Currency Option Combinations

In addition to the basic call and put options just discussed, a variety of currency option combinations are available to the currency speculator and hedger. A **currency option combination** uses simultaneous call and put option positions to construct a unique position to suit the hedger's or speculator's needs. A currency option combination may include both long and short positions and will itself be either long or short. Typically, a currency option combination will result in a unique contingency graph.

Currency option combinations can be used both to hedge cash inflows and outflows denominated in a foreign currency and to speculate on the future movement of a foreign currency. More specifically, both MNCs and individual speculators can construct a currency option combination to accommodate expectations of either appreciating or depreciating foreign currencies.

In this appendix, two of the most popular currency option combinations are discussed. These are **straddles** and **strangles**. For each of these combinations, the following topics will be discussed:

- The composition of the combination
- The worksheet and contingency graph for the long combination
- The worksheet and contingency graph for the short combination
- Uses of the combination to speculate on the movement of a foreign currency

The two main types of currency option combinations are discussed next.

Currency Straddles

Long Currency Straddle

To construct a long straddle in a foreign currency, an MNC or individual would buy (take a long position in) both a call option and a put option for that currency; the call and the put option have the same expiration date and striking price.

When constructing a long straddle, the buyer purchases both the right to buy the foreign currency and the right to sell the foreign currency. Since the call option will become profitable if the foreign currency appreciates, and the put option will become profitable if the foreign currency depreciates, a long straddle becomes profitable when the foreign currency *either* appreciates or depreciates. Obviously, this is a huge advantage for the individual or entity that constructs a long straddle, since it appears that it

would benefit from the position as long as the foreign currency exchange rate does not remain constant. The disadvantage of a long straddle position is that it is expensive to construct, because it involves the purchase of two separate options, each of which requires payment of the option premium. Therefore, a long straddle becomes profitable only if the foreign currency appreciates or depreciates substantially.

Long Currency Straddle Worksheet. To determine the profit or loss associated with a long straddle (or any combination), it is easiest to first construct a profit or loss worksheet for several possible currency values at option expiration. The worksheet can be set up to show each individual option position and the net position. The worksheet will also help in constructing a contingency graph for the combination.

E X A M P L E

Put and call options are available for euros (€) with the following information:

- Call option premium on euro = $.03 per unit
- Put option premium on euro = $.02 per unit
- Strike price = $1.05
- One option contract represents €62,500.

To construct a long straddle, the buyer would purchase both a euro call and a euro put option, paying $.03 + $.02 = $.05 per unit. If the value of the euro at option expiration is above the strike price of $1.05, the call option is in the money, but the put option is out of the money. Conversely, if the value of the euro at option expiration is below $1.05, the put option is in the money, but the call option is out of the money.

A possible worksheet for the long straddle that illustrates the profitability of the individual components is shown below:

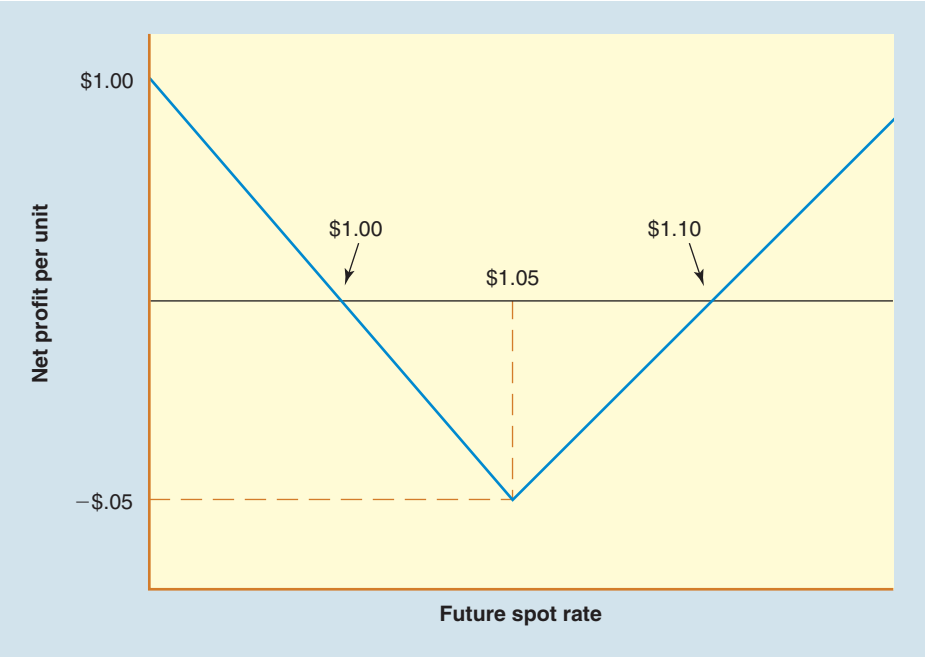
	Value of Euro at Option Expiration					
	$.95	$1.00	$1.05	$1.10	$1.15	$1.20
Own a call	−$.03	−$.03	−$.03	+$.02	+$.07	+$.12
Own a put	+$.08	+$.03	−$.02	−$.02	−$.02	−$.02
Net	+$.05	$.00	−$.05	$.00	+$.05	+$.10

Long Currency Straddle Contingency Graph. A contingency graph for the long currency straddle is shown in Exhibit 5B.1. This graph includes more extreme possible outcomes than are shown in the table. Either the call or put option on the foreign currency will be in the money at option expiration as long as the foreign currency value at option expiration differs from the strike price.

There are two break-even points for a long straddle position—one below the strike price and one above the strike price. The lower break-even point is equal to the strike price less both premiums; the higher break-even point is equal to the strike price plus both premiums. Thus, for the above example, the two break-even points are located at $1.00 = $1.05 − $.05 and at $1.10 = $1.05 + $.05.

The maximum loss for the long straddle in the example occurs at a euro value at option expiration equal to the strike price, when both options are at the money. At that point, the straddle buyer would lose both option premiums. The maximum loss for the straddle buyer is thus equal to $.05 = $.03 + $.02.

Exhibit 5B.1
Contingency Graph for a Long Currency Straddle



Short Currency Straddle

Constructing a short straddle in a foreign currency involves selling (taking a short position in) both a call option and a put option for that currency. As in a long straddle, the call and put option have the same expiration date and strike price.

The advantage of a short straddle is that it provides the option writer with income from two separate options. The disadvantage is the possibility of substantial losses if the underlying currency moves substantially away from the strike price.

Short Currency Straddle Worksheet and Contingency Graph. A short straddle results in a worksheet and contingency graph that are exactly opposite to those of a long straddle.

EXAMPLE

Assuming the same information as in the previous example, a short straddle would involve writing both a call option on euros and a put option on euros. A possible worksheet for the resulting short straddle is shown below:

	Value of Euro at Option Expiration					
	$.95	$1.00	$1.05	$1.10	$1.15	$1.20
Sell a call	+$.03	+$.03	+$.03	−$.02	−$.07	−$.12
Sell a put	−$.08	−$.03	+$.02	+$.02	+$.02	+$.02
Net	−$.05	$.00	+$.05	$.00	−$.05	−$.10

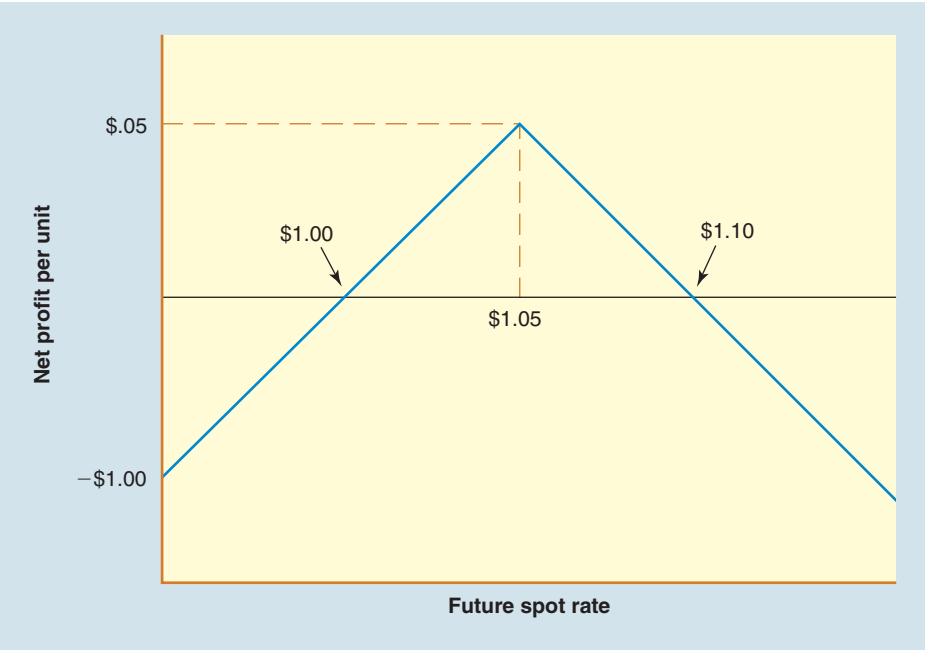
The worksheet also illustrates that there are two break-even points for a short straddle position—one below the strike price and one above the strike price. The lower break-

even point is equal to the strike price less both premiums; the higher break-even point is equal to the strike price plus both premiums. Thus, the two break-even points are located at \$1.00 = \$1.05 − \$.05 and at \$1.10 = \$1.05 + \$.05. This is the same relationship as for the long straddle position.

The maximum gain occurs at a euro value at option expiration equal to the strike price of \$1.05 and is equal to the sum of the two option premiums (\$.03 + \$.02 = \$.05).

The resulting contingency graph is shown in Exhibit 5B.2.

Exhibit 5B.2
Contingency Graph for a Short Currency Straddle



Speculating with Currency Straddles

Individuals can speculate using currency straddles based on their expectations of the future movement in a particular foreign currency. For example, speculators who expect that the British pound will appreciate or depreciate substantially can buy a straddle. If the pound appreciates substantially, the speculator will let the put option expire and exercise the call option. If the pound depreciates substantially, the speculator will let the call option expire and exercise the put option.

Speculators may also profit from short straddles. The writer of a short straddle believes that the value of the underlying currency will remain close to the exercise price until option expiration. If the value of the underlying currency is equal to the strike price at option expiration, the straddle writer would collect premiums from both options. However, this is a rather risky position; if the currency appreciates or depreciates substantially, the straddle writer will lose money. If the currency appreciates substantially, the straddle writer will have to sell the currency for the strike price, since the call option will be exercised. If the currency depreciates substantially, the straddle writer has to buy the currency for the strike price, since the put option will be exercised.

EXAMPLE

Call and put option contracts on British pounds (£) are available with the following information:

- Call option premium on British pounds = $.035
- Put option premium on British pounds = $.025
- Strike price = $1.50
- One option contract represents £31,250.

At expiration, the spot rate of the pound is $1.40. A speculator who had bought a straddle will therefore exercise the put option but let the call option expire. Therefore, the speculator will buy pounds at the prevailing spot rate and sell them for the exercise price. Given this information, the net profit to the straddle buyer is calculated as follows:

	Per Unit	Per Contract
Selling price of £	+$1.50	$46,875 ($1.50 × 31,250 units)
− Purchase price of £	−1.40	−43,750 ($1.40 × 31,250 units)
− Premium paid for call option	−.035	−1,093.75 ($.035 × 31,250 units)
− Premium paid for put option	−.025	−781.25 ($.025 × 31,250 units)
= Net profit	$.04	$1,250 ($.04 × 31,250 units)

The straddle writer will have to purchase pounds for the exercise price. Assuming the speculator immediately sells the acquired pounds at the prevailing spot rate, the net profit to the straddle writer will be:

	Per Unit	Per Contract
Selling price of £	+$1.40	$43,750 ($1.40 × 31,250 units)
− Purchase price of £	−1.50	−46,875 ($1.50 × 31,250 units)
+ Premium received for call option	+.035	1,093.75 ($.035 × 31,250 units)
+ Premium received for put option	+.025	781.25 ($.025 × 31,250 units)
= Net profit	−$.04	−$1,250 ($.04 × 31,250 units)

As with an individual short put position, the seller of the straddle could simply refrain from selling the pounds (after being forced to buy them at the exercise price of $1.50) until the spot rate of the pound rises. However, there is no guarantee that the pound will appreciate in the near future.

Note from the above example and discussion that the straddle writer gains what the straddle buyer loses, and vice versa. Consequently, the straddle writer's gain or loss is the straddle buyer's loss or gain. Thus, the same relationship that applies to individual call and put options also applies to option combinations.

Currency Strangles

Currency strangles are very similar to currency straddles, with one important difference: the call and put options of the underlying foreign currency have different exercise prices. Nevertheless, the underlying security and the expiration date for the call and put options are identical.

Long Currency Strangle

Since the call and put options used in a strangle can have different exercise prices, a long strangle can be constructed in a variety of ways. For example, a strangle could be constructed in which the call option has a higher exercise price than the put option and vice versa. The most common type of strangle, and the focus of this section, is a strangle that involves buying a put option with a lower strike price than the call option that is purchased. To construct a long strangle in a foreign currency, an MNC or individual would thus take a long position in a call option and a long position in a put option for that currency. The call option has the higher exercise price.

An advantage of a long strangle relative to a comparable long straddle is that it is cheaper to construct. From previous sections, recall that there is an inverse relationship between the spot price of the currency relative to the strike price and the call option premium: the lower the spot price relative to the strike price, the lower the option premium will be. Therefore, if a long strangle involves purchasing a call option with a relatively high exercise price, it should be cheaper to construct than a comparable straddle, everything else being equal.

The disadvantage of a strangle relative to a straddle is that the underlying currency has to fluctuate more prior to expiration. As with a long straddle, the reason for constructing a long strangle is the expectation of a substantial currency fluctuation in either direction prior to the expiration date. However, since the two options involved in a strangle have different exercise prices, the underlying currency has to fluctuate to a larger extent before the strangle is in the money at future spot prices.

Long Currency Strangle Worksheet. The worksheet for a long currency strangle is similar to the worksheet for a long currency straddle, as the following example shows.

EXAMPLE

Put and call options are available for euros (€) with the following information:

- Call option premium on euro = $.025 per unit
- Put option premium on euro = $.02 per unit
- Call option strike price = $1.15
- Put option strike price = $1.05
- One option contract represents €62,500.

Note that this example is almost identical to the earlier straddle example, except that the call option has a higher exercise price than the put option and the call option premium is slightly lower.

A possible worksheet for the long strangle is shown here:

	Value of Euro at Option Expiration					
	$.95	$1.00	$1.05	$1.10	$1.15	$1.20
Own a call	−$.025	−$.025	−$.025	−$.025	−$.025	+$.025
Own a put	+$.08	+$.03	−$.02	−$.02	−$.02	−$.02
Net	+$.055	+$.005	−$.045	−$.045	−$.045	+$.005

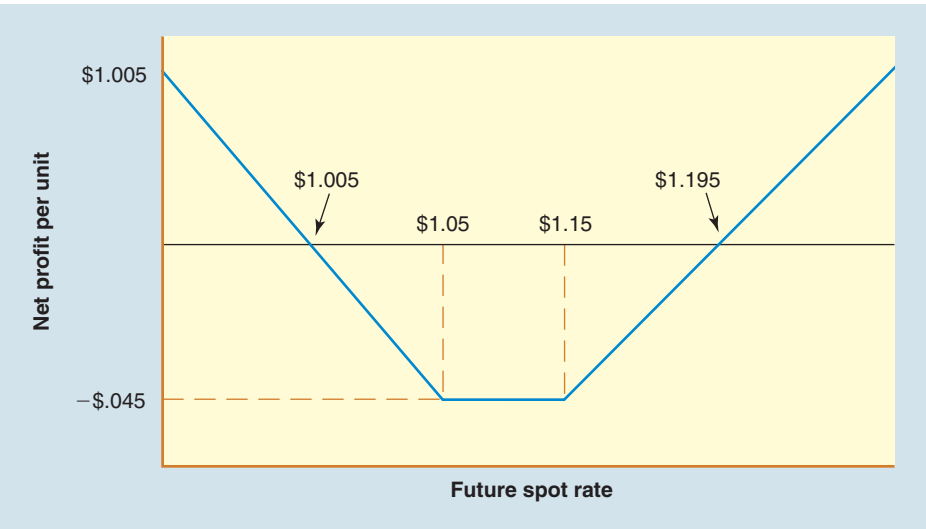
Long Currency Strangle Contingency Graph. Exhibit 5B.3 shows a contingency graph for the long currency strangle. Again, the graph includes more extreme values than are shown in the worksheet. The call option will be in the money when the foreign currency value is higher than its strike price at option expiration, and the put option will be in the money when the foreign currency value is below the put option strike price at option expiration. Thus, the long call position is in the money at euro values above the $1.15 call option exercise price at option expiration. Conversely, the put option is in the money at euro values below the put option exercise price of $1.05.

The two break-even points for a long strangle position are located below the put option premium and above the call option premium. The lower break-even point is equal to the put option strike price less both premiums ($1.005 = $1.05 − $.045); the higher break-even point is equal to the call option strike price plus both premiums ($1.195 = $1.15 + $.045).

The maximum loss for a long strangle occurs at euro values at option expiration between the two strike prices. At any future spot price between the two exercise prices, the straddle buyer would lose both option premiums (−$.045 = −$0.25 − $.02).

The contingency graph for the long strangle illustrates that the euro must fluctuate more widely than with a straddle before the position becomes profitable. However, the maximum loss is only $.045 per unit, whereas it was $.05 per unit for the long straddle.

Exhibit 5B.3
Contingency Graph for a Long Currency Strangle



Short Currency Strangle

Analogous to a short currency straddle, a short strangle involves taking a short position in both a call option and a put option for that currency. As with a short straddle, the call and put options have the same expiration date. However, the call option has the higher exercise price in a short strangle.

Relative to a short straddle, the disadvantage of a short strangle is that it provides less income, since the call option premium will be lower, everything else being equal. However, the advantage of a short strangle relative to a short straddle is that the underlying currency has to fluctuate more before the strangle writer is in danger of losing money.

Short Currency Strangle Worksheet and Contingency Graph. The euro example is next used to show that the worksheet and contingency graph for the short strangle are exactly opposite to those of a long strangle.

E X A M P L E

Continuing with the information in the preceding example, a short strangle can be constructed by writing a call option on euros and a put option on euros. The resulting worksheet is shown below:

	Value of Euro at Option Expiration					
	$.95	$1.00	$1.05	$1.10	$1.15	$1.20
Sell a call	+$.025	+$.025	+$.025	+$.025	+$.025	−$.025
Sell a put	−$.08	−$.03	+$.02	+$.02	+$.02	+$.02
Net	−$.055	−$.005	+$.045	+$.045	+$.045	−$.005

The table shows that there are two break-even points for the short strangle. The lower break-even point is equal to the put option strike price less both premiums; the higher break-even point is equal to the call option strike price plus both premiums. The two break-even points are thus located at $1.005 = $1.05 − $.045 and at $1.195 = $1.15 + $.045. These break-even points are identical to the break-even points for the long strangle position.

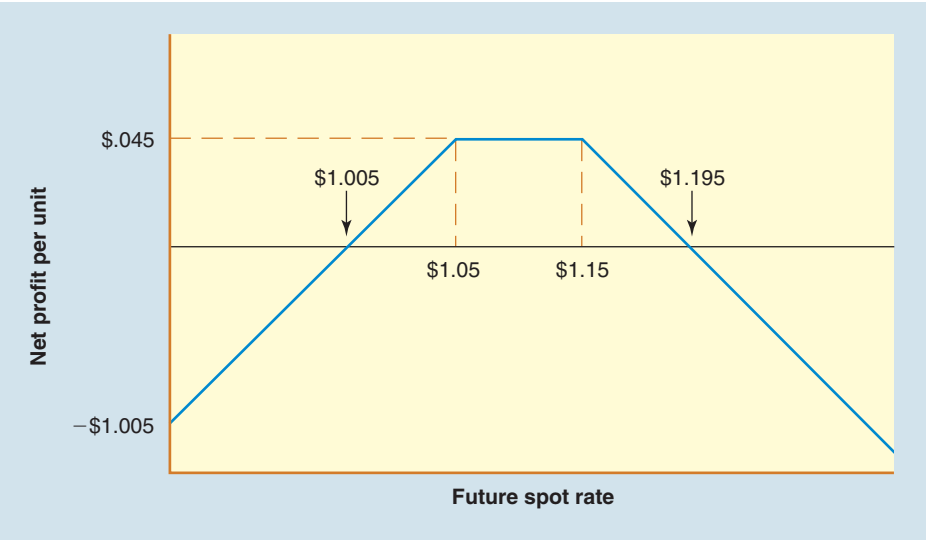
The maximum gain for a short strangle ($.045 = $.025 + $.02) occurs at a value of the euro at option expiration between the two exercise prices.

The short strangle contingency graph is shown in Exhibit 5B.4.

Speculating with Currency Strangles

As with straddles, individuals can speculate using currency strangles based on their expectations of the future movement in a particular foreign currency. For instance, speculators who expect that the Swiss franc will appreciate or depreciate substantially can construct a long strangle. Speculators can benefit from short strangles if the future spot price of the underlying currency is between the two exercise prices.

Exhibit 5B.4
Contingency Graph for a Short Currency Strangle



Compared to a straddle, the speculator who buys a strangle believes that the underlying currency will fluctuate even more widely prior to expiration. In return, the speculator pays less to construct the long strangle. A speculator who writes a strangle will receive both option premiums as long as the future spot price is between the two exercise prices. Compared to a straddle, the total amount received from writing the two options is less. However, the range of future spot prices between which no option is exercised is much wider for a short strangle.

EXAMPLE

Call and put option contracts on British pounds (£) are available with the following information:

- Call option premium on British pounds = $.030
- Put option premium on British pounds = $.025
- Call option strike price = $1.60
- Put option strike price = $1.50
- One option contract represents £31,250.

The spot rate of the pound on the expiration date is $1.52. With a long strangle, the speculator will let both options expire, since both the call and the put option are out of the money. Consequently, the strangle buyer will lose both option premiums:

	Per Unit	Per Contract
− Premium paid for call option	−$.030	−$937.50 ($.030 × 31,250 units)
− Premium paid for put option	−.025	−781.25 ($.025 × 31,250 units)
= Net profit	−$.055	−$1,718.75 (−$.055 × 31,250 units)

The straddle writer will receive the premiums from both the call and the put option, since neither option will be exercised by its owner:

	Per Unit	Per Contract
+ Premium received for call option	+$.030	$937.50 ($.030 × 31,250 units)
+ Premium received for put option	+.025	781.25 ($.025 × 31,250 units)
= Net profit	+$.055	$1,718.75 ($.055 × 31,250 units)

As with individual call or put positions and with a straddle, the strangle writer's gain or loss is the strangle buyer's loss or gain.

Currency Spreads

A variety of currency spreads exist that can be used by both MNCs and individuals to hedge cash inflows or outflows or to profit from an anticipated movement in a foreign currency. This section covers two of the most popular types of spreads: bull spreads and bear spreads. Bull spreads are profitable when a foreign currency appreciates, whereas bear spreads are profitable when a foreign currency depreciates.

Currency Bull Spreads with Call Options

A currency bull spread is constructed by buying a call option for a particular underlying currency and simultaneously writing a call option for the same currency with a higher exercise price. A bull spread can also be constructed using currency put options, as will be discussed shortly.

With a bull spread, the spreader believes that the underlying currency will appreciate modestly, but not substantially.

EXAMPLE

Assume two call options on Australian dollars (A$) are currently available. The first option has a strike price of $.64 and a premium of $.019. The second option has a strike price of $.65 and a premium of $.015. The bull spreader buys the $.64 option and sells the $.65 option. An option contract on Australian dollars consists of 50,000 units.

Consider the following scenarios:

1. The Australian dollar appreciates to $.645, a spot price between the two exercise prices. The bull spreader will exercise the option he bought. Assuming the bull spreader immediately sells the Australian dollars for the $.645 spot rate after purchasing them for the $.64 exercise price, he will gain the difference. The bull spreader will also collect the premium on the second option he wrote, but that option will not be exercised by the (unknown) buyer:

	Per Unit	Per Contract
Selling price of A$	+$.645	$32,250 ($.645 × 50,000 units)
− Purchase price of A$	−.64	−32,000 ($.64 × 50,000 units)
− Premium paid for call option	−.019	−950 ($.019 × 50,000 units)
+ Premium received for call option	+.015	+750 ($.015 × 50,000 units)
= Net profit	$.001	$50 ($.001 × 50,000 units)

Under this scenario, note that the bull spreader would have incurred a net loss of $.645 − $.64 − $.019 = −$.014/A$ if he had purchased only the first option. By writing the second call option, the spreader increased his net profit by $.015/A$.

2. The Australian dollar appreciates to $.70, a value above the higher exercise price. Under this scenario, the bull spreader will exercise the option he purchased, but the option he wrote will also be exercised by the (unknown) buyer. Assuming the bull spreader immediately sells the Australian dollars purchased with the first option and buys the Australian dollars he has to sell to the second option buyer for the spot rate, he will incur the following cash flows:

	Per Unit	Per Contract
Selling price of A$	+$.70	$35,000 ($.70 × 50,000 units)
− Purchase price of A$	−.64	−32,000 ($.64 × 50,000 units)
− Premium paid for call option	−.019	−950 ($.019 × 50,000 units)
+ Selling price of A$	+$.65	+32,500 ($.65 × 50,000 units)
− Purchase price of A$	−.70	−35,000 ($.70 × 50,000 units)
+ Premium received for call option	+.015	+750 ($.015 × 50,000 units)
= Net profit	$.006	$300 ($.006 × 50,000 units)

The important point to understand here is that the net profit to the bull spreader will remain $.006/A$ no matter how much more the Australian dollar appreciates. This is because the bull spreader will always sell the Australian dollars he purchased with the first option for the spot price and purchase the Australian dollars needed to meet his obligation for the second option. The two effects always cancel out, so the bull spreader will net the difference in the two strike prices less the difference in the two premiums ($.65 − $.64 − $.019 + $.015 = $.006). Therefore, the net profit to the bull spreader will be $.006 per unit at any future spot price above $.65.

Equally important to understand is the tradeoff involved in constructing a bull spread. The bull spreader in effect forgoes the benefit from a large currency appreciation by collecting the premium from writing a currency option with a higher exercise price and ensuring a constant profit at future spot prices above the higher exercise price; if he had not written the second option with the higher exercise price, he would have benefited substantially under this scenario, netting $.70 − $.64 − $.019 = $.041/A$ as a result of exercising the call option with the $.64 strike price. This is the reason the bull spreader expects that the underlying currency will ap-

preciate modestly so that he gains from the option he buys and collects the premium from the option he sells without incurring any opportunity costs.

3. The Australian dollar depreciates to $.62, a value below the lower exercise price. If the future spot price is below the lower exercise price, neither call option will be exercised, as they are both out of the money. Consequently, the net profit to the bull spreader is the difference between the two option premiums:

	Per Unit	Per Contract
− Premium paid for call option	−$.019	−$950 ($.019 × 50,000 units)
+ Premium received for call option	+.015	+750 ($.015 × 50,000 units)
= Net profit	−$.004	−$200 ($.004 × 50,000 units)

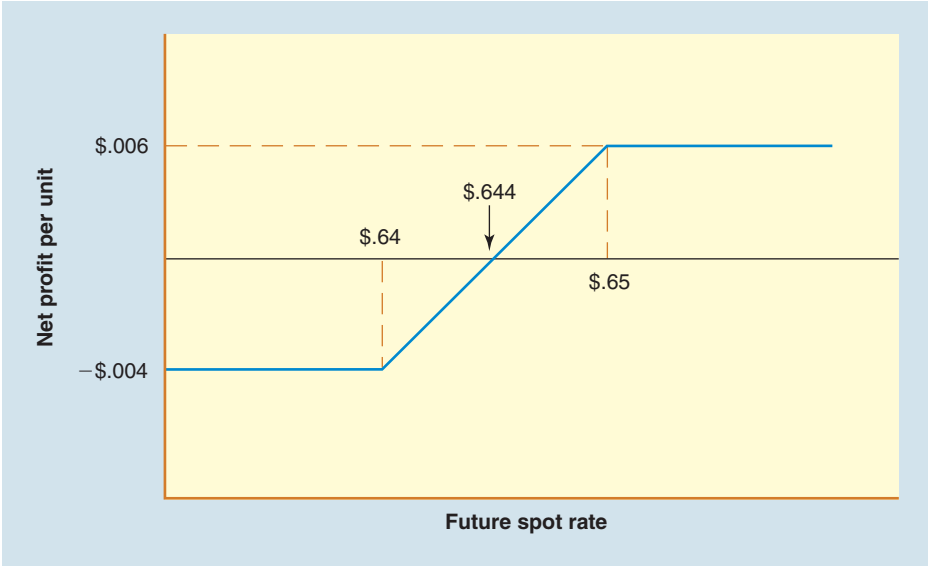
Similar to the scenario where the Australian dollar appreciates modestly between the two exercise prices, the bull spreader's loss in this case is reduced by the premium received from writing the call option with the higher exercise price.

Currency Bull Spread Worksheet and Contingency Graph. For the Australian dollar example above, a worksheet and contingency graph can be constructed. One possible worksheet is shown below:

	Value of Australian Dollar at Option Expiration				
	$.60	$.64	$.645	$.65	$.70
Buy a call	−$.019	−$.019	−$.014	−$.009	+$.041
Sell a call	+$.015	+$.015	+$.015	+$.015	−$.035
Net	−$.004	−$.004	+$.001	+$.006	+$.006

Exhibit 5B.5 shows the corresponding contingency graph.

Exhibit 5B.5
Contingency Graph for a Currency Bull Spread



The worksheet and contingency graph show that the maximum loss for the bull spreader is limited to the difference between the two option premiums of −$.004 = −$.019 + $.015. This maximum loss occurs at future spot prices equal to the lower strike price or below.

Also note that for a bull spread the gain is limited to the difference between the strike prices less the difference in the option premiums and is equal to $.006 = $.65 − $.64 − $.004. This maximum gain occurs at future spot prices equal to the higher exercise price or above.

The break-even point for the bull spread is located at the lower exercise price plus the difference in the two option premiums and is equal to $.644 = $.64 + $.004.

Currency Bull Spreads with Put Options

As mentioned previously, currency bull spreads can be constructed just as easily with put options as with call options. To construct a put bull spread, the spreader would again buy a put option with a lower exercise price and write a put option with a higher exercise price. The basic arithmetic involved in constructing a put bull spread is thus essentially the same as for a call bull spread, with one important difference, as discussed next.

Recall that there is a positive relationship between the level of the existing spot price relative to the strike price and the call option premium. Consequently, the option with the higher exercise price that is written in a call bull spread will have the lower option premium, everything else being equal. Thus, buying the call option with the lower exercise price and writing the call option with the higher exercise price involves a cash outflow for the bull spreader. For this reason, call bull spreads fall into a broader category of spreads called debit spreads. Also recall that the lower the spot rate relative to the strike price, the higher the put option premium will be. Consequently, the option with the higher strike price that is written in a put bull spread will have the higher option premium, everything else being equal. Thus, buying the put option with the lower exercise price and writing the put option with the higher exercise price in a put bull spread results in a cash inflow for the bull spreader. For this reason, put bull spreads fall into a broader category of spreads called credit spreads.

Speculating with Currency Bull Spreads

The speculator who constructs a currency bull spread trades profit potential for a reduced cost of establishing the position. Ideally, the underlying currency will appreciate to the higher exercise price but not far above it. Although the speculator would still realize the maximum gain of the bull spread in this case, he or she would incur significant opportunity costs if the underlying currency appreciates much above the higher exercise price. Speculating with currency bull spreads is appropriate for currencies that are expected to appreciate slightly until the expiration date. Since the bull spread involves both buying and writing options for the underlying currency, bull spreads can be relatively cheap to construct and will not result in large losses if the currency depreciates. Conversely, bull spreads are useful tools to generate additional income for speculators.

Currency Bear Spreads

The easiest way to think about a currency bear spread is as a short bull spread. That is, a currency bear spread involves taking exactly the opposite positions involved in a bull spread. The bear spreader writes a call option for a particular underlying currency

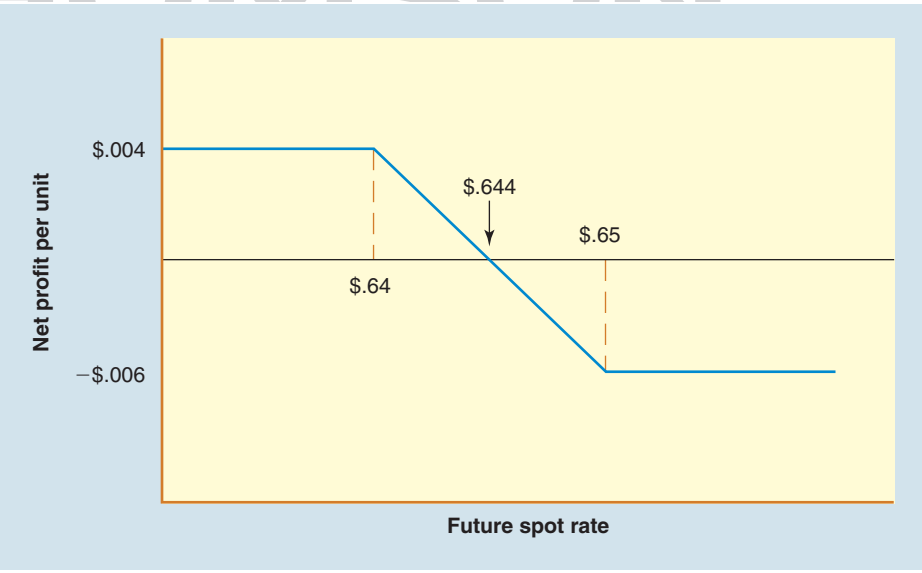
and simultaneously buys a call option for the same currency with a higher exercise price. Consequently, the bear spreader anticipates a modest depreciation in the foreign currency.

Currency Bear Spread Worksheet and Contingency Graph. For the Australian dollar example above, the bear spreader writes the $.64 option and buys the $.65 option. A worksheet and contingency graph can be constructed. One possible worksheet is shown below:

	Value of Australian Dollar at Option Expiration				
	$.60	$.64	$.645	$.65	$.70
Sell a call	+$.019	+$.019	+$.014	+$.009	−$.041
Buy a call	−$.015	−$.015	−$.015	−$.015	+$.035
Net	+$.004	+$.004	−$.001	−$.006	−$.006

The corresponding contingency graph is shown in Exhibit 5B.6.

Exhibit 5B.6
Contingency Graph for a Currency Bear Spread



Notice that the worksheet and contingency graph for the bear spread are the mirror image of the worksheet and contingency graph for the bull spread. Consequently, the maximum gain for the bear spreader is limited to the difference between the two exercise prices of $.004 = $.019 − $.015, and the maximum loss for a bear spread (−$.006 = −$.65 + $.64 + $.004) occurs when the Australian dollar's value is equal to or above the exercise price at option expiration.

Also, the break-even point is located at the lower exercise price plus the difference in the two option premiums and is equal to $.644 = $.64 + $.004, which is the same break-even point as for the bull spread.

It is evident from the above illustration that the bear spreader hopes for a currency depreciation. An alternative way to profit from a depreciation would be to buy a put option for the currency. A bear spread, however, is typically cheaper to construct, since it involves buying one call option and writing another call option. The disadvantage of the bear spread compared to a long put position is that opportunity costs can be significant if the currency depreciates dramatically. Consequently, the bear spreader hopes for a modest currency depreciation.