



# Representative Farms Economic Outlook for the August 2010 FAPRI/AFPC Baseline

# Briefing Paper 10-2 October 2010



### **Agricultural and Food Policy Center**

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#### REPRESENTATIVE FARMS ECONOMIC OUTLOOK FOR THE AUGUST 2010 FAPRI/AFPC BASELINE

AFPC Briefing Paper 10-2

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### **EXECUTIVE SUMMARY**

The Agricultural and Food Policy Center (AFPC) at Texas A&M University develops and maintains data to simulate 98 representative crop, dairy, and livestock operations in major production areas in 28 states. The chief purpose of this analysis is to project those farms' economic viability by region and commodity for 2010 through 2015. The data necessary to simulate the economic activity of these operations is developed through ongoing cooperation with panels of agricultural producers in selected states. The Food and Agricultural Policy Research Institute (FAPRI) provided projected prices, policy variables, and input inflation rates in their August 2010 Baseline.

Under the August 2010 Baseline, 23 of the 64 crop farms are considered in good liquidity condition (less than a 25 percent chance of negative ending cash by 2015). Nine crop farms have between a 25 percent and a 50 percent likelihood of negative ending cash, and the remaining 32 crop farms have greater than a 50 percent chance of negative ending cash. Furthermore, 27 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). Fourteen crop farms have between a 25 percent and 50 percent likelihood of losing real net worth, and 23 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: Ten of the 23 feedgrain farms are in good overall financial condition. Five are classified in marginal condition, and eight are in poor condition.
- WHEAT FARMS: Five of the 11 wheat farms are classified in good financial condition, two are in marginal condition, and four are in poor condition.
- COTTON FARMS: Five of the 16 cotton farms are classified in good condition, one is in marginal condition, and ten are in poor condition.
- RICE FARMS: Two of the 14 rice farms are projected to be in good financial condition, three are in marginal condition, and nine are in poor condition.
- DAIRY FARMS: Nine of the 22 dairy farms are in good overall financial condition. Seven are considered to be in marginal condition, and six are in poor condition.
- BEEF CATTLE RANCHES: Six of the 12 cattle ranches are classified in good financial condition, five are in marginal condition, and only one is projected to be in poor condition.

## REPRESENTATIVE FARMS ECONOMIC OUTLOOK FOR THE AUGUST 2010 FAPRI/AFPC BASELINE

The farm level economic impacts of the FAPRI August 2010 Baseline on representative crop and livestock operations are projected in this report. The analysis was conducted over the 2008-2015 planning horizon using FLIPSIM, AFPC's whole farm simulation model. Data to simulate farming operations in the nation's major production regions came from two sources:

- Producer panel cooperation to develop economic information to describe and simulate representative crop, livestock, and dairy farms.
- Projected prices, policy variables, and input inflation rates from the Food and Agricultural Policy Research Institute (FAPRI) August 2010 Baseline.

The FLIPSIM policy simulation model incorporates the historical risk faced by farmers for prices and production. This report presents the results of the August 2010 Baseline in a risk context using selected simulated probabilities and ranges for annual net cash farm income values. The probability of a farm experiencing negative ending cash reserves and the probability of a farm losing real net worth are included as indicators of the cash flow and equity risks facing farms through the year 2015.

### DEFINITIONS OF VARIABLES IN THE SUMMARY TABLES

- **Overall Financial Position, 2010-2015** -- As a means of summarizing the representative farms' economic efficiency, liquidity, and solvency position, AFPC classifies each farm as being in either a good (green), marginal (yellow) or poor (red) position. AFPC defines a farm 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** -- 2010-2015 average of cash receipts from all farm related sources, including market sales, CCP/ACRE and direct payments, marketing loan gains/LDPs, crop insurance indemnities, and other receipts.
- **Payments** -- 2010-2015 average of annual CCP or ACRE payments, direct payments, and marketing loan gains/LDPs for crops and the MILC program payment for dairy farms.
- NCFI -- 2010-2015 average net cash farm income equals average total receipts minus average total cash expenses.
- **Reserve 2015** -- equals total cash on hand at the end of year 2015. Ending cash equals beginning cash reserves plus net cash farm income and interest earned on cash reserves less principal payments, federal taxes (income and self employment), state income taxes, family living withdrawals, and actual machinery replacement costs (not depreciation).
- Net Worth 2015 -- equity equals total assets including land minus total debt from all sources and is reported at the end of 2015.
- **CRNW** -- annualized percentage change in the operator's net worth from January 1, 2010 through December 31, 2015, after adjusting for inflation.

Table 1. FAPRI August 2010 Baseline Projections of Crop and Livestock Prices, 2008-2015

	2008	2009	2010	2011	2012	2013	2014	2015
Crop Prices								
Corn (\$/bu.)	4.06	3.55	3.68	3.80	3.78	3.83	3.96	3.98
Wheat (\$/bu.)	6.78	4.87	5.10	4.92	4.76	4.87	4.94	4.99
Cotton (\$/lb.)	0.4780	0.6250	0.6889	0.6634	0.6700	0.6752	0.6817	0.6870
Sorghum (\$/bu.)	3.20	3.15	3.42	3.50	3.52	3.56	3.68	3.71
Soybeans (\$/bu.)	9.97	9.60	9.35	9.26	9.43	9.45	9.53	9.59
Barley (\$/bu.)	5.37	4.66	3.82	4.10	4.17	4.20	4.29	4.28
Oats (\$/bu.)	3.15	2.02	2.42	2.63	2.67	2.68	2.73	2.74
Rice (\$/cwt.)	16.80	14.00	11.98	11.70	11.73	11.90	12.00	12.07
Soybean Meal (\$/ton)	315.87	295.68	259.12	256.23	262.43	265.09	267.79	269.36
All Hay (\$/ton)	152.00	111.00	112.73	121.26	123.43	124.42	126.04	128.22
Peanuts (\$/ton)	460.00	436.00	449.50	455.24	455.05	458.57	462.49	465.14
Cattle Prices								
Feeder Cattle (\$/cwt)	107.62	101.89	115.78	123.79	132.62	137.46	139.82	137.72
Fed Cattle (\$/cwt)	92.27	82.68	93.50	98.50	103.34	105.85	106.54	105.65
Culled Cows (\$/cwt)	54.92	47.01	58.09	60.45	61.95	63.37	63.74	62.53
Milk Price								
U.S. All Milk Price (\$/cwt)	18.45	12.93	16.05	16.56	17.02	17.31	17.76	18.26

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

#### Table 2. FAPRI August 2010 Baseline Assumed Rates of Change in Input Prices and Annual Changes in Land Values, 2009-2015

	2009	2010	2011	2012	2013	2014	2015
Annual Rate of Change for Input Prices Paid							
Annual Rate of Change for input Frices Faid							
Seed Prices (%)	15.44	3.30	0.51	3.06	2.76	2.70	2.25
All Fertilizer Prices (%)	-31.10	-6.22	0.73	12.17	6.23	1.79	-1.59
Herbicide Prices (%)	8.46	2.35	-0.18	2.66	2.34	1.83	1.44
Insecticide Prices (%)	3.21	3.46	0.72	3.07	2.73	2.00	1.63
Fuel and Lube Prices (%)	-33.72	18.50	5.20	6.83	4.06	2.92	3.03
Machinery Prices (%)	6.22	5.86	1.14	3.03	2.81	2.65	2.44
Wages (%)	2.19	1.45	2.23	2.06	2.38	2.75	2.98
Supplies (%)	2.68	5.08	0.76	3.11	2.60	1.81	1.24
Repairs (%)	1.92	2.71	1.76	2.36	2.62	2.72	2.53
Services (%)	8.90	6.17	1.56	3.53	2.99	2.42	2.05
Taxes (%)	13.88	4.74	-0.43	3.49	2.67	2.17	1.81
PPI Items (%)	-4.21	2.24	1.57	3.77	2.60	2.01	1.45
PPI Total (%)	-2.66	1.99	1.55	3.91	2.85	2.30	1.80
Annual Change in Consumer Price Index (%)	-0.32	1.53	1.44	2.00	2.15	2.11	2.07
Annual Rate of Change for U.S. Land Prices (%)	-3.23	-1.63	1.01	1.94	1.45	2.81	1.22

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

## **Representative Farm: Feed Grains**

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



### Characteristics of Panel Farms Producing Feed Grains, 2009.

	Cropland	Assets	Debt/Asset	Gross Receipts	Feed Grains
	(acres)	(\$1,000)	(ratio)	(\$1,000)	(acres)
IAG1350	1,350	2,404.00	0.17	810.80	1,350
IAG3400	3,400	6,939.00	0.19	1,877.40	3,400
NEG2400	2,400	3,943.00	0.16	1,813.70	2,400
NEG4300	4,300	7,772.00	0.19	2,792.90	3,870
NDG2500	2,500	1,952.00	0.17	692.40	2,000
NDG8000	8,000	10,736.00	0.26	2,579.90	6,450
ING1000	1,000	2,651.00	0.16	579.30	1,000
ING2200	2,200	6,016.00	0.17	1,427.00	2,200
MOCG2050	2,050	6,789.00	0.17	1,039.20	2,050
MOCG4000	4,000	12,361.00	0.15	1,915.60	4,000
MONG1850	1,850	6,218.00	0.18	934.00	1,800
LAG2640	2,640	1,161.00	0.23	1,598.80	1,716
LANG2500	2,500	5,316.00	0.18	1,878.60	1,750
TNG900	900	1,526.00	0.19	473.10	900
TNG2200	2,200	3,696.00	0.29	1,053.30	2,200
SCG3500	3,500	6,645.00	0.20	1,669.50	3,500
TXNP3000	3,000	1,648.00	0.21	1,455.60	1,200
TXNP8000	8,000	4,812.00	0.21	3,983.20	3,987
TXPG2500	2,500	3,514.00	0.26	1,362.80	1,058
TXPG3760	3,760	4,683.00	0.43	2,694.70	1,878
TXHG2000	2,000	1,407.00	0.23	463.50	1,500
TXWG1600	1,600	1,079.00	0.21	431.00	1,300
TXUG1200	1,200	230.00	0.98	611.70	750

### **Representative Farm: Feed Grains**

Farm Name	Overall	Ranking	P(Negative Ending Cash)	P(Real Net Worth Declines)	
10/5/8	/5/8 2010		2010-2015	2010-2015	
IAG1350			1-3	1-1	
IAG3400			1-1	1-1	
NEG2400			1-4	1-7	
NEG4300			1-6	1-6	
NDG2500			18-15	1-11	
NDG8000			1-7	1-1	
ING1000			52-50	1-5	
ING2200			1-16	1-1	
MOCG2050			1-1	1-1	
MOCG4000			1-1	1-1	
MONG1850			90-81	1-8	
LAG2640			20-30	1-26	
LANG2500			6-13	1-5	
TNG900			31-71	1-31	
TNG2200			90-80	1-39	
SCG3500			22-36	1-19	
TXNP3000			29-74	1-61	
TXNP8000			33-44	1-30	
TXPG2500			83-89	1-63	
TXPG3760			98-99	1-97	
TXHG2000			90-88	1-64	
TXWG1600			91-91	1-66	
TXUG1200			93-91	1-81	

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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 2010 and 2015.
 3 P(Real Net Worth Decline) is the probability that the farm will have a loss in real net worth relative to the beginning net worth. Reported values represent the

probabilities for losing real net worth from 2008 to 2010 and from 2008 to 2015.

### Implications of the August 2010 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Feed Grains and Oilseeds

	Receipts	Payments	NCFI	Reserve 2015	Net Worth 2015	CRNW
	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(%)
IAG1350	900.36	42.80	295.92	671.57	2,886.10	6.75
IAG3400	2,065.17	66.09	795.40	1,959.11	7,990.34	6.13
NEG2400	1,956.44	74.69	498.07	1,541.44	4,608.51	5.33
NEG4300	3,099.30	91.30	816.93	1,960.20	8,407.11	4.87
NDG2500	928.69	54.63	248.59	537.52	2,265.71	5.78
NDG8000	3,143.86	119.16	933.93	1,992.31	11,330.92	5.97
ING1000	600.22	20.21	145.38	26.19	2,609.46	2.68
ING2200	1,387.16	43.98	364.18	488.38	6,263.99	3.71
MOCG2050	1,063.40	50.11	506.70	1,149.79	7,620.14	5.11
MOCG4000	2,013.68	25.53	1,073.35	3,390.33	14,934.60	6.19
MONG1850	1,050.14	50.26	180.63	(513.10)	5,842.69	2.48
LAG2640	1,786.06	135.75	227.87	251.38	1,264.62	5.21
LANG2500	1,915.38	130.70	446.36	709.31	5,707.98	4.45
TNG900	462.20	10.86	126.62	(152.96)	1,402.05	1.63
TNG2200	991.08	28.05	210.96	(615.34)	2,830.11	1.13
SCG3500	1,810.63	109.07	316.25	360.44	6,337.88	2.87
TXNP3000	1,555.64	53.55	98.90	(393.84)	1,168.10	(1.84)
TXNP8000	4,315.61	109.53	424.05	149.24	4,637.28	2.62
TXPG2500	1,461.82	95.69	138.15	(832.78)	2,455.82	(0.79)
TXPG3760	2,964.89	113.92	(602.96)	(5,946.85)	(1,598.14)	(31.24)
TXHG2000	513.92	31.65	39.22	(339.32)	931.07	(1.93)
TXWG1600	489.52	32.20	26.94	(416.30)	672.87	(3.07)
TXUG1200	833.33	46.34	14.29	(542.50)	(355.06)	29.02

1 Receipts are average annual total cash receipts including government payments, 2010-2015 (\$1,000)

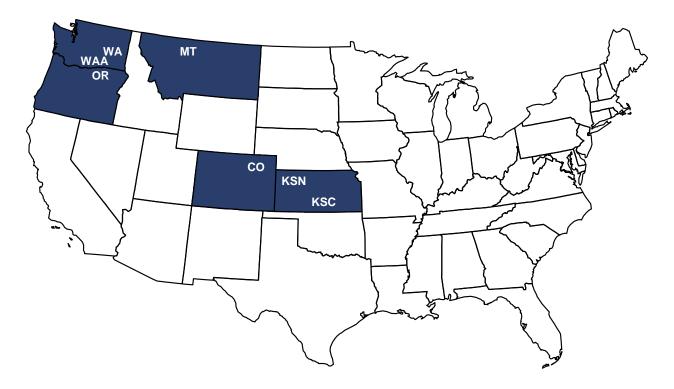
2 Payments are average annual total government payments, 2010-2015 (\$1,000)

3 NCFI is average annual net cash farm income, 2010-2015 (\$1,000)

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

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

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



#### Characteristics of Panel Farms Producing Wheat, 2009.

	Cropland	Assets	Debt/Asset	Gross Receipts	Wheat
	(acres)	(\$1,000)	(ratio)	(\$1,000)	(acres)
WAW1725	1,725	1,594.00	0.19	618.30	1,147
WAW5500	5,500	6,859.00	0.18	1,874.20	3,055
WAAW3500	3,500	1,441.00	0.17	342.80	1,500
ORW3600	3,600	1,374.00	0.14	434.50	1,600
MTW4500	4,500	2,781.00	0.17	467.60	2,330
KSCW2000	2,000	1,833.00	0.15	469.00	1,200
KSCW4500	4,500	2,986.00	0.22	908.70	2,700
KSNW4000	4,000	1,963.00	0.16	774.20	1,500
KSNW5500	5,500	3,511.00	0.16	1,542.90	1,820
COW3000	3,000	1,444.00	0.15	383.20	970
COW5640	5,640	2,523.00	0.19	674.80	2,256

### **Representative Farm: Wheat**

### Economic Viability of Representative Farms over the 2010-2015 Period

Farm Name	Overall	Ranking	P(Negative Ending Cash)	P(Real Net Worth Declines)	
5/2/4	2010	2015	2010-2015	2010-2015	
WAW1725			1-1	1-1	
WAW5500			1-1	1-1	
WAAW3500			72-77	1-36	
MTW4500			19-65	1-26	
ORW3600			1-1	1-1	
KSCW2000			1-25	1-22	
KSCW4500			1-1	1-2	
KSNW4000			18-56	1-24	
KSNW5500			31-76	1-55	
COW3000			1-11	1-4	
COW5640			33-66	1-32	

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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 2010 and 2015.

3 P(Real Net Worth Decline) is the probability that the farm will have a loss in real net worth relative to the beginning net worth. Reported values represent the probabilities for losing real net worth from 2008 to 2010 and from 2008 to 2015.

### Implications of the August 2010 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Wheat

	Receipts	Payments	NCFI	Reserve 2015	Net Worth 2015	CRNW
	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(%)
WAW1725	641.34	48.74	281.57	1,003.88	2,243.03	9.31
WAW5500	1,915.73	132.06	542.13	1,706.28	7,479.99	4.61
WAAW3500	347.03	29.45	86.10	(129.26)	1,245.92	0.80
ORW3600	431.60	30.22	220.13	627.88	1,755.55	6.28
MTW4500	478.98	49.05	103.39	(110.13)	2,467.25	1.25
KSCW2000	474.82	43.49	131.89	204.84	1,757.62	2.13
KSCW4500	1,015.56	98.39	371.94	850.32	3,311.36	5.64
KSNW4000	774.87	36.96	184.92	(67.57)	1,966.57	2.60
KSNW5500	1,328.25	53.84	107.56	(434.70)	2,855.10	(0.38)
COW3000	385.50	24.51	144.18	231.77	1,544.55	3.89
COW5640	692.64	62.94	167.19	(170.98)	2,200.78	1.63

1 Receipts are average annual total cash receipts including government payments, 2010-2015 (\$1,000)

2 Payments are average annual total government payments, 2010-2015 (\$1,000)

3 NCFI is average annual net cash farm income, 2010-2015 (\$1,000)

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

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

- Five of the sixteen cotton farms are characterized in good overall financial condition, one is in marginal condition, and ten are in poor condition.
- Ten of the farms are projected to experience severe cash flow problems, and eight farms have more than a 50 percent chance of losing real equity over the period.



### Characteristics of Panel Farms Producing Cotton, 2009.

	Cropland	Assets	Debt/Asset	Gross Receipts	Cotton
	(acres)	(\$1,000)	(ratio)	(\$1,000)	(acres)
TXSP2500	2,500	896.00	0.42	652.10	1,958
TXSP3745	3,745	1,562.00	0.24	1,077.20	2,916
TXEC5000	5,000	1,899.00	0.18	1,953.90	3,650
TXRP2500	2,500	600.00	0.19	385.10	1,000
TXMC1800	1,800	967.00	0.17	640.80	600
TXCB2250	2,250	1,277.00	0.26	684.70	1,000
TXCB8000	8,000	2,124.00	0.24	1,670.30	2,800
TXVC4500	4,500	3,100.00	0.20	1,623.60	1,495
CAC4000	4,000	17,927.00	0.16	6,078.50	1,333
ARNC5000	5,000	6,558.00	0.24	3,647.60	5,000
TNC2100	2,100	2,764.00	0.11	1,156.60	525
TNC4050	4,050	5,171.00	0.14	2,404.90	2,025
ALC3000	3,000	1,748.00	0.30	1,214.80	1,500
GAC2300	2,300	4,521.00	0.37	1,819.60	1,495
SCC1500	1,500	1,134.00	0.25	855.70	525
NCC1500	1,500	2,371.00	0.24	1,147.10	225

### **Representative Farm: Cotton**

#### Economic Viability of Representative Farms over the 2010-2015 Period

Farm Name	Overall	Ranking	P(Negative Ending Cash)	P(Real Net Worth Declines)
5/1/10	2010	2015	2010-2015	2010-2015
TXSP2500			92-98	1-95
TXSP3745			86-99	1-96
TXEC5000			7-25	1-29
TXRP2500			73-58	1-53
TXMC1800			81-93	1-80
TXCB2250			64-74	1-40
TXCB8000			54-69	1-51
TXVC4500			21-10	1-4
CAC4000			1-2	1-3
ARNC5000			67-84	1-45
TNC2100			1-1	1-1
TNC4050			1-6	1-9
ALC3000			71-88	1-71
GAC2300			99-99	1-99
SCC1500			81-85	1-71
NCC1500			1-1	1-1

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

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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 2010 and 2015.

3 P(Real Net Worth Decline) is the probability that the farm will have a loss in real net worth relative to the beginning net worth. Reported values represent the

probabilities for losing real net worth from 2008 to 2010 and from 2008 to 2015.

#### Implications of the August 2010 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Cotton

	Receipts	Payments	NCFI	Reserve 2015	Net Worth 2015	CRNW
	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(%)
TXSP2500	729.72	59.26	(96.79)	(1,270.37)	(501.04)	(46.19)
TXSP3745	1,214.61	100.60	(67.10)	(2,126.79)	(353.07)	(23.83)
TXEC5000	2,158.16	139.83	287.42	516.00	2,061.12	4.08
TXRP2500	530.86	38.23	57.19	(73.19)	458.69	(0.96)
TXMC1800	701.23	56.44	70.41	(645.83)	460.23	(7.30)
TXCB2250	812.61	64.09	85.79	(330.11)	952.27	1.20
TXCB8000	2,992.24	211.90	309.88	(911.41)	1,235.35	(2.60)
TXVC4500	1,816.91	136.62	446.44	975.36	3,860.13	8.31
CAC4000	6,374.43	22.22	935.34	3,450.08	18,482.15	3.52
ARNC5000	4,123.17	204.58	457.35	(1,234.52)	5,157.44	0.43
TNC2100	1,266.71	64.93	397.79	1,538.90	3,842.71	7.69
TNC4050	2,547.63	139.40	499.89	1,791.78	6,102.98	5.09
ALC3000	1,390.68	121.76	160.56	(1,042.70)	742.21	(7.25)
GAC2300	2,097.49	188.14	(234.59)	(3,768.09)	612.65	(12.87)
SCC1500	963.55	81.09	40.86	(486.49)	600.22	(5.11)
NCC1500	974.70	58.86	291.87	608.51	2,539.54	5.97

1 Receipts are average annual total cash receipts including government payments, 2010-2015 (\$1,000)

2 Payments are average annual total government payments, 2010-2015 (\$1,000)

3 NCFI is average annual net cash farm income, 2010-2015 (\$1,000)

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

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

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



#### Characteristics of Panel Farms Producing Rice, 2009.

	Cropland	Assets	Debt/Asset	Gross Receipts	Rice
	(acres)	(\$1,000)	(ratio)	(\$1,000)	(acres)
CAR550	550	2,371.00	0.14	841.60	500
CAR3000	3,000	9,476.00	0.17	5,220.50	3,000
CABR1300	1,300	5,575.00	0.16	1,982.60	1,200
CACR800	800	3,687.00	0.15	1,351.30	800
TXR1350	1,350	1,459.00	0.14	546.80	450
TXR3000	3,000	1,228.00	0.08	1,340.30	1,200
TXBR1800	1,800	741.00	0.30	961.70	600
TXER3200	3,200	1,357.00	0.14	1,532.00	1,067
LASR1200	1,200	767.00	0.14	790.90	660
ARMR7500	7,500	8,261.00	0.24	4,861.30	1,875
ARSR3240	3,240	3,946.00	0.20	1,895.80	1,620
ARWR1400	1,400	2,910.00	0.15	980.60	700
ARHR3000	3,000	4,863.00	0.22	1,974.00	1,450
MOWR4000	4,000	11,809.00	0.19	2,773.70	2,000

### **Representative Farm: Rice**

#### Economic Viability of Representative Farms over the 2010-2015 Period

Farm Name	Overall	Ranking	P(Negative Ending Cash)	P(Real Net Worth Declines)
2/3/9	2010	2015	2010-2015	2010-2015
CAR550			1-48	1-62
CAR3000			3-25	1-40
CABR1300			1-1	1-1
CACR800			3-2	1-6
TXR1350			57-97	1-91
TXR3000			3-31	1-50
TXBR1800			71-91	1-81
TXER3200			62-95	1-90
LASR1200			3-17 1-3	
ARMR7500			59-86	1-70
ARSR3240			19-68	1-58
ARWR1400			76-97	1-93
ARHR3000			84-98	1-91
MOWR4000			23-51	1-25

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

2 P(NegativeEnding Cash) is the probability that the farm will have a cash flow deficit. Reported values represent the probabilities for 2010 and 2015.

3 P(Real Net Worth Decline) is the probability that the farm will have a loss in real net worth relative to the beginning net worth. Reported values represent the probabilities for losing real net worth from 2008 to 2010 and from 2008 to 2015.

### Implications of the August 2010 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Rice

	Receipts	Payments	NCFI	Reserve 2015	Net Worth 2015	CRNW
	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(%)
CAR550	765.80	77.35	125.75	16.53	1,958.46	(0.63)
CAR3000	4,265.14	149.62	292.47	1,339.80	8,073.32	0.90
CABR1300	1,901.63	140.54	571.82	2,403.59	6,570.54	5.74
CACR800	1,259.11	120.16	250.23	1,116.94	3,904.84	3.62
TXR1350	483.36	60.31	(15.92)	(704.19)	651.86	(7.51)
TXR3000	1,183.68	140.24	143.43	406.45	1,169.38	0.22
TXBR1800	849.55	95.15	(33.35)	(833.47)	(201.68)	(29.87)
TXER3200	1,405.09	162.70	(138.42)	(1,530.75)	(321.13)	(25.60)
LASR1200	737.60	56.85	111.57	301.68	800.12	3.04
ARMR7500	4,976.52	235.81	253.65	(2,880.71)	4,520.92	(4.40)
ARSR3240	1,770.90	183.57	203.27	(787.98)	2,752.87	(1.63)
ARWR1400	871.33	85.67	(25.95)	(1,376.07)	1,413.33	(6.66)
ARHR3000	1,874.94	186.42	(119.40)	(3,212.35)	1,457.81	(9.96)
MOWR4000	2,552.37	194.04	438.79	(203.27)	10,551.25	1.86

1 Receipts are average annual total cash receipts including government payments, 2010-2015 (\$1,000)

2 Payments are average annual total government payments, 2010-2015 (\$1,000)

3 NCFI is average annual net cash farm income, 2010-2015 (\$1,000)

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

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

- Nine of twenty-two dairy operations are in good overall financial condition. Seven dairies are classified in marginal condition, and six are in poor condition.
- Thirteen of the dairies are projected to experience severe liquidity pressure, but only three dairies are expected to face a 50 percent or greater chance of losing real equity.



#### Characteristics of Panel Farms Producing Milk, 2009.

	Cropland	Assets	Debt/Asset	Gross Receipts	Cows
	(acres)	(\$1,000)	(ratio)	(\$1,000)	(number)
CAD1710	700	20,286.00	0.32	5,075.70	1,710
WAD250	200	3,730.00	0.31	845.90	250
WAD850	605	8,560.00	0.36	2,707.30	850
IDD1000	360	6,404.00	0.29	3,394.70	1,000
IDD3000	1,500	21,186.00	0.27	9,817.40	3,000
TXND3000	520	14,965.00	0.32	8,736.60	3,000
TXCD550	750	4,097.00	0.32	1,551.40	550
TXCD1300	560	7,302.00	0.37	3,799.60	1,300
TXED450	850	3,073.00	0.38	1,255.50	450
TXED1000	750	6,172.00	0.39	2,991.60	1,000
WID145	600	2,546.00	0.25	610.70	145
WID1000	2,000	7,450.00	0.36	3,958.60	1,000
NYWD600	1,200	5,199.00	0.42	2,085.20	600
NYWD1200	2,100	10,383.00	0.32	4,238.80	1,200
NYCD110	325	1,127.00	0.21	440.40	110
NYCD550	1,100	5,243.00	0.41	2,200.70	550
VTD140	220	1,314.00	0.34	493.60	140
VTD400	1,000	4,252.00	0.39	1,431.50	400
MOGD500	0	2,123.00	0.27	939.70	500
MOCD500	530	3,984.00	0.40	1,614.60	500
FLND550	600	3,843.00	0.23	1,778.80	550
FLSD1500	400	12,003.00	0.40	5,475.80	1,500

### **Representative Farm: Dairy**

### Economic Viability of Representative Farms over the 2010-2015 Period

Farm Name	Overall Ranking		P(Negative Ending Cash)	P(Real Net Worth Declines)	
9/7/6	2010	2015	2010-2015	2010-2015	
CAD1710			99-82	1-4	
WAD250			99-75	1-8	
WAD850			99-57	1-9	
IDD1000			96-19	1-2	
IDD3000			90-10	1-1	
TXND3000			65-8	1-1	
TXCD550			99-19	1-1	
TXCD1300			99-68	1-14	
TXED450			99-79	1-19	
TXED1000			99-82	1-32	
WID145			69-12	1-2	
WID1000			98-58	1-14	
NYWD600			99-99	1-69	
NYWD1200			90-12	1-1	
NYCD110			29-1	1-1	
NYCD550			99-93	1-15	
VTD140			99-98	1-55	
VTD400			99-97	1-40	
MOGD500			70-5	1-1	
MOCD500			99-96	1-49	
FLND550			60-1	1-1	
FLSD1500			99-97 1-52		

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

 <25</td>
 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 2010 and 2015.

3 P(Real Net Worth Decline) is the probability that the farm will have a loss in real net worth relative to the beginning net worth. Reported values represent the probabilities for losing real net worth from 2008 to 2010 and from 2008 to 2015.

### Implications of the August 2010 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Milk

	Receipts	Payments	NCFI	Reserve 2015	Net Worth 2015	CRNW
	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(%)
CAD1710	7,277.89	0.87	809.99	(1,573.77)	16,814.29	3.24
WAD250	1,176.93	0.60	197.22	(322.39)	3,265.01	4.19
WAD850	3,926.59	0.60	550.45	(220.40)	7,587.82	5.71
IDD1000	4,887.33	0.60	762.57	1,139.07	7,856.50	10.30
IDD3000	14,326.33	0.60	2,891.75	5,730.21	27,151.33	10.19
TXND3000	12,452.98	0.60	1,842.13	3,865.24	17,628.50	9.17
TXCD550	2,152.17	0.60	346.73	409.13	4,394.21	7.89
TXCD1300	5,271.88	0.60	473.07	(494.19)	6,396.43	5.20
TXED450	1,736.01	0.60	139.82	(474.75)	2,450.96	4.41
TXED1000	4,207.12	0.60	281.93	(1,367.81)	4,421.33	3.01
WID145	783.35	0.60	215.05	239.45	2,641.92	5.74
WID1000	5,366.23	16.48	394.12	(642.91)	6,375.25	6.01
NYWD600	2,869.35	0.60	16.57	(2,426.26)	2,488.50	(2.55)
NYWD1200	5,856.12	0.60	916.25	1,469.99	11,086.42	7.83
NYCD110	569.48	5.12	200.87	378.85	1,482.82	8.54
NYCD550	2,985.00	0.60	292.63	(1,229.05)	4,043.53	4.77
VTD140	649.72	0.60	41.73	(413.47)	836.81	(0.44)
VTD400	1,980.50	0.60	90.31	(1,203.68)	2,744.92	1.13
MOGD500	1,295.43	0.60	347.21	678.56	2,809.12	10.66
MOCD500	2,255.49	0.60	106.41	(1,545.95)	2,375.02	0.24
FLND550	2,405.14	0.60	557.96	1,427.36	5,366.02	10.62
FLSD1500	7,240.89	0.60	(55.29)	(4,686.68)	6,631.81	(0.98)

1 Receipts are average annual total cash receipts including government payments, 2010-2015 (\$1,000)

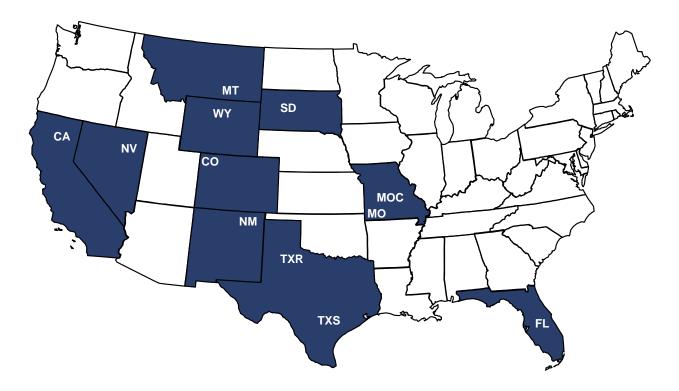
2 Payments are average annual total government payments, 2010-2015 (\$1,000)

3 NCFI is average annual net cash farm income, 2010-2015 (\$1,000)

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

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

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



#### Characteristics of Panel Farms Producing Beef Cattle, 2009.

	Cropland	Assets	Debt/Asset	Gross Receipts	Cows
	(acres)	(\$1,000)	(ratio)	(\$1,000)	(number)
CAB500	0	4,257.00	0.05	248.20	500
NVB700	1,300	4,561.00	0.04	327.70	700
MTB500	0	5,009.00	0.04	262.30	500
WYB435	330	3,461.00	0.04	248.10	435
COB250	450	14,106.00	0.02	154.10	250
NMB240	0	5,482.00	0.03	154.80	240
SDB375	1,150	5,158.00	0.02	203.80	375
MOB250	280	2,530.00	0.02	266.40	250
MOCB400	40	3,993.00	0.02	239.30	400
TXRB500	0	6,568.00	0.01	396.10	500
TXSB200	0	3,276.00	0.05	145.00	200
FLB1155	5,400	16,863.00	0.01	593.90	1,155

### **Representative Farm: Cow/Calf**

### Economic Viability of Representative Farms over the 2010-2015 Period

Farm Name	Overall Ranking		P(Negative Ending Cash)	P(Real Net Worth Declines)	
6/5/1	2010	2015	2010-2015	2010-2015	
CAB500			99-99	1-93	
NVB700			99-98	1-7	
MTB500			58-1	1-1	
WYB435			99-97	1-13	
COB250			99-94	1-1	
NMB240			99-99	1-1	
SDB375			26-7	1-1	
MOB250			1-1	1-1	
MOCB400			54-9	1-1	
TXRB500			7-1	1-1	
TXSB200			99-99	1-1	
FLB1155			1-1 1-1		

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

2 P(NegativeEnding Cash) is the probability that the farm will have a cash flow deficit. Reported values represent the probabilities for 2010 and 2015.

3 P(Real Net Worth Decline) is the probability that the farm will have a loss in real net worth relative to the beginning net worth. Reported values represent the probabilities for losing real net worth from 2008 to 2010 and from 2008 to 2015.

### Implications of the August 2010 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Beef Cattle

	Receipts	Payments	NCFI	Reserve 2015	Net Worth 2015	CRNW
	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(%)
CAB500	329.68	0.00	(34.37)	(653.92)	3,776.61	(1.25)
NVB700	420.61	0.00	36.26	(342.97)	4,855.06	1.56
MTB500	338.21	0.00	120.71	260.03	5,748.79	2.81
WYB435	317.35	0.00	43.21	(210.54)	3,608.14	1.23
COB250	220.51	0.00	37.46	(105.00)	14,914.95	1.38
NMB240	189.66	0.00	17.44	(178.85)	5,646.94	1.13
SDB375	264.91	0.00	85.09	147.34	5,689.98	1.91
MOB250	312.13	2.85	139.15	427.27	3,089.71	3.51
MOCB400	304.90	0.00	83.51	159.29	4,439.96	2.07
TXRB500	461.80	0.00	109.21	295.93	7,443.37	2.22
TXSB200	172.22	0.00	44.42	(149.08)	3,310.92	1.11
FLB1155	741.14	0.00	233.40	907.14	19,001.91	2.25

1 Receipts are average annual total cash receipts including government payments, 2010-2015 (\$1,000)

2 Payments are average annual total government payments, 2010-2015 (\$1,000)

3 NCFI is average annual net cash farm income, 2010-2015 (\$1,000)

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

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