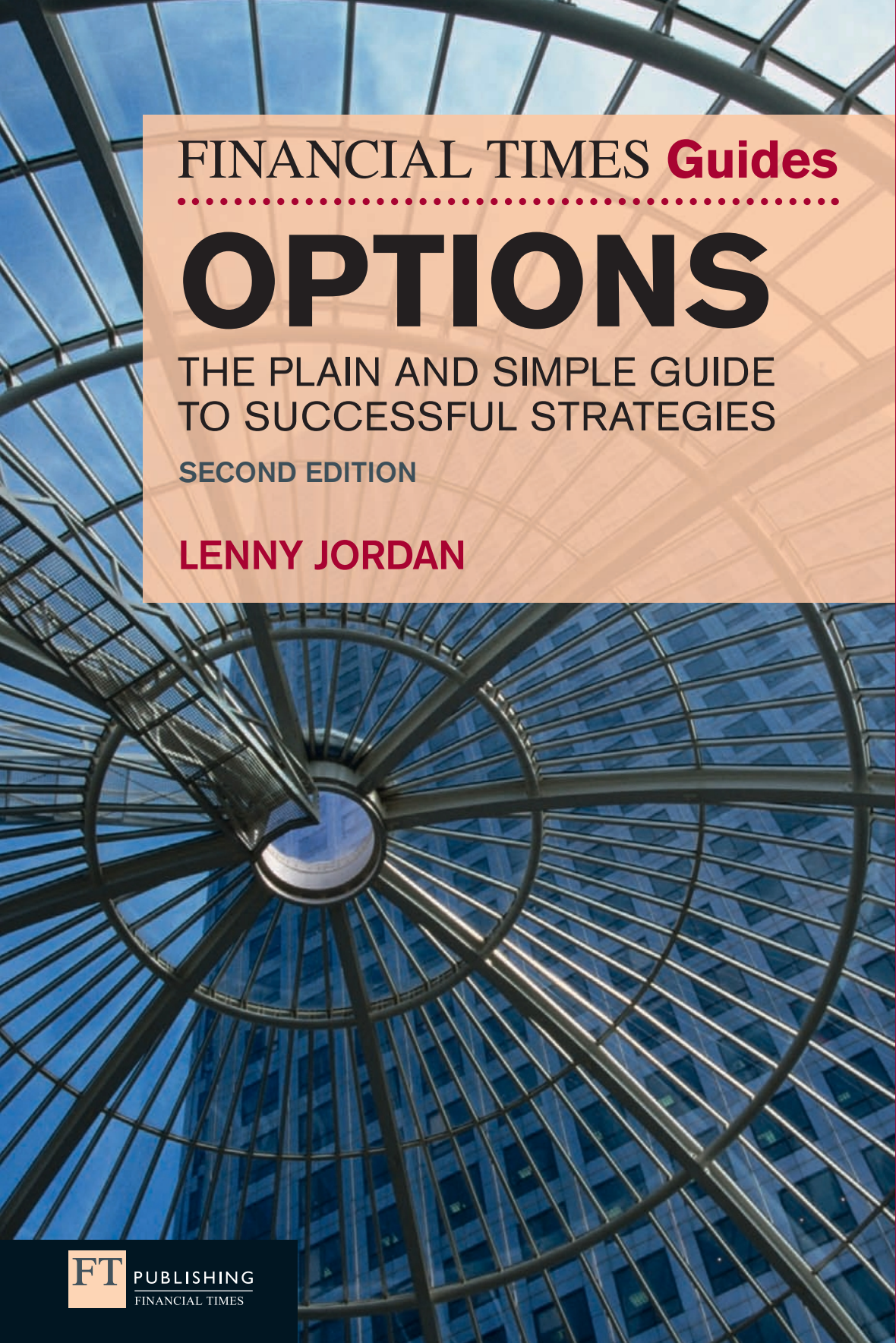
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9

One by two directional spreads

There are other ways of financing the purchase of a directional position. Those that we will discuss in this chapter are variations of the long call and put spreads. Again, they involve buying an option to take advantage of a chosen market direction. But instead of selling one, they sell two options at the strike price that is more distant from the underlying.

The spreads in this chapter are suitable for slowly trending markets, and they are unsuitable for markets that are trending rapidly higher or lower, or volatile markets that are subject to sudden shifts in direction.

Long one by two call spread

Bullish strategy

The **long one by two call spread** is a long call spread with an additional short call at the higher strike. If XYZ is at 100, you could buy one 105 call and sell two 115 calls in the same transaction. This spread is also known as the one by two ratio call spread or the one by two vertical call spread.

In order to trade this spread, your outlook should call for the underlying to increase to a level that is near, but not substantially above, the higher strike. This spread, like the long call spread, has its maximum profit if the underlying is at the higher strike at expiration. It is less costly than the long call spread because it is financed by an extra short call. But because of the extra short call, this spread has the potential for unlimited loss if the underlying rallies substantially. The extra short call includes added exposure to the Greeks.

With Coca-Cola at 52.67, examine the August options on offer[1](60 days until expiration):

Strike	40	42.50	45	47.50	50	52.50	55	57.50	60
August calls					4.04	2.52	1.45	0.79	0.34
August puts	0.34	0.47	0.82	1.30	2.05	2.90			

Here, you could pay 1.45 for one August 55 call and sell two August 60 calls at 0.34 for a net debit of 0.77. At expiration, the maximum profit occurs if the stock closes at the higher strike; this is the same level as with a long call spread at the same strike. This profit is calculated as the difference between the strike prices less the cost of the spread, or 60 – 55 – 0.77 = 4.23.

Because of the extra short call there are two break-even levels. The lower break-even level is, like the long call spread, the lower strike price plus the cost of the spread, or 55 + 0.77 = 55.77.

The upper break-even level is the maximum profit plus the higher strike price, or 60 + 4.23 = 64.23.

Above the upper break-even level this spread takes a loss equivalent to the amount that the stock increases. A summary of the profit/loss at expiration is as follows.

Debit from August 55 call:	1.45
Credit from two August 60 calls: 2 × 0.34 =	–0.68
Total debit:	–0.77

Maximum profit: (difference between strikes) minus cost of spread:
(60 – 55) – 0.77 = 4.23

Lower break-even level: lower strike plus cost of spread: 55 + 0.77 = 55.77

Upper break-even level: maximum profit plus higher strike:
60 + 4.23 = 64.23

Maximum loss: unlimited upside

In order to evaluate the risk/return potential of this spread, you must consider the upside potential of the stock or underlying. Remember that the maximum loss is potentially unlimited.

[1] Data courtesy of the Chicago Board Options Exchange, CBOE.

In tabular form, the expiration profit/loss is as shown in Table 9.1.

Table 9.1 Coca-Cola long August 55-60 one by two call spread

Coca-Cola	50.00	52.50	55.00	55.77	60.00	64.23	67.50	70.00	72.50
Spread debit	–0.77	----------							
Value of one by one spread at expiration	0.00	0.00	0.00	0.77	5.00	5.00	5.00	5.00	5.00
Value of extra short call at expiration	0.00	0.00	0.00	0.00	0.00	–4.23	–7.50	–10.00	–12.50
Profit/loss	–0.77	–0.77	–0.77	0	–4.23	0	–3.27	–5.77	–8.27

In graphic form, the expiration profit/loss of this spread is as shown in Figure 9.1.

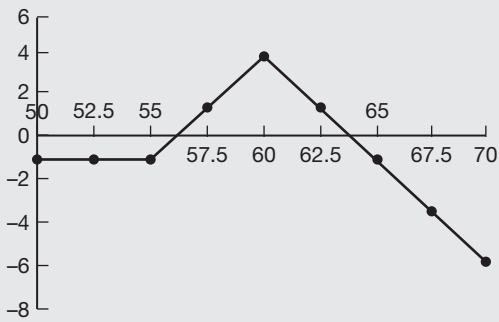

Figure 9.1 Expiration profit/loss relating to Table 9.1

Long one by two call spread for a credit

Bearish to slightly bullish strategy

With adjacent strikes, or strikes that are close to each other, the long one by two call spread can often be done for a credit. Effectively, then, there is no lower break-even level, and the spread will profit from a downside market move. The upper break-even level, however, becomes much closer to the underlying. But there is a hidden danger in this spread.

For example, using the above strikes, you could pay 1.45 for one Auggie 55 call and sell two Auggie 57.50 calls at 0.79 for a net credit of 0.13 on the spread.

The upper break-even level is calculated as the higher strike plus the maximum profit, or 57.50 + 0.13 = 57.63.

Remember that above the upper break-even level this spread has the potential for unlimited loss.

This spread may look like easy money, but *don't be misled.* If the one by two call (or put) spread can be done for a credit, the market is probably telling you that the underlying is sufficiently volatile to be above the upper break-even level at expiration. Perhaps for this reason the one by two spread for a credit is not often traded. If, after considering these factors, your outlook still calls for the stock to remain below the upper break-even level through expiration, then the long one by two call spread for a credit is a justifiable strategy. This is not recomended for beginners.

Long one by two put spread

Bearish strategy

The **long one by two put spread** is a long put spread with an extra short put at the lower strike. It is also known as the one by two ratio put spread or the one by two vertical put spread. If XYZ is at 100, you could by one 95 put and sell two 85 puts in the same transaction.

The **long one by two put spread** is a long put spread with an extra short put at the lower strike

In order to trade this spread, your outlook should call for the underlying to decline to a level that is near, but not substantially below, the lower strike. At expiration the maximum profit is earned if the stock closes at the lower strike, but because of the extra short put, the maximum downside

loss is potentially great. The extra short put includes added exposure to the Greeks. This spread is less costly than the long put spread because it is financed by the extra short put.

With Coca-Cola at 52.67, examine the August options on offer[2] (60 days until expiration):

Strike	40	42.50	45	47.50	50	52.50	55	57.50	60
August calls					4.04	2.52	1.45	0.79	0.34
August puts	0.34	0.47	0.82	1.30	2.05	2.90			

With Coca-Cola at 52.67, in the August options, you could pay 2.05 for the 50.00 put and sell two 45.00 puts at 0.82 for a net debit of 0.41 ($41). At expiration, the maximum profit occurs if the stock closes at 45.00. This profit is calculated as the difference between strikes minus the cost of the spread, or (50.00 – 45.0) – 0.41 = 4.59.

Like the long one by two call spread, there are two break-even levels. The upper break-even level is calculated as the higher strike minus the cost of the spread, or 50.00 – 0.41 = 49.59 The lower break-even level is calculated as the lower strike minus the maximum profit, or 45.00 – 4.59 = 40.41.

Below the lower break-even level the spread loses point for point with the decline of the stock.

A summary of the expiration profit/loss is as follows:

Debit from long August 50.00 put:	–2.05
Credit from two short August 45.00 puts: 2 × 0.82 =	1.64
Total debit:	–0.41

Maximum profit: (difference between strikes) minus cost of spread:
50.00 – 45.00 – 0.41 = 4.59

Upper break-even level: higher strike minus cost of spread:
50.00 – 0.41 = 49.59

Lower break-even level: lower strike minus maximum profit:
45.00 – 4.59 = 40.41

Maximum loss: amount of stock decline below lower break-even level

[2] Data courtesy of the Chicago Board Options Exchange, CBOE.