

FX

MONTHLY REVIEW

November 2016

Performance Overview of CME FX Futures and Options:

- Highlights
- Trends
- Resources

 CME Group

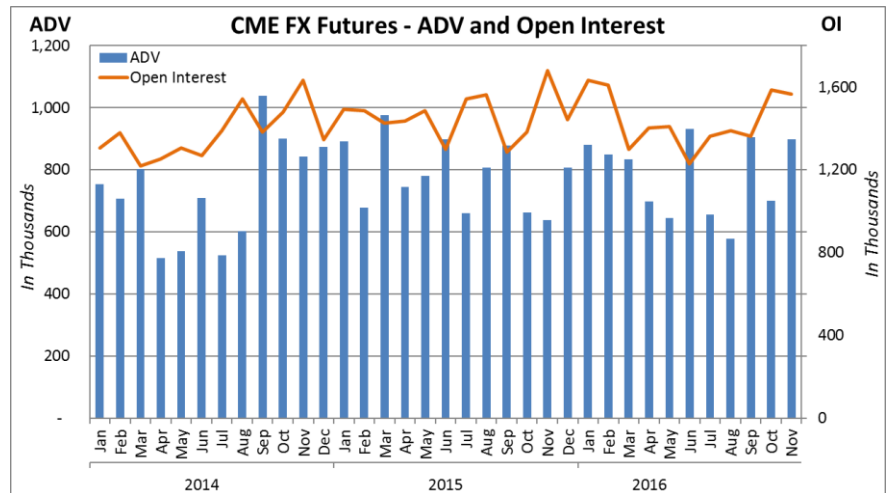
Awarded "Best FX Platform
for Hedge Funds" at the
2016 Profit & Loss
Readers' Choice Awards


2016

PRODUCT OVERVIEW - FUTURES

FX FUTURES

- November 2016 FX Futures ADV of 897,547 (\$84.7 billion notional)
- FX Futures ADV is up 28% vs. October, up 41% compared to November 2015
- Increased volatility due to the US Presidential election drove the record volume achieved in Japanese yen and Mexican peso futures and options

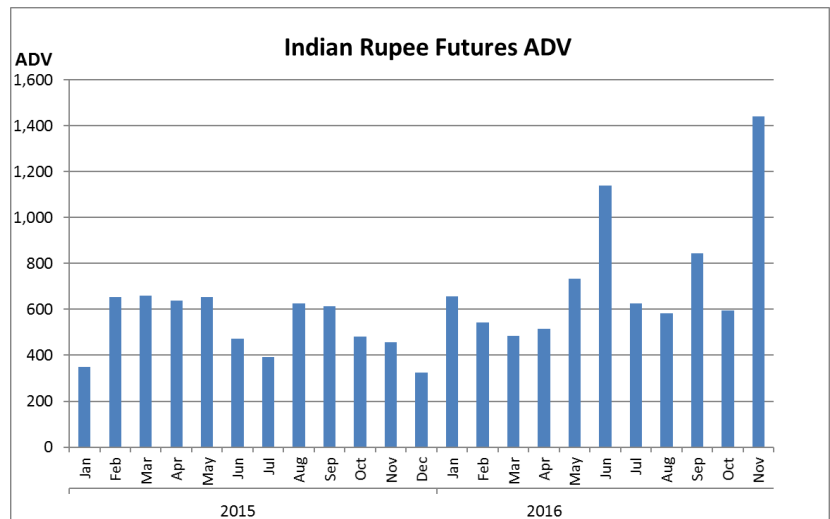


DISPLAYED QUANTITY (ICEBERG) ORDERS

- Displayed Quantity order for FX futures and options products was enable on December 4th, with the exception of the G6 pairs. This functionality will be available on G6 pairs shortly.

INDIAN RUPEE FUTURES

- Record single day volume of 2,452 was achieved, leading to record monthly ADV of 1,442
- Volume surge in November of 1,442 ADV results with MoM increase of 142%, up 216% compared to November 2015
- Dedicated market makers providing consistently tight liquidity and depth from 11am Singapore time throughout the trading day
- New incentive program is available and open to all participants



CME BLOOMBERG DOLLAR SPOT INDEX (BDI) FUTURES

BDI futures reached multiple single day volume and open interest records in November, with monthly ADV of 1,301

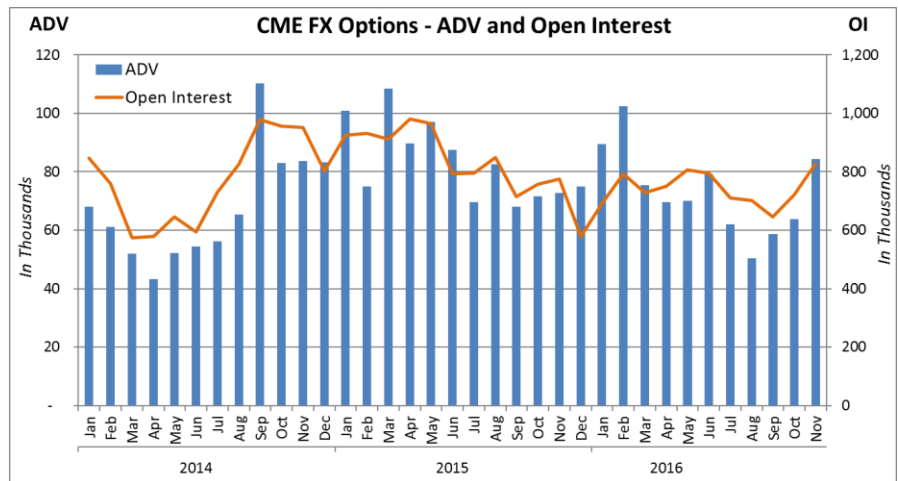
- BDI liquidity available during ETH-Europe and RTH sessions (12am – 4pm CST) with pricing at the minimum tick (0.1)
- Benefit from margin offsets against CME FX futures

Index Weights		
	BBDXY	DXY
EUR	31.75%	57.60%
JPY	18.45%	13.60%
CAD	11.48%	9.10%
MXN	9.87%	0.00%
GBP	9.47%	11.90%
AUD	6.10%	0.00%
CHF	4.37%	3.60%
KRW	3.43%	0.00%
CNH	3.00%	0.00%
BRL	2.08%	0.00%

PRODUCT OVERVIEW - OPTIONS

FX OPTIONS

- November 2016 FX Options ADV of 84,405 (\$9.6 billion notional)
- FX Options ADV grew 33% in November, up 16% compared to November 2015



VOLATILITY QUOTED OPTIONS LAUNCHED ON NOVEMBER 14

Volatility Quoted Options (VQO) on the G6 currency pairs is live with trades occurring in multiple pairs

- | | |
|-----------|-----------|
| • AUD/USD | • EUR/USD |
| • GBP/USD | • JPY/USD |
| • CAD/USD | • CHF/USD |

- VQO allows trading in terms of volatility instead of price
- Each VQO trade includes an attached delta hedge in the corresponding underlying futures contract (similar to a covered option)
- Benefits of VQO: lower execution risk as delta hedge is included and a larger average trade size (minimum trade quantity of 20 contracts)

Watch the video to learn more about VQO:

- What are Volatility-Quoted Options
- Benefits of trading VQO
- How Triangulation works



TRIANGULATION FUNCTIONALITY

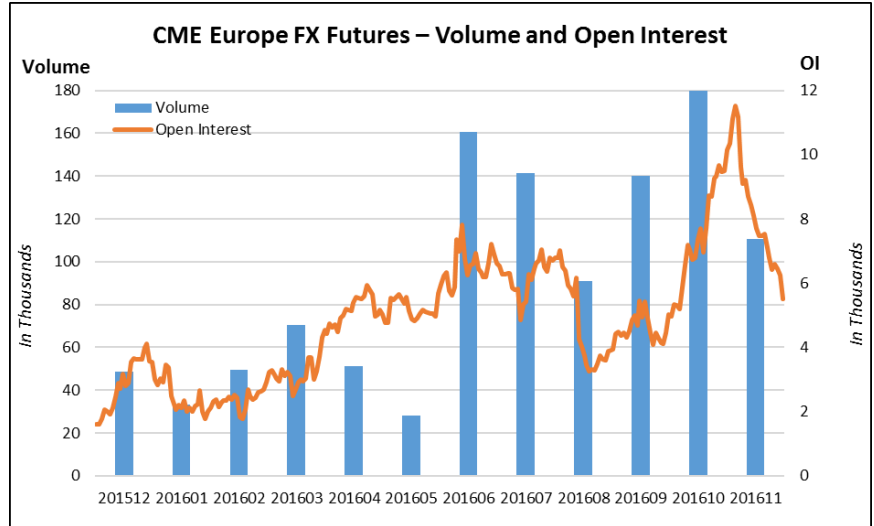
Innovative Triangulation functionality links the premium-quoted options book with the volatility-quoted options book and will go live in Q1 2017

- Triangulation functionality will launch in AUD/USD options on February 27, with subsequent pairs offering triangulation 8-10 weeks thereafter.
- Triangulation links the Volatility-Quoted Options, Premium-Quoted Options, and futures books via implied calculations to find match opportunities between the three books
- Matching from triangulation will occur in minimum trade quantity of 20 option contracts when there is a full hedge quantity available in the corresponding futures.

PRODUCT OVERVIEW – CME Europe FX Futures

CME EUROPE FX FUTURES

- CME Europe’s total volume in November was slightly down on strong performing summer
- November 2016 Total FX Volume of 110,755 contracts
- FX Futures ADV on CME Europe has grown 145% YTD
- Open Interest has grown substantially throughout the year, up 272% YTD, but experienced a slight decline in November



VOLUME BREAKDOWN BY CURRENCY PAIR ON CME EUROPE FX FUTURES

- CME Europe’s Japanese yen continues to perform strongly
 - Total November monthly volume of 48,967 contracts with the best trading day of 7,129 contracts on November 2
 - Total YTD volume for Japanese yen on CME Europe currently stands at 205,000 contracts
- CME Europe’s traditional high performer, EUR/USD, traded a monthly total of 33,607 contracts
 - The largest trading day for EUR/USD on CME Europe was November 10, with 4,837 contracts traded
 - Total YTD volume for EUR/USD on CME Europe currently stands at 423,000 contracts

