# **STOCK & OPTIONS TRADING**

By Hermes Research Labs 2025. Second Edition

The stock market is the greatest opportunity machine ever created.

We believe that everyone should have access to the stock market, not just the rich and privileged. That's why we wrote this guide. There is a place for everyone and every strategy in the stock market.

You can invest in stocks, holding them for many years and pocketing their dividends. You can also trade stocks. You can day trade them, swing trade them, or short them (bet that a stock is going to go down instead of up). Don't ever let anyone tell you what you can or cannot do with stocks.

After reading this guide, you may even come up with your own original way of profiting from the stock market that no one has ever used before . In this guide, we will give you an overview of many different approaches to the stock market. When you are first getting started, you should try out many different trading and investing strategies and see what works for you.

Each one of us has a different psychological make-up and approach to risk. Some love the quick dopamine hits that come from trading. Others just want to live their lives, and get rich slowly and quietly without any stress.

There is room for both types of people in the stock market. We would just urge you to learn how the stock market actually works. Many people never take the time to learn this. Many people like to yell at the stock market and tell it what to do.

The stock market is a complex emergent system. It won't listen to you or to anyone else. It's like the weather-- it just does what it does, so you might as well get used to it. Take the time to learn how the stock market really works.

This is important because we live in a world driven by financial markets. If you can learn even a little bit about how they work, you can give yourself a huge advantage in life.

# Let's get started!

What exactly is a stock anyway?

A stock is a share of ownership in a company. When you buy 100 shares of McDonald's, you become a partial owner of the company. You become a "shareholder." If you had enough cash, you could simply buy up every share of McDonald's, and then you would own the entire company. You would be the emperor of burgers. Here's another way to think about it.

McDonald's is like a pie that has 715,200,000 slices (shares outstanding). Each of these slices is valued by the market at \$317.24. That's what we mean when we say that the stock is trading at 317.24. Now let's take the total number of slices and multiply it by the price per slice. We get about \$226.89 billion. That's the current total value of this "pie" that we call McDonald's.

Another word for this is "market cap" or "market capitalization." When we hear that Apple has become the biggest company in the world, we usually mean that it has the highest market cap.

On 3 October 2018, Apple had a market cap of \$1.103 trillion. Today (February 1 2025), its market cap is \$3.55 trillion. A company's stock price and market cap will move around a lot over time.

This is because all of the world's smartest minds (and computers) are constantly processing new information and collectively deciding what a company is worth.

By buying or selling a company's stock, these traders and investors push a stock's price to where it should be trading based on all known information about the company. Sometimes the market is temporarily wrong. In 1999, Pets.com was valued at about \$300 million. A year later, it was valued at zero, as the company went out of business.

Sometimes the market is temporarily wrong. In 1999, Pets.com was valued at about \$300 million. A year later, it was valued at zero, as the company went out of business. In 1996, Apple was valued at less than \$3 billion. Then the company brought back Steve Jobs, who introduced the iPod and the iPhone.

The price of Apple's stock (and hence its market cap) first slowly (and then quickly) ramped up as the market began to figure out how successful and profitable these devices would be.

The stock market adjusts to new information. That is one thing that makes stocks wiggle around. Stocks also move based on the laws of supply and demand. If a lot of people want to buy a stock, the share price will move up.

Maybe those people are overly optimistic, but their buying will still cause the stock to move up. Then if a very large investor comes in and starts to dump his stock, the price of the stock will move down.

Sometimes it is a mystery why a stock is trading up or down. Eventually it becomes apparent.

Legendary hockey player Wayne Gretzky is famous for saying: "I skate to where the puck is going to be, not to where it has been."

The stock market does something similar. It tries to figure out what is most likely to happen over the next 3-6 months, and then prices stocks accordingly. That's why we say that the stock market is a "forward-looking mechanism" or "discounting mechanism."

In early 2009, the U.S. economy was still in really bad shape. Everyone was still losing their homes and jobs. Even so, the stock market began to move up off of its lows. Then it really began to rally.

This confused a lot of people who were looking out of their windows and still seeing bad economic conditions. But what the stock market was doing was

pricing in an economic recovery, which turned out to be correct. The same kind of thing can happen with an individual stock.

Sometimes a stock will report great earnings (i.e. tell everyone that it had a good quarter and made a lot of money), but still fall sharply the next day. It does this because traders are reacting to something else in the earnings call or in management's forward-looking statements. The stock is "skating" to where the company is going to be in a few months.

An inexperienced trader will be tempted to buy a stock like this when it is down, but this is almost always a bad idea. It can take time for new information to get priced into a stock, which means that this stock could continue to move lower for days or even weeks. The reverse can also happen.

A company may report much higher than expected earnings. The next day, the stock gaps up (opens up much higher than where it was trading the previous day). Then the stock continues to move higher for a few days, or even weeks.

This happens because the big institutional players (mutual funds, pensions, hedge funds) are buying more shares of the stock and driving it closer to its new "fair value" price based on the new information that came out in the earnings report and call.

When one is buying millions (or even billions) of dollars worth of stock, as these players are, one cannot do it simply by pressing a button. It can take hours, days, or even weeks.

In a later chapter, we are going to show you how you can make money by taking advantage of these slow, lumbering giants. But for now, we'd like to stick to the basics.

#### How to Get Started with Stocks

Some people like to buy stocks and hold them for many years. We call them "investors."

Other people like to buy and sell stocks more quickly, maybe holding them for only an hour, a day, a week, or a month. We call these people "traders."

Both are perfectly good ways to make money in the stock market. Some investors look down on traders, and vice versa.

We would urge you not to take a side in this debate. We like to have many different strategies running at the same time: long-term strategies, short-term strategies, as well as strategies that involve bonds, options, futures, currencies, venture capital, and real estate.

You should try the different strategies that we describe in this guide, in order to discover what works best for you and your personal psychology and risk tolerance.

Remember to consult with a registered financial adviser before making any investment decisions. Then when you are ready, the question will arise: So how exactly do I buy a stock? Stocks are usually bought and sold on what are called "stock exchanges."

A stock exchange is simply a place where buyers and sellers show up and exchange their shares for money, or their money for shares.

A stock exchange is a little bit like an eBay for stocks. The most well-known exchanges in the U.S. are the New York Stock Exchange (NYSE) and the Nasdaq. The NYSE is best known for its blue chip (high-quality) stocks like Coca-Cola and McDonald's.

The Nasdaq is best know for its tech stocks like Netflix and Apple. NYSE stocks are usually identified by a two-letter unique "ticker" (stock symbol) like KO (Coca-Cola) or HD (Home Depot). Nasdaq stocks usually have four-letter tickers like AAPL (Apple) or NFLX (Netflix). Occasionally you'll also find a two-letter ticker on the NASDAQ like FB (Facebook).

Stock exchanges used to involve a lot of men standing on a floor with little pads of paper and yelling buy and sell orders. Now it's all done by computers. The computers match up buyers and sellers who want to exchange their stock for cash (or vice versa) at a certain price.

As an individual, you cannot trade directly on a stock exchange. For that you will need a "broker" or "brokerage account."

A broker is simply a middleman who gives people access to a stock exchange. In the U.S., well- known brokers include Charles Schwab, Interactive Brokers, TD Ameritrade, TradeStation, Fidelity, and E\*Trade.

When you are buying a stock, you will be given the choice of using two different kinds of orders. The first is called a "market order." This order tells the broker to get you into the stock as quickly as possible, regardless of price.

If you use a market order, you might end up buying the stock at a price that is far away from where it last traded . This is because every stock has a bid price and an offer (or "ask") price.

The bid is the price at which someone is willing to buy the stock. The offer is the price at which someone is willing to sell the stock.

Memorize this phrase right now: "You sell to the bid, and you buy from the ask."

The distance between the bid and the ask is called the "bid-ask spread." A liquid stock like Microsoft (MSFT) or Apple (AAPL) will have a bid-ask spread of just a penny. So right now, there is someone at the bid for Microsoft who is willing to buy 2,200 shares for 376.82. And there is someone at the ask who is willing to sell 1,200 shares for 376.83. That's a bid-ask spread of just a penny (\$0.01).

A liquid stock is defined as a stock where you can buy or sell a lot of shares without moving the stock too much. Liquid stocks in the U.S. usually have a bid-ask spread of just a penny or two.

If you place a market order to buy a liquid stock, you will usually be OK. That's because a market order will tell the broker that you want to buy your shares from the ask.

Since it is just a penny away from the bid price, your order will usually be filled very close to where you are currently seeing the stock trade. However, if you use a market order on an illiquid stock, you might get a price that is far away from the current market, or from where the stock last traded.

Let's say that stock XYZ is illiquid. There's a bid for just 300 shares at 50.00. And there's an ask for just 200 shares at 52.00. If you use a market order on a stock like this, you will have your order filled at 52.00 or higher.

If you place a market order for 400 shares on XYZ, your broker will first give you the 200 shares at 52.00. Then it will look for the next best price. In an illiquid stock, that might be another 100 shares at 52.25 and then another 100 shares at 52.50. So you will end up getting 400 shares of XYZ at an average price of 52.1875.

Now let's say that you made a mistake and want to immediately sell your stock. If you place a market order to sell, you will first be able to sell 300 shares to the bid at 50.00. Then maybe the next highest bid is 100 shares at 49.50.

If you are filled at these prices, you will end up having lost \$925 (before commission), even though the stock has not really moved. That is why it is usually best to stay away from illiquid stocks. If you absolutely must trade them, you can try putting in a limit order that is right in the middle of the bidask spread. But there is no guarantee that your order will ever be filled.

A limit order is the second type of order, after a market order. Whereas a market order tells your broker to just get you into or out of the stock as fast as possible, a limit order specifies a price.

So if you place a limit order to buy MSFT at 120.25, your order will only be filled if there is a seller that is willing to part with the shares at that price. If there is never a seller at that price, your order will never be filled. We almost always use limit orders in our trading, even with highly liquid stocks.

So if we want to buy a liquid stock like Microsoft, we will look where the ask is, and then just enter a limit order using that ask price. That way we won't get into trouble if a bit of market-moving news comes out one millisecond after we place our order and Microsoft suddenly spikes to 126.

In this situation, if you have used a market order, there is a good chance that you will get filled at 126, even though Microsoft is a liquid stock. When you place an order to buy or sell a stock, you will have one more choice to make: "Do I use a Day order or a GTC order?" A Day order will only be executed during regular market hours today. If the order has not been filled by the time the stock market closes for the day, it will be automatically cancelled by the broker.

A GTC ("good 'til cancelled") order will be good for today's market hours, as well as the following days and weeks. If you don't cancel it, it will still be working. Some brokers will automatically cancel a GTC order after a month or more, if it has not yet been filled. Check with your particular broker to find out their policies.

Normal trading hours for U.S. stock exchanges like the NYSE and Nasdaq are 9:30 am EST to 4 pm EST. Some brokers will let you trade stocks in the premarket trading session (4 am to 9:30 am EST) or in the post-market trading session (also known as "after-hours trading" and lasting from 4 pm to 8 pm EST).

If you are going to trade before the market opens or in the after-hours market, always use a limit order. Even normally liquid stocks can be quite illiquid (and hence volatile) during both of these trading sessions. "Volatile" means that the stock wiggles around or jumps around a lot.

You may see it trading at 85, then 87, then 82, then back to 85. Stocks with lower trading volume will usually be more volatile, with a wide bid-ask spread that also bounces around. Until you become an advanced trader, it is probably best to stick to normal market hours.

#### What are Options?

Financial derivatives have been around for at least 200 hundred years since the Japanese introduced the first secondary market for derivatives related to commodities.

Nevertheless, they made their debut in the U.S. after the Chicago Board of Trade was founded, in 1848, to organize commodities trading activities. These markets introduced futures and opened the doors for many new financial instruments including options.

In this chapter, we will explain the basics of how options work and how they are usually employed in today's modern financial markets.

An option is a contract between two parties giving the taker (buyer) the right, but not the obligation, to buy or sell a security at a predetermined price on or before a predetermined date. To acquire this right, the taker pays a premium to the writer (seller) of the contract.

# **Call Options**

A call option is a financial contract that gives the holder the right, but not the obligation, to purchase a certain underlying asset at a certain price, known as the strike price. For example, ABC Corporation is trading at \$120. A one-month call option is trading for \$3.50. The buyer of this call option has the right, but not the obligation to buy 100 shares of ABC for \$120 per share at any time during the life of the contract. For this right, the buyer of the contract pays \$3.50 to the seller.

The seller of the contract receives and keeps the \$3.50 but is obligated to deliver 100 shares at \$120 if called upon to do so.

#### **Put Options**

In turn, a put option is a financial contract that gives the holder the right, but not the obligation, to sell a certain underlying asset at the strike price on or before expiry.

Using the example of ABC Corporation trading at \$120, a one-month put option is trading at \$4.00. The buyer of this put option has the right, but not the obligation to sell 100 shares of ABC for \$120 per share at any time during the life of the contract.

For this right, the buyer of the put contract pays \$4.00 to the seller. The seller of the contract receives and keeps the \$4.00 but is obligated to buy 100 shares at \$120 if called upon to do so.

# **Rights and Obligations**

The fact that the individual or institution who holds the option has the right and not the obligation to exercise the derivative means that if the result of the operation turns out to be unprofitable, the holder can abstain from completing the transaction and his sole loss would be the premium paid to purchase the option.

On the other hand, if the holder does exercise the option, the seller of the option must fulfill the contract.

# **RIGHTS AND OBLIGATIONS**

	Buyer: Has all the Seller: Gets all the rights obligations		
Calls	Right to BUY the Asset	Obliged to SELL the Asset	
Puts	Right to SELL the Asset	Obliged to BUY the Asset	

#### Why use Options?

Options can be used for four main purposes:

- Hedging/Risk Management
- Leverage
- Income
- Speculation

# Hedging/Risk Management

Options are a fantastic tool for hedging exposure to a certain asset. Let's say an investor has a portfolio of S&P500 stocks and is concerned about a drop in their value over the next few months.

Buying an SPX put option would give the investor some downside protection. If the S&P500 falls, the value of the investors stock portfolio will drop, but he will have made some profits from the bought put which will help offset the losses.

This is a simple example and there are many different ways in which options can be used for hedging and risk management.

#### Leverage

Since options cost only a small fraction of the price of the underlying asset an investor can gain a larger exposure to a certain security by buying put or call options instead of buying the underlying asset directly.

This particular feature of options is known as leverage. Let's say you want to invest in ABC Corporation stock, as you think the price of its shares will go up over the next 3 months.

If you have \$1,000 and the shares cost \$50 you could only buy 20 shares. Instead, you could buy 2 call option contracts for \$500 that give you the right to buy 100 ABC Corporation shares at \$50, 3 months from now.

If the price of ABC's shares goes up to \$60 you will earn a 20% return if you invested in the shares directly. At expiry, the \$50 call option would be worth \$10 with the underlying stock trading at \$50. In this case, the call option has achieved a 100% return.

However, leverage cuts both ways and if the stock doesn't move as expected, the investor could lose 100% of their investment.

# Income

Using options to generate income is a popular strategy with investors. Covered calls are a logical place for stock investors to start because it is an easy scenario to understand.

Investors who sell call options on shares they own, can produce an income in addition to any dividends earned. By selling a call option, the investor gets to

keep the option premium, but there is a possibility that the shares will get called away if the stock price rises above the strike price of the sold call.

Covered calls will be covered in more detail shortly. Other investors will use options to generate income on shares they have no ownership of via more advanced strategies such as vertical spreads, iron condors, calendar spreads and butterflies.

#### Speculation

Many investors and traders will use options to speculate on the market. Those expecting the market to rise might buy call options in the hope of making a large potential return.

Those expecting the market to drop might buy put options. Other traders may opt for income generating strategies.

The great thing about options is that there are many strategies that can be used, no matter what your market outlook or opinion.

#### **Option Features**

In this chapter, we'll take a look at the seven basic characteristics of all option contracts:

- Underlying Asset
- Call vs Put
- Contract Size
- Expiration Date
- Strike Price
- Premium
- American Vs European

# UNDERLYING ASSET

As we know, the definition of an option is that it is a contract giving the owner (buyer) of the option the right (but not the obligation) to buy or sell a defined quantity of a defined asset.

This asset is called the underlying asset or sometimes just underlying. Options can be traded on many different underlying assets, particularly in the United States and the universe of underlying assets has expanded rapidly in the last five to ten years.

The most common underlying assets are common stocks (shares in companies trading on the stock exchange). Other popular assets for option traders include indexes such as the S&P 500, Nasdaq and Russell 2000.

The Russell 2000 is a particular favorite with option traders because of the high volatility, high liquidity and 10 point strikes. Options can also be traded on futures, bonds, interest rates, currencies and ETF's

#### CALL VS PUT

There are two basic types of options – call options and put options. As a reminder A call option gives you the right, but not obligation, to buy the underlying asset.

A put option gives you the right, but not obligation, to sell the underlying asset.

#### **CONTRACT SIZE**

An options contract represents exposure to a number of underlying shares. The standard contract size is generally 100. This can occasionally change if there is a corporate action such as a reorganization or a new issuance of shares.

In the case of an index option, the contract value is fixed at a certain number of dollars per index point. The size of the contract is equal to the index level x the dollar value per index point.

For example, S&P500 (SPX) options have a value of \$100, so for an option contract with a strike price of 2,800, one contract would be 2,800 x 100 = 280,000.

#### **EXPIRATION DATE**

Options have a limited life span and expire on a certain date. The expiration date is the day on which all unexercised options expire and can no longer be traded. The expiration date is fixed during the life of an option and will not change.

Any options that are not exercised before expiration become worthless. The expiration date for listed stock options in the United States is normally the third Friday of the contract month or the month that the contract expires.

On months that the Friday falls on a holiday, the expiration date is on the Thursday immediately before the third Friday 1. Some brokers will automatically exercise any options that are in-the-money by more than \$0.01.

If a trader doesn't want the option to be exercised, they should close out the position prior to expiration. European style monthly Index options also expire on a third Friday of the month, however the last trading day for Index options is the Thursday.

This can result in a significantly different settlement price than the Thursday closing price. In the last few years there has been an explosion in the number of weekly options available. In some underlying instruments like SPX, there are options expiring every few days.

# **STRIKE PRICE**

The strike price is the predetermined price for buying or selling the underlying asset. The strike price does not change through the life of the option unless there is a corporation action such as a reorganization.

Depending on the underlying asset, there are usually many different strike prices available. Taking a quick look at SPY options for the next month's expiration date shows strike prices available from \$140 to \$225 in 5-point intervals then from \$225 to \$325 in 1-point intervals, then again from \$325 to \$400 in 5-point intervals.

Compare that to a less popular underlying asset like IYT and we have \$155 to \$175 in 5-point intervals, then \$175 to \$200 in 1-point intervals and \$200 to \$220 in 5-point intervals.

#### PREMIUM

The premium is the price of the option which is determined by the buyer and seller of the option. Option premium is determined by market participants with market makers playing a huge role in determining the price of options.

Option premiums are quoted in cents per share. To calculate the total premium cost, traders need to take the price in cents times the multiplier. An option contract quoted at \$1.20 would cost \$120 to buy ( $$1.20 \times 100$ ). Option premiums are higher for high volatility stocks which reflects the chance of higher movement in the underlying over the course of the options life.

For example, an at-the-money call option on a high volatility stock like ROKU trades for around \$14.00 whereas a similar call on a low volatility stock like JNJ trades for around \$4.00. Option premium will also depend on the price of the underlying stock.

A stock like AMZN which is currently trading at \$1720 has at-the-money options trading around \$65. Compare that to a low-price stock like GE which is trading at \$8.30 where at-the-money options trade for only \$0.20 - \$0.30.

# AMERICAN VS EUROPEAN

The difference between American and European options relates to when the owner of the option can exercise the option. American style options can be exercised at any point during the options life, but a European style option can only be exercised at a single point in its life – the moment it expires.

Exercising an option has nothing to do with trading an option and both style of options trade exactly the same way during their lifetime. The terms American and European have nothing to do with geographic locations.

Both types of options trade in many places. European style options are very common on American exchanges (SPX, RUT and NDX are all European style options).

# **Use Cases of Options**

Let's look at some practical examples of how you can make options work for you.

#### INCOME GENERATION

Selling call options against shares already owned is one of the simplest and most rewarding ways to trade options. It's a great way to get started for those that are new to options. It's a logical place to start if you're familiar with share ownership.

Selling options over shares you own, generates income in additional to any dividends earned while holding the shares.

The risk of course, is that your shares might get called away if they rise strongly. You are also limited your upside because any gains the stock makes above the strike price are not captured.

Let's look at a couple of examples:

# SCENARIO 1: SELLING OPTIONS ON SHARES YOU ALREADY OWN

Assume you already hold 100 shares of ABC Corporation as part of a diversified long-term retirement portfolio. The current price is \$60 and you would be happy to sell your shares if the price reached \$62.50.

You look in your brokerage account and see that a 3-month \$62.50 call option is trading with a bid price of \$0.98 and an ask price of \$1.02. You place an order to sell the \$62.50 call option for \$1.00 which is the mid-point of the bid-ask spread.

Assuming your order gets filled, you will receive \$100 in premium ( $1.00 \times 100$  shares in the contract) which is yours to keep. As an option seller, you now have the obligation to sell your shares for \$62.50 if called upon to do so at any time during the life of the option.

If ABC Corporation is trading above \$62.50 at expiry, your shares will be called away and you will have made a nice profit. IF ABC Corporation is trading below \$62.50 at expiry, you get to keep your shares, and the \$100 option income.

You can now continue to hold the shares or sell a new call option.

# SCENARIO 2: SELLING A PUT OPTION ON A STOCK YOU ARE HAPPY TO OWN

In this example, you don't own any ABC Corporation shares, but would be happy to buy them for \$57.50. Upon checking the option quotes, you see that a 3-month \$57.50 put option on ABC Corporation is trading with a bid price of \$1.12 and an ask price of \$1.16.

You place an order to sell the \$57.50 put option for \$1.14. Assuming your order is filled, you receive \$114 in premium. You now have the obligation to buy 100 shares of ABC Corporation at \$57.50 if called upon to do so during the life of the option.

If ABC Corporation is trading above \$57.50 at expiry, your put option expires worthless and you have generated \$114 in income. If ABC Corporation is trading below \$57.50, your put option will be assigned and you will be required to buy 100 shares at \$57.50.

The net cost of the purchase is \$56.36 which is calculated as the strike price less the premium received (\$57.50 - \$1.14). Selling put options is a great way to take ownership of shares you want to buy for a lower cost price.

The downside is that \$114 is the maximum profit you can make, no matter how high ABC Corporation's shares go.

#### **PORTFOLIO PROTECTION**

Options are a fantastic way to protect against a short-term fall in a stock's price without having to sell your shares. Selling call options was covered under income generation and does give some small protection against a drop in a stock's price, but the protection is limited to the amount of premium received.

Any further falls are not protected. A way to obtain more protection is by buying a put option. Using ABC Corporation again, the stock is trading at \$60 and you are worried about a sharp decline.

You want to lock in a sale price in case things get really bad.

Instead of selling the 3-month \$57.50 put option as in the previous example, this time we buy the put option. The put option costs \$1.14 or \$114 in total and we have a guaranteed sale price of \$57.50, no matter how low the stock goes.

Even if the company goes bankrupt and the share price goes to \$0, you can still sell you shares for \$57.50. You can see why options are such a great tool for portfolio protection! Think of buying a put like buying an insurance contract.

You pay a premium and receive coverage in the event of a disaster. If the disaster doesn't happen, you lose the premium that you paid, but you don't mind because you were able to sleep at night knowing that you had protection against the worst-case scenario.

#### LEVERAGED EXPOSURE

Speculators can choose to try and profit by predicting movements in the underlying shares. Traders can achieve far greater returns using options as opposed to just buying or selling shares.

Buying call options allows traders to profit from an increase in the price of the underlying asset. Buying 100 shares can be prohibitively expensive for some

investors but buying call options allows traders to leverage their capital to potentially achieve higher returns.

The flip side with leverage of course is the higher risk and when buying call options, there is always a chance that the investor will lose 100% of their investment.

Here's a table comparing the potential returns from share ownership and call options:

ABC Corporation Stock Price: \$60 3-Month Call Option : \$1.00					
Stock Price at Expiry	100 Shares \$	100 Shares %	\$60 Call Option \$	\$60 Call Option %	
\$40	(2,000.00)	-33.33%	(100.00)	-100.00%	
\$45	(1,500.00)	-25.00%	(100.00)	-100.00%	
\$50	(1,000.00)	-16.67%	(100.00)	-100.00%	
\$55	(500.00)	-8.33%	(100.00)	-100.00%	
\$60	0.00	0.00%	(100.00)	-100.00%	
\$65	500.00	8.33%	400.00	400.00%	
\$70	1,000.00	16.67%	900.00	900.00%	
\$75	1,500.00	25.00%	1,400.00	1400.00%	
\$80	2,000.00	33.33%	1,900.00	1900.00%	

Notice that the gains in dollar terms are similar, but the percentage returns are much higher for the call option. Buying call options can also be thought of in terms of buying time to decide if you want to buy the shares.

You pay the premium which is only a fraction of the price of the underlying shares. The option then locks in a buying price for the shares if you decide to exercise your option.

# Strategy #1: Buy-Write or Covered Call

**Construction** - Long stock, short one call for every 100 shares of stock owned.

**Function** – To enhance profitability of stock ownership and to provide limited downside protection against adverse stock movement.

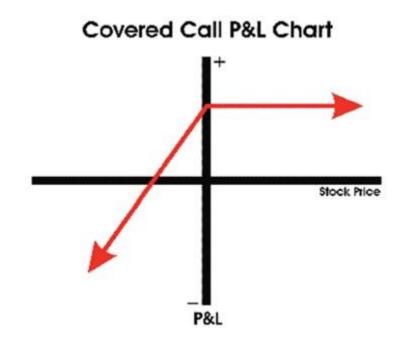
**Bias** - Neutral to slightly bullish.

**When to Use** – When you feel the stock will trade up slightly or in a tight range for a period of time and you plan on holding the stock for longer term.

**Profit Scenario** – If stock rises, profit will be enhanced by premium received. If stock stagnates, you will profit from premium received from call sale.

**Loss Scenario** – If stock trades lower than the point defined by your purchase price minus the premium received from call sale you will lose dollar for dollar. Call premium received will act as an offset to the loss in the stock.

**Key Concepts** - If stock trades up aggressively, you will only profit up to a stock price defined by the strike price plus option price. If the stock continues higher above that point (breakeven), you will incur lost opportunity. Further, if stock closes above strike price, stock will be called away unless necessary adjustment is made. Philosophically identical to the Sell-Write position except in opposite direction. Time decay helps the position.



# Strategy #2: Sell-Write or Covered Put

**Construction** – Short stock, short one put for every 100 shares of stock shorted.

**Function** – To enhance profitability of short stock position and to provide limited protection against adverse stock movement.

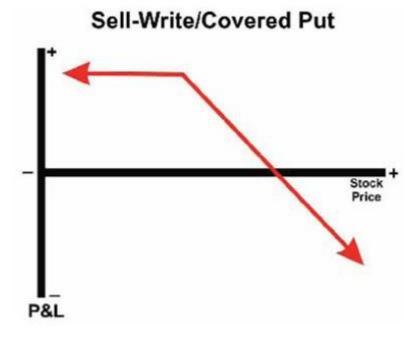
**Bias** - Neutral to slightly bearish.

**When to Use** – When you feel the stock will trade slightly down or in a tight range for a period of time.

**Profit Scenario** – If stock falls, profit will be enhanced by premium received. If stock stagnates, you will profit from premium received from put sale.

**Loss Scenario** – If stock trades higher than the point defined by your stock sales price plus the premium received from put sale, you will lose dollar for dollar. Put premium received will act as stock loss offset.

**Key Concepts** – If stock trades down aggressively, you will only profit down to a stock price defined by the strike price minus option premium. If the stock continues down below that point (breakeven), you will incur lost opportunity. Further, if stock closes below strike price, stock will be assigned to you unless necessary adjustment is made. Time decay helps the position. Philosophically identical to Buy-Write except in opposite stock direction.



# Strategy #3: Protective Put

**Construction** – Long stock, long 1 put per every 100 shares of stock

**Function** – To provide maximum downside protection for long stock position. Long stock insurance policy.

Bias - Bullish but cautious

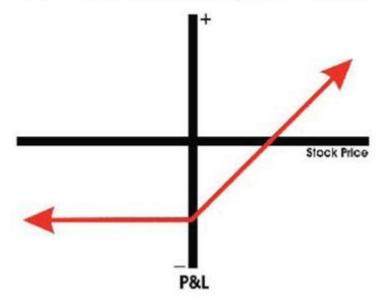
**When to use** – When wishing to protect profits of long stock position while wishing to retain position. Also, to protect speculative stock purchases (i.e. purchasing stock on potential chart break out from present trading range according to Technical Analysis.

**Profit Scenario** – If stock continues to trade up by more than the amount paid for the puts. Once above that level, position makes dollar for dollar with stock.

**Loss Scenario -** If the stock trades down, loss will be felt until stock reaches point defined by puts strike price minus put price. At that level, position will cease losing. If stock stagnates, loss will equal put price due to decay.

**Key Concepts** - Due to the acquisition of time decay from the long put, the position is best used for protection of already existing profits, or when a potentially aggressive or explosive upside move in the near future is a good possibility. Other side of the Sell-Write position. Philosophically identical to the Synthetic Put strategy except for anticipation of stock going up.

# Protective Put Strategy P&L Chart



#### Strategy #4: Collar

**Construction** – Long stock, simultaneously long one out-of-the-money put and short one out-of-the-money call per every 100 shares of stock owned.

**Function** – Provide no-to-low cost maximum profit protection for a long stock position.

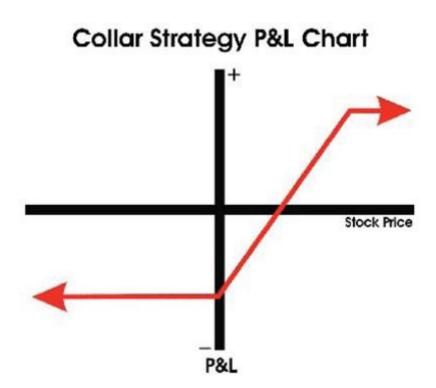
Bias - cautious or even short term bearish.

**When to Use** - When you feel that your long stock position may run into a tough period of time but you want to keep the position.

**Profit Scenario** – Depending on how you set up the collar and the prices of the put and call, you may make a very negligible amount. If the stock trades up, you may make a little.

**Loss Scenario** – Depending on how you set up the collar and prices of the put and call, you may lose a little money. If the stock trades down, you may also lose a little but the collar will limit it to a set amount regardless of how low the stock goes.

**Key Concepts** - Collars are not designed to make money. They are designed to provide maximum downside protection, similar to the protective put, but at a much better price. The premium received from the sale of the call will offset the amount paid for the put.



# Strategy #5: Bull Spread

**Construction** – Long one call while simultaneously short one call with a higher strike in the same month. Or, short one put while simultaneously long one put with a lower strike in the same month.

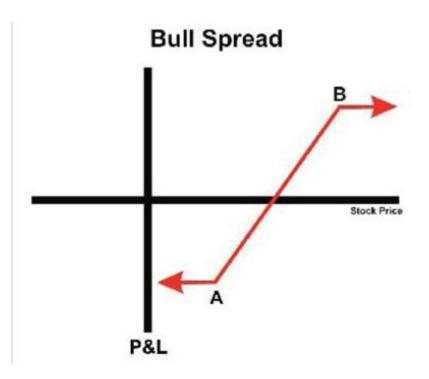
**Function** – Low cost stock directional play which allows you two choices to put on the same trade. Long Vertical Call Spread or Short Vertical Put Spread.

**Bias** – Bullish When to use – Use when you feel the stock is likely to rise but not too quickly nor explosively as this strategy has a limited profit potential. Also, when constructed properly, this spread can be used as a premium collection strategy.

**Profit Scenario** – If stock rises, profit will be defined by the increase in value of the long vertical call spread or, in the case of a short vertical put spread, its decrease in value.

**Loss Scenario** – If stock declines, loss will be defined by the decrease in value of the long vertical call spread, or in the case of a short vertical put call spread, its increase in value.

**Key Concepts** - The maximum value of a vertical spread will be equal to the difference between the two strikes, therefore both the buyer and the seller will have a limited profit and limited loss scenario. Depending on which strikes you use, time decay can help or hurt the position. Thus, some vertical spreads can make money over time even if stock stays stagnant.



# Strategy #6: Bear Spread

**Construction** – Long one call while simultaneously short one call with a lower strike in the same month. Or, short one put while simultaneously long one put with a higher strike in the same month.

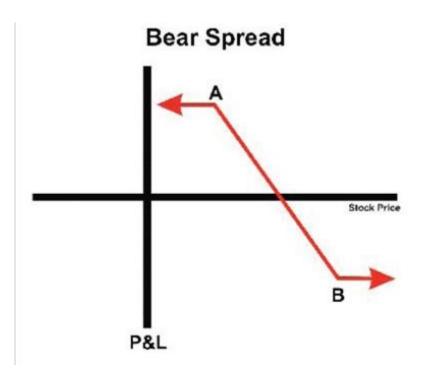
**Function** – Low cost stock directional play which allows you two choices to put on the same trade. Short Vertical Call Spread or Long Vertical Put Spread.

#### Bias - Bearish

**When to use** – Use when you feel the stock is likely to decline but not too quickly nor explosively as this strategy has a limited profit potential. Also, when constructed properly, this spread can be used as a premium collection strategy. Profit Scenario – If stock declines, profit will be defined by the decrease in value of the short vertical call spread or, in the case of a long vertical put spread, its increase in value.

**Loss Scenario** – If the stock rises, loss will be defined by the increase in value of the short vertical call spread, or, in the case of a long vertical put spread, its decrease in value.

**Key Concepts** – The maximum value of a vertical spread will be equal to the difference between the two strikes, therefore both the buyer and the seller will have a limited profit and limited loss scenario. Depending on which strikes you use, time decay can help or hurt the position. Thus, some vertical spreads can make money over time even if stock stays stagnant.



# Strategy #7: Time Spread

**Construction** – Long one call in a further out month while simultaneously short one call with the same strike but in a closer expiration month.

**Function** – To collect time premium by taking advantage of options non-linear rate of decay.

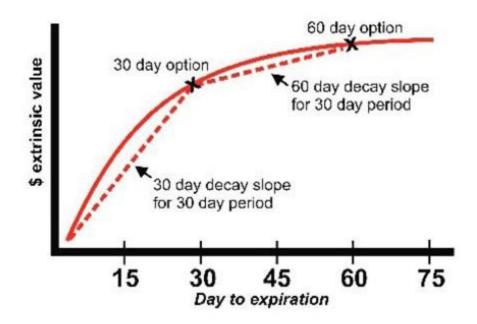
Bias - Neutral.

**When to use** – Best used during stagnant periods in order to collect premiums due to time decay. Unlike other premium collection strategies, the time spread offers a limited loss scenario in both directions.

**Profit Scenario** – If the stock remains stagnant, the position will profit by the nearer month option (which you are short) decaying at a faster rate than the further out month option (which you are long). When this occurs, the spread will widen thus creating a profit. Profit can also be attained if implied volatility increases.

**Loss Scenario** – If the stock moves away from the strike by either rising or falling, the spread will tighten, thus losing value and creating a loss.

**Key Concepts** – Time spreads are best done in at-the-money options where the extrinsic value is the highest which accentuates the rate of decay. Best results are found in stocks that are in a stagnant period as stock movement away from the strike will lead to losses.



#### **Option Definitions**

American Style Option - An option contract that may be exercised at any time between the date of entry and the expiry. Most US and ASX options are American style.

Ask Price - The price at which a seller is offering to sell an option or stock.

Assignment - The receipt of an exercise notice by an option seller that obligates him to honour the option contact at the specified strike price.

At-the-money - The strike price of the option is equal to the current price of the underlying share.

Automatic Exercise - A protection procedure whereby there is an exercise of the option if it is in the on expiry on behalf on the holder money

Backwardation – The opposite of contango. Occurs when near month volatility is higher than far month volatility

Bid Price - The price at which a buyer is willing to buy an option or stock.

Black Scholes - A formula commonly used to determine the fair price of an option taking into account underlying price, time and volatility

Break-even - The price point at which the cost of a position is offset by the growth in its Value

Buy to open - Buy an option to open a new contract

Buy to close - Buy an option to close an existing sold contract

Buy-write - Covered call approach that involves buying stock and immediately selling a call

CBOE - The Chicago Board Options Exchange

Clearing House - A regulated body that ensure an orderly options market. The source of cash margin for uncovered sold options positions

Collateral - The loan value of marginable securities. These may offset the necessity for a "cash-margin" in uncovered sold options positions

Combination - A general term for any position involving two or more option legs e.g. Spreads/butterfly Contango - A term originating from the oil market that indicates normal market conditions. This is when further month implied volatility is higher than nearer month

Contingent order - An order which can be executed only if another event occurs e.g. If the stock price is \$x then buy option y

Contract size – The amount of underlying asset covered by the option contract. This is generally 100.

Cover – To buy to close a previously sold option.

Credit Spread –An option spread in which the premium received from the sold leg is larger than the premium paid for the bought leg, so bringing money into the account. Such positions are usually subject to a cash margin requirement

Day order – An order that expires at the end of the trading day if not executed

Debit Spread – An option spread in which the premium received from the sold leg is less than the premium paid for the bought leg, thereby bringing money into the account

Delta – The amount the value of an option will change for a 1c change in price in the underlying share.

Early Exercise (Assignment) – The exercise of an option contract before its expiry date (Only possible with American style options).

European Style Option – An option contract that may be exercised only during a specified period of time just prior to its expiration.

Exercise – To follow through on the rights of holding of an option, to buy (in the case of a call) or sell (in the case of a put) the underlying security.

Exercise Price – The price at which the option holder may buy or sell the underlying security. (see also strike price)

Expiration Date - The day at which after close of trading an option contract becomes void. In the US the third Friday in the month. On the ASX the Thursday before the last Friday in the month.

Extrinsic Value – Also known as "Premium Value" or "Time Value". It is the difference between an option's price and the intrinsic value

Fair Value – Normally, a term used to describe the worth of an option or futures contract as determined by a mathematical model. Also sometimes used to indicate intrinsic value. See also Intrinsic Value and Model.

Gamma – The rate of change in an option's delta for a one cent change in the price of the underlying security.

Good Until Cancelled – An order that remains on the market until it is either filled or cancelled.

Greeks – A set of mathematical variables involved in the calculation of stock option prices e.g. Delta, Theta (time)

Historical Volatility - Volatility of past price movement of the underlying asset

Holder - The option buyer

Implied Volatility - A measure of the volatility of the underlying stock, it is determined by using option prices currently existing in the market at the time rather than using historical data on the price changes of the underlying stock. See also Volatility.

Index Option – An option whose underlying entity is an index. Most index options are cash-based.

In-the-money – An option that has some intrinsic value (i.e. Will have some value if today was the expiry day). E.g. in a call option - the strike price is lower than the current share price

Intrinsic Value – The value of an option if it were to expire immediately with the underlying stock at its current price; the amount by which an option is in-themoney. For call options, this is the difference between the stock price and the striking price, if that difference is a positive number, or zero otherwise. For put options it is the difference between the striking price and the stock price, if that difference between the striking price and the stock price, if that difference between the striking price and the stock price, if that difference is positive, and zero otherwise. See also In-the-Money, Time Value Premium and Parity.

Leg – In an option strategy involving one than one particular option, each option is known as a leg

Legging In – Entering/Exiting each leg of a combination options trading position separately.

Limit Order - An order to buy or sell at a specified price (the limit).

Liquidity –A reflection of the numbers of buyers and sellers and so the ease of getting in and out of a position at a close to fair value price. As a general rule the greater the liquidity the tighter the options spread

Margin – Buying by borrowing funds. The margin requirement - the maximum percentage of the investment that can be loaned by the broker

Margin Requirement – The amount an uncovered (naked) option seller is required to deposit. The margin requirement is calculated daily as so will change

Market Marker – An exchange member whose function is to aid in the making of a market through creating a spread where one may not already exist

Market Order – An order to buy or sell at the current market price e.g. If you are selling you will pay the bid price.

Mark To Market – An accounting process by which the price of securities held in account are valued each day to reflect the last sale price or market quote.

Naked Option – An option which has been sold that is not covered by the underlying security or another option contract.

Offer - the price at which the seller is willing to sell

Open Interest –The number of existing option contracts in a particular series. Together with daily traded volume is an indication of liquidity.

Options Clearing Corporation (OCC) – Provides clearing and settlement services for option trades. The largest equity derivatives clearing organization in the world.

Out-of-the-money –An option where the strike price is greater than the current price of the underlying security (call option), or visa versa with a put option

Position Delta – The sum of all positive and negative deltas in a hedged position

Premium – The price of an option contract, determined in the competitive marketplace, which the buyer of the option pays to the option writer for the rights conveyed by the option contract.

Rho – The expected change in the value of an option for a 1 percent change in interest rates.

Roll Down – Close out an initial option position at one strike and simultaneously open another in the same underlying stock at a lower strike.

Roll Out – Close-out an initial option position with a near-term expiry date and open the position with a longer- term expiry date.

Roll Up – Close out an initial option position at one strike and simultaneously open another in the same underlying stock at a higher strike.

Strike Price – The specific price per share for which the underlying security may be purchased (in the case of a call) or sold (in the case of a put) by the option buyer if exercised.

Theta – A measure of the rate of change in an option value for a one-day change in time left to expiry.

Time Decay – General term used to describe how the theoretical value of an option decreases as the expiry date draws nearer. Calculated using theta.

Vega – A measure of the rate of change in an option's theoretical value for a one-unit change in the volatility assumption.

Volatility - A measure of how much a stock generally fluctuates in price. Some sectors are historically more volatile than others e.g. Materials V health care

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