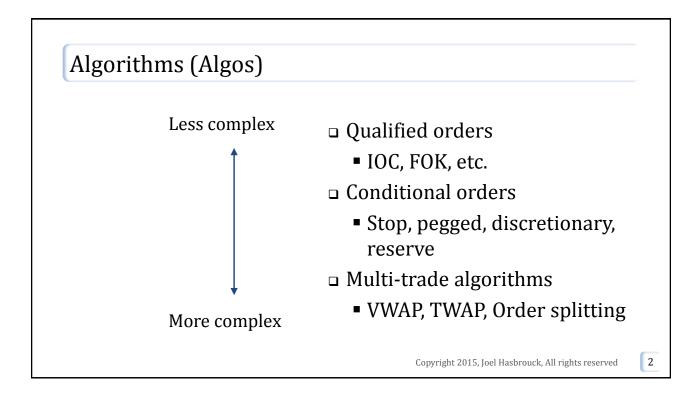
Conditional and complex orders

Securities Trading: Principles and Procedures Chapter 12

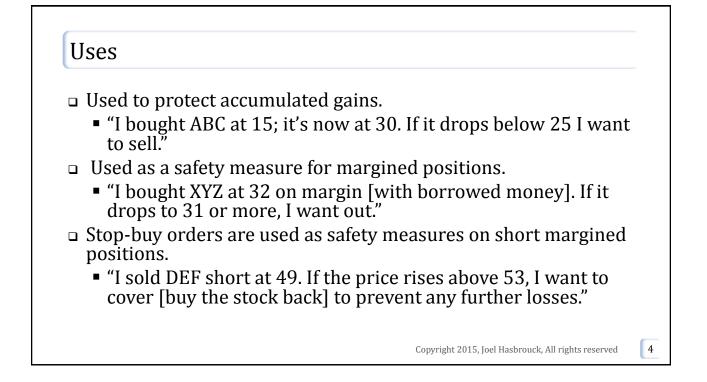


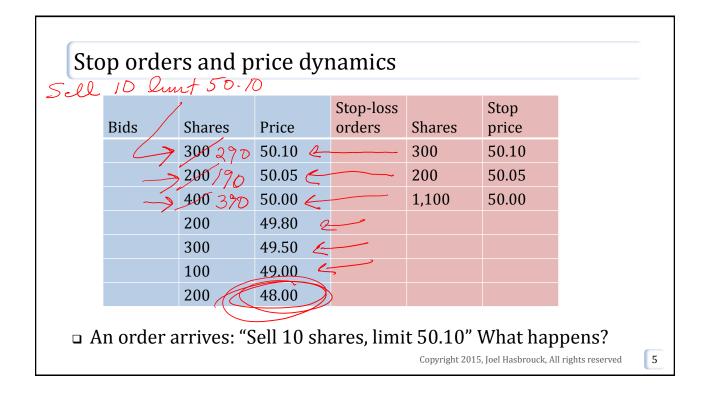
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Stop order

- "Sell 100 sh MSFT, stop 25, limit 24"
- If MSFT trades at 25 or lower, enter an order to sell 100, limit 24.
- □ Some exchanges permit stop *market* orders.
 - "Sell 100 sh MSFT, stop 25" → If there's a trade at 25 or lower, enter an order to sell 100 *at the market*.
- On the sell side, also called stop-loss orders.
- Like AON, a stop order does not reside in the book until it is activated.

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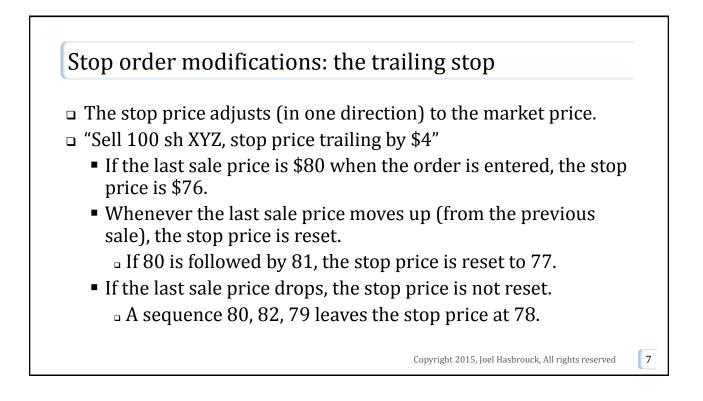




Recent experience in FX markets

- □ FCA fines five banks £1.1 billion for FX failings and announces industry-wide remediation programme
 - Press release from UK Financial Conduct Authority (12/11/2014)
- Traders at different Banks formed tight knit groups in which information was shared about client activity These groups were described as, for example, "the players", "the 3 musketeers", "1 team, 1 dream", "a co-operative" and "the A-team".
- Traders shared the information obtained through these groups to help them work out their trading strategies. They then attempted to manipulate fix rates and *trigger client "stop loss" orders* (which are designed to limit the losses a client could face if exposed to adverse currency rate movements). This involved traders attempting to manipulate the relevant currency rate in the market, for example, to ensure that the rate at which the bank had agreed to sell a particular currency to its clients was higher than the average rate it had bought that currency for in the market. If successful, the bank would profit.

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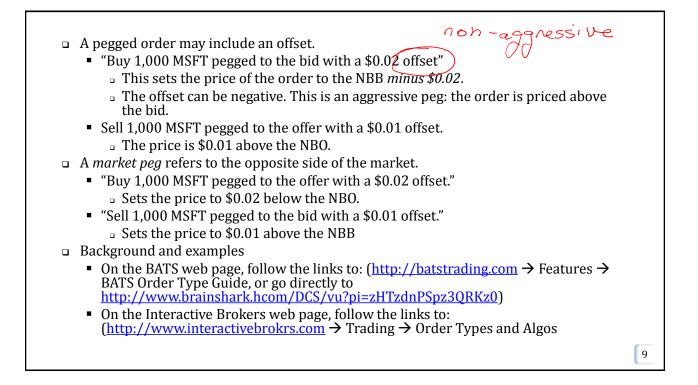


Pegged orders

- Limit orders that are automatically priced and repriced relative to same-side NBBO, opposite side NBBO, or NBBO midpoint.
- Most pegged orders are hidden.
- □ A *primary peg* refers to the same side of the market.
 - "Buy 1,000 MSFT pegged to the NBB"
 - The initial price of the order is the NBB. If the NBB changes, the price of the order changes with it.
 - "Sell 1,000 MSFT pegged to the NBO"
 The initial price of the order is the NBO.

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Why are (almost all) pegged orders hidden?

- □ A visible order pegged to the same-side quote could be unstable.
- □ "Buy 1,000 MSFT, pegged to the NBB plus \$0.01."
 - If (upon arrival) the NBB is 30.10, the order is priced at 30.11.
 - 30.11 becomes the new NBB \rightarrow the order is repriced at 30.12.
 - 30.12 becomes the new NBB → the order is repriced at 30.13
 - ...
 - "The dog chasing its tail"

Buy 1,000 MSFT, pegged to the midpoint" arrives at market A Suppose the NBBO is 29.50 bid, offered at 29.80 Both sides are from market B, which is alone. The pegged order is originally priced at 29.65. If the NBBO midpoint changes, the order is repriced. If a seller knows about the order he might: Enter a bid on market B to raise the NBB to 29.70 Send the intended sell order to market A. It executes at 29.75 (against the repriced pegged order) Cancel the bid on market B Note: The seller's bid is "spoofing". goofing is manipulative, illegal, and difficult to detect.

Discretionary orders

- When the opposite side NBBO gets within the discretionary range, execute against it.
- A discretionary order starts passive, but might go active.
- □ Example:
 - The NBBO in MSFT is 29.80 bid, offered at 29.90.
 - "Buy 100 MSFT limit 29.79 with an aggressive discretionary offset of 0.05"
 - If the NBO drops to 29.79 + 0.04 = 29.84 or below, the order is repriced to 29.84, and executes against the NBO.
 - The execution price is the NBO (not the limit price of the order).
- If you suspect that the opposite side might be using discretionary orders, move your quote incrementally.

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Reserve ("iceberg") orders

- Only a part of the size is visible.
 - The rest is hidden reserve.
 - When the visible portion executes, it is replenished from the reserve.
- □ This avoids showing the full size of the order all at once.
- □ If the refresh is instantaneous, the order is easy to detect.
- Randomization (of time or refresh quantity) will help to conceal the order.

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Implementation

- Where is the "logic" (hardware/software) for the order implemented?
- Possibilities:
 - Customer/trader
 - Broker
 - Exchange

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The life cycle Advanced algos are usually developed by proprietary ("prop") traders and implemented on traders' systems. Next, they're offered by technologically sophisticated institutional brokers ... then retail brokers Finally they become standard order types on exchanges.

- **D** The advantages of implementation on exchanges.
 - The algo doesn't have to be coded as many times (once per exchange)
 - The hardware is at each exchange (less subject to delays).
 - The algo is more stable.
- But some algos are best implemented by the broker.
 - An all-or-nothing order is handled by scanning the sizes available at all exchanges, and then (if the requested amount is available) routing separate orders to each exchange.

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Current trends

- Traditionally, exchanges have competed to offer complex order types.
- NYSE Arca (owned by ICE) has eliminated some order types (in an attempt to compete on simplicity)

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