

Richardson, James W. et al.

**Research Report**

## Representative farms economic outlook for the December 2009 FAPRI/AFPC baseline

AFPC briefing paper, No. 09-4

**Provided in Cooperation with:**

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# ***Representative Farms Economic Outlook for the December 2009 FAPRI/AFPC Baseline***

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**Briefing Paper 09-4**

**December 2009**



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**REPRESENTATIVE FARMS ECONOMIC  
OUTLOOK FOR THE DECEMBER 2009  
FAPRI/AFPC BASELINE**

AFPC Briefing Paper 09-4

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## EXECUTIVE SUMMARY

The Agricultural and Food Policy Center (AFPC) at Texas A&M University develops and maintains data to simulate 98 representative crop, dairy, and livestock operations in major production areas in 28 states. The chief purpose of this analysis is to project those farms' economic viability by region and commodity for 2009 through 2015. 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 December 2009 Baseline.

Under the December 2009 Baseline, 19 of the 64 crop farms are considered in good liquidity condition (less than a 25 percent chance of negative ending cash by 2015). Six crop farms have between a 25 percent and a 50 percent likelihood of negative ending cash, and the remaining 39 crop farms have greater than a 50 percent chance of negative ending cash. Furthermore, 24 of the 64 crop farms are considered in good equity position (less than a 25 percent chance of decreasing real net worth during the study period). Twelve crop farms have between a 25 percent and 50 percent likelihood of losing real net worth, and 28 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:** Nine of the 23 feedgrain farms are in good overall financial condition. Three are classified in marginal condition, and eleven are in poor condition.
- **WHEAT FARMS:** Six of the 11 wheat farms are classified in good financial condition, one is in marginal condition, and four are in poor condition.
- **COTTON FARMS:** Two of the 16 cotton farms are classified in good condition, none are in marginal condition, and fourteen are in poor condition. In addition, thirteen of these farms have more than a 50 percent chance of losing real net worth by 2015.
- **RICE FARMS:** Two of the 14 rice farms are in good condition, three are in marginal condition, and nine farms are projected to be in poor financial condition through 2015.
- **DAIRY FARMS:** Eighteen of the 22 dairy farms are in good overall financial condition. Three are considered to be in marginal condition, and only one is in poor condition.
- **BEEF CATTLE RANCHES:** Six of the 12 cattle ranches are classified in good financial condition, four are in marginal condition, and two are projected to be in poor condition.

## **REPRESENTATIVE FARMS ECONOMIC OUTLOOK FOR THE DECEMBER 2009 FAPRI/AFPC BASELINE**

The farm level economic impacts of the FAPRI December 2009 Baseline on representative crop and livestock operations are projected in this report. The analysis was conducted over the 2008-2015 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) December 2009 Baseline.

The FLIPSIM policy simulation model incorporates the historical risk faced by farmers for prices and production. This report presents the results of the December 2009 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 2015.

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

- **Overall Financial Position, 2009-2015** -- 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 is 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. 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** -- 2009-2015 average of cash receipts from all farm related sources, including market sales, CCP/ACRE and direct payments, marketing loan gains/LDPs, crop insurance indemnities, and other receipts.
- **Payments** -- 2009-2015 average of annual CCP or ACRE payments, direct payments, and marketing loan gains/LDPs for crops and the MILC program payment for dairy farms.
- **NCFI** -- 2009-2015 average net cash farm income equals average total receipts minus average total cash expenses.
- **Reserve 2015** -- equals total cash on hand at the end of year 2015. 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 2015** -- equity equals total assets including land minus total debt from all sources and is reported at the end of 2015.
- **CRNW** -- annualized percentage change in the operator's net worth from December 1, 2009 through December 31, 2015, after adjusting for inflation.

**Table 1. FAPRI December 2009 Baseline Projections of Crop and Livestock Prices, 2008-2015**

|                              | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   |
|------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|
| <b>Crop Prices</b>           |        |        |        |        |        |        |        |        |
| Corn (\$/bu.)                | 4.06   | 3.62   | 3.78   | 3.84   | 3.88   | 3.94   | 4.01   | 4.02   |
| Wheat (\$/bu.)               | 6.78   | 4.91   | 4.95   | 5.04   | 5.16   | 5.23   | 5.31   | 5.34   |
| Cotton (\$/lb.)              | 0.4780 | 0.5772 | 0.5638 | 0.5846 | 0.5944 | 0.6000 | 0.6076 | 0.6164 |
| Sorghum (\$/bu.)             | 3.20   | 3.30   | 3.45   | 3.46   | 3.54   | 3.62   | 3.71   | 3.74   |
| Soybeans (\$/bu.)            | 9.97   | 9.31   | 8.80   | 9.20   | 9.27   | 9.51   | 9.73   | 9.89   |
| Barley (\$/bu.)              | 5.37   | 4.46   | 4.37   | 4.50   | 4.60   | 4.66   | 4.73   | 4.73   |
| Oats (\$/bu.)                | 3.15   | 2.07   | 2.22   | 2.30   | 2.35   | 2.39   | 2.44   | 2.46   |
| Rice (\$/cwt.)               | 16.80  | 15.16  | 13.89  | 13.86  | 13.07  | 13.25  | 13.19  | 13.37  |
| Soybean Meal (\$/ton)        | 315.87 | 279.08 | 262.77 | 263.31 | 264.30 | 265.83 | 269.88 | 269.78 |
| All Hay (\$/ton)             | 152.00 | 116.18 | 114.73 | 115.02 | 114.50 | 114.60 | 115.01 | 116.53 |
| Peanuts (\$/ton)             | 460.00 | 451.93 | 453.82 | 471.82 | 480.90 | 485.14 | 490.01 | 494.48 |
| <b>Cattle Prices</b>         |        |        |        |        |        |        |        |        |
| Feeder Cattle (\$/cwt)       | 107.55 | 101.88 | 113.45 | 121.26 | 129.24 | 132.13 | 132.79 | 130.42 |
| Fed Cattle (\$/cwt)          | 92.27  | 83.08  | 89.71  | 96.47  | 101.27 | 103.03 | 103.24 | 102.01 |
| Culled Cows (\$/cwt)         | 54.92  | 46.68  | 51.26  | 55.65  | 58.78  | 59.95  | 60.25  | 59.09  |
| <b>Milk Price</b>            |        |        |        |        |        |        |        |        |
| U.S. All Milk Price (\$/cwt) | 18.41  | 12.51  | 16.78  | 17.85  | 18.31  | 18.65  | 18.86  | 19.22  |

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

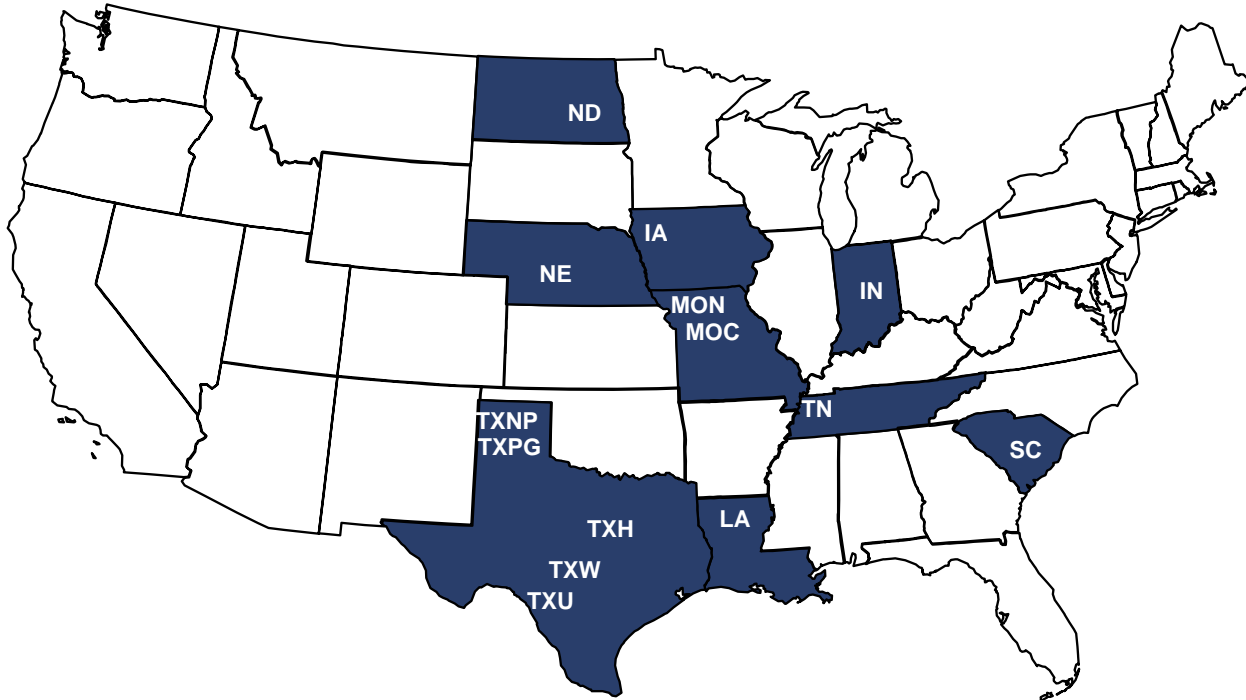
**Table 2. FAPRI December 2009 Baseline Assumed Rates of Change in Input Prices and Annual Changes in Land Values, 2009-2015**

|   | 2009   | 2010  | 2011  | 2012 | 2013 | 2014 | 2015 |
|---|--------|-------|-------|------|------|------|------|
| <b>Annual Rate of Change for Input Prices Paid</b>    |        |       |       |      |      |      |      |
| Seed Prices (%)                                       | 15.51  | 6.83  | 3.56  | 2.88 | 2.61 | 2.49 | 2.40 |
| All Fertilizer Prices (%)                             | -25.80 | -7.41 | 18.21 | 3.41 | 1.47 | 0.39 | 3.21 |
| Herbicide Prices (%)                                  | 7.24   | 4.45  | 5.67  | 3.10 | 2.13 | 1.66 | 1.42 |
| Insecticide Prices (%)                                | -1.60  | 1.65  | 3.26  | 2.39 | 2.01 | 1.77 | 1.62 |
| Fuel and Lube Prices (%)                              | -34.81 | 7.88  | 13.44 | 6.12 | 3.54 | 2.95 | 3.60 |
| Machinery Prices (%)                                  | 6.66   | 3.86  | 3.85  | 2.12 | 2.21 | 2.52 | 2.51 |
| Wages (%)   | 1.64   | 1.67  | 1.46  | 1.84 | 2.59 | 2.94 | 2.88 |
| Supplies (%)  | 2.80   | 1.34  | 4.20  | 2.18 | 1.42 | 1.11 | 1.06 |
| Repairs (%)   | 1.71   | 1.90  | 1.95  | 2.06 | 2.47 | 2.57 | 2.31 |
| Services (%)  | 1.48   | 2.28  | 4.25  | 2.20 | 1.83 | 1.96 | 2.12 |
| Taxes (%)   | 10.38  | 1.55  | 4.24  | 2.12 | 2.10 | 1.91 | 1.92 |
| PPI Items (%)   | -4.96  | 0.44  | 4.93  | 2.75 | 1.98 | 1.97 | 1.99 |
| PPI Total (%)   | -3.65  | 0.64  | 4.77  | 2.90 | 2.17 | 2.32 | 2.11 |
| <b>Annual Change in Consumer Price Index (%)</b>      | -0.39  | 1.40  | 2.23  | 2.04 | 1.88 | 1.92 | 1.93 |
| <b>Annual Rate of Change for U.S. Land Prices (%)</b> | -3.23  | -3.28 | -0.41 | 3.55 | 3.05 | 3.38 | 2.41 |

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

# Representative Farm: Feed Grains

- Overall, nine feed grain farms are characterized as good, three are marginal, and eleven are in poor condition.
- Twelve of twenty-three farms will be under severe cash flow stress, and six farms have a high probability of losing real net worth.



**Characteristics of Panel Farms Producing Feed Grains, 2008.**

|          | Cropland<br>(acres) | Assets<br>(\$1,000) | Debt/Asset<br>(ratio) | Gross Receipts<br>(\$1,000) | Feed Grains<br>(acres) |
|----------|---------------------|---------------------|-----------------------|-----------------------------|------------------------|
| IAG1350  | 1,350               | 2,388.00            | 0.19                  | 852.40                      | 1,350                  |
| IAG3400  | 3,400               | 6,625.00            | 0.17                  | 2,260.60                    | 3,400                  |
| NEG2400  | 2,400               | 3,879.00            | 0.19                  | 2,102.80                    | 2,400                  |
| NEG4300  | 4,300               | 7,555.00            | 0.20                  | 3,563.00                    | 3,870                  |
| NDG2180  | 2,180               | 887.00              | 0.16                  | 704.90                      | 1,600                  |
| NDG7500  | 7,500               | 6,581.00            | 0.22                  | 2,970.10                    | 5,750                  |
| ING1000  | 1,000               | 2,531.00            | 0.18                  | 540.60                      | 1,000                  |
| ING2200  | 2,200               | 6,394.00            | 0.19                  | 1,265.00                    | 2,200                  |
| MOCG2050 | 2,050               | 6,179.00            | 0.19                  | 992.60                      | 2,050                  |
| MOCG4000 | 4,000               | 10,378.00           | 0.17                  | 1,975.90                    | 3,950                  |
| MONG1850 | 1,850               | 6,388.00            | 0.18                  | 1,027.00                    | 1,800                  |
| LAG2640  | 2,640               | 1,065.00            | 0.23                  | 1,886.50                    | 1,716                  |
| LANG2500 | 2,500               | 5,178.00            | 0.20                  | 1,955.10                    | 1,750                  |
| TNG900   | 900                 | 999.00              | 0.23                  | 401.40                      | 900                    |
| TNG2750  | 2,750               | 3,695.00            | 0.23                  | 1,317.10                    | 2,750                  |
| SCG3500  | 3,500               | 6,606.00            | 0.18                  | 1,940.40                    | 3,500                  |
| TXNP3000 | 3,000               | 1,616.00            | 0.22                  | 1,766.90                    | 1,200                  |
| TXNP8000 | 8,000               | 4,656.00            | 0.23                  | 4,353.00                    | 3,987                  |
| TXPG2500 | 2,500               | 3,544.00            | 0.27                  | 1,350.10                    | 1,058                  |
| TXPG3760 | 3,760               | 4,596.00            | 0.30                  | 3,199.00                    | 1,878                  |
| TXHG2000 | 2,000               | 1,469.00            | 0.22                  | 524.40                      | 1,500                  |
| TXWG1600 | 1,600               | 1,131.00            | 0.19                  | 492.50                      | 1,300                  |
| TXUG1200 | 1,200               | 218.00              | 0.25                  | 894.30                      | 750                    |

# Representative Farm: Feed Grains

## Economic Viability of Representative Farms over the 2009-2015 Period

| Farm Name | Overall Ranking |      | P(Negative Ending Cash) | P(Real Net Worth Declines) |
|-----------|-----------------|------|-------------------------|----------------------------|
|           | 2009            | 2015 | 2009-2015               | 2009-2015                  |
| 9/3/11    |                 |      |                         |                            |
| IAG1350   |                 |      | 1-3                     | 1-1                        |
| IAG3400   |                 |      | 1-1                     | 1-1                        |
| NEG2400   |                 |      | 1-3                     | 1-5                        |
| NEG4300   |                 |      | 1-5                     | 1-5                        |
| NDG2180   |                 |      | 1-3                     | 1-4                        |
| NDG7500   |                 |      | 1-1                     | 1-1                        |
| ING1000   |                 |      | 99-90                   | 1-35                       |
| ING2200   |                 |      | 1-41                    | 1-2                        |
| MOCG2050  |                 |      | 1-3                     | 1-1                        |
| MOCG4000  |                 |      | 1-1                     | 1-1                        |
| MONG1850  |                 |      | 99-83                   | 1-13                       |
| LAG2640   |                 |      | 1-51                    | 1-46                       |
| LANG2500  |                 |      | 1-11                    | 1-4                        |
| TNG900    |                 |      | 99-98                   | 1-95                       |
| TNG2750   |                 |      | 1-63                    | 1-33                       |
| SCG3500   |                 |      | 1-33                    | 1-17                       |
| TXNP3000  |                 |      | 1-74                    | 1-63                       |
| TXNP8000  |                 |      | 1-54                    | 1-31                       |
| TXPG2500  |                 |      | 99-81                   | 1-49                       |
| TXPG3760  |                 |      | 99-99                   | 1-98                       |
| TXHG2000  |                 |      | 99-90                   | 1-74                       |
| TXWG1600  |                 |      | 99-91                   | 1-72                       |
| TXUG1200  |                 |      | 99-96                   | 1-86                       |

1 Viability is classified as good (green), moderate (yellow), and poor (red) based on the probabilities:

|     |       |     |
|-----|-------|-----|
| <25 | 25-50 | >50 |
|-----|-------|-----|

2 P(Negative Ending Cash) is the probability that the farm will have a cash flow deficit. Reported values represent the probabilities for 2009 and 2015.

3 P(Real Net Worth Decline) is the probability that the farm will have a loss in real net worth relative to the beginning net worth. Reported values represent the probabilities for losing real net worth from 2008 to 2009 and from 2008 to 2015.

## Implications of the December 2009 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Feed Grains and Oilseeds

|          | Receipts  | Payments  | NCFI      | Reserve 2015 | Net Worth 2015 | CRNW     |
|----------|-----------|-----------|-----------|--------------|----------------|----------|
|          | (\$1,000) | (\$1,000) | (\$1,000) | (\$1,000)    | (\$1,000)      | (%)      |
| IAG1350  | 894.01    | 39.31     | 285.40    | 659.15       | 2,909.43       | 6.07     |
| IAG3400  | 2,050.99  | 63.37     | 771.95    | 1,933.03     | 8,056.64       | 5.78     |
| NEG2400  | 1,983.24  | 66.54     | 510.34    | 1,630.60     | 4,732.98       | 5.63     |
| NEG4300  | 3,111.08  | 74.52     | 826.25    | 2,107.19     | 8,617.40       | 4.83     |
| NDG2180  | 677.38    | 37.50     | 220.07    | 616.61       | 1,438.54       | 10.26    |
| NDG7500  | 2,865.10  | 76.24     | 1,070.94  | 3,739.05     | 9,485.04       | 9.87     |
| ING1000  | 530.56    | 25.11     | 89.47     | (383.62)     | 2,204.55       | 0.89     |
| ING2200  | 1,247.31  | 56.14     | 304.70    | 148.89       | 6,472.71       | 3.21     |
| MOCG2050 | 983.93    | 45.14     | 430.18    | 775.32       | 6,879.92       | 4.59     |
| MOCG4000 | 1,932.90  | 32.79     | 1,022.42  | 3,162.75     | 13,286.98      | 6.58     |
| MONG1850 | 1,027.78  | 46.52     | 159.90    | (551.89)     | 5,889.50       | 1.79     |
| LAG2640  | 1,718.27  | 175.61    | 162.99    | (107.81)     | 903.89         | (0.17)   |
| LANG2500 | 1,958.80  | 129.85    | 497.02    | 881.98       | 5,945.60       | 4.67     |
| TNG900   | 393.54    | 13.87     | (35.77)   | (833.88)     | 121.03         | (11.79)  |
| TNG2750  | 1,292.46  | 51.02     | 291.40    | (360.83)     | 3,379.45       | 2.30     |
| SCG3500  | 1,825.22  | 127.94    | 325.84    | 439.34       | 6,520.62       | 2.66     |
| TXNP3000 | 1,531.05  | 57.03     | 107.08    | (435.52)     | 1,139.82       | (2.10)   |
| TXNP8000 | 4,219.47  | 125.53    | 396.13    | (143.98)     | 4,390.40       | 1.99     |
| TXPG2500 | 1,485.45  | 119.34    | 194.23    | (557.88)     | 2,771.48       | 0.45     |
| TXPG3760 | 2,926.17  | 148.23    | (603.05)  | (6,276.49)   | (1,863.02)     | (23.93)  |
| TXHG2000 | 512.16    | 37.02     | 33.05     | (367.76)     | 918.01         | (2.58)   |
| TXWG1600 | 488.40    | 41.67     | 25.31     | (421.19)     | 676.55         | (3.47)   |
| TXUG1200 | 795.27    | 63.56     | (14.63)   | (629.89)     | (442.91)       | (503.75) |

1 Receipts are average annual total cash receipts including government payments, 2009-2015 (\$1,000)

2 Payments are average annual total government payments, 2009-2015 (\$1,000)

3 NCFI is average annual net cash farm income, 2009-2015 (\$1,000)

4 Reserve 2015 is average ending cash reserves, 2015 (\$1,000)

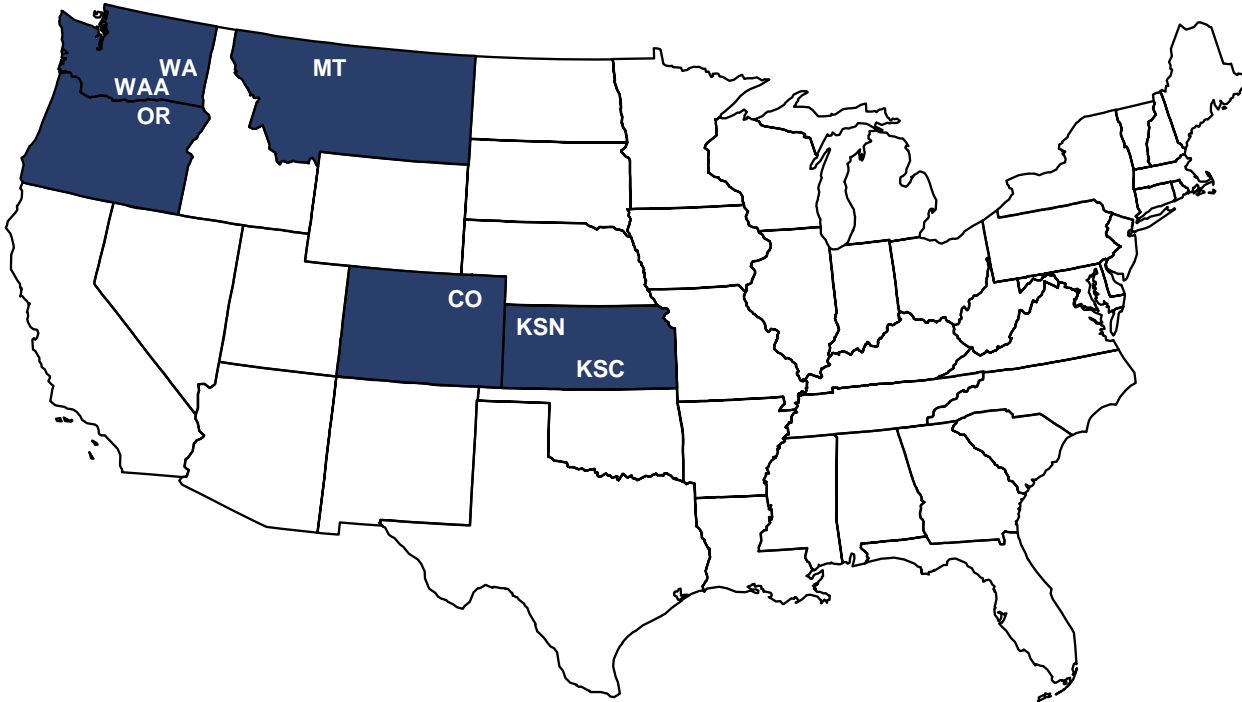
5 Net Worth 2015 is average nominal ending net worth, 2015 (\$1,000)

6 CRNW is average percentage change in real net worth over 2009-2015 period, (%)



# Representative Farm: Wheat

- Six wheat farms are projected to be in good overall financial condition, one is marginal, and four are expected to be in poor condition.
- Five of the eleven wheat farms will feel severe liquidity pressure over the period.
- Only one wheat farm has greater than a 50 percent chance of losing real equity.



## Characteristics of Panel Farms Producing Wheat, 2008.

|          | Cropland<br>(acres) | Assets<br>(\$1,000) | Debt/Asset<br>(ratio) | Gross Receipts<br>(\$1,000) | Wheat<br>(acres) |
|----------|---------------------|---------------------|-----------------------|-----------------------------|------------------|
| WAW1725  | 1,725               | 1,510.00            | 0.22                  | 705.40                      | 1,147            |
| WAW5500  | 5,500               | 6,741.00            | 0.20                  | 2,105.10                    | 3,055            |
| WAAW3500 | 3,500               | 1,457.00            | 0.18                  | 386.60                      | 1,500            |
| ORW3600  | 3,600               | 1,310.00            | 0.16                  | 482.70                      | 1,600            |
| MTW4500  | 4,500               | 2,849.00            | 0.18                  | 639.70                      | 2,330            |
| KSCW2000 | 2,000               | 1,851.00            | 0.17                  | 591.00                      | 1,200            |
| KSCW4500 | 4,500               | 2,826.00            | 0.22                  | 1,096.10                    | 2,700            |
| KSNW2800 | 2,800               | 1,865.00            | 0.19                  | 525.60                      | 1,400            |
| KSNW5000 | 5,000               | 3,186.00            | 0.18                  | 1,288.30                    | 2,325            |
| COW3000  | 3,000               | 1,434.00            | 0.17                  | 438.60                      | 970              |
| COW5640  | 5,640               | 2,425.00            | 0.17                  | 850.30                      | 2,256            |

# Representative Farm: Wheat

## Economic Viability of Representative Farms over the 2009-2015 Period

| Farm Name | Overall Ranking |      | P(Negative Ending Cash) | P(Real Net Worth Declines) |
|-----------|-----------------|------|-------------------------|----------------------------|
|           | 2009            | 2015 | 2009-2015               | 2009-2015                  |
| 6/1/4     |                 |      |                         |                            |
| WAW1725   |                 |      | 1-1                     | 1-1                        |
| WAW5500   |                 |      | 1-1                     | 1-1                        |
| WAAW3500  |                 |      | 1-60                    | 1-26                       |
| MTW4500   |                 |      | 1-58                    | 1-29                       |
| ORW3600   |                 |      | 1-1                     | 1-1                        |
| KSCW2000  |                 |      | 1-22                    | 1-23                       |
| KSCW4500  |                 |      | 1-1                     | 1-1                        |
| KSNW2800  |                 |      | 99-92                   | 1-64                       |
| KSNW5000  |                 |      | 1-52                    | 1-22                       |
| COW3000   |                 |      | 1-10                    | 1-3                        |
| COW5640   |                 |      | 1-60                    | 1-34                       |

1 Viability is classified as good (green), moderate (yellow), and poor (red) based on the probabilities:

<25

25-50

>50

2 P(NegativeEnding Cash) is the probability that the farm will have a cash flow deficit. Reported values represent the probabilities for 2009 and 2015.

3 P(Real Net Worth Decline) is the probability that the farm will have a loss in real net worth relative to the beginning net worth. Reported values represent the probabilities for losing real net worth from 2008 to 2009 and from 2008 to 2015.

## Implications of the December 2009 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Wheat

|          | Receipts  | Payments  | NCFI      | Reserve 2015 | Net Worth 2015 | CRNW   |
|----------|-----------|-----------|-----------|--------------|----------------|--------|
|          | (\$1,000) | (\$1,000) | (\$1,000) | (\$1,000)    | (\$1,000)      | (%)    |
| WAW1725  | 656.22    | 42.93     | 291.05    | 1,062.28     | 2,317.32       | 10.60  |
| WAW5500  | 1,966.04  | 112.70    | 588.91    | 1,938.98     | 7,788.70       | 5.08   |
| WAAW3500 | 358.43    | 26.97     | 105.64    | (41.94)      | 1,353.32       | 1.54   |
| ORW3600  | 445.96    | 27.82     | 238.76    | 704.51       | 1,846.91       | 7.43   |
| MTW4500  | 494.64    | 45.68     | 116.61    | (48.06)      | 2,572.82       | 1.25   |
| KSCW2000 | 479.05    | 39.16     | 137.73    | 245.23       | 1,820.87       | 2.15   |
| KSCW4500 | 1,024.94  | 88.11     | 378.84    | 927.12       | 3,416.96       | 6.25   |
| KSNW2800 | 480.85    | 46.40     | 51.23     | (418.07)     | 1,394.70       | (0.87) |
| KSNW5000 | 1,197.17  | 91.02     | 223.99    | (71.58)      | 3,101.51       | 2.22   |
| COW3000  | 392.46    | 23.62     | 147.56    | 257.81       | 1,589.31       | 4.04   |
| COW5640  | 707.47    | 57.48     | 180.83    | (100.49)     | 2,296.80       | 1.56   |

1 Receipts are average annual total cash receipts including government payments, 2009-2015 (\$1,000)

2 Payments are average annual total government payments, 2009-2015 (\$1,000)

3 NCFI is average annual net cash farm income, 2009-2015 (\$1,000)

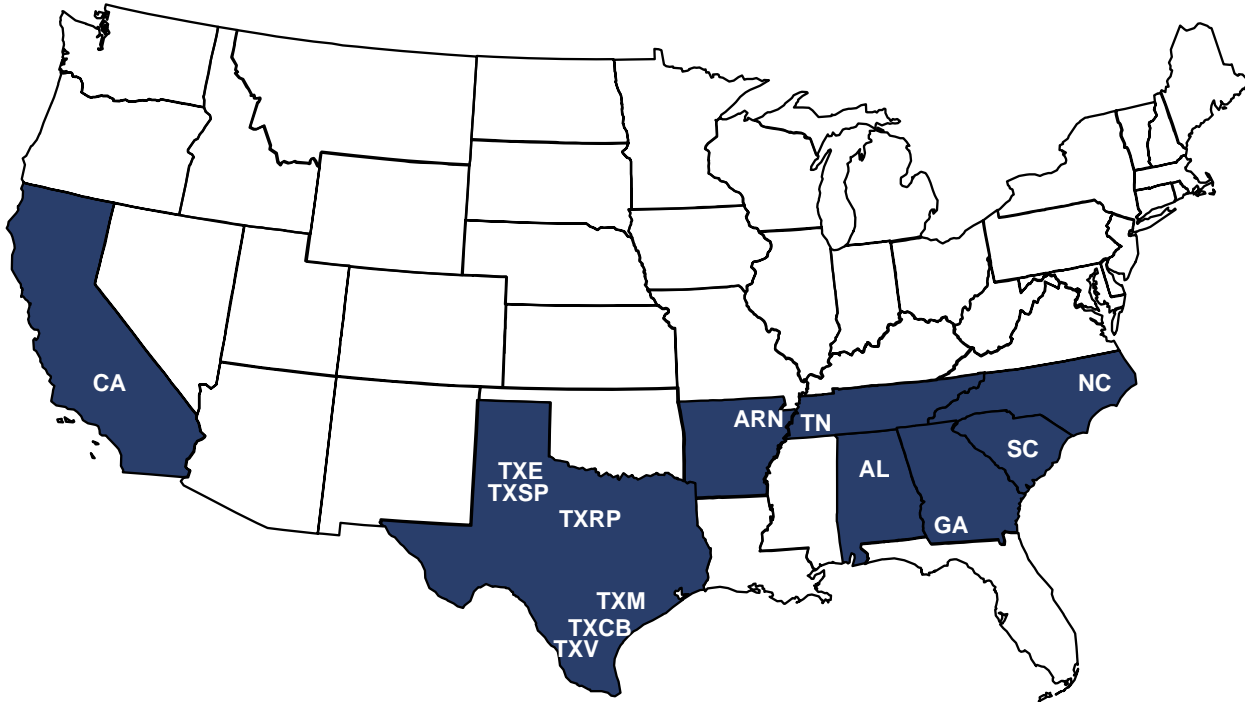
4 Reserve 2015 is average ending cash reserves, 2015 (\$1,000)

5 Net Worth 2015 is average nominal ending net worth, 2015 (\$1,000)

6 CRNW is average percentage change in real net worth over 2009-2015 period, (%)

# Representative Farm: Cotton

- Two of the sixteen cotton farms are characterized in good overall financial condition, no farms are in marginal condition, and fourteen are in poor condition.
- Thirteen of the farms are projected to experience severe cash flow problems and have more than a 50 percent chance of losing real equity over the period.



**Characteristics of Panel Farms Producing Cotton, 2008.**

|          | Cropland<br>(acres) | Assets<br>(\$1,000) | Debt/Asset<br>(ratio) | Gross Receipts<br>(\$1,000) | Cotton<br>(acres) |
|----------|---------------------|---------------------|-----------------------|-----------------------------|-------------------|
| TXSP2500 | 2,500               | 894.00              | 0.29                  | 571.10                      | 1,958             |
| TXSP3745 | 3,745               | 1,627.00            | 0.21                  | 1,009.90                    | 2,916             |
| TXEC5000 | 5,000               | 1,763.00            | 0.17                  | 2,102.80                    | 3,650             |
| TXRP2500 | 2,500               | 638.00              | 0.24                  | 365.80                      | 1,117             |
| TXMC1800 | 1,800               | 1,019.00            | 0.20                  | 630.90                      | 600               |
| TXCB2250 | 2,250               | 1,258.00            | 0.19                  | 848.30                      | 1,000             |
| TXCB8000 | 8,000               | 1,707.00            | 0.30                  | 2,480.10                    | 2,800             |
| TXVC4500 | 4,500               | 2,976.00            | 0.20                  | 1,391.10                    | 2,388             |
| CAC4000  | 4,000               | 17,861.00           | 0.17                  | 8,893.00                    | 1,333             |
| ARNC5000 | 5,000               | 6,556.00            | 0.20                  | 3,846.70                    | 5,000             |
| TNC1900  | 1,900               | 2,470.00            | 0.13                  | 1,076.90                    | 990               |
| TNC4050  | 4,050               | 5,575.00            | 0.34                  | 1,921.30                    | 2,670             |
| ALC3000  | 3,000               | 1,735.00            | 0.28                  | 1,360.90                    | 1,500             |
| GAC2300  | 2,300               | 4,553.00            | 0.30                  | 1,870.60                    | 1,495             |
| SCC1500  | 1,500               | 1,169.00            | 0.24                  | 964.10                      | 525               |
| NCC1500  | 1,500               | 3,167.00            | 0.20                  | 923.40                      | 575               |

# Representative Farm: Cotton

## Economic Viability of Representative Farms over the 2009-2015 Period

| Farm Name | Overall Ranking |      | P(Negative Ending Cash) | P(Real Net Worth Declines) |
|-----------|-----------------|------|-------------------------|----------------------------|
|           | 2009            | 2015 | 2009-2015               | 2009-2015                  |
| 2/0/14    |                 |      |                         |                            |
| TXSP2500  |                 |      | 99-99                   | 1-99                       |
| TXSP3745  |                 |      | 99-99                   | 1-99                       |
| TXEC5000  |                 |      | 1-50                    | 1-55                       |
| TXRP2500  |                 |      | 99-95                   | 1-89                       |
| TXMC1800  |                 |      | 99-96                   | 1-84                       |
| TXCB2250  |                 |      | 1-88                    | 1-64                       |
| TXCB8000  |                 |      | 1-81                    | 1-73                       |
| TXVC4500  |                 |      | 1-13                    | 1-5                        |
| CAC4000   |                 |      | 1-2                     | 1-3                        |
| ARNC5000  |                 |      | 99-99                   | 1-98                       |
| TNC1900   |                 |      | 1-56                    | 1-33                       |
| TNC4050   |                 |      | 99-99                   | 1-99                       |
| ALC3000   |                 |      | 99-92                   | 1-79                       |
| GAC2300   |                 |      | 99-99                   | 1-99                       |
| SCC1500   |                 |      | 99-87                   | 1-75                       |
| NCC1500   |                 |      | 99-99                   | 1-86                       |

1 Viability is classified as good (green), moderate (yellow), and poor (red) based on the probabilities:

<25

25-50

>50

2 P(NegativeEnding Cash) is the probability that the farm will have a cash flow deficit. Reported values represent the probabilities for 2009 and 2015.

3 P(Real Net Worth Decline) is the probability that the farm will have a loss in real net worth relative to the beginning net worth. Reported values represent the probabilities for losing real net worth from 2008 to 2009 and from 2008 to 2015.

## Implications of the December 2009 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Cotton

|          | Receipts  | Payments  | NCFI       | Reserve 2015 | Net Worth 2015 | CRNW    |
|----------|-----------|-----------|------------|--------------|----------------|---------|
|          | (\$1,000) | (\$1,000) | (\$1,000)  | (\$1,000)    | (\$1,000)      | (%)     |
| TXSP2500 | 676.37    | 79.00     | (135.74)   | (1,601.93)   | (825.81)       | (37.31) |
| TXSP3745 | 1,115.92  | 128.87    | (148.24)   | (2,808.28)   | (1,029.27)     | (26.83) |
| TXEC5000 | 2,021.07  | 212.53    | 194.77     | 6.96         | 1,560.73       | (0.41)  |
| TXRP2500 | 362.52    | 48.02     | (2.88)     | (425.87)     | 110.45         | (10.81) |
| TXMC1800 | 684.32    | 71.32     | 54.40      | (765.72)     | 345.33         | (8.41)  |
| TXCB2250 | 773.62    | 88.16     | 51.61      | (497.45)     | 798.12         | (2.58)  |
| TXCB8000 | 2,748.39  | 307.07    | 259.34     | (1,543.28)   | 607.52         | (9.06)  |
| TXVC4500 | 1,767.24  | 186.51    | 401.70     | 818.70       | 3,730.29       | 6.39    |
| CAC4000  | 6,150.68  | 54.61     | 859.12     | 2,978.81     | 18,305.94      | 2.66    |
| ARNC5000 | 3,735.06  | 334.39    | 61.29      | (3,656.55)   | 2,784.80       | (6.25)  |
| TNC1900  | 1,075.81  | 88.74     | 175.63     | (141.55)     | 2,436.05       | 1.58    |
| TNC4050  | 1,891.25  | 213.76    | (1,144.31) | (11,544.01)  | (5,950.66)     | (45.16) |
| ALC3000  | 1,332.56  | 171.86    | 105.17     | (1,389.03)   | 391.04         | (9.82)  |
| GAC2300  | 1,947.91  | 232.68    | (410.81)   | (5,162.10)   | (715.68)       | (17.95) |
| SCC1500  | 955.70    | 115.82    | 38.79      | (507.43)     | 590.25         | (4.79)  |
| NCC1500  | 885.68    | 86.86     | 13.13      | (1,162.45)   | 1,870.90       | (3.36)  |

1 Receipts are average annual total cash receipts including government payments, 2009-2015 (\$1,000)

2 Payments are average annual total government payments, 2009-2015 (\$1,000)

3 NCFI is average annual net cash farm income, 2009-2015 (\$1,000)

4 Reserve 2015 is average ending cash reserves, 2015 (\$1,000)

5 Net Worth 2015 is average nominal ending net worth, 2015 (\$1,000)

6 CRNW is average percentage change in real net worth over 2009-2015 period, (%)

# Representative Farm: Rice

- Two of the fourteen rice farms are projected to be in good overall financial condition, three are in marginal condition, and nine are in poor condition.
- Nine of the rice farms are expected to face severe cash flow problems and eight have high likelihoods of losing real equity.



**Characteristics of Panel Farms Producing Rice, 2008.**

|          | Cropland<br>(acres) | Assets<br>(\$1,000) | Debt/Asset<br>(ratio) | Gross Receipts<br>(\$1,000) | Rice<br>(acres) |
|----------|---------------------|---------------------|-----------------------|-----------------------------|-----------------|
| CAR550   | 550                 | 2,115.00            | 0.19                  | 783.10                      | 500             |
| CAR2365  | 2,365               | 6,632.00            | 0.18                  | 3,518.90                    | 2,240           |
| CABR1300 | 1,300               | 4,821.00            | 0.21                  | 1,934.80                    | 1,200           |
| CACR715  | 715                 | 2,534.00            | 0.21                  | 1,105.10                    | 650             |
| TXR1350  | 1,350               | 1,451.00            | 0.15                  | 622.10                      | 450             |
| TXR3000  | 3,000               | 1,000.00            | 0.12                  | 1,524.00                    | 1,200           |
| TXBR1800 | 1,800               | 617.00              | 0.15                  | 1,111.50                    | 600             |
| TXER3200 | 3,200               | 1,316.00            | 0.17                  | 1,715.80                    | 1,067           |
| LASR1200 | 1,200               | 605.00              | 0.13                  | 882.00                      | 660             |
| ARMR7500 | 7,500               | 8,288.00            | 0.25                  | 5,458.40                    | 1,875           |
| ARSR3240 | 3,240               | 3,564.00            | 0.18                  | 2,164.80                    | 1,620           |
| ARWR1200 | 1,200               | 3,177.00            | 0.24                  | 889.40                      | 600             |
| ARHR3000 | 3,000               | 5,000.00            | 0.20                  | 2,251.90                    | 1,450           |
| MOWR4000 | 4,000               | 11,526.00           | 0.19                  | 3,129.20                    | 2,000           |

# Representative Farm: Rice

## Economic Viability of Representative Farms over the 2009-2015 Period

| Farm Name | Overall Ranking |      | P(Negative Ending Cash) | P(Real Net Worth Declines) |
|-----------|-----------------|------|-------------------------|----------------------------|
|           | 2009            | 2015 | 2009-2015               | 2009-2015                  |
| 2/3/9     |                 |      |                         |                            |
| CAR550    |                 |      | 1-88                    | 1-77                       |
| CAR2365   |                 |      | 1-61                    | 1-51                       |
| CABR1300  |                 |      | 1-56                    | 1-40                       |
| CACR715   |                 |      | 1-46                    | 1-34                       |
| TXR1350   |                 |      | 1-81                    | 1-77                       |
| TXR3000   |                 |      | 1-9                     | 1-24                       |
| TXBR1800  |                 |      | 1-78                    | 1-78                       |
| TXER3200  |                 |      | 1-76                    | 1-77                       |
| LASR1200  |                 |      | 1-4                     | 1-14                       |
| ARMR7500  |                 |      | 1-84                    | 1-75                       |
| ARSR3240  |                 |      | 1-49                    | 1-42                       |
| ARWR1200  |                 |      | 99-99                   | 1-99                       |
| ARHR3000  |                 |      | 1-94                    | 1-81                       |
| MOWR4000  |                 |      | 1-31                    | 1-13                       |

1 Viability is classified as good (green), moderate (yellow), and poor (red) based on the probabilities:

|     |       |     |
|-----|-------|-----|
| <25 | 25-50 | >50 |
|-----|-------|-----|

2 P(NegativeEnding Cash) is the probability that the farm will have a cash flow deficit. Reported values represent the probabilities for 2009 and 2015.

3 P(Real Net Worth Decline) is the probability that the farm will have a loss in real net worth relative to the beginning net worth. Reported values represent the probabilities for losing real net worth from 2008 to 2009 and from 2008 to 2015.

## Implications of the December 2009 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Rice

|          | Receipts  | Payments  | NCFI      | Reserve 2015 | Net Worth 2015 | CRNW    |
|----------|-----------|-----------|-----------|--------------|----------------|---------|
|          | (\$1,000) | (\$1,000) | (\$1,000) | (\$1,000)    | (\$1,000)      | (%)     |
| CAR550   | 684.31    | 72.13     | 41.47     | (530.33)     | 1,380.44       | (3.21)  |
| CAR2365  | 3,056.72  | 175.67    | 280.33    | (611.33)     | 5,588.13       | (0.60)  |
| CABR1300 | 1,691.64  | 170.39    | 258.40    | (87.21)      | 4,236.54       | 0.61    |
| CACR715  | 967.92    | 96.38     | 117.51    | 52.13        | 2,274.09       | 0.92    |
| TXR1350  | 539.52    | 54.04     | 60.67     | (361.41)     | 1,011.53       | (3.22)  |
| TXR3000  | 1,320.96  | 124.92    | 302.55    | 1,055.46     | 1,817.19       | 6.91    |
| TXBR1800 | 962.10    | 84.54     | 33.73     | (645.79)     | 28.79          | (13.66) |
| TXER3200 | 1,531.08  | 146.00    | 28.77     | (822.65)     | 398.75         | (9.75)  |
| LASR1200 | 796.59    | 55.33     | 182.20    | 589.15       | 1,087.41       | 7.72    |
| ARMR7500 | 5,022.76  | 287.79    | 334.46    | (2,907.90)   | 4,526.89       | (4.31)  |
| ARSR3240 | 1,914.70  | 174.26    | 376.38    | (57.67)      | 3,509.84       | 1.05    |
| ARWR1200 | 785.03    | 71.10     | (251.58)  | (3,404.39)   | (443.56)       | (17.19) |
| ARHR3000 | 2,012.45  | 172.73    | 69.75     | (2,377.10)   | 2,334.51       | (5.88)  |
| MOWR4000 | 2,746.23  | 171.75    | 669.02    | 742.74       | 11,637.03      | 2.53    |

1 Receipts are average annual total cash receipts including government payments, 2009-2015 (\$1,000)

2 Payments are average annual total government payments, 2009-2015 (\$1,000)

3 NCFI is average annual net cash farm income, 2009-2015 (\$1,000)

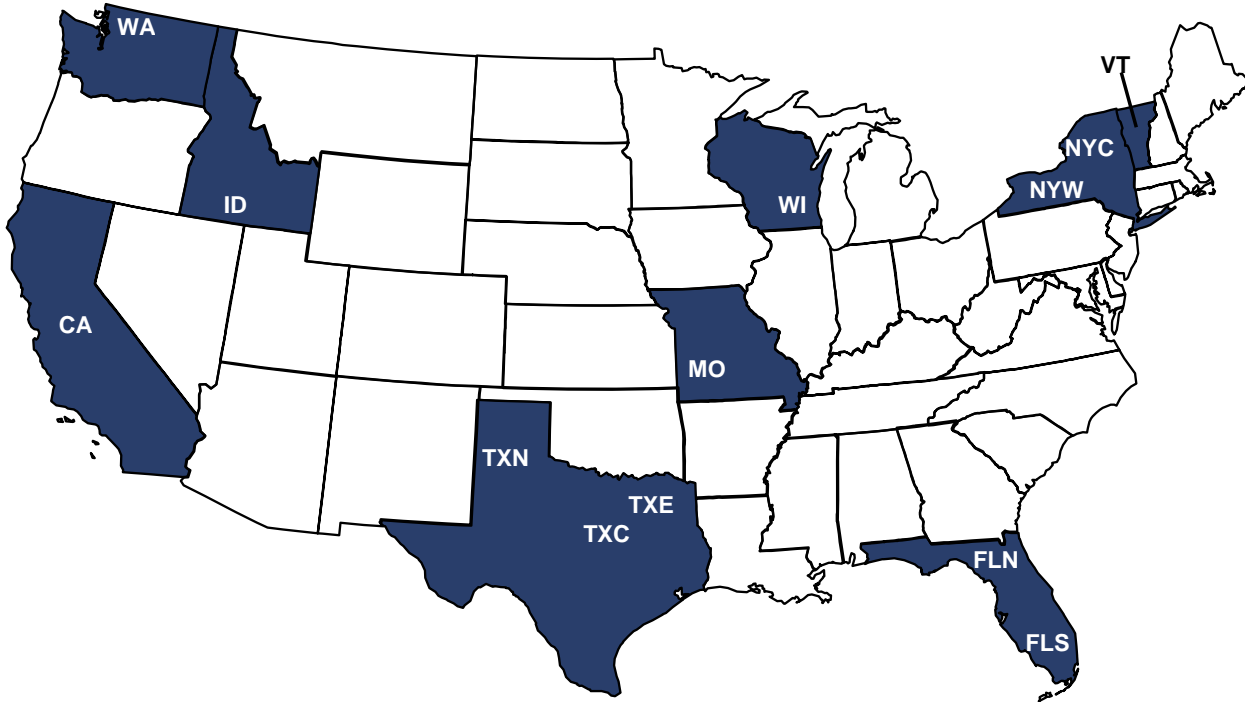
4 Reserve 2015 is average ending cash reserves, 2015 (\$1,000)

5 Net Worth 2015 is average nominal ending net worth, 2015 (\$1,000)

6 CRNW is average percentage change in real net worth over 2009-2015 period, (%)

# Representative Farm: Dairy

- Eighteen of twenty-two dairy operations are in good overall financial condition. Three dairies are classified in marginal condition, and one is in poor condition.
- Four of the dairies are projected to experience severe liquidity pressure; however, none of the dairies are expected to face a 50 percent or greater chance of losing real equity.



**Characteristics of Panel Farms Producing Milk, 2008.**

|          | Cropland<br>(acres) | Assets<br>(\$1,000) | Debt/Asset<br>(ratio) | Gross Receipts<br>(\$1,000) | Cows<br>(number) |
|----------|---------------------|---------------------|-----------------------|-----------------------------|------------------|
| CAD1710  | 700                 | 21,095.00           | 0.21                  | 7,199.20                    | 1,710            |
| WAD250   | 200                 | 3,847.00            | 0.22                  | 1,142.80                    | 250              |
| WAD850   | 605                 | 8,894.00            | 0.22                  | 3,816.60                    | 850              |
| IDD1000  | 360                 | 6,971.00            | 0.15                  | 4,739.10                    | 1,000            |
| IDD3000  | 1,500               | 22,855.00           | 0.16                  | 13,894.20                   | 3,000            |
| TXND3000 | 520                 | 16,314.00           | 0.17                  | 12,010.00                   | 3,000            |
| TXCD550  | 750                 | 4,364.00            | 0.19                  | 2,102.90                    | 550              |
| TXCD1300 | 560                 | 7,733.00            | 0.17                  | 5,146.80                    | 1,300            |
| TXED450  | 850                 | 3,156.00            | 0.19                  | 1,687.70                    | 450              |
| TXED1000 | 750                 | 6,494.00            | 0.20                  | 4,117.50                    | 1,000            |
| WID145   | 600                 | 2,671.00            | 0.22                  | 823.50                      | 145              |
| WID1000  | 2,000               | 8,128.00            | 0.19                  | 5,580.50                    | 1,000            |
| NYWD600  | 1,200               | 5,339.00            | 0.21                  | 2,735.30                    | 600              |
| NYWD1200 | 2,100               | 10,957.00           | 0.20                  | 5,586.70                    | 1,200            |
| NYCD110  | 325                 | 1,228.00            | 0.19                  | 543.00                      | 110              |
| NYCD550  | 1,100               | 5,336.00            | 0.24                  | 2,847.30                    | 550              |
| VTD140   | 220                 | 1,375.00            | 0.17                  | 636.30                      | 140              |
| VTD400   | 1,000               | 4,461.00            | 0.23                  | 1,945.30                    | 400              |
| MOGD500  | 0                   | 2,335.00            | 0.21                  | 1,282.30                    | 500              |
| M OCD500 | 530                 | 4,088.00            | 0.21                  | 2,238.40                    | 500              |
| FLND550  | 600                 | 4,297.00            | 0.18                  | 2,547.70                    | 550              |
| FLSD1500 | 400                 | 12,458.00           | 0.20                  | 7,015.90                    | 1,500            |

# Representative Farm: Dairy

## Economic Viability of Representative Farms over the 2009-2015 Period

| Farm Name | Overall Ranking |      | P(Negative Ending Cash) | P(Real Net Worth Declines) |
|-----------|-----------------|------|-------------------------|----------------------------|
|           | 2009            | 2015 | 2009-2015               | 2009-2015                  |
| 18/3/1    |                 |      |                         |                            |
| CAD1710   |                 |      | 99-12                   | 1-1                        |
| WAD250    |                 |      | 99-24                   | 1-1                        |
| WAD850    |                 |      | 99-12                   | 1-1                        |
| IDD1000   |                 |      | 99-1                    | 1-1                        |
| IDD3000   |                 |      | 99-1                    | 1-1                        |
| TXND3000  |                 |      | 99-1                    | 1-1                        |
| TXCD550   |                 |      | 99-1                    | 1-1                        |
| TXCD1300  |                 |      | 99-4                    | 1-1                        |
| TXED450   |                 |      | 99-8                    | 1-2                        |
| TXED1000  |                 |      | 99-12                   | 1-4                        |
| WID145    |                 |      | 1-1                     | 1-1                        |
| WID1000   |                 |      | 99-8                    | 1-3                        |
| NYWD600   |                 |      | 99-90                   | 1-37                       |
| NYWD1200  |                 |      | 99-1                    | 1-1                        |
| NYCD110   |                 |      | 1-1                     | 1-1                        |
| NYCD550   |                 |      | 99-53                   | 1-3                        |
| VTD140    |                 |      | 99-63                   | 1-18                       |
| VTD400    |                 |      | 99-35                   | 1-4                        |
| MOGD500   |                 |      | 1-1                     | 1-1                        |
| MOCD500   |                 |      | 99-60                   | 1-8                        |
| FLND550   |                 |      | 1-1                     | 1-1                        |
| FLSD1500  |                 |      | 99-45                   | 1-9                        |

1 Viability is classified as good (green), moderate (yellow), and poor (red) based on the probabilities:

|     |       |     |
|-----|-------|-----|
| <25 | 25-50 | >50 |
|-----|-------|-----|

2 P(NegativeEnding Cash) is the probability that the farm will have a cash flow deficit. Reported values represent the probabilities for 2009 and 2015.

3 P(Real Net Worth Decline) is the probability that the farm will have a loss in real net worth relative to the beginning net worth. Reported values represent the probabilities for losing real net worth from 2008 to 2009 and from 2008 to 2015.

## Implications of the December 2009 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Milk

|          | Receipts  | Payments  | NCFI      | Reserve 2015 | Net Worth 2015 | CRNW  |
|----------|-----------|-----------|-----------|--------------|----------------|-------|
|          | (\$1,000) | (\$1,000) | (\$1,000) | (\$1,000)    | (\$1,000)      | (%)   |
| CAD1710  | 7,243.41  | 0.03      | 1,058.99  | 1,953.51     | 20,451.97      | 5.07  |
| WAD250   | 1,175.58  | 0.00      | 241.10    | 299.81       | 3,911.01       | 5.87  |
| WAD850   | 3,927.37  | 0.00      | 679.09    | 1,775.93     | 9,614.37       | 8.25  |
| IDD1000  | 4,865.01  | 0.00      | 1,018.65  | 3,770.44     | 10,458.56      | 15.16 |
| IDD3000  | 14,266.67 | 0.00      | 3,320.12  | 12,194.41    | 33,573.13      | 13.67 |
| TXND3000 | 12,555.13 | 0.00      | 2,367.77  | 10,143.59    | 23,714.62      | 15.11 |
| TXCD550  | 2,166.75  | 0.00      | 434.26    | 1,606.22     | 5,590.00       | 10.70 |
| TXCD1300 | 5,308.21  | 0.00      | 735.42    | 2,523.92     | 9,356.45       | 10.34 |
| TXED450  | 1,745.74  | 0.00      | 244.87    | 640.03       | 3,562.52       | 9.13  |
| TXED1000 | 4,246.43  | 0.00      | 577.60    | 1,415.22     | 7,172.83       | 9.31  |
| WID145   | 815.92    | 0.00      | 268.26    | 740.10       | 3,162.65       | 7.48  |
| WID1000  | 5,471.11  | 14.17     | 659.70    | 2,328.29     | 9,339.62       | 9.76  |
| NYWD600  | 2,788.85  | 0.00      | 84.06     | (1,121.68)   | 3,793.09       | 1.45  |
| NYWD1200 | 5,697.26  | 0.00      | 963.58    | 3,416.82     | 13,035.88      | 9.34  |
| NYCD110  | 553.75    | 4.52      | 201.75    | 541.96       | 1,647.79       | 9.77  |
| NYCD550  | 2,905.51  | 0.00      | 354.95    | (57.62)      | 5,205.48       | 7.14  |
| VTD140   | 651.05    | 0.00      | 67.84     | (58.14)      | 1,193.55       | 3.10  |
| VTD400   | 1,988.82  | 0.00      | 220.40    | 166.76       | 4,132.74       | 5.50  |
| MOGD500  | 1,301.29  | 0.00      | 376.84    | 1,229.35     | 3,351.94       | 13.37 |
| MOCD500  | 2,269.39  | 0.00      | 232.55    | (237.26)     | 3,683.28       | 5.15  |
| FLND550  | 2,445.09  | 0.00      | 670.23    | 2,789.62     | 6,727.93       | 13.60 |
| FLSD1500 | 7,343.34  | 0.00      | 469.23    | 304.96       | 11,671.10      | 5.38  |

1 Receipts are average annual total cash receipts including government payments, 2009-2015 (\$1,000)

2 Payments are average annual total government payments, 2009-2015 (\$1,000)

3 NCFI is average annual net cash farm income, 2009-2015 (\$1,000)

4 Reserve 2015 is average ending cash reserves, 2015 (\$1,000)

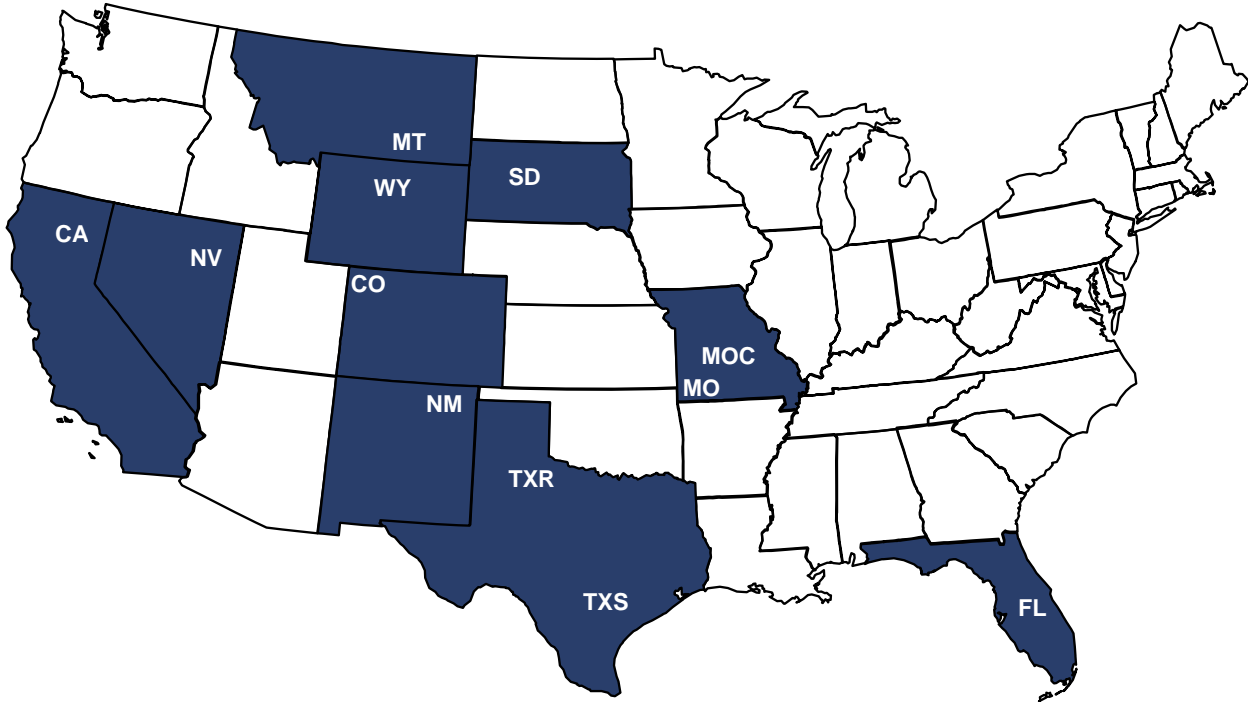
5 Net Worth 2015 is average nominal ending net worth, 2015 (\$1,000)

6 CRNW is average percentage change in real net worth over 2009-2015 period, (%)



# Representative Farm: Cow/Calf

- Six of twelve cow-calf operations are projected to be in good overall financial condition, four are marginal, and two are expected to be in poor condition.
- Six of the operations will face significant liquidity pressure over the period, as their likelihoods of experiencing negative ending cash in 2015 exceed 50 percent.
- Two of the twelve operations are projected to face a severe threat of losing real equity over the period.



## Characteristics of Panel Farms Producing Beef Cattle, 2008.

|         | Cropland<br>(acres) | Assets<br>(\$1,000) | Debt/Asset<br>(ratio) | Gross Receipts<br>(\$1,000) | Cows<br>(number) |
|---------|---------------------|---------------------|-----------------------|-----------------------------|------------------|
| CAB500  | 0                   | 5,660.00            | 0.03                  | 274.00                      | 500              |
| NVB700  | 1,300               | 4,693.00            | 0.02                  | 351.00                      | 700              |
| MTB500  | 0                   | 5,185.00            | 0.02                  | 289.50                      | 500              |
| WYB335  | 330                 | 3,613.00            | 0.03                  | 261.90                      | 335              |
| COB250  | 450                 | 17,840.00           | 0.01                  | 217.60                      | 250              |
| NMB240  | 0                   | 5,674.00            | 0.02                  | 163.50                      | 240              |
| SDB375  | 1,150               | 5,343.00            | 0.01                  | 219.90                      | 375              |
| MOB250  | 280                 | 2,554.00            | 0.02                  | 296.10                      | 250              |
| MOCB400 | 40                  | 4,095.00            | 0.01                  | 259.50                      | 400              |
| TXRB500 | 0                   | 6,831.00            | 0.01                  | 406.30                      | 500              |
| TXSB200 | 0                   | 3,058.00            | 0.03                  | 124.10                      | 185              |
| FLB1155 | 5,400               | 17,463.00           | 0.01                  | 600.10                      | 1,155            |

# Representative Farm: Cow/Calf

## Economic Viability of Representative Farms over the 2009-2015 Period

| Farm Name | Overall Ranking |      | P(Negative Ending Cash) | P(Real Net Worth Declines) |
|-----------|-----------------|------|-------------------------|----------------------------|
|           | 2009            | 2015 | 2009-2015               | 2009-2015                  |
| 6/4/2     |                 |      |                         |                            |
| CAB500    |                 |      | 99-99                   | 1-99                       |
| NVB700    |                 |      | 99-98                   | 1-8                        |
| MTB500    |                 |      | 1-1                     | 1-1                        |
| WYB335    |                 |      | 99-99                   | 1-97                       |
| COB250    |                 |      | 1-94                    | 1-1                        |
| NMB240    |                 |      | 99-99                   | 1-1                        |
| SDB375    |                 |      | 1-3                     | 1-1                        |
| MOB250    |                 |      | 1-1                     | 1-1                        |
| MOCB400   |                 |      | 99-15                   | 1-1                        |
| TXRB500   |                 |      | 1-1                     | 1-1                        |
| TXSB200   |                 |      | 99-99                   | 1-14                       |
| FLB1155   |                 |      | 1-1                     | 1-1                        |

1 Viability is classified as good (green), moderate (yellow), and poor (red) based on the probabilities:

<25

25-50

>50

2 P(NegativeEnding Cash) is the probability that the farm will have a cash flow deficit. Reported values represent the probabilities for 2009 and 2015.

3 P(Real Net Worth Decline) is the probability that the farm will have a loss in real net worth relative to the beginning net worth. Reported values represent the probabilities for losing real net worth from 2008 to 2009 and from 2008 to 2015.

## Implications of the December 2009 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Beef Cattle

|         | Receipts  | Payments  | NCFI      | Reserve 2015 | Net Worth 2015 | CRNW   |
|---------|-----------|-----------|-----------|--------------|----------------|--------|
|         | (\$1,000) | (\$1,000) | (\$1,000) | (\$1,000)    | (\$1,000)      | (%)    |
| CAB500  | 314.59    | 0.00      | (84.61)   | (1,002.54)   | 4,723.99       | (1.91) |
| NVB700  | 392.98    | 0.00      | 28.31     | (323.60)     | 4,868.46       | 1.14   |
| MTB500  | 315.57    | 0.00      | 108.10    | 272.14       | 5,782.10       | 2.29   |
| WYB335  | 281.84    | 0.00      | (33.47)   | (740.97)     | 3,138.46       | (1.13) |
| COB250  | 222.39    | 0.00      | 17.91     | (132.22)     | 18,628.28      | 0.82   |
| NMB240  | 179.26    | 0.00      | 18.26     | (151.66)     | 5,751.96       | 0.76   |
| SDB375  | 246.50    | 0.00      | 77.97     | 163.70       | 5,756.94       | 1.49   |
| MOB250  | 300.39    | 2.82      | 125.71    | 394.32       | 3,074.74       | 2.94   |
| MOCB400 | 284.58    | 0.00      | 66.49     | 113.54       | 4,441.45       | 1.51   |
| TXRB500 | 450.05    | 0.00      | 118.44    | 421.09       | 7,632.20       | 2.01   |
| TXSB200 | 162.02    | 0.00      | 33.95     | (197.12)     | 3,296.34       | 0.40   |
| FLB1155 | 666.21    | 0.00      | 200.75    | 864.06       | 19,183.82      | 1.73   |

1 Receipts are average annual total cash receipts including government payments, 2009-2015 (\$1,000)

2 Payments are average annual total government payments, 2009-2015 (\$1,000)

3 NCFI is average annual net cash farm income, 2009-2015 (\$1,000)

4 Reserve 2015 is average ending cash reserves, 2015 (\$1,000)

5 Net Worth 2015 is average nominal ending net worth, 2015 (\$1,000)

6 CRNW is average percentage change in real net worth over 2009-2015 period, (%)