Algo Trading
A Level Set

Larry Tabb
Founder & Research Chairman
TABB Group
Agenda

- Types of Algos
- Difference between futures and equities
- The need for speed
- How MiFID 2 will impact US markets
- Algo regulation
Three types of algos

- **Alpha generating algos**
  - (~54% of total equity volumes)
  - Liquidity provisioning (market making)
  - Opportunity seeking (pick off)
  - Arbitrage algos

- **Quantitative strategies**
  - (~16% of total equity vols (~5%HFT/11% non-HFT)

- **Execution Algos**
  - (~45% of buy-side flow – (buy-side flow ~24% of total equity volumes)
  - Buy-side algos
Difference between Equities & Futures

Equities
- 12 Exchanges
  - Soon to be 13
- 33 Equity ATS
- ~35 Major Brokers/Mkt Makers
- ~8 Major Wholesalers
- ~92 routing decisions
- ~45 formal queues to be first

Futures
- While there are multiple futures exchanges – most products traded on only one venue
- 1 Queue
When liquidity is fragmented & tick size small, speed becomes important

- When there is a single venue (queue), and tick size is large, size is important
  - Need to pay up to jump queue

- When there are multiple venues (queues), speed becomes important
  - Can just go elsewhere to match price (or pay up a *de minimis* amount)

- In fragmented world – speed is about managing queue priority (and picking off stale quotes)
Execution algos are typically slower than proprietary algos

Execution Algo Architecture

Alpha Algo Architecture
MiFID II will impact US – Key Provisions

- Fully unbundled research
  - Research treated as inducement (bribe)
  - Creates research payment accounts or pay out of P&L
  - Includes fixed income

- Best execution regime pivots from more of an agreed upon process to…
  - “Take all sufficient steps to obtain…, the best possible result…”
  - Bans payment for order flow
  - Pre-trade price discover for liquid fixed income products

- Significant change in market structure
  - Bans broker dark pools
  - Limits MTF dark trading to 4/8%
  - Implementation of Large in Scale waver to incentivize blocks

- Requires buy-side firms to report trade
  - Real time & end of day

- Requires exchange-traded derivatives clearing “open access” (postponed till July 2020)
Regulation
My thoughts on regulation

- Regulators should try to create level playing field
  - Not pick winners, losers, or business models

- Focus on transparency, fairness & systematic risk not how buyers and sellers meet
  - Focus on market manipulation, clearing, margin, and safety
  - By defining how buyers/sellers meet – traders will find alternatives/loopholes

- Hyper-transparency is becoming increasingly important
  - Allow traders to measure their performance and the performance of their agents
  - Time stamps, clock synch, and data normalization are critical
  - MiFID 2 got it right here (1mili for execution algos, 100 micros for venues/HFT)

- Hyper-transparency enables traders to measure effectiveness of markets and providers
My bottom line on market structure regulation

- Markets are symbiotic

- Hard to say who is more important – provider or taker

- Investors don’t like to post liquidity

- Best to allow investors to measure performance and change behavior/service providers

- Making regulation without fully understanding the data / impact is dangerous