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# *Representative Farms Economic Outlook for the January 2015 FAPRI/AFPC Baseline*

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**Briefing Paper 15-1**

**March 2015**



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**REPRESENTATIVE FARMS ECONOMIC  
OUTLOOK FOR THE JANUARY 2015  
FAPRI/AFPC BASELINE**

AFPC Briefing Paper 15-1

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## EXECUTIVE SUMMARY

The Agricultural and Food Policy Center (AFPC) at Texas A&M University develops and maintains data to simulate 91 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 2015 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 2015 Baseline.

Under the January 2015 Baseline, 28 of the 63 crop farms are considered in good liquidity condition (less than a 25 percent chance of negative ending cash by 2018). Six crop farms have between a 25 percent and a 50 percent likelihood of negative ending cash, and the remaining 29 crop farms have greater than a 50 percent chance of negative ending cash. Additionally, 40 of the 63 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 17 crop farms have greater than a 50 percent probability of decreasing real net worth. The following discussion provides an overall evaluation by commodity considering both liquidity and equity measures.

- **FEEDGRAIN FARMS:** Thirteen of the 23 feedgrain farms are in good overall financial condition. Six 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:** Four of the 16 cotton farms are classified in good condition, three are in marginal condition, and nine are in poor condition.
- **RICE FARMS:** Six of the 13 rice farms are projected to be in good financial condition. No rice farms are projected to be in marginal condition; seven are in poor condition.
- **DAIRY FARMS:** Fifteen of the 18 dairies are in good overall financial condition. Two are classified in marginal condition, and one is in poor condition.
- **BEEF CATTLE RANCHES:** Eight of the ten cattle ranches are classified in good financial condition, one is in marginal condition, and one is projected to be in poor condition.

## **REPRESENTATIVE FARMS ECONOMIC OUTLOOK FOR THE JANUARY 2015 FAPRI/AFPC BASELINE**

The farm level economic impacts of the FAPRI January 2015 Baseline on representative crop and livestock operations are projected in this report, assuming provisions of 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 2015 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 2015 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, 2015-2018** -- 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** -- 2015-2018 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** -- 2015-2018 average annual PLC or ARC payments and marketing loan gains/LDPs for crop farms.
- **NCFI** -- 2015-2018 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 real net worth from January 1, 2015 through December 31, 2018, after adjusting for inflation.

**Table 1. FAPRI January 2015 Baseline Projections of Crop and Livestock Prices, 2012-2018.**

	2012	2013	2014	2015	2016	2017	2018
<b>Crop Prices</b>							
Corn (\$/bu.)	6.89	4.46	3.63	3.83	3.89	3.99	4.11
Wheat (\$/bu.)	7.77	6.87	6.13	5.12	5.22	5.46	5.64
Cotton (\$/lb.)	0.7250	0.7790	0.6177	0.6004	0.6142	0.6226	0.6405
Sorghum (\$/bu.)	6.33	4.28	3.80	3.57	3.66	3.76	3.86
Soybeans (\$/bu.)	14.40	13.00	10.02	9.18	9.42	9.81	10.26
Barley (\$/bu.)	6.43	6.06	5.30	4.54	4.59	4.69	4.82
Oats (\$/bu.)	3.89	3.75	3.25	2.93	2.95	3.00	3.06
Rice (\$/cwt.)	15.10	16.10	13.87	13.86	13.73	13.74	13.78
Soybean Meal (\$/ton)	446.49	467.31	337.77	317.74	318.29	329.46	341.89
All Hay (\$/ton)	191.00	176.00	174.90	151.31	147.94	154.20	161.04
Peanuts (\$/ton)	602.00	498.00	428.08	437.89	428.41	436.08	442.88
<b>Cattle Prices</b>							
Feeder Cattle (\$/cwt)	158.19	158.84	225.21	233.77	219.81	192.09	171.01
Fed Cattle (\$/cwt)	122.86	125.89	154.56	155.85	149.78	136.49	126.56
Culled Cows (\$/cwt)	76.68	76.38	104.10	106.75	97.83	85.51	78.06
<b>Milk Price</b>							
U.S. All Milk Price (\$/cwt)	18.56	20.12	23.97	17.32	17.33	17.81	18.24

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

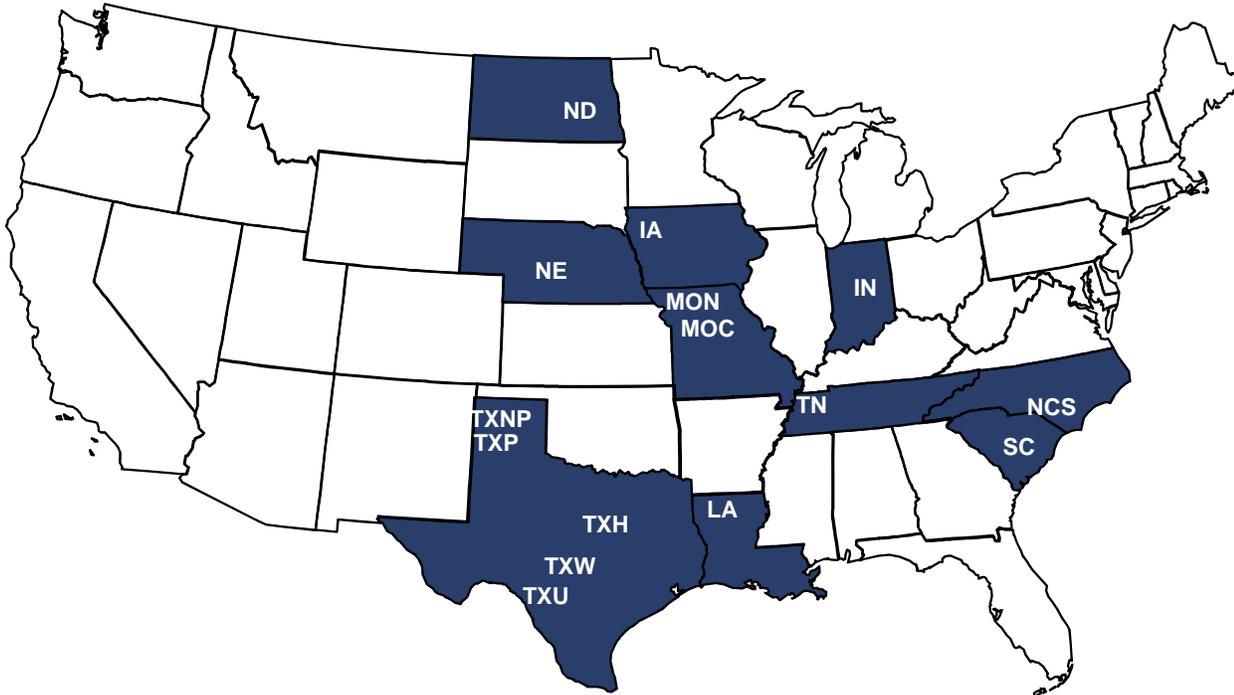
**Table 2. FAPRI January 2015 Baseline Assumed Rates of Change in Input Prices and Annual Changes in Land Values, 2013-2018.**

	2013	2014	2015	2016	2017	2018
<b>Annual Rate of Change for Input Prices Paid</b>						
Seed Prices (%)	3.77	2.73	-0.79	0.51	1.33	2.03
All Fertilizer Prices (%)	-1.89	0.24	-8.85	-3.02	-0.58	1.98
Herbicide Prices (%)	1.89	2.08	-0.95	1.80	2.82	3.47
Insecticide Prices (%)	6.73	1.73	-0.85	0.54	1.76	2.70
Fuel and Lube Prices (%)	-1.01	1.79	-22.56	6.72	7.79	7.99
Machinery Prices (%)	2.86	2.78	-0.81	1.41	1.64	3.22
Wages (%)	2.91	1.42	1.60	3.09	3.30	3.48
Supplies (%)	0.97	1.68	1.86	1.65	2.12	1.85
Repairs (%)	0.97	1.52	1.48	1.43	1.76	1.70
Services (%)	3.92	2.75	0.71	2.66	2.92	3.37
Taxes (%)	1.98	1.94	0.27	1.71	2.11	2.08
PPI Items (%)	1.90	6.15	-2.79	-0.69	0.14	1.22
PPI Total (%)	1.90	4.91	-2.26	-0.18	0.64	1.47
<b>Annual Change in Consumer Price Index (%)</b>	1.46	1.77	0.12	2.35	2.39	2.50
<b>Annual Rate of Change for U.S. Land Prices (%)</b>	8.33	8.06	-3.50	-3.50	2.00	2.00

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

# Representative Farm: Feed Grains

- Overall, thirteen feed grain farms are characterized as good, six are marginal, and four are in poor condition.
- Seven of the twenty-three farms will be under severe cash flow stress; two of those farms (TXHG2500 and TXWG1600) have high likelihoods (greater than a 55 percent chance) of losing real net worth.



**Characteristics of Panel Farms Producing Feed Grains, 2014.**

	Cropland (acres)	Assets (\$1,000)	Debt/Asset (ratio)	Gross Receipts (\$1,000)	Feed Grains (acres)
IAG1350	1,350	5,497.00	0.20	912.30	1,350
IAG3400	3,400	13,488.00	0.18	2,082.00	3,400
NEG2400	2,400	6,263.00	0.14	1,694.60	2,400
NEG4300	4,300	22,175.00	0.16	3,219.10	4,000
NDG3000	3,000	4,063.00	0.22	1,111.60	2,500
NDG8000	8,000	25,011.00	0.17	3,328.60	5,750
ING1000	1,000	3,559.00	0.15	609.60	1,000
ING2200	2,200	9,512.00	0.18	1,465.60	2,200
MOCG2300	2,300	14,728.00	0.15	1,235.10	2,300
MOCG4000	4,000	20,122.00	0.14	1,954.50	4,000
MONG2300	2,300	10,670.00	0.13	1,763.80	2,250
LAG2640	2,640	1,971.00	0.22	1,650.60	2,244
LANG2500	2,500	8,106.00	0.14	1,830.40	1,750
TNG900	900	2,227.00	0.24	438.50	900
TNG2200	2,200	4,815.00	0.21	936.30	2,200
NCSP1800	1,800	4,604.00	0.20	967.40	1,440
SCG3500	3,500	11,119.00	0.16	2,356.60	2,625
TXNP3000	3,000	1,927.00	0.14	1,484.10	1,200
TXNP10000	10,000	16,511.00	0.12	5,444.20	5,700
TXPG2500	2,500	5,076.00	0.23	1,618.00	1,453
TXHG2500	2,500	2,371.00	0.31	621.10	1,700
TXWG1600	1,600	1,382.00	0.12	513.10	1,050
TXUG1600	1,600	851.00	0.02	1,391.30	150

# Representative Farm: Feed Grains

## Economic Viability of Representative Farms over the 2015-2018 Period

Farm Name	Overall Ranking		P(Negative Ending Cash)	P(Real Net Worth Declines)
	2015	2018	2015-2018	2015-2018
13/6/4				
IAG1350			83-92	1-25
IAG3400			54-72	1-4
NEG2400			1-15	1-2
NEG4300			1-17	1-1
NDG3000			1-19	1-1
NDG8000			1-1	1-1
ING1000			1-4	1-1
ING2200			2-33	1-1
MOCG2300			1-1	1-1
MOCG4000			1-1	1-1
MONG2300			1-1	1-1
LAG2640			35-48	26-39
LANG2500			1-1	1-1
TNG900			56-71	1-1
TNG2200			17-53	1-3
NCSP1800			23-86	1-39
SCG3500			1-1	1-1
TXNP3000			21-35	1-10
TXNP10000			1-1	1-1
TXPG2500			9-18	1-1
TXHG2500			99-99	93-99
TXWG1600			32-94	1-56
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
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2 P(Negative Ending Cash) is the probability that the farm will have a cash flow deficit. Reported values represent the probabilities for 2015 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 2015 and from 2012 to 2018.

## Implications of the January 2015 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	1,007.93	40.99	30.09	(676.47)	4,732.95	(2.07)
IAG3400	2,301.01	99.31	195.67	(571.30)	12,496.42	(1.02)
NEG2400	1,852.82	77.13	182.35	793.58	5,934.18	(0.36)
NEG4300	3,496.01	128.65	443.92	1,306.43	21,088.64	(0.38)
NDG3000	1,232.12	53.02	182.64	457.52	3,648.64	0.06
NDG8000	3,630.27	138.55	1,057.06	4,640.89	25,566.56	1.37
ING1000	612.33	18.56	190.78	296.86	3,546.53	0.83
ING2200	1,476.23	42.50	305.44	222.66	9,111.73	0.15
MOCG2300	1,525.43	41.24	737.88	1,788.77	16,019.17	1.73
MOCG4000	2,331.17	62.15	1,108.97	3,004.42	22,415.18	2.03
MONG2300	1,714.99	45.74	504.26	1,668.94	11,296.67	1.18
LAG2640	1,790.27	62.42	131.10	91.48	1,637.71	0.33
LANG2500	1,941.83	58.36	374.40	1,356.13	8,553.17	1.55
TNG900	492.10	13.08	120.56	(126.93)	1,947.67	0.34
TNG2200	1,054.67	39.11	209.82	(27.42)	4,245.58	(0.12)
NCSP1800	1,167.91	84.06	15.50	(476.95)	3,413.90	(3.28)
SCG3500	2,393.80	134.26	403.70	1,567.57	11,123.46	0.67
TXNP3000	1,659.14	80.02	151.59	201.52	2,079.32	1.55
TXNP10000	5,840.03	281.15	1,624.84	6,428.38	20,161.58	4.78
TXPG2500	1,714.84	62.17	341.89	435.72	4,832.75	2.11
TXHG2500	694.80	43.95	(53.88)	(1,159.40)	1,019.65	(9.14)
TXWG1600	518.16	30.92	21.20	(251.11)	1,028.49	(4.63)
TXUG1600	1,384.20	124.82	207.16	711.86	1,129.43	7.59

1 Receipts are average annual total cash receipts including government payments, 2015-2018 (\$1,000)

2 Payments are average annual total government payments, 2015-2018 (\$1,000)

3 NCFI is average annual net cash farm income, 2015-2018 (\$1,000)

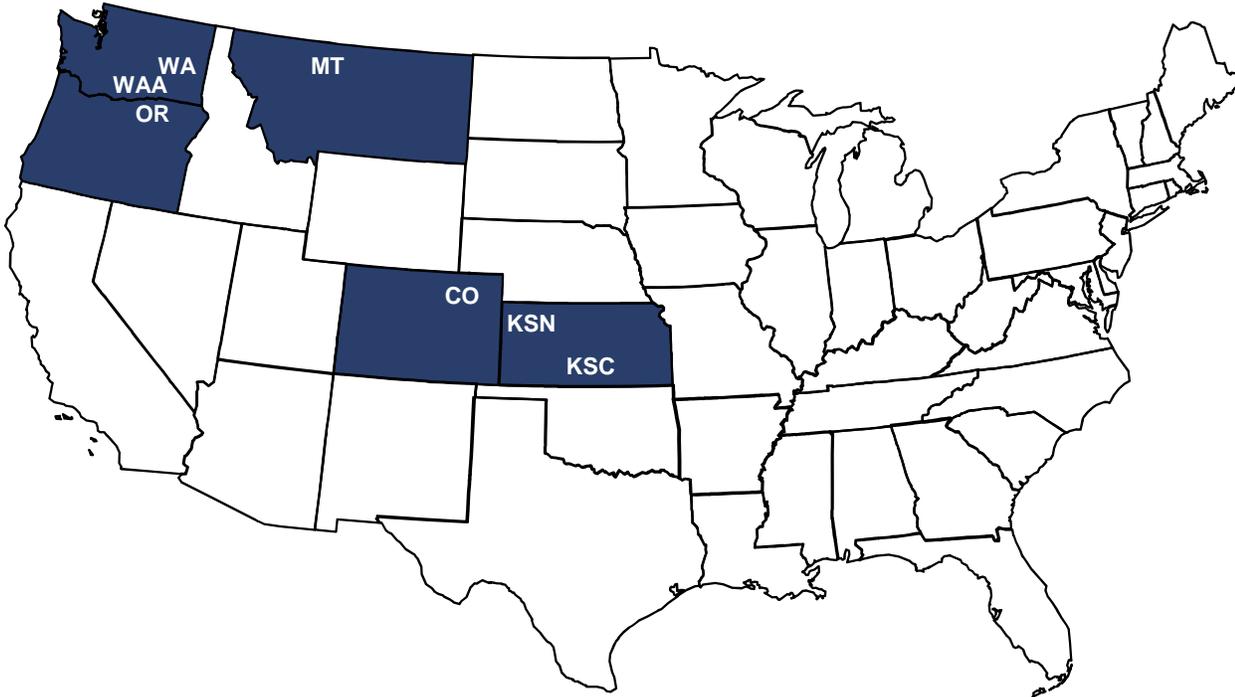
4 Reserve 2018 is average ending cash reserves, 2018 (\$1,000)

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

6 CRNW is average percentage change in real net worth over 2015-2018 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.
- Six of the eleven wheat farms are expected to feel significant liquidity pressure over the period; however, only two of those six farms have a greater than 50 percent chance of losing real equity.



**Characteristics of Panel Farms Producing Wheat, 2014.**

	Cropland (acres)	Assets (\$1,000)	Debt/Asset (ratio)	Gross Receipts (\$1,000)	Wheat (acres)
WAW2000	2,000	2,240.00	0.13	834.10	1,320
WAW7000	7,000	8,347.00	0.15	2,614.90	4,060
WAAW4500	4,000	2,037.00	0.15	497.00	2,000
ORW4100	4,100	2,039.00	0.16	489.10	1,950
MTW7000	7,000	6,335.00	0.14	1,179.80	4,200
KSCW2000	2,000	2,679.00	0.20	486.20	1,200
KSCW4500	4,500	4,635.00	0.17	1,018.60	2,700
KSNW4000	4,000	4,060.00	0.20	810.80	1,500
KSNW5980	5,980	8,436.00	0.23	1,334.00	1,820
COW3000	3,000	2,678.00	0.18	423.50	970
COW5640	5,640	4,100.00	0.21	771.40	1,900

# Representative Farm: Wheat

## Economic Viability of Representative Farms over the 2015-2018 Period

Farm Name	Overall Ranking		P(Negative Ending Cash)	P(Real Net Worth Declines)
	2015	2018	2015-2018	2015-2018
5/4/2				
WAW2000			1-1	1-1
WAW7000			41-86	1-55
WAAW4500			25-58	1-18
MTW7000			1-1	1-1
ORW4100			1-1	1-1
KSCW2000			3-83	1-13
KSCW4500			1-1	1-1
KSNW4000			64-64	1-3
KSNW5980			98-97	3-56
COW3000			1-1	1-1
COW5640			5-59	1-1

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

<25

25-50

>50

2 P(Negative Ending Cash) is the probability that the farm will have a cash flow deficit. Reported values represent the probabilities for 2015 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 2015 and from 2012 to 2018.

## Implications of the January 2015 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	827.50	28.12	262.81	1,101.66	2,561.88	3.60
WAW7000	2,626.66	95.64	61.85	(1,175.40)	6,514.36	(4.00)
WAAW4500	471.12	22.48	50.38	(42.33)	1,753.68	(2.53)
ORW4100	451.85	16.03	144.18	378.06	1,882.69	(0.02)
MTW7000	1,198.13	64.49	511.14	1,985.25	6,914.62	2.43
KSCW2000	486.67	12.48	77.93	(227.37)	2,167.63	(2.40)
KSCW4500	974.65	29.01	265.90	1,157.06	4,532.23	1.56
KSNW4000	845.57	34.65	159.11	(126.94)	3,788.99	(0.34)
KSNW5980	1,433.35	56.77	30.63	(1,397.90)	6,785.73	(2.54)
COW3000	417.77	12.61	145.82	234.08	2,552.34	0.43
COW5640	740.49	24.57	153.58	(39.47)	3,513.53	(0.66)

1 Receipts are average annual total cash receipts including government payments, 2015-2018 (\$1,000)

2 Payments are average annual total government payments, 2015-2018 (\$1,000)

3 NCFI is average annual net cash farm income, 2015-2018 (\$1,000)

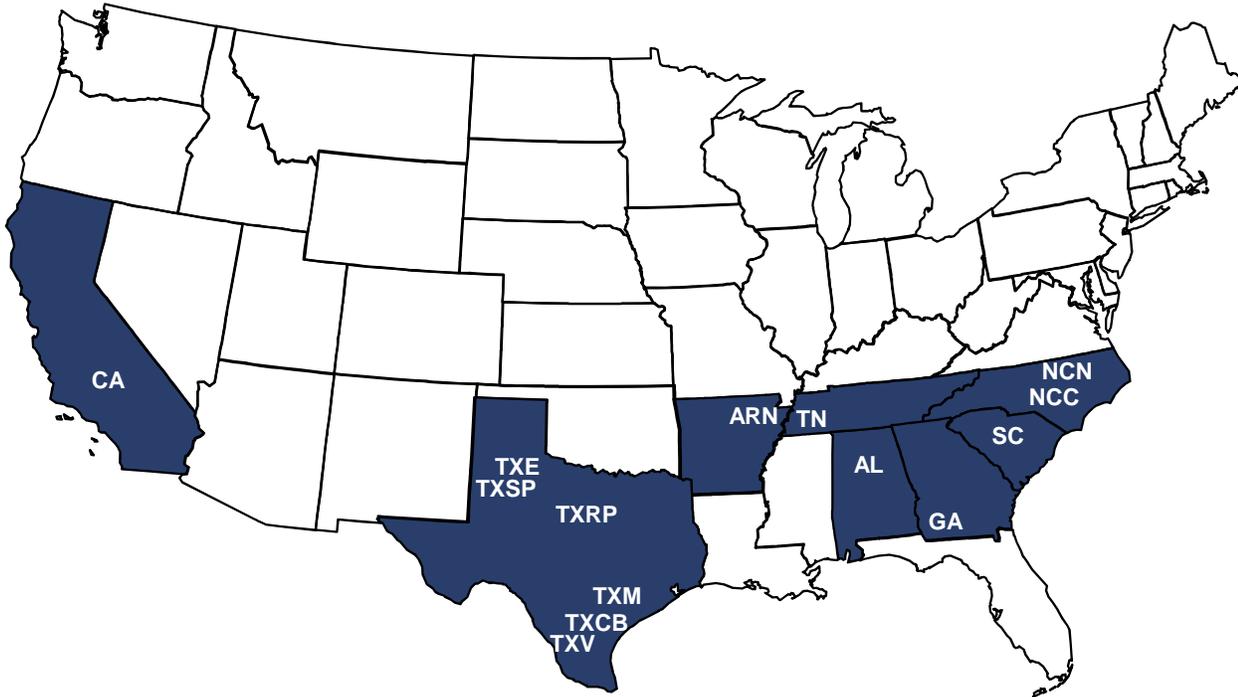
4 Reserve 2018 is average ending cash reserves, 2018 (\$1,000)

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

6 CRNW is average percentage change in real net worth over 2015-2018 period, (%)

# Representative Farm: Cotton

- Four of the sixteen cotton farms are characterized in good overall financial condition, three are in marginal condition, and nine are in poor condition.
- Nine of the farms are projected to experience severe cash flow problems (having a greater than 50 percent chance of a cash flow deficit).
- Eight farms are expected to have a greater than 50 percent chance of losing real equity over the period.



**Characteristics of Panel Farms Producing Cotton, 2014.**

	Cropland (acres)	Assets (\$1,000)	Debt/Asset (ratio)	Gross Receipts (\$1,000)	Cotton (acres)
TXSP2500	2,500	1,460.00	0.24	862.60	2,275
TXSP4500	4,500	3,107.00	0.18	1,960.30	4,047
TXEC5000	5,000	3,722.00	0.16	2,000.30	4,150
TXRP2500	2,500	724.00	0.23	512.40	1,000
TXMC1800	1,800	1,565.00	0.40	799.00	900
TXCB2500	2,500	1,845.00	0.41	830.30	1,250
TXCB8000	8,000	3,703.00	0.17	3,060.10	3,600
TXVC4500	4,500	5,514.00	0.15	1,870.50	1,395
ARNC5000	5,000	7,620.00	0.22	3,957.70	5,000
TNC2100	2,100	3,830.00	0.10	1,208.90	525
TNC4050	4,050	6,750.00	0.17	2,438.80	2,025
ALC3000	3,000	2,488.00	0.20	1,524.00	1,050
GAC2300	2,300	8,794.00	0.21	2,298.30	1,200
SCC1800	1,800	3,781.00	0.22	1,314.80	900
NCC1700	1,700	2,584.00	0.12	1,008.50	225
NCNP1500	1,500	3,031.00	0.18	937.90	375

# Representative Farm: Cotton

## Economic Viability of Representative Farms over the 2015-2018 Period

Farm Name	Overall Ranking		P(Negative Ending Cash)	P(Real Net Worth Declines)
	2015	2018	2015-2018	2015-2018
4/3/9				
TXSP2500			62-78	41-62
TXSP4500			15-38	1-13
TXEC5000			1-1	1-1
TXRP2500			99-99	92-99
TXMC1800			92-97	70-89
TXCB2500			99-99	90-98
TXCB8000			44-60	38-55
TXVC4500			5-1	1-1
ARNC5000			83-93	44-77
TNC2100			1-1	1-1
TNC4050			1-5	1-1
ALC3000			27-76	19-67
GAC2300			13-37	1-1
SCC1800			18-35	1-2
NCC1700			1-51	1-26
NCNP1500			72-99	4-83

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

<25	25-50	>50
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2 P(NegativeEnding Cash) is the probability that the farm will have a cash flow deficit. Reported values represent the probabilities for 2015 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 2015 and from 2012 to 2018.

## Implications of the January 2015 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	919.56	62.64	45.40	(494.53)	918.38	(5.97)
TXSP4500	1,999.60	137.02	292.10	229.24	2,803.82	0.55
TXEC5000	2,223.90	163.54	487.08	971.45	4,337.40	4.70
TXRP2500	460.09	30.89	(58.44)	(675.91)	25.93	(19.18)
TXMC1800	851.59	64.19	(10.60)	(789.80)	479.26	(10.84)
TXCB2500	893.16	77.24	(71.63)	(1,164.18)	537.95	(11.92)
TXCB8000	3,268.56	281.89	158.10	(312.21)	2,505.88	(4.97)
TXVC4500	1,988.69	144.45	402.14	1,166.11	6,028.04	2.64
ARNC5000	4,063.75	285.56	101.38	(2,109.88)	4,935.98	(4.86)
TNC2100	1,265.48	62.79	344.21	1,524.36	4,448.87	3.90
TNC4050	2,477.35	158.01	235.19	787.31	6,365.74	0.28
ALC3000	1,644.35	112.13	80.70	(464.97)	1,424.53	(6.29)
GAC2300	2,569.52	307.15	277.80	162.37	8,244.28	0.56
SCC1800	1,420.11	142.18	186.22	182.48	3,541.66	0.82
NCC1700	1,007.17	31.17	99.70	13.89	2,132.40	(2.80)
NCNP1500	1,021.91	107.44	27.87	(760.93)	2,113.86	(4.84)

1 Receipts are average annual total cash receipts including government payments, 2015-2018 (\$1,000)

2 Payments are average annual total government payments, 2015-2018 (\$1,000)

3 NCFI is average annual net cash farm income, 2015-2018 (\$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 2015-2018 period, (%)

# Representative Farm: Rice

- Six of the thirteen representative rice farms are projected to be in good overall financial condition, none are in marginal condition, and seven are in poor condition.
- Seven of the rice farms are expected to face severe cash flow problems; five of those farms have high likelihoods of losing real equity.



**Characteristics of Panel Farms Producing Rice, 2014.**

	Cropland (acres)	Assets (\$1,000)	Debt/Asset (ratio)	Gross Receipts (\$1,000)	Rice (acres)
CAR550	550	3,042.00	0.27	776.00	500
CAR3000	3,000	11,507.00	0.16	4,680.20	3,000
CABR1300	1,300	8,030.00	0.15	1,968.80	1,200
CACR800	800	4,984.00	0.13	1,299.90	800
TXR1500	1,500	1,866.00	0.16	726.00	600
TXR3000	3,000	1,330.00	0.10	1,328.80	1,200
TXBR1800	1,800	1,257.00	0.09	0.10	0
TXER3200	3,200	2,264.00	0.14	1,558.70	1,067
LASR1480	1,480	1,622.00	0.39	905.40	800
ARMR6500	6,500	10,295.00	0.32	3,688.20	325
ARSR3240	3,240	5,956.00	0.18	1,999.60	1,296
ARWR1400	1,400	3,665.00	0.32	910.10	700
ARHR3000	3,000	7,034.00	0.23	2,092.10	1,800

# Representative Farm: Rice

## Economic Viability of Representative Farms over the 2015-2018 Period

Farm Name	Overall Ranking		P(Negative Ending Cash)	P(Real Net Worth Declines)
	2015	2018	2015-2018	2015-2018
6/0/7				
CAR550			99-99	2-38
CAR3000			4-9	4-8
CABR1300			1-1	1-1
CACR800			4-9	1-1
TXR1500			49-91	1-31
TXR3000			1-15	1-8
TXBR1800			1-1	1-1
TXER3200			85-99	4-90
LASR1480			99-99	99-99
ARMR6500			98-99	88-99
ARSR3240			3-11	1-3
ARWR1400			99-99	91-99
ARHR3000			98-99	29-97

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

<25	25-50	>50
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2 P(NegativeEnding Cash) is the probability that the farm will have a cash flow deficit. Reported values represent the probabilities for 2015 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 2015 and from 2012 to 2018.

## Implications of the January 2015 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	781.04	9.54	76.95	(651.20)	2,304.05	(2.52)
CAR3000	4,648.56	54.25	449.86	1,715.10	11,399.64	0.82
CABR1300	1,998.23	22.93	578.11	2,631.06	8,933.19	2.90
CACR800	1,279.99	15.16	198.04	617.64	4,968.26	0.29
TXR1500	738.57	11.13	89.18	(225.25)	1,526.51	(2.10)
TXR3000	1,351.54	20.01	144.25	289.62	1,215.69	0.18
TXBR1800	832.85	17.95	271.62	1,238.57	1,809.66	11.29
TXER3200	1,529.84	23.05	(35.91)	(1,065.02)	1,247.73	(8.56)
LASR1480	919.69	13.46	(67.32)	(1,198.52)	239.70	(15.47)
ARMR6500	3,867.31	133.79	(932.27)	(7,808.73)	1,596.82	(15.99)
ARSR3240	2,052.08	55.09	231.85	741.03	5,176.39	(0.40)
ARWR1400	920.35	22.46	(73.42)	(1,791.68)	1,627.97	(8.22)
ARHR3000	2,192.94	46.43	27.50	(2,102.72)	4,682.78	(4.97)

1 Receipts are average annual total cash receipts including government payments, 2015-2018 (\$1,000)

2 Payments are average annual total government payments, 2015-2018 (\$1,000)

3 NCFI is average annual net cash farm income, 2015-2018 (\$1,000)

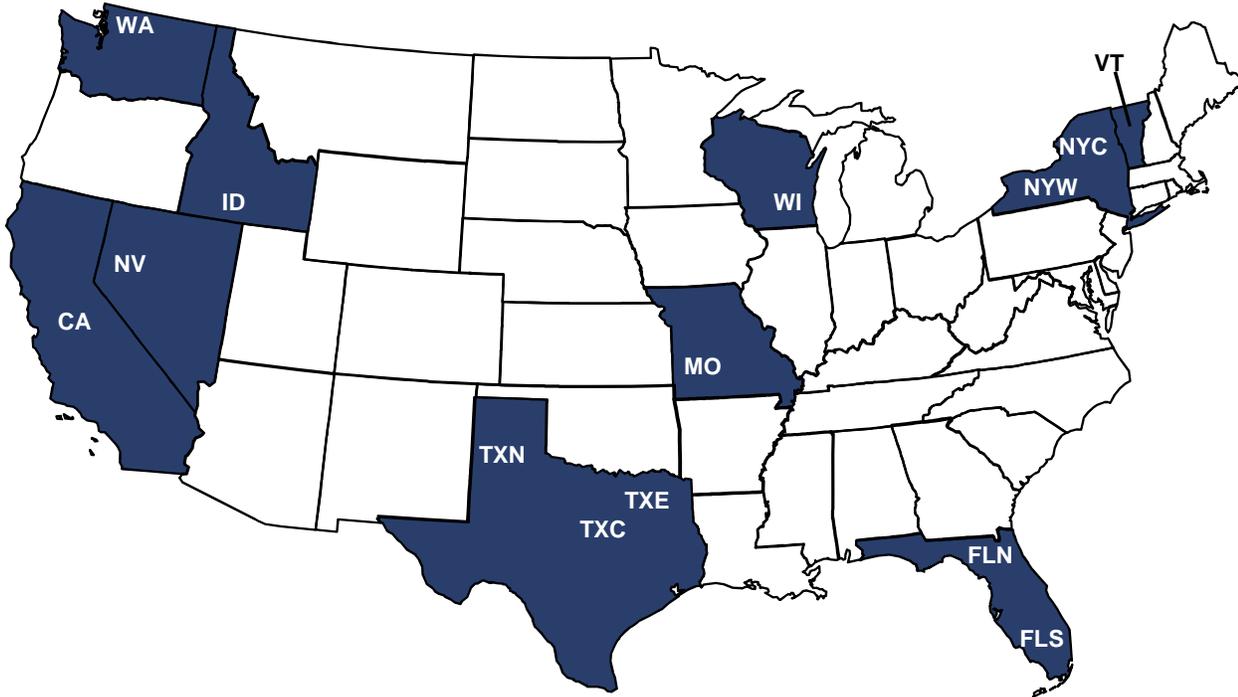
4 Reserve 2018 is average ending cash reserves, 2018 (\$1,000)

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

6 CRNW is average percentage change in real net worth over 2015-2018 period, (%)

# Representative Farm: Dairy

- Fifteen of eighteen dairy operations are in good overall financial condition. Two dairies are classified in marginal condition, and one is in poor condition.
- Two of the dairies are projected to experience severe liquidity pressure; however, only one dairy faces a greater than 25 percent chance of losing real equity.



**Characteristics of Panel Farms Producing Milk, 2014.**

	Cropland (acres)	Assets (\$1,000)	Debt/Asset (ratio)	Gross Receipts (\$1,000)	Cows (number)
CAD2000	1,200	25,065.00	0.22	13,370.40	2,000
WAD250	250	4,251.00	0.17	1,478.70	250
WAD850	605	11,894.00	0.16	6,268.60	850
IDD3000	1,500	31,364.00	0.13	20,768.90	3,000
NVD1000	200	8,975.00	0.15	6,955.20	1,000
TXND3000	520	20,786.00	0.17	19,373.10	3,000
TXCD1300	560	9,127.00	0.15	7,673.90	1,300
TXED400	950	3,274.00	0.18	2,036.00	400
WID145	600	3,472.00	0.18	1,147.60	145
WID1000	2,000	12,791.00	0.16	8,051.10	1,000
NYWD500	1,000	6,743.00	0.13	3,812.50	500
NYWD1200	2,100	16,518.00	0.15	8,819.00	1,200
VTD140	220	1,689.00	0.17	891.80	140
VTD400	1,000	5,483.00	0.18	2,873.70	400
MOGD550	0	4,095.00	0.13	1,950.30	550
MOGD180	0	1,402.00	0.13	709.40	180
FLND550	600	4,420.00	0.12	3,729.90	550
FLSD1500	400	12,002.00	0.19	10,344.60	1,500

# Representative Farm: Dairy

## Economic Viability of Representative Farms over the 2015-2018 Period

Farm Name	Overall Ranking		P(Negative Ending Cash)	P(Real Net Worth Declines)
	2015	2018	2015-2018	2015-2018
15/2/1				
CAD2000			1-2	1-6
WAD250			38-58	1-1
WAD850			1-1	1-1
IDD3000			10-17	1-1
NVD1000			1-1	1-1
TXND3000			2-4	1-1
TXCD1300			15-19	1-1
TXED400			8-13	1-1
WID145			1-1	1-1
WID1000			1-1	1-1
NYWD500			1-1	1-1
NYWD1200			1-1	1-1
VTD140			96-99	1-47
VTD400			3-15	1-1
MOGD550			1-1	1-1
MOGD180			1-1	1-1
FLND550			4-4	1-1
FLSD1500			59-41	3-17

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 2015 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 2015 and from 2012 to 2018.

## Implications of the January 2015 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)	(%)
CAD2000	10,596.47	30.71	2,302.08	3,859.41	22,895.30	1.03
WAD250	1,174.43	3.43	243.32	(77.33)	3,839.31	(0.50)
WAD850	4,994.41	12.85	1,319.20	3,624.05	12,588.41	3.14
IDD3000	16,355.24	17.54	3,050.84	4,170.39	30,513.15	0.57
NVD1000	5,525.54	0.00	1,153.00	2,825.10	8,695.72	2.10
TXND3000	15,487.56	4.21	3,048.48	5,843.69	19,767.08	2.58
TXCD1300	6,202.39	0.00	1,020.47	1,137.50	8,298.02	0.39
TXED400	1,618.05	0.00	369.75	516.89	3,154.79	1.19
WID145	930.29	2.86	302.07	529.07	3,259.08	1.16
WID1000	6,567.40	36.35	1,474.55	4,098.01	12,918.83	2.29
NYWD500	3,113.03	17.26	1,065.24	3,832.38	7,995.87	5.78
NYWD1200	7,102.01	29.08	2,080.45	6,396.35	17,835.15	3.79
VTD140	723.71	2.09	83.28	(304.35)	1,186.58	(4.17)
VTD400	2,318.22	7.56	414.23	405.19	4,855.56	(0.25)
MOGD550	1,583.07	0.00	711.63	2,102.01	4,888.74	5.92
MOGD180	575.03	0.00	225.21	512.39	1,499.80	3.48
FLND550	3,080.31	0.00	596.67	1,065.58	4,550.63	1.97
FLSD1500	8,652.91	0.00	1,039.21	250.28	10,266.54	(0.19)

1 Receipts are average annual total cash receipts including government payments, 2015-2018 (\$1,000)

2 Payments are average annual total government payments, 2015-2018 (\$1,000)

3 NCFI is average annual net cash farm income, 2015-2018 (\$1,000)

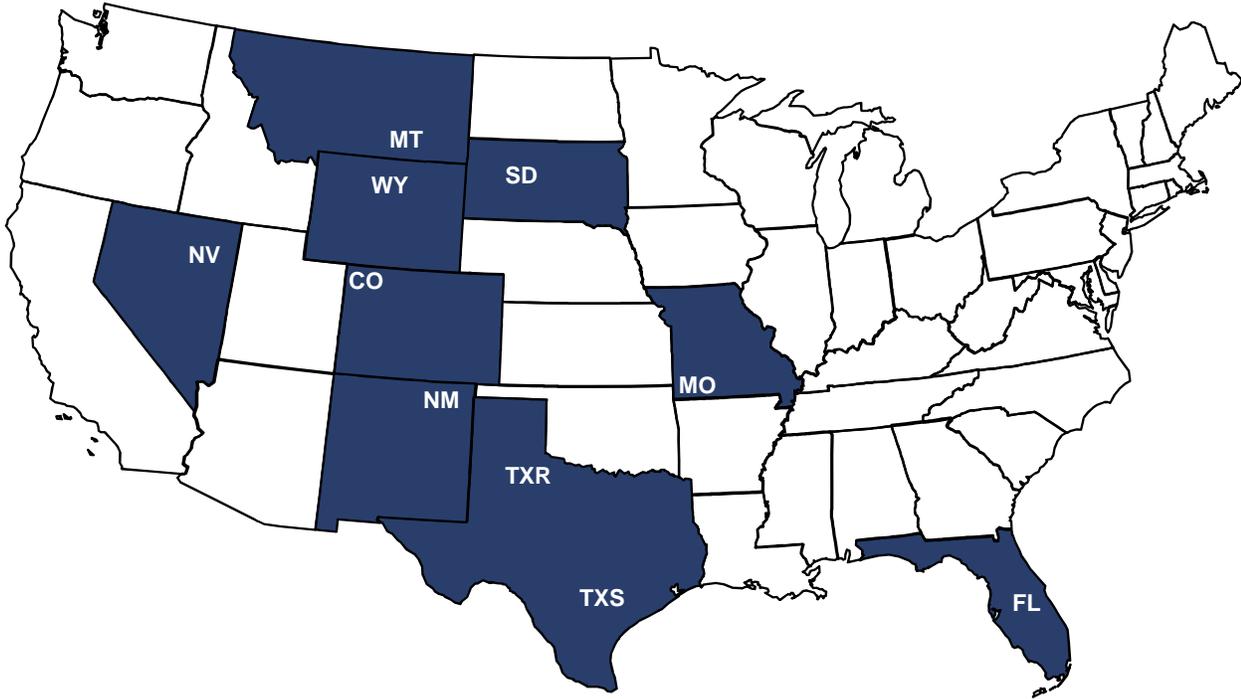
4 Reserve 2018 is average ending cash reserves, 2018 (\$1,000)

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

6 CRNW is average percentage change in real net worth over 2015-2018 period, (%)

# Representative Farm: Cow/Calf

- Eight of ten cow-calf operations are projected to be in good overall financial condition; one each is in marginal and poor condition.
- Only two operations will face significant liquidity pressure over the period, as their likelihoods of experiencing negative ending cash in 2018 are in excess of 95 percent.
- Only one of the ten operations is projected to face severe threats of losing real equity over the period.



**Characteristics of Panel Farms Producing Beef Cattle, 2014.**

	Cropland (acres)	Assets (\$1,000)	Debt/Asset (ratio)	Gross Receipts (\$1,000)	Cows (number)
NVB650	1,300	7,598.00	0.01	707.20	650
MTB600	0	7,673.00	0.02	674.10	600
WYB475	330	5,831.00	0.02	572.40	435
COB250	650	13,787.00	0.01	353.10	250
NMB160	0	6,268.00	0.02	214.30	160
SDB375	1,150	7,098.00	0.02	458.50	375
MOB250	280	3,248.00	0.02	477.10	250
TXRB250	0	7,619.00	0.06	514.90	335
TXSB275	0	5,085.00	0.02	353.10	275
FLB1155	5,400	22,675.00	0.01	1,198.10	1,155

# Representative Farm: Cow/Calf

## Economic Viability of Representative Farms over the 2015-2018 Period

Farm Name	Overall Ranking		P(Negative Ending Cash)	P(Real Net Worth Declines)
	2015	2018	2015-2018	2015-2018
8/1/1				
NVB650			1-1	1-1
MTB600			1-1	1-1
WYB475			1-1	1-1
COB250			1-1	1-1
NMB160			99-99	1-1
SDB375			1-1	1-1
MOB250			1-1	1-1
TXRB250			99-99	1-80
TXSB275			1-1	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 2015 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 2015 and from 2012 to 2018.

## Implications of the January 2015 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)	(%)
NVB650	652.23	0.00	267.03	675.59	8,478.67	(0.02)
MTB600	618.92	0.00	311.57	872.88	8,493.98	(0.14)
WYB475	534.16	0.00	223.58	500.97	6,311.20	(0.31)
COB250	330.48	0.00	153.04	296.44	15,186.46	(0.85)
NMB160	197.09	0.00	84.71	(178.59)	6,620.30	(1.46)
SDB375	421.97	0.00	195.54	263.03	7,755.34	(0.59)
MOB250	454.37	3.81	259.02	794.39	3,697.37	1.31
TXRB250	478.03	0.00	(65.95)	(891.78)	7,224.02	(2.68)
TXSB275	327.69	0.00	133.40	167.95	5,440.66	(0.80)
FLB1155	1,111.32	0.00	540.70	1,947.93	25,761.28	(0.20)

1 Receipts are average annual total cash receipts including government payments, 2015-2018 (\$1,000)

2 Payments are average annual total government payments, 2015-2018 (\$1,000)

3 NCFI is average annual net cash farm income, 2015-2018 (\$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 2015-2018 period, (%)