MICHIGAN STATE UNIVERSITY | Extension

Grain Marketing Basics Workshop

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Our goal

- To understand the difference between cash price, futures prices, and basis.
- Introduce a few basic grain pricing tools, including forward contracts, delayed pricing contracts, basis contracts, and options.
- Help attendees develop the tools to work with merchandisers to develop a marketing plan

Tonight's plan

- Pricing decision tool
- Cash market, delayed pricing, forward contracts
- Basis contract
- Hedge-to-arrive
- Some options basics (if time allows)

Next week:

- Calls, puts, and minimum price contracts
- Guest speakers: Q&A with MAC
- Review

Review

Cash Price = Futures Price + Basis

Review

$$\underbrace{\text{Cash Price} = \text{Futures Price}}_{\text{A hedge locks in a net price}} + \textbf{Basis}$$

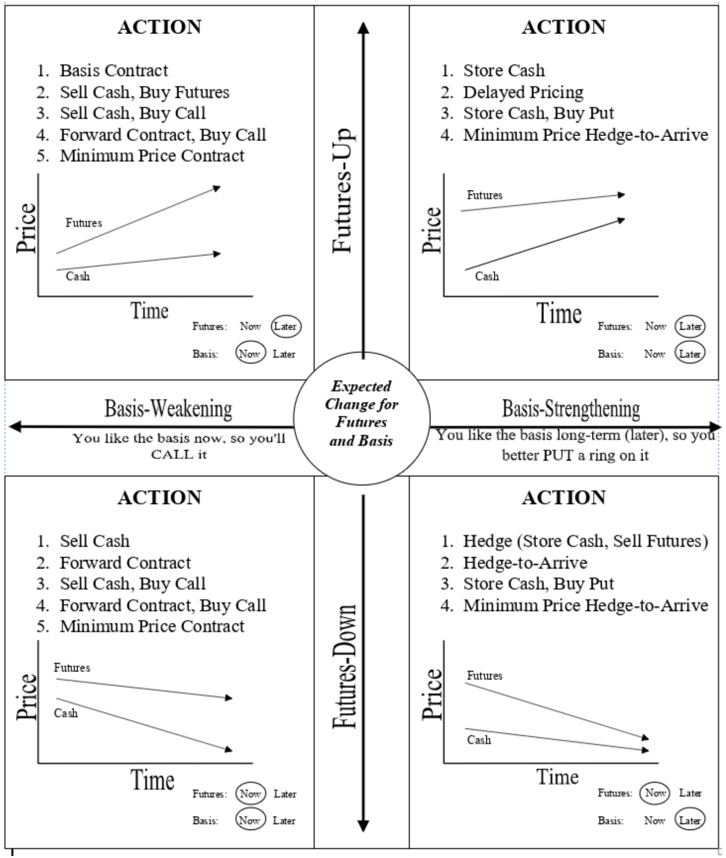
Review

$$\underbrace{\text{Cash Price} = \text{Futures Price}}_{\text{A hedge locks in a net price}} + \textbf{Basis}$$

A hedge locks in
a net price

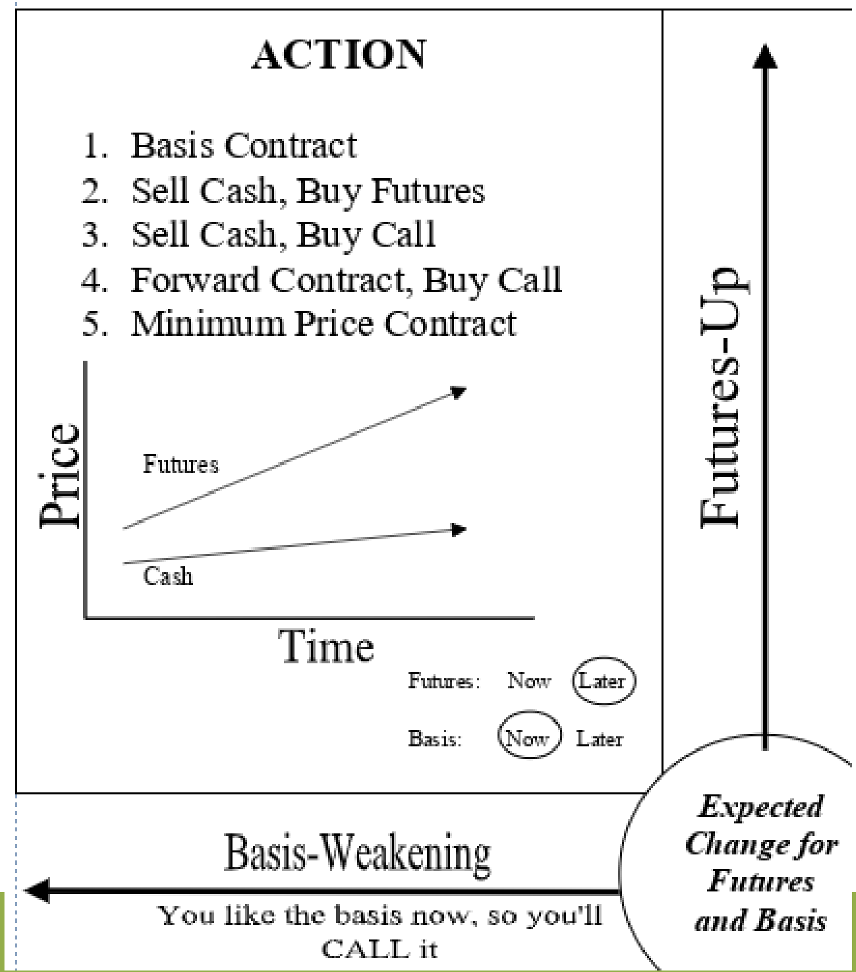
Still have
basis risk

Quadrant pricing tool



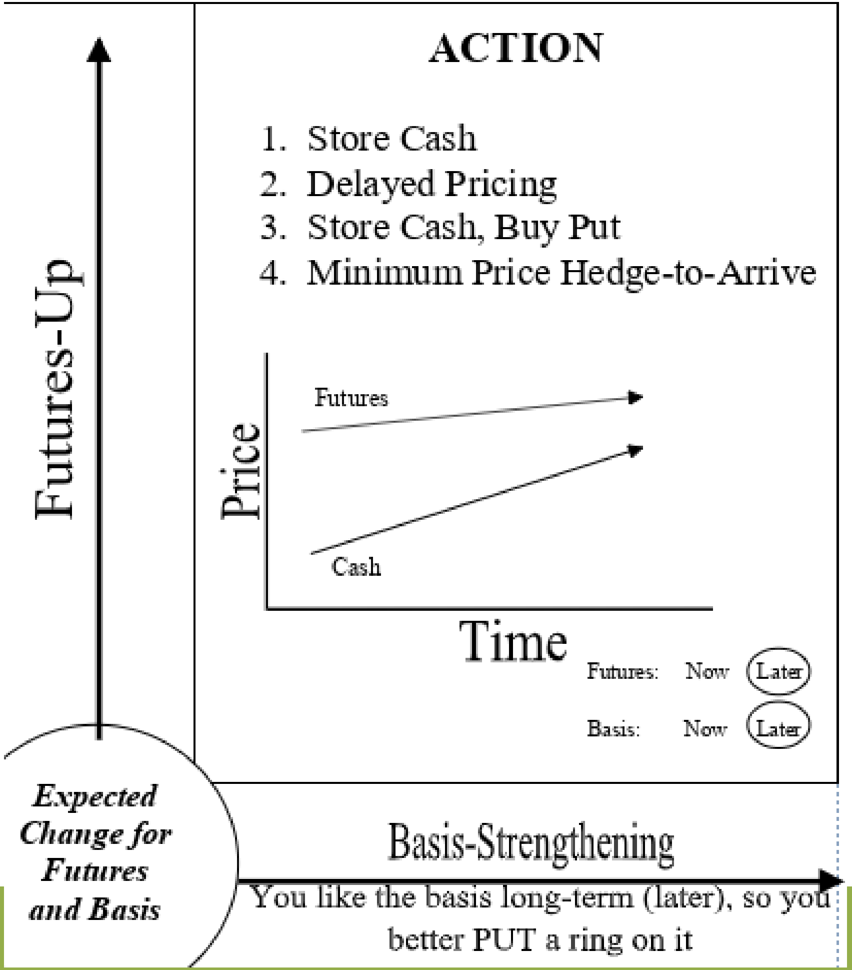
- Shows which tools should be considered based on market expectations
- Need to form expectations about both futures and basis

Futures up, basis weakening



- Want to lock in basis NOW
- Want to lock in futures LATER

Futures up, basis strengthening



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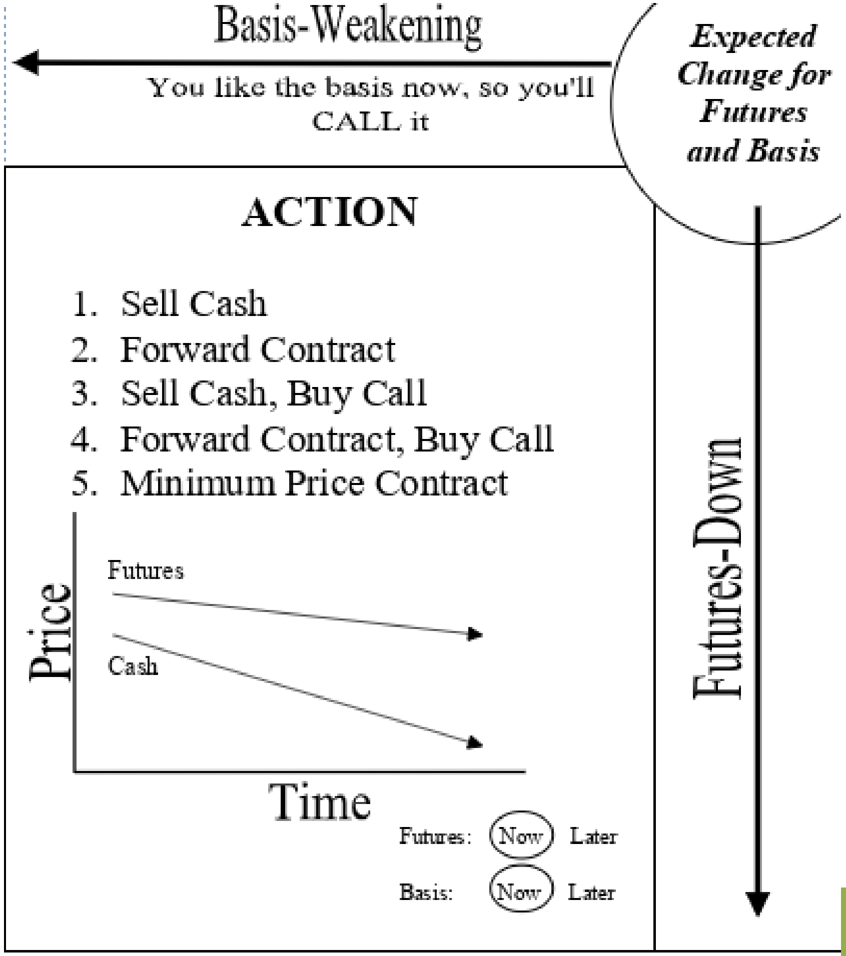
Futures down, basis weakening



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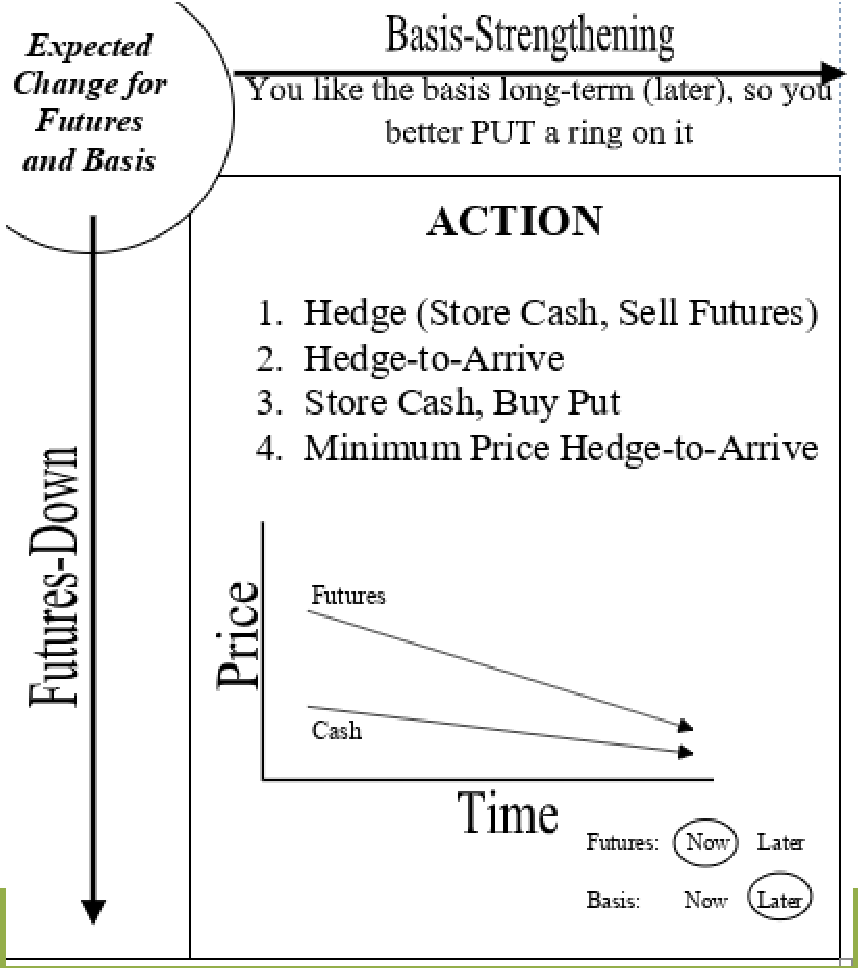
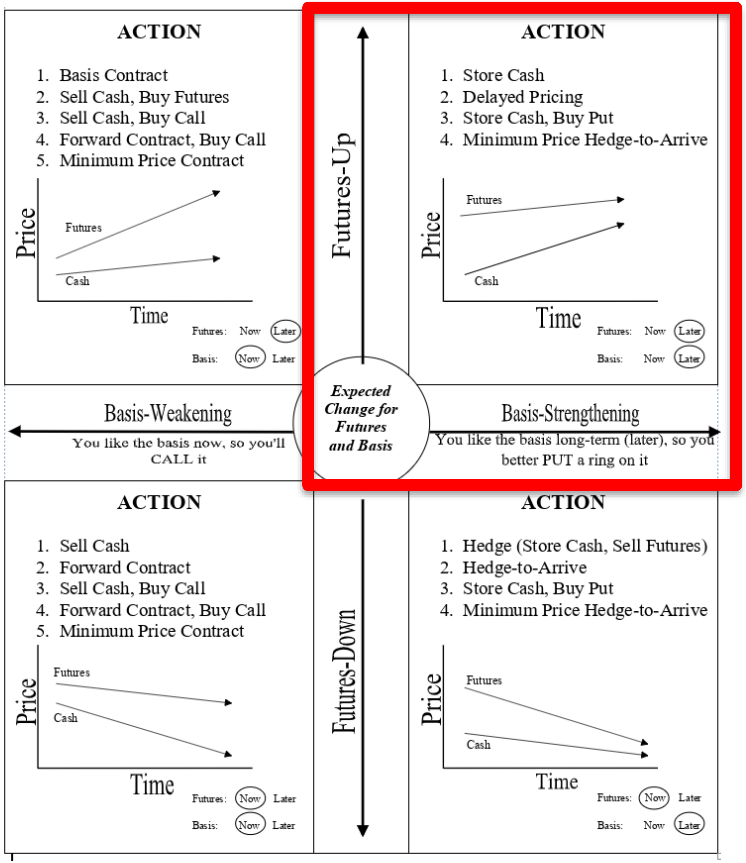
Futures down, basis strengthening



- Want to lock in basis LATER
- Want to lock in futures NOW

Tools for futures up, basis strengthening



Store cash:
Provided you have on-farm storage, you hold grain and wait for improved prices. Selling at harvest causes you to miss out on higher prices and better basis.

Delay pricing:
Producer delivers to elevator. Producer pays the elevator a minimum fee (typically 0.10 to 0.20 per bushel) to have the priviledge to price grain within a specified time window.

The cash market

- Definition: price agreement for immediate delivery
- Advantages
  - Cash is available quickly
  - Price is known at time of sale
  - No quantity restrictions
  - Easy to understand, can deal with people you know
- Disadvantages
  - Timing may be inopportune (especially at harvest)
  - Can't establish price before deciding to produce

Delayed pricing

- Definition: Agreement that delivered grain will be priced at a time selected by seller. Elevator owns grain and changes the producer for service and storage.
- Advantages
  - Flexibility to price when opportune
  - Price is known at time of sale
  - No quantity restrictions
  - Easy to understand, can deal with people you know
- Disadvantages
  - Timing may be inopportune (especially at harvest)
  - Can't establish price before deciding to produce

Delayed pricing example

Suppose it's October and you are short of storage space. You feel prices will rise in the next few months and the basis is currently weak (likely to strengthen). You use a delayed pricing contract and sell in December, when prices have risen 0.40.

October Harvest price	12.50

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Gross price after selling	12.90

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Delayed pricing fee	0.20

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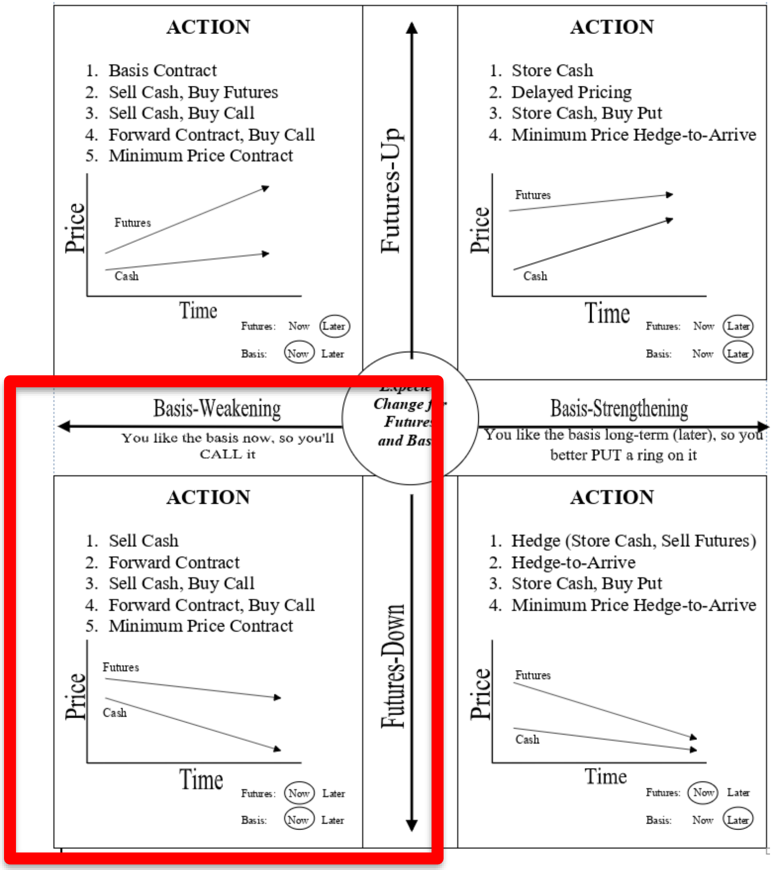
October Harvest price	12.50
December price	12.90
Gross price after selling	12.90
Delayed pricing fee	0.20
Net received	12.70

Tools for futures down, basis weakening



Sell cash:
Get rid of it in the spot market! Don't wait for prices to go down.

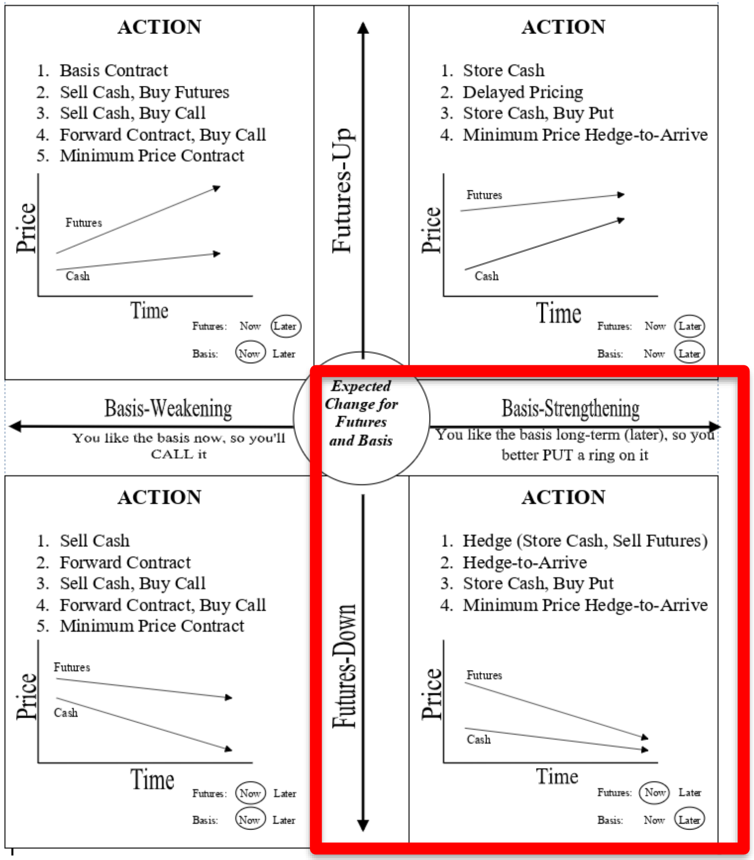
Forward contract:
Allows a producer to lock in an elevator's deferred cash grain price. Locks in both the futures and basis and location in the delivery period. Often used to establish a new crop selling price.

Forward contracts

- Definition: Price agreements for future delivery
- Advantages
  - Price is known at time of sale
  - No quantity restrictions
  - Easy to understand, can deal with people you know
- Disadvantages
  - Risk of ending up oversold
  - Often offers lower net returns than a futures contract

Chalkboard video

Tools for futures down, basis strengthening



Hedge:
Store cash, sell futures

Hedge-to-arrive:
Elevators will allow you to lock in the futures price portion and lock in the basis at a later date (prior to delivery).

Hedge-to-arrive contracts (ADM description)

Hedge-to-Arrive (HTA)

The Hedge-to-Arrive (HTA) grain contract offers you the choice to lock in only the futures reference price portion of your cash contract for a specific quantity to be delivered in the future. The basis can be set at a later date, but must be done prior to delivery. It's one of many contract options that allow you to actively manage price risk.

How it Works

Here's how to put Hedge-to-Arrive to work for you:

1. Working with your ADM representative, you lock in a Futures Reference Price for a specific quantity to be delivered in the future.
2. You set your basis for the designated delivery period and location, at a level you are satisfied with prior to delivery.
3. You deliver your contracted grain and receive the cash price, which is your Futures Reference Price +/– Basis – Service Fee.

Hedge-to-arrive example

- Date: February 15
- Locks in futures price for a specific delivery date
- Must deliver to specific location
- Fees (for benefit of not handling margin calls)

Date	May. Futures	Basis	Cash Price
Sep 15	14.10	-1.00	13.10
Feb 23			
Net price			

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Feb 23		-0.40	
Net price	14.20+(-0.40)=13.80+storage		

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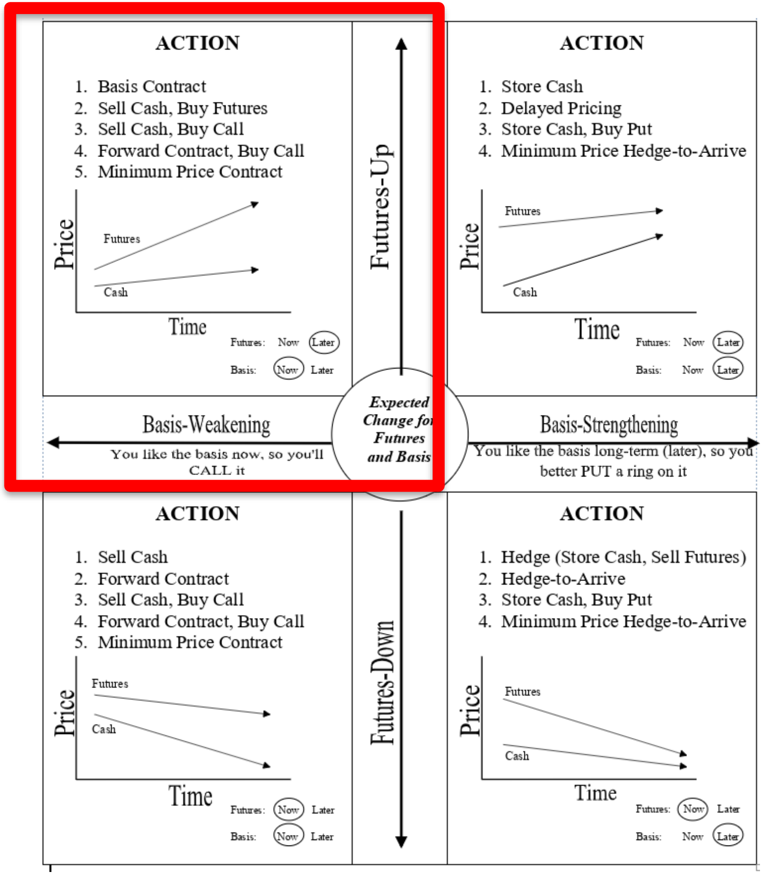
Video on hedges vs H2A vs forward contracts

Tools for futures up, basis weakening



Basis contract:
Contract to price a product at a fixed discount relative to a specific futures contract. Timing is determined by producer.

Sell cash, buy futures:
You expect cash to rise less than futures. So immediately sell cash, and buy futures to sell later.

Basis contracts

- Advantages
  - Flexibility to price when opportune
  - Price is known at time of sale
  - No quantity restrictions
  - Easier to understand, can deal with people you know
- Disadvantages
  - Still exposed to futures price risk
  - Futures are more difficult to forecast than basis

Basis contracts

- Advantages
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  - Easier to understand, can deal with people you know
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How it Works

1. Working with an ADM representative, you lock in the basis for a specific delivery period.
2. If you wish, you may be able to receive a partial cash advance after delivery has occurred.
3. You set your final futures reference price prior to the deadline provided by the contract terms.
4. You deliver your grain within the contracted period and receive the contracted cash price (minus your cash advance, if applicable), which is the Futures Reference Price +/– Basis.

Options intro

- Options provide a "right to buy" or a "right to sell" a futures contract at a specified price.
- **Call option**: gives the holder the right to buy
- **Put option**: gives the holder the right to sell
- **Strike price:** the price at which the option provides the right to buy/sell
- **Intrinsic value**: Positive difference between strike price and underlying futures contract price
  - For puts: Strike price exceeds futures price
  - For calls: Strike price is below futures price
- **Option premium**: the market value of the option
  - The price of the "insurance"

CME videos on options

Simple example of put

Suppose it's October and the price of a July futures contract is 5.50. You buy a futures contract and you buy a put at a strike price of 5.25 at a premium of 0.20.

July futures price (Oct.)	5.50
July futures price (June)	5.60

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July futures price (June)	5.60
Gross price	5.60
Cost of put	-0.20

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July futures price (June)	5.60
Gross price	5.60
Cost of put	-0.20
Net Price	5.40

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July futures price (June)	5.60
Gross price	5.25
Cost of put	0.20
Net Price	5.05

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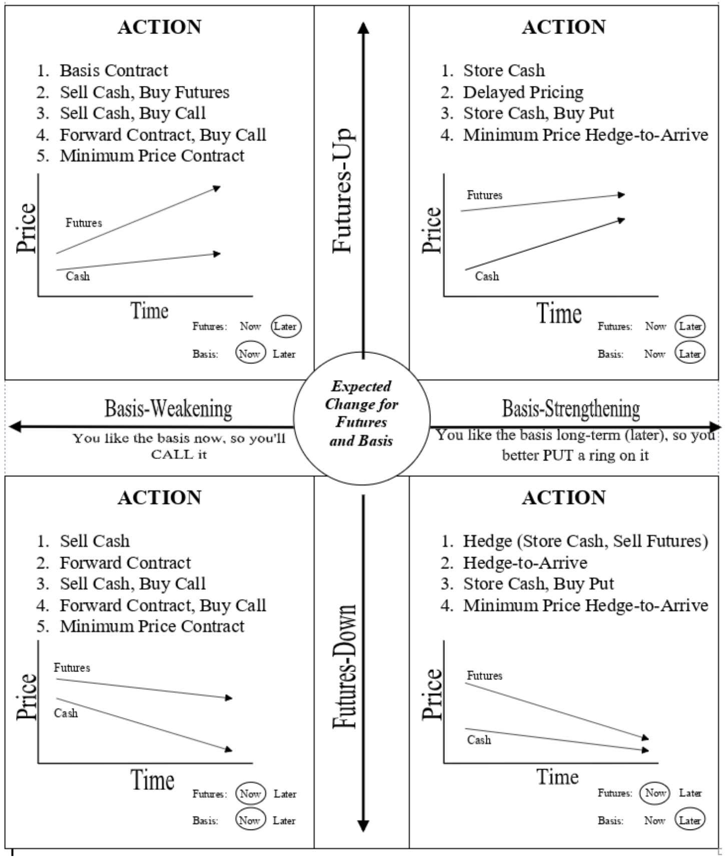
Gross price	5.25
Cost of put	-0.20
Net Price	5.05

Andersons Options Prices

Options prices

Next week



- Go through each quadrant, giving examples of how one would use options in that market scenario
- Q&A session on marketing logistics. Not "what to do", but "how do I do it".
- Review