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#### **Research Report**

Representative farms economic outlook for the January 2007 FAPRI/AFPC baseline

AFPC Briefing Paper, No. 07-2

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

# **AFPC Briefing Paper 07-2**

February 2007

**Agricultural and Food Policy Center** 



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

AFPC Briefing Paper 07-2

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#### **EXECUTIVE SUMMARY**

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

Under the January 2007 Baseline, 20 of the 64 crop farms are considered in good liquidity condition (less than a 25 percent chance of negative ending cash in 2012). Five crop farms have between a 25 percent and a 50 percent likelihood of negative ending cash. The remaining 39 crop farms have greater than a 50 percent chance of negative ending cash. Additionally, 30 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). Nine crop farms have between a 25 percent and 50 percent likelihood of losing real net worth, and 25 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: Eleven of the 19 feedgrain farms are in good overall financial condition. Two can be considered to be in marginal condition, and six are in poor condition.
- WHEAT FARMS: Six of the 11 wheat farms are classified in good financial condition, five are marginal, and none are in poor condition.
- COTTON FARMS: Two of the 20 cotton farms are classified in good condition, five are in marginal condition, and 13 are in poor condition. Also, 12 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, one is classified in marginal condition, and 13 farms are projected to be in poor financial condition through 2012.
- DAIRY FARMS: Nine of the 23 dairy farms are in good overall financial condition. Four are considered to be in marginal condition, and ten are in poor condition.
- BEEF CATTLE RANCHES: Four of the 12 cattle ranches are classified in good financial condition, eight are classified in marginal condition, and none are projected to be in poor condition.

### REPRESENTATIVE FARMS ECONOMIC OUTLOOK FOR THE JANUARY 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) January 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 January 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 January 1, 2007 through December 31, 2012, after adjusting for inflation.

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

	2005	2006	2007	2008	2009	2010	2011	2012
Crop Prices								
Corn (\$/bu.)	2.00	3.16	3.24	3.24	3.25	3.22	3.19	3.15
Wheat (\$/bu.)	3.42	4.28	4.11	4.07	4.11	4.15	4.17	4.19
Cotton (\$/lb.)	0.4770	0.4813	0.5181	0.5538	0.5668	0.5743	0.5776	0.5819
Sorghum (\$/bu.)	1.86	3.09	2.97	2.98	3.01	3.02	3.02	3.01
Soybeans (\$/bu.)	5.66	6.10	6.68	7.02	7.01	6.90	6.83	6.76
Barley (\$/bu.)	2.53	2.94	3.21	3.20	3.18	3.13	3.10	3.06
Oats (\$/bu.)	1.63	1.90	1.91	1.93	1.93	1.93	1.91	1.90
Rice (\$/cwt.)	7.62	9.85	8.09	8.02	8.30	8.51	8.54	8.72
Soybean Meal (\$/ton)	166.14	171.63	178.67	177.72	173.62	169.75	167.79	165.67
All Hay (\$/ton)	98.20	110.66	109.77	108.68	108.99	109.53	109.39	108.59
Peanuts (\$/ton)	346.00	360.00	424.87	454.68	450.26	444.73	445.56	444.75
Cattle Prices								
Feeder Cattle (\$/cwt)	120.02	117.59	109.17	102.22	95.64	90.51	91.54	95.57
Fat Cattle (\$/cwt)	07.00		05.04	05.04	0.4.00			
Culled Cows (\$/cwt)	87.28	85.41	85.61	85.91	84.36	82.36	82.40	83.08
Milk Price	54.36	47.73	47.88	48.13	47.23	45.95	46.23	47.16
U.S. All Milk Price (\$/cwt)	15.14	12.91	14.21	14.26	14.28	14.35	14.50	14.49

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

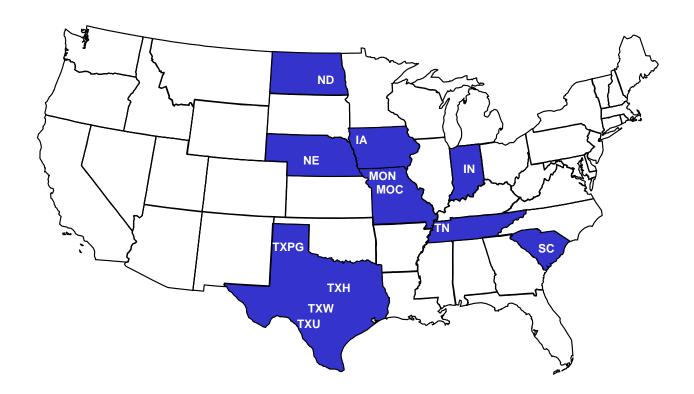
Table 2. FAPRI January 2007 Baseline Assumed Rates of Change in Input Prices, Annual Interest Rates, and Annual Changes in Land Values, 2006-2012

	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 (%)	3.77	5.57	4.59	-1.20	-0.95	-0.32	-1.05
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 (%)	3.27	2.18	2.01	1.79	1.76	1.84	1.94
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	7.56	7.78	8.34	3.36	2.96	3.05

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

# **Representative Farm: Feed Grains**

- Overall, eleven feed grain farms are characterized as good, two are marginal, and six are in poor condition.
- Seven of nineteen farms will be under 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	1,505.00	0.14	612.60	1,350
IAG3400	3,400	5,074.00	0.14	1,515.20	3,400
NEG1960	1,960	2,371.00	0.10	1,260.70	1,770
NEG4300	4,300	5,627.00	0.20	2,431.00	3,784
NDG2180	2,180	749.00	0.14	465.50	1,600
NDG7500	7,500	5,897.00	0.09	2,062.10	5,750
MOCG2050	2,050	4,982.00	0.12	732.20	2,050
MOCG3630	3,630	6,824.00	0.11	1,223.60	3,530
MONG1850	1,850	4,703.00	0.10	789.60	1,800
ING1000	1,000	2,012.00	0.10	405.20	1,000
ING2200	2,200	5,231.00	0.11	965.10	2,200
TXPG3760	3,760	3,013.00	0.20	2,425.40	1,344
TXHG2000	2,000	1,160.00	0.18	506.40	1,000
TXWG1400	1,400	775.00	0.13	359.50	900
TXUG1200	1,201	378.00	0.37	709.80	450
TNG900	900	932.00	0.11	300.60	900
TNG2750	2,750	3,081.00	0.17	940.30	2,750
SCG1500	1,500	1,121.00	0.16	626.90	1,500
SCG3500	3,500	5,288.00	0.13	1,589.20	3,100

### 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)
11/2/6	2007	2012	2007-2012	2007-2012
IAG1350			14-7	1-1
IAG3400			2-5	1-1
NEG1960			1-1	1-1
NEG4300			21-2	1-1
NDG2180			19-3	1-1
NDG7500			1-1	1-1
MOCG2050			1-1	1-1
MOCG3630			1-1	1-1
MONG1850			1-6	1-1
ING1000			52-78	1-1
ING2200			1-2	1-1
TXPG3760			74-88	1-39
TXHG2000			80-85	1-45
TXWG1400			64-88	1-40
TXUG1200			95-99	1-94
TNG900			68-59	1-29
TNG2750			29-41	1-1
SCG1500			54-80	1-26
SCG3500			20-20	1-1

<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 January 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	643.99	29.05	186.77	319.47	2,043.07	7.01
IAG3400	1,593.83	71.55	534.57	736.04	6,659.55	6.30
NEG1960	1,208.32	51.11	374.81	710.15	3,135.63	7.04
NEG4300	2,447.02	101.23	724.20	1,010.30	6,921.21	7.84
NDG2180	540.46	25.08	190.91	350.99	1,107.37	9.52
NDG7500	2,397.66	99.67	1,082.26	3,521.26	9,151.07	8.70
MOCG2050	796.34	33.23	406.07	806.29	7,147.36	7.21
MOCG3630	1,329.28	50.44	732.56	1,997.88	10,210.90	7.97
MONG1850	823.81	30.39	291.50	463.56	6,348.65	5.88
ING1000	428.59	21.12	108.32	(106.36)	2,551.53	4.72
ING2200	1,016.20	46.26	318.03	546.10	7,160.64	6.15
TXPG3760	2,546.13	221.90	113.79	(935.15)	2,662.60	0.90
TXHG2000	506.68	44.05	38.21	(286.97)	989.92	0.00
TXWG1400	365.41	45.31	33.44	(203.35)	749.84	0.82
TXUG1200	730.89	74.00	2.73	(600.19)	(185.58)	(49.83)
TNG900	321.08	11.43	49.50	(50.83)	921.05	1.37
TNG2750	1,019.04	37.94	339.51	57.21	3,726.45	5.52
SCG1500	651.93	79.11	57.36	(182.11)	1,124.17	1.99
SCG3500	1,653.06	163.53	302.53	382.19	6,835.97	6.22

<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)

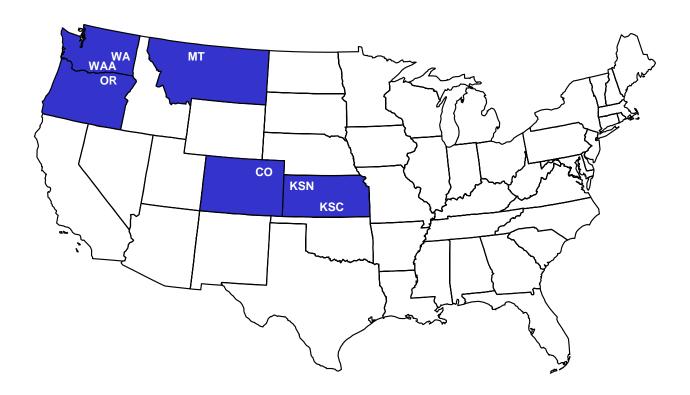
<sup>4</sup> Reserve 2012 are average ending cash reserves, 2012 (\$1,000)

<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: Wheat**

- Six wheat farms are projected to be in good overall financial condition with five in marginal condition and none in poor condition.
- Four of the eleven wheat farms will feel severe liquidity pressure over the period.
- None of the wheat farms have a 20 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	1,275.00	0.18	441.80	1,121
WAW5000	5,000	4,900.00	0.12	1,334.80	2,915
WAAW3500	3,500	1,221.00	0.11	270.20	1,500
ORW4000	3,600	1,314.00	0.09	335.00	1,600
MTW4500	4,500	2,551.00	0.12	580.80	2,330
KSCW1600	1,600	1,099.00	0.26	286.80	1,072
KSCW4000	4,000	2,139.00	0.19	710.10	2,000
KSNW2800	2,800	1,564.00	0.11	406.30	1,400
KSNW5000	5,000	2,725.00	0.10	969.40	2,325
COW3000	3,000	1,489.00	0.10	310.10	970
COW5640	5,640	2,417.00	0.13	590.50	1,900

### 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)
6/5/0	2007	2012	2007-2012	2007-2012
WAW1725			92-66	1-1
WAW5000			55-78	1-1
WAAW3500			2-11	1-1
MTW4500			1-1	1-1
ORW4000			1-7	1-1
KSCW1600			99-87	1-19
KSCW4000			52-33	1-1
KSNW2800			21-67	1-7
KSNW5000			2-11	1-1
COW3000			1-1	1-1
COW5640			1-4	1-1

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

Implications of the January 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	439.43	34.24	75.21	(52.59)	1,389.36	3.84
WAW5000	1,325.38	94.24	178.50	(323.46)	5,741.08	3.70
WAAW3500	264.18	23.51	82.16	116.84	1,583.20	5.31
ORW4000	327.38	26.81	117.15	196.13	1,609.72	4.02
MTW4500	448.35	45.78	195.34	622.05	3,410.32	6.16
KSCW1600	293.71	22.25	50.36	(165.89)	986.55	2.38
KSCW4000	709.46	47.06	211.93	81.78	2,431.01	4.55
KSNW2800	399.93	27.65	81.70	(87.94)	1,786.15	3.02
KSNW5000	990.94	52.26	250.60	408.88	3,498.08	4.85
COW3000	312.03	15.61	163.87	530.28	2,198.89	7.24
COW5640	602.39	32.65	214.85	259.89	3,164.54	6.00

<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

- Two of the twenty cotton farms are characterized as being in good overall condition, with five farms characterized in marginal and thirteen in poor condition.
- Fourteen of the farms are projected to experience severe cash flow problems over the period.
- Twelve 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	0.49	1,165.00	1,500
TXNP7000	7,000	2,934.00	0.34	2,662.80	2,850
TXSP2239	2,239	928.00	0.27	544.30	1,800
TXSP3745	3,745	2,256.00	0.20	930.40	3,036
TXPC2500	2,500	2,527.00	0.18	1,213.20	1,367
TXEC5000	5,000	1,653.00	0.15	1,515.20	3,800
TXRP2500	2,500	580.00	0.36	247.90	1,117
TXMC1800	1,800	871.00	0.08	662.50	900
TXCB2250	2,250	1,150.00	0.23	710.30	1,350
TXCB5500	5,500	1,276.00	0.42	1,659.40	2,750
TXVC4500	4,500	2,714.00	0.21	1,136.30	2,388
CAC4000	4,000	13,645.00	0.13	6,408.00	2,000
LAC2640	2,640	976.00	0.18	1,364.00	924
ARC6000	6,000	7,265.00	0.31	3,225.80	2,000
ARNC5000	5,000	6,247.00	0.29	2,843.50	5,000
TNC1900	1,900	2,410.00	0.13	939.00	990
TNC4050	4,050	4,466.00	0.16	1,707.80	2,670
ALC3000	3,000	1,567.00	0.45	1,214.30	2,100
GAC2300	2,300	3,961.00	0.12	1,982.60	1,495
NCC1100	1,100	1,889.00	0.20	563.40	700

### **Representative Farm: Cotton**

Economic Viability of Representative Farms over the 2007-2012 Period
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Farm Name	Overall	Ranking	P(Negative Ending Cash)	P(Real Net Worth Declines)
2/5/13	2007	2012	2007-2012	2007-2012
TXNP3000			99-99	1-98
TXNP7000			98-98	1-70
TXSP2239			99-98	1-83
TXSP3745			96-99	1-76
TXPC2500			29-50	1-9
TXEC5000			4-24	1-38
TXRP2500			89-76	1-46
TXMC1800			58-49	1-38
TXCB2250			82-88	1-54
TXCB5500			90-98	1-87
TXVC4500			43-26	1-3
CAC4000			22-51	1-1
LAC2640			26-60	1-52
ARC6000			99-99	1-99
ARNC5000			99-99	1-87
TNC1900			1-1	1-1
TNC4050			77-99	1-69
ALC3000			99-99	1-95
GAC2300			1-1	1-1
NCC1100			99-99	1-94

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

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

	Receipts	Payments	NCFI	Reserve 2012	Net Worth 2012	CRNW
	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(%)
TXNP3000	1,240.54	76.38	(64.65)	(1,671.48)	(603.78)	(44.76)
TXNP7000	2,761.50	170.70	62.17	(1,824.48)	1,447.46	(4.73)
TXSP2239	590.94	110.71	(7.90)	(763.12)	299.25	(9.69)
TXSP3745	1,008.71	187.06	(7.78)	(1,233.46)	1,412.77	(3.91)
TXPC2500	1,294.50	173.76	164.39	(45.77)	2,594.40	3.11
TXEC5000	1,590.08	293.50	240.08	221.37	1,516.29	0.86
TXRP2500	349.19	64.02	45.48	(189.30)	406.91	0.34
TXMC1800	691.57	98.35	101.13	(40.82)	858.94	1.06
TXCB2250	757.70	121.32	58.79	(466.98)	821.51	(2.07)
TXCB5500	1,727.02	257.57	17.27	(1,355.60)	(52.89)	(21.06)
TXVC4500	1,646.41	255.89	331.51	280.46	3,333.65	6.45
CAC4000	6,236.25	207.04	475.62	(243.06)	16,918.55	4.75
LAC2640	1,419.33	228.14	145.31	(121.17)	773.65	(1.13)
ARC6000	3,225.97	476.49	(199.95)	(5,247.52)	2,450.67	(7.30)
ARNC5000	2,926.34	459.32	(22.58)	(3,614.68)	2,782.78	(4.97)
TNC1900	978.25	123.02	312.61	802.09	3,374.82	7.43
TNC4050	1,828.40	295.68	(56.43)	(2,278.06)	3,344.14	(2.22)
ALC3000	1,238.93	241.70	8.07	(1,388.97)	4.14	(17.74)
GAC2300	1,908.57	308.33	291.78	401.36	4,836.86	4.63
NCC1100	581.32	91.37	(42.28)	(1,104.45)	1,192.86	(3.73)

<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, one is in marginal condition, and thirteen are in poor condition.
- All fourteen of the rice farms are expected to face severe cash flow problems and twelve of fourteen have high probabilities of real equity losses.



Characteristics of Panel Farms Producing Rice, 2006.

	<u> </u>				
	Cropland	Assets	Debt/Asset	Gross Receipts	Rice
	(acres)	(\$1,000)	(ratio)	(\$1,000)	(acres)
CAR550	550	1,764.00	0.34	495.90	500
CAR2365	2,365	5,206.00	0.45	2,182.30	2,240
CABR1100	1,100	2,342.00	0.49	939.70	1,000
CACR715	715	2,013.00	0.37	661.00	650
TXR1350	1,350	1,083.00	0.22	399.70	855
TXR2400	2,400	939.00	0.53	838.80	2,280
TXBR1800	1,800	861.00	0.44	692.90	1,200
TXER3200	3,200	1,179.00	0.55	1,105.80	2,240
LASR1200	1,200	444.00	0.99	400.70	660
LANR2500	2,500	4,071.00	0.21	1,216.50	1,000
MOWR4000	4,000	8,637.00	0.15	1,911.40	2,000
ARSR3640	3,640	3,974.00	0.14	1,148.10	1,620
ARWR1200	1,200	2,425.00	0.26	559.00	600
ARHR3000	3,000	6,005.00	0.30	1,525.20	1,750

### Representative Farm: Rice

Economic Viability of Representative Farms over the 2007-2012 Period

Farm Name	Overall	Ranking	P(Negative Ending Cash)	P(Real Net Worth Declines)
0/1/13	2007	2012	2007-2012	2007-2012
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			99-99	1-99
TXBR1800			99-99	1-99
TXER3200			99-99	1-99
LASR1200			99-99	1-99
LANR2500			99-99	1-99
MOWR4000			71-86	1-3
ARSR3640			85-99	1-47
ARWR1200			99-99	1-99
ARHR3000			99-99	1-99

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

25-50

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Implications of the January 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	454.35	85.67	(142.76)	(1,604.89)	440.12	(10.12)
CAR2365	1,981.17	397.33	(1,060.89)	(8,967.29)	(2,653.67)	(35.82)
CABR1100	852.35	176.48	(466.06)	(4,435.80)	(1,718.28)	(50.30)
CACR715	599.23	119.65	(356.68)	(3,085.58)	(542.67)	(24.75)
TXR1350	364.59	73.80	(68.64)	(936.55)	341.80	(9.50)
TXR2400	761.72	137.97	(146.62)	(1,832.10)	(949.14)	(96.28)
TXBR1800	630.48	115.53	(96.95)	(1,336.60)	(457.49)	(38.92)
TXER3200	1,011.97	196.80	(311.89)	(3,211.15)	(1,684.04)	(140.78)
LASR1200	375.55	62.67	(183.48)	(1,745.31)	(1,356.67)	109.55
LANR2500	1,183.25	183.73	(133.13)	(2,716.27)	1,773.31	(6.15)
MOWR4000	1,866.81	273.37	313.78	(923.73)	9,906.71	4.08
ARSR3640	1,131.63	169.79	129.97	(1,240.92)	3,088.43	(0.10)
ARWR1200	542.11	84.64	(262.82)	(3,047.96)	(250.78)	(19.82)
ARHR3000	1,447.58	230.41	(390.26)	(5,131.59)	1,482.88	(9.47)

<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)

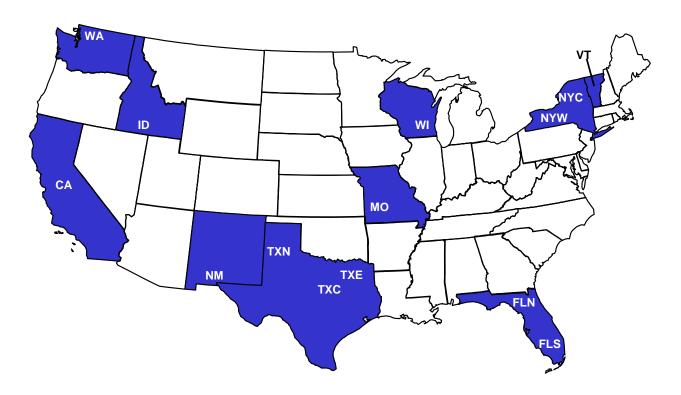
<sup>4</sup> Reserve 2012 are average ending cash reserves, 2012 (\$1,000)

<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**

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



Characteristics of Panel Farms Producing Milk. 2006.

	Cropland	Assets	Debt/Asset	Gross Receipts	Cows
	(acres)	(\$1,000)	(ratio)	(\$1,000)	(number)
CAD1710	700	13,304.00	0.13	5,121.00	1,710
NMD2125	370	10,276.00	0.11	6,351.80	2,125
WAD250	200	2,894.00	0.16	816.10	250
WAD850	605	6,705.00	0.20	2,730.00	850
IDD1000	360	6,097.00	0.09	3,296.50	1,000
IDD3000	1,500	20,551.00	0.10	9,574.90	3,000
TXND3000	480	12,383.00	0.10	8,537.00	3,000
TXCD550	250	2,654.00	0.19	1,492.20	550
TXCD1300	460	6,492.00	0.14	3,939.00	1,300
TXED450	850	2,854.00	0.13	1,208.20	450
TXED1000	750	5,975.00	0.16	2,869.80	1,000
WID145	600	2,941.00	0.15	551.50	145
WID775	1,200	5,637.00	0.12	2,887.00	775
NYWD800	1,440	6,027.00	0.19	2,808.50	800
NYWD1200	2,160	9,121.00	0.15	4,192.60	1,200
NYCD110	296	1,036.00	0.13	453.30	110
NYCD500	1,100	4,070.00	0.12	1,870.70	500
VTD140	220	1,732.00	0.14	561.10	140
VTD400	1,000	4,280.00	0.14	1,457.50	400
MOD85	222	1,451.00	0.14	247.20	85
MOD400	450	3,839.00	0.12	1,260.30	400
FLND550	600	4,096.00	0.10	1,760.60	550
FLSD1500	400	8,958.00	0.21	4,481.30	1,500

### Representative Farm: Dairy

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

Farm Name	Overall	Ranking	P(Negative Ending Cash)	P(Real Net Worth Declines)
9/4/10	2007	2012	2007-2012	2007-2012
CAD1710			4-20	1-10
NMD2125			4-13	1-12
WAD250			10-41	1-6
WAD850			79-98	1-77
IDD1000			16-54	1-29
IDD3000			5-22	1-12
TXND3000			41-83	1-80
TXCD550			99-99	1-99
TXCD1300			4-18	1-20
TXED450			36-91	1-48
TXED1000			40-93	1-70
WID145			3-31	1-1
WID775			2-1	1-3
NYWD800			94-99	1-73
NYWD1200			53-96	1-68
NYCD110			2-1	1-1
NYCD500			6-42	1-15
VTD140			4-23	1-9
VTD400			29-77	1-25
MOD85			30-97	1-2
MOD400			3-21	1-7
FLND550			2-1	1-1
FLSD1500			99-99	1-99

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

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25-50

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Implications of the January 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	5,707.06	19.24	471.38	945.20	14,669.19	3.17
NMD2125	7,021.49	0.58	937.60	2,245.55	11,904.44	4.06
WAD250	877.35	1.92	123.46	(24.64)	3,180.25	3.66
WAD850	2,985.89	10.60	(150.84)	(2,158.91)	4,439.53	(3.00)
IDD1000	3,612.57	0.58	107.15	(535.30)	6,038.41	1.06
IDD3000	10,541.75	20.63	1,074.72	1,498.31	22,855.22	3.12
TXND3000	9,496.05	0.58	(267.56)	(3,590.55)	7,560.96	(5.24)
TXCD550	1,638.10	0.58	(320.23)	(2,612.91)	219.27	(15.37)
TXCD1300	4,335.31	0.58	407.77	1,037.21	6,487.23	2.26
TXED450	1,291.40	0.58	(3.06)	(611.67)	2,403.73	(0.80)
TXED1000	3,132.32	0.58	(29.02)	(1,625.99)	4,112.31	(3.06)
WID145	578.15	3.58	106.89	18.50	3,353.41	3.84
WID775	3,107.40	10.05	738.64	2,371.94	7,459.69	6.40
NYWD800	3,123.16	20.16	(178.57)	(2,408.51)	4,094.55	(2.90)
NYWD1200	4,665.63	27.45	(165.33)	(2,612.03)	6,833.26	(2.16)
NYCD110	485.80	4.01	147.74	428.84	1,363.93	6.56
NYCD500	2,066.44	11.44	170.71	(132.60)	4,341.01	2.62
VTD140	597.10	4.44	106.02	69.03	1,853.76	3.13
VTD400	1,582.87	14.53	83.92	(416.27)	3,961.09	0.93
MOD85	257.48	0.38	43.08	(138.13)	1,627.52	3.53
MOD400	1,355.79	0.58	185.28	237.03	4,415.55	3.73
FLND550	1,904.16	0.58	576.07	1,771.81	5,910.83	7.67
FLSD1500	4,890.94	0.58	(972.56)	(7,357.01)	2,110.34	(11.66)

<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)

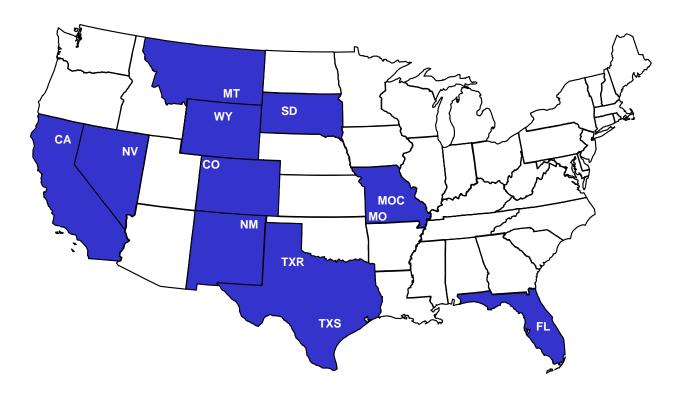
<sup>4</sup> Reserve 2012 are average ending cash reserves, 2012 (\$1,000)

<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: Cow/Calf

- Four of twelve cow-calf operations are projected to be in good overall financial condition. Eight are expected to be in marginal condition and none are in poor condition.
- Seven 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	12,627.00	0.01	306.90	500
NVB700	1,300	4,155.00	0.02	354.40	700
MTB500	0	3,983.00	0.01	299.30	500
WYB335	330	3,094.00	0.03	258.50	335
COB250	450	14,191.00	0.01	225.50	250
NMB240	0	5,112.00	0.01	292.20	240
SDB450	1,150	3,796.00	0.02	284.10	450
MOB240	240	2,451.00	0.02	234.90	250
MOCB400	40	3,499.00	0.01	279.50	400
TXRB500	0	6,043.00	0.01	428.80	500
TXSB175	0	2,600.00	0.02	191.00	250
FLB1155	5,400	14,897.00	0.01	628.80	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)
4/8/0	2007	2012	2007-2012	2007-2012
CAB500			99-99	1-1
NVB700			16-99	1-3
MTB500			1-17	1-1
WYB335			93-99	1-9
COB250			1-64	1-1
NMB240			41-99	1-1
SDB450			2-28	1-1
MOB240			1-1	1-1
MOCB400			1-9	1-1
TXRB500			1-1	1-1
TXSB175			3-99	1-1
FLB1155			19-99	1-1

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

Implications of the January 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	276.29	0.00	(60.22)	(603.40)	16,838.23	3.88
NVB700	306.63	0.00	(8.79)	(290.98)	5,103.08	2.30
MTB500	248.71	0.00	54.63	92.17	5,331.11	3.74
WYB335	234.81	0.00	(27.16)	(474.95)	3,387.46	1.44
COB250	182.92	0.00	18.03	(30.76)	19,508.63	4.45
NMB240	256.63	0.00	(2.30)	(226.70)	6,542.96	3.63
SDB450	249.41	0.04	37.61	56.65	4,681.90	3.23
MOB240	209.41	3.45	103.26	364.12	3,392.75	4.85
MOCB400	224.09	0.00	39.12	123.99	4,568.08	3.71
TXRB500	418.58	0.00	142.08	556.45	8,568.70	4.68
TXSB175	120.85	0.00	16.62	(153.31)	3,070.67	2.59
FLB1155	525.52	0.00	(76.34)	(646.49)	19,093.91	3.61

<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, (%)

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