CHAPTER 4

The Options Marketplace

INTRODUCTION

Listed options trade on exchanges in a manner that is similar to the trading in listed stocks. The exchanges maintain orderly markets for listed options and provide investors with a marketplace to buy and sell options. Because options are derivative securities and there are different types, classes, and series of options, the options market has some unique trading features.

THE OPTION CLEARING CORPORATION

The Option Clearing Corporation (OCC) was created and is owned by the exchanges that trade options. It is regulated by the SEC. The OCC issues all standardized options and guarantees their performance. The OCC does not guarantee a customer against a loss; it only guarantees the option's performance. The OCC guarantees that if an investor who is short an option is unable to perform his or her obligation under the contract, the investor who is exercising the contract will still be able to do so without any delay. Without this performance guarantee, the trading of standardized options would be impossible. The OCC issues option contracts the day after the trade date, and all standardized options will settle on the next business day, or T + 1. When an investor closes out a position through either a closing purchase or sale, the OCC will eliminate the closing investor's obligations or rights from its books. All standardized options of the same series are interchangeable (fungible). For example, all XYZ April 50 calls are the same. In order to meet the prospectus requirements of the Securities Act of 1933, the OCC publishes a disclosure document known as the Characteristics and Risks of Standardized Options. All option investors must be given this document prior to or at the time their account is approved for option trading.

THE OPTIONS MARKETS

Standardized options trade on exchanges through a dual-auction process similar to that for listed stocks. All standardized options are known as listed options. However, large institutions may trade specialized options over the counter (OTC). The terms and conditions of the contract may be negotiated with the OTC option dealer. Listed options trade on the following exchanges:

- CBOE
- NYSE/AMEX
- Nasdaq/OMX/PHLX
- PSE

Although the NYSE is the premier exchange for listed stocks, the Chicago Board Option Exchange is the premier exchange for listed options. The directors of the exchanges that trade options determine which options to trade based on public interest in the underlying security. They also set the expiration cycles and strike prices for the options that trade on their floors. The exchanges generally set the strike prices for most stocks and exchange-traded funds (ETFs) in $1 intervals; options for higher priced stocks can be set in $5 or $10 intervals.

If any option fails to meet the exchange's listing requirements, no new option series for that underlying security will be opened for trading by the exchange unless the option receives an exception from the exchange. If no exception is received, existing option series for the underlying security will continue to trade until the last series of options expires.

TAKENOTE!

A customer must be notified prior to executing a transaction in an existing series of options that will be delisted.

The option exchanges have also set maximum limits on the spread between the bid and ask for option contracts that trade on their floors. The maximum spread depends on the price of the option contract and is currently set as follows:

- Bid price is less than $2: Maximum spread is 25 cents.
- Bid price is greater or equal to $2 but less than $5: Maximum spread is 40 cents.
- Bid price is greater or equal to $5 but less than $10: Maximum spread is 50 cents.
- Bid price is greater or equal to $10 but less than $20: Maximum spread is 80 cents.
- Bid price is greater than $20: Maximum spread is $1.

THE CHICAGO BOARD OPTION EXCHANGE

The CBOE functions in many ways exactly like other exchanges, except it has one major difference. The CBOE does not use a specialist system like the one used on all other exchanges. The specialist system requires that specialist members maintain a fair and orderly market in the securities in which they specialize and that they buy and sell for their own accounts. However, on the CBOE the duty of maintaining a fair and orderly market is given to an exchange employee known as an order book official. The personnel trading on the options floors are:

- An order book official/specialist.
- A market maker/registered option trader/local.
- Spread broker.
- Commission house broker.
- Two-dollar broker.

ORDER BOOK OFFICIAL/BOARD BROKER

Order book officials on the CBOE are employees of the exchange who maintain a fair and orderly market for the options they have been assigned. Order book officials also maintain a book of limit and stop orders left with them and will execute them when the order's conditions are met. Order book officials may only accept orders left with them by members for the accounts of public customers. Member firms may not leave orders for the official to execute for the member's own account. Order book officials may not trade for their own accounts or be associated with a member firm. A board broker or a floor par official is an exchange member who has been appointed to maintain a fair and orderly market in options.

SPECIALIST

Specialists are members of any other option exchange who are required to maintain a fair and orderly market for the options in which they specialize. Specialists are required to buy and sell from their own accounts in the absence of public orders and must execute stop and limit orders left with them. Specialists, unlike order book officials, are members of the exchange, not employees of the exchange, and, unlike order book officials, are required to trade for their own accounts.

OPTIONS MARKET MAKERS

Options market makers are individual members of the exchange who are required to maintain a two-sided market in the options they trade. A two-sided market consists of both a bid and an offer. An options market maker must display a two-sided market at all times. An options market maker may also be called a registered options trader or a local. These members trade for their own profit and loss. Options market makers must meet the financial requirements of the exchange and qualify through examination to be a member of the exchange. Market makers are also required to register in the options they trade and may not be affiliates with the option's board broker in the options they trade. The main function of the market maker in the marketplace is to improve liquidity and to narrow option spreads.

COMMISSION HOUSE BROKER

A commission house broker is an employee of a member organization and will execute orders for the member's customers and for the member's own account.

TWO-DOLLAR BROKER

Two-dollar brokers are independent members who execute orders for commission house brokers when they are too busy managing other orders. Floor brokers may not accept orders directly from public customers unless they are registered and approved by the exchange to do so.

SPREAD BROKER

A spread broker is an independent member who specializes in executing multiple option orders, such as spreads and straddles, for a fee.

OPENING AND CLOSING OPTION PRICES

Options begin trading as soon as an opening price for the underlying security may be determined. Options are opened for trading through a rotation that accepts orders and quotes for the series of calls that expire the soonest and have the lowest strike price. The rotation continues through all the near-term series of call options and continues to the call options that expire further out. Once all of the calls are open, the rotation continues with the puts, starting with the puts with the highest strike price and the nearest expiration. The rotation in the puts continues through puts with lower strike prices and then to further out expirations.

Listed options also close on a rotation as soon as a closing price can be determined for the underlying security. A rotation can also be imposed during fast market conditions if the specialist or the order book official determines that the market is not operating in an orderly fashion. If a stock is halted, all option trading on that stock is also halted until the stock reopens.

FAST MARKETS AND TRADING HALTS

A sudden influx of orders as a result of news can result in fast market conditions in the option markets. If two floor officials agree that the conditions are such that the integrity of the market is compromised as a result of the fast market conditions, the floor officials can:

- Institute a trading rotation.
- Assign trading of options to another board broker.
- Allow board broker clerks to execute orders.
- Temporarily suspend the firm quote rule and AutoEx.
- Take other actions that may be required.

If the integrity of the markets cannot be restored after taking these actions, trading may be halted in the options if two floor officials agree. Trading can be halted by the floor officials for up to two business days if the underlying stock is halted, has a delayed opening, or if other unusual circumstances exist. Only the board of directors at the CBOE can suspend the trading of options if the trading in the option has been halted for two days or if the underlying security has been suspended on its principal exchange or other unusual circumstances exist. The exchange during unusual market conditions may also suspend the use of stop and limit orders to help restore the market's integrity.

ORDER EXECUTION

Most customer orders, which are market orders or executable limit orders, will be routed electronically to the trading post for automatic execution. The electronic system bypasses the firm's commission house broker, the order is executed automatically, and an execution report is sent back to the brokerage firm. More complex orders will be handled by the firm's commission house broker. A member firm may not execute an order for a listed option off the floor of the exchange unless it has tried to execute the order on the floor and a better price is available in another trading venue.

TYPES OF ORDERS

Investors can enter various types of orders to buy or sell options. Some orders guarantee that the investor's order will be executed immediately. Other types of orders may state a specific price or condition under which the investor wants the order to be executed. All orders are considered "day" orders unless otherwise specified. All day orders will be canceled at the end of the trading day if they are not executed. An investor may also specify that the order remain active until canceled. This type of order is known as "good til cancel" (GTC).

MARKET ORDERS

A market order will guarantee that the investor's order is executed as soon as the order is presented to the market. A market order to either buy or sell guarantees the execution but not the price at which the order will be executed. When a market order is presented for execution, the market for the option may be very different from the market that was displayed when the order was entered. As a result, the investor does not know the exact price that the order will be executed at.

BUY LIMIT ORDERS

A buy limit order sets the maximum price that the investor will pay for the option. The order may never be executed at a price higher than the investor's limit price. Although a buy limit order guarantees that the investor will not pay over a certain price, it does not guarantee that the order will be executed. If the option continues to trade higher away from the investor's limit price, the investor will not purchase the option and may miss a chance to realize a profit.

SELL LIMIT ORDERS

A sell limit order sets the minimum price that the investor will accept for the option. The order may never be executed at a price lower than the investor's limit price. Although a sell limit order guarantees that the investor will not receive less than a certain price, it does not guarantee that the order will be executed. If the option continues to trade lower away from the investor's limit price, the investor will not sell the option and may miss a chance to realize a profit or may realize a loss as a result.

FOCUSPOINT

It's important to remember that even if an investor sees options trading at the limit price, it does not mean that the order was executed, because there could have been orders ahead of the investor's order at that limit price.

STOP ORDERS/STOP LOSS ORDERS

A stop order or stop loss order can be used by investors to limit or guard against a loss or to protect a profit. A stop order will be placed away from the market in case the option starts to move against the investor. A stop order is not a "live" order; it has to be elected. A stop order is elected and becomes a live order when the option trades at or through the stop price. The stop price is also known as the trigger price. Once the option has traded at or through the stop price, the order becomes a market order to either buy or sell the option, depending on the type of order that was placed.

BUY STOP ORDERS

A buy stop order is placed above the market and is used to protect against a loss or to protect a profit on a short sale of an option. A buy stop order could also be used by a technical analyst to get long an option.

SELL STOP ORDERS

A sell stop order is placed below the market and is used to protect against a loss or to protect a profit on the purchase of an option. A sell stop order could also be used by a technical analyst to get short an option.

STOP LIMIT ORDERS

Investors would enter a stop limit order for the same reasons they would enter a stop order. The only difference is that once the order has been elected, the order becomes a limit order instead of a market order. The same risks that apply to traditional limit orders apply to stop limit orders. If the option continues to trade away from the investor's limit, the investor could give back all of the profits or suffer large losses.

OTHER TYPES OF ORDERS

Investors may enter into several other types of orders:

- All or none (AON).
- Immediate or cancel (IOC).
- Fill or kill (FOK).
- Not held (NH).
- Market on open/market on close.

ALL OR NONE (AON) ORDERS

AON orders may be entered as day orders or GTC. All or none orders, as the name implies, indicates that the investor wants to buy or sell all of the options or none of them. AON orders are not displayed in the market because of the required special handling, and the investor will not accept a partial execution.

IMMEDIATE OR CANCEL (IOC) ORDERS

With IOC orders, investors want to buy or sell whatever contracts they can immediately and whatever orders are not filled are canceled.

FILL OR KILL (FOK) ORDERS

With FOK orders, the investor wants the entire order executed immediately or the entire order canceled.

NOT HELD (NH) ORDERS

With NH orders, the investor gives discretion to the floor broker as to the time and price of execution. All retail NH orders given to a representative are considered day orders unless the order is received in writing from the customer and entered as GTC.

SPREAD ORDERS

With spread orders, orders to establish or liquidate spreads are entered on one order ticket and are executed in a single transaction on the floor of the exchange. Larger spread orders may be handled by floor brokers who specialize in spread orders and are known as spread brokers. Orders for spreads can be entered as market orders or as limit orders. Spread limit orders will be entered as orders stating the net debit or credit to be paid or received. A spread order will identify the number of options to be bought and sold as follows:

Buy 10 TRY June 70 calls.

Sell 10 TRY June 80 calls.

If this was a limit order, the price of both options would be listed and the difference in premiums would be the debit the investor would be willing to pay for the spread.

PRIORITY OF OPTION ORDERS

The acceptance of bids and offers for exchange-listed options are filled on a first come, first serve basis, with the highest bid or lowest offer being filled first. Customer orders that are entered at the same price as a member's order will be given priority over the member's order. If two member orders are competing at the same price, priority will be given to the member order that was entered first. Spread orders are given priority over single option orders.

TRADE REPORTING

When a transaction takes place on the floor of the exchange, the member firm on the sell side of the transaction must report the trade to the clerk to be displayed on the tape. Members that execute orders transmitted to the floor of the exchange must then report the execution to the originating party. All orders sent to the floor must be sent in writing on an exchange-approved form. Orders transmitted by member firms through wire or telephone must be sent through exchanged-approved communication facilities. Orders received through these facilities will, in most cases, be written on exchange-approved order tickets by the order clerks who receive the order. At the end of each trading day, clearing members are required to report all option trades to the exchange. These reports will include orders executed for the clearing member's own account as well as orders executed for the accounts of the clearing member's customers (introducing broker dealers). The exchange compares all trades submitted by all clearing members at the end of the day and will notify members of any unmatched trades. Members are required to reconcile all open unmatched trades contained in the report by 9:30 a.m. EST on T + 1 and to notify the exchange of the resolution by that time. All matched trades are reported by the exchange to the OCC on a daily basis. The OCC, in turn, sends a daily report to each clearing member detailing the previous day's matched trades, net premiums owed or due to the OCC, and any assignment notices.

OPTION ORDER TICKETS

Prior to transmitting a customer's option order, the representative must fill out the appropriate order ticket and present it to the trading department or wire room for execution. All order tickets will include:

- Buy or sell.
- The name of the underlying security.
- Number of contracts.
- Type of option.
- Expiration date.
- Exercise price.
- An indication if the transaction is opening or closing the contracts.
- If an opening sale, a notation regarding covered or uncovered is required.
- Account name and number.
- Account type (i.e., cash or margin)
- Price and time limits, if any.
- Solicited or unsolicited.

- Discretionary authority exercised or discretionary authority not exercised, if applicable.
- Time stamp when entered, executed, changed, or canceled.

EXPIRATION AND EXERCISE

The OCC has set the following rules for the expiration and exercise of stock and narrow-based index options:

- Options cease trading at 4:00 p.m. EST (3:00 p.m. CST) on the third Friday prior to expiration.
- Option holders who wish to exercise their options must do so by 5:30 p.m. EST (4:30 p.m. CST), the third Friday prior to expiration.
- All options expire at 11:59 p.m. EST (10:59 p.m. CST) on the Saturday following the third Friday.
- All options held by public customers will automatically be exercised if they are 1 cent in the money.
- All options held by broker dealers will automatically be exercised if they are 1 cent in the money.

The OCC has set the following rules for the expiration and exercise of broad-based options:

- Options cease trading at 4:15 p.m. EST (3:15 p.m. CST) on the third Friday prior to expiration.
- Option holders who wish to exercise their options must do so by 5:30 p.m. EST (4:30 p.m. CST) the third Friday prior to expiration.
- All options expire at 11:59 p.m. EST (10:59 p.m. CST) on the Saturday following the third Friday.

AMERICAN VS. EUROPEAN EXERCISE

There are two styles of options that trade in the United States: American and European. An American-style option may be exercised at any time by the holder during the life of the contract. A European-style option may only be exercised by the holder at expiration.