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

Recall: The relevant profit functions are:

- $S_T - S_0 e^{rT}$ **LONG STOCK**
- $(S_T - K)^+ - ce^{rT}$ **LONG CALL**
- $(K - S_T)^+ - pe^{rT}$ **LONG PUT**
- $S_0 e^{rT} - S_T$ **SHORT STOCK**
- $ce^{rT} - (S_T - K)^+$ **SHORT CALL**
- $pe^{rT} - (K - S_T)^+$ **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

