«Win it, without being in it?»
Auction Volume Discovery

About the AVD Order Type:

- **DARK,** enhancing liquidity in opening and closing auctions
- **PRICE REFERENCING** i.e. not contributing to uncross price or volume during the auction call phase
- **CONSIDERED FOR MATCHING AT UNCROSS**, first interacting with auction imbalance, then with contra AVD orders
- **A "WOULD/COULD" OPTION** for efficiently sourcing supplemental block liquidity
- **LIVE** and utilized by dozens of banks and brokers in a variety of algos

Discover on the next slides:

- **Unlocking Liquidity**: AVD Orders Tap into Uncross Imbalance & Contra AVD Orders
- **Opening Auction**: Trade Ahead of Dark Midpoint Orderbooks, leveraging AVD
- **Closing Auction**: Using Participation Caps? Seize AVD for sourcing additional liquidity!
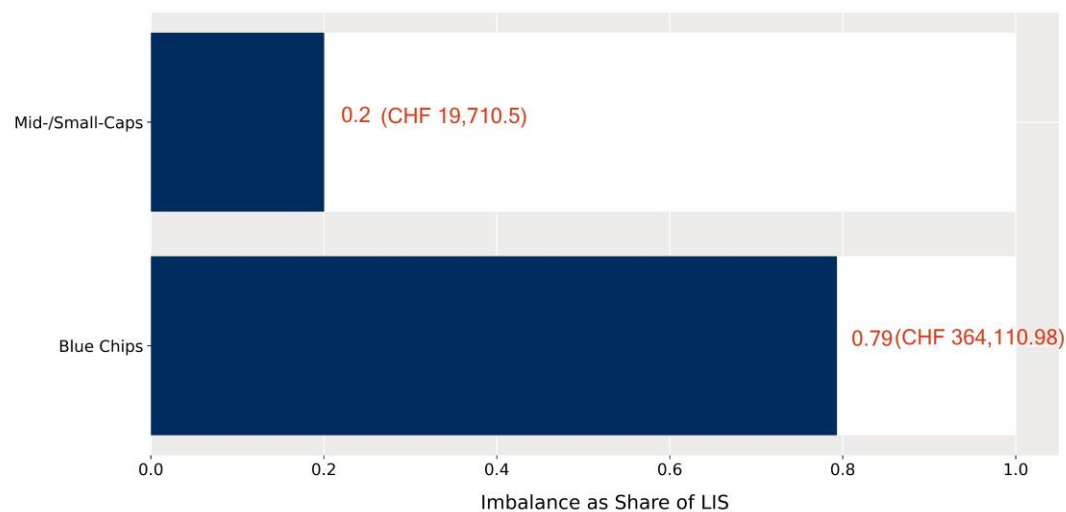- **AVD Algo Implementations**

SIX

→ Read on to discover more

Unlocking Liquidity:
Tap into Uncross Imbalance & Contra AVD Orders

Potential Liquidity Source 1: Uncross Imbalance
Across all securities, imbalances persist, varying in side and magnitude. The example below illustrates the median Blue Chip imbalance at ~CHF 360k, and the median Mid-/Small-Cap imbalance at ~CHF 20k.
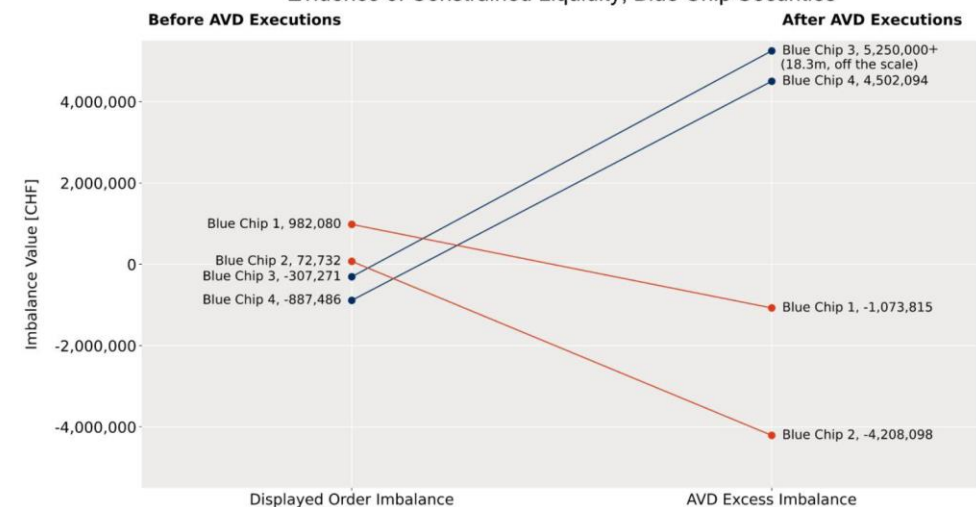
Potential Liquidity Source 2: AVD Excess
We have observed that AVD orders, often larger than the imbalance, absorb it entirely, leaving unmet demand on the opposite side. The example below shows that in *Blue Chip 1*, the displayed order imbalance was ~CHF 1mn, AVD orders consumed it and left unmet appetite of ~CHF 1mn on the other side.

Median Closing Auction Imbalances as a Share of LIS Thresholds

Mid-/Small-Caps: 0.2 (CHF 19,710.5)

Blue Chips: 0.79 (CHF 364,110.98)

Imbalance as Share of LIS (x-axis: 0.0, 0.2, 0.4, 0.6, 0.8, 1.0)

Evidence of Constrained Liquidity, Blue Chip Securities

Before AVD Executions | **After AVD Executions**

Blue Chip 3, 5,250,000+ (18.3m, off the scale)
Blue Chip 4, 4,502,094

Blue Chip 1, 982,080
Blue Chip 2, 72,732
Blue Chip 3, -307,271
Blue Chip 4, -887,486

Blue Chip 1, -1,073,815

Blue Chip 2, -4,208,098

Imbalance Value [CHF] (y-axis: 4,000,000; 2,000,000; 0; -2,000,000; -4,000,000)

Displayed Order Imbalance | AVD Excess Imbalance

Opening Auction: Trade Ahead of Dark Midpoint Orderbooks, leveraging AVD

Ahead of any execution opportunities in dark midpoint orderbooks, utilising **AVD** in the **OPENING AUCTION** presents the first dark trading opportunity of a trading day. It provides a great opportunity to trade sizeable volume without impacting price formation.

The bubble chart showcases volume traded in PKTM (M/S Cap; 27/12/23), whereby the bubble size denotes volume, by trade period, with a focus on the Open.

First, **AVD orders traded against, and consumed the entirety of Open Auction imbalance liquidity (*CHF 79'110*)** **Secondly, AVD orders then traded against contra AVD orders (*CHF 535'365*)**
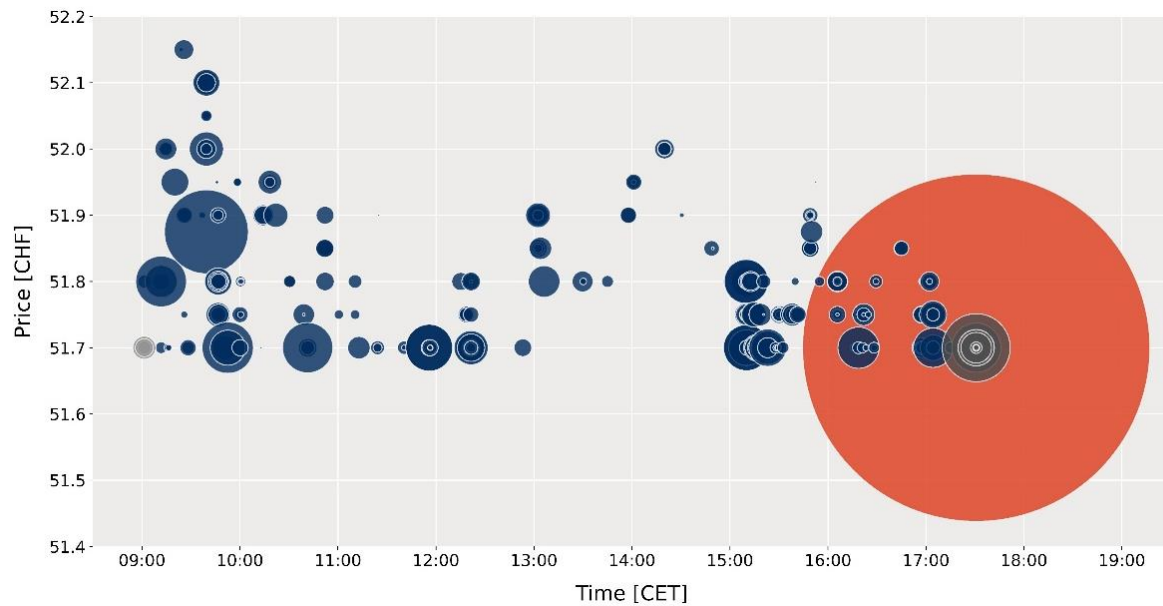
The **cumulative AVD turnover of CHF 614'475 accounted for 79.2% of OnBook turnover, and 97.6% of the Open**, in PKTM, on that day.
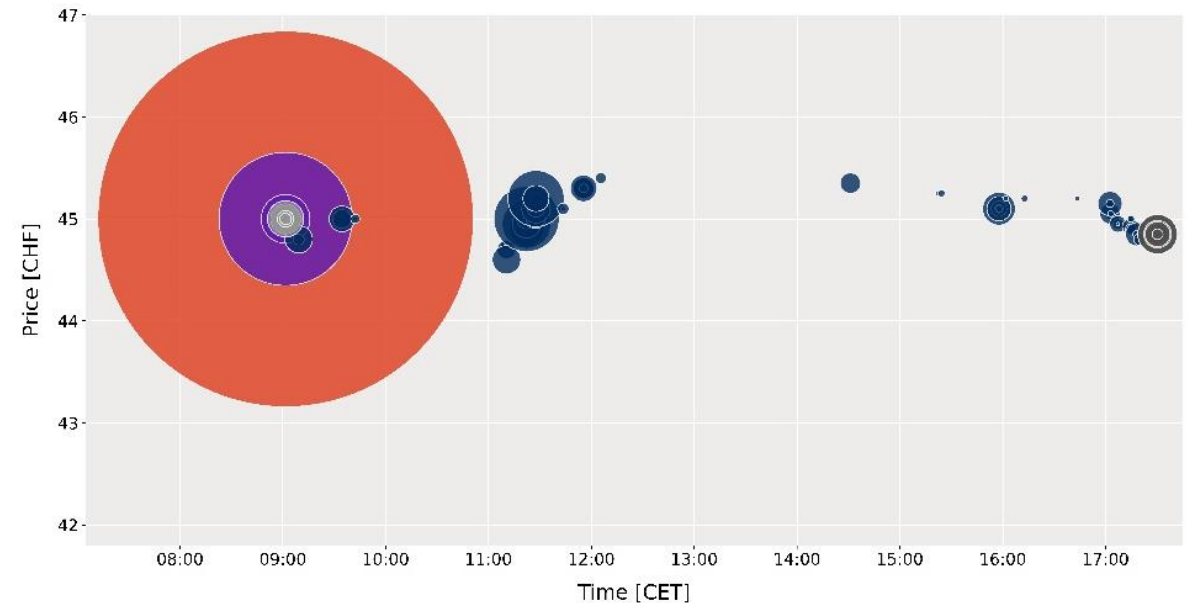
Opening Auction interactions:	Non-AVD
	AVD vs. Imbalance
	AVD vs. AVD

Closing Auction: Using Participation Caps? Seize AVD for sourcing additional liquidity!

Closing Auction interactions:
Non-AVD
AVD vs. Imbalance
(Cont. trading)

There is a rising demand for auction executions, particularly at the close. However, traders often exercise caution by utilizing 'participation caps/rates' to mitigate potential price impacts. **This careful approach can inadvertently sideline valuable contra-liquidity during auctions.**

The AVD order type has been designed to stitch this capped liquidity together ensuring no information leakage or adverse price impact.

The bubble chart showcases an **AVD order interacting with the Close Imbalance** in DOCM (M/S Cap, 26/9/23). The size of the bubble reflects volume, and the colour Trade Period.

The AVD order executed CHF 1'613'246 against overhang liquidity, constituting 79.3% of Close volume, and 46.3% of daily notional traded; a significant liquidity event.

AVD Algo Implementations

Connect with your brokers to explore if and how AVD is supported, and the most effective ways to leverage its capabilities.

- **At Close**; any additional liquidity that exceeds participant rates is submitted towards the end of the Auction.

- **Scaling Close**; any additional liquidity that exceeds participant rate per price level is submitted towards the end of the auction as a dynamically adjusting AVD order.

- **Liquidity Seeking Close;** at the discretion of the broker to seek additional liquidity at favourable prices and to manage impact via AVD order type.

- **Implementation Shortfall**; any residual liquidity that exceeds participation rate or will move the Uncross outside of IS arrival price is submitted as an AVD order, so long as Auction us Uncrossing at, or better than, arrival.

- **Dark**; extended window for submission to include the Opening Auction and allow for re-submission during the Closing Auction.

«Win it, with AVD!»

Reach out to your broker today to inquire about leveraging AVD to enhance your execution performance.

Visit SIX Swiss Exchange at booth 51

→ Or contact **equities@six-group.com** to find out more.

🌐 www.six-group.com/trading