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Research Report

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

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

**Briefing Paper 09-4
December 2009**



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

AFPC Briefing Paper 09-4

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EXECUTIVE SUMMARY

The Agricultural and Food Policy Center (AFPC) at Texas A&M University develops and maintains data to simulate 98 representative crop, dairy, and livestock operations in major production areas in 28 states. The chief purpose of this analysis is to project those farms' economic viability by region and commodity for 2009 through 2015. The data necessary to simulate the economic activity of these operations is developed through ongoing cooperation with panels of agricultural producers in selected states. The Food and Agricultural Policy Research Institute (FAPRI) provided projected prices, policy variables, and input inflation rates in their December 2009 Baseline.

Under the December 2009 Baseline, 19 of the 64 crop farms are considered in good liquidity condition (less than a 25 percent chance of negative ending cash by 2015). Six crop farms have between a 25 percent and a 50 percent likelihood of negative ending cash, and the remaining 39 crop farms have greater than a 50 percent chance of negative ending cash. Furthermore, 24 of the 64 crop farms are considered in good equity position (less than a 25 percent chance of decreasing real net worth during the study period). Twelve crop farms have between a 25 percent and 50 percent likelihood of losing real net worth, and 28 crop farms have greater than a 50 percent probability of decreasing real net worth. The following discussion provides an overall evaluation by commodity considering both liquidity and equity measures.

- **FEEDGRAIN FARMS:** Nine of the 23 feedgrain farms are in good overall financial condition. Three are classified in marginal condition, and eleven are in poor condition.
- **WHEAT FARMS:** Six of the 11 wheat farms are classified in good financial condition, one is in marginal condition, and four are in poor condition.
- **COTTON FARMS:** Two of the 16 cotton farms are classified in good condition, none are in marginal condition, and fourteen are in poor condition. In addition, thirteen of these farms have more than a 50 percent chance of losing real net worth by 2015.
- **RICE FARMS:** Two of the 14 rice farms are in good condition, three are in marginal condition, and nine farms are projected to be in poor financial condition through 2015.
- **DAIRY FARMS:** Eighteen of the 22 dairy farms are in good overall financial condition. Three are considered to be in marginal condition, and only one is in poor condition.
- **BEEF CATTLE RANCHES:** Six of the 12 cattle ranches are classified in good financial condition, four are in marginal condition, and two are projected to be in poor condition.

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

The farm level economic impacts of the FAPRI December 2009 Baseline on representative crop and livestock operations are projected in this report. The analysis was conducted over the 2008-2015 planning horizon using FLIPSIM, AFPC's whole farm simulation model. Data to simulate farming operations in the nation's major production regions came from two sources:

- Producer panel cooperation to develop economic information to describe and simulate representative crop, livestock, and dairy farms.
- Projected prices, policy variables, and input inflation rates from the Food and Agricultural Policy Research Institute (FAPRI) December 2009 Baseline.

The FLIPSIM policy simulation model incorporates the historical risk faced by farmers for prices and production. This report presents the results of the December 2009 Baseline in a risk context using selected simulated probabilities and ranges for annual net cash farm income values. The probability of a farm experiencing negative ending cash reserves and the probability of a farm losing real net worth are included as indicators of the cash flow and equity risks facing farms through the year 2015.

DEFINITIONS OF VARIABLES IN THE SUMMARY TABLES

- **Overall Financial Position, 2009-2015** -- As a means of summarizing the representative farms' economic efficiency, liquidity, and solvency position, AFPC classifies each farm as being in either a good (green), marginal (yellow) or poor (red) position. AFPC defines a farm is in a good financial position when it has less than a 25 percent chance each of a negative ending cash position and less than a 25 percent chance of losing real net worth. If the probabilities of these events are between 25 and 50 percent the farm is classified as marginal. A probability greater than 50 percent places the farm in a poor financial position.
- **Receipts** -- 2009-2015 average of cash receipts from all farm related sources, including market sales, CCP/ACRE and direct payments, marketing loan gains/LDPs, crop insurance indemnities, and other receipts.
- **Payments** -- 2009-2015 average of annual CCP or ACRE payments, direct payments, and marketing loan gains/LDPs for crops and the MILC program payment for dairy farms.
- **NCFI** -- 2009-2015 average net cash farm income equals average total receipts minus average total cash expenses.
- **Reserve 2015** -- equals total cash on hand at the end of year 2015. Ending cash equals beginning cash reserves plus net cash farm income and interest earned on cash reserves less principal payments, federal taxes (income and self employment), state income taxes, family living withdrawals, and actual machinery replacement costs (not depreciation).
- **Net Worth 2015** -- equity equals total assets including land minus total debt from all sources and is reported at the end of 2015.
- **CRNW** -- annualized percentage change in the operator's net worth from December 1, 2009 through December 31, 2015, after adjusting for inflation.

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

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

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

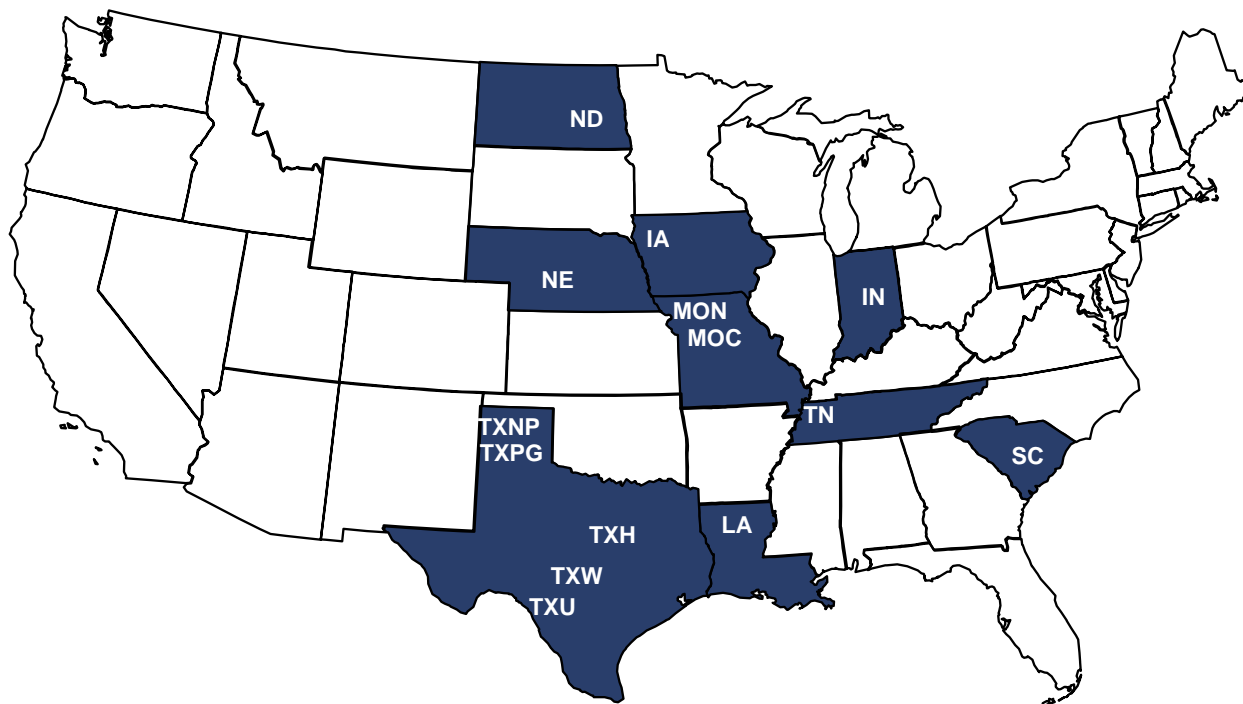
Table 2. FAPRI December 2009 Baseline Assumed Rates of Change in Input Prices and Annual Changes in Land Values, 2009-2015

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

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

Representative Farm: Feed Grains

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



Characteristics of Panel Farms Producing Feed Grains, 2008.

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

Representative Farm: Feed Grains

Economic Viability of Representative Farms over the 2009-2015 Period

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

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

<25

25-50

>50

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

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

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

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

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

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

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

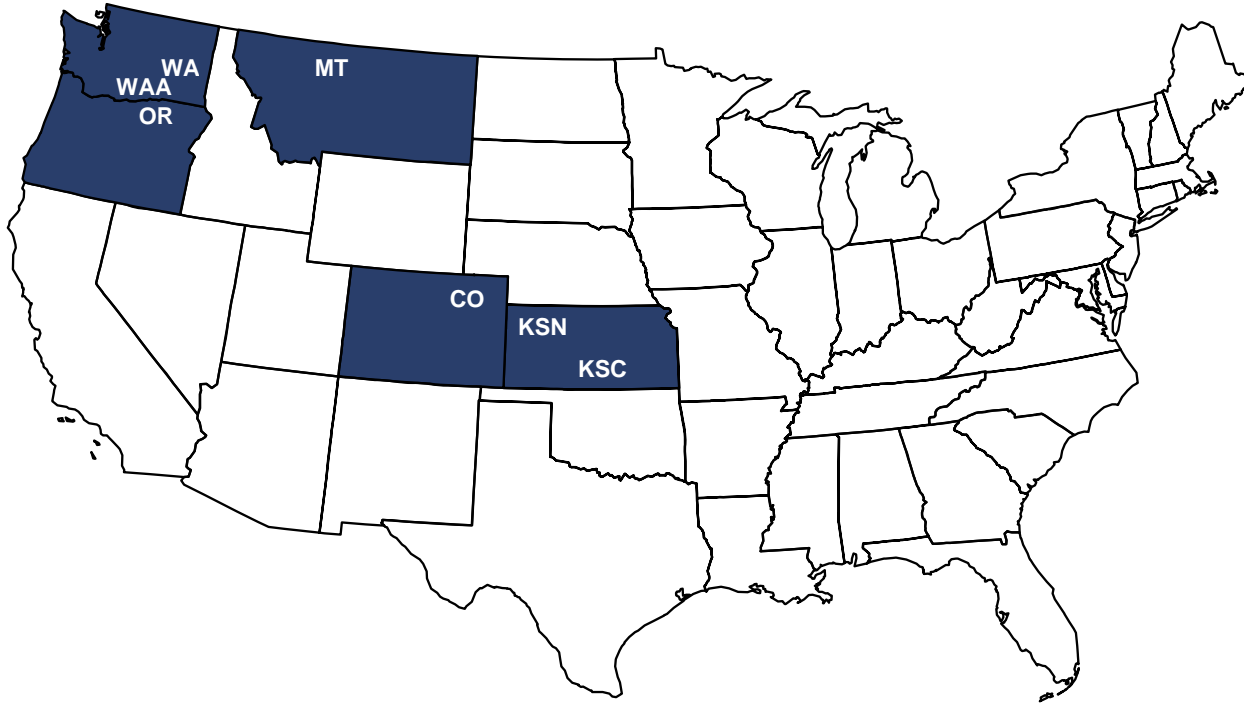
4 Reserve 2015 is average ending cash reserves, 2015 (\$1,000)

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

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

Representative Farm: Wheat

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



Characteristics of Panel Farms Producing Wheat, 2008.

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

Representative Farm: Wheat

Economic Viability of Representative Farms over the 2009-2015 Period

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

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

<25

25-50

>50

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

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

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

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

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

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

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

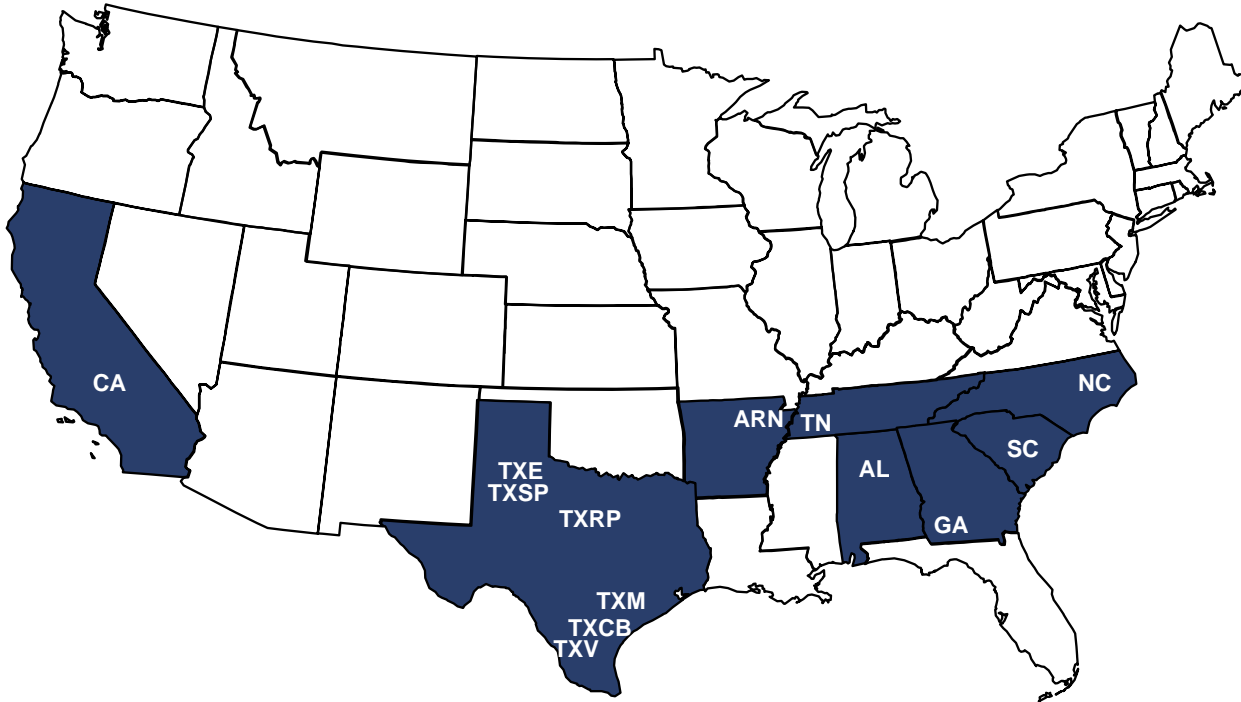
4 Reserve 2015 is average ending cash reserves, 2015 (\$1,000)

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

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

Representative Farm: Cotton

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



Characteristics of Panel Farms Producing Cotton, 2008.

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

Representative Farm: Cotton

Economic Viability of Representative Farms over the 2009-2015 Period

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

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

<25

25-50

>50

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

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

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

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

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

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

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

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

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

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

Representative Farm: Rice

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



Characteristics of Panel Farms Producing Rice, 2008.

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

Representative Farm: Rice

Economic Viability of Representative Farms over the 2009-2015 Period

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

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

<25

25-50

>50

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

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

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

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

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

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

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

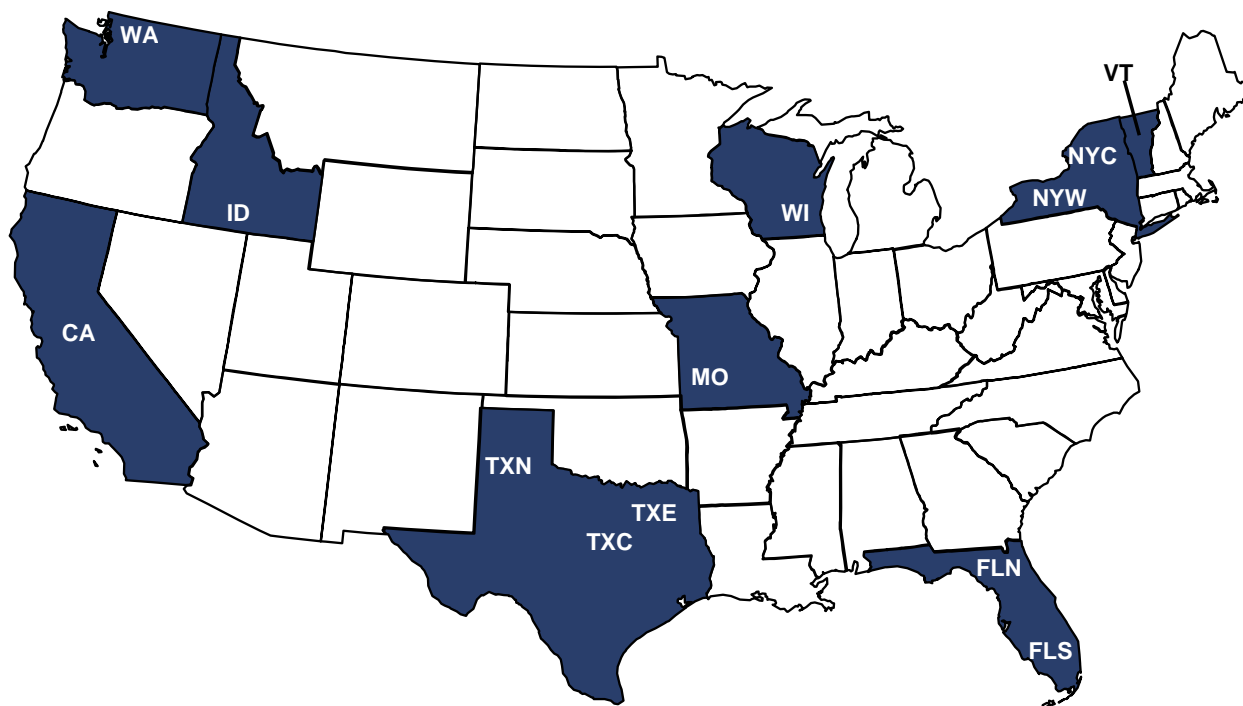
4 Reserve 2015 is average ending cash reserves, 2015 (\$1,000)

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

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

Representative Farm: Dairy

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



Characteristics of Panel Farms Producing Milk, 2008.

	Cropland (acres)	Assets (\$1,000)	Debt/Asset (ratio)	Gross Receipts (\$1,000)	Cows (number)
CAD1710	700	21,095.00	0.21	7,199.20	1,710
WAD250	200	3,847.00	0.22	1,142.80	250
WAD850	605	8,894.00	0.22	3,816.60	850
IDD1000	360	6,971.00	0.15	4,739.10	1,000
IDD3000	1,500	22,855.00	0.16	13,894.20	3,000
TXND3000	520	16,314.00	0.17	12,010.00	3,000
TXCD550	750	4,364.00	0.19	2,102.90	550
TXCD1300	560	7,733.00	0.17	5,146.80	1,300
TXED450	850	3,156.00	0.19	1,687.70	450
TXED1000	750	6,494.00	0.20	4,117.50	1,000
WID145	600	2,671.00	0.22	823.50	145
WID1000	2,000	8,128.00	0.19	5,580.50	1,000
NYWD600	1,200	5,339.00	0.21	2,735.30	600
NYWD1200	2,100	10,957.00	0.20	5,586.70	1,200
NYCD110	325	1,228.00	0.19	543.00	110
NYCD550	1,100	5,336.00	0.24	2,847.30	550
VTD140	220	1,375.00	0.17	636.30	140
VTD400	1,000	4,461.00	0.23	1,945.30	400
MOGD500	0	2,335.00	0.21	1,282.30	500
MOCD500	530	4,088.00	0.21	2,238.40	500
FLND550	600	4,297.00	0.18	2,547.70	550
FLSD1500	400	12,458.00	0.20	7,015.90	1,500

Representative Farm: Dairy

Economic Viability of Representative Farms over the 2009-2015 Period

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

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

<25

25-50

>50

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

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

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

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

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

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

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

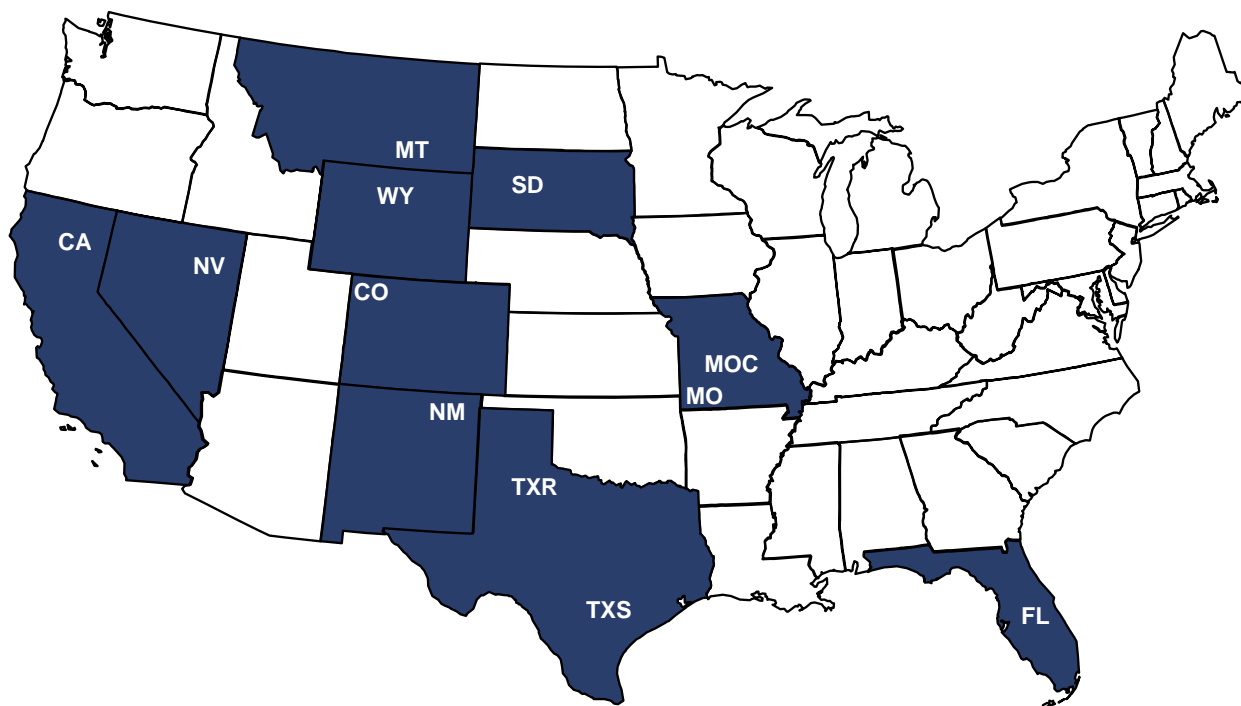
4 Reserve 2015 is average ending cash reserves, 2015 (\$1,000)

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

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

Representative Farm: Cow/Calf

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



Characteristics of Panel Farms Producing Beef Cattle, 2008.

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

Representative Farm: Cow/Calf

Economic Viability of Representative Farms over the 2009-2015 Period

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

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

<25

25-50

>50

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

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

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

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

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

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

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

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

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

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