

STRATEGY EUTURES & OPTIONS COLUMN COL

Introduction

Using futures and options, whether separately or in combination, can offer countless trading opportunities. The 21 strategies in this publication are not intended to provide a complete guide to every possible trading strategy, but rather a starting point. Whether the contents will prove to be the best strategies and follow-up steps for you will depend on your knowledge of the market, your risk-carrying ability and your trading objectives.

Interested in learning more about futures? The Chicago Mercantile Exchange® (CME®) Education Department offers a full range of courses and seminars designed to meet your needs, whether you're still learning the basics or looking for advanced instruction in options strategies or technical analysis. Courses are offered in classrooms at the Exchange as well as online. Please visit the Education section of the CME Web site, www.cme.com, to see current educational offerings and upcoming class schedules. You may also call the Education Department at 312-930-6937or e-mail us at edu@cme.com.

How to Use This Guide

This publication was designed, not as a complete guide to every possible scenario, but rather as an easy-to-use manual that suggests possible trading strategies. One way to use it effectively is to follow these simple steps:

1. Determine Your Market Outlook.

Are you generally bullish, bearish, or undecided on future market moves?

2. Determine Your Volatility Outlook.

Do you feel that volatility will rise, fall, or are you undecided?

3. Look Up the Corresponding Strategy on the Appropriate Table.

Whether you are initiating a position or trying to follow up a current position, line up the correct row and column on the proper table to find a strategy that will help you make the most of your outlook.

4. Determine the "Best" Strike Price.

By analyzing your market and volatility outlook further you should be able to select the option strike that provides the best opportunity. The Guide does not go into detail on selecting the best strikes. You can do this by calculating a few "What-If" scenarios.

Some Things You Should Be Aware Of:

- In addition to breaking down market analysis into two main questions ("What is your market outlook?" and "What is your volatility outlook?"), you must also consider margin requirements, commission costs, taxes and execution costs, as well as other possible factors.
- The follow-up strategies in this Guide are usually "One Trade" changes. In other words, we asked: "How can a trader transform a position into a more desirable position with just one trade?" We did, however, bend this rule a little when one trade produced no acceptable strategy.
- Although you may be able to transform a trade with just one transaction, the resulting position can contain options at strikes that may or may not be appropriate for your new outlook.
- The ratio spreads and ratio backspreads are strategies that do not fit neatly into one of the nine scenarios. Therefore, a trader MUST analyze these strategies in greater depth. The strikes chosen bear greatly on the resulting profit/loss. Do several "What-If" scenarios before using these strategies.
- There are many other strategies, such as: calendar spreads, condors, Christmas trees, and option strips that are not addressed here. While they are all valid strategies, they do not fit neatly into this approach.
- The suggested strategies on the following pages are just that—suggestions. Because of limited space, the strategies suggested may or may not the "best" ones for your trading plan.

How to Use the Tables

On the next page is a table suggesting strategies to use when "Initiating a Market Position." Let's go through an example: A trader has been watching a major increase in the value of the S&P 500® futures contract and feels the market is poised for a minor downward move. A small market drop with volatility dropping and futures leveling off is this trader's outlook.

The market scenario is bearish.

The trader looks across the top of the page and finds "BEARISH."

The volatility scenario is down.

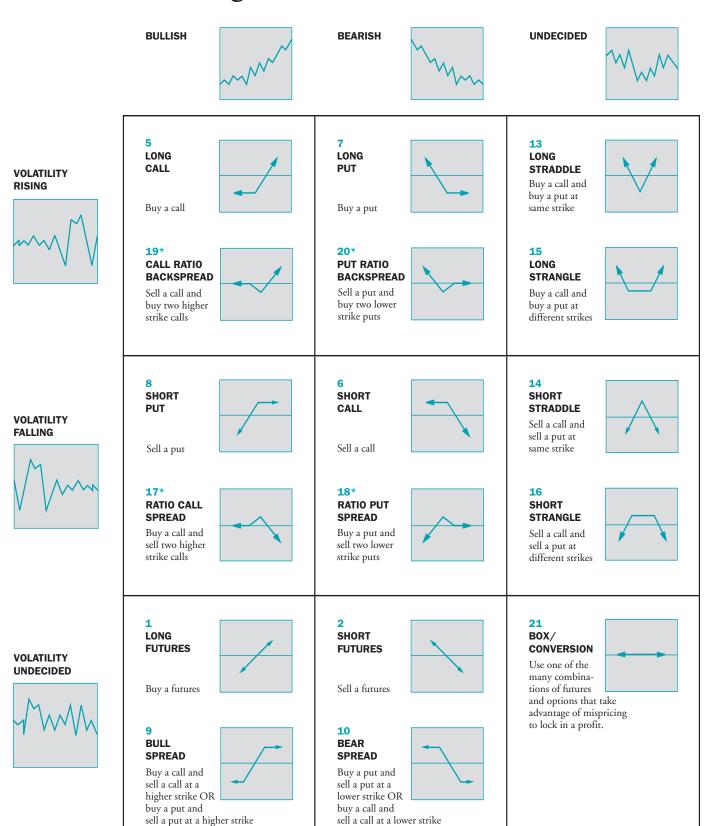
The trader looks down the left of the page and finds "VOLATILITY FALLING."

The trader lines up the **BEARISH** colum with the **VOLATILITY FALLING** row and finds two possible suggested market scenarios:

Number 6, SHORT CALL, and Number 18, RATIO PUT SPREAD.

The trader now does a number of "What-If" scenarios to determine the best strike, the profit objective and loss tolerance before making any trading decisions.

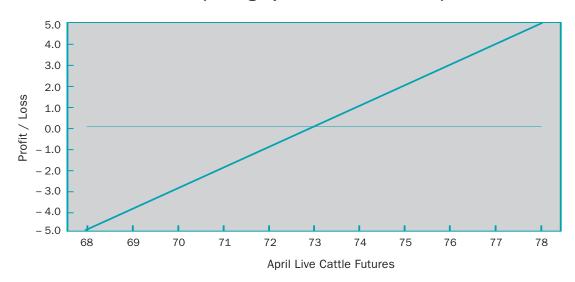
Initiating a Market Position



^{*} All ratio spreads and ratio backspreads need more analysis. These strategies do not fit neatly into any of the nine market scenarios. Define your market expectation more closely and work out examples with different market scenarios before choosing these strategies. Also, ratio strategies are sometimes done at ratios other than one by two.

1 Long Futures

(1 Long April Live Cattle Futures)



Scenario:

This trader feels that Live Cattle futures are poised for a rally. The implied volatility of the options is relatively high, but the trader does not expect it to come down soon. Therefore, he decides to buy one futures contract.

Specifics:

Underlying Futures Contract: April Live Cattle

Futures Price Level: 73.00

Days to Futures Expiration: 75

Days to Options Expiration: 55

Option Implied Volatility: 16.2%

Position: Long 1 Futures

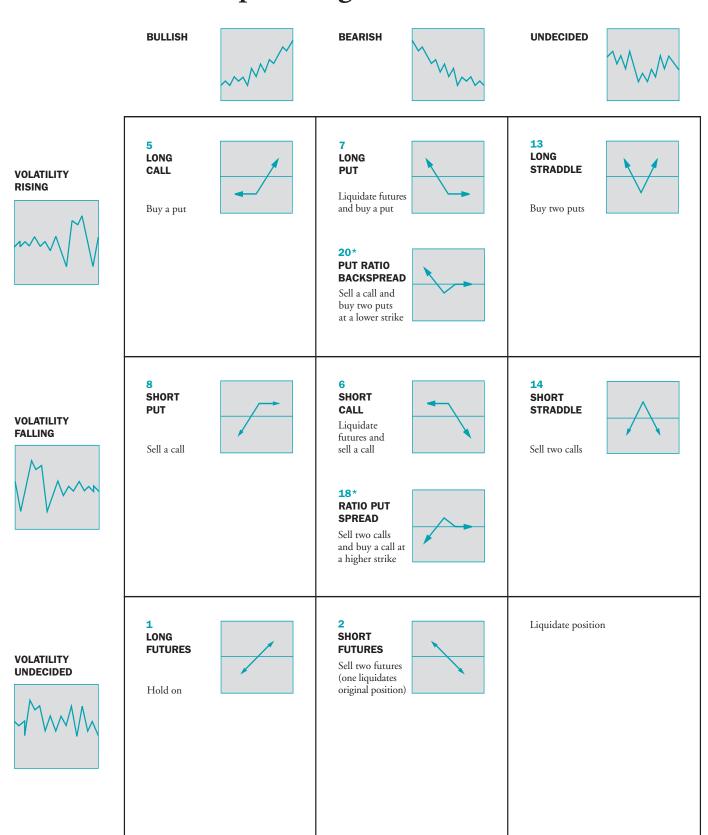
At Expiration:

Breakeven: 73.00 (original futures price)

Loss Risk: Unlimited; losses increase as futures fall.
Potential Gain: Unlimited; profits increase as futures rise.

Things to Watch:

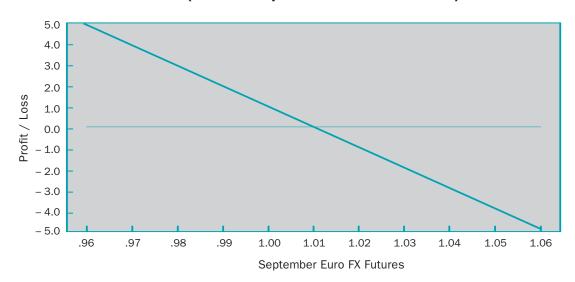
Changes in implied volatility have no effect on this position. If the trader has an opinion on volatility, he may consider another strategy. Another strategy may increase potential profits and/or reduce potential losses. Check the next page for suggested follow-up strategies.



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Short Futures

(1 Short September Euro FX Futures)



Scenario:

This trader is a technician. He sees a major turnaround in the price of Euro FX Futures. He points out that chart patterns suggest a big downward move, the short-term moving average crossed under the long-term moving average, even the fundamentals look bearish. He has looked at the options market, but feels that a short futures position would be the best.

Specifics:

Underlying Futures Contract: September Euro FX

Futures Price Level: 1.0100
Days to Futures Expiration: 65
Days to Options Expiration: 55
Option Implied Volatility: 14.9%

Position: Short 1 Futures

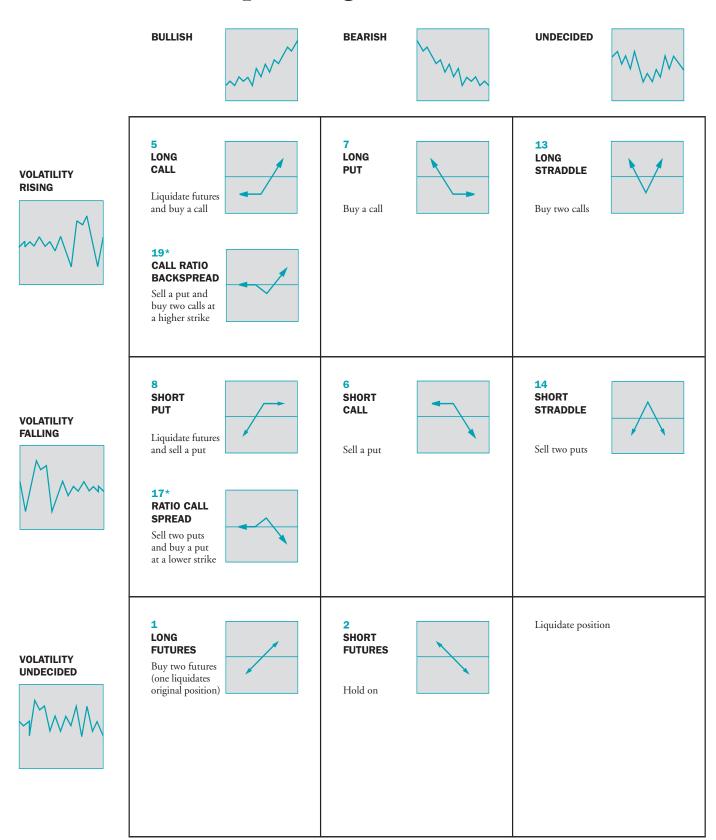
At Expiration:

Breakeven: 1.0100 (original futures price)

Loss Risk: Unlimited; losses increase as futures rise. Potential Gain: Unlimited; profits increase as futures fall.

Things to Watch:

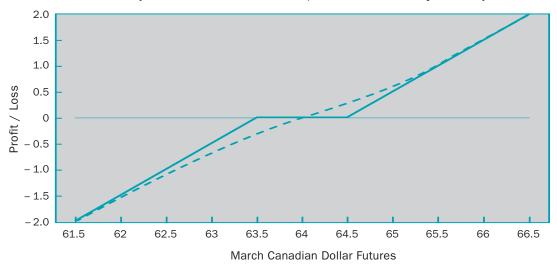
Implied volatility has no effect on this position. If the trader has an opinion on volatility, he may consider another strategy. Other strategies may increase the reward and/or reduce the risk. Check the following page for follow-up strategies.



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Synthetic Long Futures (Split Strike)

(1 Long Mar CD Call @ .6450; 1 Short Put @ .6350) (Dashed Line = Current; Solid Line = Expiration)



Scenario:

Normally a trader enters into this position only as a follow-up strategy. Suppose the trader had a short strangle that he wanted to convert to a long futures. He can buy 2 calls (one liquidates the original short call). This nearly creates a synthetic long futures (long call, short put); however, it does so at different strike prices. The only difference in the risk/reward profile is the flat area between strikes—where little is gained or lost (depending upon the premiums and the exact strikes chosen).

Specifics:

Underlying Futures Contract: March Canadian Dollar

Futures Price Level: .6400
Days to Futures Expiration: 30
Days to Options Expiration: 20
Option Implied Volatility: 5.0%

Option Position: Long 1 Mar .6450 Call - .0020 (\$200) Short 1 Mar .6350 Put + .0019 (\$190)

- .0001 (\$ 10)

At Expiration:

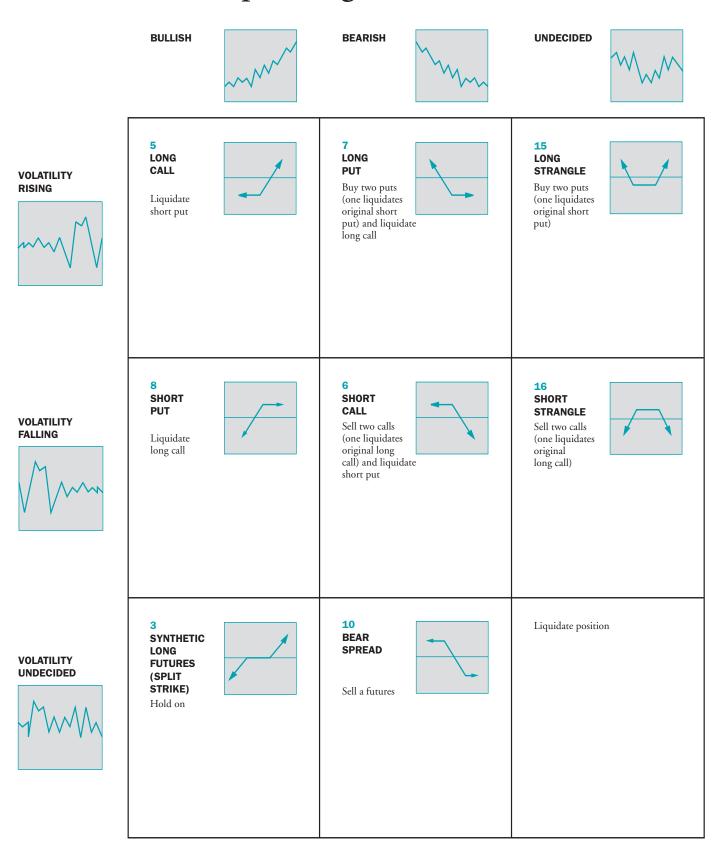
Breakeven: .6451 (.6450 strike + 0.0001 debit)

Loss Risk: Unlimited; losses mount as futures fall past .6350 strike.

Potential Gain: Unlimited; profits increase as futures rise past .6451 breakeven.

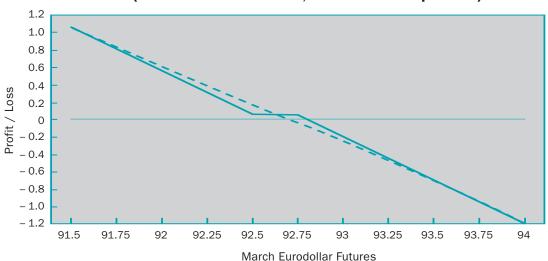
Things to Watch:

This position is not normally affected by changes in implied volatility. It is nearly the same as a long futures position except for the flat area between strikes. The flat area below the current futures price allows for some downside movement without loss. However, the trader gives away a little upside potential. Check the next page for follow-up strategies.



Synthetic Short Futures (Split-Strike)

(1 Long Mar ED Put @ 92.50; 1 Short Call @ 92.75) (Dashed Line = Current; Solid Line = Expiration)



Scenario:

This trader feels that Eurodollar prices are going to drop (interest rates to rise). He has no opinion on volatility. He considers a straight short futures, but decides that there is a slight chance that EuroDollar futures will rise a little. He therefore decides to try a split-strike synthetic short futures position.

Specifics:

Underlying Futures Contract: March Eurodollar futures

Futures Price Level: 92.70
Days to Futures Expiration: 59
Days to Options Expiration: 40
Option Implied Volatility: 23.2%

Option Position: Long 1 Mar 92.50 Put - 0.14 (\$ 350) Short 1 Mar 92.75 Call + 0.20 (\$ 500)

+ 0.06 (\$ 150)

At Expiration:

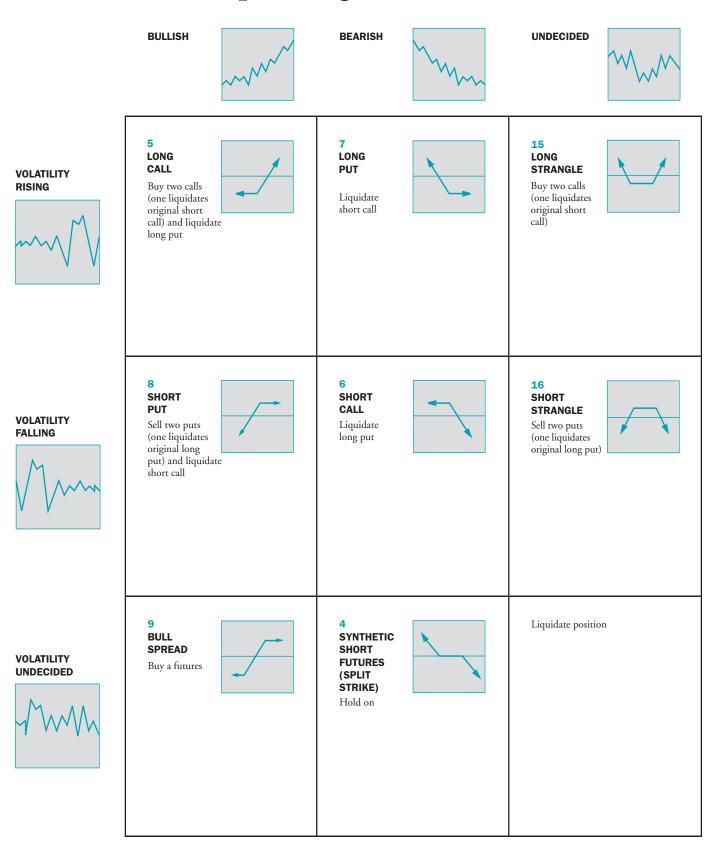
Breakeven: 92.81 (92.75 strike + 0.06 credit)

Loss Risk: Unlimited; losses mount above 92.81 breakeven.

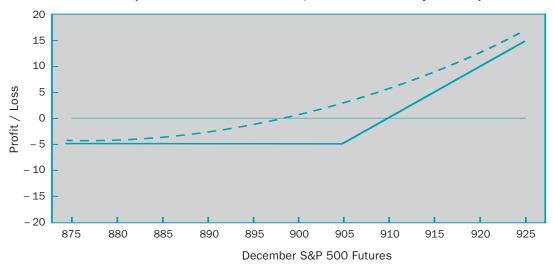
Potential Gain: Unlimited; profits increase as futures fall past 92.50 strike.

Things to Watch:

Implied volatility changing normally has no effect on this strategy. Therefore, if the trader has an opinion on volatility, he may find another strategy with a better risk/reward profile. Watch this position carefully; just like a short futures, this position has unlimited risk. Check the next page for follow-up strategies.



(1 Long Dec S&P 500 Call @ 905) (Dashed Line = Current; Solid Line = Expiration)



Scenario:

A trader projects that stock market futures are poised for a large upward move in a short period of time. An increase in the underlying futures to 1315.00 or greater, and an increase in implied volatility by 4 percentage points, also seem likely. Consequently, the trader decides to buy a call.

Specifics:

Underlying Futures Contract: December S&P 500

Futures Price Level: 900
Days to Futures Expiration: 45
Days to Options Expiration: 45
Option Implied Volatility: 18.1%

Option Position: Long 1 Dec 905 Call – 5.40 (\$1350)

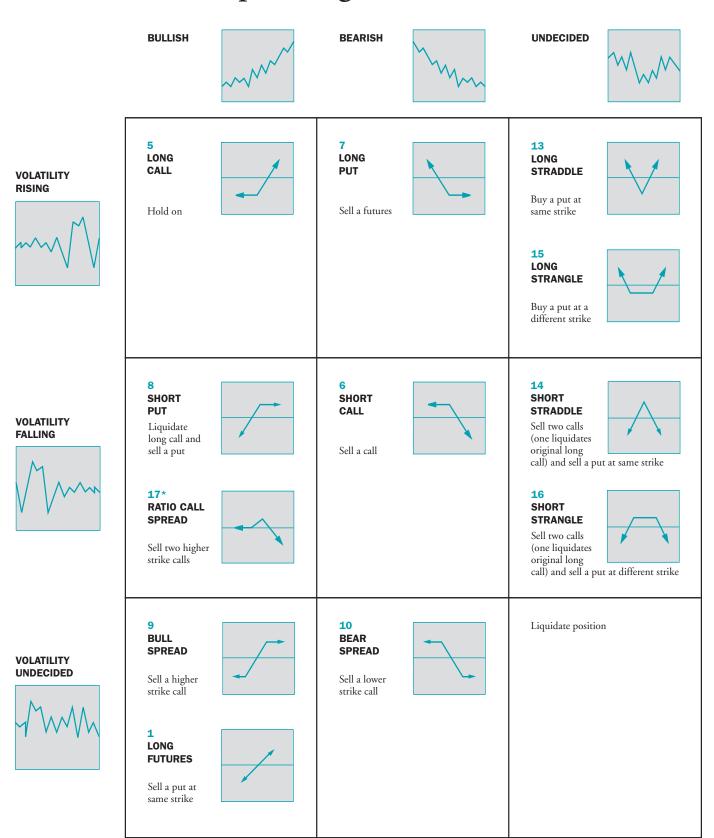
At Expiration:

Breakeven: 910.40 (905 strike + 5.40 premium)

Loss Risk: Below 910.40; with maximum loss, at 905 or below, of 5.40. Potential Gain: Unlimited; profits continue to increase as futures rise above 910.40.

Things to Watch:

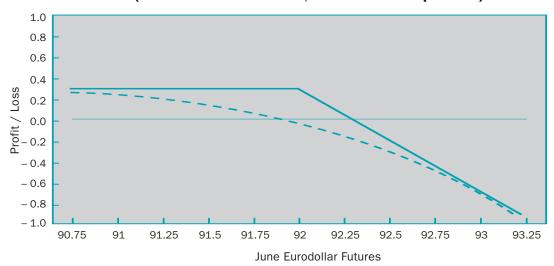
The trader will lose the volatility effect if this position is held to expiration. As soon as implied volatility rises to the expected level the trader may consider liquidating or transforming this position. Check the next page for appropriate follow-up strategies.



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6 Short Call

(1 Short Jun Eurodollar Call @ 92.00) (Dashed Line = Current; Solid Line = Expiration)



Scenario:

After a large increase this trader now believes the Eurodollar market is in for a consolidation and a mild downward fall. Implied volatility is approaching all-time highs. Premiums, therefore, are relatively large. The trader wants to capture the inflated premium through the sale of one 92.00 call.

Specifics:

Underlying Futures Contract: June Eurodollar

Futures Price Level: 91.97
Days to Futures Expiration: 30
Days to Options Expiration: 30
Option Implied Volatility: 34.4%

Option Position: Short 1 Jun 92.00 Call + 0.30 (\$750)

At Expiration:

Breakeven: 92.30 (92.00 strike + 0.30 premium)

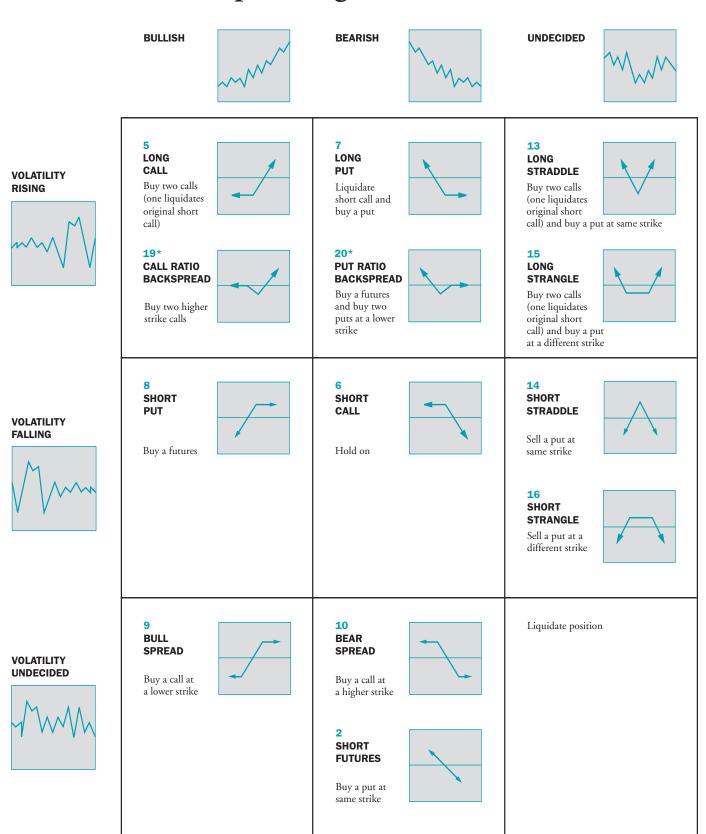
Loss Risk: Unlimited; losses continue to increase as futures rise above 92.30

breakeven.

Potential Gain: Limited to the premium received. Maximum profit below 92.00 strike.

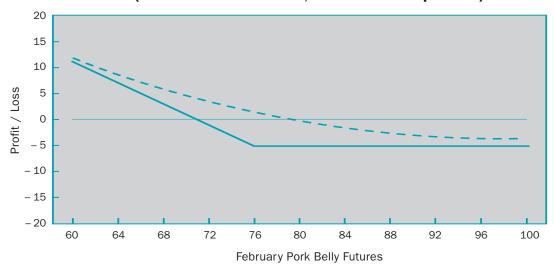
Things to Watch:

Although the trader is highly compensated for the risk assumed (with implied volatility high), the trader must watch this (and all) unlimited risk positions closely. Consider another strategy if the futures and/or volatility continue to rise. A review of the trade should occur at some predetermined place.



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(1 Long Feb Pork Belly Put @ 76.00) (Dashed Line = Current; Solid Line = Expiration)



Scenario:

Pork Bellies have been trading at contract highs of between 75 and 85 cents per pound. The trader feels that a major decline is very likely. However, the trader is not sure when it will come. He decides to buy a long-term put option. By doing this he initially has very little time decay. He can ride out a temporary upward move and still be in for the big break.

Specifics:

Underlying Futures Contract: February Pork Bellies

Futures Price Level: 80.15
Days to Futures Expiration: 210
Days to Options Expiration: 180
Option Implied Volatility: 33.2%

Option Position: Long 1 Feb 76 Put - 5.10 (\$2040)

At Expiration:

Breakeven: 70.90 (76.00 strike – 5.10 premium)

Loss Risk: Limited to the premium paid. Loss above 70.90 with maximum

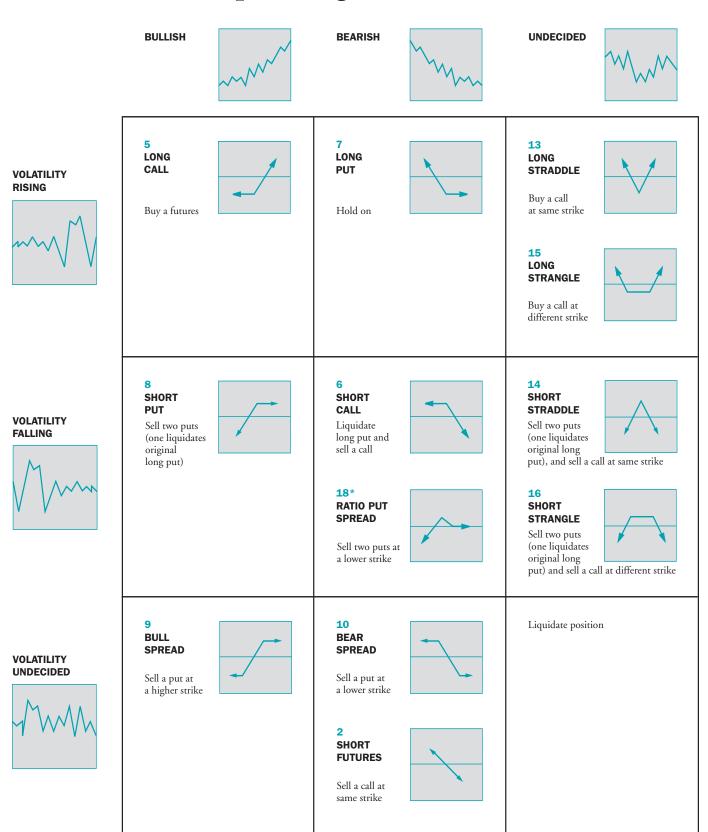
loss of 5.10 above 76.00.

Potential Gain: Unlimited, with profits increasing as the futures fall further and further

past 70.90 breakeven.

Things to Watch:

This trader must be very bearish, with volatility increasing, to make this trade profitable. If held to expiration, the futures would have to fall more than 10% by expiration just to break even. Check the follow-up strategies if the futures fall or volatility rises to the levels expected before expiration.



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(1 Short Mar Australian Dollar Put @ 0.5500) (Dashed Line = Current; Solid Line = Expiration)



Scenario:

This trader feels very strongly that Australian Dollar futures will not fall. He thinks, though, that the market has an equal chance of going up or leveling out. He also expects implied volatility to fall about 11%. The trader decides to sell a put option.

Specifics:

Underlying Futures Contract: March Australian Dollar

Futures Price Level: 0.5500
Days to Futures Expiration: 50
Days to Options Expiration: 40
Option Implied Volatility: 14.1%

Option Position: Short 1 Mar 0.5500 Put + .0111 (\$1110)

At Expiration:

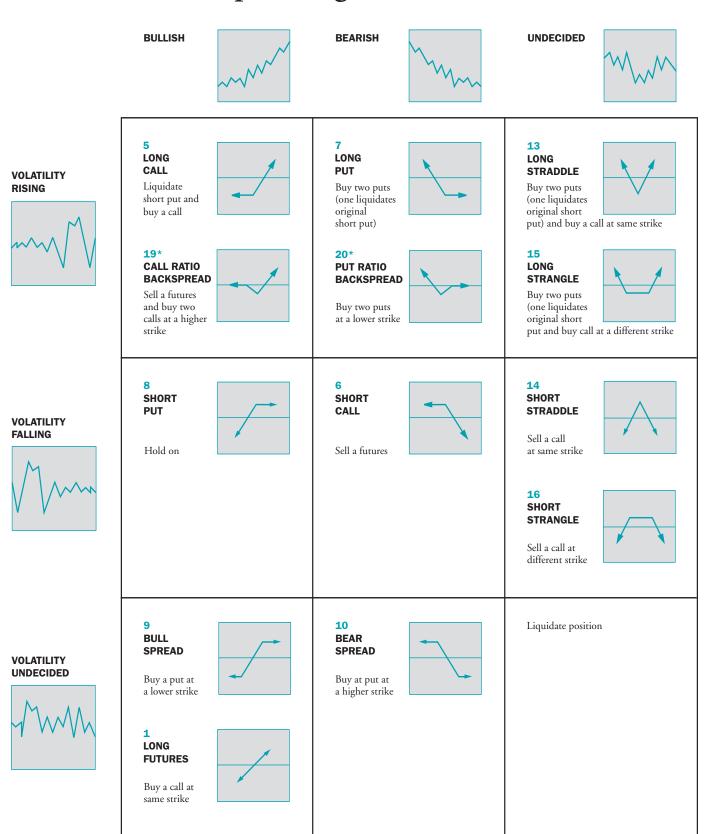
Breakeven: 0.5389 (0.5500 strike – 0.0111 credit)

Loss Risk: Unlimited; with losses increasing as futures fall past 0.5389 breakeven. Potential Gain: Limited to the premium received 0.0111 (\$1110). This occurs when

futures is above 0.5500 strike at option expiration.

Things to Watch:

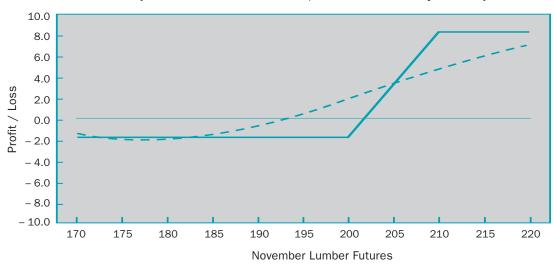
As with all unlimited risk situations, the trader must watch this position carefully. Special consideration must be give to foreign currency trading, due to foreign and domestic central bank policy changes. The worst scenario is to be in this position with volatility rising and futures falling. Always re-evaluate this position at some predetermined point.



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9 Bull Spread

(1 Long Nov Lumber Call@200; 1 Short Call@210) (Dashed Line = Current; Solid Line = Expiration)



Scenario:

The trader feels bullish on Lumber, but volatility is in question. He could try futures as an alternative, but wants the comfort of a limited loss position. He decides on a bull spread with the higher strike written at the top of his expected trading range of 210.

Specifics:

Underlying Futures Contract: November Lumber

Futures Price Level: 193.00
Days to Futures Expiration: 60
Days to Options Expiration: 40
Option Implied Volatility: 18.6%

Option Position: Long 1 Nov 200 Call - 2.10 (\$315) Short 1 Nov 210 Call + 0.50 (\$75)

- 1.60 (\$240)

At Expiration:

Breakeven: 201.60 (200.00 strike + 1.60 debit)

Loss Risk: Limited to premium paid. Losses increase below 201.60

to a maximum loss below 200.00 of 1.60 (\$240).

Potential Gain: Limited to difference between strikes less debit paid (10.00 – 1.60) 8.40

(\$12,600). Gains mount above 201.60 with maximum profit at 210.00.

Things to Watch:

Volatility changes affect this spread very little. Therefore, if the trader has an opinion on volatility, one of the other strategies may work better. Check the next page for follow-up strategies.





BEARISH



UNDECIDED

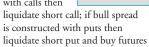


VOLATILITY RISING



5 LONG CALL

If bull spread is constructed with calls then



7 LONG PUT

If a bull spread is constructed with puts then liquidate short p

with puts then
liquidate short put; if bull spread
is constructed with calls then
liquidate short call and sell futures

12 SHORT BUTTERFLY

Add a bear spread at lower strikes



VOLATILITY FALLING



8 SHORT PUT

If bull spread is constructed with puts then

liquidate long put; if bull spread is constructed with calls then liquidate long call and buy futures

SHORT CALL

If bull spread is constructed with calls then

liquidate long call; if bull spread is constructed with puts then liquidate long put and sell futures

11 LONG BUTTERFLY

Add a bear spread at higher strikes



VOLATILITY UNDECIDED



9 BULL SPREAD

Hold on



SYNTHETIC SHORT FUTURES (SPLIT

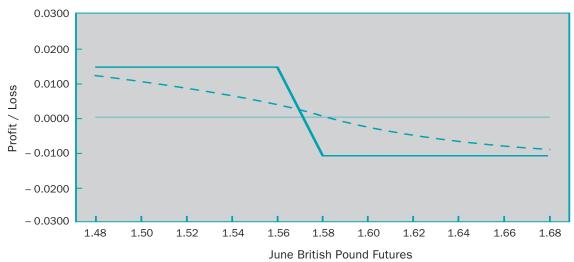
STRIKE)Sell a futures



Liquidate position

10 Bear Spread

(1 Long June BP Put @ 1.5800; 1 Short Put @ 1.5600) (Dashed Line = Current; Solid Line = Expiration)



Scenario:

This trader is convinced the British Pound market is going to fall. The trader does not expect a sharp drop, just a gradual decline to about 1.5600 US\$/pound. He decides on a bear spread with the written put at the target price.

Specifics:

Underlying Futures Contract: June British Pound

Futures Price Level: 1.5850
Days to Futures Expiration: 80
Days to Options Expiration: 70
Option Implied Volatility: 12.0%

Option Position: Long 1 Jun 1.5800 Put - .0320 (\$2000.00)

Short 1 Jun 1.5600 Put + .0210 (\$1312.50) - .0110 (\$ 687.50)

At Expiration:

Breakeven: 1.5690 (1.5800 strike – .0110 debit)

Loss Risk: Losses start above 1.5690, but limited to the debit paid.

Maximum loss above 1.5800.

Potential Gain: Gains mount as futures fall below 1.5690. Maximum profit of

.0090 (\$562.50) at or below 1.5600 (the difference between strikes

.0200 - debit .0110).

Things to Watch:

If the trader had a target price in mind, this would be an effective strategy. Why should the trader pay for an option with unlimited potential when he thinks the move is limited? Selling an option at the target price will reduce the cost of an outright long option.





BEARISH



UNDECIDED

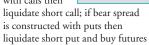


VOLATILITY RISING



LONG **CALL**

If bear spread is constructed with calls then



LONG PUT

If a bear spread is constructed with puts then

liquidate short put; if bear spread is constructed with calls then liquidate short call and sell futures

12 SHORT **BUTTERFLY**

Add a bull spread at higher strikes



VOLATILITY FALLING



SHORT PUT

If bear spread is constructed with puts then

liquidate long put; if bear spread is constructed with calls then liquidate long call and buy futures

SHORT CALL

If bear spread is constructed with calls then

liquidate long call; if bear spread is constructed with puts then liquidate long put and sell futures

11 LONG **BUTTERFLY**

Add a bull spread at lower strikes



VOLATILITY UNDECIDED



SYNTHETIC LONG **FUTURES** (SPLIT STRIKE)

Buy a futures

Hold on

10

BEAR

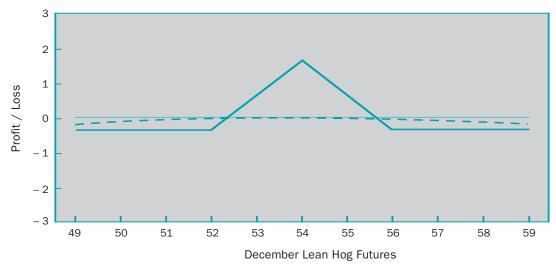
SPREAD



Liquidate position

11 Long Butterfly

(1 Long LHZ Call@52; 2 Short Calls@54; 1 Long Call@56) (Dashed Line = Current; Solid Line = Expiration)



Scenario:

The trader currently has a #17 Ratio Call Spread. He thinks this is still a good position. However, he is worried that the futures may increase dramatically on the upside, leaving him with a substantial loss. He adds a long call and converts the position into a long butterfly.

Specifics:

Underlying Futures Contract: December Lean Hogs

Futures Price Level: 52.50
Days to Futures Expiration: 74
Days to Option Expiration: 45
Option Implied Volatility: 21.5%

Option Position: Long 1 Dec 52.00 Call - 1.825 (\$547.50)

Short 2 Dec 54.00 Calls + 0.950 (\$285.00) Long 1 Dec 56.00 Call - 0.450 (\$135.00) - 0.375 (\$112.50)

At Expiration:

Breakeven: Downside: 52.375 (52.00 strike + 0.375 debit).

Upside: 55.625 (56.00 strike – 0.375 debit).

Loss Risk: Losses start above 55.625, or below 52.375, but limited to the

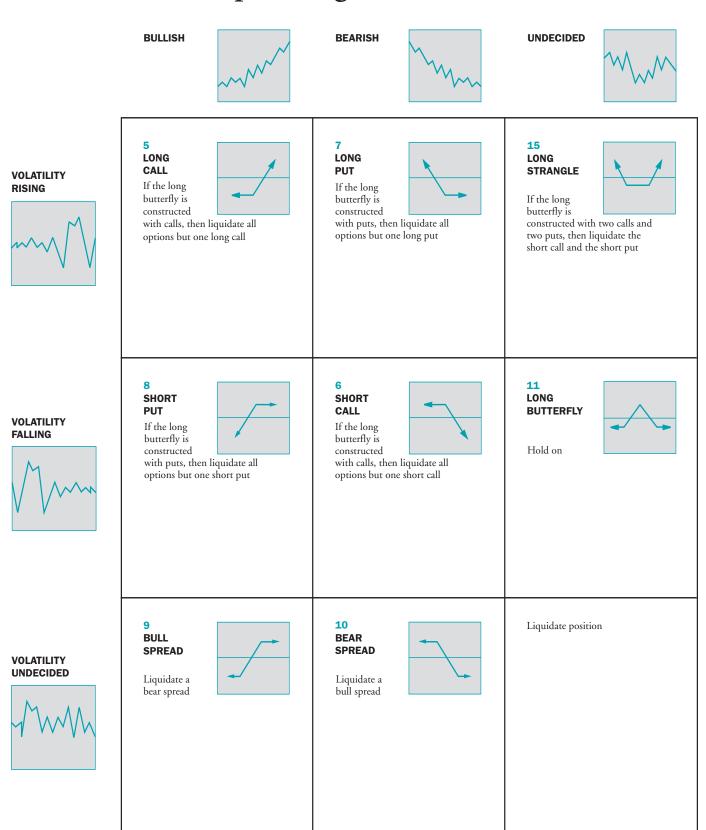
debit paid. Maximum loss above 56.00 strike or below 52.00 strike.

Potential Gain: Gains peak at strike of written calls. Maximum profit of

1.625 (\$487.50).

Things to Watch:

There is not much risk in this position. Volatility has little effect. Avoid follow-up strategies unless you are quite certain of a particular move. Nearly every follow-up to this strategy requires more than one trade—possibly incurring large transaction costs.



[†] It is very difficult to convert a butterfly into another strategy with one or even two transactions. Normally, for off-floor-traders, this trade would not be entered into as transaction costs can be substantial. Also, follow-up trades can add to commission costs, making it very difficult to realize a profit.

12 Short Butterfly

(1 Short SFM Call@.69; 2 Long Calls@.70; 1 Short Call@.71) (Dashed Line = Current; Solid Line = Expiration)



Scenario:

This trader currently has a #19 Call Ratio Backspread, but now feels that the underlying futures will not explode on the upside. Instead, the trader feels that the market has an equal chance of going up or down, and thus converts the position into a short butterfly.

Specifics:

Underlying Futures Contract: June Swiss Franc

Futures Price Level: 0.7000
Days to Futures Expiration: 30
Days to Option Expiration: 20
Option Implied Volatility: 12.2%

Option Position: Short 1 Jun 0.6900 Call + 0.0129 (\$1612.50)

Long 2 Jun 0.7000 Calls - 0.0068 (\$ 850.00) x 2 Short 1 Jun 0.7100 Call + 0.0031 (\$ 387.50)

+ 0.0024 (\$ 300.00)

At Expiration:

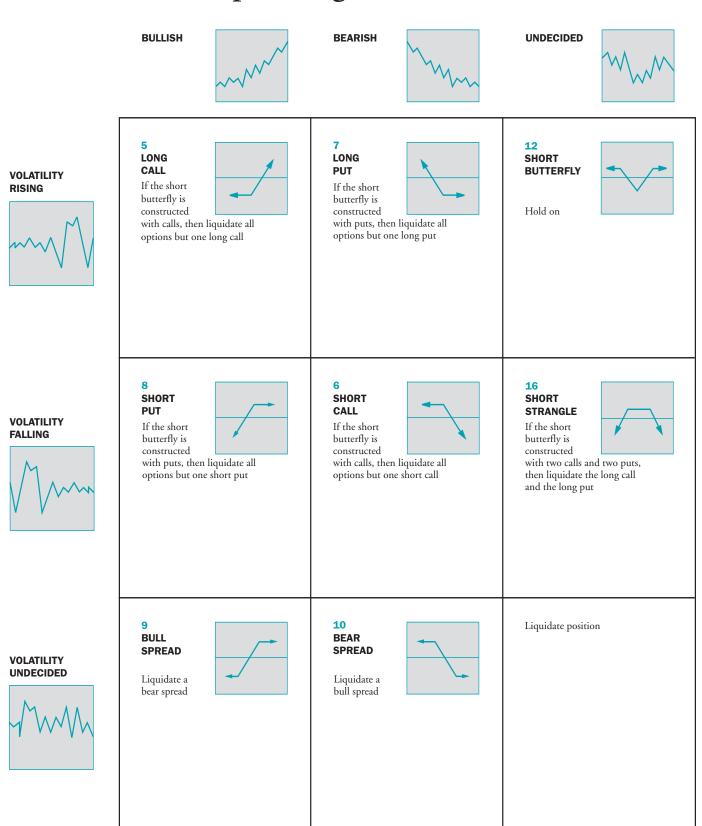
Breakeven: Downside: 0.6924 (0.6900 strike + 0.0024 credit).

Upside: 0.7076 (0.7100 strike – 0.0024 credit).

Loss Risk: Losses bottom at 0.7000 strike. Maximum loss of 0.0076 (\$950). Potential Gain: Gains top out at original net credit of 0.0024 (\$300). This occurs when futures rise above 0.7100 strike, or fall below 0.6900 strike.

Things to Watch:

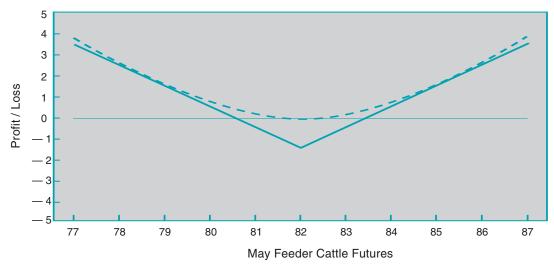
There is not much risk in this position. Volatility has little effect. You should avoid follow-up strategies unless you are quite certain of a particular move. Nearly every follow-up to this strategy requires more than one trade—possibly incurring large transaction costs.



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13 Long Straddle

(1 Long May Feeder Cattle Call @ 82; 1 Long Put @ 82) (Dashed Line = Current; Solid Line = Expiration)



Scenario:

This trader looks at the low implied volatility and feels that options are relatively inexpensive. The expectation here is that this market is poised for a big move. However, the trader is not sure which way it will be. So a decision is made to buy both a call and a put.

Specifics:

Underlying Futures Contract: May Feeder Cattle

Futures Price Level: 81.00
Days to Futures Expiration: 20
Days to Options Expiration: 20
Option Implied Volatility: 8.4%

Option Position: Long 1 May 82.00 Call -0.25 (\$110.00)

Long 1 May 82.00 Put = 1.25 (\$550.00) - 1.50 (\$660.00)

At Expiration:

Breakeven: Downside: 80.50 (82.00 strike – 1.50 debit).

Upside: 83.50 (82.00 strike + 1.50 debit).

Loss Risk: Losses bottom out at 82.00 strike with a maximum loss of

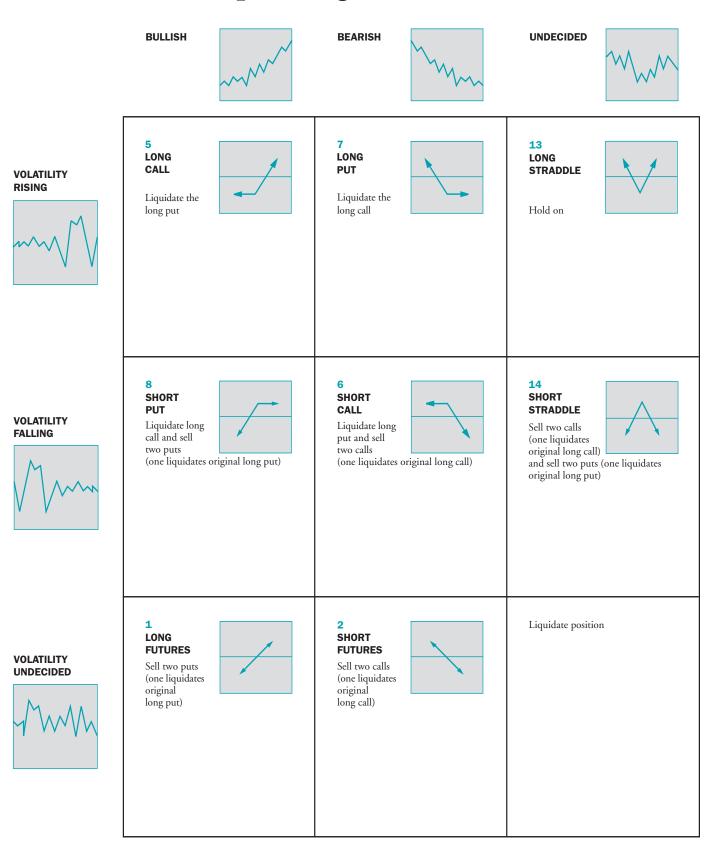
1.50 (\$660).

Potential Gain: Unlimited; gains begin below 80.50 breakeven and increase as

futures fall. Also, gains increase as futures rise past 83.50 breakeven.

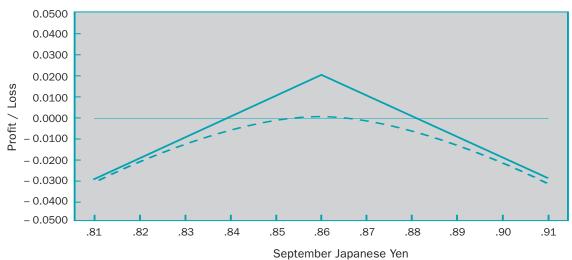
Things to Watch:

This is primarily a volatility play. A trader enters into this position with no clear idea of market direction, but a forecast of greater movement (risk) in the underlying futures.



14 Short Straddle

(1 Short Sep JY Call @ 0.8600; 1 Short Put @ 0.8600) (Dashed Line = Current; Solid Line = Expiration)



Scenario:

This trader finds a market with relatively high implied volatility. The current feeling is the market will stabilize after having had a long run to its present level. To take advantage of time decay and dropping volatility this trader sells both a call and a put at the same strike price.

Specifics:

Underlying Futures Contract: September Japanese Yen

Futures Price Level: 0.8600
Days to Futures Expiration: 40
Days to Options Expiration: 30
Option Implied Volatility: 12.6%

Option Position: Short 1 Sep 0.8600 Call + 0.0100 (\$1250.00) Short 1 Sep 0.8600 Put + 0.0100 (\$1250.00)

+ 0.0200 (\$2500.00)

At Expiration:

Breakeven: Downside: 0.8400 (0.8600 strike – 0.0200 credit).

Upside: 0.8800 (0.8600 strike + 0.0200 credit).

Loss Risk: Unlimited; losses increase as futures fall below 0.8400 breakeven

or rise above 0.8800 breakeven.

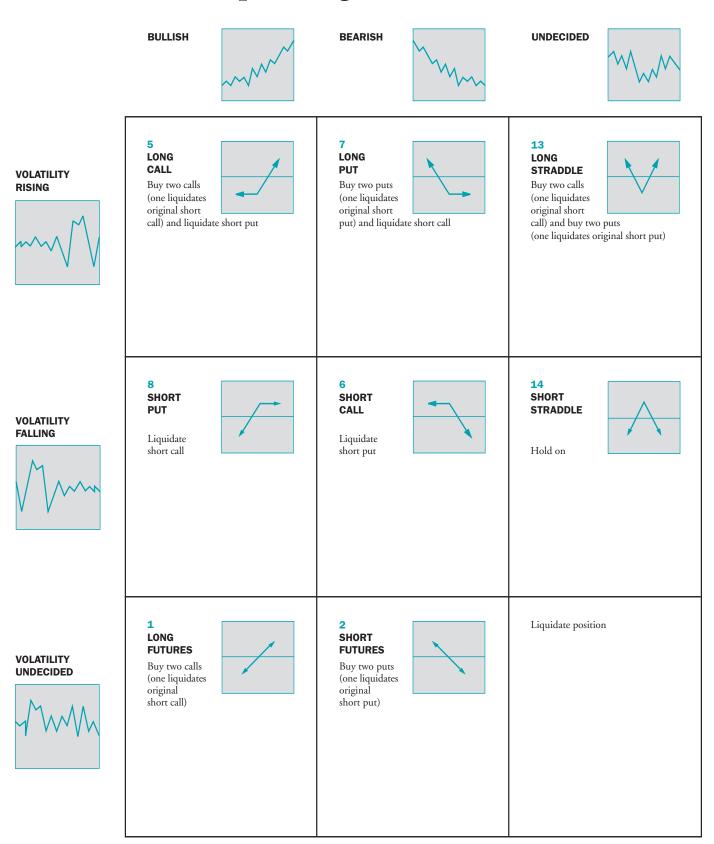
Potential Gain: Limited to credit received; maximum profit of 0.0200 (\$2500)

achieved as position is held to expiration and futures close exactly

0.8600 strike.

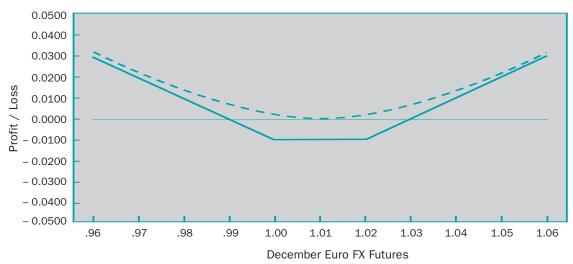
Things to Watch:

This is primarily a volatility play. A trader enters into this position with no clear idea of market direction but a forecast of less movement (risk) in the underlying futures. Be aware of early exercise. Assignment of a futures position transforms this strategy into a synthetic short call or synthetic short put.



15 Long Strangle

(1 Long Dec EC Call @ 1.0200; 1 Long Put @ 1.0000) (Dashed Line = Current; Solid Line = Expiration)



Scenario:

This trader looks at the low implied volatility and feels that options are relatively cheap. The thinking here is that this market will have a very big move. However, the trader is not sure which way it will be, so he decides to buy both a call and a put. The trader saves on premiums by buying both options out-of-the-money. However, the trader must get an even larger move than a long straddle to make this strategy profitable by expiration.

Specifics:

Underlying Futures Contract: December Euro FX

Futures Price Level: 1.0100
Days to Futures Expiration: 65
Days to Option Expiration: 55
Option Implied Volatility: 11.3%

Option Position: Long 1 Dec 1.0200 Call - 0.0500 (\$ 625.00) Long 1 Dec 1.0000 Put - 0.0048 (\$ 600.00)

- 0.0098 (\$1225.00)

At Expiration:

Breakeven: Downside: 0.5002 (1.0000 strike – 0.0098 debit).

Upside: 1.0298 (1.0200 strike + 0.0098 debit).

Loss Risk: Losses bottom at 0.0098 with a maximum loss between

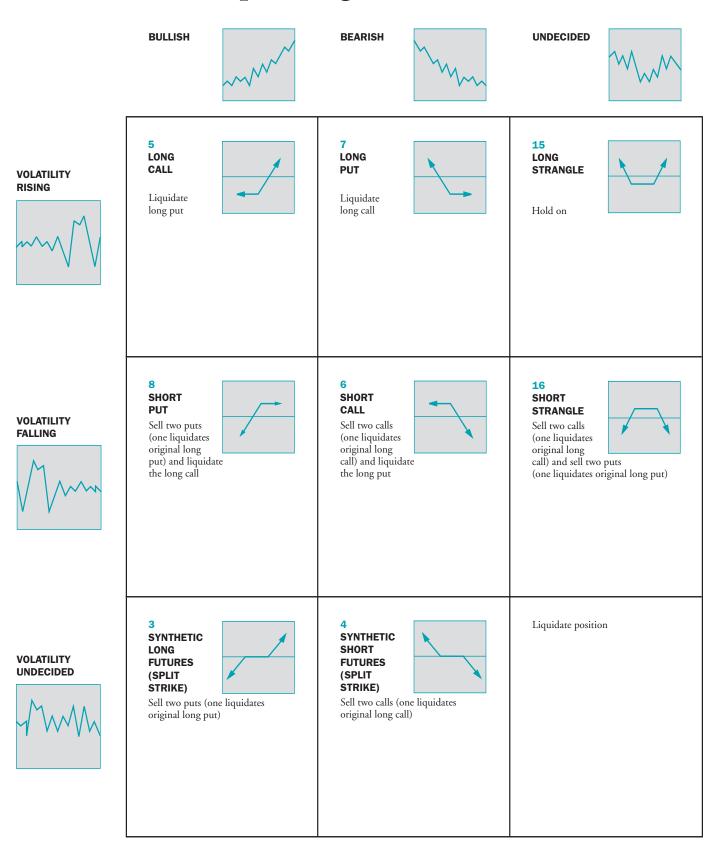
1.0200 and 1.0000 strikes.

Potential Gain: Unlimited; gains begin below .9902 and increase as futures fall.

Also, gains increase as futures rise past 1.0298.

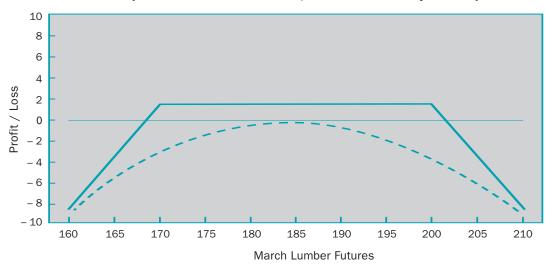
Things to Watch:

This is primarily a volatility play. A trader enters into this position with no clear idea of market direction but a forecast of greater movement in the underlying futures.



16 Short Strangle

(1 Short Mar LB Call @ 200; 1 Short Put @ 170) (Dashed Line = Current; Solid Line = Expiration)



Scenario:

This trader finds current implied volatility at relatively high levels. The expectation now is for a very lackluster trading month with no trend, and reduced volatility. The trader could sell a straddle, but feels more comfortable with the wider range of maximum profit of the short strangle.

Specifics:

Underlying Futures Contract: March Lumber Futures Price Level: 185.00

Futures Price Level: 185.00
Days to Futures Expiration: 65
Days to Option Expiration: 45
Option Implied Volatility: 19.4%

Option Position: Short 1 Mar 200.00 Call + 0.80 (\$120.00)
Long 1 Dec 1.0000 Put Short 1 Mar 170.00 Put + 0.60 (\$ 90.00)
+ 1.40 (\$210.00)

At Expiration:

Breakeven: Downside: 168.60 (170.00 strike – 1.40 credit).

Upside: 201.40 (200.00 strike + 1.40 credit).

Loss Risk: Unlimited; losses continue to mount as futures fall below 168.60

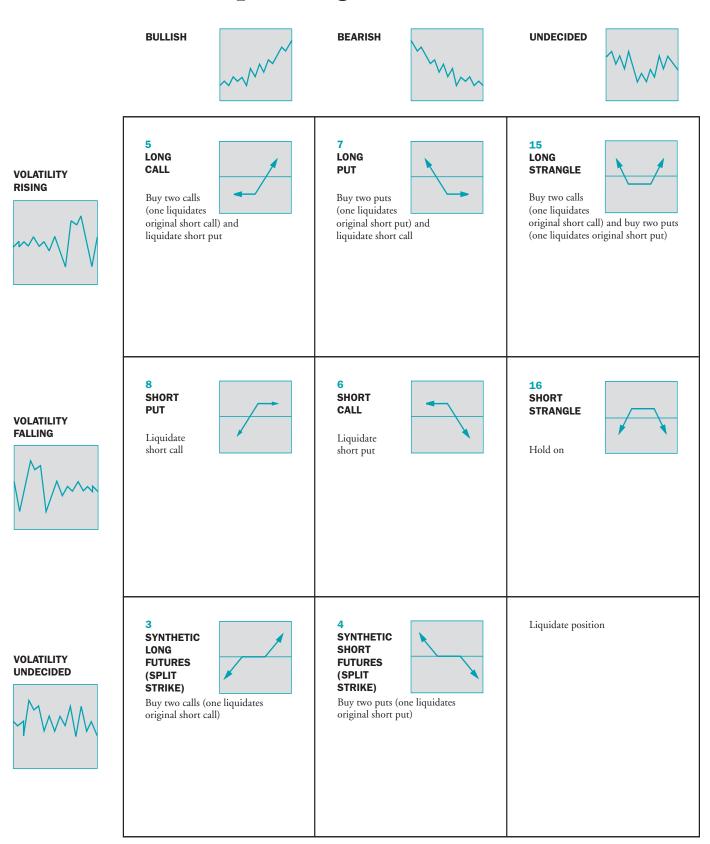
breakeven or rise above 201.40 breakeven.

Potential Gain: Maximum gains occur between strikes (a 30.00 range of

maximum profit).

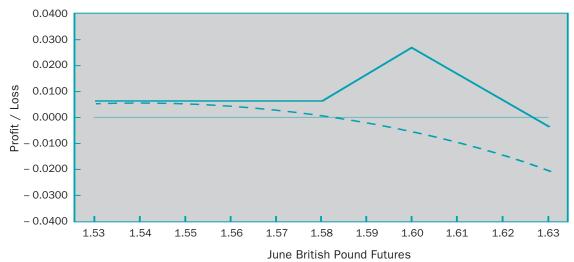
Things to Watch:

There is a high probability that futures will expire in this range, thereby yielding the maximum profit. However, the profit received is relatively small for the amount that could be at risk if futures were to rally or drop sharply. Assignment of a futures position transforms this strategy into a synthetic short call or synthetic short put.



17 Ratio Call Spread

(1 Long June BP Call @ 1.58; 2 Short Calls @ 1.60) (Dashed Line = Current; Solid Line = Expiration)



Scenario:

This trader finds current implied volatility at relatively high levels. Analysis of this market leads this trader to conclude that British Pound futures will trend very slowly up to about \$1.60/pound. Also, there is a small chance that the pound may fall dramatically. The trader, therefore, likes the risk/reward profile of the ratio call spread with this outlook.

Specifics:

Underlying Futures Contract: June British Pound

Futures Price Level: 1.5800
Days to Futures Expiration: 35
Days to Option Expiration: 25
Option Implied Volatility: 14.1%

Option Position: Long 1 Jun 1.5800 Call -0.0232 (\$1450.00)

Short 2 Jun 1.6000 Calls + 0.0146 (\$ 912.50) x 2 + 0.0060 (\$ 375.00)

At Expiration:

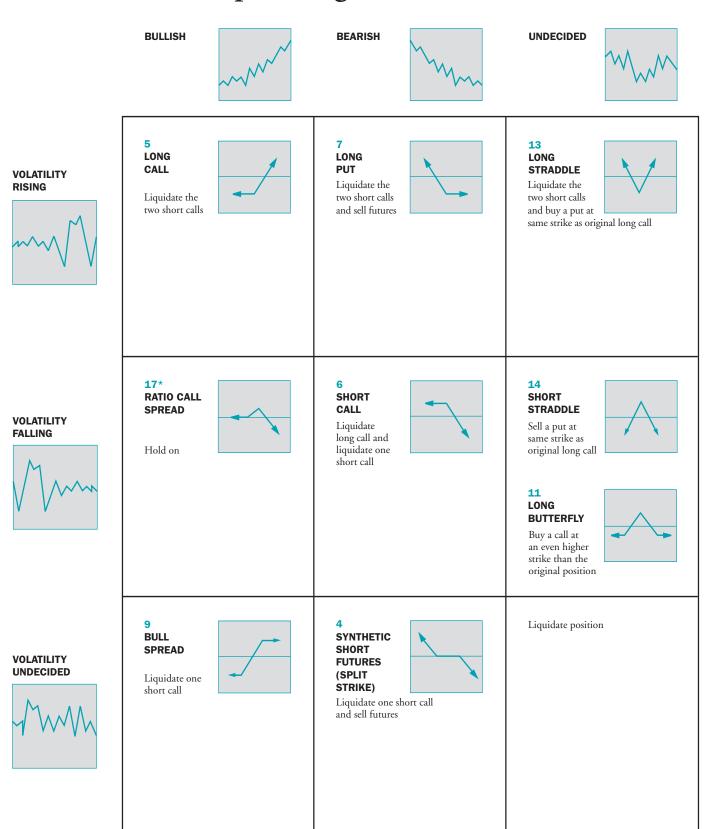
Breakeven: 1.6260 (1.6000 strike + 0.02 difference between

strikes + 0.0060 credit).

Loss Risk: Unlimited; losses continue to mount as futures rise above 1.6260. Potential Gain: Maximum gain of 0.0260 (\$1625.00) peaks at 1.6000 strike.

Things to Watch:

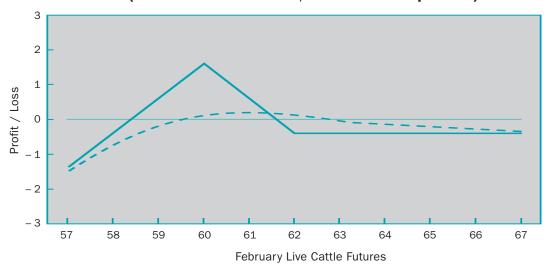
Do not enter into this position when there is a chance of an explosive upward move. In this particular situation, a profit is realized if futures fall. However, depending on the strikes chosen, a small loss may also occur.



^{*} All ratio spreads and ratio backspreads need more analysis. These strategies do not fit neatly into any of the nine market scenarios. Define your market expectation more closely and work out examples with different market scenarios before choosing these strategies. Also, ratio strategies are sometimes done at ratios other than one by two.

18 Ratio Put Spread

(1 Long Feb LC Put @ 62; 2 Short Puts @ 60) (Dashed Line = Current; Solid Line = Expiration)



Scenario:

This trader feels that current implied volatility is at relatively high levels. The thinking here is that the market should consolidate after its big drop. The trader now believes reduced volatility and a slow downward drifting of price are likely. Consequently, an order to execute a ratio put spread is placed with the broker.

Specifics:

Underlying Futures Contract: February Live Cattle

Futures Price Level: 62.50
Days to Futures Expiration: 30
Days to Option Expiration: 20
Option Implied Volatility: 15.5%

 Option Position:
 Long 1 Feb 62.00 Put
 - 0.675 (\$270.00)

 Long 1 Dec 1.0000 Put
 Short 2 Feb 60.00 Puts
 + 0.150 (\$ 60.00) x 2

 - 0.375 (\$150.00)

At Expiration:

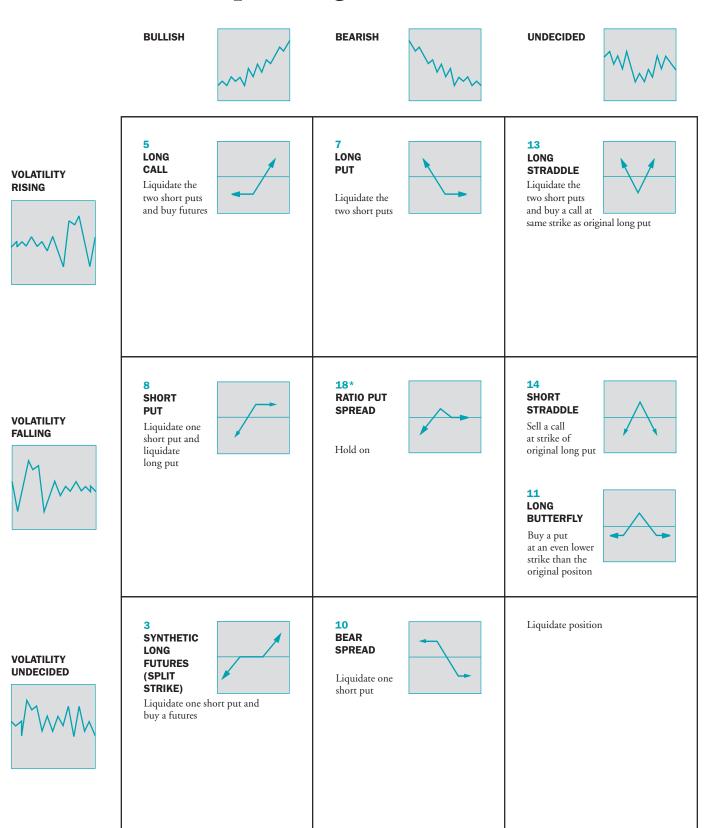
Breakeven: 58.375 (60.00 strike – difference between strikes + 0.375 debit).

Loss Risk: Unlimited; losses continue to mount as futures fall below 58.375.

Potential Gain: Maximum gain of 1.625 (\$650) peaks at 60.00 strike.

Things to Watch:

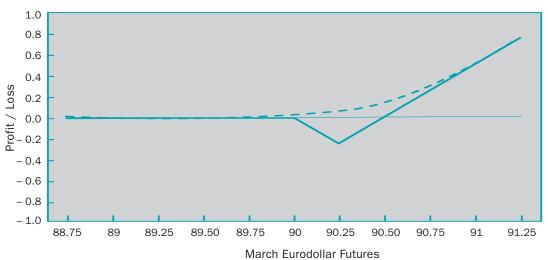
Be very sure that prices will not go into a sharp decline. But, if a slow drop is anticipated this may be a good strategy. A rally will produce a small gain or loss depending on the strikes chosen.



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19 Call Ratio Backspread

(1 Short Mar ED Call @ 90.00; 2 Long Calls @ 90.25) (Dashed Line = Current; Solid Line = Expiration)



Scenario:

This trader notices the low implied volatility of the options. The expectation now is for the Eurodollar market to rally. But, the trader does not want to lose money if the market moves the other way. A strategy that fits this outlook fairly well is the call ratio backspread.

Specifics:

Underlying Futures Contract: March Eurodollar

Futures Price Level: 90.00
Days to Futures Expiration: 60
Days to Option Expiration: 40
Option Implied Volatility: 14.6%

 Option Position:
 Short 1 Mar 90.00 Call
 + 0.19 (\$475.00)

 Long 1 Dec 1.0000 Put
 Long 2 Mar 90.25 Calls
 - 0.09 (\$225.00)
 x 2

 + 0.01 (\$ 25.00)

At Expiration:

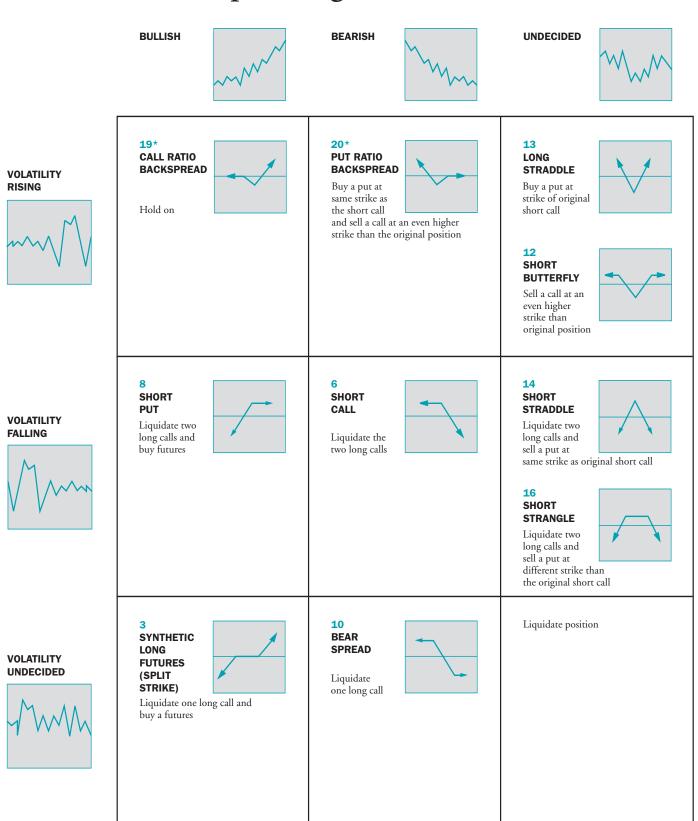
Breakeven: 90.49 (90.25 strike + 0.25 difference between strikes – 0.01 credit).

Loss Risk: Limited to 0.24 (\$600); occurs only at 90.25 strike. Potential Gain: Unlimited; gains mount as futures rise above the 90.49

breakeven point.

Things to Watch:

The worst situation would be a slow drifting of the price up toward the strike of purchased calls. Increased volatility helps this position, so the trader wants large upward price moves.



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20 Put Ratio Backspread

(1 Short Dec S&P 500 Put @ 930; 2 Long Puts @ 920) (Dashed Line = Current; Solid Line = Expiration)



Scenario:

The trader is getting very nervous about the stock market. He is sure that the market is overvalued, but not sure when the break will occur. Also, the trader does not want to stand in front of a runaway bull market. This trader is will to NOT participate in upside gains to be certain that the position will be held when the market drops dramatically. He consequently enters into a put ratio backspread.

Specifics:

Underlying Futures Contract: December S&P 500

Futures Price Level: 940
Days to Futures Expiration: 105
Days to Option Expiration: 105
Option Implied Volatility: 16.2%

Option Position: Short 1 Dec 930 Put + 7.10 (\$1775.00)

Long 1 Dec 1.0000 Put Long 2 Dec 920 Puts - 4.00 (\$1000.00) x 2

- 0.90 (\$ 225.00)

At Expiration:

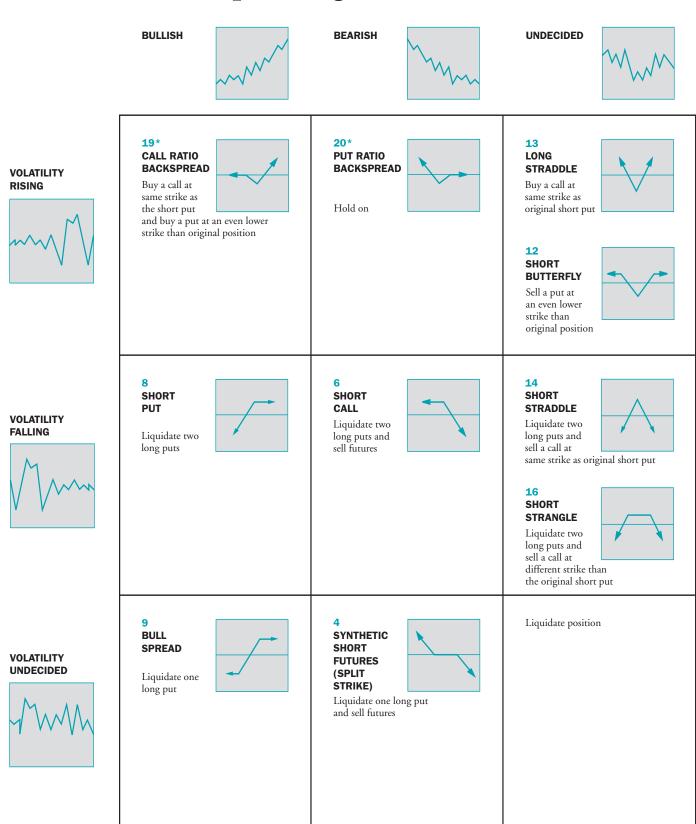
Breakeven: 909.10 (920.00 strike – 10.00 difference between strikes – 0.90 debit). Loss Risk: Limited; losses bottom out at strike of long puts. At 920.00 the

maximum loss of 10.90 (\$2725.00) occurs.

Potential Gain: Unlimited; gains mount as futures fall past 909.10 breakeven.

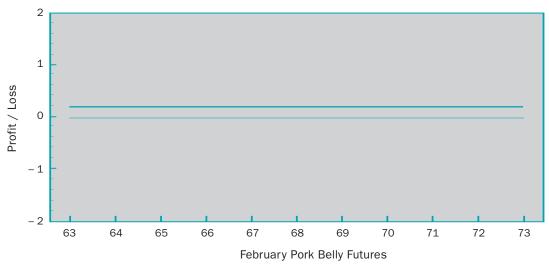
Things to Watch:

Depending on the exact strikes chosen, a trader could come away with a small gain or loss if futures continued their rally. The worst scenario is to have a mild bear market with volatility dropping.



^{*} All ratio spreads and ratio backspreads need more analysis. These strategies do not fit neatly into any of the nine market scenarios. Define your market expectation more closely and work out examples with different market scenarios before choosing these strategies. Also, ratio strategies are sometimes done at ratios other than one by two.

(1 Short Feb PB Futures; 1 Long Call @ 68; 1 Short Put@ 68) (Dashed Line = Current; Solid Line = Expiration)



Scenario:

This trader wants to take advantage of mis-pricing between futures and options. There are many ways that combinations of futures and/or options can generate a locked-in profit from mis-pricing. In this case, though, the synthetic long futures (long call + short put at same strike) is cheaper than the underlying futures. This trader can buy the synthetic futures and sell the actual futures to lock in a profit equal to the mis-pricing.

Specifics:

Underlying Futures Contract: February Pork Bellies

Futures Price Level: 68.30
Days to Futures Expiration: 35
Days to Option Expiration: 10

Option Implied Volatility: Call = 34%; Put 37.5%

Option Position: Long 1 Feb 68 Call - 1.675 (\$670.00) Short 1 Feb 68 Put + 1.550 (\$620.00)

- 0.125 (\$ 50.00)

 Long: Synthetic Futures
 68.125

 Short 1 Feb Futures
 68.300

 Locked-In Profit
 +0.175 (\$ 70.00)

At Expiration:

Profit is "locked in" with amount received equal to the 0.175 (\$70) less commission costs.

Things to Watch:

Rarely will the mis-pricing be great enough for off-floor traders to capitalize on it. Unwinding the position can create problems if all of the positions are not liquidated at exactly the same time. Also, be aware of the possible forced early assignment of the short option.





Chicago

Chicago Mercantile Exchange 20 South Wacker Drive Chicago, Illinois 60606-7499 1 312 930-1000 FAX: 1 312 466-4410 E-mail: info@cme.com

London

Chicago Mercantile Exchange Pinnacle House 23-26 St. Dunstan's Hill London EC3R 8HN England +44 (0) 20 7623 2550 FAX: +44 (0) 20 7623 2565

Tokyo

Chicago Mercantile Exchange Level 16, Shiroyama JT Trust Tower 4-3-1 Toranomon, Minato-ku Tokyo 105-6016 Japan +81-3-5403-4828 FAX: +81-3-5403-4646

Internet

www.cme.com