Cattle Outlook

James Mintert
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Agriculture & Natural Resources
Purdue University
A Picture of A Healthy Industry

U.S. Cattle Inventory
January 1, 1925-1975

Source: USDA
A Shrinking Industry
Responding to a Long-Run Lack of Profitability

U.S. Cattle Inventory
January 1, 1975-2009

Current inventory is about 28% smaller than in 1975

Source: USDA
Index Tracks Demand Changes

But it does not address why demand shifts occurred.

Source: USDA, Dept. of Commerce & James Mintert, K-State Dept. of Ag. Economics
Price Deflated By CPI, 1980 = 100 for Choice Domestic Beef Demand Index
Beef Demand Study

“Beef Demand Drivers & Enhancement Opportunities”

by

Glynn Tonsor, James Mintert & Ted Schroeder
Consumer Incomes Improving But Expenditures Remain Weak

Personal Disposable Income vs. Personal Consumption Expenditures
Quarterly at Annual Rate, Seasonally Adjusted, 1982-2009

Source: Bureau of Economic Analysis
Consumers Pushing Savings Rate Up Which Is Holding Down Beef Demand

Personal Savings
% of Disposable Personal Income
Quarterly, 1982-2009

Source: Bureau of Economic Analysis
Consumers Pulling Back on Food Purchases

Percentage Change in Personal Consumption Expenditures for Food, Annualized Rate, Seasonally Adjusted, 1990-2009


Percentage Change: -3, -2, -1, 0, 1, 2, 3

Graph showing the percentage change in personal consumption expenditures for food from 1990 to 2008.
Beef demand & the U.S. Economy

Historically, beef demand benefited from

- Growth in U.S. economy & low savings rate

But in ‘09 & ‘10 problem areas are

- Weak incomes
- Rising savings rate, which will reduce expenditures

Near-term, weak consumer expenditures expected to hold back beef demand
IMPACT OF SHIFTING COST STRUCTURE
Cow-Calf Production Costs Rising Rapidly

Cow-Calf Total Production Costs in Kansas

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Source: Kansas State Farm Management Association & K-State Farm Management Guides

30% increase since 2005
Feed Helped Drive Production Costs Up

Cow-Calf Feed Costs Per Cow in Kansas

Source: Kansas State Farm Management Association & K-State Farm Management Guides
Rising Breakevens Putting Pressure On Cow-Calf Sector

Estimated ‘09 Breakevens Up 39% Compared to ‘06

Breakeven Calf Prices

Required to Cover Estimated Total Production Costs in Kansas

Year

Source: Kansas State Farm Management Association & K-State Farm Management Guides
But Calf Prices Were Falling As Costs Rose

Source: AMS-USDA, Dodge City, KS

KSU Dept. of Ag.Econ.
www.agmanager.info
Returns Declined Rapidly
Returns Dipped Into The Red During ‘08 & Will Be Negative in ‘09

Cow-Calf Returns Above Variable Costs in Kansas

Returns in ‘08 Dropped Nearly $250/Head Below ’04’s & ’05’s

Source: Kansas Farm Management Association
Returns Above Variable Costs

KSU Dept. of Ag Econ
www.agmanager.info
Total Cow Slaughter Up 3 Straight Years

Cow slaughter increased 12% in ’06, 6% in ’07 & 9% in ’08

1st Half ’09 Total female slaughter up 2% vs. 2008
But the increase is coming from the Dairy sector

Source: USDA
www.agmanager.info
Beef Cow Inventory Declining

U.S. Beef Cow Inventory
1995-2009

January 1, 2009 inventory down 2% vs. 2008
July 1, 2009 inventory down 1.4% vs. 2008

Source: USDA & James Mintert, K-State Ag. Economics
KSU Dept. of Ag Econ
www.agmanager.info
Slaughter Declines Expected in ’09 & ‘10

Annual U.S. Commercial Cattle Slaughter

Year

Million Head

31 32 33 34 35 36 37 38

Source: USDA, LMIC Forecasts for 2009 & 2010
But Cattle Are Coming Out At Heavier Weights

Commercial Cattle Carcass Weights

Annual Average

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Trend

Source: USDA & James Mintert, K-State Ag. Economics, 2009 Forecast

K-State Dept. of Ag Econ
www.agmanager.info
Beef Production Still Expected to Decline Even With Heavier Weights

Source: USDA, LMIC Forecasts for 2009 & 2010
Beef Exports Were Still Growing in Early ‘09 But Are Expected to Weaken During ’09’s 2nd Half

Annual U.S. Beef Exports

Exports in ‘08 were up 32% vs. 2007 & remained above a year ago thru April, but fell 4% below ‘08 during May

Source: USDA, 2009 & 2010 LMIC Forecasts
Smaller Domestic Beef Supplies Lie Ahead Especially in 2010 & Beyond

Annual U.S. Retail Beef Consumption Per Capita

Year

Source: LMIC, Forecasts for 2009 & 2010
Total Meat Supplies Will Be Very Tight By 2010

Annual U.S. Red Meat & Poultry Consumption
Per Capita

Year

Source: LMIC, forecasts for 2009 & 2010
Futures Expect A Fall Recovery

Kansas Slaughter Steer Price Forecasts
Mid-Month Futures Based Price Forecasts

Futures Imply an $85-$86 Average in '09

Source: USDA-AMS & CME
Based on 07.27.09 CME Live Cattle settlement prices
Weak Demand Is Still a Problem in ‘09
When Demand Recovers, Tight Supplies Will Push Prices Up

Kansas Slaughter Steers
Annual Average Prices

Year
85 87 89 91 93 95 97 99 01 03 05 07 09

Source: USDA-AMS, 2009 & 2010 Forecast
Record Losses for Cattle Feeders

Losses Averaged $120/Hd in ‘08 & $110/hd. In ‘09

Monthly Iowa Yearling Finishing Steer Returns

$’s Per Head

Source: Iowa State University
Lower Fed Cattle Prices Will Hold Down Feeder Prices But Look For Modest Recovery in 2010

Source: AMS-USDA, Dodge City, KS, 2009 & 2010 Forecast
Look for Calf Price Recovery to Begin in 2010
But Prices Will Still Be Below Breakevens

Dodge City, KS 500-600 Lb. Steer Prices

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Source: AMS-USDA, Dodge City, KS, 2009 & 2010 Forecast
Looking Forward

- Weak U.S. economy will hold back beef demand
  - Rising savings rates will have a long lasting impact
- Tight supplies could set the stage for very strong price rebound, once demand improves
- Domestic beef demand still suffering from long-term decline…late ‘90’s through ‘04 starting to look it was just a “blip” in the long-term decline
NEW RISK MANAGEMENT AID
The Cattle Basis Risk Analysis Tools at BeefBasis.com give producers the information and analytics they need to improve marketing decisions influenced by cattle basis risk. This site is completely free of charge to producers.

Basis, defined simply as the difference between the local cash markets and futures contract prices, can be complex and can vary dramatically between weight classes and market locations from year to year. Understanding the risk related to basis uncertainty, or “basis risk,” is essential to making effective use of price risk management tools such as Chicago Mercantile Exchange (CME) futures and options and forward contracts.

The BeefBasis website was developed by Custom Ag Solutions, Inc. (CAS) and Kansas State University (K-State) in partnership with the USDA’s Risk Management Agency (RMA).

BeefBasis gives you relevant information and analytics you need to evaluate marketing decisions and manage your price risk.

BeefBasis In the News!

- BeefBasis is featured in the December issue of BEEF magazine Read
# Feeder Cattle Basis Forecast

**State:** Florida  
**Sex:** Steer  
**Weight:** 410 lbs/head  
**Location:** Ocala  
**Frame:** Lg & Med/Lg  
**Head:** 1  
**Grade:** 1–2  
**Expected Sale Date:** 8/17/2009

**Reference Contract: Aug 2009**  
**Transaction Date:** Mar 09, 2009

**Feeder Cattle Futures Price:** $96.27 /cwt

**Live Cattle Futures Price:** $89.35 /cwt

**Corn Futures Price:** $3.84 /bu

**Reference Contract: Sep 2009**  
**Transaction Date:** Mar 09, 2009

Click **RUN**
## Feeder Cattle Basis Forecast

### State: Florida  
### Location: Ocala

#### Sex: Steer  
#### Frame: Lg & Med/Lg  
#### Grade: 1-2

<table>
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<th>Weight: 410 lbs/head</th>
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<tr>
<td>Feeder Cattle Futures Price: 96.27 $/cwt</td>
<td>Live Cattle Futures Price: 89.35 $/cwt</td>
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**Reference Contract:** Aug 2009  
**Transaction Date:** Mar 09, 2009

**Reference Contract:** Feb 2010  
**Transaction Date:** Mar 09, 2009

**Reference Contract:** Sep 2009  
**Transaction Date:** Mar 09, 2009

### Model-estimated feeder cattle basis values

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<tr>
<th>Description</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model-estimated feeder cattle basis, $/cwt</td>
<td>9.49</td>
</tr>
<tr>
<td>Confidence interval for basis, $/cwt</td>
<td>3.29 to 15.68</td>
</tr>
<tr>
<td>Expected cash price, $/cwt</td>
<td>105.76</td>
</tr>
<tr>
<td>Confidence interval for expected cash price, $/cwt</td>
<td>99.56 to 111.95</td>
</tr>
<tr>
<td>Optimal hedge ratio</td>
<td>0.8199</td>
</tr>
<tr>
<td>Number of calves hedged per contract</td>
<td>149</td>
</tr>
</tbody>
</table>

### Expected Sale Date: 8/17/2009