Chapter 10

Trading Strategies involving Options

Definition 10.1
Positions in an option and the underlying:
• Writing a covered call (long stock, short call)
• Reverse of writing a covered call (short stock, long call)
• Protective put strategy (long stock, long put)
• Reverse of protective put strategy (short stock, short put)

Example 10.2
The profits for the strategies in Definition 10.1 are (for European options):
• \(-K + S_T\) for covered call
• \(-S_T - K\) for reverse covered call
• \(-K + S_T\) for protective put
• \(-S_T - K\) for reverse protective put

Recall: The relevant profit functions are:
• \(-S_T + S_0\) for long stock
• \(-K + S_T\) for long call
• \(-S_T + K\) for long put
• \(-S_0 + S_T\) for short stock
• \(-S_T - K\) for short call
• \(-K + S_0\) for short put

Definition 10.3
A spread is a position in two or more options of the same type.

Example 10.4
We discuss the following spreads:
• bull spread
• bear spread
• box spread
• butterfly spread
• calendar spread
• diagonal spread

Definition 10.5
A combination is a position in both calls and puts on the same stock.
Example 10.6

We discuss the following combinations:

• straddle
• strip
• strap
• strangle