

The Simpson/Caputo Group



Complete Guide on How to Hedge using Futures and Futures Options

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*“Specially designed for Grain, Oilseed and
Livestock Producers”*

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Futures Markets

Cash Crop and Livestock producers face a great deal of risk. This risk includes uncertain weather, yield, price, import/export market, feed costs, basis, just to name a few.

Producers have managed such production risk over the years with top-notch farming practices. However, no amount of farming practice can address market risk – the uncertainty of price due to shifting supply and demand factors. This is where the futures markets come in.

Concept of a Futures Contract

What is a futures contract?

A futures contract is a standardized contract to buy or sell a commodity at a certain date in the future. The contract specifics;

1. Commodity – (Hogs, Corn, Soybean Meal)
2. Quantity of the commodity – (40,000 pounds for Lean Hog Futures, 5000 bushels for corn and 100 short tons for soybean meal)
3. Quality of the commodity – (51-52% lean hogs)
4. Delivery point -(location at which to deliver commodity or cash settlement in case of Lean Hog Futures)
5. Delivery date – (month that contract terminates)

The only aspect of a futures contract that is not specified is price. Price is determined by traders who execute buy and sell orders from clients. The bid and offer price reflects the supply and demand for that commodity as well as peoples expectation of whether the price will rise or fall.

How can producers use the futures market?

Producers not wanting to take the risk of changing prices in the cash markets can use the futures market to lock in a price ahead of actual merchandising. They transfer price risk to another party. Since both cash and futures prices always converge (come together) at the expiry of the futures contract, producers are able to use the futures market as a temporary substitute for cash sales or cash purchases to be made later.

What is hedging?

Hedging is buying or selling futures contract as **protection against the risk of loss** due to changing prices in the cash market. If you are feeding hogs to market, you want to protect against falling prices in the cash market. If you need to buy feed grain, you want to protect against rising prices in the cash market.

Short Hedge

A short hedge is used when you plan on **selling** your product **at a future date** and want to **protect** yourself against **falling prices**. A hog producer will sell a Lean Hog Futures Contract for hogs they will ship at a future date. When those hogs are actually shipped, the hog producer will offset this short hedge by buying back their futures contract. If there has been a drop in the cash market prices, it would mostly be offset by a gain in the futures transaction.

Long Hedge

A **long hedge** is used when you plan on **buying** a commodity such as soybean meal and want to **protect against prices increasing**. A hog producer wanting to protect against raising soybean meal prices will buy Soybean Meal Futures contracts. When the producer actually books physical soybean meal, they will offset their futures position by selling soybean meal futures. An increase in cash price would mostly be offset by a gain in the futures transaction.

The Importance of Basis

What is Basis?

The relationship of local cash price and the futures price is called basis. Basis is calculated by subtracting the price of the appropriate futures contract from the local cash market price.

$$\text{BASIS} = \text{CASH PRICE} - \text{FUTURES PRICE}$$

For a **short hedge**, the more positive (stronger) the basis, the higher the price received for livestock.

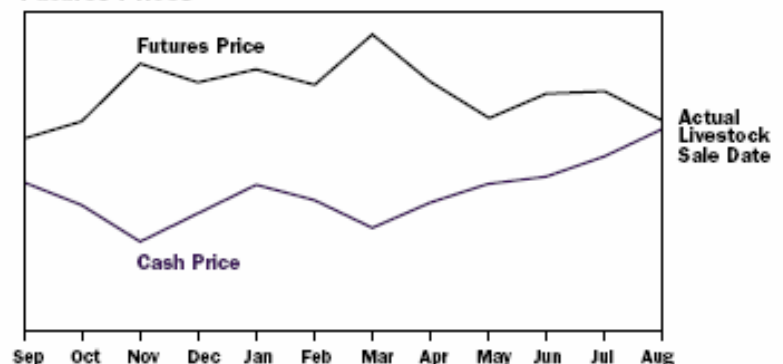
For a **long hedge**, the more negative (weaker) the basis, the lower the price paid for livestock.

Example;

If cash prices for Lean Hogs is \$69.00/cwt and the futures price is \$73/cwt, then the basis is \$69.00-\$73.00 = -\$4.00 or \$4.00 under.

With a cash price of \$69.50 and a future price of \$68.50, the basis is \$69.50-\$68.50 = \$1.00 or \$1.00 over

Basis: The Relationship Between Cash and Futures Prices



Lean Hog Futures Contract Specifications - (see Appendix 1 for more commodities)

Trade Unit – 40,000 pounds or 400 per hundred weight (cwt) (approximately 210 hogs)

Point Description – 2.5 point = \$10.00 per cwt

Limits – 300 points (\$3.00 cwt) or \$1200 US\$

Contract Listing – February, April, May, June, July, August, October, and December

Hours Pit Session - 10:05 a.m. to 2:00 p.m. E.T.

Electronic Session – Open Monday at 10:05 a.m. and Closes Friday at 2:45 p.m. E.T.

(Market closes each day between 5:00 p.m. and 6:00 p.m.)

Settlement – cash settled – if a buyer or seller does not offset the position prior to expiration, the contract will be settled in cash to the Two Day Lean Hog index.

Converting CME Lean Hog Futures to Index 100 Ontario Base Price

Futures Price **multiple** U.S dressing percentage 0.74

Multiple Metric conversion 2.2046

Divided by exchange rate (CAD/US)

Divided by Ontario dressing percentage 0.80

Divided by 1.1195 divisor

= 100% Ontario Base Formula Price 100 Index

Margin Requirements

When you sell or buy futures contracts, you are required to post a performance bond deposit with the broker. This is a small percentage of the value of each contract traded.

Example of Margining

While you hold a futures position, the value of your account is calculated each day. This is called “**marked-to-market**”. If the value of your position falls and your account balance falls below a certain amount called the “**maintenance margin**”, you will receive a “**margin call**” asking for additional funds to be deposited into your account.

Day	Market Action	Value of Position (40,000 lb. contract)	Debit/Credit Account	Account Balance	Performance Bond Call
1	Deposit \$800				
2	Sell 1 Dec hog contract at \$56/cwt	\$22,400			
	Close \$55.20	\$22,080	+\$ 320	\$1,120	
3	Close \$54.65	\$21,860	+\$ 220	\$1,340	
4	Close \$53.15	\$21,260	+\$ 600	\$1,940	
5	Close \$54.00	\$21,600	–\$ 340	\$1,600	
10	Close \$55.50	\$22,200	–\$ 600*	\$1,000	
15	Close \$56.80	\$22,720	–\$ 520*	\$ 480	\$ 320
20	Close \$57.25	\$22,900	–\$ 180*	\$ 620	
25	Close \$58.15	\$23,260	–\$ 360*	\$ 260	\$ 540
60	Close \$50.75	\$20,300	+\$ 2,960*	\$3,760	
61	Buy back 1 Dec hog contract at \$50.95	\$20,380	–\$ 80	\$3,680	

\$56.00/cwt selling price

–\$50.95/cwt buying price

\$5.05/cwt futures gain

\$1,660 perf. bond deposits

+\$2,020 total gain

\$3,680 account balance

*accumulated

The Short Futures Hedge – (assuming zero basis)

If you are feeding hogs for market, you can use a short futures hedge to offset the risk of prices falling by the time those hogs are ready for market.

Steps:

1. Sell Lean Hog Futures Contract to cover the hogs you plan to sell at a future date
2. Sell physical hogs in the cash market
3. Buy back your short futures positions

Example

It is October and you plan to sell 210 hogs in December. You are uncertain about the outlook for hog prices and want to protect the value of your inventory from falling prices. The current cash price in October is \$70.00. The December Lean Hog Futures contract is also trading at \$70.00 cwt. You sell 1 Lean Hog Futures contract @ \$70.00.

Scenario 1: Prices Fall

In December, cash hog market price is \$65.00 cwt. You deliver your hog and receive \$65.00 cwt, and offset your futures positions by buying a December Lean Hog Futures contract at \$65.00 cwt.

Cash Market		Futures Market	
October:	cash hogs @ \$70.00 cwt		Sell Dec Hog Futures @ \$70.00 cwt
December:	sell cash hogs @ \$65.00 cwt		Buy Dec Hog Futures @ \$65.00 cwt
Change:	\$5.00 cwt less		Change: \$5.00 cwt gain

Sell Cash hog in December at	\$65.00 cwt
Gain on Futures position	\$5.00 cwt
Net Sell Price	\$70.00 cwt

Scenario 2: Prices Rise

In December, cash market price is \$77.00 cwt. You deliver your hog and receive \$77.00 cwt, and offset your futures positions by buying a December Lean Hog Futures contract at \$77.00 cwt.

Cash Market		Futures Market	
October:	cash hogs @ \$70.00 cwt		Sell Dec Hog Futures @ \$70.00 cwt
December:	sell cash hogs @ \$77.00		Buy Dec Hog Futures @ \$77.00 cwt
Change:	\$7.00 cwt more		Change: \$7.00 cwt loss

Sell Cash hog in December at	\$77.00 cwt
Loss on Futures position	\$7.00 cwt
Net Sell Price	\$70.00 cwt

The Long Hedge – (assume zero basis)

If you need to buy soybean meal in the future, you will be disadvantaged if prices increase. You can use a long hedge to control that risk.

Steps:

1. Buy a Soybean Meal Futures contract to cover the amount of meal you need to purchase.
2. Purchase soybean meal in the cash market when needed
3. Offset your long soybean meal futures contract

Example

It is October and you plan to buy 100 tons of soybean meal in March. You are uncertain about the outlook for meal prices. Cash meal in October is trading at \$250 per ton. The March Soybean Meal Futures contract is also trading at \$250.00. You buy 1 contract to cover your future soybean meal purchases.

Scenario 1: Prices Fall

In March, cash market price for meal is \$236.00. You buy your cash meal at \$236.00 and offset your futures positions by selling 1 March Soybean Meal Futures contract at \$236.00.

Cash Market	Futures Market
October: cash meal @ \$250.00 March: buy cash meal @ \$236.00 Change: \$14.00 savings	Buy 1 March Meal Futures @ \$250.00 Sell 1 March Meal Futures @ \$236.00 Change: \$14.00 loss

Buy Cash meal in March at	\$236.00
Loss on Futures position	\$14.00
Net Purchase Price	\$250.00

Scenario 2: Prices Rise

In March, cash market price for meal is \$260.00. You buy your cash meal at \$260.00 and offset your futures positions by selling 1 March Soybean Meal Futures contract at \$260.00.

Cash Market	Futures Market
October: cash meal @ \$250.00 March: buy cash meal @ \$260.00 Change: \$10.00 more expensive	Buy 1 March Meal Futures @ \$250.00 Sell 1 March Meal Futures @ \$260.00 Change: \$10.00 gain

Buy Cash meal in March at	\$260.00
Gain on Futures position	\$10.00
Net Purchase Price	\$250.00

OPTIONS ON FUTURES

The Vocabulary of Options

An option is the right, but not the obligation, to buy or sell a particular futures contract at a specific price on or before a certain expiration date. There are two different types of options:

- a) Call Option
- b) Put Option

Each offers an opportunity to take advantage of futures price moves without actually having a futures position.

Call Option

A call option gives the buyer the right to buy (go long) a futures contract at a specific price on or before an expiration date. For example, a December Soybean Meal \$280 call option gives the buyer the right to buy or go long one December Soybean Meal futures contract at a price of \$280 anytime between purchase and November expiration. Even if Soybean Meal prices rise substantially above \$280, the call holder will still have the right to buy Soybean Meal futures at \$280.

a) Put Option

A buyer of a put option has the right to sell (go short) a futures contract at a specific price on or before the expiration date. For example, a December Lean Hog \$70.00 put option gives the put buyer the right to sell December Hog futures at \$70.00 cwt. Should December Hog futures decline to \$55.00 cwt, the put holder still retains the right to go short December hogs at \$70.00 cwt.

Option Buyer

The buyer, or holder of an option can choose to exercise his right and take a position in the underlying futures. The call buyer can exercise his right to buy the underlying futures and the put holder can exercise his right to sell the underlying futures contract.

Option Seller

Option sellers are also called option writers. The seller could be a trader or hedger and is contractually obligated to take the opposite futures position if the buyer exercises his right. In return for the premium, the seller assumes the risk of taking a possibly adverse futures positions.

Puts and calls are separate option contracts; they are not the opposite side of the same transaction. For every put buyer there is a put seller, and for every call buyer there is a call seller.

The option buyer pays a premium to the seller in every transaction. The following table illustrates the rights and obligations associated with trading put and call options on futures.

Calls and Puts

Call Buyer	Call Seller
<ul style="list-style-type: none">• pays premium• has right to exercise, resulting in long futures position• time works against call buyer• no margin calls	<ul style="list-style-type: none">• collects premium• has obligation if assigned, resulting in a short position in the underlying futures contract• time works in favour of call seller• has performance bond requirement
Put Buyer	Put Seller
<ul style="list-style-type: none">• pays premium• has right to exercise, resulting in short futures position• time works against put buyer• no margin call	<ul style="list-style-type: none">• collects premium• has obligation if assigned, resulting in a long position in the underlying futures contract• time works in favour of put seller• has performance bond requirement

Exercise Price

Also known as the strike price, the exercise price is the price at which the option buyer may buy or sell the underlying futures contracts. Exercising the option results in a futures position at the designated strike price. For example, by exercising a December Corn \$4.00 call, the holder of the option would then be long a December Corn futures contract at \$4.00. If the holder of a December Lean Hog \$70.00 put were to exercise his option, the result would be a short futures position, at \$70.00 in December Lean Hogs.

Strike prices are set by the Exchange and have different intervals depending on the underlying contract. Strike prices are set above and below the existing futures price and additional strikes are added if the futures move significantly up or down.

Premium

The premium is the price the buyer of an option pays and the seller of an option receives for the rights conveyed by an option. Thus, ultimately the cost of an option is determined by supply and demand. Various factors affect the options premium including strike price level in relation to the futures price level, time remaining to expiration, and the market volatility.

The Arithmetic of Options

Option Buyer

MAXIMUM LOSS = Premium paid

BREAKEVEN (LONG CALL) = Strike Price + Premium paid

BREAKEVEN (LONG PUT) = Strike Price – Premium paid

MARGIN = None

Option Seller

MAXIMUM LOSS FOR SELLER OF CALL = Unlimited

MAXIMUM LOSS FOR SELLER OF PUT = Limited –(prices can only fall to zero)

BREAKEVEN (LONG CALL) = Strike price + Premium received

BREAKEVEN (LONG PUT) = Strike Price - Premium received

MARGIN = Yes

Additional Terminology

In-the-money – Call option is in-the-money when the futures price exceeds the option's strike price.
Put option is in-the-money when the futures price is below the option's strike price.

At-the-money – An option is at-the-money when the futures price equals the option's strike price.

Out-of-the-money – Call option is out-of-the-money when the futures price is below the option's strike price.
Put option is out-of-the-money when the futures price is above the option's strike price.

Delta – Measures the rate of change of an option premium with respect to a price change in the underlying futures contract. Not all options move point-for-point with their underlying futures contract. If a futures contract moves 0.50 points and the options only moves 0.25 points, its delta is 50% - the option is only 50% as sensitive to the movement of the underlying futures contract.
The delta will change as an option moves from out-of-the-money to in-the-money. Delta range from 0% to 100%

Basic Strategies

Examples: **Buying a put option to establish a floor price for hogs you will sell in February**

Assume You Enter a Long put position in November

Feb hog futures trading @ \$67.50 cwt

Cash Hogs \$65.00 cwt

\$64.00 cwt Feb Put Option @ \$1.70 = $(1.70 \times 400 = \$680\text{US})$

Scenario 1: Prices Fall

It is now February and the Option Expires

Feb hogs futures trading @ \$60.00 cwt

Cash Hogs \$60.00 cwt

\$64.00 cwt Feb put option @ \$4.00

Cash Market	Futures Market
November: cash hogs @ \$65.00 cwt February: sell cash hogs @ \$60.00 cwt Change: \$5.00 cwt less	Buy 1 Feb \$64 hog put @ \$1.70 Sell 1 Feb \$64 hog put @ \$4.00 Change: \$2.30 cwt gain

Sell Cash hog in February at	\$60.00 cwt
Gain on Option position	\$2.30 cwt
	<hr/>
Net Sell Price	\$62.30 cwt

Scenario 2: Prices Rise

It is now February and the Option Expires

Feb hogs futures trading @ \$70.00 cwt

Cash Hogs \$70.00 cwt

\$64.00 cwt Feb put option @ \$0.00

Cash Market	Futures Market
November: cash hogs @ \$65.00 cwt February: sell cash hogs @ \$70.00 cwt Change: \$5.00 cwt more	Buy 1 Feb \$64 hog put @ \$1.70 Sell 1 Feb \$64 hog put @ \$0.00 Change: \$1.70 cwt loss

Sell Cash hog in February at	\$70.00 cwt
Loss on Option position	\$1.70 cwt
Net Sell Price	\$68.30 cwt

Basic Strategies

Examples: **Buying a Corn call option to protect against rising prices**

Scenario 1: Prices Fall

Assume You Enter a Long call position in November

March corn futures trading @ \$4.10/bu

Cash Corn \$3.85/bu

\$4.10 March Call Option @ \$0.15/bu = $(\$0.15 * 5000 = \$750\text{US})$

It is now February and the Option Expires

March corn futures trading @ \$3.55/bu

Cash Corn \$3.55/bu

\$4.10 March call option @ \$0.00/bu

Cash Market	Futures Market
November: cash corn @ \$3.85/bu February: buy cash corn @ \$3.55/bu Change: \$0.30/bu saving	Buy 1 March \$4.10 call @ \$0.15/bu Sell 1 March \$4.10 call @ \$0.00/bu Change: \$0.15/bu loss

Buy Cash corn in February at	\$3.55/bu
Loss on Option position	\$0.15/bu
Net Purchase Price	\$3.70/bu

Scenario 2: Prices Rise

Assume You Enter a Long call position in November

March corn futures trading @ \$4.10/bu

Cash Corn \$3.85/bu

\$4.10 March Call Option @ \$0.15/bu = $(\$0.15 \times 5000 = \$750\text{US})$

It is now February and the Option Expires

March corn futures trading @ \$4.50/bu

Cash Corn \$4.50/bu

\$4.10 March call option @ \$0.40/bu

Cash Market	Futures Market
November: cash corn @ \$3.85/bu February: buy cash corn @ \$4.50/bu Change: \$0.65/bu more expensive	Buy 1 March \$4.10 call @ \$0.15/bu Sell 1 March \$4.10 call @ \$0.40/bu Change: \$0.25/bu gain

Buy Cash corn in February at	\$4.50/bu
Gain on Option position	\$0.25/bu
Net Purchase Price	\$4.25/bu

The Option Writer

The above examples illustrated buying options as a way to hedge your price risk. A strategy we have been employing for our hedge accounts have been writing or selling option contracts. When you sell an option, you become the “insurance company”. Instead of *paying* the premium, you *receive* the premium in turn for making a promise to take on a future obligation. Let’s look at an example;

Scenario 1: A cash crop producer looking to hedge their bean production.

Assume it is April and you Sell a November Bean \$10.00 Call at \$0.60 – (This means you are making a promise to sell November beans at \$10.00 (market is \$9.60) and for that promise someone will pay you \$0.60/bu. Your breakeven on this deal \$10.60.)

November Bean futures trading @ \$9.60/bu in April

Cash Bean \$9.60/bu

\$10.00 November Call Option @ \$0.60/bu = $(\$0.60 \times 5000 = \$3000\text{US} - \text{which you would receive})$

It is now October and the Option Expires

November bean futures trading @ \$9.25/bu

Cash Beans \$9.25/bu

\$10.00 November call option @ \$0.00/bu

Cash Market	Futures Market
April: cash beans @ \$9.60/bu October: sell cash beans @ \$9.25/bu Change: \$0.35/bu less	Sell 1 Nov \$10.00 call @ \$0.60/bu Option expire worthless Change: \$0.60/bu gain

Sell Cash beans in October at \$9.25/bu
 Gain on Option position \$0.60/bu

Net Sell Price \$9.85/bu

Scenario 2 - Prices Increase

Assume it is April and you Sell a November Bean \$10.00 Call at \$0.60 – (This means you are making a promise to sell November beans at \$10.00 (market is \$9.60) and for that promise someone will pay you \$0.60/bu. Your breakeven on this deal \$10.60.)

November Bean futures trading @ \$9.60/bu in April

Cash Bean \$9.60/bu

\$10.00 November Call Option @ \$0.60/bu = ($0.60 \times 5000 = \3000 US – which you would receive)

It is now October and the Option Expires

November bean futures trading @ \$10.80/bu

Cash Beans \$10.80/bu

\$10.00 November call option @ \$0.80/bu

Cash Market	Futures Market
April: cash beans @ \$9.60/bu October: sell cash beans @ \$10.80/bu Change: \$1.20/bu more	Sell 1 Nov \$10.00 call @ \$0.60/bu Buy 1 Nov \$10.00 call @ \$0.80/bu Change: \$0.20/bu loss

Sell Cash beans in October at \$10.80/bu
 Loss on Option position \$0.20/bu

Net Sell Price \$10.60/bu

With your futures hedging account with Kevin Simpson and Bert Caputo, we can show you how to use these tools effectively as part of your risk management plan. Turn the page to get started.

Opening a Hedging Account

Hedging your price risk involves opening a hedge account with Kevin Simpson and Bert Caputo.

With your “Full Service” hedge account with Kevin and Bert, they will:

1. Guide you in planning your marketing strategy to enhance profit, cut losses, protect inventory value, lock in costs, and assure the predictability of your future income.
2. Help you assess your risks, your opportunities, your finances, and your goals to discover your marketing options.
3. Offer insights as you make informed decisions, bring proven formulas to the planning process.
4. Access the futures market and execute your transaction with the backing of the Royal Bank, Canada’s largest chartered bank.
5. Respond to your changing needs and market dynamics with ongoing ideas for identifying value, market trends, and seasonal patterns.

How to Get Started

Contact us, toll free 866-989-0997 or e-mail bert.caputo@rbc.com.

We will begin the interview process to determine how our services can meet your needs.

Appendix 1

CONTRACT SPECIFICATIONS

CORN FUTURES (FULL-SIZED AND MINI-SIZED)	
Contract Size	Full-sized: 5,000 bushels Mini-sized: 1,000 bushels
Deliverable Grades	No. 2 Yellow at par; other grades are acceptable for delivery at premiums and discounts – see Rules and Regulations for specific information.
Price Quote	Cents per bushel
Tick Size	Full-sized: 1/4 cent per bushel (\$12.50 per contract) Mini-sized: 1/8 cent per bushel (\$1.25 per contract)
Contract Months	Dec, Mar, May, Jul, Sep
Last Trading Day	The business day prior to the 15th calendar day of the contract month.
Last Delivery Day	Second business day following the last trading day of the delivery month.
Trading Hours	Electronic: 6:00 p.m. – 7:15 a.m. and 9:30 a.m. – 1:15 p.m. Central Time (CT), Sun – Fri Trading Floor: 9:30 a.m. – 1:15 p.m. CT, Mon – Fri Note: Mini-sized contracts close electronically and on the trading floor at 1:45 p.m. CT. Trading in expiring contracts closes at noon on last trading day.
Ticker Symbols	Full-sized Electronic: ZC Full-sized Floor: C Mini-sized Electronic: XC Mini-sized Floor: YC
Daily Price Limit	Thirty cents (\$0.30) per bushel (\$1,500 per contract for full-sized and \$300 per contract for mini-sized) above or below the previous day's settlement price with expandable limits up to forty-five cents (\$0.45) per bushel and further to seventy cents (\$0.70) per bushel.* No limit in the spot month (limits are lifted beginning on First Position Day).
CORN OPTIONS (FULL-SIZED)	
Contract Size	One Corn futures contract (of a specified contract month) of 5,000 bushels
Tick Size	1/8 cent per bushel (\$6.25 per contract)
Strike (Exercise) Price Intervals	Strike prices shall be in integral multiples of five cents (\$.05) per bushel for the first two months and ten cents (\$.10) per bushel for all other months. At the commencement of trading, list all strikes within approximately 50 percent of the at-the-money strike.*
Contract Months	Dec, Mar, May, Jul, Sep; a monthly (serial) option contract is listed when the front month is not a standard option contract. The monthly option contract exercises into the nearby futures contract. For example, an August serial option exercises into a September futures position.
Last Trading Day	For standard option contracts: The last Friday preceding the first notice day of the corresponding Corn futures contract month by at least two business days. For serial option contracts: The last Friday which precedes by at least two business days the last business day of the month preceding the option month.
Exercise	The buyer of a futures option may exercise the option on any business day prior to expiration by giving notice to CME Clearing by 6:00 p.m. CT. Option exercise results in an underlying futures market position. Options in-the-money on the last day of trading are automatically exercised.
Expiration	Unexercised Corn futures options shall expire at 7:00 p.m. CT on the last day of trading.
Trading Hours	Electronic: 6:00 p.m. – 7:15 a.m. and 9:30 a.m. – 1:15 p.m. CT, Sun – Fri Floor: 9:30 a.m. – 1:15 p.m. CT, Mon – Fri
Ticker Symbols	Electronic: OZC Floor: CY for calls/PY for puts
Daily Price Limit	Option Daily Price Limits and expanded levels are the same as the underlying Corn futures contracts.

SOYBEAN MEAL FUTURES

Contract Size	100 tons (2,000 pounds per short ton)
Deliverable Grades	48 percent Protein Soybean Meal
Price Quote	Dollars and cents per short ton
Tick Size	10 cents per ton (\$10 per contract)
Contract Months	Oct, Dec, Jan, Mar, May, Jul, Aug, Sep
Last Trading Day	Business day prior to the 15th calendar day of the contract month.
Last Delivery Day	Second business day following the last trading day of the delivery month.
Trading Hours	Electronic: 6:00 p.m. – 7:15 a.m. and 9:30 a.m. – 1:15 p.m. CT, Sun – Fri Floor: 9:30 a.m. – 1:15 p.m. CT, Mon – Fri Trading in expiring contracts closes at noon on the last trading day.
Ticker Symbols	Electronic: ZM Floor: SM
Daily Price Limit	\$20 per short ton (\$2,000 per contract) above or below the previous day's settlement price with expandable limits to \$30 per unit of trading and further to \$45 per unit of trading.* No limit in the spot month (limits are lifted beginning on First Position Day).

SOYBEAN MEAL OPTIONS

Contract Size	One Soybean Meal futures contract (of a specified contract month) of 100 short tons
Tick Size	5 cents per short ton (\$5 per contract)
Strike (Exercise) Price Intervals	Strike prices shall be in integral multiples of 5 dollars per ton for all strikes less than \$200 and in integral multiples of 10 dollars per ton for all strikes greater than or equal to \$200. At the commencement of trading, list all strikes within approximately 50 percent of the at-the-money strike.*
Contract Months	Oct, Dec, Jan, Mar, May, Jul, Aug, Sep; a monthly (serial) option contract is listed when the front month is not a standard option contract. The monthly option contract exercises into the nearby futures contract. For example, a February serial option exercises into a March futures position.
Last Trading Day	For standard option contracts: The last Friday preceding the first notice day of the corresponding Soybean Meal futures contract month by at least two business days. For serial option contracts: The last Friday which precedes by at least two business days the last business day of the month preceding the option month.
Exercise	The buyer of a futures option may exercise the option on any business day prior to expiration by giving notice to CME Clearing by 6:00 p.m. CT. Option exercise results in an underlying futures market position. Options in-the-money on the last day of trading are automatically exercised.
Expiration	Unexercised Soybean Meal futures options shall expire at 7:00 p.m. CT on the last day of trading.
Trading Hours	Electronic: 6:00 p.m. – 7:15 a.m. and 9:30 a.m. – 1:15 p.m. CT, Sun – Fri Floor: 9:30 a.m. – 1:15 p.m. CT, Mon – Fri
Ticker Symbols	Electronic: OZM Floor: MY for calls/ MZ for puts
Daily Price Limit	Option Daily Price Limits and expanded levels are the same as the underlying Soybean Meal futures contracts.

WHEAT FUTURES (FULL-SIZED AND MINI-SIZED)

Contract Size	Full-sized: 5,000 bushels Mini-sized: 1,000 bushels
Deliverable Grades	No. 2 Soft Red Winter, No. 2 Hard Red Winter, No. 2 Dark Northern Spring and No. 2 Northern Spring at par; other grades are acceptable for delivery at premiums and discounts – see Rules and Regulations for specific information.
Price Quote	Cents per bushel
Tick Size	Full-sized: 1/4 cent per bushel (\$12.50 per contract) Mini-sized: 1/8 cent per bushel (\$1.25 per contract)
Contract Months	Jul, Sep, Dec, Mar, May
Last Trading Day	The business day prior to the 15th calendar day of the contract month.
Last Delivery Day	Seventh business day following the last trading day of the delivery month.
Trading Hours	Full-sized Electronic: 6:00 p.m. – 7:15 a.m. and 9:30 a.m. – 1:15 p.m. CT, Sun – Fri Trading Floor: 9:30 a.m. – 1:15 p.m. CT, Mon – Fri Note: Mini-sized contracts close electronically and on the trading floor at 1:45 p.m. CT. Trading in expiring contracts closes at noon on last trading day.
Ticker Symbols	Full-sized Electronic: ZW Full-sized Floor: W Mini-sized Electronic: XW Mini-sized Floor: YW
Daily Price Limit	Sixty cents (\$0.60) per bushel (\$3,000 per contract for full-sized contract and \$600 per mini-sized contract) above or below the previous day's settlement price with expandable limits to ninety cents (\$0.90) per bushel and further to one dollar and thirty-five (\$1.35) per bushel.* No limit in the spot month (limits are lifted beginning on First Position Day).

WHEAT OPTIONS (FULL-SIZED)

Contract Size	One Wheat futures contract (of a specified contract month) of 5,000 bushels
Tick Size	1/8 cent per bushel (\$6.25 per contract)
Strike (Exercise) Price Intervals	Strike prices shall be in integral multiples of five cents (\$.05) per bushel for the first two months and ten cents (\$.10) per bushel for all other months. At the commencement of trading, list all strikes within approximately 50 percent of the at-the-money strike.*
Contract Months	Jul, Sep, Dec, Mar, May; a monthly (serial) option contract is listed when the front month is not a standard option contract. The monthly option contract exercises into the nearby futures contract. For example, an August serial option exercises into a September futures position.
Last Trading Day	For standard option contracts: The last Friday preceding the first notice day of the corresponding Wheat futures contract month by at least two business days. For serial option contracts: The last Friday which precedes by at least two business days the last business day of the month preceding the option month.
Exercise	The buyer of a futures option may exercise the option on any business day prior to expiration by giving notice to CME Clearing by 6:00 p.m. CT. Option exercise results in an underlying futures market position. Options in-the-money on the last day of trading are automatically exercised.
Expiration	Unexercised Wheat futures options shall expire at 7:00 p.m. CT on the last day of trading.
Trading Hours	Electronic: 6:00 p.m. – 7:15 a.m. and 9:30 p.m. – 1:15 p.m. CT, Sun – Fri Open Auction: 9:30 a.m. – 1:15 p.m. CT, Mon – Fri
Ticker Symbols	Electronic: OZW Floor Calls: WY Floor Puts: WZ
Daily Price Limit	Option Daily Price Limits and expanded levels are the same as the underlying Wheat futures contracts.

SOYBEAN FUTURES (FULL-SIZED AND MINI-SIZED)

Contract Size	Full-sized: 5,000 bushels Mini-sized: 1,000 bushels
Deliverable Grades	No. 2 Yellow at par; other grades are acceptable for delivery at premiums and discounts – see Rules and Regulations for specific information.
Price Quote	Cents per bushel
Tick Size	Full-sized: 1/4 cent per bushel (\$12.50 per contract) Mini-sized: 1/8 cent per bushel (\$1.25 per contract)
Contract Months	Nov, Jan, Mar, May, Jul, Aug, Sep
Last Trading Day	Business day prior to the 15th calendar day of the contract month.
Last Delivery Day	Second business day following the last trading day of the delivery month.
Trading Hours	Electronic: 6:00 p.m. – 7:15 a.m. and 9:30 a.m. – 1:15 p.m. CT, Sun – Fri Trading Floor: 9:30 a.m. – 1:15 p.m. CT, Mon – Fri Note: Mini-sized contracts close electronically and on the trading floor at 1:45 p.m. CT. Trading in expiring contracts closes at noon on last trading day.
Ticker Symbols	Full-sized Electronic: S Full-sized Floor: ZS Mini-sized Electronic: XK Mini-sized Floor: YK
Daily Price Limit	Seventy cents (\$0.70) per bushel (\$3,500 per contract for full-sized and \$700 per contract for mini-sized) above or below the previous day's settlement with expandable limits to one dollar and five cents (\$1.05) per bushel and further to one dollar and sixty cents (\$1.60) per bushel.* No limit in the spot month (limits are lifted beginning on First Position Day).

SOYBEAN OPTIONS (FULL-SIZED)

Contract Size	One Soybean futures contract (of a specified contract month) of 5,000 bushels
Tick Size	1/8 cent per bushel (\$6.25 per contract)
Strike (Exercise) Price Intervals	Strike prices shall be in integral multiples of 10 cents (\$0.10) per bushel for the first two months and 20 cents (\$0.20) per bushel for all other months. At the commencement of trading, list all strikes within approximately 50 percent of the at-the-money strike.*
Contract Months	Nov, Jan, Mar, May, Jul, Aug, Sep; a monthly (serial) option contract is listed when the front month is not a standard option contract. The monthly option contract exercises into the nearby futures contract. For example, an October serial option exercises into a November futures position.
Last Trading Day	For standard option contracts: The last Friday preceding the first notice day of the corresponding Soybean futures contract month by at least two business days. For serial option contracts: The last Friday which precedes by at least two business days the last business day of the month preceding the option month.
Exercise	The buyer of a futures option may exercise the option on any business day prior to expiration by giving notice to CME Clearing by 6:00 p.m. CT. Option exercise results in an underlying futures market position prior to the open of the next open auction session. Options in-the-money on the last day of trading are automatically exercised.
Expiration	Unexercised Soybean futures options shall expire at 7:00 p.m. CT on the last day of trading.
Trading Hours	Electronic: 6:00 p.m. – 7:15 a.m. and 9:30 a.m. – 1:15 p.m. CT, Sun – Fri Floor: 9:30 a.m. – 1:15 p.m. CT, Mon – Fri
Ticker Symbols	Electronic: OZS Floor: CZ for calls/ PZ for puts
Daily Price Limit	Option Daily Price Limits and expanded levels are the same as the underlying Soybean futures contracts.

*For complete rules and regulations visit <http://www.cmegroup.com/rulebook/cbot-rulebook-listing.html> and select the product of interest.

SOYBEAN OIL FUTURES

Contract Size	60,000 pounds
Deliverable Grades	Crude soybean oil meeting exchange-approved grades and standards – see exchange Rules and Regulations for exact specifications.
Price Quote	Cents per pound
Tick Size	1/100 cent (\$0.0001) per pound (\$6 per contract)
Contract Months	Oct, Dec, Jan, Mar, May, Jul, Aug, Sep
Last Trading Day	Business day prior to the 15th calendar day of the contract month.
Last Delivery Day	Business day prior to the 15th calendar day of the contract month.
Trading Hours	Electronic: 6:00 p.m. – 7:15 a.m. and 9:30 a.m. – 1:15 p.m. CT, Sun – Fri Floor: 9:30 a.m. – 1:15 p.m. CT, Mon – Fri Trading in expiring contracts closes at noon on the last trading day.
Ticker Symbols	Electronic: ZL Floor: BO
Daily Price Limit	2.5 cents per pound (\$1,500 per contract) above or below the previous day's settlement price with expandable limits to 3.5 cents per pound and further to 5.5 cents per pound.* No limit in the spot month (limits are lifted beginning on First Position Day).

SOYBEAN OIL OPTIONS

Contract Size	One Soybean Oil futures contract (of a specified contract month) of 60,000 pounds
Tick Size	5/1000 cent (\$0.00005) per pound (\$3 per contract)
Strike (Exercise) Price Intervals	Strike prices shall be in integral multiples of one-half cent per pound. At the commencement of trading, list all strikes within approximately 50 percent of the at-the-money strike.*
Contract Months	Oct, Dec, Jan, Mar, May, Jul, Aug, Sep; a monthly (serial) option contract is listed when the front month is not a standard option contract. The monthly option contract exercises into the nearby futures contract. For example, a November serial option exercises into a December futures position.
Last Trading Day	For standard option contracts: The last Friday preceding the first notice day of the corresponding Soybean Oil futures contract month by at least two business days. For serial option contracts: The last Friday which precedes by at least two business days the last business day of the month preceding the option month.
Exercise	The buyer of a futures option may exercise the option on any business day prior to expiration by giving notice to CME Clearing by 6:00 p.m. CT. Option exercise results in an underlying futures market position. Options in-the-money on the last day of trading are automatically exercised.
Expiration	Unexercised Soybean Oil futures options shall expire at 7:00 p.m. CT on the last day of trading.
Trading Hours	Electronic: 6:00 p.m. – 7:15 a.m. and 9:30 a.m. – 1:15 p.m. CT, Sun – Fri Floor: 9:30 a.m. – 1:15 p.m. CT, Mon – Fri
Ticker Symbols	Electronic: OZL Floor: OY for calls/ OZ for puts
Daily Price Limit	Option Daily Price Limits and expanded levels are the same as the underlying Soybean Oil futures contracts.

*For complete rules and regulations visit <http://www.cmegroup.com/rulebook/cbot-rulebook-listing.html> and select the product of interest.