Commodity Marketing Tools:
Forward Cash Contracts
Basis Contracts
Minimum Price Contracts

February 2005

Wes Harris

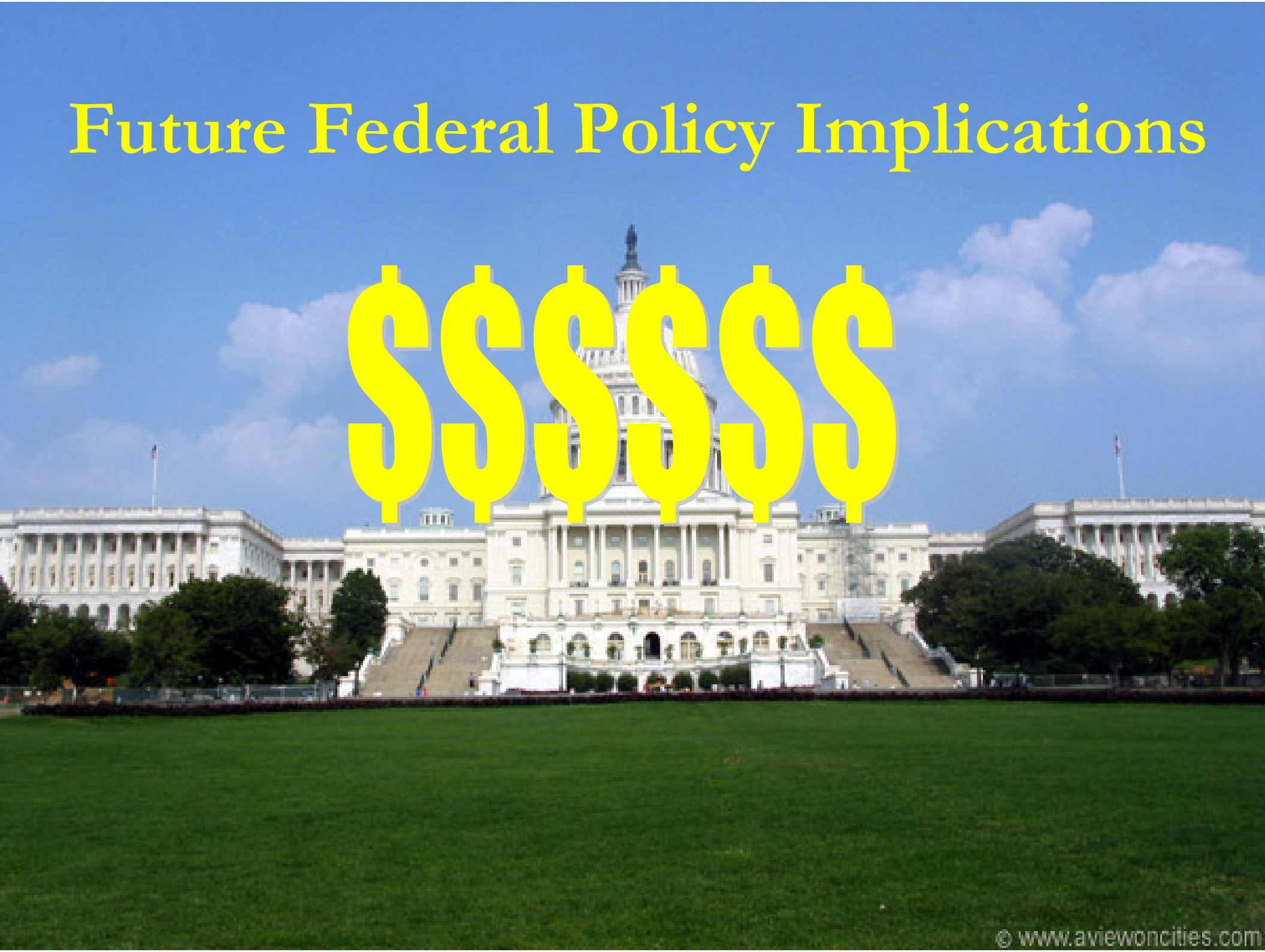
Special Projects Coordinator

Center for Agribusiness and Economic Development

The University of Georgia

PR-05-10

Future Federal Policy Implications



Budget Reconciliation

- Reducing payment limit cap to $250,000 including all types of marketing loans
- Removing the three entity rule
- Base marketing loans on historical production
- Reducing payments from all commodity programs (marketing loans, LDPs, direct and counter-cyclical payments) by 5%

Commodity Contracts

- Know what you are signing
- If in doubt, don't sign
- Know the other party to the contract
- Know how your final pricing will be determined
- Understand failure to deliver consequences
- Keep good communications
- Perform a sensitivity analysis of extremes

1000 Acre Plantings Sensitivity Analysis

Crop	Contract Volume	Price	Variance	Gain/ Loss	65% APH Insurance
Corn Irrigated	80 bpa	$2.75	$0.50	$40,000.00	$180,000.00
Soybeans	20 bpa	$6.50	$1.50	$30,000.00	$72,000.00
Wheat	30 bpa	$3.25	$0.75	$22,500.00	$91,000.00
Cotton	400 lbs per acre	$0.68	$0.15	$60,000.00	$220,000.00

Elements of Commodity Contracts

1. Grade of commodity to be delivered
2. Date of completion of delivery
3. Location of delivery
4. Price or formula used to calculate net price
5. Deductions for not making grade
6. Quantity to be delivered
7. Signatures of both parties with date

Alternatives

Futures up

- Store for future
- Price later contract
- Minimum Price Contract

- Basis Contract
- Cash sale and buy futures or call option
- Minimum price contract

Basis stronger ---------- Outlook ---------- Basis weaker

- Hedge
- Buy put option

- Cash sale
- Forward contract

Futures down

Ferris 1985

Month Codes:

F - January	J - April	N - July	V - October
G - February	K - May	Q - August	X - November
H - March	M - June	U - September	Z - December

Chicago Board of Trade (CBOT)

C	Corn	HKNUZ	5,000 bu
O	Oats	HKNUZ	5,000 bu
S	Soybeans	FHKNQUX	5,000 bu
W	Wheat	HKNUZ	5,000 bu

New York Cotton Exchange (NYCE)

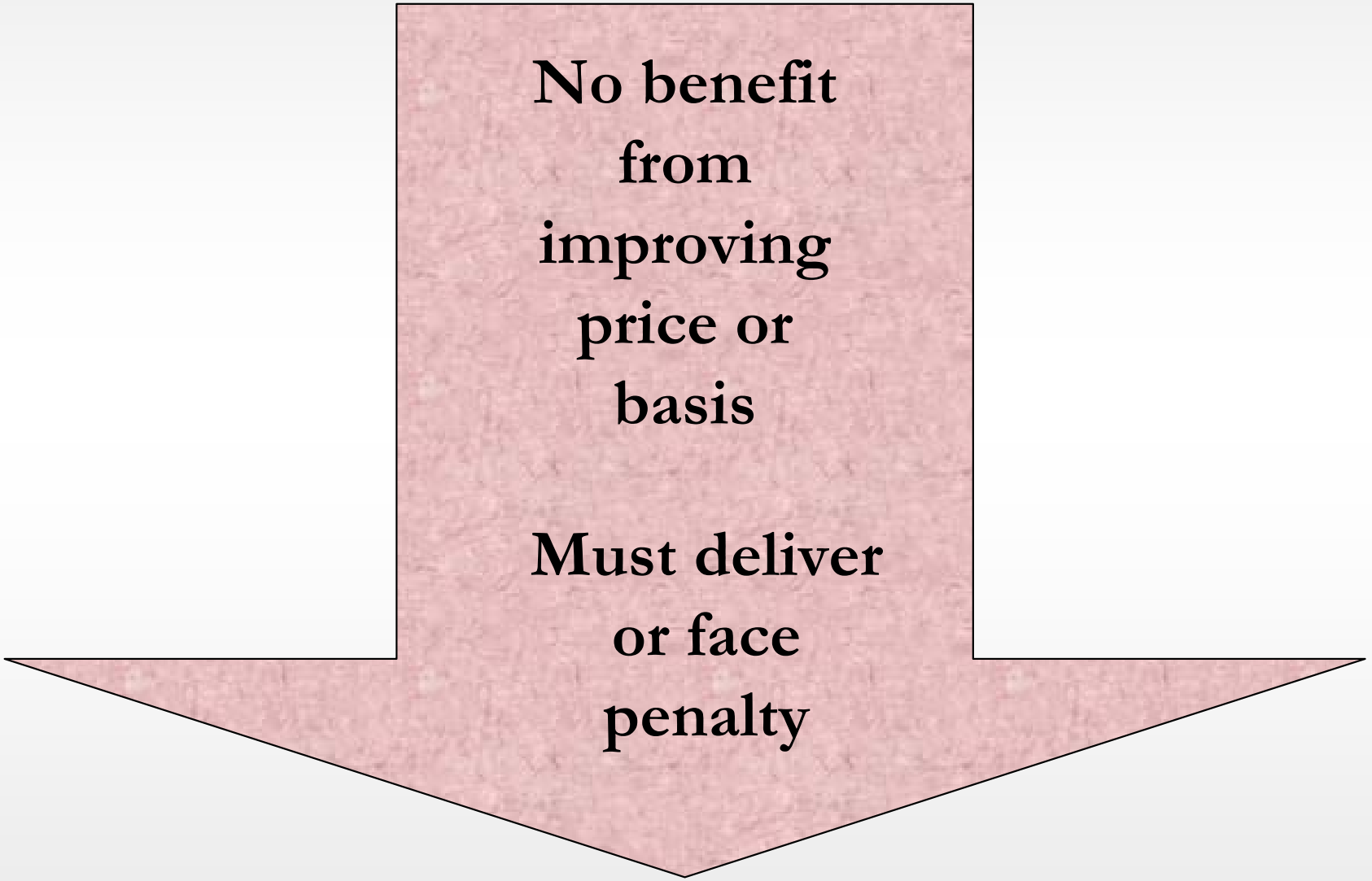
CT	Cotton	HKNVZ	50,000 lbs

Forward Contracts (Cash)

Eliminates risk of falling prices

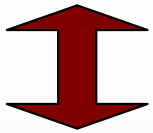
Negotiable contract terms

Forward Contracts (Cash)



Forward Contracts (Cash)

- Know your cost of production
- Be comfortable with making a profit
- Secure adequate crop insurance *(RAC)*
- Use economies of scale



- Understand potential of loan deficiency program
- Work the basis – negotiate, {AOG}

Futures Contract Example

- September 05 corn closes at $2.18
- Basis offered by elevator is +$0.25 delivered
- #2 Yellow Corn
- Contract price determination:

Futures price	$2.18
Basis	+$0.25
Price on delivery	$2.43

Basis Contracts

- **Basis:**

  Difference between the local cash price and futures price for any commodity

- **Example:**

Cash price soybeans	**$6.20**
Nearby futures	**$6.50**
Basis	**- $0.30**

Basis Contracts

Advantages

- Eliminates basis risk
- Gain futures price increases
- Advance payment
- No storage
- Ability to 'roll' basis allows extended time to price

Disadvantages

- Risk of declining futures
- Must deliver commodity as specified
- Ability to track futures and trends
- Full payment delayed until futures price is locked in

Basis Contract Example

- Soybean producer in August negotiates a 20 under basis with elevator on 10,000 bu to be delivered by Jan 1
- Producer elects Jan futures (SF)
- Elevator offers 70% advance on delivery
- Producer may elect to roll basis contract
- #2 YSB grades apply

Basis Contract Example

SF = $6.20

Basis = -$0.20

Current value = $6.00

Advance = (0.70)($6.00) = $4.20

$4.20 per bushel paid on delivery up to 10,000 bushels or $42,000

Basis Contract Example

On Dec 20 (closing date) SF = $6.15

Producer does not want to absorb nickel and decides to 'roll' the contract

Roll:

1. Determine the spread between current designated futures price and desired futures
2. Add the spread to current basis to determine new basis

Basis Contract Example

Producer speculates South American rally and chooses May futures

SF = $6.15	Current basis = -$0.20 SF
SK = $6.25	Spread SF – SK = -$0.10
Spread = -$0.10	New basis = -$0.30 SK

Basis Contract Example

Producer's prognostication of S.A. production problem manifests correct and by March 28th

SK = $6.65

Producer executes contract at close:

SK = $6.65	Net price = $6.35
Basis = -$0.30	Advance = $4.20
Net price = $6.35	Settlement = $2.15

Basis Contract Example

Producers gain:

Advance =	$42,000	
Settlement =	$21,500	($2.15)(10,000)
Total sale=	$63,500	(or $6.35/bu)

Price at delivery =	$6.00	$60,000
Actual sale =	$6.35	$63,500
Gain =	$0.35	$ 3,500

Basis Contract Example - *NS*

Producer wrong about S.A.

April 20th SK = $5.60

Spread SK – SQ = $0.12

Decides not to roll – settlement:

SK = $5.60	Delivery price = $60,000
Basis = -$0.30	Actual sales = $53,000
Net price = $5.30	Loss = -$ 7,000
	(-$0.70/bu)

Dr. Shumaker - Hedging and Options

UGA CENTER FOR AGRIBUSINESS & ECONOMIC DEVELOPMENT

Minimum Price Contracts (MPC) Objective

- Sell commodity at an established minimum price and keep the upside potential of price movement with no downside risk
- Not an option for cotton with most gins

MPC - When

- Cash prices have reached your objective (cop), but you think prices will improve
- Allows delivery and partial payment, but keeps upside potential in play
- Future prices appear to have significant upward mobility

MPC - Advantages

- Reduces market risk before crop is harvested
- Establishes floor price
- Allows for the sale of grain with reward of market increases
- No storage
- No margin calls (hedging)
- May have ability to ‘re-price’ before expiration
- No ‘out-of-pocket’ up front premium cost

MPC - Disadvantages

- A losing alternative if market goes down – loss of premium
- A losing alternative in a sideways market – loss of premium
- Must deliver – production risk
- No basis appreciation

MPC - Method

- A beginning cash price is established (forward contract price)
- A futures month and strike price are designated with final pricing date and call premium cost
- Minimum price equals the difference in the beginning cash price and the premium
- Final price equals the minimum price plus any gain in the call option

MPC - Example

Wheat producer in Georgia in February with 500 acres of wheat – will book 10,000 bushels

WN =	$3.05
Basis =	-$0.20
Forward contract =	$2.85

MPC - Example

July strike price of $3.10

Call premium = $0.15

Minimum price:

Forward contract price = $2.85

Call premium = -$0.15

Minimum price = $2.70

Wheat

Expiration	Opening		High	Low	Closing		Settle	Net Change
05Mar	294'0	295'0	295'0	289'4	292'2	291'0	291'6	-0'6
05May	303'4	302'4	303'4	297'4	301'0	300'0	300'4	-0'4
05Jul	308'6	309'0	309'6	303'6	305'4	305'0	305'2	-2'0
05Sep	315'0	315'4	315'4	309'4	310'0	309'4	309'6	-2'4
05Dec	323'0		323'0	318'0	318'0		318'0	-2'0
06Mar					323'4 N		323'4	-1'4
06May					325'4 N		325'4	-2'0
06Jul					327'4 N		327'4	-2'4
Table generated February 08, 2005 17:00 CST								

Price Unit: Cents and quarter-cents/bu (5,000 bu)

Wheat Calls Jul 05

Strike	Opening		High	Low	Closing		Settle	Net Change
280'0					31'1 N		31'1	-1'3
300'0					19'4 N		19'4	-1'0
310'0	17'0		17'0	15'0	15'0		15'0	-1'0
320'0	12'0		12'0	11'5	11'5		11'5	-0'6
330'0	9'0		9'0	9'0	9'0		9'0	-0'5
340'0	7'0		7'0	7'0	7'0		7'0	-0'4
350'0	5'2		5'3	5'2	5'3		5'3	-0'4
360'0	4'6		4'6	4'1	4'1		4'1	-0'3
370'0	3'4		3'4	3'1	3'1		3'1	-0'2
380'0					2'3 N		2'3	-0'1
390'0	1'7		1'7	1'7	1'7		1'7	-0'1
400'0					1'3 N		1'3	-0'1
Table generated February 08, 2005 17:00 CST								

MPC - Example

Good Scenario

Good Friday WN closes limit up at $3.50

Producer contacts elevator and exercises call option:

$3.50 Futures

$3.10 Strike

$0.40 Premium

Minimum price = $2.70

Premium = $0.40

Final sales price = $3.10

Bad Scenario

Bumper crops in Midwest

June 20 WN closes at $2.95

Since the WN price does not exceed the strike price of $3.10, the producer allows the option to expire with no gain in premium

Final sales price = $2.70

MPC - Example

Good Scenario

Forward Contract

($2.85)(10,000) = $28,500

Final price

($3.10)(10,000) = $31,000

Gain = $ 2,500

Bad Scenario

Forward Contract = $28,500

Final Price

(2.70)(10,000) = $27,000

Loss = $ 1,500

(cost of premium)

Corn Calls Dec 05

Strike	Opening		High	Low	Closing		Settle	Net Change
210'0					18'2		18'2	-1'0
220'0	14'4		14'4	13'6	13'6		13'6	-0'6
230'0	10'4		10'4	10'4	10'4		10'4	-1'0
240'0	8'4		8'4	8'0	8'0		8'0	-0'4
250'0	6'4		6'4	6'4	6'4		6'4	-0'2
260'0	5'0		5'0	5'0	5'0		5'0	-0'2
270'0	4'0		4'0	4'0	4'0		4'0	-0'2
280'0	3'0		3'2	3'0	3'2		3'2	-0'2
290'0					2'4		2'4	-0'2
300'0	2'2		2'2	2'2	2'2		2'2	Unch
320'0					1'4		1'4	Unch

Table generated February 08, 2005 17:00 CST

Corn

Expiration	Opening		High	Low	Closing		Settle	Net Change
05Mar	196'4	196'2	196'6	194'4	194'6	194'4	194'6	-1'4
05May	204'4	204'2	204'6	202'4	202'6	202'4	202'6	-1'6
05Jul	211'2	211'4	211'6	209'4	209'6	209'4	209'6	-1'4
05Sep	219'0		219'0	217'2	217'4	217'6	217'6	-1'2
05Dec	228'4	228'6	228'6	227'0	227'2		227'2	-1'2
06Mar	235'6		236'0	234'4	234'6	235'0	235'0	-0'6
06May	240'6		240'6	239'4	239'6		239'6	-1'0
06Jul	243'4		244'0	243'0	243'0		243'0	-1'0
06Sep					244'0		244'0	-1'0
06Dec	248'2		248'6	247'4	248'0		248'0	-1'0
07Dec	248'0		248'0	248'0	248'0		248'0	Unch

Table generated February 08, 2005 17:00 CS

Price Unit: Cents and quarter-cents/bu (5,000 bu)

Corn Call Selection

February			
Futures price	$2.18		
Strike price	$2.20	$2.30	$2.40
Forward contract price	$2.38	$2.38	$2.38
Dec call premium	$0.14	$0.11	$0.08
Minimum price	$2.24	$2.27	$2.30
August			
Futures price rally	$3.10		
Minimum price	$2.24	$2.27	$2.30
Gain on call	$0.90	$0.80	$0.70
Final price	$3.14	$3.07	$3.00

Summary

- Use a professional
- Ask questions
- Communicate
- Read the contract
- DON'T STAY CONFUSED

Questions

wlharris@uga.edu

912.871.6130

Corn Puts Dec 05

Strike	Opening		High	Low	Closing		Settle	Net Change
190'0					3'2 N		3'2	Unch
200'0					6'2 N		6'2	-0'2
210'0	10'4		10'4	10'4	10'4		10'4	Unch
220'0					16'2 N		16'2	+0'6
230'0					22'6 N		22'6	+0'4
250'0					38'4 N		38'4	+1'0
600'0					382'2 N		382'2	+1'2
Table generated February 08, 2005 17:00 CST								

Soybeans

Expiration	Opening		High	Low	Closing		Settle	Net Change
05Mar	500'4	501'4	505'6	500'4	502'4	504'4	503'4	+2'2
05May	504'0	504'4	508'4	504'0	506'0	507'0	506'4	+1'4
05Jul	509'0	508'6	512'6	508'6	509'4	512'0	510'6	+2'4
05Aug	514'4		515'4	512'0	512'0	513'0	512'4	+1'4
05Sep	516'0		519'0	514'0	514'0	514'4	514'2	+0'6
05Nov	522'4	523'0	526'0	522'0	522'4	522'0	522'2	-0'4
06Jan	531'0		532'0	527'4	527'4		527'4	-0'4
06Mar	532'0		534'0	530'4	530'4		530'4	-0'4
06May					531'0 N		531'0	Unch
06Jul					536'0 N		536'0	Unch
06Nov					546'0 N		546'0	Unch
Table generated February 08, 2005 17:00 CST								

Price Unit: Cents and quarter-cents/bu (5,000 bu)

Soybean Calls Nov 05

Strike	Opening		High	Low	Closing		Settle	Net Change
300'0					222'2 N		222'2	-0'4
480'0	63'0		63'0	61'4	61'4		61'4	-0'2
520'0	41'4		42'0	40'6	40'6		40'6	-0'2
540'0	35'0		35'0	32'6	32'6		32'6	-0'2
560'0	28'0		28'0	26'4	26'4		26'4	-0'2
580'0	22'0		22'4	21'7	22'0		22'0	+0'2
600'0	18'0		18'0	18'0	18'0		18'0	+0'2
620'0	15'0		15'4	15'0	15'0		15'0	+0'4
640'0	13'4		13'4	12'0	12'2		12'2	+0'2
660'0	11'4		11'4	10'2	10'2		10'2	+0'2
680'0	9'4		9'4	8'2	8'2		8'2	Unch
700'0	7'4		7'4	7'0	7'0		7'0	Unch
Table generated February 08, 2005 17:00 CST								

Soybean Puts Nov 05

Strike	Opening		High	Low	Closing		Settle	Net Change
420'0					5'0 N		5'0	Unch
440'0	7'4		8'0	7'4	8'0		8'0	Unch
460'0	13'0		13'0	13'0	13'0		13'0	+0'2
480'0	19'4		20'4	19'4	20'0		20'0	+0'2
500'0	27'4		29'0	27'4	28'4		28'4	+0'2
520'0	39'0		39'0	38'4	38'4		38'4	+0'2
540'0					50'0 N		50'0	+0'2
560'0					63'4 N		63'4	+0'2
580'0					78'4 N		78'4	+0'6
Table generated February 08, 2005 17:00 CST								

Wheat Calls Sep 05

Strike	High	Low	Settle	Net Change
200'0			100'4	-0'4
280'0			24'4	-0'3
290'0			17'7	-0'3
300'0	12'5	12'0	12'5	-0'3
310'0	10'0	8'0	8'5	-0'3
320'0	6'4	5'7	5'7	-0'2
330'0	4'4	3'6	3'7	-0'2
340'0			2'6	-0'1
350'0	2'1	1'6	1'6	-0'2
360'0	1'4	1'1	1'1	-0'1
370'0			0'6	-0'1
380'0			0'4	Unch
390'0			0'3	Unch
400'0			0'2	Unch

Wheat Puts Jul 05

Strike	Opening		High	Low	Closing		Settle	Net Change
260'0					1'7 N		1'7	+0'2
270'0	3'2		3'4	3'2	3'4		3'4	+0'3
280'0	4'6		6'0	4'6	6'0		6'0	+0'4
290'0	9'0		9'5	9'0	9'5		9'5	+0'5
300'0	13'0		14'4	13'0	14'2		14'2	+1'0
310'0	19'4		19'7	19'4	19'7		19'7	+1'0
320'0					26'3 N		26'3	+1'3
330'0					33'5 N		33'5	+1'3
340'0	37'0		41'5	37'0	41'5		41'5	+1'5
350'0					50'0 N		50'0	+1'5
Table generated February 08, 2005 17:00 CST								

Cotton

CONTRACT SIZE: 50,000 pounds net weight

CONTRACT	DAILY PRICE RANGE				SETTLE		CONTRACT	
MONTH	OPEN	HIGH	LOW	CLOSE	PRICE	CHANGE	HIGH	LOW
Mar 2005	4300 4310	4315	4265	4266 4275	4270	-54	7250	4172
May 2005	4430 4440	4440	4405	4405 4415	4412	-48	7325	4171
Jul 2005	4570 4580	4580	4532	4535	4535	-50	7200	4260
Oct 2005	4770 4810	4790	4790	4800 4801	4800	-20	6700	4500
Dec 2005	4885 4900	4900	4871	4871 4885	4882	-25	6850	4625
Mar 2006	5090 5110	0	0	5080 5090	5085	-30	6900	4830
May 2006	5160 5210	0	0	5160 5180	5170	-15	5500	4925
Jul 2006	5230 5300	0	0	5230 5250	5240	-20	5425	5040
Oct 2006	5300 5400	0	0	5300 5350	5325	-40	0	0
Dec 2006	5450 5600	0	0	5480 5510	5495	-15	5675	5600

Cotton Calls Dec 05

MONTH	STRIKE	P/C	PRICE	CHANGE	MONTH	STRIKE	P/C	PRICE	CHANGE
Dec 2005	35	C	1390	-23	Dec 2005	53	C	259	-11
Dec 2005	40	C	963	-21	Dec 2005	54	C	230	-10
Dec 2005	41	C	887	-21	Dec 2005	55	C	204	-9
Dec 2005	42	C	814	-20	Dec 2005	56	C	182	-8
Dec 2005	43	C	744	-19	Dec 2005	57	C	162	-7
Dec 2005	44	C	679	-18	Dec 2005	58	C	142	-7
Dec 2005	45	C	617	-18	Dec 2005	59	C	125	-6
Dec 2005	46	C	560	-17	Dec 2005	60	C	111	-5
Dec 2005	47	C	506	-16	Dec 2005	61	C	98	-5
Dec 2005	48	C	455	-15	Dec 2005	62	C	87	-5
Dec 2005	49	C	408	-14	Dec 2005	63	C	78	-4
Dec 2005	50	C	366	-13	Dec 2005	64	C	70	-4
Dec 2005	51	C	327	-12	Dec 2005	65	C	62	-3
Dec 2005	52	C	291	-11	Dec 2005	70	C	33	-2
					Dec 2005	72	C	25	-1

Cotton Puts Dec 05

MONTH	STRIKE	P/C	PRICE	CHANGE	MONTH	STRIKE	P/C	PRICE	CHANGE
Dec 2005	35	P	29	+2	Dec 2005	54	P	740	+15
Dec 2005	40	P	94	+3	Dec 2005	55	P	813	+16
Dec 2005	41	P	117	+4	Dec 2005	56	P	889	+17
Dec 2005	42	P	142	+4	Dec 2005	57	P	967	+17
Dec 2005	43	P	170	+5	Dec 2005	58	P	1046	+17
Dec 2005	44	P	204	+6	Dec 2005	59	P	1129	+19
Dec 2005	45	P	241	+7	Dec 2005	60	P	1212	+19
Dec 2005	46	P	282	+8	Dec 2005	61	P	1298	+20
Dec 2005	47	P	327	+9	Dec 2005	62	P	1385	+20
Dec 2005	48	P	374	+10	Dec 2005	63	P	1475	+20
Dec 2005	49	P	426	+11	Dec 2005	64	P	1566	+21
Dec 2005	50	P	482	+11	Dec 2005	65	P	1655	+21
Dec 2005	51	P	542	+13	Dec 2005	70	P	2120	+23
Dec 2005	52	P	604	+13	Dec 2005	72	P	2319	+25
Dec 2005	53	P	671	+14					