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Representative Farms Economic Outlook for the December 2011 FAPRI/AFPC Baseline

Briefing Paper 11-3

December 2011

Agricultural and Food Policy Center

Department of Agricultural Economics
Texas AgriLife Research
Texas AgriLife Extension Service
Texas A&M University

College Station, Texas 77843-2124
Telephone: (979) 845-5913
Fax: (979) 845-3140
http://www.afpc.tamu.edu

REPRESENTATIVE FARMS ECONOMIC OUTLOOK FOR THE DECEMBER 2011 FAPRI/AFPC BASELINE

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James W. Richardson
Joe L. Outlaw
George M. Knapek
J. Marc Raulston
Brian K. Herbst
David P. Anderson
Steven L. Klose

Agricultural and Food Policy Center
Department of Agricultural Economics
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EXECUTIVE SUMMARY

The Agricultural and Food Policy Center (AFPC) at Texas A&M University develops and maintains data to simulate 98 representative crop, dairy, and livestock operations in major production areas in 28 states. The chief purpose of this analysis is to project the economic viability of those farms by region and commodity for 2011 through 2016. 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 2011 Baseline.

Under the December 2011 Baseline, 44 of the 64 crop farms are considered in good liquidity condition (less than a 25 percent chance of negative ending cash by 2015). Seven crop farms have between a 25 percent and a 50 percent likelihood of negative ending cash, and the remaining 13 crop farms have greater than a 50 percent chance of negative ending cash. Furthermore, 49 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 nine 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: Twenty-one of the 23 feedgrain farms are in good overall financial condition. One is classified in marginal condition and one in poor condition.

- WHEAT FARMS: All 11 of the representative wheat farms are classified in good overall financial condition.

- COTTON FARMS: Eleven of the 16 cotton farms are classified in good condition, three are in marginal condition, and two are in poor condition.

- RICE FARMS: Two of the 14 rice farms are projected to be in good financial condition, two are in marginal condition, and ten are in poor condition.

- DAIRY FARMS: Twelve of the 22 dairy farms are in good overall financial condition. Nine are classified in marginal condition, and one is in poor condition.

- BEEF CATTLE RANCHES: Eleven of the 12 cattle ranches are classified in good financial condition, none are in marginal condition, and only one is projected to be in poor condition.

REPRESENTATIVE FARMS ECONOMIC OUTLOOK FOR THE DECEMBER 2011 FAPRI/AFPC BASELINE

The farm level economic impacts of the FAPRI December 2011 Baseline on representative crop and livestock operations are projected in this report. The analysis was conducted over the 2009-2016 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 2011 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 2011 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 2016.

DEFINITIONS OF VARIABLES IN THE SUMMARY TABLES

- **Overall Financial Position, 2011-2016** -- As a means of summarizing the representative farms' economic efficiency, liquidity, and solvency position, AFPC classifies each farm as being in either a good (green), marginal (yellow) or poor (red) position. AFPC defines a farm to be in a good financial position when it has less than a 25 percent chance each of a negative ending cash position and less than a 25 percent chance of losing real net worth. If the probabilities of these events are between 25 and 50 percent the farm is classified as marginal. A probability greater than 50 percent places the farm in a poor financial position.
- **Receipts** -- 2011-2016 average cash receipts from all farm related sources, including market sales, CCP/ACRE and direct payments, marketing loan gains/LDPs, crop insurance indemnities, and other receipts.
- **Payments** -- 2011-2016 average annual CCP or ACRE payments, direct payments, and marketing loan gains/LDPs for crops and the MILC program payment for dairy farms.
- **NCFI** -- 2011-2016 average net cash farm income equals average total receipts minus average total cash expenses.
- **Reserve 2016** -- equals total cash on hand at the end of year 2016. 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 2016** -- equity equals total assets including land minus total debt from all sources and is reported at the end of 2016.
- **CRNW** -- annualized percentage change in the operator's net worth from January 1, 2011 through December 31, 2016, after adjusting for inflation.

Table 1. FAPRI December 2011 Baseline Projections of Crop and Livestock Prices, 2009-2016

	2009	2010	2011	2012	2013	2014	2015	2016
Crop Prices								
Corn ($/bu.)	3.55	5.18	6.37	5.06	4.94	5.08	5.07	5.06
Wheat ($/bu.)	4.87	5.70	7.37	6.31	6.07	6.14	6.19	6.29
Cotton ($/lb.)	0.6290	0.8150	0.8910	0.7342	0.7367	0.7495	0.7616	0.7729
Sorghum ($/bu.)	3.22	5.02	6.35	4.74	4.73	4.85	4.91	4.93
Soybeans ($/bu.)	9.59	11.30	12.23	11.74	11.64	11.54	11.57	11.64
Barley ($/bu.)	4.66	3.86	5.31	4.96	4.84	4.94	4.93	4.94
Oats ($/bu.)	2.02	2.52	3.31	3.07	2.97	2.98	2.98	2.98
Rice ($/cwt.)	14.40	12.70	14.54	12.51	12.46	12.81	13.16	13.46
Soybean Meal ($/ton)	296.89	329.56	302.31	261.80	255.79	255.02	259.01	264.75
All Hay ($/ton)	108.00	114.00	174.57	149.96	140.47	139.44	142.02	145.35
Peanuts ($/ton)	434.00	450.00	599.79	515.85	525.29	522.96	524.96	522.77
Cattle Prices								
Feeder Cattle ($/cwt)	101.89	115.11	139.02	152.42	163.30	164.65	156.05	149.90
Fed Cattle ($/cwt)	83.25	95.38	113.98	123.94	125.88	126.80	123.40	121.18
Culled Cows ($/cwt)	47.01	56.76	68.98	77.56	79.06	80.62	74.07	70.42
Milk Price								
U.S. All Milk Price ($/cwt)	12.93	16.35	20.15	18.12	18.59	18.8	18.83	18.92

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

Table 2. FAPRI December 2011 Baseline Assumed Rates of Change in Input Prices and Annual Changes in Land Values, 2010-2016

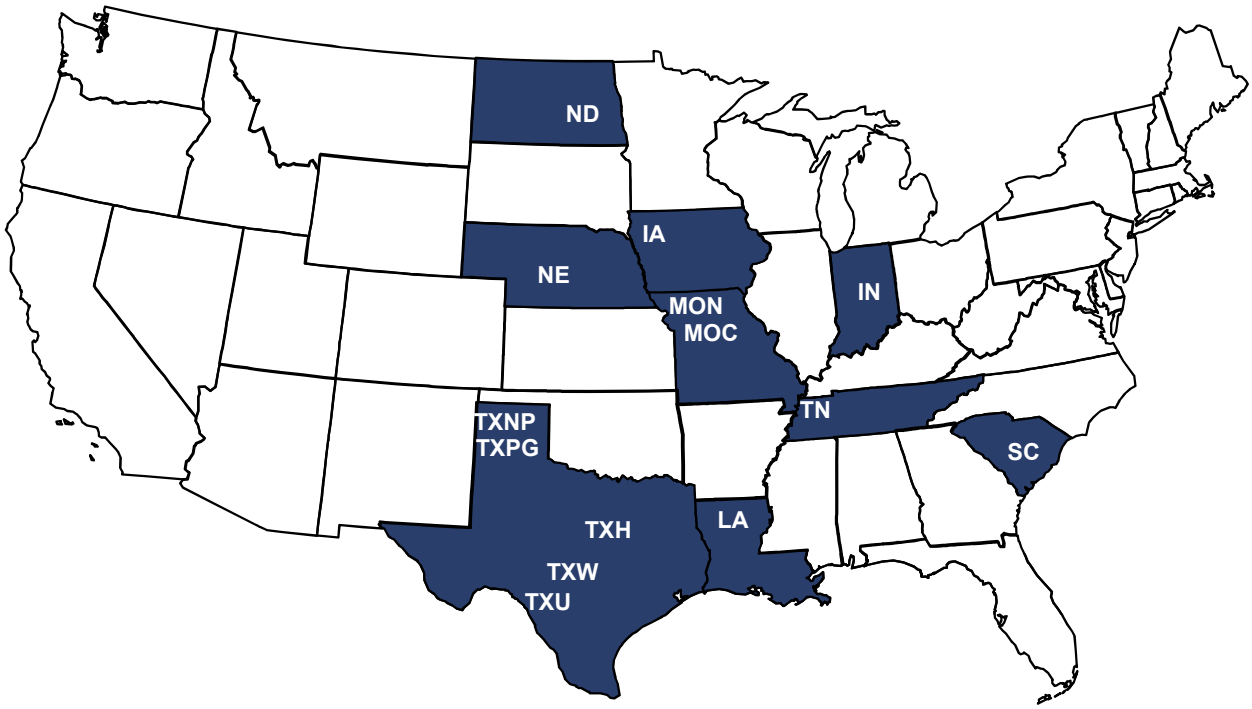
	2010	2011	2012	2013	2014	2015	2016
Annual Rate of Change for Input Prices Paid							
Seed Prices (%)	3.68	7.04	4.51	4.82	1.90	1.06	1.08
All Fertilizer Prices (%)	-6.23	34.56	0.98	2.85	2.29	1.16	1.10
Herbicide Prices (%)	-6.38	0.79	1.89	5.91	3.96	2.51	1.31
Insecticide Prices (%)	1.86	2.95	1.33	5.13	3.67	2.46	1.34
Fuel and Lube Prices (%)	24.02	27.06	-6.12	4.61	4.05	1.36	-0.44
Machinery Prices (%)	3.60	5.00	0.86	3.24	3.02	2.67	2.29
Wages (%)	1.07	1.15	2.58	2.30	2.66	2.86	3.11
Supplies (%)	1.31	5.15	-0.66	2.55	2.46	1.89	1.10
Repairs (%)	1.89	4.18	1.13	2.50	2.79	2.63	2.36
Services (%)	3.21	4.15	-0.27	3.27	3.11	2.52	1.94
Taxes (%)	1.47	8.85	-0.37	5.83	5.36	3.68	3.04
PPI Items (%)	3.30	13.09	2.54	1.55	1.60	1.40	0.90
PPI Total (%)	3.31	11.54	2.33	1.91	2.11	2.01	1.29
Annual Change in Consumer Price Index (%)	1.65	3.04	1.30	1.90	2.32	2.12	1.89
Annual Rate of Change for U.S. Land Prices (%)	-0.57	9.08	15.00	1.91	2.11	2.01	1.29

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

Representative Farm: Feed Grains

- Overall, twenty-one feed grain farms are characterized as good, one is marginal, and one is in poor condition.

- Only one of the twenty-three farms will be under severe cash flow stress; none of the farms have greater than a 50 percent chance of losing real net worth.



Characteristics of Panel Farms Producing Feed Grains, 2010.

	Cropland (acres)	Assets ($1,000)	Debt/Asset (ratio)	Gross Receipts ($1,000)	Feed Grains (acres)
IAG1350	1,350	2,816.00	0.17	1,142.40	1,350
IAG3400	3,400	7,448.00	0.17	2,627.40	3,400
NEG2400	2,400	4,288.00	0.14	2,532.70	2,400
NEG4300	4,300	8,482.00	0.18	3,943.60	3,870
NDG2500	2,500	2,049.00	0.14	1,099.60	2,000
NDG8000	8,000	11,268.00	0.22	3,839.30	6,450
ING1000	1,000	2,932.00	0.14	754.10	1,000
ING2200	2,200	6,651.00	0.13	1,703.50	2,200
MOCG2050	2,050	7,461.00	0.13	1,333.30	2,050
MOCG4000	4,000	13,598.00	0.15	2,511.40	4,000
MONG1850	1,850	6,876.00	0.14	1,230.60	1,800
LAG2640	2,640	1,481.00	0.45	1,652.20	2,244
LANG2500	2,500	5,976.00	0.16	2,215.50	1,750
TNG900	900	1,707.00	0.14	574.50	900
TNG2200	2,200	3,987.00	0.15	1,211.60	2,200
SCG3500	3,500	8,897.00	0.16	2,453.00	3,150
TXNP3000	3,000	1,924.00	0.21	1,890.50	1,200
TXNP8000	8,000	5,695.00	0.14	5,306.50	3,987
TXPG2500	2,500	3,925.00	0.22	1,741.40	1,058
TXPG3760	3,760	4,760.00	0.25	3,710.80	1,878
TXHG2000	2,000	1,456.00	0.15	664.90	1,500
TXWG1600	1,600	1,192.00	0.14	703.50	1,050
TXUG1200	1,200	232.00	0.29	1,021.90	750

Representative Farm: Feed Grains

Economic Viability of Representative Farms over the 2011-2016 Period

Farm Name	Overall Ranking		P(Negative Ending Cash)	P(Real Net Worth Declines)
21/1/1	2011	2016	2011-2016	2011-2016
IAG1350			1-1	1-1
IAG3400			1-1	1-1
NEG2400			1-1	1-1
NEG4300			1-1	1-1
NDG2500			1-1	1-1
NDG8000			1-1	1-1
ING1000			3-8	1-1
ING2200			1-1	1-1
MOCG2050			1-1	1-1
MOCG4000			1-1	1-1
MONG1850			10-9	1-1
LAG2640			42-13	1-11
LANG2500			1-1	1-1
TNG900			1-6	1-1
TNG2200			3-5	1-1
SCG3500			1-1	1-1
TXNP3000			1-4	1-3
TXNP8000			1-1	1-1
TXPG2500			1-18	1-4
TXPG3760			35-59	1-37
TXHG2000			1-1	1-1
TXWG1600			28-9	1-1
TXUG1200			24-27	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 2011 and 2016.

3 P(Real Net Worth Decline) is the probability that the farm will have a loss in real net worth relative to the beginning net worth. Reported values represent the probabilities for losing real net worth from 2009 to 2011 and from 2009 to 2016.

Implications of the December 2011 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Feed Grains and Oilseeds

	Receipts	Payments	NCFI	Reserve 2016	Net Worth 2016	CRNW
	($1,000)	($1,000)	($1,000)	($1,000)	($1,000)	(%)
IAG1350	1,199.60	63.75	556.64	1,760.86	4,881.75	10.98
IAG3400	2,689.52	31.57	1,356.40	4,182.97	12,527.39	10.71
NEG2400	2,601.74	58.64	1,013.55	3,857.72	7,839.82	10.56
NEG4300	4,080.95	44.69	1,656.99	5,653.97	13,819.56	9.79
NDG2500	1,213.03	74.54	490.10	1,602.03	3,680.20	12.09
NDG8000	4,220.61	59.94	1,880.56	6,582.15	17,694.57	10.74
ING1000	772.07	20.31	280.04	606.76	4,195.26	6.59
ING2200	1,748.10	35.01	663.06	1,915.12	10,014.88	7.24
MOCG2050	1,357.10	51.08	749.23	2,474.09	11,721.81	8.13
MOCG4000	2,534.33	14.05	1,506.41	5,569.06	21,890.54	9.21
MONG1850	1,414.50	63.49	514.09	1,251.82	10,299.45	7.41
LAG2640	2,213.96	113.48	511.12	988.22	2,426.92	16.08
LANG2500	2,291.11	103.37	700.87	1,907.75	8,687.43	7.39
TNG900	612.44	10.93	257.81	537.83	2,427.97	6.90
TNG2200	1,295.49	27.19	476.10	1,139.20	5,162.32	5.71
SCG3500	2,864.44	88.71	882.74	2,964.87	12,587.29	7.47
TXNP3000	2,020.35	54.56	465.98	1,460.81	3,254.65	10.51
TXNP8000	5,393.15	80.71	1,247.04	4,808.15	9,994.54	9.91
TXPG2500	1,835.84	86.87	400.04	756.73	4,687.61	5.32
TXPG3760	3,983.45	98.76	307.96	(304.40)	5,003.74	1.86
TXHG2000	725.03	31.42	221.42	543.93	2,098.29	6.72
TXWG1600	614.09	32.35	132.33	259.91	1,502.65	5.74
TXUG1200	1,017.70	46.59	157.46	250.12	435.71	9.53

1 Receipts are average annual total cash receipts including government payments, 2011-2016 ($1,000)

2 Payments are average annual total government payments, 2011-2016 ($1,000)

3 NCFI is average annual net cash farm income, 2011-2016 ($1,000)

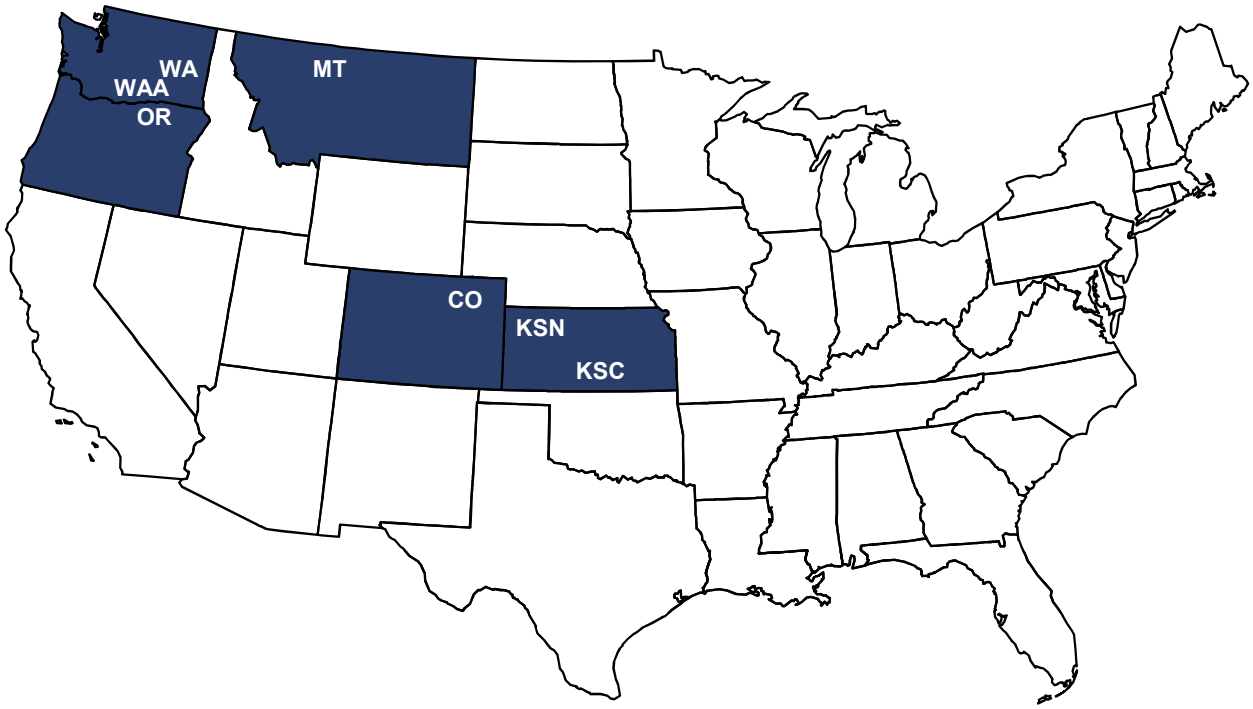
4 Reserve 2016 is average ending cash reserves, 2016 ($1,000)

5 Net Worth 2016 is average nominal ending net worth, 2016 ($1,000)

6 CRNW is average percentage change in real net worth over 2011-2016 period, (%)

Representative Farm: Wheat

- All eleven wheat farms are projected to be in good overall financial condition.
- One of the eleven wheat farms will feel moderate liquidity pressure over the period.
- None of the wheat farms have a greater than 25 percent chance of losing real equity.



Characteristics of Panel Farms Producing Wheat, 2010.

	Cropland (acres)	Assets ($1,000)	Debt/Asset (ratio)	Gross Receipts ($1,000)	Wheat (acres)
WAW1725	1,725	1,687.00	0.12	672.90	1,147
WAW5500	5,500	7,307.00	0.15	2,013.10	3,055
WAAW3500	3,500	1,525.00	0.24	379.50	1,500
ORW3600	3,600	1,304.00	0.14	473.90	1,600
MTW4500	4,500	2,930.00	0.16	538.60	2,330
KSCW2000	2,000	1,858.00	0.14	549.90	1,200
KSCW4500	4,500	3,161.00	0.16	1,171.80	2,700
KSNW4000	4,000	2,393.00	0.16	968.60	1,500
KSNW5500	5,500	4,129.00	0.16	1,674.80	1,820
COW3000	3,000	1,874.00	0.16	442.50	970
COW5640	5,640	3,099.00	0.16	1,036.30	1,900

Representative Farm: Wheat

Economic Viability of Representative Farms over the 2011-2016 Period

Farm Name	Overall Ranking		P(Negative Ending Cash)	P(Real Net Worth Declines)
11/0/0	2011	2016	2011-2016	2011-2016
WAW1725			1-1	1-1
WAW5500			1-1	1-1
WAAW3500			71-33	1-1
MTW4500			2-2	1-1
ORW3600			1-1	1-1
KSCW2000			1-1	1-1
KSCW4500			1-1	1-1
KSNW4000			1-1	1-1
KSNW5500			1-1	1-1
COW3000			1-1	1-1
COW5640			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 2011 and 2016.

3 P(Real Net Worth Decline) is the probability that the farm will have a loss in real net worth relative to the beginning net worth. Reported values represent the probabilities for losing real net worth from 2009 to 2011 and from 2009 to 2016.

Implications of the December 2011 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Wheat

	Receipts	Payments	NCFI	Reserve 2016	Net Worth 2016	CRNW
	($1,000)	($1,000)	($1,000)	($1,000)	($1,000)	(%)
WAW1725	775.63	67.39	389.06	1,474.75	3,111.61	11.38
WAW5500	2,293.83	125.89	818.31	3,109.15	10,882.01	7.59
WAAW3500	430.27	41.26	157.71	105.45	1,787.15	6.06
ORW3600	556.89	46.62	321.79	867.46	2,223.47	10.99
MTW4500	690.71	76.17	281.40	550.30	4,241.58	7.16
KSCW2000	650.29	64.43	278.80	611.95	2,824.43	7.71
KSCW4500	1,315.30	130.07	619.44	1,956.18	5,174.75	10.10
KSNW4000	999.08	36.31	423.22	1,068.13	3,807.63	8.69
KSNW5500	1,700.30	46.37	491.58	1,493.61	6,088.83	6.84
COW3000	519.94	37.04	248.59	646.32	2,804.96	7.71
COW5640	950.71	96.16	371.92	916.41	4,183.61	6.20

1 Receipts are average annual total cash receipts including government payments, 2011-2016 ($1,000)

2 Payments are average annual total government payments, 2011-2016 ($1,000)

3 NCFI is average annual net cash farm income, 2011-2016 ($1,000)

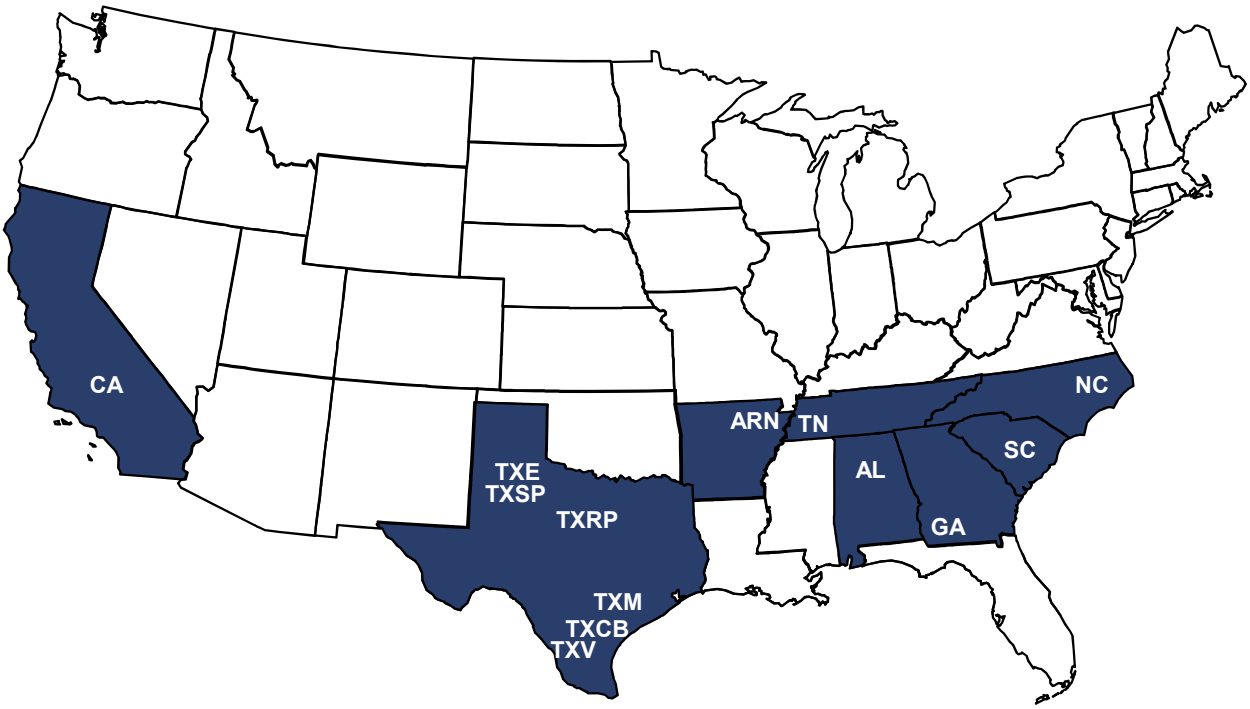
4 Reserve 2016 is average ending cash reserves, 2016 ($1,000)

5 Net Worth 2016 is average nominal ending net worth, 2016 ($1,000)

6 CRNW is average percentage change in real net worth over 2011-2016 period, (%)

Representative Farm: Cotton

- Eleven of the sixteen cotton farms are characterized in good overall financial condition, three are in marginal condition, and two are in poor condition.
- Two of the farms are projected to experience severe cash flow problems, and those two farms also have greater than a 25 percent chance of losing real equity.



Characteristics of Panel Farms Producing Cotton, 2010.

	Cropland (acres)	Assets ($1,000)	Debt/Asset (ratio)	Gross Receipts ($1,000)	Cotton (acres)
TXSP2500	2,500	1,356.00	0.18	1,016.40	2,275
TXSP4500	4,500	2,825.00	0.17	2,599.50	4,047
TXEC5000	5,000	2,084.00	0.14	2,495.40	3,650
TXRP2500	2,500	584.00	0.17	562.30	1,000
TXMC1800	1,800	1,184.00	0.20	888.10	600
TXCB2250	2,250	1,466.00	0.32	955.80	1,000
TXCB8000	8,000	3,124.00	0.25	3,743.60	2,800
TXVC4500	4,500	3,773.00	0.24	2,139.50	1,495
CAC4000	4,000	18,350.00	0.16	7,024.80	1,333
ARNC5000	5,000	7,143.00	0.23	4,559.40	5,000
TNC2100	2,100	2,811.00	0.09	1,475.10	525
TNC4050	4,050	5,266.00	0.14	2,866.30	2,025
ALC3000	3,000	2,326.00	0.33	2,023.10	1,050
GAC2300	2,300	4,911.00	0.25	2,157.10	1,495
SCC1800	1,800	3,293.00	0.16	1,685.90	720
NCC1500	1,500	2,590.00	0.26	1,098.90	225

Representative Farm: Cotton

Economic Viability of Representative Farms over the 2011-2016 Period

Farm Name	Overall Ranking		P(Negative Ending Cash)	P(Real Net Worth Declines)
11/3/2	2011	2016	2011-2016	2011-2016
TXSP2500			31-27	1-18
TXSP4500			1-1	1-1
TXEC5000			1-3	1-3
TXRP2500			99-99	1-86
TXMC1800			8-26	1-15
TXCB2250			19-22	1-7
TXCB8000			1-6	1-8
TXVC4500			1-1	1-1
CAC4000			1-1	1-1
ARNC5000			13-26	1-7
TNC2100			1-1	1-1
TNC4050			1-1	1-1
ALC3000			1-9	1-10
GAC2300			71-96	1-37
SCC1800			1-1	1-1
NCC1500			1-1	1-1

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

<25 | 25-50 | >50

2 P(NegativeEnding Cash) is the probability that the farm will have a cash flow deficit. Reported values represent the probabilities for 2011 and 2016.

3 P(Real Net Worth Decline) is the probability that the farm will have a loss in real net worth relative to the beginning net worth. Reported values represent the probabilities for losing real net worth from 2009 to 2011 and from 2009 to 2016.

Implications of the December 2011 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Cotton

	Receipts	Payments	NCFI	Reserve 2016	Net Worth 2016	CRNW
	($1,000)	($1,000)	($1,000)	($1,000)	($1,000)	(%)
TXSP2500	1,023.18	58.92	192.70	301.27	1,635.06	7.04
TXSP4500	2,272.38	112.90	614.12	1,820.60	4,166.42	9.43
TXEC5000	2,339.29	141.95	382.17	1,056.34	2,843.98	5.75
TXRP2500	447.80	34.11	(30.54)	(595.46)	53.16	(14.18)
TXMC1800	873.62	56.19	229.38	223.67	1,480.51	5.45
TXCB2250	948.09	63.89	219.45	329.69	1,831.24	8.17
TXCB8000	3,602.41	149.60	836.46	2,383.83	4,772.13	9.43
TXVC4500	2,208.77	114.86	799.47	2,841.18	6,150.79	12.16
CAC4000	7,781.24	5.47	1,928.29	6,049.17	28,545.42	8.09
ARNC5000	4,658.43	149.74	816.83	658.05	7,630.04	4.61
TNC2100	1,495.10	46.31	587.80	2,303.63	5,102.35	10.74
TNC4050	2,875.06	108.84	712.05	2,696.26	8,027.55	8.36
ALC3000	2,039.13	130.01	505.95	1,136.48	2,865.16	8.02
GAC2300	2,451.80	165.69	77.39	(1,532.44)	4,647.59	0.98
SCC1800	1,691.41	101.67	481.33	1,567.25	4,812.27	7.83
NCC1500	1,146.15	52.69	408.88	1,083.56	3,292.59	8.49

1 Receipts are average annual total cash receipts including government payments, 2011-2016 ($1,000)

2 Payments are average annual total government payments, 2011-2016 ($1,000)

3 NCFI is average annual net cash farm income, 2011-2016 ($1,000)

4 Reserve 2016 is average ending cash reserves, 2016 ($1,000)

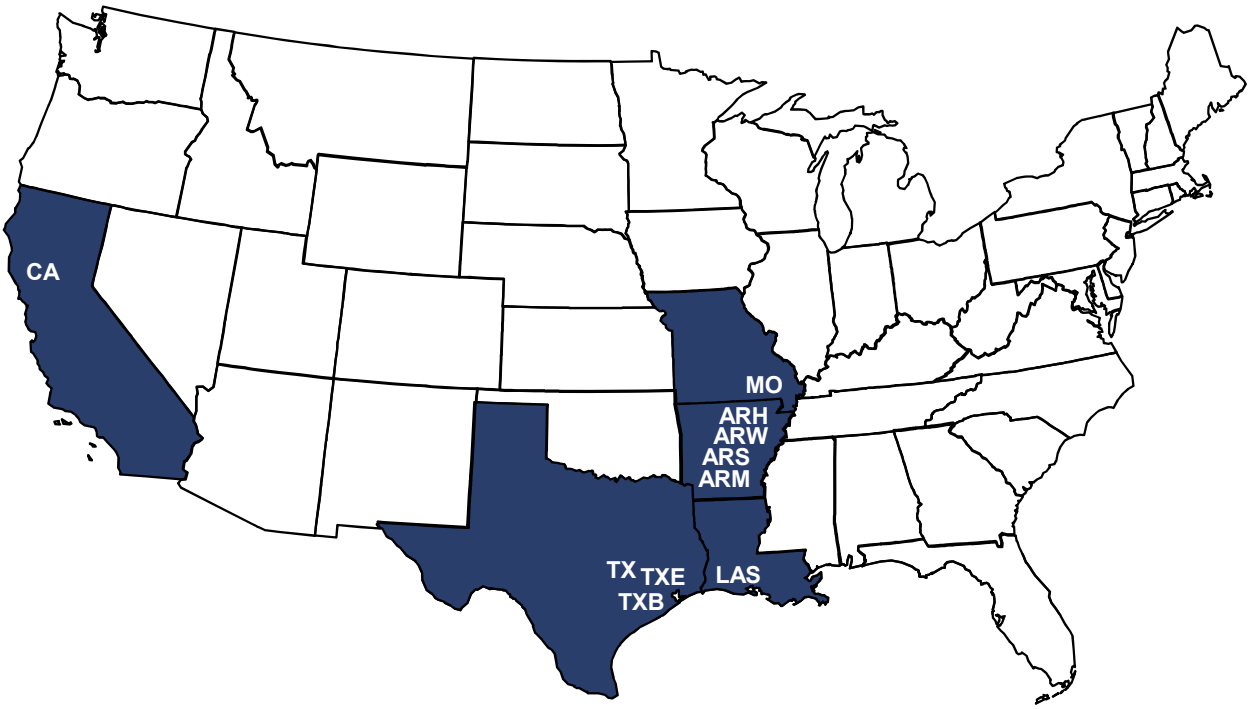
5 Net Worth 2016 is average nominal ending net worth, 2016 ($1,000)

6 CRNW is average percentage change in real net worth over 2011-2016 period, (%)

Representative Farm: Rice

- Two of the fourteen representative rice farms are projected to be in good overall financial condition, two are in marginal condition, and ten are in poor condition.

- Ten of the rice farms are expected to face severe cash flow problems, and eight of those farms have high (greater than 50 percent) probabilities of losing real equity.



Characteristics of Panel Farms Producing Rice, 2010.

	Cropland (acres)	Assets ($1,000)	Debt/Asset (ratio)	Gross Receipts ($1,000)	Rice (acres)
CAR550	550	2,247.00	0.15	786.00	500
CAR3000	3,000	8,669.00	0.18	4,337.70	3,000
CABR1300	1,300	5,641.00	0.14	1,979.20	1,200
CACR800	800	3,619.00	0.13	1,307.80	800
TXR1350	1,350	1,404.00	0.18	495.30	450
TXR3000	3,000	1,085.00	0.13	1,214.50	1,200
TXBR1800	1,800	803.00	0.71	641.80	600
TXER3200	3,200	1,318.00	0.14	1,537.40	1,067
LASR1480	1,480	1,427.00	0.14	810.50	800
ARMR7500	7,500	8,981.00	0.19	5,594.00	1,875
ARSR3240	3,240	4,114.00	0.24	1,900.10	1,620
ARWR1400	1,400	2,950.00	0.20	955.80	700
ARHR3000	3,000	4,905.00	0.21	2,037.20	1,450
MOWR4000	4,000	12,643.00	0.17	2,781.80	2,000

Representative Farm: Rice

Economic Viability of Representative Farms over the 2011-2016 Period

Farm Name	Overall Ranking		P(Negative Ending Cash)	P(Real Net Worth Declines)
2/2/10	2011	2016	2011-2016	2011-2016
CAR550			37-82	1-45
CAR3000			24-53	1-34
CABR1300			3-1	1-1
CACR800			3-9	1-3
TXR1350			75-95	1-81
TXR3000			24-57	1-64
TXBR1800			78-88	1-76
TXER3200			60-90	1-87
LASR1480			65-86	1-79
ARMR7500			9-40	1-38
ARSR3240			42-74	1-54
ARWR1400			72-90	1-71
ARHR3000			69-91	1-76
MOWR4000			26-43	1-6

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 2011 and 2016.

3 P(Real Net Worth Decline) is the probability that the farm will have a loss in real net worth relative to the beginning net worth. Reported values represent the probabilities for losing real net worth from 2009 to 2011 and from 2009 to 2016.

Implications of the December 2011 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Rice

	Receipts	Payments	NCFI	Reserve 2016	Net Worth 2016	CRNW
	($1,000)	($1,000)	($1,000)	($1,000)	($1,000)	(%)
CAR550	812.32	73.55	117.68	(450.57)	2,261.27	0.97
CAR3000	4,630.06	168.07	371.14	(40.86)	9,140.58	2.65
CABR1300	2,025.95	143.25	610.91	2,098.56	8,091.11	7.00
CACR800	1,337.92	112.47	249.39	741.38	4,837.29	5.38
TXR1350	527.81	57.36	(41.05)	(1,036.28)	613.70	(7.92)
TXR3000	1,292.45	132.96	110.51	(143.64)	661.70	(7.70)
TXBR1800	947.18	88.97	(29.36)	(1,163.93)	(533.35)	(105.25)
TXER3200	1,577.95	154.40	(161.93)	(1,906.60)	(472.81)	(5.51)
LASR1480	967.89	66.76	(14.00)	(986.01)	421.35	(11.15)
ARMR7500	5,967.54	190.00	915.51	746.45	8,720.75	1.88
ARSR3240	1,985.77	163.51	240.20	(1,034.91)	3,321.38	(0.05)
ARWR1400	1,009.05	80.88	24.60	(1,424.79)	1,820.51	(4.11)
ARHR3000	2,163.32	169.63	(10.47)	(2,855.55)	2,307.53	(6.61)
MOWR4000	2,896.96	157.86	588.98	425.71	15,010.21	4.36

1 Receipts are average annual total cash receipts including government payments, 2011-2016 ($1,000)

2 Payments are average annual total government payments, 2011-2016 ($1,000)

3 NCFI is average annual net cash farm income, 2011-2016 ($1,000)

4 Reserve 2016 is average ending cash reserves, 2016 ($1,000)

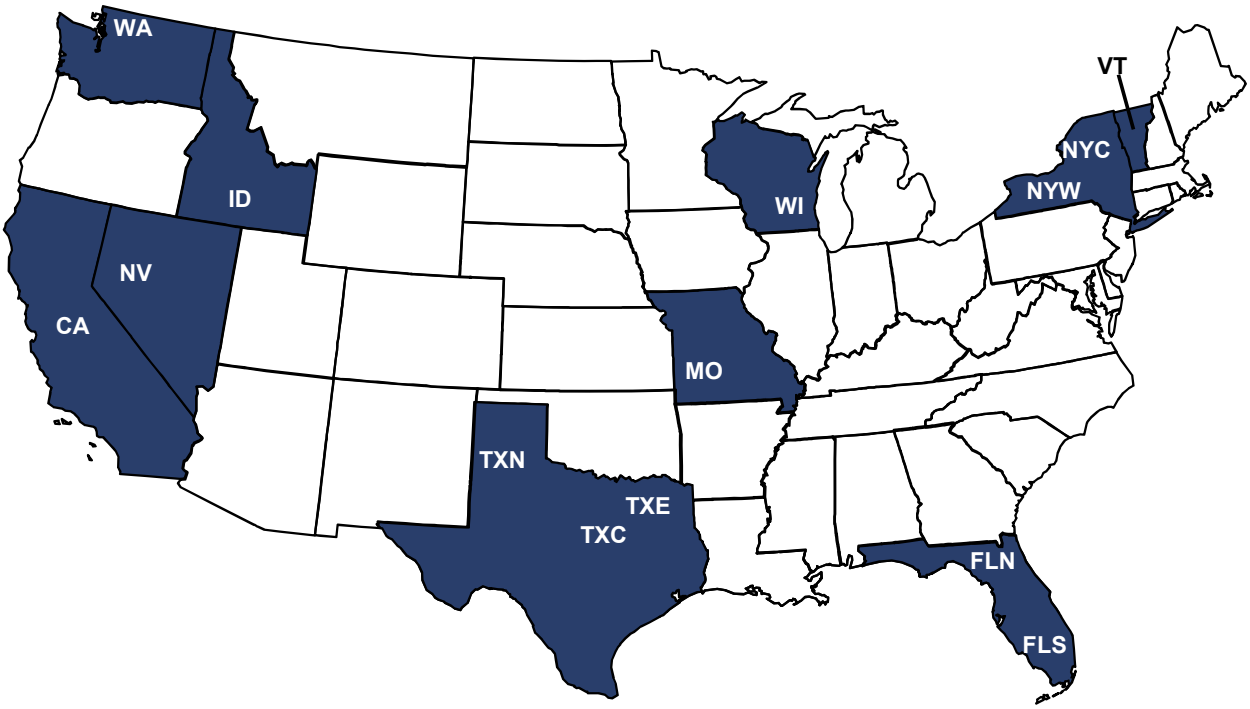
5 Net Worth 2016 is average nominal ending net worth, 2016 ($1,000)

6 CRNW is average percentage change in real net worth over 2011-2016 period, (%)

Representative Farm: Dairy

- Twelve of twenty-two dairy operations are in good overall financial condition. Nine dairies are classified in marginal condition, and one is in poor condition.

- Ten of the dairies are projected to experience severe liquidity pressure, but none of the dairies are expected to face a 50 percent or greater chance of losing real equity.



Characteristics of Panel Farms Producing Milk, 2010.

	Cropland (acres)	Assets ($1,000)	Debt/Asset (ratio)	Gross Receipts ($1,000)	Cows (number)
CAD1710	700	21,564.00	0.32	6,535.90	1,710
WAD250	200	3,946.00	0.29	1,086.50	250
WAD850	605	9,143.00	0.35	3,605.50	850
IDD3000	1,500	21,052.00	0.29	11,710.70	3,000
NVD500	200	3,515.00	0.25	2,339.70	500
TXND3000	1,920	18,157.00	0.45	11,767.90	3,000
TXCD550	750	4,218.00	0.32	1,995.90	550
TXCD1300	560	7,502.00	0.38	4,889.90	1,300
TXED400	950	2,416.00	0.46	1,224.30	400
TXED1000	750	6,400.00	0.44	3,893.20	1,000
WID145	600	2,771.00	0.27	725.90	145
WID1000	2,000	8,037.00	0.40	4,858.70	1,000
NYWD600	1,200	5,304.00	0.43	2,655.40	600
NYWD1200	2,100	10,777.00	0.34	5,419.10	1,200
NYCD110	325	1,160.00	0.22	531.10	110
NYCD550	1,100	5,513.00	0.40	2,769.40	550
VTD140	220	1,321.00	0.35	603.70	140
VTD400	1,000	4,329.00	0.40	1,829.70	400
MOGD550	0	2,686.00	0.20	1,287.00	550
MOGD180	0	1,008.00	0.09	441.10	180
FLND550	600	4,016.00	0.28	2,213.20	550
FLSD1500	400	9,531.00	0.38	6,902.40	1,500

Representative Farm: Dairy

Economic Viability of Representative Farms over the 2011-2016 Period

Farm Name	Overall Ranking		P(Negative Ending Cash)	P(Real Net Worth Declines)
12/9/1	2011	2016	2011-2016	2011-2016
CAD1710			99-61	1-1
WAD250			95-24	1-1
WAD850			89-6	1-1
IDD3000			91-71	1-13
NVD500			79-12	1-1
TXND3000			98-84	1-27
TXCD550			95-11	1-1
TXCD1300			99-62	1-8
TXED400			99-67	1-2
TXED1000			99-73	1-18
WID145			70-5	1-1
WID1000			93-36	1-1
NYWD600			99-84	1-11
NYWD1200			75-1	1-1
NYCD110			33-1	1-1
NYCD550			99-66	1-1
VTD140			99-81	1-3
VTD400			99-72	1-1
MOGD550			1-1	1-1
MOGD180			1-1	1-1
FLND550			68-1	1-1
FLSD1500			94-18	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 2011 and 2016.

3 P(Real Net Worth Decline) is the probability that the farm will have a loss in real net worth relative to the beginning net worth. Reported values represent the probabilities for losing real net worth from 2009 to 2011 and from 2009 to 2016.

Implications of the December 2011 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Milk

	Receipts	Payments	NCFI	Reserve 2016	Net Worth 2016	CRNW
	($1,000)	($1,000)	($1,000)	($1,000)	($1,000)	(%)
CAD1710	8,179.83	0.00	1,197.47	(437.94)	23,737.25	6.12
WAD250	1,366.58	0.00	361.20	313.19	5,012.13	8.25
WAD850	4,589.28	0.00	1,120.90	2,114.99	12,249.13	10.80
IDD3000	14,333.04	0.00	799.88	(2,908.71)	22,087.58	5.06
NVD500	2,660.24	0.00	391.10	766.80	4,644.71	7.99
TXND3000	14,381.26	0.00	694.44	(4,180.30)	8,985.45	4.50
TXCD550	2,433.81	0.00	422.13	769.93	5,421.56	10.09
TXCD1300	5,943.63	0.00	527.13	(508.10)	7,106.66	6.08
TXED400	1,509.41	0.00	214.48	(216.54)	2,400.18	8.94
TXED1000	4,753.32	0.00	409.28	(1,147.99)	5,435.54	5.67
WID145	886.36	0.00	288.61	399.64	3,624.77	8.24
WID1000	5,997.40	14.12	860.38	989.86	10,074.44	10.45
NYWD600	3,238.45	0.00	297.66	(1,091.79)	4,628.98	5.19
NYWD1200	6,599.28	0.00	1,413.41	3,361.42	14,434.22	11.04
NYCD110	638.90	4.56	252.64	487.32	1,774.62	10.58
NYCD550	3,351.40	0.00	487.90	(236.66)	5,731.48	8.36
VTD140	728.21	0.00	109.16	(157.25)	1,322.05	5.49
VTD400	2,229.02	0.00	299.60	(288.46)	4,379.02	7.04
MOGD550	1,591.41	0.00	731.41	2,468.62	5,149.82	14.67
MOGD180	538.03	0.00	298.68	1,092.66	2,120.45	13.13
FLND550	2,658.13	0.00	679.94	1,776.36	6,364.09	13.14
FLSD1500	8,182.36	0.00	1,145.24	1,981.60	11,713.31	10.92

1 Receipts are average annual total cash receipts including government payments, 2011-2016 ($1,000)

2 Payments are average annual total government payments, 2011-2016 ($1,000)

3 NCFI is average annual net cash farm income, 2011-2016 ($1,000)

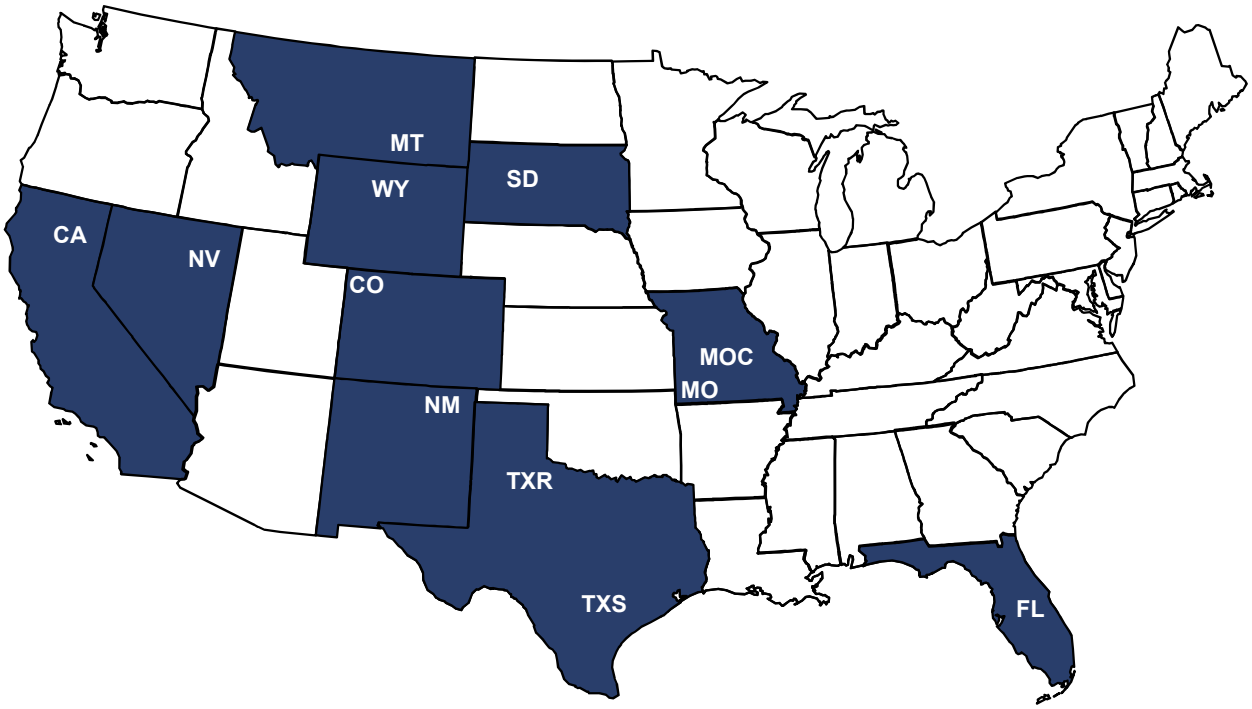
4 Reserve 2016 is average ending cash reserves, 2016 ($1,000)

5 Net Worth 2016 is average nominal ending net worth, 2016 ($1,000)

6 CRNW is average percentage change in real net worth over 2011-2016 period, (%)

Representative Farm: Cow/Calf

- Eleven of twelve cow-calf operations are projected to be in good overall financial condition, none are marginal, and one is expected to be in poor condition.
- One of the operations will face significant liquidity pressure over the period, as its likelihood of experiencing negative ending cash in 2016 exceeds 50 percent.
- Only one of the twelve operations is projected to face a greater than 25 percent chance of losing real equity over the period.



Characteristics of Panel Farms Producing Beef Cattle, 2010.

	Cropland (acres)	Assets ($1,000)	Debt/Asset (ratio)	Gross Receipts ($1,000)	Cows (number)
CAB500	0	4,338.00	0.04	287.50	500
NVB700	1,300	5,585.00	0.02	426.40	700
MTB500	0	5,074.00	0.02	299.10	500
WYB435	330	3,567.00	0.05	280.90	435
COB250	450	15,416.00	0.01	197.60	250
NMB240	0	5,479.00	0.02	171.90	240
SDB375	1,150	5,205.00	0.02	233.80	375
MOB250	280	2,622.00	0.04	307.80	250
MOCB400	40	4,394.00	0.01	271.30	400
TXRB500	0	6,654.00	0.01	429.20	500
TXSB200	0	3,272.00	0.02	156.40	200
FLB1155	5,400	17,031.00	0.01	665.70	1,155

Representative Farm: Cow/Calf

Economic Viability of Representative Farms over the 2011-2016 Period

Farm Name	Overall Ranking		P(Negative Ending Cash)	P(Real Net Worth Declines)
11/0/1	2011	2016	2011-2016	2011-2016
CAB500			99-99	1-49
NVB700			23-1	1-1
MTB500			1-1	1-1
WYB435			99-43	1-1
COB250			69-20	1-1
NMB240			99-23	1-1
SDB375			4-1	1-1
MOB250			1-1	1-1
MOCB400			1-1	1-1
TXRB500			1-1	1-1
TXSB200			48-6	1-1
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 2011 and 2016.

3 P(Real Net Worth Decline) is the probability that the farm will have a loss in real net worth relative to the beginning net worth. Reported values represent the probabilities for losing real net worth from 2009 to 2011 and from 2009 to 2016.

Implications of the December 2011 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Beef Cattle

	Receipts	Payments	NCFI	Reserve 2016	Net Worth 2016	CRNW
	($1,000)	($1,000)	($1,000)	($1,000)	($1,000)	(%)
CAB500	392.12	0.00	22.72	(295.30)	4,224.23	0.05
NVB700	556.00	0.00	174.83	515.74	8,293.48	4.72
MTB500	396.92	0.00	173.62	566.28	7,240.31	5.26
WYB435	375.08	0.00	92.50	23.41	4,612.32	3.92
COB250	258.19	0.00	69.17	52.00	21,924.12	4.19
NMB240	217.11	0.00	44.20	29.73	7,253.76	4.06
SDB375	312.54	0.00	124.56	313.40	7,113.36	4.53
MOB250	368.47	2.84	167.48	381.89	3,782.05	5.07
MOCB400	358.47	0.00	123.00	458.67	6,533.67	5.03
TXRB500	548.02	0.00	191.42	631.01	9,451.23	5.04
TXSB200	197.28	0.00	70.93	76.49	4,282.97	3.97
FLB1155	855.69	0.00	306.83	1,314.09	23,818.49	4.86

1 Receipts are average annual total cash receipts including government payments, 2011-2016 ($1,000)

2 Payments are average annual total government payments, 2011-2016 ($1,000)

3 NCFI is average annual net cash farm income, 2011-2016 ($1,000)

4 Reserve 2016 is average ending cash reserves, 2016 ($1,000)

5 Net Worth 2016 is average nominal ending net worth, 2016 ($1,000)

6 CRNW is average percentage change in real net worth over 2011-2016 period, (%)