

# MONTREAL EXCHANGE

## Long Call

### Description

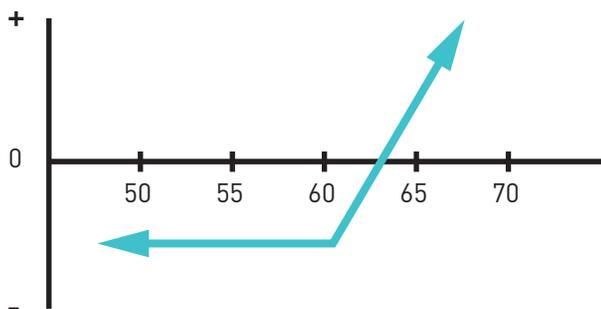
A long call strategy typically doesn't appreciate in a 1-to-1 ratio with the stock, but pricing models often give us a reasonable estimate about how a \$1 stock price change might affect the call's value, assuming other factors remain the same. What's more, the percentage gains relative to the premium can be significant if the forecast is on target.

The call buyer who plans to resell the option at a profit is looking for suitable opportunities to close the position out early: usually a rally and/or a sharp increase in volatility. Some investors set price targets or re-evaluation dates; others 'play it by ear.' Either way, timing is everything for this strategy, because all value must be realized before the option expires. Being right about an anticipated rally does no good if it occurs after expiration.

If the gains fail to materialize, and expiration is approaching, a careful investor is ready to re-evaluate. One choice is to wait and see if the stock rallies before expiration. If it does, the strategy might generate a nice profit after all.

#### Long Call

Net Position (at expiration)



#### Example

Long 1 XYZ 60 call

#### MAXIMUM GAIN

Unlimited

#### MAXIMUM LOSS

Premium paid

On the other hand, if a quick turnaround starts looking unlikely, it might make sense to sell the call while it still has some time value. A timely decision might allow the investor to recoup some or even all of the investment.

### Outlook

A call buyer is definitely bullish in the near term, anticipating gains in the underlying stock during the life of the option.

An investor's long-term outlook could range from very bullish to somewhat bullish or even neutral. If the long-term outlook is solidly bearish, another strategy alternative might be more appropriate.

## Summary

This strategy consists of buying a call option. Buying a call is for investors who want a chance to participate in the underlying stock's expected appreciation during the term of the option. If things go as planned, the investor will be able to sell the call at a profit at some point before expiration.

## Motivation

The investor buys calls as a way to profit from growth in the underlying stock's price, without the risk and up-front capital outlay of outright stock ownership. The smaller initial outlay also gives the buyer a chance to achieve greater percentage gains (i.e., greater leverage).

## Variations

This discussion targets the long call investor who buys the call option primarily with the idea of reselling it later at a profit.

If acquiring the underlying stock is a key motive, see cash-backed call, a variation of the long call strategy. In that case, the investor buys the call but also sets aside enough capital to buy the stock. Then the call acts as a sort of 'rain check': a limited-time guarantee on the stock price for investors who intend to buy the stock, but hesitate to do so right away. This approach is especially relevant if a substantial near-term price move is expected.

## Max Loss

The maximum loss is limited and occurs if the investor still holds the call at expiration and the stock is below the strike price. The option would expire worthless, and the loss would be the price paid for the call option.

## Max Gain

The profit potential is theoretically unlimited. The best that can happen is for the stock price to rise to infinity. In that case, the investor could either sell the option at a virtually infinite profit, or exercise it and purchase stock at the strike price and sell it for 'infinity'.

## Profit/Loss

The potential profit is unlimited, while the potential losses are limited to the premium paid for the call.

Although a call option is unlikely to appreciate a full dollar for every dollar that the stock rises during most of the option's life, there is in theory no limit to how high either could go. Considering the limited size of the investment (i.e., premium), the potential percentage gains can be substantial. The caveat is that all gains must be realized by the time the call expires. Generally speaking, the earlier and sharper the increase in the stock's value, the better for the long call strategy.

All other things being equal, an option typically loses time value premium with every passing day, and the rate of time value erosion tends to accelerate. That means the long call holder may not be able to re-sell the call at a profit, unless at least one major pricing factor changes favorably. The most obvious is an increase in the underlying stock's price. A rise in implied volatility could also help significantly by boosting the call's time value.

An option holder cannot lose more than the initial price paid for the option.

## Breakeven

At expiration, the strategy breaks even if the stock price is equal to the strike price plus the initial cost of the call option. Any stock price above that point produces a net profit. In other words:

**Breakeven = strike + premium**

## Volatility

An increase in implied volatility would have a positive impact on this strategy, all other things being equal. Volatility tends to boost the value of any long option strategy, because it indicates a greater mathematical probability that the stock will move enough to give the option intrinsic value (or add to its current intrinsic value) by expiration day.

By the same logic, a decline in volatility has a tendency to lower the long call strategy's value, regardless of the overall stock price trend.

## Time Decay

As with most long option strategies, the passage of time has a negative impact here, all other things being equal. As time remaining to expiration disappears, the statistical chances of achieving further gains in intrinsic value shrink. Furthermore, the cost-to-carry savings offered by a long call strategy, versus an outright long stock position, diminish over time.

Once time value disappears, all that remains is intrinsic value. For in-the-money options, that is the difference between the stock price and the strike price. For at-the-money and out-of-the-money options, intrinsic value is zero.

## Assignment Risk

None. The investor is in control.

## Expiration Risk

Slight. If the option expires in-the-money it may be exercised for you by your brokerage firm. Since this investor did not originally set aside the cash to buy the stock, an unexpected exercise could be a major inconvenience and require urgent measures to come up with the cash for settlement.

Every investor carrying a long option position into expiration is urged to verify all related procedures with their brokerage firm: automatic exercise minimums, exercise notification deadlines, etc.

## Comments

All option investors have reason to monitor the underlying stock and keep track of dividends. This applies to long call holders too, regardless of whether they intend to acquire the stock.

On an ex-dividend date, the amount of the dividend is deducted from the value of the underlying stock. That in turn puts downward pressure on the call option's value. Although the effect is foreseeable and usually gets factored more gradually, dividend dates are still a consideration in deciding when it might be optimal to close out the call position.

If the holder of an in-the-money call decides to exercise the option, and a dividend has been announced, it may be optimal to exercise the call before the ex-dividend date to capture the dividend payment.

## Related Position

Comparable Position: [Protective Put](#)

Opposite Position: [Naked Call](#)