Order Book Basics

Introduction

In the course of trading, market participants may send "orders" to an exchange to indicate their interest in trading a security at a specific quantity and price. To indicate an interest in trading, participants can send:

- A "bid," which is an order to buy; and,
- An "offer," which is an order to sell.

A bid and an offer whose prices are the same or "cross" will pair, resulting in a trade. We consider bid and offer prices to "cross" when the bid price is higher than the offer price; in those cases, a trade will occur at the price of the older order (the "resting" order). Unpaired bids and offers make up the "order book," which is maintained by the exchange.

Worked Examples

Suppose you are willing to buy 100 shares of stock ABC at $15.00/share. You would indicate this interest by sending a bid to the exchange of $15.00 for 100 shares. Also suppose that Participant A is willing to sell 100 shares of stock ABC at $16.00/share. They would send an offer of 100 shares at $16.00.

The order book for stock ABC would be as follows:

Bid Quantity	Bid Price	Ask Price	Ask Quantity
100	$15.00	$16.00	100

There is no trade because the bid and offer prices do not equal or cross. Now, suppose that Participant B sends an offer of 100 shares at $15.00.

Bid Quantity	Bid Price	Ask Price	Ask Quantity
100	$15.00	$15.00	100
		$16.00	100

Because Participant B's offer price is less than or equal to your bid price, a trade will occur: you buy 100 shares from Participant B at a price of $15.00.

At the exchange, your bid and Participant B's offer will no longer appear on the order book because both orders have been paired. Participant A's offer of 100 shares at $16.00 will remain on the order book because it is unpaired.

If another participant later sent a bid with a price equal to or greater than Participant A's offer price, another trade would occur.

Please note, the book is ordered with the most competitive orders on top, and least competitive on bottom. We also don't group separate orders and executions at the same price together.