

Long Call

Because you think the price of the asset is going up.



Payoff graph for long call position

If Alice pays \$5 to buy the JAG June 30th 110 call option, she is buying the right to pay \$110 for one JAG token on or before June 30th. The \$5 she pays is called the **premium**. Let's compare the outcomes of

buying one of these calls for \$5 to buying JAG for \$100. We'll examine three scenarios that could occur on June 30th:

1. The price of JAG rises to \$130
2. The price of JAG remains at \$100
3. The price of JAG falls to \$70

Scenario 1:

- If Alice had bought one JAG for \$100, she would make \$30 on her investment (+30%)
- If she had bought the June 30th 110 call for \$5, she can purchase the coin for \$110 and sell it for \$130, netting \$15 profit. Factoring in the \$5 cost of the option, she has profited $\$20 - \$5 = \$15$, making for a 300% (!!) return on her investment.

Scenario 2:

- If Alice had bought one JAG for \$100, she would be flat (price unchanged).
- If she had bought the call for \$5, so she would lose \$5 (-100%). The option is worthless as the strike is greater than the token price.

Scenario 3:

- If Alice had bought one JAG for \$100, she would lose \$30 (-30%).
- If she had bought the call for \$5, she would lose \$5 (-100%).

These scenarios illustrate a couple of key points about options:

- They are great sources of leverage: In Scenario 1 Alice makes a return 10x greater than had she simply purchased JAG
- They protect buyers from downside: In Scenario 3 Alice only lost \$5 compared to losing \$30 had she bought the token. Note that she still retained the upside in the case that JAG had increased in value.

- They do poorly when the price of asset doesn't move much: In Scenario 2, Alice loses her entire investment (-100%) compared to being flat had she bought the token.

When you own a call your upside is unlimited (since stocks can go up indefinitely), and your downside is capped at the price you paid for the call.

Why trade it? You think the stock is going up within a certain time frame.

Optimal conditions? Cheap volatility, bullish asset.

Example: Buy 10x September 100 Call for \$5.

Cost: The premium you pay, in this example $10 \times \$5 = \50 .

Theoretical Max Profit: Unlimited. It's not likely an asset will go to infinity, but it's theoretically possible.

Theoretical Max Loss: The price you paid for the call, in this example \$50.

Breakeven at expiration: The strike plus the price you paid for the call ($100 + \$5 = \105).