



The Impacts of Electronic Trading on the Front Office

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Outline

- Fears vs. Reality
- US Treasury Markets the impact of electronic execution on volume
- Foreign Exchange building a franchise using e-trading
- Interest Rate Swaps straight-through processing as the catalyst for e-trading
- Money Markets where are we?
- BARX offerings



Fears: the traditional reasons for resistance to electronic trading:

- ▶ Fears over loss of jobs e.g., less coverage required, less traders needed to manage flow
- Margin compression as multidealer platforms only allow dealers to compete on price
- Too much transparency ("winners curse") leading to less desire to put capital at risk



Reality: what did we find?

- Jobs change
 - − Traders \rightarrow X-Box generation risk managers
 - − Flow sales \rightarrow structured sales
- > Margins have reduced but exploding volumes have more than made up for it
- As markets become increasingly price-transparent, "size discovery" is becoming the valuable commodity
- New opportunities have emerged prompt and strong investment in technology can present dealers with a real first-mover advantage
- The breadth of market data generated is creating an appreciating asset, and generates the possibility of algorithmic trading
- Security and efficiency
 - Single, automated point of entry leads to near-zero error rates
 - STP reduces back office costs and operational risk
- Firms can now reach the "long tail" historically too expensive to cover, dealers with a good e-strategy can now cover these clients, and with enough of them they can be a sizeable revenue source

But you have to invest in technology and infrastructure properly – offering electronic execution without the right level of straight-through processing brings all the downsides but without the upside



US Treasury Markets – the impact of electronic execution on volume

- Average daily trading volume for UST increased from:
 - ► US\$226 billion in 1998 → <5% 'e'</p>
 - ► US\$556 billion in 2005 → >70% 'e'
- Whereas total UST outstanding only increased from:
 - US\$3.35 trillion in 1998
 - US\$4 trillion in 2005

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Average Daily Trading Volume of U.S. Treasury Securities

Beginning in the late 90s, technology was introduced that allowed traders to both view and execute prices on a screen in real time, which improved both pre- and post-trade transparency.

Source: Bond Market Association

Foreign Exchange – building a franchise using e-trading

BARX FX Build-Out



Euromoney eFX Rankings (and Overall FX Rankings)

2002		2003		2004		2005		2006	
Provider	Rank	Provider	Rank	Provider	Rank	Provider	Rank	Provider	Rank
UBS	1 (2)	UBS	1 (1)	UBS	1 (1)	Deutsche Bank	1 (1)	Deutsche Bank	1 (1)
Goldman Sachs	2 (4)	Deutsche Bank	2 (3)	Deutsche Bank	2 (2)	UBS	2 (2)	UBS	2 (2)
Citigroup	3 (1)	Dresdner	3 (15)	Dresdner	3 (12)	Barclays Capital	3 (5)	Barclays Capital	3 (4)
Dresdner	4 (14)	Citigroup	4 (2)	Barclays Capital	4 (7)	HSBC	4 (4)	Citigroup	4 (3)
Deutsche Bank	5 (3)	Goldman Sachs	5 (5)	Citigroup	5 (3)	Goldman Sachs	5 (8)	RBS	5 (5)
CSFB	6 (6)	Barclays Capital	6 (9)	JP Morgan Chase	6 (4)	Dresdner	6 (13)	HSBC	6 (7)
JP Morgan Chase	7 (5)	State Street	7 (16)	Goldman Sachs	7 (6)	Citigroup	7 (3)	Goldman Sachs	7 (6)
Barclays Capital	8 (10)	CSFB	8 (6)	SEB	8 (N/A)	ABN AMRO	8 (9)	Dresdner	8 (13)
SEB	9 (9)	HSBC	9 (7)	ABN AMRO	9 (11)	Merrill Lynch	9 (6)	Bank of America	9 (8)
HSBC	10 (12)	JP Morgan Chase	10 (4)	HSBC	10 (5)	SEB	10 (21)	ABN Amro	10 (11)



Interest Rate Swaps – straight-through processing as the catalyst for e-trading

Execution Bloomberg TradeWeb BARX Fixed Income	Bloomberg * Widespread distribution * Bloomberg Analytics * Multi-dealer and single dealer swaps pages * Single dealer order based trading	TradeWeb * Multi-dealer RFQ * Spread/Rate-based trading * Strong technology * High cost of participation * Well developed post trade (STP) functionality	BARX Fixed Income * Proprietary technology * Reduced dependency on 3 rd party distributors * Main channel for innovative product development for Barclays
Only via	ble with very high levels of post t	rade automation and industr	y-driven STP
<u>Confirmation</u> Swapswire	 * Eliminates expensive paper-based of * Reduces back-office resource over * Trade confirmation, trade capture, 	head	
Risk <u>Management</u> LCH Switchfix	London Clearing House * Ability to net multiple, bilaterally r swap agreements in single, multi-lat agreement * Lower counterparty and operation * Standardized processing	regotiated * Reset matching s eral * Personalized and unwanted risk	ix & Fra-Cross ervice efficient method to manage nto the Swapswire system

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What is out there

- E-Mid, 360T, FX-All offer multidealer B-2-C portals for execution of MM deposits
- Other third party platforms are considering MM deposits
- Bloomberg, MTS, Eurex and Brokertec offer electronic repo execution
- Barclays offers MM deposit trading on our proprietary multi-asset class BARX platform

How is it developing?

- Liquidity is currently very fragmented
- Client traction is patchy as the money market product is still very much viewed in the "secondary product" space, i.e. a tag-on for FX, fixed income etc. rather than being seen as a product in its own right. This is exacerbated by the lack of serious offering from multidealer platforms but presents opportunities for proprietary bank portals that offer multiple asset classes
- Efficiency improvements in the B-2-C repo market by platforms such as Bloomberg are starting to have an effect but it's still early days, and varying degrees of technology integration from participant dealers has a drag-effect on the uptake



BARX offerings

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BARX offers access to Barclays Capital's liquidity through innovative proprietary platforms and via leading ECNs in the following asset classes:

- Fixed Income
- Foreign Exchange
- Futures & Options
- Commodities
- Equities

- Money Market deposits and Repo
- Structured Products

Our commitment to e-trading:

- Uptime over past 6 months **99.75%** (513 trading minutes lost out of 206,000)
- Over 100 IT personnel dedicated to development and technical support
- Over 120 E-Sales and Client Services personnel dedicated to marketing, client onboarding and business support
- BARX is a single global brand for all our e-trading services



Questions?



