Livestock Outlook

American Farm Bureau Federation
Annual Meeting
Nashville, Tennessee

January 7-8, 2018

James G. Robb
Director, LMIC

Website: www.lmic.info
28 US Land Grant Universities:

USDA Data Sources – NASS, AMS, FAS, and ERS

All Forecasts by LMIC

7 USDA Agencies:
AMS (Market News), APIS, ERS, GIPSA (Packers & Stock.), NASS, FAS, and WAOB

12 Associate Members:
AFBF
ASI
NCBA
NPB
CME-Group
Canadian Consortium
Noble Research Institute
CoBank
TCFA
TCU
NWFCS
DLR
Topics: Economic Drivers and ....

- **LMIC’s Forecasts**
  - Where Prices Are
  - Price Outlook
- **Economic Environment**
  - Perspective on Demand
  - Packer and Retailer Margins
- **Feedstuffs**
- **Dairy Sector**
- **More on: Pork, Chicken, and Total**
- **More on Cattle and Beef**
  - International Trade
  - Cyclically – 2017/18 a Key Transition
  - Returns (Cow-Calf and Feedlot)
  - Management Environment Comments
- **Topical Issues ....**
SLAUGHTER STEER PRICES
5 Market Weighted Average, Weekly

$ Per Cwt.

Data Source: USDA-AMS
MID. & LRG. #1 STEER CALF PRICES
500-600 Pounds, Southern Plains, Weekly

$ Per Cwt.

Data Source: USDA-AMS
FEEDER STEER vs FED STEER PRICES
700-800 Lbs. Minus Slaughter Steer, S. Plains, Weekly

$ Per Cwt.

Data Source: USDA-AMS, Compiled by LMIC
AVERAGE ANNUAL CATTLE PRICES
Southern Plains

$ Per Cwt

Date Source: USDA-AMS, Compiled and Forecasts by LMIC
### AVERAGE CALF PRICES

**Steer Price from Southern Plains**

<table>
<thead>
<tr>
<th>Year</th>
<th>Quarter</th>
<th>5-Mkt Avg</th>
<th>% Chg. from Year Ago</th>
<th>7-800#</th>
<th>5-600#</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>I</td>
<td>134.81</td>
<td>-17.0</td>
<td>160.06</td>
<td>195.73</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>127.68</td>
<td>-19.2</td>
<td>149.22</td>
<td>173.86</td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>113.22</td>
<td>-21.5</td>
<td>144.10</td>
<td>157.12</td>
</tr>
<tr>
<td></td>
<td>IV</td>
<td>107.69</td>
<td>-15.7</td>
<td>129.07</td>
<td>138.44</td>
</tr>
<tr>
<td></td>
<td>Year</td>
<td>120.85</td>
<td>-18.4</td>
<td>145.61</td>
<td>166.29</td>
</tr>
<tr>
<td>2017</td>
<td>I</td>
<td>122.96</td>
<td>-8.8</td>
<td>132.88</td>
<td>157.38</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>132.76</td>
<td>4.0</td>
<td>149.30</td>
<td>170.49</td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>112.47</td>
<td>-0.6</td>
<td>153.36</td>
<td>165.47</td>
</tr>
<tr>
<td></td>
<td>IV</td>
<td>117.88</td>
<td>9.1</td>
<td>157.13</td>
<td>170.66</td>
</tr>
<tr>
<td></td>
<td>Year</td>
<td>121.52</td>
<td>0.5</td>
<td>148.17</td>
<td>166.00</td>
</tr>
<tr>
<td>2018</td>
<td>I</td>
<td>119-121</td>
<td>-2.4</td>
<td>149-152</td>
<td>164-168</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>121-124</td>
<td>-7.7</td>
<td>145-149</td>
<td>164-169</td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>107-111</td>
<td>-3.1</td>
<td>138-143</td>
<td>156-162</td>
</tr>
<tr>
<td></td>
<td>IV</td>
<td>110-115</td>
<td>-4.6</td>
<td>135-141</td>
<td>148-155</td>
</tr>
<tr>
<td></td>
<td>Year</td>
<td>115-117</td>
<td>-4.5</td>
<td>142-146</td>
<td>158-164</td>
</tr>
<tr>
<td>2019</td>
<td>I</td>
<td>113-119</td>
<td>-3.3</td>
<td>136-143</td>
<td>151-159</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>116-123</td>
<td>-2.4</td>
<td>135-143</td>
<td>152-161</td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>106-114</td>
<td>0.9</td>
<td>130-139</td>
<td>148-158</td>
</tr>
<tr>
<td></td>
<td>IV</td>
<td>107-116</td>
<td>-0.9</td>
<td>127-137</td>
<td>143-154</td>
</tr>
<tr>
<td></td>
<td>Year</td>
<td>112-116</td>
<td>-1.7</td>
<td>133-139</td>
<td>149-157</td>
</tr>
</tbody>
</table>

**Data Source:** USDA-AMS, Compiled and Forecasts by LMIC

---

\* Average of Kansas and Oklahoma Weekly Combined reports
PORK CUTOUT VALUE
(Voluntary data prior to 2013), Weekly

Data Source: USDA-AMS, Compiled by LMIC
EARLY WEANED PIG PRICES
National, 10-12 Lbs, Delivered, Weekly

$ Per Head

Data Source: USDA-AMS
### Base Slaughter Hog Prices

#### National, Weighted Average Carcass Price, Weekly

<table>
<thead>
<tr>
<th>Year</th>
<th>Quarter</th>
<th>Carcass Price ($/Cwt.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>I</td>
<td>62.15</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>73.38</td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>68.31</td>
</tr>
<tr>
<td></td>
<td>IV</td>
<td>53.15</td>
</tr>
<tr>
<td></td>
<td>Year</td>
<td>64.24</td>
</tr>
<tr>
<td>2017</td>
<td>I</td>
<td>67.79</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>71.13</td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>75.72</td>
</tr>
<tr>
<td></td>
<td>IV a</td>
<td>63.06</td>
</tr>
<tr>
<td></td>
<td>Year</td>
<td>69-70</td>
</tr>
<tr>
<td>2018</td>
<td>I b</td>
<td>64-67</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>69-74</td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>70-75</td>
</tr>
<tr>
<td></td>
<td>IV</td>
<td>55-61</td>
</tr>
<tr>
<td></td>
<td>Year</td>
<td>66-68</td>
</tr>
<tr>
<td>2019</td>
<td>I</td>
<td>61-67</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>67-74</td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>67-75</td>
</tr>
<tr>
<td></td>
<td>IV</td>
<td>51-60</td>
</tr>
<tr>
<td></td>
<td>Year</td>
<td>63-68</td>
</tr>
</tbody>
</table>
## CLASS III MILK PRICES

### Monthly

<table>
<thead>
<tr>
<th>Year</th>
<th>Class III Price</th>
<th>% Chg. from Year Ago</th>
<th>Qtr. Price</th>
<th>US All Milk Price</th>
<th>% Chg. from Year Ago</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>($/Cwt.)</td>
<td></td>
<td>($/Cwt.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>13.75</td>
<td>(12.6)</td>
<td>15.70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>13.20</td>
<td>(18.7)</td>
<td>14.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>III</td>
<td>16.18</td>
<td>0.2</td>
<td>16.90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV</td>
<td>16.33</td>
<td>8.4</td>
<td>17.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year</td>
<td>14.87</td>
<td>(5.9)</td>
<td>16.30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>16.49</td>
<td>19.9</td>
<td>18.23</td>
<td></td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>15.74</td>
<td>19.2</td>
<td>16.83</td>
<td></td>
<td></td>
</tr>
<tr>
<td>III</td>
<td>16.13</td>
<td>(0.3)</td>
<td>17.70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV</td>
<td>16.70-16.90</td>
<td>2.9</td>
<td>17.85-18.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year</td>
<td>16.25-16.35</td>
<td>9.6</td>
<td>17.65-17.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>15.45-15.95</td>
<td>(4.8)</td>
<td>17.00-17.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>15.35-16.35</td>
<td>0.7</td>
<td>16.90-17.90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>III</td>
<td>16.25-17.25</td>
<td>3.9</td>
<td>17.75-18.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV</td>
<td>16.25-17.75</td>
<td>1.2</td>
<td>18.00-19.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year</td>
<td>15.83-16.83</td>
<td>0.2</td>
<td>17.41-18.41</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Economic Environment (Demand)
North America Consumer Confidence

Monthly, Long Term Average = 100

Index

United States

Canada

Mexico

Data Source: OECD
Asia Consumer Confidence
Monthly, Long Term Average = 100

Index

Data Source: OECD
US BEEF CONSUMPTION
Per Capita, Retail Weight, Annual

Data Source: USDA-NASS, Compiled & Analysis by LMIC
RETAIL ALL FRESH BEEF DEMAND INDEX
Third Quarter, Using CPI 1990=100

Data Source: Bureau of Labor Statistics, USDA-ERS, Compiled & Analysis by LMIC
LIVE TO CUTOUT BEEF PRICE SPREAD

Monthly

$ Per 1000 lbs

Avg. 2011-15  ●  2016  ●  2017

Data Source: USDA-AMS & USDA-ERS, Compiled & Analysis by LMIC
CUTOUT TO RETAIL BEEF PRICE SPREAD

Monthly

$ Per 1000 lbs

Data Source: USDA-AMS & USDA-ERS, Compiled & Analysis by LMIC
LIVE TO CUTOUT PORK PRICE SPREAD

Monthly

$ Per Head

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

Note: Prior to 2013 pork cutout was voluntary
Feedstuffs
US TOTAL CORN SUPPLY AND PRICE

Crop Year

Bil. Bushels

Supply

Price

$ Per Bushel

Data Source: USDA-NASS, Compiled & Forecasts by LMIC
Dairy
Sequestration suspended data from March to July of 2013 from USDA-NASS. These graphs use LMIC estimates during this time.
DAIRY COW SLAUGHTER
Federally Inspected, Weekly

Thou. Head

Data Source: USDA-AMS & USDA-NASS
Sequestration suspended data from March to July of 2013 from USDA-NASS. These graphs use LMIC estimates during this time.
BUTTER PRICES
Grade AA, CME, Monthly

$ Per Pound

Data Source: USDA-AMS, Dairy Market News
NONFAT DRY MILK PRICES
Central and East, Monthly

$ Per Pound

Data Source: USDA-AMS, Dairy Market News
Pork, Chicken, and Total Red Meat and Poultry Output
DECEMBER 1 MARKET HOGS

U.S. Inventory

Mil. Head

Data Source: USDA-NASS
COMMERCIAL PORK PRODUCTION
US, Quarterly

Bil. Pounds

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Avg. 2012/16</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>JAN-MAR</td>
<td>5.5</td>
<td>6.0</td>
<td>6.5</td>
<td>7.0</td>
</tr>
<tr>
<td>APR-JUN</td>
<td>5.0</td>
<td>6.5</td>
<td>7.0</td>
<td>7.5</td>
</tr>
<tr>
<td>JUL-SEP</td>
<td>5.5</td>
<td>6.5</td>
<td>7.0</td>
<td>7.5</td>
</tr>
<tr>
<td>OCT-DEC</td>
<td>6.0</td>
<td>6.5</td>
<td>7.0</td>
<td>7.5</td>
</tr>
</tbody>
</table>

Data Source: USDA-NASS, Forecasts by LMIC
US PORK EXPORTS
Carcass Weight, Monthly

Mil. Pounds

Data Source: USDA-ERS & USDA-FAS
IOWA MARKET HOG PROFIT
Farrow/Finish, Monthly

Latest Data: November 2017

Data Source: Iowa State University
RTC BROILER PRODUCTION
US, Quarterly

Bil. Pounds

<table>
<thead>
<tr>
<th></th>
<th>JAN-MAR</th>
<th>APR-JUN</th>
<th>JUL-SEP</th>
<th>OCT-DEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avg. 2012/16</td>
<td>9.0</td>
<td>9.5</td>
<td>9.3</td>
<td>9.7</td>
</tr>
<tr>
<td>2017</td>
<td>10.0</td>
<td>10.5</td>
<td>10.8</td>
<td>10.5</td>
</tr>
<tr>
<td>2018</td>
<td>11.0</td>
<td>11.5</td>
<td>11.8</td>
<td>11.5</td>
</tr>
<tr>
<td>2019</td>
<td>11.5</td>
<td>12.0</td>
<td>12.0</td>
<td>11.5</td>
</tr>
</tbody>
</table>

Data Source: USDA-NASS, Forecasts by LMIC
US BROILER EXPORTS
RTC Weight, Monthly

Mil. Pounds

Data Source: USDA-ERS & USDA-FAS
TOTAL RED MEAT & POULTRY PRODUCTION
US, Quarterly

Data Source: USDA-NASS, Forecasts by LMIC
Cattle
STEER DRESSED WEIGHT
Federally Inspected, Weekly

Data Source: USDA-AMS & USDA-NASS
TOTAL CATTLE INVENTORY BY CYCLE

U.S., January 1

Mil. Head

Data Source: USDA-NASS
CALF CROP
July Estimates, U.S., Annual

Data Source: USDA-NASS
BEEF COW SLAUGHTER
Federally Inspected, Weekly

Thou. Head

Data Source: USDA-AMS & USDA-NASS
HEIFER SLAUGHTER
Federally Inspected, Weekly

Thou. Head

Data Source: USDA-AMS & USDA-NASS
JANUARY 1 TOTAL CATTLE INVENTORY
U.S., Annual

Data Source: USDA-NASS; Forecasts by LMIC
ESTIMATED AVERAGE COW CALF COSTS
Total Cash Cost Plus Pasture Rent, Annual

$ Per Cow

Data Source: USDA & LMIC, Compiled by LMIC
FEEDLOT PLACEMENTS
US Total, Monthly

Data Source: USDA-NASS
COMMERCIAL BEEF PRODUCTION
US, Quarterly

<table>
<thead>
<tr>
<th>Bil. Pounds</th>
<th>Jan-Mar</th>
<th>Apr-Jun</th>
<th>Jul-Sep</th>
<th>Oct-Dec</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avg. 2012/16</td>
<td>5.9</td>
<td>6.3</td>
<td>7.1</td>
<td>6.9</td>
</tr>
<tr>
<td>2017</td>
<td>6.0</td>
<td>6.4</td>
<td>6.9</td>
<td>7.0</td>
</tr>
<tr>
<td>2018</td>
<td>6.1</td>
<td>6.6</td>
<td>7.3</td>
<td>7.1</td>
</tr>
<tr>
<td>2019</td>
<td>6.2</td>
<td>6.8</td>
<td>7.4</td>
<td>7.2</td>
</tr>
</tbody>
</table>

Data Source: USDA-NASS, Forecasts by LMIC

2018 Annual Per Person Dis. 58.1 Lb. Retail. Largest Since 2010
Beef Exports and Imports
US BEEF AND VEAL EXPORTS
Carcass Weight, Monthly

Data Source: USDA-ERS & USDA-FAS
US BEEF AND VEAL EXPORTS

Carcass Weight, Annual

Bil. Pounds

Data Source: USDA-ERS & USDA-FAS
US BEEF AND VEAL IMPORTS
Carcass Weight, Annual

Data Source: USDA-ERS & USDA-FAS
ESTIMATED AVERAGE COW CALF RETURNS

Returns Over Cash Cost (Includes Pasture Rent), Annual

Data Source: USDA & LMIC, Compiled by LMIC
CHOICE STEER PRICE vs BREAKEVEN
Cattle Feeding, S. Plains, Monthly

$ Per Cwt

Latest Data: December 2017

Steer Price  Breakeven  Projected Breakeven

Data Source: USDA-AMS & USDA-NASS, Compiled & Analysis by LMIC
Economic Environment and Managing . . .

- A Lot Went Right for Cattle Prices in 2017, but Still Marketing Calves Against Larger Supplies
- Financial Management Critical -- Marketing Plan Tied to Monthly Cash Flow Statement
BEEF GRADED CHOICE
As a Percent of Beef Graded

Cost of Production is Important, But Don’t Forget Quality

Data Source: USDA-AMS
In The News ....

• U.S. Beef Exports to China
• JBS Corruption Scandal
• Japanese Beef Safeguard
• NAFTA Renegotiation
• Federal Government Shutdown and Debt Ceiling
• Geopolitical Environment in Asia
• Korean Free Trade Agreement
• Grading, Cattle and Hogs (Quality Grade)
• Tax Cuts Impact on Consumer Demand
• .....
U.S. Exports of Beef & Pork Remain Strong

U.S. red meat export tonnage continued to post year-over-year increases in the latest data compiled by USDA, which is for the month of May. For some details see the article below from the LMIC’s Livestock Monitor. Also, this site has more monthly international trade graphics available by selecting “Key Graphs” and then “International”.