



Implied Volatility

The implied volatility of an option is always changing. It's a current temperature of what options traders expect the volatility or movement of a stock to be going forward. It moves higher and lower for a variety of reasons. Most of the time the changes are gradual. However, some stocks move a lot and that does affect the implied volatility. Here are a few reasons implied volatility can be unusually high.

- When the market declines rapidly, implied volatility tends to increase rapidly. If the market plunges say there is a virus or some event that drags down the entire market investors start to fear owning stocks. This dramatically raises the implied volatility of an option.
- When the market gaps higher, especially after it had been moving lower, an interesting thing happens. Investors start to be afraid of missing out. They can't make up their mind! Implied volatility usually falls when the market edge higher because enthusiasm = silly investors that don't pay attention to risk. They may also be right though they don't have to be silly.
- Once the news is released (i.e. earnings are announced or the FDA issues a report), IV is often crushed. This is called the IV or implied volatility crush. This is exactly why I say think through just how much you think a stock will move when you buy options during earnings weeks.

When news is pending for a given stock (earnings announcement, FDA results on a drug trial, etc.) option buyers are more aggressive than sellers. That's because sometimes these news events come out and a stock gaps up by 20% or more. An option buyer in that scenario could have an option that increase 1000%!

Example

I'll make an example now and show you why it is so important to take cost into account. I've learned the hard way about implied volatility crushes.

1. AAPL is \$110 per share and earnings will be announced after the market closes (in 10 minutes) today. Most traders, investors, and speculators have already made their plays. But the options are still trading actively.

2. Let's consider options that expire in 7 days. Say it's Friday and you open a call option for next Friday. The implied volatility for these options is 78%, but right now buying demand is high and the IV is pumped to a peak.

- If you want to buy those options (strike price 120), the market is \$3.40 bid and \$3.60 ask (fair value is \$3.50, based on the 78% volatility).

3. Here is what happens next. You probably know your breakeven price, right? I know you can see it on the page but hopefully you knew before I gave it to you. \$123.50 per share. Apple reports great sales.

In fact, it is so good the stock gaps up 10% to \$121 after hours. You wait till Monday to cash in your profits.

You figure this option must have become more expensive so I will be able to sell it for a profit. However, you realize on Monday the option is worth \$3.50. What? How does that make any sense?

Here is why...

The stock moved in the direction you predicted. That's good. But because the earnings event has passed investors no longer expect high

implied volatility. Now the IV has fallen to its normal 50% from 78% or even lower.

The stock is at \$121 on Monday but due to lower volatility it is only pricing in \$3.50 for the call option. It's \$1 intrinsic value from being in the money and \$2.50 extrinsic because the option still has a few more days of time decay. You made no money! Or worse the crush was so high that it is now below what you paid for the option. This happens because expectations were baked in. Buyers are usually losers long-term. Therefore, if you used a covered call strategy, which is my top strategy and sold the \$120 call option you would be in better shape. In fact, you would make \$10 on the stock rising and \$3.50 in premium. Despite the stock rising \$11 you would have made \$13.50. Keep it simple champion!