CME Group
A CME/Chicago Board of Trade Company

OPTIONS SPREADS

ON THE CME GLOBEX PLATFORM

August 2008

Options Spreads on CME Globex

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1 Introduction

Options spreads are the basic building blocks of options trading strategies. A spread position is entered by buying and selling equal number of options of the same class on the same underlying security but with different strike prices or expiration dates.

Options provide additional financial flexibility to the investment community as another type of exchange-traded derivative contract. An option on a futures contract provides the buyer the right, but not the obligation, to buy or sell an underlying futures contract at a specific price. The structure of an option offers the trader the ability to limit the risk taken.

1.1 Options Naming Conventions

The naming conventions for CME Group options outrights are:

- Product Code
- Contract expiration (month/year)
- Space (" ")
- Type of strike (C = Call; P = Put)
- Strike Price

For example, the March 2009 Eurodollar Option 9800 Call contract is **GEH9 C9800**

The naming conventions for CME Group options spreads are:

- Product Code
- Punctuation Mark – Colon (":")
- Strategy Type Code
- Contract expiration (month/year)
- Type of strike (C = Call; P = Put)
- Strike Price
    - o Repeated as necessary

For example, the March 2009 Eurodollar Option 9800 Straddle spread is **GE:STH9C980**

2 UDS & Generic Spread Option Type

The Generic (Strategy Type Code **GN**) spread type makes all CME Globex spread configurations available for all CME Group options via the User-Defined Spreads: Combos functionality. This enables users to create option spread instruments with configurations not listed for an option product.

For example, CME Globex lists the Condor (**CO**) spread type for Eurodollar options only. With the Generic spread type and the CME Globex User-Defined Spreads (UDS) functionality, the user can create a Condor spread configuration for any option product, such as Lean Hogs. The Lean Hog Condor would be shown as a Generic (GN) option spread.

Additionally, the user can create option spread instruments comprised of multiple spread types which are not supported with exchange-defined spreads. A Generic combination could include, for instance, joining a Vertical option spread and Xtree option spread together into a singe tradable instrument.

Generic spreads can be defined with up to 40 legs and allow users to create delta neutral strategies. Generic spreads work in conjunction with the UDS: Covereds and can be used as an option spread.

The options comprising a Generic spread may deliver into different futures, and all legs may have different expirations; therefore a Combo spread may be covered with one or two different futures.

3 Options Spread Construction Summary

CME Globex offers the following exchange-defined options spread types. It is important to note that not all of these listed strategies are available in all product groups. Any questions in this regard should be directed to the CME Globex Control Center at 312.456.2391.

Strategy	Strategy Type Code	Construction	Instrument Code/ Security Definition
Calendar			
Horizontal	HO	Call - Buy1callstrike1exp1 Sell1callstrike1exp2	OZC:HON8Z8C600
		Put - Buy1putstrike1exp1 Sell1putstrike1exp2	OZC:HON8Z8P600
Diagonal		Call - Sell1callstrike1exp1 Buy1callstrike2exp2	OZC:HON8Z8C600 650
		Put - Sell1putstrike1exp1 Buy1putstrike2exp2	OZC:HON8Z8P600 650
Straddle	ST	Buy1callstrike1exp1 Buy1putstrike1exp1	GE0:STZ8C980
Strangle	SG	Buy1putstrike1exp1 Buy1callstrike2exp1	GE0:SGZ8P980 990
Vertical	VT	Call - Buy1callstrike1exp1 Sell1callstrike2exp1 Put - Buy1putstrike2exp1 Sell1putstrike1exp1	GE0:VTZ8C980 990
			GE0:VTZ8P990 980
Equity Call	VC		Equity Call - ES:VCZ8C1305 1285
Equity Put	VP		Equity Put - ES:VPZ8P1305 1285
Box	BX	Buy1callstrike1exp1 Sell1putstrike1exp1 Buy1putstrike2exp1 Sell1callstrike2exp1	OYM:BXZ81200 1300
Butterfly	BO	Call - Buy1callstrike1exp1 Sell2callstrike2exp1 Buy1callstrike3exp1	GE0:BOZ8C980 985
		Put - Buy1putstrike3exp1 Sell2putstrike2exp1 Buy1putstrike1exp1	GE0:BOZ8P985 980
Conditional Curve	CC	Call - Buy1callstrikeexp1instr1 Sell1callstrikeexp1instr2 Put - Buy1putstrikeexp1 instr1 Sell1putstrikeexp1 instr2	Same Strike Value:
			GE:CCGE0Z8C980
			GE:CCGE0Z8P980
			Different Strike Values:
			GE:CCGE0H9C960 965
			GE:CCGE0H9P960 965
Condor	CO	Call - Buy1callstrike1exp1 Sell1callstrike2exp1 Sell1callstrike3exp1 Buy1callstrike4exp1	GE0:COZ8C980 995
		Put - Buy1putstrike4exp1 Sell1putstrike3exp1 Sell1putstrike2exp1Buy1putstrike1exp1	
Double	DB	Call - Buy1callstrike1exp1 Buy1callstrike2exp1	GE:DBZ8C980 985
		Put - Buy1putstrike2exp1 Buy1putstrike1exp1	GE:DBZ8P985 980
Horizontal Straddle	HS	Buy1callstrike1exp2 Buy1putstrike1exp2 Sell1callstrike1exp1 Sell1putstrike1exp1	GE:HSU8M8C980 985
Iron Condor	IC	Sell1putstrike1exp1 Buy1putstrike2exp1 Buy1callstrike3exp1 Sell1callstrike4exp1	OZB:ICM8P116 119
Ratio 1x2	12	Call - Buy1callstrike1exp1 Sell2callstrike2exp1	GE:12H8C980 995
		Put - Buy1putstrike2exp1 Sell2putstrike1exp1	GE:12H8P995 980
Ratio 1x3	13	Call - Buy1callstrike1exp1 Sell3callstrike2exp1	OYM:13H8C1200 1300
		Put - Buy1putstrike2exp1 Sell3putstrike1exp1	OYM:13H8P1200 1300
Ratio 2x3	23	Call - Buy2callstrike1exp1 Sell3callstrike2exp1	GE:23H8C980 995
		Put - Buy2putstrike2exp1 Sell3putstrike1exp1	GE:23H8P995 980
Strip	SR	Call - Buy1callstrike1exp1 Buy1callstrike1exp2 Buy1callstrike1exp3 Buy1callstrike1exp4	GE:SRM8C980
		Put - Buy1putstrike1exp1 Buy1putstrike1exp2 Buy1putstrike1exp3 Buy1putstrike1exp4	GE:SRM8P980
Risk Reversal	RR	Buy1callstrike2exp1 Sell1putstrike1or2exp1	GE0:RRM8C990 980
Straddle Strips	SS	Call - Buy1callstrike1exp1 Buy1callstrike1exp2 Buy1callstrike1exp3Buy1callstrike1exp4	GE0:SSM8C980
		Put - Buy1putstrike1exp1 Buy1putstrike1exp2 Buy1putstrike1exp3 Buy1putstrike1exp4	GE0:SSM8P980
Xmas Tree	XT	Call - Buy1callstrike1exp1Sell1callstrike2exp1Sell1callstrike3exp1	GE:XTM8C980 985 990
		Put - Buy1putstrike3exp1Sell1putstrike2exp1Sell1putstrike1exp1	GE:XTM8P990 985 980
3-Way	3W	Call - Buy1callstrike2exp1 Sell1callstrike3exp1 Sell1putstrike1exp1	HE:3WN8C770 780 800
		Put - Buy1putstrike2exp1 Sell1putstrike1exp1 Sell1callstrike3exp1	HE:3WN8P780 760 800

4 Options Spread Detailed Description

All strategies described in the text below are shown from the buyer's perspective.

4.1 Calendar (Horizontal or Diagonal)

Horizontal (**HO**) consists of buying a call(put) in one expiration month and selling a call(put) in another expiration month at the same strike. Diagonal (**HO**) consists of buying a call(put) in one expiration month and selling a call(put) in another expiration month at different strike prices.

4.1.1 Horizontal (HO)

4.1.1.1 Commodities

For commodity products**,** Horizontal (**HO**) consists of buying a call (put) at a strike in the near month, and selling a call (put) at the same strike in the far month. Leg ratio is (+1:-1)

Construction: Call Spread: Buy1callstrike1exp1 Sell1callstrike1exp2
Put Spread: Buy1putstrike1exp1 Sell1putstrike1exp2

Examples

Call Spread
Buy 1 July 2008 Corn 600 Call and Sell 1 December 2008 Corn 600 Call
Put Spread
Buy 1 July 2008 Corn 600 Put and Sell 1 December 2008 Corn 600 Put

FIX/FAST and iLink SecurityDesc (FIX tag 107)

Call: OZC:HON8Z8C600
Put: OZC:HON8Z8P600

4.1.1.2 Equities

For CME Group Equity products, the Horizontal (**HO**) spread consists of selling a call (put) at a strike in the near month, and buying a call (put) at the same strike in the far month. Leg ratio is (-1:+1).

Construction: Call Spread: Sell1callstrike1exp1 Buy1callstrike1exp2
Put Spread: Sell1putstrike1exp1 Buy1putstrike1exp2

Examples

Call Spread
Sell 1 June 2008 E-mini® S&P 500® 1300 Call and
Buy 1 Sept 2008 E-mini S&P 500 1300 Call
Put Spread
Sell 1 June 2008 E-mini S&P 500 1300 Put and
Buy 1 Sept 2008 E-mini S&P 1300 Put

FIX/FAST and iLink SecurityDesc (FIX tag 107)

Call: ES:HOM8U8C1300
Put: ES:HOM8U8P1300

Options Spreads on CME Globex

4.1.1.3 Interest Rates & FX

For interest rate and FX products, the Horizontal (**HO**) spread consists of buying a call (put) at a strike in the deferred month, and selling a call (put) at the same strike in the near month. Leg ratio is (+1:-1).

Construction: Call Spread: Buy1callstrike1exp2 Sell1callstrike1exp1
Put Spread: Buy1putstrike1exp2 Sell1putstrike1exp1

Examples

Call Spread

Buy 1 September 2008 Eurodollar 9800 Call and
Sell 1 June 2008 Eurodollar 9800 Call

Put Spread

Buy 1 September 2008 Eurodollar 9800 Put and
Sell 1 June 2008 Eurodollar 9800 Put

FI**X/FAST and iLink SecurityDesc (FIX tag 107)**

Call: GE:HOU8M8C980
Put: GE:HOU8M8P980

4.1.2 Diagonal (HO)

4.1.2.1 Commodities

For commodity products, Diagonal (**HO**) consists of buying a call (put) in one expiration month and selling a call (put) in the same or another expiration month at a different strike price. Leg ratio is (-1:+1).

Construction: Call Spread: Sell1callstrike1exp1 Buy1callstrike2exp2
Put Spread: Sell1putstrike1exp1 Buy1putstrike2exp2

Examples

Call Spread

Sell 1 July 2008 Corn 600 Call and Buy 1 December 2008 Corn 650 Call

Put Spread

Sell 1 July 2008 Corn 600 Put and Buy 1 December 2008 Corn 650 Put

FIX/FAST and iLink SecurityDesc (FIX tag 107)

Call: OZC:HON8Z8C600 650
Put: OZC:HON8Z8P600 650

4.1.2.2 Interest Rates & FX

For interest rate and FX products, the Diagonal (**HO**) spread consists of buying a call (put) at a strike in the deferred month, and selling a call (put) at a different strike in the near month. Leg ratio is (+1:-1).

Construction: Call Spread: Buy1callstrike1exp2 Sell1callstrike2exp1
Put Spread: Buy1putstrike1exp2 Sell1putstrike2exp1

Examples

Call Spread

Buy 1 September 2008 Eurodollar 9800 Call and

Sell 1 June 2008 Eurodollar 9900 Call
Put Spread
Buy 1 September 2008 Eurodollar 9900 Put and
Sell 1 June 2008 Eurodollar 9800 Put

FIX/FAST and iLink SecurityDesc (FIX tag 107)
Call: GE:HOU8M8C980 990
Put: GE:HOU8M8P990 980

4.2 Straddle

Straddle (**ST**) consists of buying both a call and put option on the same contract, strike price and expiration date. Leg ratio is (+1:+1).

Construction: Buy1callstrike1exp1 Buy1putstrike1exp1

Example
Buy 1 December 2008 Eurodollar 9800 Call and
Buy 1 December 2008 Eurodollar 9800 Put

FIX/FAST and iLink SecurityDesc (FIX tag 107)
GE:STZ8C980

4.3 Strangle

Strangle (**SG**) consists of buying a put at a lower strike price and buying a call at a higher strike price within the same product and expiration. Leg ratio is (+1:+1).

Construction: Buy1putstrike1exp1 Buy1callstrike2exp1

Example
Buy 1 December 2008 Eurodollar 9800 Put and
Buy 1 December 2008 Eurodollar 9900 Call

FIX/FAST and iLink SecurityDesc (FIX tag 107)
GE0:SGZ8P980 990

4.4 Vertical

Vertical (**VT**) is made up of all calls or all puts and consists of buying a call at a strike price and selling a call at a higher strike price, or buying a put at a strike price and selling a put at a lower strike price, within the same contract and expiration date.

For Vertical spreads on equity products, the Strategy Type Code is **VT** but the Instrument Code/Security Definition uses a legacy convention of **VC** for vertical calls and **VP** for Vertical puts. For example, for the E-mini S&P 500 call Vertical, the Instrument Code/Security Definition is **ES:VCZ8C1305 1285**; while for the E-mini S&P 500 put Vertical, the Instrument Code/Security Definition is **ES:VPZ8P1305 1285.** Leg ratio is (+1:-1).

Construction:
Call Spread: Buy1callstrike1exp1 Sell1callstrike2exp1
Put Spread: Buy1putstrike2exp1 Sell1putstrike1exp1

Example

Call Spread
Buy 1 December 2008 Eurodollar 9800 Call and
Sell 1 December 2008 Eurodollar 9900 Call
Put Spread
Buy 1 December 2008 Eurodollar 9900 Put and
Sell 1 December 2008 Eurodollar 9800 Put

FIX/FAST and iLink SecurityDesc (FIX tag 107)
Call: GE0:VTZ8C980 990
Equity Call: ES:VCZ8C1305 1285
Put: GE0:VTZ8P990 980
Equity Put: ES:VPZ8C1305 1285

4.5 Box

Box (**BX**) spread consists of buying the call and selling the put at the same lower strike price and buying the put and selling the call at the same higher strike all within the same contract and expiry month. Leg ratio is (+1:-1:+1:-1).

Construction
Buy1callstrike1exp1
Sell1putstrike1exp1
Buy1putstrike2exp1
Sell1callstrike2exp1

Example
Buy 1 December mini-sized Dow Index 12000 Call,
Sell 1 December mini-sized Dow Index 12000 Put,
Buy 1 December mini-sized Dow Index 13000 Put, and
Sell 1 December mini-sized Dow Index 13000 Call

FIX/FAST and iLink SecurityDesc (FIX tag 107)
OYM:BXZ81200 1300

4.6 Butterfly

Butterfly (**BO**) spread is constructed of all calls (Call Butterfly) or all puts (Put Butterfly).

The Call Butterfly consists of buying a call, selling two calls at a higher strike price and buying a call at a still higher strike price within the same contract and expiration month.

The Put Butterfly consists of buying a put, selling two puts at a lower strike price and buying a put at a still lower strike price within the same contract and expiration month.

The Butterfly requires a specific symmetry in the strikes in that the difference between the strike prices is the same for all legs.

Leg ratio is (+1:-2:+1).

Construction:
Call Spread: Buy1callstrike1exp1 Sell2callstrike2exp1 Buy1callstrike3exp1
Put Spread: Buy1putstrike3exp1 Sell2putstrike2exp1 Buy1putstrike1exp1

Examples

Call Spread
Buy 1 December 2008 Eurodollar 9800 Call,
Sell 2 December 2008 Eurodollar 9825 Calls, and
Buy 1 December 2008 Eurodollar 9850 Call

Put Spread
Buy 1 December 2008 Eurodollar 9850 Put,
Sell 2 December 2008 Eurodollar 9825 Puts, and
Sell 1 December 2008 Eurodollar 9800 Put

FIX/FAST and iLink SecurityDesc (FIX tag 107)
Call: GE0:BOZ8C980 985
Put: GE0:BOZ8P985 980

4.7 Conditional Curve

Conditional Curve (**CC**) spread is unique to legacy CME interest rate products and consists of buying a call (put) at a strike in one instrument group and selling a call (put) at a strike in another instrument group.

Additionally, it is possible to have a Conditional Curve spread with a single strike (i.e., same for each leg) or two different strikes, in which case both strikes are listed.

Leg ratio is (+1:-1).

Construction
Call Spread: Buy1callstrikeexp1instrument1 Sell1callstrikeexp1instrument2
Put Spread: Buy1putstrikeexp1instrument 1 Sell1putstrikeexp1instrument2

Examples
Call Spread
Buy 1 December Eurodollar 9800 Call, and
Sell 1 December 1-year Mid-Curve 9800 Call
Put Spread
Buy 1 December Eurodollar 9800 Put, and
Sell 1 December 1-year Mid-Curve 9800 Put

FIX/FAST and iLink SecurityDesc (FIX tag 107)
Call: GE:CCGE0Z8C980
Put: GE:CCGE0Z8P980

Or when two different strikes are used: GE:CCGE0H9P960 965

4.8 Condor

Condor (**CO**) is constructed of all calls (Call Condor) or all puts (Put Condor).

The Call Condor consists of buying a call, selling one call at a higher strike price and selling a call at a still higher strike price and buying a fourth call at a still higher strike price within the same contract and expiration month.

The Put Condor consists of buying a put at the highest strike price, selling one put at a lower strike price, selling a put at a still lower strike price and buying a fourth put at a still lower strike price within the same contract and expiry month.

The Condor requires a specific symmetry in the strikes in that the difference between the strike prices is the same for all legs.

Leg ratio is (+1:-1:-1:+1).

Construction

Call Spread

Buy1callstrike1exp1
Sell1callstrike2exp1
Sell1callstrike3exp1
Buy1callstrike4exp1

Put Spread

Buy1putstrike4exp1
Sell1putstrike3exp1
Sell1putstrike2exp1
Buy1putstrike1exp1

Examples

Call Spread

Buy 1 December 2008 Eurodollar 98000 Call,
Sell 1 December 2008 Eurodollar 98500 Call,
Sell 1 December 2008 Eurodollar 99000 Call, and
Buy 1 December 2008 Eurodollar 99500 Call

Put Spread

Buy 1 December 2008 Eurodollar 99500 Put,
Sell 1 December 2008 Eurodollar 99000 Put,
Sell 1 December 2008 Eurodollar 98500 Put, and
Buy 1 December 2008 Eurodollar 98000 Put

FIX/FAST and iLink SecurityDesc (FIX tag 107)

Call: GE0:COZ8C980 995
Put: GE0:COZ8P995 980

4.9 Double

Double (**DB**) is constructed of all calls (Call Double) or all puts (Put Double).

The Call Double consists of buying a call at a strike price and buying another call at a higher strike price within the same contract and expiry month.

The Put Double consists of buying a put at a strike price and buying another put at a lower strike price within the same contract and expiry month.

Leg ratio is (+1:+1).

Construction

Call Spread: Buy1callstrike1exp1 Buy1callstrike2exp1
Put Spread: Buy1putstrike2exp1 Buy1putstrike1exp1

Examples

Call Spread

Buy 1 December 2008 Eurodollar 98000 Call and
Buy 1 December 2008 Eurodollar 98500 Call

Put Spread
Buy 1 December 2008 Eurodollar 98500 Put and
Buy 1 December 2008 Eurodollar 98000 Put

FIX/FAST and iLink SecurityDesc (FIX tag 107)
Call: GE:DBZ8C980 985
Put: GE:DBZ8P985 980

4.10 Horizontal Straddle

Horizontal Straddle (**HS**) consists of buying a straddle at one strike price in the deferred month and selling a straddle at the same or different strike in the near month. More specifically, a Horizontal Straddle (**HS**) consists of buying a call and buying a put at the same strike price in the deferred month and selling a call and selling a put at the same lower strike price in the near month, all within the same contract and expiry month. Leg ratio is (+1:+1:-1:-1)

Construction
Buy1callstrike1exp2
Buy1putstrike1exp2
Sell1callstrike1exp1
Sell1putstrike1exp1

Example
Buy 1 Sept 2008 Eurodollar 98000 Call,
Buy 1 Sept 2008 Eurodollar 98000 Put,
Sell 1 June 2008 Eurodollar 98500 Call, and
Sell 1 June 2008 Eurodollar 98500 Put

FIX/FAST and iLink SecurityDesc (FIX tag 107)
GE:HSU8M8C980 985

4.11 Iron Condor

Iron Condor (**IC**) consists of buying a put spread and buying a call spread at higher strike prices. More specifically, this consists of selling a put at one strike price, buying a put at a higher strike price, buying a call at a higher strike price, and selling a call at an even higher strike price, all within the same contract and expiration. Leg ratio is (-1:+1:+1:-1).

Construction
Sell1putstrike1exp1
Buy1putstrike2exp1
Buy1callstrike3exp1
Sell1callstrike4exp1

Example
Sell 1 June 2008 30 Year Treasury Bond 116 Put,
Buy 1 June 2008 30 Year Treasury Bond 117 Put,
Buy 1 June 2008 30 Year Treasury Bond 118 Call, and
Sell 1 June 2008 30 Year Treasury Bond 119 Call

FIX/FAST and iLink SecurityDesc (FIX tag 107)

OZB:ICM8P116 119

4.12 Ratio 1x2

Ratio 1x2 (**12**) is constructed of all calls (Call Ratio 1x2) or all puts (Put Ratio 1x2).

The Call Ratio 1x2 consists of buying a call and selling two calls at a higher strike price within the same contract and expiry month.

The Put Ratio 1x2 consists of buying a put at a strike price and selling two puts at a lower strike price within the same contract and expiry month.

Leg ratio is (+1:-2).

Construction

Call Spread: Buy1callstrike1exp1 Sell2callstrike2exp1
Put Spread: Buy1putstrike2exp1 Sell2putstrike1exp1

Example

Call Spread
Buy 1 March 2008 Eurodollar 9800 Call and
Sell 2 March 2008 Eurodollar 9950 Call

Put Spread
Buy 1 March 2008 Eurodollar 9950 Put and
Sell 2 March 2008 Eurodollar 9800 Put

FIX/FAST and iLink SecurityDesc (FIX tag 107)

Call Spread: GE:12H8C980 995
Put Spread: GE:12H8P995 980

4.13 Ratio 1x3

Ratio 1x3 (**13**) is constructed of all calls (Call Ratio 1x3) or all puts (Put Ratio 1x3).

The Call Ratio 1x3 consists of buying a call at one strike price and selling 3 calls at a higher strike price within the same contract and expiration month.

The Put Ratio 1x3 consists of buying a put at 1 strike price and selling 3 puts at a lower strike price within the same contract and expiration month.

Leg ratio is (+1:-3).

Construction

Call Spread: Buy1callstrike1exp1 Sell3callstrike2exp1
Put Spread: Buy1putstrike2exp1 Sell3putstrike1exp1

Examples

Call Spread
Buy 1 March 2008 December mini-sized Dow Index 12000 Call and
Sell 3 March 2008 December mini-sized Dow Index 13000 Call

Put Spread
Buy 1 March 2008 December mini-sized Dow Index 13000 Put and

Sell 3 March 2008 December mini-sized Dow Index 12000 Put

FIX/FAST and iLink SecurityDesc (FIX tag 107)
Call: OYM:13H8C1200 1300
Put: OYM:13H8P1200 1300

4.14 Ratio 2x3

Ratio 2x3 (**23**) is constructed of all calls (Call Ratio 2x3) or all puts (Put Ratio 2x3).

The Call Ratio 2x3 consists of buying 2 calls at one strike and selling 3 calls at a higher strike price within the same contract and expiration month.

The Put Ratio 2x3 consists of buying 2 puts at one strike price and selling 3 puts at a lower strike price within the same contract and expiration month.

Leg ratio is (+2:-3).

Construction
Call Spread: Buy2callstrike1exp1 Sell3callstrike2exp1
Put Spread: Buy2putstrike2exp1 Sell3putstrike1exp1

Example
Call Spread
Buy 2 March 2008 Eurodollar 9800 Call and
Sell 3 March 2008 Eurodollar 9950 Call

Put Spread
Buy 2 March 2008 Eurodollar 9950 Put and
Sell 3 March 2008 Eurodollar 9800 Put

FIX/FAST and iLink SecurityDesc (FIX tag 107)
Call: GE:23H8C980 995
Put: GE:23H8P995 980

4.15 Strip

A Strip (**SR**) spread is constructed of all calls (Call Strip) or all puts (Put Strip).

The Call Strip consists of buying calls within the same contract and strike price for each of 4 consecutive quarterly expiry months, resulting in a total of 4 calls purchased.

The Put Strip consists of buying puts within the same contract and strike price for each of 4 consecutive quarterly expiry months, resulting in a total of 4 puts purchased.

The Strip requires a specific symmetry in the expiration months in that the time difference between the expiry months is the same for all legs.

Leg ratio is (+1:+1:+1:+1).

Construction
Call Spread
Buy1callstrike1exp1
Buy1callstrike1exp2

Buy1callstrike1exp3
Buy1callstrike1exp4
Put Spread
Buy1putstrike1exp1
Buy1putstrike1exp2
Buy1putstrike1exp3
Buy1putstrike1exp4

Example

Call Spread
Buy 1 June 2008 Eurodollar 9800 Call,
Buy 1 Sept 2008 Eurodollar 9800 Call,
Buy 1 Dec 2008 Eurodollar 9800 Call, and
Buy 1 March 2009 Eurodollar 9800 Call

Put Spread
Buy 1 June 2008 Eurodollar 9800 Put,
Buy 1 Sept 2008 Eurodollar 9800 Put,
Buy 1 Dec 2008 Eurodollar 9800 Put, and
Buy 1 March 2009 Eurodollar 9800 Put

FIX/FAST and iLink SecurityDesc (FIX tag 107)

Call: GE:SRM8 C980
Put: GE:SRM8 P980

4.16 Risk Reversal

Risk Reversal (**RR**) consists of buying a call and selling a put option within the same contract and expiration month. The put component can be the same strike or a lower strike as the call option. Leg ratio is (+1:-1).

Construction: Buy1callstrike2exp1 Sell1putstrike1or2exp1

Example

Buy 1 June 2008 Eurodollar 9900 Call and
Sell 1 June 2008 Eurodollar 9800 Put

FIX/FAST and iLink SecurityDesc (FIX tag 107)

GE0:RRM8C990 980

4.17 Straddle Strips

Straddle Strip (**SS**) consists of buying a call and put within the same contract at the same strike price (Straddle) for each of 4 consecutive quarterly expiry months. This results in 4 Straddle spreads being purchased.

The Straddle Strip requires a specific symmetry in the expiration months in that the time difference between the expiration months is the same for all legs.

Leg ratio is (+1:+1:+1:+1).

Construction

Buy1callstrike1exp1
Buy1putstrike1exp1

Buy1callstrike1exp2
Buy1putstrike1exp2
Buy1callstrike1exp3
Buy1putstrike1exp3
Buy1callstrike1exp4
Buy1putstrike1exp4

Example

Buy 1 June 2008 Eurodollar 9800 Call,
Buy 1 June 2008 Eurodollar 9800 Put,
Buy 1 Sept 2008 Eurodollar 9800 Call,
Buy 1 Sept 2008 Eurodollar 9800 Put,
Buy 1 Dec 2008 Eurodollar 9800 Put,
Buy 1 Dec 2008 Eurodollar 9800 Call,
Buy 1 March 2009 Eurodollar 9800 Put, and
Buy 1 March 2009 Eurodollar 9800 Call

FIX/FAST and iLink SecurityDesc (FIX tag 107)

Call: GE0:SSM8C980
Put: GE0:SSM8P980

4.18 Xmas Tree

Xmas Tree (**XT**) is constructed of all calls (Call Xmas Tree) or all puts (Put Xmas Tree).

The Call Xmas Tree consists of buying a call at one strike, selling a call at a higher strike and selling yet another call at a higher strike, all within the same contract and expiration month.

The Put Xmas Tree consists of buying a put at a higher strike, selling a put at a lower strike and selling yet another put at a still lower strike, all within the same contract and expiration month.

The Xmas Tree requires a specific symmetry in the strikes in that the difference between the strike prices is the same for all legs.

Leg ratio is (+1:-1:-1).

Construction

Call Spread
Buy1callstrike1exp1 Sell1callstrike2exp1 Sell1callstrike3exp1
Put Spread
Buy1putstrike3exp1 Sell1putstrike2exp1 Sell1putstrike1exp1

Example

Call Spread
Buy 1 June 2008 Eurodollar 9800 Call,
Sell 1 June 2008 Eurodollar 9850 Call, and
Sell 1 June 2008 Eurodollar 9900 Call.

Put Spread
Buy 1 June 2008 Eurodollar 9900 Put,
Sell 1 June 2008 Eurodollar 9850 Put, and
Sell 1 June 2008 Eurodollar 9800 Put.

FIX/FAST and iLink SecurityDesc (FIX tag 107)
Call: GE:XTM8C980 985 990
Put: GE:XTM8P990 985 980

4.19 3-Way

3-Way (**3W**) is constructed of calls and puts on the same contract and expiry month with different strike prices.

A Call 3-Way consists of buying the call for the middle strike price, selling the call for the high strike price, and selling the put for the low strike price.

A Put 3-Way consists of buying the put for the middle strike price, selling the put for the low strike price, and selling the call for the high strike price.

Leg ratio is (+1:-1:-1).

Construction
Call Spread
Buy1callstrike2exp1 Sell1callstrike3exp1 Sell1putstrike1exp1
Put Spread
Buy1putstrike2exp1 Sell1putstrike1exp1 Sell1callstrike3exp1

Examples
Call Spread
Buy 1 July 2008 Lean Hog 78000 Call,
Sell 1 July 2008 Lean Hog 80000 Call, and
Sell 1 July 2008 Lean Hog 77000 Put

Put Spread
Buy 1 July 2008 Lean Hog 76000 Put,
Sell 1 July 2008 Lean Hog 78000 Put, and
Sell 1 July 2008 Lean Hog 80000 Call

FIX/FAST and iLink SecurityDesc (FIX tag 107)
Call: HE:3WN8C770 780 800
Put: HE:3WN8P780 760 800