in November, on LR.

The EBA's report includes input from the ESRB with regard to the potential impact of a LR on market liquidity. The introduction to this ESRB contribution includes the observation that the most recent discussions on the introduction of a LR have focused on the topic of market liquidity. It notes that some industry participants and other observers are investigating whether financial markets have become less liquid or more prone to episodes of severe illiquidity, with some pointing to post-crisis regulatory reform as having affected the supply of liquidity and intermediation services by broker-dealers in a significant way; and goes on to note that the LR, which has been introduced in some key jurisdictions (US, Switzerland and UK) and is expected to be introduced more widely from 2018, has come under particular criticism for constraining broker-dealers' balance sheets particularly with respect to low margin business such as SFTs.

The conceptual discussion then notes that, all things being equal, in normal market conditions the LR may make some market liquidity-related activities less attractive for a part of the banking sector and result in increased capital costs for firms with low average risk weights; and that this might particularly affect holding inventory in markets where the expected returns are relatively low such as sovereign bonds and high quality corporate bonds, and intermediating SFTs. Prior to its conclusions, this ESRB contribution then includes a section regarding market makers' feedback on factors affecting their market making capacity and market liquidity and a section outlining the ESRB's associated empirical investigation.

ICMA European repo survey

ICMA's European Repo and Collateral Council has released the results of its 31st semi-annual survey of the European repo market. The survey, which calculates the amount of repo business outstanding on 8 June 2016 (prior to the Brexit vote in the UK) from the returns of 67 offices of 63 financial groups, mainly banks, sets the baseline figure for market size at €5,379 billion, a 4.1% decrease on the December 2015 figure of €5,608 billion and a year on year decrease of 1.6% from the survey in June 2015.

The decline in the baseline figure since the previous survey largely reflects the reduced number of survey participants. However, a comparison of a constant sample of survey participants shows a small, largely seasonal, rise of 0.5% since December but a year-on-year decline of 1.6%, confirming that the overall trend for repo market activity continues to be downward.

This long term reduction in repo activity may be attributed to the impact of regulation, including new liquidity and leverage regulations. However, the survey shows that global systemically important financial institutions (G-SIFIs) with strong investment banking franchises have taken the opportunity to increase the size of their repo books, perhaps because there is scope provided by the phased implementation of these new regulations. National differences in the implementation of the new rules may have also created opportunities for some banks. If this is the case, then further contraction can be expected in the market.

SELECTED ICMA CAPITAL MARKET RESEARCH

The Counterparty Gap: A study for the ICMA European Repo and Collateral Council on the Trade Registration Models used by European Central Counterparties for Repo Transactions
Published: 27 September 2016
Author: Prepared for ICMA by John Burke, independent consultant

Remaking the Corporate Bond Market: ICMA's 2nd Study into the State and Evolution of the European Investment Grade Corporate Bond Secondary Market
Published: 6 July 2016
Author: Andy Hill, ICMA

Evolutionary Change: The Future of Electronic Trading in European Cash Bonds
Published: 20 April 2016
Author: Elizabeth Callaghan, ICMA

Perspectives from the Eye of the Storm: The Current State and Future Evolution of the European Repo Market
Published: 18 November 2015
Author: Andy Hill, ICMA

Impact Study for CSDR Mandatory Buy-ins
Published: 24 February 2015
Author: Andy Hill, ICMA