

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

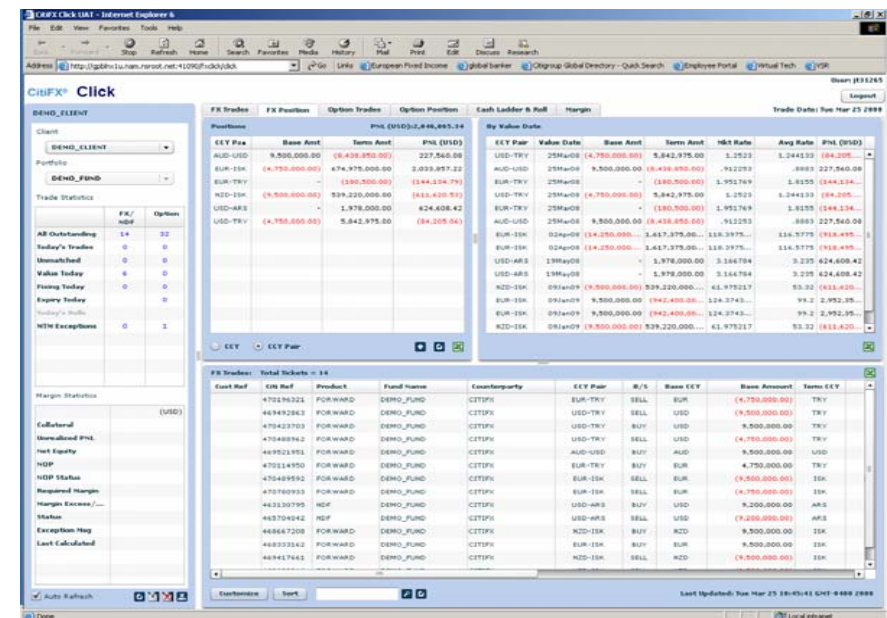
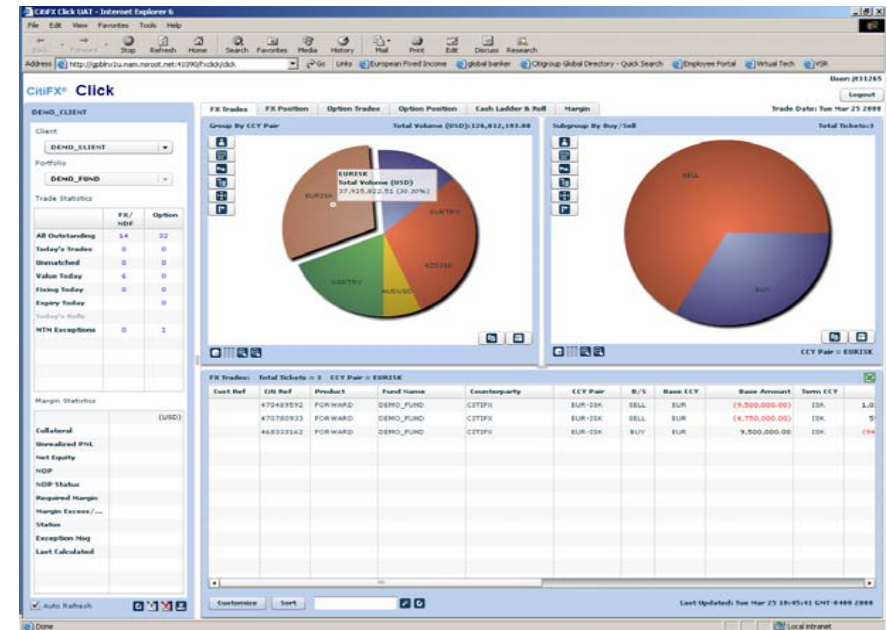
- A vibrant mainstream business
- As an indication of the dimensions of the FXPB business, PB accounts for approximately 50 pct of all FX turnover by ticket numbers at Citi
- All major FX banks have some degree of FX Prime Brokerage presence
- FX Prime Brokerage is now a highly automated high volume 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 a 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.

CitiFX Click

- Cash, NDF and options, real-time MTM
- Positions
 - By currency or pair
 - NPV
 - Cash ladder
 - Rolls
- Graphic filtering & quick filters
- Complete portfolio
 - Includes matched and unmatched trades
 - Unmatched trades highlighted
- Customizable screen, column drag/drop
- NDF fixings, option expiry
- Data export
 - Template design
 - PDF , CSV, HTML
 - FTP available



CitiFX Click

Multiple Filters

Dynamic Filtering

Status Panel

Credit Status

Customisable

The screenshot displays the CitiFX Click web application interface within an Internet Explorer browser window. The interface is divided into several sections:

- Client Information:** Shows 'DEMO_CLIENT' as the client and 'DEMO_FUND' as the portfolio.
- Trade Statistics:** A table with columns for 'FX/NDF' and 'Option'.

	FX/NDF	Option
All Outstanding	14	32
Today's Trades	0	0
Unmatched	0	0
Value Today	6	0
Fixing Today	0	0
Expiry Today		0
Today's Rolls		
MTM Exceptions	0	1
- Margin Statistics:** A section for credit status, including fields for Collateral, Unrealized PNL, Net Equity, NDP, NDP Status, Required Margin, Margin Excess/..., Status, Exception Msg, and Last Calculated.
- FX Trades:** A pie chart titled 'Group By Product' showing the distribution of trades across various products like OEC, VSB, DIP, DOP, BEP, UOC, BAP, BCP, OEP, and UIC. Total Tickets: 32.
- Subgroup By CCY:** A pie chart showing the distribution of trades by currency pair. A tooltip for NOK shows: 'NOK Total Tickets: 4 (20.00%), Matched: 4, Unmatched: 0'. Total Tickets: 10.
- Option Trades Table:** A table with columns: Cust Ref, Citi Ref, Product, Fund Name, Counterparty, CCY Pair, B/S, Base CCY, Base Amount, Term CCY.

Cust Ref	Citi Ref	Product	Fund Name	Counterparty	CCY Pair	B/S	Base CCY	Base Amount	Term CCY
13597333		OEP	DEMO_FUND	CITIFX	CAD-NOK	BUY	CAD	14,250,000.00	NOK
13597339		OEP	DEMO_FUND	CITIFX	CAD-NOK	BUY	CAD	14,250,000.00	NOK
13597336		OEP	DEMO_FUND	CITIFX	CAD-NOK	SELL	CAD	(14,250,000.00)	NOK
13597330		OEP	DEMO_FUND	CITIFX	CAD-NOK	SELL	CAD	(14,250,000.00)	NOK

At the bottom, there are 'Customize' and 'Sort' buttons, and a status bar indicating 'Last Updated: Tue Mar 25 10:53:18 GMT-0400 2008'.

Credit - Real-Time FX

- Net open position (NOP) based margining
- Real-time calculations
- Delta equivalent for FX options
- Snapshot view and detailed calculation display

The screenshot displays the CitiFX Click web application interface. The browser address bar shows the URL: <https://fidirect.citigroup.com/fxclick/>. The application header includes the CitiFX Click logo, navigation links (CitiFX Prime, Support, Disclaimer, Logout), and the user name: PRIMEDEMO.

The interface is divided into several sections:

- DEMO_CLIENT**: A sidebar containing a Portfolio dropdown (DEMO_FUND), Trade Statistics table, and PNL (USD) summary.
- NOP Summary**: A table showing key metrics for the DEMO_FUND portfolio as of 27 Nov 08.
- NOP by CCY Groups**: A table showing NOP details broken down by currency groups (e.g., Group 3%, Group 4%) with columns for Margin, NOP Short, Spot Margin, and Required Margin.
- Trade NOP Details (872)**: A table listing individual trade details with columns for Cust Ref, Citi Product Ref, Product, Fund Name, Counterparty, CCY Group, and CCY Pair.

Key data points from the NOP Summary:

Metric	Value
Business Date	27 Nov 08
Forward Date	-
Collateral (USD)	-
MTM (USD)	40,481,689.48
Premium PV (...)	1,227,879.32
Net Equity (U...)	41,709,568.79
NOP Short (U...)	572,221,530.47
NOP Limit (USD)	NA
NOP Status (U...)	NA
Margin CCY (U...)	22,547,912.42

Key data points from the Trade NOP Details table:

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

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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Citi works with its clients in greenhouse gas intensive industries to evaluate emerging risks from climate change and, where appropriate, to mitigate those risks.

efficiency, renewable energy & mitigation

