

Richardson, James W. et al.

**Research Report**

## Representative farms economic outlook for the December 2008 FAPRI/AFPC baseline

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# ***Representative Farms Economic Outlook for the December 2008 FAPRI/AFPC Baseline***

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**Briefing Paper 08-3**

**December 2008**



## **Agricultural and Food Policy Center**

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Texas AgriLife Research  
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**REPRESENTATIVE FARMS ECONOMIC  
OUTLOOK FOR THE DECEMBER 2008  
FAPRI/AFPC BASELINE**

AFPC Briefing Paper 08-3

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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 2008 through 2013. 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 2008 Baseline.

Under the December 2008 Baseline, 30 of the 64 crop farms are considered in good liquidity condition (less than a 25 percent chance of negative ending cash in 2013). Ten crop farms have between a 25 percent and a 50 percent likelihood of negative ending cash. The remaining 24 crop farms have greater than a 50 percent chance of negative ending cash. Additionally, 43 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). Seven crop farms have between a 25 percent and 50 percent likelihood of losing real net worth, and 14 crop farms have greater than a 50 percent probability of decreasing real net worth. The following discussion provides an overall evaluation by commodity considering both liquidity and equity measures.

- **FEEDGRAIN FARMS:** Twelve of the 19 feedgrain farms are in good overall financial condition. Three are classified in marginal condition, and four are in poor condition.
- **WHEAT FARMS:** Ten of the 11 wheat farms are classified in good financial condition, one is marginal, and none are in poor condition.
- **COTTON FARMS:** Five of the 20 cotton farms are classified in good condition, three are in marginal condition, and twelve are in poor condition. In addition, nine of these farms have more than a 50 percent chance of losing real net worth by 2013.
- **RICE FARMS:** Three of the 14 rice farms are in good condition, six are classified in marginal condition, and five farms are projected to be in poor financial condition through 2013.
- **DAIRY FARMS:** Twenty-one of the 22 dairy farms are in good overall financial condition. One is considered to be in marginal condition, and none are in poor condition.
- **BEEF CATTLE RANCHES:** Six of the 12 cattle ranches are classified in good financial condition, five are classified in marginal condition, and one is projected to be in poor condition.

## **REPRESENTATIVE FARMS ECONOMIC OUTLOOK FOR THE DECEMBER 2008 FAPRI/AFPC BASELINE**

The farm level economic impacts of the FAPRI December 2008 Baseline on representative crop and livestock operations are projected in this report. The analysis was conducted over the 2007-2013 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 2008 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 2008 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 2013.

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

- **Overall Financial Position, 2008-2013** -- 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** -- 2008-2013 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** -- 2008-2013 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** -- 2008-2013 average net cash farm income equals average total receipts minus average total cash expenses.
- **Reserve 2013** -- equals total cash on hand at the end of year 2013. 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 2013** -- equity equals total assets including land minus total debt from all sources and is reported at the end of 2013.
- **CRNW** -- annualized percentage change in the operator's net worth from December 1, 2008 through December 31, 2013, after adjusting for inflation.

**Table 1. FAPRI December 2008 Baseline Projections of Crop and Livestock Prices, 2007-2013**

	2007	2008	2009	2010	2011	2012	2013
<b>Crop Prices</b>							
Corn (\$/bu.)	4.20	3.93	3.93	3.89	4.05	4.14	4.27
Wheat (\$/bu.)	6.48	6.48	5.36	5.63	5.61	5.81	5.92
Cotton (\$/lb.)	0.5930	0.4706	0.5200	0.5444	0.5606	0.5708	0.5848
Sorghum (\$/bu.)	4.08	3.47	3.57	3.5	3.71	3.77	3.94
Soybeans (\$/bu.)	10.10	9.71	9.34	9.32	9.62	9.90	10.15
Barley (\$/bu.)	4.02	4.86	4.20	4.19	4.35	4.39	4.50
Oats (\$/bu.)	2.63	2.96	2.75	2.71	2.79	2.84	2.92
Rice (\$/cwt.)	12.80	14.34	13.61	13.21	13.33	13.23	13.39
Soybean Meal (\$/ton)	320.42	275.45	246.43	232.87	233.78	238.41	242.59
All Hay (\$/ton)	128.00	152.63	138.73	137.13	137.06	137.81	139.29
Peanuts (\$/ton)	410.00	395.16	372.65	389.74	407.07	401.60	415.18
<b>Cattle Prices</b>							
Feeder Cattle (\$/cwt)	115.48	109.71	104.92	113.32	119.59	125.79	130.09
Fed Cattle (\$/cwt)	91.82	93.30	91.30	96.04	99.54	103.00	104.82
Culled Cows (\$/cwt)	52.12	55.69	53.42	57.35	59.32	61.52	62.41
<b>Milk Price</b>							
U.S. All Milk Price (\$/cwt)	19.21	18.34	16.33	16.98	17.55	17.74	17.96

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

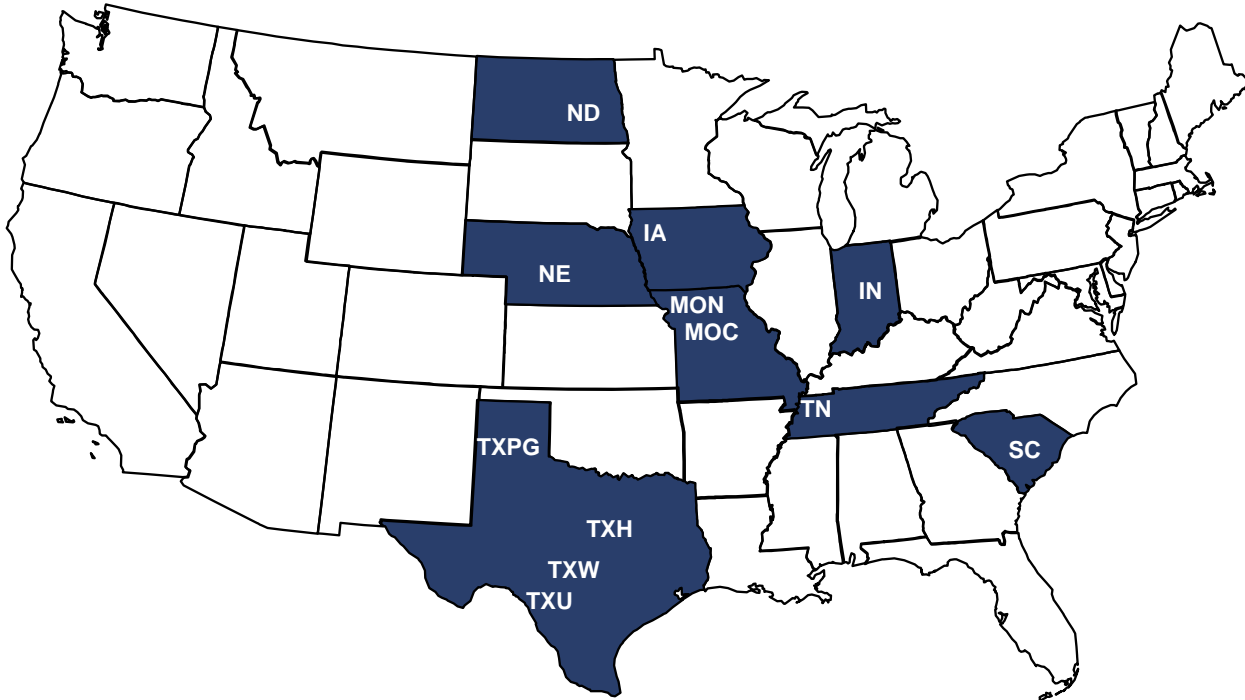
**Table 2. FAPRI December 2008 Baseline Assumed Rates of Change in Input Prices and Annual Changes in Land Values, 2008-2013**

	2008	2009	2010	2011	2012	2013
<b>Annual Rate of Change for Input Prices Paid</b>						
Seed Prices (%)	22.00	-5.89	3.51	4.71	3.44	3.54
All Fertilizer Prices (%)	41.26	-26.58	-7.57	3.26	2.31	3.52
Herbicide Prices (%)	5.42	-8.42	1.22	2.38	1.71	2.07
Insecticide Prices (%)	8.82	-2.58	1.86	2.43	0.87	0.75
Fuel and Lube Prices (%)	36.18	-37.01	11.54	14.74	5.01	4.74
Machinery Prices (%)	7.48	-5.94	3.46	3.45	2.60	2.92
Wages (%)	3.29	3.37	1.51	1.05	1.80	2.12
Supplies (%)	7.78	-8.55	2.40	4.00	2.94	3.20
Repairs (%)	3.58	-0.43	1.36	2.15	2.56	2.71
Services (%)	4.84	-9.08	1.84	2.93	1.99	2.38
Taxes (%)	8.82	-8.68	6.86	4.79	2.16	2.74
PPI Items (%)	19.73	-10.02	1.54	3.42	2.32	2.42
PPI Total (%)	20.66	-8.71	1.76	3.70	2.45	2.45
<b>Annual Change in Consumer Price Index (%)</b>	3.93	-0.86	2.38	2.95	2.41	2.39
<b>Annual Rate of Change for U.S. Land Prices (%)</b>	8.80	8.55	3.93	2.70	3.20	3.30

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

# Representative Farm: Feed Grains

- Overall, twelve feed grain farms are characterized as good, three are marginal, and four are in poor condition.
- Five of nineteen farms will be under severe cash flow stress; however, only one farm has a high probability of losing real wealth.



**Characteristics of Panel Farms Producing Feed Grains, 2007.**

	Cropland (acres)	Assets (\$1,000)	Debt/Asset (ratio)	Gross Receipts (\$1,000)	Feed Grains (acres)
IAG1350	1,350	1,765.00	0.18	834.20	1,350
IAG3400	3,400	5,778.00	0.19	2,063.80	3,400
NEG1960	1,960	2,624.00	0.19	1,558.40	1,770
NEG4300	4,300	6,450.00	0.20	3,171.00	3,784
NDG2180	2,180	918.00	0.14	712.10	1,600
NDG7500	7,500	6,223.00	0.18	2,975.30	5,750
MOCG2050	2,050	5,381.00	0.18	691.40	2,050
MOCG4000	4,000	9,188.00	0.17	1,521.90	3,950
MONG1850	1,850	5,841.00	0.19	1,051.70	1,800
ING1000	1,000	2,333.00	0.17	557.60	1,000
ING2200	2,200	5,869.00	0.17	1,303.70	2,200
TXPG3760	3,760	4,639.00	0.17	3,217.30	1,878
TXHG2000	2,000	1,413.00	0.18	486.70	1,500
TXWG1600	1,600	1,131.00	0.26	530.20	1,300
TXUG1200	1,200	254.00	0.31	646.70	850
TNG900	900	1,035.00	0.17	412.70	900
TNG2750	2,750	3,579.00	0.15	1,341.80	2,750
SCG1500	1,500	1,174.00	0.20	888.00	600
SCG3500	3,500	6,508.00	0.18	1,931.00	3,500

# Representative Farm: Feed Grains

## Economic Viability of Representative Farms over the 2008-2013 Period

Farm Name	Overall Ranking		P(Negative Ending Cash)	P(Real Net Worth Declines)
	2008	2013	2008-2013	2008-2013
12/3/4				
IAG1350			1-1	1-1
IAG3400			1-2	1-1
NEG1960			1-1	1-1
NEG4300			1-1	1-1
NDG2180			1-1	1-1
NDG7500			1-1	1-1
MOCG2050			13-1	1-1
MOCG4000			1-1	1-1
MONG1850			59-47	1-1
ING1000			45-52	1-1
ING2200			6-3	1-1
TXPG3760			71-73	1-40
TXHG2000			59-24	1-3
TXWG1600			49-40	1-7
TXUG1200			78-59	1-53
TNG900			63-67	1-50
TNG2750			3-12	1-1
SCG1500			41-52	1-29
SCG3500			7-4	1-1

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 2008 and 2013.

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 2008 and from 2007 to 2013.

## Implications of the December 2008 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Feed Grains and Oilseeds

	Receipts	Payments	NCFI	Reserve 2013	Net Worth 2013	CRNW
	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(%)
IAG1350	816.26	27.70	239.72	754.84	2,585.02	9.45
IAG3400	2,008.64	68.30	659.26	1,695.90	7,977.06	8.44
NEG1960	1,518.58	49.73	551.42	1,785.50	4,298.24	12.85
NEG4300	3,092.39	80.00	1,100.70	3,608.60	9,729.52	10.80
NDG2180	702.30	23.42	286.10	1,005.36	1,797.00	15.31
NDG7500	2,902.73	82.10	1,270.07	4,550.12	10,553.32	12.93
MOCG2050	1,006.31	31.49	495.32	1,057.87	7,884.42	8.78
MOCG4000	1,975.71	56.71	1,144.24	3,272.24	14,529.14	10.07
MONG1850	1,039.54	28.79	238.69	62.17	7,333.39	6.34
ING1000	546.14	20.10	134.65	(11.40)	2,867.04	5.63
ING2200	1,280.29	44.06	394.83	914.11	8,039.87	7.52
TXPG3760	3,165.17	174.22	(8.40)	(1,001.19)	3,886.99	0.91
TXHG2000	534.19	41.78	110.26	182.08	1,638.14	5.91
TXWG1600	509.13	49.22	100.46	71.37	1,232.50	7.07
TXUG1200	760.34	73.64	63.93	(95.84)	107.09	11.58
TNG900	408.33	10.82	39.52	(138.78)	863.78	0.42
TNG2750	1,332.31	35.55	467.86	985.52	4,905.63	8.28
SCG1500	928.11	151.37	81.88	(42.19)	1,101.48	3.04
SCG3500	1,904.03	120.59	525.75	1,753.99	8,680.16	7.97

1 Receipts are average annual total cash receipts including government payments, 2008-2013 (\$1,000)

2 Payments are average annual total government payments, 2008-2013 (\$1,000)

3 NCFI is average annual net cash farm income, 2008-2013 (\$1,000)

4 Reserve 2013 is average ending cash reserves, 2013 (\$1,000)

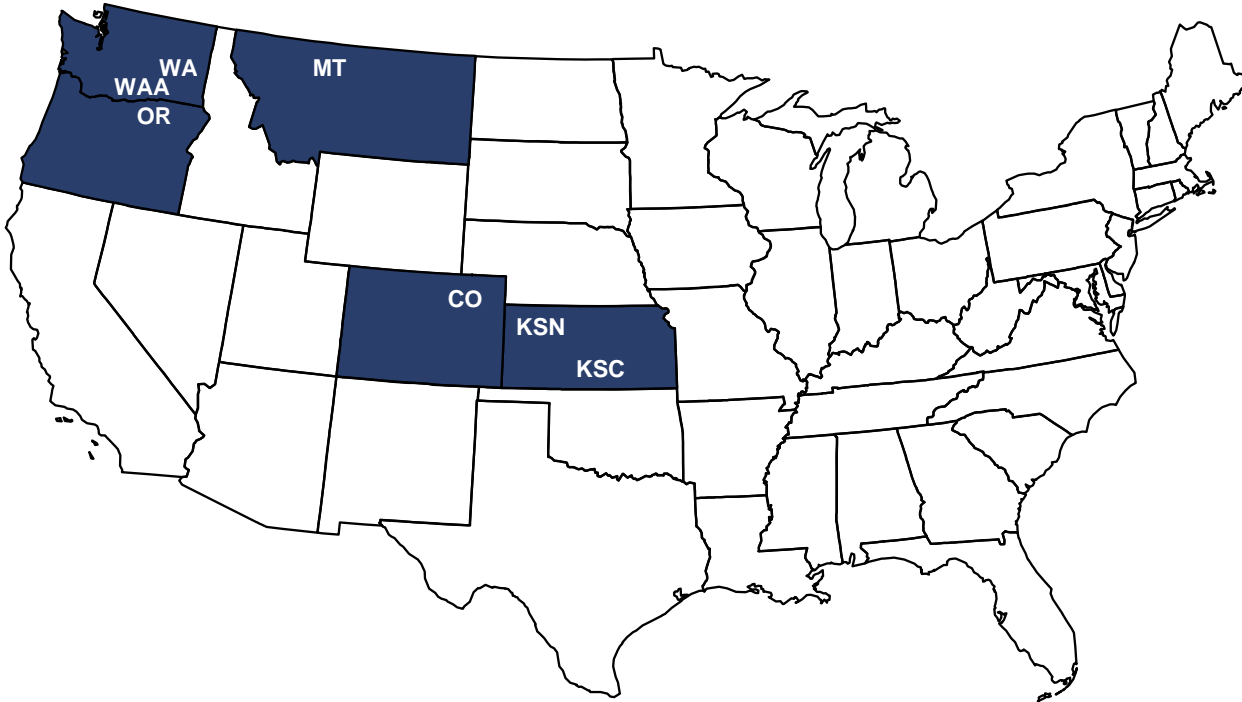
5 Net Worth 2013 is average nominal ending net worth, 2013 (\$1,000)

6 CRNW is average percentage change in real net worth over 2008-2013 period, (%)



# Representative Farm: Wheat

- Ten wheat farms are projected to be in good overall financial condition. One farm is expected to be in marginal condition, and none are 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 25 percent or greater chance of losing real equity.



**Characteristics of Panel Farms Producing Wheat, 2007.**

	Cropland (acres)	Assets (\$1,000)	Debt/Asset (ratio)	Gross Receipts (\$1,000)	Wheat (acres)
WAW1725	1,725	1,280.00	0.16	527.40	1,147
WAW5500	5,500	6,066.00	0.22	1,809.60	3,055
WAAW3500	3,500	1,408.00	0.18	378.50	1,500
ORW3600	3,600	1,305.00	0.16	481.10	1,600
MTW4500	4,500	2,678.00	0.18	614.20	2,330
KSCW1600	1,600	1,230.00	0.18	401.20	1,072
KSCW4000	4,000	2,533.00	0.18	1,000.60	2,000
KSNW2800	2,800	1,749.00	0.17	532.10	1,400
KSNW5000	5,000	3,078.00	0.16	1,314.00	2,325
COW3000	3,000	1,381.00	0.16	433.40	970
COW5640	5,640	2,309.00	0.17	825.70	2,256

# Representative Farm: Wheat

## Economic Viability of Representative Farms over the 2008-2013 Period

Farm Name	Overall Ranking		P(Negative Ending Cash)	P(Real Net Worth Declines)
	2008	2013	2008-2013	2008-2013
10/1/0				
WAW1725			1-1	1-1
WAW5500			6-1	1-1
WAAW3500			1-1	1-1
MTW4500			1-1	1-1
ORW3600			1-1	1-1
KSCW1600			14-18	1-2
KSCW4000			1-2	1-1
KSNW2800			19-44	1-2
KSNW5000			1-5	1-1
COW3000			1-1	1-1
COW5640			1-10	1-1

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 2008 and 2013.

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 2008 and from 2007 to 2013.

## Implications of the December 2008 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Wheat

	Receipts	Payments	NCFI	Reserve 2013	Net Worth 2013	CRNW
	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(%)
WAW1725	657.26	35.21	319.59	1,054.99	2,362.21	13.84
WAW5500	1,954.77	87.70	641.86	1,649.06	7,979.91	8.48
WAAW3500	389.72	23.11	164.86	293.13	1,862.15	7.45
ORW3600	483.85	24.30	293.60	895.80	2,145.26	11.42
MTW4500	560.45	45.02	218.84	660.48	3,583.64	6.72
KSCW1600	369.47	21.73	94.28	157.20	1,359.46	3.90
KSCW4000	939.18	45.93	351.23	994.13	3,457.18	7.62
KSNW2800	495.97	27.18	116.98	59.60	2,078.37	4.73
KSNW5000	1,239.10	51.09	364.87	1,033.10	4,378.95	7.86
COW3000	415.30	15.28	200.53	640.45	2,055.74	8.84
COW5640	760.03	34.36	299.29	646.93	3,147.46	6.89

1 Receipts are average annual total cash receipts including government payments, 2008-2013 (\$1,000)

2 Payments are average annual total government payments, 2008-2013 (\$1,000)

3 NCFI is average annual net cash farm income, 2008-2013 (\$1,000)

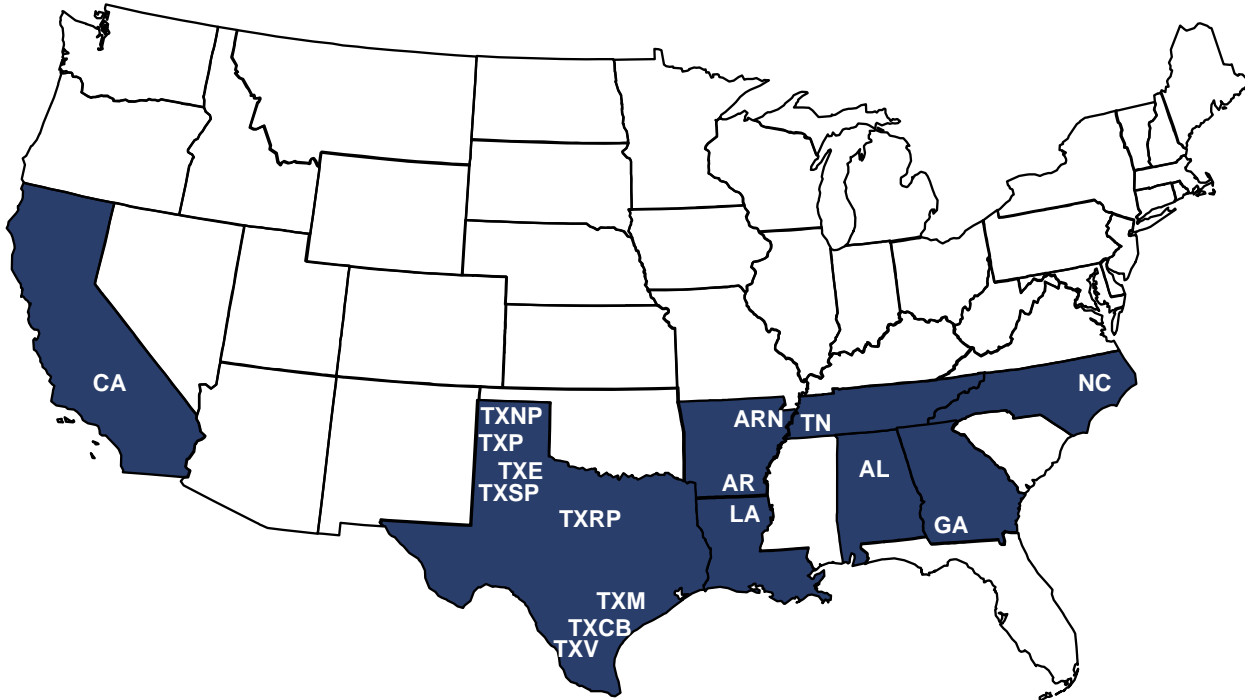
4 Reserve 2013 is average ending cash reserves, 2013 (\$1,000)

5 Net Worth 2013 is average nominal ending net worth, 2013 (\$1,000)

6 CRNW is average percentage change in real net worth over 2008-2013 period, (%)

# Representative Farm: Cotton

- Five of the twenty cotton farms are characterized in good overall financial condition, three farms are in marginal condition, and twelve are in poor condition.
- Thirteen of the farms are projected to experience severe cash flow problems over the period.
- Nine of the twenty cotton farms have more than a 50 percent chance of losing real equity.



**Characteristics of Panel Farms Producing Cotton, 2007.**

	Cropland (acres)	Assets (\$1,000)	Debt/Asset (ratio)	Gross Receipts (\$1,000)	Cotton (acres)
TXNP3000	3,000	1,514.00	0.15	1,483.50	630
TXNP8000	8,000	4,648.00	0.18	3,975.00	1,872
TXSP2500	2,500	1,036.00	0.14	1,033.90	1,958
TXSP3745	3,745	1,911.00	0.19	1,624.90	2,916
TXPC2500	2,500	2,567.00	0.22	1,356.20	1,367
TXEC5000	5,000	1,401.00	0.24	1,487.70	3,800
TXRP2500	2,500	614.00	0.21	343.60	1,117
TXMC1800	1,800	999.00	0.26	720.10	900
TXCB2250	2,250	1,152.00	0.17	742.30	1,000
TXCB5500	5,500	1,300.00	0.21	1,762.50	2,750
TXVC4500	4,500	2,971.00	0.18	1,598.60	2,388
CAC4000	4,000	16,585.00	0.18	7,698.80	1,333
LAC2640	2,640	911.00	0.14	1,633.10	924
ARC7500	7,500	7,599.00	0.21	4,446.80	1,500
ARNC5000	5,000	6,910.00	0.27	2,803.00	5,000
TNC1900	1,900	2,507.00	0.12	1,045.70	990
TNC4050	4,050	5,250.00	0.31	1,818.00	2,670
ALC3000	3,000	1,533.00	0.24	1,040.20	1,500
GAC2300	2,300	4,041.00	0.21	1,741.60	1,495
NCC1500	1,500	3,080.00	0.17	882.00	575

# Representative Farm: Cotton

## Economic Viability of Representative Farms over the 2008-2013 Period

Farm Name	Overall Ranking		P(Negative Ending Cash)	P(Real Net Worth Declines)
	2008	2013	2008-2013	2008-2013
5/3/12				
TXNP3000			37-22	1-8
TXNP8000			44-12	1-4
TXSP2500			56-85	1-80
TXSP3745			44-90	1-89
TXPC2500			83-90	1-54
TXEC5000			99-99	1-99
TXRP2500			67-64	1-44
TXMC1800			68-82	1-72
TXCB2250			40-44	1-21
TXCB5500			70-88	1-83
TXVC4500			59-59	1-28
CAC4000			2-1	1-1
LAC2640			27-14	1-9
ARC7500			54-47	1-20
ARNC5000			99-99	1-99
TNC1900			4-4	1-1
TNC4050			99-99	1-99
ALC3000			70-58	1-36
GAC2300			99-99	1-99
NCC1500			22-56	1-7

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 2008 and 2013.

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 2008 and from 2007 to 2013.

## Implications of the December 2008 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Cotton

	Receipts	Payments	NCFI	Reserve 2013	Net Worth 2013	CRNW
	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(%)
TXNP3000	1,564.04	66.85	240.76	441.73	2,062.34	10.16
TXNP8000	4,229.08	140.36	678.33	1,787.60	6,500.21	12.43
TXSP2500	638.49	89.04	(43.63)	(534.46)	303.43	(10.23)
TXSP3745	1,042.74	138.13	(25.65)	(933.10)	609.01	(9.21)
TXPC2500	1,383.14	174.41	33.17	(808.89)	1,842.21	(0.73)
TXEC5000	1,515.79	253.33	(98.67)	(1,821.57)	(476.88)	(30.56)
TXRP2500	370.87	62.16	40.75	(92.45)	500.25	1.03
TXMC1800	744.37	87.32	8.92	(620.12)	286.83	(11.15)
TXCB2250	787.68	114.33	124.10	30.66	1,342.46	5.12
TXCB5500	1,867.73	236.32	(48.41)	(1,662.11)	(241.87)	(31.08)
TXVC4500	1,647.46	230.38	148.45	(261.06)	2,850.33	2.76
CAC4000	6,813.11	125.04	1,720.81	5,727.78	23,360.88	9.20
LAC2640	1,737.69	195.59	308.65	769.10	1,645.61	18.85
ARC7500	5,002.75	240.80	746.38	124.21	7,662.72	4.94
ARNC5000	2,919.93	320.40	(608.74)	(7,049.58)	562.06	(14.74)
TNC1900	1,084.43	118.44	276.50	686.87	3,441.62	7.31
TNC4050	1,878.26	248.30	(697.53)	(6,769.07)	(815.26)	(21.44)
ALC3000	1,352.71	205.15	254.42	(207.52)	1,318.25	2.69
GAC2300	1,866.31	246.54	(302.41)	(3,225.98)	1,644.36	(7.79)
NCC1500	916.18	112.66	157.74	(25.60)	3,232.26	3.58

1 Receipts are average annual total cash receipts including government payments, 2008-2013 (\$1,000)

2 Payments are average annual total government payments, 2008-2013 (\$1,000)

3 NCFI is average annual net cash farm income, 2008-2013 (\$1,000)

4 Reserve 2013 is average ending cash reserves, 2013 (\$1,000)

5 Net Worth 2013 is average nominal ending net worth, 2013 (\$1,000)

6 CRNW is average percentage change in real net worth over 2008-2013 period, (%)

# Representative Farm: Rice

- Three of the fourteen rice farms are projected to be in good overall financial condition, six are in marginal condition, and five are in poor condition.
- Six of the rice farms are expected to face severe cash flow problems, and four of fourteen have high probabilities of real equity losses.



**Characteristics of Panel Farms Producing Rice, 2007.**

	Cropland (acres)	Assets (\$1,000)	Debt/Asset (ratio)	Gross Receipts (\$1,000)	Rice (acres)
CAR550	550	1,941.00	0.18	644.20	500
CAR2365	2,365	6,005.00	0.19	2,802.70	2,240
CABR1300	1,300	4,272.00	0.18	1,519.40	1,200
CACR715	715	2,220.00	0.19	905.10	650
TXR1350	1,350	1,365.00	0.23	443.70	810
TXR3000	3,000	788.00	0.19	958.80	2,280
TXBR1800	1,800	553.00	0.49	637.50	1,200
TXER3200	3,200	1,301.00	0.25	1,142.70	2,027
LASR1200	1,200	504.00	0.29	604.70	660
LANR2500	2,500	4,700.00	0.19	1,539.60	500
MOWR4000	4,000	10,477.00	0.19	2,593.30	2,000
ARSR3240	3,240	3,130.00	0.20	1,488.10	1,620
ARWR1200	1,200	3,106.00	0.36	754.40	600
ARHR3000	3,000	4,722.00	0.24	1,695.90	1,450

# Representative Farm: Rice

## Economic Viability of Representative Farms over the 2008-2013 Period

Farm Name	Overall Ranking		P(Negative Ending Cash)	P(Real Net Worth Declines)
	2008	2013	2008-2013	2008-2013
3/6/5				
CAR550			53-66	1-20
CAR2365			39-49	1-20
CABR1300			39-49	1-12
CACR715			38-38	1-8
TXR1350			70-69	1-25
TXR3000			40-12	1-14
TXBR1800			76-77	1-66
TXER3200			73-70	1-59
LASR1200			32-7	1-5
LANR2500			28-9	1-1
MOWR4000			29-27	1-2
ARSR3240			45-48	1-24
ARWR1200			99-99	1-97
ARHR3000			73-85	1-58

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 2008 and 2013.

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 2008 and from 2007 to 2013.

## Implications of the December 2008 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Rice

	Receipts	Payments	NCFI	Reserve 2013	Net Worth 2013	CRNW
	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(%)
CAR550	675.75	67.21	70.91	(194.46)	1,940.15	2.26
CAR2365	2,943.26	92.37	293.84	(222.28)	6,541.62	3.64
CABR1300	1,597.67	87.02	237.40	43.80	4,858.95	4.40
CACR715	950.30	83.91	135.86	133.21	2,713.51	5.64
TXR1350	530.52	53.89	74.11	(207.69)	1,257.05	2.50
TXR3000	1,259.64	85.30	281.55	786.73	1,404.32	19.53
TXBR1800	945.23	83.66	46.09	(584.11)	(49.12)	(40.43)
TXER3200	1,468.59	85.98	27.70	(592.12)	625.63	(6.73)
LASR1200	788.64	49.81	206.38	542.77	984.26	23.33
LANR2500	1,940.29	112.59	554.23	1,103.43	6,459.85	9.34
MOWR4000	2,659.36	88.71	661.70	869.04	12,755.05	5.94
ARSR3240	1,838.57	85.99	368.09	37.54	3,426.31	4.21
ARWR1200	782.53	61.79	(208.60)	(2,760.40)	480.68	(12.56)
ARHR3000	1,923.62	87.18	100.25	(1,752.65)	3,291.80	(1.34)

1 Receipts are average annual total cash receipts including government payments, 2008-2013 (\$1,000)

2 Payments are average annual total government payments, 2008-2013 (\$1,000)

3 NCFI is average annual net cash farm income, 2008-2013 (\$1,000)

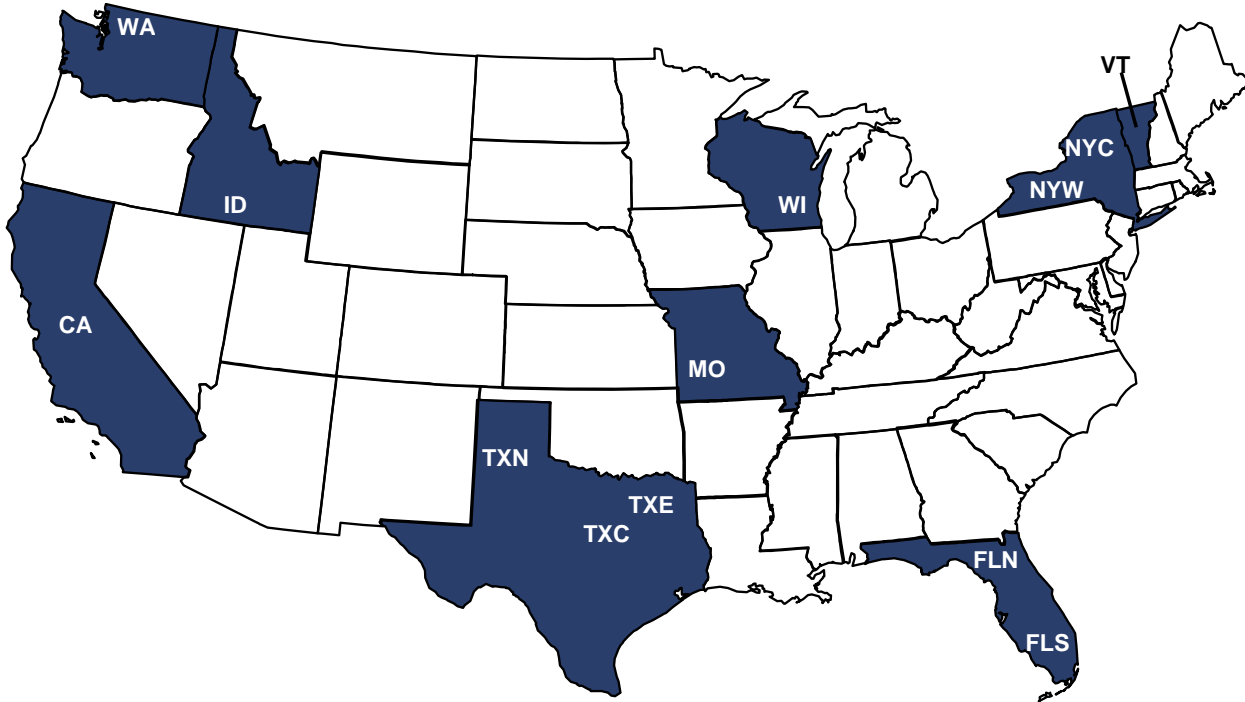
4 Reserve 2013 is average ending cash reserves, 2013 (\$1,000)

5 Net Worth 2013 is average nominal ending net worth, 2013 (\$1,000)

6 CRNW is average percentage change in real net worth over 2008-2013 period, (%)

# Representative Farm: Dairy

- Twenty-one of twenty-two dairy operations are in good overall financial condition. Only one dairy is classified in marginal condition, and none are in poor condition.
- Two of the dairies are projected to experience moderate liquidity pressure.
- None of the dairies are projected to face a 25 percent or greater probability of losing real equity.



**Characteristics of Panel Farms Producing Milk, 2007.**

	Cropland (acres)	Assets (\$1,000)	Debt/Asset (ratio)	Gross Receipts (\$1,000)	Cows (number)
CAD1710	700	20,462.00	0.20	7,602.90	1,710
WAD250	200	3,721.00	0.22	1,213.40	250
WAD850	605	8,738.00	0.21	4,105.60	850
IDD1000	360	6,831.00	0.16	4,842.50	1,000
IDD3000	1,500	22,467.00	0.16	14,223.70	3,000
TXND3000	480	13,346.00	0.10	12,771.50	3,000
TXCD550	750	4,353.00	0.18	2,184.70	550
TXCD1300	560	8,067.00	0.16	5,337.60	1,300
TXED450	850	3,174.00	0.18	1,748.40	450
TXED1000	750	6,535.00	0.19	4,265.60	1,000
WID145	600	2,548.00	0.23	802.10	145
WID775	1,200	5,888.00	0.18	4,110.80	775
NYWD600	1,200	5,355.00	0.21	2,859.20	600
NYWD1200	2,100	10,977.00	0.20	5,826.90	1,200
NYCD110	325	1,223.00	0.19	562.60	110
NYCD550	1,100	5,171.00	0.20	2,961.10	550
VTD140	220	1,820.00	0.15	780.70	140
VTD400	1,000	4,608.00	0.20	2,089.10	400
MOGD500	0	2,886.00	0.15	1,469.80	500
MOCD500	530	4,245.00	0.19	2,272.10	500
FLND550	600	4,424.00	0.21	2,444.70	550
FLSD1500	400	11,897.00	0.20	6,712.20	1,500

# Representative Farm: Dairy

## Economic Viability of Representative Farms over the 2008-2013 Period

Farm Name	Overall Ranking		P(Negative Ending Cash)	P(Real Net Worth Declines)
	2008	2013	2008-2013	2008-2013
21/1/0				
CAD1710			3-9	1-1
WAD250			22-7	1-1
WAD850			10-2	1-1
IDD1000			4-3	1-1
IDD3000			1-1	1-1
TXND3000			22-10	1-8
TXCD550			1-1	1-1
TXCD1300			13-5	1-6
TXED450			24-11	1-3
TXED1000			19-11	1-6
WID145			1-1	1-1
WID775			1-1	1-1
NYWD600			43-40	1-7
NYWD1200			1-1	1-1
NYCD110			1-1	1-1
NYCD550			30-15	1-1
VTD140			12-2	1-1
VTD400			25-9	1-1
MOGD500			1-1	1-1
M OCD500			26-15	1-2
FLND550			45-5	1-1
FLSD1500			76-29	1-2

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 2008 and 2013.

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 2008 and from 2007 to 2013.

## Implications of the December 2008 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Milk

	Receipts	Payments	NCFI	Reserve 2013	Net Worth 2013	CRNW
	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(%)
CAD1710	7,020.43	18.38	903.86	1,904.18	22,490.60	4.29
WAD250	1,132.38	2.64	238.07	434.77	4,407.98	6.27
WAD850	3,773.96	9.90	648.72	1,951.65	10,554.72	6.55
IDD1000	4,738.05	0.00	736.57	2,436.32	9,585.84	8.16
IDD3000	13,890.66	19.79	2,845.75	9,630.58	32,672.48	8.84
TXND3000	12,461.95	5.52	1,014.81	3,893.37	16,093.95	5.26
TXCD550	2,113.55	0.00	409.50	1,555.04	5,909.64	8.66
TXCD1300	5,176.55	0.00	612.16	2,124.66	9,313.33	5.33
TXED450	1,697.27	0.00	199.08	570.77	3,769.60	6.32
TXED1000	4,135.14	0.00	526.52	1,463.88	7,569.16	5.79
WID145	827.07	2.90	306.12	891.36	3,512.23	9.35
WID775	4,156.52	9.35	1,395.86	5,753.81	11,156.50	15.34
NYWD600	2,738.99	19.35	225.11	142.99	5,409.75	3.93
NYWD1200	5,570.98	26.55	1,037.73	3,892.85	14,198.73	7.96
NYCD110	540.38	4.51	205.06	546.58	1,727.50	9.49
NYCD550	2,844.66	10.73	401.09	533.54	6,049.44	6.46
VTD140	756.52	3.82	166.78	391.46	2,316.97	6.85
VTD400	2,018.98	13.78	269.18	565.51	5,175.53	5.91
MOGD500	1,282.02	0.00	399.50	1,519.90	3,772.02	10.77
M OCD500	2,235.53	0.00	330.21	556.70	4,720.51	5.73
FLND550	2,601.79	0.00	539.35	1,385.13	6,473.51	11.80
FLSD1500	7,142.18	0.00	603.86	1,082.32	13,877.58	6.83

1 Receipts are average annual total cash receipts including government payments, 2008-2013 (\$1,000)

2 Payments are average annual total government payments, 2008-2013 (\$1,000)

3 NCFI is average annual net cash farm income, 2008-2013 (\$1,000)

4 Reserve 2013 is average ending cash reserves, 2013 (\$1,000)

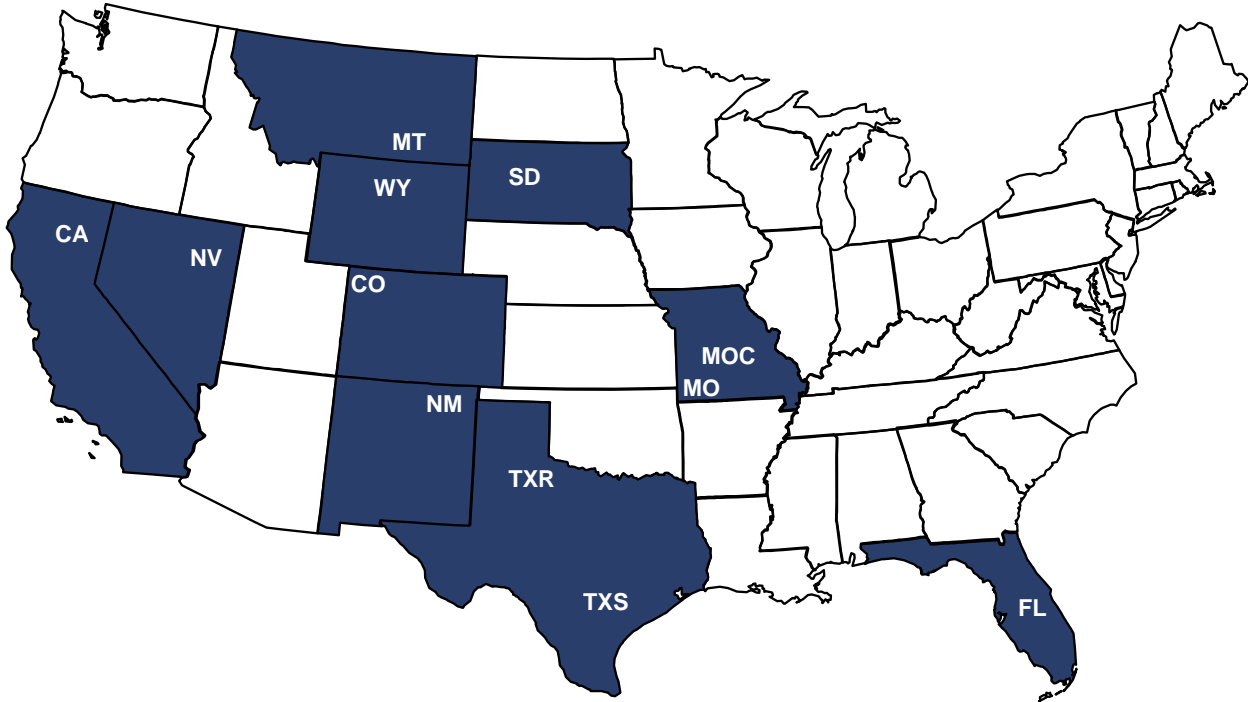
5 Net Worth 2013 is average nominal ending net worth, 2013 (\$1,000)

6 CRNW is average percentage change in real net worth over 2008-2013 period, (%)



# Representative Farm: Cow/Calf

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



**Characteristics of Panel Farms Producing Beef Cattle, 2007.**

	Cropland (acres)	Assets (\$1,000)	Debt/Asset (ratio)	Gross Receipts (\$1,000)	Cows (number)
CAB500	0	5,683.00	0.02	292.00	500
NVB700	1,300	4,223.00	0.01	347.50	700
MTB500	0	4,312.00	0.01	298.20	500
WYB335	330	3,409.00	0.02	262.90	335
COB250	450	15,955.00	0.01	216.30	250
NMB240	0	5,259.00	0.01	168.10	240
SDB375	1,150	5,045.00	0.01	230.40	375
MOB250	280	2,340.00	0.02	262.40	250
MOCB400	40	3,702.00	0.01	257.00	400
TXRB500	0	6,661.00	0.01	454.30	500
TXSB200	0	2,826.00	0.02	125.90	175
FLB1155	5,400	38,131.00	0.01	657.30	1,155

# Representative Farm: Cow/Calf

## Economic Viability of Representative Farms over the 2008-2013 Period

Farm Name	Overall Ranking		P(Negative Ending Cash)	P(Real Net Worth Declines)
	2008	2013	2008-2013	2008-2013
6/5/1				
CAB500			99-99	1-99
NVB700			64-81	1-1
MTB500			39-17	1-1
WYB335			99-99	1-1
COB250			1-56	1-1
NMB240			96-99	1-1
SDB375			3-1	1-1
MOB250			1-1	1-1
MOCB400			17-11	1-1
TXRB500			1-1	1-1
TXSB200			99-99	1-1
FLB1155			58-37	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 2008 and 2013.

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 2008 and from 2007 to 2013.

## Implications of the December 2008 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Beef Cattle

	Receipts	Payments	NCFI	Reserve 2013	Net Worth 2013	CRNW
	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(%)
CAB500	300.43	0.00	(95.37)	(870.57)	4,848.43	(1.54)
NVB700	379.21	0.00	40.26	(124.49)	5,760.35	4.11
MTB500	306.84	0.00	80.74	107.68	5,761.60	4.60
WYB335	284.79	0.00	(5.06)	(367.57)	3,990.47	2.44
COB250	225.29	0.00	29.28	(9.28)	21,847.91	4.14
NMB240	173.82	0.00	19.88	(99.04)	6,811.71	3.89
SDB375	237.84	0.00	80.09	186.85	6,643.54	4.32
MOB250	303.36	3.18	144.96	477.07	3,480.36	6.03
MOCB400	276.69	0.00	66.51	129.67	5,113.09	4.39
TXRB500	478.00	0.00	167.98	669.75	9,272.63	5.24
TXSB200	153.94	0.00	31.34	(135.30)	3,482.57	3.31
FLB1155	676.29	0.00	103.40	82.90	50,703.90	4.30

1 Receipts are average annual total cash receipts including government payments, 2008-2013 (\$1,000)

2 Payments are average annual total government payments, 2008-2013 (\$1,000)

3 NCFI is average annual net cash farm income, 2008-2013 (\$1,000)

4 Reserve 2013 is average ending cash reserves, 2013 (\$1,000)

5 Net Worth 2013 is average nominal ending net worth, 2013 (\$1,000)

6 CRNW is average percentage change in real net worth over 2008-2013 period, (%)

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