



# FX Liquidity Moving Into 2015

For the ECB FXCG

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## Introduction – FX Liquidity An Empirical Study

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1. FX liquidity has decreased going into 2015 and this has been observed by trading desks and throughout the investment industry. The Scandinavian currency pairs in particular have become much more illiquid.
  - After a long period of low volatility and spread compression in FX, we are witnessing increased FX volatility since mid 2014.
  - Events such as the SNB's removal of the EURCHF floor on January 15<sup>th</sup> have also imposed specifically large intraday currency moves.
2. Effective February 15<sup>th</sup>, WMR changed the calculation window for its benchmarks from 1 minute to 5 minutes.
  - How has this impacted FX liquidity? The answer to this question deserves an extensive debate enlightening fundamental market changes, including liquidity fragmentation, regulatory reforms and decreased risk mandates in principal market making.



## Introduction – FX Liquidity An Empirical Study

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Currency liquidity is highly fragmented across a range of electronic trading venues and by voice. This study aims to estimate the actual numbers behind these facts and observations through ECN data.

The analysis quantifies:

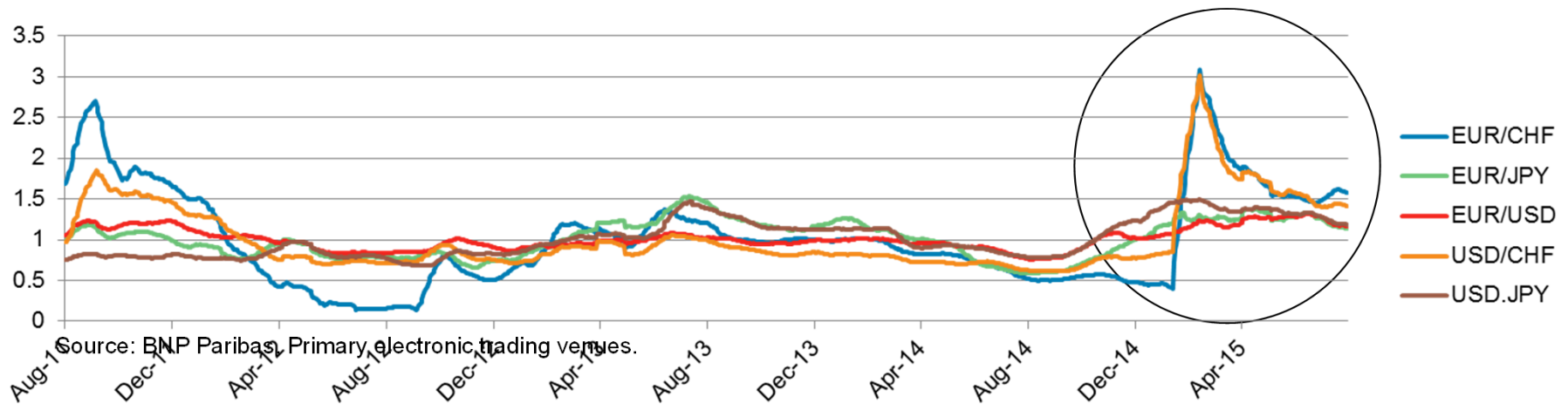
- Volume distributions, volatility and spreads across time zones and currency pairs. Changes going into 2015.
- An overview of liquidity conditions and changes around 4pm London post the WMR changes since mid February. Included is also a study of the liquidity conditions around the ECB fixing.



# 1) FX Liquidity – Indicative Spread Changes over the last 4 years

This chart displays evolution of monthly average indicative spreads (inner bid/offer\*) on primary ECNs. For each currency the spreads are normalized with the average over the full period.

Following a period of spread compression and low volatility, we have seen spreads widen since the later part of 2014 and in 2015. For example, end of October last year the BOJ announced quantitative easing (QE), and the FOMC ended QE that same month. We have thus seen increased volatility and re-ignited market reactions to macro data and events. Specifically, the removal of the EURCHF floor the 15th of Jan contributed to the significant spread widening in January.



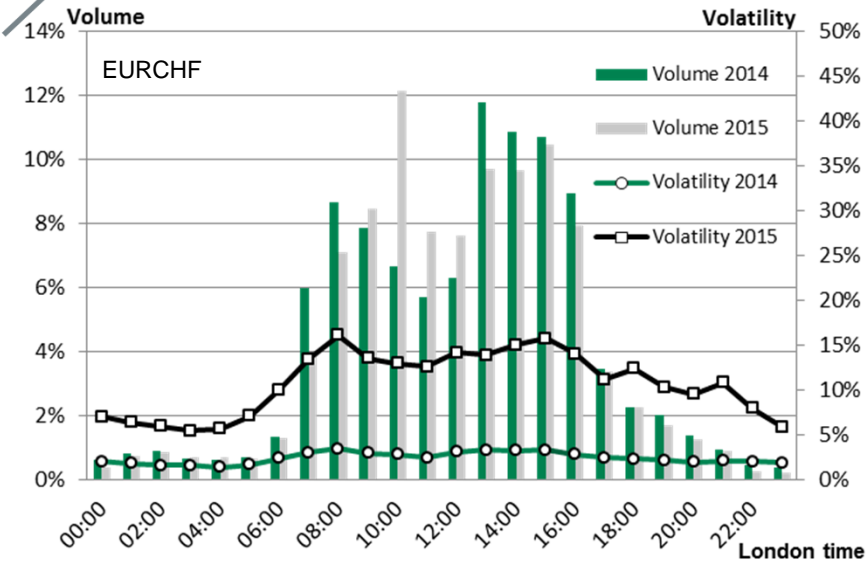
Source: BNP Paribas, Primary electronic trading venues.

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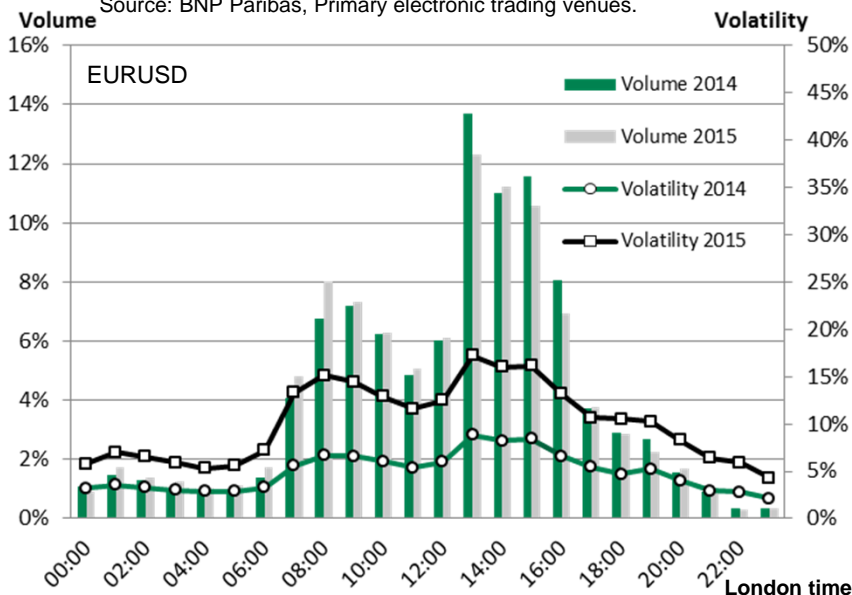
\*Average 8am – 6pm London Time



# 1) FX Liquidity – 2014 vs 2015 YTD

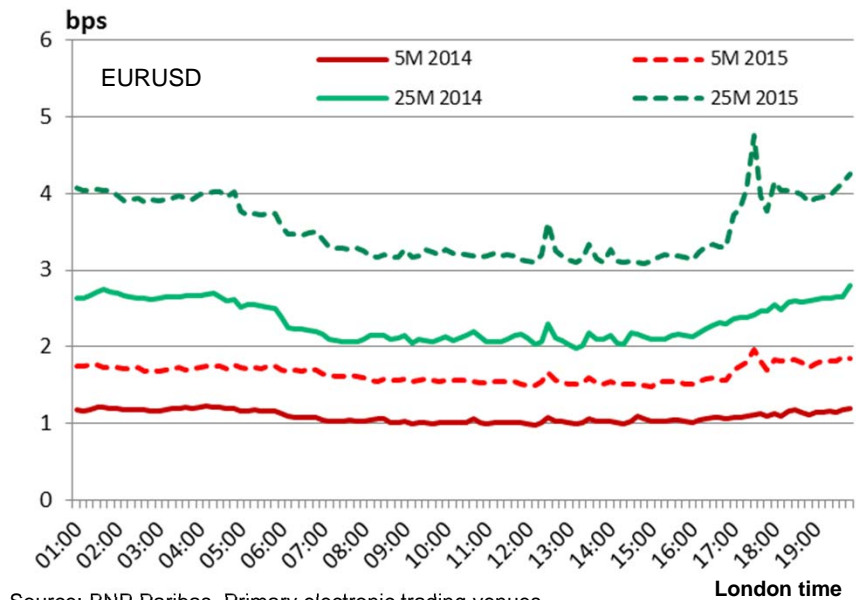


Source: BNP Paribas, Primary electronic trading venues.



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Estimated Volume Distribution, Volatility, and Spreads, 2014 vs 2015 YTD.



Source: BNP Paribas, Primary electronic trading venues.



## 2) FX Liquidity & the new WMR Fixing

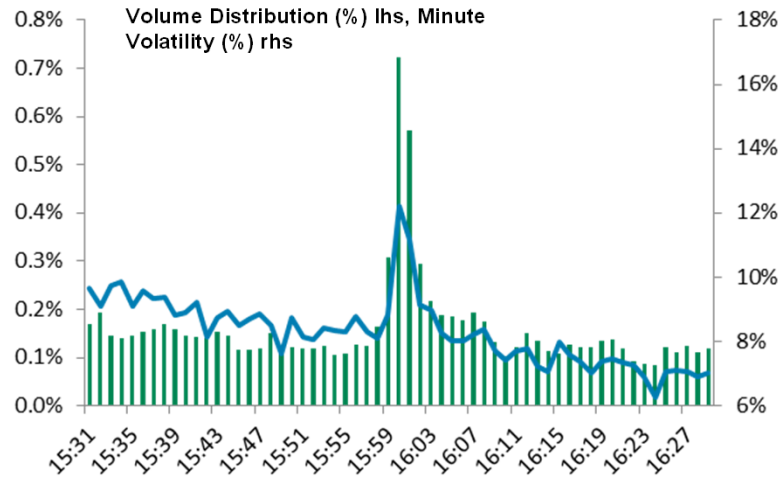
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- FSB's "Final Report on Foreign Exchange Benchmarks" published in Sept. 2014 made a number of key recommendations with regards to the WMR Fixing
- Effective February 15th, WMR changed the calculation window for its benchmarks from 1 minute to 5 minutes.
- Observations:
  - Traded volumes are now equally distributed over the entire 5 minute interval instead of only 1 minute.
  - More automated algorithms are now executing WM orders.

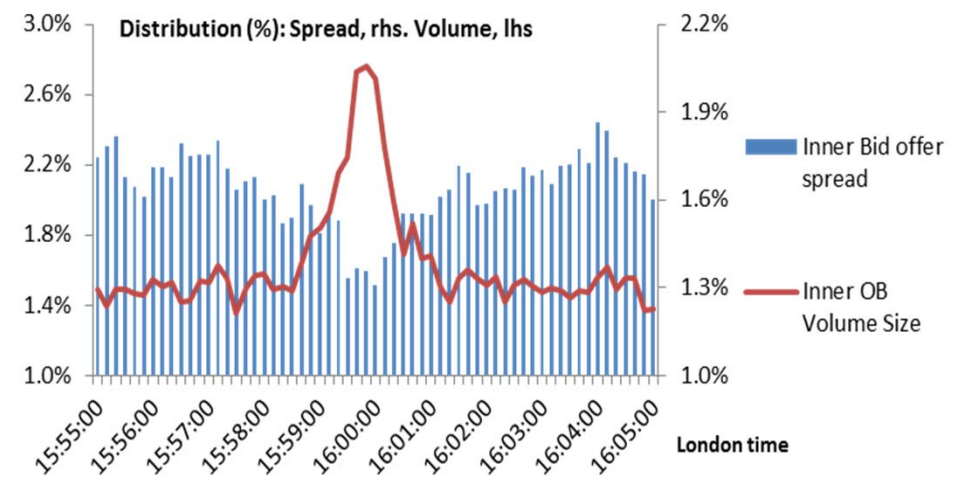


# A) FX Liquidity & the new WMR Fixing

EURUSD Sep 15<sup>th</sup> 2014 – Jan 14<sup>th</sup> 2015

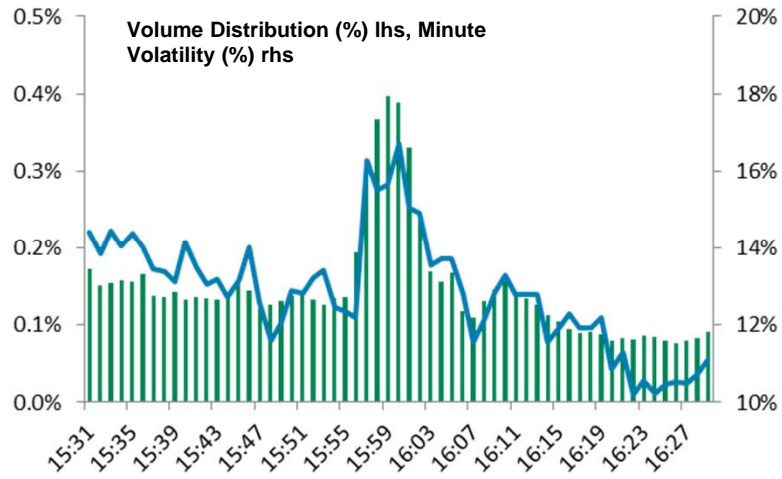


Source: BNP Paribas, Primary electronic trading venues.

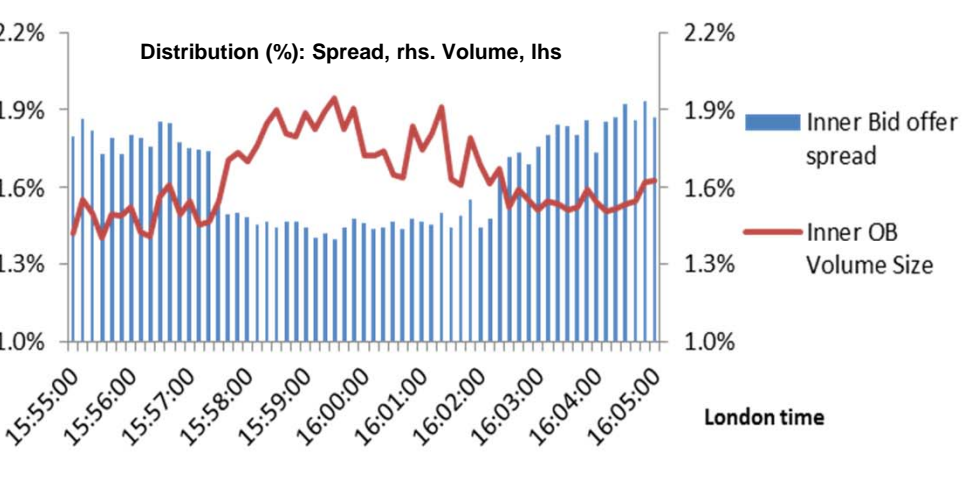


Source: BNP Paribas, Primary electronic trading venues.

EURUSD Feb 15<sup>th</sup> 2015 – June 15<sup>th</sup> 2015



Source: BNP Paribas, Primary electronic trading venues.

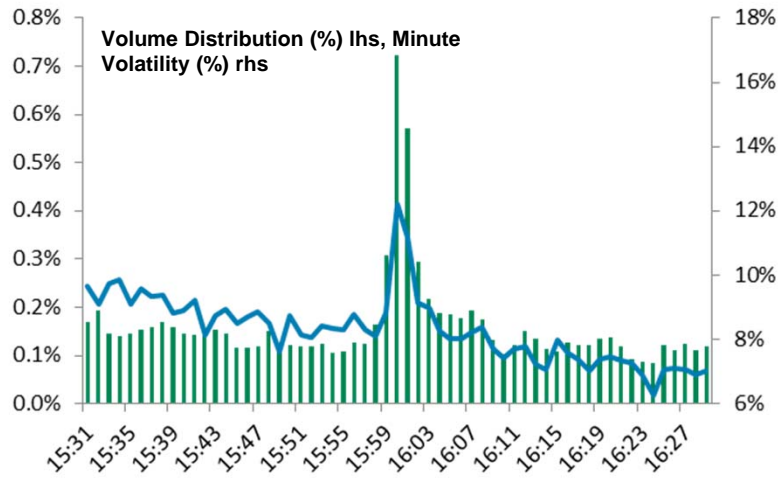


Source: BNP Paribas, Primary electronic trading venues.



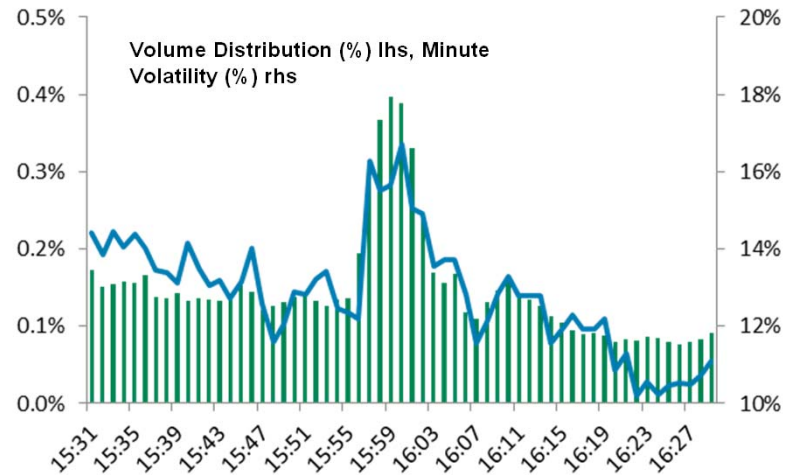
# A) EURUSD – Before and After WMR Calculation Window Change

EURUSD Sep 15<sup>th</sup> 2014 – Jan 14<sup>th</sup> 2014



Source: BNP Paribas, Primary electronic trading venues.

EURUSD Feb 15<sup>th</sup> 2015 – June 15<sup>th</sup> 2015

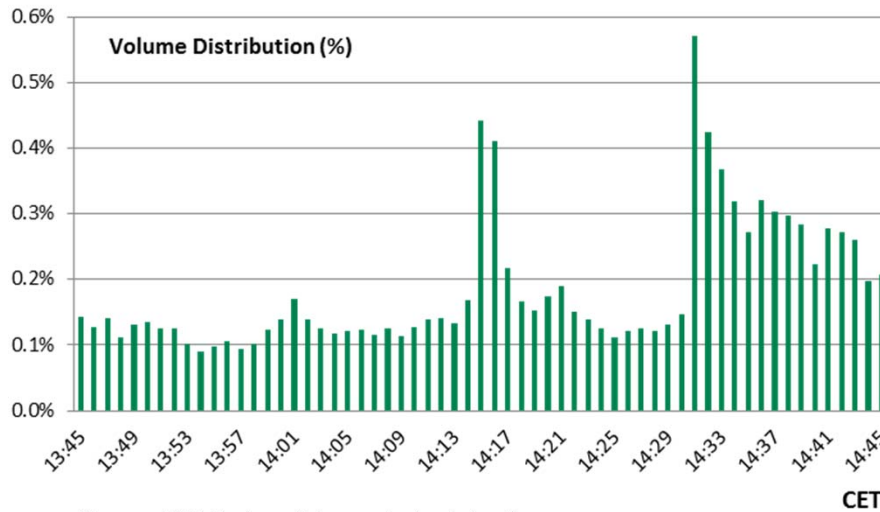


Source: BNP Paribas, Primary electronic trading venues.



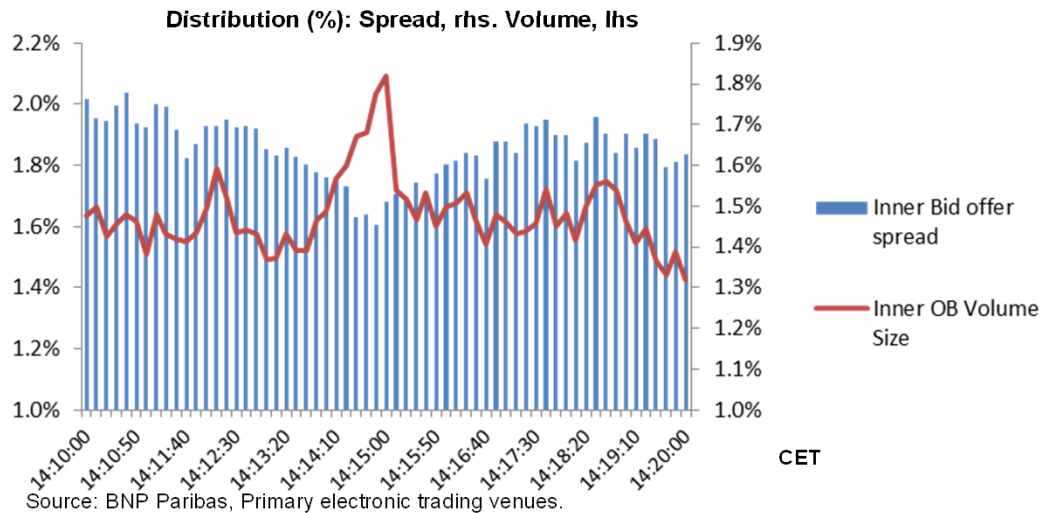


## B) FX Liquidity & ECB Fixing



EURUSD Dec 15th 2014 – Jun 15th 2015

- The most active period is between 14:14 and 14:16 CET



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