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I recently commented on an /options/ thread about covered calls and made the observation that the profit profile of a covered call trade can be exactly replicated by selling a naked put at the same strike and expiration. It appears I kicked over a hornet's nest, because many redditors here told me there was *no way* that could be the case. In fact it is, and below I will attempt to explain why.

It is a result of [put-call parity](https://en.wikipedia.org/wiki/Put%E2%80%93call_parity). Sure, we can read the definition, but what does it mean in real life?

Here's how I think of it: using the 3 security types (put, call, stock), you can use a combination of any TWO to precisely replicate the profit profile of the other one.

These are illustrated below:
Long put = Short stock + long call
Long call = Long stock + long put
Long stock = Long call + short put
Short put = Long stock + short call (covered call)
Short call = Short stock + short put
Short stock = Long put + short call

(All of these presume that the options are implemented with the same strike and expiration as the one on the other side of the "=" sign.)

Violations of these equalities would result in a risk-free arbitrage situation (subject to certain bounds outlined below). This has the effect of constraining the IVs of puts and calls at the same strike to be equal. E.g., a $40 put and a $40 call will have the same IV. If this were not the same, someone could buy the underpriced IV and sell the overpriced IV using the hedging equalities outlined above, and presto, free money.

Here are some cases in which put-call parity can be violated:
- Bid/ask spreads: The securities have to be tradeable at the calculated IVs
- Shortable: the underlying stock must be freely shortable without high SLB rates, and the cash proceeds invested at the risk-free rate.
- Dividends: I've seen excited traders think they found a violation in the options chain, without considering upcoming dividends.

How do you spot a violation of put-call parity? Simple, look for calls and puts with different IVs at the same strike and expiration. It's a useful exercise to look down an options chain and try to spot them (most likely, it's due to wide spreads).

If covered call and short puts are the same, why would you choose one over the other? One reason is the OTM options generally have more narrow spreads than ITM options, so it may be easier to sell an OTM call than an OTM put.

Several weeks ago I was in a discussion with a trader who was selling double covered calls (long 100 shares + short 2 OTM calls), which he thought of as a low-risk trade. Using the equalities above you can see that this trade has the same profit profile as a short straddle, which has the reputation of a high-risk trade.

Put-call parity is a fundamental concept of options trading. I understand that there are new traders on this sub every day who are still learning how things work, so hopefully this was a helpful post.

Another explanation can be found
[here](https://www.reddit.com/r/thetagang/comments/iwlz21/comparing_covered_calls_and_short_puts/).