

Richardson, James W. et al.

**Research Report**

## Representative farms economic outlook for the August 2012 FAPRI/AFPC Baseline

AFPC Briefing Paper, No. 12-2

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# ***Representative Farms Economic Outlook for the August 2012 FAPRI/AFPC Baseline***

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**Briefing Paper 12-2**

**August 2012**



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**REPRESENTATIVE FARMS ECONOMIC  
OUTLOOK FOR THE AUGUST 2012  
FAPRI/AFPC BASELINE**

AFPC Briefing Paper 12-2

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## EXECUTIVE SUMMARY

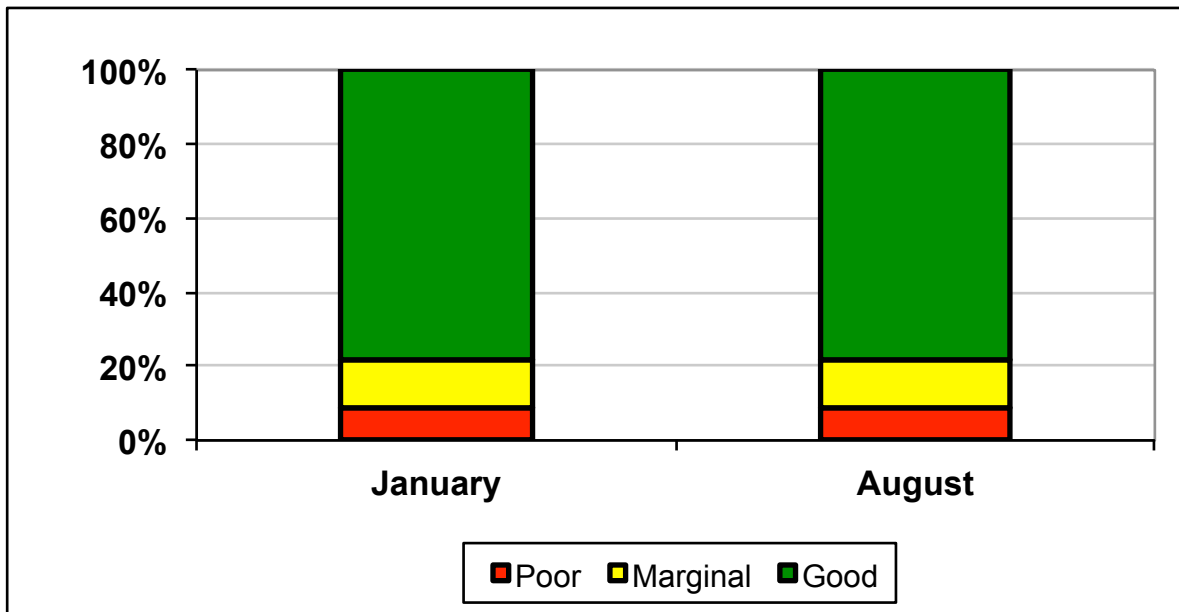
The Agricultural and Food Policy Center (AFPC) at Texas A&M University develops and maintains data to simulate 98 representative crop, dairy, and livestock operations in major production areas in 28 states. The chief purpose of this analysis is to project the economic viability of those farms by region and commodity for 2012 through 2017. 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 August 2012 Baseline.

Under the August 2012 Baseline, 46 of the 64 crop farms are considered in good liquidity condition (less than a 25 percent chance of negative ending cash by 2017). Five crop farms have between a 25 percent and a 50 percent likelihood of negative ending cash, and the remaining 13 crop farms have greater than a 50 percent chance of negative ending cash. Furthermore, 42 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 ten 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.

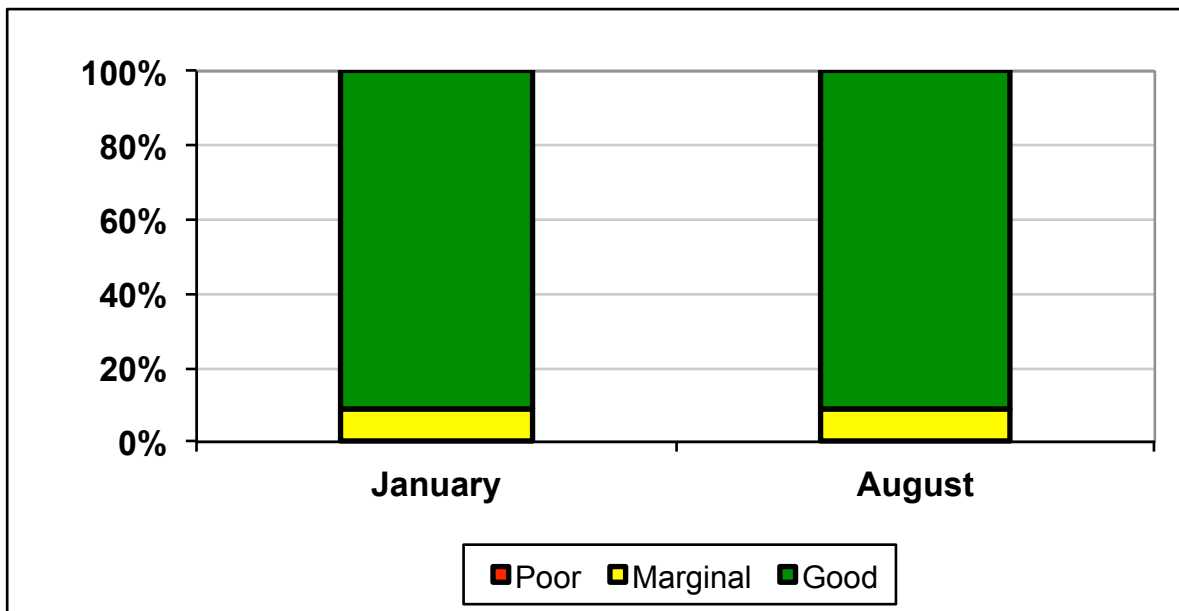
- **FEEDGRAIN FARMS:** Eighteen of the 23 feedgrain farms are in good overall financial condition. Three are classified in marginal condition and two are in poor condition. Overall financial rankings for representative feedgrain farms remain unchanged from January 2012 baseline.
- **WHEAT FARMS:** Ten of the representative wheat farms are classified in good overall financial condition, and one is in marginal condition. These rankings are the same under the August 2012 baseline as compared to the January 2012 baseline.
- **COTTON FARMS:** Eight of the 16 cotton farms are classified in good condition, four are in marginal condition, and four are in poor condition. The August 2012 baseline results in a slight degradation in overall financial rankings, as the current baseline results in one less good farm and one more poor farm.
- **RICE FARMS:** Four of the 14 rice farms are projected to be in good financial condition, three are in marginal condition, and seven are in poor condition. This shows an improvement in overall financial rankings for representative farms, resulting in 2 more farms in good condition and 2 less farms in poor condition under the August 2012 baseline.
- **DAIRY FARMS:** Eight of the 22 dairy farms are in good overall financial condition. Eight are classified in marginal condition, and six are in poor condition. Lower milk prices, especially in 2012, results in a marked decline in overall financial rankings for representative dairies as compared to the January 2012 baseline.
- **BEEF CATTLE RANCHES:** Nine of the 12 cattle ranches are classified in good financial condition, two are in marginal condition, and one is projected to be in poor condition. The August 2012 baseline resulted in a shift of one farm from good to marginal condition as compared to the January 2012 baseline.

# Comparison of Projected Overall Economic Viability of Representative Farms, Dairies, and Ranches Between January 2012 and August 2012 FAPRI/AFPC Baselines

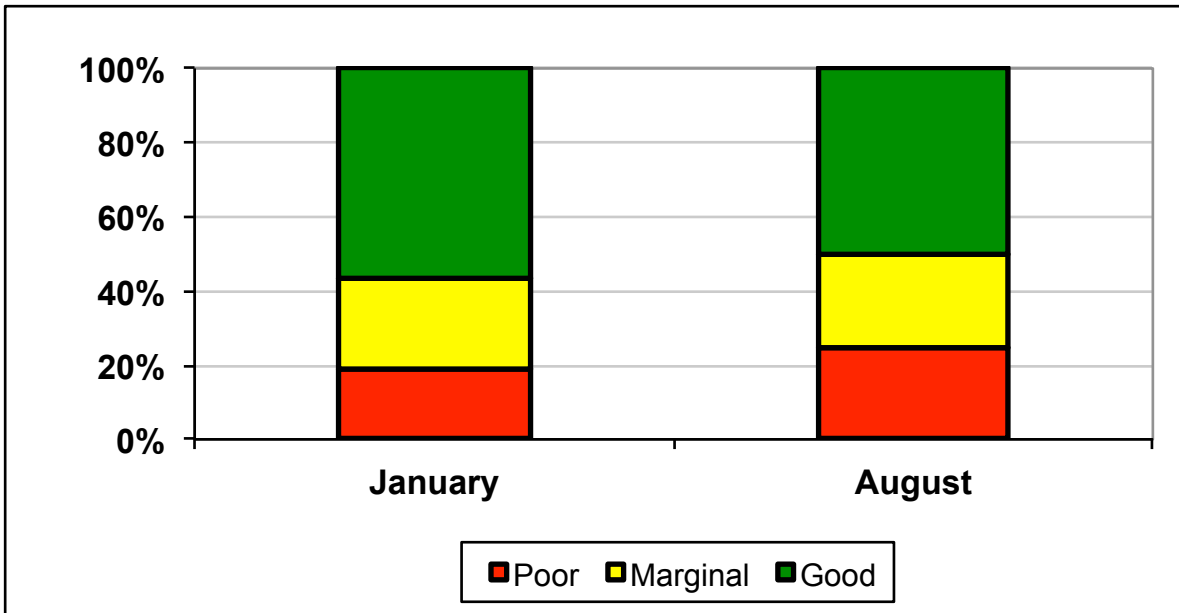
## Feedgrain Farms



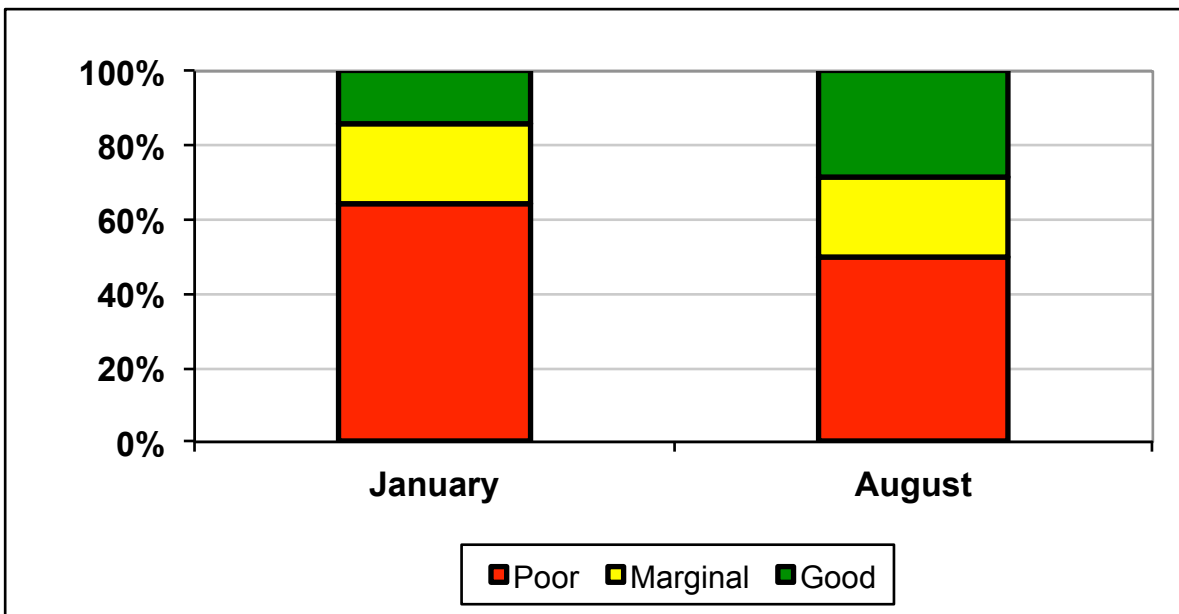
## Wheat Farms



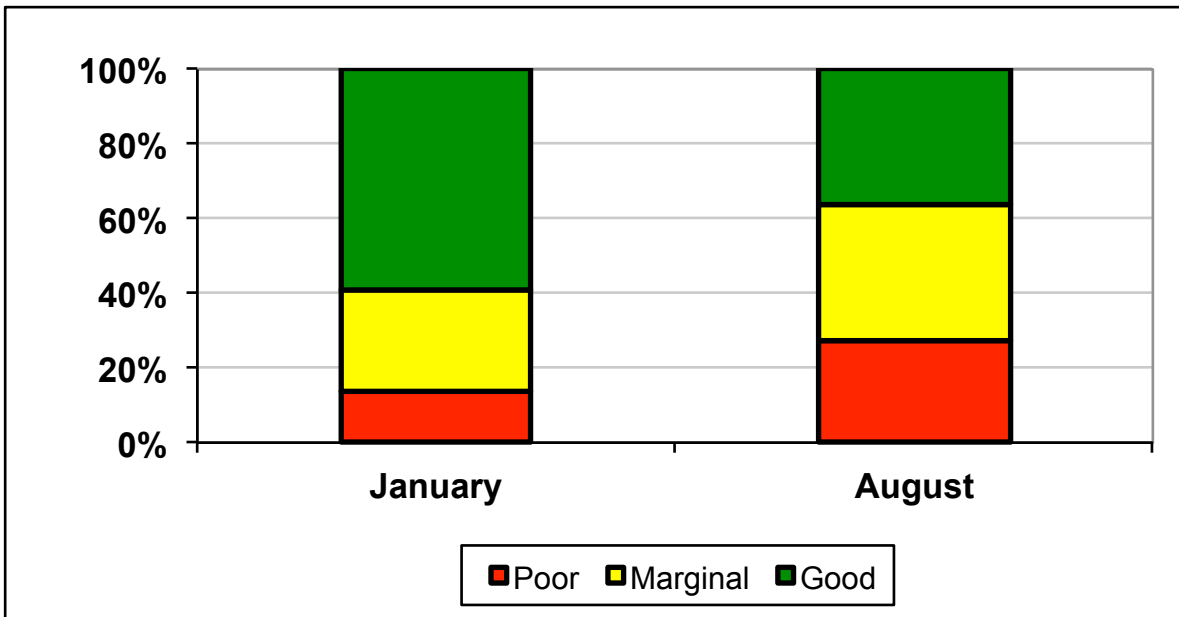
### Cotton Farms



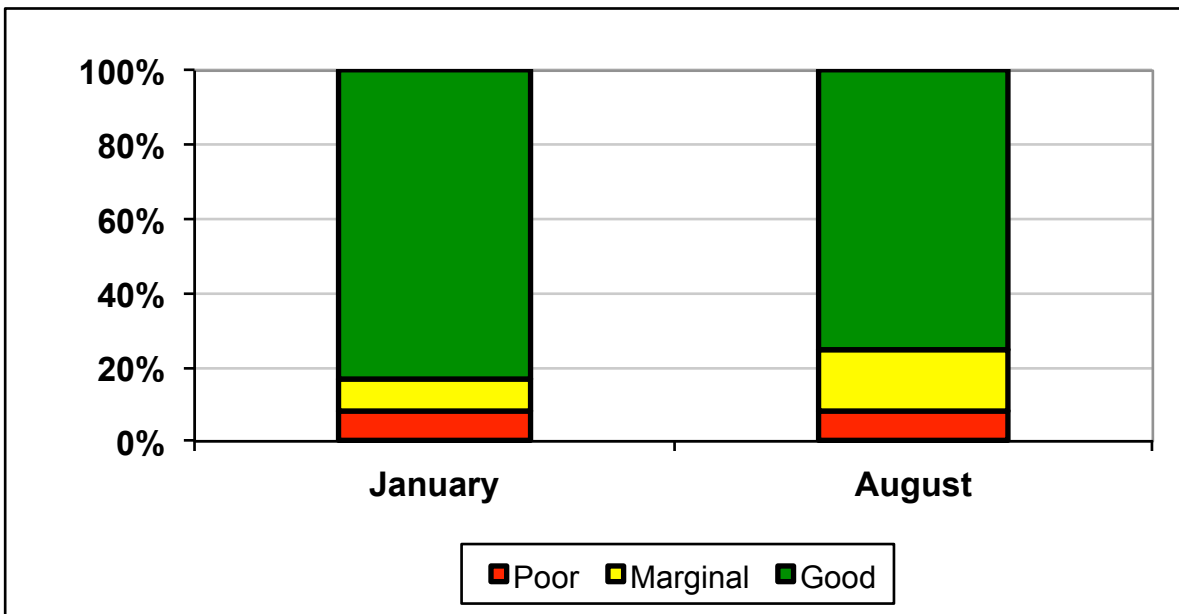
### Rice Farms



### Dairies



### Ranches



## **REPRESENTATIVE FARMS ECONOMIC OUTLOOK FOR THE AUGUST 2012 FAPRI/AFPC BASELINE**

The farm level economic impacts of the FAPRI August 2012 Baseline on representative crop and livestock operations are projected in this report. The analysis was conducted over the 2009-2017 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) August 2012 Baseline.

The FLIPSIM policy simulation model incorporates the historical risk faced by farmers for prices and production. This report presents the results of the August 2012 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 2017.

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

- **Overall Financial Position, 2012-2017** -- 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. 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** -- 2012-2017 average 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** -- 2012-2017 average annual CCP or ACRE payments, direct payments, and marketing loan gains/LDPs for crops and the MILC program payment for dairy farms.
- **NCFI** -- 2012-2017 average net cash farm income equals average total receipts minus average total cash expenses.
- **Reserve 2017** -- equals total cash on hand at the end of year 2017. 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 2017** -- equity equals total assets including land minus total debt from all sources and is reported at the end of 2017.
- **CRNW** -- annualized percentage change in the operator's net worth from January 1, 2012 through December 31, 2017, after adjusting for inflation.



**Table 1. FAPRI August 2012 Baseline Projections of Crop and Livestock Prices, 2009-2017**

	2009	2010	2011	2012	2013	2014	2015	2016	2017
<b>Crop Prices</b>									
Corn (\$/bu.)	3.55	5.18	6.25	8.10	5.20	4.86	4.74	4.74	4.75
Wheat (\$/bu.)	4.87	5.70	7.24	8.42	7.01	6.22	5.98	6.01	6.07
Cotton (\$/lb.)	0.6290	0.8150	0.8950	0.7013	0.7096	0.7076	0.7094	0.7111	0.7092
Sorghum (\$/bu.)	3.22	5.02	6.10	7.56	4.81	4.58	4.53	4.55	4.59
Soybeans (\$/bu.)	9.59	11.30	12.45	16.27	11.28	11.05	11.26	11.41	11.57
Barley (\$/bu.)	4.66	3.86	5.35	6.16	4.89	4.65	4.59	4.59	4.60
Oats (\$/bu.)	2.02	2.52	3.49	3.99	3.33	3.12	3.04	3.03	3.04
Rice (\$/cwt.)	14.40	12.70	14.05	14.62	14.41	14.19	14.11	14.15	14.29
Soybean Meal (\$/ton)	296.89	329.56	371.98	469.19	281.53	280.05	291.80	301.02	308.41
All Hay (\$/ton)	108.00	114.00	175.00	191.87	170.26	144.49	142.31	144.73	147.73
Peanuts (\$/ton)	434.00	450.00	634.00	648.47	517.58	566.67	552.51	552.04	548.37
<b>Cattle Prices</b>									
Feeder Cattle (\$/cwt)	101.89	115.40	141.25	151.64	159.09	167.47	160.68	153.52	149.15
Fed Cattle (\$/cwt)	83.25	95.38	114.73	122.02	130.86	130.99	126.44	124.26	122.73
Culled Cows (\$/cwt)	47.01	56.76	69.92	73.41	82.95	83.99	78.67	74.12	72.38
<b>Milk Price</b>									
U.S. All Milk Price (\$/cwt)	12.93	16.35	20.25	17.50	19.23	19.19	18.97	19.00	19.01

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

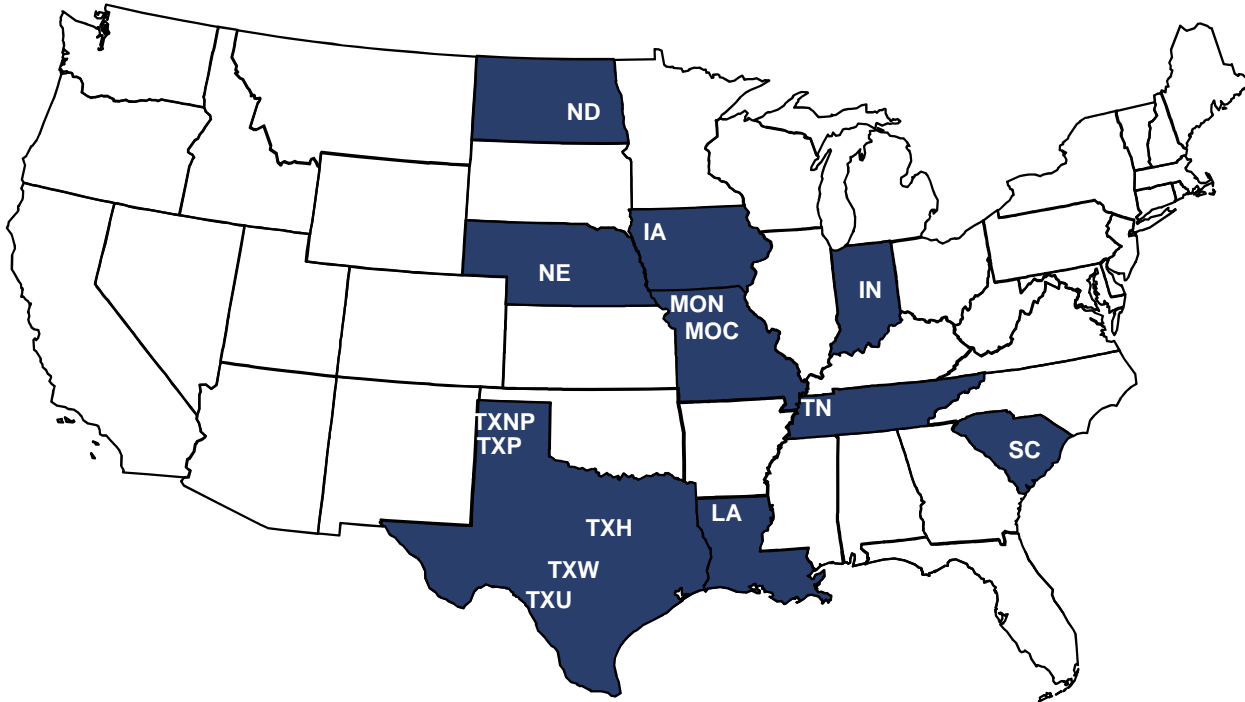
**Table 2. FAPRI August 2012 Baseline Assumed Rates of Change in Input Prices and Annual Changes in Land Values, 2010-2017**

	2010	2011	2012	2013	2014	2015	2016	2017
<b>Annual Rate of Change for Input Prices Paid</b>								
Seed Prices (%)	3.68	7.10	7.73	4.61	2.59	-0.57	0.57	1.21
All Fertilizer Prices (%)	-6.23	36.93	10.17	2.53	2.88	0.62	1.19	0.14
Herbicide Prices (%)	-6.38	-1.52	5.64	1.49	4.67	1.98	0.87	-0.05
Insecticide Prices (%)	1.86	2.44	4.70	1.30	4.19	1.91	0.91	0.08
Fuel and Lube Prices (%)	24.02	27.46	-3.24	-4.70	7.41	-0.16	-1.19	-1.64
Machinery Prices (%)	3.60	6.09	4.78	3.44	4.12	2.63	2.15	1.95
Wages (%)	0.53	1.59	3.16	2.24	2.46	2.75	2.94	3.04
Supplies (%)	1.31	4.52	1.85	1.75	3.65	1.92	1.09	0.46
Repairs (%)	1.89	3.70	2.92	1.60	2.70	2.43	2.17	2.04
Services (%)	3.21	1.86	1.58	2.12	4.52	2.71	2.02	1.52
Taxes (%)	3.43	5.21	4.33	3.41	6.54	3.38	2.93	2.18
PPI Items (%)	3.30	14.36	7.09	0.12	0.50	0.98	0.88	0.48
PPI Total (%)	3.31	11.76	6.79	0.50	1.13	1.52	1.36	0.79
<b>Annual Change in Consumer Price Index (%)</b>	1.64	3.14	1.70	1.27	2.34	2.00	1.75	1.63
<b>Annual Rate of Change for U.S. Land Prices (%)</b>	4.27	8.64	10.88	5.44	2.11	2.88	0.87	1.18

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

# Representative Farm: Feed Grains

- Overall, eighteen feed grain farms are characterized as good, three are marginal, and two are in poor condition.
- Only two of the twenty-three farms will be under severe cash flow stress; three farms have high probabilities (greater than a 50 percent chance) of losing real net worth.



**Characteristics of Panel Farms Producing Feed Grains, 2011.**

	Cropland (acres)	Assets (\$1,000)	Debt/Asset (ratio)	Gross Receipts (\$1,000)	Feed Grains (acres)
IAG1350	1,350	3,448.00	0.15	1,261.80	1,350
IAG3400	3,400	8,990.00	0.15	2,891.30	3,400
NEG2400	2,400	5,264.00	0.12	2,781.70	2,400
NEG4300	4,300	10,193.00	0.16	4,435.10	3,870
NDG2500	2,500	2,373.00	0.11	1,193.40	2,000
NDG8000	8,000	12,649.00	0.18	4,226.30	6,450
ING1000	1,000	3,342.00	0.10	812.60	1,000
ING2200	2,200	7,672.00	0.10	1,821.20	2,200
MOCG2300	2,300	12,102.00	0.11	1,686.90	2,300
MOCG4000	4,000	19,767.00	0.11	2,383.50	4,000
MONG1850	1,850	7,981.00	0.11	1,361.30	1,800
LAG2640	2,640	1,588.00	0.27	2,262.20	2,244
LANG2500	2,500	7,145.00	0.15	2,433.70	1,750
TNG900	900	1,950.00	0.12	630.60	900
TNG2200	2,200	4,314.00	0.11	1,324.50	2,200
SCG3500	3,500	10,062.00	0.14	3,167.90	2,625
TXNP3000	3,000	2,247.00	0.13	2,102.20	1,200
TXNP8000	8,000	7,038.00	0.11	5,970.70	3,987
TXPG2500	2,500	4,388.00	0.18	1,966.30	1,058
TXPG3760	3,760	5,183.00	0.18	4,377.90	1,878
TXHG2500	2,500	2,100.00	0.26	790.00	1,700
TXWG1600	1,600	1,209.00	0.10	619.70	1,050
TXUG1200	1,200	280.00	0.09	1,139.30	750

# Representative Farm: Feed Grains

## Economic Viability of Representative Farms over the 2012-2017 Period

Farm Name	Overall Ranking		P(Negative Ending Cash)	P(Real Net Worth Declines)
	2012	2017	2012-2017	2012-2017
18/3/2				
IAG1350			1-1	1-1
IAG3400			1-1	1-1
NEG2400			1-1	1-1
NEG4300			1-1	1-1
NDG2500			1-1	1-1
NDG8000			1-1	1-1
ING1000			1-1	1-1
ING2200			1-1	1-1
MOCG2300			1-1	1-1
MOCG4000			1-1	1-1
MONG1850			1-1	1-1
LAG2640			1-5	1-11
LANG2500			1-1	1-1
TNG900			1-1	1-3
TNG2200			1-1	1-8
SCG3500			1-1	1-1
TXNP3000			1-1	1-2
TXNP8000			1-1	1-4
TXPG2500			1-13	1-26
TXPG3760			1-55	1-60
TXHG2500			19-94	1-75
TXWG1600			1-7	1-26
TXUG1200			2-18	1-56

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

<25	25-50	>50
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2 P(NegativeEnding Cash) is the probability that the farm will have a cash flow deficit. Reported values represent the probabilities for 2012 and 2017.

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 2009 to 2012 and from 2009 to 2017.

## Implications of the August 2012 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Feed Grains and Oilseeds

	Receipts	Payments	NCFI	Reserve 2017	Net Worth 2017	CRNW
	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(%)
IAG1350	1,223.95	26.60	566.69	2,035.39	4,949.92	6.64
IAG3400	2,767.10	8.48	1,405.67	4,853.50	12,734.81	6.80
NEG2400	2,711.04	24.87	1,089.01	4,437.70	8,235.48	6.98
NEG4300	4,298.10	6.65	1,827.15	6,844.51	14,757.92	6.87
NDG2500	1,223.53	29.02	469.41	1,640.14	3,883.04	6.28
NDG8000	4,284.92	6.37	1,812.20	6,479.49	18,373.45	6.17
ING1000	822.85	20.32	316.51	829.62	4,258.75	4.32
ING2200	1,861.60	30.23	737.12	2,435.41	10,175.16	5.09
MOCG2300	1,651.52	22.95	830.28	1,971.83	14,690.72	4.48
MOCG4000	2,569.94	2.76	1,360.63	4,075.90	24,709.66	4.97
MONG1850	1,468.82	27.70	541.90	1,365.71	9,857.03	4.63
LAG2640	2,259.35	109.46	547.16	1,220.46	2,752.47	6.17
LANG2500	2,425.28	88.42	833.82	2,777.03	9,260.21	6.04
TNG900	622.33	10.94	250.89	511.36	2,620.59	3.87
TNG2200	1,321.33	27.74	465.38	1,109.10	5,465.43	2.66
SCG3500	2,826.43	77.60	817.57	3,218.20	13,402.53	4.00
TXNP3000	2,037.84	61.67	481.66	1,836.46	3,757.79	6.41
TXNP8000	5,323.70	71.50	1,185.06	5,494.95	11,035.27	5.20
TXPG2500	1,833.57	93.72	374.72	630.93	4,876.47	1.65
TXPG3760	4,025.15	98.77	320.48	(171.72)	5,541.18	(1.02)
TXHG2500	865.92	41.14	123.78	(535.95)	1,719.41	(2.22)
TXWG1600	631.50	35.07	145.29	253.60	1,590.86	1.58
TXUG1200	992.91	55.15	140.48	239.38	430.35	(4.53)

1 Receipts are average annual total cash receipts including government payments, 2012-2017 (\$1,000)

2 Payments are average annual total government payments, 2012-2017 (\$1,000)

3 NCFI is average annual net cash farm income, 2012-2017 (\$1,000)

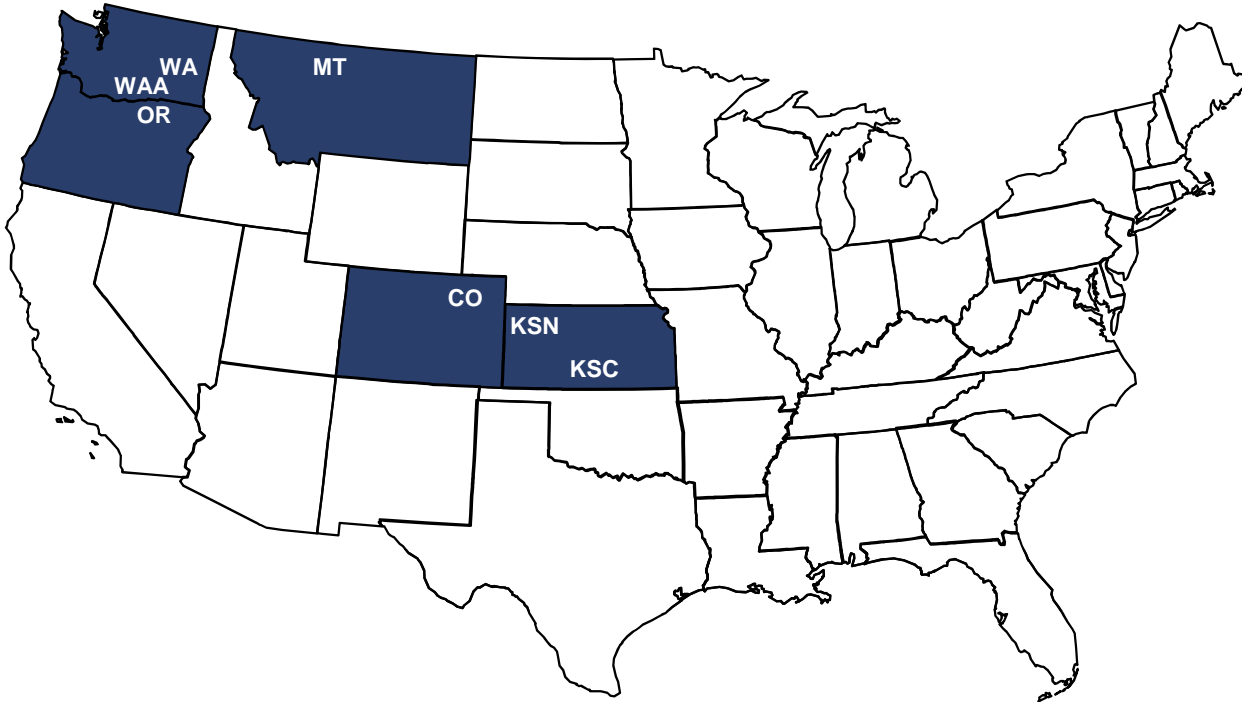
4 Reserve 2017 is average ending cash reserves, 2017 (\$1,000)

5 Net Worth 2017 is average nominal ending net worth, 2017 (\$1,000)

6 CRNW is average percentage change in real net worth over 2012-2017 period, (%)

# Representative Farm: Wheat

- Ten wheat farms are projected to be in good overall financial condition and one is in marginal condition; no farms are expected to be in poor condition.
- Only one of the eleven wheat farms will feel moderate liquidity pressure over the period.
- None of the wheat farms have a greater than 25 percent chance of losing real equity.



## Characteristics of Panel Farms Producing Wheat, 2011.

	Cropland (acres)	Assets (\$1,000)	Debt/Asset (ratio)	Gross Receipts (\$1,000)	Wheat (acres)
WAW1725	1,725	2,035.00	0.09	795.50	1,147
WAW5500	5,500	8,382.00	0.11	2,383.30	3,055
WAAW3500	3,500	1,658.00	0.19	454.60	1,500
ORW3600	3,600	1,580.00	0.14	562.20	1,600
MTW4500	4,500	3,437.00	0.13	672.50	2,330
KSCW2000	2,000	2,142.00	0.11	638.80	1,200
KSCW4500	4,500	3,754.00	0.15	1,376.10	2,700
KSNW4000	4,000	2,936.00	0.16	1,128.10	1,500
KSNW5500	5,500	4,994.00	0.15	1,913.60	1,820
COW3000	3,000	2,142.00	0.12	539.20	970
COW5640	5,640	3,425.00	0.12	978.40	1,900

# Representative Farm: Wheat

## Economic Viability of Representative Farms over the 2012-2017 Period

Farm Name	Overall Ranking		P(Negative Ending Cash)	P(Real Net Worth Declines)
	2012	2017	2012-2017	2012-2017
10/1/0				
WAW1725			1-1	1-1
WAW5500			1-1	1-4
WAAW3500			1-28	1-12
MTW4500			1-5	1-6
ORW3600			1-1	1-1
KSCW2000			1-3	1-7
KSCW4500			1-1	1-1
KSNW4000			1-1	1-1
KSNW5500			1-1	1-2
COW3000			1-1	1-1
COW5640			1-1	1-5

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 2012 and 2017.

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 2009 to 2012 and from 2009 to 2017.

## Implications of the August 2012 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Wheat

	Receipts	Payments	NCFI	Reserve 2017	Net Worth 2017	CRNW
	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(%)
WAW1725	742.27	33.00	343.15	1,463.37	3,028.54	6.84
WAW5500	2,200.45	68.87	662.45	2,650.06	10,022.87	3.69
WAAW3500	424.53	23.47	145.84	91.19	1,883.45	2.89
ORW3600	552.93	24.69	307.30	914.54	2,356.36	6.90
MTW4500	652.21	45.68	240.60	454.41	3,864.68	3.71
KSCW2000	635.97	24.74	237.82	428.09	2,550.38	3.65
KSCW4500	1,286.36	52.85	547.93	1,872.73	4,958.90	5.93
KSNW4000	1,073.38	36.52	473.55	1,459.26	4,060.31	6.59
KSNW5500	1,833.38	44.60	578.37	2,082.86	6,365.05	4.78
COW3000	512.42	16.99	242.90	670.17	2,844.31	5.22
COW5640	910.13	35.80	339.34	780.45	4,132.72	3.34

1 Receipts are average annual total cash receipts including government payments, 2012-2017 (\$1,000)

2 Payments are average annual total government payments, 2012-2017 (\$1,000)

3 NCFI is average annual net cash farm income, 2012-2017 (\$1,000)

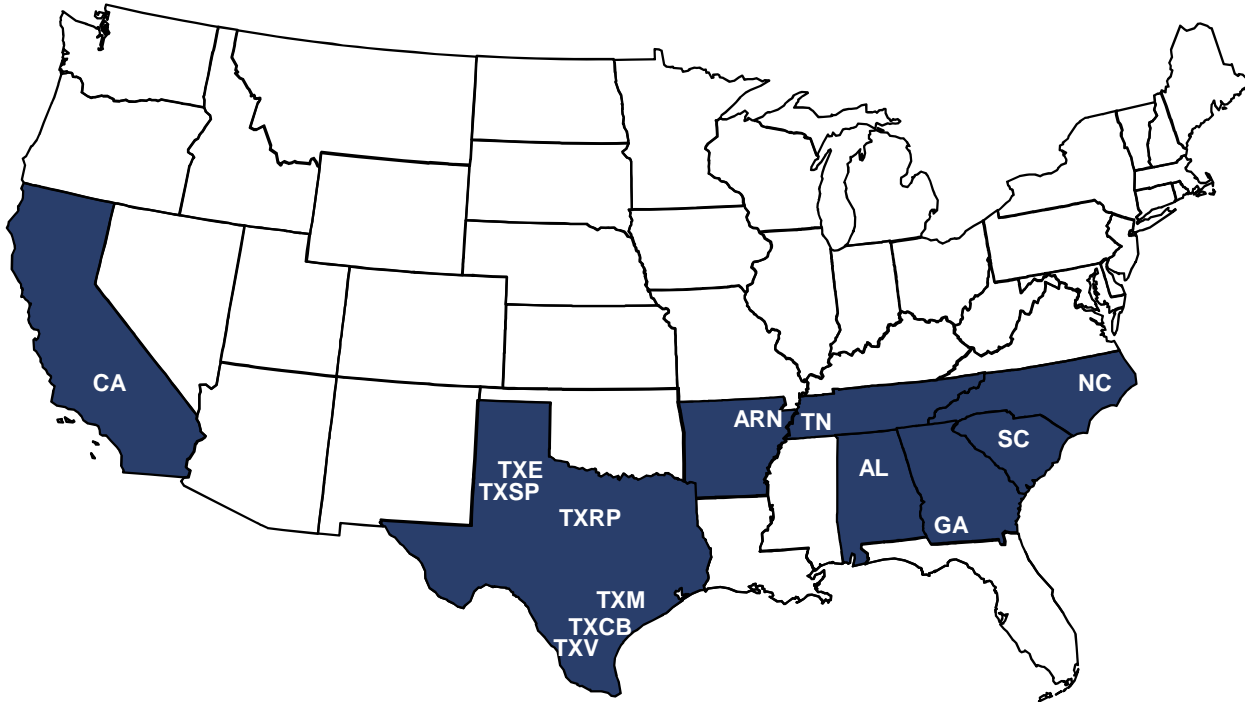
4 Reserve 2017 is average ending cash reserves, 2017 (\$1,000)

5 Net Worth 2017 is average nominal ending net worth, 2017 (\$1,000)

6 CRNW is average percentage change in real net worth over 2012-2017 period, (%)

# Representative Farm: Cotton

- Eight of the sixteen cotton farms are characterized in good overall financial condition, four are in marginal condition, and four are in poor condition.
- Four of the farms are projected to experience severe cash flow problems; however, only one farm has more than a 50 percent chance of losing real equity over the period.



**Characteristics of Panel Farms Producing Cotton, 2011.**

	Cropland (acres)	Assets (\$1,000)	Debt/Asset (ratio)	Gross Receipts (\$1,000)	Cotton (acres)
TXSP2500	2,500	1,404.00	0.12	804.30	2,275
TXSP4500	4,500	3,256.00	0.12	2,148.70	4,047
TXEC5000	5,000	2,581.00	0.14	2,710.50	3,650
TXRP2500	2,500	624.00	0.08	461.30	1,000
TXMC1800	1,800	1,124.00	0.39	845.00	900
TXCB2500	2,500	1,694.00	0.19	1,190.10	1,250
TXCB8000	8,000	4,515.00	0.30	4,341.10	4,000
TXVC4500	4,500	4,386.00	0.19	2,345.40	1,495
CAC4000	4,000	22,372.00	0.13	8,588.70	1,333
ARNC5000	5,000	7,651.00	0.21	5,206.40	5,000
TNC2100	2,100	3,361.00	0.07	1,595.60	525
TNC4050	4,050	6,155.00	0.11	3,184.10	2,025
ALC3000	3,000	2,507.00	0.25	2,153.80	1,050
GAC2300	2,300	7,462.00	0.16	3,320.30	1,200
SCC1800	1,800	3,653.00	0.12	1,758.30	900
NCC1500	1,500	2,788.00	0.21	1,169.40	225

# Representative Farm: Cotton

## Economic Viability of Representative Farms over the 2012-2017 Period

Farm Name	Overall Ranking		P(Negative Ending Cash)	P(Real Net Worth Declines)
	2012	2017	2012-2017	2012-2017
8/4/4				
TXSP2500			22-34	1-33
TXSP4500			1-1	1-2
TXEC5000			1-5	1-41
TXRP2500			5-98	1-95
TXMC1800			29-69	1-49
TXCB2500			2-64	1-48
TXCB8000			1-5	1-25
TXVC4500			1-1	1-1
CAC4000			1-1	1-1
ARNC5000			1-54	1-32
TNC2100			1-1	1-1
TNC4050			1-1	1-1
ALC3000			1-4	1-26
GAC2300			1-1	1-1
SCC1800			1-1	1-2
NCC1500			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 2012 and 2017.

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 2009 to 2012 and from 2009 to 2017.

## Implications of the August 2012 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Cotton

	Receipts	Payments	NCFI	Reserve 2017	Net Worth 2017	CRNW
	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(%)
TXSP2500	1,052.91	73.54	188.68	177.15	1,596.58	2.18
TXSP4500	2,286.34	143.25	571.28	1,820.46	4,368.48	5.58
TXEC5000	2,286.27	176.09	246.61	625.36	2,587.98	0.61
TXRP2500	524.29	42.77	16.03	(337.61)	362.23	(7.40)
TXMC1800	1,046.71	73.65	189.32	(229.07)	1,056.07	(0.23)
TXCB2500	1,068.80	78.45	133.25	(150.22)	1,681.08	0.32
TXCB8000	3,860.71	186.00	708.07	1,963.68	4,800.83	2.90
TXVC4500	2,168.22	121.54	737.42	2,985.42	6,459.12	7.61
CAC4000	7,745.90	81.33	1,991.08	7,790.63	28,437.02	5.83
ARNC5000	4,532.35	275.66	607.18	(182.56)	7,625.33	1.12
TNC2100	1,509.69	67.65	577.36	2,628.61	5,632.51	6.95
TNC4050	2,832.34	140.74	611.17	2,698.57	8,424.59	4.07
ALC3000	2,026.86	145.02	467.36	1,029.20	2,844.19	2.30
GAC2300	2,955.35	173.54	653.63	1,612.23	9,748.51	4.42
SCC1800	1,637.56	117.02	410.56	1,419.38	4,909.86	4.15
NCC1500	1,146.48	56.23	387.21	1,082.36	3,421.75	4.64

1 Receipts are average annual total cash receipts including government payments, 2012-2017 (\$1,000)

2 Payments are average annual total government payments, 2012-2017 (\$1,000)

3 NCFI is average annual net cash farm income, 2012-2017 (\$1,000)

4 Reserve 2017 is average ending cash reserves, 2017 (\$1,000)

5 Net Worth 2017 is average nominal ending net worth, 2017 (\$1,000)

6 CRNW is average percentage change in real net worth over 2012-2017 period, (%)

# Representative Farm: Rice

- Four of the fourteen representative rice farms are projected to be in good overall financial condition, three are in marginal condition, and seven are in poor condition.
- Seven of the rice farms are expected to face severe cash flow problems; six of those farms have high likelihoods of losing real equity.



**Characteristics of Panel Farms Producing Rice, 2011.**

	Cropland (acres)	Assets (\$1,000)	Debt/Asset (ratio)	Gross Receipts (\$1,000)	Rice (acres)
CAR550	550	2,473.00	0.11	866.00	500
CAR3000	3,000	9,828.00	0.16	4,828.50	3,000
CABR1300	1,300	6,894.00	0.16	2,182.60	1,200
CACR800	800	4,257.00	0.11	1,442.10	800
TXR1350	1,350	1,587.00	0.22	566.60	450
TXR3000	3,000	1,196.00	0.11	1,388.90	1,200
TXBR1800	1,800	763.00	0.73	987.20	600
TXER3200	3,200	2,003.00	0.14	1,574.80	1,067
LASR1480	1,480	1,390.00	0.12	1,011.40	800
ARMR7500	7,500	9,582.00	0.16	6,334.30	1,875
ARSR3240	3,240	4,746.00	0.26	2,112.50	1,620
ARWR1400	1,400	3,134.00	0.19	1,058.70	700
ARHR3000	3,000	5,175.00	0.27	2,269.10	1,450
MOWR4000	4,000	14,076.00	0.14	3,069.30	2,000



# Representative Farm: Rice

## Economic Viability of Representative Farms over the 2012-2017 Period

Farm Name	Overall Ranking		P(Negative Ending Cash)	P(Real Net Worth Declines)
	2012	2017	2012-2017	2012-2017
4/3/7				
CAR550			16-98	1-25
CAR3000			2-13	1-13
CABR1300			1-1	1-1
CACR800			2-2	1-5
TXR1350			96-99	1-97
TXR3000			2-25	1-44
TXBR1800			95-97	1-83
TXER3200			21-91	1-69
LASR1480			34-99	1-97
ARMR7500			1-25	1-44
ARSR3240			5-36	1-19
ARWR1400			52-99	1-81
ARHR3000			55-99	1-90
MOWR4000			1-5	1-3

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

<25	25-50	>50
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2 P(NegativeEnding Cash) is the probability that the farm will have a cash flow deficit. Reported values represent the probabilities for 2012 and 2017.

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 2009 to 2012 and from 2009 to 2017.

## Implications of the August 2012 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Rice

	Receipts	Payments	NCFI	Reserve 2017	Net Worth 2017	CRNW
	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(%)
CAR550	858.15	66.83	160.10	(306.63)	2,349.93	1.49
CAR3000	4,862.50	150.10	588.79	1,329.72	9,972.79	2.78
CABR1300	2,168.20	142.16	736.66	2,913.55	8,496.12	6.11
CACR800	1,400.28	103.10	309.41	1,138.85	4,954.79	4.17
TXR1350	548.38	52.12	(24.67)	(1,007.44)	759.94	(7.14)
TXR3000	1,343.46	121.88	165.85	228.33	1,113.28	(1.69)
TXBR1800	1,020.00	80.84	48.92	(681.92)	(33.94)	(295.17)
TXER3200	1,708.00	140.57	106.44	(772.48)	1,603.12	(3.18)
LASR1480	1,021.92	60.06	20.43	(893.29)	644.24	(8.71)
ARMR7500	5,933.43	181.55	909.78	1,082.82	9,938.54	0.24
ARSR3240	2,173.37	155.05	444.54	131.05	4,401.12	2.87
ARWR1400	1,074.93	74.18	84.54	(1,175.44)	2,318.83	(2.76)
ARHR3000	2,309.39	154.41	83.64	(2,535.63)	3,259.88	(4.91)
MOWR4000	3,219.11	138.34	848.64	1,683.12	15,586.56	3.60

1 Receipts are average annual total cash receipts including government payments, 2012-2017 (\$1,000)

2 Payments are average annual total government payments, 2012-2017 (\$1,000)

3 NCFI is average annual net cash farm income, 2012-2017 (\$1,000)

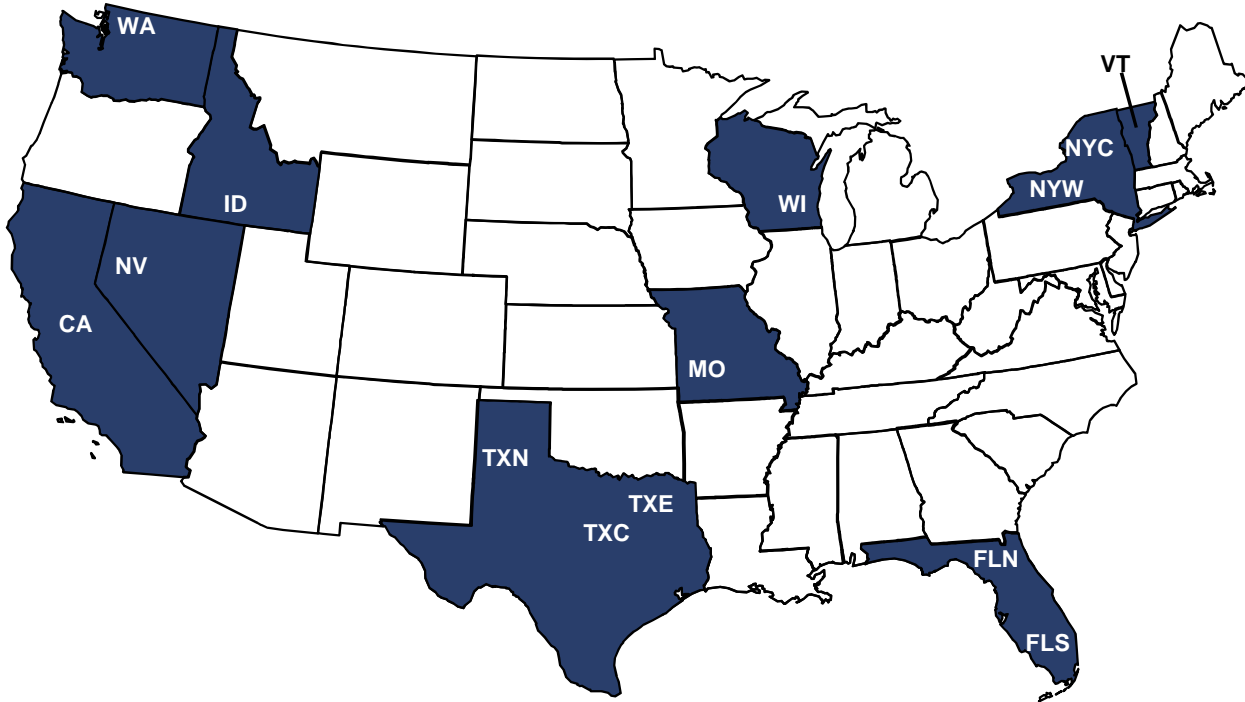
4 Reserve 2017 is average ending cash reserves, 2017 (\$1,000)

5 Net Worth 2017 is average nominal ending net worth, 2017 (\$1,000)

6 CRNW is average percentage change in real net worth over 2012-2017 period, (%)

# Representative Farm: Dairy

- Eight of twenty-two dairy operations are in good overall financial condition. Eight dairies are classified in marginal condition, and six are in poor condition.
- Fourteen of the dairies are projected to experience severe liquidity pressure, but none of the dairies are expected to face a 50 percent or greater chance of losing real equity.



**Characteristics of Panel Farms Producing Milk, 2011.**

	Cropland (acres)	Assets (\$1,000)	Debt/Asset (ratio)	Gross Receipts (\$1,000)	Cows (number)
CAD1710	700	24,577.00	0.25	8,380.40	1,710
WAD250	200	4,423.00	0.24	1,411.30	250
WAD850	605	10,254.00	0.26	4,753.70	850
IDD3000	1,500	23,907.00	0.28	14,792.10	3,000
NVD500	200	3,972.00	0.18	2,867.50	500
TXND3000	520	15,548.00	0.38	14,642.80	3,000
TXCD700	1,000	5,739.00	0.31	3,098.10	700
TXCD1300	560	8,390.00	0.32	6,028.10	1,300
TXED400	950	2,643.00	0.35	1,657.40	400
TXED1000	750	7,078.00	0.40	4,832.70	1,000
WID145	600	3,204.00	0.20	953.80	145
WID1000	2,000	9,213.00	0.31	6,148.50	1,000
NYWD600	1,200	5,907.00	0.34	3,416.50	600
NYWD1200	2,100	11,707.00	0.21	6,938.40	1,200
NYCD110	325	1,359.00	0.20	650.50	110
NYCD550	1,100	6,157.00	0.36	3,423.40	550
VTD140	220	1,556.00	0.32	742.00	140
VTD400	1,000	4,842.00	0.35	2,279.60	400
MOGD550	0	3,176.00	0.13	1,601.60	550
MOGD180	0	1,287.00	0.06	541.90	180
FLND550	600	4,434.00	0.20	2,645.20	550
FLSD1500	400	10,464.00	0.33	8,115.30	1,500

# Representative Farm: Dairy

## Economic Viability of Representative Farms over the 2012-2017 Period

Farm Name	Overall Ranking		P(Negative Ending Cash)	P(Real Net Worth Declines)
	2012	2017	2012-2017	2012-2017
8/8/6				
CAD1710			99-89	1-5
WAD250			99-68	1-1
WAD850			98-27	1-1
IDD3000			99-96	1-44
NVD500			92-8	1-1
TXND3000			99-88	1-37
TXCD700			99-77	1-7
TXCD1300			99-89	1-35
TXED400			99-87	1-23
TXED1000			99-92	1-40
WID145			1-1	1-1
WID1000			99-51	1-6
NYWD600			99-91	1-17
NYWD1200			63-1	1-1
NYCD110			6-1	1-1
NYCD550			99-95	1-13
VTD140			99-94	1-39
VTD400			99-97	1-19
MOGD550			1-1	1-1
MOGD180			1-1	1-1
FLND550			94-13	1-1
FLSD1500			99-85	1-32

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

<25	25-50	>50
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2 P(NegativeEnding Cash) is the probability that the farm will have a cash flow deficit. Reported values represent the probabilities for 2012 and 2017.

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 2009 to 2012 and from 2009 to 2017.

## Implications of the August 2012 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Milk

	Receipts	Payments	NCFI	Reserve 2017	Net Worth 2017	CRNW
	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(%)
CAD1710	8,166.84	43.82	865.67	(2,884.07)	20,838.42	3.58
WAD250	1,424.97	37.17	302.45	(178.37)	4,393.75	5.81
WAD850	4,701.78	40.01	918.88	999.69	10,734.92	8.69
IDD3000	14,595.53	46.56	72.39	(9,649.21)	15,947.63	0.91
NVD500	2,829.38	34.56	474.69	896.94	4,773.07	8.09
TXND3000	14,526.80	37.81	497.66	(5,730.22)	8,185.04	3.49
TXCD700	3,244.97	34.56	362.51	(678.20)	5,409.61	5.17
TXCD1300	6,017.56	34.56	277.61	(2,526.85)	5,601.80	2.19
TXED400	1,666.91	34.56	148.56	(805.52)	1,998.56	5.14
TXED1000	4,809.06	34.56	180.42	(2,886.67)	4,060.98	1.61
WID145	1,000.54	37.43	382.60	825.42	3,916.32	7.58
WID1000	6,250.24	43.98	799.19	(104.98)	8,758.85	8.21
NYWD600	3,405.31	53.36	283.85	(1,352.47)	4,707.01	3.56
NYWD1200	6,854.90	40.89	1,441.55	3,637.89	15,323.83	8.81
NYCD110	677.41	39.04	276.14	550.22	1,897.70	8.74
NYCD550	3,417.30	44.66	323.58	(1,601.03)	4,688.25	3.98
VTD140	767.61	38.38	80.90	(433.53)	1,182.53	1.75
VTD400	2,278.88	48.26	181.90	(1,252.44)	3,730.13	2.85
MOGD550	1,629.48	34.56	738.53	2,612.60	5,340.80	12.28
MOGD180	573.23	34.24	324.47	1,280.79	2,324.93	11.75
FLND550	2,658.86	34.56	497.39	846.87	5,705.94	9.17
FLSD1500	8,129.75	34.56	206.99	(3,428.08)	6,948.65	3.33

1 Receipts are average annual total cash receipts including government payments, 2012-2017 (\$1,000)

2 Payments are average annual total government payments, 2012-2017 (\$1,000)

3 NCFI is average annual net cash farm income, 2012-2017 (\$1,000)

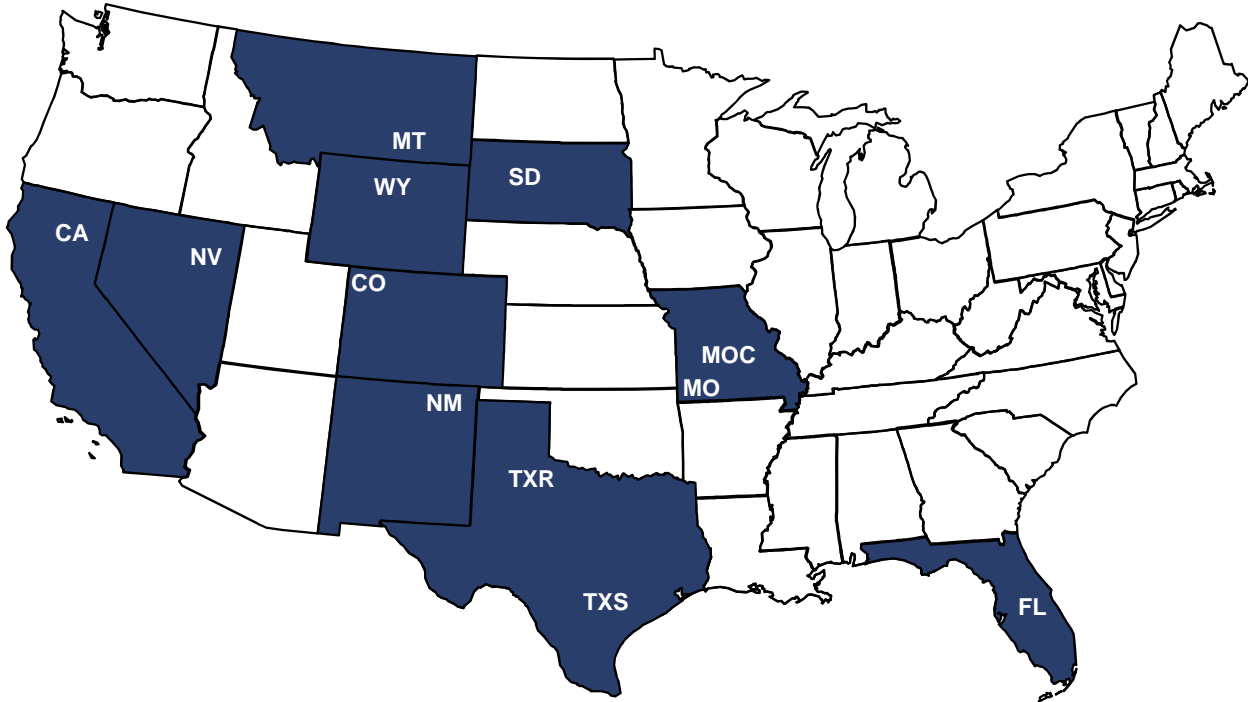
4 Reserve 2017 is average ending cash reserves, 2017 (\$1,000)

5 Net Worth 2017 is average nominal ending net worth, 2017 (\$1,000)

6 CRNW is average percentage change in real net worth over 2012-2017 period, (%)

# Representative Farm: Cow/Calf

- Nine of twelve cow-calf operations are projected to be in good overall financial condition, two are marginal, and one is expected to be in poor condition.
- Three operations will face significant liquidity pressure over the period, as their likelihoods of experiencing negative ending cash in 2017 exceeds 50 percent.
- Only one of the twelve operations is projected to face a severe threat of losing real equity over the period.



**Characteristics of Panel Farms Producing Beef Cattle, 2011.**

	Cropland (acres)	Assets (\$1,000)	Debt/Asset (ratio)	Gross Receipts (\$1,000)	Cows (number)
CAB500	0	4,495.00	0.05	357.90	500
NVB700	1,300	6,726.00	0.01	514.90	700
MTB500	0	5,832.00	0.01	365.90	500
WYB435	330	4,057.00	0.04	350.00	435
COB250	450	18,276.00	0.01	259.10	250
NMB240	0	6,229.00	0.01	203.40	240
SDB375	1,150	5,937.00	0.01	287.90	375
MOB250	280	3,066.00	0.03	369.30	250
MOCB400	40	5,203.00	0.01	334.70	400
TXRB500	0	7,692.00	0.01	510.30	500
TXSB200	0	3,963.00	0.05	164.00	200
FLB1155	5,400	19,545.00	0.01	795.80	1,155

# Representative Farm: Cow/Calf

## Economic Viability of Representative Farms over the 2012-2017 Period

Farm Name	Overall Ranking		P(Negative Ending Cash)	P(Real Net Worth Declines)
	2012	2017	2012-2017	2012-2017
9/2/1				
CAB500			99-99	1-76
NVB700			1-1	1-4
MTB500			1-1	1-2
WYB435			99-23	1-6
COB250			3-1	1-9
NMB240			97-75	1-9
SDB375			1-1	1-4
MOB250			1-1	1-1
MOCB400			1-1	1-1
TXRB500			1-1	1-2
TXSB200			99-99	1-21
FLB1155			1-1	1-4

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 2012 and 2017.

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 2009 to 2012 and from 2009 to 2017.

## Implications of the August 2012 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Beef Cattle

	Receipts	Payments	NCFI	Reserve 2017	Net Worth 2017	CRNW
	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(%)
CAB500	401.46	0.00	22.74	(366.80)	4,180.79	(0.51)
NVB700	567.66	0.00	177.04	457.72	7,662.68	2.47
MTB500	406.19	0.00	172.23	448.91	7,570.89	3.10
WYB435	399.25	0.00	112.50	41.22	4,879.57	2.28
COB250	291.63	0.00	98.83	124.59	20,049.13	2.31
NMB240	221.17	0.00	40.32	(31.18)	7,617.90	2.06
SDB375	320.13	0.00	128.73	266.41	7,443.17	2.51
MOB250	390.53	3.22	182.70	422.06	3,824.21	3.03
MOCB400	372.27	0.00	130.24	429.39	6,497.70	2.95
TXRB500	559.79	0.00	192.69	596.59	9,910.43	2.88
TXSB200	196.76	0.00	18.87	(349.86)	4,765.05	1.34
FLB1155	873.35	0.00	304.12	1,133.68	24,935.41	2.66

1 Receipts are average annual total cash receipts including government payments, 2012-2017 (\$1,000)

2 Payments are average annual total government payments, 2012-2017 (\$1,000)

3 NCFI is average annual net cash farm income, 2012-2017 (\$1,000)

4 Reserve 2017 is average ending cash reserves, 2017 (\$1,000)

5 Net Worth 2017 is average nominal ending net worth, 2017 (\$1,000)

6 CRNW is average percentage change in real net worth over 2012-2017 period, (%)