

FUTURES SPREADS
ON THE CME GLOBEX PLATFORM
JUNE 2008

Futures Spreads on CME Globex

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Futures Spreads on CME Globex

1. Introduction

A spread is defined as the purchase of one or more futures contracts and the sale of one or more offsetting futures contracts. Spreads allow you to take less risk than is available with outright futures positions. The amount of risk between two intra-market futures positions is usually less than the risk in an outright futures position.

CME Globex lists exchange-defined spreads that are separate from the order book of the outright markets.

All spreads are shown from the buyer's perspective.

Leg Description

For the purpose of this discussion, the term Leg1 refers to the first component of the spread as shown in the naming convention. Leg2 refers to the second component of the spread, Leg3 refers to the third component of the spread, and so on.

Abbreviations

AG = Agricultural

Com = Commodity

EQ = Equity

Exp = expiration

FX = Foreign Exchange

IR = Interest Rate

RT = Reduced Tick Spread

Vol = Volatility

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2. Futures Spreads

CME Globex lists the following exchange-defined futures spread types per product complex and exchange.

| Futures | | Legacy CME | | | | Legacy CBOT | | | NYMEX | KCBT | | MGEX |
|--|--------------------|------------|----|----------------|----|-------------|----|----|-------|------|----|------|
| Strategy | Strategy Type Code | EQ | FX | AG | IR | EQ | AG | IR | ALL | EQ | AG | AG |
| Calendar | | | | | | | | | | | | |
| Foreign Exchange | FX | | ● | ● ¹ | | | | | | | | |
| Reduced Tick | RT | | | | | | | ● | ● | | | |
| Standard | SP | | | ● | ● | ● | ● | ● | ● | | ● | ● |
| Equities | EQ | ● | | | | ● | | | | ● | | |
| Butterfly | BF | | | ● | ● | ● | ● | ● | | | ● | ● |
| Condor | CF | | | | ● | | ● | ● | | | ● | ● |
| Strip | FS | ● | ● | ● | | | | ● | ● | | | |
| Inter-commodity | IS | ● | ● | ● | ● | | ● | | ● | | | |
| E-mini S&P MidCap 400 - E-mini Russell 2000 | EC | ● | | | | | | | | | | |
| Crack 1:1 | C1 | | | | | | | | ● | | | |
| Pack | PK | | | | ● | | | | | | | |
| Month Pack | MP | | | | ● | | | | | | | |
| Pack Butterfly | PB | | | | ● | | | | | | | |
| Double Butterfly | DF | | | | ● | | | | | | | |
| Pack Spread | PS | | | | ● | | | | | | | |
| Bundle | FB | | | | ● | | | | | | | |
| Bundle Spread | BS | | | | ● | | | | | | | |

¹ Note: CME Group lists the **FX** calendar spread on the Goldman Sachs Commodity Index (GSCI) product, which is classified as an agricultural product.

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3. Futures Spreads Construction Summary

| Futures Spreads | Strategy Type Code | Construction | Example Instrument Code / Security Definition |
|---|--------------------|--|---|
| Calendar | | | |
| Foreign Exchange | FX | Buy1exp2 Sell1exp1 | 6EH9-6EZ8 |
| Reduced Tick | RT | Buy1exp1 Sell1exp2 | ZBZ8-ZBH9 |
| Standard | SP | Buy1exp1 Sell1exp2 | GEZ8-GEH9 |
| Equities | EQ | Sell1exp1 Buy1exp2 | ESZ8-ESH9 |
| Butterfly | BF | Buy1exp1 Sell2exp2 Buy1exp3 | GE:BFM8-U8-Z8 |
| Condor | CF | Buy1exp1 Sell1exp2 Sell1exp3 Buy1exp4 | GE:CFZ8H9M9U9 |
| Strip Month Expiry Year Expiry | FS | Buy1exp1 Buy1exp2 Buy1exp3 Buy1exp4 | CL:FS 03M U8 ZB:FS 01Y U8 |
| Inter-commodity | IS | Buy1exp1com1 Sell1exp1com2 | GTBZ8-GEH9 |
| Crack 1:1 | C1 | Buy1exp1Distillate Sell1exp1Crude | CL:C1 HO-CL U8 |
| Pack | PK | Buy1exp1 Buy1exp2 Buy1exp3 Buy1exp4 | GE:PK 01Y M8 |
| Month Pack | MP | Buy4exp1 Sell (Pack)1exp2 | GE:MP Z8 1YH9 |
| Pack Butterfly | PB | Buy1(Pack)exp1 Sell2 (Pack)exp2 Buy1(Pack)exp3 | GE:PB Z8-Z9-Z0 |
| Double Butterfly | DF | Buy1exp1 Sell3exp2 Buy3exp3 Sell1exp4 | GE:DF Z8H9M9U9 |
| Pack Spread | PS | Buy1(Pack)exp1 Sell1(Pack)exp2 | GE:PS Z8-H9 |
| Bundle | FB | Buy1exp1 Buy1exp2 Buy1exp3 Buy1exp4 Buy2exp5 Buy3exp6 Buy4exp7 Buy5exp8 | GE:FB 02Y M8 |
| Bundle Spread | BS | Buy1(Bundle)exp1 Sell1(Bundle)exp2 | GE:BS 2YU8 2YU9 |

Futures Spreads on CME Globex

4. Futures Spread Detailed Descriptions

4.1 Calendar (Horizontal or Diagonal)

Calendar spreads consist of two contracts within the same instrument group and with different maturity months. There are variations in calendar spreads based on the product. Each calendar spread variation is designated through the use of a different spread type code.

Most, but not all, CME Group futures spread markets follow the convention of Buying the Spread, which indicates buying the front expiration and selling the back expiration. The following markets use the convention for calendar spreads only, where Buying the Spread is inverted to mean selling the front expiration month and buying the back expiration month:

- FX
- Equity

4.1.1 SP Calendar Spreads

The standard (**SP**) Calendar spreads consist of two contracts within the same instrument group with different maturity months. Buying one calendar means buying one front month leg and selling one back month leg. This is a +1:-1 ratio spread.

Products: **All Products**
 Construction: **Buy1exp1 Sell1exp2**

Examples

Buy one spread GEZ8-GEH9:
 Buy one December 2008 Eurodollar future and
 Sell one March 2009 Eurodollar future

Sell one spread GEZ8-GEH9:
 Sell one December 2008 Eurodollar future and
 Buy one March 2009 Eurodollar future

4.1.2 FX Calendar Spreads

The Foreign Exchange (**FX**) calendar spreads consist of two contracts within a single Foreign Exchange instrument group with different maturity months. Buying one calendar means buying one back month leg and selling one front month leg. This is a +1:-1 ratio spread.

Due to the tick differences between the spreads and the outright markets, Foreign Exchange leg prices from spread trades may be traded at non-standard tick increments.

Products: **Foreign Exchange (FX) Products**
 Construction: **Buy1exp2 Sell1exp1**

Examples

Buy one spread 6EH9-6EZ8:
 Buy one March 2009 EuroFX future and
 Sell one December 2008 EuroFX future

Sell one spread 6EH9-6EZ8:
 Sell one March 2008 EuroFX future and
 Buy one December 2009 EuroFX future

Note: CME Group lists the **FX** calendar spread on the Goldman Sachs Commodity Index (**GSCI**) product, which is classified as an agricultural product.

4.1.3 EQ Calendar Spreads

The Equities (**EQ**) calendar spreads consist of two contracts within a single Equities instrument group with different maturity months. Buying one calendar means selling one front month leg and buying one back month leg. This is a -1:+1 ratio spread.

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Products: **Equities Products**
 Construction: **Sell1exp1 Buy1exp2**

Examples

Buy one spread ESZ8-ESH9:
 Sell one December 2008 E-mini S&P 500® future and
 Buy one March 2009 e-mini S&P 500 future

Sell one spread ESZ8-ESH9:
 Buy one December 2008 E-mini S&P 500 future and
 Sell one March 2009 E-mini S&P 500 future

4.1.4 RT Calendar Spreads

The Reduced Tick (**RT**) calendar spreads are unique to the CME Group U.S. Treasury futures and COMEX Silver markets, and allow a different tick size for the underlying instrument versus the spread. The underlying instrument trades in the published tick size (e.g., $1/32^{nd}$ or $1/2$ of $1/32^{nd}$), while the spread market of the underlying trades in a reduced tick size of $1/4$ of $1/32^{nd}$. This is a +1:-1 ratio spread.

Products:

- 30-Year U.S. Treasury Bond Futures (**ZB**)
- 10-Year U.S. Treasury Note Futures (**ZN**)
- 5-Year U.S. Interest Rate Swap Futures (**SA**)
- 10-Year U.S. Interest Rate Swap Futures (**SR**)
- 30-Year Interest Rate Swap Futures (**I3**)
- COMEX Silver (**SI**)

Note: Silver futures trade in increments of five; Silver **RT** calendar spreads trade in increments of one.

Construction: **Buy1exp1 Sell1exp2**

Examples

Buy one spread ZBZ8-ZBH9:
 Buy one December 2008 30-year U.S. Treasury Bond future and
 Sell one March 2009 30-year U.S. Treasury Bond future

Sell one spread ZBZ8-ZBH9:
 Sell one December 2008 30-year U.S. Treasury Bond future and
 Buy one March 2009 30-year U.S. Treasury Bond future

4.2 Butterfly

The Butterfly (**BF**) spreads consist of three contracts within the same instrument group with equally distributed maturity months (e.g., M8-U8-Z8). Buying one butterfly means buying one of the closest maturity leg, selling two of the next maturity leg, and buying one of the furthest maturity leg. This is a +1:-2:+1 ratio spread.

Products: **Agricultural, Interest Rate, Legacy CBOT Equity Products**
 Construction: **Buy1exp1 Sell2exp2 Buy1exp3**

Examples

Buy one spread GE:BFM8-U8-Z8:
 Buy one June 2008 Eurodollar future
 Sell two September 2008 Eurodollar futures and
 Buy one December 2008 Eurodollar future

Sell one spread GE:BFM8-U8-Z8:
 Sell one June 2008 Eurodollar future
 Buy two September 2008 Eurodollar futures and
 Sell one December 2008 Eurodollar future

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4.3 Condor

The Condor (**CF**) spreads consist of four contracts within the same instrument group with consecutive quarterly maturity months (e.g., Z8-H9-M9-U9). Buying one condor means buying one of the closest maturity leg, selling one of the next maturity leg, selling one of the next maturity leg, and buying one of the furthest maturity leg. This is a +1:-1:-1:+1 ratio spread.

Products: **Interest Rate, Legacy CBOT and KCBT Agricultural Products**

Construction: **Buy1exp1 Sell1exp2 Sell1exp3 Buy1exp4**

Examples

Buy one spread GE:CFZ8H9M9U9:

Buy one December 2008 Eurodollar future

Sell one March 2009 Eurodollar future

Sell one June 2009 Eurodollar future and

Buy one September 2009 Eurodollar future

Sell one spread GE:CFZ8H9M9U9:

Sell one December 2008 Eurodollar future

Buy one March 2009 Eurodollar future

Buy one June 2009 Eurodollar future and

Sell one September 2009 Eurodollar future

4.4 Strip

The Strip (**FS**) spreads are the simultaneous purchase (or sale) of futures positions in consecutive months. The average of the prices for the futures contracts bought (or sold) is the price level of the hedge. A six-month strip, for example, consists of an equal number of futures contracts for each of six consecutive contract months. The Strip spread consists of four to 40 contracts within the same instrument group and with consecutive months. The leg ratios vary.

Strip spreads are also known as calendar strips.

Strips are constructed as buying a series of contracts simultaneously. Strips tick in one-tick increments. Strips can consist of any consecutive months between and including two-month to 12-month strips.

Products: **Legacy CME Equities, FX, Agriculturals, Legacy CBOT Interest Rates, Nymex Products**

Construction: **Buy1exp1 Buy1exp2 Buy1exp3 Buy1exp4**

Examples

Buy one spread CL:FS 03M U8:

Buy one September 2008 Crude Oil future

Buy one October 2008 Crude Oil future

Buy one November 2008 Crude Oil future and

Buy one December 2008 Crude Oil future

Sell one spread CL:FS 03M U8:

Sell one September 2008 Crude Oil future

Sell one October 2008 Crude Oil future

Sell one November 2008 Crude Oil future and

Sell one December 2008 Crude Oil future

4.5 Inter-Commodity

The Inter-Commodity (**IS**) spreads consist of two futures contracts of different products. Tick increments must be the same value. Expiration month does not matter. This is a +1:-1 ratio spread.

Construction: **Buy1exp1com1 Sell1exp1com2**

Examples

Buy one spread GTBZ8-GEH9:

Buy one December 2008 13-week U.S. Treasury Bill future and

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Sell one March 2009 Eurodollar future

Sell one spread GTBZ8-GEH9:

Sell one December 2008 13-week U.S. Treasury Bill future and
 Buy one March 2009 Eurodollar future

4.5.1 Crack 1:1

The Crack 1:1 (**C1**) inter-commodity spreads are unique to NYMEX energy products and consist of two different products within the same instrument group with the same maturity months. Buying the Crack 1:1 spread means buying the distilled product (Gasoline or Heating Oil) and selling the Crude Oil. All Crack Spreads are listed as same-month contracts. This is a +1:-1 ratio spread.

Products: **NYMEX Products**

Construction: **Buy1exp1Distillate Sell1exp1Crude**

Examples

Buy one spread CL:C1 HO-CL U8:

Buy one September 2008 Heating Oil future and
 Sell one September 2008 Crude Oil future

Sell one spread CL:C1 HO-CL U8:

Sell one September 2008 Heating Oil future and
 Buy one September 2008 Crude Oil future

4.5.2 E-mini S&P MidCap 400® - E-mini Russell 2000® Inter-Commodity

The E-mini S&P MidCap 400 - E-mini Russell 2000 Inter-Commodity spreads are unique and used only to trade these specific products. The spread is intended to assist customers wanting to transfer their E-mini Russell 2000 open interest to a liquid trading alternative. This is a +1:-1 ratio spread.

Note: This spread will not be available after the E-mini Russell 2000 contract is delisted from the CME Globex platform following the September 2008 expiration.

Construction: **Buy1exp1com1 Sell1exp1com2**

Examples

Buy one spread EMDU8-ER2U8:

Buy one September 2008 E-mini S&P MidCap 400 future and
 Sell one September 2008 E-mini Russell 2000 future

Sell one spread EMDU8-ER2U8:

Sell one September 2008 E-mini S&P MidCap 400 future and
 Buy one September 2008 E-mini Russell 2000 future

4.6 Pack

The Pack (**PK**) spreads are the simultaneous purchase or sale of an equally weighted, consecutive series of four Eurodollar futures, quoted on an average net change basis from the previous day's close. The pack spreads consist of four contracts within the same instrument group with consecutive quarterly maturity months (e.g., M8-U9-Z9-H9). This is a +1:+1:+1:+1 ratio spread.

Products: **Eurodollar Products**

Construction: **Buy1exp1 Buy1exp2 Buy1exp3 Buy1exp4**

Examples

Buy one spread GE:PK 01Y M8:

Buy one June 2008 Eurodollar future
 Buy one September 2008 Eurodollar future
 Buy one December 2008 Eurodollar future and
 Buy 1 March 2009 Eurodollar future

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Sell one spread GE:PK 01Y M8:

Sell one June 2008 Eurodollar future
 Sell one September 2008 Eurodollar future
 Sell one December 2008 Eurodollar future and
 Sell one March 2009 Eurodollar future

4.7 Month Pack

The Month-Pack (**MP**) spreads consist of selling one pack with a later maturity and buying four outright contracts of the same contract month with a maturity earlier than the front month of the pack.

The spread is listed with the Instrument Code/Security Description of the month code followed by a space then the pack code.

For example: GE:MP Z8 1YZ9 represents four GEZ8 futures vs. the Z9 1-year Pack (GEH9, GEM9, GEU9, GEZ9). This is a +4:-1(Pack) ratio spread.

Products: **Eurodollar Products**
 Construction: **Buy4exp1 Sell (Pack)1exp2**

Examples

Buy one spread GE:MP Z8 1YH9:
 Buy four December 2008 Eurodollar futures and
 Sell one March 2009 Eurodollar Pack
 One Year March 2009 Pack consists of the March2009, June2009, Sept2009, Dec2009
 Eurodollar futures

Sell one spread GE:MP Z8 1YH9:
 Sell four December 2008 Eurodollar futures and
 Buy one March 2009 Eurodollar Pack
 One Year March 2009 Pack consists of the March2009, June2009, Sept2009, Dec2009
 Eurodollar futures

4.8 Pack Butterfly

The Pack-Butterfly (**PB**) spreads consist of a butterfly spread with each of the legs being a pack. Buying one pack-butterfly means buying one of the closest maturity pack, selling two of the next maturity pack, and buying one of the furthest maturity pack. This is a +1:-2:+1 ratio spread.

Products: **Eurodollar Products**
 Construction: **Buy (Pack)1exp1 Sell (Pack)2exp2 Buy (Pack)1exp3**

Examples

Buy one spread GE:PB Z8-Z9-Z0:
 Buy one December 2008 Eurodollar Pack
 Sell two December 2009 Eurodollar Packs and
 Buy one December 2010 Eurodollar Pack

Sell one spread GE:PB Z8-Z9-Z0:
 Sell one December 2008 Eurodollar Pack
 Buy two December 2009 Eurodollar Packs and
 Sell 1 December 2010 Eurodollar Pack

4.9 Pack Spread

The Pack-Spread (**PS**) spreads consist of a calendar spread with each leg being a pack with different maturities. Buying one pack-spread means buying one closer maturity pack, and selling one further maturity pack. This is a +1:-1 ratio spread.

Products: **Eurodollar Products**
 Construction: **Buy (Pack)1exp1 Sell (Pack)1exp2**

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Examples

Buy one spread GE:PS Z8-H9:

Buy one December 2008 Eurodollar Pack and

Sell one March 2009 Eurodollar Pack

December 2008 Pack=Dec2008, March2009, June2009, Sept2009

March 2009 Pack= March2009, June2009, Sept2009, Dec2009

Sell one spread GE:PS Z8-H9:

Sell one December 2008 Eurodollar Pack and

Buy one March 2009 Eurodollar Pack

December 2008 Pack=Dec2008, March2009, June2009, Sept2009

March 2009 Pack= March2009, June2009, Sept2009, Dec2009

4.10 Double Butterfly

The Double Butterfly (**DF**) spreads are a calendar spread between two butterfly spreads where the second and third leg of the first butterfly are common to the first and second leg of the second butterfly. The net effect of this causes a spread with four legs of equal separation.

The Double Butterfly spread consists of four contracts within the same instrument group and equally distributed maturity months (e.g., Z7-H8-M8-U8). Buying one double butterfly means buying one of the closest maturity leg, selling three of the next maturity leg, selling three of the next maturity leg, and buying one of the furthest maturity leg. This is a +1:-3:+3:-1 ratio spread.

Products: **Eurodollar Products**

Construction: **Buy1exp1 Sell3exp2 Buy3exp3 Sell1exp4**

Examples

Buy one spread GE:DF Z8H9M9U9:

Buy one December 2008 Eurodollar future

Sell three March 2009 Eurodollar futures

Buy three June 2009 Eurodollar futures and

Sell one September 2009 Eurodollar future

Sell one spread GE:DF Z8H9M9U9:

Sell one December 2008 Eurodollar future

Buy three March 2009 Eurodollar futures

Sell three June 2009 Eurodollar futures and

Buy one September 2009 Eurodollar future

4.11 Bundle

The Bundle (**FB**) spreads consist of eight to 40 contracts within the same instrument group and with consecutive quarterly maturity months per block of four. A two-year bundle consists of 8 contracts, five-year bundle consists of 20 contracts, and a 10-year bundle consists of 40 contracts. Buying one bundle means buying one of each leg. This is a +1:+1:+1:...+1 ratio spread.

Products: **Eurodollar Products**

Construction:

Buy1exp1 Buy1exp2 Buy1exp3 Buy1exp4 Buy2exp5 Buy3exp6 Buy4exp7 Buy5exp8

Examples

Buy a two-year bundle GE:FB 02Y M8:

Buy one June 2008 Eurodollar future

Buy one September 2008 Eurodollar future

Buy one December 2008 Eurodollar future

Buy one March 2009 Eurodollar future

Buy one June 2009 Eurodollar future

Buy one September 2009 Eurodollar future

Buy one December 2009 Eurodollar future and

Buy one March 2010 Eurodollar future

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Sell a two-year bundle GE:FB 02Y M8:

Sell one June 2008 Eurodollar future
 Sell one September 2008 Eurodollar future
 Sell one December 2008 Eurodollar future
 Sell one March 2009 Eurodollar future
 Sell one June 2009 Eurodollar future
 Sell one September 2009 Eurodollar future
 Sell one December 2009 Eurodollar future and
 Sell one March 2010 Eurodollar future

4.12 Bundle-Spread

The Bundle Spread (**BS**) spreads consist of a calendar spread with each leg being a bundle with different maturities. Buying a bundle spread means buying one bundle with closer maturity and selling one bundle with further maturity.

Bundle Spread spreads must have an equal number of legs on each leg of the bundle. For instance, a two-year bundle can only be paired with another two-year bundle to create a bundle spread.

In addition, common future legs between the two bundles are not allowed. So a June 2008 two-year bundle cannot be spread with a March 2010 two-year bundle since this would result in a common leg of the March 2010 futures contract between the two bundles:

| June 2008 2-Year Bundle | March 2010 2-Year Bundle |
|--------------------------------|--------------------------------|
| Buy 1 June 2008 Eurodollar | Buy 1 March 2010 Eurodollar |
| Buy 1 Sept 2008 Eurodollar | Buy 1 Sept 2010 Eurodollar |
| Buy 1 December 2008 Eurodollar | Buy 1 December 2010 Eurodollar |
| Buy 1 March 2009 Eurodollar | Buy 1 March 2011 Eurodollar |
| Buy 1 June 2009 Eurodollar | Buy 1 June 2011 Eurodollar |
| Buy 1 Sept 2009 Eurodollar | Buy 1 Sept 2011 Eurodollar |
| Buy 1 December 2009 Eurodollar | Buy 1 December 2011 Eurodollar |
| Buy 1 March 2010 Eurodollar | Buy 1 March 2012 Eurodollar |

Products: **Eurodollar Products**

Construction: **Buy1(Bundle)exp1 Sell1(Bundle)exp2**

Examples

Buy one spread GE:BS 2YU8 2YU9:

Buy one June 2008 Eurodollar bundle and
 Sell one June 2009 Eurodollar bundle

Sell one spread GE:BS 2YU8 2YU9:

Sell one June 2008 Eurodollar bundle and
 Buy one June 2009 Eurodollar bundle