

Learn to trade options

OPTION STRATEGIES FOR NOVICE TRADERS



PREFACE

Dear trader,

When Questrade introduced multi-leg options strategies into our IQ trading platforms, the whole team was pretty excited. One of our clients was thrilled too. He said “stocks compared to options are like driving an automatic compared to a six-speed stick shift. With stocks (and automatics), you have a destination and you point and steer. With options, you are continually evaluating and adjusting your approach, shifting up or down according to market activity. It can be exciting, but it can also be quite sedate.”

We’ve seen a range of clients embrace options trading. Our active traders were clearly the first on board. Slowly we’ve seen more of our buy-and-hold investors testing the more basic strategies. They were happily reaching their goals with stocks, ETFs, mutual funds and bonds. But they wanted more options.

Which brings us to this book, **option strategies for novice traders**. This is the first of three options ebooks, and will demystify the security for anyone ready to get started with fundamental strategies. We cover option types and important terminology, the four best strategies for novices, the market outlook of each, payoff diagrams, and how to set up your strategies.

Enjoy the read.

Edward Kholodenko
President & CEO, Questrade, Inc.

CHAPTER 1

INTRODUCTION TO OPTIONS

An option is a contract between two market participants that gives the option holder the right, but not the obligation, to buy or sell a specified number of shares at a fixed price up to the option expiration date. The option to buy or sell must be exercised before and/or at the expiration date, depending on the option style (American or European).

Option types

There are two types of options:

- **Call:** gives the owner the right to buy a specified number of shares of the underlying stock at the strike price up to the set expiration date.
- **Put:** gives the owner the right to sell a specified number of shares of the underlying stock at the strike price up to the set expiration date.

Option quotes

A typical option quote will contain the following elements:

Underlying stock: security that must be delivered when an option contract is exercised.

Example: THI.TO

Quantity: number of option contracts the option owner will purchase.

In this example, 1000 shares will be purchased since one standard option contract equals 100 shares.

One standard option contract = 100 shares

One mini option contract = 10 shares

Example: 10

Expiry: date at which an option owner can exercise the right to buy (or sell) shares of the underlying stock.

Example: Mar 16 2013

Strike: price at which the option owner can buy (or sell) the shares.

Example: 52.00

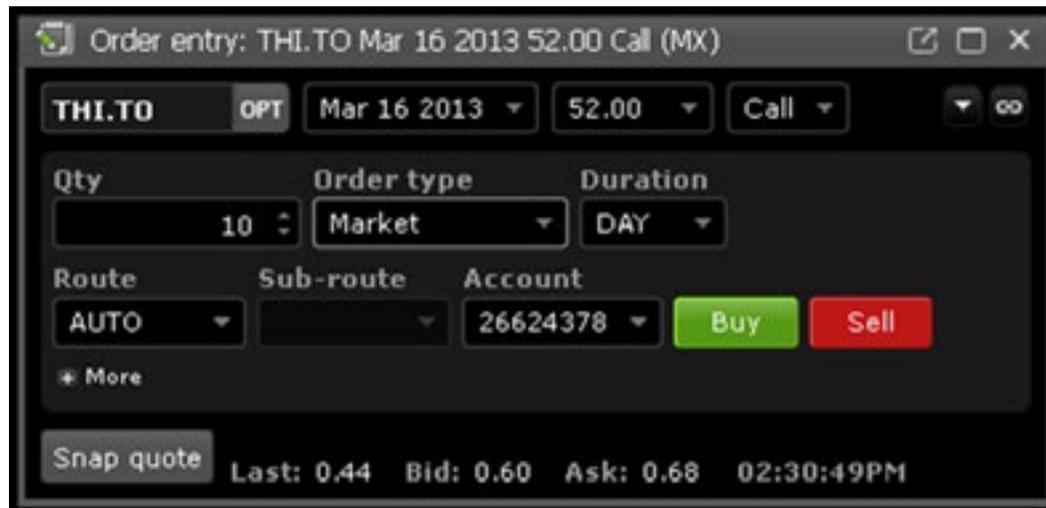
Type: specifies whether the option is a Call or Put option.

Example: Call

Price: premium paid or received to buy or sell one option contract. The premium is calculated per share.

In the example below, the buyer of the option would need to pay \$680 (\$0.68 premium x 10 contracts x 100 shares) to purchase a call option on the underlying security.

Example: 0.68



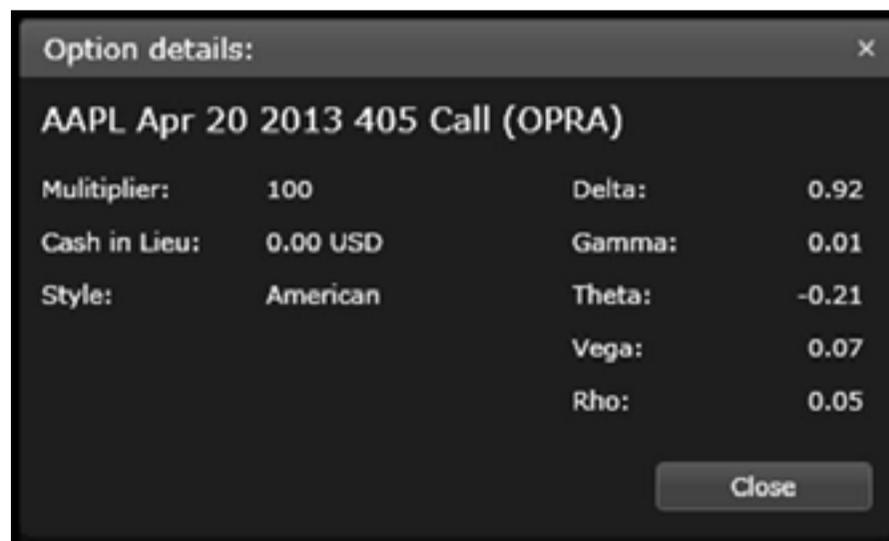
Option quote in IQ Edge

Option styles

There are two common types of options – **American** and **European** – which are also referred to as “plain vanilla” options. In general, an American option may be exercised any time before the expiration date, while a European option may only be exercised at the expiration date.

Almost all stock options are American options, while indices are typically classified as European options.

To view option dates in your IQ trading platform, right-click the strike price and choose **Option details**.



Option details in IQ Web

Option assignments

If an option finishes in the money at expiration by \$0.01 cent or more, it will be automatically assigned. In some cases, in-the-money options may not be automatically exercised. When this is the case, Questrade will attempt to notify clients on a best-efforts basis. To learn more about option exercise and assignment policies, please visit [myQuestrade](#).

Number of shares per option contract

One standard option contract represents a deliverable of 100 shares of the underlying stock, while one mini option contract represents a deliverable of ten shares.

Option premium

To buy an option contract, you must pay a premium to the seller. Conversely, when you sell an option contract, you receive a premium from the buyer.

All option premiums are calculated per share. For example, 100 shares x premium per share = cost or profit of option contract.

Important terminology

To understand and trade options, you'll need to familiarize yourself with some general terminology:

Assign

The act of the seller fulfilling the obligation of the option contract when the buyer of the option exercises their rights.

Seller of a Call option will need to deliver shares of the underlying stock to the buyer at the strike price.

Seller of a Put option will need to purchase shares of the underlying stock from the buyer at the strike price.

At-the-money

When the option's strike price is identical to the current trading price of the underlying stock.

Call

Gives the owner the right to buy a specified number of shares of the underlying stock at the strike price up to the set expiration date.

Expiration

The date at which an option contract expires. This means that the option cannot be exercised after that date.

Extrinsic value

The difference between an option's market price and its intrinsic value.

In-the-money

When the option contract has a positive value if exercised:

Call option: the stock price is above the strike price

Put option: the stock price is below the strike price

Intrinsic value

The difference between the current market value of the underlying stock and the strike price of an option. In-the-money is the term used when the intrinsic value is positive.

Long

A term that refers to ownership of securities. For example, if you are long 100 shares of XYZ, this means that you own 100 shares of XYZ company.

Option premium

The amount per share the option buyer pays to the option seller to purchase an option contract consisting of 100 shares in a standard contract, or 10 shares in a mini option contract.

Out-of-the-money

When the option contract has no intrinsic value:

Call option: the stock price is below the strike price

Put option: the stock price is above the strike price

Put

Gives the owner the right to sell a specified number of shares of the underlying stock at the strike price up to the set expiration date.

Short

The act of selling a stock or option that you don't own. This is a speculative practice done when the seller believes a stock's price is going to fall and the seller will be able to cover the sale by buying the security back at a lower price. The profit is the difference between the initial selling price and the subsequent purchase price.

Strike

The price at which the owner of an option can purchase or sell the underlying security.

Time value

The difference between an option's premium and its intrinsic value.

CHAPTER 2

OPTION STRATEGIES

For novice traders

Option strategies allow traders to limit their risk and maximize their return, while controlling more positions for less money than trading stocks. They also allow traders to profit in any type of market – upward, downward, or neutral.

An option strategy involves the buy (and/or sell) of one or more option types (calls or puts) – usually simultaneously - which allows a trader to potentially profit from an underlying stock's price movements or stagnant state.

In the following sections, we'll describe each strategy using detailed examples, including the benefits and downsides.

The following strategies are ideal for novice traders:

- Covered call
- Married put
- Vertical call
- Vertical put

CHAPTER 3

COVERED CALL

A covered call is an option strategy in which a trader holds a position on a stock and subsequently sells a call option on the same stock in order to produce supplementary earnings from the asset.

When you sell a call option, you are obligated to sell the stock you already own at the strike price if the buyer exercises the call option.

Your market outlook

Slightly bullish or slightly bearish

Who should run this strategy

Ideal for all traders, from novice to advanced.

Strategy benefits

Receive income from the option premium when you sell call options

Offset losses if your stock depreciates in value

Strategy downsides

May lose your stocks if the stock value rises beyond the strike price of the option

Even if your stock goes up significantly, the upside is capped by the strike price, plus the option premium received

If the stock goes down significantly, the option premium you receive will not be enough to offset your losses

Setting up the strategy

1. Buy 100 shares of an underlying stock.
2. Sell a call option on the same underlying stock.

Goal: Sell call option on the underlying stock to produce supplementary income.

Ideal result at expiry: Stock should be close to the strike price, but not above it.

Goal: Sell stock at expiry, while earning additional profit from selling the call option.

Ideal result at expiry: Stock should be slightly above the strike price, so the call option is assigned.

Option level required

To trade options within your account, your level of options trading must be approved. Option levels can be modified in [myQuesttrade](#).

Option strategy: Short covered calls (i.e. protected puts)

Option level required: Level 1

Option strategy: Long covered calls

Option level required: Level 2

Questrade's margin requirements

[Learn more](#) about Questrade's option margin requirements.

Covered call example

Scenario

You own 100 shares of ABC stock valued at \$45. In the short term (less than 30 days) you expect the stock price to rise slightly to a maximum value of \$48.

You sell a 50 call option on ABC stock that expires in 30 days, which earns you an option premium valued at \$100 ($\$1 \times 100 \text{ shares} = \100).

Note: one option contract = 100 shares.

This means that the buyer of the call option has the right to purchase the stock at a \$50 strike price prior to the 30-day expiration date.

Possible results

1. ABC shares go up slightly for the next 30 days, rising to \$47.50, but still well below the strike price of \$50. The 50 call option expires worthless, and you keep the call option premium (\$100), plus you earn an additional \$250 because the shares went up \$2.50. Your total profit would be \$350.
2. ABC shares drop to \$44, meaning the call option expires worthless, and you keep the call option premium (\$100). However you lose \$1 per share ($\$1 \times 100 = \100) because the share price dropped from \$45 to \$44. Since the option premium offsets the share depreciation, you break even.
3. ABC shares rise to \$52, slightly above the \$50 strike price, meaning the call option is exercised by the buyer. Although your profit upside was capped at \$50, you miss out on an additional profit of \$200 ($\2×100). Still, this gives you a total profit of \$600.
4. ABC shares drop to \$40, well below the strike price, meaning the call option expires worthless. Although you keep the option premium (\$100), you incur significant loss by owning the shares themselves ($\$5 \times 100 = \500). Your total loss would be \$100 (call option premium) – \$500 (share depreciation) = -\$400.

Profit and loss explained

Maximum profit

Maximum profit = [(strike price – stock purchase price) x number of shares] + (option premium x number of option contracts x number of shares per contract)

Maximum loss

Maximum loss = (stock purchase price x number of shares) – (option premium x number of option contracts x number of shares)

Although you receive a premium when you sell the call option, the most risk comes from owning the shares

themselves because the stock may actually drop in value before the option expiry date.

Break-even at expiration

Break-even point = stock purchase price – option premium per share

Option strategy: Short covered calls (i.e. protected puts)

Option level required: Level 1

Stock value at start of strategy: \$45

To execute the covered call strategy:

Sell: 50 call option for \$100

Result: \$100 net credit

Scenario 1

Stock price at expiration: \$40

50 call option not assigned at expiration.

Profit and loss calculations:

Option premium received: ($\$1$ premium \times 1 contract \times 100 shares) = \$100

– Stock loss: ($\$40$ stock price at expiration – $\$45$ stock purchase price) \times 100 shares = $-\$500$
= $-\$400$ loss

Scenario 2

Stock price at expiration: \$44

50 call option not assigned at expiration.

Profit and loss calculations:

Option premium received: ($\$1$ premium \times 1 contract \times 100 shares) = \$100

– Stock loss: ($\$44$ stock price at expiration – $\$45$ stock purchase price) \times 100 shares = \$0 (break-even)

Scenario 3

Stock price at expiration: \$45

50 call option not assigned at expiration.

Profit and loss calculations:

Option premium received: ($\$1$ premium \times 1 contract \times 100 shares) = \$100 profit

Scenario 4

Stock price at expiration: \$48

50 call option not assigned at expiration.

Profit and loss calculations:

Option premium received: ($\$1$ premium \times 1 contract \times 100 shares) = \$100

+ Stock profit: ($\$48$ stock price at expiration – $\$45$ stock purchase price) \times 100 shares = \$300
= \$400 profit

Scenario 5

Stock price at expiration: \$52

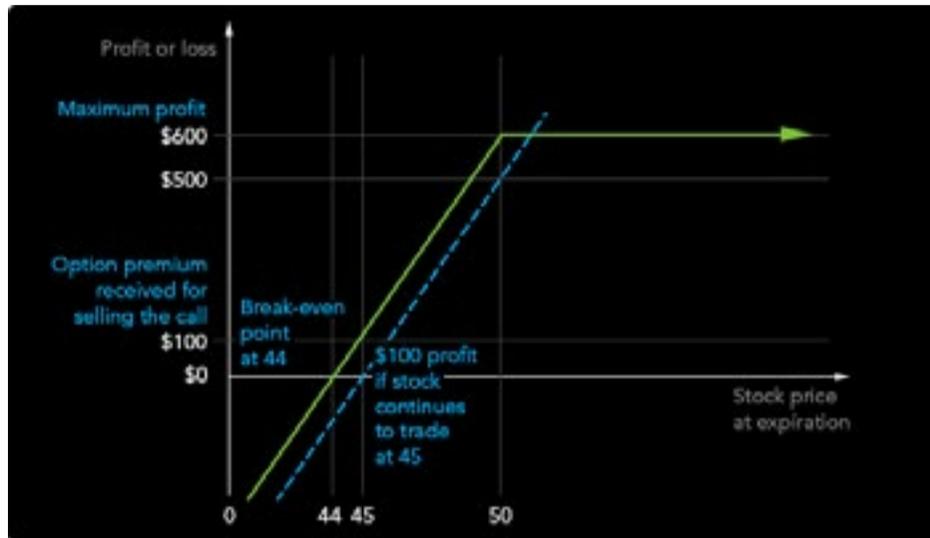
50 call option assigned at expiration.

Profit and loss calculations:

Option premium received: ($\$1$ premium \times 1 contract \times 100 shares) = $\$100$
 + Stock profit capped at 50 strike: ($\$50$ stock price at expiration – $\$45$ stock purchase price) \times 100 shares = $\$500$
 = $\$600$ profit

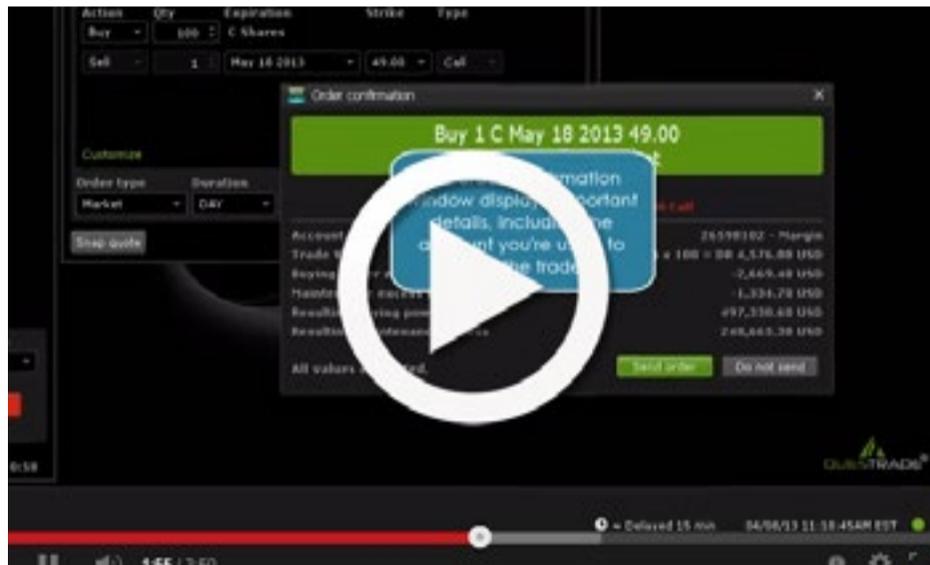
Note: commission fees are not included in the above calculations.

Covered call payoff diagram



Real-world example

Learn how to set up a [covered call](#) in IQ, and see it in action.



CHAPTER 4

MARRIED PUT

A married put is an option strategy in which a trader purchases a put option while simultaneously buying an equivalent number of shares of the underlying stock. This protects the trader against the potential depreciation of the share price.

Your market outlook

Bullish or bearish

Who should run this strategy

Ideal for all traders, from novice to advanced.

Strategy benefits

Hold your stocks while insuring against any losses

Strategy downsides

Reduces your profit due to the option premium paid on the put options

Setting up the strategy

You buy a put option and simultaneously purchase an equivalent number of shares of the same underlying stock.

When choosing the strike price, consider the following:

- The further out of the money the strike price is, the cheaper the premium will be. However, this strategy offers you less downside protection.
- The further in the money the strike is, the more expensive the option premium will be. As a result, this strategy offers more downside protection.

Option level required

To trade options within your account, your level of options trading must be approved. Option levels can be modified in [myQuestrade](#).

Option strategy: Long married puts

Option level required: Level 1

Option strategy: Short married puts (i.e. covered puts)

Option level required: Level 2

Questrade's margin requirements

[Learn more](#) about Questrade's option margin requirements.

Married put example

Scenario

You purchase 100 shares of ABC stock valued at \$26 per share. To protect yourself against the potential depreciation of the shares, you simultaneously purchase a 24 put option for \$75 (0.75 option premium x 100 shares) with a 30-day expiration. Although your initial loss is \$75, this also caps your total potential loss at \$275 ($26 - 24 \times 100 + 75$).

As the buyer of the put option, you have the right to sell the stock at a 24 strike price before the option expiry date.

Possible results

1. ABC shares drop significantly over the next 30 days to \$20, well below the purchase price of \$26. In this case you would exercise the 24 put option on the expiration date to cap your loss at \$275.
2. ABC shares rise to \$30 over the next 30 days, well above the 24 strike price. The put option expires worthless, but you can now sell your stock at the higher price and realize a profit. In this case, it would be $\$4 \times 100 \text{ shares} = \400 , minus the option premium you paid. Your total profit would be \$325.

Profit and loss explained

Maximum profit

Maximum profit = [(current stock price - original purchase price) x number of shares] - (option premium paid x number of option contracts x number of shares)

Maximum loss

Maximum loss = [(strike price - current stock price) x number of shares] + (option premium x number of contracts x number of shares)

Break-even at expiration

Break-even point = purchase price + option premium paid per share

Stock value at start of strategy: \$26

To execute the married put strategy:

Buy: 24 put option for \$75

Result: \$75 net debit

Scenario 1

Stock price at expiration: \$20

24 put option exercised at expiration.

Profit and loss calculations:

Stock loss: ($\$26 \text{ stock purchase price} - \$24 \text{ put strike price}$) x 100 shares = -\$200

+ Option premium paid: ($\$0.75 \text{ premium} \times 1 \text{ contract} \times 100 \text{ shares}$) = -\$75

= -\$275 loss

Scenario 2

Stock price at expiration: \$28.50

24 put option not exercised at expiration.

Profit and loss calculations:

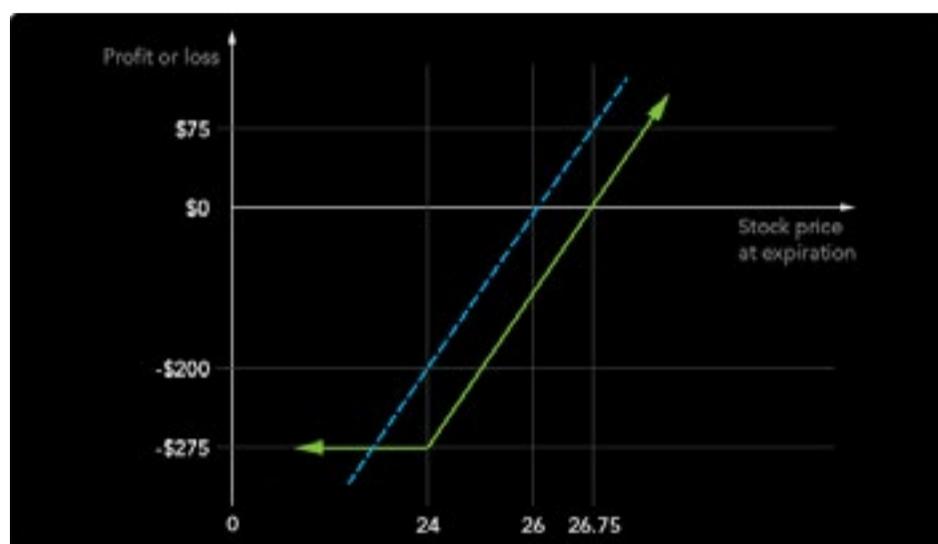
Stock profit: ($\$28.50$ stock price at expiration $-$ $\$26$ stock purchase price) \times 100 shares = $\$250$

$-$ Option premium paid: ($\$0.75$ premium \times 1 contract \times 100 shares) = $-\$75$

= $\$175$ profit

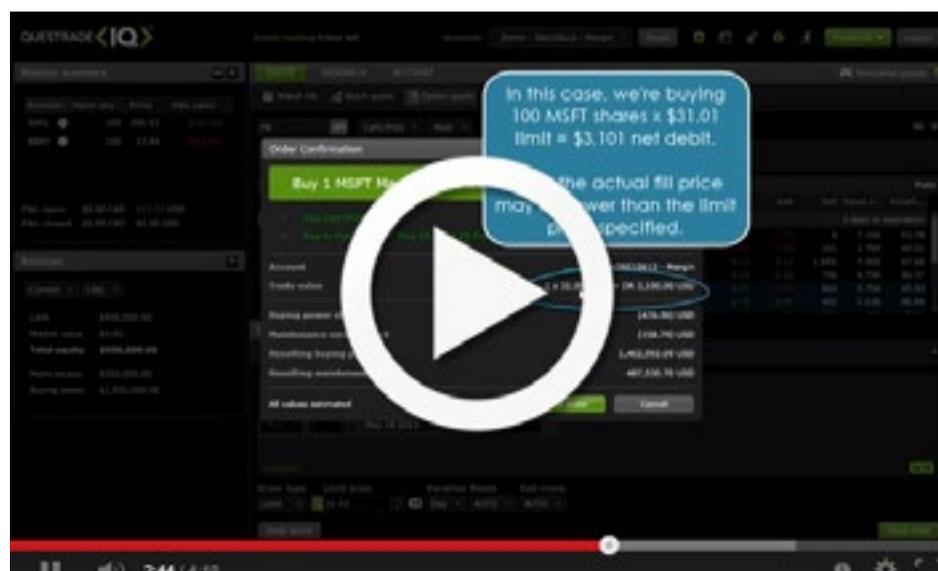
Note: commission fees are not included in the above calculations.

Married put payoff diagram



Real-world example

Learn how to set up a [married put](#) in IQ, and see it in action.



CHAPTER 5

VERTICAL CALL

A vertical call spread is an option strategy in which a trader buys and sells a short and long call option of the same underlying symbol simultaneously. The call options must have identical expiration dates but different strike prices.

Vertical call spread type:

- **Bull:** used by a trader who thinks the security's price will rise before the call options expire. This strategy may be used by a trader who wants to offset the cost of purchasing the long call option by selling a short call option. However, keep in mind that this also limits the potential profit.
- **Bear:** used by a trader who thinks the security's price will fall before the call options expire. This strategy may be used by a trader who wants to reduce their overall risk by having the higher strike as upside protection rather than selling the naked call on its own.

Your market outlook

Slightly bullish or slightly bearish

Who should run this strategy

Ideal for all traders, from novice to advanced.

Strategy benefits

Cost savings when implementing a bullish call spread due to the premium received from selling the short call

Reduced risk when implementing a bearish call spread by having the higher strike as upside protection rather than selling the naked call on its own

Strategy downsides

Profit is limited to the premium received when implementing a bearish call spread

Profit potential is capped when implementing a bullish call spread

Setting up the strategy

Bull vertical call

1. Buy one call option on the underlying stock.
2. Sell one call option on the same underlying stock with a higher strike price.
3. Ideally you want the stock price to be above the short call's strike at expiration.

Bear vertical call

1. Buy one call option on the underlying stock.
2. Sell one call option on the same underlying stock, with a strike price above the long call option.

3. Ideally you want the stock to be below long call's strike at expiration.

Option level required

To trade options within your account, your level of options trading must be approved. Option levels can be modified in [myQuestrade](#).

Option strategy: Long vertical calls
Option level required: Level 3

Option strategy: Short vertical calls
Option level required: Level 3

Questrade's margin requirements

[Learn more](#) about Questrade's option margin requirements.

Bull vertical call example

Scenario

You believe that ABC shares currently trading at \$50 will rise moderately, so you buy a 45 long call option for \$500 and sell a 55 short call option for \$100. Your initial investment would be a debit of \$400.

This strategy means that you:

- as the buyer of the call option, have the right to buy the shares at \$45 before the expiration date

and

- as the seller of the call option, have the obligation to sell the shares at \$55 before the expiration date, if the option is exercised.

Possible results

1. At expiration, the stock's price closes at \$56, meaning both options expire in the money (i.e. the strike prices – \$45 and \$55 – are both below the market price of the stock). In this case both call options would be exercised. The intrinsic value of the call options would be as follows:

- \$1,100 for the long call $(\$56 - \$45) \times 100$
- \$100 for the short call $(\$55 - \$56) \times 100$

Your spread value would be \$1,000 minus your initial investment of \$400, which would leave you with a profit of \$600.

2. At expiration, the shares close at \$39, meaning both options would expire worthless. Your initial investment of \$400 would be lost.

Profit and loss explained

Maximum profit

Maximum profit = [(strike price of short call – strike price of long call)] x (number of contracts) x 100 – option

premium paid

Maximum loss

Maximum loss = option premium paid

Break-even at expiration

Break-even point = strike price of long call + long call premium per share – short option premium per share

Stock value at start of strategy: \$50

To execute the bull vertical call strategy:

Buy: 45 long call option for \$500

Sell: 55 short call option for \$100

Result: \$400 net debit

Scenario 1

Stock price at expiration: \$39

Options not exercised at expiration.

Profit and loss calculations:

Option premium received: (\$1 premium x 100 shares) = \$100

– Option premium paid: (\$5 premium x 100 shares) = -\$500

= -\$400 loss

Scenario 2

Stock price at expiration: \$56

45 long call and 55 short call options exercised at expiration.

Profit and loss calculations:

Spread value: (55 short call strike price – 45 long call strike price) x 100 shares = \$1,000

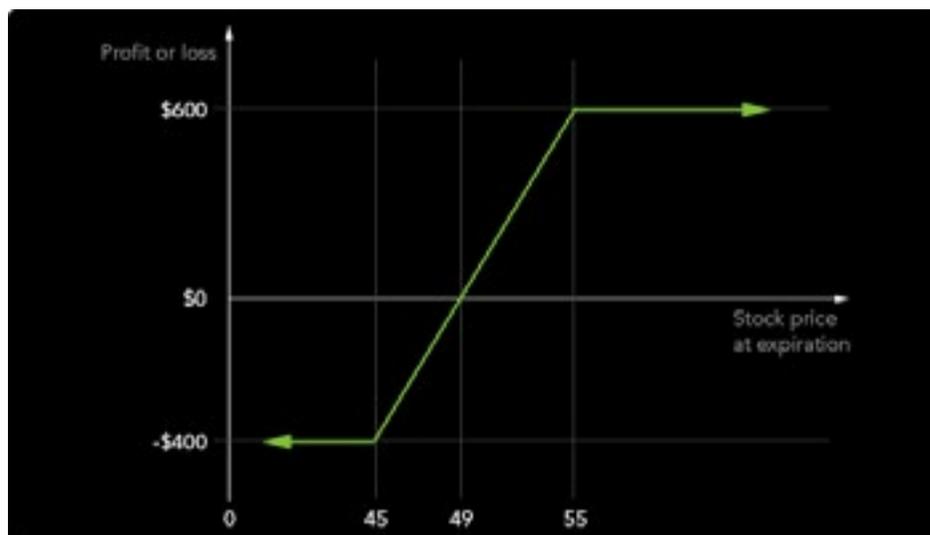
+ Option premium received: (\$1 premium x 100 shares) = \$100

– Option premium paid: (\$5 premium x 100 shares) = -\$500

= \$600 profit

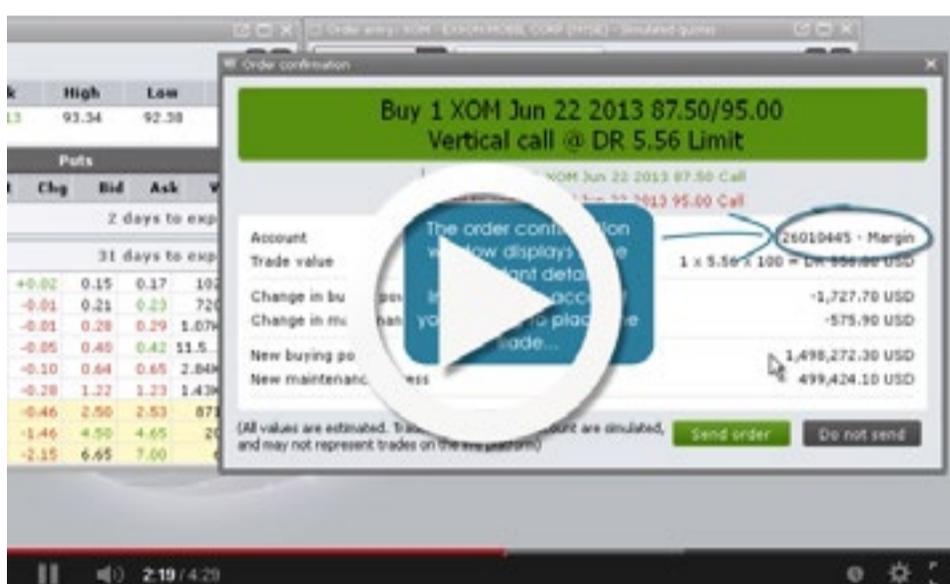
Note: commission fees are not included in the above calculations.

Bull vertical call payoff diagram



Real-world example

Learn how to set up a [bull vertical call](#) in IQ, and see it in action.



Bear vertical call example

Scenario

You believe that ABC shares currently trading at \$50 will fall in the near future, so you buy a \$54 long call option for \$100 and sell a \$45 short call option for \$500. Your initial credit would be \$400.

This strategy means that you:

- as the buyer of the call option, have the right to buy the shares at \$54 before the expiration date

and

- as the seller of the call option, have the obligation to sell the shares at \$45 before the expiration date if the option is exercised.

Possible results

1. At expiration, the stock's price closes at \$44, meaning both options expire worthless. As a result, you keep the \$400 credit as profit.
2. At expiration, the shares close at \$55, meaning both options expire in the money (i.e. the strike prices – \$45 and \$54 – are both below the market price of the stock).

In this case, both call options would be exercised. The intrinsic value of the call options would be as follows:

- \$1,000 for the short call $(55 - 45) \times 100$
- \$100 for the long call $(55 - 54) \times 100$

The spread value would be \$900, leaving you with a total loss of \$500 after the initial \$400 credit has been applied.

Profit and loss explained

Maximum profit

Maximum profit = (short option premium – long option premium) x number of contracts x 100

Maximum loss

Maximum loss = [(strike price of long call – strike price of short call) x number of contracts x 100] – NET option premium received

Break-even at expiration

Break-even point = strike price of short call + short option premium per share – long option premium per share

Stock value at start of strategy: \$50

To execute the bear vertical call strategy:

Buy: 54 long call option for \$100

Sell: 45 short call option for \$500

Result: \$400 net credit

Scenario 1

Stock price at expiration: \$44

Options not exercised at expiration.

Profit and loss calculations:

Option premium received: $(\$5 \text{ short call premium} \times 100 \text{ shares}) = \500

– Option premium paid: $(\$1 \text{ long call premium} \times 100 \text{ shares}) = -\100 (long call option premium)

= \$400 profit

Scenario 2

Stock price at expiration: \$55

45 long call and 55 short call options exercised at expiration.

Profit and loss calculations:

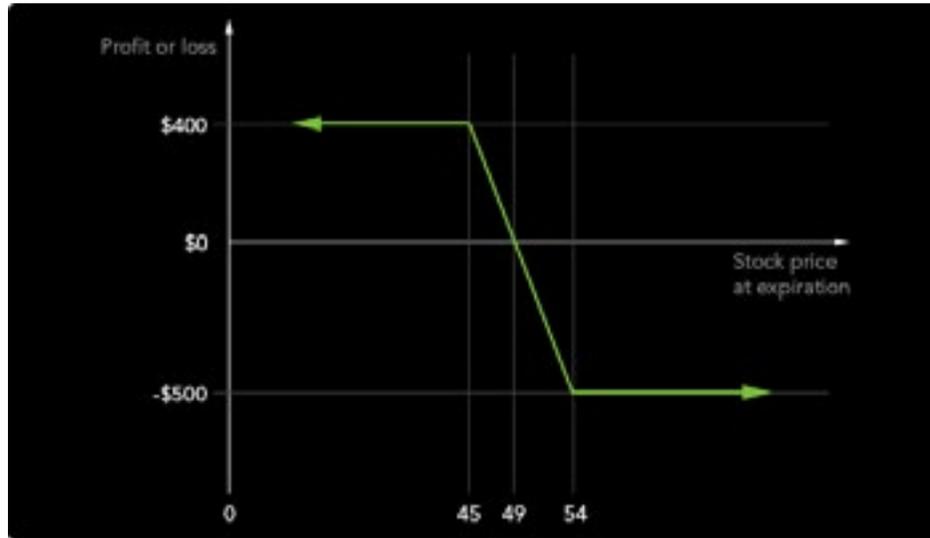
Spread value: $(45 \text{ short call strike price} - 54 \text{ long call strike price}) \times 100 \text{ shares} = -\900

+ Option premium received: $(\$5 \text{ short call premium} \times 100 \text{ shares}) = \500

= -\$400 loss

Note: commission fees are not included in the above calculations.

Bear vertical call diagram



Real-world example

Learn how to set up a [bear vertical call](#) in IQ, and see it in action.

The screenshot shows a trading platform interface with an order confirmation window. The window displays the following details:

- Order type: Sell 1 IN
- Expiration: 20 2013 21.00/25.00
- Strategy: Vertical
- Limit: @ CR 2.60 Limit
- Trade value: $1 \times 2.60 \times 100 = \text{CR } 260.00 \text{ USD}$

The interface also shows a table of market data and a play button icon overlaid on the order confirmation window.

CHAPTER 6

VERTICAL PUT

A **vertical put spread** is an option strategy in which a trader buys and sells a short and long put option of the same underlying symbol simultaneously. The put options must have identical expiration dates but different strike prices.

There are two types of vertical put spreads:

Vertical put spread type:

- **Bull:** used by a trader who thinks the security's price will rise before the call options expire. This is a credit strategy and may be used by a trader who wants to limit their risk by buying a long put option. However, keep in mind that this also limits the potential profit.
- **Bear:** used by a trader who thinks the security's price will fall before the call options expire. This is a debit strategy and may be used by a trader who wants to offset the cost of purchasing the long put option by selling a short put option. However, keep in mind that this limits the maximum profit to the difference between the put strike prices minus the premium paid if the underlying stock price falls below the long put option strike price.

Your market outlook

Slightly bullish or slightly bearish

Who should run this strategy

Ideal for all traders, from novice to advanced.

Strategy benefits

Limits your total potential risk

Offsets the cost of the put option by selling a less expensive put option

Strategy downsides

Limits the maximum profit to the initial option premium received if the underlying stock price rises above the short put option strike price

Setting up the strategy

Bull vertical call

1. Buy one put option on the underlying stock.
2. Sell one put option on the same underlying stock, with the same expiry date.

Ideally you want the stock to be above the short put's strike price at expiration.

Bear vertical put

1. Buy one put option on the underlying stock.
2. Sell one put option on the same underlying stock with the same expiry date.

Ideally you want the stock to be at or below the short put's strike at expiration.

Option level required

To trade options within your account, your level of options trading must be approved. Option levels can be modified in [myQuestrade](#).

Option strategy: Long vertical puts

Option level required: Level 3

Option strategy: Short vertical puts

Option level required: Level 3

Questrade's margin requirements

[Learn more](#) about Questrade's option margin requirements.

Bull vertical put example

Scenario

You believe that ABC shares currently trading at \$23 will rise moderately, so you buy a 20 long put option for \$125 and sell a 27 short put option for \$300. You would receive an initial credit of \$175.

This strategy means that you:

- as the buyer of the put option, have the right to sell the shares at \$20 before or at the expiration date
- and
- as the seller of the put option, have the obligation to buy the shares at \$27 before or at the expiration date, if the option is exercised by the buyer.

Possible results

1. At expiration, the stock's price closes at \$28, meaning both put options would expire worthless. As a result, you keep the \$175 credit as profit.
2. At expiration, the shares close at \$18, meaning both put options expire in the money (i.e. the strike prices are above the price of the underlying stock).

In this case, both put options would be exercised. The intrinsic value of the put options would be as follows: \$200 for the long call; \$900 for the short call. The spread value would be \$700, leaving you with a total loss of \$525 after the initial \$175 credit has been applied.

Profit and loss explained

Maximum profit

Maximum profit = option premium received – option premium paid

Maximum loss

Maximum loss = strike price of short put – strike price of long put – net option premium received

Break-even at expiration

Break-even point = strike price of short put – net option premium received per share

Stock value at start of strategy: \$23

To execute the bull vertical put strategy:

Buy: 20 long put option for \$125

Sell: 27 short put option for \$300

Result: \$175 net credit

Scenario 1

Stock price at expiration: \$18

20 long put and 27 short put options not exercised at expiration.

Profit and loss calculations:

Spread value: $(27 \text{ short put strike price} - 20 \text{ long put strike price}) \times 100 \text{ shares} = -\700

+ Option premium received: $(\$3 \text{ short put premium} \times 100 \text{ shares}) = \300

- Option premium paid: $(\$1.25 \text{ long put premium} \times 100 \text{ shares}) = -\125

= $-\$525 \text{ loss}$

Scenario 2

Stock price at expiration: \$28

Options not exercised at expiration.

Profit and loss calculations:

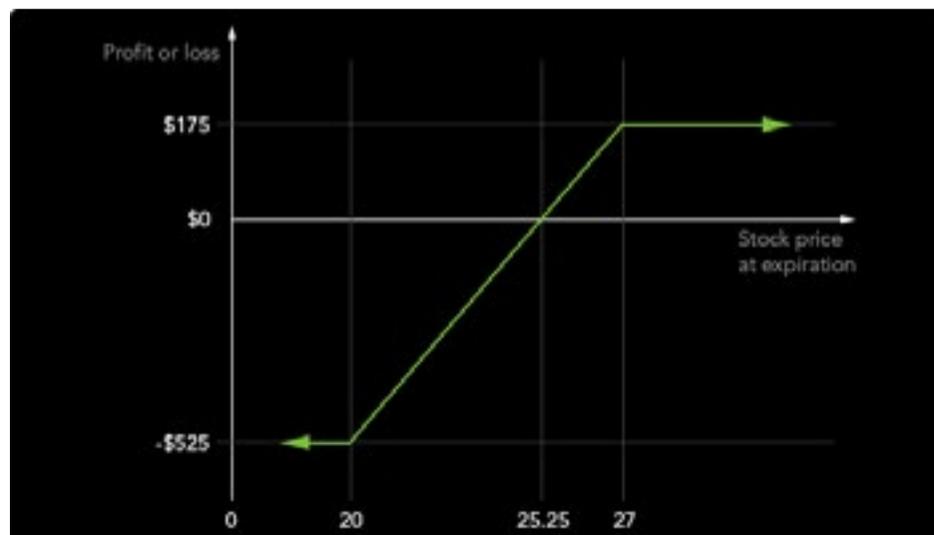
Option premium received: $(\$3 \text{ short put premium} \times 100 \text{ shares}) = \300

- Option premium paid: $(\$1.25 \text{ long put premium} \times 100 \text{ shares}) = -\125

= $\$175 \text{ profit}$

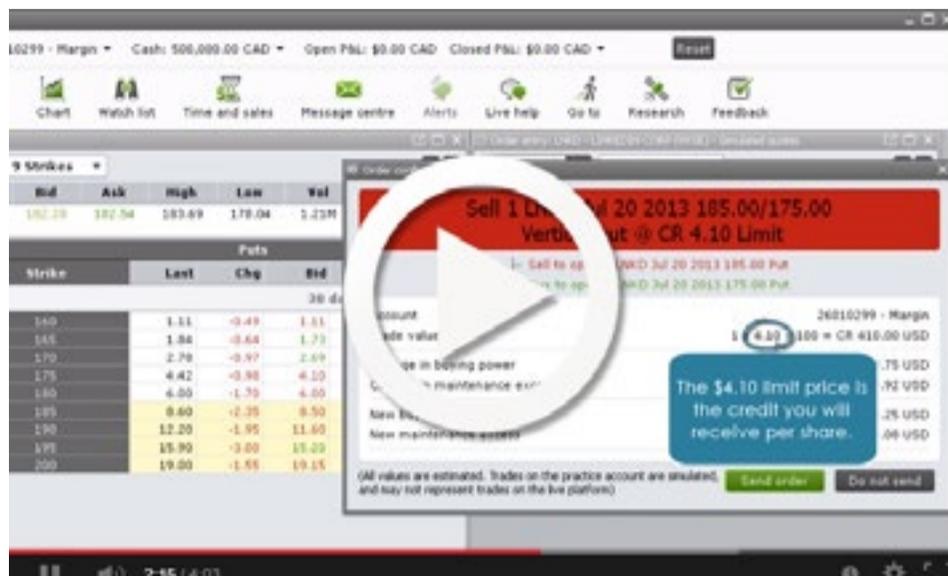
Note: commission fees are not included in the above calculations.

Bull vertical put diagram



Real-world example

Learn how to set up a [bull vertical put](#) in IQ, and see it in action.



Bear vertical put example

Scenario

Let's say that ABC shares are trading at \$28 in August. You believe that the price will fall in the near future so you purchase a September 30 long put option for \$400 and sell a September 25 short put for \$100. To enter into this strategy, your initial investment would be a debit of \$300.

This strategy means that you:

- as the buyer of the put option, have the right to sell the shares at \$30 before or at the expiration date
- and
- as the seller of the put option, have the obligation to buy the shares at \$25 before or at the expiration date, if the option is exercised by the buyer.

Possible results

1. ABC shares drop to \$24 at expiration, meaning both put options would expire in the money. The intrinsic value of each put would be as follows: \$600 for the long put; \$100 for the short put. This would give you a spread of \$500; minus the initial debit of \$300, this would give you a profit of \$200.
2. At expiration, if the shares closed at \$37, both options would expire worthless. As a result, you would lose \$300 as a result of entering into this strategy.

Profit and loss explained

Maximum profit

Maximum profit = strike price of long put option – strike of short put option – option premium paid + option premium received

Maximum loss

Maximum loss = option premium paid – option premium received

Break-even at expiration

Break-even point = strike price of long put – option premium paid per share

Stock value at start of strategy: \$28

To execute the bear vertical put strategy:

Buy: 30 long put option for \$400

Sell: 25 short put option for \$100

Result: \$300 net debit

Scenario 1

Stock price at expiration: \$24

30 long put and 25 short put options not exercised at expiration.

Profit and loss calculations:

Spread value = $(30 \text{ long put strike price} - 25 \text{ short put strike price}) \times 100 \text{ shares} = \500

+ Option premium received: $(\$1 \text{ short put premium} \times 100 \text{ shares}) = \100

- Option premium paid: $(\$4 \text{ long put premium} \times 100 \text{ shares}) = -\400

= \$200 profit

Scenario 2

Stock price at expiration: \$37

Options not exercised at expiration.

Profit and loss calculations:

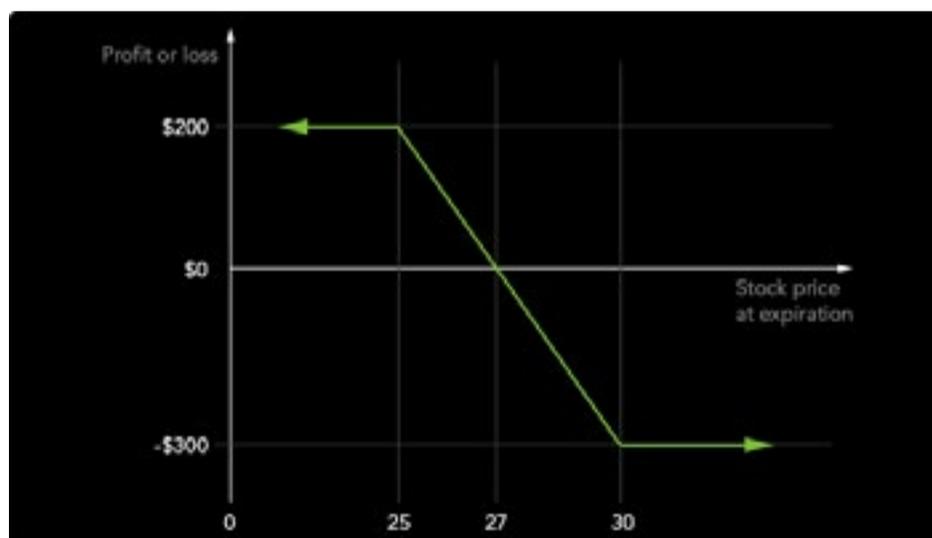
Option premium received: $(\$1 \text{ short put premium} \times 100 \text{ shares}) = \100

- Option premium paid: $(\$4 \text{ long put premium} \times 100 \text{ shares}) = -\400

= -\$300 loss

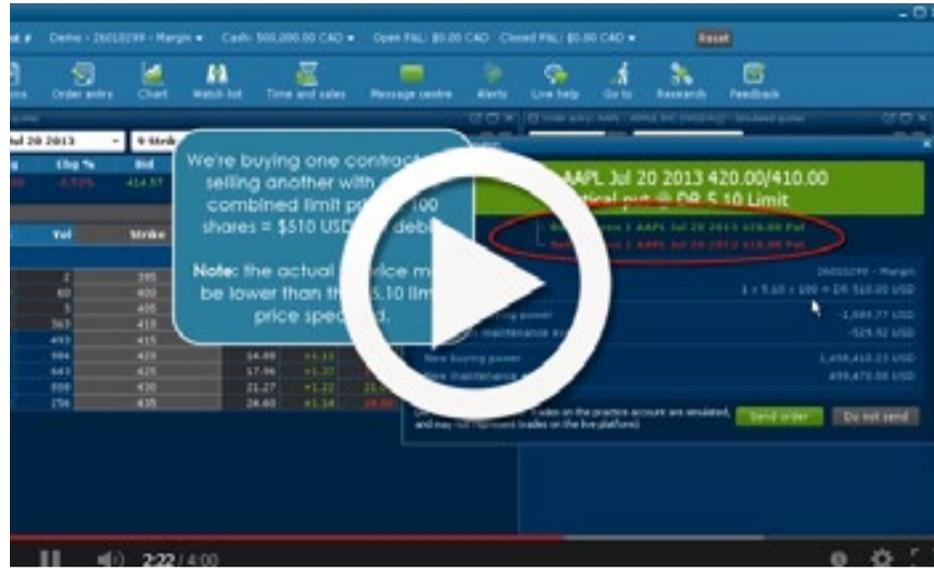
Note: commission fees are not included in the above calculations.

Bear vertical put diagram



Real-world example

Learn how to set up a [bear vertical put](#) in IQ, and see it in action.



RISK DISCLOSURE

Transactions in Options carry a high degree of risk. Purchasers and sellers of Options should familiarize themselves with the type of Option (i.e. put or call) which they contemplate trading and the associated risks. You should calculate the extent to which the value of the Options must increase for your position to become profitable, taking into Account the premium and all transaction costs.

The purchaser of Options may offset or exercise the Options or allow the Options to expire. The exercise of an Option results either in a cash settlement or in the purchaser acquiring or delivering the underlying interest. If the Option is on a Future, the purchaser will acquire a Futures position with associated liabilities for Margin (see the section on Futures above). If the purchased Options expire worthless, you will suffer a total loss of your investment which will consist of the Option premium plus transaction costs. If you are contemplating purchasing deep out of the money Options, you should be aware that the chance of such Options becoming profitable ordinarily is remote.

Selling ('writing' or 'granting') an Option generally entails considerably greater risk than purchasing Options.

Although the premium received by the seller is fixed, the seller may sustain a loss well in excess of that amount. The seller will be liable for additional Margin to maintain the position if the market moves unfavourably. The seller will also be exposed to the risk of the purchaser exercising the Option and the seller will be obligated to either settle the Option in cash or to acquire or deliver the underlying interest. If the Option is on a Future, the seller will acquire a position in a Future with associated liabilities for Margin (see the section on Futures above). If the Option is 'covered' by the seller holding a corresponding position in the underlying interest or a Future or another Option, the risk may be reduced. If the Option is not covered, the risk of loss can be unlimited.

Certain exchanges in some jurisdictions permit deferred payment of the Option premium, exposing the purchaser to liability for Margin payments not exceeding the amount of the premium. The purchaser is still subject to the risk of losing the premium and transaction costs. When the Option is exercised or expires, the purchaser is responsible for any unpaid premium outstanding at that time.