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**Research Report**

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

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

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**Briefing Paper 09-2  
September 2009**



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

AFPC Briefing Paper 09-2

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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 those farms' economic viability by region and commodity for 2009 through 2014. 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 2009 Baseline.

Under the August 2009 Baseline, 35 of the 64 crop farms are considered in good liquidity condition (less than a 25 percent chance of negative ending cash by 2014). Only one crop farm has between a 25 percent and a 50 percent likelihood of negative ending cash, and the remaining 28 crop farms have greater than a 50 percent chance of negative ending cash. Additionally, 33 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). Six crop farms have between a 25 percent and 50 percent likelihood of losing real net worth, and 25 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:** Thirteen of the 23 feedgrain farms are in good overall financial condition. Two are classified in marginal condition, and eight are in poor condition.
- **WHEAT FARMS:** Ten of the 11 wheat farms are classified in good financial condition, and only one farm is in poor condition.
- **COTTON FARMS:** Three of the 16 cotton farms are classified in good condition, one is in marginal condition, and twelve are in poor condition. In addition, twelve of these farms have more than a 50 percent chance of losing real net worth by 2014.
- **RICE FARMS:** Six of the 14 rice farms are in good condition, one is in marginal condition, and seven farms are projected to be in poor financial condition through 2014.
- **DAIRY FARMS:** Nine of the 22 dairy farms are in good overall financial condition. Four are considered to be in marginal condition, and nine are in poor condition.
- **BEEF CATTLE RANCHES:** Five of the 12 cattle ranches are classified in good financial condition, and seven of the operations are projected to be in poor condition.

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

The farm level economic impacts of the FAPRI August 2009 Baseline on representative crop and livestock operations are projected in this report. The analysis was conducted over the 2007-2014 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 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 August 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 2014.

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

- **Overall Financial Position, 2009-2014** -- 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** -- 2009-2014 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** -- 2009-2014 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** -- 2009-2014 average net cash farm income equals average total receipts minus average total cash expenses.
- **Reserve 2014** -- equals total cash on hand at the end of year 2014. 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 2014** -- equity equals total assets including land minus total debt from all sources and is reported at the end of 2014.
- **CRNW** -- annualized percentage change in the operator's net worth from December 1, 2009 through December 31, 2014, after adjusting for inflation.

**Table 1. FAPRI August 2009 Baseline Projections of Crop and Livestock Prices, 2007-2014**

	2007	2008	2009	2010	2011	2012	2013	2014
<b>Crop Prices</b>								
Corn (\$/bu.)	4.20	4.05	3.47	3.69	3.74	3.81	3.90	3.98
Wheat (\$/bu.)	6.48	6.78	5.04	4.96	5.17	5.25	5.35	5.44
Cotton (\$/lb.)	0.5930	0.4900	0.5476	0.5512	0.5746	0.5893	0.6006	0.6118
Sorghum (\$/bu.)	4.08	3.30	3.25	3.25	3.32	3.39	3.47	3.55
Soybeans (\$/bu.)	10.10	10.00	9.44	9.12	9.34	9.47	9.61	9.74
Barley (\$/bu.)	4.02	5.37	4.28	4.60	4.65	4.72	4.82	4.90
Oats (\$/bu.)	2.63	3.15	2.27	2.38	2.44	2.49	2.55	2.60
Rice (\$/cwt.)	12.80	16.25	14.53	13.24	13.43	13.44	13.58	13.65
Soybean Meal (\$/ton)	320.42	309.99	278.80	267.70	267.00	268.54	272.07	275.66
All Hay (\$/ton)	128.00	157.00	121.35	119.61	119.57	119.05	118.92	120.32
	410.00	460.00	437.60	442.29	470.50	476.42	481.39	487.03
<b>Cattle Prices</b>								
Feeder Cattle (\$/cwt)	115.47	107.55	103.38	114.79	122.86	128.61	131.08	128.60
Fed Cattle (\$/cwt)	91.82	92.27	85.07	92.67	98.06	101.29	101.93	100.05
Culled Cows (\$/cwt)	52.12	54.92	47.37	54.55	58.17	60.07	60.84	58.73
<b>Milk Price</b>								
U.S. All Milk Price (\$/cwt)	19.21	18.41	12.47	15.16	16.37	17.09	17.18	17.19

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

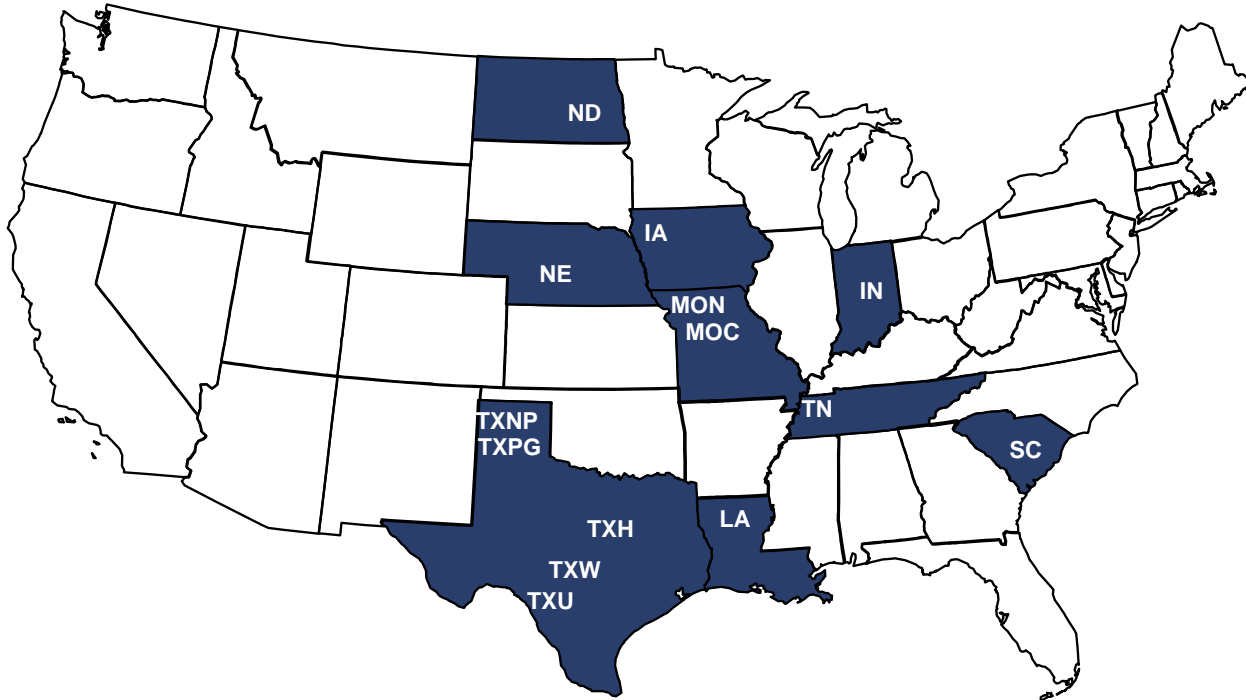
**Table 2. FAPRI August 2009 Baseline Assumed Rates of Change in Input Prices and Annual Changes in Land Values, 2008-2014**

	2008	2009	2010	2011	2012	2013	2014
<b>Annual Rate of Change for Input Prices Paid</b>							
Seed Prices (%)	26.96	15.51	5.04	5.16	3.83	3.65	3.32
All Fertilizer Prices (%)	61.47	-28.28	4.67	19.88	6.46	5.07	5.86
Herbicide Prices (%)	6.56	-0.13	2.19	3.51	2.32	2.18	1.77
Insecticide Prices (%)	5.41	-8.17	1.03	2.68	2.50	2.76	2.33
Fuel and Lube Prices (%)	30.30	-36.63	11.34	11.74	6.42	6.53	4.47
Machinery Prices (%)	9.42	4.98	0.86	2.48	1.88	2.40	2.61
Wages (%)	3.39	2.46	1.74	1.38	1.85	2.54	2.81
Supplies (%)	6.43	2.57	2.57	4.35	2.81	2.45	2.00
Repairs (%)	1.30	1.28	1.43	1.77	2.10	2.59	2.63
Services (%)	0.00	2.51	2.83	4.23	2.77	2.64	2.47
Taxes (%)	10.99	10.38	1.25	3.63	2.48	2.91	2.48
PPI Items (%)	17.50	-5.17	2.01	4.85	3.22	2.88	2.82
PPI Total (%)	16.15	-3.77	1.90	4.56	3.31	2.97	3.05
<b>Annual Change in Consumer Price Index (%)</b>	3.80	-0.65	1.79	2.43	2.17	2.16	2.13
<b>Annual Rate of Change for U.S. Land Prices (%)</b>	8.00	-3.20	-4.20	-0.50	3.20	2.30	2.60

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

# Representative Farm: Feed Grains

- Overall, thirteen feed grain farms are characterized as good, two are marginal, and eight are in poor condition.
- Eight 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 (acres)	Assets (\$1,000)	Debt/Asset (ratio)	Gross Receipts (\$1,000)	Feed Grains (acres)
IAG1350	1,350	2,527.00	0.15	852.40	1,350
IAG3400	3,400	7,090.00	0.15	2,260.60	3,400
NEG2400	2,400	4,100.00	0.17	2,102.80	2,400
NEG4300	4,300	8,013.00	0.19	3,563.00	3,870
NDG2180	2,180	1,071.00	0.11	704.90	1,600
NDG7500	7,500	7,483.00	0.19	2,970.10	5,750
ING1000	1,000	2,587.00	0.16	540.60	1,000
ING2200	2,200	6,661.00	0.16	1,265.00	2,200
MOCG2050	2,050	6,241.00	0.16	992.60	2,050
MOCG4000	4,000	10,711.00	0.14	1,975.90	3,950
MONG1850	1,850	6,422.00	0.16	1,006.40	1,800
LAG2640	2,640	1,244.00	0.19	1,922.10	1,716
LANG2500	2,500	5,248.00	0.18	1,967.00	1,750
TNG900	900	999.00	0.16	401.40	900
TNG2750	2,750	4,028.00	0.18	1,317.10	2,750
SCG3500	3,500	7,051.00	0.16	1,940.40	3,500
TXNP3000	3,000	1,814.00	0.17	1,791.50	1,200
TXNP8000	8,000	5,192.00	0.19	4,419.60	3,987
TXPG2500	2,500	3,589.00	0.22	1,359.80	1,058
TXPG3760	3,760	4,596.00	0.19	3,230.00	1,878
TXHG2000	2,000	1,469.00	0.17	528.60	1,500
TXWG1600	1,600	1,141.00	0.23	496.80	1,300
TXUG1200	1,200	237.00	0.47	758.00	850

# Representative Farm: Feed Grains

## Economic Viability of Representative Farms over the 2009-2014 Period

Farm Name	Overall Ranking		P(Negative Ending Cash)	P(Real Net Worth Declines)
	2009	2014	2009-2014	2009-2014
13/2/8				
IAG1350			1-1	1-1
IAG3400			1-1	1-1
NEG2400			1-1	1-2
NEG4300			1-1	1-1
NDG2180			1-1	1-1
NDG7500			1-1	1-1
ING1000			39-80	1-26
ING2200			1-1	1-2
MOCG2050			1-1	1-1
MOCG4000			1-1	1-1
MONG1850			47-68	1-15
LAG2640			1-23	1-41
LANG2500			1-4	1-2
TNG900			90-98	1-96
TNG2750			1-14	1-12
SCG3500			1-7	1-15
TXNP3000			1-40	1-51
TXNP8000			2-16	1-21
TXPG2500			18-63	1-39
TXPG3760			82-99	1-99
TXHG2000			74-85	1-77
TXWG1600			66-92	1-78
TXUG1200			90-94	1-91

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(Negative Ending Cash) is the probability that the farm will have a cash flow deficit. Reported values represent the probabilities for 2009 and 2014.

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 2007 to 2009 and from 2007 to 2014.

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

	Receipts	Payments	NCFI	Reserve 2014	Net Worth 2014	CRNW
	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(%)
IAG1350	882.04	45.61	285.53	629.90	2,604.44	4.64
IAG3400	2,031.51	92.08	789.51	2,105.74	7,437.40	4.73
NEG2400	1,949.75	83.24	494.25	1,448.21	4,259.52	4.27
NEG4300	3,067.10	85.82	816.94	2,196.15	8,007.56	4.05
NDG2180	688.17	45.52	252.87	886.76	1,598.78	9.21
NDG7500	2,915.36	40.71	1,176.55	4,238.10	9,460.37	8.63
ING1000	531.94	27.98	116.04	(117.45)	2,181.56	1.08
ING2200	1,244.45	61.50	342.80	661.23	6,199.15	2.77
MOCG2050	971.22	47.27	442.79	818.22	6,133.24	3.93
MOCG4000	1,909.81	44.16	1,029.92	2,844.41	11,647.02	5.45
MONG1850	1,032.69	53.87	202.80	(123.99)	5,557.65	1.67
LAG2640	1,706.59	194.55	187.96	454.50	1,313.63	1.37
LANG2500	1,941.48	134.93	512.92	912.07	5,483.32	4.11
TNG900	393.62	15.96	0.09	(319.77)	548.52	(6.79)
TNG2750	1,287.35	60.06	368.37	506.83	3,880.05	2.68
SCG3500	1,831.00	130.61	397.65	1,210.17	6,785.91	2.58
TXNP3000	1,508.81	65.53	144.22	183.95	1,612.69	(0.28)
TXNP8000	4,153.67	156.24	473.97	1,049.79	5,233.01	3.05
TXPG2500	1,465.69	125.49	220.68	(25.14)	3,003.55	0.51
TXPG3760	2,990.48	165.34	(312.81)	(2,327.39)	1,696.13	(12.20)
TXHG2000	504.61	39.48	42.67	(112.83)	1,102.32	(2.11)
TXWG1600	481.27	44.16	26.18	(258.58)	729.11	(3.70)
TXUG1200	726.44	66.61	1.18	(364.40)	(155.97)	263.69

1 Receipts are average annual total cash receipts including government payments, 2009-2014 (\$1,000)

2 Payments are average annual total government payments, 2009-2014 (\$1,000)

3 NCFI is average annual net cash farm income, 2009-2014 (\$1,000)

4 Reserve 2014 is average ending cash reserves, 2014 (\$1,000)

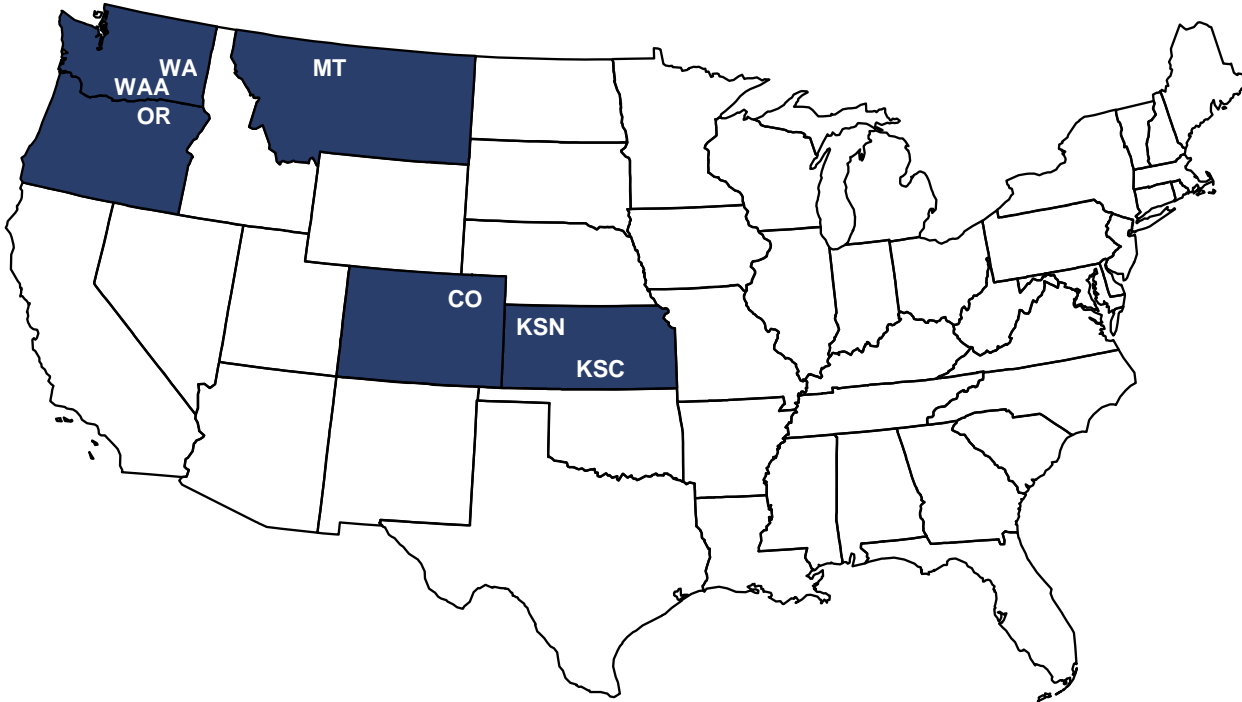
5 Net Worth 2014 is average nominal ending net worth, 2014 (\$1,000)

6 CRNW is average percentage change in real net worth over 2009-2014 period, (%)



# Representative Farm: Wheat

- Ten wheat farms are projected to be in good overall financial condition, and one farm is expected to be in poor condition.
- Only one of the eleven wheat farms will feel severe liquidity pressure over the period.
- None of the wheat farms have a 50 percent or greater chance of losing real equity.



## Characteristics of Panel Farms Producing Wheat, 2008.

	Cropland (acres)	Assets (\$1,000)	Debt/Asset (ratio)	Gross Receipts (\$1,000)	Wheat (acres)
WAW1725	1,725	1,617.00	0.19	705.40	1,147
WAW5500	5,500	6,887.00	0.21	2,105.10	3,055
WAAW3500	3,500	1,507.00	0.15	386.60	1,500
ORW3600	3,600	1,450.00	0.12	482.70	1,600
MTW4500	4,500	3,004.00	0.14	639.70	2,330
KSCW2000	2,000	1,893.00	0.13	591.00	1,200
KSCW4500	4,500	2,973.00	0.17	1,096.10	2,700
KSNW2800	2,800	1,949.00	0.16	526.90	1,400
KSNW5000	5,000	3,481.00	0.14	1,288.30	2,325
COW3000	3,000	1,561.00	0.13	438.60	970
COW5640	5,640	2,628.00	0.14	850.30	2,256

# Representative Farm: Wheat

## Economic Viability of Representative Farms over the 2009-2014 Period

Farm Name	Overall Ranking		P(Negative Ending Cash)	P(Real Net Worth Declines)
	2009	2014	2009-2014	2009-2014
10/0/1				
WAW1725			1-1	1-1
WAW5500			1-1	1-1
WAAW3500			1-5	1-12
MTW4500			1-1	1-17
ORW3600			1-1	1-1
KSCW2000			1-1	1-13
KSCW4500			1-1	1-1
KSNW2800			1-66	1-47
KSNW5000			1-2	1-13
COW3000			1-1	1-2
COW5640			1-5	1-10

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 2014.

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 2007 to 2009 and from 2007 to 2014.

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

	Receipts	Payments	NCFI	Reserve 2014	Net Worth 2014	CRNW
	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(%)
WAW1725	763.89	64.33	407.45	1,400.70	2,514.07	11.88
WAW5500	2,253.45	157.97	903.32	2,699.25	8,054.21	7.13
WAAW3500	373.66	36.55	135.31	170.52	1,481.55	1.87
MTW4500	515.44	54.04	164.40	507.74	2,757.31	1.76
ORW3600	459.20	33.71	255.91	753.93	1,833.26	6.31
KSCW2000	486.02	46.05	160.80	401.65	1,857.41	2.05
KSCW4500	1,020.88	94.47	392.57	1,011.05	3,236.94	5.31
KSNW2800	488.98	52.09	86.26	(49.10)	1,581.39	0.14
KSNW5000	1,198.71	102.13	272.65	705.18	3,381.04	2.48
COW3000	394.37	27.21	167.63	528.94	1,647.24	3.70
COW5640	737.41	70.49	258.88	518.99	2,604.54	3.06

1 Receipts are average annual total cash receipts including government payments, 2009-2014 (\$1,000)

2 Payments are average annual total government payments, 2009-2014 (\$1,000)

3 NCFI is average annual net cash farm income, 2009-2014 (\$1,000)

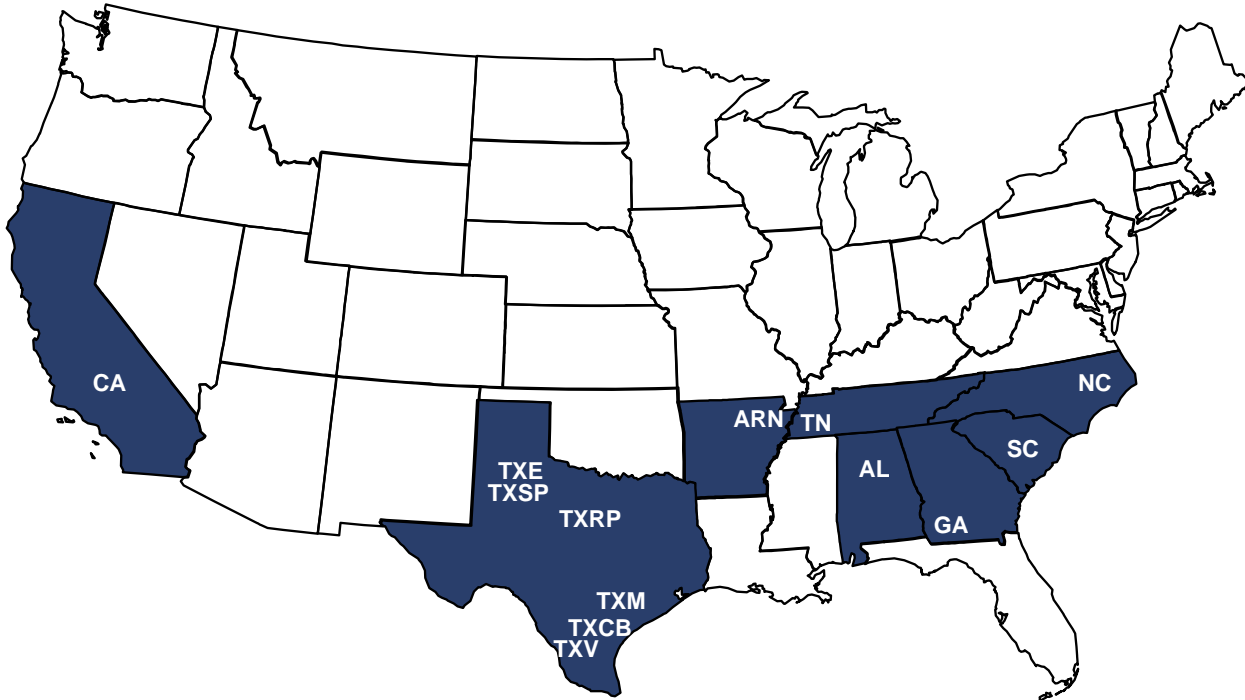
4 Reserve 2014 is average ending cash reserves, 2014 (\$1,000)

5 Net Worth 2014 is average nominal ending net worth, 2014 (\$1,000)

6 CRNW is average percentage change in real net worth over 2009-2014 period, (%)

# Representative Farm: Cotton

- Three of the sixteen cotton farms are characterized in good overall financial condition, one farm is in marginal condition, and twelve are in poor condition.
- Twelve of the farms are projected to experience severe cash flow problems over the period.
- Twelve of the sixteen cotton farms have more than a 50 percent chance of losing real equity.



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

	Cropland (acres)	Assets (\$1,000)	Debt/Asset (ratio)	Gross Receipts (\$1,000)	Cotton (acres)
TXSP2500	2,500	978.00	0.13	585.40	1,958
TXSP3745	3,745	1,849.00	0.16	1,042.00	2,916
TXEC5000	5,000	2,222.00	0.12	2,102.80	3,650
TXRP2500	2,500	638.00	0.22	379.70	1,117
TXMC1800	1,800	1,019.00	0.14	630.90	600
TXCB2250	2,250	1,334.00	0.15	873.60	1,000
TXCB8000	8,000	1,843.00	0.14	2,540.70	2,800
TXVC4500	4,500	3,026.00	0.18	1,386.30	2,388
CAC4000	4,000	19,282.00	0.14	8,943.50	1,333
ARNC5000	5,000	6,925.00	0.17	3,995.20	5,000
TNC1900	1,900	2,688.00	0.09	1,114.50	990
TNC4050	4,050	5,575.00	0.43	1,993.00	2,670
ALC3000	3,000	1,722.00	0.30	1,397.10	1,500
GAC2300	2,300	4,553.00	0.30	1,940.60	1,495
SCC1500	1,500	1,231.00	0.20	987.30	525
NCC1500	1,500	3,282.00	0.17	945.90	575

# Representative Farm: Cotton

## Economic Viability of Representative Farms over the 2009-2014 Period

Farm Name	Overall Ranking		P(Negative Ending Cash)	P(Real Net Worth Declines)
	2009	2014	2009-2014	2009-2014
3/1/12				
TXSP2500			62-94	1-96
TXSP3745			35-99	1-98
TXEC5000			1-1	1-27
TXRP2500			73-82	1-81
TXMC1800			57-91	1-87
TXCB2250			27-76	1-69
TXCB8000			1-79	1-79
TXVC4500			1-1	1-1
CAC4000			1-1	1-1
ARNC5000			13-99	1-93
TNC1900			1-11	1-18
TNC4050			99-99	1-99
ALC3000			66-96	1-83
GAC2300			99-99	1-99
SCC1500			20-52	1-55
NCC1500			20-97	1-81

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 2014.

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 2007 to 2009 and from 2007 to 2014.

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

	Receipts	Payments	NCFI	Reserve 2014	Net Worth 2014	CRNW
	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(%)
TXSP2500	683.72	90.46	(72.33)	(558.41)	194.16	(18.02)
TXSP3745	1,104.18	147.01	(67.17)	(907.13)	536.31	(15.63)
TXEC5000	2,005.88	264.46	242.79	901.79	2,325.11	1.70
TXRP2500	361.96	55.24	15.83	(176.19)	333.92	(7.67)
TXMC1800	673.57	78.73	74.24	(298.80)	653.18	(6.61)
TXCB2250	751.45	101.01	55.84	(228.47)	904.27	(3.40)
TXCB8000	2,619.75	321.53	173.73	(858.57)	857.32	(11.88)
TXVC4500	2,005.15	201.25	673.58	1,628.35	4,244.11	10.39
CAC4000	6,457.86	54.97	1,361.26	5,920.75	19,979.11	3.23
ARNC5000	3,749.42	431.13	225.22	(1,076.37)	4,959.71	(3.36)
TNC1900	1,076.52	112.02	216.12	395.15	2,723.69	2.04
TNC4050	1,888.89	254.16	(1,006.87)	(7,673.79)	(2,595.68)	(47.85)
ALC3000	1,309.24	193.71	123.58	(699.63)	855.48	(8.23)
GAC2300	1,938.81	255.50	(264.57)	(2,771.00)	1,104.33	(13.97)
SCC1500	955.47	130.90	88.35	19.16	1,001.65	(1.21)
NCC1500	889.93	100.32	75.17	(372.07)	2,438.18	(1.77)

1 Receipts are average annual total cash receipts including government payments, 2009-2014 (\$1,000)

2 Payments are average annual total government payments, 2009-2014 (\$1,000)

3 NCFI is average annual net cash farm income, 2009-2014 (\$1,000)

4 Reserve 2014 is average ending cash reserves, 2014 (\$1,000)

5 Net Worth 2014 is average nominal ending net worth, 2014 (\$1,000)

6 CRNW is average percentage change in real net worth over 2009-2014 period, (%)

# Representative Farm: Rice

- Six of the fourteen rice farms are projected to be in good overall financial condition, one is in marginal condition, and seven are in poor condition.
- Seven of the rice farms are expected to face both severe cash flow problems and high likelihoods of losing real equity.



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

	Cropland (acres)	Assets (\$1,000)	Debt/Asset (ratio)	Gross Receipts (\$1,000)	Rice (acres)
CAR550	550	2,134.00	0.16	783.10	500
CAR2365	2,365	6,868.00	0.15	3,518.90	2,240
CABR1300	1,300	5,018.00	0.18	1,934.80	1,200
CACR715	715	2,603.00	0.18	1,105.10	650
TXR1350	1,350	1,405.00	0.22	622.10	450
TXR3000	3,000	1,025.00	0.11	1,524.00	1,200
TXBR1800	1,800	536.00	0.54	1,111.50	600
TXER3200	3,200	1,302.00	0.27	1,715.80	1,067
LASR1200	1,200	605.00	0.19	882.00	660
ARMR7500	7,500	8,615.00	0.24	5,527.50	1,875
ARSR3240	3,240	3,657.00	0.16	2,164.80	1,620
ARWR1200	1,200	3,177.00	0.41	889.40	600
ARHR3000	3,000	4,944.00	0.21	2,251.90	1,450
MOWR4000	4,000	11,902.00	0.17	3,129.20	2,000

# Representative Farm: Rice

## Economic Viability of Representative Farms over the 2009-2014 Period

Farm Name	Overall Ranking		P(Negative Ending Cash)	P(Real Net Worth Declines)
	2009	2014	2009-2014	2009-2014
6/1/7				
CAR550			4-73	1-80
CAR2365			2-18	1-29
CABR1300			2-11	1-15
CACR715			2-12	1-18
TXR1350			55-92	1-80
TXR3000			2-2	1-7
TXBR1800			74-93	1-81
TXER3200			49-71	1-76
LASR1200			2-3	1-7
ARMR7500			4-70	1-64
ARSR3240			2-11	1-13
ARWR1200			99-99	1-99
ARHR3000			47-97	1-84
MOWR4000			2-3	1-4

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 2009 and 2014.

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 2007 to 2009 and from 2007 to 2014.

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

	Receipts	Payments	NCFI	Reserve 2014	Net Worth 2014	CRNW
	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(%)
CAR550	685.35	67.86	74.91	(57.23)	1,639.83	(1.96)
CAR2365	3,077.03	176.10	391.61	736.55	6,104.92	0.59
CABR1300	1,695.08	161.81	324.21	748.56	4,545.47	1.53
CACR715	969.29	90.24	145.46	325.48	2,300.72	1.47
TXR1350	543.25	52.16	72.17	(178.77)	1,053.70	(2.82)
TXR3000	1,331.87	121.88	334.17	1,185.35	1,805.33	10.13
TXBR1800	969.09	81.17	54.51	(482.96)	81.67	(61.32)
TXER3200	1,535.48	141.57	78.87	(194.90)	869.40	(0.31)
LASR1200	795.01	50.51	197.37	572.89	1,001.03	10.47
ARMR7500	5,026.48	325.33	537.87	(217.46)	6,796.97	(1.40)
ARSR3240	1,933.27	173.04	462.12	691.91	3,744.18	2.65
ARWR1200	788.88	68.42	(251.23)	(2,634.26)	209.20	(21.04)
ARHR3000	2,005.58	167.38	159.98	(991.79)	3,497.86	(3.39)
MOWR4000	2,795.89	176.48	842.69	1,806.45	11,506.86	3.22

1 Receipts are average annual total cash receipts including government payments, 2009-2014 (\$1,000)

2 Payments are average annual total government payments, 2009-2014 (\$1,000)

3 NCFI is average annual net cash farm income, 2009-2014 (\$1,000)

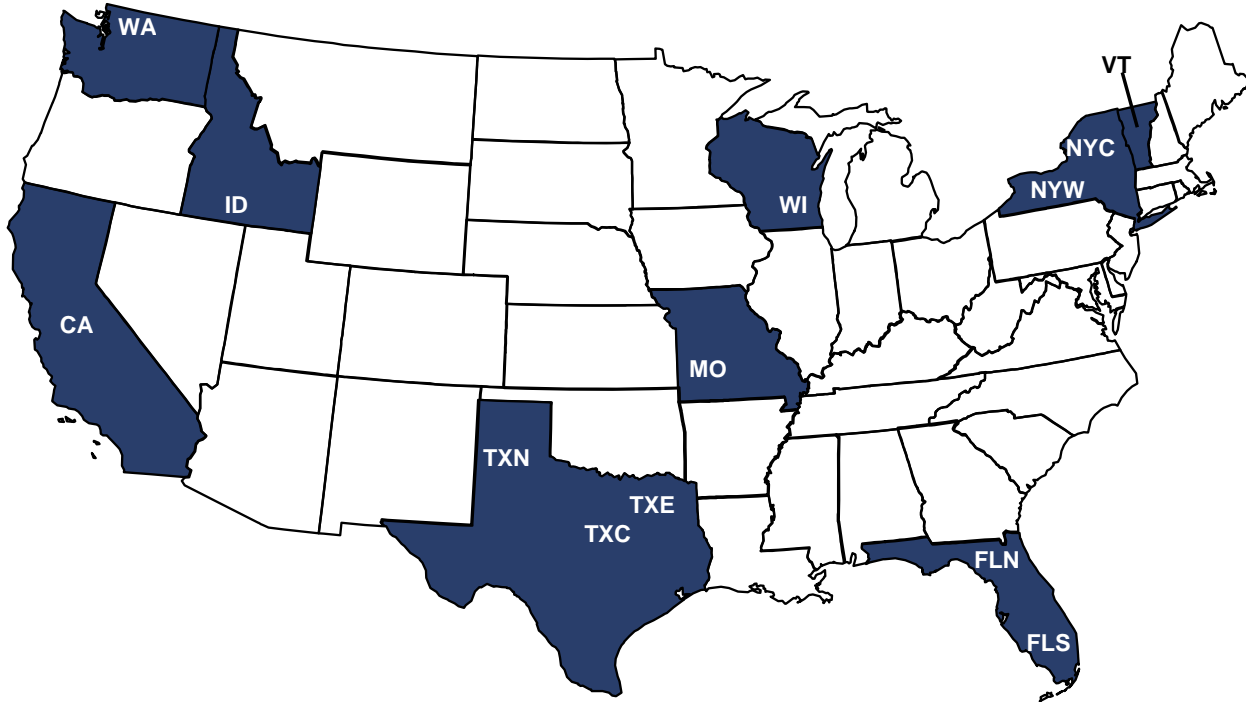
4 Reserve 2014 is average ending cash reserves, 2014 (\$1,000)

5 Net Worth 2014 is average nominal ending net worth, 2014 (\$1,000)

6 CRNW is average percentage change in real net worth over 2009-2014 period, (%)

# Representative Farm: Dairy

- Nine of twenty-two dairy operations are in good overall financial condition. Four dairies are classified in marginal condition, and nine are in poor condition.
- Eleven of the dairies are projected to experience severe liquidity pressure.
- Four dairies are projected to face a 50 percent or greater probability of losing real equity.



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

	Cropland (acres)	Assets (\$1,000)	Debt/Asset (ratio)	Gross Receipts (\$1,000)	Cows (number)
CAD1710	700	21,925.00	0.18	7,199.20	1,710
WAD250	200	3,973.00	0.19	1,142.80	250
WAD850	605	9,425.00	0.19	3,816.60	850
IDD1000	360	7,467.00	0.13	4,739.10	1,000
IDD3000	1,500	24,729.00	0.13	13,894.20	3,000
TXND3000	520	18,027.00	0.15	12,010.00	3,000
TXCD550	750	4,660.00	0.16	2,102.90	550
TXCD1300	560	8,445.00	0.15	5,146.80	1,300
TXED450	850	3,329.00	0.17	1,687.70	450
TXED1000	750	6,897.00	0.17	4,117.50	1,000
WID145	600	2,804.00	0.19	824.70	145
WID775	1,200	6,838.00	0.15	4,086.20	775
NYWD600	1,200	5,425.00	0.19	2,735.30	600
NYWD1200	2,100	11,727.00	0.18	5,586.70	1,200
NYCD110	325	1,323.00	0.16	543.00	110
NYCD550	1,100	5,551.00	0.21	2,847.30	550
VTD140	220	1,399.00	0.14	636.30	140
VTD400	1,000	4,630.00	0.19	1,945.30	400
MOGD500	0	2,733.00	0.15	1,282.30	500
M OCD500	530	4,322.00	0.18	2,238.40	500
FLND550	600	4,671.00	0.19	2,556.90	550
FLSD1500	400	12,458.00	0.20	7,015.90	1,500

# Representative Farm: Dairy

## Economic Viability of Representative Farms over the 2009-2014 Period

Farm Name	Overall Ranking		P(Negative Ending Cash)	P(Real Net Worth Declines)
	2009	2014	2009-2014	2009-2014
9/4/9				
CAD1710			73-60	1-32
WAD250			81-59	1-20
WAD850			63-46	1-28
IDD1000			49-18	1-9
IDD3000			23-8	1-5
TXND3000			35-13	1-12
TXCD550			34-13	1-8
TXCD1300			71-50	1-38
TXED450			82-65	1-41
TXED1000			72-57	1-42
WID145			1-1	1-1
WID775			1-1	1-1
NYWD600			98-98	1-85
NYWD1200			18-17	1-11
NYCD110			1-1	1-1
NYCD550			93-85	1-45
VTD140			97-92	1-72
VTD400			87-74	1-45
MOGD500			1-1	1-1
MOCD500			87-83	1-52
FLND550			93-60	1-19
FLSD1500			99-96	1-71

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 2009 and 2014.

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 2007 to 2009 and from 2007 to 2014.

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

	Receipts	Payments	NCFI	Reserve 2014	Net Worth 2014	CRNW
	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(%)
CAD1710	6,494.14	0.09	315.17	(599.47)	16,673.75	0.87
WAD250	1,060.13	0.00	124.64	(133.15)	3,189.50	1.95
WAD850	3,519.73	0.00	233.85	(24.00)	7,268.13	1.99
IDD1000	4,373.04	0.00	422.42	688.79	6,938.07	6.13
IDD3000	12,790.87	0.00	1,787.24	4,781.90	24,787.59	6.16
TXND3000	11,239.91	0.00	907.60	2,990.35	16,534.93	5.25
TXCD550	1,948.84	0.00	203.50	529.49	4,343.20	4.44
TXCD1300	4,786.15	0.00	138.77	(130.38)	6,553.48	1.16
TXED450	1,570.30	0.00	33.64	(282.69)	2,510.97	0.89
TXED1000	3,801.52	0.00	122.28	(454.96)	5,078.48	0.84
WID145	744.87	0.00	205.98	458.04	2,628.66	4.68
WID775	3,737.99	0.00	891.03	3,596.02	8,282.95	10.48
NYWD600	2,535.31	0.01	(163.34)	(1,790.20)	2,859.58	(5.20)
NYWD1200	5,177.74	0.01	466.29	1,230.90	10,386.72	3.73
NYCD110	505.61	4.51	157.63	329.96	1,369.07	5.31
NYCD550	2,651.23	0.00	97.36	(1,012.59)	3,957.78	0.49
VTD140	594.04	0.00	11.39	(247.13)	957.57	(2.13)
VTD400	1,805.45	0.00	44.92	(412.57)	3,343.72	0.29
MOGD500	1,186.17	0.00	257.19	875.37	2,848.71	6.69
MOCD500	2,065.32	0.00	35.72	(743.94)	2,897.86	(0.78)
FLND550	2,422.45	0.00	188.46	(316.04)	3,990.66	3.90
FLSD1500	6,661.82	0.00	(420.26)	(3,891.41)	6,947.15	(3.58)

1 Receipts are average annual total cash receipts including government payments, 2009-2014 (\$1,000)

2 Payments are average annual total government payments, 2009-2014 (\$1,000)

3 NCFI is average annual net cash farm income, 2009-2014 (\$1,000)

4 Reserve 2014 is average ending cash reserves, 2014 (\$1,000)

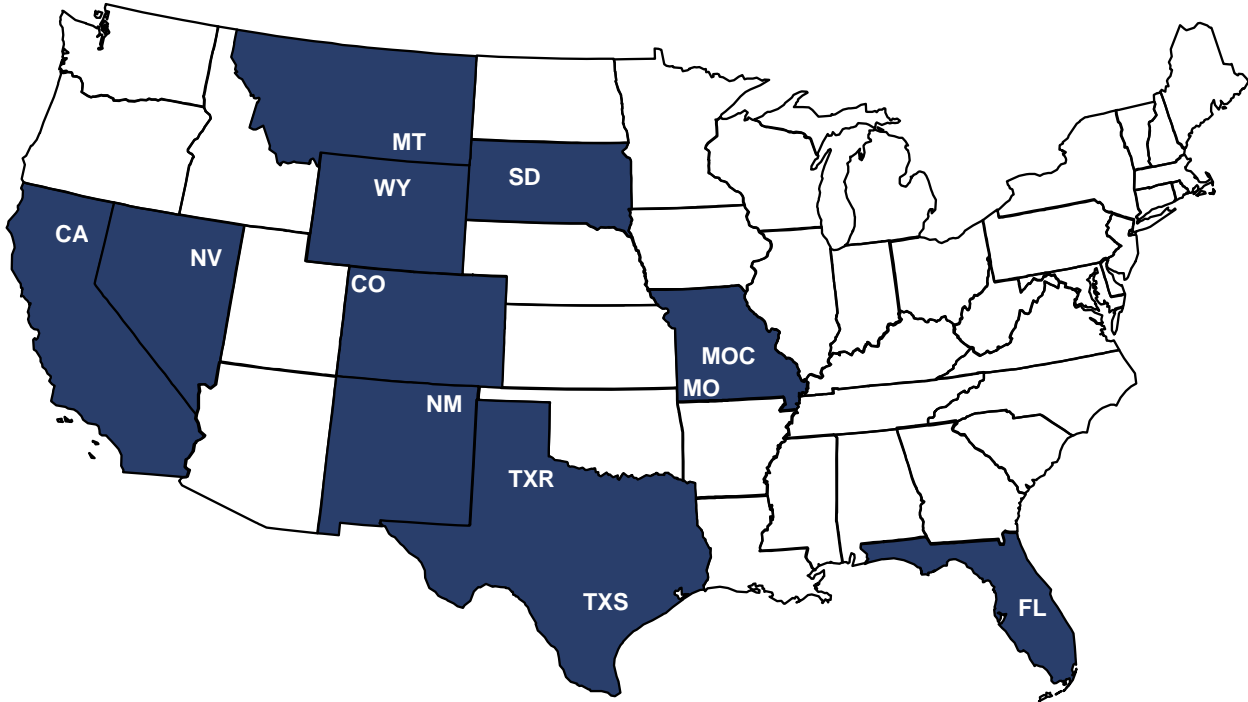
5 Net Worth 2014 is average nominal ending net worth, 2014 (\$1,000)

6 CRNW is average percentage change in real net worth over 2009-2014 period, (%)



# Representative Farm: Cow/Calf

- Five of twelve cow-calf operations are projected to be in good overall financial condition and seven are expected to be in poor condition.
- Seven of the operations will face significant liquidity pressure over the period, as their likelihoods of experiencing negative ending cash in 2014 exceed 50 percent.
- Three 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 (acres)	Assets (\$1,000)	Debt/Asset (ratio)	Gross Receipts (\$1,000)	Cows (number)
CAB500	0	5,660.00	0.05	275.20	500
NVB700	1,300	4,743.00	0.02	351.00	700
MTB500	0	4,663.00	0.03	285.10	500
WYB335	330	3,615.00	0.03	270.20	335
COB250	450	17,839.00	0.01	217.60	250
NMB240	0	5,674.00	0.02	163.50	240
SDB375	1,150	5,378.00	0.01	219.90	375
MOB250	280	2,611.00	0.02	297.00	250
MOCB400	40	4,126.00	0.01	259.50	400
TXRB500	0	6,887.00	0.01	407.40	500
TXSB200	0	3,058.00	0.04	133.00	185
FLB1155	5,400	41,016.00	0.01	631.90	1,155

# Representative Farm: Cow/Calf

## Economic Viability of Representative Farms over the 2009-2014 Period

Farm Name	Overall Ranking		P(Negative Ending Cash)	P(Real Net Worth Declines)
	2009	2014	2009-2014	2009-2014
5/0/7				
CAB500			99-99	1-99
NVB700			96-96	1-32
MTB500			58-22	1-14
WYB335			99-99	1-86
COB250			1-92	1-43
NMB240			99-99	1-45
SDB375			1-1	1-18
MOB250			1-1	1-1
MOCB400			14-7	1-12
TXRB500			1-1	1-10
TXSB200			99-99	1-57
FLB1155			91-95	1-41

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 2014.

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 2007 to 2009 and from 2007 to 2014.

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

	Receipts	Payments	NCFI	Reserve 2014	Net Worth 2014	CRNW
	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(%)
CAB500	310.08	0.00	(94.62)	(811.67)	4,896.91	(2.14)
NVB700	388.60	0.00	28.91	(198.50)	4,539.94	0.57
MTB500	314.53	0.00	77.77	54.94	4,697.13	1.24
WYB335	282.78	0.00	(21.51)	(427.92)	3,196.89	(1.30)
COB250	222.87	0.00	22.73	(56.07)	16,642.00	0.20
NMB240	177.37	0.00	19.31	(105.40)	5,451.60	0.18
SDB375	243.89	0.00	79.14	155.77	5,431.82	0.93
MOB250	299.04	2.83	124.55	368.80	2,791.60	2.23
MOCB400	282.69	0.00	69.66	115.32	4,080.91	0.93
TXRB500	446.27	0.00	118.46	360.91	7,115.62	1.39
TXSB200	159.87	0.00	30.42	(159.30)	2,827.35	(0.22)
FLB1155	690.38	0.00	37.90	(275.32)	39,977.90	0.26

1 Receipts are average annual total cash receipts including government payments, 2009-2014 (\$1,000)

2 Payments are average annual total government payments, 2009-2014 (\$1,000)

3 NCFI is average annual net cash farm income, 2009-2014 (\$1,000)

4 Reserve 2014 is average ending cash reserves, 2014 (\$1,000)

5 Net Worth 2014 is average nominal ending net worth, 2014 (\$1,000)

6 CRNW is average percentage change in real net worth over 2009-2014 period, (%)