ICMA

International Capital Market Association

QUARTERLY REPORT

ASSESSMENT OF MARKET PRACTICE AND REGULATORY POLICY

INSIDE:

BREXIT CLIFF-EDGE RISKS

10 YEARS AFTER LEHMAN

TRANSITION TO RISK-FREE RATES

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ICMA

International Capital Market Association

The mission of ICMA is to promote resilient and well-functioning international and globally integrated cross-border debt securities markets, which are essential to fund sustainable economic growth and development.

ICMA is a membership association, headquartered in Switzerland, committed to serving the needs of its wide range of members. These include public and private sector issuers, financial intermediaries, asset managers and other investors, capital market infrastructure providers, central banks, law firms and others worldwide. ICMA currently has 550 members located in 62 countries.

ICMA brings together members from all segments of the wholesale and retail debt securities markets, through regional and sectoral member committees, and focuses on a comprehensive range of market practice and regulatory issues which impact all aspects of international market functioning. ICMA prioritises four core areas – primary markets, secondary markets, repo and collateral markets, and the green and social bond markets.

FEATURES:

01:

Brexit: cliff-edge risks in international capital markets

By Paul Richards

02:

10 years after Lehman

10

03:

Transition to risk-free rates

RFR

CONTENTS

Embracing technology

By Armin Peter

Technology has become a dominant theme for financial markets and ICMA members, following the general cross-industry trend to digitisation. Technological developments in the last few years were originally focused on secondary markets, then increasingly on repo and collateral management, but more recently have extended to primary markets.

Regulation has led not only to an increase in electronic trading, but it has also driven market participants to develop technology that helps capture information to meet regulatory requirements and make better use of data.

FinTech has given rise to technological buzzwords and new product developments from blockchain to artificial intelligence, machine learning, cloud computing and billion-dollar issuance of initial coin offerings (ICOs).

All this shows that our industry is at a crossroads and will change materially over the coming years. This evolution will require increased integration of technology into human work processes. As much as it is a challenge, it is also an opportunity for our industry to increase service quality, define best practices, and take advantage of innovation to support well-functioning and resilient markets for the future.

For ICMA, FinTech and market electronification are cross-cutting priorities, affecting our broad and growing membership of issuers, intermediaries, asset managers and investors, infrastructure providers and others. Over the last few years we have undertaken substantive work in this area across the whole lifecycle of bonds with our members.

In secondary markets ICMA's focus has been on electronic trading and evolving market structure. A mapping directory of electronic trading platforms was first published in 2015 to create greater transparency and was revised in June 2018. In repo and collateral markets, the ERCC Ops FinTech working group conducted a comprehensive mapping exercise of technology solutions in 2017. At the latest update in July 2018, it included over 110 solutions for repo and cash bond operations. This number is likely to increase further as we continue to prepare for the implementation of the reporting regime of the Securities Financing Transactions (SFT) Regulation by 2020, which will drive further electronification.

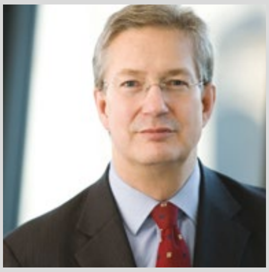
While technology has until recently been deployed to a lesser extent in primary markets, we are now seeing emerging trends towards process electronification, but also tokenisation of debt instruments based on distributed ledger technology. An ICMA roundtable discussion in May highlighted the need to enhance efficiency and deliver straight-through-processing, underpinned by common standards for communication, data exchange, and end-to-end connectivity.

To help educate our members, the ICMA Future Leaders have created a useful FinTech glossary, first published in May and further expanded in September. We have been monitoring regulatory approaches to these technological developments and have published a paper which gives an overview of recent initiatives in 26 jurisdictions.

Looking ahead, and in light of the potential impact of technological advances on international debt capital markets, we created an ICMA Board sub-group on technology at the beginning of the year, with a view to joining up our FinTech-related workstreams, raising awareness of technology trends, and engaging in constructive discussions with market participants, technology providers and regulators, as the market continues to evolve. Our view is that it is vital to "keep our finger on the pulse" of product innovation and process development in compliance with the changing regulatory environment.

Defining common standards and best practices, through this collaborative approach, will be key to supporting well-functioning markets and helping to avoid market fragmentation.

***Armin Peter** is Head of Syndicate, UBS Limited, and Member of the ICMA Board.*



Message from the Chief Executive

By Martin Scheck

Welcome to the ICMA Quarterly Report for the Fourth Quarter of 2018. In this edition we lead with our work on Brexit. At a time when the political discussions are becoming increasingly intense, we are focused on the potential impact of Brexit on international capital markets. In particular a priority for our Board and members is the damage to international capital markets and to financial stability which arises if pending cliff-edge risks are not addressed and avoided. We raised this at the most senior political level in both the EU 27 and the UK through an open letter on 22 June which gave examples of the specific cliff-edge risks and suggested ways of avoiding them, arguing that they needed to be resolved between the EU27 and UK as soon as possible. The responses from the EU27 and UK are on our website, along with other relevant information from official and other sources. Brexit is of course an important issue for all our committees and we are currently working on FAQs for publication and engaged in a review of the impacts of Brexit on the secondary bond markets which we expect to publish shortly.

On the topic of secondary markets, I would like to draw your attention to the report published in September on the state and evolution of the Asian cross-border corporate bond secondary markets. Based on interviews with a broad range of market participants, this continues the series of studies in the European markets and extends it to Asia. The focus is mainly on bonds denominated in the G3 currencies but there is also information on the increasing internationalisation of the Chinese Interbank Bond Market. It is well worth reading and I recommend you take a look.

Since the last Quarterly Report, the draft regulatory technical standard dealing with mandatory buy-ins within the CSDR has been passed into law, meaning that mandatory buy-ins will commence in September 2020. You will be well aware that we have opposed this part of the Regulation vehemently, ever since it was first mooted, on the basis that the design is flawed and its imposition will severely damage European bond market efficiency, liquidity and stability, in particular for less liquid and lower credit quality bond markets. Whilst we were instrumental in engineering a two-year delay to its implementation, the legislation is now enacted "warts and all". For us this is not the end of the story and we will continue to work with regulators and politicians to raise awareness of the problems this creates, and see whether a market-led solution, perhaps involving the existing ICMA discretionary buy-in provisions, can go some way to mitigating the most severe problems. Although this is an EU Regulation, it has severe extraterritorial implications for members outside the EU. There is a segment on our website devoted to this topic under CSDR Settlement Discipline, and we have recently published three papers expanding on MBIs, the latest being *CSDR Mandatory Buy-Ins and Securities Financing Transactions*.

The European covered bond market is an important and highly reliable source of funding for financial institutions both within and beyond Europe. With the release of the rapporteur's first report on the EU's proposed Covered Bond Directive, work has stepped up in our Covered Bond Investor Council (CBIC). We have been analysing the report, and in particular the proposal for a two-tier "premium" and "ordinary" covered bond market in Europe. The CBIC is seeking further input to form a response in advance of additional amendments being tabled in the European Parliament and Council.

ICMA's work on the transition from IBORs to near risk-free rates is escalating and likely to do so for the foreseeable future. ICMA is heavily engaged particularly in the UK, the euro area and Switzerland. We cooperate not only with many other relevant trade associations but also closely with the various authorities involved. There are still many unanswered questions and one cannot overstate the scale and complexity of the transition. Hence the topic is on the agenda of all our various committees and councils for all groups of participants in the cross-border debt securities markets in.

Finally, it is a sign of the times that the Foreword from our Board member Armin Peter is focused on the impact of FinTech on capital markets and ICMA's extensive work in this respect. This cuts across all our major workstreams and is changing the way the markets operate. Recent ICMA papers have included *Regulatory Approaches to Fintech and Innovation in Capital Markets* and *Electronification in Primary Bond Markets*. Our two mapping directories are still unique in the market and both have been updated – *The Electronic Trading Platform Mapping Directory* and the *ICMA ERCC Ops FinTech Mapping Directory*. Please take a look at the segment, FinTech and Market Electronification, on our website for more detail.

Martin Scheck
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Brexit: cliff-edge risks in international capital markets

By Paul Richards

Summary

The UK is proposing to leave the EU Single Market in financial services when it leaves the EU. Cliff-edge risks will arise when passporting rights between the EU27 and the UK cease. The UK originally proposed to the EU27 that there should be mutual market access when passporting rights cease. This approach was rejected by the EU27. One alternative for firms in the UK is to make use of EU provisions for regulatory equivalence for third countries. This is currently a patchwork. If it is not possible to rely solely on regulatory equivalence, the other option is to ensure that, before passporting rights cease, firms are authorised to provide financial services in both the EU27 and in the UK. It appears that, when passporting rights cease, firms will in general be able to carry out contractual obligations already agreed between EU27 and UK entities on cross-border financial contracts. But specific cliff-edge risks will still arise when passporting rights cease. The best way of avoiding these risks is by agreement between the EU27 and the UK. Agreement is needed as soon as possible.

Introduction

1 On 22 June, ICMA sent an open letter to senior political leaders in the EU27 and the UK on Brexit cliff-edge risks in international capital markets.[1] The open letter explained the concern of ICMA and its members about the risks of a cliff edge on Brexit, which would fragment international debt capital markets and damage business in the real economy and financial stability. ICMA's open letter gave examples of cliff-edge risks and argued that ways of avoiding them needed to be agreed between the EU27 and the UK as soon as possible ahead of Brexit. The Vice President of the European Commission replied on 19 July;[2] and the UK City Minister replied on 6 August.[3] The purpose of this Quarterly Assessment is to set out possible steps that market firms can take, and help needed from the authorities in the EU27 and the UK, to avoid cliff-edge risks in international capital markets, despite the remaining uncertainty about the terms of Brexit.[4]

Cliff-edge risks: background

2 Given that the UK is proposing to leave the EU Single Market in financial services when it leaves the EU, cliff-edge risks in international capital markets will arise when passporting

1. Martin Scheck, Chief Executive, ICMA: *Brexit: Cliff-Edge Risks in International Capital Markets:* Open letter to President Juncker and Prime Minister May, 22 June 2018.

2. Valdis Dombrovskis, Vice President of the European Commission: Letter to Martin Scheck, 19 July 2018.

3. John Glen, UK City Minister: Letter to Martin Scheck, 6 August 2018.

4. The paper does not consider the pros and cons of Brexit, nor the political and economic implications.

rights between the EU27[5] and the UK cease. Passporting rights allow firms authorised in one EU Member State to provide services in other EU Member States without requiring authorisation or supervision from the local regulator.[6] The European Commission explains the loss of passporting rights as follows: "Many operators, including from third countries, have established themselves in the UK and operate in the rest of the Single Market based on the passporting rights enshrined in the EU financial services legislation. These passporting rights will cease to exist after withdrawal. This means that the provision of financial services from the UK to EU27 will be regulated by the third country regimes in EU law and in the national legal frameworks of the respective Member State of the EU customers. There will be no Single Market access."[7]

3 When will cliff-edge risks arise?

- Cliff-edge risks will arise most immediately if the UK leaves the EU without an agreement on Brexit on 29 March 2019.
- If there is an EU27/UK withdrawal agreement, as a result of which passporting rights continue during a transition period[8] after Brexit, cliff-edge risks will still arise if there is no EU27/UK trade agreement at the end of the transition period at the end of 2020, unless the transition period is extended.
- And, even if there is an EU27/UK trade agreement, there will be cliff-edge risks if the agreement does not preserve existing passporting rights.

The British Government's proposals in the White Paper

4 The EU (Withdrawal) Act, which will take EU law into UK law on Brexit, was passed by Parliament in the UK in June. Shortly after receiving Royal Assent, HM Treasury started publishing secondary legislation on the first financial services statutory instruments, including temporary permissions and recognition regimes. These regimes are intended to enable firms currently authorised to operate in the UK to continue to be authorised for a limited period after Brexit. However, no equivalent has yet been proposed by the EU27.[9]

5 The British Government also published a White Paper in July.[10] Its main objective is to set out the British Government's proposals to remain aligned with the EU27 after Brexit on customs arrangements and EU regulations relating to goods. In addition, these proposals are intended to address the UK's commitment to avoid a hard border between Northern Ireland (in the UK) and the Irish Republic.

6 Although trade in goods is its main focus, the White Paper also covers services, including financial services. The British Government recognises that "the UK can no longer operate under the EU's passporting regime, as this is intrinsic to the Single Market of which it will no longer be a member." It argues that "the UK and the EU will wish to maintain autonomy of decision-making and the ability to legislate for their own interests. ... The decision on whether and on what terms the UK should have access to the EU's markets will be a matter for the EU, and vice versa. However, a coordinated approach leading to compatible regulation is also essential for promoting financial stability and avoiding regulatory arbitrage."[11]

7 It is not yet clear to what extent the EU27 will be prepared to accept the UK proposals in the White Paper: the main EU27 criticism so far has been that the UK proposals "cherry pick" from the four EU freedoms (people, goods, services and capital), on the grounds that the four freedoms are indivisible.[12] Nor is it yet clear what the response will be in the British Parliament, both if the proposals are accepted by the EU27 and in particular if the EU27 does not accept them. A framework for a future trade agreement, in the form of a political declaration, needs to be reached this year in order to give sufficient time for ratification of the EU27/UK withdrawal agreement by the British Parliament, European Parliament

5. And the rest of the European Economic Area (EEA) which also includes Norway, Iceland and Liechtenstein. The British Government has so far ruled out remaining within the EU Single Market by joining the EEA.

6. HM Government: *Banking, Insurance and Other Financial Services if here's No Brexit Deal,* 23 August 2018.

7. European Commission: *Preparing for the Withdrawal of the UK from the EU on 30 March 2019:* Communication, 19 July 2018.

8. The British Government refers to the transition period after Brexit as an "implementation period". The main change during the transition period after Brexit is that the UK will no longer have any say over new EU regulatory standards.

9. Bank of England Financial Policy Committee: minutes of the meeting on 19 June 2018, published on 3 July.

10. HM Government: *The Future Relationship Between the United Kingdom and the European Union:* Cm 9593, July 2018.

11. HM Government: *The Future Relationship Between the United Kingdom and the European Union:* Cm 9593, July 2018, chapter 1, paragraphs 60-61.

12. Donald Tusk, President of the European Council: "The suggested framework for economic cooperation will not work.": Salzburg Summit, 20 September 2018.

and EU27 Member States before the deadline of 29 March 2019, when Article 50 expires. Extending Article 50 would require unanimity in the EU27 and the agreement of the UK. The British Government is currently opposed to seeking an extension, and also opposed to holding a second referendum on the outcome of its negotiations with the EU27.

Ways of avoiding cliff-edge risks in general

8 International capital market firms have known for some time that they need to prepare for the risks of a cliff edge on Brexit. The question is: what is the best way of avoiding cliff-edge risks? The UK originally proposed to the EU27 that there should be mutual market access when passporting rights cease. This would have involved mutual recognition of each other's regulatory standards, taking into account that EU27 and UK regulatory standards will be the same at the outset. Under this approach, the EU27 and the UK would have recognised each other's regulatory standards, so long as they were consistent with equivalent regulatory outcomes, which would have been agreed in advance; and there would have been an agreed mechanism for resolving disputes. But this approach was rejected by the EU27, on the grounds that the EU27 needs to be autonomous in its decision-making.

(i) Enhanced regulatory equivalence between the EU27 and the UK

9 In those circumstances, as there is no consensus on a way forward under mutual recognition, international capital market firms have two main options. One option for firms with operations in the UK is to make use of EU provisions on regulatory equivalence for third countries (ie countries outside the EEA). This is currently a patchwork:

- It applies to some parts of the EU regulatory framework, but not others; and, in EU regulations where it does apply, it is not always complete.[13] Provisions for regulatory equivalence have so far evolved piecemeal, case by case.
- It requires a judgment by the European Commission as well as a technical assessment, and it takes time to assess.
- The determination of equivalence by the Commission can be withdrawn at short notice, though this has not happened so far.
- The assessment of regulatory equivalence is based on measuring outcomes, but outcomes are not straightforward to measure, as in the case of mutual recognition.
- Unlike mutual recognition, regulatory equivalence would be determined unilaterally by the EU27 and the UK in their respective markets, not jointly by both the EU27 and the UK.[14]

10 Given London's role as a global financial centre, it is also important to note that many of its markets and products are different from the EU27. The British Government's view is that these differences mean that rule-taking – in the sense of an open-ended commitment to adopt rules without having any say in making them – will not work in the UK financial services sector.[15] There is also a risk that new EU27 rules – which will be made without any direct influence from the UK – will not take sufficient account of their impact on market firms in the UK.

11 In its White Paper, the British Government accepts that the EU27's equivalence regimes for third countries currently "provide limited access for some of its third country partners to some areas of EU financial services markets"; and states that "the existing autonomous frameworks for equivalence would need to be expanded, to reflect the fact that equivalence as it exists today is not sufficient in scope for the breadth of the interconnectedness of UK-EU financial services provision". It "proposes that there should be reciprocal recognition of equivalence [between the EU27 and the UK] under all existing third country regimes, taking effect at the end of the implementation [ie transition] period".[16]

12 There is a case for enhancing regulatory equivalence between the EU27 and the UK as far as possible, since "the UK and the EU start from a position of identical rules and entwined supervisory frameworks". In that sense, the EU27 and UK are super-equivalent. No other third country has identical rules to the EU27, as the UK will have when Brexit takes place. There are in any case limits on the extent to which regulatory standards in wholesale markets in the EU27 and the UK can in practice diverge significantly, given the framework of global standards within which they operate under the G20 through the Financial Stability Board. And if regulatory standards in the UK were to diverge from regulatory standards in the EU27 after Brexit, then there would be an opportunity for an assessment to be made about

13. For example, services not covered include: wholesale lending and deposit-taking in CRD; some areas of investment firm activity in MiFID; and wholesale insurance within Solvency II: HM Government: *Framework for the UK-EU Partnership: Financial Services,* 25 July 2018.

14. See also Chancellor of the Exchequer: "Our financial regulatory frameworks are in effect identical. It is inconceivable that the mutual benefits of this relationship could be preserved by an "off-she-shelf" model, such as the EU's existing equivalence framework for third country financial services relationships.": *An Alternative Approach for Britain's Financial Services:* FT, 13 July 2018.

15. HM Government: *Framework for the UK-EU Partnership: Financial Services,* 25 July 2018.

16. HM Government: *The Future Relationship Between the United Kingdom and the European Union:* Cm 9593, July 2018, chapter 1, paragraphs 62, 65 and 66.

whether regulatory equivalence should continue to apply, as with any other third country. But despite this, it is not yet clear whether and to what extent there will in practice be scope during the EU27/UK negotiations to enhance the arrangements for regulatory equivalence between the EU27 and the UK as a third country; and, if EU or UK regulations need to change, it will take time to implement the EU or UK legislation required.

(ii) Authorisation to operate in both the EU27 and the UK

13 Regulatory equivalence is useful for international capital market firms, but it is not likely to be a complete solution; and it will not be a complete solution if it is limited in scope to the regulatory equivalence available to other third countries at the moment. If it is not possible to rely solely on regulatory equivalence, the other option for international capital market firms is to ensure that, before passporting rights cease, they are authorised to provide financial services in both the EU27 and in the UK, even though this is likely to involve higher costs for them (eg in terms of extra capital and liquidity) and for their business customers than at present. Most large international capital market firms either have authorised operations in the EU27 and the UK already or are seeking authorisation to do so, as long lead-times are involved. But those which have not yet done so need to consider this option carefully, given the long lead-times involved and the shortage of time available. Market firms are likely to be in a better position to avoid cliff-edge risks after passporting rights cease if they are authorised to operate in both the EU27 and in the UK.

14 On behalf of the EU27, the European Central Bank (ECB), the European Banking Authority (EBA) and the European Securities and Markets Authority (ESMA) have all drawn attention to the need for market firms to be authorised in the EU27 in order to be able to operate there after passporting rights between the EU27 and the UK cease:

- The ECB and national supervisors "expect banks to continue to prepare for all possible contingencies, including a no-deal scenario leading to a hard Brexit with no transition. Banks are responsible for ensuring that all authorisations required for them to carry out their activities as envisaged are in place in a timely manner."[17]
- The EBA has asked national competent authorities to ensure that financial institutions take practical steps now to prepare for the possibility of UK withdrawal from the EU with no ratified withdrawal agreement in place, and no transition period between 29 March 2019 and the end of 2020.[18]
- The ESMA has reiterated its own concerns on the timely submission of applications for authorisation to operate in the EU27; and encouraged UK-based regulated entities to prepare for the possibility that the UK and the EU27 will fail to agree on a withdrawal agreement, with the result that there is no transition period.[19]

15 The ECB has also provided guidance to banks on relocating to the euro area:

- The ECB is completely neutral regarding the choice of location within the euro area and ensures consistent supervision throughout the euro area.
- It usually takes six months for a decision to be made regarding a licence application once the application is complete.
- Banks in the euro area need to be capable of managing all material risks potentially affecting them independently and at the local level, and they should have control over the balance sheet and all exposures.
- Sufficient staff need to be located in the supervised entity to run operations, including both risk management and the front office.
- With specific reference to "back-to-back booking models", the ECB and national supervisors would expect that part of the risk generated by all material product lines should be managed and controlled locally. Transitional arrangements may be allowed on a case-by-case basis.[20]

16 The British Government has recognised that many financial services firms which currently passport from the UK into the EEA are taking steps to ensure that they can continue to operate after Brexit, for example by establishing a new subsidiary authorised in the EU27. This would allow the UK firm to offer new services after Brexit through its EEA subsidiary; and, in some cases, existing contracts could be transferred to the new entity.[21]

17. ECB: *Relocating to the Euro Area:* updated on 2 August 2018.

18. EBA Opinion, 25 June 2018.

19. *ESMA Reminds UK-Based Regulated Entities about Timely Submission of Authorisation Applications*, 12 July 2018.

20. ECB: *Relocating to the Euro Area:* updated to 2 August 2018.

21. HM Government: *Banking, Insurance and Other Financial Services if There's No Brexit Deal*, 23 August 2018.

Specific cliff-edge risks

17 Apart from cliff-edge risks in general when passporting rights cease, there are a number of specific cliff-edge risks in international capital markets involving the EU27 and the UK. It appears that, on Brexit, firms will in general be able to carry out contractual obligations already agreed between UK and EU27 entities on cross-border financial contracts.[22] But when passporting rights cease, market firms may no longer be able fully to service some outstanding contracts across EU27/UK borders.[23] There are also a number of other specific cliff-edge risks which arise when passporting rights cease. For example, specific cliff-edge risks include:

- the risk that it may not be possible for EU27 and UK parties to continue to perform some existing cross-border insurance contracts by paying claims to, or receiving premiums from, policyholders in the other jurisdiction;
- the risk that EU27 and UK parties may no longer have the necessary permissions to service over-the-counter (OTC) derivative contracts with parties in the other jurisdiction;[24]
- the risk that central counterparties (CCPs) may no longer be recognised across borders with the result that EU27 and UK CCPs may find that they are in breach of regulation by providing clearing services in the other jurisdiction, requiring abrupt close-out of positions;[25]
- the risk that the holding and sharing by the EU27 and UK of each other's data may be in breach of national law, with the result that barriers to the cross-border flow of personal data disrupt the provision of financial services;
- the risk that liabilities already issued under UK law may be considered in the EU27 like any other liability governed by the law of a third country, with the effect that they no longer count towards the minimum capital requirement for own funds and eligible liabilities (MREL);
- the risk that, under MiFID II/MiFIR, data thresholds set for the EU as a whole may no longer be relevant;
- the risk that automatic recognition of resolution actions under the Bank Recovery and Resolution Directive across the EU may no longer apply between the EU27 and the UK; and
- the risk that delegation of fund management across borders between the EU27 and the UK may be restricted or suspended if there is no agreement on third country cooperation.

The European Commissioner's reply to ICMA's open letter[26]

In the reply on 19 July from the European Commission to ICMA's open letter about cliff-edge risks in international capital markets on Brexit, the European Commissioner says that he has "at this stage the impression that most of those risks can be addressed through timely adaptation by the industry".

"On insurance and OTC derivative contracts, I would note that while every type of contract needs to be looked at separately, at this juncture, there does not appear to be an issue of a general nature linked to contract continuity as even after Brexit the performance of existing obligations can generally continue to take place. Of course, when the parties to the contract decide to create new rights and obligations by, for instance, concluding new contracts or amending contracts, an authorisation may be required under Union or national law.

As regards possible cliff-edge risks related to non-recognition of EU27 and UK CCPs, the EU has in this area the tools necessary to deal with different scenarios. In this context, the Commission proposal to amend EMIR is important, as it would make relevant

22. Financial Markets Law Committee (FMLC): "The FMLC is in agreement with the European Commission's Communication of July 2018 and considers it unlikely that Brexit will give rise to issues of contractual continuity in a general sense and so far as it is a matter of English law and jurisdiction." *UK Withdrawal from the EU: Issues of Legal Uncertainty Arising in the Context of Robustness of Financial Contracts:* August 2018.

23. See, for example, ISDA and AFME: *Contractual Continuity in OTC Derivatives: Challenges with Transfers:* "The loss of EU financial passporting rights after Brexit will have implications for cross-border OTC derivatives contracts between UK and EU27 firms and their EU27 and UK clients and counterparties respectively where those firms currently rely on an EU passport to trade cross-border in the EU27 or the UK.": July 2018.

24. Scott O'Malia, Chief Executive, ISDA: "Many other critical actions that take place during the life of a derivatives trade will be disrupted. These so-called lifecycle events include material amendments to contractual terms, the rolling over of trades and trade compression. These occur on a daily basis and are vital to the efficient functioning of the derivatives market. In fact, some – like trade compression – are important risk management techniques required by EU regulation: Letter to the FT, 4 July 2018. See also Bank of England Financial Policy Committee Statement from its policy meeting, 3 October 2018.

25. Steven Maijoor, Chair of ESMA: "The current legislative framework of EMIR does not allow ESMA to recognise CCPs based in the UK as third country CCPs as long as it is an EU Member State.": Athens, 3 October 2018. See also Bank of England Statement, 3 October 2018.

26. Extract from the letter of Valdis Dombrovskis, Vice President of the European Commission to Martin Scheck, ICMA, 19 July 2018.

changes to the EU's third country framework. We hope it will be rapidly agreed by the Union legislator. [27]

You also mention the issue of cross-border data flows. As you certainly know data controllers have a series of instruments available to ensure legal data transfers to third countries, even in the absence of continuation of the current situation or an adequacy decision. The Commission has highlighted the various tools that are available to data controllers in a notice to stakeholders of early January 2018.

With regard to the resolution dimension you mention both the eligibility of MREL and the recognition of resolution actions under BRRD. As on the other issues, the UK's withdrawal from the EU will have an impact on the legal situation which resolution authorities need to take into account in their work to ensure banks can be effectively resolved without impact on financial stability. The Single Resolution Board has issued guidance on these issues, to allow credit institutions to prepare in the best possible manner for the new situation.

Finally, on the issue of delegation of portfolio management, the Commission's proposal for the review of the ESAs simply contributes to supervisory convergence, which is of the utmost importance for CMU and will help your members to do business in the EU. Our proposal does not change the substantive rules applicable to delegation. We are proposing to promote transparency among supervisors within the ESAs on certain delegation arrangements, in particular cases where firms engage in very substantial outsourcing with the objective of being active in the EU only by way of letter-box entities. In this context, it is clear that supervisors will take into account the particular situation in the asset management sector – where many firms have recourse to outsourcing not to avoid EU supervision but to provide EU clients with the highest quality of service."

Ways of avoiding specific cliff-edge risks

18 If these specific cliff-edge risks cannot be avoided, the resulting fragmentation in the functioning of international capital markets, and associated market uncertainty, will damage growth in the real economy and damage financial stability. This appears to be common ground between the EU27 and the UK. However, there are different views between the EU27 and the UK about how to avoid them.

(i) Private sector approach

19 The European Commission and the EBA have both emphasised the role of the private sector in avoiding cliff-edge risks:

- In his reply to ICMA's open letter, the European Commissioner says that he has "at this stage the impression that most of those risks can be addressed through timely adaptation by the industry".[28] (See box.)
- The EBA has given its opinion that financial institutions should take adequate steps to mitigate the impact of Brexit without relying on possible public sector solutions that may not be proposed and/or agreed in time. This involves not only ensuring that they have the correct regulatory permissions and associated management capacity in place in time, but also addressing any impact on rights and obligations of their existing contracts, in particular derivative contracts.[29]

(ii) Public sector approach

20 By contrast, the Bank of England Financial Policy Committee argues that "it would be difficult, ahead of March 2019, for financial companies on their own to mitigate fully the risks of disruption to households and businesses."[30] This is because it is not feasible for international capital market firms to address all the potential cross-border contractual issues – including the associated requirements for repapering – that arise when passporting rights cease through private sector negotiation alone, given the shortage of time available.[31]

27. See also Steven Maijoor, Chair of ESMA: "In my view, we need to ensure continued access to UK CCPs for EU clearing members and trading venues. I would support a swift conclusion of the EMIR 2.2 legislative file, complemented by a transitional provision allowing for the continued access to UK-based CCPs.": Athens, 3 October 2018.

28. Extract from the letter of Valdis Dombrovskis, Vice President of the European Commission to Martin Scheck, 19 July 2018.

29. EBA: "While the political agreement on a transition period is welcome, it will not be given legal effect until there is a ratified withdrawal agreement in place. This is not guaranteed, and in any event, it will only come at the end of the Article 50 process.": Opinion, 25 June 2018.

30. Bank of England Financial Policy Committee minutes: Minutes of the meeting on 19 June 2018, published on 3 July.

31. Scott O'Malia, Chief Executive of ISDA: "The problem is not the notional figure but the substantial number of contracts that would have to be transferred and the number of counterparties that would individually have to agree to the transfer in a short period of time. A transfer of this scale has never before been attempted and is operationally unlikely without regulatory and legislative support from the EU and the UK.": Letter to the FT, 4 July 2018.

21 The UK is introducing a Temporary Permissions Regime, which will allow EEA firms and funds using a UK passport to continue to operate for a limited period after Brexit without needing to apply for authorisation at this stage. The UK has also made a commitment to legislate, if necessary, to ensure that contractual obligations (such as under insurance contracts) between EEA firms and UK-based customers that are not covered by the Temporary Permissions Regime can continue to be met.[32] And the UK is proposing Temporary Recognition Regimes for CCPs, central securities depositories, credit rating agencies, trade repositories, data reporting service providers, systems currently under the Settlement Finality Directive and depositories for authorised funds.[33]

(iii) A joint approach?

22 Although the UK has proposed a Temporary Permissions Regime, there is currently no reciprocal Temporary Permissions Regime proposed by the EU27.[34] Many specific cliff-edge risks cannot be fully resolved by unilateral action by the EU27 or the UK.[35] They can only be fully resolved by agreement between the EU27 and the UK.[36] It is therefore encouraging that, on 27 April this year, the European Central Bank and the Bank of England announced the formation of a working group reporting to the European Commission and HM Treasury on risk management in response to Brexit.[37] The European Central Bank and Bank of England will also be able to invite other relevant authorities, such as the FCA, where their expertise is required.[38] But if it takes too long to work out the scale of the problem, there may be insufficient time left to resolve it. Regular communication from the European Central Bank and Bank of England jointly in the run-up to Brexit would help reduce market uncertainty.

23 The best way to address cliff-edge risks is through a joint statement by the EU27 and the UK in, or in a side letter alongside, the withdrawal agreement. This should include provision for continuity of cross-border financial contracts between the EU27 and the UK by "grandfathering" all such financial contracts outstanding at the point at which passporting ceases.[39] Something similar was done when several EU national currencies were replaced by the euro on 1 January 1999. If it is not possible to use the withdrawal agreement, a separate agreement is needed between the EU27 and the UK, or alternatively the EU27 could make a commitment to provide its own Temporary Permissions Regime, as the UK has already done: the sooner the better; and the sooner there is a joint statement of intent by the EU27 and the UK, the better, given the shortage of time available.

Supervisory cooperation to avoid systemic risks in future

24 In the White Paper, the British Government has also proposed that the EU27 and the UK should commit to an overall supervisory framework which supports:

- extensive supervisory cooperation in relation to firms which pose a systemic risk or provide significant cross-border services on the basis of equivalence; and appropriate reciprocal participation in supervisory colleges;
- regulatory dialogue under which the UK and the EU should be able to understand and comment on each other's proposals at an early stage, while respecting the autonomy of each side's legislative process and decision-making; and
- transparency processes to ensure that the relationship is stable, reliable and enduring, with some of the processes treaty-based.[40]

32. Some cross-border contracts have been transferred by large insurance companies from the UK to the EU27: FT, 27 August 2018.

33. HM Government: *Banking, Insurance and Other Financial Services if There's No Brexit Deal*, 23 August 2018.

34. See also: HM Government: *Banking, Insurance and Other Financial Services if There's No Brexit Deal,* 23 August 2018.

35. For example: "In the absence of EU action, EEA clients will no longer be able to use the services of UK-based investment banks, and UK-based investment banks may be unable to service existing cross-border contracts.": HM Government: *Banking, Insurance and Other Financial Services if There's No Brexit Deal,* 23 August 2018.

36. Bank of England Financial Policy Committee: "The biggest remaining risks of disruption were where action was needed by both UK and EU authorities, such as ensuring the continuity of existing derivative contracts. As yet the EU had not indicated a solution analogous to a temporary permissions regime.": Minutes of the meeting on 19 June 2018, published on 3 July.

37. Chancellor of the Exchequer: "Working with the European Commission, we have set up a Technical Working Group between the Bank of England and the European Central Bank which is working to manage transition risk and provide further reassurances to our financial services firms.": Mansion House speech, 21 June 2018.

38. HM Government: *Banking, Insurance and Other Financial Services If There's No Brexit Deal,* 23 August 2018.

39. See, for example, ISDA and AFME, *op. cit.:* "The withdrawal agreement should contain appropriate provisions both facilitating contract transfers or novations to EU entities and allowing firms to continue to service legacy contracts after the end of the transition period at least to the extent such transfers or novations cannot be effected within an appropriate amount of time. However, there should also be coordinated backstop arrangements that apply if a withdrawal agreement is not concluded.": July 2018.

40. HM Government: *The Future Relationship Between the United Kingdom and the European Union:* Cm 9593, July 2018, chapter 1, paragraphs 69 and 70.

25 Supervisory cooperation between the EU27 and the UK needs to continue after Brexit, including the securities markets as well as banking. This would be consistent with the global initiative to manage cross-border challenges to financial stability (eg by sharing information and working together), and to set strong global standards to make the financial system safer, simpler and fairer. The Governor of the Bank of England has said that "an ambitious future financial services relationship, founded on commitments to achieving equivalent outcomes and supervisory cooperation, remains both feasible and in the interests of the UK, Europe and the world."[41]

Conclusion

26 When passporting rights between the EU27 and the UK under the Single Market in financial services cease, there are cliff-edge risks for international capital market firms operating cross-border between the EU27 and the UK, particularly in cases in which they are not yet authorised to operate in both the EU27 and the UK and they rely on the Single Market for access. These cliff-edge risks will arise on Brexit, if there is no withdrawal agreement which includes a transition period after Brexit; and even if there is a transition period, they may still arise at the end of it, depending on the form of the trade agreement negotiated between the EU27 and the UK. The best way of avoiding these risks is by agreement between the EU27 and the UK. To remove uncertainty and prevent instability in international capital markets, agreement is needed as soon as possible.

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41. See Mark Carney, Governor of the Bank of England: *New Economy, New Finance, New Bank:* Mansion House speech, 21 June 2018. In addition, Steven Maijoor, Chair of ESMA, has proposed to start negotiations with the UK FCA on MOUs, which "are essential to meet our regulatory objectives and allow information exchange for effective supervision and enforcement.": Athens, 3 October 2018.

Ten years after Lehman: retrospective

By Robert Parker

10

Introduction

Since 15 September was the tenth anniversary of the Lehman bankruptcy, this article sets outs a review of what caused the crash, subsequent policy responses and a review of the current situation.

Reasons for the crash

There are a complex number of reasons, but the list of 16 factors below encompasses most of the contributors to the financial and economic events in 2008.

1. *Undercapitalised and over leveraged banks:* The average leverage ratio of US and European banks in 2007/08 was close to 30 as compared with a historic average of less than 15. Consequently, the banking system was more vulnerable to a withdrawal of liquidity and a deterioration in asset quality, implying greater scope for market and economic volatility.

2. *Investors were over leveraged:* Surveys of investor positions showed historically high levels of leverage either through options/derivatives purchases, straight borrowings or the purchases of instruments with embedded leverage. Consequently, investors were vulnerable to asset price declines and/or defaults, again implying a high degree of volatility built into markets.

3. *Opaque structured products* were widely purchased by banks and investors. In many cases, products such as CDOs, CBOs and CLOs had different levels of risk built into them with investors unable to calculate clearly the degree of risk they were buying and the extent of potential losses in a market downturn.

4. *Consumer and mortgage credit* was "easy" in the US and in certain other countries. In the US, household debt-to-GDP, currently 89%, reached a record 98% in Q1 2008.

5. *Misuse of derivatives and mis-pricing of risk*: Investors were major purchasers of derivatives either to obtain market access with leverage and/or to get market exposure without buying the underlying assets. Frequently, there was a divergence between the price performance of the derivatives relative to the assets with derivative pricing being opaque.

6. *Concentration of derivatives risks:* In the OTC markets and notably in the credit derivatives markets, there was a concentration of risk and activity amongst a limited number of participants, which was a key contributor to the bankruptcy and forced rescue of AIG.

7. *Reactive behaviour of the credit rating agencies:* Although it is contentious, much criticism has been levelled at the CRAs for either being tardy in making downgrades, in incorrectly assigning ratings and in underestimating the risks and speed with which credit risks could change in multi-tiered structures, such as CDOs.

8. *"Blind faith" of investors in the credit agencies:* Many investors purchased credit risk without carrying out their own due diligence and therefore were particularly exposed when structured product investment grade tiers were downgraded to high yield status. These credit downgrades triggered forced selling where investor guidelines prevented them from holding assets lower than investment grade.

9. *Overvalued, mis-priced bank takeovers*, such as the RBS acquisition of ABN Amro: In many cases, it was clear that the acquirer had not correctly stress-tested the value of the assets to be purchased, while valuations were historically high and acquisitions which were debt financed compounded the increase in bank leverage. The level of M&A activity concentrated bank risk, thereby compounding economic/systemic risks in a downturn.

10. *Flow of foreign capital into the US mortgage market:* Countries with high savings ratios and banking systems with high or excess reserves with insufficient lending opportunities in their home markets were attracted to the higher returns in the US mortgage market. This was particularly the case of the European and notably the German banks. The Japanese banks, having experienced their own major crisis in the 1990s were less exposed although pockets of Asian banks outside Japan had high levels of exposure as did the Middle East banks. Capital flows into the US increased liquidity in the US market and stretched valuations further.

11. *Investor positions were concentrated:* Risk surveys of investor positions showed a steady increase in risk appetites in 2006-H1 2008 with investors increasingly chasing higher risk assets such as those in the US mortgage market, high yield and emerging markets. There is often a high correlation between market volatility and the concentration of investor positions.

12. *High market valuations/tight credit spreads:* Although the P/E ratio on the S&P in 2007 was around 17, credit spreads had rallied since 2002. High yield spreads in October 2002 were 10.6% but had narrowed to less than 250 bps by May 2007, clearly implying that in contrast to 1999, when the "bubble" was in equity markets led by the tech sector, in 2007 the bubble was driven by the credit markets, which were more associated with banking risk.

13. *Monetary policy was too easy* with the Fed Funds Rate being cut from 6.5% in November 2000 to 1.25% in July 2004 and then slowly and progressively being increased to 5.25% in March 2007. Private debt-to-GDP was 212% in 2008 compared with 180% in 2000 (and higher than today's 202%). Arguably, monetary policy was eased too rapidly and by too great an extent until 2004 and then was only tightened slowly and too late, with real rates being negative. Although borrowing became more expensive in 2007, credit availability was still generous.

14. *The housing market in the US became overstretched:* The Case Shiller 20 city index rose from 100 in 2000 to approximately 210 in 2006 and after the crash reversed to 140 by 2009. Housing affordability became increasingly difficult in 2006-2007 and encouraged home owners to borrow more either to upgrade their homes or to take equity out (a much-used phrase at the time was to treat your home as an ATM).

15. *"Waterfall" selling:* As defaults rose on lower rated tiers of structured debt, higher rated tiers were downgraded, forcing investors to sell. Where forced sales were at a loss, investors would have to liquidate profitable positions to cover losses elsewhere, which compounded downward pressure on asset prices leading to a further spiralling of price declines (the waterfall effect). As the banks were de-risking their balance sheets, market maker liquidity declined, thereby forcing investors to sell at frequently distressed prices.

16. *Poor regulation:* Although at the time, regulators resisted any criticism, however, in hindsight, most current and past regulators, at least in private, agree that the regulatory regimes worldwide were far too lax. Banks were not properly stress-tested, frequently regulators were unaware of the poor quality of assets on bank balance sheets, insufficient work had been done on contagion risks and regulators were not fully cognisant of the risks in the OTC/derivatives markets. Two further areas where regulators either lacked information or misunderstood risks were in special purpose vehicles (usually in offshore centres) and the risks of downgrades amongst the tiers in CDOs, while banks were allowed to run relatively low levels of capital.

Many if not all of the above factors are inter-related, but the key themes were over-leverage, risk opacity, easy credit availability and a culture of excessive risk taking. One factor which has also been widely debated has been bonus-driven compensation, and at the time, it was obvious that a compensation structure of lower base salaries in the financial sector with potentially higher bonuses driven by (sometimes) questionable performance criteria encouraged excessive risk taking.

The policy responses

Broadly, there were nine policy responses:

1. Banks were forced to deleverage their balance sheets with average leverage ratios declining to less than 15.

Key themes were over-leverage, risk opacity, easy credit availability and a culture of excessive risk taking.

2. Bank capital was increased with straight equity issuance, but also with new capital instruments being used such as CoCos.

3. Investment banks were forced in the US to take banking licences, thereby coming under the regulation of the Federal Reserve.

4. Bank regulation and regulatory resources were dramatically increased. *Inter alia*, banks were subject to stress tests and were forced to write "living wills". In Europe, bank bonuses were restricted. Serious attempts have been made to ring fence banks' domestic and retail operations away from the global operations and/or investment banking.

5. Market regulation was increased with a concerted effort by regulators to curtail opaque OTC trading and force trading onto regulated exchanges. Outside the banking sector, regulation was tightened on asset managers, brokers and exchanges. The levels of liquidity being provided to markets/investors by the investment banks was curtailed as were trading volumes. Likewise, the creation and distribution of opaque products has been restricted notably in the structured products markets.

6. Given government support for banking sectors and the extent of the H2 2008/2009 recessions, fiscal revenues decreased and fiscal policies were in many countries tightened (in hindsight a mistake notably in the euro area).

7. Monetary policy was eased in an unprecedented way with the move to negative interest rates in a number of countries but notably in the euro area and Japan while central bank balance sheets were expanded to record levels. The Fed balance sheet was less than US$900 billion prior to the Lehman collapse but then peaked at US$4.5 trillion prior to the slow process of tapering. The ECB and Bank of Japan balance sheets are still at record levels. The Fed balance sheet was expanded by major purchases of mortgage debt while the ECB intervened in the covered and corporate bond markets while the Bank of Japan has become the largest owner of Japanese equity ETFs.

8. Selective bank bailouts occurred and/or regulators forced strong banks to purchase weak or failing banks. In the US, examples were the JP Morgan acquisitions of Washington Mutual and Bear Stearns and Bank of America's purchase of Merrill Lynch. In the UK, Lloyds Bank purchased HBOS, while the Spanish and Italian banking systems saw significant consolidations notably amongst the smaller regional savings banks. The largest bailouts were AIG, RBS and UBS.

9. Selected asset classes received bailouts, notably in the US with the TARP programme to support the mortgage markets.

The current situation

The last ten years have seen a trend decline in leverage. Despite the near ten-year rally in equity markets, investor leverage is low and surveys clearly show that investors are defensively positioned and well diversified (with the exception of exposure to the FAANGs). Bank leverage has, on average, been reduced to less than 15 times and required loan loss provisioning by the banks has been reduced to low levels. Bank stress tests are now generally robust with most banks passing the tests.

Although US corporate debt has increased, largely to finance share buy backs, corporate defaults are at a near record low level and the recent rise in the Fed Funds Rate with an associated increase in borrowing costs has not led to any signs of stress amongst corporates. Likewise, except for selected countries, consumer debt is relatively low and, finally, the recent improvement in wage growth in the US, UK and the euro area combined with low unemployment has led to an upgrade in consumer balance sheets.

However, government debt levels are high with debt to GDP at 253% in Japan, 132% in Italy, 105% in the US, 98% in Spain and 97% in France. Central bank balance sheets, as mentioned above, are at record levels in the euro area and Japan and the process of tapering in the US from the current Fed balance sheet total of US$4.2 trillion is slow.

Potential or actual problems are the deleveraging of the Chinese shadow banking industry and the potential for further defaults in China, selected emerging market countries with high current account/fiscal deficits and the corporate sector where US dollar liabilities have financed devalued local currency assets.

The overall picture is one of pockets of problems with systemic/contagion risks reduced.

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Repo: underpinning the stability of the financial market system

By Godfried De Vidts

10

"D'abord réfléchir, après agir" is a useful principle which can be applied on many occasions and for many reasons, and it is exactly what should have happened ten years ago in the panic after the Lehman default. As a community we had taken, well before the crisis, various measures that should have been noticed by those scrambling to respond to what proved to be a lack of confidence in financial markets. Many articles in recent weeks have reflected on the crisis and the response to it, but my gut feeling is that little notice will be paid even now to the essential activity that actually helped markets to recover. The oil on the wheels of financial markets is provided by secured financing.

A highly respected ex-central banker said it all: "If the repo market would not have grown as it did, the crisis that followed the demise of Lehman Brothers would have been, at least in Europe, even more damaging or the burden on the ECB to attenuate its effects would have been even heavier" (Francesco Papadia, former Director General, Market Operations, ECB, at the *Future of the European Repo Market* Conference, London, 11 June 2013).

Policy makers rightly use various channels to help them understand how products/financial markets function. Immediately after the Lehman default, market participants themselves were often kept out of the relevant discussions – recall Commissioner Barnier instructing his department to halt visitors from the banking world. Instead, too much importance was attached not only by policy makers but also by central bankers to academic research. Granted, such research is important in the right proportion, but should always be taken with a pinch of salt. Any findings need to be carefully checked for accuracy and complemented by insights from market practitioners. The picture painted by Gorton and Metrick, in their widely quoted paper, that the expansion of repo drove the large "shadow-banking" system and the subsequent run on repo caused its collapse, was clearly misleading.

At the same time the lack of data is blamed for the lack of information that could have warned policy makers a crisis was in the making.

The first ICMA ERCC repo market survey was compiled 17 years ago, and this survey is now widely distributed and clearly shows market trends. Immediately after the Lehman event the value of outstanding repo dropped considerably. As repo is a very short term but important financing tool, banks (the sell side) reacted immediately and reduced outstandings with all counterparties. The subsequent roll-out of various regulatory and prudential rules forced banks to look at the size of their balance sheets and profitability in the light of events, and to make adjustments throughout their franchise. Of course there have been mistakes, but the repo market never stopped functioning. How else would the central bank community have been able to inject massive liquidity following the financial crisis and even more after the sovereign debt crisis? The latest survey shows a recovery, with even bigger outstandings than before. Does that mean we are back to square one? Not at all, repo is there to serve the real economy, and is part of the Pittsburgh agreement (even if it is not explicitly mentioned), and part of the enhanced stability of financial markets.

Gradually re-pricing happened as LR, LCR, NSFR, Basel III, CRD IV, CRR II, MiFID II, EMIR, among others, started to bite. At that point the true value of repo became apparent, in particular as the year-ends of 2016 and 2017 clearly showed the pain points: ie the real economy (insurance, pension funds, asset managers) being unable to raise adequate short term liquidity. It became clear that a fresh look at the tsunami of regulatory changes was needed.

The shift toward real economy financing as it is envisaged by the Capital Markets Union project, the implementation in the EU of EMIR, Basel III, MiFID II, CSDR, and others can only prove robust if supported by a sufficiently fluid collateral market. Having the right collateral in the right place at the right time and of the right quality depends on collateral movements through the secured financing market. The push by the authorities towards centralised clearing and bilateral margining has created huge collateral demands. The sell side has already adopted this mandatory obligation while the buy side is slowly coming on board, with the final deadline in 2020. The electronification of the repo market continues with new initiatives being launched, widening its appeal to both sell and buy side supported by FinTech solutions. A new repo world is emerging which is, more than ever before, at the service of the real economy. The central bank community was absolutely right to choose repo as the instrument for central bank financing of the real economy, using the banking system as the go-between.

The last piece of the puzzle is now being prepared, SFTR, although somewhat over-engineered, with 150+ fields to be reported. The ICMA ERCC survey has already shown the benefits of gathering data, and we are obviously supportive of providing more transparency. Added transparency for use by the regulatory community is clearly needed, but to avoid yet another financial crisis we need to combine data in the right proportion with market intelligence. Taken on their own, the SFTR's 150+ fields are not going to tell a new repo story, or disclose issues that have not been visible before. But when combining this data with information obtained through MiFID II/R, EMIR and the emerging Post Trade Risk Reduction Services we should be on the right track.

Repo/collateral markets are crucial, providing unprecedented protection in what remains a global financial market which is experiencing unprecedented innovation. The new regulatory and prudential framework is built around collateral. Collateral is the new cash. Welcome to the new world.

Godfried De Vidts *is Chairman of the ICMA European Repo and Collateral Council and Committee.*

A new repo world is emerging which is, more than ever before, at the service of the real economy.

Establishing a euro risk-free rate

By David Hiscock

RFR

Considering the topic of transition to new near risk-free rates (RFRs) in the context of the euro, the background is that the most widely used interest rate benchmarks for financial contracts denominated in euro are EONIA, the Euro Overnight Index Average, and EURIBOR, the Euro Interbank Offered Rate, both of which are administered by EMMI, the European Money Markets Institute. These benchmarks are based on the unsecured interbank market and, in the context of the EU's Benchmarks Regulation, have both been designated by the European Commission as "critical benchmarks" – which makes them subject to certain specific provisions, notably regarding the modalities for their supervision.

More than 20 trillion euros worth of interest rate derivatives and securities are linked to EONIA. However, underlying volumes have fallen substantially from approximately 35 billion euros per day before the financial crisis to 8 billion euros per day in recent years. In addition, EONIA has become increasingly determined by a minority of participants, as the five largest lending banks contribute approximately 80% of the total volume, raising concerns about representativeness.

Most recently in 2018, underlying volumes have averaged just below 5 billion euros per day and have fallen below 1 billion euros on a handful of occasions, owing to local business holidays. These factors reflect prolonged structural change in the underlying interbank lending market. In light of these developments, EMMI has made public its conclusion that, under current market conditions, EONIA's compliance with the EU Benchmarks Regulation by January 2020 "cannot be warranted".

Meanwhile, EURIBOR is presently a quote-based interest rate benchmark available for eight tenors; and is currently undergoing reforms, led by EMMI. Its 2016-17 "pre-live verification" exercise led to the conclusion that basing EURIBOR on a fully transactions-based methodology was not possible, given the current low level of transactions in the euro money markets. This exercise also more specifically confirmed the low levels of activity in the underlying markets which the two week, two month and nine month tenors intend to represent. In light of this, coupled with subsequent feedback that reliance on contracts and instruments pricing these tenors is also less significant, EMMI has announced the cessation of these three tenors, as of Monday 3 December 2018.

Considering the other five tenors – one week, as well as one, three, six and twelve months – as the current, quote-based methodology is not compliant with the EU Benchmarks Regulation, EMMI is working on a hybrid methodology, combining transactions, market data and, should reliance on transactions be deemed impossible, well-framed expert judgment, with the aim of EURIBOR achieving compliance with the Regulation. Following a public consultation, which closed on 15 May, EMMI is currently undertaking in-depth testing of the proposed methodology under live conditions – with further consultation on some of the details anticipated ahead of year-end 2018.

In light of international work on transition to near risk-free rates and aware of the specific challenges associated with these critical euro benchmarks, in September 2017 the European Central Bank, the Belgian Financial Services and Markets Authority, the European Securities and Markets Authority and the European Commission collectively announced the launch of the Working Group on Euro Risk-Free Rates. This working group was tasked with the identification and adoption of a "risk-free overnight rate" able to serve as a basis for an alternative to current benchmarks used in a variety of financial instruments and contracts in the euro area.

The working group is chaired by a private sector representative and the ECB provides the secretariat. The working group is comprised of 21 credit institutions as voting members and five institutions as non-voting members –

> **The working group announced its recommendation that ESTER be used as the risk-free rate for the euro area, and as the replacement for EONIA.**

namely, EMMI; the European Fund and Asset Management Association (EFAMA); the Loan Market Association (LMA); the International Swaps and Derivatives Association (ISDA); and ICMA. The European Investment Bank also participates in the group, as an invitee, and the four public institutions that were involved in the launch of the working group have observer status.

At its inaugural meeting, held in Frankfurt on 26 February, the working group decided to set up three workstreams to flesh out more specific proposals:

- workstream 1 – identify and recommend an alternative RFR, or RFRs;
- workstream 2 – identify and recommend term structure on RFR; and
- workstream 3 – contractual robustness for legacy and new contracts.

Subsequent working group meetings have been held, on 20 April, 17 May, 11 July and 13 September, and another is scheduled for 18 October. To ensure transparency throughout the entire process, the working group:

- is regularly reporting on its meetings, with information made publicly available on the ECB's website; and
- is committed to consult market participants and end-users, as well as to gather feedback from public authorities.

Calls and meetings of the workstreams complement the work of the overall group, which is kept updated on progress being made by each workstream, and recently it was identified that a workstream 4 needed to be created, specifically to focus on EONIA transition to the euro RFR.

Concerning the determination of the euro RFR, the working group developed key selection criteria for a robust alternative rate and assessed a number of candidate rates against these criteria. After careful consideration, the working group concluded that three rates had characteristics that could potentially qualify them to become the euro RFR. The working group also agreed that a market-wide consultation to assess the potential advantages and disadvantages of these rates could provide valuable input into the decision-making process.

Accordingly, on 21 June, the working group published a call for market participants and all other interested parties to comment on its assessment of candidate euro RFRs against key selection criteria; and making clear that the new euro RFR will replace EONIA, which will no longer meet the criteria of the EU Benchmarks Regulation as of 2020 – when the current transition period ends. The three candidates proposed for the euro RFR in this public consultation were:

1. the euro short-term rate (ESTER), a new wholesale unsecured overnight bank borrowing rate, which the ECB has committed to produce on a daily basis by October 2019, based entirely on money markets' statistical data reported to it daily by banks;
2. GC Pooling Deferred, a one-day secured, centrally cleared, general collateral repo rate, which is produced by STOXX, a wholly owned subsidiary of the Deutsche Börse Group; and
3. RepoFunds Rate, a one-day secured, centrally cleared, combined general and specific collateral repo rate, which is produced by NEX Data Services Limited, a wholly owned subsidiary of NEX Group plc.

This public consultation closed on 13 July and a summary of the responses was published, on 13 August. The consultation drew considerable interest from the financial sector, with 66 market participants – 41 of which are from the banking sector – submitting responses or comments. It is considered that this response sample ensures suitable geographic coverage and adequately reflects relevant sectoral views. The main messages from the financial sector may be summarised as follows:

1. Respondents broadly agreed with the working group's analysis of candidates for the euro RFR in terms of the analytical approach, selection criteria, results and conclusions – while highlighting some additional aspects that could have merited assessment.
2. Respondents generally concurred with the working group's conclusion that ESTER is the most reliable and robust – and consequently the most appropriate – unsecured candidate rate; and also, largely shared the conclusion that the GC Pooling Deferred Funding Rate and the RepoFunds Rate

are the most reliable and robust secured candidate rates – although some qualified their backing or expressed a preference for one of these two.

3. Regarding the question of which of these final three candidate rates would be the most appropriate future euro RFR, 58 respondents – or 88% of responses – supported ESTER, predominantly on the grounds of its unsecured nature, compilation methodology and low volatility, as well as the fact that the ECB – an EU institution – is the administrator. However, many respondents urged that both the start of the regular production and the daily publication time of ESTER be brought forward.

Based on further discussion and the feedback received, on 13 September, the working group announced its recommendation that ESTER be used as the risk-free rate for the euro area; and as the replacement for EONIA. This recommendation is a key step in moving to alternative euro benchmarks, as the usage of non-compliant benchmarks will be restricted from 1 January 2020.

On 9 November, at the ECB in Frankfurt, the working group will be hosting a roundtable, which will be webcast on the ECB website shortly after the event, in order to: explain to market participants the reasons behind the recommendation of ESTER as the preferred euro risk-free rate; make the features of ESTER better known to future users; and discuss the next steps in the transition.

Also, looking ahead, workstream 4 will be analysing available paths for the transition of EONIA to the euro RFR and will provide its recommendations on this to the working group. This work will be closely coordinated with work already being progressed under the other workstreams.

Concretely, the working group has tasked workstream 2 with the following deliverables:

1. explore the possible fallback arrangements for EURIBOR; and
2. determine and recommend a term structure methodology on RFR, as a fallback in EURIBOR linked contracts.

And, the working group has tasked workstream 3 with the following deliverables:

1. analyse the legal risks and impact of:
    - embedding fallback provisions referencing newly defined RFRs; or
    - the replacement of references to EONIA and EURIBOR with references to newly defined RFRs (and, where appropriate, applicable term and/or credit spreads) in legacy contracts;
2. define solutions to embed fallbacks, and replacements where appropriate, for EONIA and EURIBOR; and
3. suggest measures to enhance the legal soundness of references to newly defined RFRs (and, where appropriate, applicable term and/or credit spreads) in new contracts, taking into account consumer protection interests.

Acting on behalf of its members, ICMA is actively engaged in this important ongoing work.

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New sterling bonds referencing LIBOR

By Charlotte Bellamy

RFR

In July, the Working Group on Sterling Risk-Free Reference Rates (for which Paul Richards, Head of Market Practice and Regulatory Policy at ICMA, chairs a sub-group focusing on benchmark transition issues in bond markets) published a paper on new issuance of sterling bonds referencing LIBOR. The considerations in the paper are likely to have relevance for issuance of international floating rate bonds in all currencies for which LIBOR is quoted.

The paper is addressed to bond market participants who are continuing to issue, offer or purchase new sterling bonds referencing LIBOR, in particular where those bonds mature beyond the end of 2021 when LIBOR may cease to be available.

While the clear direction of travel is a move away from LIBOR, the paper acknowledges that market participants need uninterrupted access to financing and risk management products, and that, in the light of this, LIBOR usage might continue in the near term.

With that in mind, the paper is intended to raise market awareness of the potential risks of continuing to reference LIBOR in new bond issues, and ways that market participants might seek to mitigate those risks. The paper does not deal with the impact of LIBOR discontinuation on outstanding, legacy bonds.

The paper identifies seven examples of potential risks that market participants could face when they are involved in a new issue of bonds referencing LIBOR; and five suggested steps for mitigating those risks. It is worth noting that the risks identified in the paper are just examples of the potential risks to market participants, and there may be others (for example in relation to accounting, tax and/or credit ratings).

The first risk identified in the paper is that floating rate bonds referencing LIBOR may become fixed if LIBOR is discontinued. The paper explains how typical provisions in bond terms and conditions relating to interest calculation (known as "fallback" provisions) work. If LIBOR were to be permanently discontinued, traditional fallback provisions are likely to mean that floating rate bonds would become fixed rate bonds, because it is likely that the last rate that could be calculated would be applied for the remainder of the life of the bond. This may be commercially unacceptable for issuers and investors.

The second risk is that a liability management exercise may be required if LIBOR is discontinued. This is because the terms and conditions of floating rate bonds may need to be amended if LIBOR is discontinued and neither issuers nor investors wish the bonds to switch to a fixed rate of interest. For the majority of bonds, amendments to terms and conditions will require bondholder consent by way of bondholder meetings. The paper explains that this is neither quick nor easy.

The third risk is the possibility that hedging arrangements could be impacted. This is because the fallback provisions under swaps and bonds could operate differently or be triggered at different times in the event of LIBOR discontinuation. This may result in mismatches on payments due under the bond and any associated swaps, which could impact both issuers and investors.

The fourth risk is that market participants may be subject to increased litigation risk, for example where there is a transfer of economic value in the event that LIBOR is discontinued.

The fifth risk identified in the paper is that bank capital instruments referencing LIBOR may not operate as intended after the end of 2021, when LIBOR may not be available. This is something that regulated bank issuers will wish to keep in mind.

The sixth risk flagged in the paper relates to LIBOR continuing to be published but being based on submissions from fewer panel banks or a different methodology. In those circumstances, the provisions of traditional floating rate bonds would be likely to continue to use LIBOR, even if it were an unrepresentative rate. Again, this may not be agreeable to issuers or investors.

The seventh risk relates to regulatory obligations. The paper notes that banks acting as manufacturers of floating rate bonds will need to consider their product governance obligations. Where relevant, firms will also need to ensure compliance with UK FCA Principles.

Having identified those potential risks, the paper goes on to discuss ways of mitigating those risks.

As an initial comment, the Sterling Risk Free Rate Working Group believes that the most effective way of avoiding risks related to LIBOR discontinuation is to transition to alternative benchmarks, in particular SONIA in the case of sterling transactions.

This view was also expressed by Andrew Bailey, Chief Executive of the FCA, in a speech on 12 July, in which he stated:

"The best option is actively to transition to alternative benchmarks. The most effective way to avoid LIBOR-related risk is not to write LIBOR-referencing business."

This approach has been adopted by some issuers already, who have referenced SONIA (or SOFR, in the case of US dollar-denominated transactions) in new bond issues over the course of the summer and autumn.

Nevertheless, the paper also discusses other possible ways of mitigating risks related to LIBOR discontinuation where LIBOR continues to be referenced in new sterling bonds issued in the interim period before market conventions and infrastructure for referencing alternatives to LIBOR are fully developed.

In that context, the paper highlights four areas that market participants might wish to consider:

First, market participants should make themselves fully aware of the implications of the uncertainties surrounding LIBOR. For sell-side market participants, it is appropriate to include detailed risk factors in prospectuses for new LIBOR bonds. Even though a prospectus can only speak as of its date, and so cannot predict future developments, prospectus disclosure is still a key way of ensuring that the risks associated with LIBOR discontinuation are clearly communicated to investors. Andrew Bailey also acknowledged in his 12 July speech that the FCA is already seeing the necessary changes in prospectuses.

The paper also notes that it may also be prudent for sell-side market participants to examine how products are labelled and marketed.

Second, issuers could include an alternative fallback in the terms of new bonds. This alternative fallback could attempt to provide for a switch to an alternative rate in certain defined circumstances. If such a provision is included in bond terms and conditions on issue, then the application of the alternative rate in accordance with those terms would not require a bondholder meeting and bondholder consent later on. This type of provision is already being included in some bond terms and conditions. However, the efficacy of these provisions depends upon it being possible to select and apply an alternative rate and calculate any necessary adjustment spread at the relevant time in accordance with the relevant provisions. Given the current uncertainty surrounding each of these aspects, alternative fallback provisions may not operate as expected in the event of LIBOR discontinuation.

Another option might be for issuers to include provisions in bond terms and conditions which facilitate easier amendments to the interest rate provisions. These provisions would still require some action by the parties in order to effect a switch of reference rate at the relevant time, but the process would be easier. This approach has been used in the securitisation market in particular.

Finally, the paper flags some conduct-related steps that regulated entities who are offering LIBOR products might wish to consider. For example, regulated entities may wish to take the uncertainties of LIBOR discontinuation into account when identifying the appropriate target market or investor base for new floating rate issues. Senior managers within UK credit institutions may wish to consider their duty to take reasonable steps to prevent regulatory breaches from occurring, or continuing to occur, in their area of responsibility. Regulated entities might also wish to document the reasons for concluding that the particular floating rate issuance was acceptable for regulatory purposes, at the time of issuance.

To sum up, this paper is important for any market participants involved in the new issuance of floating rate bonds referencing LIBOR, regardless of the currency.

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Other recent developments related to the transition to risk-free rates

Set out below is a selection of some of the key recent developments related to the transition to risk-free rates. Please also see the article on euro risk-free rates in this ICMA Quarterly Report.

ISDA IBOR fallback consultation: ISDA published a consultation on certain aspects of fallbacks for derivatives referencing certain inter-bank offered rates (IBORs) in July. The consultation closes on 12 October. This consultation relates to ISDA's work to amend its standard documentation to implement fallbacks for certain IBORs. The fallbacks will apply if the relevant IBOR is permanently discontinued, based on defined triggers. The fallbacks will be to alternative RFRs that have been identified for the relevant IBORs as part of recent global benchmark reform work (eg SONIA in the case of sterling LIBOR). The consultation seeks input on the approach for addressing certain technical issues associated with adjustments that will apply to the RFRs if the fallbacks are triggered. These adjustments are necessary because of the differences between the IBORs and the RFRs. For example, LIBOR is a forward-looking rate quoted for a number of tenors. The alternative RFRs are backward-looking, overnight rates.

Subsequently the Working Group on Sterling Risk-Free Reference Rates published a set of considerations to assist market participants in assessing each of the three proposed methodologies for the credit spread adjustment in the ISDA consultation.

ISDA's consultation will be of interest to bond market participants on at least two levels. First, because bond market participants may have entered into swaps to hedge their positions. Second, because it is possible that the adjustments used in ISDA IBOR fallbacks might also be considered for adaptation and/or use in a bond market context in due course.

ISDA Benchmarks Supplement: ISDA also published its Benchmarks Supplement in September. This Supplement is separate from (and covers a wider range of benchmarks than) ISDA's work on IBOR fallbacks. ISDA states: "While two separate initiatives, the ISDA Benchmarks Supplement complements the IBOR fallback work, as it enables firms to agree interim fallback arrangements should an IBOR cease to exist before the IBOR fallbacks are implemented. The IBOR fallbacks will take precedence for specified IBORs once implemented, but the ISDA Benchmarks Supplement will continue to provide an additional layer of protection with respect to index cessation in the event an IBOR fallback fails. It also enables parties to specify primary fallbacks if a benchmark (including an IBOR) is prohibited from use in a derivatives transaction."

FCA/PRA Dear CEO Letter: The FCA and PRA wrote to the CEOs of large UK banks and insurance companies regarding LIBOR transition in September. The purpose of the letter is to seek assurance that firms' senior managers and boards understand the risks associated with this transition and are taking appropriate action now so that firms can transition to alternative rates ahead of end-2021. Among other things, the FCA and PRA request in response to the letter, by Friday 14 December, a board-approved summary of firms' assessment of key risks relating to LIBOR discontinuation and details of planned actions to mitigate those risks.

US ARRC consultation on fallbacks: On 9 July 2018, the US Alternative Reference Rates Committee (ARRC) released guiding principles for the development of fallback language for new financial contracts for cash products to ensure they will continue to be effective in the event that US dollar LIBOR ceases to be produced. Subsequently, the ARRC published consultations on fallback language for floating rate notes and syndicated business loans referencing US dollar LIBOR in September. The deadline for comments is 8 November 2018. Debt capital market participants may also wish to consider if the concepts in this consultation could have application for floating rate notes denominated in other currencies.

Term SONIA consultation: The Working Group on Sterling Risk-Free Reference Rates announced in April 2017 that SONIA is its preferred RFR for use in sterling derivatives and relevant financial contracts. LIBOR is a forward-looking rate quoted for a number of tenors whereas SONIA is an overnight rate. In light of feedback from market participants that suggested that a forward-looking, term rate was important for them, the Working Group on Sterling Risk-Free Reference Rates launched a consultation seeking feedback on practical recommendations aimed at catalysing the development of term SONIA reference rates (ie a forward-looking term rate derived from the RFR), which could play a role in facilitating transition to SONIA and complement ongoing efforts to encourage the direct use of RFRs. The deadline for the consultation was 30 September. A summary of feedback is expected to be published.

Many of the publications noted above and other relevant information is available on the ICMA webpage on benchmark reform and transition to risk-free rates.

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The Asia-Pacific cross-border corporate bond secondary market

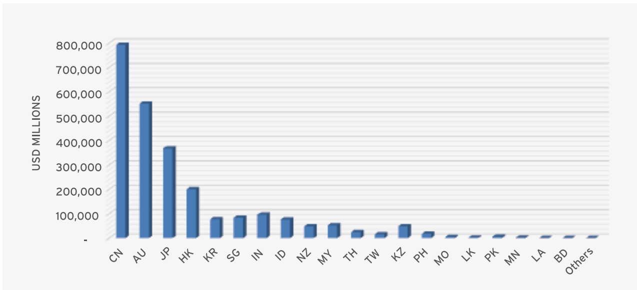
By Andy Hill and Mushtaq Kapasi

In August 2018, ICMA published a report on *The State and Evolution of the Asia-Pacific Cross-Border Corporate Bond Secondary Market*. The report is primarily focused on the APAC cross-border corporate bond markets and largely confined to G3 (US$, EUR, GBP)[1] denominated bonds of non-financial and financial corporate issuers, as defined by having issuer country of risk within the APAC region. However, to the extent that regional local currency (LCY) markets are opening up to international investors and issuers, these are also discussed in the report, in particular the Chinese onshore corporate bond market. In compiling the report, ICMA adopted a similar approach to that of the previous European based studies, combining both qualitative and quantitative research and analysis, utilising available market data[2] as well as extensive interviews with a broad range of market stakeholders, including sell side, buy side, and trading venues.

Market size and growth

The Asia-Pacific G3 cross-border corporate bond market has grown significantly over the past five-to-six years, and currently stands at almost US$2.5 trillion in nominal value, including financial issuers, and just over US$900 billion in terms of non-financial corporates. In the same time, annual corporate issuance has more than trebled to over US$930 billion in 2017. Issue sizes have also become larger, with more marquee issues coming to market, and less reliance on 144A tranches. Much of the increase in issuance has been driven by Chinese onshore financial and non-financial corporates. In terms of demand, China is also a key part of the story, with the offshore offices of Chinese investment firms and securities firms, as well as Chinese private banks, providing most of the appetite for Chinese US$ issuance.

Outstanding APAC G3 corporate bond issuance nominal value (May 2018)



Source: ICMA analysis using Bloomberg data

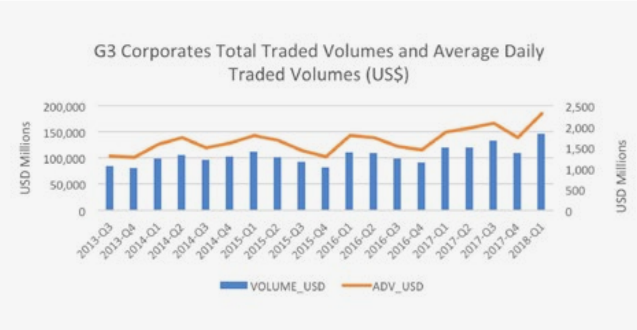
Secondary market liquidity

The interviews paint a mixed picture on secondary market liquidity, which appears to be a relative concept. Some respondents feel that liquidity is generally good, while others posit that the market is traditionally a buy-to-hold market, and so inherently illiquid. However, it would seem that, to the extent that liquidity is healthy, it is skewed heavily to investment grade issuance, as well as to the bid side of the market, while the interviews and data suggest that secondary market activity has lagged the overall growth in market size. In terms of liquidity provision, again China is an important part of the story, with an influx of Chinese broker dealers filling the gap as some international banks scale back their trading activity.

1. Here G3 refers to US$, EUR, and GBP, and not JPY.

2. ICMA would especially like to thank Bloomberg, Bond Connect, DataLend, ISDA/DTCC Trade Information Warehouse, and Trax (a subsidiary of MarketAxess), whose data is used in the report with kind permission.

APAC G3 secondary market quarterly and daily average trading volumes (Trax)



Source: ICMA analysis using Trax data

Repo and credit default swap markets

Both credit repo and corporate single name credit default swap (SN-CDS) markets remain under-developed, which seems to have a direct impact on the ability for dealers to provide liquidity. Respondents feel that improvements in both financing and hedging markets would help secondary market liquidity and boost activity. Short-selling is particularly difficult, not least since many regional investors have a low tolerance for settlement fails.

Regulatory impacts

In terms of regulatory impacts, these are mostly imported from US and European regulation. Basel III has put pressure on the balance sheets and trading books of international banks, as has the Volcker Rule, while MiFID II/R is being "globalized" by a number of European and international investment firms. Perhaps more significantly, regional regulators appear to be watching the impacts of MiFID with a view to introducing their own regulatory initiatives around transparency and best execution.

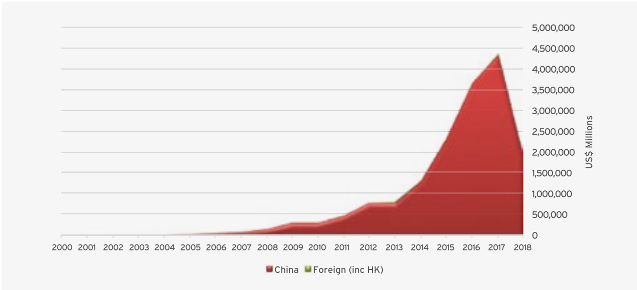
Market electronification

The adoption of e-trading in the market seems to be a two-speed process. While a number of banks and asset managers are trying to move as much business as possible onto trading platforms, there is a cultural reticence among many to move away from OTC trading. Relationships and personal trust are deeply ingrained in Asian markets, and so full electronification of the market could take time. For the most part, platforms are either used to identify axes or to process bilaterally agreed trades. However, for some, the means of trading are irrelevant, and the focus is more on digitalizing the order and trading process with a view to enhanced data capture.

The CNY onshore market

The internationalisation of LCY markets in the APAC region is of key interest to interviewees, in particular the opening up of the CNY domestic corporate bond market. While there remain a number of barriers to entry, in particular concerns around the transparency of issuers' balance sheets, the absence of reliable credit ratings, and uncertainty around Chinese bankruptcy and tax law, the general view is that international inflows into the CNY bond markets are set to accelerate.[3] The inclusion of China in international bond indices[4] will only help to expedite these flows.

CNY corporate bond issuance



Source: ICMA analysis using Bloomberg data

Future outlook

Looking forward, many believe that China will remain the most important part of the story, in terms of US$ issuance, investment, and intermediation, as well as the ongoing internalization of its onshore CNY market. Other LCY markets are also expected to become a more prominent part of the cross-border corporate bond market. There are broad concerns of a potential marked correction in the near future, with participants citing unsustainable credit valuations, excess leverage, and the turning of the rate and credit cycle. However, the longer-term outlook for the APAC cross-border corporate bond markets would seem to be mostly positive, with plenty of opportunities for investors, intermediaries, and issuers.

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3. The report also discusses the development and growth of the Bond Connect programme.

4. In March 2018, the Bloomberg Barclays Global Aggregate Index announced plans to include Chinese government and policy bank bonds, starting from April 2019.

Covered bonds legislation: harmonisation of a trusted asset class in Europe

By Patrik Karlsson

On 12 March 2018, the European Commission launched its long-awaited legislative proposal on covered bonds, in the form of a Directive on covered bonds and a Regulation on CRR exposures to covered bonds. The proposed Directive builds on detailed reports in 2014 and 2016 by the European Banking Authority (EBA).

The Directive specifies the core elements of covered bonds and provides a common definition as a consistent and sufficiently detailed point of reference for prudential regulation purposes, applicable across financial sectors. It will establish the structural features of the instrument, a covered bond specific public supervision, rules allowing the use of the "European Covered Bonds" label and competent authorities' publication obligations in the field of covered bonds.

The regulation mainly deals with amending Article 129 of the CRR. The amendments add requirements on minimum over-collateralisation (OC) and substitution assets.

ICMA's Covered Bond Investor Council (CBIC) has followed the progress of the European Commission's deliberations with interest and has updated readers of the ICMA Quarterly Report through periodic articles in the asset management section. As investors we have been actively involved in the policy debate on covered bonds. We have worked with the issuers to deliver the Harmonised Transparency Template (HTT) which has successfully increased transparency of covered bonds for investors.

CBIC welcomes the development of a legislative framework for covered bonds as harmonisation will not only consolidate and codify high standards in Europe but could act as a spur for more non-EU countries to issue covered bond laws.

The CBIC published its position in early May 2018, focusing mostly on the Directive. The CBIC welcomed the European Commission's legislation on covered bonds. Although CBIC may have expressed some concern in the past regarding the need for this legislation, the extensive preparatory work by the EBA and the Commission (consultation, impact assessment) laid the ground for a sensible proposal that should achieve the objectives sought.

Investors were pleased that in many of the areas that national traditions have developed a robust national covered bond framework can exist within this European framework. This flexibility should minimise disruption to well-functioning national covered bond frameworks that are relied on by issuers and investors.

However, this flexibility is in some areas of the text taken too far and risks lowering standards. The CBIC position paper covers concerns investors have in the following areas:

- lack of clarity on assets in the cover pool;
- lack of recognition of existing transparency requirements in the HTT;
- slow pace for recognising third country regimes as equivalent;
- lack of an explicit insolvency trigger in extendable maturity structures;
- lack of clarity on eligible assets for cover pool liquidity buffers;
- concerns about country ratings in group covered bonds;
- lack of clarity about cover pool monitors; and
- overly complicated OC calculation methods.

In August the European Parliament's *rapporteur*, Bernd Lucke MEP, issued his first reports on the Directive and Regulation with suggested amendments to the Commission's proposal. Among his main amendments, Bernd Lucke proposed to create a two-tier covered bond market.

This would be achieved by dividing covered bonds into UCITS and CRR Article 129 compliant "premium" covered bonds

Harmonisation will not only consolidate and codify high standards in Europe but could act as a spur for more non-EU countries to issue covered bond laws.

and only UCITS compliant "ordinary" covered bonds. For the "premium" covered bonds in Article 6, eligible cover assets are restricted to only those mentioned in CRR Article 129(1)(a)-(g) and does not include "other high quality assets" as the Commission had originally proposed. The restrictions on eligible cover assets for "ordinary" Article 6a covered bonds are that there should be a public register recording ownership and collateral rights, transparency of collateral value, risk mitigation and diversification in cover pools, which would seem to exclude SME exposures.

Another significant change to the Commission's proposals comes in the form of capital penalties for extendable maturities. The report adds a definition and treatment for extendable maturity covered bonds. The report makes the case that extended maturities protect the value of the cover pool by avoiding fire sales, so maturity extensions of one year or less should not be penalised (because if asset prices have not recovered after one year they might never recover). But maturity extensions beyond one year should be penalised on the basis that the risk is shifting from the issuer to the investor. The risk penalty is applied on a sliding scale (5% for three years, 10% for five years, 15% for ten years, 20% for more than ten years).

While recognising that the *rapporteur* is trying to safeguard the high quality of traditional covered bonds, CBIC opposes the concept to create an "ordinary" and "premium" covered bond market in this harmonisation Directive. CBIC members would rather only have one (high quality) covered bond product and label. Other products using the same technique should not carry the covered bond name. It would also be better to have more time to prepare this separate debate, eg through the discussion on European Secured Notes (ESNs) which is going on in parallel to the Covered Bond Directive by the European Commission and the European Banking Authority (EBA).

The potential "de-harmonisation" of covered bonds through the proposal to create ordinary and premium covered bonds is a threat to the covered bond market and might deter investors from re-entering the covered bond market after the ECB's Third Covered Bond Purchase Programme ends.

Furthermore, it remains essential that the original proposal's concept of "other high quality assets" must be more carefully defined to stop the potential watering down of the covered bond label as it currently exists and is used. CBIC remains convinced that the EBA should be given an option to define other high quality assets.

Regarding the penalties for extendable maturities, CBIC believes that there is insufficient data currently on the long-term effect of very long maturity extensions. While CBIC agrees that there may be a benefit to short extensions in case of insolvency to avoid disorderly fire sales of cover pool assets, endless extensions could leave investors exposed to residual risk over a long period of time that could be unwelcome. However, significant capital penalties could destabilise the current conditional pass-through (CPT) market, so perhaps milder penalties or increased disclosure of CPT pools (monthly instead of quarterly) could be other potential solutions.

The debate in the European Parliament will intensify as other MEPs tabled amendments on 26 September to the Directive and Regulation. Compromise positions will now be negotiated between the political groups. The Council, for its part is also negotiating a compromise position on the Commission's proposal and is expected to publish a public draft in October. Both institutions would need to start trilogue negotiations as soon as possible to facilitate an agreement before the end of this parliamentary period in March 2019.

CBIC will continue to contribute to the debate on the appropriate level of harmonisation of the covered bond framework in Europe as deliberations take place in the coming months. This legislation presents an opportunity to consolidate and codify the current practices on covered bonds and ensure the continued success of this important funding tool for European banks and popular asset for European investors.

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Summary of practical initiatives by ICMA

The practical initiatives on which ICMA has been engaged over the past quarter, with – and on behalf of – members, include the following:

Brexit

1 *Brexit cliff-edge risks:* Following publication of ICMA's open letter to senior political leaders in the EU27 and the UK on Brexit cliff-edge risks international capital markets on 22 June, the Vice-President of the European Commission, Valdis Dombrovskis, replied on 19 July, and the UK City Minister, John Glen, replied on 6 August. Taking account of their responses and other recent developments, ICMA has published a new paper on *Brexit: Cliff-Edge Risks in International Capital Markets* as the Quarterly Assessment in this edition of the ICMA Quarterly Report.

Transition to risk-free rates

2 *Transition to risk-free rates:* ICMA has continued to work on the transition from LIBOR and other IBORs to near risk-free rates. ICMA is participating in the Sterling Risk-Free Rates Working Group, including chairing the Bond Market Sub-Group, and also participating in the Euro Risk-Free Rates Working Group and the National Working Group on Swiss Franc Reference Rates. There are two feature articles on the transition to risk-free rates in this edition of the ICMA Quarterly Report.

Primary markets

3 *Public sector issuers:* The Public Sector Issuer Forum (PSIF) is meeting on 11 October in the margins of the IMF and World Bank AGM in Bali to discuss the implications of Brexit for international capital markets and progress in the transition from LIBOR and other IBORs to near risk-free rates.

4 *ICMA Primary Market Handbook:* Various updates to the ICMA Primary Market Handbook were published in September 2018. Further details are available in the Primary Market section of this Quarterly Report.

5 *FICC Markets Standards Board:* ICMA responded to the FICC Markets Standards Board on its proposed statement of good practice on information and confidentiality for FICC markets on 31 August.

6 *PRIIPs Regulation:* ICMA responded to the UK FCA's call for input on initial experience with the new requirements in the PRIIPs Regulation by the deadline of 28 September.

7 *Prospectus Regulation:* ICMA responded to the ESMA consultation relating to guidelines on risk factors under the EU Prospectus Regulation by the deadline of 5 October.

8 *EU Benchmark Regulation:* ICMA has published on its website suggested language for EU Benchmark Regulation Article 29(2).

9 *ICMA Primary Market Forum:* The ICMA Primary Market Forum, which is now in its 12th year, and involves issuers, syndicate banks, investors and law firms, is due to take place in London on 8 November, and will discuss market trends and practices, regulatory developments and the overall outlook for the primary debt capital markets.

Secondary markets

10 *ICMA SMR&R:* ICMA is consulting members on the impact of MiFID II/R and other proposed new EU regulations on the ICMA Secondary Market Rules & Recommendations (SMR&R), and has established a dedicated working group to review the ICMA SMR&R.

11 *Electronic Trading Council:* The ICMA Electronic Trading Council (ETC), a technical working group under the umbrella of the ICMA Secondary Market Practices Committee, is focusing on electronic trading and the role of technology in the evolving structure of fixed income secondary markets.

12 *CSDR settlement discipline:* Following the publication of a discussion paper on *How to Survive in a Mandatory Buy-in World,* ICMA has published an information brochure on CSD Regulation mandatory buy-ins, outlining the scope and regulatory requirements. The CSDR buy-in provisions will come into force in September 2020 and will also apply to non-EU/EEA domiciled trading entities. The brochure is part of ICMA's ongoing work to ensure industry awareness and preparedness in the international cross-border fixed income markets.

13 *MiFID II/R trading suspensions:* ICMA has published a position paper on MiFID II/R trading suspensions from the perspective of fixed income markets. The paper highlights scenarios where a blanket suspension for trading in debt instruments or related derivatives could be damaging to investors' interests and the orderly functioning of the market; and recommends that national competent authorities consider these risks, and possibly also consult market stakeholders, before imposing removals or suspensions of trading under Articles 32 and 52 of the Regulation.

14 *MiFID II/R regional workshops:* Following a series of ICMA workshops in the autumn of 2017 on the implications of MiFID II/R for fixed income trading, further workshops are planned before the end of 2018.

15 *Asian corporate bond liquidity study:* ICMA has published a report, written by Andy Hill and Mushtaq Kapasi, on the state and evolution of the Asian corporate bond markets, as an extension of its work on the European markets.

16 *Brexit and secondary bond markets:* Led by Andy Hill, ICMA is planning to publish a paper outlining member concerns with respect to Brexit and secondary European bond and repo markets. The paper will be based on interviews with members, including sell-side, buy-side and trading venues, both based in the UK and the EU27.

17 *Electronic trading platform (ETP) mapping directory:* In light of the evolving market structure resulting from MiFID II/R, ICMA has reviewed and updated the ETP mapping directory, which includes new types of trading venues such as organised trading facilities, but also information networks and order management systems.

Repo and collateral markets

18 *SFTR implementation:* ICMA is continuing to help members to implement the EU Securities Financing Transactions Regulation (SFTR), through the ICMA European Repo and Collateral Council (ERCC) SFTR Task Force. The SFTR will be one of the main issues on the agenda at the ERCC autumn meeting in London on 17 October. The introduction of extensive reporting requirements through the SFTR is one of the major challenges that the industry is currently facing.

19 *ECB AMI-SeCo:* The ERCC is represented on the ECB's Advisory Group on Market Infrastructure for Securities and Collateral (AMI-SeCo) and is playing an active role on its Collateral Management Harmonisation Task Force and the related workstreams.

20 *Technology:* The ERCC is following closely how technology is shaping repo and collateral markets and the resulting need for standardisation.

21 *Intraday liquidity:* The ERCC is analysing the important challenges around intraday liquidity management for the industry and assessing the need for further alignment and market practice. The ERCC Ops Group held three workshops on this topic over the summer and a larger cross-industry workshop on intraday liquidity management and shaping was held on 12 September in London.

22 *Mandatory buy-ins:* On 3 October, ICMA published a discussion paper on CSDR mandatory buy-ins and securities financing transactions.

Green, social and sustainable bond markets

23 *European Commission Technical Expert Group on Sustainable Finance:* Nicholas Pfaff has been appointed to represent ICMA on the European Commission Technical Expert Group (TEG) on Sustainable Finance, with the support of the GBP Executive Committee. The inaugural meeting of the TEG was held in Brussels on 4 and 5 July. ICMA is especially focused on monitoring and providing input into a possible future European Green Bond Standard.

24 *France's Green Evaluation Council:* ICMA has been nominated as an observer on the Evaluation Council of France's green sovereign bond and is represented by Nicholas Pfaff. The Evaluation Council will define the specifications and schedule for evaluation reports on the environmental impact of France's green sovereign bond. The last physical meeting of the Council was held in Paris on 12 July.

Asset management

25 *Stress testing:* ESMA organised a roundtable for industry experts on investment funds' liquidity stress testing on 19 July. AMIC and EFAMA were invited to take part alongside several experts chosen from AMIC and EFAMA member firms. ESMA is in the process of preparing liquidity stress testing guidelines for UCITS funds and AIFs, in line with the ESRB's recommendation on investment funds, and wanted to hear from industry experts. Sessions at the roundtable included discussion on liability stress testing, asset stress testing and the role of depositaries. AMIC and EFAMA are separately preparing a third joint report on systemic risk in asset management focusing on stress testing.

26 *Primary Market Investor Working Group:* AMIC has established a Primary Market Investor Working Group. The first meeting of the Working Group was held on 13 June in London where the Working Group approved its proposed terms of reference and initial focus. The second meeting was held on 5 September and featured an exchange of views with Euroclear on ISIN availability and discussion of standardised initial deal terms.

27 *Covered bonds legislation:* The ICMA Asset Management and Investors Council (AMIC) Covered Bonds Investor Council (CBIC) secretariat has prepared a summary analysis of *rapporteur* Bernd Lucke MEP's first report on the European Commission's proposed Directive on covered bonds. The analysis covers the main amendments proposed, including the suggested creation of a two tier "premium" and "ordinary" covered bond market in Europe. CBIC is seeking feedback from its members on the report in order form a response in advance of additional amendments being tabled in the European Parliament and the Council.

28 *AMIC Conference:* The next AMIC Conference will be held in London on 22 November, with an agenda for the buy side including benchmark reform and the transition to risk-free rates, mandatory buy-ins, the evolution of the landscape for investment research and securitisation.

FinTech in capital markets

29 *FinTech meetings with regulators:* ICMA held meetings with the FCA (11 June), the AMF (26 June) and BaFin (23 July) to exchange views on Fintech in capital markets.

30 *Regulators' approaches to FinTech and innovation in capital markets:* On 7 September, ICMA published a paper which provides an overview of regulators' approaches to FinTech and innovation in capital markets.

31 *FinTech mapping directory:* ICMA's FinTech mapping directory, which includes more than 100 technology solutions for repo and cash bond operations, is being kept up-to-date on the ICMA website.

32 *New FinTech applications in capital markets:* On 31 August, ICMA published on its FinTech webpage a listing of new FinTech applications in primary, secondary, repo and collateral markets, taken from public sources.

Other meetings with central banks and regulators

33 *ICMA Regulatory Policy Committee:* Adam Farkas, Executive Director of the EBA, joined the ICMA Regulatory Policy Committee meeting in London on 21 September for a discussion on regulatory developments.

34 *Official groups:* ICMA continues to be represented, through Martin Scheck, on the ECB Bond Market Contact Group; through René Karsenti, on the ESMA Securities and Markets Stakeholder Group; through Godfried De Vidts on the ECB Macroprudential Policies and Financial Stability Contact Group, and on the Consultative Working Group to ESMA's Secondary Markets Standing Committee, and through Charlotte Bellamy on the Consultative Working Group on ESMA's Corporate Finance Committee.

35 An updated draft of the *ICMA Regulatory Grid* has been posted on a password-protected webpage on the ICMA website.

 

Primary Markets

by Ruari Ewing and Charlotte Bellamy

Prospectus Regulation

The EU Prospectus Regulation is due to apply from 21 July 2019 and work is under way on developing Level 2 and Level 3 measures. There have been two significant developments for debt capital markets participants recently.

- First, ESMA published its *Final Report on Draft RTS under the new Prospectus Regulation*, covering key financial information for the prospectus summary, data and machine readability of prospectuses, advertisements, prospectus supplements and prospectus publication in July.
- Second, ESMA published a *Consultation Paper on Guidelines on Risk Factors*, also in July.

ESMA Final Report on Draft RTS under the new Prospectus Regulation

ESMA was mandated to prepare draft regulatory technical standards in certain specific areas of the Prospectus Regulation, namely key financial information for the prospectus summary, data and machine readability of prospectuses, advertisements, prospectus supplements and prospectus publication.

As reported in the 2018 Q2 edition of this Quarterly Report, ICMA responded to ESMA's consultation paper on the proposed draft RTS in March 2018, broadly supporting the RTS in areas where ESMA had carried across existing certain Prospectus Directive Level 2 provisions and raising certain queries on other areas.

Overall, the final draft RTS is improved from the original proposal in some areas, although other areas remain as originally proposed and so may require some thought in terms of their practical application.

An area that has been improved for debt capital market participants is the requirements on key financial information for the prospectus summary. One of the key concerns in this area was the relatively prescriptive approach that had been proposed, together with a cap on the number of additional line items or APMs that could be included in the summary. ICMA members urged ESMA to remove this cap; and were pleased to see that ESMA understood the concerns of debt capital markets participants and removed the cap in the final draft RTS.

Another key area of concern for ICMA members related to the advertisements provisions, where the expanded definition of "advertisement" at Level 1 (now capturing "communications" rather than "announcements") gave rise to some questions as to how the proposed provisions would work in practice for underwriters. This area of the RTS remains relatively unchanged. For example, in many cases the requirements still relate to both oral and written advertisements. This may be an area of focus for ICMA members in advance of the implementation date in July 2019, as they consider how to implement the new regime in practice across a broader range of "advertisements".

The original proposals for RTS relating to prospectus publication and supplements were relatively uncontroversial and there have been very few changes to the final draft RTS. In relation to supplements, ESMA has helpfully provided some clarification in relation to withdrawal rights, which has long been an area of uncertainty under the current PD and, given the drafting of the Prospectus Regulation, could have been a continuing area of uncertainty under the new regime. ESMA states that it believes that withdrawal rights "do not apply to prospectuses for the admission to trading of wholesale non-equity securities as these do not fall within Article 23(2) of the Prospectus Regulation, under which withdrawal rights relate to offers of securities to the public. This in ESMA's view does not encompass exempt offers of wholesale securities being admitted to trading." This is a welcome clarification.

In relation to data and machine readability, ESMA had suggested that issuers may be required to submit significant amounts of data to NCAs, if required by the relevant NCA. These proposals have been carried through to the final draft RTS largely unchanged. Depending on the approach that individual NCAs take, this could represent a significant additional regulatory reporting burden for issuers.

The final area of the RTS relates to a notification portal. ESMA did not consult on this area of the RTS. The notification portal is a portal through which NCAs will submit Prospectus Regulation-related documents to other NCAs for the purposes of passporting. ESMA states that issuers and other stakeholders will have no direct interaction with the portal.

The draft RTS were delivered to the European Commission in July. The Commission must decide whether to endorse the RTS within three months of receiving it (ie by mid-October 2018). If the Commission decides to adopt the RTS without amendment, the European Parliament and the Council will then have a one month "non-objection period" within which to consider the RTS. This period can be extended by one month. If the Parliament and the Council do not object to the RTS within the relevant non-objection period, or both the Parliament and the Council tell the Commission before the end of the period that they do not intend to object to the RTS, then the RTS will be published in the *Official Journal* and will enter into force on the date specified in the RTS. This means that if the Commission adopts the draft RTS with no amendments and neither the European Parliament nor the Council object, the RTS could be published in the *Official Journal* before the end of this year.

ESMA Consultation Paper on Guidelines on Risk Factors

For ICMA members, one of the most significant changes to the current prospectus regime is the introduction of new, specific provisions relating to risk factors under the Prospectus Regulation.

The background to this change was a concern among authorities that risk factor sections in prospectuses could be too lengthy and general in nature, or contain language which negated the risk. This was a finding of the 2016 *ESMA Peer Review on the Prospectus Approval Process*. In the light of this, new provisions were introduced to the Prospectus Regulation regime at Level 1, which (broadly) require risk factors to be limited to risks that are specific and material and presented in a limited number of categories depending on their nature, with the most material risk factors mentioned first in each category.

ESMA was mandated to develop guidelines to assist competent authorities in their review of the specificity and materiality of risk factors and the presentation of risk factors across categories depending on their nature. Following this mandate, ESMA consulted market participants on proposed draft guidelines on risk factors under the Prospectus Regulation. ICMA responded to that consultation ahead of the 5 October deadline.

For ICMA members, one of the most significant changes to the current prospectus regime is the introduction of new, specific provisions relating to risk factors.

The draft guidelines are addressed to national competent authorities, but ESMA expects that persons responsible for the prospectus will take the draft guidelines into account before submitting a draft prospectus for approval.

ESMA has proposed 12 draft guidelines relating to specificity, materiality, corroboration of specificity and materiality, presentation of risk factors across categories, focused/concise risk factors and risk factors in the summary.

Generally, many of the draft guidelines appear to be flexible and proportionate, and the position set out in the consultation paper is a helpful starting point. The precise impact of the draft guidelines on issuers will depend on the approach taken by NCAs in applying the guidelines. It is hoped that NCAs will make use of the flexibility envisaged in the guidelines (in particular by not viewing the "example" risk factors as templates to which risk factors should be matched). As with all areas of prospectus regulation application, it is important that NCAs consider the intended audience of the prospectus (ie retail or wholesale investors) and calibrate their review accordingly. Issuers will also need to ensure that they are able to make consistent and compliant risk factor disclosure in markets beyond Europe, and it is hoped that NCAs will also bear this in mind.

One specific area of concern with the guidelines might be the focus on the need for quantitative information to illustrate the potential negative impact of a risk factor. Disclosure of quantitative information to illustrate the potential negative impact of risk factors is currently rare in debt securities prospectuses. It is likely to be very difficult to disclose quantitative information on the negative impact of the risk factor in a manner that is not misleading for investors. By way of example, it would be very difficult to quantify and disclose in a non-misleading way the negative impact of any reputational damage an issuer or guarantor might suffer as a result of a particular risk factor. In addition, the draft guidelines seem to indicate that qualitative information can only be provided when quantitative information is not available. This could be problematic for issuers because it may not always be clear whether quantitative information is "available" or not. It could be challenging for issuers to diligence whether quantitative information is available internally or externally for a particular risk factor and, if so, model that information to ensure it can be appropriately disclosed in a non-misleading manner. It is hoped that ESMA may reconsider the emphasis on the need for quantitative information in the final guidelines.

Overall, it is anticipated that risk factor disclosure could be a key area of the Prospectus Regulation that will require some time and thought in the lead-up to next summer as the first Prospectus Regulation-compliant prospectuses are prepared and submitted. This was reflected in comments from both official sector and market participants at IFLR's 9th EU Prospectus and Primary Market Issuance conference on 27 September, which ICMA supported.

Level 2 delegated acts: next steps

ESMA issued its *Final Report on Technical Advice under the Prospectus Regulation* at the end of March 2018, which included technical advice relating to the format and content of the prospectus and scrutiny and approval of the prospectus. The last edition of this ICMA Quarterly Report included an article on page 22-23 on the content of that Final Report.

Following receipt of ESMA's Final Report, it is anticipated that the Commission will publish draft delegated acts on its Better Regulation portal in mid-October, and there will be a four week period during which market participants can submit feedback. The overall deadline for the Commission to adopt the delegated acts is 21 January, which is six months ahead of the date on which the Prospectus Regulation will be fully implemented.

Other prospectus-related matters

ICMA is monitoring developments related to the *European Commission Action Plan on Financing Sustainable Growth* published in March 2018, under which the Commission is intending to specify by Q2 2019 the content of the prospectus for green bond issuances to provide potential investors with additional information.

Overall, we are expecting a busy period ahead for ICMA primary market members as they begin to prepare for the implementation of the Prospectus Regulation on 21 July 2019. For many members, the impact of Brexit will be one part of those considerations. ICMA will aim to support members through this implementation period.

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ICMA Primary Market Handbook: recent updates

On 26 September 2018, ICMA published several updates to the ICMA Primary Market Handbook and communicated this to ICMA members and ICMA Primary Market Handbook subscribers and holders via a circular (ICMA login details are required to access the circular online).

The changes were as follows.

- In Chapter 5 (Bookbuilding and launch) certain terminology used in Recommendation R5.1 was amended to align with the title of the recommendation, "initial price thoughts". In addition, a new item 5.7B flagging certain considerations relating to X accounts (confidentiality, transparency, potential impact on demand disclosure and allocation/pricing recommendations and only issuers having the ability to review and reconcile) was included.
- In Appendix A1 (Agreement Among Managers (Versions 1 and 2), a new section titled *Version 1 – Asia Pacific (ex-Japan) Subscription Agreement Amendments* was added.
- In Appendix A7 (ECP documentation for Investment Grade issuers), a note relating to the MiFID II product governance regime was added.
- Several changes were made to Appendix A8 (Final terms and pricing supplement) namely: (i) language relating to the PRIIPs Regulation was included; (ii) a note relating to the MiFID II product governance regime was added; (iii) placeholders for legal entity identifiers (LEIs) and certain other codes were added; (iv) a note relating to the UK's withdrawal from the European Union and the implementation of the Prospectus Regulation was added; and (v) certain other minor, corrective changes were made.
- Appendix A13 (Selling restrictions and legends (EEA PRIIPS Regulation, EEA Prospectus Directive, UK), previously titled Selling restrictions (UK & EEA Prospectus Directive)) was significantly revised to include language relating to the PRIIPs Regulation, to update the EEA Prospectus Directive selling restrictions and legends and to include a note relating to the

UK's withdrawal from the European Union and the implementation of the Prospectus Regulation.

- Appendix A16 (Sub-€100,000 denomination bonds under the EEA Prospectus Directive and retail cascade legends, previously titled Sub-€100,000 denomination bonds in the EEA and retail cascade legends) was amended to include language relating to the MiFID II product governance regime, to update certain aspects related to the Prospectus Directive, to include a note relating to the UK's withdrawal from the European Union and the implementation of the Prospectus Regulation and to make certain other minor, corrective changes.
- Minor amendments were made to Appendix A17 (Withholding tax) to achieve consistency with prior amendments.

Hard copy updates will be printed and distributed to ICMA members and ICMA Primary Market Handbook "hard copy update service" subscribers in due course.

Further information (including open links to the amended pages) is available on the ICMA Primary Market Handbook amendments/archive webpage.

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FMSB: *Information & Confidentiality* and *Risk Management Transactions*

On 31 August, ICMA responded to the FICC Markets Standards Board (FMSB)'s *Information & Confidentiality for the Fixed Income and Commodities Markets* Transparency Draft Statement of Good Practice (SGP). The response notes generally that much of the proposed SGP seems to replicate common sense or concepts already enshrined in law or regulation (which renders it challenging to identify and assess any aspects that are distinct or intended to be so).

The response also appreciates FMSB's avowed intention that the SGP (i) will not create any presumption or implication that a firm has failed to meet its regulatory or other obligations or that it has been negligent and (ii) does not impose legal or regulatory obligations on FMSB members – though whether this is so in practice is not within FMSB's gift.

The response queries a few other aspects of technical clarity, including in terms of conflating confidential information with non-public information generally (rather than just client or third party non-public information). Information merely being non-public does not necessarily make it confidential information, let alone inside information. Regarding the ability of a market participant to treat public information as "public" being subject to a proviso that that participant has not made the information public, the response notes that bond syndicate desks frequently make previously non-public information public (notably in new issue announcements) and do not themselves treat that information as confidential thereafter.

Also, in terms of traders having to act and behave independently where they are competitors, the response notes that bond syndicate desks, once they have been mandated by their issuer client to work together as a syndicate, act and behave in concert and no longer act as competitors.

Distinctly, the FMSB's *Risk Management Transactions* final Standard on was published on 3 July. This follows ICMA's December 2017 comments on the preceding transparency draft (reported at page 25 of the First Quarter 2018 edition of this Quarterly Report). The final Standard seems to address ICMA's key comment that the draft Standard's Core Principle 9 seemed to prohibit market soundings. The final Standard also seems to address a couple of ICMA's other comments – namely that, in the table listing the three core scenarios, the text (i) use "pricing" rather than "issuance" terminology and (ii) cover both the issuer vs investor angles.

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FCA: *Call for Input on PRIIPs*

On 28 September, ICMA responded to a UK FCA *Call for Input on PRIIPs*.

The ICMA response notes that the product scope of the PRIIPs regime has been confusing in practice. It seems to have been interpreted by some as wider than initially expected, eg to include some vanilla bonds. This needs to be rectified given the potential sanctions for PRIIPs availability to EEA retail investors without a KID and the apparent consequential avoidance of retail investors by many borrowers (see further below). In this respect, the ESAs' suggestion of granular scope clarifications in their 19 July letter are helpful – for example that make-whole features are not "packaging" if the discount rate "mechanism" is known in advance (so including where this involves observation of a specified value at a specified time). To the extent a conceptual, rather than a granular, approach to scope clarification is desired, the response suggests some possible wording.

The response notes that challenges within the KID include the fact that vanilla bonds involve no costs

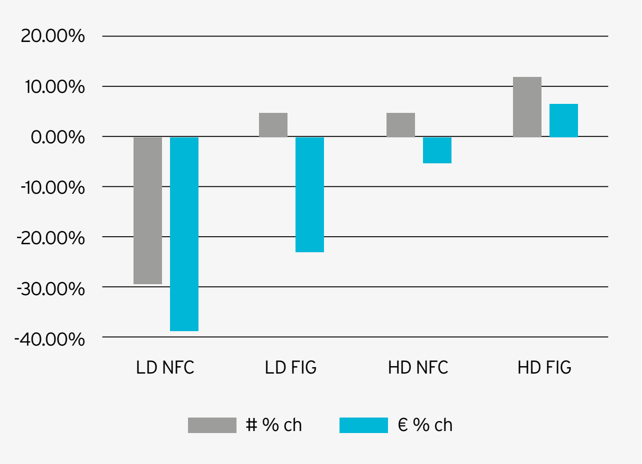
> **The product scope of the PRIIPs regime has been confusing.**

and charges. Also, the synthetic risk indicator involves seemingly arbitrarily weighted components. And lastly, the prescribed performance scenario methodology seems flawed, potentially misleading and needs to be amended.

The response flags that the clear purpose of short-form disclosure should be as a quick first point of information and not as the basis for an informed investment decision. However, the vague position under the PRIIPs regime raises civil liability risk to the point of undermining a borrower's certainty of funding (ie confidence that the borrowed amount can be used for the whole bond term) – certainly for investment grade benchmark-funding borrowers in the international markets. Such borrowers consequently prefer to avoid retail investors unless they are clearly outside the product scope of PRIIPs.

In this respect, ICMA's full first half 2018 findings seem to indicate a 30%-40% decline in low denomination non-financial corporate (LD NFC) issuance, in contrast to high denomination (HD) and financial institution (FIG) issuance – see chart. (Same basis first quarter data had indicated a 60% decline as reported in the Second Quarter 2018 edition of this Quarterly Report.) This recent decline comes on the back of a long-term decline in low-denomination bonds over the past 15 years, originally driven by the EU Prospectus Directive's low denomination regime. (See further separate article in this edition: *Bond denominations 2000-2018*.)

2018H1 vs 2017H1 percentage change in EUR benchmark issuance (by number and value of transactions)



Source: ICMA/Dealogic

The response recalls that there are non-PRIIPs regulatory, as well as non-regulatory, disincentives to retail supply. Also, in attempting to promote direct retail access to investments, one should not disrupt EEA wholesale funding markets that are crucial for the economy. Lastly, the response flags a couple of apparent inaccuracies in the text of the Call for Input.

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Bond denominations 2000-2018

ICMA has reviewed denomination data since 2000 for EUR benchmark bond issues (with an aggregate size of €500 million or more), with its findings combining industrial & utility issuers from the public & private sectors set out in the chart below. These are split between low denominations (LD / up to €10,000), medium denominations (MD / €50,000) and high denominations (HD / €100,000 upwards). Leaving aside 651 excluded tranches (€637.5 billion) with no recognisable denomination, the data relates to a meaningful 12,546 tranches worth €11.6 trillion. (First half 2018 data was doubled to extrapolate roughly some full year 2018 figures.)

The timing of this decline seems to correlate with the EU's Prospectus Directive (PD) regime: the PD (which formalised an alleviated regime for €50,000 or higher denominations) was initially adopted at Level 1 in 2003 and implemented 2005; and the PD's first revision (which increased the alleviated regime's threshold to €100,000) was adopted at Level 1 in 2010 and implemented 2012. However, it is worth noting that the high denomination concept has at least enabled the wholesale markets to continue significant operations in Europe. In any case, it now seems this historic decline is being accentuated by the PRIIPs and MiFID II product governance regimes in further curtailing the availability of low-denomination bonds to retail investors (see further separate article in this edition reporting a 30%-40% decline in the first half of 2018: *FCA Call for Input on PRIIPs*). This does not seem consistent with the EU's CMU policy intent (expressed in the 2015 CMU Action Plan) that "retail investors should also have easy access to a range of suitable and cost-effective investment products".

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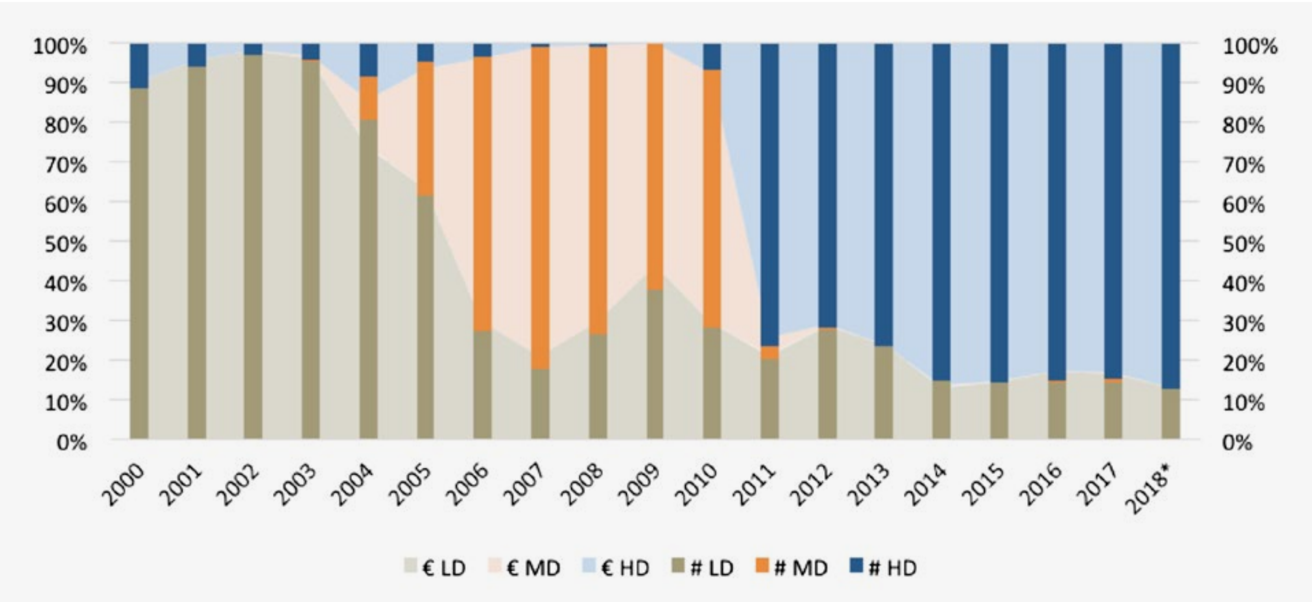
Combined industrial & utility (volume and number)



Source: ICMA/Dealogic

The ICMA FIIF and CIF *By Katie Kelly*

It has been a busy few years for the ICMA Financial Institution Issuer Forum (FIIF) and ICMA Corporate Issuer Forum (CIF), with the markets presenting all kinds of challenges: from the effects of existing regulation, to potentially seismic shifts in future practice.

The bedding-down of regulations such as the Market Abuse Regulation (MAR), MiFID II and the Prospectus Regulation has led to some lengthy discussions at the FIIF and the CIF, assessing practical impact on, among other things, new issues processes, investor relations and availability of research. External speakers (such as KPMG), as well as members of the Asset Management and Investors Council (AMIC) and the Primary Market Practices Committee, have been invited to the FIIF and CIF meetings to engage with the issuers and share their perspectives. In January, representatives of the FCA attended the CIF to discuss the impacts of implementation of MAR and MiFID II and associated challenges, which has led to continued, ongoing dialogue between the regulators and the issuers in both the FIIF and the CIF. Communications such as this ensure that the issuer voice is being represented when considering the necessity for, and the effects of, regulatory interventions and helps a comprehensive, rounded industry view to be formed.

The FIIF and the CIF have been engaging with ICMA on FinTech, automation and market electronification. Members of each forum have attended roundtable discussions, with the aim of helping ICMA members identify and anticipate the impact of technological innovation more broadly on capital markets. These roundtables not only facilitate a better understanding of the existing and potential offerings, but also encourage issuers to get involved, with a view to moulding the future direction of FinTech and ensuring that it works for the good of the whole market. From the point of view of the issuers, common connectivity standards to improve the functioning of primary markets, ease of issuance, and practical end-to-end straight through processing are an important focus, which ICMA will continue to explore.

Related to this, relevant conclusions from the recently-established Primary Market Investor Working Group of the AMIC have also been on the agenda of the FIIF and the CIF, further establishing the links between ICMA members across different constituencies. This includes working to develop efficiencies which should speed up and facilitate the investment decision process, such as agreeing a template of initial terms which should be disclosed when a deal is first announced, and minimising delays in ISIN provisions for new deals.

Markets-wise, corporate issuance remains buoyant. However, market tensions and behaviour are changing: corporate sector purchase programmes are being tapered, which steers demand towards more normalised market forces, and environmental, social and governance (ESG) factors are higher up investors' agendas. Complementary to this shift is the continued upward trajectory in issuance of instruments such as green bonds, social bonds and sustainability bonds, which have joined the mainstream of debt capital markets funding instruments and all of which were explored in some detail at the FIIF and the CIF in 2018.

These developments present opportunities for treasurers to engage a whole new investor base, while continuing to nurture existing relationships. Recent investor presentations to the CIF assuaged potential issuer concerns over suitability of, and access to, the sustainability bond market by highlighting that investors generally apply a more substantive approach in their analysis, which looks beyond the form of the instrument, to the company and its strategy. Added to this is the focus at a regulatory level on making sustainable issuance less problematic for large corporate issuers, all of which should help to encourage, foster and advance scalable, sustainable issuance.

Members of the FIIF and the CIF have been heavily engaged on the work of transitioning away from IBORs towards risk-free rates. It is in all market participants' interests to ensure a smooth transition with minimum market disruption, so it is important that the issuers become part of the solution by helping to influence the outcome and demonstrate leadership. Members of the FIIF and CIF have spent a significant amount of time discussing potential outcomes, including for new issuances of floating rate bonds as well as for legacy issues, and have provided a lot of expertise to allow a market-led solution to emerge. ICMA is very grateful to all those involved for their clear, pragmatic thinking and the technical inputs, all of which is helping to inform the work of the Sterling Risk-Free Rate Bond Market Sub-Group.

Exciting times are ahead, and it is with a sense of anticipation that we approach 2019 – Brexit is imminent, processes are automating, benchmarks are changing, investor priorities are shifting and financial instruments are evolving. But while plenty of preliminary work has been carried out, a lot remains to be done. ICMA is looking forward to supporting these important issuer groups, as they to continue to shape these and other developments in the capital markets.

Membership of the FIIF is high, with more and more members of the FIIF Treasury Counsel Group also now attending the meetings. The CIF attracted two new members in 2018 – Telefónica and Associated British Ports – and engagement at the respective meetings continues to be excellent.

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Asset-Backed Commercial Paper

In February 2018, as reported in this section of Issue no 49 of the ICMA Quarterly Report, ICMA supported AFME in responding to a European Commission consultation on proposals to change some of the details in the EU liquidity coverage ratio (LCR). This industry response particularly called for this refinement of the LCR to include integration into the LCR Delegated Regulation of the new STS criteria for securitisation, including for the LCR treatment of ABCP. Dated 13 July, the Commission has now published its final proposed text for this Delegated Regulation, which shall apply from 18 months after formal publication in the EU's *Official Journal* (which, as this proposal is now subject to scrutiny by the European Council and Parliament, will follow in the coming months).

Regarding the link to the STS Regulation, the sixth paragraph of section 1.2 of the Explanatory Memorandum states that: "The last substantive amendment concerns the integration in the LCR Delegated Regulation of the new criteria for simple, transparent and standardised (STS) securitisations. Specifically, it is proposed to count STS securitisations as Level 2B HQLAs if they fulfil the conditions laid down in Article 13 of the LCR Delegated Regulation. The STS Regulation sets a list of criteria which define STS securitisations. Based on the proposal, most of the criteria laid down in the LCR Delegated Regulation would be replaced by a reference to the STS Regulation. Criteria specific to liquidity (such as the criteria regarding the issue size, the types of underlying exposures or the rating) would be kept."

Related to this, the sixth paragraph in the impact assessment section, at 1.3 in the Explanatory Memorandum, states that: "As regards the alignment with the definition of STS securitisations, the impact is expected to be quite marginal as the total amount of securitisations held as liquid assets is limited due to the cap on Level 2B assets in the liquidity buffer and to diversification requirements." The related elements within the actual proposed text of the Delegated Regulation are recital (4), on page 7 (8 of the pdf), and Article 1(8), on pages 12-14 (13-15 of the pdf).

This is disappointing, however, as there is no adjusted standard for ABCP. Fully supported ABCP provides funding for companies' working capital and thereby supports the real economy. Accordingly, the industry continues to consider that it is sensible to propose an LCR approach that better reflects the characteristics of the European ABCP market, in which investors enjoy dual recourse through fully-supported ABCP programmes that are 100% wrapped by a bank liquidity line.

On 16 July, ESMA issued a first set of technical standards under the EU Securitisation Regulation containing both draft regulatory and implementing standards (RTS/ITS):

(i) Notification templates for STS securitisations: ESMA's draft standards specify the information and format that the originators and sponsors of securitisation products are required to notify to ESMA should a securitisation transaction meet the STS requirements – the STS notification is a necessary step in order to apply for STS preferential capital treatment. The STS notification standardised template distinguishes between non-ABCP securitisation, ABCP transaction and ABCP programme. The STS notification needs to include a confirmation, and a concise or detailed explanation as to why the securitisation transaction satisfies each of the STS criteria – this obligation is proportionate, as some criteria require greater explanation than others. The notification process also includes a cross-referencing system to investment prospectuses, if any, to avoid duplication of disclosure requirements.

(ii) Authorisation of third party assessing STS compliance: the draft standards specify the information to be provided to the competent authorities in the application for the authorisation of a third party assessing the compliance of securitisations with the STS criteria.

These final drafts have been submitted to the European Commission for endorsement, following which there will be a further short period for scrutiny by the European Council and Parliament.

In April 2018, as reported in this section of Issue no 50 of the ICMA Quarterly Report, the EBA launched a public consultation on its draft Guidelines, which will provide a harmonised interpretation of the criteria for securitisation to be eligible as STS – considering both non-ABCP and ABCP STS securitisations. On 19 July AFME duly submitted its comments in response to this EBA consultation and ICMA, noting that ABCP is an important financing tool for the real economy, submitted short letters of support for these AFME responses (on both non-ABCP and ABCP). These AFME responses, which should be read together, include a number of general points, alongside detailed responses to the specific consultation questions.

“It is sensible to propose an LCR approach that better reflects the characteristics of the European ABCP market.

On 31 July, the EBA published two final draft regulatory technical standards (RTS) for securitisation transactions. These have been submitted to the European Commission for adoption, which should happen within three months. The Commission can either adopt these RTS without changes or suggest amendments for the EBA to make. Once the Commission concludes this process and publishes its adopted proposals, the RTS will be subject to scrutiny by the European Parliament and Council, during a period of one or more months, before being published in the EU's *Official Journal* and then entering into force 20 days thereafter. Hence, it remains possible for these RTS to enter into force before the 1 January 2019 start date of the EU's STS regime, but this is far from certain.

1. RTS specifying the requirements for originators, sponsors and original lenders related to risk retention as laid down in the new EU securitisation framework (STS Regulation): These final draft RTS, which will replace the current Commission Delegated Regulation on risk retention, aim to provide clarity on the requirements to ensure that the originators, sponsors or original lenders maintain their 'skin in the game' and retain at least 5% of material net economic interest in each securitisation. In addition, these RTS include various new provisions, in particular relating to when an entity shall be deemed not to have been established or to operate for the sole purpose of securitising exposures, transfers or hedging of the retained interest, circumstances under which the retainer should be changed and adverse selection of assets. However, due to the narrower mandate on risk retention under the STS Regulation, as opposed to the previous mandate, certain provisions from the existing Delegated Regulation were not included in these final draft RTS, in particular those relating to due diligence requirements, policies for credit granting and disclosure of materially relevant data. The new STS Regulation also contains transitional provisions regarding the application of the existing Delegated Regulation to those securitisations whose securities were issued before its application date. Specific textual references to ABCP are made in Articles 3.4(a) and (b); 3.5(a); 5.1(b); and 8.1(a).

2. RTS setting out conditions for securitisation to be deemed homogeneous: Homogeneity is one of the crucial requirements for a securitisation transaction to be assessed as STS and to be eligible for more risk-sensitive risk weights under the new EU securitisation framework. Homogeneity is also a key element for investors when assessing the underlying risks and performing their due diligence. According to the conditions specified in the RTS, homogeneous exposures need to be underwritten according to similar underwriting standards and serviced according to similar servicing procedures. In addition, they need to fall within the same asset category. To facilitate the assessment of homogeneity, the RTS specify a non-exhaustive list of the most common asset categories, reflecting the market practice. Finally, for the majority of these asset categories, the underlying exposures need to be homogeneous with reference to at least one of the homogeneity factors, such as type of obligor, ranking of security rights, jurisdiction, or type of immovable property. The RTS are applicable to both ABCP and non-ABCP securitisations.

On 22 August, ESMA issued a set of final draft RTS/ITS under the EU Securitisation Regulation, which is the regulation for STS securitisations. These RTS, which distinguish between non-ABCP securitisation and ABCP securitisation, specify information to be provided regarding the underlying exposures; investor report information; any inside information on insider dealing and market manipulation relating to the securitisation that is obliged to be made public; and information on significant events affecting the securitisation (annexes 11, 13, 15 and 17 are ABCP specific). The RTS also distinguish between all securitisations and those securitisations that are required to make information available via a securitisation repository. The draft ITS specify the format and templates that are expected to be used by originators, sponsors and SSPEs for making this information available.

ESMA has submitted these draft RTS/ITS to the European Commission for endorsement and the Commission now has three months to adopt or reject ESMA's final draft. Once the Commission has duly accepted a version of these RTS/ITS, they will then be subject to a short period of scrutiny by the European Parliament and Council, ahead of then being published in the EU's Official Journal and entering into force on the twentieth day thereafter. It is hoped that this adoption process can now be completed as soon as possible, thereby affording market participants as much time as possible to understand these requirements and to appropriately adapt their reporting systems.

Circulated on 12 September, AFME's *Second Quarter 2018 Securitisation Data Report* shows that European ABCP issuance was €109.4 billion in the second quarter of 2018. This is an increase of 60.3% versus the prior quarter and an increase of 59.9% versus the same quarter in the prior year. Multi-seller conduits (98.8% of total), particularly from France (64.5% of total) and Ireland (27.8% of total), continue to dominate as the largest issuance category in the ABCP market.

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Secondary Markets

by Andy Hill, Elizabeth Callaghan and Gabriel Callsen

MiFID II/R Trading Suspensions

In August 2018, ICMA published a position paper on MiFID II Trading Suspensions. Articles 32 and 52 and MiFID II[1] establish obligations for national competent authorities (NCAs) and trading venues relating to the suspension and removal of certain financial instruments from trading. Where a multilateral trading facility (MTF), organised trading facility (OTF), or regulated market suspends or removes a financial instrument or a related derivative from trading, as a consequence of its rules, the respective venue is required to make this decision public and notify its NCA.

Depending on the reasons for the suspension or removal, the NCA has to make this decision public, and if so, suspend or remove that instrument, or related derivatives, from trading not only on other regulated markets, MTFs, and OTFs, but also systematic internalisers (SIs) under its jurisdiction. It is further required to communicate this to ESMA and other NCAs. Notified NCAs are then required also to suspend or remove from trading the instrument or derivative on regulated markets, MTFs, OTFs, and SIs under their respective jurisdictions.

The relevant NCAs, however, have the discretion not to apply the suspension or removal where this could cause significant damage to investors' interests or the orderly functioning of the market.

ICMA believes that there are many scenarios where a debt instrument or related derivatives may be suspended or removed from trading on an MTF or OTF, in keeping with the rules of the relevant venue, but where the continued ability to trade the instruments in the over-the-counter (OTC) market will be in the best interest of investors and the orderly functioning of the market. In these cases, the key source of liquidity is likely to come from specialist market makers for the relevant instruments, who may also be SIs. It is therefore important that before NCAs require the suspension or removal of financial instruments or related derivatives, they first consider the implications for OTC trading in these instruments, the rights and interests of investors and other creditors of the issuer, and, as much as possible, consult with relevant investors and liquidity providers in their jurisdiction, who may be active in these instruments, prior to any decision to suspend or remove them from trading.

The Novo Banco case: An example of how a blanket trading suspension could have been highly damaging for investors' interests and orderly market functioning is the case of Novo Banco bonds. In 2017, Novo Banco attempted to avoid a more disorderly default and restructuring by means of a "liability management exercise" (LME). The LME consisted of a bond buyback targeting over €8 billion nominal of outstanding debt and was a condition for the sale of a significant stake in Banco Novo to a private equity firm.

Between 31 March 2017 and 20 October 2017, Novo Banco bonds were suspended from trading by the Luxembourg Stock Exchange.[2] Had this occurred post-MiFID II, the consequences could have been highly detrimental for Novo Banco creditors and depositors. While the volumes of Novo Banco bonds traded on the Luxembourg Stock Exchange would have been negligible, the volumes traded by

1. Directive 2014/65/EU

2. See: Luxembourg Stock Exchange - Suspension Novo Banco/NB Finance

investors through market makers (which would be classified as SIs) going into the LME process increased significantly, running into multiples of billions. Had a blanket suspension of trading across EU trading venues, including SIs, been applied, the LME would not have been possible, and Novo Banco would have been forced to enter into resolution and liquidation and a much more detrimental outcome for investors.

ICMA foresees many similar circumstances where the automatic application of Article 32 or 52 in issuer default or bankruptcy scenarios with respect to debt instruments or related derivatives could have highly damaging impacts on investors' interests and/or the orderly functioning of the market.

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MiFID II/R: ESMA guidance in the third quarter

In the third quarter of 2018, the European Securities and Markets Authority (ESMA) issued further guidance in relation to MiFID II/R. The following briefing is designed to provide a non-exhaustive summary of selected guidance impacting market structure and fixed income trading, notably (i) ESMA's announcement to publish new data completeness indicators for trading venues regarding bond liquidity data; (ii) ESMA's liquidity assessments of bonds for Q3 2018 for transparency purposes; (iii) publication of data for the systematic internaliser calculations for bonds; (iv) ESMA's announcement regarding the systematic internaliser regime calculations and publications; (v) further ESMA Q&A updates.

MiFID II/R

Overview of selected ESMA guidance in the third quarter of 2018:
27 September: New indicators for trading venues regarding bond liquidity data
26 September: Q&As on MiFIR data reporting
8 August: FITRS liquidity assessments for individual bonds by ISIN for Q2
2 August: Systematic internaliser calculations for bonds
12 July: Q&As on transparency topics
12 July: Q&As on investor protection and intermediaries topics

(i) ESMA announcement to publish new data completeness indicators for trading venues regarding bond liquidity data

On 27 September 2018, ESMA announced it will be publishing two new data completeness indicators for trading venues regarding the double volume cap (DVC) and bond liquidity data. In recent months ESMA, and the national competent authorities (NCAs), have been working to improve the timeliness and completeness of the data underpinning the monthly DVC and quarterly bond liquidity assessment publications. While these efforts have produced some positive results, the current situation remains unsatisfactory with significant data completeness issues.

In order to increase the incentives for trading venues to deliver data for the performance of the DVC and bond liquidity calculations on a timely basis, ESMA will publish two completeness indicators, the Completeness Ratio and the Completeness Shortfall. These will assist trading venues in delivering complete and accurate data on a timely basis, by providing performance information on the timeliness and completeness of their data provision.

The indicators are being published for the first time on 8 October for DVC data and by 1 November for bond liquidity. Subsequently, the indicators will be made available on a quarterly basis for bonds. ESMA will publish one file containing trading venue identification information – MIC Code, full name, country of the NCA – and quantitative information – Completeness Ratio, Completeness Shortfall, number of ISINs, number of reporting periods and number of incomplete ISINs.

(ii) ESMA liquidity assessments of bonds for Q2 2018 for transparency purposes

On 8 August 2018, ESMA announced that the second quarterly liquidity assessment for bonds under MiFID II/R had been made available through the Financial Instruments Transparency System (FITRS) in the form of machine-readable XML files. The list of ISINs was subsequently published through the FITRS interface.

According to the ESMA publication (as of 15 August 2018), 466 bonds were deemed liquid in Q2. However, ESMA pointed out that "data quality issues" had been experienced, and "additional data and corrections submitted to ESMA may result in further updates within each quarter". The liquidity assessments are applicable from 16 August 2018 until 15 November 2018.

Note: The majority of instruments were government bonds. However, some instruments such as DE0001135358 (04/07/2018) or ES00000121A5 (30/07/2018) have matured.

(iii) Publication of data for the systematic internaliser calculations for bonds

On 1 August 2018, ESMA released data for the systemic internaliser calculations for bonds, equity, and equity-like instruments under MiFID II/R. Due to data quality issues, a revised dataset for bonds was published by ESMA on 2 August 2018. In total, 73,632 bonds and 9,173 equity and equity-like instruments have been considered by ESMA.

The calculations were based on data submitted by trading venues and Approved Publication Arrangements (APAs) to ESMA's Financial Instruments Reference Database (FIRDS) and the Financial Instruments Transparency System (FITRS) covering the period from 1 January to 30 June 2018. The total number of transactions and total volume executed were computed by ESMA for instruments that were admitted to trading/started trading before 20 May 2018, and for which trading venues submitted data for at least 95% of all trading days. As a result, no transactions have been reported for 67,878 bonds, reducing the number of instruments for which the number of transactions and volume data have been published to 5,754 bonds. ESMA pointed out that the data have been computed "on a voluntary and best effort basis". Investment firms were required to perform an internal assessment against the data provided by ESMA, and if in scope of the SI regime, comply with relevant SI obligations from 1 September 2018.

Furthermore, ESMA noted that "for equity and equity-like instruments and bonds not included in this publication, investment firms, which are based on data from other sources indicating that they pass the relevant threshold for an instrument, should register as an SI." In other words, investment firms could choose, but were not required, to use other data sources to conduct their SI assessment for bonds not covered by ESMA, and if meeting the relevant thresholds, register as SIs. Further information on the SI regime and calculations are available on ESMA's website.

(iv) Announcement regarding the systematic internaliser regime calculations and publications

On 12 July 2018, ESMA released information on its action plan (within its updated Q&As on MiFID II and MiFIR transparency topics) for systematic internaliser (SI) regime calculations ahead of their publication on 1 August 2018. In its press release, ESMA stated it had to "amend its original action plan as data completeness for the various asset classes had not reached adequate levels when ESMA conducted its completeness analyses. Given the complexity and size of the task, ESMA then decided to focus on improving completeness for a select number of asset classes while postponing the publication for others."

Accordingly, ESMA intended to publish SI data covering a period from 3 January to 30 June 2018 for bonds, equity, and equity-like instruments on 1 August 2018, as planned. However, SI data for ETCs, ETNs, SFPs, securitised derivatives, emission allowances and derivatives covering a period from 1 July to 31 December 2018 will only be published on 1 February 2019. SI's were/are required to comply with the obligations of the SI regime by 1 September 2018 and 1 March 2019 respectively, ie a month after publication of the relevant SI data.

(v) Further ESMA Q&A updates

Other Q&A updates include clarifications of technical reporting requirements for MiFIR data reporting, such as changes of the issued nominal amounts for bonds or other debt instruments (26 September); transparency purposes in the context of corporate actions and ISIN changes (12 July); investor protection, research and the treatment of free trial periods as minor non-monetary benefits (MNMBs; also on 12 July).

Further information on the aforementioned ESMA guidance can be found on ICMA's MiFID II secondary markets website.

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MiFID II's SI regime: is it achieving its goals?

In 2017 ICMA published an article in its Quarterly Report on *MiFID II implementation: The Systematic Internaliser (SI) regime*. This proved to be helpful for firms trying to work out what the SI regime meant for cash bond trading and how regulatory obligations would affect them. To assist ICMA members further, below is an update on SI registration and a Q&A on how the SI regime has "landed", which we hope market participants will find useful.

Update on SI registration

A sell-side firm reasons it is an SI for a specific bond, due to high levels of trading *and* that bond is listed as "traded on a trading venue". However, the ESMA database is *not showing any trading data for that bond*. Is that firm *required* to register as an SI?

A firm may think it is an SI for a specific bond. However, if the bond is listed as TOTV but the ESMA database is not showing any trading data for said bond (on which to base its SI calculations**)**, *the firm does not have to register as an SI.* Where no data has been published, there is not sufficiently reliable information for firms or regulators to base a judgement about SI status.

Note: This should not be deemed guidance from ESMA. However, it is based on FCA feedback.

SI regime Q&A

The goal of the MiFID II's SI regime for bonds, was and is, two-fold:

- bring about transparency in bond trading by creating transparency obligations on a quote-by-quote basis: bringing light into previously un-lit OTC trading practices;
- capture over-the-counter (OTC) trading activity and ensure that the internalisation of order flow by investment firms does not undermine the efficiency of price formation on trading venues.

Has the SI regime achieved its goal? In order to determine the success of the SI regime, we need to ask eight key questions. Below are the eight questions, followed by a compilation of member firm views/answers. The firm's consensus views/answers were aggregated.

Q1: Can firms easily access SI quotes on trading venues or APAs?

*Sell side: A***:** Yes, most quotes are available on trading venue/ technology provider "Single Dealer" pages (via chat or voice). However, this is as easy or as difficult to access as it was before MiFID II came into effect.

A: No, APA disaggregation and charging for data consumption are impeding access.

Buy-side: A: Yes, nothing has changed. Quotes are still visible/available just as they were pre- MIFID. The quality of the quotes has also not changed. There is no need to change when the universe of liquid bonds remains so small.

Q2: Are trades executing on the back of SI quotes? And if so, are there any discernible differences between trading off SI quotes and traditional axes?

Sell side: A: Yes, however nothing has changed. There is no difference between SI quotes and axes. They are adding nothing to existing transparency mechanisms, eg indicative quote streams, axes, IDBs - D2D platforms, etc. The market was and is continuing to provide acceptable pre-trade indicative quotes, which seem to be the prevalent way to trade.

A: SI quotes are not actively used for trading. Therefore, SI commercial policies are not relevant.

Buy side: A: There is no perceived or marked difference pre- and post-MiFID II regarding quotes, whether SI or axes.

Q3: Has the SI regime helped price discovery for your clients?

Sell side: A: No. Price discovery through SI transparency has only barely met the objectives. This is because of very low liquidity thresholds.

Buy side: A: No. In liquid markets price discovery was and still is relatively easy; in illiquid markets it remains challenging.

Q4: Is there more liquidity today, due to the SI regime?

Sell side: A: No. Nothing has changed in terms of liquidity. The SI regime was not really designed to impact liquidity, it was more about transparency.

Buy side: A: No. The buy-side has not experienced additional liquidity. There is more electronic trading (or processing trades electronically) which "one day" may provide the buy-side with useful data for more informed execution pre-trade; but liquidity has definitely not been created by the SI regime.

Q5: Are ESMA's SI regime data practices working as they should?

Sell side only: A: SI reference data contains mistakes. A couple of examples: according to SI denominator published by ESMA, there are bonds that trade in sizes larger than their issuance size. Furthermore, there are known liquid bonds that are not even appearing in ESMA's database. In the latter's case, the market is benefitting from broker-dealers opting in as SIs, versus waiting to qualify. Were this opting in to change in the future (and it easily could), the SI determination would be carried out on flawed data and the SI regime overall quality would deteriorate.

Q6: Is the SI regime too complex to implement properly?

Sell side only: A: The SI regime is proving to be a challenge to implement. More so for ESMA, as the data in ESMA's FITRS database is evidencing.

It was decided long before MiFID II "go-live" that the SI determination would be based on an ISIN-by-ISIN basis. This is even though firms register as an SI with their various national competent authorities on an asset class level, eg bonds, equities etc. The thinking on this granular ISIN-by-ISIN approach is that it is more flexible for market participants. However, this approach is proving to be difficult not only for ESMA but the market as well. The data is often incorrect or missing.

The alternative that ESMA considered was SI determination based on bond class level (eg corporate or sovereign, possibly further broken down by high yield or IG). While this approach would be easier to implement, it would be less flexible for market participants.

It appears there is tension between flexibility and ease of implementation for both ESMA and the market. So, there is no SI regime "one size fits all" option and that is really the crux of the matter.

Q7: One of the main objectives of MiFID II, is to create a more 'level playing field' between trading venues on the one hand and market makers and other liquidity providers on the other. Is the SI regime helping to create a "level playing field" within the EEA?

Sell side: A: No. In fact, it is more the case of the opposite. The SI regime has made some smaller players re-consider business due to implementation costs.

A: Too early to determine.

A: Currently the SI regime is not creating a level playing field within the EEA. This could change in the future. However, today it is important to *contrast* the lack of a level playing field within the EEA with other jurisdictions. The US, Asia and some other financial sectors in the rest of the world, are currently experiencing a more "level playing field".

Looking at this with an even wider (extra-territorial) lens, EEA firms are finding that there is also not a level playing field between non-EEA branches of EEA investment firms and non- EEA investment firms. eg an Asian branch of an EEA investment firm versus local Asian bank. Due to concerns regarding information leakage (perception of the consequences of MiFID II reporting requirements), there is greater incentive for non-EEA firms to *not* trade with EEA SIs.

Buy side: A: The market has not seen much/enough change to judge the "level playing field". The buy side is now the biggest/most important liquidity provider. There is a high likelihood that the EEA playing field will never be level, while the EEA NCAs have different opinions/rules on reporting deferrals etc.

Q8: Are there benefits to the market from the SI regime, besides post-trade reporting?

Sell side: A: No, no additional benefits to the SI regime. Most broker-dealers opted-in as an SI in order to facilitate their clients reporting obligations for products where reporting was necessary.

A: "The SI regime is meaningless. It became all about post-trade reporting obligations".

Buy side: A: No benefits besides reporting "support". For firms that do not have the scale, money or infrastructure to do their own reporting, the SI regime is of great benefit. For larger firms, trading with an SI or not is not a factor in the "execution decision tree".

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ICMA Electronic Trading Council and MiFID II data workstream

Over the past few years, ICMA has focused in-depth on issues surrounding MiFID II and electronic trading market structure in secondary markets. Recently, ICMA created two industry groups, the "Electronic Trading Council" (ETC) and the "MiFID II data workstream" (MDW). Both of these groups are made up of buy-side heads of trading desks, sell-side senior traders or heads of market structure and/or electronic trading and senior representatives from trading venues and technology providers. Membership is European with members locally based in the UK/Continent/Ireland but may be globally headquartered.

Both the ETC and the MDW are proving very popular with ICMA members. Attendance at meetings is very high and quite interactive. The Electronic Trading Council covers bond electronic trading and automation, eg algos, axe dissemination, streaming quotes etc. The MiFID II data workstream covers data availability and usability, taking into account quality, scope, delivery, ownership/rights, aggregation and use, with MiFID II at its core. These cash bond dual structure platforms provide an opportunity for centralised interactive dialogue for relevant fixed income trading participants and trading enablers. The primary purpose of the ETC and the MDW is to identify and document where appropriate, best practice and/or recommended standards for cash bond trading market structure, as the ecosystem in Europe evolves.

Both the Electronic Trading Council and the MiFID II data workstream have steering committees and task forces, with task force "leaders":

- Steering committees agree what the deliverables should be for the respective deliverable task forces and that the task forces are resourced properly.
- Deliverable task force leaders drive delivery of the task at hand. The deliverable leaders determine the management of the deliverable, including meeting frequency, output and the setting of deadlines.

ICMA is very pleased that our efforts in electronic trading market structure, including data availability and usability, are so well received by members. More detail on the Council/Workstream structure follows.

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Electronic Trading Council & MiFID II Data Workstream

CSDR Settlement Discipline

On 19 September 2018, the regulatory technical standards (RTS) for CSD Regulation Settlement Discipline was published in the *Official Journal* of the EU. The settlement discipline package, which includes cash penalties and a mandatory buy-in mechanism for unsettled trades, will come into force from September 2020.

ICMA will continue its work both to raise awareness of the settlement discipline provisions, particularly as they are likely to have significant extraterritorial reach and implications, as well as working with the industry and regulators to support successful implementation. The mandatory buy-in framework in particular presents a number of challenges, stemming firstly from the lack of flexibility in the timing of the process (eg firms are legally required to buy-in their failing counterparties after seven days in the case of fixed income) and secondly from an unconventional asymmetric treatment of the buy-in payment process. This asymmetry is widely understood to be the result of a drafting error in the Level 1 Regulation and creates additional market risks for market participants that would not normally exist in a buy-in process.

The general market concern is that the design of the mandatory buy-in framework will have negative consequences for market liquidity and stability, particularly for less liquid, dealer-driven markets, such as corporate bonds, smaller sovereign issuers and emerging markets, as well as SME securities.

To date ICMA has published a number of papers on CSDR mandatory buy-ins, including an information brochure which outlines the scope and provisions of the regulatory initiative. Other papers and resources can be found on the dedicated ICMA CSDR-SD webpage. ICMA has also mobilised a CSDR-SD Working Group for members, with particular focus on the practicalities of implementation. One of the key initiatives of the working group, in coordination with ICMA's Secondary Market Rules & Recommendations Working Group, will be to adapt the ICMA Buy-in Rules to provide market best practice for the CSDR buy-in process and to support efficient implementation in the bond markets, where the provisions apply. It is further hoped that the ICMA Buy-in Rules may provide a contractual solution for the problematic asymmetry in the CSDR buy-in process.

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ICE Data Services Corporate Bond Market Liquidity Tracker

September 2018

Liquidity Tracker

Source: ICE Data Services

Commentary

As discussed in previous Quarterly Reports, corporate bond market liquidity appears to show a sharp decline in Q1 2018, which largely correlates with the US led sell-off in global credit markets. But IG market liquidity seems to recover in Q2 and has remained relatively rangebound through Q3.

EUR and GBP HY liquidity, however, shows a fairly steep decline through Q2 and Q3. While it is difficult to attribute causality, a possible explanation for the deterioration in EUR HY liquidity could be the announcement of the wind-down of the ECB's Corporate Sector Purchase Programme (CSPP). While HY is not in scope of the purchase programme, the sector has benefited from a "portfolio rebalancing" effect. Meanwhile, it seems probable that the deep decline in GBP HY liquidity is compounded by the increasing economic uncertainty stemming from Brexit.

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ICE Liquidity Trackers are designed to reflect average liquidity across global markets. The ICE Liquidity Trackers are bounded from 0 to 100, with 0 reflecting a weighted-average liquidity cost estimate of 10% and 100 reflecting a liquidity cost estimate of 0%. The ICE Liquidity Trackers are directly relatable to each other, and therefore, the higher the level of the ICE Liquidity Tracker the higher the projected liquidity of that portfolio of securities at that point in time, as compared with a lower level. Statistical methods are employed to measure liquidity dynamics at the security level (including estimating projected trade volume capacity, projected volatility, projected time to liquidate and projected liquidation costs) which are then aggregated at the portfolio level to form the ICE Liquidity Trackers by asset class and sector. ICE Data Services incorporates a combination of publicly available data sets from trade repositories as well as proprietary and non-public sources of market colour and transactional data across global markets, along with evaluated pricing information and reference data to support statistical calibrations.

Repo and Collateral Markets

by David Hiscock and Alexander Westphal

SFTR implementation

The exact implementation timeline of the extensive SFTR reporting regime remains uncertain. In latest news, on 24 July, the European Commission notified ESMA that it is planning to make significant amendments to two of the draft RTS and ITS that ESMA had submitted to them back in March 2017 for review. In response, on 5 September, ESMA issued an opinion on the proposed amendments, making it very clear that they disagree with the proposals put forward. The main point of contention is around the process for incorporating into the SFTR any future standards that are being developed at global level, such as UTIs or LEIs for branches, and whether this would require the Commission to be involved. Importantly, it is now up to the Commission to decide whether to adopt the amendments as proposed alongside the other technical standards or whether to make any further changes based on ESMA's opinion. While this latest development is likely to introduce some further delay, this is probably rather limited. The expectation continues to be that the final technical standards can be published towards the end of Q1 2019, following further scrutiny by Parliament and Council, which would mean that the reporting regime could still go live as soon as Q1 2020 for banks (after a transition period of 12 months following entry into force).

The ERCC's SFTR Task Force therefore continues to work at full steam with members to prepare the hugely challenging implementation of the rules. The main focus of the SFTR Task Force is to agree common definitions and establish market best practices to facilitate the implementation of SFTR. Given its extensive experience with best practices the ERCC is well placed to do so. The ERCC's *Guide to Best Practice in the European Repo Market* is among the most detailed and established best practice documents across all markets. Using the Guide as a framework, the ERCC is looking to develop an Annex with specific recommendations related to SFTR reporting and this work is already well advanced.

Best practices can of course only work effectively if they are based on a broad industry consensus and implemented by all stakeholders. This is reflected in the composition of the SFTR Task Force, which brings together market participants, both sell-side and buy-side, but also includes market infrastructures and other relevant service providers, including vendors and trade repositories (TRs), which will all have an important role to play in this process. Another important aspect remains collaboration with other industry bodies and ultimately of course also regulators. ESMA itself is looking to provide detailed additional guidance for the market in relation to SFTR implementation as part of the so-called Level 3 process. This process will formally kick off once the technical standards have been finalised. However, the ERCC continues to be in close contact with ESMA to ensure that the extensive work done by the Task Force is suitably taken into account.

SFTR will be one of the focus topics at the ERCC's upcoming General Meeting on 17 October, hosted by Bloomberg in London. This will be a good opportunity for members to learn more about SFTR, the work of the Task Force, but also to continue the dialogue with ESMA who will actively participate in the meeting. For more details on the event and to register please visit the event section of the ICMA website.

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CSDR mandatory buy-ins and SFTs

In October 2018, ICMA published the discussion paper, *CSDR Mandatory Buy-Ins and Securities Financing Transactions*. This discussion paper is intended to serve as a companion paper to ICMA's earlier discussion paper, *How to Survive in a Mandatory Buy-In World,* and seeks to explore and discuss the potential impacts, considerations, and risks specifically in relation to in-scope SFTs (ie SFTs with terms of 30 business days and longer). What becomes clear is that applying the CSDR buy-in (and cash compensation) provisions to SFTs is not straightforward, and there remain a number of questions as to how the Regulation is intended to be implemented, as well as to how market participants can identify and manage their risk.

Buy-ins, mandatory or otherwise, are generally not applied to SFTs, and GMRAs and GMSLAs provide for alternative remedies in the case of settlement fails which are tailored to the underlying characteristics of SFTs, as opposed to outright cash transactions. The ICMA paper attempts to illustrate the potential challenges of applying the CSDR mandatory buy-in framework to SFTs, and the complications and questions that this raises. SFTs are fundamentally different in nature to outright securities purchases and sales, and it is difficult to understand how the architects of the CSDR Level 1 provisions ever expected mandatory buy-ins to apply to SFTs, and to what extent they had evaluated the practicalities and implications. This further raises concerns about the overall market impact of CSDR mandatory buy-ins in terms of liquidity, efficiency, and stability with respect to termed (ie longer-dated) SFTs.

The paper also highlights a number of areas where Level 3 guidance can play a critical role in supporting implementation with respect to SFTs. However, it also supports the broader market view that the CSDR mandatory buy-in regime is highly undesirable and will be far more damaging to the functioning of European financial markets than beneficial. With the regime not set to come into force until September 2020, there is still time for regulators and policy makers to reconsider both its design and application.

More information and resources on CSDR Settlement Discipline can be found on the dedicated ICMA CSDR-SD webpage. Under the umbrella of its Secondary Market Practices Committee, ICMA has also mobilised a CSDR-SD Working Group, focused on the practicalities of implementing the CSDR settlement discipline regime with respect to both bond and repo and collateral markets.

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Other regulatory reforms

In January 2018, the European Commission launched a consultation on proposals to change some of the details in the EU liquidity coverage ratio (LCR). Dated 13 July 2018, the Commission has now published its final proposed text for this Delegated Regulation, which shall apply from 18 months after formal publication in the EU's *Official Journal* (which, as this proposal is now subject to scrutiny by the European Council and Parliament, will follow in the coming months).

In context of repos and collateral, it should be noted that the second paragraph of section 1.2 of the Explanatory Memorandum states that: "The first, and most important, amendment is the full alignment of the calculation of the expected liquidity outflows and inflows on repurchase agreements (repos), reverse repurchase agreements (reverse repos) and collateral swaps transactions with the international liquidity standard developed by the BCBS. Although the treatment of those transactions in the LCR Delegated Regulation is in line with the treatment contained in the CRR and had not been challenged during the many discussions preceding the adoption of the LCR Delegated Regulation, several stakeholders subsequently asked for the cash outflows calculation to be directly linked to the prolongation rate of the transaction (aligned with the haircut on the collateral provided applied to the cash liability, as in the BCBS standard) rather than to the liquidity value of the underlying collateral. This approach should also be followed for collateral swaps. This change would ensure that outflows and inflows on the same transactions are symmetrical and would thereby facilitate efficient liquidity management, particularly by internationally active credit institutions."

Related to this, at the start of the second paragraph in the impact assessment section, at 1.3 in the Explanatory Memorandum, it states that: "The impact of the proposed change to outflows and inflows on repos, reverse repos and collateral swaps transactions should be relatively neutral or negligible."

Among the other changes in this new text it can also be noted that:

(i) the third paragraph of section 1.2 of the Explanatory Memorandum starts: "The second substantive amendment concerns the treatment of certain reserves held with third-country central banks." With respect to this, the impact assessment states that: "As regards the impact of the treatment of certain reserves with central banks, it should be contained as well since the amount of those reserves is limited. Moreover, the impact would be further limited by the safeguard provided in the proposal, namely that the treatment would be limited to liquid assets used to cover the stressed net liquidity outflows incurred in the corresponding currency."

A newsletter will be published on leverage ratio window-dressing behaviour around regulatory reporting date.

(ii) the fifth paragraph of section 1.2 of the Explanatory Memorandum starts: "The fourth substantive amendment relates to the application of the unwind mechanism for the calculation of the liquidity buffer." With respect to this, the impact assessment states that: "Removing collateral received through derivatives transactions from the unwind mechanism is not expected to have a significant impact on the level of the LCR and the waiver introduced for secured transactions with the ECB or the central bank of a Member State is subject to competent authorities' decisions. This unwind is only considered for the application of the caps on HQLA in the liquidity buffer."

A Public Register of Statements of Commitment to the *UK Money Markets Code* was launched, on 17 September. Following this, on 21 September, the UK Money Markets Code *Annual Survey* has been launched – and will stay open until 19 October. The survey aims to enable the *Money Markets Committee* – which owns the Code – to gain a broader and more detailed cross-market perspective on awareness and adherence to the Code, as well as allowing respondents to provide feedback on, for example, specific contents of the Code and application of the Code within their institution. To obtain the broadest possible view across UK money market participants, with all sectors to be represented in the survey results, all relevant firms are invited to take part.

The BCBS met in Basel, on 19-20 September. Among other things, it was reported that:

- a newsletter will be published on leverage ratio window-dressing behaviour around regulatory reporting dates – Pillar 1 (minimum capital requirements) and Pillar 3 (disclosure) measures to prevent this behaviour will be considered;
- clarification of the treatment of "settled-to-market" derivatives in the liquidity standards has been agreed and an FAQ has been published on this topic; and
- the outcome of the BCBS review of the impact of the leverage ratio on client clearing was discussed, as was an associated joint consultation paper by the BCBS, FSB, CPMI and IOSCO on the effects of post-crisis reforms on incentives to CCP clear OTC derivatives – a consultation paper will be published in October to seek the views of stakeholders as to whether the exposure measure should be revised and, if so, on targeted revision options.

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Repo and collateral-related research

Published on 3 August, *Repo Market Functioning: The Role of Capital Regulation* is a Bank of England staff working paper, which shows that the leverage ratio affects repo intermediation for banks and non-bank financial institutions. The authors exploit a novel regulatory change in the UK to identify an exogenous intensification of the leverage ratio and combine this with supervisory transaction-level data capturing the near-universe of gilt repo trading. Studying adjustments at the dealer-client level and controlling for demand and confounding factors, they find that dealers subject to a more binding leverage ratio reduced liquidity in the repo market. This affected their small but not their large clients.

The authors further document a reduction in frequency of transactions and a worsening of repo pricing, but no adjustment in haircuts or maturities. Finally, they find evidence of market resilience, based on existing, rather than new repo relationships, with foreign, non-constrained dealers stepping in. Overall, their findings help shed light on the impact of Basel III capital regulation on repo markets.

On 10 September, the ESRB published the *EU Shadow Banking Monitor 2018*, which covers data up to end-2017 and identifies several key risks and vulnerabilities in the EU shadow banking system. Within the overview of risks and vulnerabilities, in section 1.2, it is reported that these include "procyclicality, leverage and liquidity risk created through the use of derivatives and SFTs".

- "The reuse of collateral creates intermediation chains – these can become channels for spreading funding liquidity shocks among market participants along the chains. Derivatives and SFTs can be used to build up leverage, and procyclicality in collateral requirements can lead to sudden deleveraging during the downswing phase of asset price cycles. In addition to the risks typically associated with leverage, the haircut and margining practices in bilaterally and centrally cleared trades may force market participants to post additional cash or other cash-like collateral. These market dynamics expose counterparties to liquidity risk, which needs to be monitored and managed."

> **Repos, covered bonds and OTC derivatives are among the main source of asset encumbrance.**

- "In 2017, the use of non-cash relative to cash collateral increased in the important government bond lending market. This may be a reflection of the growing role of collateral transformation trades in securities lending markets. The haircuts and margins applied to collateral transformation trades determine how much higher quality collateral can be obtained for a given portfolio of lower-quality collateral. Haircuts and margins may increase if prices decline in the underlying lower-quality collateral. Collateral transformation trades can therefore be prone to a sudden repricing of risks in the underlying markets."
- "In some types of securities lending transactions, lenders may recall the securities lent at any time. This exposes borrowers to liquidity risk as it may be difficult for them to return the securities, which they may have used in other transactions, at short notice. If borrowers are unable to return securities this will also expose lenders to risk, since lenders will need to sell the collateral obtained from borrowers and repurchase the securities lent in the market. More generally, the reuse of cash and non-cash collateral can involve liquidity and maturity transformation, as cash collateral may be reinvested in securities with longer maturities, or in those which are less liquid than the securities lent."

On 19 September, the EBA published reports on EU banks' funding plans and asset encumbrance respectively, which aim to provide important information for EU supervisors to assess the sustainability of banks' main sources of funding. The results of the assessment show that banks plan to match the asset side increase in the forecast years by a growth in client deposits as well as market-based funding. 159 banks submitted their plans for funding over a forecast period of three years (2018 to 2020). According to the plans, total assets are projected to grow, on average, by 6.2% by 2020. The main drivers for asset growth are loans to households and to non-financial corporates.

The asset encumbrance report shows that in December 2017 the overall weighted average asset encumbrance ratio stood at 27.9%, compared to 26.6% in 2016, with the modest increase mostly driven by a reduced volume of total assets as opposed to an increase in encumbered assets. As previously, the report shows a wide dispersion across institutions and countries. Besides repos, covered bonds and OTC derivatives are among the main source of asset encumbrance involving also monetary, fiscal and even structural policies.

The Implications of Removing Repo Assets from the Leverage Ratio is an ECB Macroprudential Bulletin article, published on 2 October, which summarises the key findings from a counterfactual exercise where the effect of removing repo assets from the leverage ratio on banks' default probabilities is considered. The findings suggest that granting such an exemption may have adverse effects on the stability of the financial system, even when measures are introduced to compensate for the decline in capital required by the leverage ratio framework. Increases in probabilities of default are mainly seen for larger banks which are more active in the repo market. Moreover, it is observed that the predictive power of the model improves when repo assets are included. Overall, the analysis in this article does not support a more lenient treatment of repo assets in the leverage ratio framework, eg by exempting them or allowing for more netting with repo liabilities or against high-quality government bonds.

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Green, Social and Sustainable Bond Markets



by Nicholas Pfaff, Valérie Guillaumin and Peter Munro

Green, social and sustainable bond market developments

Market performance

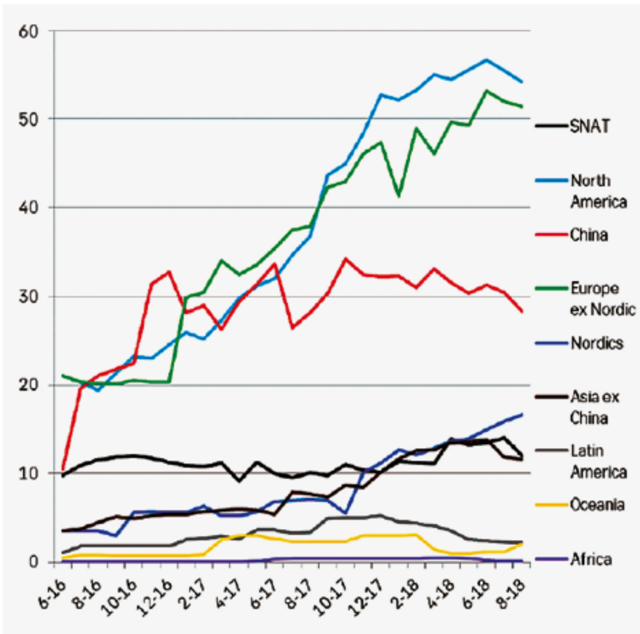
Global issuance of green bonds continues to grow strongly. Preliminary data for H1 2018 indicates that compared to H1 2017 global issuance grew 21% to US$85 billion (source: SEB, unless stated). Growth was robust in early Q3, with issuance at end-August passing $97 billion (+19% year-on-year). Significantly, cumulative green bond issuance closed around US$500 billion at end-August, reflecting improving liquidity and portfolio diversification opportunities.

In H1, issuance from corporates and financials grew especially well (+40% to US$44 billion and more than double to US$27 billion respectively). So far this year, issuance volume has become more evenly balanced between SSAs and corporate/financial issuers, although agency ABS/MBS tips the balance in favour of SSAs. Fannie Mae, which in June announced a new green bond framework aligned with the GBP, led securitisation and wider green bond market volumes in H1 with issuance of a remarkable US$10.2 billion.

Renewable energy continued to be the largest use of proceeds at 48%, followed by green buildings and sustainable transportation at 26% and 14%, respectively.

Geographically, issuance remained diverse, coming from no less than 34 jurisdictions (as of end-August), including three new countries - New Zealand, Iceland and Lebanon. The top five slots were obtained by the US, China, supranationals, France and Belgium. The regional picture shows impressive growth in issuance, on a rolling 12-month basis, in multiple regions – including North America, Europe and Asia ex-China (see Figure 1 below).

Figure 1: Last Twelve Months Analysis by Region (US$ billion)



Source: SEB analysis based on Bloomberg and SEB data

Leading issuance currencies were correlated with the geographic picture set out above as well as global bond market flows, with EUR (40% year to end-August) and USD (34%) dominating, followed by CNY (13%). The exceptional role of Scandinavian issuers was reflected by SEK taking fourth place (6%).

The social and sustainability bond segment has also been growing, with amounts outstanding now at $44 billion by end H1. Social bond flows in H1 2018 totalled US$ 4.7 billion, with outstandings reaching US$15 billion, whilst sustainability bonds were somewhat more popular, with flows of US$7.5 billion, taking outstandings up to US$29 billion.

GBP SBP Executive Committee priorities

The GBP SBP Executive Committee held a physical meeting, kindly hosted by the EBRD in London on 20 September 2018, to consider its 2018/19 priorities. The forthcoming annual consultation's main themes and timelines were identified during the session. GBP SBP members and observers will be asked for their feedback by the second half of November 2018. The Executive Committee also discussed potential updates to the governance of the Principles.

It was confirmed that the six following working groups and taskforces will pursue their tasks during the next months: Index and Database; Green Projects Eligibility; Impact Reporting; Social Bonds; New Markets and Research. The Terms of Reference of those working groups and their expected deliverables will be made publicly available in the coming weeks.

Additional feedback on the themes of this meeting have been given to GBP SBP members on a conference call held on 5 October 2018.

Tokyo conference

ICMA and the Japan Securities Dealers Association (JSDA) will hold their second joint Conference on Developments in Green and Social Bond Markets on 11 December 2018 in Tokyo. This follows the exceptional response to the first such conference last year, with around 500 registrations. It also responds to the momentum of the market in this region. In Asia, the Asia-ex-China region has grown most rapidly in the past 12 months, with issuance growing almost 300% to US$14 billion (to end-August 2018). China remains the largest market in Asia, with close to US$30 billion issued in the last 12 months.

Capacity building: training initiatives

ICMA has built on its well-established executive education platform, with over 40 years of experience, as well as its experience from hosting the platform for the Green & Social Bond Principles, to develop a new training course dedicated to introducing green, social and sustainability bonds. After launching in March this year, four public courses have been held so far, 3 in London and one in Hong Kong. These courses have been fully booked. They are in a 1-2 day classroom format, providing hands-on knowledge and including a range of case studies. The courses are led by experienced market and training professionals working with ICMA. Looking ahead, in line with other ICMA training courses, ICMA is responding to demand from members for tailor-made courses and will be holding a series of such courses in Asia this autumn.

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European Technical Expert Group on Sustainable Finance

The European Commission released on 8 March an *Action Plan on Sustainable Finance* that follows many of the recommendations of the High Level Expert Group (HLEG) on Sustainable Finance. In order to support the implementation of its Action Plan, the Commission further announced on 13 June the establishment of the Technical Working Group on Sustainable Finance (TEG) on which ICMA, represented by Nicholas Pfaff, has been nominated following a highly selective process. The main tasks of the group are to assist the Commission in the development of:

- an EU taxonomy of environmentally sustainable economic activities;
- an EU Green Bond Standard;
- a category of "low carbon" indices for use by asset and portfolio managers as a benchmark for a low carbon investment strategy;
- metrics allowing improving disclosure on climate-related information.

In addition to ICMA, the members of the group represent a wide variety of financial and economic actors as well as non-governmental agencies and academics. Several European and international institutions contributing to the development of sustainable finance have also been invited as members or observers to the group. They include among other representatives from the European Supervisory Authorities, the European Central Bank, multilateral development banks (such as the European Investment Bank and the European Bank for Reconstruction and Development), the Central Banks and Supervisors Network for Greening the Financial System and the Organisation for Economic Co-operation and Development.

The TEG has held three plenary meetings since its inception in early July 2018. Its mandate will run until 30 June 2019, with possible extension until the end of 2019. At this early stage and with reference to its published status, the progress and orientations of the TEG can be summarised as follows:

- The future EU taxonomy, commencing with definitions of environmentally sustainable activities, will build on similar, existing market-led and Member State-based initiatives. Its objective among others is to facilitate the achievement of the EU's mid- and long-term greenhouse gas (GHG) emissions targets and environmental policy objectives by encouraging capital flows to environmentally sustainable economic activities. The taxonomy will serve as the basis for the future establishment of standards and labels for sustainable financial products**.**
- The EU Green Bond Standard (GBS) will draw on the EU taxonomy and will refer to an external verification process envisaged as is common practice for green bonds in the EU market already today. Discussions regarding the granularity of requirements placed upon the verification process and the scope of the EU GBS are ongoing. Given the relatively well-developed EU market for green bonds, the EU GBS could focus on maintaining and reinforcing market integrity and establishing the basis for a recognised international standard.
- Benchmarks play a central role in the price formation of financial instruments and provide a useful tool for investors, as they allow tracking and measuring performance and for allocating assets accordingly. Existing ESG benchmarks are seen as lacking transparency with regards to their methodologies and fund managers pursuing a low-carbon or Paris-aligned investment strategy may lack a reliable index to benchmark their performance against. The work on the low carbon benchmarks is focused on selection criteria, data needs, and weighting methods for underlying assets of such benchmarks. This includes determining the key elements of minimum standards for low-carbon and positive carbon impact benchmarks. The importance of ensuring the comparability and reliability of data used for the construction of these benchmarks has also been underlined. The proposed low-carbon benchmark (LCB) would be used for risk diversification and the positive carbon impact benchmark (PCIB) for investing with impact.
- The starting points for the work on climate-related disclosures are the existing guidelines to the Non-Financial Reporting Directive (NFRD) and the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). The work of the TEG will build on and further develop the TCFD recommendations. For example, the group has also taken up the challenge of identifying disclosure metrics that could give meaningful information about the impact a company has on climate change. Both climate change mitigation and adaptation are part of the scope.

Reflecting its engagement and support for the Green, Social and Sustainability Bond market and its key role in providing the Secretariat for the GBP & SBP, ICMA is involved as a priority in the discussions on the future EU GBS and on its link with the EU Taxonomy. We are stressing, among other things, that the work on the EU GBS should avoid accompanying regulatory initiatives that could have possible unintentional negative outcomes such as the crystallization of liabilities and/or additional costs. It is important to underline that the international green, social and sustainable bond market already benefits from a very effective global self-regulatory initiative, coordinated by the Executive Committee of the GBP & SBP, that provides a full range of guidance for market participants including guidelines for issuance, reporting and external reviews.

In parallel, ICMA is monitoring aspects of the Commission's plans such as for investor duties that may impact more particularly its buyside members. The Commission held a public consultation on this topic that closed in January 2018. The Commission aims now to prepare delegated acts regarding the duties of institutional investors and asset managers. EIOPA and ESMA have been invited to provide technical advice for these delegated acts by 30 April 2019. The delegated acts for which the Commission seeks technical advices by EIOPA and ESMA would introduce level 2 amendments under UCITS, AIFMD, MiFID II, Solvency II and IDD with "the aim of incorporating sustainability risks, ie environmental, social and governance risks in the decisions taken and processes applied by financial market participants subject to those rules". ICMA's Asset Management and Investors Council is creating a sustainability contact group to follow specifically these potential developments as well as others related to the Commission's Action Plan.

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Asset Management

by Patrik Karlsson and Bogdan Pop

Stress testing in investment funds

Work by AMIC on systemic risk in asset management has continued over the summer. While the AMIC Fund Liquidity Working Group is waiting for IOSCO to issue a consultation on leverage, ESMA has taken up new work on stress testing in investment funds.

ESMA organised on 19 July 2018 a roundtable with industry experts on liquidity stress testing of investment funds. The roundtable was organised as part of the process ESMA is following to prepare liquidity stress testing guidelines for UCITS funds and AIFs, in line with suggestions from the ESRB in its recommendation on liquidity and leverage risks in investment funds. Recommendation C on stress testing requests ESMA to develop guidance for firms for the stress testing of liquidity risk for individual AIFs and UCITS funds.

There will likely be a public consultation on the guidelines by the end of 2018 or early 2019 and final guidelines could be published by mid-2019.

AMIC and EFAMA are in the process of drafting a third joint report on systemic risk in investment focusing on stress testing in investment funds.

With a view to contributing more formal industry views to ESMA's work, particularly to the public consultation, AMIC and EFAMA are in the process of drafting a third joint report on systemic risk in investment focusing on stress testing in investment funds.

The basic structure would likely follow the previous AMIC/EFAMA reports on liquidity risk management and leverage: the report would attempt to show the existing regulatory and practical initiatives regarding stress testing in order to highlight the robust framework already in place in Europe. The report will likely feature industry best practices to illustrate the kinds of stress testing currently being used, both for assets and redemptions. The report will also review the current international regulatory debate on stress testing, drawing on recent work by IOSCO and the FSB.

AMIC and EFAMA Secretariats are aiming to finalise a paper by the end of 2018.

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AMIC Primary Market Investor Working Group

AMIC has established a new Primary Market Investor Working Group in June 2018, as outlined in the previous Quarterly Report update.

The first meeting took place on 13 June, where the working group agreed to (i) identify a standardised set of base terms from an investor perspective, (ii) agree a process for automating asset set-up (such as obtaining ISINs), (iii) standardise engagement via a communication timeline and (iv) build FIX protocols and pipelines.

The second meeting of the working group took place on 5 September in London. AMIC invited a representative from an ICSD and the Association of National Numbering Agencies (ANNA) to discuss the generation and availability of ISINs during the issuance process. The working group heard that rigorous due diligence requirements on the issuer (AML/KYC/sanctions) are time consuming for the ICSDs when needing to generate ISINs for new or infrequent issuers. However, participants were pleased to learn that for drawdowns under programmes it should be possible to achieve ISINs before books open. The group also discussed further its draft set of base and initial deal terms, refining the terms and restructuring the format with helpful input from ICMA staff representing syndicates and issuers.

The next meeting of the AMIC Primary Market Investor Working Group will be organised in the period ahead and will focus on the draft set of base and initial deal terms by discussing the draft AMIC list with representatives of the syndicate and issuer communities.

ICMA buy-side members interested in participating in the work of this working group or proposing further topics in due course are encouraged to contact the AMIC Secretariat to find out more and to get involved.

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MiFID II second FICC research unbundling survey

Following the success of the initial AMIC FICC Research Unbundling Survey and at the suggestion of the AMIC Executive Committee, the AMIC Secretariat has prepared and issued a follow up survey to assess the implementation of the MiFID II research unbundling rules.

Since MiFID II implementation, the market for investment research has evolved rapidly with research providers trying to identify a price that consumers of research are willing to pay. Meanwhile, research consumers are working to identify the value added of external research to their portfolios.

The initial AMIC survey was run in October 2017, less than three months before MiFID II came into effect. It was presented at the AMIC Conference in November 2017 and saw 33 firms respond of which two-thirds were asset managers or investment funds and roughly one third were private banks. The survey provided an idea of the direction of travel that the industry was following in respect of the new research rules.

The purpose of the second survey is to assist our members understand their peers' views on research unbundling and to establish progress compared to the first survey. More specifically the survey will ask how firms have implemented the rules, whether the market for research has settled and to see what aspects firms still have difficulties with the rules.

This second survey is longer, more detailed and builds on the experience gained on the remaining challenges, difficulties and outstanding issues in the implementation of the MIFID II rules. The survey will attempt to understand investor firms' attitudes towards roadshow participation, the use of research published freely on a website, trial periods, value assessment and cross-border implementation.

Following agreement by the AMIC Executive Committee on 19 September, the second AMIC FICC Research Unbundling survey was issued the week of 1 October with a *deadline of Friday 26 October.* Subject to agreement by the AMIC Executive Committee, the results of the survey will be made public at the AMIC Conference on 22 November and will also be published on the ICMA website. *We encourage buy-side firms to respond so that the survey can provide a valuable reflection of the implementation of the research unbundling rules after the implementation of MiFID II.*

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International Regulatory Digest


by David Hiscock and Alexander Westphal

G20 financial regulatory reforms

On 5 July 2018, the BCBS released the *Global Systemically Important Banks: Revised Assessment Methodology and the Higher Loss Absorbency Requirement*, consistent with the agreement to review the G-SIB framework every three years to allow opportunity for its enhancement. Building on member jurisdictions' experience and the feedback received during last year's public consultation, the BCBS has reconfirmed the fundamental structure of the G-SIB framework – there is general recognition that the framework is meeting its primary objective of requiring G-SIBs to hold higher capital buffers and providing incentives for such firms to reduce their systemic importance.

The decision to maintain the core elements of the G-SIB framework also contributes to the stability of the regulatory environment following the end-2017 finalisation of the Basel III post-crisis reforms. Nevertheless, based on the review, a number of enhancements to the G-SIB framework have been agreed, including the extension of the scope of consolidation to insurance subsidiaries and the introduction of a trading volume indicator in the substitutability category. The revised G-SIB assessment methodology is expected to be implemented in member jurisdictions by 2021.

On 18 July, the FSB published a consultation report, for comment by 22 August, on the *Evaluation of the Effects of Financial Regulatory Reforms on Infrastructure Finance*. This evaluation is the first under the FSB framework for the post-implementation evaluation of the effects of the G20 financial regulatory reforms, and forms part of a broader FSB examination of the effects of reforms on financial intermediation. It focuses on infrastructure finance that is provided in the form of corporate and project debt financing (loans and bonds), for which the financial regulatory reforms are of immediate relevance; and concludes that the effect of the G20 financial reforms on infrastructure finance is of a second order relative to other factors. In particular, for the reforms that have been largely implemented and are most relevant for this evaluation the analysis thus far does not identify material negative effects on the provision and cost of infrastructure finance.

On 19 July, the BIS published a report, *Survey on the Interaction of Regulatory Instruments: Results and Analysis*, which aims to summarise and analyse the results of the second wave of the survey conducted by the BCBS's Research Task Force on the role of multiple regulatory constraints in the Basel III framework (the results of the first wave were published in February 2017). Some aggregate results are broken down by bank groups and geography. To provide additional insights (and check data quality), banks' answers from this survey are merged to banks' information on the other topics collected through the Basel III monitoring exercise. The authors find that there is a great degree of consistency across topics and, also, between the two survey waves.

A meeting of G20 finance ministers and central bank governors was held in Buenos Aires, on 21-22 July, preceded by a meeting of deputies. Considering ongoing financial regulatory reform, the communiqué issued at the close of

The financial system must remain open, resilient and supportive of growth.

the meeting says (paragraph #9): "The financial system must remain open, resilient and supportive of growth. We remain committed to the full, timely and consistent implementation and finalisation of the post-crisis reforms, and the evaluation of their effects. We welcome progress on the evaluations by the FSB and standard setting bodies of the effects of the reforms on infrastructure financing and incentives to centrally clear OTC derivatives and we expect the final results by the Leaders' Summit. We look forward to the FSB's continuing progress on achieving resilient, market-based finance. We continue to monitor and, if necessary, address emerging risks and vulnerabilities in the financial system."

In brief, other points in the communiqué include:

- we welcome progress on the Roadmap to infrastructure as an Asset Class;
- we continue monitoring cross-border capital flows and examining available tools to help countries harness their benefits while also managing risks;
- we reaffirm our commitment to further strengthening the global financial safety net, with a strong, quota-based, and adequately resourced IMF at its centre;
- we continue to monitor debt vulnerabilities in Low Income Countries with concern;
- we are looking forward to the report on Global Financial Governance;
- technological innovations, including those underlying crypto-assets can deliver significant benefits to the financial system; but crypto-assets do raise issues and we welcome work to monitor their potential risks;
- we support a globally fair, sustainable, and modern international tax system;
- mobilising sustainable finance and strengthening financial inclusion are important for global growth; and our fight against terrorist financing, money laundering and proliferation financing continues.

The BCBS met in Basel, on 19-20 September, to discuss a range of policy and supervisory issues, and to take stock of its members' implementation of post-crisis reforms:

- the results of the annual assessment exercise for G-SIBs were approved and will be submitted to the FSB before it publishes the 2018 list of G-SIBs – it was also agreed to publish the high-level indicator values of all the banks that are part of the G-SIB assessment exercise;
- finalisation of revisions to the market risk framework is expected by around the end of the year;
- a newsletter will be published on leverage ratio window-dressing behaviour around regulatory reporting dates – Pillar 1 (minimum capital requirements) and Pillar 3 (disclosure) measures to prevent this behaviour will be considered
- clarification of the treatment of "settled-to-market" derivatives in the liquidity standards has been agreed and an FAQ has been published on this topic;
- the outcome of the BCBS review of the impact of the leverage ratio on client clearing was discussed, as was an associated joint consultation paper by the BCBS, FSB, CPMI and IOSCO on the effects of post-crisis reforms on incentives to CCP clear OTC derivatives – a consultation paper will be published in October to seek the views of stakeholders as to whether the exposure measure should be revised and, if so, on targeted revision options;
- it was agreed to publish, in October, a revised version of the BCBS Principles on Stress Testing, following the consultation paper published in December 2017; and
- views were exchanged on emerging conjunctural and structural risks, partially focusing on banks' exposures to crypto-assets and the risks such assets may pose – further work on this topic was agreed.

BCBS members, whose next meeting is scheduled for 26-27 November in Abu Dhabi, reiterated their expectation of full, timely and consistent implementation of the Basel III standards for internationally-active banks.

On 25 September, the FSB and the IMF published the third progress report on the implementation of the second phase of the G20 Data Gaps Initiative (DGI-2). This report updates on the work undertaken since September 2017 to advance implementation of the 20 recommendations aimed at addressing the data gaps identified after the global financial crisis and promoting the regular flow of timely and reliable statistics for policy use. The progress report highlights the following:

- considerable progress was made by the economies participating in DGI-2 during its second year;
- key challenges remain, and high-level political support is crucial to overcome them; and
- further progress in implementing the DGI-2 is expected from the participating economies and will be reported to G20 Finance Ministers and Central Bank Governors.

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ICMA in China

By Ricco Zhang

ICMA now has more than 30 members in China including banks, securities firms, law firms, rating agencies, accounting firms and infrastructure operators.

ICMA has a long established cooperation with the China's National Association of Financial Market Institutional Investors (NAFMII) and since 2010 has worked with them to assist in the development of standards for the onshore interbank bond market as this market continues to grow in volume, attract new entrants, and diversify its products.

In particular, as part of the UK-China Economic and Financial Dialogue, ICMA and NAFMII continue to co-host two working groups on this year's subjects: (i) recommendations to onshore policy makers on implementing trustee/agency structures in the domestic capital markets, based on international practice; and (ii) to develop a market development toolkit covering foreign investment in Chinese domestic bond markets and further expansion of the foreign issuer base in the panda bond market, respectively.

ICMA is now regarded as a key partner for policy makers and market participants in debt capital markets in China, as an authority on standard setting in the international capital market, particularly in areas such as primary markets, repo markets and green bonds where much of the international growth is coming from. ICMA also acts as a bridge between market infrastructures and international investors to advise on the improvement of Bond Connect and other schemes.

The 2018 Green and Social Bond Principles AGM and Conference was successfully held in Hong Kong, for the first time in Asia, jointly organized with the Hong Kong Monetary Authority.

ICMA substantially contributed to the development of green bond regulations and policies both in mainland China and Hong Kong, to help ensure such policies on green finance are as consistent as possible with international norms.

ICMA continues to work closely with an affiliate of the National Development and Reform Commission's training center on the Corporate Finance Certification in China, which started in 2013. Enrolment is growing and there are now more than 1,000 candidates each year.

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European financial regulatory reforms

Following from the Bulgarian Presidency in the first half of 2018, as from 1 July Austria has taken over as the Presidency of the Council of the European Union, for the second half. During its Presidency, Austria intends to take on the role of bridge builder in Europe and reduce the tensions that have recently arisen. Under the motto of "A Europe that protects", the Austrian Government will focus on the following priorities during its Presidency: security and the fight against illegal migration, securing prosperity and competitiveness through digitalisation, and stability in the European neighbourhood. Within the programme of the Austrian Presidency the section on the Economic and Financial Affairs Council is headed "A stable and strong euro area and fair and efficient taxation". This includes paragraphs on completing the Banking Union and developing a Capital Markets Union; deepening and strengthening economic policy coordination; improving efficiency and fairness in taxation; and provision of financial resources – 2019 EU budget.

The former of these reports states that with respect to the Banking Union, the Presidency will focus on further risk reduction measures, as progress in this area is a prerequisite for resuming discussions on further risk sharing measures - first and foremost, the Presidency will strive for an agreement on the Banking Package (risk reduction measures) presented by the European Commission in November 2016, which already addresses a number of important objectives outlined in the ECOFIN roadmap of June 2016 on risk reduction measures. Also, with respect to the numerous other topics related to financial services, the Presidency will do its best to achieve significant progress and finalise dossiers. The Presidency will also ensure an appropriate follow-up to the Commission's FinTech Action Plan (and the respective conclusions of the ECOFIN Council), with a particular focus on opportunities and risks of virtual assets and on regulatory and supervisory measures that may become necessary in this context. Finally, the Presidency will also advance the building of CMU, thus contributing to innovation and competitiveness, employment and growth.

Within the programme, it is also observed that the complex Brexit negotiations, the Withdrawal Agreement and the terms on the transition period as well as the Political Declaration on the framework for future EU-UK relations associated with the Withdrawal Agreement have to be finalised by autumn 2018 – to ensure the UK's orderly withdrawal from the EU on 30 March 2019. In this context, the Presidency will focus on maintaining the unity of the EU27, and on laying the foundations for a positive and successful relationship with the UK after its withdrawal. It is also stated that the Withdrawal Agreement must provide for strong guarantees and controls as well as protections for the citizens' rights; and that the Presidency's goal is a constructive and forward-looking relationship with the UK, which requires a level playing field and a reasonable balance between rights and obligations.

On 3 July, Austria's Federal Chancellor, Sebastian Kurz, presented the Presidency at a plenary session of the European Parliament, in Strasbourg. European Commission President, Jean-Claude Juncker, and the leaders of the major political groups urged Sebastian Kurz to pursue work on asylum reform, the euro area and the creation of a European Monetary Fund. Priority should also be given to discussing proposals for the EU's new long-term financial framework in the Council, in order to reach an agreement with Parliament before the EU elections in May 2019, they added. Austrian Presidency kick-off meetings with Coreper I and Coreper II took place on 4 July, in Brussels, and a visit of the College of Commissioners, to Vienna, was arranged for 6 July.

In April, as reported in this section of Issue no 50 of the ICMA Quarterly Report, a draft European Parliament own initiative report was published, on the topic of relationships between the EU and third countries concerning financial services regulation and supervision. Subsequently, an 11 July ECON vote provided a very significant majority for a final version of this own initiative report, which has been published, dated 18 July.

ESMA published its 2019 Annual Work Programme, dated 26 September. In its initial set-up period, from 2011 up to 2015, ESMA focused on building a single rulebook for EU financial markets and on establishing itself as a credible direct supervisor. In accordance with ESMA's Strategic Orientation 2016-2020 ESMA has now shifted its focus onto its other two activities: supervisory convergence and assessing risks in the financial markets. In 2019, ESMA will continue on this line, as well as fulfilling its responsibilities stemming from the initiatives of the CMU.

In addition, ESMA will be taking on new direct supervisory responsibilities under the SFTR and the Securitisation Regulation, as well as new supervisory convergence powers and responsibilities under European funds' Regulations. Moreover, ESMA is planning to support sustainable finance through a set of priority actions.

With regard to ESMA's existing mandates, major work streams for 2019 include supervisory convergence work in the areas of the prospectus and securitisation regulations. Continued implementation of MiFID II and MiFIR will be a point of focus, in particular to meet the increasing demand for effective supervisory convergence, to analyse and manage the related data requirements, and to provide advice to the Commission on the retention or the review of the new requirements. ESMA will also work on the third country regime under MiFIR including, among other tasks, support to the Commission on equivalence assessments and concluding co-operation arrangements with third countries.

As European regulator and supervisor of specific financial entities, ESMA will persistently and prudently continue its work in 2019 to support a smooth and resilient withdrawal of the UK from the EU. This withdrawal will make demands on ESMA, and NCAs, in terms of supervisory convergence work and financial stability work, as well as third-country policies. And ESMA will continue its preparedness planning based on all scenarios, including a no-deal scenario.

Finally, during 2017, the European Commission made two legislative proposals that, if approved by the co-legislators in 2018, would significantly affect ESMA's planning environment for 2019. First, the proposed amendment to EMIR aims to enhance the supervision of third-country CCPs and make the supervision of EU CCPs more coherent. Second, in September 2017, an amendment to ESMA's founding Regulation, as part of a wider review of the ESFS, was proposed. This proposal would set up a new governance and funding structure for ESMA, as well as new objectives, tasks and powers.

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Macroprudential risk

Published on 2 July 2018, *Evaluating Macroprudential Policies* is an ESRB staff working paper which looks at this relatively new policy field, the goal of which is to preserve financial stability and to prevent the build-up of systemic risk that may have adverse effects for the functioning of the financial system and for the real economy. New institutions have been tasked with the implementation of macroprudential policies, and new policy instruments have been introduced, yet uncertainty about the state of the financial system and the effects and effectiveness of these policy instruments is high. This uncertainty entails two risks: the risk of acting too late (inaction bias) and the risk of choosing an inappropriate instrument or inadequate calibration.

In this paper, the authors argue that both these risks can be mitigated if macroprudential policy is embedded in a structured policy process, which should involve four steps: defining policy objectives for macroprudential policies; choosing intermediate objectives and appropriate indicators; linking instruments to these indicators through ex-ante evaluation studies; and analysing the effects of these policies through ex-post evaluation studies. They argue that the infrastructure for this policy process can be further improved by providing data for policy evaluation, establishing or strengthening legal mandates for policy evaluation, establishing mechanisms for international cooperation, and building up repositories of evaluation studies.

Also published on 2 July, *Cyclical Investment Behavior Across Financial Institutions* is an ESRB staff working paper in which the author contrasts the investment behaviour of different financial institutions in debt securities as a response to past returns. For identification, he uses unique security level data from the German Microdatabase Securities Holdings Statistics. He finds that banks and investment funds respond in a pro-cyclical manner to past security-specific holding period returns, while, in contrast, insurance companies and pension funds act counter cyclically – they buy when returns have been negative and sell after high returns. These heterogeneous responses can be explained by differences in their balance sheet structure.

Published by the CGFS, on 5 July, *Financial Stability Implications of a Prolonged Period of Low Interest Rates* identifies channels through which a "low-for-long" interest rate scenario might affect the health of banks, insurance companies and private pension funds, and finds that this scenario would be harder on insurers and pension funds than on banks. Even though the analysis did not show that measures of firms' financial soundness dropped significantly, prolonged low rates could still involve material risks to financial stability. In particular, a "snapback", involving an unexpected sudden increase in market rates from currently low levels, could affect banks' solvency and create liquidity issues for insurers and pension funds.

On 5 July, the ESRB reported on the 30th regular meeting of its General Board, which was held on 28 June. The General Board noted that more broad-based economic growth is supporting the outlook for the stability of the EU financial system. However, tail risks remain elevated amid significant political, geopolitical and policy uncertainties. Furthermore, the General Board discussed the vulnerabilities in the EU commercial real estate (CRE) sector; endorsed the publication of the third EU Shadow Banking Monitor; and exchanged views on macroprudential approaches to NPLs.

Alongside this, the ESRB released the 24th issue of its *Risk Dashboard*. In overview, this reports that geopolitical and political uncertainties pushed up market-based indicators of systemic stress in the EU over the past quarter. Considering macro risk, economic growth in the EU moderated from the high levels seen in 2017; and although most countries deleveraged in the years following the global financial crisis, debt levels remain elevated across countries and sectors in the EU. Looking at finance industry sectors, bank profitability in the EU continued to improve in the first quarter of 2018 and banking sector resilience continued to strengthen. Meanwhile, total assets of EU investment funds and other financial institutions changed little in 2017, although the euro area saw slightly stronger growth. And, in recent quarters, CCPs' resources have remained broadly stable, while the contributions of larger clearing members are relatively high.

An unexpected sudden increase in market rates from currently low levels, could affect banks' solvency and create liquidity issues for insurers and pension funds.

Subsequently, on 9 July, the ESRB Chair, Mario Draghi, addressed an ECON hearing, in Brussels, alongside which the ESRB published its seventh *Annual Report*, which presents the ESRB's risk outlook together with the underlying analysis and discusses ESRB contributions to the EU macroprudential policy framework; and also documents the follow-up to ESRB recommendations. In his remarks the Chair focused firstly on the most recent developments in macroprudential policy at the national level; and then secondly, moving on to macroprudential policy at the European level, on the main features of the recent ESRB recommendation aimed at addressing liquidity and leverage risks in investment funds.

Published on 11 July, *A Risk-Centric Model of Demand Recessions and Macroprudential Policy* is a BIS staff working paper, in which the authors demonstrate how the zero lower bound on interest rates can constrain the capacity of monetary policy to stabilise asset markets and the economy in the case of an adverse financial shock. Macroprudential policy that curbs speculation by optimistic investors in the boom can mitigate downward spirals in the bust as it safeguards optimistic investors from suffering heavy losses during downturns, thus preserving their stabilising role.

On July 16, the Executive Board of the IMF concluded its annual Article IV consultation on euro area policies with member countries. This year, the consultation also included a discussion of the findings of the Financial Sector Assessment Program (FSAP) exercise for the euro area. The Executive Board Assessment includes paragraphs stating that:

"Directors welcomed the improvement in overall banking health, as documented in the FSAP review. They urged further efforts to strengthen the resilience of the system, in particular in terms of profitability, and encouraged vigilance against financial stability risks. They appreciated the strengthening of banking supervision under the Single Supervisory Mechanism, while noting remaining challenges. Directors encouraged ongoing supervisory and other actions to clean up legacy assets. They recognized that bank crisis preparedness and management have been upgraded, yet saw the need to address certain transitional and structural issues. They agreed on the importance of building up "bail-in-able" debt in banks, and gradually reducing financial intermediaries' exposures to home sovereign debt, both of which will help attenuate sovereign bank feedback loops. Further progress on building the Capital Markets Union and enhancing the supervision of nonbanks were viewed as valuable in themselves, and all the more so in the context of Brexit.

Directors considered architectural reforms a necessary complement to national action. They urged swift progress on reducing the legal fragmentation across national lines, creating a credit line from the European Stability Mechanism to backstop the Single Resolution Fund, and establishing a common deposit insurance scheme. Most Directors saw merit in developing over time a central fiscal capacity to support macro stabilization, embedding strong safeguards against permanent transfers and moral hazard."

For ease of comparative reference, the most recent annual Article IV consultation on UK policies was concluded by the IMF's Executive Board on 12 February. The Executive Board Assessment on that occasion includes a paragraph stating that:

"Directors welcomed the resilience of the UK financial sector, owing in part to post-crisis regulatory reform. They encouraged the authorities to maintain robust prudential and supervisory standards, and to continue monitoring consumer credit and bank risk weights. Directors commended the authorities for proactively helping financial institutions prepare for the [Br]exit, given the uncertainties regarding the future of financial service arrangements with the EU. They called on all parties involved to work together to mitigate transition risks related to changes in regulatory regimes and responsibilities. More generally, they underscored the importance of close cross-border cooperation in a potentially more fragmented European financial system."

On 19 July, the EBA published the latest periodical update to its *Risk Dashboard*, which summarises the main risks and vulnerabilities in the EU banking sector using quantitative risk indicators, along with the opinions of banks and market analysts from its Risk Assessment Questionnaire. In the first quarter of 2018, the updated dashboard identified ongoing improvements in the repair of the EU banking sector but also residual risks in banks' profitability. The results of the *Risk Assessment Questionnaire* also show that cyber risk and data security are considered as the main drivers for the increase in operational risk. They are also assumed to be the main factors that might negatively influence market sentiment, along with geopolitical uncertainties including the UK's decision to leave the EU.

Measuring Risks to UK Financial Stability is a Bank of England staff working paper, published on 20 July, in which the authors present a framework for measuring the evolution of risks to financial stability over the financial cycle, which they apply to the UK. They identify 29 indicators of financial stability risk, drawing from the literature on early warning indicators of banking crises, which they normalise and aggregate to produce three composite measures, capturing: leverage in the private non-financial sector, including the level and growth of household and corporate debt, as well as the UK's external debt; asset valuations in residential and commercial property markets, and in government and corporate bond and equity markets; and credit terms facing household and corporate borrowers. They assess these composite measures relative to their historical distributions and present preliminary evidence for how they influence downside risks to economic growth and different horizons. They consider that the measures provide an intuitive description of the evolution of the financial cycle of the past three decades and that they could lend themselves to simple communication, both with macroprudential policymakers and the wider public.

On 24 July, EIOPA published its updated *Risk Dashboard* based on the first quarter 2018 data, which shows that the risk exposure of the EU insurance sector remains stable overall with a decline in macro and insurance risks and an increasing trend in market risks. Points highlighted by EIOPA include that:

- persisting low yields and recent adverse developments such as increased protectionism should not be neglected, despite the improvement in recent economic data and the ongoing normalisation of monetary policy;
- higher volatility in bond markets since March led to an increase in market risks, but these continue at a medium level; and
- credit risks also remain at a medium level, although spreads increased across all bond segments.

On 31 July, EIOPA published the third in a series of papers with the aim of contributing to the debate on systemic risk and macroprudential policy, which until now has mainly focused on the banking sector. This third paper builds on and supplements the previous ones by carrying out an initial assessment of other potential tools or measures to be included in a macroprudential framework designed for insurers. EIOPA carried out an analysis focusing on four categories of tools: (i) capital and reserving-based tools; (ii) liquidity-based tools; (iii) exposure-based tools; and (iv) pre-emptive planning – focusing on whether a specific instrument should or should not be further considered. This initial assessment represents a first step in a process and is not yet a formal proposal.

Published on 1 August, *Shadow Banking and Market-Based Finance* is an IMF staff departmental paper. Noting that variants of non-bank credit intermediation differ greatly, the authors provide a conceptual framework to help distinguish various characteristics – structural features, economic motivations, and risk implications – associated with different forms of nonbank credit intermediation. Anchored by this framework, they take stock of the evolution of shadow banking and the extent of its transformation into market-based finance since the global financial crisis. In light of the substantial regulatory and supervisory responses of recent years, they highlight key areas of progress while drawing attention to elements where work still needs to be done.

Would Macroprudential Regulation Have Prevented the Last Crisis? is a Bank of England staff working paper, published on 3 August, in which the authors consider how well equipped are today's macroprudential regimes to deal with a re-run of the factors that led to the global financial crisis? They argue that a large proportion of the fall in US GDP associated with the crisis can be explained by two factors: the fragility of financial sector – represented by the increase in leverage and reliance on short-term funding at non-bank financial intermediaries – and the build-up in indebtedness in the household sector. They describe and calibrate the policy interventions a macroprudential regulator would wish to make to address these vulnerabilities; and compare and contrast how well placed two prominent macroprudential regulators – the US Financial Stability Oversight Council and the UK's Financial Policy Committee – are to implement these policy actions.

On 9 August, the EBA published 12 indicators and updated the underlying data from the 35 largest institutions in the EU, whose leverage ratio exposure measure exceeds €200 billion. This end-2017 data contributes to the internationally agreed basis on which a smaller subset of banks will be identified as G-SIIs, following the BCBS and FSB final assessments. The EBA, acting as a central data hub in the disclosure process, will update this data on a yearly basis and aggregate it across the EU. A stable sample of 33 institutions shows that their aggregate total exposures, as measured for the leverage ratio, decreased by 1.1% and stood at €24.3 trillion at the end of 2017.

On 6 September, ESMA published its latest *Trends, Risks, and Vulnerabilities (TRV) Report (No 2, 2018)*. This TRV, which covers the first half of 2018, finds that overall risk levels for the EU's securities markets remained stable but at high levels for most risk categories, with equity and bond volatility spikes in February and May reflective of growing sensitivities. The TRV identifies the following key risks in EU securities markets:

- market risk remains at a very high level accompanied by very high risk in securities markets and elevated risk for investors, infrastructures and services – the outcome of the Brexit negotiations remains at this stage the most important political risk for the EU;
- credit risk and liquidity risk remain high with a deterioration in outstanding corporate debt ratings, and deteriorating measures of corporate and sovereign bond liquidity; and
- operational risk continues to be elevated with negative outlook, as cyber threats and Brexit-related risks to business operations remain major concerns.

Going forward, EU financial markets can be expected to become increasingly sensitive to mounting economic and political uncertainty from diverse sources, such as weakening economic fundamentals, transatlantic trade relations, emerging market capital flows, Brexit negotiations, and others. Assessing business exposures and ensuring adequate hedging against these risks will be a key concern for market participants in the coming months.

Then, on 10 September, the ESRB published the *EU Shadow Banking Monitor 2018*, which covers data up

EU financial markets can be expected to become increasingly sensitive to mounting economic and political uncertainty from diverse sources.

to end-2017 and is the third issue in an annual series that contributes to the monitoring of a part of the financial system that has grown in recent years and, while little changed in 2017, now accounts for around 40% of the EU financial system. While the size of the shadow banking system is important for monitoring purposes, it is not, in itself, a measure of risks and vulnerabilities. Nevertheless, the report does identify several key risks and vulnerabilities in the EU shadow banking system, namely:

- liquidity risk and risks associated with leverage among some types of investment funds;
- interconnectedness and the risk of contagion across sectors and within the shadow banking system, including domestic and cross-border linkages;
- procyclicality, leverage and liquidity risk created through the use of derivatives and SFTs; and
- vulnerabilities in some parts of the other financial institution sector, where significant data gaps prevent a comprehensive risk assessment.

Subsequently, on 11 September, the Joint Committee of the ESAs published its latest report on risks and vulnerabilities in the EU financial system, which shows that the EU's securities, banking and insurance sectors continue to face a range of risks. The report highlights the following risks as potential sources of instability:

- abrupt yield increases could generate substantive asset price volatility and lead to losses across asset classes;
- repricing of risk premia and potentially increasing interest rates could affect financial institutions and may bring with them a risk of contagion between different sectors; and
- uncertainties around the terms of the UK's withdrawal from the EU and the need to prepare for a no-deal scenario, as well as trade policy uncertainties and wider geo-political risks.

In light of the ongoing risks and uncertainties, especially those around Brexit, supervisory vigilance and cooperation across all sectors remains key. Therefore, the ESAs advise the following policy actions by European and national competent authorities as well as financial institutions:

- stress tests – should be conducted and developed further across all sectors;
- risk appetite – supervisory authorities need to pay continued attention to the risk appetite of all market participants;
- contagion risks – macro- and microprudential authorities should contribute to addressing possible contagion risks, including continuing their efforts in monitoring lending standards; and
- Brexit – it is crucial that EU financial institutions and their counterparties, as well as investors and retail consumers, plan appropriate mitigating actions to prepare for the UK's withdrawal from the EU in a timely manner, including the risks associated with a no-deal scenario.

Macroprudential Stress Tests and Policies: Searching for Robust and Implementable Frameworks is an IMF staff working paper, published on 11 September. Macroprudential stress testing (MaPST) is becoming firmly embedded in the post-crisis policy-frameworks of financial-sectors around the world. They can offer quantitative, forward-looking assessments of the resilience of financial systems as a whole to particularly adverse shocks; and are thus well suited to support the surveillance of macrofinancial vulnerabilities and to inform the use of macroprudential policy-instruments. This report summarizes the findings of a joint-research effort by the IMF's Monetary and Capital Markets Department and the LSE based Systemic Risk Centre, which aimed at (i) presenting state-of-the-art approaches on MaPST, including modelling and implementation-challenges; (ii) providing a roadmap for future-research, and; (iii) discussing the potential uses of MaPST to support policy.

The Real Effects of Disrupted Credit - Evidence from the Global Financial Crisis is a, 13 September, paper written by the former Chairman of the US Federal Reserve, Ben S. Bernanke, and released by the Brookings Papers on Economic Activity. This paper firstly reviews research since the crisis on the role of credit factors in the decisions of households, firms, and financial intermediaries and in macroeconomic modelling. This research provides broad support for the view that credit market developments deserve greater attention from macroeconomists, not only for analysing the economic effects of financial crises but in the study of ordinary business cycles as well.

Secondly, new evidence is provided on the channels by which the recent financial crisis depressed economic activity in the US. Although the deterioration of household balance sheets and the associated deleveraging likely contributed to the initial economic downturn and the slowness of the recovery, the paper finds that the unusual severity of the Great Recession was due primarily to the panic in funding and securitization markets, which disrupted the supply of credit. This finding helps to justify the government's extraordinary efforts to stem the panic in order to avoid greater damage to the real economy.

On 19 September, the EBA published reports on EU banks' funding plans and asset encumbrance respectively, which aim to provide important information for EU supervisors to assess the sustainability of banks' main sources of funding. The results of the assessment show that banks plan to match the asset side increase in the forecast years by a growth in client deposits as well as market-based funding. 159 banks submitted their plans for funding over a forecast period of three years (2018 to 2020). According to the plans, total assets are projected to grow, on average, by 6.2% by 2020. The main drivers for asset growth are loans to households and to non-financial corporates. The asset encumbrance report shows that in December 2017 the overall weighted average asset encumbrance ratio stood at 27.9%, compared to 26.6% in 2016, with the modest increase mostly driven by a reduced volume of total assets as opposed to an increase in encumbered assets.

On 24 September, ESMA published an article setting out the details of its analysis of volatility in financial markets. The potential of market volatility to undermine financial stability as well as to impose unexpected losses on investors, is a subject of concern for securities market regulators, and is a key element of ESMA's market monitoring. Relatively high levels of volatility increase the likelihood of stressed financial markets. Also, however, a prolonged period of relatively low volatility may lead to a more fragile financial system, promoting increased risk-taking by market participants. ESMA will continue to monitor the development of market volatility and include regular updates in the TRV and Risk Dashboards, on a quarterly basis.

Also published on 24 September, *Managing the Sovereign-Bank Nexus* is an ECB staff working paper on the various channels that give rise to the interconnectedness between the financial health of banks and sovereigns – the "sovereign-bank nexus". The authors find that the link is caused by three interacting channels: banks hold large amounts of sovereign debt; banks are protected by government guarantees; and the health of banks and governments affects/is affected by economic activity. The paper underlines the need for a holistic policy response to decrease this interconnectedness, arguing for stronger balance sheets and bank governance, disincentives to holding of large amounts of sovereign bonds and limits on public guarantees.

The ESRB held its third annual conference, on 27 and 28 September, in Frankfurt. Mario Draghi, ESRB Chair, opened the conference and gave a keynote address to conference participants. Subsequent keynote speeches were given by Philip Lane, Governor, Central Bank of Ireland and Chair of the ESRB ATC; and John Schindler, Associate Director, Board of Governors of the Federal Reserve System. Panel discussions were conducted on sustainable finance; international perspectives on macroprudential policy; identifying and assessing risks in the shadow banking system; and macroprudential policy in recovering economies.

Also on 28 September, the Bank of England hosted a *Conference on Non-Bank Financial Institutions and Financial Stability*. The opening keynote speech was given by Alex Brazier, Executive Director, Financial Stability Strategy and Risk, Bank of England; and a keynote lecture, *Asset Managers and Financial Fragility*, was delivered by Itay Goldstein, Wharton School of Business, University of Pennsylvania. Discussions sessions considered the indirect impact of leverage ratio on banks and non-banks; systemic risk in asset managers and insurance companies; financial networks and peer-to-peer lending; and trading behaviour and financial stability.

Cross-border Banking and the Circumvention of Macroprudential and Capital Control Measures is an IMF staff working paper, published on 28 September, in which the authors analyse the joint impact of macroprudential and capital control measures on cross-border banking flows, while controlling for multidimensional aspects in lender-and-borrower-relationships (eg distance, cultural proximity, microprudential regulations). They uncover interesting spillover effects from both types of measures when applied either by lender or borrowing countries, with many of them most likely associated with circumvention or arbitrage incentives.

Published on 2 October, the sixth edition of the semi-annual ECB *Macroprudential Bulletin* contains three articles on key macroprudential topics. The first article analyses the leverage ratio and its links with the repo markets; the second focuses on the regulatory framework for G-SIBs, which was developed by the BCBS to address the negative externalities that a failure of these large banks could exert on the financial sector and the economy as a whole; and the third aims to facilitate the discussion on potential macroprudential liquidity instruments for investment funds by providing a preliminary assessment of the effectiveness and efficiency of several instruments. As in previous issues, this Macroprudential Bulletin also provides an overview of macroprudential policy measures which currently apply in euro area countries.

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Interest rate benchmarks

This issue of the ICMA Quarterly Report includes two feature articles relating to work on the transition from IBORs, including details of several relevant recent developments.

On 11 July 2018, Jakub Michalik of ESMA addressed an ECON scrutiny session (ahead of which a briefing paper was prepared for ECON) on Level 2 measures under the EU Benchmarks Regulation (BMR). Noting that the BMR started to apply on 1 January he reported that, through a range of activities, ESMA has supported its smooth implementation. This has included the delivery of applicable RTS and ITS, but delayed endorsement of these is creating significant uncertainties for all parties involved and risks the proper implementation of the BMR. ESMA has also consulted on some Guidelines, the finalisation of which awaits that of the RTS, and has started producing applicable Q&As. Additionally, ESMA has started publishing the applicable BMR registers and is participating in the colleges of competent authorities which have been established in respected of the three benchmarks which have thus far been included by the European Commission in the list of critical benchmarks – namely, EURIBOR, EONIA and LIBOR.

Delayed endorsement of these is creating significant uncertainties for all parties involved and risks the proper implementation of the BMR.

On 12 July, the FSB published a *Statement on Interest Rate Benchmark Reform: Overnight Risk-Free Rates and Term Rates*. This Statement is well aligned with that day's speech by the Chief Executive of the FCA, Andrew Bailey, and the opening statement of the CFTC Chairman, J. Christopher Giancarlo, given before a Market Risk Advisory Committee Meeting.

On 19 July, the ARRC hosted a half-day public forum, for which presentation materials are available. Subsequently, on 20 September, the ARRC released a new set of frequently asked questions designed to provide information to the market and broader public about the work of ARRC, its progress to date and the overall effort to promote voluntary market adoption of its recommended alternative to U.S. Dollar LIBOR, the Secured Overnight Financing Rate (SOFR).

A statement, published on 25 July, shows that the Bank of England complies with the IOSCO benchmark principles, and therefore with international best practice, in its administration of SONIA. The statement has been independently assured by Ernst and Young.

On 10 September, it was announced that the EMMI Board of Directors had decided to stop the efforts toward the production of a pan-European reference index for the secured segment of the euro money market under the New Repo Index project.

On 19 December 2017, ESMA issued an announcement that it would, as from 3 January (ESMA's first working day of 2018), begin publishing a register of administrators and third country benchmarks, in accordance with Article 36 of the EU BMR. Initially ESMA was publishing the latest registers' information, on a daily basis (ESMA working days), in a comma-separated values (CSV) file format, available for download. However, on 7 September ESMA announced that, following satisfactory completion of the necessary technical preparations, it has now moved this publication to the ESMA registers database.

In view of ESMA's statutory role to build a common supervisory culture by promoting common supervisory approaches and practices, ESMA has established a process for adopting Q&A documents which relate to the consistent application of of the BMR. The most recent update was published on 27 September

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Credit rating agencies

On 18 July 2018, ESMA published supplementary guidance on the application of the endorsement regime for non-EU credit ratings under the EU CRA Regulation (CRAR). In order to ensure that third-country credit ratings, which are endorsed for use by EU investors, meet requirements which are at least as stringent as those set out in CRAR, ESMA adds a new section to its Guidelines on Endorsement first published in November 2017. The new Guidelines will enter into force on 1 January 2019.

On 19 July, ESMA issued a consultation paper (for comment by 26 September) regarding revised Guidelines on the information that is to be periodically reported to ESMA by CRAs for supervisory purposes. In March 2015, ESMA published its first such set of Guidelines, however, since their introduction ESMA's supervisory processes have evolved to a point where the timing, frequency, and format of the information submitted is no longer capable of supporting ESMA's supervisory processes in an efficient and effective manner – therefore, ESMA is proposing a revision. For CRAs, ESMA anticipates that these Guidelines will introduce greater proportionality in their reporting requirements, as well as greater predictability in their supervisory interactions with ESMA.

The revised Guidelines aim to achieve this by:

1. introducing a revised approach to determining a CRAs' reporting obligations, that is based upon ESMA's internal risk assessment;
2. proposing greater differentiation in the reporting frequencies for CRAs, to ensure more proportionate reporting requirements for different entities;
3. providing more specific reporting instructions for a number of existing reporting requirements, to improve the consistency of the information currently provided;
4. introducing a number of new periodic reporting requirements to support ESMA's supervisory activities, to reduce the need for ESMA to submit ad-hoc requests for information; and
5. introducing standardised reporting templates for a number of new and existing reporting requirements, to ensure a streamlined approach to reporting for CRAs and a higher level of usability of the information received.

On 23 July, ESMA announced that it had fined five banks and issued five associated public notices for negligently breaching the EU CRAR. ESMA found that the five banks infringed the CRAR by issuing credit ratings without being authorised, by ESMA, to do so.

On 27 July, ESMA announced the EFTA Surveillance Authority's (EFTA SA's) registration, effective 3 August, of the Nordic Credit Rating AS (NCR) as a CRA under the EU CRAR, as incorporated into the Agreement on the EEA. NCR, which is based in Oslo, Norway, with a branch in Stockholm, Sweden, intends to issue corporate ratings. This decision was adopted by the EFTA SA on the basis of a draft prepared by ESMA, which is the EU's single supervisor for CRAs. In this case, NCR will be subject to on-going supervision and monitoring by EFTA SA and ESMA respectively, to make sure that the firm continues to meet the conditions for registration.

On 13 August, ESMA announced that, effective that day, it had registered Moody's Investors Service (Nordics) AB as a CRA under the CRAR. Moody's Investors Service (Nordics) AB, which is based in Sweden, intends to issue sovereign and public finance ratings, structured finance ratings and corporate ratings. This brings to 28 the total number of CRAs registered in the EU (amongst these three operate under a group structure, totaling 16 legal entities in the EU, which means that the total number of CRA entities registered in the EU is 41).

The most recent update to ESMA's Q&A on the application of the EU CRAR was published on 20 November 2017.

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OTC (derivatives) regulatory developments

EMIR introduced a temporary exemption for pension scheme arrangements (PSAs) from the clearing obligation to allow time for a suitable technical solution for the transfer of non-cash collateral as variation margins to be developed by CCPs and provided for two possible extensions of this temporary extension. Following the two possible extensions there is no possibility to further extend this temporary exemption under EMIR. The EMIR Refit proposal includes amongst other measures a further extension of the temporary exemption for PSAs from the clearing obligation, in view of the fact that there is not yet a suitable technical solution for the transfer of non-cash collateral as variation margins.

Given that the Refit negotiations have not finalised and that the resulting text is not expected to start applying by the time the temporary exemption expires, there would be a timing gap during which PSAs would need to have clearing arrangements in place and start clearing their derivative contracts before they are once again no longer required to do so. In light of this, on 3 July 2018, ESMA issued a communication in which its states that it expects competent authorities to not prioritise their supervisory actions towards entities that are expected to be exempted again in a relatively short period of time and to generally apply their risk-based supervisory powers in their day-to-day enforcement of applicable legislation in a proportionate manner.

Subsequently, on 8 August, ESMA issued an updated statement, clarifying that also for the purpose of the trading obligation ESMA expects competent authorities to not prioritise their supervisory actions towards entities that are expected to be exempted again in a relatively short period of time, and to generally apply their risk-based supervisory powers in their day-to-day enforcement of applicable legislation in a proportionate manner. Nevertheless, ESMA would encourage PSAs to trade on trading venues.

On 11 July, ESMA published a consultation paper (for comment by 30 August) on the clearing obligation under EMIR. The clearing obligation requires a range of interest rate and credit derivatives to be cleared. However, intragroup derivative transactions with a third country entity, and where certain conditions are satisfied, currently do not have to be cleared due to a deferred application date in the Delegated Regulations on the clearing obligation. The deferred dates are soon approaching, and the consultation sets out reasons to extend them through an amending RTS.

On 7 August, the FSB, BCBS, CPMI and IOSCO published a consultative document (for comment by 7 September) on incentives to CCP clear OTC derivatives. A number

This consultative document evaluates how these reforms interact and how they could affect incentives.

of post-crisis reforms are, directly or indirectly, relevant to incentives to CCP clear and this consultative document evaluates how these reforms interact and how they could affect incentives. The evaluation will inform relevant standard-setting bodies, and if warranted, could provide a basis for fine-tuning post-crisis reforms, bearing in mind the original objectives of the reforms – this does not imply a scaling back of those reforms or an undermining of members' commitment to implement them.

Subsequently, on 9 August, the FSB, BCBS, CPMI and IOSCO published a second report mapping interdependencies between CCPs and their clearing members and other financial service providers. Analysing this network of relationships is a useful starting point for understanding potential sources of systemic risk in CCP clearing, is intended to provide useful inputs for designing supervisory stress tests and has informed the policy work as set out in the joint workplan to promote CCP resilience, recovery and resolvability. The results are broadly consistent with the previous analysis and show that:

- prefunded financial resources are concentrated at a small number of CCPs;
- exposures to CCPs are concentrated among a small number of entities;
- the relationships mapped are characterised, to varying degrees, by a core of highly connected CCPs and entities and a periphery of less highly connected CCPs and entities;
- a small number of entities tend to dominate the provision of each of the critical services required by CCPs; and
- clearing members and clearing member affiliates are also important providers of other critical services required by CCPs and can maintain several types of relationships with multiple CCPs simultaneously.

There are, however, some changes to highlight in the interdependencies in CCP clearing. For instance, the concentration of client clearing activity has decreased; and initial margins from clients are now concentrated in two CCPs, compared to only one in the previous report.

On 27 September, ESMA published its *Final Report on the Clearing Obligation Under EMIR*, which presents a new set of draft RTS related to the deferred date of application for the treatment of certain intragroup transactions concluded with a third country group entity. With existing deferred dates soon approaching and, in the absence of implementing acts on equivalence on the legal, supervisory and enforcement framework of a third country under Article 13(2) of EMIR in respect of the clearing obligation, ESMA proposes to prolong these exemptions for a very limited period. In the interest of simplicity, ESMA also proposes to align the date of extension for the three relevant Commission Delegated Regulations to 21 December 2020 in case no equivalence decision has been adopted. The draft RTS has been sent to the European Commission for endorsement.

In view of ESMA's statutory role to build a common supervisory culture by promoting common supervisory approaches and practices, ESMA has established a process for adopting Q&A documents which relate to the consistent application of EMIR. The first version of ESMA's EMIR Q&A document was published on 20 March 2013, with the most recent update having been published on 26 September.

ESMA's list of CCPs authorised to offer services and activities in the EU, in accordance with EMIR, was last updated on 9 August, and its list of third-country CCPs recognised to offer services and activities in the EU was last updated on 21 August. ESMA's *Public Register for the Clearing Obligation* under EMIR was last updated on 9 August; whilst its (non-exhaustive) list of CCPs established in non-EEA countries which have applied for recognition has not been updated since 19 June.

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Market infrastructure

ECB: TARGET2-Securities (T2S)

As reported in the previous edition of the Quarterly Report, the Eurosystem recently reviewed the fee structure for T2S, its common settlement platform. On 21 June, the ECB's Governing Council approved the proposed increase of settlement fees as proposed by AMI-SeCo, the ECB's relevant advisory group on market infrastructure. In order to ensure full cost recovery despite a shortfall in T2S settlement volumes (and hence revenues) as compared to initial estimates, fees will rise as of 2019 from currently 0.15 EUR per (DvP) settlement instruction to 0.235 EUR. At the same time, the cost recovery period was extended to 14.5 years (until 2029) in order to keep the increase limited.

Following up on the discussions around the T2S pricing review, AMI-SeCo members decided to initiate more detailed work to better understand the evolution of T2S volumes and the different driving forces behind it. On 21 June, AMI-SeCo members held a first ad hoc workshop on T2S volumes chaired by Nicholas Hamilton, co-chair of the ICMA ERCC Operations Group who represents the ERCC in AMI-SeCo. The work on T2S volumes is currently being followed up by a small working group.

ECB: Advisory Groups on market infrastructure

The ECB's two main advisory groups on market infrastructure, AMI-SeCo and AMI-Pay have not had any regular meeting since the summer break. However, all the relevant meeting documents from previous sessions are available from the ECB website. The next meeting will be a joint meeting of both groups which is scheduled for 20-21 November 2018.

ECB: collateral management harmonisation

As reported in more detail in previous editions of the Quarterly Report (eg Q2 2018), the ECB in close collaboration with the industry has launched extensive work to foster the harmonisation of collateral management activities in Europe. A key objective of this work is to prepare the launch of the future Eurosystem Collateral Management System (ECMS), developed to offer a single system for users to manage eligible assets used as collateral for Eurosystem credit operations, and replacing the fragmented collateral framework based on the Correspondent Central Banking Model (CCBM).

The harmonisation work is undertaken by a dedicated Collateral Management Harmonisation Task Force (CMH-TF) set up under the umbrella of AMI-SeCo. Members of the ERCC Operations Group are active contributors to the different work streams that have been established in this context. In line with the priorities of the ECMS, the focus of the work is initially on the harmonisation of tri-party and corporate action processes. An important milestone was achieved in June with the submission of two final reports to AMI-SeCo with detailed harmonisation proposals in relation to corporate actions and triparty collateral management which have both been approved by AMI-SeCo at their latest meeting.

While the finalisation of the two reports was an important step, this does not mean that the CMH-TF work is over. The group continues to be closely involved, working out further details and ensuring the implementation of the harmonisation proposals. On 25 September, the group met for the ninth time in Frankfurt. A useful overview of priorities and upcoming activities for the CMH-TF was published alongside the meeting documents and is available on the ECB website.

ECB: other market infrastructure-related initiatives

On 17 September, the ECB organised the latest Focus Session in Frankfurt, a follow-up format to the previous T2S Info Sessions. The full-day event provided a useful overview of the various initiatives that are currently under way in the area of market infrastructure, led by the Eurosystem and undertaken in close collaboration with market participants through the two relevant industry advisory groups.

A first panel, moderated by Marc Bayle, the ECB's Director General for Market Infrastructure and Payments, focused on the new TARGET Instant Payments Settlement (TIPS) platform, which is scheduled to go live in November 2018. This work is making good progress. Most recently, the ECB announced the final TIPS pricing structure and also approved the TIPS software which is now ready for pilot testing with a first group of payment service providers ahead of the November go-live.

Another priority is the Eurosystem's ongoing work in relation to cyber resilience. At the Focus Session the ECB presented its new *Eurosystem cyber resilience strategy for FMIs* approved in March 2018 by the Governing Council. This work is closely coordinated at a global level under the auspices of CPMI-IOSCO (see section on FinTech regulatory developments below).

Other important initiatives that are being pursued include the ongoing project to consolidate the TARGET2 and T2S platforms and related services. The ECB provided a detailed status update on this project and its implications for market participants. Finally, as mentioned above, detailed work is under way to prepare the launch of the Eurosystem Collateral Management System (ECMS) scheduled for 2021. At the recent focus session, a panel of market practitioners looked at way to "Prepare for the new RTGS system and the transition to the Eurosystem Collateral Management System".

ECB: Market contact groups

Members of the Bond Market Contact Group (BMCG) last met on 26 June in Frankfurt. A summary of the meeting as well as a number of presentations have been published on the ECB's website. Members exchanged views on the bond market outlook for the year ahead, based on an introduction by HSBC. This was followed by a discussion on the likely implications from the global unwind of QE, which was introduced jointly by BlackRock and Commerzbank. Members also dedicated time to assess a number of other 'hidden' risks to bond markets, such as the growth of passive investing, the use of leverage in investment funds and the role of geopolitics. This was based on two separate presentations by Allianz and Citi. The next regular meeting of the BMCG is scheduled for 9 October 2018. Highlights on the draft agenda include discussions on electronic trading in bond markets & MiFID II and an update on the impact of Brexit. The latter discussion is being introduced jointly by ICMA's Paul Richards and a representative of Nomura.

The latest meeting of the Money Market Contact Group (MMCG) was held on 7 June in Frankfurt. As usual, members spent some time to assess the relevant developments in money markets, including the recent widening of USD LIBOR-OIS spreads (see introduction by Deutsche Bank) and the functioning of the Italian repo market (see presentation by Unicredit). Other topics discussed included money market reform in Europe, introduced by ING, as well as the ECB's work to develop ESTER, the new euro unsecured overnight interest rate. The next quarterly meeting of the MMCG will be held on 25 September and will see discussions on, *inter alia*, the impact of the recent developments in Italy on the money market, implications from Brexit, and finally also the impacts of the repayments of the ECB's second round of targeted longer-term refinancing operations (TLTRO-II).

European Commission

As reported in the previous Quarterly Report, the Commission is undertaking a broad review of all existing EU financial reporting regimes, the so-called fitness check on supervisory reporting. The related public consultation was launched on 1 December 2017 and closed on 14 March 2018. As a follow-up to this work the Commission organised a conference on "Preparing Supervisory Reporting for the Digital Age" which was held on 6 June in Brussels. A video of the conference is available on the Commission's website.

ESMA: post-trading

Exactly four years after the publication of the CSDR in the *Official Journal*, work on the implementation of the rules is still far from being concluded. This is particularly the case for the most contentious part of the law, the rules on settlement discipline (see more detailed articles in the Secondary Markets and Repo and Collateral Markets sections). However, progress is also being made on other aspects of the law. In particular, national regulators are busy assessing applications by their national CSDs to get authorised under the new framework. ESMA is maintaining a central register to track any authorisations granted. Five CSDs have been authorised so far, four of which have been added to the list over the past quarter: Interbolsa (Portugal), the Slovak CSD, OeKB CSD (Austria) and the Latvian CSD. These four follow VP from Denmark having been the first CSD to receive the stamp of approval from its national competent authority in March this year.

In addition to CSD authorisations, ESMA also continue to provide so-called Level 3 guidance on CSDR in the form of Q&As. The latest iteration of this document was published on 27 September and is available on the ESMA website.

Global Legal Entity Identifier System (GLEIS)

On 4 September 2018, the Association of National Numbering Agencies (ANNA) and the Global Legal Entity Identifier Foundation (GLEIF) announced the launch of a new initiative to link International Securities Identification Numbers (ISINs) and Legal Entity Identifiers (LEIs). The initiative has been created to help improve transparency of exposure by linking the issuer and issuance of securities.

The GLEIF continues to monitor regulatory initiatives on LEIs around the world and has created a detailed overview table tracking the related regulatory requirements in all the relevant jurisdictions. The table is updated on a regular basis and is available on the GLEIF website.

BIS: Committee on Payments and Market Infrastructures (CPMI)

The global harmonization of data for OTC derivatives reporting remains among the key priorities for CPMI and IOSCO. This includes work on unique identifiers, such as the Unique Transaction Identifier (UTI) and the Unique Product Identifier (UPI), but also other critical data elements. The latest publication concerns the latter. On 16 August, CPMI-IOSCO published a consultative report on governance arrangements for critical OTC derivatives data elements (other than UTI and UPI). The consultation concluded on 27 September.

In parallel, CPMI-IOSCO continue to monitor the implementation of the 2012 Principles of Financial Market Infrastructures (PFMI), a set of international standards for payment systems, CSDs and securities settlement systems, CCPs and trade repositories. The monitoring is done at three different levels. The latest Level 2 report, which looks at the consistency of the existing legal framework with the Principles, was published on 2 August, focusing on Canada which was found to have broadly implemented the PFMI. The full list of PFMI monitoring reports is available on the CPMI-IOSCO website.

The latest version of the CPMI's Red Book statistics on payments and financial market infrastructure was published on 27 September. The extensive database covering all the 27 CPMI jurisdictions is now available in new interactive format through the BIS Statistics Explorer. For the time being this includes only preliminary statistics for 2017, but the final figures will be added by December this year.

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by Gabriel Callsen

FinTech in International Capital Markets

FinTech regulatory developments

BIS Quarterly Review: widening divergences in markets

On 23 September 2018, the BIS published its Quarterly Review which includes the following Fintech-related special features: *Fintech Credit Markets around the World: Size, Drivers and Policy Issues* by Stijn Claessens, Jon Frost, Grant Turner and Feng Zhu. FinTech credit has grown rapidly around the world in recent years, but its size still varies greatly across economies. Differences reflect economic development and financial market structure: the higher a country's income and the less competitive its banking system, the larger is FinTech credit activity. FinTech credit volumes are also greater in countries with less stringent banking regulation.

Regulating Cryptocurrencies: Assessing Market Reactions by Raphael Auer and Stijn Claessens. Cryptocurrencies are often thought to operate out of the reach of national regulation, but in fact their valuations, transaction volumes and user bases react substantially to news about regulatory actions. The impact depends on the specific regulatory category to which the news relates: events related to general bans on cryptocurrencies or to their treatment under securities law have the greatest adverse effect, followed by news on combating money laundering and the financing of terrorism, and on restricting the interoperability of cryptocurrencies with regulated markets.

BIS Markets Committee: monitoring of fast-paced electronic markets

On 17 September 2018, the BIS Markets Committee published the report, *Monitoring of Fast-paced Electronic Markets*, which analyses major developments in the evolution of market structure and their implications for central banks. The report, prepared by a study group led by Imène Rahmouni-Rousseau (Bank of France) and Rohan Churm (Bank of England), highlights three key structural trends: (i) Trading is increasingly fragmented across a range of new venues, while the frequency of activity and speed of information flows have accelerated significantly, especially in foreign exchange markets. (ii) Liquidity provision has become more concentrated among the largest banks, as smaller players resort to an agency model of market-making or exit the business altogether. At the same time, a new set of non-bank intermediaries, most notably principal trading firms, have strengthened their positions. (iii) Greater electronification has led to the commoditisation of large quantities of high-frequency data. The report points to an overall trend among central banks towards greater usage of high-frequency, transaction-level data. Monitoring market conditions in near time using such data can support monetary policy implementation and foreign exchange reserves management.

IOSCO: payment, clearing and settlement operators meet on global cyber resilience

On 14 September 2018, key global and regional payment, clearing and settlement operators met at a roundtable in Paris to discuss cyber-security and the resilience of financial market infrastructures (FMIs) and the wider market ecosystem. Senior executives, together with financial authorities, discussed continued collaboration and preparation for and responses to cyber-incidents, with a particular focus on cross-border actions. The meeting, hosted by the Bank of France, was convened by the international standard-setting bodies for FMIs, the Committee on Payments and Market Infrastructures (CPMI) and the International Organization of Securities Commissions (IOSCO), who issued guidance on cyber-resilience in 2016.

ESMA: financial innovation and product trends

On 6 September 2018, ESMA published its latest *Trends, Risks, and Vulnerabilities (TRV) Report* (No 2, 2018). With this TRV, ESMA starts publishing its on-going monitoring of financial innovation and product trends. FinTech continues to drive innovation in financial services, with potentially far-reaching consequences for both end users and service providers. Virtual Currencies (VCs) and Initial Coin Offerings (ICOs) have been the focal point of attention recently because of the massive cash inflows that they have attracted. Yet other applications of the Distributed Ledger Technology (DLT) and RegTech are also witnessing interesting developments. With this TRV, ESMA starts publishing its on-going monitoring of financial innovation and product trends. This new section outlines how these innovations, and various others such as crowdfunding and VIX Exchange-Traded Notes (ETNs), score on ESMA's innovation scoreboard, and discusses the main recent market and regulatory developments around them (pages 24-30).

FCA: creation of the Global Financial Innovation Network (GFIN)

On 7 August 2018, the Financial Conduct Authority (FCA) has, in collaboration with 11 financial regulators and related organisations, announced the creation of the Global Financial Innovation Network (GFIN), building on the FCA's proposal earlier this year to create a 'global sandbox'. The network will seek to provide a more efficient way for innovative firms to interact with regulators, helping them navigate between countries as they look to scale new ideas. It will also create a new framework for co-operation between financial services regulators on innovation related topics, sharing different experiences and approaches. The collaborative effort, involving regulators from around the world, has also launched a consultation on the role the GFIN should play in delivering its objectives, including the tools it will use. The consultation is open until 14 October 2018.

FSB report: framework to monitor crypto-asset markets

On 16 July 2018, the Financial Stability Board (FSB) published a report delivered to the G20 Finance Ministers and Central Bank Governors on the work of the FSB and standard-setting bodies on crypto-assets. For its part, the FSB has developed a framework, in collaboration with Committee on Payments and Market Infrastructures (CPMI), to monitor the financial stability implications of developments in crypto-asset markets. The report sets out the metrics that the FSB will use to monitor crypto-asset markets as part of its ongoing assessment of vulnerabilities in the financial system. While the FSB believes that crypto-assets do not pose a material risk to global financial stability at this time, it recognises the need for vigilant monitoring in light of the speed of market developments. The monitoring framework focuses on the transmission channels from crypto-asset markets that may give rise to financial stability risks.

BIS Financial Stability Institute: innovative technology in financial supervision

On 16 July 2018, the Financial Stability Institute (FSI) of the Bank for International Settlements (BIS) published a report on innovative technology in financial supervision (suptech) – the experience of early users. Financial supervisors can harness the same innovative technologies that are driving fintech developments. Such so-called suptech applications can be found in the areas of data collection and analysis. The experience of early users suggests that suptech can enhance supervisory effectiveness, cut costs and improve capabilities. However, suptech also raises challenges that include increased operational risks, as well as data, resource and legal issues. This paper outlines the experiences of early users and highlights specific considerations that could help supervisory agencies take advantage of suptech developments.

EBA: risks and opportunities from FinTech and its impact on incumbents' business models

On 3 July 2018, the EBA published the first products of its FinTech Roadmap, namely (i) a thematic report on the impact of FinTech on incumbent credit institutions' business models and (ii) a thematic report on the prudential risks and opportunities arising for institutions from FinTech. The report sets out five factors that might significantly affect incumbents' business models from a sustainability perspective: (i) digitalisation/innovation strategies pursued to keep up with the fast-changing environment, (ii) challenges arising from legacy ICT systems, (iii) operational capacity to implement the necessary changes, (iv) concerns over retaining and attracting staff and (v) increasing risk of competition from peers and other entities. The report concurs that currently the predominant type of relationship between incumbents and FinTech is partnership with FinTech firms, which is considered a "win-win" situation.

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Regulatory approaches to FinTech and innovation in capital markets

The rise of FinTech[1] has sparked increasing interest from financial regulators. Applications of distributed ledger technology, machine learning, big data analytics or cloud computing, to name a few, have significant potential to alter business models and impact the functioning of financial markets. In response, financial regulators have adopted different approaches to address FinTech and innovation in their respective jurisdictions.

ICMA published a paper on 7 September 2018 that provided an overview of financial regulators' approaches to FinTech, identified relevant use cases for capital markets, notably cross-border debt capital markets, and aimed to provide a sense of the direction of travel. The paper is based on publicly available information and covers selected regulatory initiatives across 26 jurisdictions within Europe, Asia and North America.

Within the last 18 months, a number of research papers and reports have been published by public sector organisations on this topic. These include notably the BCBS report *Sound Practices - The Implications of FinTech Developments for Banks and Bank Supervisors* (February 2018), the FSB's *Financial Stability Implications from FinTech: Supervisory and Regulatory Issues that Merit Authorities' Attention* (June 2017), the IOSCO Research Report on Financial Technologies (FinTech) (February 2017), the EBA's discussion paper on its approach to financial technology (FinTech) (August 2017)[2], the IADB's discussion Paper on regulatory sandboxes in Latin America and the Caribbean for the FinTech Ecosystem and the Financial System (March 2018), and the FCA's Regulatory sandbox lessons learned report (October 2017).

From these publications, and a review of publicly accessible information, it becomes apparent that financial regulators have put in place different schemes to address innovation. These can be broadly split into three different categories according to the BCBS report (previously mentioned): (i) innovation hubs, (ii) accelerators, and (iii) regulatory sandboxes. While a shared objective is to provide regulatory guidance, the precise level of guidance and support is dependent on the individual supervisory or regulatory authority, its mandate and the regulatory framework.

Out of 26 selected jurisdictions across Europe, Asia and North America, it can be observed that a majority have set up dedicated FinTech units or "innovation hubs", while "accelerators" have been put in place in a few selected jurisdictions only. However, the concept of a regulatory sandbox, coined and introduced by the UK FCA in 2016, has gained wider traction globally. From the 26 jurisdictions, at least 7 jurisdictions have set up an operational regulatory sandbox framework, while others have announced plans to create such a framework. Most initiatives have been put in place within the last two to three years.

The level of publicly available information on technology tested and use cases in FinTech accelerators or regulatory sandboxes varies. Based on a review of use cases published notably by the UK FCA, Canada's CSA, Australia's ASIC, Hong Kong's HKMA, and Singapore's MAS, it appears that a majority of innovative solutions target the retail segment. That said, the number of Fintech applications for capital markets has increased markedly in the UK FCA's sandbox since its launch in 2016, the focus being on distributed ledger technology (DLT), and more recently, digital assets. A key theme is the tokenisation of debt instruments in a DLT environment, targeting at least initially small or medium-sized issuers, and private placements. In Canada's CSA regulatory sandbox, testing involved cryptocurrency investment funds and initial coin offerings. It is worth noting that DLT has also been a focus in FinTech accelerators for central banking use cases, explored in particular by the Bank of England and the Monetary Authority of Singapore.

ICMA will continue to monitor developments in the regulatory FinTech landscape and its potential impact on international debt capital markets. It will be interesting to see to what extent innovative technology solutions tested in a confined regulatory sandbox framework will succeed in a fully regulated environment.

The full paper is available on the ICMA FinTech webpage.

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New FinTech applications in bond markets

ICMA has produced a listing of new applications of fintech in bond markets taken from public sources, such as press announcements and made it available on the ICMA website. It contains over 20 examples including the World Bank's recent issuance of a DLT-based bond with Commonwealth Bank of Australia; or the completion of a DLT-based proof of concept for collateral management by ABN AMRO Clearing, EuroCCP, Euroclear and Nasdaq.

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1. FinTech, a term broadly used to describe innovation in financial services enabled by technology.

2. From pages 32-33.

ICMA Capital Market Research

CSDR Mandatory Buy-Ins and Securities Financing Transactions
Published: 2 October 2018
Author: Andy Hill, ICMA

ICMA Briefing: Regulatory Approaches to FinTech and Innovation in Capital Markets
Published: 7 September 2018
Author: Gabriel Callsen, ICMA

The Asia-Pacific Cross-Border Corporate Bond Secondary Market: A report on the state and evolution of the market
Published: 30 August 2018
Authors: Andy Hill and Mushtaq Kapasi, both ICMA

How to Survive in a Mandatory Buy-in World
Published: 26 June 2018
Author: Andy Hill, ICMA

The European Corporate Single Name Credit Default Swap Market: A Study into the State and Evolution of the European Corporate SN-CDS Market
Published: 15 February 2018
Authors: Andy Hill and Gabriel Callsen, both ICMA

ICMA ERCC Briefing Note: The European Repo Market at 2017 Year-End
Published: 15 January 2018
Author: Andy Hill, ICMA

The Panda Bond Market and Perspectives of Foreign Issuers
Published: 19 October 2017
Authors: ICMA/NAFMII Joint Report

Market Electronification and FinTech
Published: 3 October 2017
Author: Gabriel Callsen, ICMA

Use of Leverage in Investment Funds in Europe
Published: 19 July 2017
Authors: AMIC/EFAMA Joint Paper

European infrastructure finance: a Stock-Take
Published: 13 July 2017
Authors: ICMA/AFME Joint Paper

The European Credit Repo Market: The Cornerstone of Corporate Bond Market Liquidity
Published: 22 June 2017
Author: Andy Hill, ICMA

Closed for Business: A Post-Mortem of the European Repo Market Break-Down over the 2016 Year-End
Published: 14 February 2017
Author: Andy Hill, ICMA

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

The Current State and Future Evolution of the European Investment Grade Corporate Bond Secondary Market: Perspectives from the Market
Published: 25 November 2014
Author: Andy Hill, ICMA

Continually Working to Develop Efficient and Effective Collateral Markets
ERC Occasional Paper
Published: 4 September 2014
Author: David Hiscock, ICMA

Covered Bond Pool Transparency: the Next Stage for Investors
Published: 21 August 2014
Author: Prepared for ICMA by Richard Kemmish Consulting Ltd

Collateral is the New Cash: The Systemic Risks of Inhibiting Collateral Fluidity
Published: 3 April 2014
Author: Andy Hill, ICMA

Avoiding Counterproductive Regulation in Capital Markets: A Reality Check
Published: 29 October 2013
Author: Timothy Baker, Senior Adviser to ICMA

Collateral Damage: the Impact of the Financial Transaction Tax on the European Repo Market and its Consequences for the Financial Markets and the Real Economy
Published: 8 April 2013
Author: Richard Comotto, ICMA Centre

Economic Importance of the Corporate Bond Markets
Published: 8 April 2013
Author: Timothy Baker, Senior Adviser to ICMA

Diary 2018

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	IWN Events The ICMA Women's Network provides an impartial and open forum to discuss issues relevant to professional women in the international capital market and gives members the opportunity to build their network and focus on their career progression. IWN holds networking events throughout the year in the main financial centres of Europe, usually focused around themes related to career development in capital markets; these are open to all employees from ICMA member firms, regardless of gender.
1 November *Register*	**Sustainability: the perspective of influential women in the rapidly growing ESG market, London, 1 November** Green bonds, social bonds, sustainable bonds and other innovative financing solutions have in recent years been catapulted into the mainstream of debt capital markets funding. ESG credentials and sustainability are now featured in many investment mandates, often linked to gender diversity. Influential women in the industry will discuss their own career paths and highlight the career progression opportunities that sustainability presents.
15 November *Register*	**Starting out – influencing your career progression, Milan, 15 November** A panel of inspirational industry figures discuss where their careers began, the barriers they encountered as they progressed and how they have adapted to succeed. In the context of current working environments, they consider what tools women can use to nurture their career progression and best position themselves to develop leadership skills, imparting practical tips along the way for boosting confidence and raising profile.
	ICMA Workshops
24-26 October *Register*	**Repo and securities lending under the GMRA and GMSLA, London, 24-26 October** The workshop analyses how repo and securities lending transactions operate within the framework provided by the Global Master Repurchase Agreement (GMRA) and the Global Master Securities Lending Agreement (GMSLA) and highlights the issues that need to be addressed by users. These two separate but increasingly overlapping master agreements are the essential underpinnings of the cross-border repo and securities lending markets.
30 October *Register*	**European Regulation: An Introduction for Capital Market Practitioners, London, 30 October** How much do you know about the new regulations that are already in force and impacting your daily work in the capital market and the ones that are still in the pipeline? How do the institutions of Europe work together to develop new regulation? ICMA's one-day, fast-track course on European regulation for capital market practitioners gives an overview of the new regulatory landscape for financial institutions in Europe.
2 November *Register*	**Bond syndication practices for compliance professionals and middle office professionals, London, 2 November** This workshop aims to give compliance professionals an in-depth understanding of the practices that are involved in launching a deal in the international debt capital market. It explains precisely how the deal is done, starting with first steps in the pre-launch process - looking at the pitch book, the mandate, the roadshow and the prospectus - through syndication, including book building and allocation, up to and including the final public launch of the issue.
	ICMA Conferences
18 October *Register*	**9th Annual bwf and ICMA Capital Markets Conference, Frankfurt, 18 October** This one-day conference will look at the regulatory and business issues currently facing capital market participants with specific emphasis on the German perspective and will feature keynote speeches from Verena Ross, Executive Director, European Securities and Markets Authority (ESMA) and Jürgen Hillen, CFO/CRO, Clearstream Banking AG.

Diary 2018

DATE	
1 November *Register*	**ICMA and SIX Joint Conference: LIBOR to SARON: Are you ready? Zurich, 1 November** The authorities want financial markets to transition from the IBORs (eg LIBOR) to near Risk-Free Rates (RFRs). In Switzerland the Swiss National Working Group has overseen a process leading to the selection of SARON as the RFR and will coordinate the transition to the new benchmark. This conference, jointly presented by SIX and ICMA, is an opportunity for market participants to hear from the authorities and experts about the practical issues involved in the transition.
8 November *Register*	**The 12th ICMA Primary Market Forum, London, 8 November** The ICMA Primary Market Forum, in its 12th year, is the definitive annual event gathering issuers, syndicate banks, law firms and investors to discuss market trends and practices, regulatory developments and the overall outlook for the primary debt capital markets.
22 November *Register*	**ICMA Asset Management and Investors Council (AMIC) Conference, London, 22 November** The Asset Management and Investors Council (AMIC), ICMA's forum for the international asset management industry and the global investor community, will be holding its next bi-annual conference in London in November. Key ICMA priorities including benchmark reform and transition to risk-free rates, mandatory buy-ins, the evolution of the landscape for investment research as well as securitisation will be discussed from a buy-side perspective.
11 December *Register*	**Annual ICMA and JSDA Joint Conference: Developments in Green and Social Bond Markets – The Asian Perspective, Tokyo, 11 December** Global issuance of green bonds, which raise finance for projects with environmental benefits, continues to grow rapidly. The Tokyo conference will bring together issuers, underwriters, investors, policy makers, market infrastructure and service providers, NGOs and other stakeholders in the global and in particular Asian green, social and sustainability bond markets.

For more information, please contact: ICMAevents@icmagroup.org or visit www.icmagroup.org/events

Who are ICMA's members?

ICMA membership is now at an 18-year high, standing at nearly 550 firms in 62 countries.

We aim to represent the full range of capital market participants across the whole life cycle of a bond issue. Our members include private and public sector issuers, financial intermediaries, asset managers and other investors, capital market infrastructure providers, central banks, law firms and others worldwide.

Since we opened our office in Hong Kong we have seen steady growth in the number of members in Asia-Pacific, adding 34 institutions since 2015, which brings the total of members to 78. This reflects the increasing involvement of the region, particularly China, in international markets. The Middle East and North Africa (MENA) region is also an area where membership is growing fast.

Since 2008 the number of buy-side members has been increasing, 30% of our members are now from the buy-side or have buy-side interests as asset managers and investors have become an increasingly important force in the financial ecosystem.

Infrastructure providers in an age of increasing automation are also a significant part of the new market landscape; exchanges and solution providers are continuing to join ICMA members and are vital contributors to our committees and working groups, especially in secondary markets.

ICMA Executive Education

Courses 2018

ICMA Executive Education

Why is the ICMA Fixed Income Certificate (FIC) so beneficial for industry professionals?

Central banks around the world responded to the financial crisis through a series of conventional and unconventional policy measures, including zero or negative policy rates and long-term asset purchases. These policies kept short-term interest rates at record-low levels, flattened the yield curve and suppressed interest rate volatility. Now, however, as these policies are gradually unwound, interest rates are once again on the move. Identifying relative value opportunities and protecting positions from adverse movements in interest rates in these new market conditions is a challenging task.

Derivatives markets are also undergoing dramatic change. Mandatory clearing has been introduced for many derivatives, and new rules (e.g. EMIR) require parties to post initial and variation margin in non-cleared derivatives. These and other changes in how counterparty risk is managed have led to entirely new methods for valuing derivatives. Currently, the market is focused on agreeing replacements for the LIBOR/EURIBOR benchmarks referenced by interest rate derivatives, which are to be discontinued. This in turn will affect how derivatives are valued, creating new challenges and opportunities for market participants. No one can hope to use derivatives successfully without understanding this new market framework.

Finally, credit markets have been transformed by the crisis. Tougher capital rules have made banks less willing to act as dealers, reducing liquidity, while average credit quality has fallen. This has left investors holding bonds that are more risky and less liquid. These conditions, combined with reduced liquidity in single-name CDS (an alternative trading venue for credit risk), have made credit trading more difficult and a sound understanding of the sources of credit risk even more essential.

The ICMA Fixed Income Certificate (FIC) qualification offers exactly the comprehensive grounding that is necessary for success in this new environment, by helping participants develop analytical skills that they can use to construct and assess trading and risk management strategies in today's interest rate, credit and derivatives markets.

By David Oakes, director of ICMA's Fixed Income Certificate (FIC) course

Next sessions of the course:

- Amsterdam, 22-26 October 2018
- Amsterdam, 8-12 April 2019
- Amsterdam, 21-25 October 2019

The ICMA Fixed Income Certificate (FIC) is also available online as a 6 month programme starting every month.

For more information please email education@icmagroup.org.

Book now for these ICMA Executive Education Courses

Securitisation - An Introduction,
London, 15-16 October

Fixed Income Certificate (FIC),
Amsterdam, 22-26 October

Financial Markets Foundation Qualification (FMFQ),
London, 5-7 November

Introduction to Primary Markets Qualification (IPMQ)
London, 7-9 November

Securities Lending & Borrowing - Operational Challenges
London, 12-13 November

Primary Markets Certificate (PMC)
London, 19-23 November

Securities Operations Foundation Qualification (SOFQ),
Brussels, 21-23 November

Operations Certificate Programme (OCP) Brussels, 26-30 November

Fixed Income Portfolio Management,
London, 29-30 November

OTC Derivatives Operations - Products, Collateral and EMIR,
London, 3-4 December

Compliance in Fixed Income,
London, 7 December

For more information, please contact: education@icmagroup.org or visit www.icmagroup.org/education

GLOSSARY

ABCP	Asset-Backed Commercial Paper
ABS	Asset-Backed Securities
ADB	Asian Development Bank
AFME	Association for Financial Markets in Europe
AIFMD	Alternative Investment Fund Managers Directive
AMF	Autorité des marchés financiers
AMIC	ICMA Asset Management and Investors Council
AMI-SeCo	Advisory Group on Market Infrastructure for Securities and Collateral
ASEAN	Association of Southeast Asian Nations
AuM	Assets under management
BBA	British Bankers' Association
BCBS	Basel Committee on Banking Supervision
BIS	Bank for International Settlements
BMCG	ECB Bond Market Contact Group
BMR	EU Benchmarks Regulation
bp	Basis points
BRRD	Bank Recovery and Resolution Directive
CAC	Collective action clause
CBIC	ICMA Covered Bond Investor Council
CCBM2	Collateral Central Bank Management
CCP	Central counterparty
CDS	Credit default swap
CFTC	US Commodity Futures Trading Commission
CGFS	Committee on the Global Financial System
CICF	Collateral Initiatives Coordination Forum
CIF	ICMA Corporate Issuer Forum
CMU	Capital Markets Union
CNAV	Constant net asset value
CoCo	Contingent convertible
COP21	Paris Climate Conference
COREPER	Committee of Permanent Representatives (in the EU)
CPMI	Committee on Payments and Market Infrastructures
CPSS	Committee on Payments and Settlement Systems
CRA	Credit Rating Agency
CRD	Capital Requirements Directive
CRR	Capital Requirements Regulation
CSD	Central Securities Depository
CSDR	Central Securities Depositories Regulation
DMO	Debt Management Office
D-SIBs	Domestic systemically important banks
DVP	Delivery-versus-payment
EACH	European Association of CCP Clearing Houses
EBA	European Banking Authority
EBRD	European Bank for Reconstruction and Redevelopment
ECB	European Central Bank
ECJ	European Court of Justice
ECOFIN	Economic and Financial Affairs Council (of the EU)
ECON	Economic and Monetary Affairs Committee of the European Parliament
ECP	Euro Commercial Paper
ECPC	ICMA Euro Commercial Paper Committee
EDGAR	US Electronic Data Gathering, Analysis and Retrieval
EEA	European Economic Area
EFAMA	European Fund and Asset Management Association
EFC	Economic and Financial Committee (of the EU)
EFSF	European Financial Stability Facility
EFSI	European Fund for Strategic Investment
EFTA	European Free Trade Area
EGMI	European Group on Market Infrastructures
EIB	European Investment Bank
EIOPA	European Insurance and Occupational Pensions Authority
ELTIFs	European Long-Term Investment Funds
EMDE	Emerging market and developing economies
EMIR	European Market Infrastructure Regulation
EMTN	Euro Medium-Term Note
EMU	Economic and Monetary Union
EP	European Parliament
ERCC	ICMA European Repo and Collateral Council
ESA	European Supervisory Authority
ESG	Environmental, social and governance
ESCB	European System of Central Banks
ESFS	European System of Financial Supervision
ESM	European Stability Mechanism
ESMA	European Securities and Markets Authority
ESRB	European Systemic Risk Board
ETF	Exchange-traded fund
ETP	Electronic trading platform
ESG	Environmental, social and governance
EU27	European Union minus the UK
ETD	Exchange-traded derivatives
EURIBOR	Euro Interbank Offered Rate
Eurosystem	ECB and participating national central banks in the euro area
FAQ	Frequently Asked Question
FASB	Financial Accounting Standards Board
FATCA	US Foreign Account Tax Compliance Act
FATF	Financial Action Task Force
FCA	UK Financial Conduct Authority
FEMR	Fair and Effective Markets Review
FICC	Fixed income, currency and commodity markets
FIIF	ICMA Financial Institution Issuer Forum
FMI	Financial market infrastructure
FMSB	FICC Markets Standards Board
FPC	UK Financial Policy Committee
FRN	Floating-rate note
FRTB	Fundamental Review of the Trading Book
FSB	Financial Stability Board
FSC	Financial Services Committee (of the EU)
FSOC	Financial Stability Oversight Council (of the US)
FTT	Financial Transaction Tax
G20	Group of Twenty
GBP	Green Bond Principles
GDP	Gross Domestic Product
GHOS	Group of Central Bank Governors and Heads of Supervision
GMRA	Global Master Repurchase Agreement
G-SIBs	Global systemically important banks
G-SIFIs	Global systemically important financial institutions
G-SIIs	Global systemically important insurers
HFT	High frequency trading
HMRC	HM Revenue and Customs
HMT	HM Treasury
HQLA	High Quality Liquid Assets
HY	High yield
IAIS	International Association of Insurance Supervisors
IASB	International Accounting Standards Board
IBA	ICE Benchmark Administration
ICMA	International Capital Market Association
ICSA	International Council of Securities Associations
ICSDs	International Central Securities Depositaries
IFRS	International Financial Reporting Standards
IG	Investment grade
IIF	Institute of International Finance
IMMFA	International Money Market Funds Association
IMF	International Monetary Fund
IMFC	International Monetary and Financial Committee
IOSCO	International Organization of Securities Commissions
IRS	Interest rate swap
ISDA	International Swaps and Derivatives Association
ISLA	International Securities Lending Association
ITS	Implementing Technical Standards
KfW	Kreditanstalt für Wiederaufbau
KID	Key information document
KPI	Key performance indicator
LCR	Liquidity Coverage Ratio (or Requirement)
L&DC	ICMA Legal & Documentation Committee
LEI	Legal Entity Identifier
LIBOR	London Interbank Offered Rate
LTRO	Longer-Term Refinancing Operation
MAR	Market Abuse Regulation
MEP	Member of the European Parliament
MiFID	Markets in Financial Instruments Directive
MiFID II	Revision of MiFID (including MiFIR)
MiFIR	Markets in Financial Instruments Regulation
MMCG	ECB Money Market Contact Group
MMF	Money market fund
MOU	Memorandum of Understanding
MREL	Minimum requirement for own funds and eligible liabilities
MTF	Multilateral Trading Facility
NAFMII	National Association of Financial Market Institutional Investors
NAV	Net asset value
NCA	National competent authority
NCB	National central bank
NPL	Non-performing loan
NSFR	Net Stable Funding Ratio (or Requirement)
OAM	Officially Appointed Mechanism
OJ	Official Journal of the European Union
OMTs	Outright Monetary Transactions
ORB	London Stock Exchange Order book for Retail Bonds
OTC	Over-the-counter
OTF	Organised Trading Facility
PCS	Prime Collateralised Securities
PMPC	ICMA Primary Market Practices Committee
PRA	UK Prudential Regulation Authority
PRIIPs	Packaged Retail and Insurance-Based Investment Products
PSEs	Public Sector Entities
PSI	Private Sector Involvement
PSIF	Public Sector Issuer Forum
QE	Quantitative easing
QIS	Quantitative impact study
QMV	Qualified majority voting
RFQ	Request for quote
RFRs	Near risk-free rates
RM	Regulated Market
RMB	Chinese renminbi
ROC	Regulatory Oversight Committee of the Global Legal Entity Identifier System
RPC	ICMA Regulatory Policy Committee
RSF	Required Stable Funding
RSP	Retail structured products
RTS	Regulatory Technical Standards
RWA	Risk-weighted asset
SBBS	Sovereign bond-backed securities
SEC	US Securities and Exchange Commission
SFT	Securities financing transaction
SGP	Stability and Growth Pact
SI	Systematic Internaliser
SLL	Securities Law Legislation
SMEs	Small and medium-sized enterprises
SMPC	ICMA Secondary Market Practices Committee
SMSG	Securities and Markets Stakeholder Group (of ESMA)
SPV	Special purpose vehicle
SRF	Single Resolution Fund
SRM	Single Resolution Mechanism
SRO	Self-regulatory organisation
SSAs	Sovereigns, supranationals and agencies
SSM	Single Supervisory Mechanism
SSR	EU Short Selling Regulation
STORs	Suspicious transactions and order reports
STS	Simple, transparent and standardised
T+2	Trade date plus two business days
T2S	TARGET2-Securities
TD	EU Transparency Directive
TFEU	Treaty on the Functioning of the European Union
TLAC	Total Loss-Absorbing Capacity
TMA	Trade matching and affirmation
TRs	Trade repositories
UKLA	UK Listing Authority
VNAV	Variable net asset value

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