Where’s The Beef???
Ruminating On The Cattle Cycle

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2012 Animal Nutrition Conference

Bozeman, MT
April 17, 2012
1. History
2. Current Situation
3. Hypotheses
4. Research Strategy
5. Comments
OUTLINE

1. History
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U.S. Cattle Inventory (January 1)

Source: Livestock Marketing Information Center & MSU Agricultural Marketing Policy Center
Nominal Fed And Feeder Cattle Prices

Nebraska Direct 1100-1300 lb Choice Steers
Montana 500-600 lb Steers

Source: Livestock Marketing Information Center & MSU Agricultural Marketing Policy Center
Real Fed And Feeder Cattle Prices

Nebraska Direct 1100-1300 lb Choice Steers
Montana 500-600 lb Steers

$/cwt

Source: Livestock Marketing Information Center (2011=100)
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2012 January 1 Inventory equals 90.77 million head
(decline from 2011 inventory of 92.68 million head)
(2011 calf crop is lowest since 1950)

Source: Livestock Marketing Information Center & MSU Agricultural Marketing Policy Center
Productivity of U.S. Beef Cow Breeding Herd

Carcass Weight Pounds Per Beef Cow, Annual

Lbs

Source: Livestock Marketing Information Center & MSU Agricultural Marketing Policy Center
U.S. Demand for Beef

Choice Retail Beef Demand Index (1980=100)

Source: Glynn Tonsor, Kansas State University
Demand for Fed Cattle


Price ($/cwt) vs. Beef Supply (billion lbs)
U.S. Beef, Veal and Live Animal Imports

Annual, Billion Lbs, Carcass Weight Basis

Source: Livestock Marketing Information Center & MSU Agricultural Marketing Policy Center
U.S. Beef, Veal and Live Animal Exports

Annual, Billion Lbs, Carcass Weight Basis

Billion Lbs

Source: Livestock Marketing Information Center & MSU Agricultural Marketing Policy Center

*CUS TA  **NAFTA

Total
### Value of U.S. Beef, Veal and Live Animal, By-Product Net Imports/Exports

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
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<tbody>
<tr>
<td>1982</td>
<td>2,000</td>
</tr>
<tr>
<td>1985</td>
<td>1,000</td>
</tr>
<tr>
<td>1988*</td>
<td>-1,000</td>
</tr>
<tr>
<td>1991</td>
<td>0</td>
</tr>
<tr>
<td>1994**</td>
<td>2,000</td>
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<tr>
<td>1997</td>
<td>3,000</td>
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<td>2000</td>
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<td>2003</td>
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<tr>
<td>2006</td>
<td>0</td>
</tr>
<tr>
<td>2009</td>
<td>3,000</td>
</tr>
</tbody>
</table>

*Source: Livestock Marketing Information Center & MSU Agricultural Marketing Policy Center

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World Beef Production

Million Metric Tons

Source: Foreign Agricultural Service
World Cattle Inventory and Beef Production

Source: Foreign Agricultural Service
India, Brazil, China Cattle Inventories

Source: Foreign Agricultural Service
U.S., Argentina, Australia, EU-27, Canada Inventories

Million Head

100
90
80
70
60
50
40
30
20
10
0


Source: Foreign Agricultural Service
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Weather Related

1. Over the past 15 years, drought has occurred in the
   a. West
   b. Southeast
   c. Southern Plains

2. Recent high hay prices
Structure of Cattle Production

1. Hog cycles no longer exist
   a. Vertically coordinated production processes reduces entry and exit

2. Have alliances, vertical coordination, contracting caused the same result in the cattle industry?
1. Labor has become more expensive for all of production agriculture (and elsewhere)

2. Technological change has allowed crop producers to substitute capital for labor
   a. Wider
   b. GPS
   c. Contract hire

3. Technological change has not helped cattle producers to the same extent
Crop Insurance

1. Livestock have been used to reduce risk through income diversification

2. Widely available and heavily subsidized crop insurance provides a less expensive way to do the same
   a. Much less labor intensive
   b. Age profiles
Grazing Limitations

1. Reductions in public grazing access?

2. Reductions in private grazing access?

3. Larger cows need more grass
1. History
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Research Strategy

1. Consider changes in herd sizes
2. Evaluate changes by state
3. Incorporate purchases of crop insurance
4. Consider labor costs
5. Range conditions over time
6. Public grazing AUMs