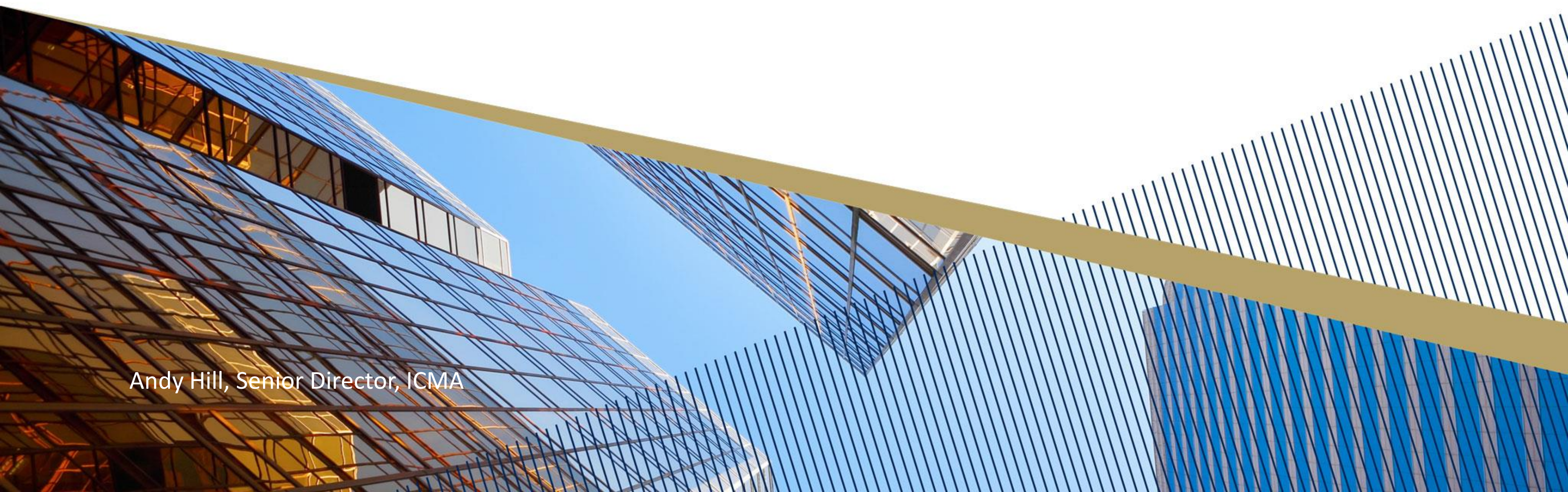
The evolving structure and drivers of the European corporate bond markets

ICMA Seminar: Developments in international and MENA fixed income and repo markets
Dubai, April 16 2018



Andy Hill, Senior Director, ICMA

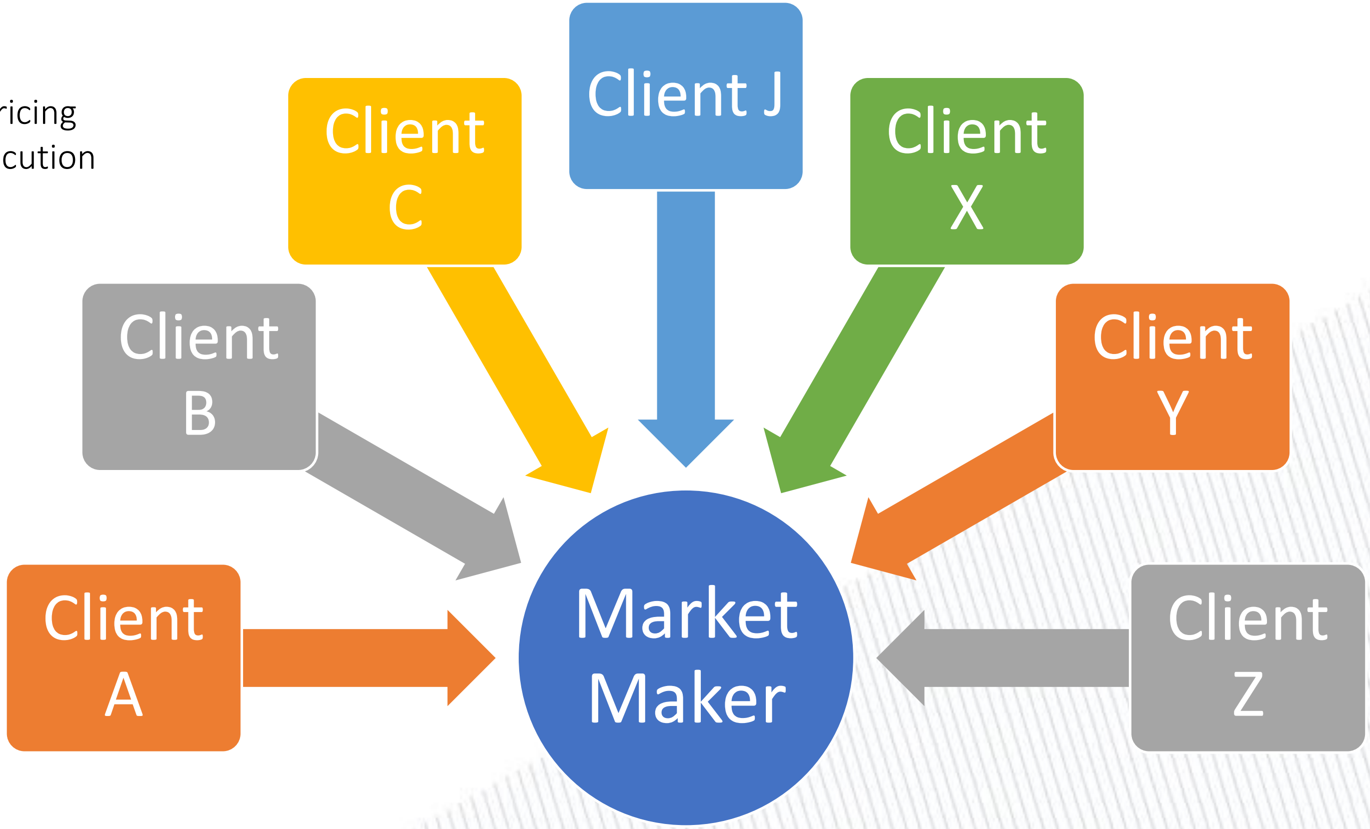
Agenda

- The traditional fixed income liquidity model
- Regulation
  - Basel III
  - MiFID II/R
  - CSDR mandatory buy-ins
- Monetary policy: ECB CSPP
- Electronification
- Hedging and financing markets
- The evolving dealer model
- The liquidity debate
- Looking forward

The traditional fixed income liquidity model

Provides for:

- Ready two-way pricing
- Immediacy of execution



The principal dealer (or market-maker) model

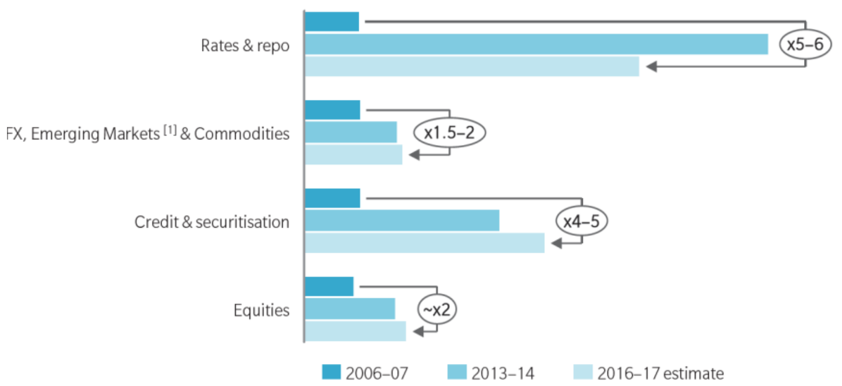
Essential ingredients for the model:

- ❑ Availability of capital (balance sheet) to hold long and short-positions and warehouse risk
- ❑ Availability of an efficient and liquid derivatives market (such as single-name CDS) to hedge dealer positions
- ❑ Availability of an efficient and liquid repo market to fund dealer positions
- ❑ Skills and experience of the trader

Regulation: Basel III

- Increases in capital and liquidity requirements have pressured the market-making business model by increasing the cost of providing intermediation services and driving down profitability.
- In low margin market making activities, the combined Leverage Ratio and NSFR costs are estimated to impact funding costs in the 60bps–110bps range.

Dealer financial resource consumption [1]



Balance sheet reductions 2010-15 (% change) [2]

PRODUCT	2010–15	NEXT 3–4 YEARS
Repo	Down ~50%	Down ~10%
Prime	Up ~20%	Flat
Bonds, FX & commodities	Down ~25%	Down ~10%
Structured & securitized	Down ~20%	Down ~10%
Listed, flow & cleared products	Down ~20%	Down ~5%
Issuance & advisory	~ Flat	Down ~5%
Total	-25% to -30%	-5% to -10%

FRTB impacts (gap between revised standardised approach and internal model) [3]

	SA to IMA impact
Interest rate risk	x 4.2
Credit spread risk	x 2.1
Equity risk	x 4.6
Commodity risk	x 3.6
FX risk	x 3.8

[1] Source: Oliver Wyman and Morgan Stanley (2015)
[2] Source: Oliver Wyman and Morgan Stanley (2016)
[3] Source: ISDA/GFMA/IIF (2015)

Regulation: MiFID II/R

- The Markets in Financial Instruments Directive (MiFID) II is a European Union law that provides harmonized regulation for investment services across the 31 Member States of the European Economic Area (EEA). The Markets in Financial Instruments Regulation (MiFIR) complements MiFID II by setting out a common framework.

- Objectives: Increase market transparency, efficiency and safety by bringing the majority of non-equity products into a robust regulatory regime and moving a significant part of OTC trading onto regulated platforms.

- Scope: MiFID II/R is only intended to apply to EU investment firms and activities undertaken in the EU.

- MiFID II and MiFIR applied from 3 January 2018.

EEA post-implementation discussion points

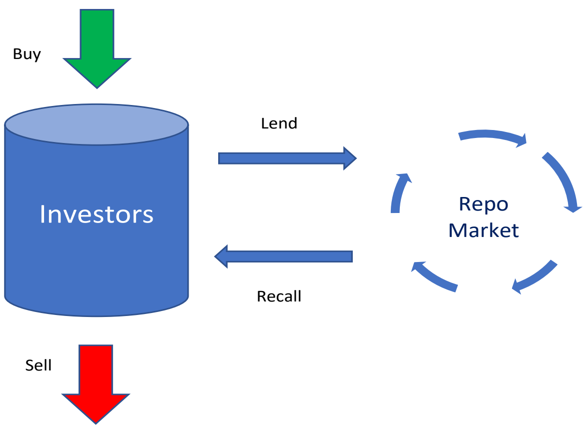
- Access to pre- and post-trade data and lack of consolidated tape for fixed income
- No central database of Systematic Internalisers
- Best Execution reporting
- Differing liquidity assessments for bonds
- Interpretation of what constitutes research
- Increase in move-to-venue trading

- *No major impact on market liquidity and volumes*

Non-EEA post-implementation discussion points

- New terms of business with EU and global counterparties
- Distributing research into the EU
- Data requests to support transaction reporting
- LEIs and implications of non-compliance
- Product Governance requirements for non-EEA entities distributing new issues into the EU
- Impacts on market efficiency and liquidity
- Influence on local regulation

Regulation: CSDR mandatory buy-ins

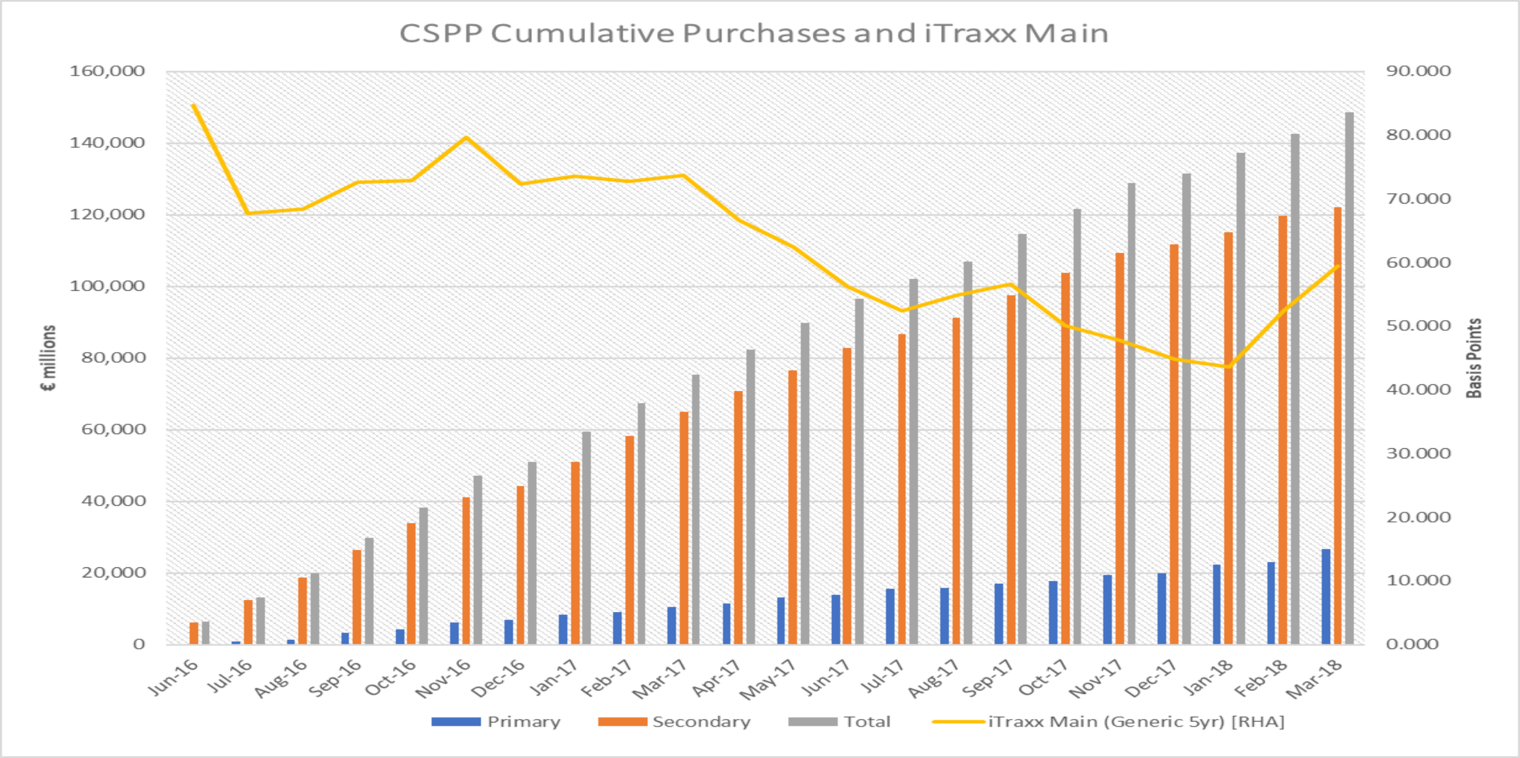


- CSDR mandatory buy-ins are intended to replace the existing discretionary buy-in remedies for OTC markets with a legal obligation to buy-in failing counterparties.
- Failing counterparties will not only face the normal costs of being bought-in (the buy-in premium), but will be further penalized should the market fall (the 'CSDR put').
- In the event that the buy-in is unsuccessful, the non-defaulting purchasing party will be forced to cancel the trade in return for 'cash compensation'.
- Short-term repos (<30 business days) are expected to be exempt.
- The regulation is expected to come into force in late 2020.

The widely understood unintended consequences of the CSDR mandatory buy-in regime include:

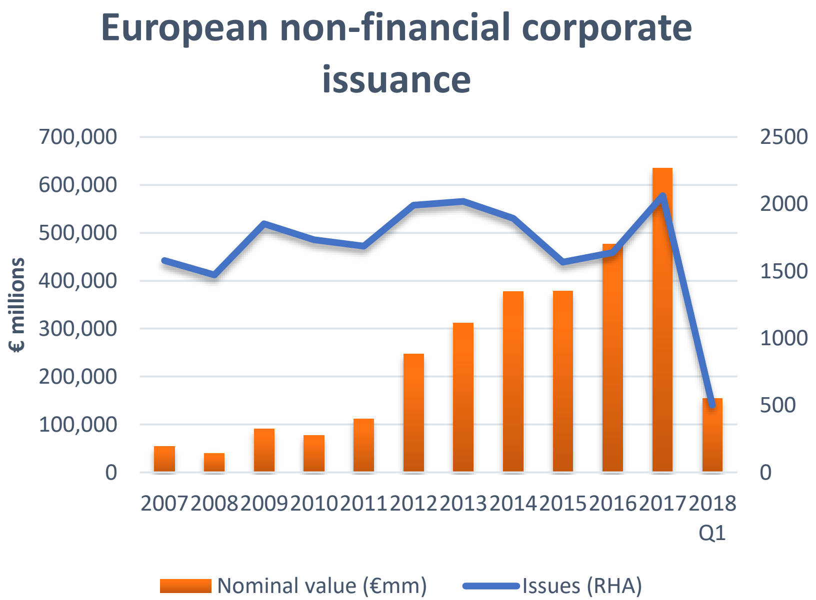
- a significant increase in risk for market-makers providing offer-side liquidity;
- an increase in market risk for investors who may be forced out of their long positions in return for unpredictable (and unmanageable) cash compensation;
- a powerful disincentive to lending securities, given the lack of contractual interoperability between mandatory buy-ins and repo/lending agreements;
- a break-down in the market's ability to maintain fair value between cash instruments and derivatives;
- the heightened likelihood of multiple buy-ins being triggered by single fails; and
- increased market volatility and instability.

Monetary policy: ECB Corporate Sector Purchase Programme

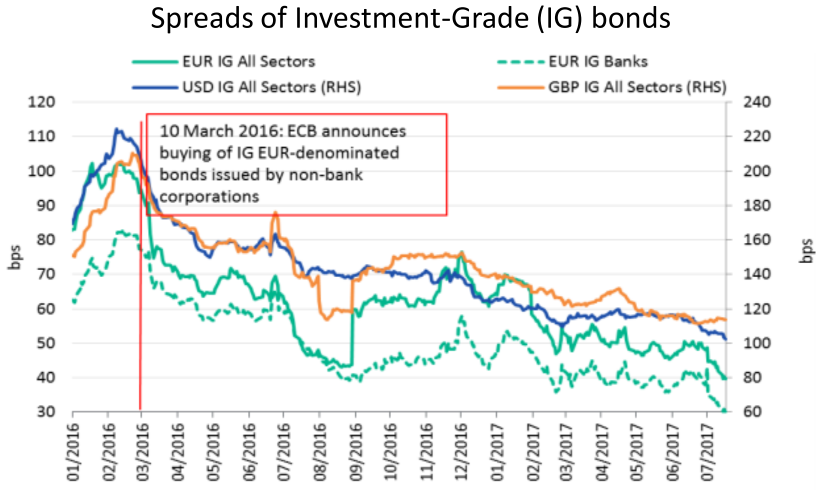


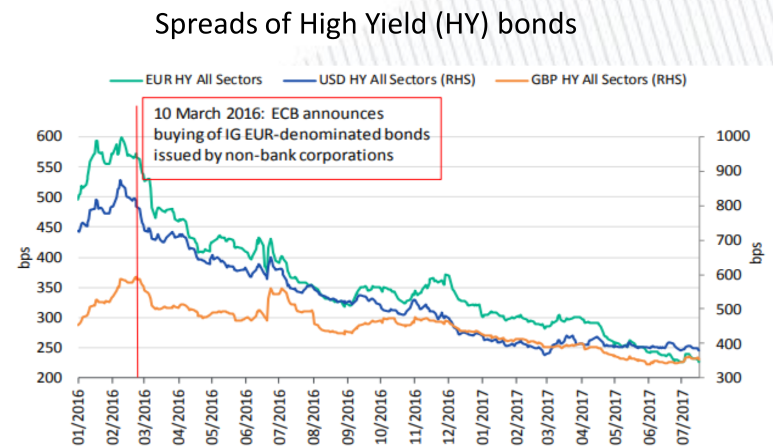
Source: ICMA analysis based on ECB and Bloomberg/Markit data

CSPP: European corporate issuance and credit spreads



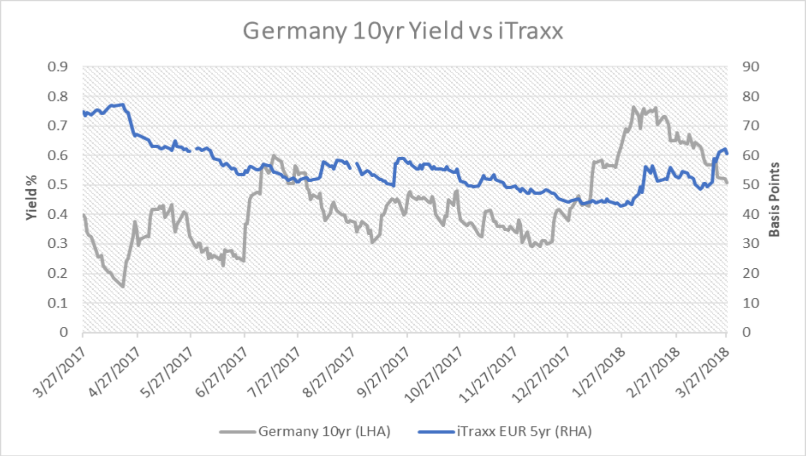
Source: ICMA analysis based on Bloomberg data

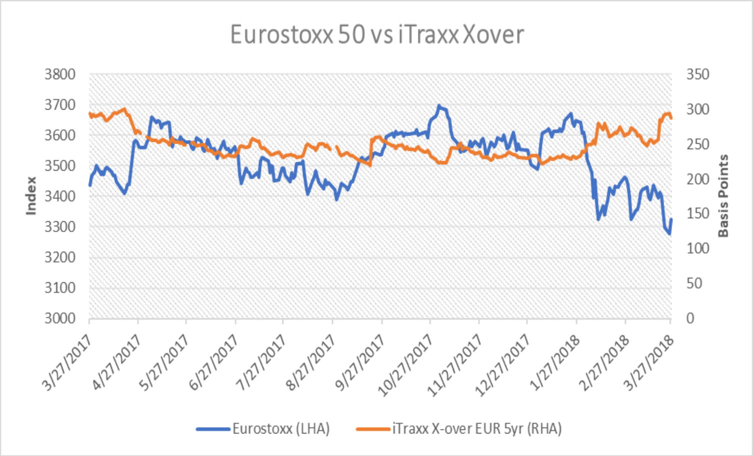


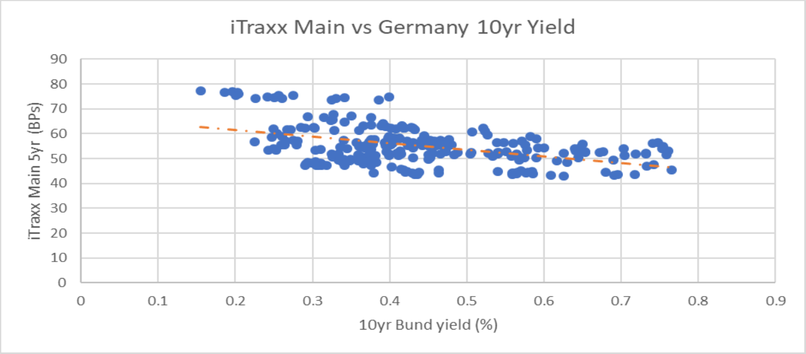


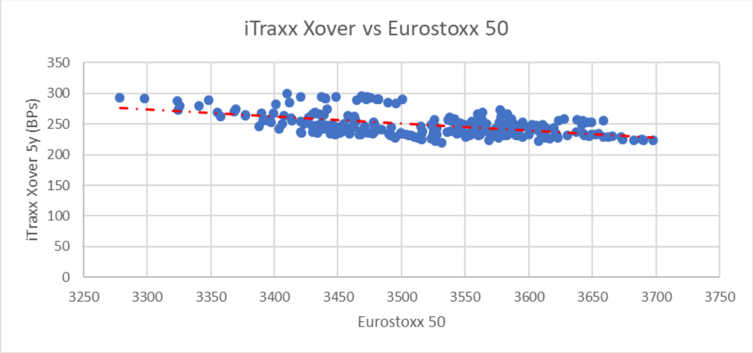
Source: Macchiarelli et al (2017), based on Bloomberg data

CSPP: and spread volatility







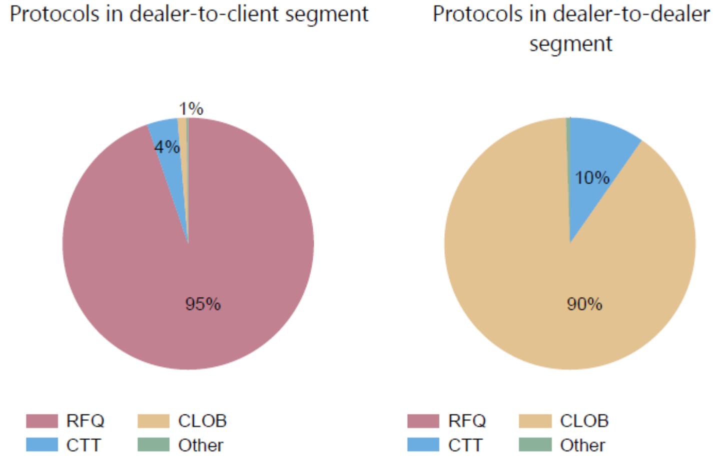


Source: ICMA analysis, based on Bloomberg/Markit data (03/17-03/18)

Electronification

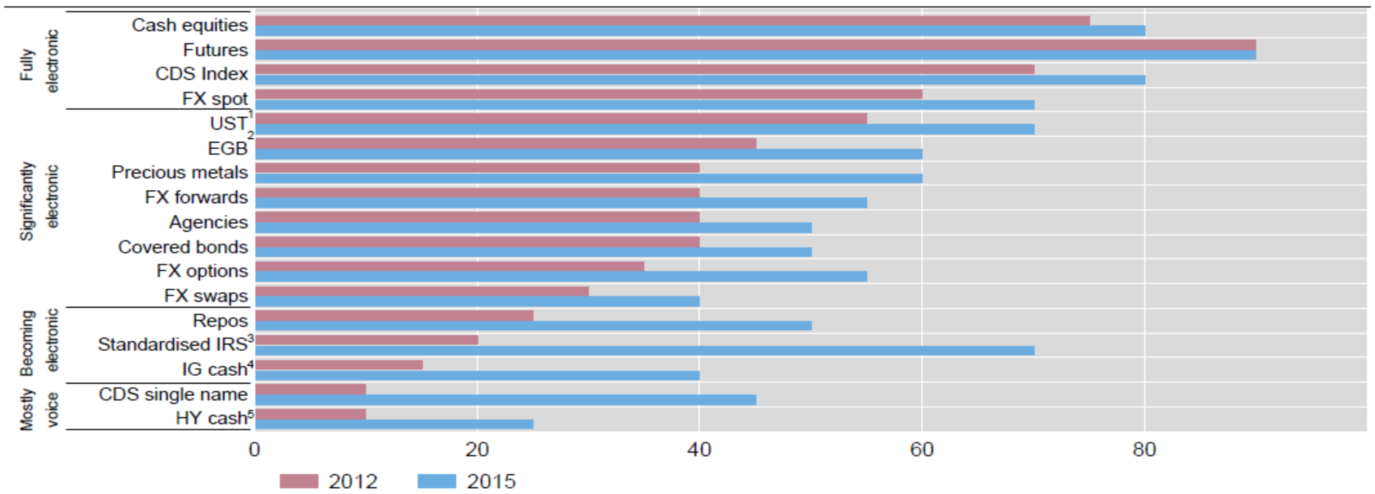
"Electronic trading has become increasingly important in fixed income markets, enabling greater use of automated, computer-driven trading based on algorithms. This has allowed a more diverse set of participants to enter the market, introducing new sources of liquidity, increasing competition, and reducing transaction costs."
- Vanguard, Innovation and evolution in the fixed income market, 2016

Electronic protocols for FI



Source: BIS (2016)

State of Electronification by asset class (%)

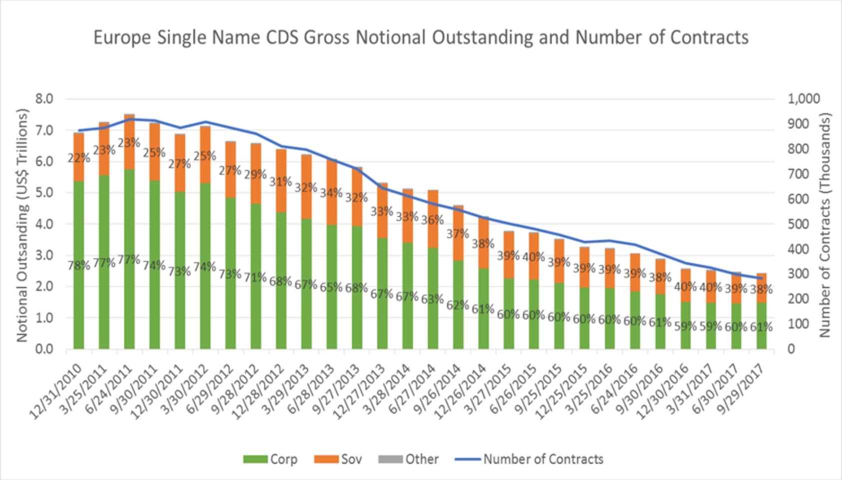


[1] US Treasuries. [2] European government bonds. [3] Standardised interest rate swaps. [4] Investment grade cash bonds. [5] High-yield cash bonds.

Sources: Greenwich Associates (2014); McKinsey & Company and Greenwich Associates (2013); BIS (2016)

Hedging and financing markets

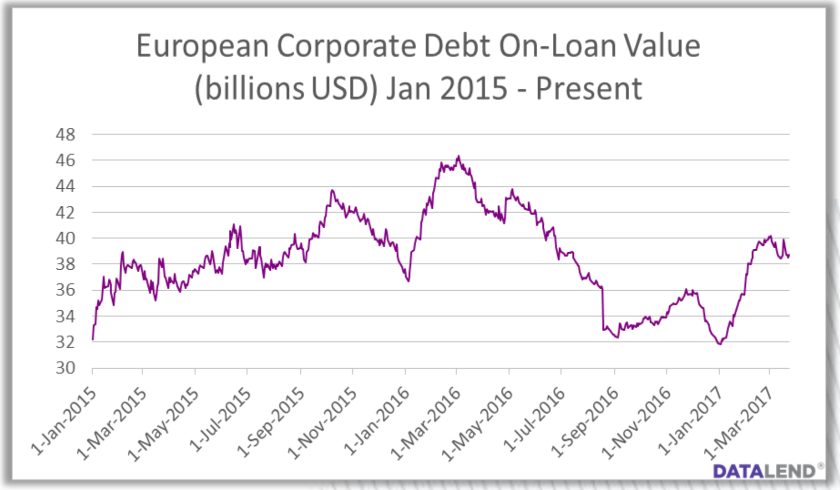
The European Corporate Single Name Credit Default Swap Market (ICMA 2018)



Source: ISDA analysis based on DTCC TIW data

- Liquidity in the corporate SN-CDS market has deteriorated significantly in the period since 2007-2008.
- This can largely be attributed to a retrenchment of market-makers.
- In turn this is attributed largely to the increased capital costs of running CDS books post Basel III, as well as benign market conditions which have reduced the demand for protection, as low credit spread volatility makes it more difficult to generate profits

The European Credit Repo Market: the cornerstone of corporate bond market liquidity (ICMA 2017)



Source: DataLend

- The changing nature of the underlying market, with a trend toward smaller trade sizes and more rapid turn-over of dealer positions, is making sourcing supply more difficult.
- Looking forward, the single biggest challenge to supply, and so the health of the credit repo market, is the CSDR mandatory buy-in regime.
- The biggest challenge to credit repo intermediation is likely to come from the application of NSFR, which will increase the cost of borrowing corporate bonds significantly.

The principal dealer (or market-maker) model

Undermining the model:

- Availability of capital (balance sheet) to hold long and short-positions and warehouse risk
  - Increased cost of capital (Basel III)
  - Volker Rule and restrictions on bank proprietary trading
- Availability of an efficient and liquid derivatives market (such as single-name CDS) to hedge dealer positions
  - CRD IV/R, EMIR, NSFR
- Availability of an efficient and liquid repo market to fund dealer positions
  - Leverage Ratio, NSFR,....
  - QE: negative rates and excess reserves
- Skills and experience of the trader
  - Ongoing attrition of experienced staff and 'juniorization' of trading desks

The evolving dealer model

Principal trader → Principal broker → Agency broker

Changes in dealer behaviour:

- Smaller inventories and faster turnover
- More considered allocation of balance sheet
- Deeper client engagement and awareness of needs
- More specialization and focus on competitive advantage
- More streamlined trading and sales desks

What we lose is:

- Ready two-way pricing
- Immediacy of execution

The liquidity debate

Remaking the corporate bond market, ICMA (2016)

"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."

Examination of Liquidity of the Secondary Corporate Bond Markets, IOSCO (2017)

"Based on the totality of information collected and analysed, IOSCO did not find substantial evidence showing that liquidity in the secondary corporate bond markets has deteriorated markedly from historic norms for non-crisis periods. "

Drivers of Liquidity in the EU Corporate Bond Market, Risk Control (2017)

"Activity-based indicators (such as turnover rates and trade numbers) suggest that liquidity has deteriorated in recent years. Price-based indicators (for example, bid-ask and effective spreads, round trip measures and market depth indicators) point to some recovery in liquidity after the crisis but deterioration after 2014. Conditional on the riskiness of individual bonds, both price and activity measures show declines in liquidity since 2011, suggesting a structural deterioration in liquidity."

Liquidity in French bond markets, AMF (2015)

"Based on trade data received by the AMF and bid-ask spreads data, a composite liquidity indicator was constructed. The results suggest that, after the two episodes of strong decline due to 2007-2009 and 2011 crisis, liquidity has improved steadily in French bond markets since beginning of 2012 albeit without recovering its pre-crisis level (2005-2007). "

New evidence on liquidity in UK corporate bond markets, FCA (2017)

"Taken together, this indicates that trading conditions have become somewhat more difficult over the past 18-24 months. Market participants may have to work harder today to complete a trade than in previous years. "

Looking forward

- ❑ Tapering and withdrawal of quantitative easing
- ❑ Increased market volatility
- ❑ Geopolitical uncertainty
- ❑ Further increases to capital costs for market-makers (FRTB)
- ❑ CSDR mandatory buy-ins and the prospect of a "long only" market
- ❑ Further declines in repo and SN-CDS market liquidity
- ❑ Increased market transparency
- ❑ The prospect of new (non traditional) liquidity providers
- ❑ Harnessing and utilization of "big data"
- ❑ Ongoing developments in FinTech and market electronification

ICMA's Secondary Market Practices Committee (SMPC)

ICMA's Secondary Market Practices Committee (SMPC) is an open forum for sell-side and buy-side member firms active in the international cross-border fixed income secondary market, in particular the European investment grade corporate bond market. Through open dialogue and engagement, as well as through its subsidiary working groups and work-streams, the SMPC seeks to be the representative body of the European corporate bond secondary market by:

(i) addressing practical issues directly relevant to market practitioners;

(ii) standardising market best practice;

(iii) disseminating relevant market information; and

(iv) promoting the best interests of an efficient and liquid market.

https://www.icmagroup.org/Regulatory-Policy-and-Market-Practice/Secondary-Markets/

Contacts:

Andy Hill
Senior Director, Secretary to the Secondary Market Practices Committee
andy.hill@icmagroup.org
+44 20 7213 0335

Liz Callaghan
Director
liz.callaghan@icmagroup.org
+44 20 7213 0313

Gabriel Callsen
Associate
gabriel.callsen@icmagroup.org
+44 20 7213 0334