Situation Overview and Outlook for U.S. Agriculture

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Central National Bank Meeting Lawrence, KS. September 15, 2011



The U.S. economic recovery is anemic.

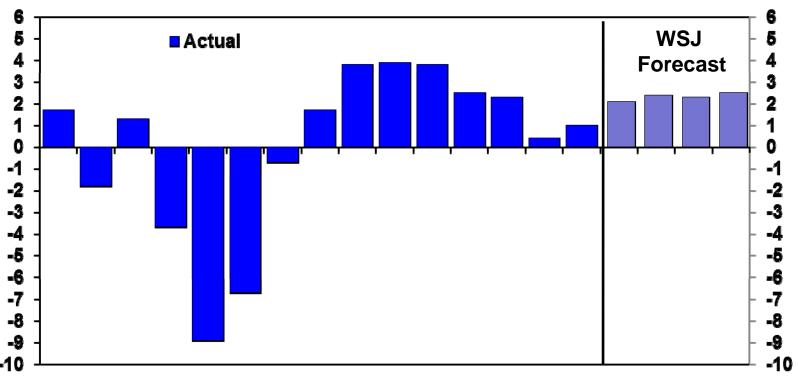
- Too few jobs, too much debt, weak housing and lots of uncertainty
- Questions surround the global recovery.
- Agriculture has been a bright a spot.
 - Even through the recession and financial crisis of 2008-2009, most of agriculture held up quite well.
 - Rural economies benefited, but slumping demand curtailed livestock profits
- What is the light at the end of the tunnel?



Soft data has curbed U.S. growth and dampened forecasts.

Real GDP Growth

Annualized percent change from previous quarter



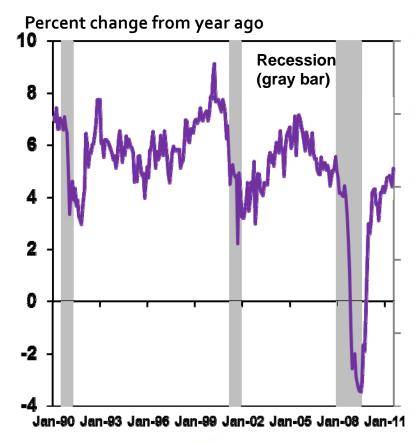
2007:Q42008:Q22008:Q42009:Q22009:Q42010:Q22010:Q42011:Q22011:Q42012:Q2

Source: Bureau of Economic Analysis and Wall Street Journal August 2011 Forecast Survey (Average)

Consumption growth is key for the economic recovery in the U.S.

- About 70 percent of U.S. GDP comes from consumption.
- Consumption plummeted during the most recent recession.
- When tax credits expired, the housing sector slowed considerably.
 - Inventories remain elevated.
 - Housing starts remain low.
 - Are prices reaching a bottom?
- Consumer confidence is shaky.
- Savings rate has risen and debt is being reduced.
- Should consumers spend like they did in the 1990s and early 2000s?

Personal Consumption Expenditures

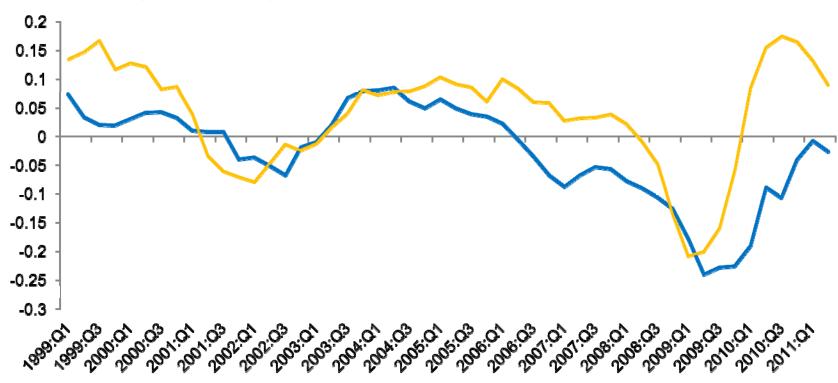


Source: Bureau of Economic Analysis

Since 2008, business investment has improved, but will it continue?

Nonresidential Private Fixed Investment





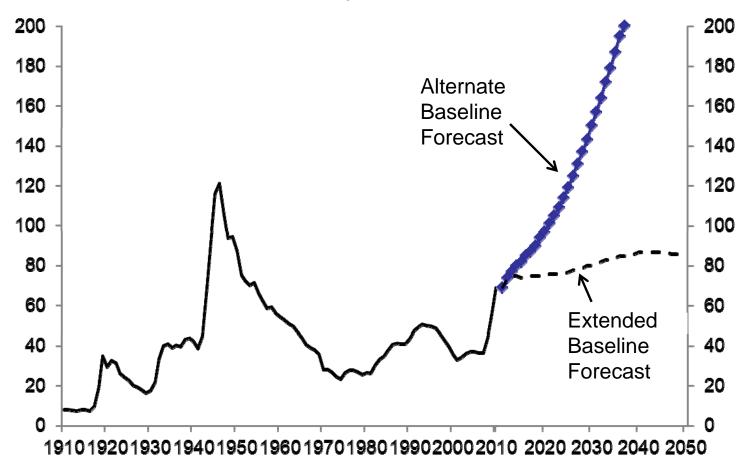
Private fixed investment in structures

Private fixed investment in equipment and software

Source: U.S. Census Bureau

Government spending has surged.

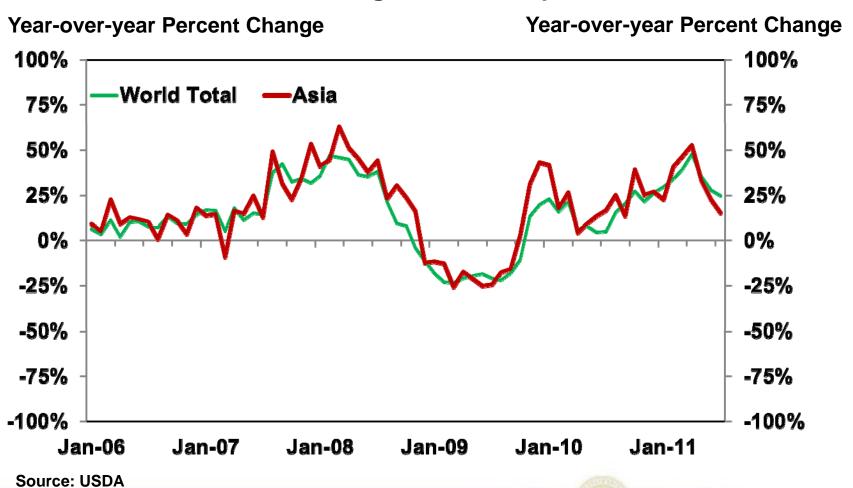
Ratio of Federal Debt Held by the Public to Gross Domestic Product



Source: Congressional Budget Office (CBO)

While cooling recently, agricultural exports have surged led by Asia.

Real U.S. Agricultural Exports



What does this mean for agriculture?



Volatility Perspective 2011 Price Levels vs. Past

Within-Year Average Values

| YEAR | Corn (\$/bu) | Alfalfa Hay (\$/ton) | Slaughter Steer Price 5-Mkt Avg (\$/cwt) | Feeder Steers 7-800 Lbs. (\$/cwt) | Feeder Steers 5-600 Lbs. (\$/cwt) | Slaughter Cows (KY, 75-80% Breaking) (\$/cwt) | Bred Cows (Medium-Large 2 Young, 1,000 lb) (\$/hd) |
|------------------------------------|-----------------|----------------------------|---|---|---|--|---|
| 1996-2007 | 2.37 | 99.88 | 75.18 | 89.37 | 100.33 | 42.34 | 812.11 |
| 2008 | 4.78 | 162.50 | 92.78 | 104.99 | 115.81 | 51.02 | 785.76 |
| 2009 | 3.75 | 122.92 | 83.25 | 97.28 | 109.68 | 45.40 | 682.40 |
| 2010 | 3.83 | 116.00 | 95.38 | 110.89 | 122.84 | 53.61 | 698.73 |
| 2011 (Jan-July) | 5.94 | 156.29 | 111.24 | 131.85 | 148.10 | 68.99 | 847.60 |
| Change <u>('11 vs. '96-'07)</u> | 150% | 56% | 48% | 48% | 48% | 63% | 4% |



Prices Variability in Context

Within-Year Range (Maximum less Minimum)

| YEAR | Corn (\$/bu) | Alfalfa Hay (\$/ton) | Slaughter Steer Price 5-Mkt Avg (\$/cwt) | Feeder Steers 7-800 Lbs. (\$/cwt) | Feeder Steers 5- | (KY /5-80% | Bred Cows (Medium-Large 2 Young, 1,000 lb) (\$/hd) |
|------------|-----------------|----------------------------|--|---|------------------|------------|---|
| 1996-2007 | 0.65 | 18.95 | 11.54 | 15.77 | 16.56 | 9.59 | 180.00 |
| 2008 | 1.49 | 44.00 | 14.04 | 23.27 | 23.69 | 14.16 | 291.67 |
| 2009 | 1.11 | 39.00 | 5.33 | 10.03 | 15.26 | 9.36 | 148.75 |
| 2010 | 1.41 | 11.00 | 18.17 | 21.99 | 21.75 | 14.98 | 168.50 |
| 2011 | | | | | | | |
| (Jan-July) | 1.52 | 68.00 | 13.91 | 13.49 | 17.40 | 19.91 | 156.50 |

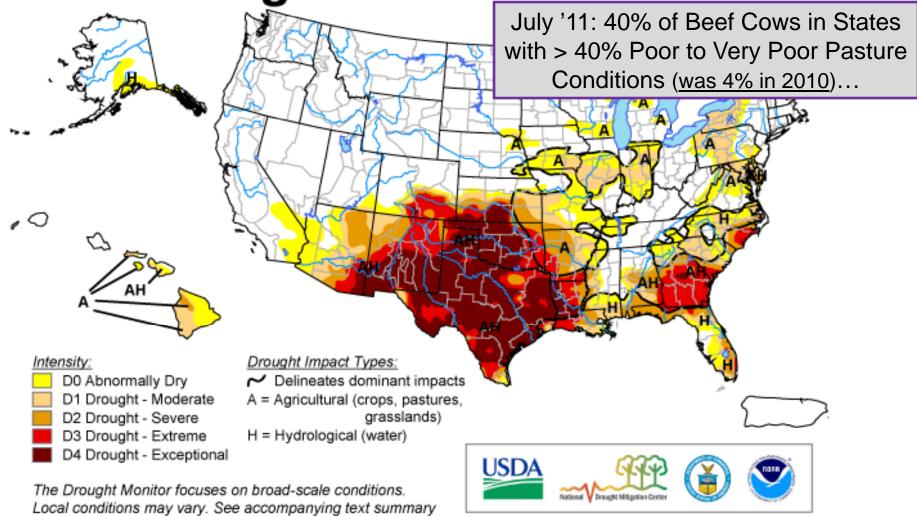
Within-Year Coefficient of Variation

| YEAR | Corn (\$/bu) | Alfalfa Hay (\$/ton) | Slaughter Steer Price 5-Mkt Avg (\$/cwt) | Feeder Steers 7-800 Lbs. (\$/cwt) | Feeder Steers 5- | | Bred Cows (Medium-Large 2 Young, 1,000 lb) (\$/hd) |
|------------|-----------------|----------------------------|--|---|------------------|------|---|
| 1996-2007 | 0.09 | 0.06 | 0.05 | 0.06 | 0.05 | 0.07 | 0.07 |
| 2008 | 0.11 | 0.10 | 0.05 | 0.07 | 0.07 | 0.09 | 0.10 |
| 2009 | 0.08 | 0.12 | 0.02 | 0.04 | 0.04 | 0.06 | 0.07 |
| 2010 | 0.13 | 0.03 | 0.05 | 0.06 | 0.05 | 0.09 | 0.07 |
| 2011 | | | | | | | |
| (Jan-July) | 0.10 | 0.19 | 0.04 | 0.03 | 0.05 | 0.10 | 0.07 |

U.S. Drought Monitor

August 9, 2011

Valid 8 a.m. EDT



http://drought.unl.edu/dm

for forecast statements.

Released Thursday, August 11, 2011
Author: Laura Edwards, Western Regional Climate Center





Corn for Grain Yields, September 1, 2011



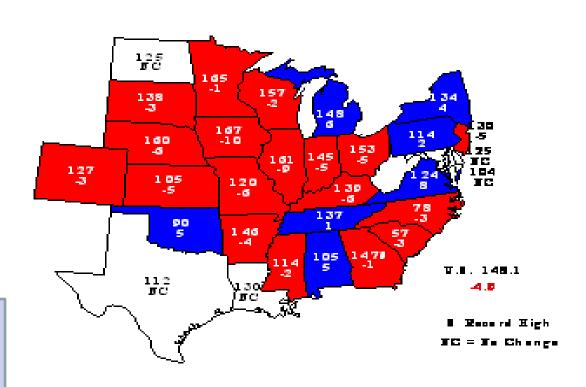
Bushels and Change From Previous Month



US: - 4.9 bu. (148.1)

KS: - 5.0 bu. (105.0)

IA: - 10.0 bu. (167.0)



USDA-NASS 09-12-11

http://www.nass.usda.gov/Charts_and_Maps/Field_Crops/cornmap.asp

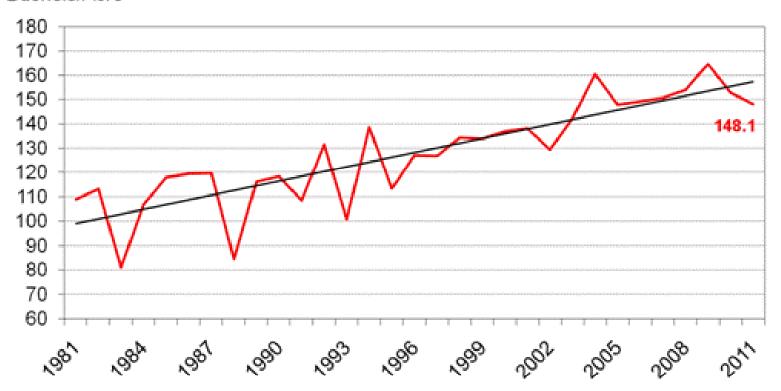
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U.S. Corn Yield







USDA-NASS 09-12-11

http://www.nass.usda.gov/Charts_and_Maps/Field_Crops/cornyld.asp



U.S. Corn %Stocks/Use vs Price\$

MY 1973/74 thru MY 2011/12 September 12, 2011 USDA WASDE Report



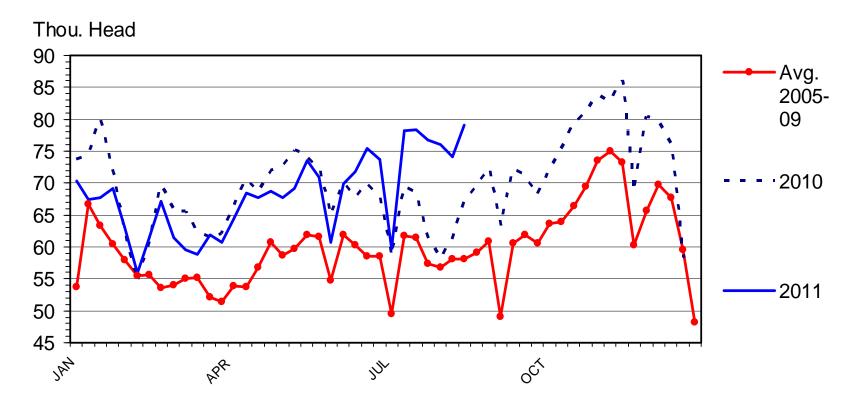
■U.S. Corn % Ending Stocks/Use

—U.S. Corn Price



BEEF COW SLAUGHTER

Federally Inspected, Weekly



C-S-34 09/05/11

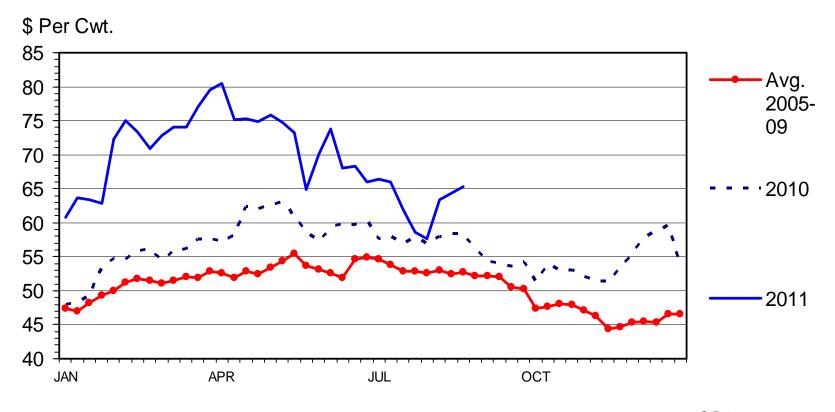
Livestock Marketing Information Center

Data Source: USDA-AMS & USDA-NASS



SLAUGHTER COW PRICES

Southern Plains, 85-90% Lean, Weekly



Livestock Marketing Information Center

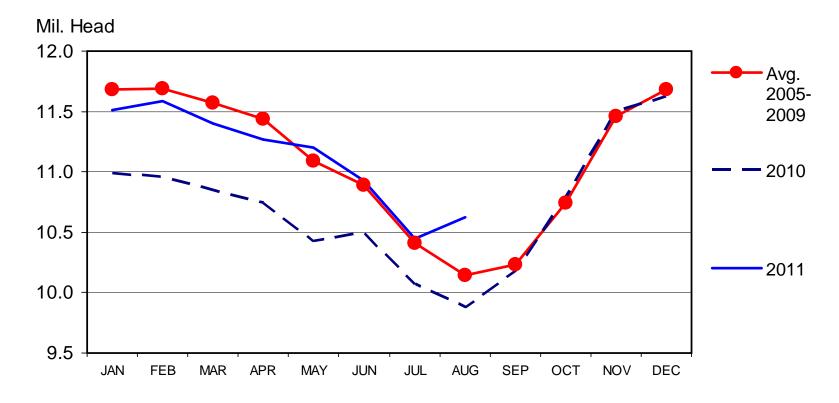
Data Source: USDA-AMS





CATTLE ON FEED

US Total, Monthly



C-N-10 08/19/11

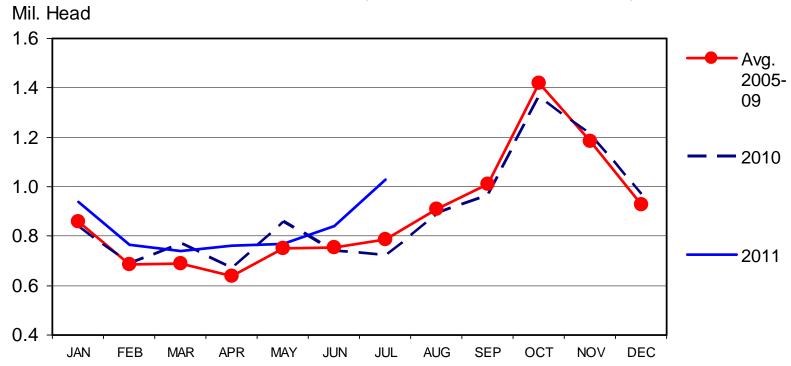
Livestock Marketing Information Center

Data Source: USDA-NASS



CATTLE PLACED WEIGHING LESS THAN 700 POUNDS

1,000 Plus Capacity Feedlots, U.S., Monthly



C-N-08A 08/19/11

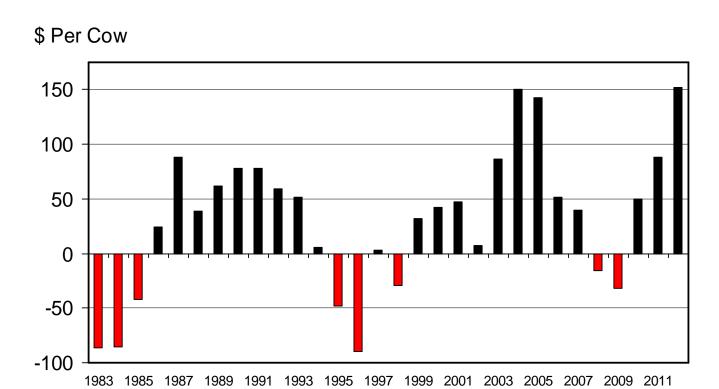
Livestock Marketing Information Center

Data Source: USDA-NASS, Compiled & Analysis by LMIC



ESTIMATED AVERAGE COW CALF RETURNS

Returns Over Cash Cost (Includes Pasture Rent), Annual



C-P-66 08/16/11

Livestock Marketing Information Center

Data Source: USDA-AMS & USDA-NASS, Compiled & Analysis by LMIC



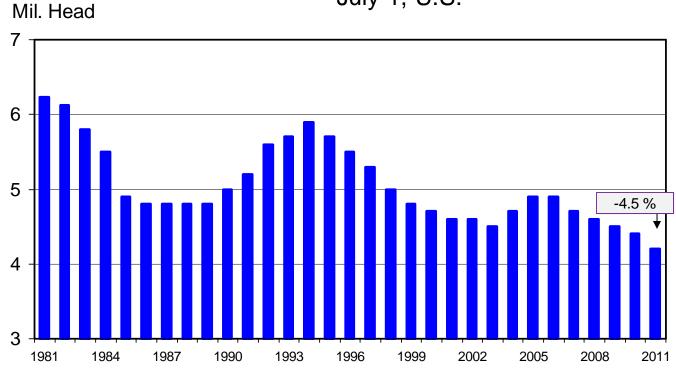


Will national herd expand by 2014???

-- who & where will expansion occur???

HEIFERS HELD AS BEEF COW REPLACEMENTS

July 1, U.S.



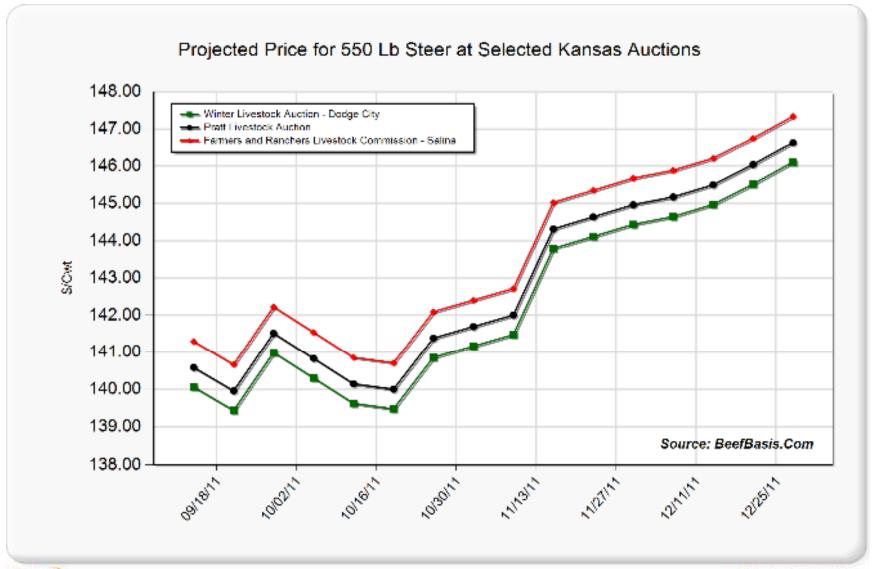
C-N-37 07/22/11

Livestock Marketing Information Center

Data Source: USDA-NASS



As of: 9/12/11



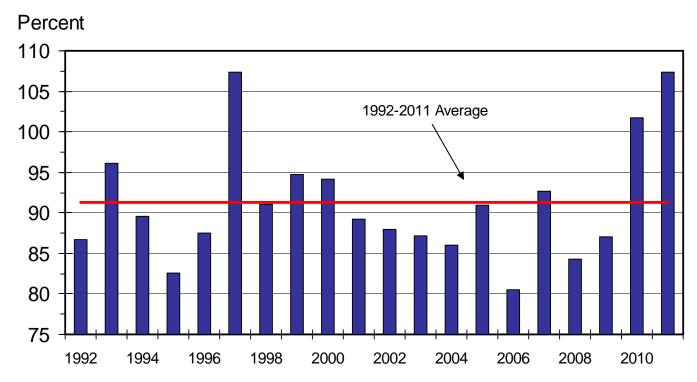






BUY/SELL MARGINS

S. Plains, Mar. 7-800 lb. Steer as % of Nov. 5-600 lb. Steer

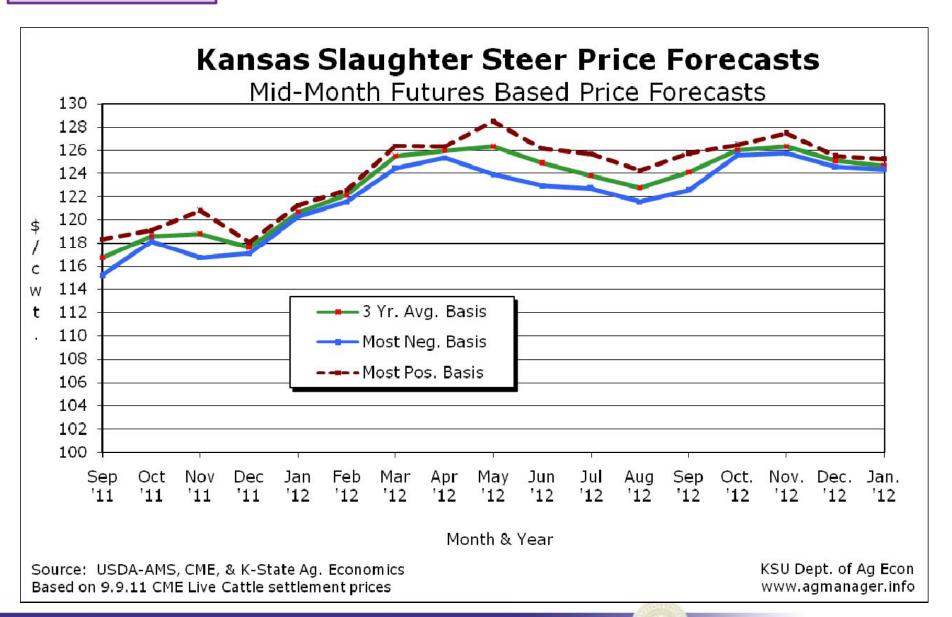


C-P-60 08/17/11

Livestock Marketing Information Center

Data Source: USDA-AMS, Compiled & Analysis by LMIC



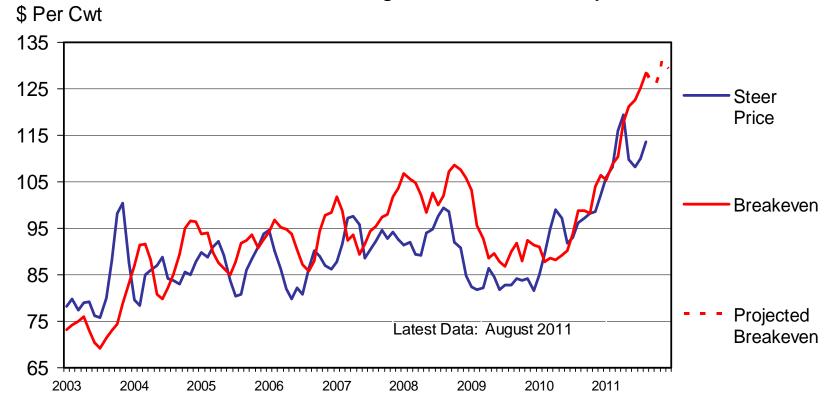






CHOICE STEER PRICE vs BREAKEVEN

Cattle Feeding, S. Plains, Monthly



C-P-21 09/08/11

Livestock Marketing Information Center

Data Source: USDA-AMS & USDA-NASS, Compiled & Analysis by LMIC





Quarterly Forecasts (LMIC: 9/10/11)

| Year | Comm'l | % Chg. from | Average Dressed | % Chg. from | Comm'l Beef | % Chg. from |
|---------|-----------|----------------|--------------------|----------------|----------------|----------------|
| Quarter | Slaughter | Year Ago | Weight | Year Ago | Production | Year Ago |
| 2011 | | | | | | |
| 1 | 8,317 | 1.9 | 770.88 | 0.7 | 6,411 | 2.6 |
| П | 8,639 | -0.5 | 759.23 | 0.7 | 6,559 | 0.2 |
| Ш | 8,771 | 0.2 | 772.77 | 0.1 | 6,778 | 0.1 |
| IV | 8,195 | -5.3 | 781.70 | 0.4 | 6,406 | -5.0 |
| Year | 33,922 | -1.0 | 771.02 | 0.4 | 26,154 | -0.6 |
| 2012 | | | | | | |
| 1 | 7,934 | -4.6 | 779.18 | 1.1 | 6,182 | -3.6 |
| II | 8,180 | -5.3 | 766.38 | 0.9 | 6,269 | -4.4 |
| Ш | 8,182 | -6.7 | 785.63 | 1.7 | 6,428 | -5.2 |
| IV | 7,914 | -3.4 | 788.35 | 0.9 | 6,239 | -2.6 |
| Year | 32,210 | -5.0 | 779.82 | 1.1 | 25,118 | -4.0 |
| 2013 | | | | | | |
| 1 | 7,483 | -5.7 | 788.19 | 1.2 | 5,898 | -4.6 |
| II | 7,766 | -5.1 | 771.95 | 0.7 | 5,995 | -4.4 |
| Ш | 8,116 | -0.8 | 793.25 | 1.0 | 6,438 | 0.2 |
| IV | 7,657 | -3.2 | 794.44 | 0.8 | 6,083 | -2.5 |
| Year | 31,022 | -3.7 | 786.99 | 0.9 | 24,414 | -2.8 |



Quarterly Forecasts (LMIC: 9/10/11)

| | Live Sltr. | % Chg. | Feeder Ste | er Price |
|---------|-------------|----------|------------|----------|
| Year | Steer Price | from | Southern | Plains |
| Quarter | 5-Mkt Avg | Year Ago | 7-800# | 5-600# |
| 2011 | | | | |
| I | 110.12 | 23.11 | 129.06 | 150.07 |
| II | 112.79 | 17.08 | 132.03 | 148.61 |
| III | 112-113 | 17.84 | 135-137 | 141-143 |
| IV | 115-118 | 16.18 | 130-134 | 136-140 |
| Year | 112-114 | 18.47 | 131-133 | 142-147 |
| 2012 | | | | |
| 1 | 116-120 | 7.16 | 126-131 | 139-146 |
| II | 118-123 | 6.84 | 130-137 | 144-153 |
| III | 114-120 | 4.00 | 133-141 | 146-156 |
| IV | 117-124 | 3.43 | 128-137 | 141-152 |
| Year | 117-121 | 5.31 | 129-137 | 142-152 |
| 2013 | | | | |
| 1 | 119-127 | 4.24 | 129-139 | 143-157 |
| II | 121-130 | 4.15 | 133-144 | 146-159 |
| III | 116-126 | 3.42 | 135-147 | 147-161 |
| IV | 119-130 | 3.32 | 131-144 | 143-158 |
| Year | 120-127 | 3.78 | 133-143 | 146-158 |

Beef industry changes underway

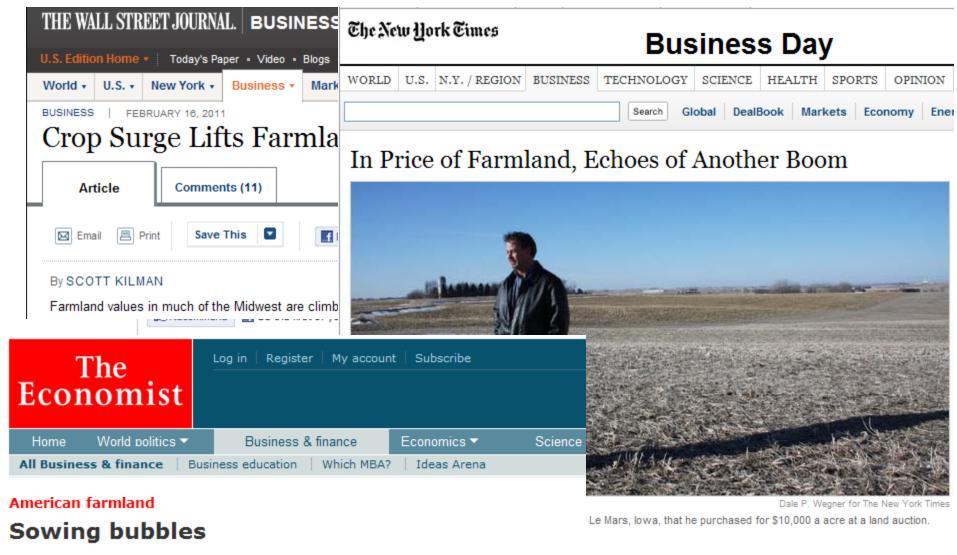
- Growth of stocker segment
 - Larger operations least likely to exit as they already are retaining ownership more...
 - Association with public grazing, value of gain, etc.
 makes this trend likely to continue...
- Reduced farmer-feeders (2010 vs 2009)
 - -<1,000 hd yards; reduced total capacity by 150,000 hd (5,000 operations exited)
 - ->50,000 hd yards; increased total capacity by 370,000 hd (4 more operations)
 - w/ +/- 20% feedlot over-capacity, will '11 be different ???



Policy/Regulation Issues & Trends

- GIPSA "fair market" proposed rules / "anticompetition" listening sessions ...
 - No timetable on USDA's benefit-cost assessment...
- Environmental regulation concerns
- Animal welfare/mandatory labeling???
 - Is overall uncertainty holding back investment throughout livestock supply chain???





Regulators grow increasingly worried about steep cropland prices

Apr 20th 2011 | NEW YORK | from the print edition

>Tweet < 16

Like 6

69eff Freking and his brother

on Monday for \$10,000 an acre

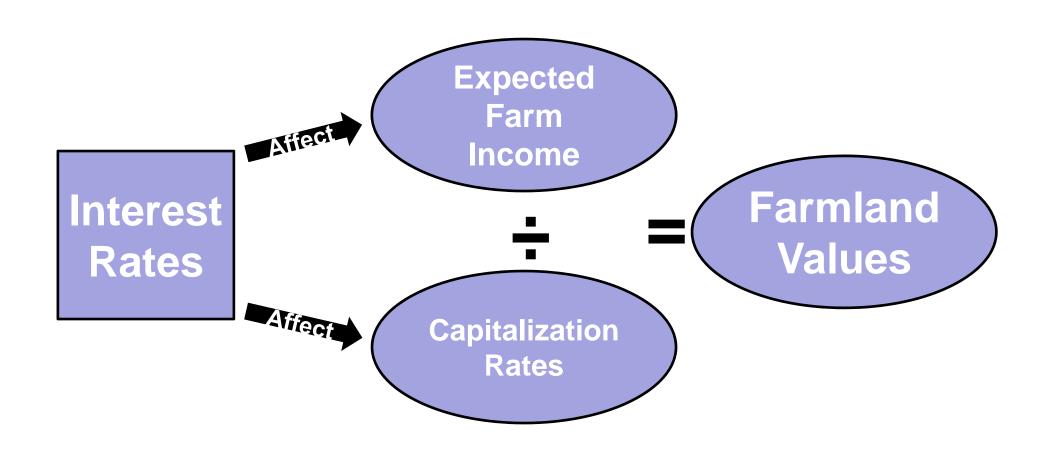
FINANCIAL regulators in America were criticised for doing too little about the country's would seem to have nothing in common with a condo in Miami or a house in Las Vegas.

COMMENTS (69)

SIGN IN TO E-

KANSAS STATE UNIVERSITY

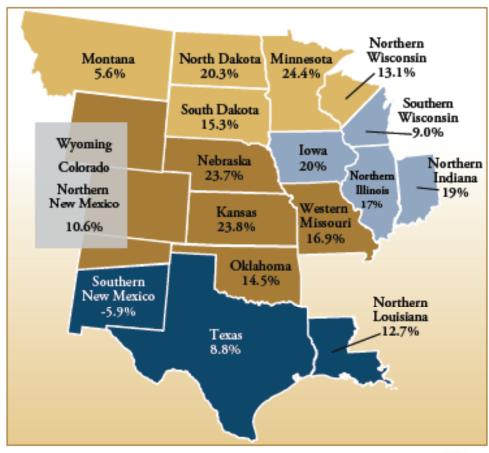
Interest rates can affect farmland values through two avenues.



With low capitalization rates and elevated farm income, farmland values have surged.

Non-irrigated Cropland Values

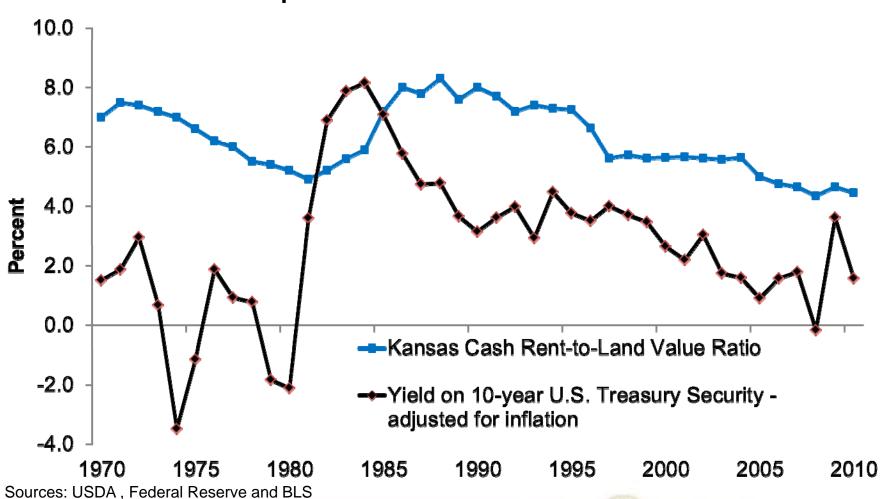
(Percent change from 2010:Q1 to 2011:Q1)



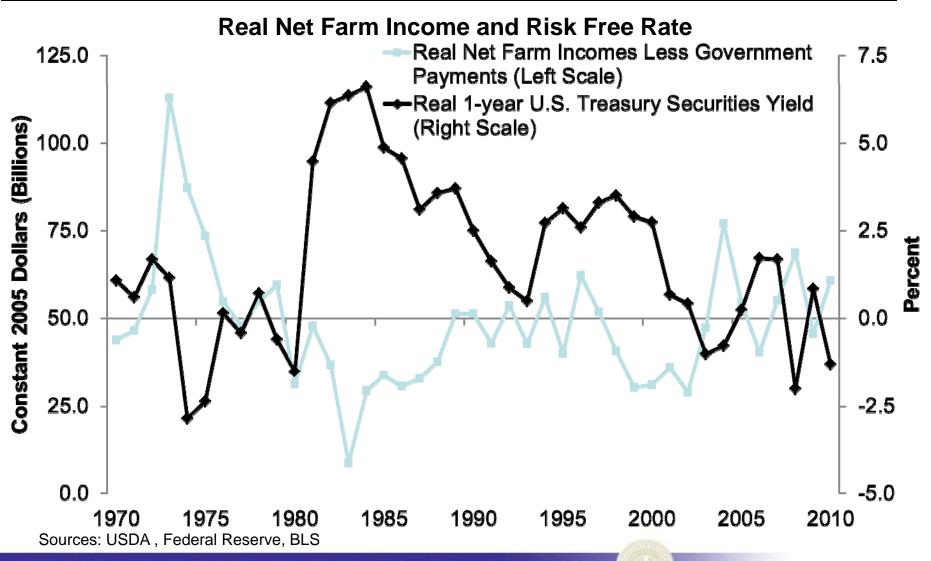
Source: Agricultural Finance Databook, Federal Reserve Bank of Kansas City

Over time, real interest rates and capitalization rates tend to move together.

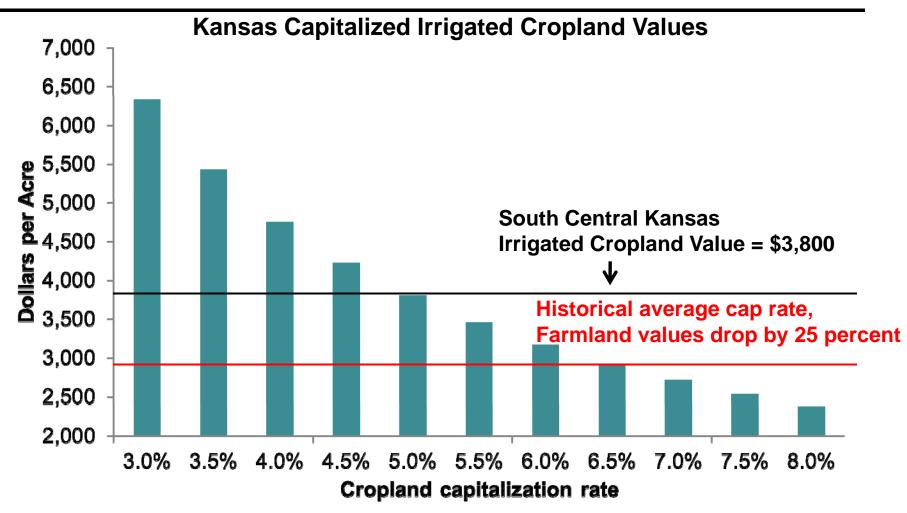
Kansas Capitalization Rate and Real Interest Rate



Over time, real interest rates and real net farm income tend to move in opposite directions.



Historically low capitalization rates help support current cropland values.

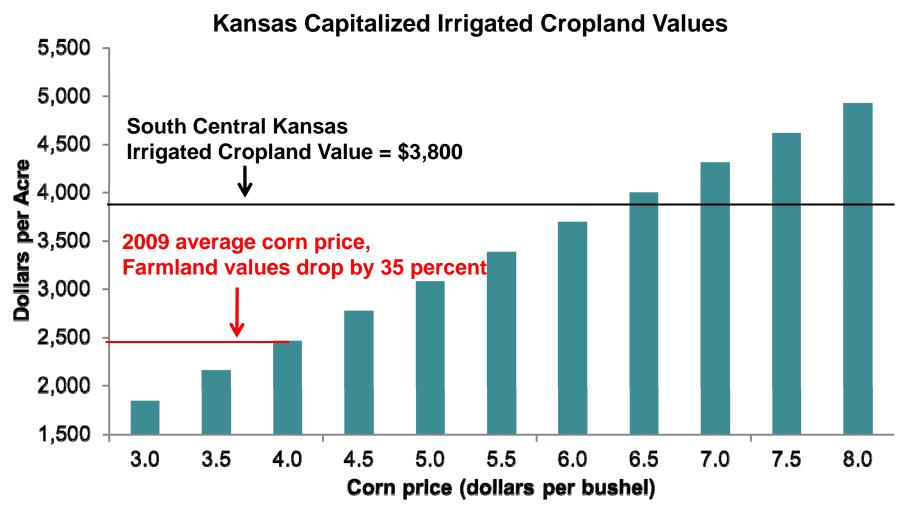


Authors' calculations based on KSU Corn Cost-return Budget in South Central Kansas.

Assumed 200 bushels per acre, a corn price of \$4.75 per bushel, and 20% of gross revenues capitalized into land.



At a historical average cap rate and today's corn prices, current cropland values in Kansas are reasonable.



Authors' calculations based on KSU Corn Cost-return Budget in South Central Kansas.

Assumed 200 bushels per acre, a corn price of \$4.75 per bushel, 20% of gross revenues capitalized into land, and cap rate of 6.5%.



List of Volatility Factors Shaping U.S. Agriculture

- Fiscal and Monetary Policy
- Domestic Demand (employment, debt, food demand)
- Export Demand (exchange rates, GDPs)
- Agricultural Policy Uncertainty (Farm Bill, Ethanol, GIPSA, MCOOL, Animal Welfare)
- Weather (grain prices & feed availability)
- Shrinking livestock herds; over-capacity in segments
- Land Use Adjustments (pasture vs. crop decisions)
- Land Value Adjustments (up, down, hold, bubble?)
- Interest rates (expansion capital, increased line of credit implications)



More information available at: AgManager (http://www.agmanager.info/)

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PDF of presentation will be posted to:

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