Chapter 4: Sweeps and Intermarket Sweep Orders

Sweeps are an automated execution feature introduced in the Hybrid Market expressly to allow electronic users the ability to access liquidity beyond the best bid/offer.

What is a sweep?

- Incoming marketable limit orders or market orders automatically execute to the extent possible at the best bid or offer and then sweep up (or down) automatically, executing against available liquidity at each price point in one continuous transaction until they:
- Reach their total cumulative quantity;
- Reach their limit price; or
- Hit an intervening Liquidity Replenishment Point (LRP).

How does a sweep work?

- Sweeps offer immediate access to the NYSE depth of book.
- When "sweeping" the Display Book, a trader is able to remove displayed liquidity at each price point, as well as reserve liquidity, Convert and Parity (CAP) liquidity, and specialist liquidity at each price point.
- The "sweeping" trader benefits from all of the intermediate prices on Display Book.
- Customers may execute their orders at better prices than intended because of additional liquidity at each price point, which will be available to participate within this new design.

What about the impact of Liquidity Replenishment Points on Sweeps?

- As discussed in Chapter 5, Liquidity Replenishment Points ("LRP") are a volatility control built into the Display Book to help mitigate wide price movements in the fast market.
- Should an LRP be triggered in connection with a sweep, the market automatically converts temporarily to an auction market only, allowing specialists, floor brokers, and customers to supplement liquidity and respond to the stock's volatility.

What is an Intermarket Sweep Order?

- An Intermarket Sweep Order is a limit order designated to be executed exclusively at one market center even when other market centers are publishing better quotations.
- When sending an Intermarket Sweep Order, the sender fulfills Reg NMS best-price obligations because he or she will concurrently send orders to all market centers with better prices themselves.

Buy 16,000 at 20.45 2,000 shares trade at 20.36		20.30	20.30	st Bid I Offer
1,000 shares trade at 20.37	LMT	100ths	LMT	
4,000 shares trade at 20.38		20.46	140	
1,500 shares trade at 20.39		20.45	30	
5,000 shares trade at 20.40		20.44	30	
500 shares trade at 20.41 2.000 shares trade at 20.42		20.43	80	
2,000 Shares trade at 20.42		20.42	20	
Under this scenario, 2,000 shares automatically		20.41	5	
executed at \$20.36, the best offer. Since there are		20.40	50	
14,000 shares yet to fill, the price automatically		20.39	15	
sweeps up to — and executes at — \$20.42, the		20.38	40	
point at which the needed liquidity is met. Note that liquidity and the intermediate prices from		20.37	10	
\$20.37 to \$20.41 are swept.		20.36	20	

Example of how a sweep works in the Hybrid Market.

Chapter 4: Sweeps and Intermarket Sweep Orders (cont'd)

How do sweeps comply with Reg NMS?

- When another fast market has the top-of-book best bid/offer falling within the sweep range, the NYSE automatically sends or matches the best bid/offer. The top of the book at other market centers can be slow; in these situations the NYSE has no trade-through rule obligations.
- The trade-through protection offered through Reg NMS requires market centers to protect the top of the book at other market centers that are "fast markets."
- The NYSE protects only fast quotes (whether they are part of the top of the book at other market centers or not, provided those that are not top of the book are at a better price than the NYSE BBO).
- The Exchange does not have an obligation to send the order to an away market if it is an Intermarket Sweep Order.

How does the New York Stock Exchange handle Intermarket Sweep Orders?

- If an order is sent to the NYSE that would sweep through the top of the book at other market centers, the Exchange accesses the best bid/offer on other markets.
- If an away price is better than the NYSE quote, the NYSE honors it before trading at the NYSE.

- The Exchange protects only the top of the book, not the depth of book.
- These obligations are automatically met when the NYSE market is fast.
- Intermarket Sweep Orders sent to the NYSE are not subject to this auto-routing.
- Quotes are assumed fast available for immediate and automatic execution — unless the quote is marked "slow" with an indication.
- Quotes are automatically updated for new orders, cancellations, and trades.
- During a slow quote, the best bid/offer from that market center can be traded through.
- A slow quote is a quote published by a market center indicating automatic execution is currently unavailable for that issue at that market.
- The published quote can either be slow on both sides or slow on only one side.
- Refer to Chapter 10 for a summary of quote indicators.

Buy 6,000 at 20.38 2,000 shares trades at 20.36 NYSE Best Bid 1,000 shares trades at 20.37 and Offer and traded at 20.37 Away Market offering 500 at 20.37 2,500 shares trades at 20.38 100ths LMT 20.46 140 executed on the NYSE at \$20.36, the top of the book. Since there are 4,000 shares yet to fill, the 20.45 30 20.44 30 However, as there are 500 shares offered at the top of book on an away market at 20.37, 500 shares 20.43 80 20.42 20 automatically route to the away market, thereby fulfilling Reg. NMS requirements. The remaining 20.41 5 20.40 550 3,500 shares automatically sweep up to, and are 20.39 15 executed on the NYSE at \$20.38, the point at which the needed liquidity is met. Note that the liquidity 20.38 140 on the NYSE is swept up to 20.38 in multiple executions, while any best offers on away markets at 20.37 10 20.36 20

Examples of how a sweep works in the Hybrid Market that involves another market center.