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Representative Farms Economic Outlook for the January 2014 FAPRI/AFPC Baseline

Briefing Paper 14-1

May 2014

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REPRESENTATIVE FARMS ECONOMIC OUTLOOK FOR THE JANUARY 2014 FAPRI/AFPC BASELINE

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EXECUTIVE SUMMARY

The Agricultural and Food Policy Center (AFPC) at Texas A&M University develops and maintains data to simulate 97 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 2014 through 2018. 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 January 2014 Baseline.

Under the January 2014 Baseline, 31 of the 66 crop farms are considered in good liquidity condition (less than a 25 percent chance of negative ending cash by 2018). Ten crop farms have between a 25 percent and a 50 percent likelihood of negative ending cash, and the remaining 25 crop farms have greater than a 50 percent chance of negative ending cash. Additionally, 46 of the 66 crop farms are considered in good equity position (less than a 25 percent chance of decreasing real net worth during the study period). Eight crop farms have between a 25 percent and 50 percent likelihood of losing real net worth, and 12 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 24 feedgrain farms are in good overall financial condition. Eight are classified in marginal condition, and four are in poor condition.

- WHEAT FARMS: Five representative wheat farms are classified in good overall financial condition, four are in marginal condition, and two are in poor condition.

- COTTON FARMS: Nine of the 17 cotton farms are classified in good condition, one is in marginal condition, and seven are in poor condition.

- RICE FARMS: Five of the 14 rice farms are projected to be in good financial condition, three are in marginal condition, and six are in poor condition.

- DAIRY FARMS: Sixteen of the 20 dairies are in good overall financial condition. Two are classified in marginal condition, and two are in poor condition.

- BEEF CATTLE RANCHES: Six of the 11 cattle ranches are classified in good financial condition, three are in marginal condition, and two are projected to be in poor condition.

REPRESENTATIVE FARMS ECONOMIC OUTLOOK FOR THE JANUARY 2014 FAPRI/AFPC BASELINE

The farm level economic impacts of the FAPRI January 2014 Baseline on representative crop and livestock operations are projected in this report, assuming the 2014 Farm Bill. The analysis was conducted over the 2012-2018 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) January 2014 Baseline.

The FLIPSIM policy simulation model incorporates the historical risk faced by farmers for prices and production. This report presents the results of the January 2014 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 2018.

DEFINITIONS OF VARIABLES IN THE SUMMARY TABLES

- **Overall Financial Position, 2014-2018** -- 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 through 2018. 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** -- 2014-2018 average cash receipts from all farm related sources, including market sales, PLC/ARC payments, marketing loan gains/LDPs, crop insurance indemnities, and other receipts.
- **Payments** -- 2014-2018 average annual PLC or ARC payments and marketing loan gains/LDPs for crop farms.
- **NCFI** -- 2014-2018 average net cash farm income equals average total receipts minus average total cash expenses.
- **Reserve 2018** -- equals total cash on hand at the end of year 2018. 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 2018** -- equity equals total assets including land minus total debt from all sources and is reported at the end of 2018.
- **CRNW** -- annualized percentage change in the operator's net worth from January 1, 2014 through December 31, 2018, after adjusting for inflation.

Table 1. FAPRI January 2014 Baseline Projections of Crop and Livestock Prices, 2012-2018.

	2012	2013	2014	2015	2016	2017	2018
Crop Prices							
Corn ($/bu.)	6.89	4.42	4.11	4.07	4.05	4.04	4.05
Wheat ($/bu.)	7.77	6.82	5.51	5.34	5.33	5.32	5.31
Cotton ($/lb.)	0.7250	0.7417	0.6733	0.6705	0.6662	0.6672	0.6715
Sorghum ($/bu.)	6.33	4.19	3.96	3.86	3.85	3.83	3.88
Soybeans ($/bu.)	14.40	12.58	9.74	9.71	9.70	9.69	9.82
Barley ($/bu.)	6.43	5.99	4.57	4.57	4.51	4.52	4.52
Oats ($/bu.)	3.89	3.62	3.41	3.27	3.21	3.20	3.20
Rice ($/cwt.)	14.90	15.82	14.77	13.66	13.75	13.71	13.68
Soybean Meal ($/ton)	446.49	415.28	310.58	313.80	310.91	304.96	315.20
All Hay ($/ton)	187.00	179.05	142.34	135.04	134.55	135.77	138.44
Peanuts ($/ton)	602.00	469.54	520.06	525.80	523.90	515.66	514.26
Cattle Prices							
Feeder Cattle ($/cwt)	158.19	158.80	183.88	186.03	174.01	165.60	156.66
Fed Cattle ($/cwt)	122.86	125.89	137.09	137.57	132.04	128.26	124.19
Culled Cows ($/cwt)	76.68	76.38	85.49	86.47	79.00	72.95	69.08
Milk Price							
U.S. All Milk Price ($/cwt)	18.56	19.99	20.34	18.74	18.07	17.75	17.61

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

Table 2. FAPRI January 2014 Baseline Assumed Rates of Change in Input Prices and Annual Changes in Land Values, 2013-2018.

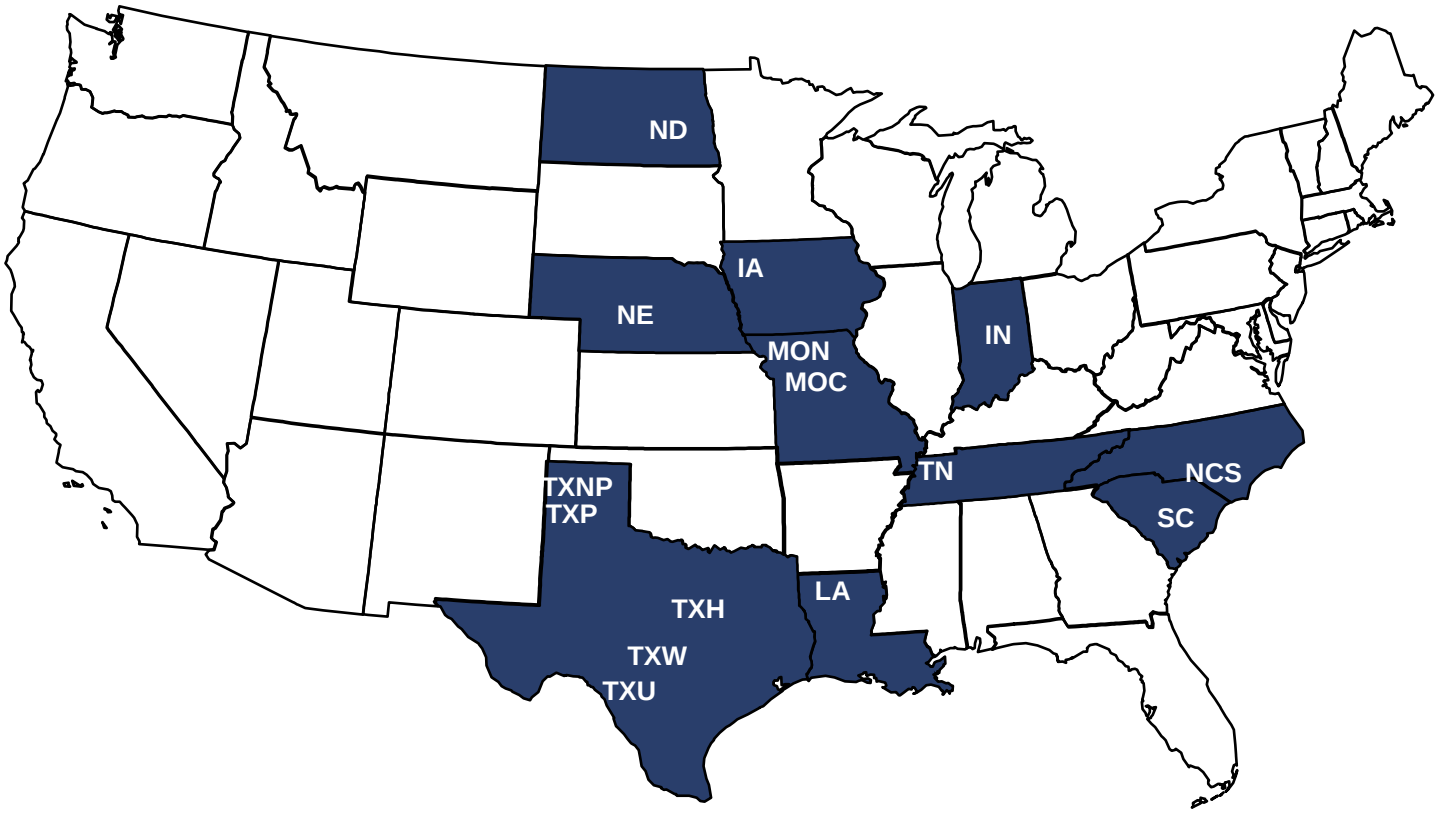
	2013	2014	2015	2016	2017	2018
Annual Rate of Change for Input Prices Paid						
Seed Prices (%)	5.34	0.77	-0.13	0.36	1.06	1.85
All Fertilizer Prices (%)	-7.74	-11.84	-6.09	1.60	0.54	0.98
Herbicide Prices (%)	1.93	-0.47	1.71	2.63	1.98	1.92
Insecticide Prices (%)	4.76	-0.16	1.81	2.62	2.00	1.89
Fuel and Lube Prices (%)	-0.79	-2.75	-2.00	-0.51	1.23	2.53
Machinery Prices (%)	2.59	2.23	1.55	2.36	2.35	2.50
Wages (%)	3.27	2.39	2.62	3.00	3.09	3.14
Supplies (%)	0.65	0.85	1.64	1.95	1.44	1.38
Repairs (%)	0.57	1.39	2.29	2.65	2.51	2.49
Services (%)	2.35	0.35	1.65	2.25	2.05	2.30
Taxes (%)	3.08	1.98	3.25	2.68	1.61	1.69
PPI Items (%)	1.13	-4.27	-1.99	0.69	1.07	1.28
PPI Total (%)	1.46	-3.24	-1.26	1.21	1.49	1.50
Annual Change in Consumer Price Index (%)	1.46	1.44	1.75	1.83	1.91	2.04
Annual Rate of Change for U.S. Land Prices (%)	9.43	2.87	0.18	0.22	0.11	0.22

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

Representative Farm: Feed Grains

- Overall, twelve feed grain farms are characterized as good, eight are marginal, and four are in poor condition.

- Six of the twenty-four farms will be under severe cash flow stress; TXPG2500, TXPG3760, and TXHG2500 all have high likelihoods (greather than a 65 percent chance) of losing real net worth.



Characteristics of Panel Farms Producing Feed Grains, 2013.

	Cropland (acres)	Assets ($1,000)	Debt/Asset (ratio)	Gross Receipts ($1,000)	Feed Grains (acres)
IAG1350	1,350	6,382.00	0.17	1,148.10	1,350
IAG3400	3,400	15,878.00	0.18	2,625.80	3,400
NEG2400	2,400	7,147.00	0.14	2,136.90	2,400
NEG4300	4,300	25,151.00	0.15	3,992.80	4,000
NDG2500	2,500	2,998.00	0.15	1,109.70	2,000
NDG8000	8,000	15,719.00	0.14	3,739.60	6,450
ING1000	1,000	4,399.00	0.12	699.00	1,000
ING2200	2,200	10,417.00	0.16	1,598.30	2,200
MOCG2300	2,300	16,237.00	0.15	1,453.20	2,300
MOCG4000	4,000	26,333.00	0.13	2,297.50	4,000
MONG1850	1,850	10,945.00	0.15	1,229.30	1,800
LAG2640	2,640	2,231.00	0.23	2,014.50	2,244
LANG2500	2,500	9,105.00	0.15	2,203.50	1,750
TNG900	900	2,502.00	0.27	535.40	900
TNG2200	2,200	5,116.00	0.18	1,150.00	2,200
NCSP1800	1,800	4,854.00	0.13	1,194.50	1,440
SCG3500	3,500	11,817.00	0.16	2,807.30	2,625
TXNP3000	3,000	2,322.00	0.16	1,741.90	1,200
TXNP10000	10,000	17,275.00	0.14	6,353.70	5,700
TXPG2500	2,500	4,628.00	0.18	1,666.20	1,058
TXPG3760	3,760	6,994.00	0.18	3,673.60	1,878
TXHG2500	2,500	2,408.00	0.19	724.70	1,700
TXWG1600	1,600	1,524.00	0.14	594.10	1,050
TXUG1600	1,600	836.00	0.04	1,538.30	150

Representative Farm: Feed Grains

Economic Viability of Representative Farms over the 2014-2018 Period

Farm Name	Overall Ranking		P(Negative Ending Cash)	P(Real Net Worth Declines)
12/8/4	2014	2018	2014-2018	2014-2018
IAG1350			41-74	1-9
IAG3400			14-52	1-2
NEG2400			1-7	1-1
NEG4300			1-13	1-1
NDG2500			1-1	1-1
NDG8000			1-1	1-1
ING1000			1-15	1-1
ING2200			1-2	1-1
MOCG2300			1-11	1-1
MOCG4000			1-1	1-1
MONG1850			7-32	1-1
LAG2640			10-32	4-22
LANG2500			1-1	1-1
TNG900			1-50	1-1
TNG2200			1-27	1-1
NCSP1800			1-42	1-3
SCG3500			1-1	1-1
TXNP3000			5-29	1-9
TXNP10000			1-1	1-1
TXPG2500			70-94	3-66
TXPG3760			45-99	3-91
TXHG2500			92-99	21-97
TXWG1600			1-87	1-34
TXUG1600			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 2014 and 2018.

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 2012 to 2014 and from 2012 to 2018.

Implications of the January 2014 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Feed Grains and Oilseeds

	Receipts	Payments	NCFI	Reserve 2018	Net Worth 2018	CRNW
	($1,000)	($1,000)	($1,000)	($1,000)	($1,000)	(%)
IAG1350	1,028.25	24.05	89.40	(381.05)	5,102.21	(0.50)
IAG3400	2,339.05	58.21	313.26	(29.35)	13,220.95	0.37
NEG2400	1,874.16	47.50	247.54	1,090.82	6,294.09	0.54
NEG4300	3,518.61	79.51	511.36	1,605.61	21,652.98	0.47
NDG2500	947.92	28.16	224.59	894.48	3,115.05	2.98
NDG8000	3,353.19	90.68	1,059.54	5,568.62	17,228.88	3.89
ING1000	626.43	16.94	157.40	187.44	4,105.57	1.24
ING2200	1,458.21	34.21	384.82	869.59	9,739.05	2.16
MOCG2300	1,247.45	28.58	440.71	626.85	14,970.18	1.65
MOCG4000	1,973.24	46.44	774.69	1,826.34	25,137.12	1.92
MONG1850	1,185.39	21.93	258.72	239.81	10,028.60	1.37
LAG2640	1,807.17	42.00	204.12	466.78	2,016.51	2.41
LANG2500	1,978.63	51.65	435.88	1,660.09	8,947.54	2.65
TNG900	499.47	8.40	148.60	14.30	2,110.60	1.95
TNG2200	1,066.91	26.46	277.40	323.33	4,634.73	1.56
NCSP1800	1,232.05	38.26	125.31	106.72	4,027.19	(0.94)
SCG3500	2,428.60	108.24	528.88	2,100.12	11,789.06	2.34
TXNP3000	1,680.99	52.96	165.77	264.41	2,163.06	1.33
TXNP10000	5,949.32	188.02	1,859.20	7,317.10	21,214.78	6.00
TXPG2500	1,514.68	65.99	103.22	(889.00)	3,296.31	(2.61)
TXPG3760	3,070.30	106.27	(488.70)	(2,952.14)	2,648.21	(10.13)
TXHG2500	711.55	40.01	(6.58)	(920.15)	1,274.09	(6.55)
TXWG1600	529.23	24.87	43.78	(175.83)	1,116.24	(2.95)
TXUG1600	1,413.32	88.76	247.87	897.17	1,317.41	9.85

1 Receipts are average annual total cash receipts including government payments, 2014-2018 ($1,000)

2 Payments are average annual total government payments, 2014-2018 ($1,000)

3 NCFI is average annual net cash farm income, 2014-2018 ($1,000)

4 Reserve 2018 is average ending cash reserves, 2018 ($1,000)

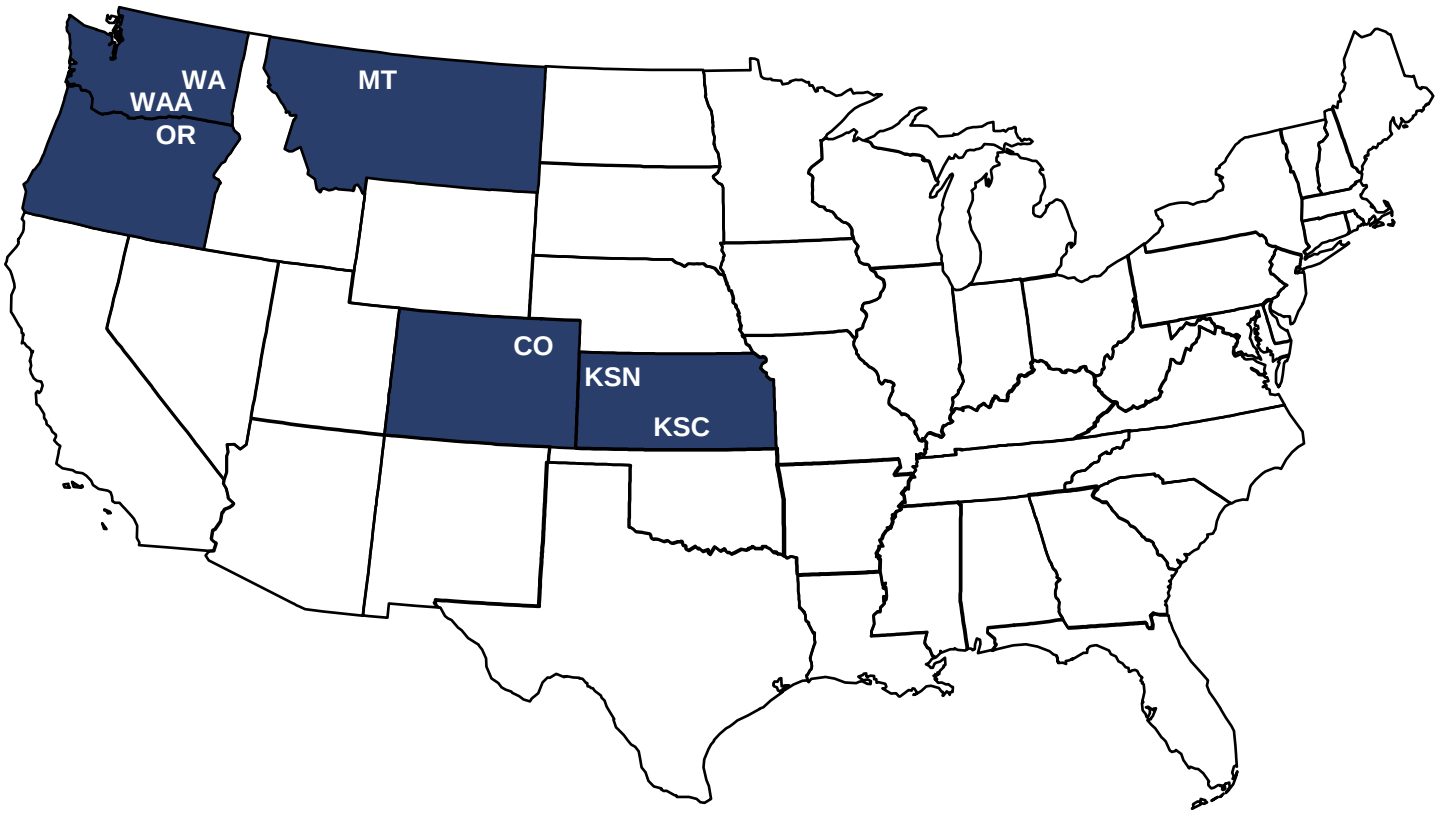
5 Net Worth 2018 is average nominal ending net worth, 2018 ($1,000)

6 CRNW is average percentage change in real net worth over 2014-2018 period, (%)

Representative Farm: Wheat

- Five wheat farms are projected to be in good overall financial condition, four are in marginal condition, and 2 are in poor condition.

- Four of the eleven wheat farms are expected to feel significant liquidity pressure over the period; however, none of the wheat farms have a greater than 50 percent chance of losing real equity.



Characteristics of Panel Farms Producing Wheat, 2013.

	Cropland	Assets	Debt/Asset	Gross Receipts	Wheat
	(acres)	($1,000)	(ratio)	($1,000)	(acres)
WAW2000	2,000	2,160.00	0.12	969.30	1,320
WAW7000	7,000	9,393.00	0.16	3,016.60	4,060
WAAW4500	4,000	2,269.00	0.15	569.40	2,000
ORW4100	4,100	2,132.00	0.19	592.00	1,950
MTW7000	7,000	6,391.00	0.12	1,397.30	4,200
KSCW2000	2,000	2,959.00	0.18	585.20	1,200
KSCW4500	4,500	4,904.00	0.17	1,224.50	2,700
KSNW4000	4,000	4,493.00	0.20	745.50	1,500
KSNW5980	5,980	9,180.00	0.19	1,311.20	1,820
COW3000	3,000	2,897.00	0.17	493.10	970
COW5640	5,640	4,271.00	0.16	903.80	1,900

Representative Farm: Wheat

Economic Viability of Representative Farms over the 2014-2018 Period

Farm Name	Overall Ranking		P(Negative Ending Cash)	P(Real Net Worth Declines)
5/4/2	2014	2018	2014-2018	2014-2018
WAW2000			1-1	1-1
WAW7000			15-84	1-42
WAAW4500			3-60	1-5
MTW7000			1-1	1-1
ORW4100			1-1	1-1
KSCW2000			1-77	1-3
KSCW4500			1-1	1-1
KSNW4000			34-47	1-1
KSNW5980			83-90	1-27
COW3000			1-1	1-1
COW5640			1-40	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 2014 and 2018.

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 2012 to 2014 and from 2012 to 2018.

Implications of the January 2014 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Wheat

	Receipts	Payments	NCFI	Reserve 2018	Net Worth 2018	CRNW
	($1,000)	($1,000)	($1,000)	($1,000)	($1,000)	(%)
WAW2000	820.41	39.25	268.21	1,122.10	2,600.51	5.00
WAW7000	2,614.73	138.48	105.19	(975.52)	6,804.66	(2.69)
WAAW4500	468.24	33.58	52.75	(28.72)	1,792.03	(1.35)
ORW4100	443.16	18.21	141.11	366.34	1,880.75	0.66
MTW7000	1,194.27	80.08	548.38	2,112.03	7,105.45	3.95
KSCW2000	494.10	19.01	92.89	(154.09)	2,273.49	(0.95)
KSCW4500	998.09	41.51	300.17	1,301.24	4,709.77	2.83
KSNW4000	860.33	33.24	196.60	41.97	4,014.47	1.34
KSNW5980	1,462.40	48.27	118.14	(971.40)	7,334.24	(0.80)
COW3000	422.10	14.06	164.74	312.78	2,661.70	2.02
COW5640	745.98	27.43	177.47	83.16	3,671.39	0.76

1 Receipts are average annual total cash receipts including government payments, 2014-2018 ($1,000)

2 Payments are average annual total government payments, 2014-2018 ($1,000)

3 NCFI is average annual net cash farm income, 2014-2018 ($1,000)

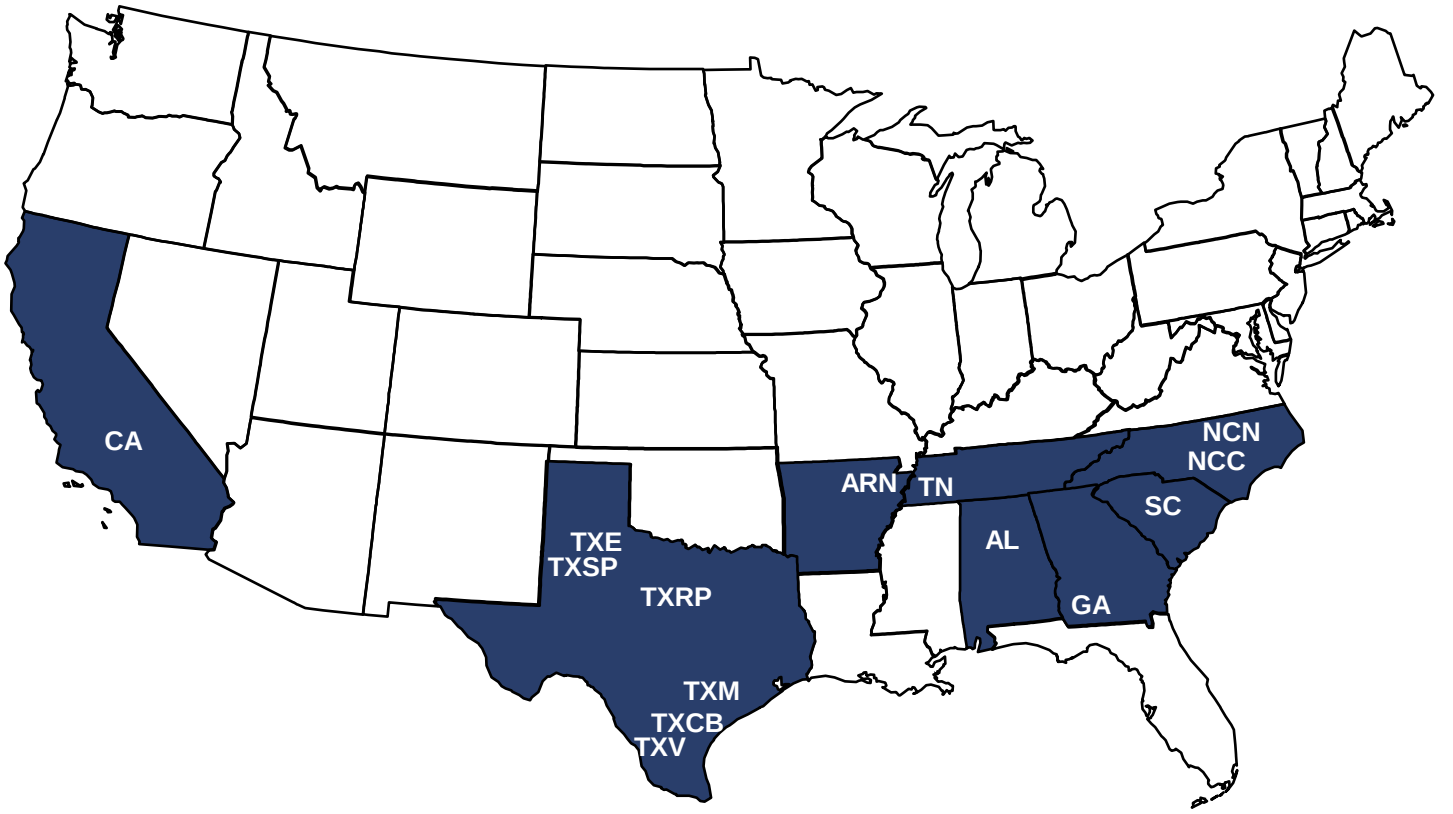
4 Reserve 2018 is average ending cash reserves, 2018 ($1,000)

5 Net Worth 2018 is average nominal ending net worth, 2018 ($1,000)

6 CRNW is average percentage change in real net worth over 2014-2018 period, (%)

Representative Farm: Cotton

- Nine of the seventeen cotton farms are characterized in good overall financial condition, one is in marginal condition, and seven are in poor condition.
- Eight of the farms are projected to experience moderate to severe cash flow problems (having greater than a 30 percent chance of a cash flow deficit).
- Three farms are expected to have more than a 50 percent chance of losing real equity over the period.



Characteristics of Panel Farms Producing Cotton, 2013.

	Cropland	Assets	Debt/Asset	Gross Receipts	Cotton
	(acres)	($1,000)	(ratio)	($1,000)	(acres)
TXSP2500	2,500	1,481.00	0.12	1,001.40	2,275
TXSP4500	4,500	3,220.00	0.18	2,269.70	4,047
TXEC5000	5,000	3,832.00	0.16	2,325.20	4,150
TXRP2500	2,500	758.00	0.16	588.00	1,000
TXMC1800	1,800	1,453.00	0.18	954.10	900
TXCB2500	2,500	1,953.00	0.28	967.10	1,250
TXCB8000	8,000	4,056.00	0.12	3,552.40	3,600
TXVC4500	4,500	5,948.00	0.18	1,720.50	1,395
CAC4000	4,000	30,661.00	0.15	8,438.40	1,333
ARNC5000	5,000	7,998.00	0.19	4,524.00	5,000
TNC2100	2,100	3,879.00	0.12	1,431.80	525
TNC4050	4,050	6,950.00	0.15	2,841.30	2,025
ALC3000	3,000	2,727.00	0.17	1,808.40	1,050
GAC2300	2,300	9,887.00	0.19	2,636.20	1,200
SCC1800	1,800	4,118.00	0.21	1,511.40	900
NCC1500	1,500	3,155.00	0.13	1,101.00	225
NCNP1500	1,500	3,268.00	0.13	1,118.70	375

Representative Farm: Cotton

Economic Viability of Representative Farms over the 2014-2018 Period

Farm Name	Overall Ranking		P(Negative Ending Cash)	P(Real Net Worth Declines)
9/1/7	2014	2018	2014-2018	2014-2018
TXSP2500			40-65	28-44
TXSP4500			1-15	1-3
TXEC5000			1-1	1-1
TXRP2500			86-99	13-99
TXMC1800			45-90	11-64
TXCB2500			93-98	53-89
TXCB8000			4-32	1-25
TXVC4500			2-1	1-1
CAC4000			1-5	1-1
ARNC5000			44-69	6-38
TNC2100			1-1	1-1
TNC4050			1-1	1-1
ALC3000			1-54	1-42
GAC2300			1-2	1-1
SCC1800			1-9	1-1
NCC1500			1-1	1-1
NCNP1500			7-88	1-39

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 2014 and 2018.

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 2012 to 2014 and from 2012 to 2018.

Implications of the January 2014 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Cotton

	Receipts	Payments	NCFI	Reserve 2018	Net Worth 2018	CRNW
	($1,000)	($1,000)	($1,000)	($1,000)	($1,000)	(%)
TXSP2500	959.48	40.76	93.05	(252.91)	1,175.54	(2.50)
TXSP4500	2,082.45	88.59	394.02	751.80	3,349.25	3.46
TXEC5000	2,313.90	109.43	579.47	1,445.06	4,837.51	6.82
TXRP2500	467.76	23.93	(44.65)	(606.36)	99.10	(16.63)
TXMC1800	883.94	50.24	55.18	(450.01)	825.53	(5.26)
TXCB2500	931.79	57.93	(14.06)	(874.32)	846.27	(7.51)
TXCB8000	3,398.84	214.64	359.83	727.56	3,562.71	(0.11)
TXVC4500	2,050.94	112.57	493.28	1,569.64	6,496.44	4.62
CAC4000	6,189.35	88.40	404.30	2,624.84	26,649.01	0.54
ARNC5000	4,207.94	181.70	365.87	(762.58)	6,344.60	(1.17)
TNC2100	1,282.81	45.98	404.96	1,772.08	4,721.55	5.52
TNC4050	2,531.83	114.90	392.13	1,476.91	7,116.59	2.65
ALC3000	1,675.20	67.06	162.57	(43.14)	1,855.32	(3.61)
GAC2300	2,601.23	144.55	420.83	943.77	9,105.10	2.53
SCC1800	1,467.84	74.24	274.48	627.11	4,026.77	3.17
NCC1500	984.77	25.04	270.27	1,031.17	3,363.09	2.88
NCNP1500	1,049.16	49.07	97.41	(401.47)	2,504.23	(2.52)

1 Receipts are average annual total cash receipts including government payments, 2014-2018 ($1,000)

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3 NCFI is average annual net cash farm income, 2014-2018 ($1,000)

4 Reserve 2018 is average ending cash reserves, 2018 ($1,000)

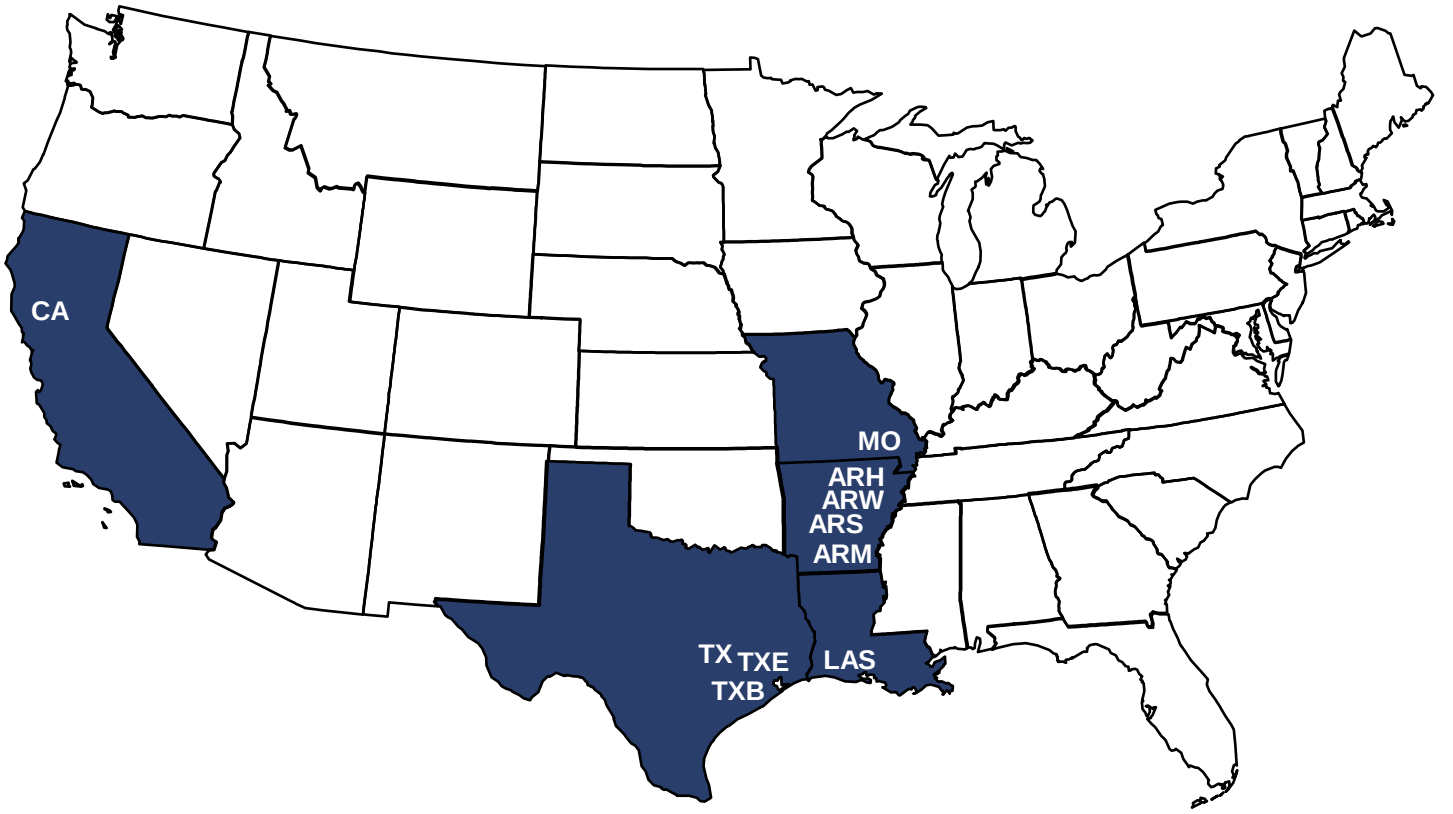
5 Net Worth 2018 is average nominal ending net worth, 2018 ($1,000)

6 CRNW is average percentage change in real net worth over 2014-2018 period, (%)

Representative Farm: Rice

- Five of the fourteen representative rice farms are projected to be in good overall financial condition, three are in marginal condition, and six are in poor condition.

- Eight of the rice farms are expected to face severe cash flow problems; six of those farms have high likelihoods of losing real equity.



Characteristics of Panel Farms Producing Rice, 2013.

	Cropland	Assets	Debt/Asset	Gross Receipts	Rice
	(acres)	($1,000)	(ratio)	($1,000)	(acres)
CAR550	550	3,439.00	0.23	901.90	500
CAR3000	3,000	12,788.00	0.16	5,373.30	3,000
CABR1300	1,300	8,577.00	0.15	2,273.40	1,200
CACR800	800	5,458.00	0.13	1,502.10	800
TXR1500	1,500	2,060.00	0.18	862.20	600
TXR3000	3,000	1,442.00	0.13	1,575.00	1,200
TXBR1800	1,800	763.00	0.27	1,041.00	600
TXER3200	3,200	2,595.00	0.14	1,850.10	1,067
LASR1480	1,480	1,605.00	0.25	1,067.30	800
ARMR6500	6,500	11,388.00	0.20	5,832.80	325
ARSR3240	3,240	6,428.00	0.16	2,782.90	1,296
ARWR1400	1,400	3,584.00	0.19	1,112.80	700
ARHR3000	3,000	7,190.00	0.16	2,515.00	1,800
MOWR4000	4,000	18,037.00	0.14	3,241.80	2,000

Representative Farm: Rice

Economic Viability of Representative Farms over the 2014-2018 Period

Farm Name	Overall Ranking		P(Negative Ending Cash)	P(Real Net Worth Declines)
5/3/6	2014	2018	2014-2018	2014-2018
CAR550			95-99	1-13
CAR3000			2-9	2-4
CABR1300			1-1	1-1
CACR800			2-9	1-1
TXR1500			4-81	1-15
TXR3000			1-6	1-2
TXBR1800			73-89	65-87
TXER3200			3-98	2-70
LASR1480			87-99	42-99
ARMR6500			78-99	27-98
ARSR3240			1-9	1-1
ARWR1400			99-99	21-99
ARHR3000			80-99	3-88
MOWR4000			1-28	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 2014 and 2018.

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 2012 to 2014 and from 2012 to 2018.

Implications of the January 2014 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Rice

	Receipts	Payments	NCFI	Reserve 2018	Net Worth 2018	CRNW
	($1,000)	($1,000)	($1,000)	($1,000)	($1,000)	(%)
CAR550	792.33	12.61	95.36	(561.41)	2,433.27	(1.32)
CAR3000	4,716.57	71.69	540.92	2,191.36	11,996.81	1.77
CABR1300	2,026.67	30.30	609.27	2,733.52	9,124.43	3.85
CACR800	1,298.91	20.04	219.85	737.52	5,142.76	1.30
TXR1500	747.43	14.71	104.42	(147.13)	1,622.34	(1.47)
TXR3000	1,367.73	26.44	177.92	451.54	1,385.53	0.28
TXBR1800	958.42	23.73	56.52	(246.22)	390.77	(7.36)
TXER3200	1,551.77	29.32	6.65	(880.54)	1,463.16	(7.10)
LASR1480	927.63	15.12	(31.21)	(1,014.44)	434.03	(12.55)
ARMR6500	3,898.40	89.72	(762.18)	(6,973.15)	2,512.16	(13.91)
ARSR3240	2,062.84	47.88	289.11	1,026.52	5,505.05	0.48
ARWR1400	927.34	21.92	(48.92)	(1,668.91)	1,779.35	(7.25)
ARHR3000	2,214.64	48.72	81.38	(1,846.68)	5,009.62	(4.11)
MOWR4000	2,853.80	57.41	535.40	646.45	16,406.85	0.91

1 Receipts are average annual total cash receipts including government payments, 2014-2018 ($1,000)

2 Payments are average annual total government payments, 2014-2018 ($1,000)

3 NCFI is average annual net cash farm income, 2014-2018 ($1,000)

4 Reserve 2018 is average ending cash reserves, 2018 ($1,000)

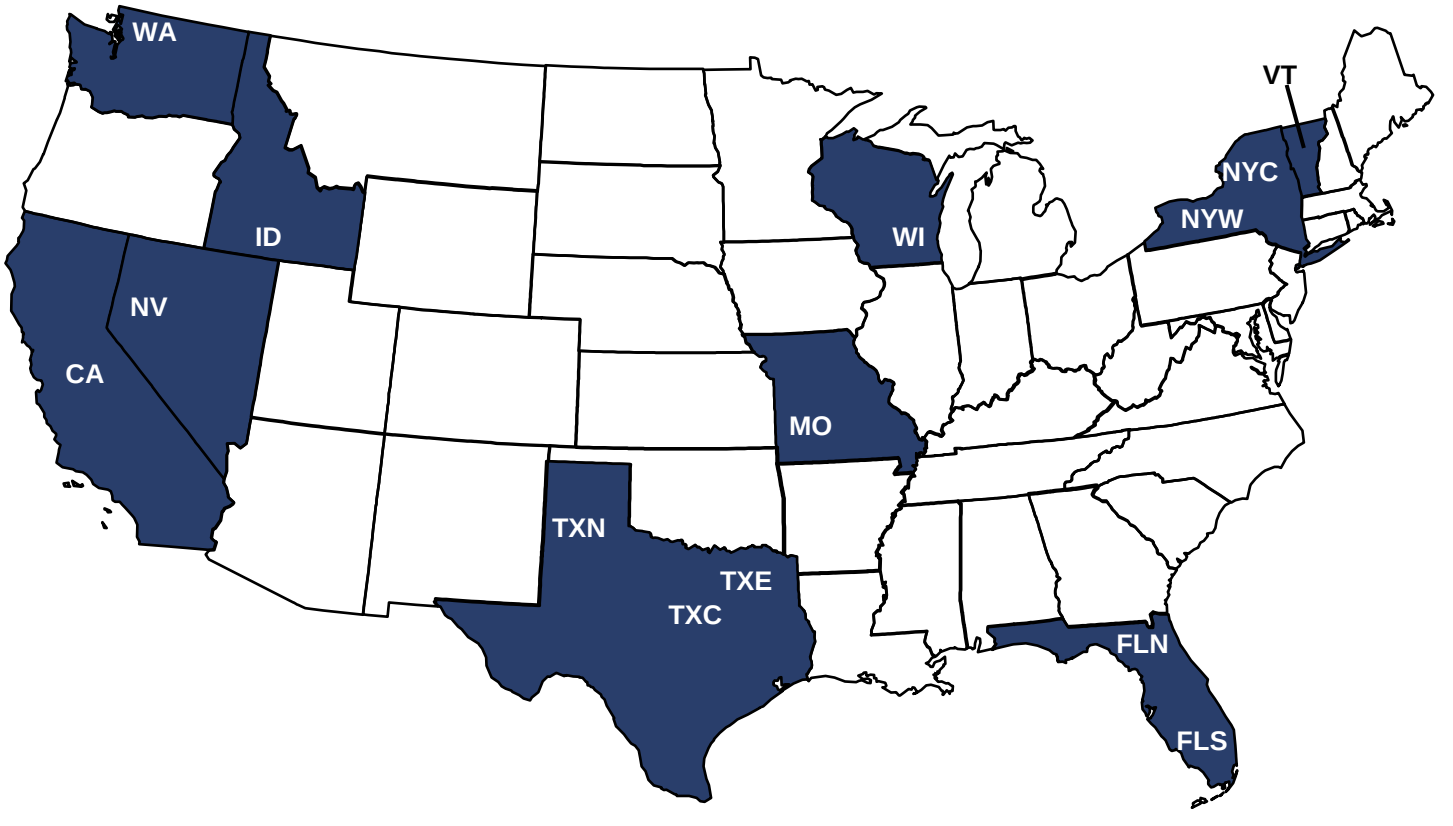
5 Net Worth 2018 is average nominal ending net worth, 2018 ($1,000)

6 CRNW is average percentage change in real net worth over 2014-2018 period, (%)

Representative Farm: Dairy

- Sixteen of twenty dairy operations are in good overall financial condition. Two dairies are classified in marginal condition, and two are also in poor condition.

- Three of the dairies are projected to experience severe liquidity pressure, with two of these facing a greater than 65 percent chance of losing real equity.



Characteristics of Panel Farms Producing Milk, 2013.

	Cropland	Assets	Debt/Asset	Gross Receipts	Cows
	(acres)	($1,000)	(ratio)	($1,000)	(number)
CAD1710	700	29,644.00	0.25	8,631.70	1,710
WAD250	250	4,419.00	0.22	1,140.50	250
WAD850	605	10,688.00	0.20	4,851.10	850
IDD3000	1,500	28,753.00	0.22	15,933.20	3,000
NVD500	200	4,896.00	0.18	2,954.20	500
TXND3000	520	16,160.00	0.33	14,864.30	3,000
TXCD1300	560	7,907.00	0.32	5,934.00	1,300
TXED400	950	3,039.00	0.40	1,560.80	400
WID145	600	3,334.00	0.22	901.00	145
WID1000	2,000	11,152.00	0.20	6,276.00	1,000
NYWD500	1,000	5,541.00	0.19	3,032.90	500
NYWD1200	2,100	14,081.00	0.21	6,941.30	1,200
NYCD110	325	1,604.00	0.19	666.20	110
NYCD550	1,100	6,660.00	0.24	3,501.80	550
VTD140	220	1,626.00	0.25	705.60	140
VTD400	1,000	4,864.00	0.23	2,263.00	400
MOGD550	0	3,612.00	0.16	1,660.00	550
MOGD180	0	1,397.00	0.16	561.90	180
FLND550	600	3,671.00	0.23	2,956.90	550
FLSD1500	400	11,445.00	0.33	8,319.90	1,500

Representative Farm: Dairy

Economic Viability of Representative Farms over the 2014-2018 Period

Farm Name	Overall Ranking		P(Negative Ending Cash)	P(Real Net Worth Declines)
16/2/2	2014	2018	2014-2018	2014-2018
CAD1710			88-46	1-1
WAD250			80-79	1-1
WAD850			3-1	1-1
IDD3000			59-29	1-4
NVD500			1-1	1-1
TXND3000			32-13	6-6
TXCD1300			81-45	4-13
TXED400			99-96	40-68
WID145			5-4	1-1
WID1000			1-3	1-1
NYWD500			1-1	1-1
NYWD1200			1-1	1-1
NYCD110			1-1	1-1
NYCD550			60-24	1-1
VTD140			99-99	4-80
VTD400			46-38	1-1
MOGD550			1-1	1-1
MOGD180			1-1	1-1
FLND550			33-11	1-1
FLSD1500			93-48	19-19

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 2014 and 2018.

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 2012 to 2014 and from 2012 to 2018.

Implications of the January 2014 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Milk

	Receipts	Payments	NCFI	Reserve 2018	Net Worth 2018	CRNW
	($1,000)	($1,000)	($1,000)	($1,000)	($1,000)	(%)
CAD1710	8,348.63	0.00	1,403.95	250.84	25,229.81	1.44
WAD250	1,113.30	0.00	191.50	(265.31)	3,653.85	0.59
WAD850	4,735.56	0.00	1,153.34	3,107.19	11,991.95	4.98
IDD3000	15,537.97	0.00	2,441.73	2,442.55	28,380.27	2.54
NVD500	2,847.75	0.00	695.22	1,944.95	5,963.44	5.52
TXND3000	14,687.32	0.00	2,425.37	3,814.19	17,187.63	4.90
TXCD1300	5,885.65	0.00	753.64	221.42	7,126.47	1.84
TXED400	1,535.50	0.00	98.80	(1,003.62)	1,726.57	(3.49)
WID145	868.74	0.00	250.78	362.34	3,084.72	2.24
WID1000	6,136.04	0.00	1,124.89	2,946.09	11,623.48	3.53
NYWD500	2,974.72	0.00	953.26	3,447.76	7,542.75	7.66
NYWD1200	6,792.85	0.00	1,789.03	5,431.51	16,729.25	5.35
NYCD110	651.09	0.00	254.14	553.97	1,851.37	4.92
NYCD550	3,439.96	0.00	568.58	470.17	6,522.12	2.12
VTD140	690.59	0.00	55.48	(417.01)	1,056.88	(3.59)
VTD400	2,210.38	0.00	336.18	144.56	4,553.75	1.16
MOGD550	1,643.34	0.00	839.85	2,769.44	5,487.19	10.20
MOGD180	555.40	0.00	319.34	1,019.52	2,072.46	9.87
FLND550	2,956.12	0.00	496.61	746.60	4,147.79	4.06
FLSD1500	8,342.19	0.00	943.21	65.09	9,887.53	2.45

1 Receipts are average annual total cash receipts including government payments, 2014-2018 ($1,000)

2 Payments are average annual total government payments, 2014-2018 ($1,000)

3 NCFI is average annual net cash farm income, 2014-2018 ($1,000)

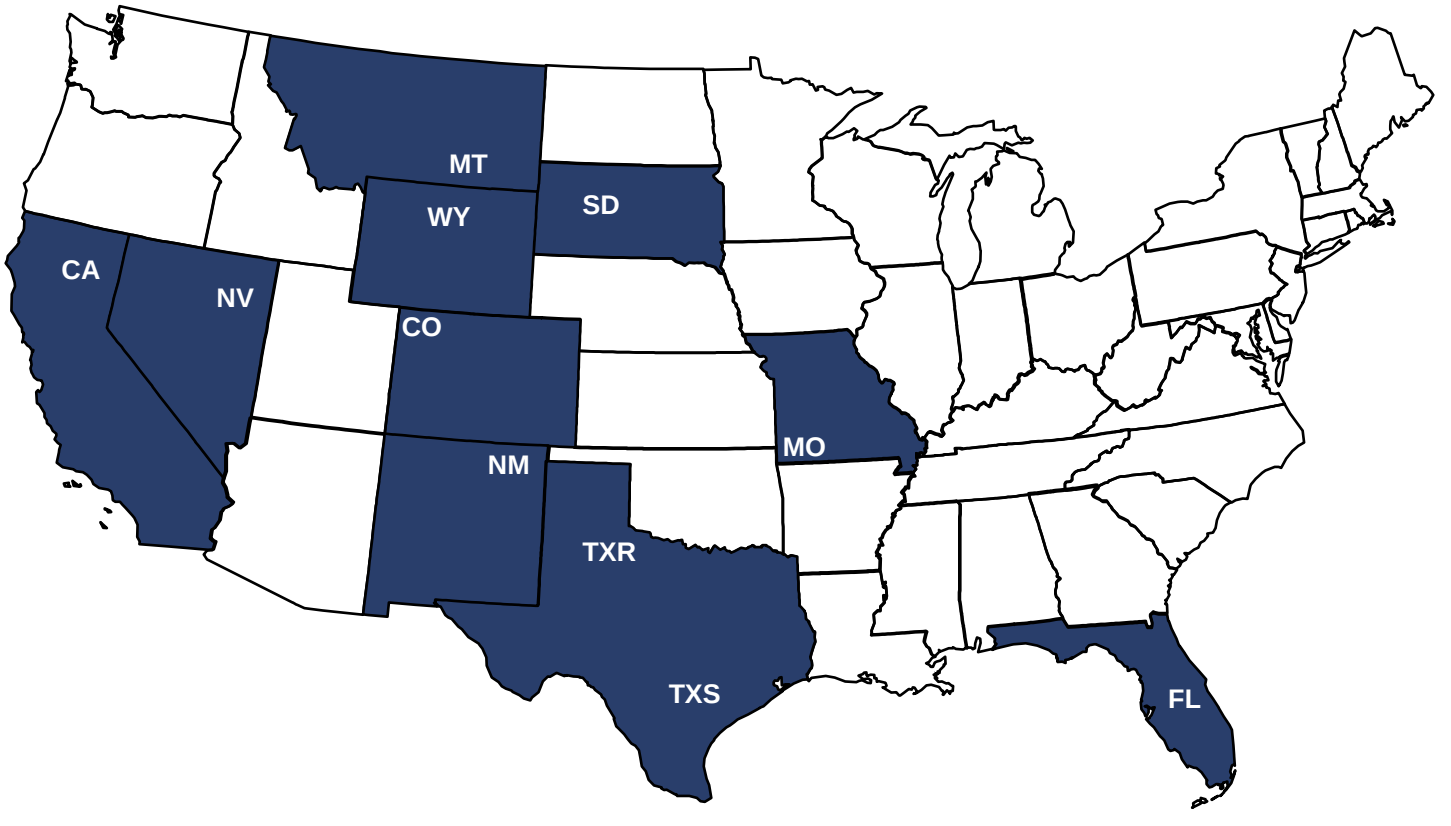
4 Reserve 2018 is average ending cash reserves, 2018 ($1,000)

5 Net Worth 2018 is average nominal ending net worth, 2018 ($1,000)

6 CRNW is average percentage change in real net worth over 2014-2018 period, (%)

Representative Farm: Cow/Calf

- Six of eleven cow-calf operations are projected to be in good overall financial condition, three are marginal, and two are expected to be in poor condition.
- Five operations will face significant liquidity pressure over the period, as their likelihoods of experiencing negative ending cash in 2018 are 80 percent or greater.
- Only two of the eleven operations are projected to face severe threats of losing real equity over the period.



Characteristics of Panel Farms Producing Beef Cattle, 2013.

	Cropland	Assets	Debt/Asset	Gross Receipts	Cows
	(acres)	($1,000)	(ratio)	($1,000)	(number)
CAB500	0	4,611.00	0.03	405.90	500
NVB650	1,300	7,744.00	0.01	505.30	650
MTB600	0	7,557.00	0.02	472.10	600
WYB435	330	5,740.00	0.03	417.20	435
COB250	650	14,690.00	0.01	269.10	250
NMB160	0	6,667.00	0.02	155.20	160
SDB375	1,150	7,268.00	0.03	324.60	375
MOB250	280	3,975.00	0.01	368.00	250
TXRB250	0	7,947.00	0.05	376.40	335
TXSB200	0	4,765.00	0.02	198.70	200
FLB1155	5,400	23,551.00	0.01	878.60	1,155

Representative Farm: Cow/Calf

Economic Viability of Representative Farms over the 2014-2018 Period

Farm Name	Overall Ranking		P(Negative Ending Cash)	P(Real Net Worth Declines)
6/3/2	2014	2018	2014-2018	2014-2018
CAB500			83-92	49-93
NVB650			1-1	1-1
MTB600			1-1	1-1
WYB435			2-5	1-1
COB250			1-1	1-1
NMB160			99-99	1-1
SDB375			98-80	1-1
MOB250			1-1	1-1
TXRB250			99-99	1-97
TXSB200			38-99	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 2014 and 2018.

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 2012 to 2014 and from 2012 to 2018.

Implications of the January 2014 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Beef Cattle

	Receipts	Payments	NCFI	Reserve 2018	Net Worth 2018	CRNW
	($1,000)	($1,000)	($1,000)	($1,000)	($1,000)	(%)
CAB500	440.45	0.00	73.19	(96.41)	4,467.07	(0.80)
NVB650	545.04	0.00	163.99	240.76	7,940.50	0.33
MTB600	510.40	0.00	214.21	549.00	8,141.91	0.50
WYB435	448.42	0.00	138.40	131.90	5,909.62	(0.02)
COB250	279.38	0.00	107.13	187.43	15,210.42	0.10
NMB160	165.38	0.00	54.98	(240.98)	6,612.84	(0.44)
SDB375	350.00	0.00	119.61	(65.05)	7,411.45	(0.13)
MOB250	360.79	0.00	174.46	357.88	4,125.02	0.54
TXRB250	403.91	0.00	(131.10)	(1,216.49)	6,931.39	(2.24)
TXSB200	211.12	0.00	56.59	(121.19)	4,761.32	(0.56)
FLB1155	939.61	0.00	391.44	1,410.74	25,366.16	0.64

1 Receipts are average annual total cash receipts including government payments, 2014-2018 ($1,000)

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