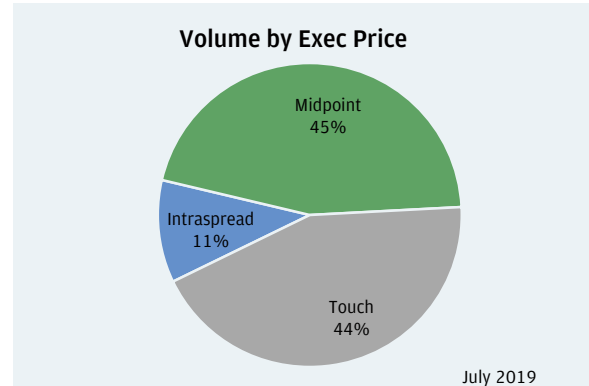


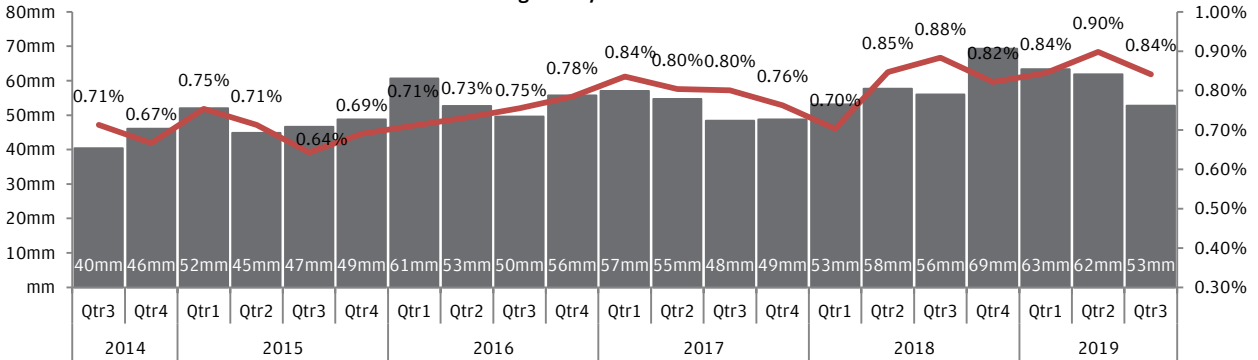
Features and Benefits

- Tier structure to support customizable crossing
- Conditional order support
- Price/Tier/Time priority matching
- Broad spectrum of J.P. Morgan liquidity
- Liquidity, speed, and execution quality
- Opportunity for price improvement
- Continuous crossing

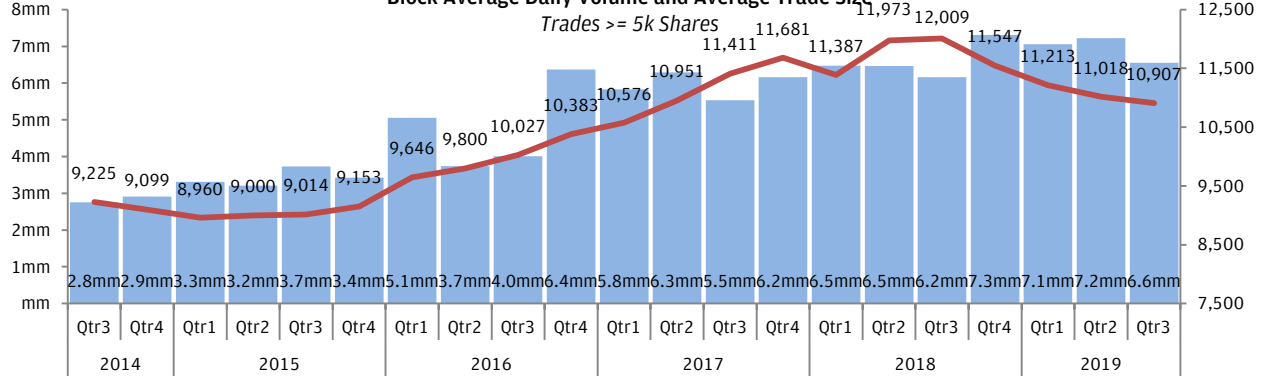
July 2019 JPM-X Statistics	
Average Daily Volume (single counted)	52.8 mm
Average Trade Size	174 shares
# of Symbols traded	6,555 unique symbols
% of Volume >= 5k shares	12.4% of Volume (6.5mm ADV)
Average Block Size (>= 5k shares)	10,906 shares



Average Daily Volume and Market Share



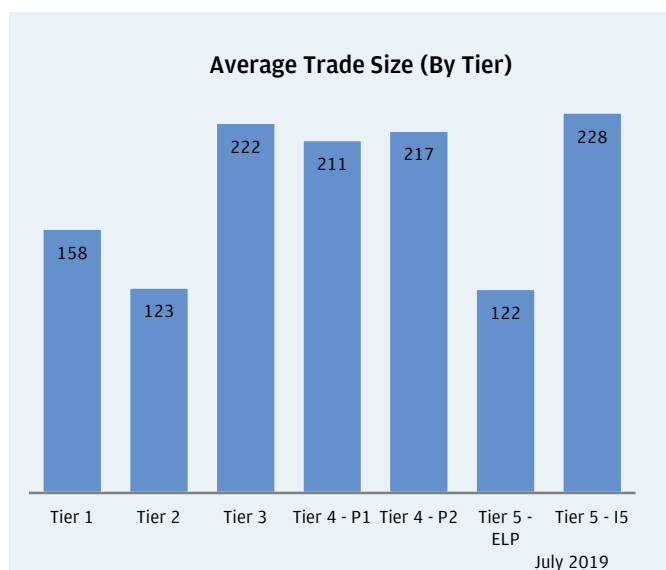
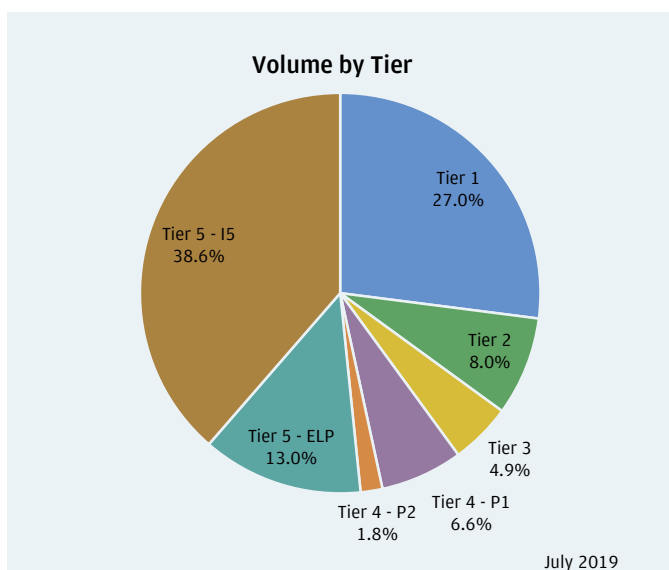
Block Average Daily Volume and Average Trade Size



Order Flow Tiers

Our differentiated tiering structure allows clients to customize the order flow types with which they interact. Order flow types are used to tier the JPM-X order book.

- **Tier 1:** Institutional investor client flow and JPMS affiliates' flow accessing JPM-X via algorithms/SOR
- **Tier 2:** Institutional investor client flow with direct access to JPM-X
- **Tier 3:** U.S. registered broker-dealer client flow (both agency and principal) accessing JPM-X via algorithms/SOR
- **Tier 4 (P1):** Internal (JPMS) trading desk flow accessing JPM-X via algorithms/SOR
- **Tier 4 (P2):** Internal (JPMS) electronic liquidity provider flow with direct access to JPM-X
- **Tier 5 (I4/ELP):** Flow of external broker-dealers acting as electronic liquidity providers with direct access to JPM-X
- **Tier 5 (I5):** Flow of external broker-dealers not acting as electronic liquidity providers (both agency and principal) with direct access to JPM-X



Sources: JPMorgan Tick and Trade Data, BATS Market Volume Summary http://www.batstrading.com/market_summary

Please also see:

JPM-X FAQs: <https://www.jpmorgan.com/directdoc/jpmxfaq.pdf>

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