12. Tackling Big Issues in the U.S. Cattle Industry: An Interactive ‘Clicker Session’

Glynn Tonsor      <gtonsor@k-state.edu>

Glynn T. Tonsor joined the Dept. of Agricultural Economics at Kansas State University in March 2010 as an Assistant Professor. He obtained his Ph.D. from KSU in 2006 and was an Assistant Professor in the Dept. of Agricultural, Food, and Resource Economics at Michigan State University from May 2006 to March 2010. Glynn’s current efforts are primarily devoted to a range of integrated research and extension activities with particular focus on the cattle/beef and swine/pork industries. He has broad interests and experiences which span issues throughout the meat supply chain. Through both applied research and first-hand knowledge with livestock production, Glynn has expertise in topics including animal identification and traceability, animal welfare and handling, food safety, and price risk management and analysis.

Abstract/Summary

This session will facilitate an open exchange of thoughts and visions on issues facing the U.S. cattle industry. Interaction will be coordinated by attendees using clickers (audience response devices) to indicate their insights into issues including beef demand strength, impact of animal welfare discussions, prospects for domestic herd expansion, etc. The audience's view will be compared with Dr. Tonsor's in an "on the fly" fashion providing a unique opportunity for interested attendees.
Tackling Big Issues in the U.S. Beef-Cattle Industry: An Interactive ‘Clicker’ Session

Glynn Tonsor,
Kansas State University

How many football games will K-State win this coming football season?

1. Less than 4
2. 4 or 5
3. 6 or 7
4. 8 or 9
5. 10 or 11
6. 12

What best describes the U.S. beef-cattle industry segment you are most involved in?

1. Cow-calf operator
2. Stocker/backgrounder
3. Feedlot
4. Processor
5. Input Supplier
6. Ag Lender
7. Other

How many football games will Kansas win this coming football season?

1. Less than 4
2. 4 or 5
3. 6 or 7
4. 8 or 9
5. 10 or 11
6. 12

What best describes your sentiment regarding the long run economic prospects of the U.S. beef-cattle industry?

1. I’m optimistic
2. I’m neutral
3. I’m pessimistic
4. I have no clear sentiment

In 2022, how many beef cows will there be in the national U.S. herd?

1. Less than 20 million
2. 21-25 million
3. 26-30 million
4. 31-35 million
5. 36-40 million
6. Over 40 million
Longer-term projections (as of Feb. 2013)
2021 Projection 1.1 million less than Feb. 12

What factor do you think most restricts current investment in the U.S. beef-cattle industry?

1. Input price volatility
2. Output price volatility
3. Regulatory uncertainty
4. Tax policy uncertainty
5. Global growth uncertainty
6. Other

What do you think most influences profitability for cow-calf operations?

1. Revenue received
2. Production costs
3. Other

How much “excess capacity” currently exists in the U.S. feedlot industry?

1. None
2. 1-10%
3. 11-20%
4. 21-30%
5. Over 30%
6. I have no clue

Do you think “southern” feedyards are more likely to close or have lower utilization going forward?

1. Yes
2. No
3. I have no clue

Table 1. Beef Cow-calf Enterprise Returns over Total Costs, 2008-2012 (minimum of three years)*

<table>
<thead>
<tr>
<th>Profit Category</th>
<th>All Farms</th>
<th>High 1/3</th>
<th>Mid 1/3</th>
<th>Low 1/3</th>
<th>Difference between High 1/3 and Low 1/3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Farms</td>
<td>99</td>
<td>33</td>
<td>32</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>Labor allocated to livestock, %</td>
<td>36.3</td>
<td>40.5</td>
<td>37.7</td>
<td>30.6</td>
<td></td>
</tr>
<tr>
<td>Cost of Cows in Herd</td>
<td>137</td>
<td>172</td>
<td>152</td>
<td>87</td>
<td>85%</td>
</tr>
<tr>
<td>Number of Calves Sold</td>
<td>125</td>
<td>186</td>
<td>130</td>
<td>79</td>
<td>79%</td>
</tr>
<tr>
<td>Calves Sold per Cow in Herd</td>
<td>0.900</td>
<td>0.904</td>
<td>0.904</td>
<td>0.900</td>
<td>0.00%</td>
</tr>
<tr>
<td>Weight of Calves Sold</td>
<td>586</td>
<td>600</td>
<td>579</td>
<td>579</td>
<td>22%</td>
</tr>
<tr>
<td>Past Sales Price / Unit</td>
<td>$126.99</td>
<td>$127.79</td>
<td>$127.49</td>
<td>$127.91</td>
<td>$0.42%</td>
</tr>
<tr>
<td>Gross Income</td>
<td>$655.43</td>
<td>$671.50</td>
<td>$553.11</td>
<td>$592.60</td>
<td>$58.03%</td>
</tr>
<tr>
<td>Feed</td>
<td>$195.36</td>
<td>$144.51</td>
<td>$396.91</td>
<td>$433.67</td>
<td>-$58.16%</td>
</tr>
<tr>
<td>Interest</td>
<td>$229.74</td>
<td>$211.52</td>
<td>$202.70</td>
<td>$244.60</td>
<td>$23.93%</td>
</tr>
<tr>
<td>Vet Medicine / Drugs</td>
<td>$20.96</td>
<td>$18.27</td>
<td>$23.53</td>
<td>$21.68</td>
<td>$2.79%</td>
</tr>
<tr>
<td>Livestock Marketing / Breeding</td>
<td>$16.81</td>
<td>$13.41</td>
<td>$12.28</td>
<td>$17.75</td>
<td>-$4.48%</td>
</tr>
<tr>
<td>Depreciation</td>
<td>$42.15</td>
<td>$24.55</td>
<td>$42.44</td>
<td>$59.44</td>
<td>$16.70%</td>
</tr>
<tr>
<td>Machinery</td>
<td>$8.39</td>
<td>$7.48</td>
<td>$9.68</td>
<td>$14.19</td>
<td>-$5.51%</td>
</tr>
<tr>
<td>Labour</td>
<td>$345.09</td>
<td>$305.83</td>
<td>$451.34</td>
<td>$201.07</td>
<td>-$93.30%</td>
</tr>
<tr>
<td>Others</td>
<td>$36.14</td>
<td>$27.92</td>
<td>$36.31</td>
<td>$53.17</td>
<td>-$25.25%</td>
</tr>
<tr>
<td>Net Return to Management</td>
<td>$427.72</td>
<td>$296.60</td>
<td>$386.00</td>
<td>$242.30</td>
<td>$541.45%</td>
</tr>
<tr>
<td>Total Cost</td>
<td>$553.15</td>
<td>$579.34</td>
<td>$681.10</td>
<td>$519.95</td>
<td>$103.09%</td>
</tr>
</tbody>
</table>

Available at: http://www.agmanager.info/livestock/budgets/production/default.asp#Beef Cattle
Regionally varied feedlot excess capacity resolution?

- Are “southern” yards more likely to close or have lower utilization?
  - Less DGS availability?
  - Less aligned with “attempted” U.S. heifer expansion?
  - More reliant on Mexican feeder supplies?
  - Older facilities?

In 2012, how many feeders were available for feedlot placement for each animal already on feed?

1. 1.43
2. 2.43
3. 3.43
4. 4.43
5. I have no clue

Feeder Cattle Supply Overview

<table>
<thead>
<tr>
<th>Cows &amp; Heifers that have Calved</th>
<th>1970s</th>
<th>1980s</th>
<th>1990s</th>
<th>2000s</th>
<th>2010s</th>
<th>2012</th>
<th>2012 vs 1973</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000 Head</td>
<td>32,431</td>
<td>26,951</td>
<td>41,397</td>
<td>41,522</td>
<td>30,868</td>
<td>32,553</td>
<td>-13,966</td>
</tr>
<tr>
<td>Calf Crop</td>
<td>47,208</td>
<td>42,068</td>
<td>35,226</td>
<td>37,298</td>
<td>35,096</td>
<td>41,194</td>
<td>-14,915</td>
</tr>
<tr>
<td>1000 Head</td>
<td>52,106</td>
<td>48,824</td>
<td>60,610</td>
<td>60,121</td>
<td>42,444</td>
<td>51,538</td>
<td>-25,770</td>
</tr>
<tr>
<td>All Cattle &amp; Calves</td>
<td>109,732</td>
<td>98,864</td>
<td>95,236</td>
<td>97,343</td>
<td>84,890</td>
<td>87,081</td>
<td>-15,711</td>
</tr>
<tr>
<td>100 Head</td>
<td>13,053</td>
<td>11,686</td>
<td>12,755</td>
<td>14,118</td>
<td>13,926</td>
<td>14,432</td>
<td>-311</td>
</tr>
</tbody>
</table>

Source: USDA NASS. Jan. data; Tons or tabulations

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;1000</td>
<td>14.2%</td>
<td>14.0%</td>
<td>15.4%</td>
<td>11.4%</td>
<td>2.8%</td>
<td></td>
</tr>
<tr>
<td>1000-1999</td>
<td>4.6%</td>
<td>5.1%</td>
<td>5.4%</td>
<td>5.2%</td>
<td>0.6%</td>
<td></td>
</tr>
<tr>
<td>2000-3999</td>
<td>7.6%</td>
<td>6.9%</td>
<td>6.7%</td>
<td>7.3%</td>
<td>-0.4%</td>
<td></td>
</tr>
<tr>
<td>4000-7999</td>
<td>11.1%</td>
<td>10.1%</td>
<td>9.5%</td>
<td>9.3%</td>
<td>-1.8%</td>
<td></td>
</tr>
<tr>
<td>8000-15999</td>
<td>9.4%</td>
<td>8.4%</td>
<td>7.8%</td>
<td>8.7%</td>
<td>-0.7%</td>
<td></td>
</tr>
<tr>
<td>16000-23999</td>
<td>10.0%</td>
<td>9.3%</td>
<td>7.9%</td>
<td>7.5%</td>
<td>-2.5%</td>
<td></td>
</tr>
<tr>
<td>24000-31999</td>
<td>15.3%</td>
<td>17.2%</td>
<td>15.7%</td>
<td>15.0%</td>
<td>-0.2%</td>
<td></td>
</tr>
<tr>
<td>&gt;50000</td>
<td>24.5%</td>
<td>25.8%</td>
<td>28.6%</td>
<td>32.7%</td>
<td>8.3%</td>
<td></td>
</tr>
</tbody>
</table>

Source: USDA NASS data; Tons tabulations
### Capacity, DOF, Turns/Year

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity (≥1,000 Hd Yards)  (mil hd)</td>
<td>16.50</td>
<td>16.60</td>
<td>16.80</td>
<td>16.90</td>
<td>0.40</td>
</tr>
<tr>
<td>DOF (steers) per KS FOF Survey</td>
<td>141.50</td>
<td>151.58</td>
<td>148.83</td>
<td>152.08</td>
<td>10.58</td>
</tr>
<tr>
<td>Implied turns/year</td>
<td>2.58</td>
<td>2.41</td>
<td>2.45</td>
<td>2.40</td>
<td>-0.18</td>
</tr>
</tbody>
</table>

**Source:** USDA NASS and FOF data; Tonsor tabulations

---

**USDA’s longer-term projections (as of Feb. 2013) ...**

- **U.S. beef cow inventory:**
  - 29.9 million in 2012
  - 33.5 million in 2022 (+/- 1993 levels)

- **U.S. domestic per capita red meat & poultry consumption:**
  - 221 lbs in 2004-2007 (Beef=65.7 lbs; Pork=50.4 lbs; Poultry=103.8 lbs)
  - 197 lbs in 2013 (Beef=54.8 lbs; Pork=45.0 lbs; Poultry=96.4 lbs)
  - 209 lbs in 2022 (Beef=54.8 lbs; Pork=48.1 lbs; Poultry=104.6 lbs)

- **U.S. beef exports:**
  - 2.47 billion lbs in 2012
  - 3.27 billion lbs in 2022
    - 32% increase from 2012 levels, would be 11% of forecasted production

---

**How does domestic beef demand currently compare to 2012?**

1. Demand has increased
2. Demand has decreased
3. Demand has not changed
4. I have no clue

---

**In 2022, what portion of U.S. beef production do you think will be exported?**

1. Less than 5%
2. 6-10%
3. 11-15%
4. 16-20%
5. Over 20%
6. I have no clue

---

**In 2022, what portion of U.S. beef production being exported would be “best for the industry?”**

1. Less than 5%
2. 6-10%
3. 11-15%
4. 16-20%
5. Over 20%
6. I have no clue

---

**How does domestic beef demand currently compare to 2012?**

- 62% for 2012
- 31% for 2013
- 8% for 2014
- 0% for 2015

---

**2nd Quarter (Apr-Jun), All Fresh Beef Demand Index (1990=100)**

- Actual Quantity & Price Changes:
  - Q2 2013: +0.8% (Year-to-Year)
  - Real All Fresh Beef Prices = +3.6% ($4.88/lb nominal price)
  - IF Real All Fresh Beef Prices -0.5% = 0% Demand Change

**Source:** USDA FAS, Kansas State University, July 2013

http://www.agmanager.info/livestock/marketing/Beef%20Demand/default.asp
What broad beef demand determinant do you think should be of top priority in domestic beef demand enhancement strategies and national investments?

1. Food Safety  
2. Health  
3. Nutrition  
4. Price  
5. Product Quality  
6. Social Aspects  
7. Sustainability  
8. I have no clue

**2013 Beef Demand Study**
- Prioritizing Broad Demand Determinants
  - Most important to focus on:
    - Food Safety (impactful & feasible to be influenced)
    - Product Quality (impactful & feasible to be influenced)
    - Price (impactful yet less feasible to be influenced)
  - Secondary importance to focus on:
    - Nutrition (middle ranking in impact and feasibility)
    - Health (middle ranking in impact and feasibility)
  - Less important to focus on:
    - Sustainability (lower ranking on both impact and feasibility)
    - Social Aspects (lower ranking on both impact and feasibility)

Available at:
http://www.beefboard.org/evaluation/130612demanddeterminantstudy.asp

What portion of U.S. fed cattle do you believe will be produced with use of beta-agonists in January of 2014?

1. 0%  
2. 1-25%  
3. 26-50%  
4. 51-75%  
5. 76-100%  
6. I have no clue

When an Extension specialist makes an “outlook” presentation what is the most common source of data used?

1. The Ext. specialist  
2. Livestock Marketing Info. Center (LMIC)  
3. USDA (NASS, ERS, AMS..)  
4. Other  
5. I have no clue

Example of 2 USDA reports
(Crop Progress; Cattle inventory) being jointly used to inform...

US RANGE AND PASTURE CONDITION
Percent Poor and Very Poor, Weekly

If a new policy increases the total costs for an industry, without enhancing demand for its products, can an industry gain market share from the policy being implemented?

1. Yes  
2. No  
3. I have no clue
Have you identified the comparative advantage your operation holds?

1. Yes
2. No

What best describes your sentiment regarding the long run economic prospects of the U.S. beef-cattle industry?

1. I’m optimistic
2. I’m neutral
3. I’m pessimistic
4. I have no clear sentiment

Questions, thoughts, and suggestions are welcome...

This presentation is available in PDF format at:
http://www.agmanager.info/about/contributors/individual/tonsor.asp

Glynn T. Tonsor
Associate Professor
Dept. of Agricultural Economics
Kansas State University

gtonsor@ksu.edu