

## U.S. Farm Income: Latest 2016 Projection (08/30/2016)

U.S. net cash income (gross cash income minus cash expenses) and U.S. net farm income (total gross income minus total expenses) in the 2016 calendar year are forecast to decline year over in response to low commodity prices. According to USDA-ERS's Farm Income and Wealth Statistics data published in August 2016, compared with the previous year, U.S. net cash income is expected to fall 13.3% to \$94.1 billion, whereas U.S. net farm income is forecast to decline 11.5% to \$71.5 billion. Net cash income includes only cash receipts and expenses, whereas net farm income, in addition to include net cash income, includes non-money income (the value of home consumption of farm products and the imputed rental value of operator and hired labor dwellings), the value of inventory adjustment, and capital replacement during the current year.

Cash receipts from all commodities are forecast to decline by \$25.7 billion (6.8%) to \$353.4 billion in 2016 from the estimated value last year (\$379.2 billion). Overall cash receipts for animals and products and crops are expected to fall 9.8% (\$18.7 billion) and 3.7% (\$7.1 billion), respectively. The expected level of cash receipts for animal and products (\$171.1 billion), if realized, will be the lowest since 2012 (see Table below). Cash receipts for cattle/calves, hogs, and broilers are expected to decline 11.1%, 6.5%, and 3.7%, respectively, from the previous year.

The 2016 cash receipt forecast for crops (\$182.3 billion) is expected to be lowest since calendar year 2010 (\$180.4 billion). Corn and soybean cash receipts are forecast to represent 24.6% and 19.5% of total cash receipts from crops. Cash receipts are expected to decline 6.0% for corn and 0.4% for soybean from the estimated value during 2015 (see Table).

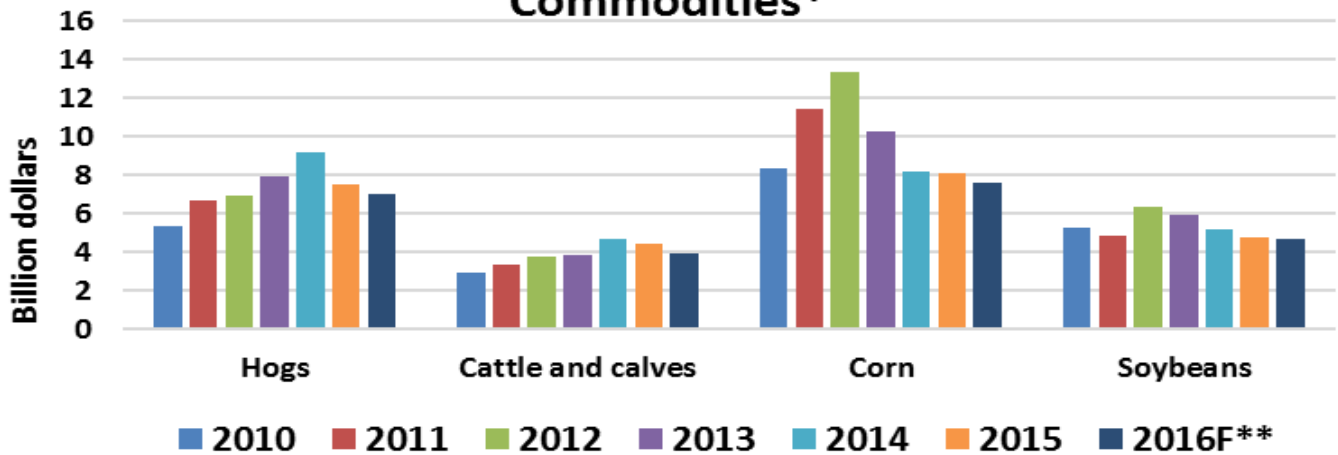
### Cash Receipts by Selected Commodities, 2010-2016F Nominal (Current Billion Dollars)

| Commodity                          | 2010         | 2011         | 2012         | 2013         | 2014         | 2015         | 2016F        |
|------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| <b>All commodities</b>             | <b>321.2</b> | <b>365.8</b> | <b>401.4</b> | <b>403.6</b> | <b>424.1</b> | <b>379.2</b> | <b>353.4</b> |
| <b>Animals and products</b>        | <b>140.8</b> | <b>164.8</b> | <b>169.8</b> | <b>182.7</b> | <b>212.8</b> | <b>189.8</b> | <b>171.1</b> |
| Meat animals                       | 69.1         | 84.0         | 88.2         | 91.2         | 108.0        | 99.3         | 89.2         |
| Cattle and calves                  | 51.2         | 62.3         | 66.1         | 67.5         | 81.5         | 78.2         | 69.6         |
| Hogs                               | 17.9         | 21.6         | 22.1         | 23.8         | 26.5         | 21.0         | 19.7         |
| Dairy products, Milk               | 31.4         | 39.5         | 37.1         | 40.3         | 49.4         | 35.7         | 34.4         |
| Poultry and eggs                   | 34.7         | 35.4         | 38.3         | 44.4         | 48.4         | 48.0         | 40.5         |
| Broilers                           | 23.7         | 23.0         | 24.8         | 30.8         | 32.7         | 28.7         | 27.6         |
| Chicken eggs                       | 6.6          | 7.4          | 7.9          | 8.7          | 10.3         | 13.5         | 6.5          |
| Farm chickens                      | 0.1          | 0.1          | 0.1          | 0.1          | 0.1          | 0.1          | 0.1          |
| Turkeys                            | 4.4          | 5.0          | 5.5          | 4.8          | 5.3          | 5.7          | 6.2          |
| Miscellaneous animals and products | 5.6          | 5.9          | 6.3          | 6.8          | 7.1          | 6.7          | 6.9          |
| <b>Crops</b>                       | <b>180.4</b> | <b>201.0</b> | <b>231.6</b> | <b>220.9</b> | <b>211.3</b> | <b>189.4</b> | <b>182.3</b> |
| Food grains                        | 14.3         | 16.5         | 19.3         | 17.2         | 16.1         | 13.0         | 11.2         |
| Feed crops                         | 55.1         | 71.7         | 82.1         | 70.8         | 65.9         | 57.8         | 54.6         |
| Corn                               | 47.5         | 62.7         | 72.0         | 60.0         | 54.5         | 47.7         | 44.9         |
| Oil crops                          | 36.5         | 35.3         | 46.9         | 47.3         | 42.6         | 37.9         | 37.5         |
| Soybeans                           | 34.7         | 33.1         | 44.1         | 44.5         | 40.8         | 35.6         | 35.5         |
| Vegetables and melons              | 17.4         | 17.6         | 17.4         | 19.4         | 18.9         | 19.8         | 18.3         |
| Fruits and nuts                    | 21.6         | 24.2         | 28.1         | 29.9         | 31.9         | 27.1         | 25.3         |
| All other crops                    | 35.3         | 35.7         | 37.7         | 36.2         | 36.0         | 33.8         | 35.3         |

Source: USDA-ERS (Farm Income and Wealth Statistics, Aug 2016). 2016 is the August 2016 forecast.

Since USDA/ERS cash receipt state data are available only up to 2015, Iowa's cash receipts for corn, soybeans, hogs and cattle/calves for 2016 were estimated assuming the USDA's forecast national level percent reduction for the corresponding commodities for 2016 relative to 2015. Based on this assumption, the resulting estimates shown in Figure 1 indicates that 2016 Iowa's corn cash receipts would decrease by \$0.5 billion (from \$8.1 billion in 2015 to \$7.6 billion in 2016), whereas soybean cash receipts would decline by \$0.02 billion (from \$4.75 billion in 2015 to \$4.73 billion in 2016). Iowa's cash receipts for hogs would decline to \$7.0 billion in 2016 compared with \$7.5 billion in 2015, and cattle/calves would drop to \$3.9 billion from the estimate for 2015 (\$4.4 billion).

**Figure 1. Iowa Cash Receipts: Selected Commodities\***



Source: USDA/ERS (Farm Income and Wealth Statistics , August 30,2016)

\*Cash receipts refers to nominal cash receipts

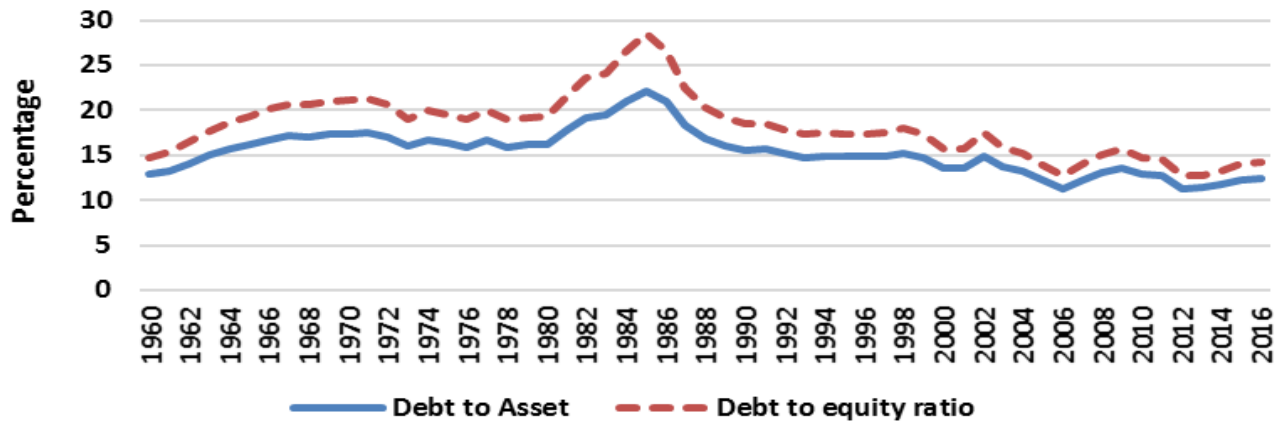
2016F\*\*= 2016 Iowa forecasts were estimated assuming USDA's projected national level percent reduction for the corresponding commodities for 2016 relative to 2015

Partially offsetting the reduction in cash receipts in 2016, is a projected 2.9% decline in production expenses in 2016. In particular, expenses for inputs of farm origin (e.g., feed and livestock/poultry) are forecast to drop 6.2% to \$103.4 billion. Overall, manufactured inputs are expected down 7.5% to \$54.7 billion. Manufactured inputs include fertilizer/lime/soil conditioner and fuel/oils which are forecast down 13% each from the previous year. Pesticide on the other hand, is forecast to increase 3.5% to \$15.1 billion relative to 2015. Electricity is also expected to increase 2.6% from \$5.7 billion in 2015 to \$5.9 billion in 2016.

Cash labor expenses are forecast up 3.7% to \$32.8 billion relative to 2015 (\$31.6 billion) as a result of higher hired labor costs, which are anticipated to increase 5.3% from \$25.9 billion in 2015 to \$27.2 billion in 2016. Because of forecasted declining real estate interest expenses in 2016, interest expenses are expected down 2.4% to \$16.0 billion compared with 2015.

Farm equity is expected to fall 2.4% to \$2,492 billion in 2016 relative to 2015. The reduction in total farm debt is forecast smaller than the reduction in farm assets, which causes farm equity to follow suit. Total farm debt is forecast to decline 0.8% from \$356.9 billion in 2015 to \$354.20 in 2016, whereas farm assets, of which real estate represents 83% of total farm assets, are expected down 2% from \$2,910 billion in 2015 to \$2,846 billion in 2016. The debt-to-asset ratio and debt to equity ratio, which are farm solvency measures, are forecast to increase to 12.45% and to 14.21% in 2016 compared with 2015, respectively. Figure 2 indicates that these measures are historically low, but they have been deteriorating for the last four years.

**Figure 2. U.S. Farm Solvency**



Source: USDA-ERS (Farm Income and Wealth Statistics, August 30, 2016)

Government farm program payments in 2016 are forecast up \$2.7 billion (24.8%) to \$13.5 billion year over year. The Price Loss Coverage (PLC) and Agriculture Risk Coverage (ARC) are expected to account for 15% (\$2.1 billion) and 49% (\$6.6 billion) of the total program payments. According to USDA, in 2015 at the national level, about 84% of ARC-County (ARC-CO) went to operators with corn base acres, indicating a reduction in corn price and the large number of corn base acres on which payments are made. This year (2016) USDA forecasts that about 65% of ARC-CO payments will go to operators with corn base acres and 15% to producers with soybean base acres. In addition, conservation program payments are expected to increase 1.9% to \$3.7 billion. Conservation program payments are forecast to account for 27% of total government payments to agriculture.

The estimated program payments in Iowa last year (2015) was \$0.899 billion, which went entirely to ARC (no payments for PLC). ARC payments in Iowa represented 63.8% of total government payments to agriculture in the state (\$1.4 billion).

USDA/ERS will update the forecast for 2016 by the end of November 2016. The forecasts for 2016 will be converted to estimate a year from now (August 2017).