2. Trading Strategies Involving Options

Hull: Chapter 10
Types of Strategies

- Take a position in the option and the underlying.
- Take a position in 2 or more options of the same type (A spread).
- Combination: Take a position in a mixture of calls & puts (A combination)
Positions in an Option & the Underlying (Figure 10.1, page 220)
Bull Spread Using Calls

(Figure 10.2, page 221)

Profit

\[ S_T \]

\[ K_1 \]

\[ K_2 \]
Bull Spread Using Puts

Figure 10.3, page 222

Profit

$K_1 \quad K_2 \quad S_T$
Bear Spread Using Puts

Figure 10.4, page 223

Profit

$K_1$ $K_2$ $S_T$
Bear Spread Using Calls

Figure 10.5, page 225

Profit

$K_1$  $K_2$  $S_T$
Butterfly Spread Using Calls

Figure 10.6, page 227

Profit

$K_1 \quad K_2 \quad K_3 \quad S_T$
Butterfly Spread Using Puts

Figure 10.7, page 228
A Straddle Combination

Profit

Figure 10.10, page 230

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Strip & Strap

Figure 10.11, page 231

Profit

Strip

Profit

Strap

$K \quad S_T$

$K \quad S_T$
A Strangle Combination

Figure 10.12, page 232

Profit

$K_1$ $K_2$

$S_T$
Calendar Spread Using Calls

Figure 10.8, page 228

Profit

$S_T$

$K$

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Calendar Spread Using Puts

Figure 10.9, page 229
Box Spread

- A combination of a bull call spread and a bear put spread.
- If all options are European a box spread is worth the present value of the difference between the strike prices.
- If they are American this is not necessarily so. (See Business Snapshot 10.1).