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# Representative Farms Economic Outlook for the August 2006 FAPRI/AFPC Baseline

## **AFPC Briefing Paper 06-3**

August 2006

**Agricultural and Food Policy Center** 



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#### REPRESENTATIVE FARMS ECONOMIC OUTLOOK FOR THE AUGUST 2006 FAPRI/AFPC BASELINE

AFPC Briefing Paper 06-3

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#### **EXECUTIVE SUMMARY**

The Agricultural and Food Policy Center (AFPC) at Texas A&M University develops and maintains data to simulate 100 representative crop 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 2006 through 2011. The data necessary to simulate the economic activity of these operations is developed through ongoing cooperation with panels of agricultural producers in each of these states. The Food and Agricultural Policy Research Institute (FAPRI) provided projected prices, policy variables, and input inflation rates in their August 2006 Baseline.

Under the August 2006 Baseline, 14 of the 65 crop farms are considered in good liquidity condition (less than a 25 percent chance of negative ending cash in 2011). Ten crop farms have between a 25 percent and a 50 percent likelihood of negative ending cash. The remaining 41 crop farms have greater than a 50 percent of negative ending cash. Additionally, 23 of the 65 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 36 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: Six of the 19 feedgrain farms are in good overall financial condition. Six are considered to be in marginal condition, and seven are in poor condition.
- WHEAT FARMS: Five of the 11 wheat farms are classified in good financial condition, three are marginal, and three are in poor condition.
- COTTON FARMS: Two of the 20 cotton farms are classified in good condition, two are in marginal condition, and 16 are in poor condition. Also, 15 of these farms have more than a 50 percent chance of losing real net worth by 2011.
- RICE FARMS: None of the 15 rice farms are in good condition, two are classified in marginal condition, and 13 farms are projected to be in poor financial condition through 2011.
- DAIRY FARMS: Nine of the 23 dairy farms are in good overall financial condition. Five are considered to be in marginal condition, and nine are in poor condition.
- BEEF CATTLE RANCHES: Five of the 12 cattle ranches are classified in good financial condition, four are classified in marginal condition, and three are in poor condition.

## REPRESENTATIVE FARMS ECONOMIC OUTLOOK FOR THE AUGUST 2006 FAPRI/AFPC BASELINE

The farm level economic impacts of the Farm Security and Rural Investment Act of 2002 on representative crop and livestock operations are projected in this report. The analysis was conducted over the 2004-2011 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, and
- Projected prices, policy variables, and input inflation rates from the Food and Agricultural Policy Research Institute (FAPRI) August 2006 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 2006 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 2011.

#### **Definitions of Variables in the Summary Tables**

- Overall Financial Position, 2006-2011 -- As a means of summarizing the representative farms' economic efficiency, liquidity, and solvency position, AFPC classifies each farm as being in either a good (green), marginal (yellow) or poor (red) position. AFPC defines a farm is in a good financial position when it has less than a 25 percent chance each of a negative ending cash position and less than a 25 percent chance of losing real net worth. If the probabilities of these events are between 25 and 50 percent the farm is classified as marginal. A probability greater than 50 percent places the farm in a poor financial position.
- **Receipts** -- 2006-2011 average of cash receipts from all farm related sources, including market sales, counter-cyclical payments (CCPs), direct payments, marketing loan gains/loan deficiency payments (LDPs), crop insurance indemnities, and other receipts. Also included are lump sum disaster payments for livestock.
- **Payments** -- 2006-2011 average of annual CCPs, direct payments, and marketing loan gains/LDPs for crops and the MILC program payment for dairy farms.
- NCFI -- 2006-2011 average net cash farm income equals average total cash receipts minus average total cash expenses.
- Reserve 2011 -- equals total cash on hand at the end of year 2011. 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 2011 -- equity equals total assets including land minus total debt from all sources and is reported at the end of 2011.
- **CRNW** -- annualized percentage change in the operator's net worth from January 1, 2006 through December 31, 2011, after adjusting for inflation.

Table 1. FAPRI August 2006 Baseline Projections of Crop Prices, Loan Rates, and Direct Payment Rates, 2004-2011

	2004	2005	2006	2007	2008	2009	2010	2011
Crop Prices								
Corn (\$/bu.)	2.06	1.98	2.33	2.54	2.58	2.61	2.64	2.67
Wheat (\$/bu.)	3.40	3.42	3.88	3.68	3.70	3.74	3.76	3.78
Cotton (\$/lb.)	0.4160	0.4780	0.5115	0.5338	0.5474	0.5554	0.5545	0.5570
Sorghum (\$/bu.)	1.79	1.80	2.14	2.32	2.35	2.37	2.39	2.41
Soybeans (\$/bu.)	5.74	5.65	5.29	5.63	5.72	5.80	5.88	5.94
Barley (\$/bu.)	2.48	2.53	2.72	2.84	2.87	2.85	2.85	2.84
Oats (\$/bu.)	1.48	1.63	1.80	1.90	1.92	1.93	1.95	1.96
Rice (\$/cwt.)	7.33	7.63	8.79	7.92	7.91	7.89	7.85	7.83
Soybean Meal (\$/ton)	174.44	166.92	155.91	155.23	149.73	148.87	153.01	157.10
All Hay (\$/ton)	92.00	98.00	97.05	98.52	100.18	101.38	102.07	102.65
Peanuts (\$/ton)	378.00	352.00	383.21	398.73	405.49	407.46	403.79	401.57
Cattle Prices								
Feeder Cattle (\$/cwt)	111.79	120.02	117.27	109.44	99.19	92.00	86.04	81.47
Fat Cattle (\$/cwt)	84.75	87.28	83.53	81.98	79.97	77.09	74.57	73.06
Culled Cows (\$/cwt)	52.35	54.36	49.58	47.54	44.81	42.83	41.00	39.41
Milk Price								
U.S. All Milk Price (\$/cwt)	16.13	15.20	12.85	13.15	13.38	13.41	13.5	13.55

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

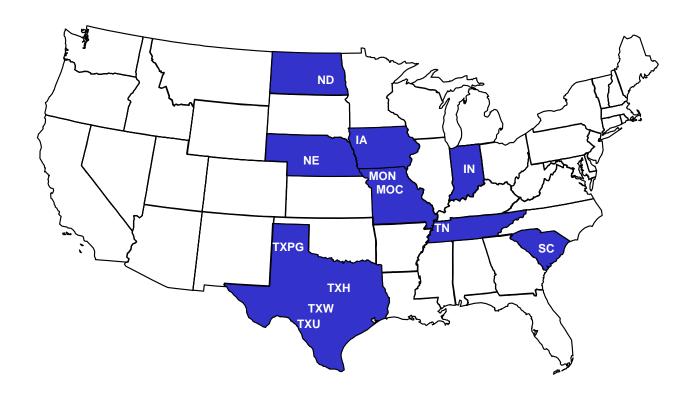
Table 2. FAPRI August 2006 Baseline Assumed Rates of Change in Input Prices, Annual Interest Rates, and Annual Changes in Land Values, 2005-2011

	2005	2006	2007	2008	2009	2010	2011
Annual Rate of Change for Input Prices Paid							
Seed Prices (%)	6.57	6.18	1.46	-1.30	0.97	1.44	1.64
All Fertilizer Prices (%)	16.88	3.52	0.57	-1.09	-1.17	1.37	0.89
Herbicide Prices (%)	1.19	3.09	-0.30	-1.19	0.88	0.98	1.01
Insecticide Prices (%)	-0.83	1.52	-1.42	-2.45	1.44	1.74	1.62
Fuel and Lube Prices (%)	37.98	11.65	-1.37	-5.79	-3.26	-2.74	-2.14
Machinery Prices (%)	5.92	4.00	2.24	2.34	3.58	3.19	2.87
Wages (%)	2.34	2.50	3.04	3.24	2.78	2.42	2.63
Supplies (%)	6.36	8.64	2.11	-0.68	1.43	1.42	1.20
Repairs (%)	4.46	3.55	1.28	1.19	1.45	1.53	1.66
Services (%)	3.77	5.81	-0.01	-1.40	1.30	1.95	2.23
Taxes (%)	-0.60	4.54	-0.08	-1.19	2.03	1.15	1.39
PPI Items (%)	5.55	3.51	0.52	-0.41	1.17	1.25	1.15
PPI Total (%)	5.01	3.75	0.25	1.03	1.01	0.49	0.70
Annual Change in Consumer Price Index (%)	3.40	2.64	1.83	1.99	1.96	1.89	2.08
Annual Interest Rates							
Long-Term (%)	5.51	6.22	6.35	6.20	6.34	6.34	6.43
Intermediate-Term (%)	4.46	5.04	5.14	5.02	5.13	5.13	5.21
Savings Account (%)	1.53	1.73	1.76	1.72	1.76	1.76	1.78
Annual Rate of Change for U.S. Land Prices (%)	11.00	8.75	3.67	-0.02	1.15	1.35	1.99

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

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

- Overall, six feed grain farms are characterized as good, six are moderate, and seven are in poor condition.
- Seven of nineteen farms will be under cash flow stress, and six have a high probability of losing real wealth.



Characteristics of Panel Farms Producing Feed Grains, 2005.

	Cropland	Assets	Debt/Asset	Gross Receipts	Feed Grains
	(acres)	(\$1,000)	(ratio)	(\$1,000)	(acres)
IAG1350	1,350	1,403.00	0.17	548.20	1,350
IAG3400	3,400	4,629.00	0.16	1,376.10	3,400
NEG1960	1,960	2,132.00	0.14	1,006.00	1,770
NEG4300	4,300	5,260.00	0.19	2,123.30	3,784
NDG2180	2,180	703.00	0.23	404.70	1,600
NDG7500	7,500	4,976.00	0.13	2,146.80	5,750
MOCG2050	2,050	4,312.00	0.16	619.30	2,050
MOCG3630	3,630	5,880.00	0.15	1,024.40	3,530
MONG1850	1,850	4,346.00	0.13	833.80	1,800
ING1000	1,000	1,840.00	0.18	359.90	1,000
ING2200	2,200	4,719.00	0.14	858.50	2,200
TXPG3760	3,760	2,454.00	0.32	2,236.50	1,344
TXHG2000	2,000	1,061.00	0.24	419.80	1,000
TXWG1400	1,400	684.00	0.18	306.00	900
TXUG1200	1,201	381.00	0.48	645.00	450
TNG900	900	868.00	0.15	252.20	900
TNG2750	2,750	2,765.00	0.19	804.90	2,750
SCG1500	1,500	925.00	0.19	531.00	1,500
SCG3500	3,500	4,335.00	0.16	1,382.60	3,100

#### Representative Farm: Feed Grains

Economic Viability of Representative Farms over the 2006-2011 Period

Farm Name	Overall	Ranking	P(Negative Ending Cash)	P(Real Net Worth Declines)
6/6/7	2006	2011	2006-2011	2006-2011
IAG1350			51-41	1-26
IAG3400			12-42	1-18
NEG1960			3-8	1-7
NEG4300			1-14	1-1
NDG2180			74-37	1-26
NDG7500			1-1	1-1
MOCG2050			1-1	1-1
MOCG3630			1-1	1-1
MONG1850			1-18	1-2
ING1000			99-99	1-49
ING2200			21-48	1-3
TXPG3760			99-89	1-62
TXHG2000			92-96	1-89
TXWG1400			84-99	1-94
TXUG1200			94-99	1-92
TNG900	_		88-89	1-80
TNG2750			16-47	1-5
SCG1500			88-99	1-85
SCG3500			34-35	1-7

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

25-50

>50

Implications of the August 2006 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Feed Grains and Oilseeds

	Receipts	Payments	NCFI	Reserve 2011	Net Worth 2011	CRNW
	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(%)
IAG1350	538.18	53.22	96.05	4.25	1,339.03	1.57
IAG3400	1,330.03	129.86	299.68	7.97	4,547.85	1.69
NEG1960	1,024.80	103.96	223.71	256.86	2,193.22	2.25
NEG4300	2,081.29	195.89	437.81	562.23	5,355.06	3.22
NDG2180	478.77	39.32	137.69	91.84	706.58	4.33
NDG7500	2,055.36	166.98	799.06	2,149.59	6,610.97	6.21
MOCG2050	684.96	60.71	320.42	588.11	5,091.60	4.32
MOCG3630	1,137.53	92.85	578.51	1,388.00	7,319.79	5.21
MONG1850	731.08	55.76	221.82	226.08	4,699.63	2.49
ING1000	364.64	37.74	48.85	(455.20)	1,585.13	(0.17)
ING2200	872.15	83.44	196.68	(6.66)	5,002.04	2.34
TXPG3760	2,410.54	288.89	95.00	(1,196.85)	1,382.46	(2.81)
TXHG2000	451.05	60.87	1.63	(449.71)	516.13	(6.03)
TXWG1400	323.50	52.53	7.60	(294.40)	388.68	(5.31)
TXUG1200	684.15	96.61	(7.49)	(590.57)	(209.69)	(78.21)
TNG900	278.32	21.43	23.35	(161.37)	607.66	(2.89)
TNG2750	892.45	70.50	264.91	(11.26)	2,770.56	2.73
SCG1500	567.04	91.55	7.13	(426.67)	543.39	(4.58)
SCG3500	1,498.60	210.26	237.03	180.64	4,628.37	2.87

<sup>1</sup> Receipts are average annual total cash receipts including government payments, 2006-2011 (\$1,000)

<sup>2</sup> P(NegativeEnding Cash) is the probability that the farm will have a cash flow deficit. Reported values represent the probabilities for 2006 and 2011.

<sup>3</sup> 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 2004 to 2006 and from 2004 to 2011.

<sup>2</sup> Payments are average annual total government payments, 2006-2011 (\$1,000)

<sup>3</sup> NCFI are average annual net cash farm income, 2006-2011 (\$1,000)

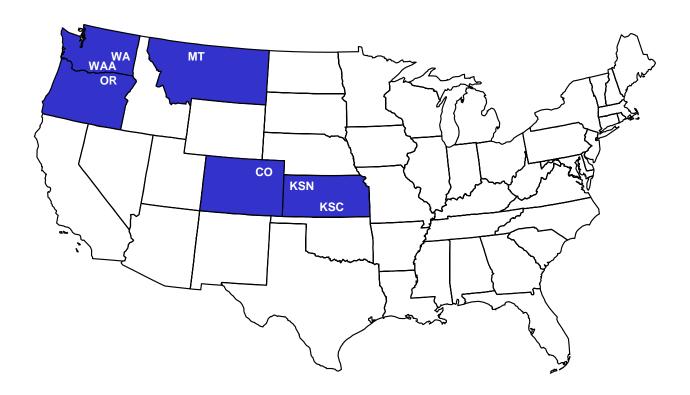
<sup>4</sup> Reserve 2011 are average ending cash reserves, 2011 (\$1,000)

<sup>5</sup> Net Worth 2011 are average nominal ending net worth, 2011 (\$1,000)

<sup>6</sup> CRNW are average percentage in real net worth over 2006-2011 period, (%)

## **Representative Farm: Wheat**

- Five wheat farms are projected to be in good overall financial condition with three in moderate condition and three in poor condition.
- Four of the eleven wheat farms will feel severe liquidity pressure over the period.
- Three wheat farms have a 35 percent or greater chance of losing real equity.



Characteristics of Panel Farms Producing Wheat, 2005.

·	Cropland	Assets	Debt/Asset	Gross Receipts	Wheat
	(acres)	(\$1,000)	(ratio)	(\$1,000)	(acres)
WAW1725	1,725	1,193.00	0.18	379.90	1,121
WAW5000	5,000	4,323.00	0.16	1,160.40	2,915
WAAW3500	3,500	1,048.00	0.15	227.20	1,500
ORW4000	3,600	1,172.00	0.13	291.50	1,600
MTW4500	4,500	2,148.00	0.16	329.00	2,475
KSCW1600	1,600	1,043.00	0.28	221.80	1,072
KSCW4000	4,000	2,061.00	0.20	535.80	2,000
KSNW2800	2,800	1,443.00	0.23	354.80	1,400
KSNW5000	5,000	2,419.00	0.22	791.70	2,325
COW3000	3,000	1,296.00	0.13	266.10	970
COW5640	5,640	2,142.00	0.16	504.90	1,900

#### Representative Farm: Wheat

Economic Viability of Representative Farms over the 2006-2011 Period

Farm Name	Overall	Ranking	P(Negative Ending Cash)	P(Real Net Worth Declines)
5/3/3	2006	2011	2006-2011	2006-2011
WAW1725			44-26	1-20
WAW5000			57-74	1-24
WAAW3500			48-21	1-1
MTW4500			1-7	1-5
ORW4000			25-12	1-13
KSCW1600			90-90	1-55
KSCW4000			59-47	1-20
KSNW2800			95-96	1-69
KSNW5000			80-69	1-35
COW3000			1-1	1-1
COW5640			4-6	1-1

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

#### Implications of the August 2006 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Wheat

	<u> </u>					
	Receipts	Payments	NCFI	Reserve 2011	Net Worth 2011	CRNW
	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(%)
WAW1725	420.04	49.68	82.89	75.99	1,143.74	1.70
WAW5000	1,270.43	136.39	194.48	(289.29)	4,179.91	1.25
WAAW3500	251.99	31.09	77.58	88.63	1,117.52	2.64
ORW4000	312.93	35.93	114.02	149.80	1,205.89	1.86
MTW4500	391.62	58.53	168.93	354.45	2,375.37	3.41
KSCW1600	276.40	30.63	42.55	(216.85)	716.68	(1.17)
KSCW4000	630.65	72.44	158.91	5.54	1,931.47	1.73
KSNW2800	366.88	41.80	50.97	(336.82)	1,096.44	(1.18)
KSNW5000	873.59	81.44	143.32	(202.60)	2,158.32	0.79
COW3000	288.21	23.91	151.31	466.87	1,683.61	5.51
COW5640	559.88	46.23	197.18	240.18	2,398.81	3.61

<sup>1</sup> Receipts are average annual total cash receipts including government payments, 2006-2011 (\$1,000)

<sup>2</sup> P(NegativeEnding Cash) is the probability that the farm will have a cash flow deficit. Reported values represent the probabilities for 2006 and 2011.

<sup>3</sup> 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 2004 to 2006 and from 2004 to 2011.

<sup>2</sup> Payments are average annual total government payments, 2006-2011 (\$1,000)

<sup>3</sup> NCFI are average annual net cash farm income, 2006-2011 (\$1,000)

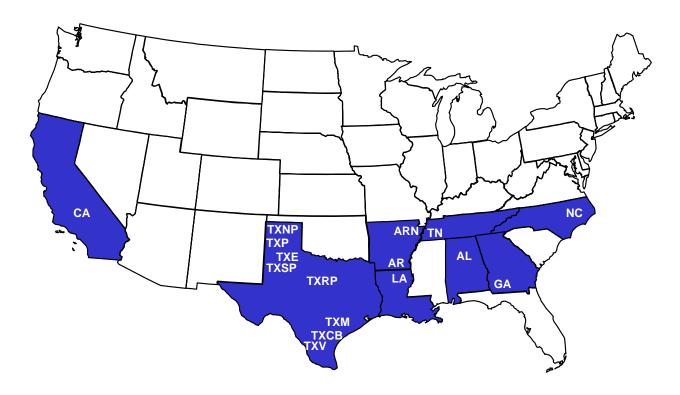
<sup>4</sup> Reserve 2011 are average ending cash reserves, 2011 (\$1,000)

<sup>5</sup> Net Worth 2011 are average nominal ending net worth, 2011 (\$1,000)

<sup>6</sup> CRNW are average percentage in real net worth over 2006-2011 period, (%)

#### **Representative Farm: Cotton**

- Two of the twenty cotton farms are characterized as being in good overall condition, with two farms characterized in moderate and sixteen in poor condition.
- Sixteen of the farms are projected to experience severe cash flow problems over the period.
- Fifteen of the twenty cotton farms have more than a 50 percent chance of losing real equity.



Characteristics of Panel Farms Producing Cotton, 2005.

	Cropland	Assets	Debt/Asset	Gross Receipts	Cotton
	(acres)	(\$1,000)	(ratio)	(\$1,000)	(acres)
TXNP3000	3,000	813.00	0.25	1,102.40	1,500
TXNP7000	7,000	2,594.00	0.36	2,513.50	2,850
TXSP2239	2,239	850.00	0.26	542.30	1,800
TXSP3745	3,745	2,094.00	0.15	925.50	3,036
TXPC2500	2,500	2,479.00	0.21	1,446.80	1,367
TXEC5000	5,000	1,952.00	0.15	2,103.50	3,800
TXRP2500	2,500	471.00	0.29	251.20	1,122
TXMC3500	3,500	1,152.00	0.41	1,291.00	1,750
TXCB2250	2,250	1,074.00	0.25	667.20	1,350
TXCB5500	5,500	1,270.00	0.25	1,565.40	2,750
TXVC4500	4,500	2,434.00	0.31	1,324.80	2,388
CAC4000	4,000	12,049.00	0.18	6,382.60	2,000
LAC2640	2,640	751.00	0.10	1,253.70	924
ARC6000	6,000	5,746.00	0.22	3,010.80	2,000
ARNC5000	5,000	4,886.00	0.24	2,860.40	5,000
TNC1900	1,900	2,090.00	0.12	899.10	990
TNC4050	4,050	3,880.00	0.17	1,661.10	2,670
ALC3000	3,000	1,633.00	0.48	1,170.10	2,100
GAC1700	1,700	2,379.00	0.21	1,288.80	1,020
NCC1100	1,100	1,545.00	0.18	557.70	700

#### **Representative Farm: Cotton**

**Economic Viability of Representative Farms over the 2006-2011 Period** 

Farm Name	Overall	Ranking	P(Negative Ending Cash)	P(Real Net Worth Declines)
2/2/16	2006	2011	2006-2011	2006-2011
TXNP3000			95-97	1-88
TXNP7000			96-85	1-57
TXSP2239			83-87	1-74
TXSP3745			42-81	1-70
TXPC2500			8-23	1-15
TXEC5000			1-2	1-25
TXRP2500			83-70	1-50
TXMC3500			83-75	1-51
TXCB2250			76-81	1-62
TXCB5500			66-82	1-78
TXVC4500			98-99	1-84
CAC4000			12-31	1-14
LAC2640			72-80	1-69
ARC6000			84-99	1-88
ARNC5000			81-93	1-66
TNC1900			1-1	1-1
TNC4050			71-99	1-84
ALC3000			95-93	1-74
GAC1700			94-99	1-78
NCC1100			93-99	1-97

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

25-50

>50

Implications of the August 2006 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Cotton

	Receipts	Payments	NCFI	Reserve 2011	Net Worth 2011	CRNW
	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(%)
TXNP3000	1,239.79	143.23	2.21	(1,040.23)	(190.02)	(28.15)
TXNP7000	2,801.50	323.85	178.93	(1,287.93)	1,398.09	(2.13)
TXSP2239	599.55	123.90	45.56	(428.99)	404.64	(6.08)
TXSP3745	1,024.87	211.78	94.25	(452.87)	1,554.83	(2.39)
TXPC2500	1,256.32	218.79	205.41	219.41	2,312.17	2.58
TXEC5000	1,594.87	314.35	311.31	807.73	1,966.53	3.32
TXRP2500	273.32	66.02	40.65	(144.35)	317.10	(1.52)
TXMC3500	1,393.39	250.84	91.56	(408.30)	584.60	(2.45)
TXCB2250	729.39	145.86	67.44	(351.64)	682.29	(3.15)
TXCB5500	1,647.38	325.55	37.35	(865.57)	261.69	(12.91)
TXVC4500	1,428.17	305.42	(36.34)	(1,443.13)	1,090.17	(5.96)
CAC4000	6,291.61	218.54	774.20	833.60	12,756.22	2.92
LAC2640	1,308.86	254.67	96.86	(344.28)	447.18	(4.65)
ARC6000	3,182.77	604.16	82.52	(2,754.01)	3,334.14	(4.07)
ARNC5000	2,941.07	510.27	216.33	(1,854.91)	3,041.46	(2.87)
TNC1900	941.17	140.35	316.17	898.57	2,807.25	6.33
TNC4050	1,742.96	363.07	14.77	(1,651.43)	2,458.36	(4.41)
ALC3000	1,201.70	257.14	54.80	(994.63)	297.65	(10.91)
GAC1700	1,381.30	274.06	28.12	(802.99)	1,605.04	(2.49)
NCC1100	570.22	102.22	(7.58)	(832.98)	853.37	(5.57)

<sup>1</sup> Receipts are average annual total cash receipts including government payments, 2006-2011 (\$1,000)

<sup>2</sup> P(NegativeEnding Cash) is the probability that the farm will have a cash flow deficit. Reported values represent the probabilities for 2006 and 2011.

<sup>3</sup> 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 2004 to 2006 and from 2004 to 2011.

<sup>2</sup> Payments are average annual total government payments, 2006-2011 (\$1,000)

<sup>3</sup> NCFI are average annual net cash farm income, 2006-2011 (\$1,000)

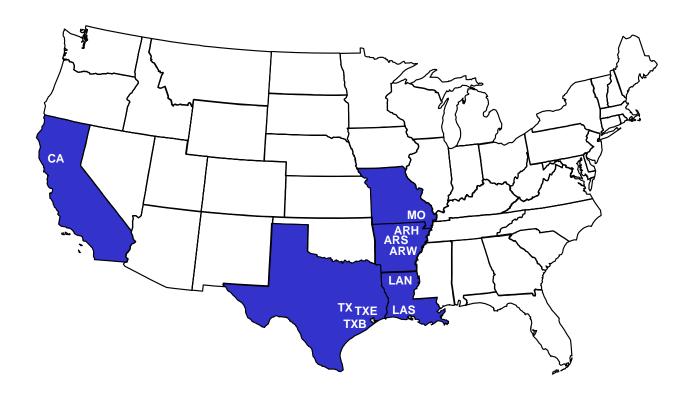
<sup>4</sup> Reserve 2011 are average ending cash reserves, 2011 (\$1,000)

<sup>5</sup> Net Worth 2011 are average nominal ending net worth, 2011 (\$1,000)

<sup>6</sup> CRNW are average percentage in real net worth over 2006-2011 period, (%)

### Representative Farm: Rice

- Two of the fifteen rice farms are projected to be in moderate overall financial condition with thirteen in poor condition
- Fourteen of the rice farms are expected to face severe cash flow problems and thirteen of fifteen have high probabilities of real equity losses.



Characteristics of Panel Farms Producing Rice, 2005.

	Cropland	Assets	Debt/Asset	Gross Receipts	Rice
	(acres)	(\$1,000)	(ratio)	(\$1,000)	(acres)
CAR550	550	1,559.00	0.35	446.90	500
CAR2365	2,365	4,547.00	0.44	1,947.60	2,240
CABR1100	1,100	1,931.00	0.46	836.60	1,000
CACR715	715	1,758.00	0.39	587.40	650
TXR1350	1,350	920.00	0.29	354.10	855
TXR2400	2,400	990.00	0.44	735.60	2,280
TXBR1800	1,800	838.00	0.36	609.30	1,200
TXER3200	3,200	1,046.00	0.44	971.90	2,240
LASR1200	1,200	415.00	0.81	355.80	660
LANR2500	2,500	3,097.00	0.26	1,095.50	1,000
MOER4500	4,500	6,862.00	0.15	1,728.80	1,500
MOWR4000	4,000	7,657.00	0.19	1,709.50	2,000
ARSR3640	3,640	2,958.00	0.14	1,026.80	1,620
ARWR1200	1,200	1,943.00	0.36	492.80	600
ARHR3000	3,000	4,349.00	0.34	1,336.20	1,750

#### Representative Farm: Rice

Economic Viability of Representative Farms over the 2006-2011 Period

Farm Name	Overall	Ranking	P(Negative Ending Cash)	P(Real Net Worth Declines)
0/2/13	2006	2011	2006-2011	2006-2011
CAR550			99-99	1-99
CAR2365			99-99	1-99
CABR1100			99-99	1-99
CACR715			99-99	1-99
TXR1350			99-99	1-99
TXR2400			97-99	1-99
TXBR1800			95-99	1-98
TXER3200			99-99	1-99
LASR1200			99-99	1-99
LANR2500			99-99	1-99
MOER4500			35-48	1-6
MOWR4000			51-76	1-17
ARSR3640			55-99	1-68
ARWR1200			99-99	1-99
ARHR3000			99-99	1-99

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

25-50

>50

Implications of the August 2006 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Rice

	Receipts	Payments	NCFI	Reserve 2011	Net Worth 2011	CRNW
	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(%)
CAR550	467.61	106.81	(80.42)	(1,164.38)	352.92	(10.72)
CAR2365	2,047.34	501.71	(745.94)	(6,680.83)	(2,090.22)	(33.81)
CABR1100	880.16	221.29	(335.42)	(3,481.18)	(1,395.86)	(49.90)
CACR715	618.51	150.61	(263.10)	(2,413.21)	(613.76)	(27.98)
TXR1350	375.65	93.54	(26.45)	(722.09)	236.99	(10.56)
TXR2400	783.58	178.88	(44.24)	(1,150.06)	(293.68)	(41.83)
TXBR1800	648.84	148.96	(10.99)	(672.10)	62.38	(15.35)
TXER3200	1,034.90	249.51	(162.49)	(2,064.04)	(853.12)	(85.43)
LASR1200	381.40	82.62	(119.68)	(1,242.29)	(905.40)	351.61
LANR2500	1,161.39	235.66	(46.92)	(1,921.78)	1,286.12	(7.36)
MOER4500	1,832.49	309.35	368.63	(81.91)	7,179.47	2.40
MOWR4000	1,822.18	373.20	374.81	(611.92)	7,461.82	2.11
ARSR3640	1,104.01	228.25	189.26	(749.21)	2,369.23	(1.61)
ARWR1200	533.24	112.99	(203.14)	(2,679.84)	(558.09)	(25.23)
ARHR3000	1,449.96	309.98	(219.33)	(3,760.80)	954.27	(11.12)

<sup>1</sup> Receipts are average annual total cash receipts including government payments, 2006-2011 (\$1,000)

<sup>2</sup> P(NegativeEnding Cash) is the probability that the farm will have a cash flow deficit. Reported values represent the probabilities for 2006 and 2011.

<sup>3</sup> 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 2004 to 2006 and from 2004 to 2011.

<sup>2</sup> Payments are average annual total government payments, 2006-2011 (\$1,000)

<sup>3</sup> NCFI are average annual net cash farm income, 2006-2011 (\$1,000)

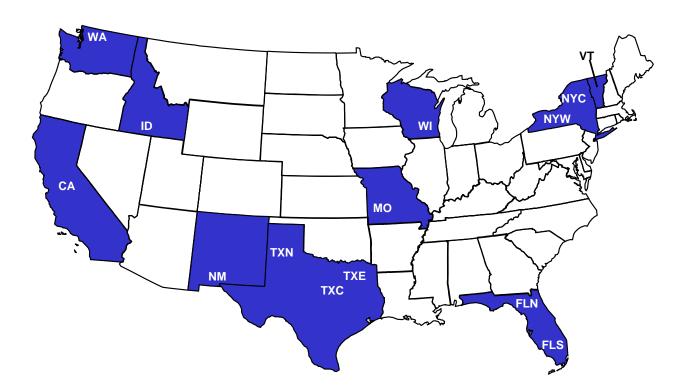
<sup>4</sup> Reserve 2011 are average ending cash reserves, 2011 (\$1,000)

<sup>5</sup> Net Worth 2011 are average nominal ending net worth, 2011 (\$1,000)

<sup>6</sup> CRNW are average percentage in real net worth over 2006-2011 period, (%)

### **Representative Farm: Dairy**

- Five of twenty-three dairy operations are in moderate overall financial condition. Nine are classified in good condition and nine in poor condition.
- Nine of the dairies are projected to experience significant liquidity pressure.
- Eleven dairies are projected to face a 25 percent or greater probability of losing real equity.



Characteristics of Panel Farms Producing Milk. 2005.

	Cropland	Assets	Debt/Asset	Gross Receipts	Cows
	(acres)	(\$1,000)	(ratio)	(\$1,000)	(number)
CAD1710	700	13,288.00	0.14	6,028.70	1,710
NMD2125	370	10,782.00	0.12	7,265.70	2,125
WAD250	200	2,765.00	0.18	935.30	250
WAD850	605	6,699.00	0.18	3,201.20	850
IDD1000	360	6,291.00	0.11	3,786.20	1,000
IDD3000	1,500	21,061.00	0.12	11,109.50	3,000
TXND3000	480	14,119.00	0.10	9,747.70	3,000
TXCD550	250	2,645.00	0.12	1,678.40	550
TXCD1300	460	6,845.00	0.12	4,431.10	1,300
TXED550	300	2,006.00	0.09	1,507.30	550
TXED1000	875	5,095.00	0.09	3,378.90	1,000
WID145	600	2,689.00	0.18	621.70	145
WID775	1,200	5,730.00	0.13	3,311.80	775
NYWD800	1,440	5,985.00	0.20	3,272.90	800
NYWD1200	2,160	9,153.00	0.18	4,884.00	1,200
NYCD110	296	1,007.00	0.13	506.80	110
NYCD500	1,100	3,931.00	0.15	2,156.00	500
VTD140	220	1,502.00	0.14	604.60	140
VTD400	1,000	3,952.00	0.18	1,617.90	400
MOD85	222	1,295.00	0.19	272.00	85
MOD400	450	3,657.00	0.15	1,431.50	400
FLND550	600	3,858.00	0.12	1,987.90	550
FLSD1500	400	8,538.00	0.13	5,122.40	1,500

#### Representative Farm: Dairy

**Economic Viability of Representative Farms over the 2006-2011 Period** 

Farm Name	Overall	Ranking	P(Negative Ending Cash)	P(Real Net Worth Declines)
9/5/9	2006	2011	2006-2011	2006-2011
CAD1710			1-2	1-10
NMD2125			1-2	1-16
WAD250			16-36	1-15
WAD850			52-80	1-73
IDD1000			11-49	1-54
IDD3000			1-10	1-25
TXND3000			7-68	1-83
TXCD550			80-99	1-99
TXCD1300			1-4	1-27
TXED550			8-52	1-73
TXED1000			1-4	1-20
WID145			1-21	1-12
WID775			1-1	1-1
NYWD800			56-82	1-78
NYWD1200			42-76	1-74
NYCD110			1-1	1-1
NYCD500			2-31	1-24
VTD140			1-21	1-24
VTD400			43-69	1-63
MOD85			65-87	1-16
MOD400			1-9	1-10
FLND550			1-1	1-1
FLSD1500			85-98	1-97

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

<25
25-50
>50

Implications of the August 2006 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Milk

	Receipts	Payments	NCFI	Reserve 2011	Net Worth 2011	CRNW
	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(%)
CAD1710	5,512.05	32.04	708.96	2,586.71	13,309.66	2.24
NMD2125	6,626.77	5.21	926.46	3,031.48	11,060.75	2.67
WAD250	857.35	7.44	144.27	90.70	2,624.52	2.16
WAD850	2,902.07	21.02	(32.42)	(1,255.08)	4,241.52	(3.11)
IDD1000	3,427.75	5.21	121.05	(125.21)	5,218.71	(0.81)
IDD3000	9,991.72	37.42	1,227.17	3,256.29	20,615.99	1.72
TXND3000	8,845.45	5.21	(176.60)	(1,707.02)	8,534.70	(4.68)
TXCD550	1,537.74	5.21	(231.79)	(1,804.92)	493.34	(12.82)
TXCD1300	4,078.93	5.21	445.74	1,723.36	6,533.35	1.69
TXED550	1,380.66	5.21	57.99	(20.56)	1,397.90	(2.94)
TXED1000	3,095.97	5.21	395.55	1,652.67	5,265.00	2.25
WID145	570.15	10.23	126.54	142.14	2,572.08	1.70
WID775	3,047.33	20.57	850.99	3,041.99	7,120.69	5.77
NYWD800	3,010.58	33.06	(30.79)	(1,219.73)	3,731.39	(3.20)
NYWD1200	4,497.06	43.51	3.84	(1,309.08)	6,145.23	(2.59)
NYCD110	474.70	10.10	157.03	509.01	1,261.29	5.83
NYCD500	1,999.31	20.65	223.25	222.15	3,697.79	1.69
VTD140	573.26	10.86	108.61	101.65	1,534.74	1.23
VTD400	1,508.66	25.64	91.21	(272.13)	3,307.80	(0.95)
MOD85	251.83	3.44	51.68	(118.99)	1,204.99	1.41
MOD400	1,316.21	5.21	244.89	489.82	3,775.22	2.83
FLND550	1,862.15	5.21	674.68	2,141.81	5,296.01	7.45
FLSD1500	4,761.87	5.21	(629.31)	(4,319.24)	3,122.89	(8.99)

<sup>1</sup> Receipts are average annual total cash receipts including government payments, 2006-2011 (\$1,000)

<sup>2</sup> P(NegativeEnding Cash) is the probability that the farm will have a cash flow deficit. Reported values represent the probabilities for 2006 and 2011.

<sup>3</sup> 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 2004 to 2006 and from 2004 to 2011.

<sup>2</sup> Payments are average annual total government payments, 2006-2011 (\$1,000)

<sup>3</sup> NCFI are average annual net cash farm income, 2006-2011 (\$1,000)

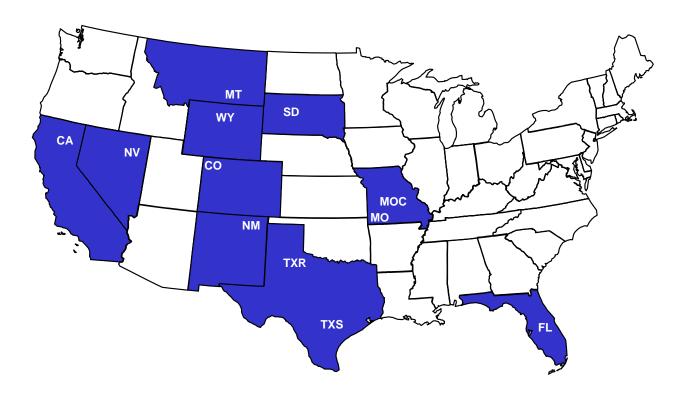
<sup>4</sup> Reserve 2011 are average ending cash reserves, 2011 (\$1,000)

<sup>5</sup> Net Worth 2011 are average nominal ending net worth, 2011 (\$1,000)  $\,$ 

<sup>6</sup> CRNW are average percentage in real net worth over 2006-2011 period, (%)

#### Representative Farm: Cow/Calf

- Five of twelve cow-calf operations are projected to be in good overall financial condition. Four are expected to be in moderate condition and three are in poor condition.
- Six of the operations will face significant liquidity pressure over the period, as their likelihoods of experiencing negative ending cash exceed 50 percent.
- Three operations are projected to have more than a 55 percent chance of losing real equity over the period.



Characteristics of Panel Farms Producing Beef Cattle, 2005.

	Cropland	Assets	Debt/Asset	Gross Receipts	Cows
	(acres)	(\$1,000)	(ratio)	(\$1,000)	(number)
CAB500	0	10,755.00	0.01	316.90	500
NVB700	1,300	2,744.00	0.02	381.40	700
MTB500	0	3,088.00	0.02	333.20	500
WYB500	330	2,866.00	0.01	304.40	500
COB250	450	12,079.00	0.01	199.60	250
NMB240	0	4,222.00	0.01	299.10	240
SDB450	1,150	3,257.00	0.02	290.90	450
MOB250	240	2,147.00	0.01	229.80	250
MOCB400	40	3,077.00	0.01	288.70	400
TXRB500	0	4,290.00	0.01	342.30	500
TXSB175	0	2,448.00	0.01	206.60	250
FLB1155	5,400	12,211.00	0.01	647.80	1,155

#### Representative Farm: Cow/Calf

**Economic Viability of Representative Farms over the 2006-2011 Period** 

Farm Name	Overall	Ranking	P(Negative Ending Cash)	P(Real Net Worth Declines)
5/4/3	2006	2011	2006-2011	2006-2011
CAB500			83-99	1-3
NVB700			1-51	1-77
MTB500			1-1	1-13
WYB500			30-99	1-96
COB250			1-1	1-1
NMB240			1-98	1-1
SDB450			1-8	1-32
MOB250			1-1	1-1
MOCB400			1-1	1-11
TXRB500			1-1	1-6
TXSB175			1-65	1-56
FLB1155			1-82	1-15

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

25-50

>50

Implications of the August 2006 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Beef Cattle

	Receipts	Payments	NCFI	Reserve 2011	Net Worth 2011	CRNW
	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(%)
CAB500	270.64	0.00	(40.76)	(448.31)	11,772.89	0.55
NVB700	312.59	0.00	26.58	(18.31)	2,651.26	(0.91)
MTB500	274.95	0.00	95.30	401.61	3,459.83	1.11
WYB500	250.42	0.00	(20.74)	(415.55)	2,617.77	(1.85)
COB250	175.01	0.00	51.67	178.38	13,936.48	1.34
NMB240	262.98	0.00	16.07	(70.57)	4,634.10	0.65
SDB450	251.84	0.21	52.39	153.88	3,458.39	0.40
MOB250	205.52	6.30	106.82	410.04	2,612.91	2.29
MOCB400	235.20	0.00	63.71	265.02	3,474.72	1.01
TXRB500	308.72	0.00	97.42	289.23	4,791.48	0.96
TXSB175	132.84	0.00	29.74	(21.52)	2,458.82	(0.05)
FLB1155	539.08	0.00	(10.94)	(236.44)	13,308.89	0.48

<sup>1</sup> Receipts are average annual total cash receipts including government payments, 2006-2011 (\$1,000)

<sup>2</sup> P(NegativeEnding Cash) is the probability that the farm will have a cash flow deficit. Reported values represent the probabilities for 2006 and 2011.

<sup>3</sup> 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 2004 to 2006 and from 2004 to 2011.

<sup>2</sup> Payments are average annual total government payments, 2006-2011 (\$1,000)

<sup>3</sup> NCFI are average annual net cash farm income, 2006-2011 (\$1,000)

<sup>4</sup> Reserve 2011 are average ending cash reserves, 2011 (\$1,000)

<sup>5</sup> Net Worth 2011 are average nominal ending net worth, 2011 (\$1,000)

<sup>6</sup> CRNW are average percentage in real net worth over 2006-2011 period, (%)