

CASH SALE TRANSACTIONS | CASH & FORWARD CASH CONTRACTS

Consumers have many variables to consider before making large purchases like a car or home. An individual purchasing a car is likely to consider the car's price, fuel economy, overall quality, and if the car generally meets his or her current and future needs. These are a handful of the many items an individual takes into account before making a \$15,000+ purchase.

Now imagine making a decision worth well over \$350,000 every year! This is the approximate value of raising corn on 500 acres of land. Just like consumers who make purchasing decisions, agricultural producers have multiple variables to consider when selling their crops and livestock. Some of these considerations include *when to sell* their production (i.e., before it is harvested, at harvest, or storing the grain to sell at a later date), when the operation needs cash to pay its bills, and what type of contract to use with the local buyer. These decisions have serious financial implications, and can make a difference on whether or not the producer generates a profit in the production year.

It is important for producers to make marketing decisions that best fit the needs and goals of their operation. The following four modules will explore the choices that producers have in selling their physical commodity to buyers in the local, cash market. This module will focus on the most common contracts: a cash and forward cash sale.

1) Cash Contracts

2) Futures Contracts

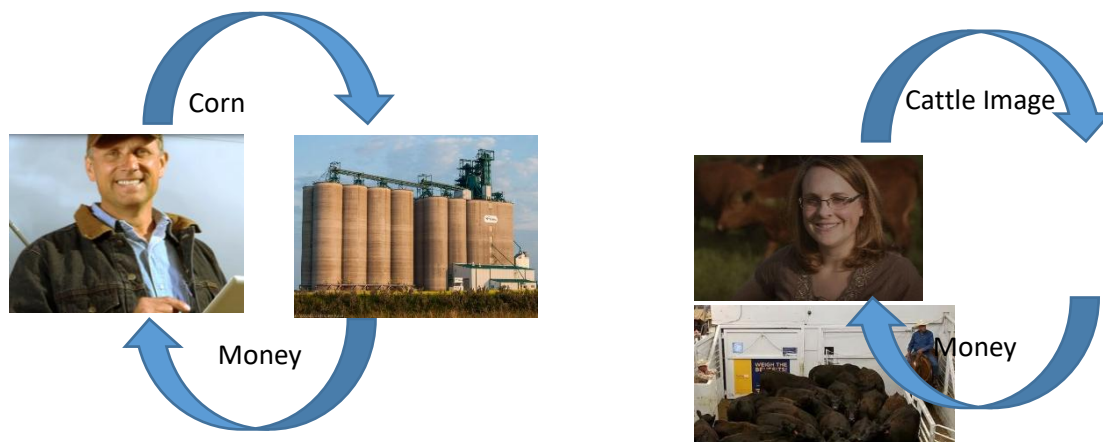
3) Option Contracts

Cash/Forward Cash	Short (sell) position	Puts
Hedge to Arrive (HTA)	Long (buy) position	Calls
Basis		
No Price Established (NPE)		

Cash contract and its advantages and disadvantages

A producer's primary goal in raising crops or livestock is to generate a profit. Even though commodity prices are changing throughout the production year, producers have some choices on how they will market, or sell, their crops and livestock. The most common type of transaction for crops and livestock is a cash contract.

A **cash sale** is a type of contract where a good is exchanged for a payment simultaneously. In a cash sale, the producer, or the seller, delivers the product to the buyer and receives money on the same day. Everyone can relate to this type of sale, as most purchases are made with this type of transaction. For example, a grocery store sells food to customers and receives money at the same time.



What's unique to commodity markets is that producers, the initial sellers of commodities, are price-takers. A **price-taker** accepts the price that a buyer is willing to pay. More specifically, a buyer of corn, such as a grain elevator, will post the price they're willing to pay for corn on a given day. The producer can choose to sell at this price or wait to sell in hopes that the buyer's price will increase in the future.

The **cash price** is the price a buyer is willing to pay for a good. The cash price is also known as the "spot price". The **spot price** is the price received today and today only. Recall that cash price is calculated by adding the commodity's futures price and basis.



For commodities that are not traded on a futures exchange, the cash price is determined by local supply and demand.

Producers who raise crops will search online or call local buyers to get the current **cash bid**. Cash bids communicate what the buyer is willing to pay for the commodity across various delivery periods. If a producer finds a bid online, he or she should call and confirm the cash price before hauling grain to the buyer. AgWeb.com is a helpful website that displays cash bids for several buyers in a geographic area.

Here's an example of a corn elevator's cash bids:

Yellow Corn

Nearby futures month price

Basis level is adjusted by local buyer

Delivery Period	Date	Futures	Basis	Cash
	03/01/17 - 03/31/17	3.615	-0.50	3.115
	04/01/17 - 04/30/17	3.615	-0.47	3.145
	05/01/17 - 05/31/17	3.615	-0.44	3.175
	06/01/17 - 07/31/17	3.695	-0.49	3.205

These bids producer in March, the \$3.115. Notice futures price cash price. (\$3.615 + -0.50=\$3.115).

Cash price per bushel

demonstrate that if a delivers his or her corn cash price per bushel is that the sum of the and basis is equal to the

There are some advantages and disadvantages to selling commodities using a cash sale contract:

Advantages	Disadvantages
Easy to understand	Seller cannot get higher price if price increases
Doesn't matter to seller if the price goes down	Payment is not received until delivery

Price, quantity, and delivery are all known	Obligation to sell to specific location
No extra costs with service/storage	

A cash sale is also how livestock are sold. For livestock, the cash price is determined at the point of sale. Cattle and hogs can be sold directly to another producer, at a livestock auction, or through an order buyer. Fat cattle are sold directly to meat processors. When selling directly to a buyer, rather than at an auction, livestock producers will negotiate and agree upon a purchase price for the livestock with the buyer.

The price for livestock can differ due to several factors, including:

1. **Weight:** The price per hundredweight (cwt) will change as the weight of the animal increases. While heavier animals will overall sell for a higher dollar amount per head, the price per cwt decreases as the weight of the animal increases.
2. **Gender:** Heifers tend to sell for about \$10 per cwt less than steers.
3. **Genetics:** The breed and genetics of livestock can be an indication of the quality of the livestock.
4. **Yield and Grade:** Premiums or discounts can occur based on yield and grade – or quality – of a carcass.

Cash Contract Examples:

It's October 10th and Shelby is harvesting her corn. She doesn't have enough bins on her farm to store all of her corn, and she is needing cash to pay off her operating loan coming due. The nearby futures price (DEC) is \$3.78 and basis is -0.28. Shelby decides the current cash bid of \$3.50 at the local grain elevator is fair, so she delivers and sells 5,000 bushels today.

Date	Futures Price	Basis	Cash Price
October 10 th	\$3.78	-0.28	\$3.50

$$\text{Net Selling Price} = \$3.78 + (-0.28) = \$3.50 \text{ per bushel}$$

It's October 20th and Steven is ready to sell 100 head of feeder calves that weigh an average of 700 lbs. November Feeder Cattle Futures Price is currently \$125/cwt, and his calves generally sell for \$5.00/cwt above the futures price. Steven is comfortable with these prices and hauls his feeder calves to the local livestock auction.

Date	Futures Price	Basis	Cash Price
October 20 th	\$125/cwt	+5.00/cwt	\$130/cwt

$$\text{Net Selling Price} = \$125/\text{cwt} + \$5.00/\text{cwt} = \$130/\text{cwt}$$

A **forward cash contract** is an agreement where the price and quantity of the good is set between the buyer and seller for delivery in the future. A forward cash contract locks in the cash price the seller will receive and the buyer will pay for the commodity. However, delivery of the commodity does not occur until a date in the future. A forward cash contract requires physical delivery of the commodity.

It is common for producers to use forward cash contracts when marketing their grain. Producers use cash bids provided by local buyers to establish a forward cash contract price.

Here's an example of an elevator's soybean bids:

	Date	Futures	Basis	Cash
	03/01/17 - 03/31/17	10.06	-0.65	9.41
Delivery period	04/01/17 - 04/30/17	10.06	-0.60	9.46
	05/01/17 - 05/31/17	10.06	-0.60	9.46
	10/01/17 - 11/30/17	10.02	-0.50	9.52

Delivery period → (points to 04/01/17 - 04/30/17)
Cash price per bushel → (points to 9.46)
Nearby futures month price → (points to 10.02)
Basis level is adjusted by local buyer → (points to -0.50)

Based on these bids, if a producer delivers his or her soybeans in October or November they will receive a cash price per bushel of \$9.52. Notice that the sum of the futures price and basis is equal to the cash price (\$10.02 + -0.50=\$9.52).

Using a forward cash contract, the producer can lock-in the price of \$9.52 and wait to deliver in October when he or she harvests the beans. By forward contracting, the producer is not affected if the price of soybeans decreases, but the producer will also not benefit if the price for soybeans increases. There is some risk associated with forward contracting before the producer knows whether or not production is high enough to meet the contract quantity, as the producer is expected to deliver the contracted quantity to the buyer.

Forward cash contracts can also be utilized by livestock producers. This is most typical when selling directly to a local buyer like a backgrounding operation, feedlot operation, or processing facility.

There are several advantages and disadvantages to selling commodities using a forward cash contract:

Advantages**Disadvantages**

Easy to understand	Seller cannot get higher price if the price increases
Does not matter if the price decreases	Payment is not received until delivery
Seller can lock-in attractive price	Risk of not producing the amount of commodity contracted
Price, quantity, and delivery are all known	Must maintain quality of farm-stored grain between sale and delivery
No extra costs with service/storage are paid to the buyer (but on farm storage may be needed)	Possible penalty for cancelling contract
	Obligation to sell to specific location

Forward Cash Contract Examples:

It's June 10th and the price of soybeans has been increasing. Paul, who grows soybeans, wants to take advantage of this high price as he believes it will be lower by harvest. Paul calls his local grain merchandiser to learn about forward contracting options on new crop. Paul wants to deliver upon harvest in October, making the nearby futures month November. The futures price for November soybeans is currently \$11.00. Basis for October delivery is set at -0.55. Paul decides to forward contract 3,000 bushels of soybeans at a cash price of \$10.45 for October delivery.

Contract Date	Delivery Date	Futures Price	Basis	Cash Price
June 10 th	October	\$11.00	-0.55	\$10.45

$$\text{Net Selling Price} = \$11.00 + (-0.55) = \$10.45$$

It's April 1st and the price of fed steers is above average. Anne, a feedlot manager, wants to forward contract 500 head of steers that will be finished in June. She calls the buyer at the nearby beef processing facility to establish a forward contract for June delivery. Using the June Live Cattle futures price of \$115/cwt and estimated basis of +2.00/cwt, Anne locks in a price of \$117/cwt for 500 head of fat cattle for June delivery.

Contract Date	Delivery Date	Futures Price	Basis	Cash Price
April 1 st	June	\$115/cwt	+2/cwt	\$117/cwt

Net Selling Price = \$115/cwt + 2/cwt = \$117/cwt
