

Current Trends in FX Prime Brokerage

ECB FX Contact Group

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Agenda

- Historical Perspective
- Current Status of the FX Prime Brokerage Market
- FXPB post 2008
- Future trends

FX Prime Brokerage – Historical Perspective

- Originally, very much a niche business with few participants operating a highly manual workflow with a small number of clients.
- The client base was exclusively hedge funds
- Some argument as to who did the first PB trade – AIG Trading Group and Deutsche Bank were definitely the early participants
- Fees were high and volumes were low
- Non scalable people intensive business
- Relatively primitive risk management controls, although arguably adequate for the volume of business at the time
- There was no e-commerce, no ECN connectivity and certainly no anonymity
- The division between buy-side and sell-side was still very strong

Current Status of the FX Prime Brokerage Market

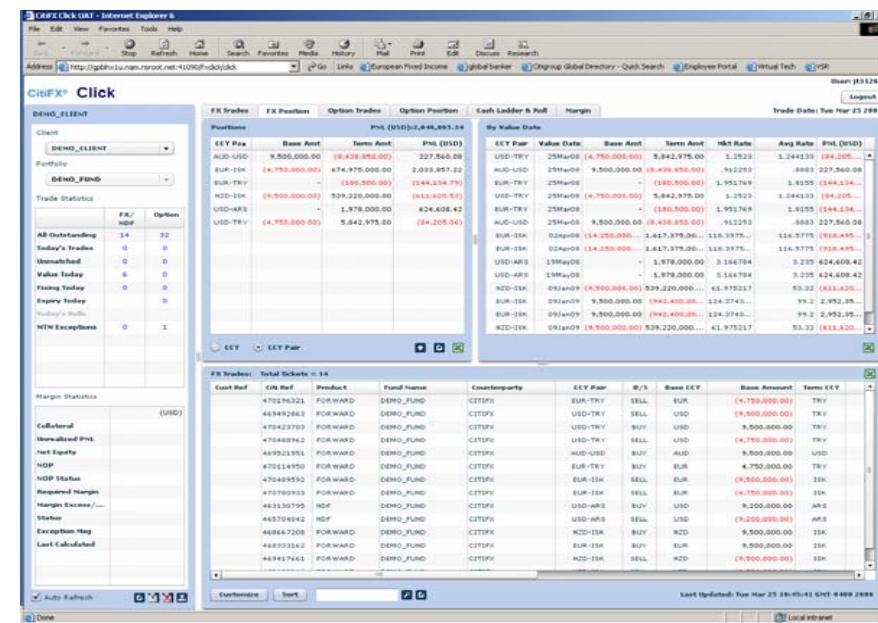
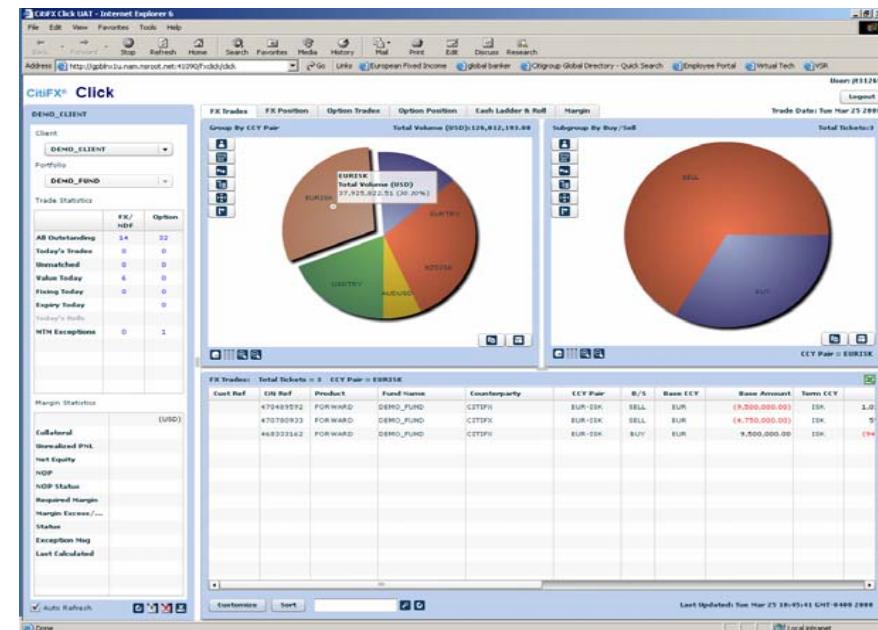
- A vibrant mainstream business
- As an indication of the dimensions of the FXPB business, PB accounts for approximately 50 pct of all FX turnover by ticket numbers at Citi
- All major FX banks have some degree of FX Prime Brokerage presence
- FX Prime Brokerage is now a highly automated high volume business utilising some of the most advanced technology both on the bank and client side available in the FX market
- The types of clients using PB represent all aspects of the FX Market, Hedge Funds, Proprietary Trading groups, Investors, Banks, even a small number of corporations
- E-commerce and prime brokerage combined have opened up a wide array of trading venues and played an significant role in the blurring of the traditional buy-side/sell-side rolls.
- The fragmented nature of the FX markets with its proliferation of trading venues essentially requires an efficient Prime Brokerage capability. Arguable one could not have developed without the other
- The FXPB market whilst being fiercely competitive does cooperate well for the best interests of the market and the clients. A good example of this being the development of the Harmony give up network which revolutionised operational efficiency in the FXPB market
- With reference to the previous presentation it can be seen that a significant component (approx 40%) of liquidity in core inter bank markets is now provided by non bank trading groups using FXPB facilities

FX Prime Brokerage post 2008

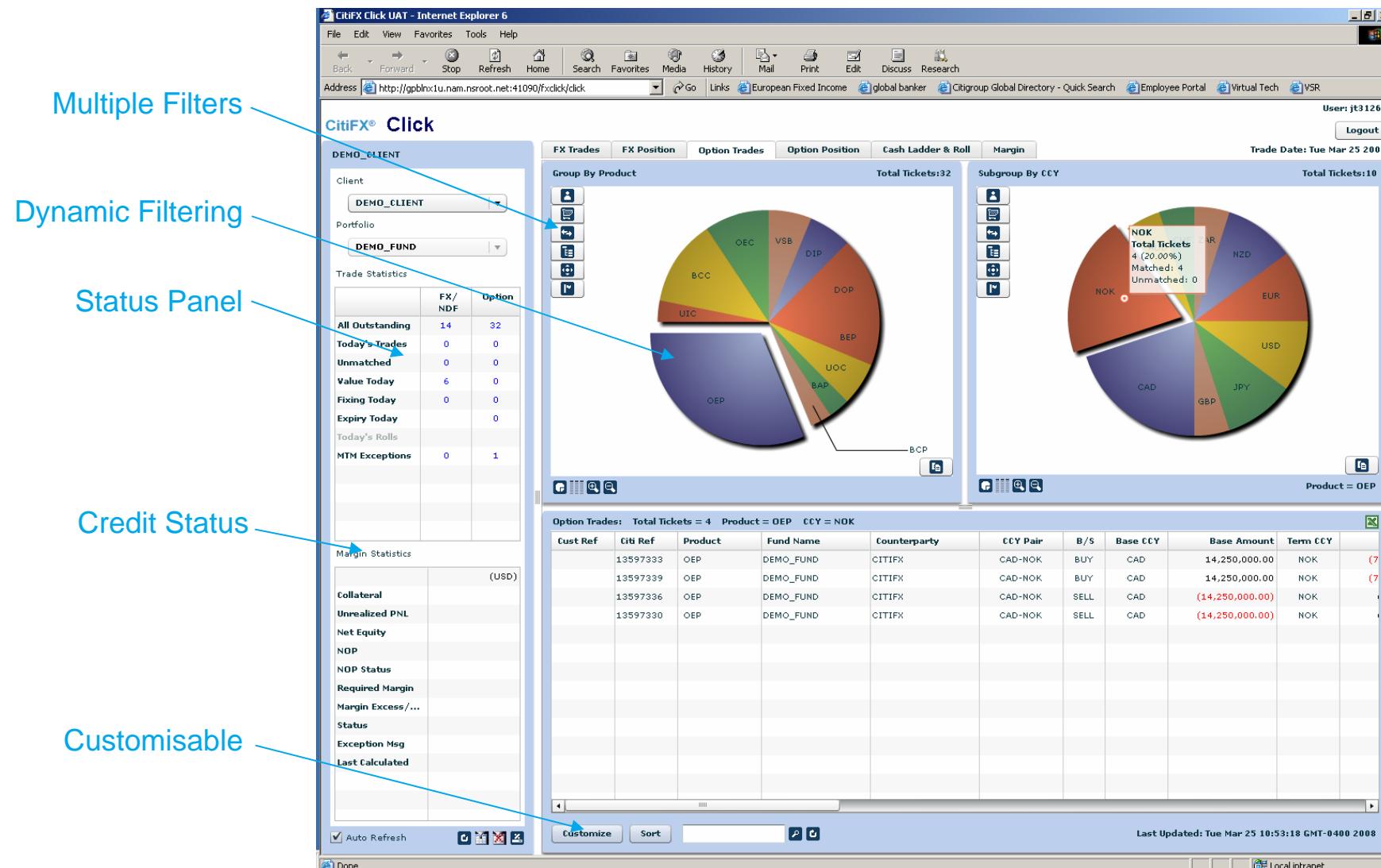
- Risk management focus
 - Broader concerns about risk in general focussed attention on the quality of risk management methodologies both from the client and the bank point of view
 - Operational risk has come increasingly into focus especially on days when the market is violent and volumes are extreme. Capacity planning is a first order priority across the FXPB industry
- Asset security
 - Custodial arrangements
 - Third party custody
- Proliferation of the multi-prime model
 - Pre 2008 consolidation of risk in one prime broker was the norm even for large hedge funds, particularly in FXPB. Post 2008 and Lehman, it is unusual even for small clients to rely on a single provider
 - Whilst multi PB presents operational inefficiencies especially with respect to collateral fragmentation the security and back up it provides is now regarded as essential by clients and more especially in the hedge fund space by their investors.

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FX Trades | FX Position | Option Trades | Option Position | Cash Ladder & Roll | Margin | FX Quotes | Reports | Trade

User: PRIMEDEMO

DEMO_CLIENT

Portfolio

DEMO_FUND

Trade Statistics

	FX/NDF	Option
All Outstanding	807	65
Today's Trades	27	0
Unmatched	0	0
Value Today	0	0
Fixing Today	6	0
Expiry Today	0	0
Today's Rolls	0	0
MTM Exceptions	0	0

MTM (USD) 40,481,689.48

FX 38,444,433.73

Option 2,037,255.75

PNL (USD) 43,542,945.17

FX 38,444,433.73

Option 5,098,511.44

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NOP Summary

Fund DEMO_FUND

Business Date	27Nov08
Forward Date	-
Collateral (USD)	-
MTM (USD)	40,481,689.48
Premium PV (USD)	1,227,879.32
Net Equity (USD)	41,709,568.79
NOP Short (USD)	572,221,530.47
NOP Limit (USD)	NA
NOP Status (USD)	NA
Margin CCY (USD)	22,547,912.42

NOP By CCY Groups

CCY GRP	Margin ...	NOP Short ...	Spot Margin...	Margin CCY...	Required Margin...
Group 3% (3.0 ...		235,615,5...	3.00	7,068,467.46	7,068,467.46
	CAD	30,145,65...	3.00	-	-
	CHF	100,384,5...	3.00	-	-
	EUR	90,623,64...	3.00	-	-
	NOK	14,461,72...	3.00	-	-
Group 4% (4.0 ...		135,085,2...	4.00	5,403,409.86	5,403,409.86
	HUF	110,036,7...	4.00	-	-
	ISK	2,865,267.81	4.00	-	-
	NZD	5,213,692.87	4.00	-	-

Summary Details Export Analysis Export Trade NOP details(872)

FX Trades (807) | Option Trades (65) | Trade NOP Details (872)

Cust Ref	Citi Product Ref	Product	Fund Name	Counterparty	CCY Group	CCY Pair
4070279498	NDF	DEMO_FUND	CITIFX	5	USD-RUB	
4075649515	FORWARD	DEMO_FUND	CITIFX	3	CHF-JPY	
4075707022	FORWARD	DEMO_FUND	CITIFX	3	EUR-JPY	
4075630804	FORWARD	DEMO_FUND	CITIFX	3	AUD-NZD	
4074495860	NDFFIX	DEMO_FUND	CITIFX	5	USD-PHP	
4075607970	SWAP	DEMO_FUND	CITIFX	3	GBP-USD	
4075621733	FORWARD	DEMO_FUND	CITIFX	3	EUR-NOK	
4075707244	FORWARD	DEMO_FUND	CITIFX	3	GBP-JPY	

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Future Trends

- Legislative impact
 - Unintended consequences and uncertainty
- Convergence of OTC and exchange models
 - Venue agnostic clearing, the requirement for a seamless service
- Increasing diversity of the user community
- Cross Asset Prime brokerage
 - True cross asset or virtual
 - Value of the product expert
 - Cross margining
- Capacity Planning
- Prime of Prime
- Retail FX

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