

**REPRESENTATIVE FARMS ECONOMIC  
OUTLOOK FOR THE JANUARY 2014  
FAPRI/AFPC BASELINE**

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## EXECUTIVE SUMMARY

The Agricultural and Food Policy Center (AFPC) at Texas A&M University develops and maintains data to simulate 97 representative crop, dairy, and livestock operations in major production areas in 28 states. The chief purpose of this analysis is to project the economic viability of those farms by region and commodity for 2014 through 2018. The data necessary to simulate the economic activity of these operations is developed through ongoing cooperation with panels of agricultural producers in selected states. The Food and Agricultural Policy Research Institute (FAPRI) provided projected prices, policy variables, and input inflation rates in their January 2014 Baseline.

Under the January 2014 Baseline, 31 of the 66 crop farms are considered in good liquidity condition (less than a 25 percent chance of negative ending cash by 2018). Ten crop farms have between a 25 percent and a 50 percent likelihood of negative ending cash, and the remaining 25 crop farms have greater than a 50 percent chance of negative ending cash. Additionally, 46 of the 66 crop farms are considered in good equity position (less than a 25 percent chance of decreasing real net worth during the study period). Eight crop farms have between a 25 percent and 50 percent likelihood of losing real net worth, and 12 crop farms have greater than a 50 percent probability of decreasing real net worth. The following discussion provides an overall evaluation by commodity considering both liquidity and equity measures.

- **FEEDGRAIN FARMS:** Twelve of the 24 feedgrain farms are in good overall financial condition. Eight are classified in marginal condition, and four are in poor condition.
- **WHEAT FARMS:** Five representative wheat farms are classified in good overall financial condition, four are in marginal condition, and two are in poor condition.
- **COTTON FARMS:** Nine of the 17 cotton farms are classified in good condition, one is in marginal condition, and seven are in poor condition.
- **RICE FARMS:** Five of the 14 rice farms are projected to be in good financial condition, three are in marginal condition, and six are in poor condition.
- **DAIRY FARMS:** Sixteen of the 20 dairies are in good overall financial condition. Two are classified in marginal condition, and two are in poor condition.
- **BEEF CATTLE RANCHES:** Six of the 11 cattle ranches are classified in good financial condition, three are in marginal condition, and two are projected to be in poor condition.

## **REPRESENTATIVE FARMS ECONOMIC OUTLOOK FOR THE JANUARY 2014 FAPRI/AFPC BASELINE**

The farm level economic impacts of the FAPRI January 2014 Baseline on representative crop and livestock operations are projected in this report, assuming the 2014 Farm Bill. The analysis was conducted over the 2012-2018 planning horizon using FLIPSIM, AFPC's whole farm simulation model. Data to simulate farming operations in the nation's major production regions came from two sources:

- Producer panel cooperation to develop economic information to describe and simulate representative crop, livestock, and dairy farms.
- Projected prices, policy variables, and input inflation rates from the Food and Agricultural Policy Research Institute (FAPRI) January 2014 Baseline.

The FLIPSIM policy simulation model incorporates the historical risk faced by farmers for prices and production. This report presents the results of the January 2014 Baseline in a risk context using selected simulated probabilities and ranges for annual net cash farm income values. The probability of a farm experiencing negative ending cash reserves and the probability of a farm losing real net worth are included as indicators of the cash flow and equity risks facing farms through the year 2018.

### **DEFINITIONS OF VARIABLES IN THE SUMMARY TABLES**

- **Overall Financial Position, 2014-2018** -- As a means of summarizing the representative farms' economic efficiency, liquidity, and solvency position, AFPC classifies each farm as being in either a good (green), marginal (yellow) or poor (red) position. AFPC defines a farm to be in a good financial position when it has less than a 25 percent chance each of a negative ending cash position and less than a 25 percent chance of losing real net worth through 2018. If the probabilities of these events are between 25 and 50 percent the farm is classified as marginal. A probability greater than 50 percent places the farm in a poor financial position.
- **Receipts** -- 2014-2018 average cash receipts from all farm related sources, including market sales, PLC/ARC payments, marketing loan gains/LDPs, crop insurance indemnities, and other receipts.
- **Payments** -- 2014-2018 average annual PLC or ARC payments and marketing loan gains/LDPs for crop farms.
- **NCFI** -- 2014-2018 average net cash farm income equals average total receipts minus average total cash expenses.
- **Reserve 2018** -- equals total cash on hand at the end of year 2018. Ending cash equals beginning cash reserves plus net cash farm income and interest earned on cash reserves less principal payments, federal taxes (income and self employment), state income taxes, family living withdrawals, and actual machinery replacement costs (not depreciation).
- **Net Worth 2018** -- equity equals total assets including land minus total debt from all sources and is reported at the end of 2018.
- **CRNW** -- annualized percentage change in the operator's net worth from January 1, 2014 through December 31, 2018, after adjusting for inflation.

**Table 1. FAPRI January 2014 Baseline Projections of Crop and Livestock Prices, 2012-2018.**

	2012	2013	2014	2015	2016	2017	2018
<b>Crop Prices</b>							
Corn (\$/bu.)	6.89	4.42	4.11	4.07	4.05	4.04	4.05
Wheat (\$/bu.)	7.77	6.82	5.51	5.34	5.33	5.32	5.31
Cotton (\$/lb.)	0.7250	0.7417	0.6733	0.6705	0.6662	0.6672	0.6715
Sorghum (\$/bu.)	6.33	4.19	3.96	3.86	3.85	3.83	3.88
Soybeans (\$/bu.)	14.40	12.58	9.74	9.71	9.70	9.69	9.82
Barley (\$/bu.)	6.43	5.99	4.57	4.57	4.51	4.52	4.52
Oats (\$/bu.)	3.89	3.62	3.41	3.27	3.21	3.20	3.20
Rice (\$/cwt.)	14.90	15.82	14.77	13.66	13.75	13.71	13.68
Soybean Meal (\$/ton)	446.49	415.28	310.58	313.80	310.91	304.96	315.20
All Hay (\$/ton)	187.00	179.05	142.34	135.04	134.55	135.77	138.44
Peanuts (\$/ton)	602.00	469.54	520.06	525.80	523.90	515.66	514.26
<b>Cattle Prices</b>							
Feeder Cattle (\$/cwt)	158.19	158.80	183.88	186.03	174.01	165.60	156.66
Fed Cattle (\$/cwt)	122.86	125.89	137.09	137.57	132.04	128.26	124.19
Culled Cows (\$/cwt)	76.68	76.38	85.49	86.47	79.00	72.95	69.08
<b>Milk Price</b>							
U.S. All Milk Price (\$/cwt)	18.56	19.99	20.34	18.74	18.07	17.75	17.61

Source: Food and Agricultural Policy Research Institute (FAPRI) at the University of Missouri-Columbia.

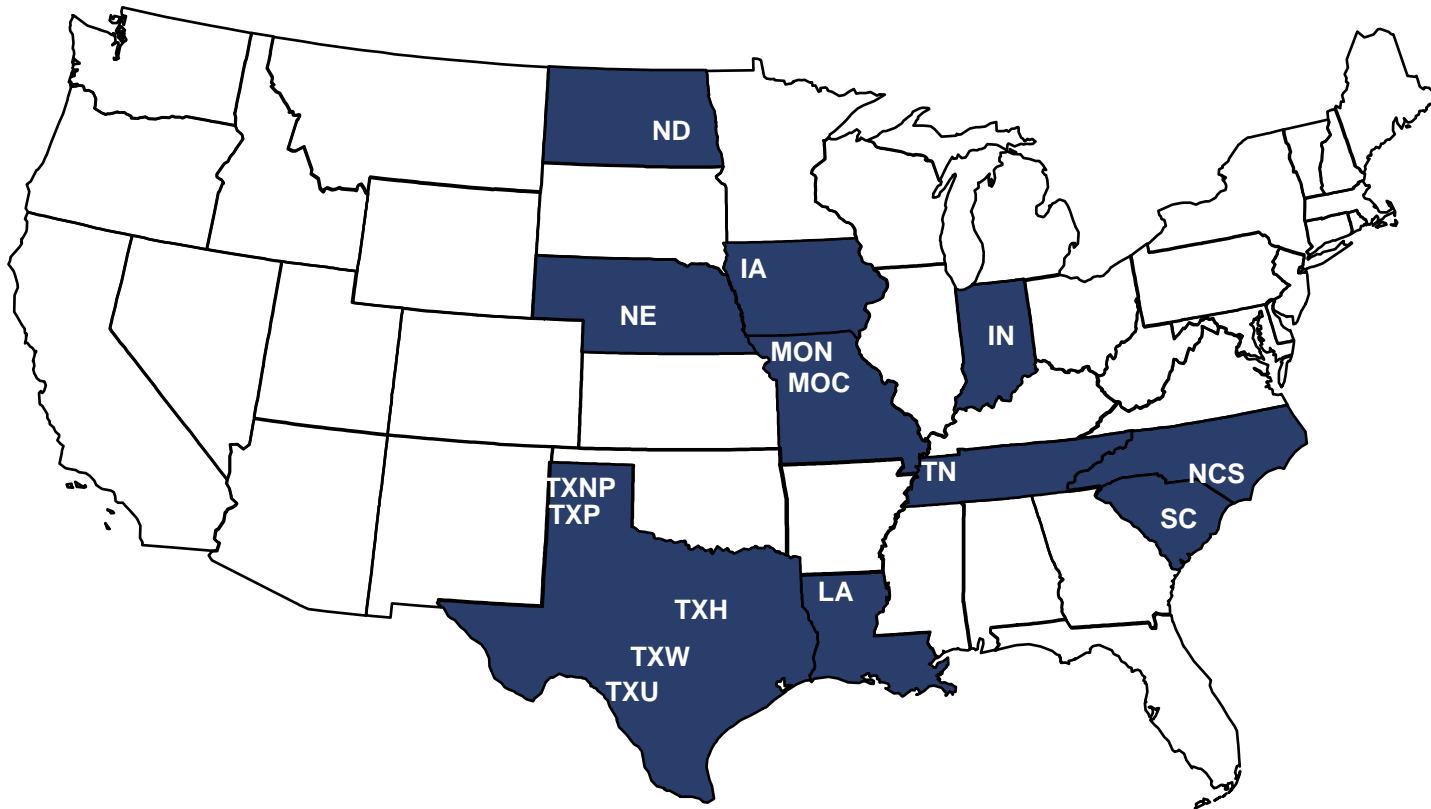
**Table 2. FAPRI January 2014 Baseline Assumed Rates of Change in Input Prices and Annual Changes in Land Values, 2013-2018.**

	2013	2014	2015	2016	2017	2018
<b>Annual Rate of Change for Input Prices Paid</b>						
Seed Prices (%)	5.34	0.77	-0.13	0.36	1.06	1.85
All Fertilizer Prices (%)	-7.74	-11.84	-6.09	1.60	0.54	0.98
Herbicide Prices (%)	1.93	-0.47	1.71	2.63	1.98	1.92
Insecticide Prices (%)	4.76	-0.16	1.81	2.62	2.00	1.89
Fuel and Lube Prices (%)	-0.79	-2.75	-2.00	-0.51	1.23	2.53
Machinery Prices (%)	2.59	2.23	1.55	2.36	2.35	2.50
Wages (%)	3.27	2.39	2.62	3.00	3.09	3.14
Supplies (%)	0.65	0.85	1.64	1.95	1.44	1.38
Repairs (%)	0.57	1.39	2.29	2.65	2.51	2.49
Services (%)	2.35	0.35	1.65	2.25	2.05	2.30
Taxes (%)	3.08	1.98	3.25	2.68	1.61	1.69
PPI Items (%)	1.13	-4.27	-1.99	0.69	1.07	1.28
PPI Total (%)	1.46	-3.24	-1.26	1.21	1.49	1.50
<b>Annual Change in Consumer Price Index (%)</b>	1.46	1.44	1.75	1.83	1.91	2.04
<b>Annual Rate of Change for U.S. Land Prices (%)</b>	9.43	2.87	0.18	0.22	0.11	0.22

Source: Food and Agricultural Policy Research Institute (FAPRI) at the University of Missouri-Columbia.

# Representative Farm: Feed Grains

- Overall, twelve feed grain farms are characterized as good, eight are marginal, and four are in poor condition.
- Six of the twenty-four farms will be under severe cash flow stress; TXPG2500, TXPG3760, and TXHG2500 all have high likelihoods (greater than a 65 percent chance) of losing real net worth.



**Characteristics of Panel Farms Producing Feed Grains, 2013.**

	Cropland (acres)	Assets (\$1,000)	Debt/Asset (ratio)	Gross Receipts (\$1,000)	Feed Grains (acres)
IAG1350	1,350	6,382.00	0.17	1,148.10	1,350
IAG3400	3,400	15,878.00	0.18	2,625.80	3,400
NEG2400	2,400	7,147.00	0.14	2,136.90	2,400
NEG4300	4,300	25,151.00	0.15	3,992.80	4,000
NDG2500	2,500	2,998.00	0.15	1,109.70	2,000
NDG8000	8,000	15,719.00	0.14	3,739.60	6,450
ING1000	1,000	4,399.00	0.12	699.00	1,000
ING2200	2,200	10,417.00	0.16	1,598.30	2,200
MOCG2300	2,300	16,237.00	0.15	1,453.20	2,300
MOCG4000	4,000	26,333.00	0.13	2,297.50	4,000
MONG1850	1,850	10,945.00	0.15	1,229.30	1,800
LAG2640	2,640	2,231.00	0.23	2,014.50	2,244
LANG2500	2,500	9,105.00	0.15	2,203.50	1,750
TNG900	900	2,502.00	0.27	535.40	900
TNG2200	2,200	5,116.00	0.18	1,150.00	2,200
NCSP1800	1,800	4,854.00	0.13	1,194.50	1,440
SCG3500	3,500	11,817.00	0.16	2,807.30	2,625
TXNP3000	3,000	2,322.00	0.16	1,741.90	1,200
TXNP10000	10,000	17,275.00	0.14	6,353.70	5,700
TXPG2500	2,500	4,628.00	0.18	1,666.20	1,058
TXPG3760	3,760	6,994.00	0.18	3,673.60	1,878
TXHG2500	2,500	2,408.00	0.19	724.70	1,700
TXWG1600	1,600	1,524.00	0.14	594.10	1,050
TXUG1600	1,600	836.00	0.04	1,538.30	150























