

Features and Benefits

- 2 types of benchmark crosses - VWAP Price Match and Close Price Match
- Tier structure to support customizable crossing
- Access to J.P. Morgan liquidity

VWAP Price Match

- Equal Split/Time priority matching
- Execution targeting a 5 min interval VWAP price

Close Price Match

- Time priority matching
- Execution at primary exchange's closing auction price

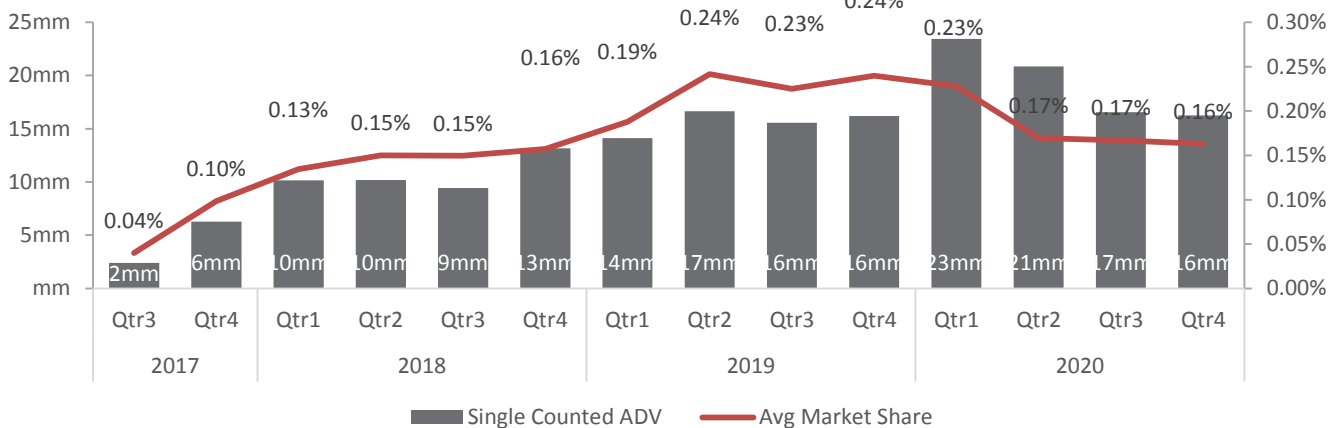
November 2020 JPB-X Statistics

Average Daily Volume (single counted)	18.8 mm shares
# of Symbols traded	3,790 unique symbols
Average Trade Size	74 shares
VWAP Price Match Internalization Rate*	20.8%
Close Price Match Internalization Rate**	31.3%

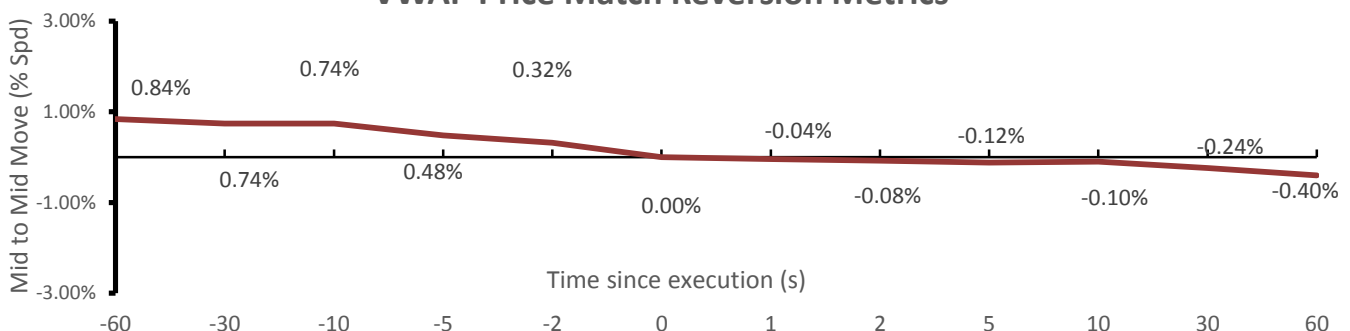
*The number of shares executed by the VWAP strategy via VWAP Price Match, as a percentage of the number of shares executed by that strategy where VWAP Price Match was enabled.

**The number of shares executed by the CLOSE, VWAP, and TWAP strategies via Close Price Match, as a percentage of the number of shares executed by those strategies where Close Price match was enabled.

JPB-X Average Daily Volume and Market Share



VWAP Price Match Reversion Metrics



*Please note executions with missing or incorrect reversions have been excluded from these stats

Tiers

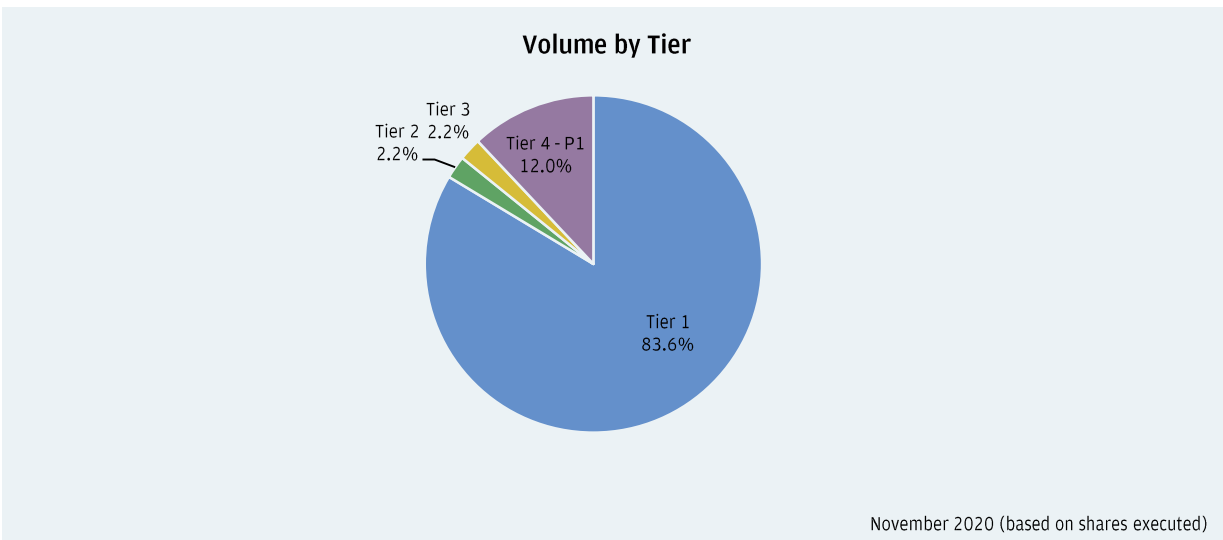
Our differentiated tiering structure allows clients to customize the order flow types with which they interact.

Order flow types are used to tier the JPB-X order book.

- **Tier 1 (Order Flow Type I-1):** Institutional investor client flow and JPMS affiliates' flow accessing JPB-X via algorithms/SOR
- **Tier 2 (Order Flow Type I-2):** Institutional investor client flow with direct access to JPB-X
- **Tier 3 (Order Flow Type I-3):** U.S. registered broker-dealer client flow (both agency and principal) accessing JPB-X via algorithms/SOR
- **Tier 4 (Order Flow Type P-1):** Internal (JPMS) principal trading desk flow accessing JPB-X via algorithms/SOR

Interaction via JPM Algorithms

- VWAP Price Match enabled by default for VWAP, TWAP and POV strategies. Can be opted-in for AQUA.
- Close Price Match enabled by default for CLOSE, VWAP and TWAP strategies



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

Please also see:

JPB-X FAQs: <https://www.jpmorgan.com/directdoc/jpbxfaq.pdf>