
# ***The New Reality: Volatility, 'State of the Industry,' and Where Things <u>May</u> Be Going…***

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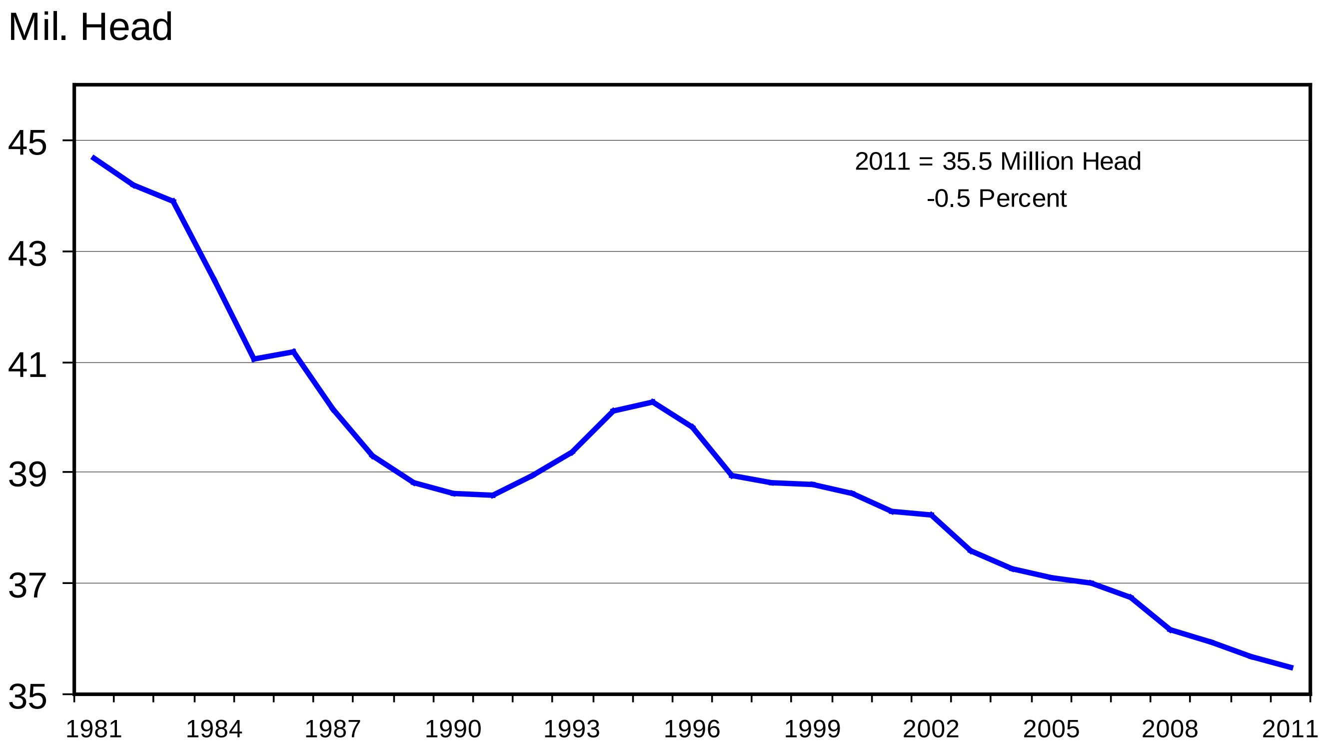
# CALF CROP

July 1 Estimates, U.S., Annual

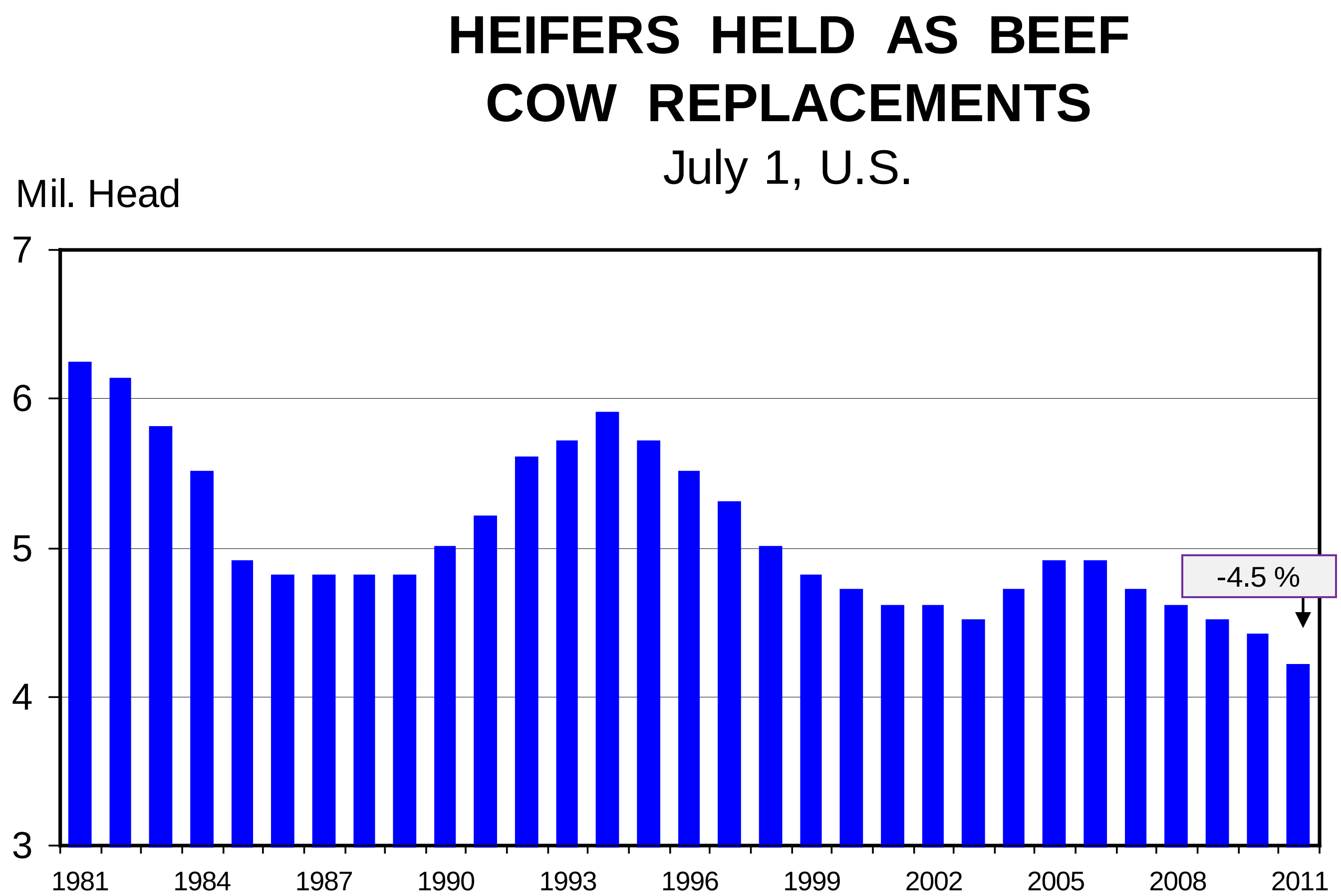



C-N-18B
07/22/11

Livestock Marketing Information Center

Data Source: USDA-NASS

# Will national herd expand by 2014??? --- should you???




C-N-37
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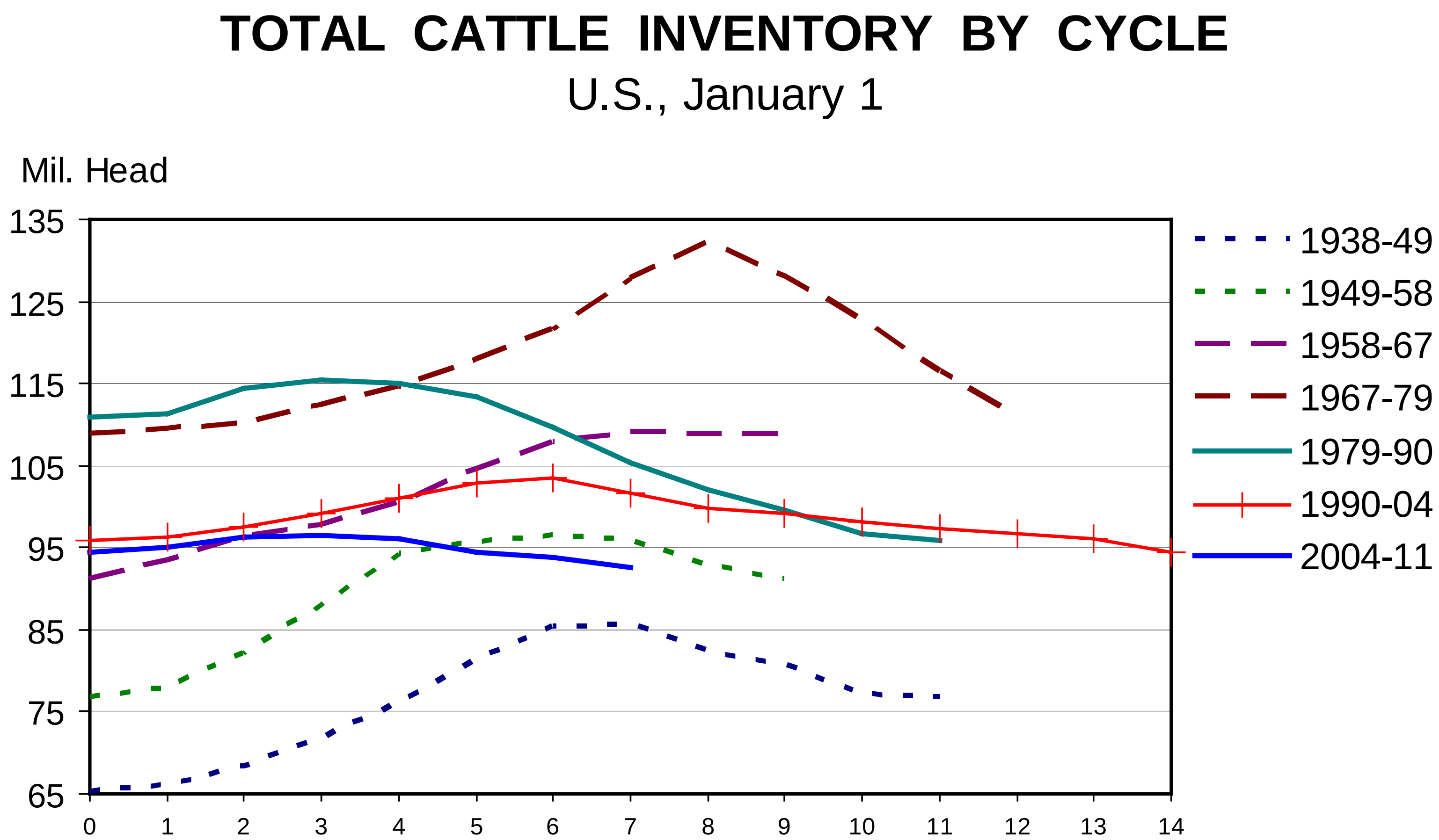
Data Source: USDA-NASS

# How relevant is assessing today's "cattle cycle" ???

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

# 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 ('11 vs. '96-'07)* | 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 5-600 Lbs. ($/cwt) | Slaughter Cows (KY, 75-80% Breaking) ($/cwt) | 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 5-600 Lbs. ($/cwt) | Slaughter Cows (KY, 75-80% Breaking) ($/cwt) | 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 |

# Commodity Price Volatility

- Max-Min, range differences = increased cost of business & interest rate risk exposure…
  - Up for most cattle industry commodities…

- COV differences = changes in relative price risk present across commodities…
  - Up mainly for Alfalfa & Slaughter Cows in ’11

# Current U.S. Cow-Calf Industry

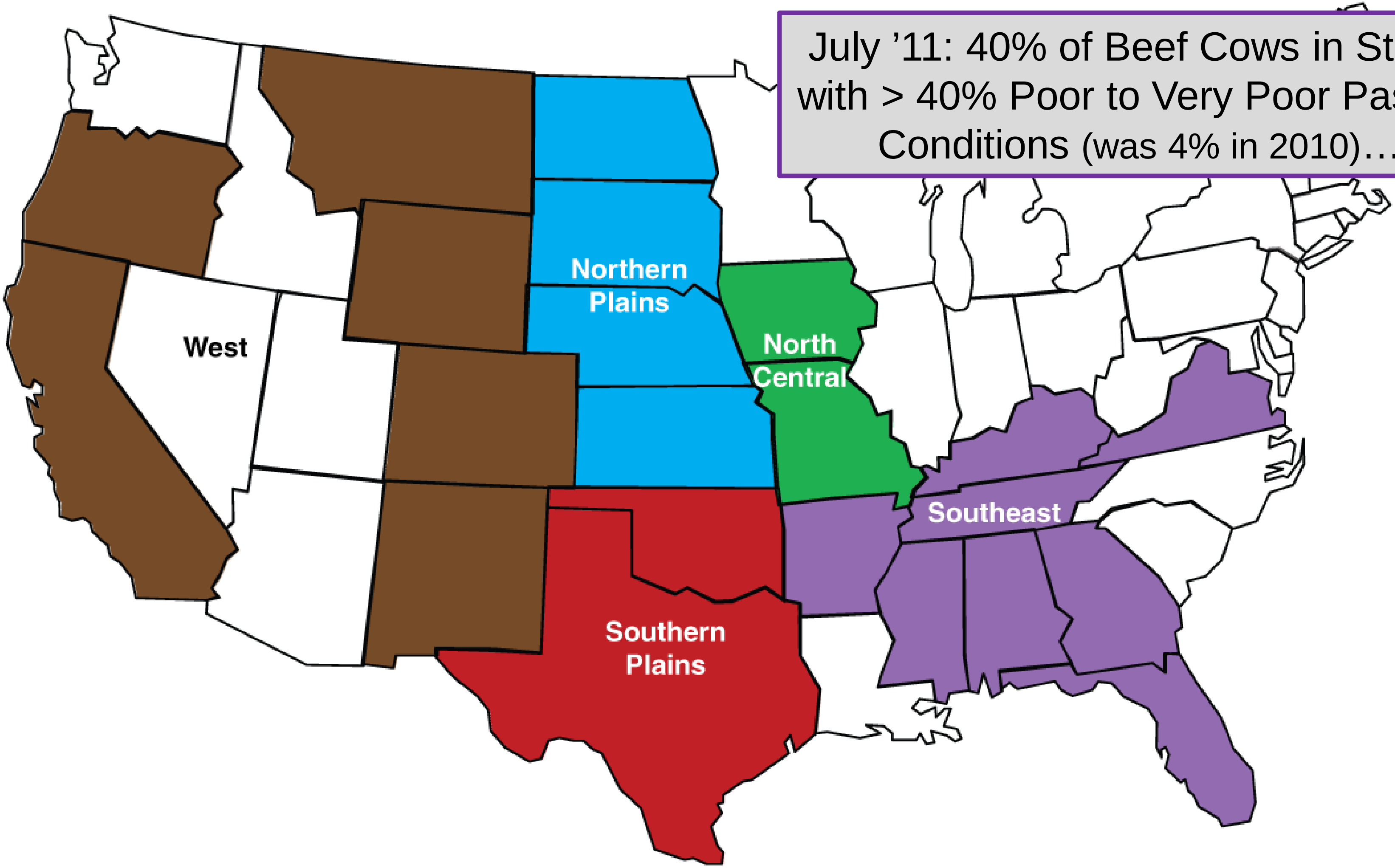
(March ’11 ERS Report: http://www.ers.usda.gov/publications/eib73/)

- 35% of 2.2. million farms have a beef cow
  - 50% have fewer than 20 cows
- Cow-calf only, CC/Stocker, & CC/Feedlot comprise 36%, 53%, and 10% of cows…
- Internet use, NAIS familiarity, and host of other issues vary notably across op. sizes..

Figure 3

**U.S. beef cow-calf production regions**

*Nearly a third of ARMS cow-calf producers were located in Southeast States, and 27 percent were in the Southern Plains region.*



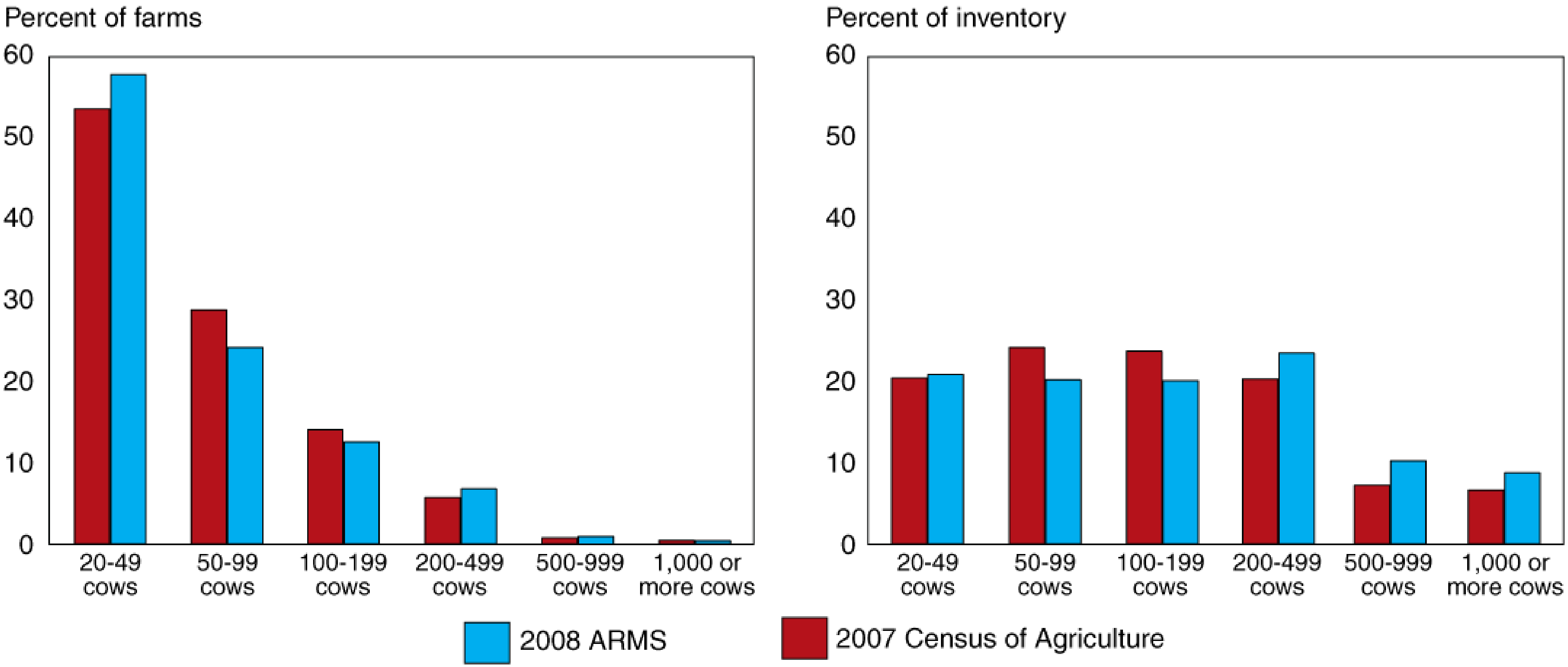

July ’11: 40% of Beef Cows in States with > 40% Poor to Very Poor Pasture Conditions (was 4% in 2010)…

Source: USDA, Economic Research Service using USDA’s 2008 Agricultural Resource Management Survey (ARMS).

Figure 2

**Survey coverage of U.S. beef cow-calf farms and inventory by size of operation, 2008**

*The expanded ARMS sample of farms with 20 or more beef cows and the ARMS beef cow inventory are distributed similarly across identical size categories of the 2007 Census of Agriculture.*




Notes: The 2007 Census of Agriculture measured beef cow inventory on December 31, 2007. The ARMS beef cow inventory is that on January 1, 2008. Differences between the estimates are primarily due to fewer States included in ARMS, and the sampling and nonsampling error of ARMS. Limiting ARMS to operations with 20 or more beef cows omitted about 53 percent of farms with beef cows and 10 percent of the beef cow inventory reported in the 2007 Census of Agriculture.

Source: USDA, Economic Research Service using 2007 Census of Agriculture; and USDA's 2008 Agricultural Resource Management Survey (ARMS).

# U.S. Cow-Calf Industry: Size Differences…

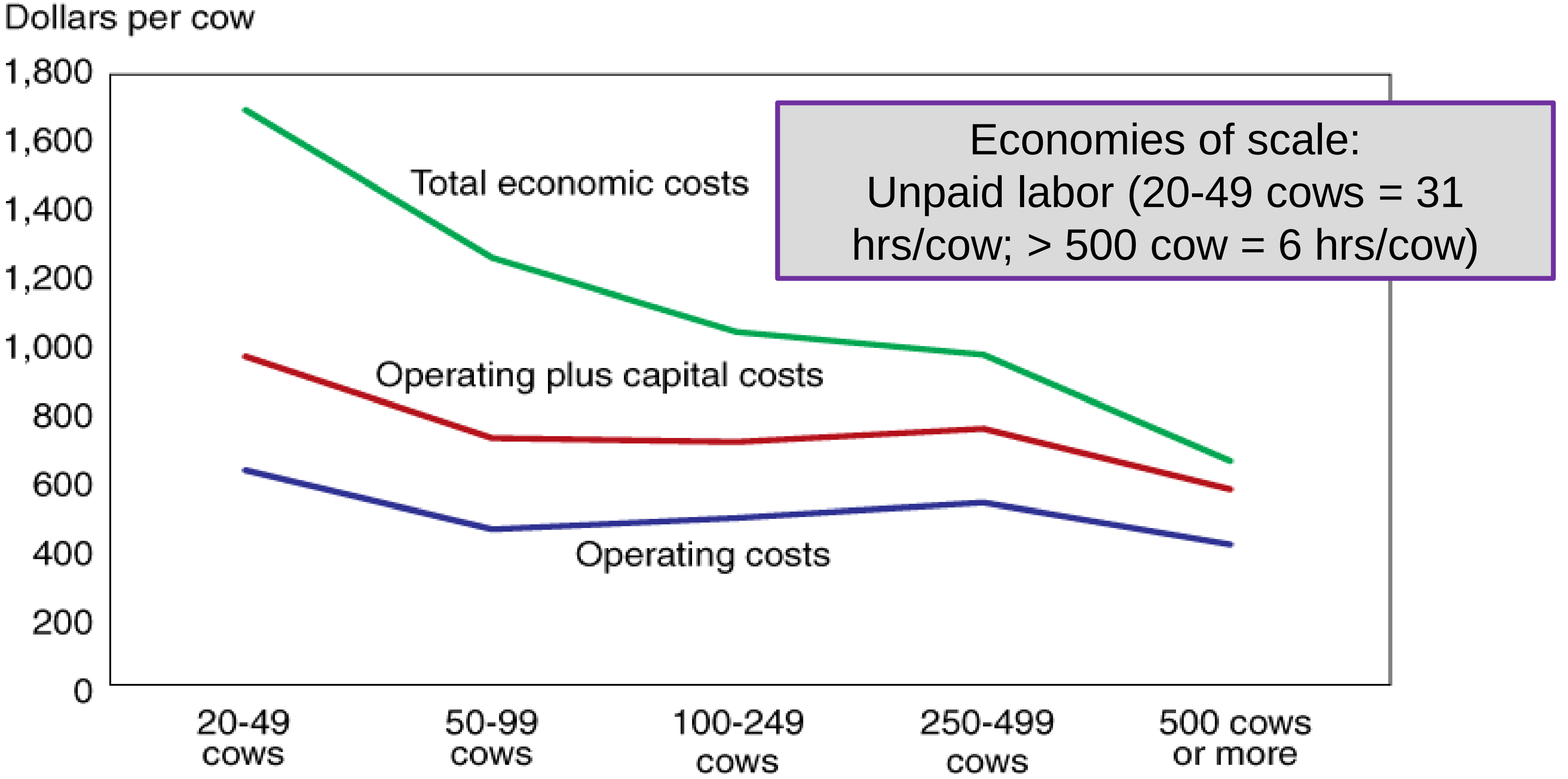
(March ’11 ERS Report: http://www.ers.usda.gov/publications/eib73/)

| | 20-49 cows | 50-99 cows | 100-249 cows | 250-499 cows | 500 or more cows |
|---|---|---|---|---|---|
| Percent of farms/beef cows | 41/13 | 32/21 | 21/31 | 5/15 | 2/20 |
| Beef cows—average per farm | 29 | 54 | 116 | 260 | 640 |
| | | | | | |
| Weaning weight (lbs) | 494 | 493 | 523 | 538 | 522 |
| Sold at weaning (%) | 63 | 62 | 51 | 49 | 39 |
| Backgrounded then sold (%) | 31 | 35 | 43 | 45 | 55 |
| Retained until slaughter (%) | 6 | 3 | 6 | 6 | 6 |
| | | | | | |
| Percent using public grazing land | 1 | 3 | 8 | 24 | 29 |
| | | | | | |
| Operator: | | | | | |
| | | | | | |
| Age (percent greater than age 65) | 38 | 40 | 32 | 30 | 22 |
| Completed college (percent) | 23 | 26 | 27 | 37 | 42 |
| Off-farm occupation (percent) | 47 | 37 | 21 | 18 | 10 |
| Exit within 5 years (percent) | 26 | 26 | 17 | 10 | 7 |

Figure 6

**Beef cow-calf cost of production per cow by size, 2008**

*Economies of size are apparent in beef cow-calf production, particularly for total economic costs.*




Notes: Production cost estimates for operations with less than 20 beef cows are not available because the ARMS sample is limited to operations with 20 or more beef cows. The number of cows refers to the peak number on the operation at any time during 2008.
Source: USDA, Economic Research Service using USDA's 2008 Agricultural Resource Management Survey (ARMS).

# Current U.S. Cow-Calf Industry

(March ’11 ERS Report: http://www.ers.usda.gov/publications/eib73/)

- Hog & Dairy operations (avg size) fell by 40% (doubled) between 1997 & 2007
  - Beef cow operations fell by only 15% and avg. size went from 38 to 43 head (13% increase)
  - Land constraint is different;
    - But is consolidation coming???
      - --- is it already under-way???

# Beef industry changes underway…

- Growth of stocker segment
  - Larger operations least likely to exit 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 ???

# Beef industry changes underway…

- KS feedlot closeout trends:
  - Increasing final weights, ADG, & Feeding costs
  - Decreasing DOF & Feed-to-Gain
    - Overall movement to more forage based gain = opportunity for cow-calf/stockers with associated comparative advantages…

# Beef industry changes underway…

- Sales value of cull cows is about = regardless of operation…
  - Those with higher costs, opportunities to row crop, etc. may increasingly exit
  - Expansion almost certainly will not come (in aggregate) from those with higher costs and notable alternative opportunities…

# Demand Side Issues & Trends

- Long run decline in domestic overall meat consumption
  - 2018 poultry consumption > (beef + pork)
    - Poultry grows every year from 2011-2020
- Global growth likely to exceed domestic
  - Heightens industry fragmentation issues such as animal ID/traceability, marketing arrangements, etc.
    - Non-price factors increasingly important for beef…
      - Prevalence of E-coli vs. irradiation acceptance
      - MCOOL, animal welfare, etc. will directly impact cow-calf…

# Policy/Regulation Issues & Trends

- GIPSA "fair market" proposed rules / "anti-competition" listening sessions …
  - No timetable on USDA's ben.-cost assessment…
- environmental regulation concerns
- animal welfare/mandatory labeling???

  - Is overall uncertainty holding back investment throughout supply chain???

# List of Volatility Factors

- Feed Costs (weather, farm policy, etc.)
- Shrinking herd; over-capacity in segments
- Domestic demand (relative prices, non-price factors)
- Export demand (exchange rates, politics)
- Policy uncertainty
- Interest rates (expansion capital)
- Industry fragmentation (bimodal dist'n???)

# What To Do?

- Does “on average higher returns are associated with higher risk” resonate w/ you?

- What is your comparative advantage?
  - Being in top 1/3 of cost structure is imperative…
  - Switch to stocker focus?; Increase herd?; Exit?

- Recognize (but don’t just complain) this “isn’t your father’s world” anymore…

# More information available at:
# AgManager (http://www.agmanager.info/)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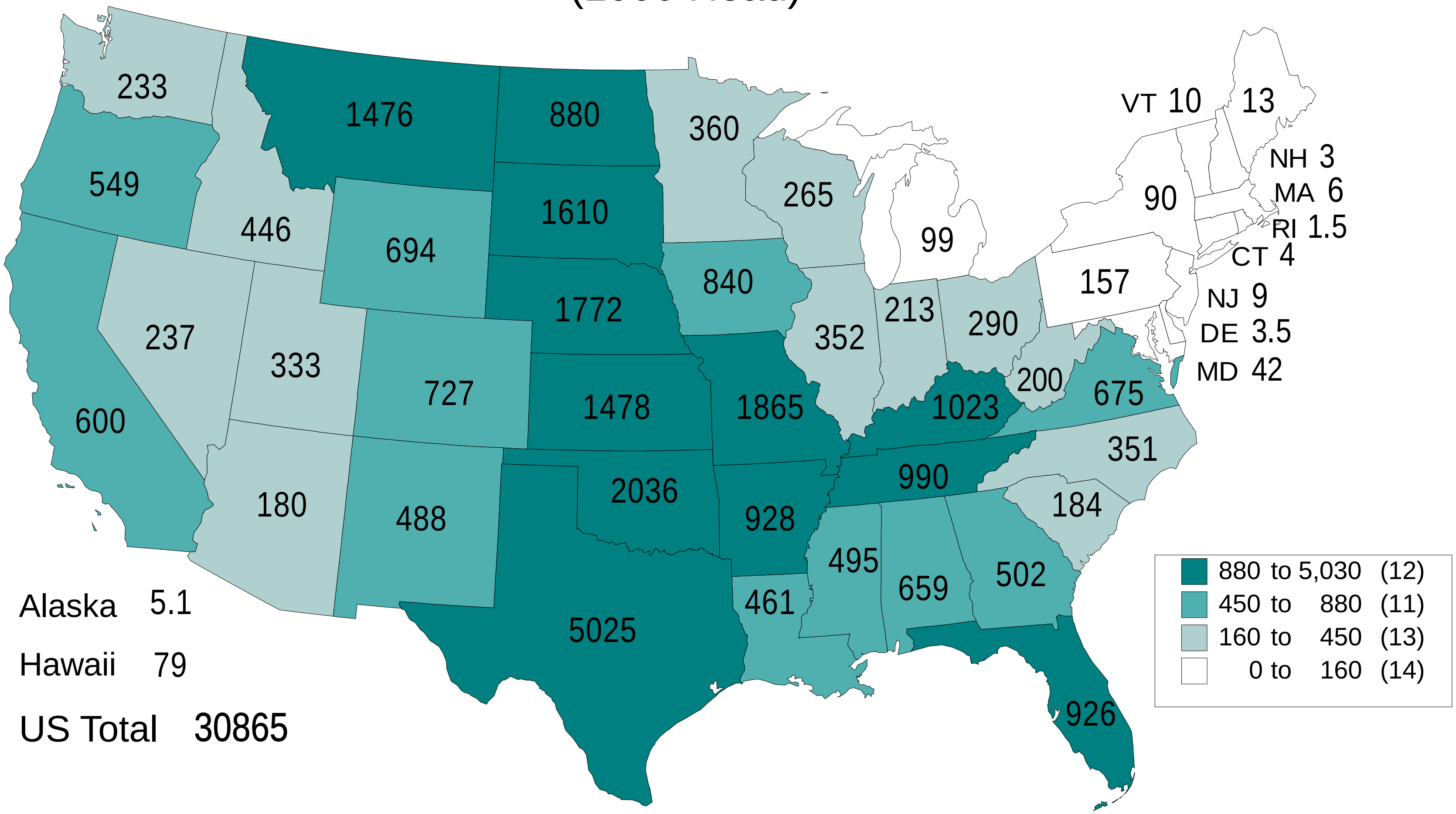
# BEEF COWS THAT HAVE CALVED
# JANUARY 1, 2011
(1000 Head)



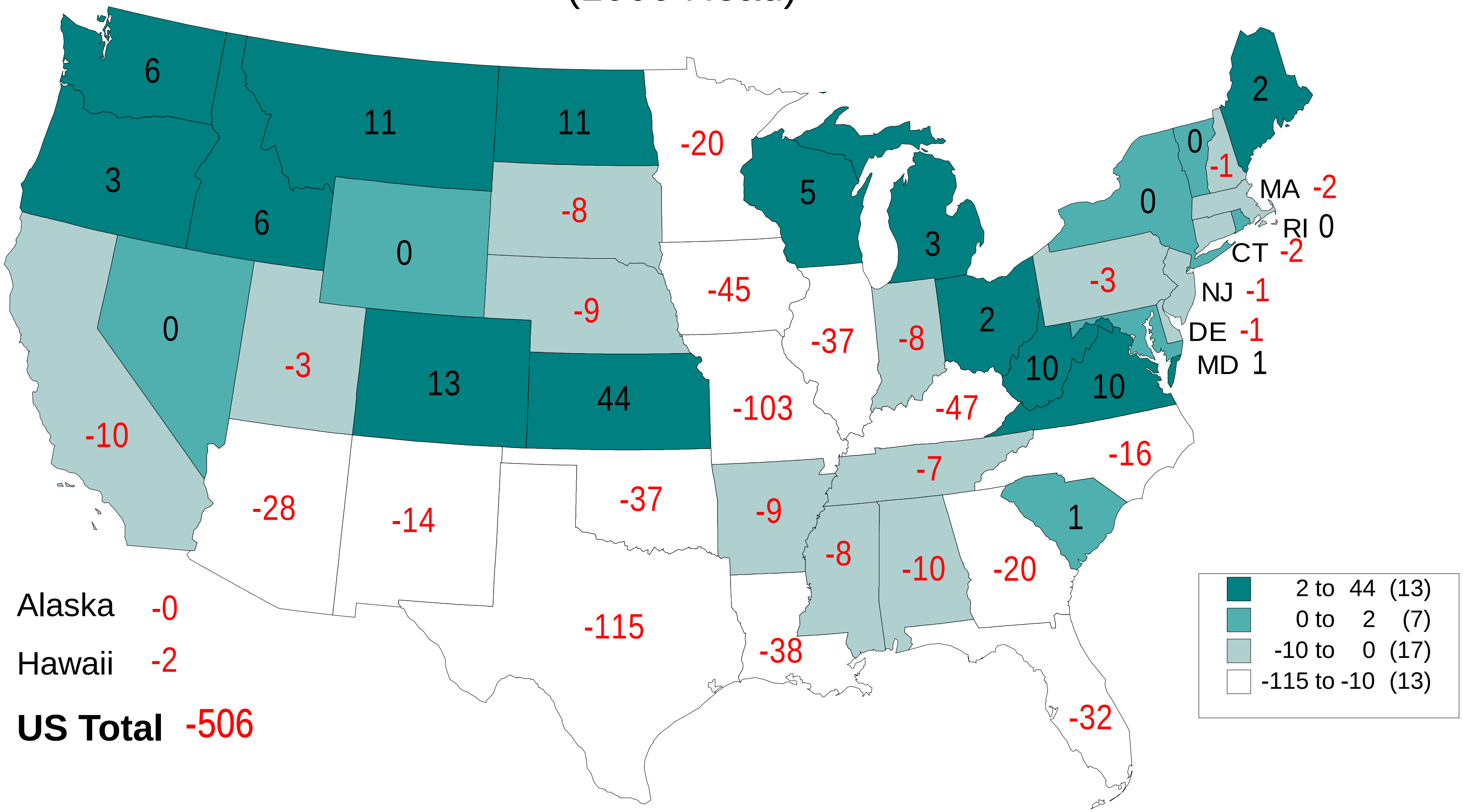

Livestock Marketing Information Center

Data Source: USDA/NASS

C-N-15
01/28/11

# CHANGE IN BEEF COW NUMBERS
# JANUARY 1, 2010 TO JANUARY 1, 2011

(1000 Head)




Alaska -0

Hawaii -2

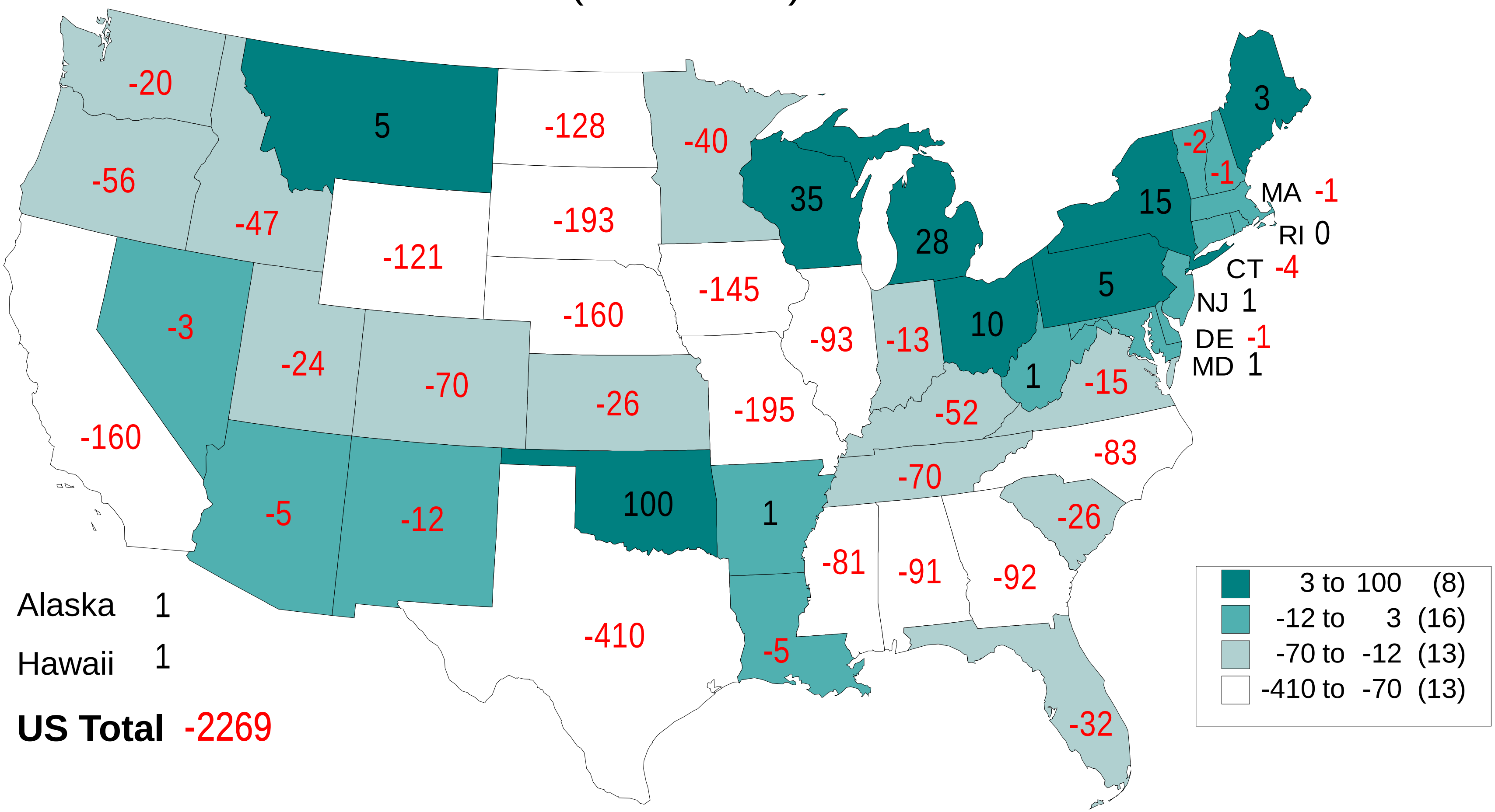
**US Total** -506

Livestock Marketing Information Center

Data Source: USDA/NASS

C-N-28
01/28/11

# CHANGE IN BEEF COW NUMBERS
# JANUARY 1, 2002 TO JANUARY 1, 2011
(1000 Head)

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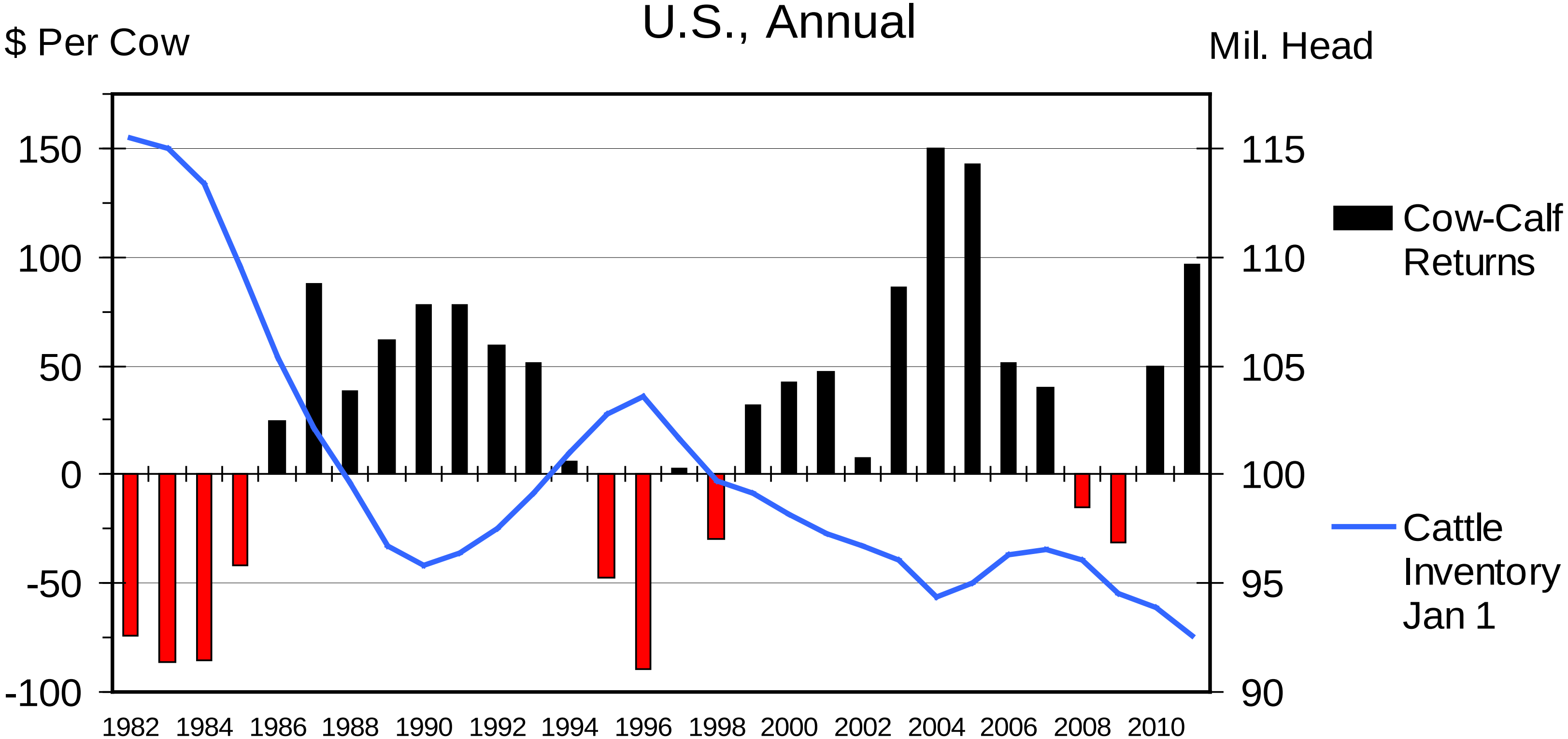
Data Source: USDA/NASS

C-N-29
01/28/11

# COW-CALF RETURNS AND CATTLE INVENTORY

U.S., Annual




C-P-67
07/26/11

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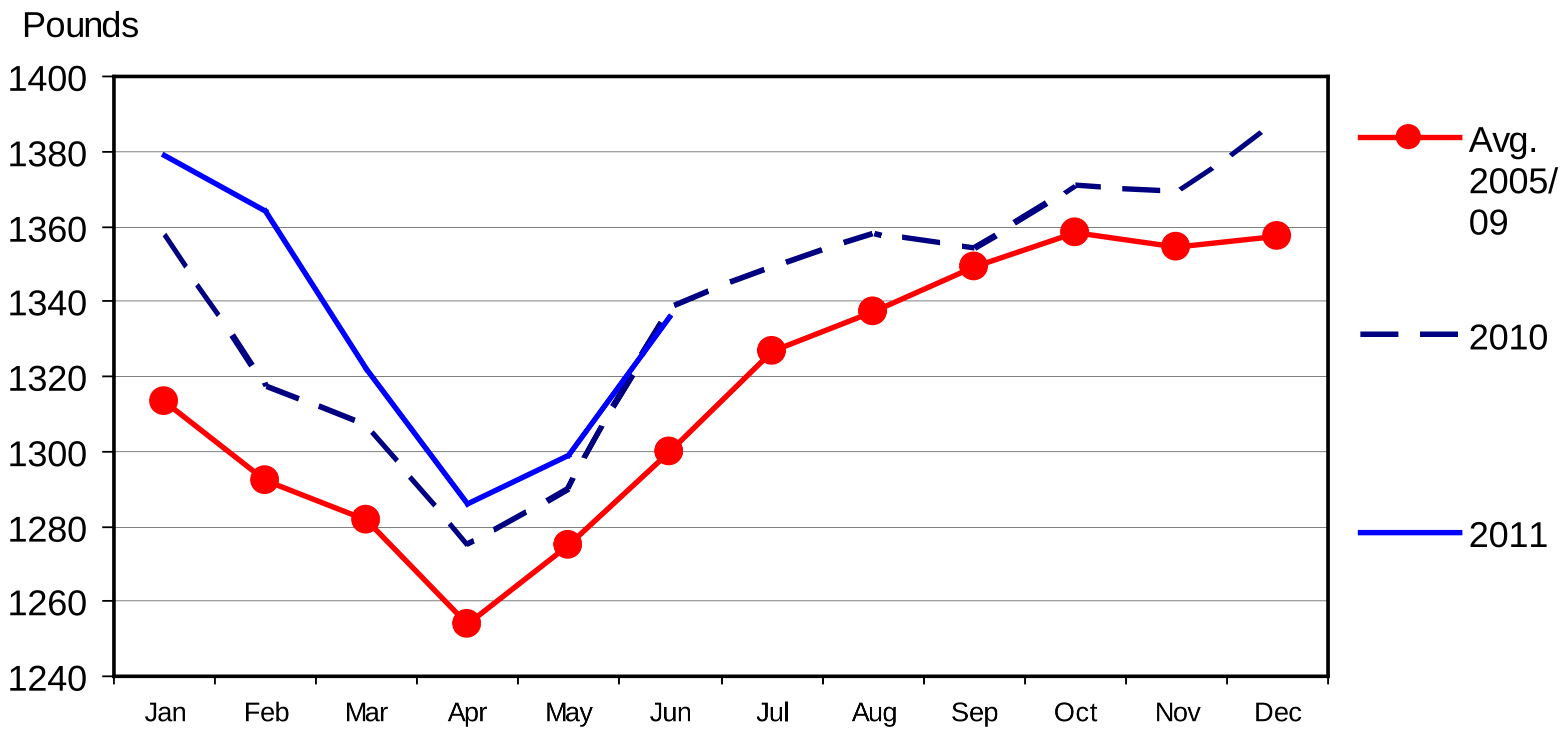
Data Source: USDA-AMS & USDA-NASS, Compiled & Analysis by LMIC

# KANSAS FEEDLOT CLOSEOUTS

Final Weight, Steers

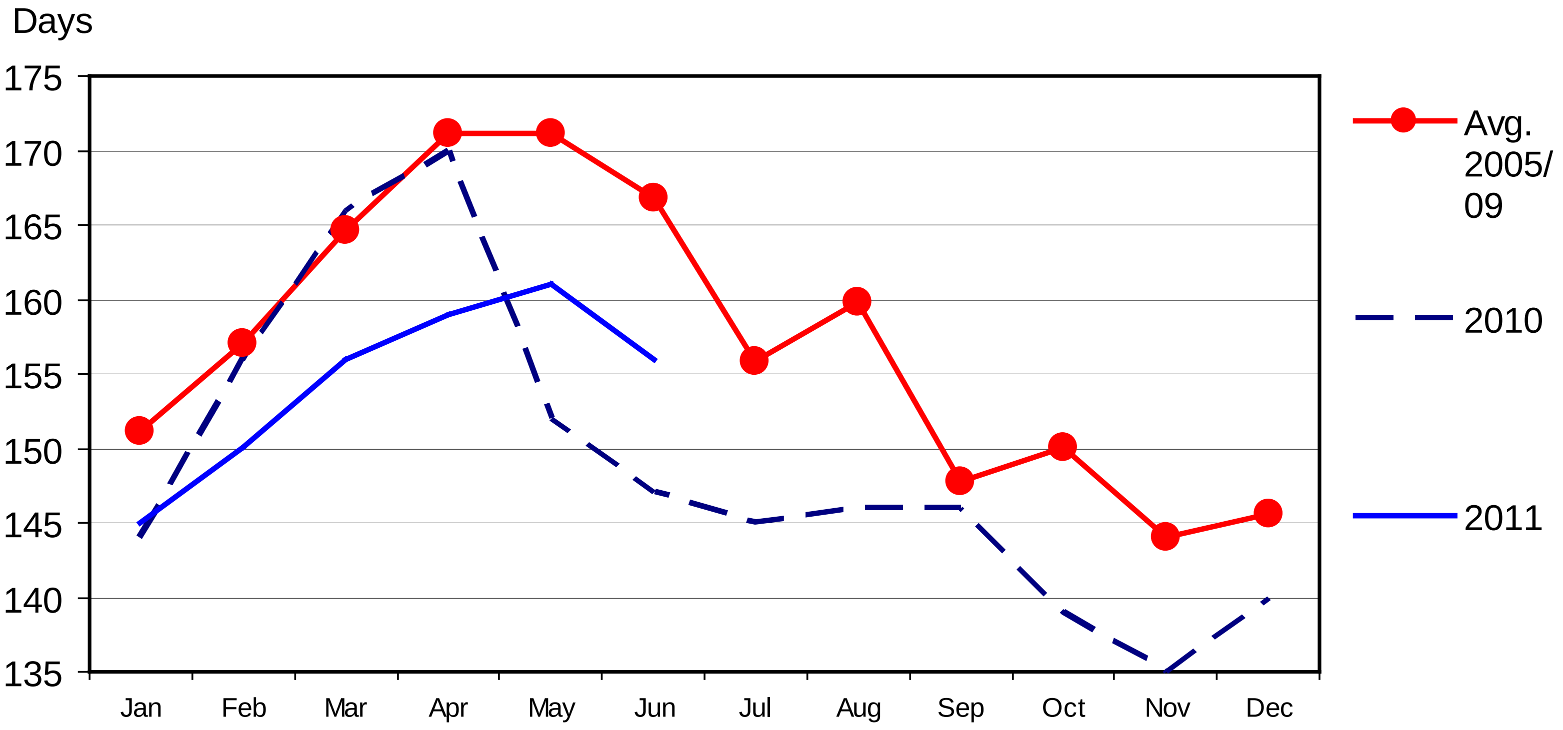



08/01/11

Data Source: KSU Focus on Feedlots, Compiled by LMIC

# KANSAS FEEDLOT CLOSEOUTS

Avg. Days on Feed, Steers

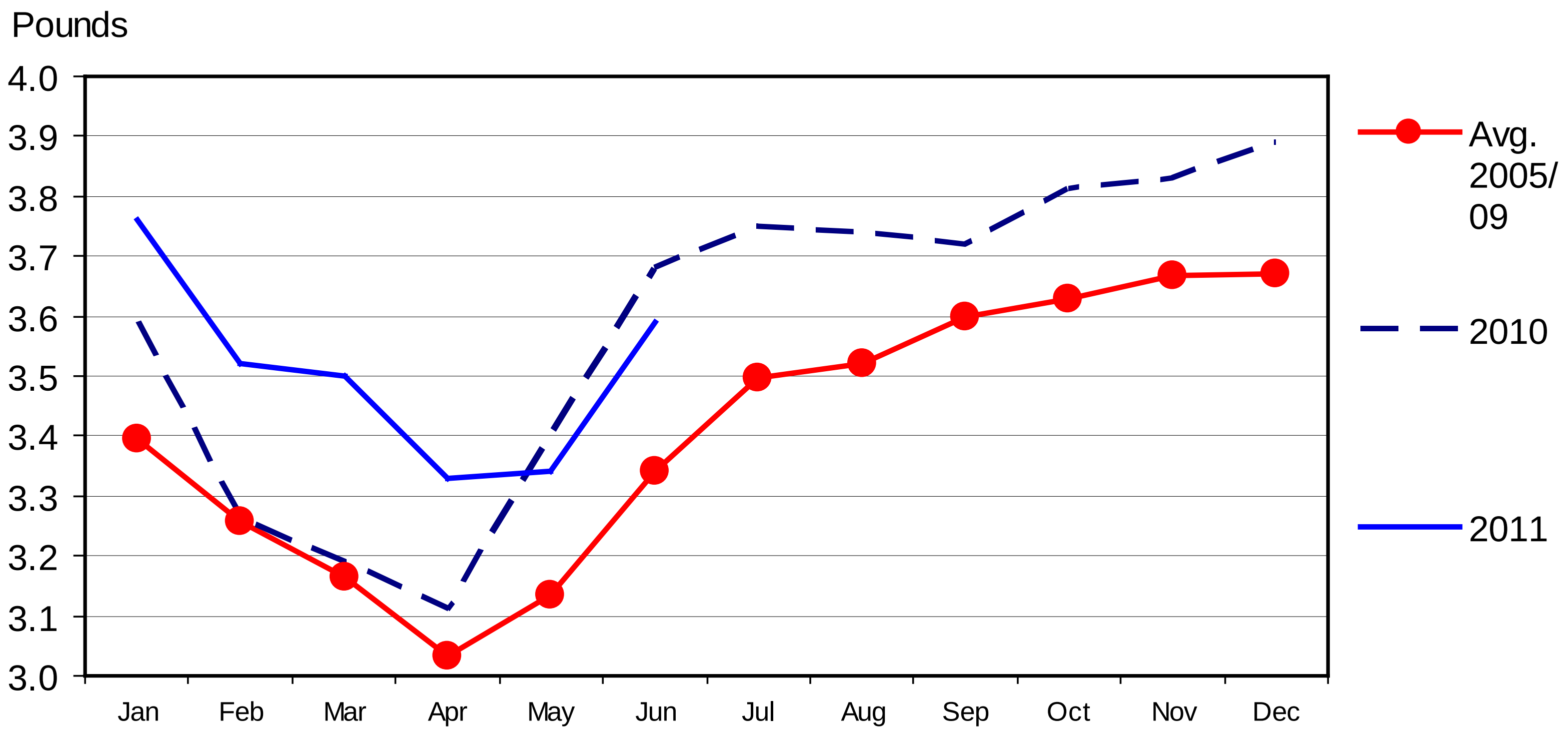



08/01/11

Data Source: KSU Focus on Feedlots, Compiled by LMIC

# KANSAS FEEDLOT CLOSEOUTS

Avg. Daily Gain, Steers

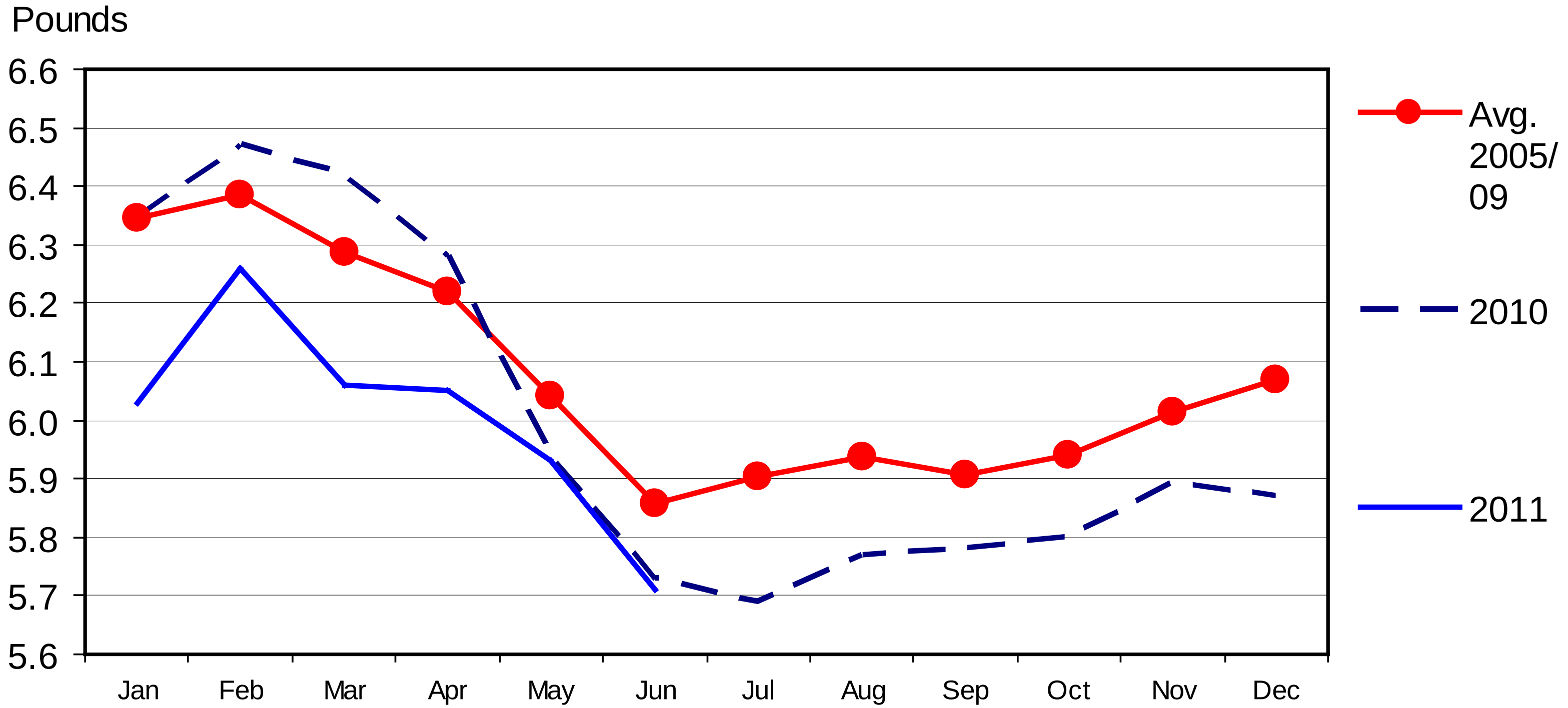



08/01/11

Data Source: KSU Focus on Feedlots, Compiled by LMIC

# KANSAS FEEDLOT CLOSEOUTS

Pounds of Feed (Dry Basis)
Per Pound of Gain, Steers




Data Source: KSU Focus on Feedlots, Compiled by LMIC

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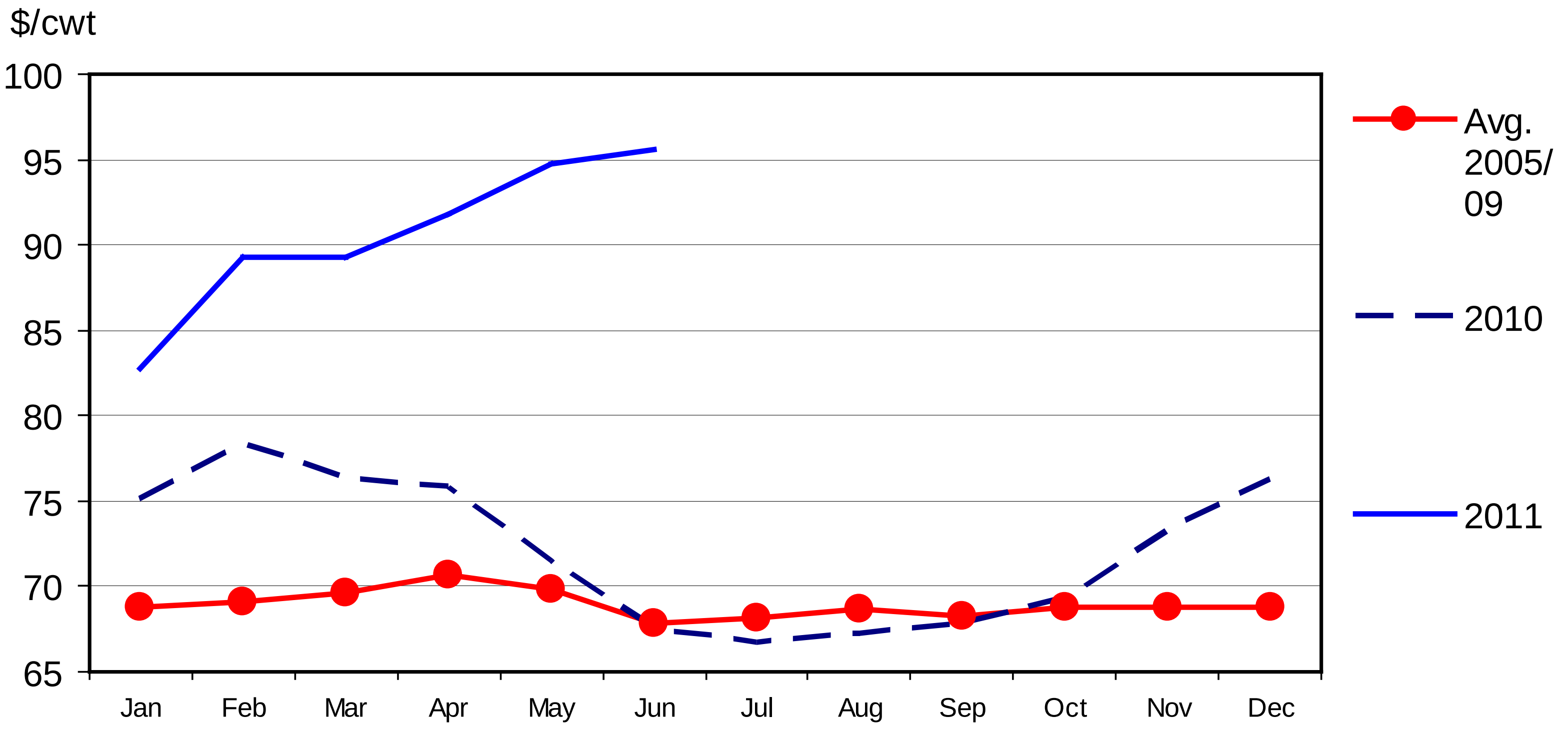
# KANSAS FEEDLOT CLOSEOUTS

Feeding Costs per Cwt, Steers

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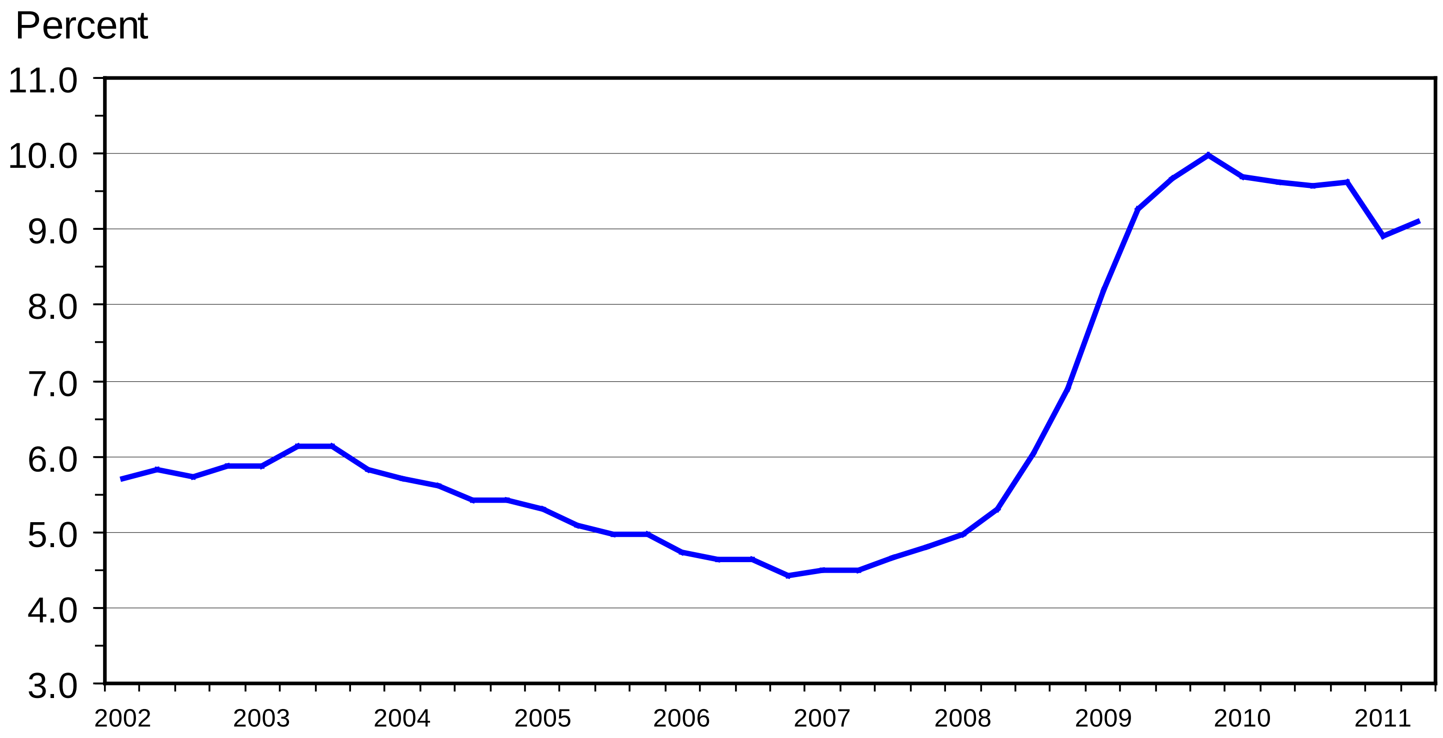
Data Source: KSU Focus on Feedlots, Compiled by LMIC

# U.S. UNEMPLOYMENT RATE

Seasonally Adjusted, Quarterly

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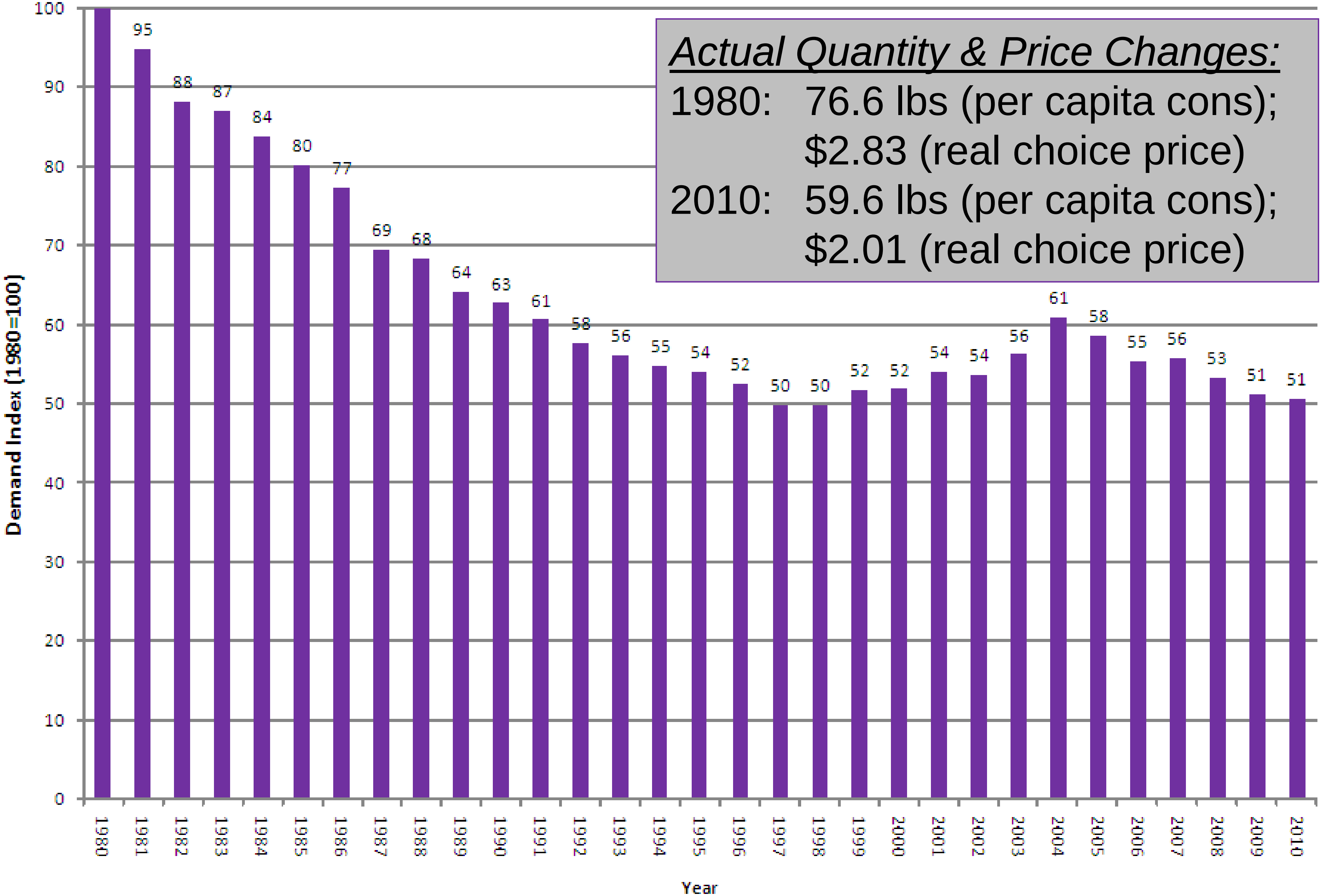
Data Source: Bureau of Labor Statistics, Compiled & Analysis by LMIC

## Annual, Choice Beef Demand Index (1980=100)

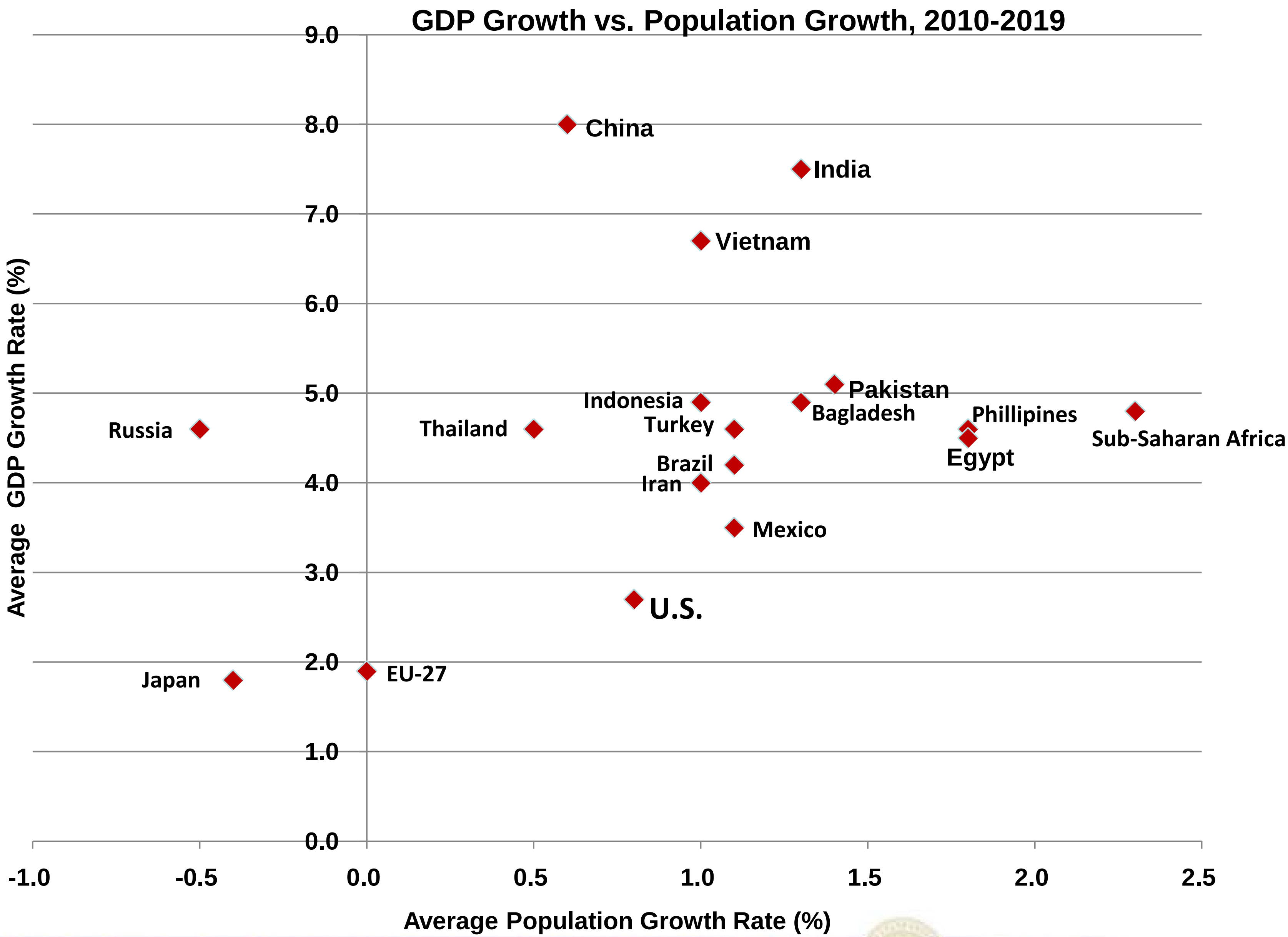



*__Actual Quantity & Price Changes:__*

1980: 76.6 lbs (per capita cons);
$2.83 (real choice price)

2010: 59.6 lbs (per capita cons);
$2.01 (real choice price)

**Source: Glynn T. Tonsor, Kansas State University, Jan. 2011**



GDP Growth vs. Population Growth, 2010-2019
9.0
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
-1.0
-0.5
0.0
0.5
1.0
1.5
2.0
2.5
Average GDP Growth Rate (%)
Average Population Growth Rate (%)
China
India
Vietnam
Pakistan
Indonesia
Bagladesh
Phillipines
Russia
Thailand
Turkey
Sub-Saharan Africa
Egypt
Brazil
Iran
Mexico
U.S.
Japan
EU-27