Options Overview for Investors

Investors considering listed options are provided a disclosure document entitled *Characteristics and Risks of Standardized Options*, also known as the Options Disclosure Document or ODD. The ODD is the definitive options disclosure document required by federal regulation to be furnished to customers who are approved for trading options. Investors may find the ODD Quick Guide, an interactive tool to assist in navigating the ODD by topic, useful as well.

This document is intended to highlight common terms and concepts that should be well understood by an investor considering options and contains examples of certain risks of trading options. However, this document does not address all aspects or risks of trading options.

Rights and Obligations

An **option** is a contract between a **buyer** (also known as the **holder**) and a **seller** (also known as the **writer**) which grants rights to the buyer and confers obligations upon the seller. An option gives the right to buy or sell a specified amount or value of an underlying interest. As examples, an equity option is an option that has a deliverable consisting of shares of an individual common stock or Exchange Traded Fund (ETF), and an index option is an option based on prices of a group of securities that are calculated into a single number known as an index. The two types of options are calls and puts:

Call Options

The **buyer of a standard equity call option** has the right to purchase 100 shares of the underlying stock at the **exercise price** (also commonly known as the **strike price**, which is the price at which the owner of an option has the right to buy or sell the underlying security). This right exists during the life of the option contract.

The **seller of a standard equity call option** is obligated to sell 100 shares of the underlying stock at the exercise or strike price. This right exists during the life of the option contract.

Put Options

The **buyer of a standard equity put option** has the right to sell 100 shares of the underlying stock at the exercise, or strike price. This right exists during the life of the option contract.

The **seller of a standard equity put option** is obligated to buy 100 shares of the underlying stock at the **exercise**, or strike price. This right exists during the life of the option contract.

These rights and obligations are realized through the processes of **exercise and assignment**. If an option buyer chooses to exercise a contract they own, an option seller will be assigned and must satisfy the associated obligation.

For options that settle into cash, such as certain **index products**, the process of exercise and assignment will result in the exchange of cash between the option buyer and seller.

Options investors generally have the ability to execute **opening option transactions** (initiating or increasing the size of an options position) and **closing option transactions** (reducing the size or eliminating an options position). Upon the execution of a closing transaction, the investor can capture a realized gain or loss on the investment without entering the exercise or assignment process.

A **standard, American-style equity option** contains a deliverable of 100 shares of the underlying stock and can be exercised anytime until expiration. Upon exercise, the aggregate strike price will be paid or received in exchange for shares with the following breakdown of rights and obligations as they relate to positions in calls and puts.

	CALLS	PUTS
LONG Buyer or Holder	**Right to Buy**	**Right to Sell**
SHORT Seller or Writer	**Obligation to Sell**	**Obligation to Buy**

Exercise and Assignment

If/when an options buyer wishes to invoke their right to buy for a call or sell for a put the underlying security, they do so through the process of an option exercise. When a buyer chooses to exercise their rights, an option seller who maintains an open short position may be assigned the exercise, thereby requiring the seller to fulfill their obligations according to the terms of the contract. Options that can be exercised (and assigned) at any time prior to and including the expiration date of the options contract are called **American-style options**; whereas options that can only be exercised on the expiration date are called **European-style options**.

Option Pricing

In-the-Money (ITM) Options

For standard options, when the current market price of the underlying interest of an option is above the exercise price of a call option and below the exercise price of a put option.

At-the-Money (ATM) Options

When the exercise price of a standard option is equal to the current market price of the underlying interest.

Out-of-the-Money (OTM) Options

For standard options, when the exercise price of an option is above the current market value of the underlying interest for a call option and below the current market value for a put option.

Ultimately, the price of an options contract is determined by the **supply and demand** from all market participants who place **bids** (the price at which a market participant is attempting to buy an option) and **offers** (the price at which a market participant is attempting to sell an option). The price of an option is known as the option '**premium**,' and it is comprised of both **intrinsic value** (exists for ITM options only and is calculated as the difference between the underlying price and exercise price) and **time value**, also known as **extrinsic value** (the portion of option premium that is not attributable to intrinsic value).

Sample of Product Types

Equity (stock and ETF) Options

Unit of Trade
Also Known as Contract Size

A standard equity or ETF option typically covers 100 shares of the underlying security.

Aggregate Option Premium

With option premiums quoted on a per share basis, a premium must be multiplied by 100 to determine the aggregate premium dollar amount to be paid (or received) by the options buyer (or seller).

Aggregate Exercise Price

The exercise price of an option multiplied by 100, the typical number of shares underlying in an option, as the aggregate dollar amount to be paid or received upon exercise (or assignment).

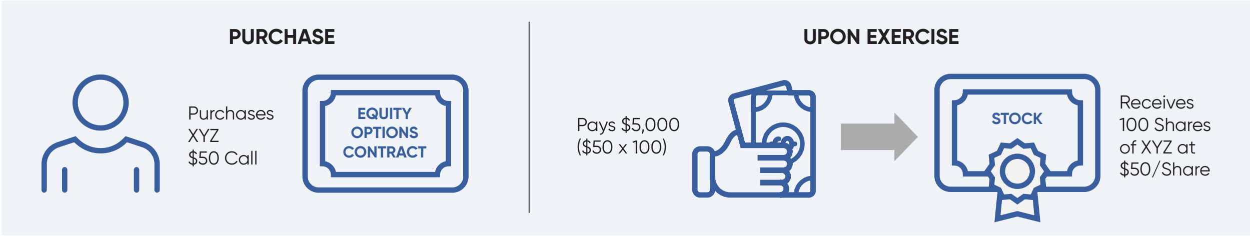
Settlement

The exercise process results in an exchange of shares between exerciser and assignee for the aggregate exercise price.

Adjustments may be made to certain standardized terms of outstanding options when certain events occur, such as stock dividends, stock distributions, stock splits, mergers, rights offerings, among others.

Option Holder Examples:

An investor who purchases an equity call option on stock symbol XYZ with a **$50 exercise price** has the right to exercise the call option and pay **$5,000 ($50 x 100)** in exchange for receipt of **100 XYZ shares**.



An investor who purchases an equity put option with a **$50 exercise price** has the right to exercise the put option and receive **$5,000** in exchange for delivering **100 XYZ shares**.

Option Writer Examples:

An investor who sells an equity call option on stock symbol XYZ with a **$50 exercise price** has the obligation to deliver **100 XYZ** shares in exchange for receipt of **$5,000**.

An investor who sells an equity put option with a **$50 exercise price** has the obligation to pay **$5,000** in exchange for receipt of **100 XYZ shares**.

Index Options

Unit of Trade

Determined by the multiplier of the option as fixed by the option market that trades it and is typically 100.

Multiplier of Option Premium

Generally, the quoted option premium must be multiplied by 100 to determine the aggregate dollar amount to be paid (or received) by the options buyer (or seller).

Multiplier of Exercise Price

Number that is multiplied by the difference between the exercise price and the exercise settlement value of the underlying interest to determine the amount to be paid or received upon exercise (or assignment).

Settlement

The exercise process results in an exchange of cash between exerciser and assignee.

Different index products settle differently—some settle based on the opening component securities prices contained within the index whereas others settle based on closing component securities prices.

Index Option Example:

An investor purchasing a broad-based index **$4,100 call** is purchasing the right to buy the index value at **$4,100 on expiration** (x the multiplier of 100). If the exercise settlement value of the index is determined to be **$4,150 on expiration**, the holder upon exercise will receive the cash settlement amount of **$5,000** (($4,150.00 - $4,100.00 = $50) x 100) in cash.

Other Products

There are additional products described in the ODD such as Debt Options, Credit Default Options, Foreign Currency Options, Flexibly Structured Options, among others.

Examples of Special Risks

Examples of Risks for Options Holders

- An option holder runs the risk of losing the entire amount paid for the option in a relatively short period of time.

  Example: With stock trading at $100, an investor purchases a call option with a strike price of $105 for a premium of $3, the total cost being $300 after factoring in the standard option multiplier. If the stock continues to trade below $105 and the option is held through expiration expiring worthless, the investor might lose their entire $300 investment.
- The more an option is out of the money and the shorter the remaining time to expiration, the greater the risk that an option holder will lose all or part of their investment in the option.
- Exercise provisions of an option may create certain risks for the option holder. Some options may be subject to an automatic exercise process, also known as exercise by exception, or 'ex-by-ex,' by which an

Examples of Risks for Options Writers

- An equity option writer may be assigned an exercise notice at any time during the period that an option is exercisable.
- The writer of a covered call forgoes the opportunity to benefit from an increase in the value of the underlying security above the option's exercise price but continues to bear the risk of a decline in the value of the underlying security.
- The writer of an uncovered call is in an extremely risky position and may incur large losses if the value of the underlying security increases above the exercise price.
- As with writing uncovered calls, the risk of writing put options is substantial. The writer of a put option bears a risk of loss if the value of the underlying interest declines below the exercise price, and such loss could be substantial if the decline is significant.
- The risk of being an option writer may be reduced by the purchase of other options on the same underlying security (i.e., spread

Examples of Risks for Options Holders
Continued

in-the-money option may be exercised automatically by a brokerage firm if the option holder does not provide explicit exercise intentions.

- The courts, the SEC, another regulatory agency, OCC®, or the options exchanges may impose exercise restrictions at certain times in specified circumstances.

Examples of Risks for Options Writers
Continued

trade) or by hedging positions in the options market or other markets. However, even where the writer has assumed a spread or other hedging position, the risks may still be significant.

- The writer of an uncovered call or put that is not cash-secured must meet applicable margin requirements and this may create additional risks.
- Option writers are at risk of assignment resulting from news or market price movement published or released after market close.

  Example: An investor is short a call option with a strike price of $105. On the expiration date, the stock closes at $100. However, news released after the market close creates bullish sentiment and the stock price rises to $110 during after-hours trading. In this case, while an option writer is always subject to assignment, the after-hours movement in the stock price may greatly increase the likelihood of assignment on the $105 call.

Other Risks

- Additional risks exist for transactions that involve buying and/or selling multiple options or buying and/or selling options in combination with buying or selling short the underlying interest.
- If a trading market were to become unavailable, such as during a trading halt, investors would no longer be able to engage in closing transactions.

Tax Considerations

Trading options may result in tax consequences for the investor. Therefore, investors should consult with a tax professional before engaging in any options trading.

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The Options Industry Council® (OIC®) offers free education on the benefits and risks of exchange-listed options. For more content, including options courses, webinars, podcasts and videos, visit OptionsEducation.org.

ATTENTION: This is educational material and is not a regulatory disclosure document. It is not a substitute for *Characteristics and Risks of Standardized Options*, also known as the Options Disclosure Document or ODD, which is the definitive options disclosure document required by SEC Rule 9b-1 to be filed by the U.S. options exchanges with the SEC and to be furnished by broker-dealers to customers who are approved for trading options that trade on a national securities exchange. Customers should read that definitive options disclosure document before investing in exchange traded options.