Arc: A Dynamic Plan for Liquidity Sourcing

Arc is BMO's proprietary liquidity sourcing strategy, designed with BMO's trading intelligence and market structure expertise to dynamically adjust the strategy's aggressiveness while searching for dark liquidity opportunistically.

Arc's Trading Plan

Arc's trading plan sets a smoothed trading trajectory—an execution arc—targeting a trading rate by incorporating intraday volume and historical volume forecasts. Within the trading plan, Arc's detection of liquidity is dynamic. As Arc hunts for liquidity, it considers each venue's probability of fill and rate of decay on a symbol-by-symbol basis. It will adjust a venue's priority in the routing protocol or systematically engage with multiple venues to maximize fill rates.



Source: BMO Capital Markets Electronic Trading Analysis 6/2021

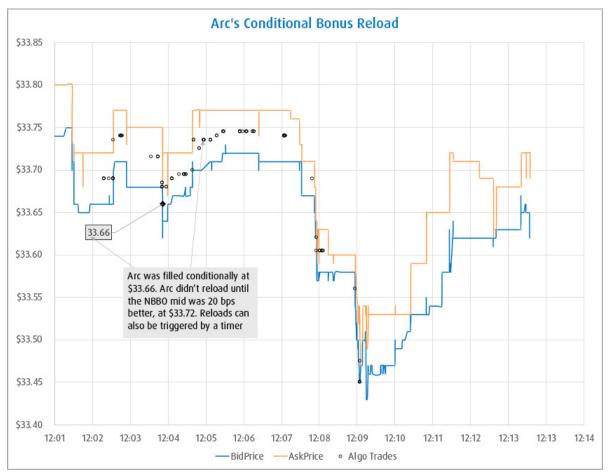


In addition, Arc leverages venues and order types where edge has been identified, accessing a curated list of dark venues where adverse selection is limited by interacting with only segmented portions of available liquidity. Arc also engages with venues that offer differentiated matching logic and order types, as well as Enterprise Cross, a private and unique source of institutional liquidity. Arc's child order placement attempts to limit pre-trade information leakage by avoiding displayed orders, trading passively at the mid.

Dark Bonus

Arc's Dark Bonus – Arc's trading logic is multi-faceted. It not only seeks edge in its order placement and liquidity detection, but also in its dark bonus trading logic.

Dark Bonus Logic – Arc's dark bonus logic, when triggered, will source block liquidity when the configured market conditions are met. This logic can be customized based on the user's execution objectives. Specifically, it can be customized to set the exposed quantity and its relative position to arrival price or regime price, as well as customization around the proportion of the parent order that is exposed conditionally and how and when reload occurs.

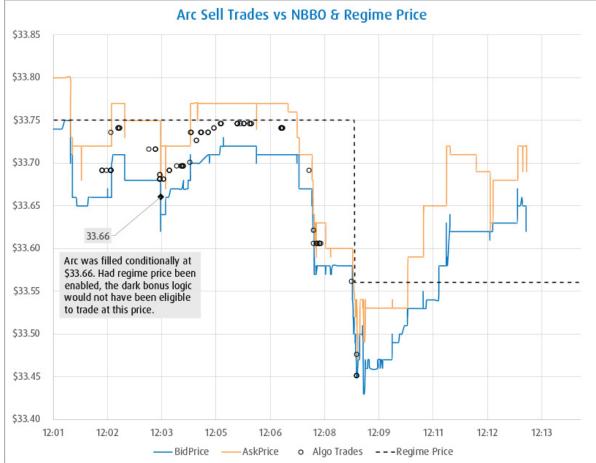


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Regime Price – Regime price is a current reference price used to trigger the dark bonus logic. Regime price is a quantitatively modeled price that reflects a more dynamic reference price as compared to a static reference to arrival – the regime price check provides an opportunity to confirm where the stock is currently trading, determine whether conditions are favorable, and trigger the dark overlay logic.





Continued

Urgency's Impact – Arc uses a progression-based urgency. By default, U3 targets a medium participation rate defined by the client, and sources dark liquidity from an expanded selection of curated venues.

- Arc Sell Order 20,000 \$33.80 NBBO Mid 18,000 \$33.75 16,000 \$33.70 14,000 \$33.65 12,000 Volume \$33.60 2 10,000 8,000 IWouldDark SharesTraded, \$33.55 6,100 6,000 \$33.50 4,000 12:02:16.403, 300 \$33.45 2,000 LowerBand, 12:02:37, -\$33.40 12:01:00 12:02:26 12:03:53 12:05:19 12:06:46 12:08:12 12:09:38 12:11:05 -LowerBand -Upperband IWouldDark_SharesTraded — TotalVolume — Mid or Better Volume NBBO Mid WWAP
- a. Arc's urgency settings (U1-U5) allow the strategy to express a range of aggression. By default, U2-U5 will look to complete.

Source: BMO Capital Markets Electronic Trading Analysis 6/2021

To learn more about Arc, consult with your BMO Electronic Sales Representative.

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