

Futures, Options & LRP Lean Hogs

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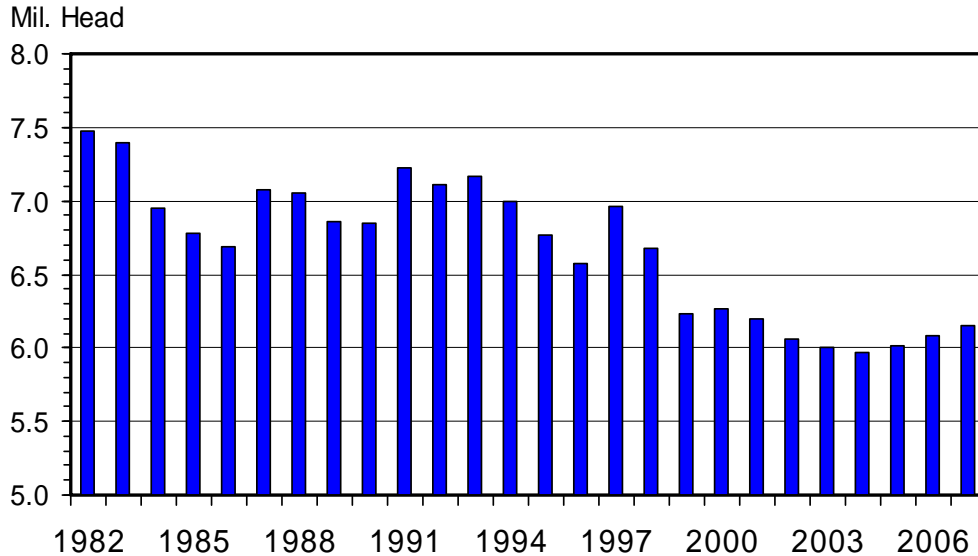
www.ag.ndsu.edu/aginfo/lsmkt/livestock.htm

USDA Web Sites

- ▶ www.ers.usda.gov
 - Livestock, Dairy, Poultry Outlook
- ▶ www.nass.usda.gov
 - Hog & Pigs Report, Mar, Jun, Sep, Dec
- ▶ www.ams.usda.gov
 - Market Reports
- ▶ www2.rma.usda.gov/livestock
 - LRP, LGM
- ▶ www.cme.com (Chicago Mercantile Exchange)
 - Futures and Options
- ▶ www.dailylivestockreport.com
- ▶ www.lmic.info (Livestock Marketing Information Center)

DECEMBER 1 HOG BREEDING HERD

U.S. Inventory



Livestock Marketing Information Center

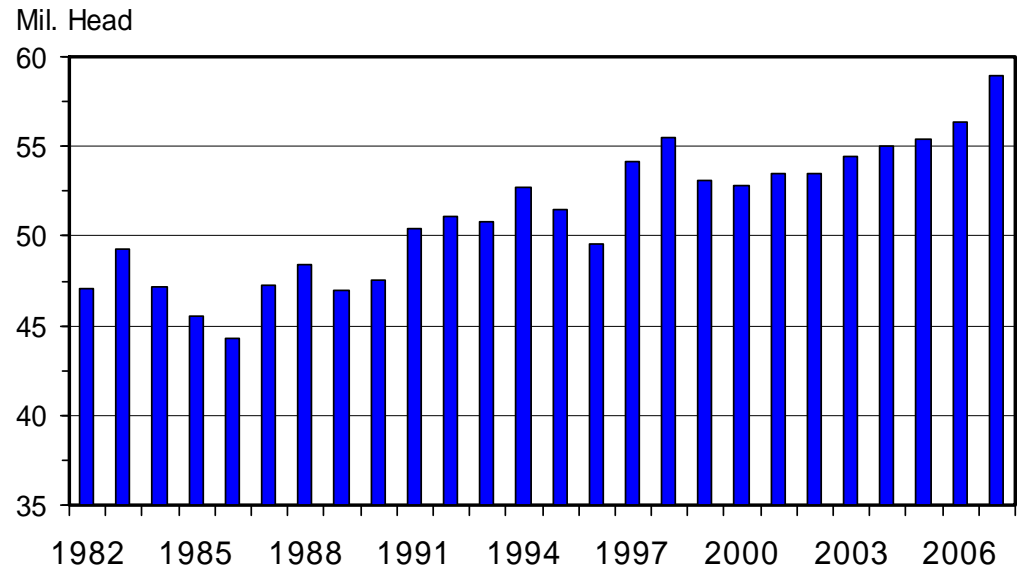
Data Source: USDA/NASS

H-S-25

01/25/08

DECEMBER 1 MARKET HOGS

U.S. Inventory



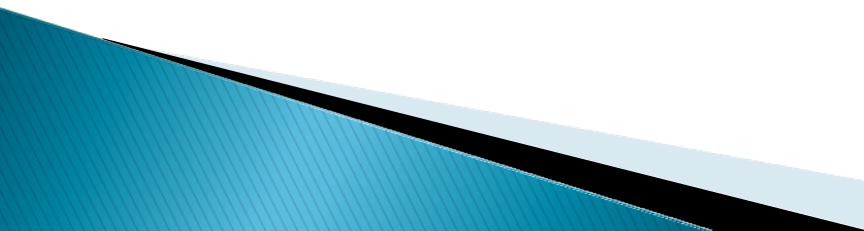
Livestock Marketing Information Center

Data Source: USDA/NASS

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12/28/07

Lean Hog Contract

- ▶ 40,000 lbs, 400 cwt
 - ▶ Hog carcasses that fall within the packer base weight range
 - ▶ Feb, Apr, May, Jun, Aug, Oct, and Dec
 - ▶ Lean Hog Trading terminates on 10th business day
 - ▶ Cash settlement based on CME Lean Hog Index
 - ▶ Daily limits: \$3/cwt
- 

CME Lean Hog Index

- ▶ Two day average of
 - Head count
 - Average net price
 - Average carcass weight
- ▶ Reported by USDA-AMS in LM_HG201 National Daily Direct Hog Prior Day Report – Slaughtered Swine
(www.ams.usda.gov/mnreports/lm_hg201.txt)

CME LEAN HOG INDEX

Tue, 02/19/08

Date	Day	Negot. Head Count	Negot. Average Net Pric	Negot. Average Carc. Wt	SPMF Head Count	SPMF Average Net Pric	SPMF Average Carc. Wt	Daily Weighted Price	CME Lean Hog Index	Net Change
02/19/08	Tue	29,972	59.32	197.15	134,375	60.38	201.34	60.19	59.85	0.67
02/18/08	Mon	29,030	58.66	199.72	118,977	59.66	200.75	59.46		

This report is based on information provided by companies that agreed to continue to participate in Livestock Mandatory Reporting on a voluntary basis.

NATIONAL DAILY DIRECT HOG PRIOR DAY REPORT - SLAUGHTERED SWINE
Slaughter Data for Tuesday, February 19, 2008

Barrows and Gilts (Live and Carcass Basis): 382,940

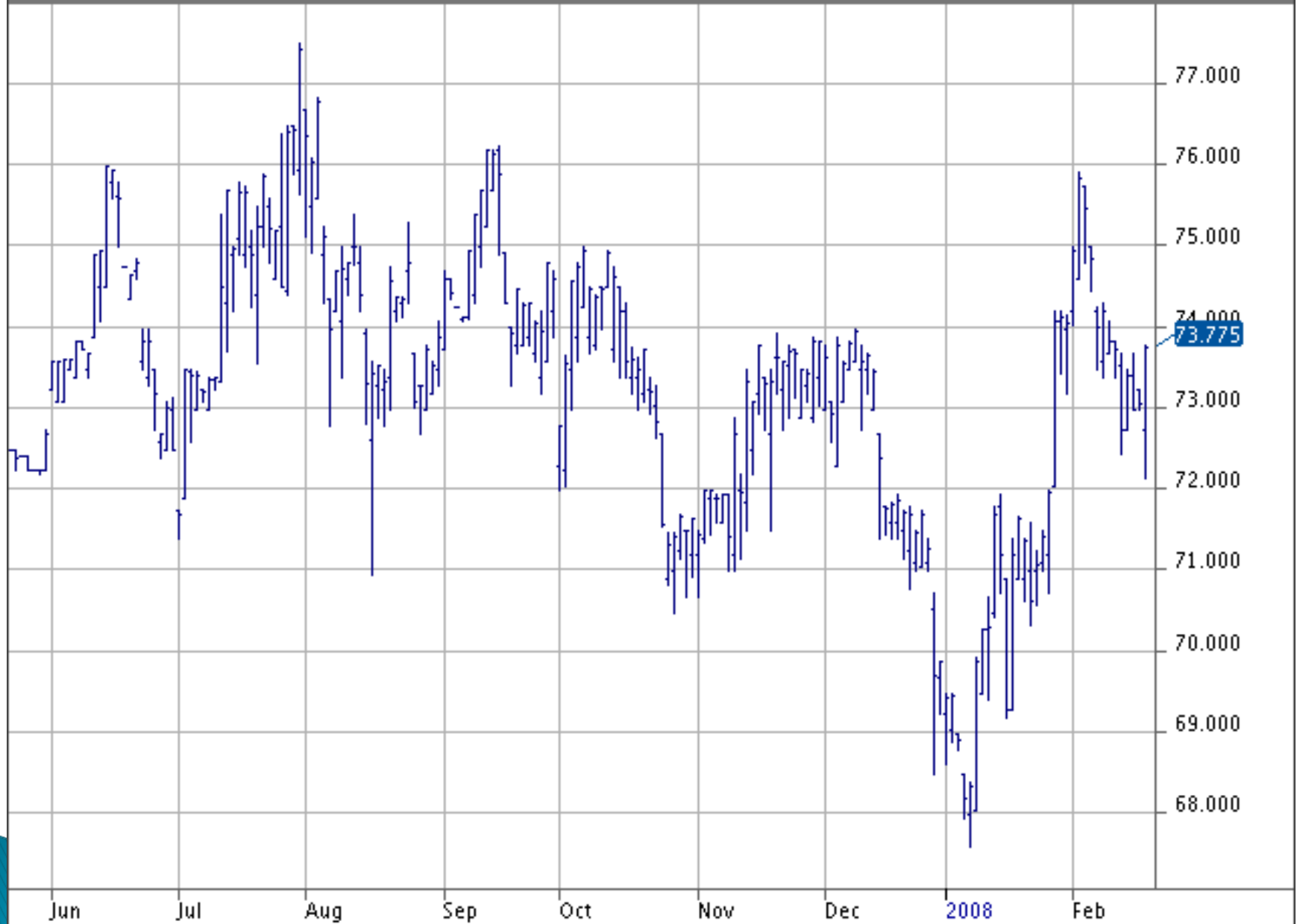
	NEGOTIATED	OTHER MARKET FORMULA	SWINE OR PORK MARKET FORMULA	OTHER PURCHASE ARRGMENT	TOTALS/ WTD AVG

Producer Sold:					
HEAD COUNT	29,972	52,508	134,375	45,780	262,635
CARCASS BASE PRICE	57.81	61.62	58.17	62.80	59.65
AVERAGE NET PRICE	59.32	65.28	60.38	64.78	62.03
LOWEST NET LOT	38.58	51.73	45.91	53.65	52.01
HIGHEST NET LOT	63.79	75.16	75.41	81.81	74.28
AVERAGE LIVE WT	258.02	272.58	264.54	257.89	264.86
AVERAGE CARCASS WT	197.15	207.19	201.34	200.74	201.97
AVERAGE SORT LOSS	-1.28	-1.82	-1.32	-1.02	-1.36
AVERAGE BACKFAT	0.70	0.69	0.72	0.71	0.71
AVERAGE LOIN DEPTH (LD)	2.32	2.57	2.54	2.29	2.47
LOINEYE AREA (LD Converted)	6.97	7.72	7.63	6.87	7.42
AVERAGE LEAN PERCENT	54.25	55.28	55.06	54.35	54.88
(Packer Buying Programs)					

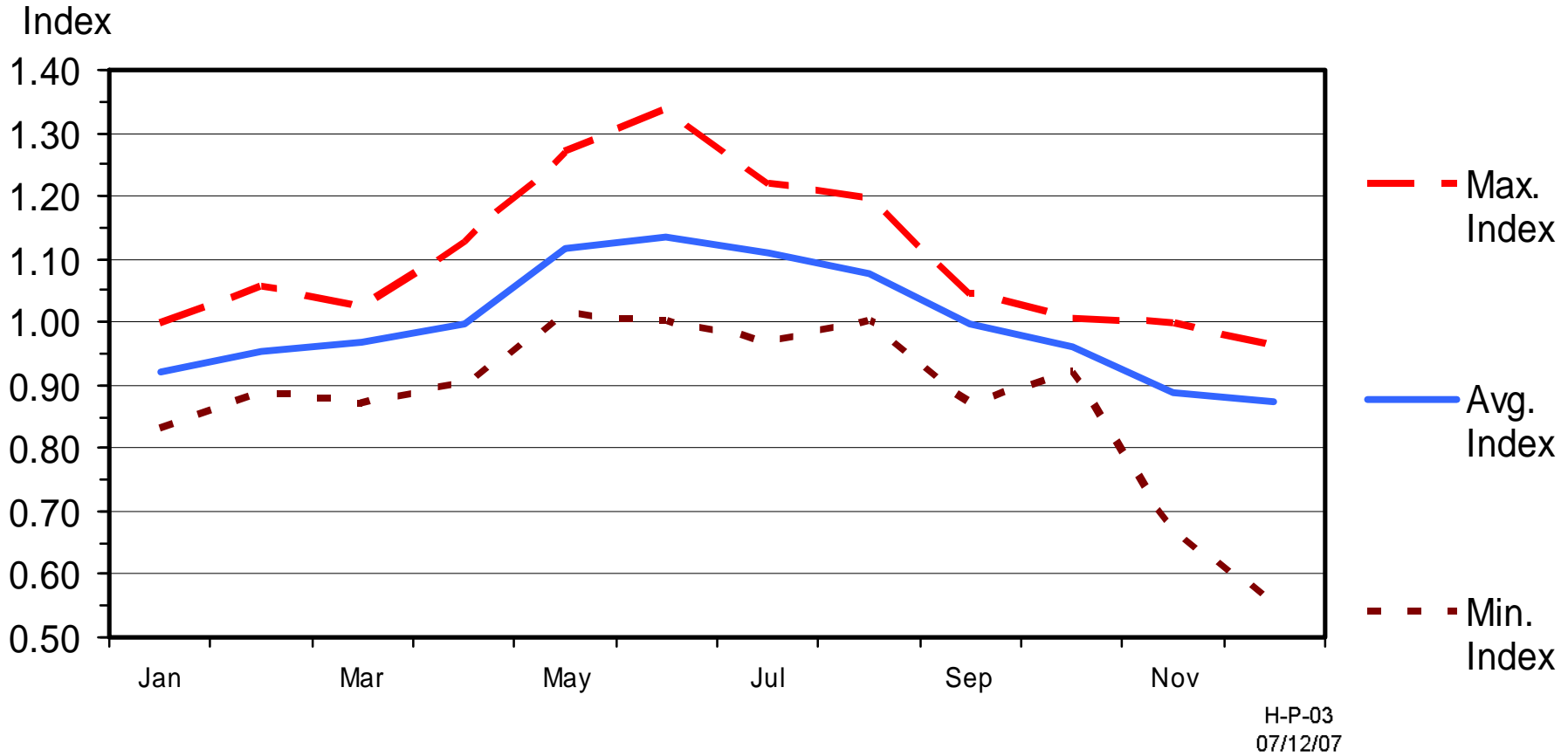
cme lean hog futures
 settlement prices as of 02/20/08 07:00 pm (cst)

MTH/ STRIKE	OPEN	----- DAILY --- HIGH	LOW	LAST	SETT	PT CHGE	EST VOL	----- PRIOR SETT	DAY VOL	---- INT
APR08	64.400	65.500	64.000	65.200	65.075	+550	14K	64.525	8118	104019
MAY08	72.700	73.800	72.150	73.800	73.775	+700	242	73.075	90	2949
JUN08	78.650	79.525	78.300	79.400	79.450	+600	5847	78.850	3460	46650
JLY08	78.950	79.550	78.850	79.425	79.525	+250	2018	79.275	1810	17095
AUG08	78.800	79.150	78.550	79.100	79.050	+250	818	78.800	1119	12469
OCT08	73.500	73.650	73.025	73.300	73.300	+650	946	72.650	871	14251
DEC08	74.500	74.675	73.850	74.100	74.125	+300	1892	73.825	978	18742
FEB09	76.900	77.850B	76.900	77.800	77.800	+1100	202	76.700	552	7722
APR09	79.500	79.900	79.500	79.900	79.900	+450	4	79.450	21	20
TOTAL						EST.VOL		VOL	OPEN	INT.
TOTAL						26843		17019		223917

LHK08(15) ~ Daily Last:73.775 +0.700 High:73.800 Low:72.150 2/20/2008 1:10:00 PM



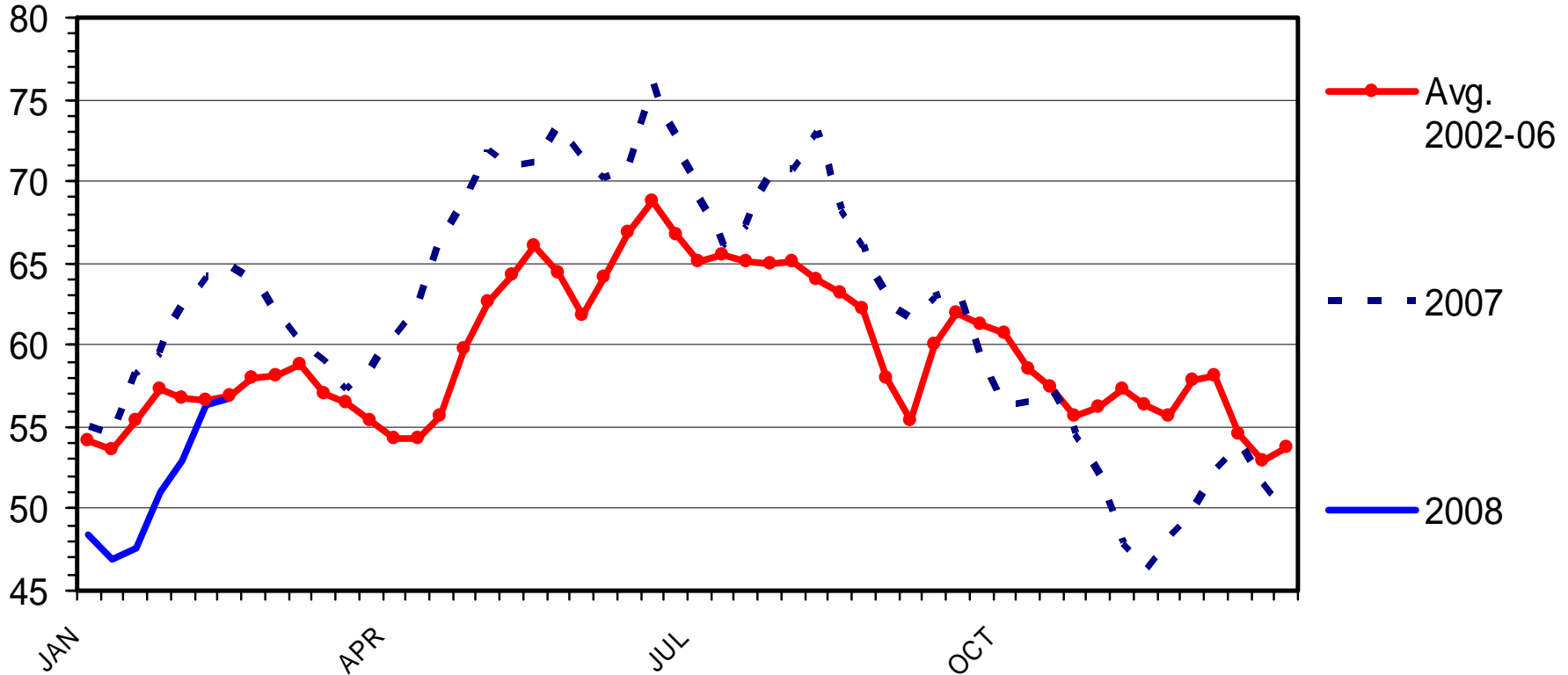
SEASONAL PRICE INDEX -- SLAUGHTER HOGS Iowa - Southern Minnesota, 1997-2006



BARROW AND GILT PRICES

Iowa - So. Minnesota, Carcass Base Price, Weekly

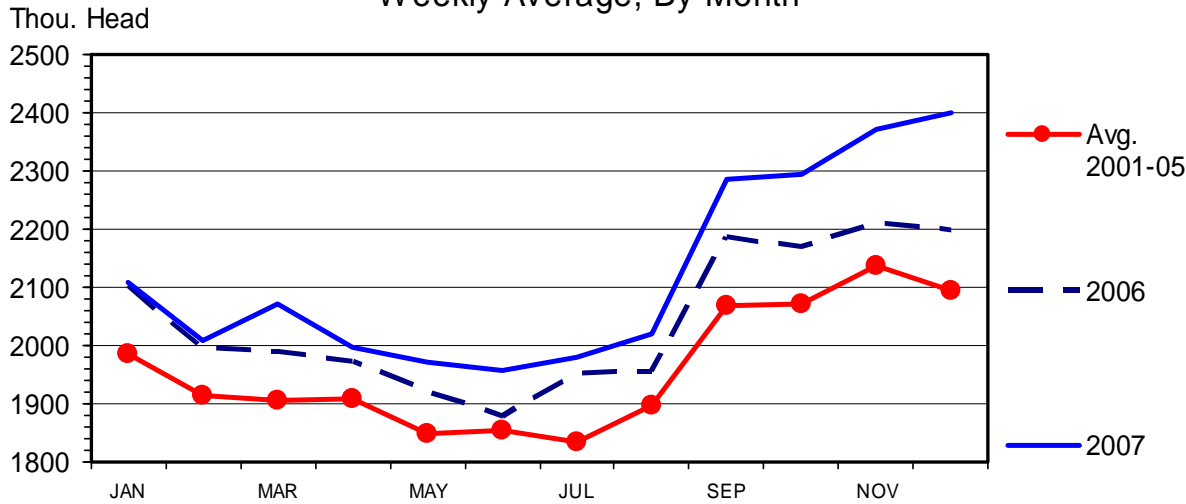
\$ Per Cwt.



HP-09
02/18/08

FEDERALLY INSPECTED HOG SLAUGHTER

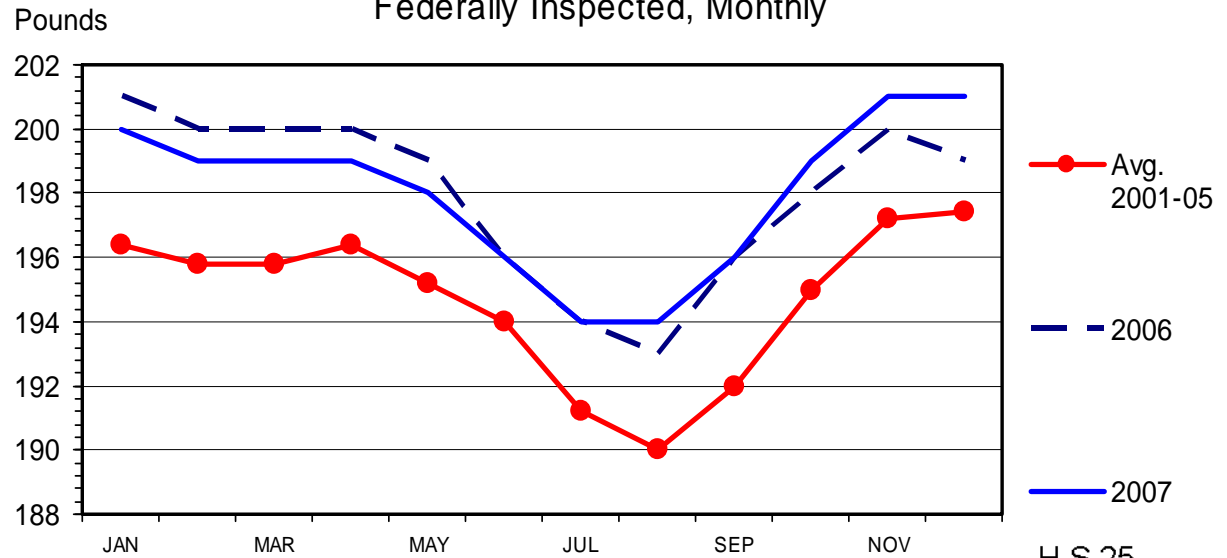
Weekly Average, By Month



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01/25/08

AVG DRESSED WEIGHT - BARROWS & GILTS

Federally Inspected, Monthly



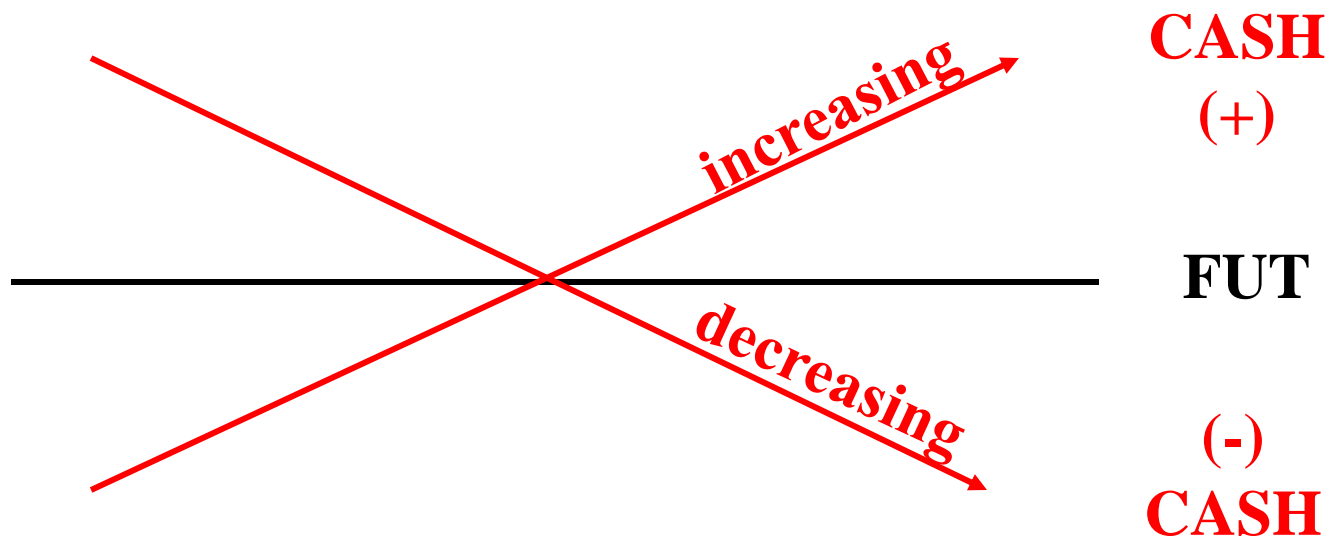
Livestock Marketing
Information Center

Data Source: USDA/NASS

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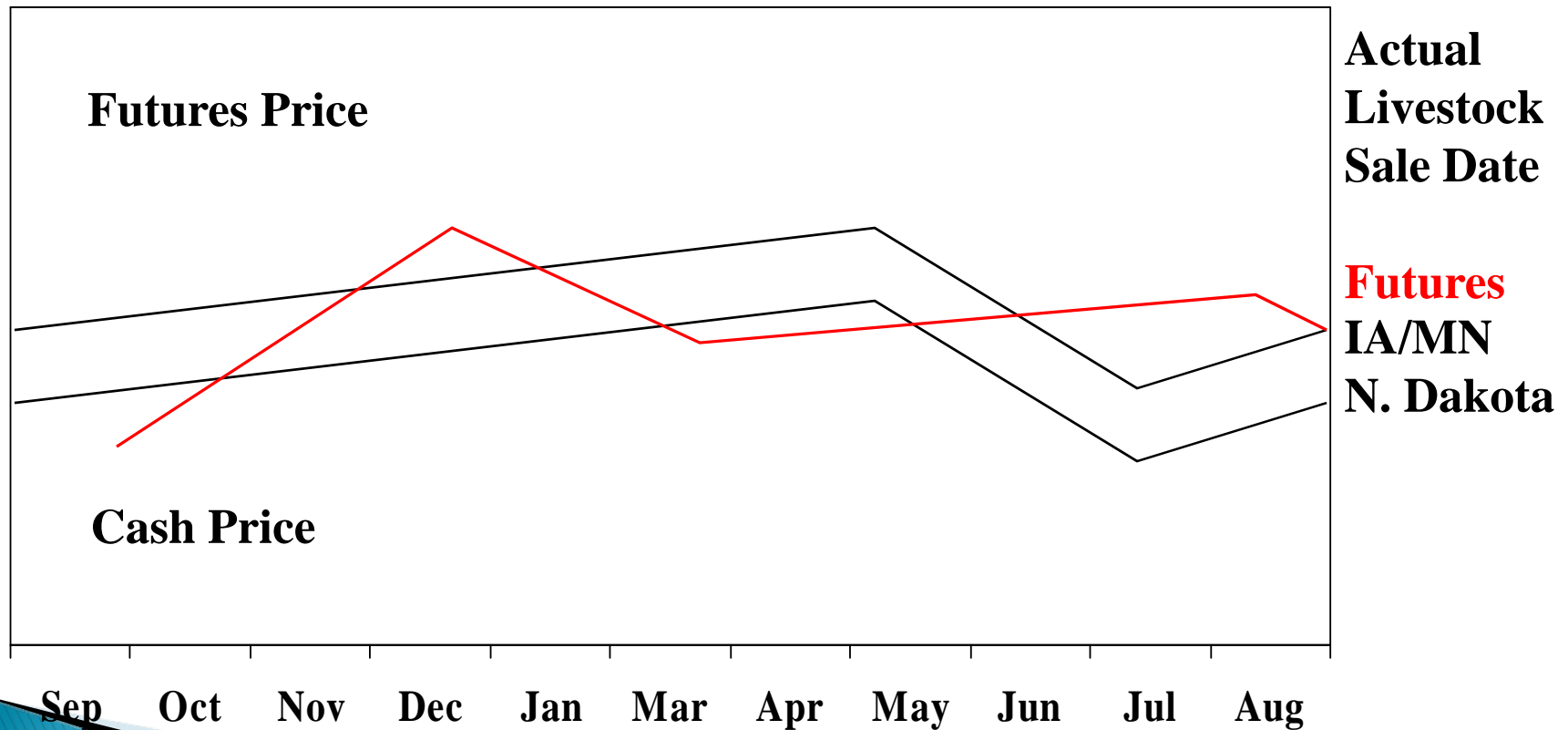
BASIS is difference between a cash price and the CME futures price.

HEDGING eliminates risk of adverse price movement, except for the risk of the basis being different than expected.

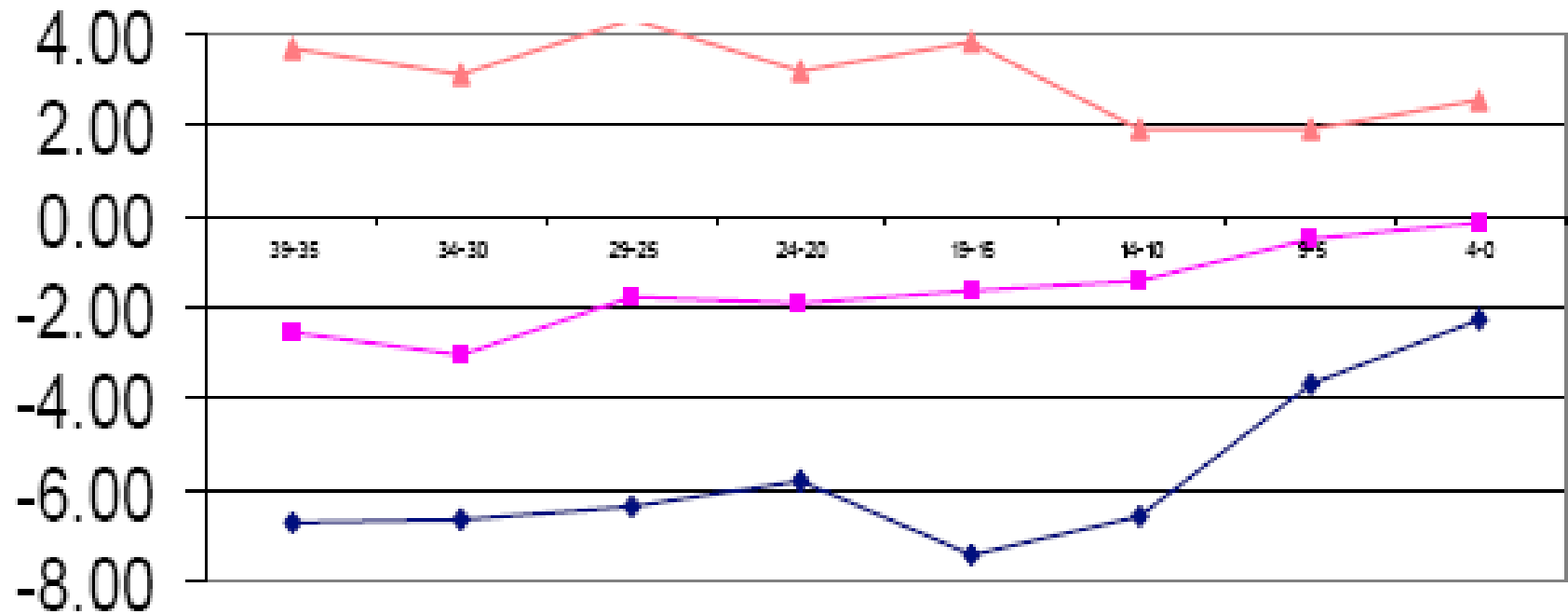


BASIS: Difference between cash price and futures price

Cash price – Futures price = basis



Apr LH Basis 1997-2004



◆ basis low ■ basis mean ▲ basis high

Futures Lean Hog Example

Hogs for May Market

	<u>Feb</u>
MAY LHFUT	\$73 / cwt
EXPECTED BASIS	<u>-0</u>
	73
BREAKEVEN	- 68
BROKERAGE	<u> </u> (included in BE)
EXPECTED PROFIT	5

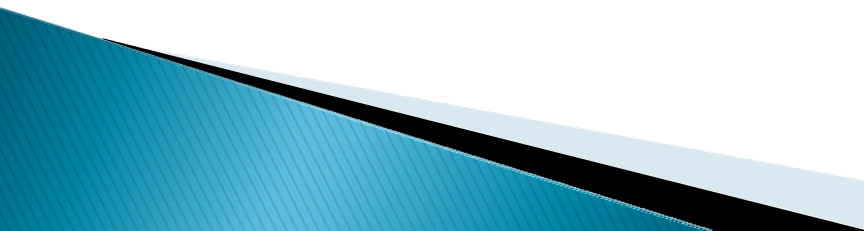
May 4

	<u>Price Decrease</u>	<u>Price Increase</u>
Short	\$73	\$73
Long	<u>64</u>	<u>78</u>
	9	-5
Cash	64	78
BE	<u>-68</u>	<u>68</u>
	<u>-4</u>	<u>10</u>
Profit	5	5

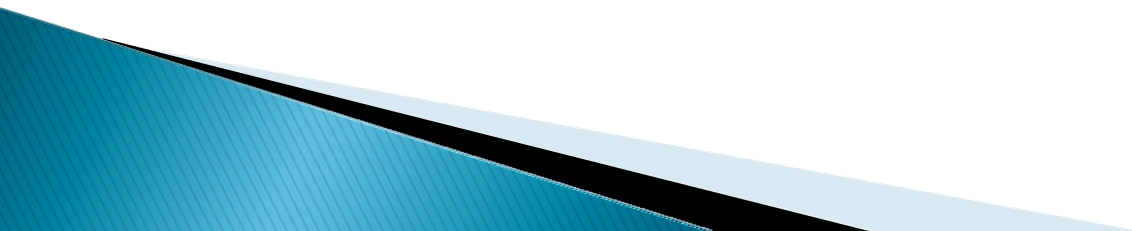
May 4

	<u>Price Decrease</u>			<u>Price Increase</u>		
Short	\$73			\$73		
Long	<u>64</u>			<u>78</u>		
	9	<u>BASIS</u>		-5		
		<u>INC</u>	<u>DEC</u>		<u>INC</u>	<u>DEC</u>
Cash	64	65	63	78	79	77
BE	<u>-68</u>	<u>68</u>	<u>68</u>	<u>68</u>	<u>68</u>	<u>68</u>
	<u>-4</u>	<u>-3</u>	<u>-5</u>	<u>10</u>	<u>11</u>	<u>9</u>
Profit	5	6	4	5	6	4

Options

- ▶ Similar to an insurance policy
 - ▶ PUT: right to a short futures contract
 - ▶ CALL: right to a long futures contract
 - ▶ Buyer pays market determined premium
 - ▶ Seller receives premium
- 

Lean Hog Options

- ▶ Feb, Apr, May, Jun, Aug, Oct, Dec
 - ▶ Strike prices available in \$2 /cwt intervals
nearby contracts may have \$1 /cwt intervals
 - ▶ Terminate same as futures
- 

Why use options?

Price	<u>cash</u>
Price	<u>futures</u>
Price ?	<u>options</u>

Options will always be 2nd best

Put Option

(same assumption as previous)

Nov

MAY LH PUT	\$73
PREMIUM	-2
EXPECTED BASIS	
BROKERAGE	
MINIMUM EXPECTED PRICE	<hr/> 71
BREAKEVEN	68
MINIMUM EXPECTED PROFIT	<hr/> 3

May 4

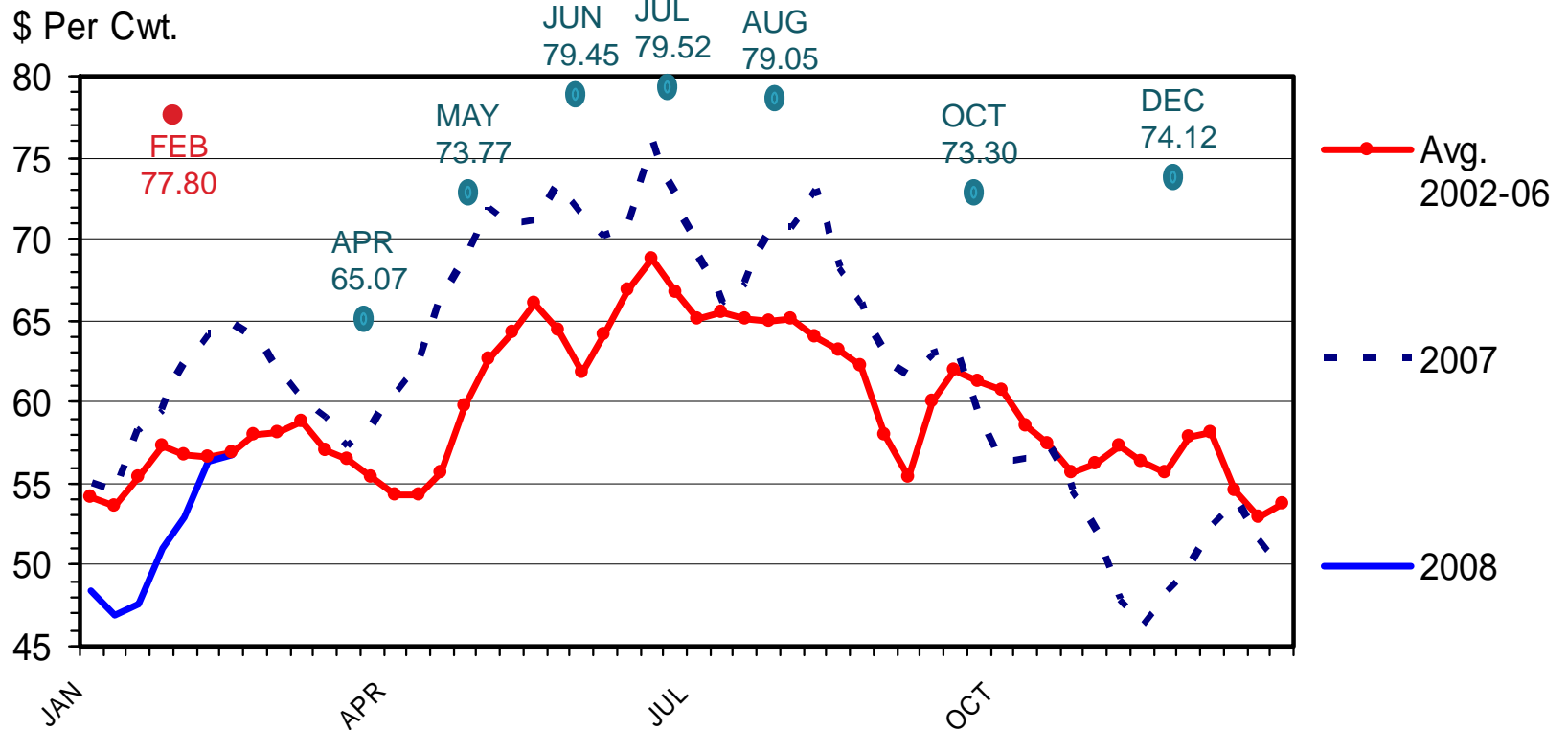
	<u>Price Decrease</u>	<u>Price Increase</u>
MAY PUT	73	73
MAY FUT	<u>64</u>	<u>78</u>
	9	0
PREM	<u>-2</u>	<u>-2</u>
	7	-2
CASH	64	78
BE	<u>68</u>	<u>68</u>
	-4	10
PROFIT	3	8

Summary

	<u>Price Decrease</u>	<u>Price Increase</u>
CASH	-4	10
OPTION	3	8
FUTURES	5	5

BARROW AND GILT PRICES

Iowa - So. Minnesota, Carcass Base Price, Weekly



HP-09
02/18/08



Livestock Risk Protection (LRP)

A New Price Risk Management Tool for Livestock Producers

Tim Petry, Livestock Economist

NDSU
Extension Service
North Dakota State University



LRP

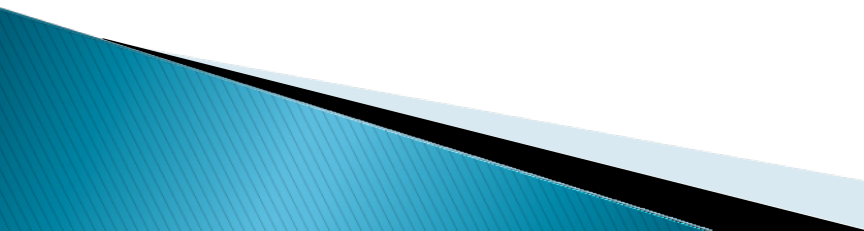
- ▶ Feeder Cattle (beef, dairy, Brahman)
 - Under 600 lbs
 - Steers or heifers
 - 600–900 lbs
 - Steers or heifers
- ▶ Fed cattle
- ▶ Hogs
- ▶ Lambs (9/17/07)

LRP

- ▶ Similar to put options
- ▶ 13% of premium is subsidized
- ▶ Crop insurance agents do not have to offer
- ▶ List of approved agents at:

www3.rma.usda.gov/apps/agentsslpi/result.cfm

Market Hogs

- ▶ Based on CME lean hog index
 - ▶ Futures, options, and LRP based on carcass weight
 - ▶ Available at www.cme.com or DTN
 - ▶ Live weight conversion = .74
- 

- ▶ Weekly lengths: 13, 17, 21, 26
- ▶ Policy size:
 - Any # up to 10,000 head per SCE
 - 32,000 maximum per year

Actuarials

Coverage prices and rates change daily and are posted on the USDA Risk Management Agency (RMA) web site

www.rma.usda.gov

Coverage levels will range from 70 to 100 percent of expected price



Indemnity

- ▶ Payment based on difference between
COVERAGE PRICE (CP) & CME LEAN HOG
INDEX (CME)

CP = \$75/cwt

CME = \$70

\$5/cwt payment

- ▶ Producers must submit 04-LRP-Claim Form
within 60 days of end of contract

Will Swine LRP Pay This Year?

Date Placed	End Date	Coverage Price	Prem.	Actual Price	Indemnity Payment	Net
10/10/07	01/08/08	61.23	1.53	48.50	12.73	11.20
	02/06/08	62.00	1.63	57.28	4.72	3.09
	03/05/08	68.45	4.09			
	04/09/08	70.66	4.48			

LRP – Swine

Price	Cost/cwt	End Date	Current Cash Price
74.04	2.70	06/17	59.85
74.00	3.04	07/15	
74.37	4.19	08/19	

LRP

▶ Advantages

- Small numbers can be hedged
- Premium subsidized 13 percent
- No brokerage or margin
- Receive higher prices in bull market
- Available in months where no futures/options
- All coverage prices available daily

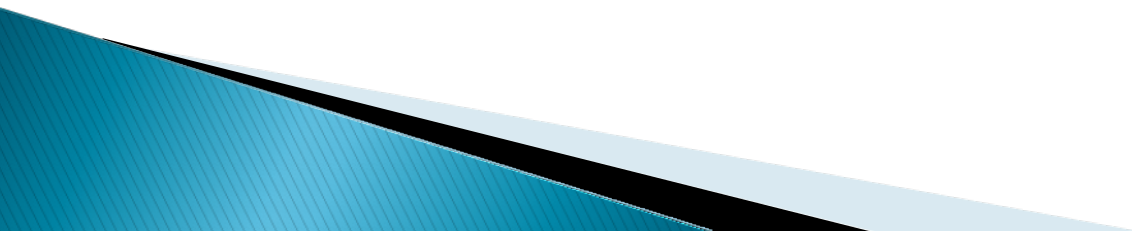
▶ Disadvantages

- Not “flexible” like futures and options
- Can be suspended at any time

Steps to LRP

1. Submit eligibility application form with insurance agent
2. Select a SCE (coverage prices and premiums are available after 5 PM (CST) except holidays)
 1. Number of head
 2. Policy length closest to marketing date
 3. Estimated average market weight
 4. Choose coverage price
3. Pay premium to agent
4. Agent submits SCE form electronically (hours are between 5 PM and 9 AM (CST), Tues–Sat only)

Livestock Gross Margin Insurance

- ▶ Offers protection against decline in hog feeding margin
 - ▶ Gross Margin for Swine – market value of market hog less soybean meal and corn costs
 - ▶ Sold only on second to last day of month
- 

LGM for Swine Available for:

- ▶ Farrow to Finish Operation
 - Finished weight = 250 lbs (live weight)
 - Soybean meal price and corn price = price 3 months prior to swine target marketing month
- ▶ Feeder Pig Finishing Operation
 - Finished weight = 250 lbs (live weight)
 - Soybean meal price and corn price = price 2 months prior to swine target marketing month
- ▶ SEW Pig Finishing Operation
 - Finished weight = 250 lbs (live weight)
 - Soybean meal price and corn price = price 2 months prior to swine target marketing month



Any Questions?