FX Algos
Market functioning
ECB FXCG Meeting
September 2019

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The Market for FX Algos
Total Volume Estimate

- Estimates of the total volume traded via FX algos can be attempted from:
  - (limited) wallet share statistics from multi-dealer platforms where FX algos are offered
  - Participation in market surveys
  - Published studies such as by Greenwich Associates

- Using a combination of these approaches, we estimate:
  - ADV: $20-25bn
  - Split: largely real money and hedge fund

Algo Usage

Real Money: 40%
Hedge Funds: 10%
Banks: 10%
Corporates: 40%

FX Algo ADV

Compiled by GS FX SMM Engineering (Securities Division), as of Sep-19
Source: GS FX SMM Engineering (Securities Division)
Algo behaviour

Algo function in illiquid conditions and distressed markets

- Significant intra-day variation in market spreads and imbalance between market paids and givens are typical even in normal markets
- Algos must constantly react to changing conditions
Risks to market functioning
Co-movement and interconnectedness

Co-movement:
- Algo execution during announcements, economic events, fixing windows
- Large executions in correlated illiquid currencies
- New portfolio algos offer ability to control correlated market impact by setting basket level limits and flow rate

Interconnectedness:
- Simple aggregation of liquidity seen on FX ECNs is insufficient as an estimator of market depth
- Plot shows simple aggregation of liquidity versus actual execution
Transparency – algo provider
Pre-, Intra- and Post-trade tools, algo questionnaires

Example of real-time algo analytics provided by GS

- Demands on algo providers significantly greater than in the early years 2010-15.
  - pre-trade cost, liquidity, and algo duration estimates
  - live intra-trade performance analysis
  - algo provider AND third-party post-trade TCA reporting
  - FAQs

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Third-party analytical tools are increasingly popular with algo users to standardize TCA and provide a performance report that is independent of the algo provider.

In FX, the most widely used names include BestX, ITG, Tradefeedr, Bloomberg.
Safety measures
Global controls, fat-finger checks, disclaimers

- Client algos fall under a framework of automatic oversight that sits above and supervises all electronic execution to address regulatory and operational risks.

- Fat-finger checks are performed on order entry on trade size and limit through market. These can be customized at client request.

The No Worse Than Level is a level beyond which the algo user is not willing to have the algo source liquidity.
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