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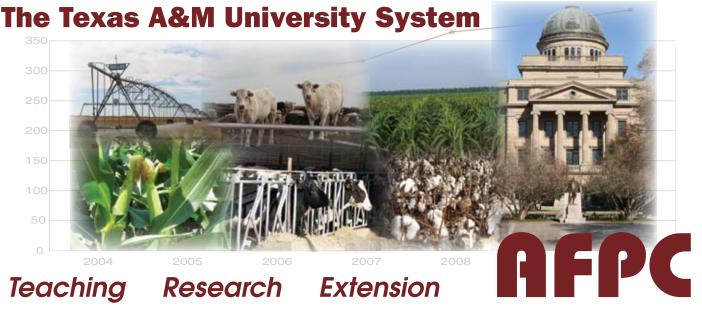
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# Representative Farms Economic Outlook for the August 2007 FAPRI/AFPC Baseline

# **AFPC Briefing Paper 07-10**

August 2007

**Agricultural and Food Policy Center** 



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#### REPRESENTATIVE FARMS ECONOMIC OUTLOOK FOR THE AUGUST 2007 FAPRI/AFPC BASELINE

AFPC Briefing Paper 07-10

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#### **EXECUTIVE SUMMARY**

The Agricultural and Food Policy Center (AFPC) at Texas A&M University develops and maintains data to simulate 99 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 2007 through 2012. 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 2007 Baseline.

Under the August 2007 Baseline, 26 of the 64 crop farms are considered in good liquidity condition (less than a 25 percent chance of negative ending cash in 2012). Eight crop farms have between a 25 percent and a 50 percent likelihood of negative ending cash. The remaining 30 crop farms have greater than a 50 percent chance of negative ending cash. Additionally, 39 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). Eight 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: Fifteen of the 19 feedgrain farms are in good overall financial condition. Two are classified in marginal condition, and two are in poor condition.
- WHEAT FARMS: Eight of the 11 wheat farms are classified in good financial condition, three are marginal, and none are in poor condition.
- COTTON FARMS: Five of the 20 cotton farms are classified in good condition, six are in marginal condition, and nine are in poor condition. Also, seven of these farms have more than a 50 percent chance of losing real net worth by 2012.
- RICE FARMS: None of the 14 rice farms are in good condition, five are classified in marginal condition, and nine farms are projected to be in poor financial condition through 2012.
- DAIRY FARMS: Seventeen of the 23 dairy farms are in good overall financial condition. Four are considered to be in marginal condition, and two are in poor condition.
- BEEF CATTLE RANCHES: Six of the 12 cattle ranches are classified in good financial condition, six are classified in marginal condition, and none are projected to be in poor condition.

### REPRESENTATIVE FARMS ECONOMIC OUTLOOK FOR THE AUGUST 2007 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 2005-2012 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 2007 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 2007 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 2012.

#### **DEFINITIONS OF VARIABLES IN THE SUMMARY TABLES**

- Overall Financial Position, 2007-2012 -- 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** -- 2007-2012 average of cash receipts from all farm related sources, including market sales, CCP and direct payments, marketing loan gains/LDPs, crop insurance indemnities, and other receipts.
- **Payments** -- 2007-2012 average of annual counter cyclical payments, direct payments, and marketing loan gains/LDPs for crops and the MILC program payment for dairy farms
- NCFI -- 2007-2012 average net cash farm income equals average total receipts minus average total cash expenses.
- Reserve 2012 -- equals total cash on hand at the end of year 2012. 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 2012 -- equity equals total assets including land minus total debt from all sources and is reported at the end of 2012.
- **CRNW** -- annualized percentage change in the operator's net worth from August 1, 2007 through December 31, 2012, after adjusting for inflation.

Table 1. FAPRI August 2007 Baseline Projections of Crop and Livestock Prices, 2005-2012

	2005	2006	2007	2008	2009	2010	2011	2012
Crop Prices								
Corn (\$/bu.)	2.00	3.03	3.10	3.38	3.35	3.34	3.28	3.25
Wheat (\$/bu.)	3.42	4.26	5.11	4.19	4.32	4.31	4.31	4.29
Cotton (\$/lb.)	0.4770	0.4730	0.5394	0.6086	0.6116	0.6044	0.6021	0.5990
Sorghum (\$/bu.)	1.86	3.28	2.92	3.19	3.12	3.15	3.10	3.07
Soybeans (\$/bu.)	5.66	6.40	7.77	8.01	7.92	7.85	7.79	7.72
Barley (\$/bu.)	2.53	2.85	3.01	3.31	3.18	3.16	3.12	3.09
Oats (\$/bu.)	1.63	1.87	2.04	2.17	2.19	2.18	2.16	2.14
Rice (\$/cwt.)	7.65	9.68	9.90	9.70	9.64	9.65	9.64	9.64
Soybean Meal (\$/ton)	166.12	195.53	207.88	205.71	200.41	196.80	194.79	192.68
All Hay (\$/ton)	98.20	109.00	123.20	114.46	110.86	110.46	111.15	111.52
Peanuts (\$/ton)	346.00	352.00	412.06	476.67	460.83	458.36	459.64	456.82
Cattle Prices								
Feeder Cattle (\$/cwt)	120.11	117.68	117.53	118.46	114.27	107.6	103.83	102.03
Fat Cattle (\$/cwt)	87.28	85.41	91.09	94.21	92.93	90.04	87.84	86.40
Culled Cows (\$/cwt)	54.36	47.56	50.94	52.98	52.36	49.92	47.93	47.14
Milk Price								
U.S. All Milk Price (\$/cwt)	15.19	12.97	19.07	16.05	15.78	15.72	15.74	15.72

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

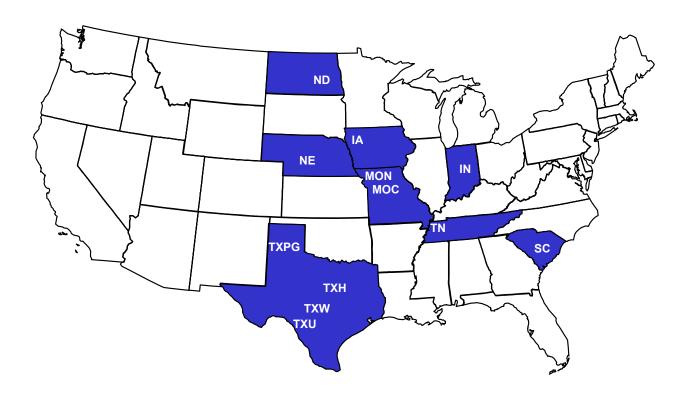
Table 2. FAPRI August 2007 Baseline Assumed Rates of Change in Input Prices, Annual Interest Rates, and Annual Changes in Land Values, 2006-2012

4.14 7.11.14 - 1.14.15 - 1.14	2006	2007	2008	2009	2010	2011	2012
Annual Rate of Change for Input Prices Paid							
Seed Prices (%)	8.03	3.60	2.18	1.45	1.49	1.66	1.40
All Fertilizer Prices (%)	6.95	4.52	3.37	0.12	-0.07	0.55	-0.01
Herbicide Prices (%)	3.71	1.80	1.73	1.19	1.08	1.29	1.09
Insecticide Prices (%)	3.06	0.97	0.80	0.70	1.42	1.72	1.46
Fuel and Lube Prices (%)	8.08	0.89	1.70	-0.75	-0.51	-1.17	-1.41
Machinery Prices (%)	4.04	3.39	3.00	1.71	1.81	2.10	2.08
Wages (%)	2.72	3.14	2.22	2.75	2.96	3.09	3.12
Supplies (%)	5.11	3.68	4.07	3.13	2.22	2.03	1.61
Repairs (%)	3.38	2.87	2.43	2.40	2.47	2.60	2.51
Services (%)	4.14	2.30	1.90	1.30	1.88	2.11	2.03
Taxes (%)	2.59	4.24	2.95	2.04	2.08	2.65	1.44
PPI Items (%)	3.53	5.11	1.77	0.82	0.81	1.08	0.74
PPI Total (%)	3.64	4.70	2.03	1.37	1.15	1.37	1.06
Annual Change in Consumer Price Index (%)	2.64	1.83	1.99	1.96	1.89	2.08	2.26
Annual Interest Rates							
Long-Term (%)	5.81	5.89	6.24	6.73	6.87	6.97	7.06
Intermediate-Term (%)	4.70	4.77	5.05	5.44	5.56	5.65	5.72
Savings Account (%)	1.61	1.63	1.73	1.86	1.90	1.93	1.96
Annual Rate of Change for U.S. Land Prices (%)	15.15	13.68	9.20	4.37	3.65	3.51	3.51

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

# **Representative Farm: Feed Grains**

- Overall, fifteen feed grain farms are characterized as good, two are marginal, and two are in poor condition.
- Four of nineteen farms will be under severe cash flow stress, and one has a high probability of losing real wealth.



**Characteristics of Panel Farms Producing Feed Grains, 2006.** 

	Cropland	Assets	Debt/Asset	Gross Receipts	Feed Grains
	(acres)	(\$1,000)	(ratio)	(\$1,000)	(acres)
IAG1350	1,350	1,490.00	0.17	600.00	1,350
IAG3400	3,400	5,027.00	0.17	1,483.40	3,400
NEG1960	1,960	2,175.00	0.14	1,044.00	1,770
NEG4300	4,300	5,421.00	0.22	2,026.60	3,784
NDG2180	2,180	741.00	0.16	472.40	1,600
NDG7500	7,500	5,736.00	0.12	2,059.00	5,750
MOCG2050	2,050	4,938.00	0.15	723.20	2,050
MOCG3630	3,630	6,756.00	0.15	1,205.60	3,530
MONG1850	1,850	4,639.00	0.13	782.30	1,800
ING1000	1,000	2,004.00	0.13	401.70	1,000
ING2200	2,200	5,147.00	0.14	956.10	2,200
TXPG3760	3,760	3,979.00	0.23	2,583.30	1,344
TXHG2000	2,000	1,160.00	0.23	500.60	1,000
TXWG1400	1,400	775.00	0.20	352.90	900
TXUG1200	1,200	255.00	0.23	702.60	450
TNG900	900	932.00	0.21	296.30	900
TNG2750	2,750	3,087.00	0.19	938.40	2,750
SCG1500	1,500	1,211.00	0.15	874.00	375
SCG3500	3,500	5,826.00	0.18	1,531.10	3,500

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

**Economic Viability of Representative Farms over the 2007-2012 Period** 

Farm Name	Overall	Ranking	P(Negative Ending Cash)	P(Real Net Worth Declines)
15/2/2	2007	2012	2007-2012	2007-2012
IAG1350			13-2	1-1
IAG3400			2-2	1-1
NEG1960			1-1	1-1
NEG4300			1-1	1-1
NDG2180			7-1	1-1
NDG7500			1-1	1-1
MOCG2050			1-1	1-1
MOCG3630			1-1	1-1
MONG1850			2-1	1-1
ING1000			71-57	1-1
ING2200			3-1	1-1
TXPG3760			49-22	1-1
TXHG2000			85-76	1-28
TXWG1400			86-89	1-16
TXUG1200			78-88	1-85
TNG900			91-48	1-6
TNG2750			13-5	1-1
SCG1500			1-1	1-1
SCG3500			1-1	1-1

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

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 2007 and 2012.

Implications of the August 2007 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Feed Grains and Oilseeds

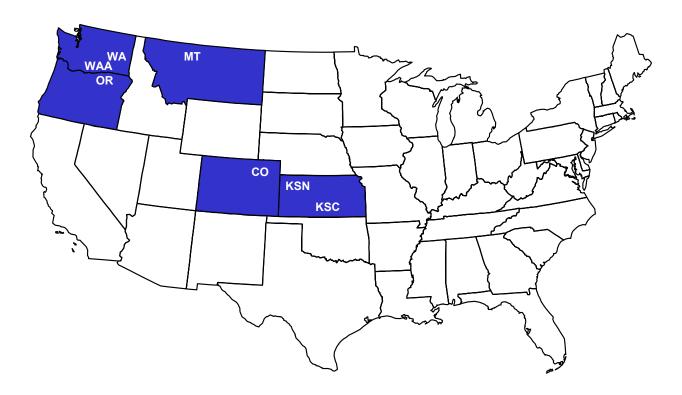
	Receipts	Payments	NCFI	Reserve 2012	Net Worth 2012	CRNW
	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(%)
IAG1350	694.03	55.01	237.23	471.90	2,191.12	8.47
IAG3400	1,715.90	135.11	655.19	996.04	6,905.72	7.11
NEG1960	1,296.24	101.13	463.32	951.98	3,307.16	8.65
NEG4300	2,638.47	192.35	938.36	1,882.66	7,633.22	9.01
NDG2180	629.89	37.30	281.77	633.44	1,401.79	13.93
NDG7500	2,620.87	125.91	1,298.09	3,993.15	9,738.27	9.95
MOCG2050	874.53	61.95	476.51	831.20	7,195.69	7.65
MOCG3630	1,448.75	95.14	841.77	2,100.30	10,350.56	8.58
MONG1850	934.55	56.74	395.82	615.88	6,538.02	6.69
ING1000	469.46	38.63	147.87	(13.24)	2,665.76	5.65
ING2200	1,115.16	86.59	409.83	635.42	7,281.03	6.88
TXPG3760	2,921.00	221.11	363.30	403.87	5,162.30	6.59
TXHG2000	539.52	52.18	68.98	(173.07)	1,126.94	2.40
TXWG1400	387.02	49.55	52.09	(152.43)	820.71	2.88
TXUG1200	675.69	79.65	40.18	(193.55)	12.79	(12.69)
TNG900	352.13	23.22	77.29	3.62	991.81	3.75
TNG2750	1,131.42	77.29	455.33	381.44	4,136.60	6.94
SCG1500	914.71	141.52	250.76	694.59	1,811.42	8.45
SCG3500	1,641.32	186.23	572.36	1,506.49	8,236.88	7.69

- 1 Receipts are average annual total cash receipts including government payments, 2007-2012 (\$1,000)
- 2 Payments are average annual total government payments, 2007-2012 (\$1,000)
- 3 NCFI are average annual net cash farm income, 2007-2012 (\$1,000)
- 4 Reserve 2012 are average ending cash reserves, 2012 (\$1,000)
- 5 Net Worth 2012 are average nominal ending net worth, 2012 (\$1,000)
- 6 CRNW are average percentage in real net worth over 2007-2012 period, (%)

<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 2005 to 2007 and from 2005 to 2012.

# **Representative Farm: Wheat**

- Eight wheat farms are projected to be in good overall financial condition with three in marginal condition and none in poor condition.
- Three of the eleven wheat farms will feel severe liquidity pressure over the period.
- None of the wheat farms have a 25 percent or greater chance of losing real equity.



**Characteristics of Panel Farms Producing Wheat, 2006.** 

	Cropland	Assets	Debt/Asset	Gross Receipts	Wheat
	(acres)	(\$1,000)	(ratio)	(\$1,000)	(acres)
WAW1725	1,725	1,277.00	0.22	432.90	1,121
WAW5000	5,000	4,848.00	0.16	1,307.20	2,915
WAAW3500	3,500	1,197.00	0.15	269.20	1,500
ORW4000	3,600	1,274.00	0.13	333.80	1,600
MTW4500	4,500	2,567.00	0.14	580.80	2,330
KSCW1600	1,600	1,101.00	0.24	288.80	1,072
KSCW4000	4,000	2,149.00	0.19	718.50	2,000
KSNW2800	2,800	1,532.00	0.14	402.90	1,400
KSNW5000	5,000	2,648.00	0.13	958.80	2,325
COW3000	3,000	1,175.00	0.23	191.50	970
COW5640	5,640	1,923.00	0.25	417.50	2,256

### **Representative Farm: Wheat**

**Economic Viability of Representative Farms over the 2007-2012 Period** 

Farm Name	Overall	Ranking	P(Negative Ending Cash)	P(Real Net Worth Declines)
8/3/0	2007	2012	2007-2012	2007-2012
WAW1725			76-45	1-1
WAW5000			57-84	1-1
WAAW3500			6-7	1-1
MTW4500			1-1	1-1
ORW4000			7-8	1-1
KSCW1600			75-50	1-7
KSCW4000			17-2	1-1
KSNW2800			39-59	1-2
KSNW5000			3-4	1-1
COW3000			72-1	1-1
COW5640			82-58	1-1

1 Viability is classified as good (green), moderate (yellow), and poor (red) based on the probabilities: <25 >50

### Implications of the August 2007 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Wheat

	Receipts	Payments	NCFI	Reserve 2012	Net Worth 2012	CRNW
	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(%)
WAW1725	459.22	40.50	94.93	0.17	1,434.99	4.08
WAW5000	1,381.68	110.16	224.84	(364.36)	5,707.88	3.73
WAAW3500	281.11	28.27	96.26	128.34	1,586.17	5.49
ORW4000	346.61	32.68	134.17	196.25	1,604.66	4.23
MTW4500	474.88	53.43	218.20	711.13	3,475.01	6.11
KSCW1600	318.12	26.32	81.42	3.90	1,154.62	3.53
KSCW4000	763.58	67.43	270.66	292.67	2,637.02	5.34
KSNW2800	428.63	36.36	106.68	(42.74)	1,831.42	3.72
KSNW5000	1,070.35	79.01	324.99	517.72	3,606.36	5.71
COW3000	342.78	22.52	168.19	299.76	1,635.28	7.85
COW5640	619.72	47.20	212.50	(36.97)	2,318.50	5.46

<sup>1</sup> Receipts are average annual total cash receipts including government payments, 2007-2012 (\$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 2007 and 2012.

<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 2005 to 2007 and from 2005 to 2012.

<sup>2</sup> Payments are average annual total government payments, 2007-2012 (\$1,000)

<sup>3</sup> NCFI are average annual net cash farm income, 2007-2012 (\$1,000)

<sup>4</sup> Reserve 2012 are average ending cash reserves, 2012 (\$1,000)

<sup>5</sup> Net Worth 2012 are average nominal ending net worth, 2012 (\$1,000)

<sup>6</sup> CRNW are average percentage in real net worth over 2007-2012 period, (%)

# **Representative Farm: Cotton**

- Five of the twenty cotton farms are characterized as being in good overall condition, with six farms characterized in marginal and nine in poor condition.
- Nine of the farms are projected to experience severe cash flow problems over the period.
- Seven of the twenty cotton farms have more than a 50 percent chance of losing real equity.



**Characteristics of Panel Farms Producing Cotton, 2006.** 

	Cropland	Assets	Debt/Asset	Gross Receipts	Cotton
	(acres)	(\$1,000)	(ratio)	(\$1,000)	(acres)
TXNP3000	3,000	907.00	0.59	1,160.10	1,500
TXNP7000	7,000	2,934.00	0.37	2,650.40	2,850
TXSP2239	2,239	928.00	0.26	542.90	1,800
TXSP3745	3,745	2,256.00	0.25	927.80	3,036
TXPC2500	2,500	2,538.00	0.18	1,157.70	1,367
TXEC5000	5,000	1,656.00	0.15	1,503.70	3,800
TXRP2500	2,500	580.00	0.28	245.60	1,117
TXMC1800	1,800	871.00	0.23	635.40	900
TXCB2250	2,250	1,150.00	0.21	711.20	1,350
TXCB5500	5,500	1,276.00	0.36	1,675.60	2,750
TXVC4500	4,500	2,694.00	0.22	1,068.80	2,388
CAC4000	4,000	13,749.00	0.16	6,384.80	2,000
LAC2640	2,640	911.00	0.23	1,345.30	924
ARC6000	6,000	7,289.00	0.30	3,219.80	2,000
ARNC5000	5,000	6,271.00	0.27	2,828.60	5,000
TNC1900	1,900	2,364.00	0.16	933.00	990
TNC4050	4,050	4,466.00	0.22	1,698.10	2,670
ALC3000	3,000	1,521.00	0.14	923.30	2,100
GAC2300	2,300	3,935.00	0.15	1,970.40	1,495
NCC1500	1,500	3,018.00	0.16	870.60	954

### **Representative Farm: Cotton**

**Economic Viability of Representative Farms over the 2007-2012 Period** 

Farm Name	Overall I	Ranking	P(Negative Ending Cash)	P(Real Net Worth Declines)
5/6/9	2007	2012	2007-2012	2007-2012
TXNP3000			99-99	1-89
TXNP7000			96-88	1-38
TXSP2239			99-92	1-72
TXSP3745			99-98	1-68
TXPC2500			1-14	1-3
TXEC5000			1-23	1-37
TXRP2500			71-43	1-26
TXMC1800			77-49	1-25
TXCB2250			68-73	1-34
TXCB5500			80-82	1-60
TXVC4500			33-16	1-1
CAC4000			25-47	1-11
LAC2640			29-43	1-30
ARC6000			99-99	1-69
ARNC5000			98-98	1-64
TNC1900			1-1	1-1
TNC4050			94-99	1-56
ALC3000			69-33	1-27
GAC2300			1-1	1-1
NCC1500			1-5	1-1

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

<25

25-50

>50

Implications of the August 2007 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Cotton

Turnis i innurny	Receipts	Payments	NCFI	Reserve 2012	Net Worth 2012	CRNW
	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(%)
TXNP3000	1,301.50	92.16	(3.58)	(1,431.92)	(371.80)	(60.83)
TXNP7000	2,911.07	202.67	229.15	(1,102.45)	2,147.69	2.19
TXSP2239	611.69	97.47	18.38	(629.09)	456.06	(6.12)
TXSP3745	1,044.08	166.41	22.24	(1,215.18)	1,494.34	(2.81)
TXPC2500	1,364.64	168.60	240.29	386.28	2,956.02	4.15
TXEC5000	1,638.22	246.04	289.39	383.84	1,698.08	2.50
TXRP2500	376.44	58.76	80.25	32.21	618.33	5.34
TXMC1800	730.75	95.22	135.69	25.84	915.02	4.97
TXCB2250	802.15	112.51	106.92	(212.70)	1,102.82	1.77
TXCB5500	1,822.13	244.68	126.46	(698.19)	616.20	(5.38)
TXVC4500	1,696.66	250.94	378.73	509.13	3,502.35	7.23
CAC4000	6,372.15	154.83	580.58	(196.35)	16,858.34	4.44
LAC2640	1,486.79	225.21	212.43	72.09	981.18	4.33
ARC6000	3,432.58	401.04	51.89	(3,753.16)	4,978.32	(1.70)
ARNC5000	3,021.55	383.45	92.65	(2,958.02)	4,450.69	(1.68)
TNC1900	1,029.22	116.56	360.67	855.06	3,501.24	8.29
TNC4050	1,901.28	289.92	3.81	(2,134.63)	3,599.76	(0.99)
ALC3000	1,233.83	214.49	259.69	106.40	1,466.72	2.22
GAC2300	1,955.92	286.61	332.21	427.17	4,946.20	5.03
NCC1500	829.60	114.53	230.31	320.46	3,483.95	3.80

<sup>1</sup> Receipts are average annual total cash receipts including government payments, 2007-2012 (\$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 2007 and 2012.

<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 2005 to 2007 and from 2005 to 2012.

<sup>2</sup> Payments are average annual total government payments, 2007-2012 (\$1,000)

<sup>3</sup> NCFI are average annual net cash farm income, 2007-2012 (\$1,000)

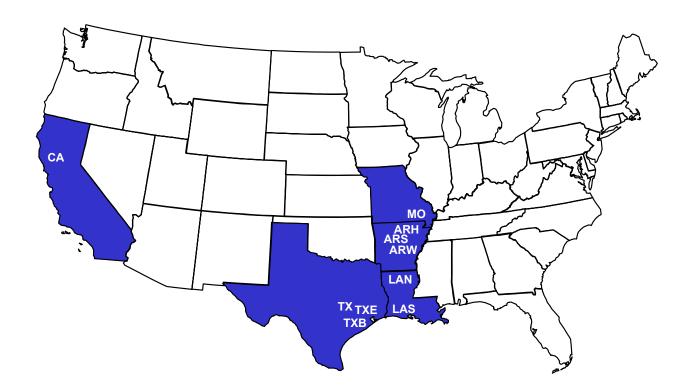
<sup>4</sup> Reserve 2012 are average ending cash reserves, 2012 (\$1,000)

<sup>5</sup> Net Worth 2012 are average nominal ending net worth, 2012 (\$1,000)

<sup>6</sup> CRNW are average percentage in real net worth over 2007-2012 period, (%)

# **Representative Farm: Rice**

- None of the fourteen rice farms are projected to be in good overall financial condition, five are in marginal condition, and nine are in poor condition.
- All fourteen of the rice farms are expected to face severe cash flow problems and nine of fourteen have high probabilities of real equity losses.



**Characteristics of Panel Farms Producing Rice, 2006.** 

	Cropland	Assets	Debt/Asset	Gross Receipts	Rice
	(acres)	(\$1,000)	(ratio)	(\$1,000)	(acres)
CAR550	550	1,793.00	0.29	483.70	500
CAR2365	2,365	5,305.00	0.20	2,318.30	2,240
CABR1300	1,300	3,872.00	0.20	1,299.10	1,200
CACR715	715	1,951.00	0.18	752.00	650
TXR1350	1,350	1,083.00	0.26	393.40	855
TXR2400	2,400	939.00	0.47	825.10	2,280
TXBR1800	1,800	861.00	0.39	681.70	1,200
TXER3200	3,200	1,179.00	0.53	1,091.60	2,240
LASR1200	1,200	445.00	0.86	396.40	660
LANR2500	2,500	4,091.00	0.22	1,205.90	1,000
MOWR4000	4,000	9,230.00	0.20	2,037.80	2,000
ARSR3640	3,640	3,992.00	0.19	1,150.60	1,620
ARWR1200	1,200	2,435.00	0.30	558.40	600
ARHR3000	3,000	6,035.00	0.31	1,515.90	1,750

### **Representative Farm: Rice**

**Economic Viability of Representative Farms over the 2007-2012 Period** 

Farm Name	Farm Name Overall Rai		P(Negative Ending Cash)	P(Real Net Worth Declines)
0/5/9	2007	2012	2007-2012	2007-2012
CAR550			99-99	1-81
CAR2365			72-93	1-14
CABR1300			29-86	1-9
CACR715			81-99	1-14
TXR1350			99-99	1-99
TXR2400			99-99	1-99
TXBR1800			98-99	1-99
TXER3200			99-99	1-99
LASR1200			99-99	1-99
LANR2500			99-99	1-78
MOWR4000			38-54	1-1
ARSR3640			87-97	1-14
ARWR1200			99-99	1-99
ARHR3000			99-99	1-83

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

Implications of the August 2007 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Rice

	Receipts	Payments	NCFI	Reserve 2012	Net Worth 2012	CRNW
	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(%)
CAR550	529.17	66.97	(12.50)	(792.91)	1,219.34	(1.84)
CAR2365	2,443.86	257.58	158.64	(910.76)	5,399.73	2.29
CABR1300	1,313.18	159.28	186.09	(320.91)	4,144.12	3.20
CACR715	747.17	87.08	33.87	(389.40)	2,011.64	2.01
TXR1350	387.58	53.83	(43.32)	(818.11)	485.93	(6.84)
TXR2400	814.97	96.89	(73.51)	(1,353.38)	(469.52)	(34.28)
TXBR1800	672.53	81.90	(41.34)	(967.57)	(80.43)	(20.86)
TXER3200	1,085.37	146.05	(218.53)	(2,618.55)	(1,073.29)	(58.84)
LASR1200	405.49	46.44	(139.10)	(1,418.74)	(993.33)	(77.81)
LANR2500	1,277.44	154.26	(21.90)	(2,068.64)	3,279.88	(1.59)
MOWR4000	2,135.03	233.06	551.78	(179.21)	10,957.55	5.16
ARSR3640	1,246.11	150.75	246.03	(856.30)	4,228.09	2.34
ARWR1200	603.81	71.73	(192.58)	(2,699.87)	509.60	(11.70)
ARHR3000	1,599.83	177.70	(202.98)	(4,038.39)	3,856.93	(2.94)

<sup>1</sup> Receipts are average annual total cash receipts including government payments, 2007-2012 (\$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 2007 and 2012.

<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 2005 to 2007 and from 2005 to 2012.

<sup>2</sup> Payments are average annual total government payments, 2007-2012 (\$1,000)

<sup>3</sup> NCFI are average annual net cash farm income, 2007-2012 (\$1,000)

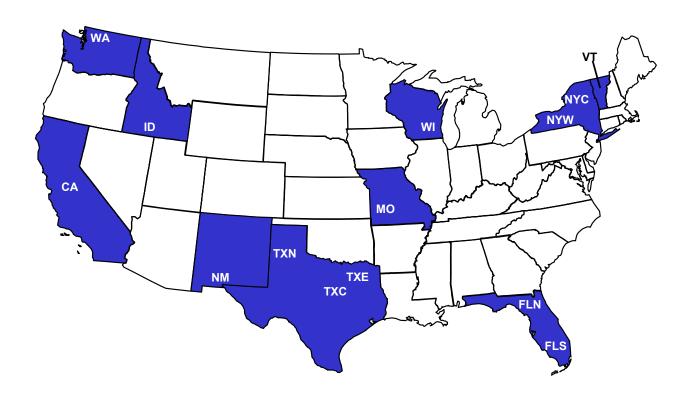
<sup>4</sup> Reserve 2012 are average ending cash reserves, 2012 (\$1,000)

<sup>5</sup> Net Worth 2012 are average nominal ending net worth, 2012 (\$1,000)

<sup>6</sup> CRNW are average percentage in real net worth over 2007-2012 period, (%)

# **Representative Farm: Dairy**

- Seventeen of twenty-three dairy operations are in good overall financial condition. Four are classified in marginal condition and two in poor condition.
- Four of the dairies are projected to experience significant liquidity pressure.
- Two dairies are projected to face a 25 percent or greater probability of losing real equity.



Characteristics of Panel Farms Producing Milk, 2006.

Characteristics of Panel Farms Producing Milk, 2006.							
	Cropland	Assets	Debt/Asset	Gross Receipts	Cows		
	(acres)	(\$1,000)	(ratio)	(\$1,000)	(number)		
CAD1710	700	13,162.00	0.16	5,135.00	1,710		
NMD2125	370	10,084.00	0.14	6,300.00	2,125		
WAD250	200	2,842.00	0.21	814.00	250		
WAD850	605	6,710.00	0.26	2,722.50	850		
IDD1000	360	5,957.00	0.13	3,263.00	1,000		
IDD3000	1,500	20,172.00	0.14	9,473.30	3,000		
TXND3000	480	12,215.00	0.12	8,528.40	3,000		
TXCD550	250	2,652.00	0.26	1,490.70	550		
TXCD1300	460	6,345.00	0.16	3,935.40	1,300		
TXED450	850	2,798.00	0.17	1,207.10	450		
TXED1000	750	5,830.00	0.19	2,867.20	1,000		
WID145	600	2,872.00	0.19	550.30	145		
WID775	1,200	5,528.00	0.15	2,877.90	775		
NYWD800	1,440	6,025.00	0.25	2,806.70	800		
NYWD1200	2,160	9,014.00	0.21	4,190.10	1,200		
NYCD110	296	1,009.00	0.16	453.00	110		
NYCD500	1,100	3,934.00	0.17	1,869.70	500		
VTD140	220	1,682.00	0.16	556.80	140		
VTD400	1,000	4,233.00	0.21	1,445.20	400		
MOD85	222	1,433.00	0.22	247.30	85		
MOD400	450	3,741.00	0.17	1,260.90	400		
FLND550	600	3,968.00	0.14	1,743.20	550		
FLSD1500	400	8,955.00	0.27	4,434.30	1,500		

### **Representative Farm: Dairy**

**Economic Viability of Representative Farms over the 2007-2012 Period** 

Farm Name	Overall	Overall Ranking P(Negative Ending Cash)		P(Real Net Worth Declines)
17/4/2	2007	2012	2007-2012	2007-2012
CAD1710			1-1	1-1
NMD2125			1-1	1-1
WAD250			2-7	1-1
WAD850			27-49	1-20
IDD1000			1-4	1-1
IDD3000			1-1	1-1
TXND3000			1-10	1-23
TXCD550			83-98	1-89
TXCD1300			1-1	1-1
TXED450			6-15	1-2
TXED1000			4-18	1-11
WID145			1-5	1-1
WID775			1-1	1-1
NYWD800			23-56	1-12
NYWD1200			5-25	1-11
NYCD110			1-1	1-1
NYCD500			1-3	1-1
VTD140			1-2	1-1
VTD400			9-19	1-2
MOD85			75-92	1-1
MOD400			1-2	1-1
FLND550			1-1	1-1
FLSD1500			93-99	1-87

<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 2007 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Milk

	Receipts	Payments	NCFI	Reserve 2012	Net Worth 2012	CRNW
	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(%)
CAD1710	6,704.61	9.58	1,313.29	3,467.53	17,137.44	5.24
NMD2125	8,287.30	0.00	2,039.20	5,498.24	15,318.38	7.01
WAD250	1,061.90	2.48	267.25	301.67	3,509.60	5.41
WAD850	3,649.81	15.48	395.21	(44.92)	6,507.25	1.85
IDD1000	4,307.58	0.00	738.98	1,461.95	8,072.85	5.04
IDD3000	12,606.02	4.90	2,974.44	6,890.06	28,354.31	5.94
TXND3000	11,249.90	0.00	1,265.82	2,987.71	14,234.84	1.98
TXCD550	1,933.70	0.00	(61.41)	(1,307.08)	1,558.74	(5.36)
TXCD1300	5,098.76	0.00	1,056.69	3,065.07	8,557.83	5.52
TXED450	1,551.26	0.00	238.77	330.60	3,381.55	3.80
TXED1000	3,768.59	0.00	584.36	658.28	6,447.21	2.64
WID145	690.97	5.17	207.39	230.32	3,543.58	5.13
WID775	3,695.34	7.14	1,253.73	3,748.17	8,808.67	8.63
NYWD800	3,656.67	20.22	342.28	(202.78)	6,388.52	2.47
NYWD1200	5,453.10	27.58	574.84	421.81	9,975.08	2.37
NYCD110	562.35	3.59	212.97	606.23	1,550.97	8.14
NYCD500	2,406.52	11.22	465.81	567.26	5,127.10	4.97
VTD140	688.00	4.00	178.68	279.69	2,114.73	4.71
VTD400	1,831.18	14.44	282.18	190.11	4,629.25	3.05
MOD85	306.17	0.00	71.60	(123.12)	1,643.55	4.28
MOD400	1,626.70	0.00	396.94	734.24	4,927.81	5.62
FLND550	2,183.03	0.00	674.28	1,842.05	6,071.75	7.69
FLSD1500	5,633.61	0.00	(372.33)	(4,277.06)	5,341.48	(4.88)

<sup>1</sup> Receipts are average annual total cash receipts including government payments, 2007-2012 (\$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 2007 and 2012.

<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 2005 to 2007 and from 2005 to 2012.

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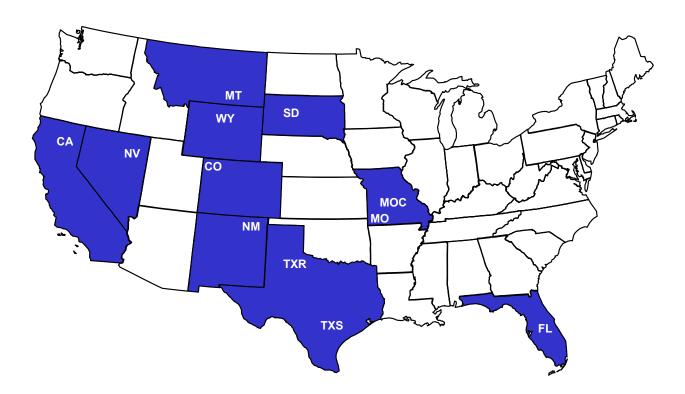
<sup>4</sup> Reserve 2012 are average ending cash reserves, 2012 (\$1,000)

<sup>5</sup> Net Worth 2012 are average nominal ending net worth, 2012 (\$1,000)

<sup>6</sup> CRNW are average percentage in real net worth over 2007-2012 period, (%)

# **Representative Farm: Cow/Calf**

- Six of twelve cow-calf operations are projected to be in good overall financial condition. Six are expected to be in marginal condition and none 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.
- None of the operations are projected to face a severe threat of losing real equity over the period.



#### **Characteristics of Panel Farms Producing Beef Cattle, 2006.**

	Cropland	Assets	Debt/Asset	Gross Receipts	Cows
	(acres)	(\$1,000)	(ratio)	(\$1,000)	(number)
CAB500	0	12,666.00	0.01	306.90	500
NVB700	1,300	4,152.00	0.02	354.40	700
MTB500	0	3,979.00	0.02	299.30	500
WYB335	330	3,094.00	0.03	258.00	335
COB250	450	14,185.00	0.02	225.50	250
NMB240	0	5,108.00	0.01	292.30	240
SDB450	1,150	3,794.00	0.02	283.60	450
MOB240	240	2,450.00	0.02	234.10	250
MOCB400	40	3,504.00	0.01	279.50	400
TXRB500	0	6,040.00	0.01	428.80	500
TXSB175	0	2,597.00	0.02	191.00	250
FLB1155	5,400	14,887.00	0.01	628.90	1,155

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

**Economic Viability of Representative Farms over the 2007-2012 Period** 

Farm Name	Overall	Ranking	P(Negative Ending Cash)	P(Real Net Worth Declines)
6/6/0	2007	2012	2007-2012	2007-2012
CAB500			99-99	1-1
NVB700			2-59	1-1
MTB500			1-1	1-1
WYB335			90-99	1-1
COB250			1-15	1-1
NMB240			27-98	1-1
SDB450			1-1	1-1
MOB240			1-1	1-1
MOCB400			1-1	1-1
TXRB500			1-1	1-1
TXSB175			1-99	1-1
FLB1155			11-85	1-1

1 Viability is classified as good (green), moderate (yellow), and poor (red) based on the probabilities: <25 >50

Implications of the August 2007 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Beef Cattle

	Receipts	Payments	NCFI	Reserve 2012	Net Worth 2012	CRNW
	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(%)
CAB500	309.77	0.00	(24.99)	(404.87)	17,235.21	3.71
NVB700	352.79	0.00	39.33	(36.63)	5,084.89	2.63
MTB500	286.86	0.00	90.07	253.06	5,445.13	3.86
WYB335	260.97	0.00	2.59	(310.58)	3,709.17	1.95
COB250	205.19	0.00	38.45	67.58	19,724.35	4.15
NMB240	291.61	0.00	21.78	(94.60)	6,952.77	3.63
SDB450	287.21	0.71	74.15	223.68	5,038.32	3.50
MOB240	239.92	5.85	132.45	459.42	3,541.12	5.00
MOCB400	269.09	0.00	83.26	312.91	4,877.17	4.07
TXRB500	449.06	0.00	167.83	653.26	8,599.37	4.47
TXSB175	122.75	0.00	13.46	(175.97)	3,168.66	2.14
FLB1155	607.54	0.00	8.31	(182.14)	20,403.04	3.67

- 1 Receipts are average annual total cash receipts including government payments, 2007-2012 (\$1,000)
- 2 Payments are average annual total government payments, 2007-2012 (\$1,000)
- 3 NCFI are average annual net cash farm income, 2007-2012 (\$1,000)
- 4 Reserve 2012 are average ending cash reserves, 2012 (\$1,000)
- 5 Net Worth 2012 are average nominal ending net worth, 2012 (\$1,000)
- 6 CRNW are average percentage in real net worth over 2007-2012 period, (%)

<sup>2</sup> P(NegativeEnding Cash) is the probability that the farm will have a cash flow deficit. Reported values represent the probabilities for 2007 and 2012.

<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 2005 to 2007 and from 2005 to 2012.

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