

BUYING A CALL TO OPEN: PROFIT & LOSS



About the author

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Emmanuel has over twenty-five years experience in financial markets, including equities, CFDs, options and futures. Emmanuel started his career with Société Générale in Paris, then with Citibank, Jefferies, Brown Brothers Harriman in London in equities, options and fixed-income trading before joining Internaxx Bank (now Swissquote Bank Europe) in Luxembourg.

Emmanuel is a member of the Client Services team of Swissquote Bank Europe, where he works closely with clients and team members to service the advanced trading needs of our most active clients.

WARNING This chapter will introduce many new options concepts. If you are new to options, excessive reading can induce drowsiness and an uncontrollable will to sleep. A short nap or a strong cup of coffee may help.

In our last discussion, we purchased to open, on 17 February 2023, one call Microsoft with a strike of \$260 and an expiry date of 3 March 2023, at \$7.45. This \$7.45 amount (which is worth \$745) is called the **option premium**.

In this chapter, we will follow up on our long call position.

Our call option gives us the right, at any time before expiration, to buy 100 shares of Microsoft at the **fixed** strike price of \$260. This operation of buying the stock at \$260 would be called **"exercising the option"**.

Exercising will only be financially interesting if the stock price moves up above \$260. Why? Because exercising this right will make us buy 100 shares at \$260, when they will be worth more and can be sold at a profit.

When we bought the call, the stock price of Microsoft was very close to \$260. When the strike price and the underlying are approximately equal, it is said that the option is **"at-the-money"**.

If, between our purchase date and the expiration, Microsoft's price moves up from \$260, the option will be said to be **"in-the-money"**. If, on the other end, Microsoft's price moves down from \$260, the option will be **"out-of-the-money"**.

Scenario 1: in-the-money call

Let's project ourselves a few weeks in the future. Since our call purchase, and shortly before expiration, the Microsoft stock price has gone up from \$260 to \$270. This is an increase of about 3.85%. The stock price has gone the right way for us! We have three alternatives to crystallise our profit.

Exercise the call

To exercise an in-the-money option, you can call the Client Services department of Swissquote and give your instruction. The result on your account, provided you have enough cash, will be a purchase of 100 shares vs a debit of \$26'000. You will then be free to either keep the Microsoft shares on your account, or sell them on your trading platform at the current price.

Your total profit, not considering commissions, will be:

$-745 \text{ (remember, this is our initial option price)} - 26'000 + 27'000 = +\255

One drawback to this operation: we needed to have \$26'000 available on the account to be able to exercise the call. This is a big amount of cash-flow. Is there a more convenient way?

Sell the call to close

The good news is that we can profit from our in-the-money call without having to exercise it: we can simply sell it. When the stock has moved to \$270, let's say the price of our call will have moved to \$10,10. On your trading platform, click the "Trade" button next to your option position, and select "Sell to close".

Our profit (before commissions) will be $(10.10 - 7.45) \times 100 = \$ 265$, or approximately 35% from our initial price of \$7.45. Our profit will be cashed in directly, without the need to purchase the shares. As a matter of fact, a large majority of long in-the-money options are sold to close, not exercised.

Wait for the call to expire

If you do not act until the expiration of an in-the-money call option, Swissquote will automatically exercise it for you on expiration day. Following the exercise, if your cash balance is not sufficient to purchase the underlying shares, your shares will be sold back the same day to avoid an overdraft. To avoid this, we recommend that you sell your in-the-money options before this automatic exercise.

Scenario 2: at-the-money or out-of-the-money call

One important factor when trading options is **time decay**. Time decay is the process by which an option loses value over time. Let's discuss this point.

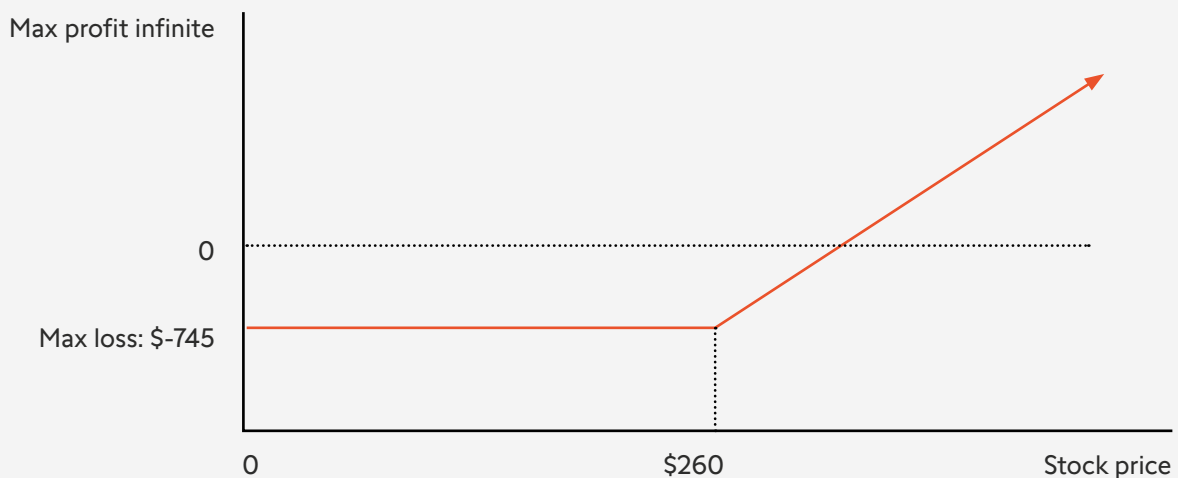
You may instinctively be aware that buying an option which will expire in several months, will have more value than an option with the same strike price, but expiring in just one week. This is because the probability of the long-termed option to become very valuable before expiration is much higher than for the short-term option. So all other things being equal, time will degrade the price of an option. Time decay is an option seller's friend, and an option buyer's foe.

For this reason, you should consider carefully before buying an option to open (call or put), as each passing day will raise the probability of you losing your option premium.

But back to our Microsoft call. If over the next weeks following the buy of our call, the price of the Microsoft stock stays at around 260, the option price will gradually go down, due to time decay; until at expiration day, the call price will be 0. The option will then expire worthless, and will automatically be removed off your Swissquote account.

In this scenario, you will have lost 100% of your initial \$745 premium, although admittedly the premium was limited. When buying an option, call or put, your maximum loss is your premium – you cannot lose more than this amount.

Buying calls to open: P&L Chart



Here is our profit and loss chart for our long call trade.

One line summary

Extremely bullish strategy. Potential for very high profit, but high probability of losing the premium.



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