International
Capital
Market
Association

ICMA Secondary Market Practices Committee
ICMA's 3rd study into the state and evolution of the European IG corporate bond secondary market
Terms of Reference
April 2019

Overview

The undertaking of ICMA's 3rd study into the state and evolution of the European investment grade corporate bond secondary market was approved by the Secondary Market Practices Committee (SMPC) at its meeting on March 19 2019. The study is intended to update the findings and conclusions of the previous two studies, published in July 2016[1] and November 2014.[2]

The new study will also seek to explore some of the themes highlighted in ICMA's 2018 report on the European single name credit default swap market[3] and its 2017 report on the European credit repo market,[4] as well as the work undertaken by the European Commission Expert Group on Corporate Bond Markets.[5]

Specifically, the new study will seek to answer three key questions with respect to the European IG corporate bond market:

- ***What is the current state and expected course for market liquidity?***
  How have secondary market liquidity conditions evolved since H1 2016, and how does this vary, if at all, across currencies, sectors, and ratings? Does liquidity differ depending on trade size, as well as counterparty? What are the dynamics driving liquidity, and what have been the impacts of regulation (in particular CRR and MiFID II/R), monetary policy (in particular the CSPP), as well as macro-economic and geopolitical considerations (such as Brexit)?

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[1] Remaking the corporate bond market: ICMA's 2nd study into the state and evolution of the European investment grade corporate bond secondary market, July 2016
[2] The current state and future evolution of the European investment grade corporate bond secondary market: perspectives from the market, November 2014
[3] The European Corporate Single Name Credit Default Swap Market: A study into the state and evolution of the European corporate SN-CDS market, February 2018
[4] The European Credit Repo Market: The cornerstone of corporate bond market liquidity - A study into the state and evolution of the European credit repo market, June 2017
[5] See: Improving European Corporate Bond Markets, November 2017

- ***How is the structure of the market evolving?***
  In the past three years, how has the structure of the market evolved, and what are the key trends and drivers? Are we seeing new liquidity providers, and changes in behaviour from both the sell-side and buy-side? How is technology playing a role, and what is the uptake of new platforms and e-trading protocols? What impact is MiFID II/R having on market behaviour and structure, as well as market conditions? What are the effects of changes and developments in ancillary markets, such as repo, CDS, and ETFs?

- ***What are the expectations for future market developments?***
  How will market liquidity and structure likely evolve in the next few years, and what will be the main forces and drivers of change? What will be the role and impact of ongoing innovation in the FinTech and data management? Should we be concerned about future regulation (in particular CRR2 and CSDR mandatory buy-ins)? Are there other emerging risks to market functioning, such as the unwind of QE, Brexit, geopolitical tensions, or climate change? What role can regulators and policy markets play in ensuring that corporate bond markets fulfill their role of servicing the European economy?

<u>Scope</u>

The main focus of the study will be on <u>EU28 investment grade corporate bond secondary markets.</u> This will include non-financial and financial corporate (non-SSA) issuers located in the EU28, issuing in euro and other EU28 currencies. The state and evolution of the primary market will also be analyzed from the perspective of how this is being impacted by secondary market developments.

To the extent that they directly interact with, or have an impact on, secondary markets, the state and evolution of the related credit repo and corporate CDS markets will also be a focus, as well the European High Yield and corporate bond ETF markets.

In terms of currency, EUR issuance will be the dominant focus, but the research is also intended to capture conditions in the other EU28 currencies, in particular GBP, but also where it is possible to obtain quantitative or qualitative data on other currencies.

With respect to market participant coverage, whether returning surveys or participating in structured interviews, the study will look to engage sell-side and buy-side firms, corporate issuers (financial and non-financial), as well as trading venues and relevant technology providers. ICMA will look to leverage its committee and working group structures and membership to reach the relevant market participants.

<u>Methodology</u>

As with previous ICMA market studies, including the 2016 report, the research will take a triangular approach utilizing:

- Market data
- Market participant surveys
- Semi-structured interviews with market participants

Data

ICMA will reach out to relevant data providers to request data in order to undertake analysis of:

- The EU IG corporate secondary bond market
- The EU IG corporate primary bond market
- The EU credit repo market
- The EU corporate SN & index CDS markets
- *The EU High Yield corporate bond market*

Where appropriate analysis will be disaggregated by currency and sector.

The researchers will also attempt to source data to support analysis of market liquidity conditions, including:

- *Market depth:*
    - ability to execute orders relative to size of order
    - time to execute orders relative to size

- *Market resilience:*
    - market move relative to trade size

- *Phantom liquidity:*
    - firm vs indicative prices
    - rate of 'dropped prices'

- *Capacity to provide liquidity:*
    - dealer balance sheet dedicated to market-making
    - trading-book turnover
    - proportion of trades relating to a position/order

Surveys

ICMA will disseminate and collate online surveys designed to ascertain:

- The state of market liquidity
- Factors impacting market liquidity
- Developments in e-trading
- Future expectations of market liquidity and structure

Surveys will be tailored for both buy-side and sell-side participants.

Interviews

ICMA will conduct a series of semi-structured interviews with relevant market participants and stakeholders, including:

- Bank/broker-dealer corporate bond traders

- Bank/broker-dealer fixed income market structure experts
- Investment and asset manager portfolio managers and traders
- Lead managers
- Corporate bond issuers (non-financial and financial)
- Inter-dealer brokers and electronic trading platform providers
- Relevant technology providers/FinTech initiatives
- Credit repo traders
- Corporate SN-CDS traders

Interviews will be focused on the three main questions:

- ***What is the current state and expected course for market liquidity?***
- ***How is the structure of the market evolving?***
- ***What are the expectations for future market developments?***

Interviews will be semi-structured, allowing participants to raise issues and considerations that are important to them, but may not have been anticipated in the scope of the research.

Ideally, ICMA will target 30-40 interviews with a balanced representation of relevant stakeholders and geography. Interviews are expected to run for 30-60 minutes, and will be in person, where possible, or by phone.

Logistics

Timing

The study is intended to run from the last week of April 2019 to mid-June 2019, with the final report published by the end of July 2019.

Researchers

Andy Hill will lead the research and analysis, supported by Gabriel Callsen.

Annex I

ICMA Buy-side IG Corporate Bond Market Survey Questions

Liquidity (past 3 years)

1) Over the past 3 years, do you feel that secondary market liquidity in general has:
Improved significantly/ Improved/Remained more or less the same/Deteriorated/Deteriorated significantly

2) Over the past 3 years, do you feel that secondary market liquidity for smaller transactions (≤€1mm nominal or equivalent) has:
Improved significantly/ Improved/Remained more or less the same/Deteriorated/Deteriorated significantly

3) Over the past 3 years, do you feel that secondary market liquidity for larger transactions (≥€1-≤10mm nominal or equivalent) has:
Improved significantly/ Improved/Remained more or less the same/Deteriorated/Deteriorated significantly

4) Over the past 3 years, do you feel that secondary market liquidity for block transactions (≥€10mm nominal or equivalent) has:
Improved significantly/ Improved/Remained more or less the same/Deteriorated/Deteriorated significantly

5) Over the past 3 years, has the number of your broker-dealer relationships: Increased/Remained the same/Decreased

6) Over the past 3 years, has your average ticket size traded: Increased/Remained the same/Decreased

7) Over the past 3 years, has the time taken to execute block orders (≥€10mm nominal or equivalent: Increased/Remained the same/Decreased

Policy & regulation

8) Do you believe that there is appropriate focus by policy makers and regulators on European corporate bond liquidity?
Yes/No/Not sure

9) Are you aware of the 2017 report and its recommendations, 'Improving European Corporate Bond Markets' by the European Commission Expert group on Corporate Bond Markets?
Yes/Somewhat aware/No

Impacts on market liquidity

10) How do rate the impacts on liquidity of the following, where -5 is very negative, +5 is very positive, and 0 is neutral?

- MiFID II/R pre-trade transparency
- MiFID II/R post-trade transparency
- MiFID II/R best execution reporting
- MiFID II/R Systematic internaliser regime
- Increased regulatory capital and liquidity costs
- CSPP
- Brexit uncertainty
- General macro-economic/geopolitical uncertainty
- Changes to credit repo/lending market liquidity
- Changes to single name corporate CDS market liquidity
- Growth of the corporate bond ETF market
- Trend toward more passive investment strategies
- Increased range of electronic trading venues and protocols

What other factors do you think have had a negative or positive impact on market liquidity?

Electronic trading

11) Compared with 3 years ago, would you say that your volumes traded electronically have:
Increased significantly/Increased/Remained at similar levels/Decreased/Decreased significantly

12) What proportion of your overall volumes would say are traded electronically:
<25% / 25-50% / 50-75% / >75%

13) Compared with 3 years ago, would you say that your use of order managements systems (OMS) for submitting orders electronically has:
Increased significantly/Increased/Remained at similar levels/Decreased/Decreased significantly

14) What proportion of your orders overall would you say are submitted via an OMS:
<25% / 25-50% / 50-75% / >75%

15) Compared with 3 years ago, has your use of rules-based, fully automated electronic execution ("auto-execution"):
Increased significantly/Increased/Remained at similar levels/Decreased/Decreased significantly

16) Compared to 3 years ago, has your use of 'move to venue' (or 'processed trade') protocols:
Increased significantly/Increased/Remained at similar levels/Decreased/Decreased significantly

17) What would you estimate to be the approximate proportion of your electronic trading attributed to the following protocols:

NA / <10% / 10-25% / 25-50% / 50-75%/ 75-90% / >90%

- Multiple RFQ
- RFQ-to-all (dealers only)
- All-to-All (both dealers and buy-side price makers)
- CLOB
- Streaming/Click-to-trade

- Dark pool
- Auction
- Matching engines/information networks
- Move to venue /processed trade

18) How many different platforms or trading venues do you use:
<5 / 5-10 / >10

Data

19) Compared to 3 years ago, how would you describe usability of transaction cost analysis (TCA) for IG corporate bonds?

High / remained more or less the same / low

Looking forward

20) How do you expect liquidity to be 3 years from now?
Improve significantly/Improve/Remain more or less the same/Deteriorate/Deteriorate significantly

21) In the next 3 years, do you expect your volumes traded electronically to:
Increase significantly /Increase/Remain at similar levels/Decrease/ Decrease significantly

22) Do you expect to use more or fewer trading venues 3 years from now:
More/Roughly the same/Fewer

23) In the next 3 years, what impact do you expect the following factors or initiatives to have on market liquidity, where -5 is very negative, +5 is very positive, and 0 is neutral?

- Improved pre-trade transparency
- Improved post-trade transparency
- FRTB / Basel IV
- CSDR mandatory buy-ins
- CSPP unwind
- Brexit
- CMU
- General macro-economic/geopolitical uncertainty
- Environmental consideration/global warming
- Further growth in the corporate bond ETF market
- New electronic trading platforms/protocols
- Emergence of non-traditional liquidity providers
- Enhancements in proprietary data management
- Algorithmic trading

Annex II

ICMA Sell-side IG Corporate Bond Market Survey Questions

Liquidity (past 3 years)

1) Over the past 3 years, do you feel that secondary market liquidity in general has:
Improved significantly/ Improved/Remained more or less the same/Deteriorated/Deteriorated significantly

2) Over the past 3 years, do you feel that secondary market liquidity for smaller transactions (≤€1mm nominal or equivalent) has:
Improved significantly/ Improved/Remained more or less the same/Deteriorated/Deteriorated significantly

3) Over the past 3 years, do you feel that secondary market liquidity for larger transactions (≥€1-≤10mm nominal or equivalent) has:
Improved significantly/ Improved/Remained more or less the same/Deteriorated/Deteriorated significantly

4) Over the past 3 years, do you feel that secondary market liquidity for block transactions (≥€10mm nominal or equivalent) has:
Improved significantly/ Improved/Remained more or less the same/Deteriorated/Deteriorated significantly

5) Over the past 3 years, has the number of your counterparty relationships: Increased/Remained the same/Decreased

6) Over the past 3 years, has your average ticket size traded: Increased/Remained the same/Decreased

7) Over the past 3 years, has the time taken to execute block orders (≥€10mm nominal or equivalent: Increased/Remained the same/Decreased

Policy & regulation

8) Do you believe that there is appropriate focus by policy makers and regulators on European corporate bond liquidity?
Yes/No/Not sure

9) Are you aware of the 2017 report and its recommendations, 'Improving European Corporate Bond Markets' by the European Commission Expert group on Corporate Bond Markets?
Yes/Somewhat aware/No

Impacts on market liquidity

10) How do rate the impacts on liquidity of the following, where -5 is very negative, +5 is very positive, and 0 is neutral?

- MiFID II/R pre-trade transparency
- MiFID II/R post-trade transparency
- MiFID II/R best execution reporting
- MiFID II/R Systematic internaliser regime
- Increased regulatory capital and liquidity costs
- CSPP
- Brexit uncertainty
- General macro-economic/geopolitical uncertainty
- Changes to credit repo/lending market liquidity
- Changes to single name corporate CDS market liquidity
- Growth of the corporate bond ETF market
- Trend toward more passive investment strategies
- Increased range of electronic trading venues and protocols

What other factors do you think have had a negative or positive impact on market liquidity?

<u>Electronic trading</u>

11) Compared with 3 years ago, would you say that your volumes traded electronically have:
Increased significantly/Increased/Remained at similar levels/Decreased/Decreased significantly

12) What proportion of your overall volumes would say are traded electronically:
<25% / 25-50% / 50-75% / >75%

13) Do you make use of rules-based, fully automated quoting technology ("auto-quoting") to respond to trade enquiries?
Yes/No

14) Compared with 3 years ago, would you say that your use of auto-quoting technology:
Increased significantly/Increased/Remained at similar levels/Decreased/Decreased significantly

15) What proportion of your transactions overall would you say involve auto-quoting technology:
<25% / 25-50% / 50-75% / >75%

16) Compared to 3 years ago, has your use of 'move to venue' (or 'processed trade') protocols:
Increased significantly/Increased/Remained at similar levels/Decreased/Decreased significantly

17) What would you estimate to be the approximate proportion of your electronic trading attributed to the following protocols:

NA / <10% / 10-25% / 25-50% / 50-75%/ 75-90% / >90%

- Multiple RFQ
- RFQ-to-all (dealers only)
- All-to-All (both dealers and buy-side price makers)
- CLOB
- Streaming/Click-to-trade
- Dark pool

- Auction
- Matching engines/information networks
- Move to venue /processed trade

18) How many different platforms or trading venues do you use:
<5 / 5-10 / >10

Looking forward

19) How do you expect liquidity to be 3 years from now?
Improve significantly/Improve/Remain more or less the same/Deteriorate/Deteriorate significantly

20) In the next 3 years, do you expect your volumes traded electronically to:
Increase significantly /Increase/Remain at similar levels/Decrease/ Decrease significantly

21) Do you expect to use more or fewer trading venues 3 years from now:
More/Roughly the same/Fewer

22) In the next 3 years, what impact do you expect the following factors or initiatives to have on market liquidity, where -5 is very negative, +5 is very positive, and 0 is neutral?

- Improved pre-trade transparency
- Improved post-trade transparency
- FRTB / Basel IV
- CSDR mandatory buy-ins
- CSPP unwind
- Brexit
- CMU
- General macro-economic/geopolitical uncertainty
- Environmental consideration/global warming
- Further growth in the corporate bond ETF market
- New electronic trading platforms/protocols
- Emergence of non-traditional liquidity providers
- Enhancements in proprietary data management
- Algorithmic trading

Annex III

Executive summary of 2016 study

This study sets out to explore how the European investment grade corporate bond market has developed since ICMA's 2014 study on the state and evolution of this market. It reviews how liquidity and market efficiency are being defined and impacted by the confluence of extraordinary monetary policy and unprecedented prudential and market regulation, and what the implications for the market are. Unlike the previous report, which was largely based on a series of in-depth interviews with market participants represented by ICMA – investors, issuers, banks and brokerdealers, intermediaries and infrastructure providers – this report relies on both qualitative and quantitative input from these market participants. It also asks where the market is heading, what are the challenges and opportunities in front of us and provides recommendations to support the long-term efficiency and functioning of the market.

Corporate bond markets serve a vital economic function in bringing together corporations requiring capital to fund or expand their businesses and investors and savers looking to earn a stable income from their investments and savings. They thus play a key role in facilitating economic growth, productivity, and employment. As the ability of banks to provide direct funding to the corporate sector has become challenged, post-crisis, policy makers are beginning to look to capital markets as an ever more important source of financing for the real economy, while also underpinning economic stability; an objective that is at the very heart of Europe's plan to build a Capital Markets Union.

Since ICMA published its report in 2014, the discourse around bond market liquidity, and its potential implications, has entered the mainstream when it comes to assessing market risks or explaining market behaviour. A number of market and academic studies have explored further the theme of bond market liquidity, across a range of asset classes, including investment grade corporate bond markets. The conclusions, based on various data collection exercises, have been mixed, with most market studies suggesting that market conditions, in general, are becoming more challenged, while a number of more academic-based studies published by authorities and regulators tend to be more sanguine. Understanding the reasons for this apparent divergence of perspectives is one of the motivations for this second study.

Market participants report that in the current environment it continues to be more challenging both to provide and source liquidity, primarily as the result of the concurrence and interaction of various regulatory initiatives and extraordinary current and future monetary policy, and the undermining of the market-making liquidity model, largely due to greater capital constraints on banks and broker-dealers. It appears to be increasingly difficult to trade in large sizes, to execute orders quickly, or to establish reliable prices. European corporate issuers are also increasingly concerned about the state of the corporate bond secondary market, which directly impacts their ability to raise capital necessary to fund investment. They note an unsustainable disconnect between primary market stability and secondary market liquidity that is being perpetuated primarily as the result of ongoing central bank intervention.

However, since the 2014 study, market participants are more resolved to adapt to the new norm and are evolving their business models accordingly. While sell-side firms continue to reshape their models around balance sheet efficiency, acting more as principal brokers than market-makers, the buy-side is taking more initiative in terms of locating and creating liquidity. Technology is playing an increasingly important role in the market, there is growing recognition that a significant part of the market will always need to be 'people based', and so values such as trust and relationship building are becoming ever more important as market conditions becomes more challenged.

There is an evolving sense that the whole market architecture may need to be redesigned if it is to continue to support its essential function of facilitating investment in the real economy. This will require the close cooperation of all market stakeholders, including issuers, asset managers and investors, banks and intermediaries, infrastructure providers, as well as policy makers and regulators. Given the breadth and diversity of its membership across the European region, ICMA is perfectly placed to bring all these key actors together.