

Electronic Bond Trading Review

Part 1: 'Electronification' of the old market structure

- *Market size and trends today*

Part 2: Structure evolution

- *where the life-cycle may lead*

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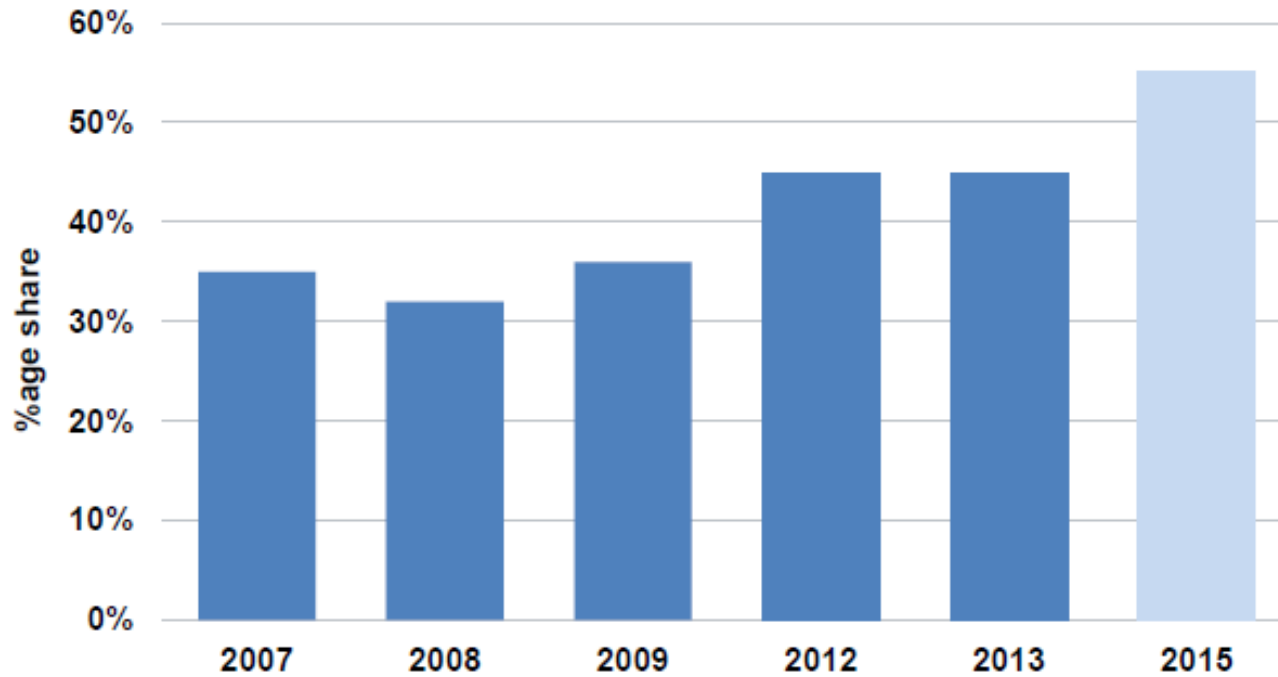
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Part 1: 'Electronifying' the old market structure

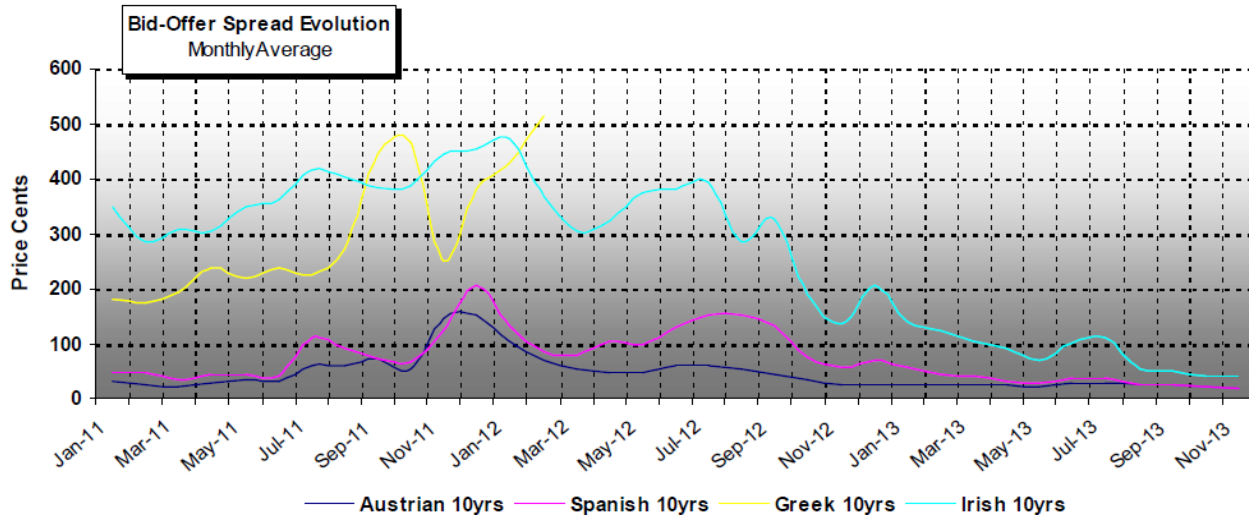
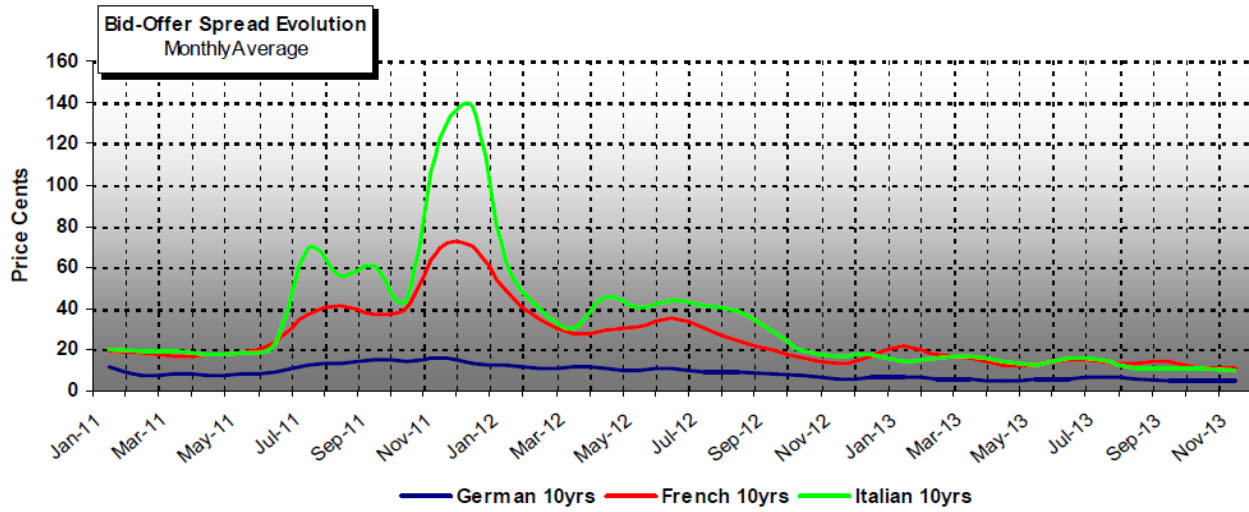
- *Market size and trends today*

Share of Electronic Trading in Overall Buy Side Fixed Income Volume



Source: SIFMA (Securities Industry and Financial Markets Association), Celent; 10/2013

Bid-Offer Spread Evolution



Source: MTS Group; 11/2013

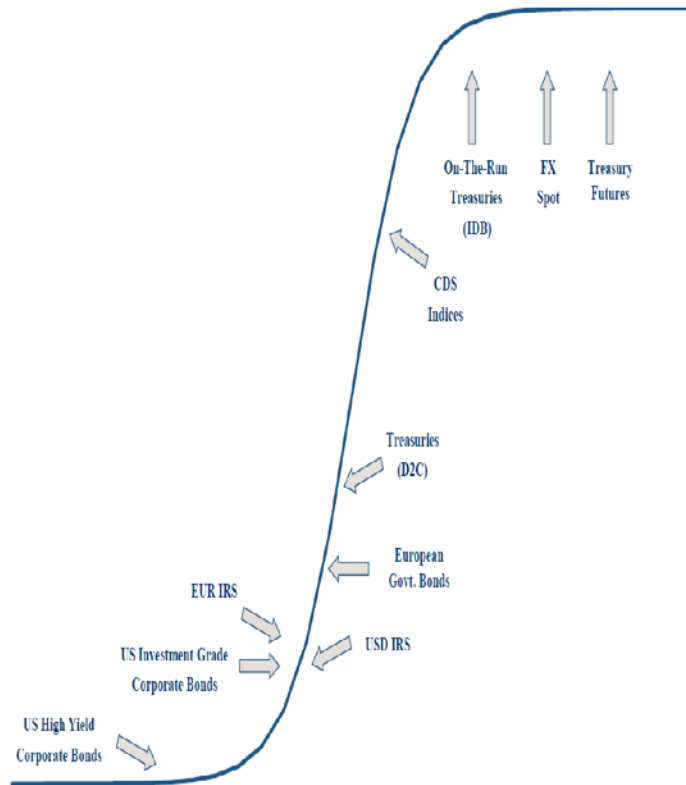
Part 2: Structure evolution

- *where the life-cycle may lead*

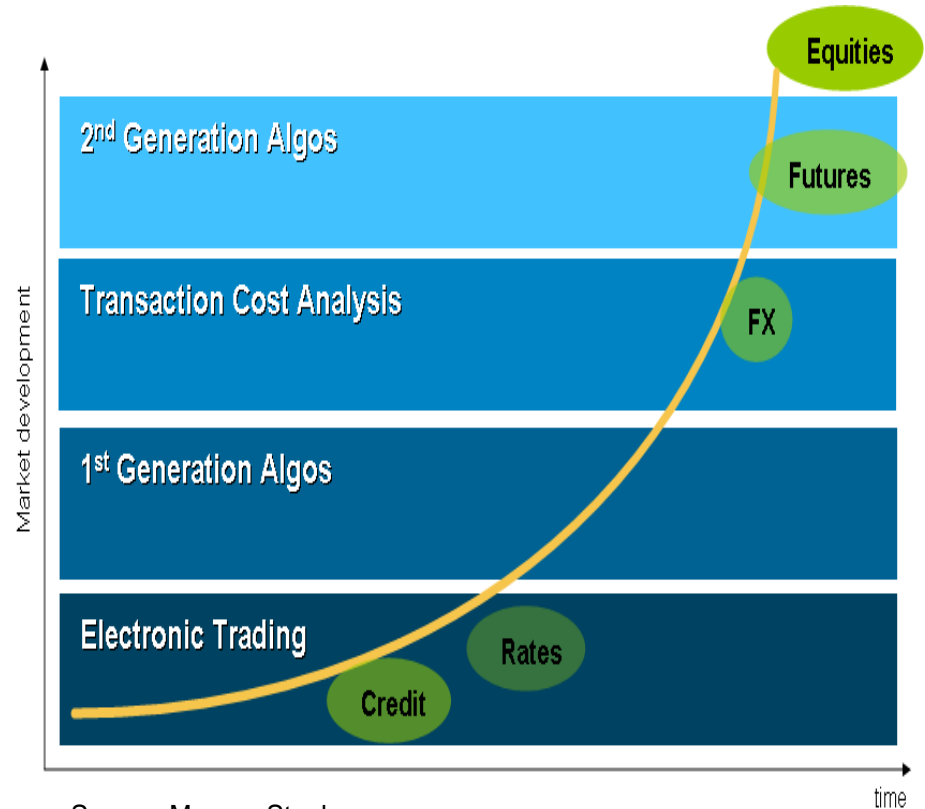
Global Fixed Income

Current State by Product Area

Source: Treasury Borrowing Advisory Committee Report on “Electronic Trading in the Secondary Fixed Income Markets”



We know where parts of the Rates and Credit markets are headed...



Source: Morgan Stanley

time

How the EU FI Cash Market Is Evolving



Going through a **similar path** that **equity markets** have before but **keeping its specificities**

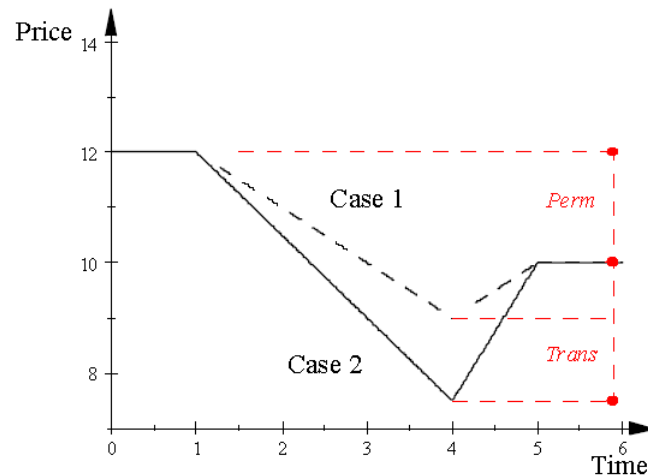
	BONDS (CURRENTLY)	BONDS (POST NEW REGULATION)	EQUITIES
INVESTORS	<ul style="list-style-type: none"> Small retail presence Institutional 	<ul style="list-style-type: none"> Still essentially institutional but growth of retail market share 	<ul style="list-style-type: none"> Significant retail presence Institutional
MARKET STRUCTURE	<ul style="list-style-type: none"> Bilateral, quote-driven, RFQs Off-exchange, OTC (87% of total trading) 	<ul style="list-style-type: none"> Firm prices models progressively overtake RFQ models More on-exchange / MTF trading Avoiding the BCN step 	<ul style="list-style-type: none"> Multilateral, order driven Predominantly on-exchange
INTERMEDIATION	<ul style="list-style-type: none"> Dealers frequently put their own capital at risk to execute a trade 	<ul style="list-style-type: none"> Only tier 1 dealers able to leverage their own capital Growth of agency trading models 	<ul style="list-style-type: none"> Trades are typically matched via limit order books
AVG TRADE SIZE	<ul style="list-style-type: none"> Large Hundreds of thousands/millions of Euros 	<ul style="list-style-type: none"> Decrease of average trade size But: it remains much bigger than on equities 	<ul style="list-style-type: none"> Small Hundreds or thousands of Euros
LIQUIDITY	<ul style="list-style-type: none"> Varies depending on size of the issue, rating Concentrated mainly in the period immediately after the issue 	<ul style="list-style-type: none"> Standardization of issuers' issuing policies Transition from on-the-run to off-the-run later in bonds' lives 	<ul style="list-style-type: none"> High and Continuous

IN BRIEF:

More electronic, more efficient, more transparent, more multilateral, more buy-side driven, more order-driven and more CCP centered
Less discriminatory, less discretionary

Buy Side Trading, Sell Side Challenge

- Buy side trading is about minimizing Implementation Shortfall (IS) – implement exposure at the lowest possible cost..
- Liquidity is important to move large volumes....
- Sell side must learn to track and illustrate implementation shortfall/ transaction costs
- Pre- and post- trade tools to develop in next stage of growth cycle

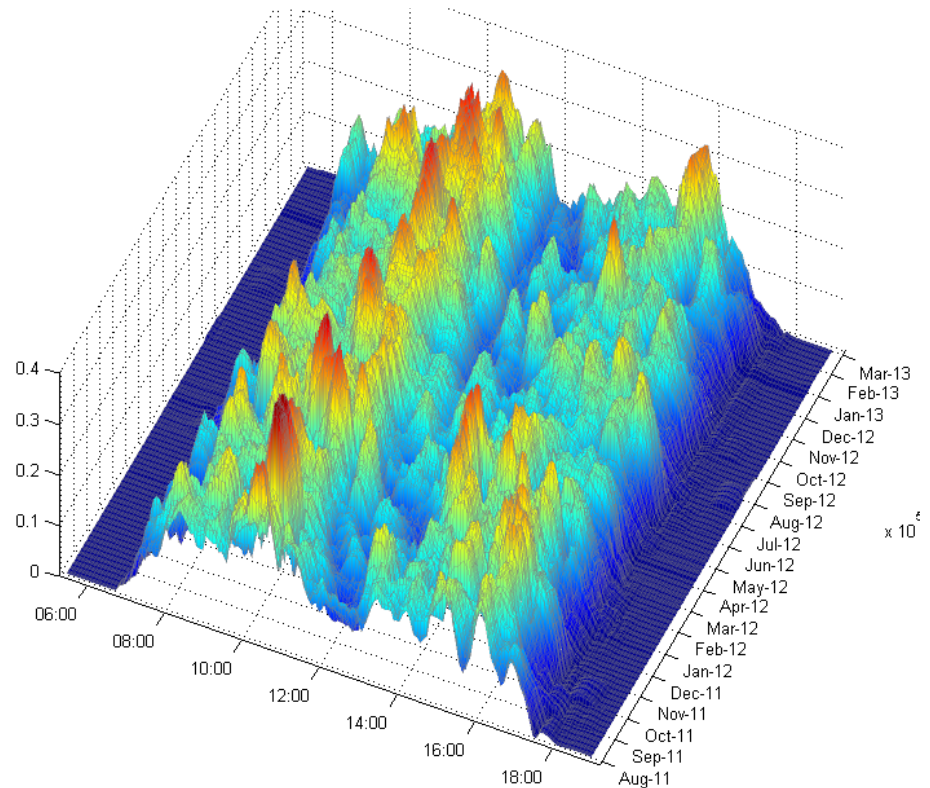


Source: APG

Transaction Costs for Fixed Income Markets

- Transaction Cost Analysis available in pre- and post-trade formats for all listed markets since the 1990's due to availability of trade data from exchanges
- Now also available for spot FX due to electronification of the market, resulting in rich data source of transaction data
- Combination of increasing electronification of liquid parts of Fixed Income markets, together with regulatory developments, means TCA becoming increasingly viable
- Initial step is to model and understand intraday liquidity and market structure

Liquidity Profile of Bunds (Maturity Bucket: 8 - 11 Years)



Source: Morgan Stanley QSI

Discussion points

- Is FI trading is becoming more expensive/difficult?
 - Smaller tickets
 - Less inventory
 - Less liquidity
- Electronic platforms - No viable alternative yet?
- Could the current situation lead to material gap risk?

Appendix

On Going Regulation Of Markets

MiFID 2

Bring bond trading on a **more regulated environment** by developing: pre-trade transparency, best execution, transaction reporting, post-trade reporting, clearing.

Current categories will remain:

- RMs and MTFs for multilateral trading
- OTFs becomes a **new trading venue category** to capture client-to-client trading currently internalized by banks
- SIs for bilateral trading
- OTC remains non-binding

Waivers currently being discussed

Basel 3

Modification of banks' ability to provide capital for **liquidity enhancement**: the **cost of trading credit** will nearly **double**.

A **change in business orientation**: from capital-intensive businesses and investments into flow and electronic businesses.

Solvency 2

Reallocation of insurance companies' capital preferentially to bonds with good credit rating and short maturities.

IMPACT

An **expected shift of power**:

From the **sell-side** - which is less likely to provide liquidity and moving towards a broker's model

To the **buy-side** - becoming more demanding regarding costs and services aligned with its needs

Existing concentration of trading venues in the RFQ multiproduct segment **creates opportunities** for **more innovative entrants**, which will have **different business models** or microstructures (including **buy-side functionalities** and **firm orders**).

Individual Platform Innovations

Platform	Summary	Description	Primary Users	Instruments	Live
Bloomberg	ALLQ / ALLX	Dealer hit / rate slippage performance in ALLQ	B2C	Cash Credit Cash Rates	Yes
Bloomberg	TNT: Transaction Network	Crossing platform for corporate bonds	B2C C2C	Cash Credit	In Development
Market Axess / Aladdin Trading Network	Crossing platform	Tie up of the Aladdin / Blackrock Trading network with Market Axess bond trading platform.	B2C C2C	Cash Credit	Live in US
Borsa Italiana, EURO TLX, Stuttgarter Boerse, Swiss Exchange	CLOB	Order book aiming at retail market	Retail	Cash Credit Cash Rates	Yes
NYSE Bondmatch	CLOB	Order book aimed at institutional clients	B2C B2B C2C	Cash Credit	Yes
MTS Credit	CLOB	Order book aimed at institutional clients. Complimentary to MTS RFQ credit offering.	B2C C2C	Cash credit	Yes
Vega Chi	CLOB	Orderbook aimed at institutions.	B2C	High Yield, ABS, Convertibles	Yes
DealerWeb	Odd-lot auctions	Inter-dealer auctions – Sweep	B2B	Cash Credit Cash Rates	Yes

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