Question
“Price at 4.70 basis on 2014 December futures”
What are they calling for?
Why? Strategy

Review
Commodity Options

Continue with
More on Commodity Options

New
Two more Pricing Tools
Farm Commodity Markets Update Meeting,
Grains @ 10 a.m., Jim Hilker, MSUE, AFRE
Dairy @ 10:45 a.m. ish, Chris Wolf, MSUE, AFRE

People can log in at:
https://connect.msu.edu/aabifirm

Start time  10 am EST
Wrap up by Noon
Coordinated by Dennis Stein, MSUExtension
Farm Business Management Educator

(First time out, hope to tape it as well)
Pricing Decision Chart for Cash Product Sellers

**ACTION**
1. Basis Contract
2. Sell Cash, Buy Futures
3. Sell Cash, Buy Call
4. Forward Contract, Buy Call
5. Minimum Price Contract

**ACTION**
1. Store Cash
2. Delayed Pricing
3. Store Cash, Buy Put
4. Minimum Price Hedge-to-Arrive

**Expected Change for Futures and Basis**
- **Basis-Weakening**: You like the basis now, so you'll CALL it.
- **Basis-Strengthening**: You like the basis long-term (later), so you better PUT a ring on it.

**Futures-Up**
- Futures: Now
- Futures: Later
- Basis: Now
- Basis: Later

**Futures-Down**
- Futures: Now
- Futures: Later
- Basis: Now
- Basis: Later
CALL OPTION

A contract that gives the holder the right to buy at a specified price

"To call from them"
PUT OPTION

A contract that gives the holder the right to sell at a specified price

"To put it on them"
OPTION BUYER
(HOLDER)

THE PERSON WHO OBTAINS THE
RIGHTS CONVEYED BY THE OPTION
OPTION SELLER (GRANTOR OR WRITER)

THE PERSON WHO SELLS THE OPTION AND GRANTS THE RIGHTS CONTAINED IN IT
EXERCISE
OR
STRIKE PRICE

THE SPECIFIED PRICE AT WHICH THE OPTION PURCHASER MAY BUY OR SELL THE COMMODITY
OPTION PREMIUM

THE MARKET VALUE OF THE OPTION.

IN EFFECT, THE PRICE OF THE "INSURANCE"
## July 2014 Corn Futures and Options
February 24, 2014
July 2014 Corn Futures $4.6225 (4.62 ¼)

### July 2014 Corn Option Premiums

<table>
<thead>
<tr>
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FACTORS AFFECTING PREMIUMS


- LENGTH OF TIME TO EXPIRATION
INTRINSIC VALUE

"POSITIVE" DIFFERENCE BETWEEN STRIKE PRICE AND UNDERLYING COMMODITY PRICE

F $5.10 - negative 10d I.V. = 0
S.P. $5.00 - positive 20d
F = $41.90

FOR A PUT - STRIKE PRICE EXCEEDS FUTURES PRICE

right sell

F: $5.10 + 10 positive 50 I.V. = 10 cent
S.P. $5.00
F = $4.90 - $ right to buy
I.V. = 0 buy

FOR A CALL - STRIKE PRICE BELOW FUTURES PRICE
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For $1.62 ½, S.P. $1.60 + .02 ½ I.U.
For $4.70, S.P. $4.62 - .06 I.U. = 0

For $4.22 ½, S.P. $4.60 = I.U. = 0
For $1.70, S.P. $1.60 = +73 ½ E.U.
OPTIONS THAT ARE SAID TO BE:

"IN-THE-MONEY"
HAVE INTRINSIC VALUE

"AT-THE-MONEY" SR 460 + Fut 4.60

"OUT-OF-THE-MONEY"
HAVE NO INTRINSIC VALUE
TIME VALUE

PORTION OF OPTION PREMIUM RESULTING FROM LENGTH OF TIME TO EXPIRATION

USUALLY TIME VALUE DECREASES WITH LENGTH OF TIME UNTIL EXPIRATION
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\[
\text{Prem} = \text{I.U.} + \text{T.U.} \]

\[
\text{SP} = 4.90, \quad \text{I.U.} = 2.7'1/4, \quad \text{Put} = 40'4, \quad \text{T.U.} = 2.13'1/4
\]

\[
\text{F} = 4.62'1/4, \quad \text{I.U.} = 2.7'1/4, \quad \text{Put} = 40'4, \quad \text{T.U.} = 2.13'1/4
\]
EXERCISE AN OPTION

TO CONVERT AN OPTION CONTRACT TO
A POSITION IN THE FUTURES MARKET
MONEY FLOWS

Holding a soybean $7.00 put purchased for a $0.15 premium

EXERCISE

Current futures price is $6.50

Receive a short (sell) futures market position at $7.00

Buy futures at $6.50

RESULT

Futures gain

- Original premium paid

Net Returns

$0.35
OFFSET AN OPTION

TO SELL AN EXISTING OPTION CONTRACT IN ORDER TO LIQUIDATE THE OPTION POSITION
MONEY FLOWS

Holding a soybean $7.00 put purchased for a $0.15 premium

net 7.00

OFFSET

Current futures price is $6.50

Sell option at a $0.60 premium

RESULT

Offset premium received $0.60

- Original premium paid -0.15

Net returns $0.45
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Cash Price $4.26 Forward Contract June Delivery $4.37

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MINIMUM PRICE

Using Put Option

Basis Open

July
(Month, Buy Put)

(Futures Month)
Actual Basis

Cash Price

Plus Net Returns from
Put Option Buy and Sell

Less:
Storage Costs

Brokerage Cost

Equal Net Returns
(Cash Price plus Net Returns)
Equals Net Price Received

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<th>Hedge Net Price</th>
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<tr>
<td>4.62</td>
<td>-0.20</td>
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-Str. -0.08
-Br. -0.01

Hedge Net Price 4.38

Stove cash
Buy Put

4.29
Cash Price

-0.21 3/4 → all Time Value

< assumes no Time Value

Price up

Price up

Prices In-Between 4.60

Prices Down 3.60

4.00