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Research Report

Representative farms economic outlook for the August 2005 FAPRI/AFPC baseline

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AFPC

Agricultural & Food Policy Center
at Texas A&M University

Representative Farms Economic Outlook for the August 2005 FAPRI/AFPC Baseline



AFPC Briefing Paper 05-2

September 2005

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**REPRESENTATIVE FARMS ECONOMIC
OUTLOOK FOR THE AUGUST 2005
FAPRI/AFPC BASELINE**

AFPC Briefing Paper 05-2

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EXECUTIVE SUMMARY

The Agricultural and Food Policy Center (AFPC) at Texas A&M University develops and maintains data to simulate 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 for 2005 through 2009. 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 2005 Baseline.

Under the August 2005 Baseline, 21 of the 64 crop farms are considered in good liquidity condition (less than a 25 percent chance of negative ending cash during 2005-2009). Seven crop farms have between a 25 percent and a 50 percent likelihood of negative ending cash. The remaining 36 crop farms have greater than a 50 percent of negative ending cash. Additionally, 21 of the 64 crop farms are considered in good equity position (less than a 25 percent chance of decreasing real net worth during 2005-2009). Six crop farms have between a 25 percent and 50 percent likelihood of losing real net worth, and 37 crop farms have greater than a 50 percent probability of decreasing real net worth.

- **FEEDGRAIN FARMS:** Eight of the 18 feedgrain farms are in good overall financial condition. One can be considered to be in marginal condition, and nine are in poor condition.
- **WHEAT FARMS:** Nine of the 13 wheat farms are classified in good financial condition, one is marginal, and three are in poor condition.
- **COTTON FARMS:** One (TNC1900) of the 18 cotton farms is classified in good condition, four are in moderate condition, and 13 are in poor condition. Also, 14 of these farms have more than a 50 percent chance of losing real net worth by 2009.
- **RICE FARMS:** Two of the 15 rice farms are in good condition, one is classified in marginal condition, and 12 farms are projected to be in poor financial condition through 2009.
- **DAIRY FARMS:** Fourteen of the 23 dairy farms are in good overall financial condition. Three are considered to be in marginal condition, and six are in poor condition.
- **BEEF CATTLE RANCHES:** Six of the 13 cattle ranches are classified in good financial condition, five are classified in marginal condition, and two are in poor condition.

The August 2005 Baseline has more farms in poor overall financial condition than previous baselines. The most important factor that contributes to the poor financial performance of the farms is the large increase in energy prices. Fuel costs, previously projected to decrease modestly in 2005 and 2006, are now projected to increase significantly on top of the increase experienced in 2003 and 2004. The increase in cost is not limited to fuel expense for trucks, equipment, and irrigation motors, but includes the cost of nitrogen fertilizer and ag-related services which are closely linked to energy prices. These prices have also increased significantly. The steady rise in energy related costs is particularly evident in farms with input-intensive crops and large amounts of irrigated crop land.

REPRESENTATIVE FARMS ECONOMIC OUTLOOK FOR THE AUGUST 2005 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 2002-2009 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 2005 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 2005 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 2009.

Definitions of Variables in the Summary Tables

- **Overall Financial Position, 2005-2009** -- 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 assumes 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** -- 2005-2009 average of cash receipts from all sources, including market sales, CCP and direct payments, loan deficiency payments, crop insurance indemnities, and other farm related receipts.
- **Payments** -- 2005-2009 average of annual counter cyclical payments, direct payments, and marketing loan gains/LDP for crops and the milk program payment for dairy farms.
- **NCFI** -- 2005-2009 average net cash farm income equals average total receipts minus average total cash expenses.
- **Reserve 2009** -- equals total cash on hand at the end of year 2009. 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 2009** -- equity equals total assets including land minus total debt from all sources and is reported at the end of 2009.
- **CRNW** -- annualized percentage change in the operator's net worth from August 1, 2005 through December 31, 2009, after adjusting for inflation.

Table 1. FAPRI August 2005 Baseline Projections of Crop Prices, Loan Rates, and Direct Payment Rates, 2002-2010

	2002	2003	2004	2005	2006	2007	2008	2009	2010
Crop Prices									
Corn (\$/bu.)	2.32	2.42	2.07	2.04	2.10	2.18	2.25	2.31	2.36
Wheat (\$/bu.)	3.56	3.40	3.40	3.09	3.20	3.32	3.40	3.47	3.51
Cotton (\$/lb.)	0.4450	0.6180	0.4280	0.4361	0.4788	0.5038	0.5146	0.5224	0.5320
Sorghum (\$/bu.)	2.32	2.39	1.75	1.89	1.92	1.98	2.05	2.11	2.16
Soybeans (\$/bu.)	5.53	7.34	5.80	5.98	5.44	5.34	5.33	5.37	5.39
Barley (\$/bu.)	2.72	2.83	2.48	2.38	2.53	2.59	2.64	2.66	2.68
Oats (\$/bu.)	1.81	1.48	1.48	1.47	1.52	1.57	1.61	1.65	1.69
Rice (\$/cwt.)	4.49	8.08	7.30	7.31	7.30	7.30	7.29	7.40	7.54
Soybean Meal (\$/ton)	173.19	244.22	176.45	179.82	166.33	164.46	162.04	160.06	157.63
All Hay (\$/ton)	92.40	85.50	89.70	95.49	94.93	95.04	96.17	97.51	98.66
Peanuts (\$/ton)	364.00	386.00	378.00	309.72	334.27	364.62	377.57	386.64	394.62
Cattle Prices									
Feeder Cattle (\$/cwt)	86.34	95.21	111.79	115.14	107.50	101.92	96.49	91.89	87.45
Fat Cattle (\$/cwt)	67.04	84.69	84.75	84.93	82.27	80.54	77.52	75.18	72.95
Culled Cows (\$/cwt)	39.23	46.62	52.35	53.22	52.06	50.32	48.60	46.53	44.18
Milk Price									
U.S. All Milk Price (\$/cwt)	12.11	12.55	16.13	15.02	13.72	13.41	13.17	13.08	13.07

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

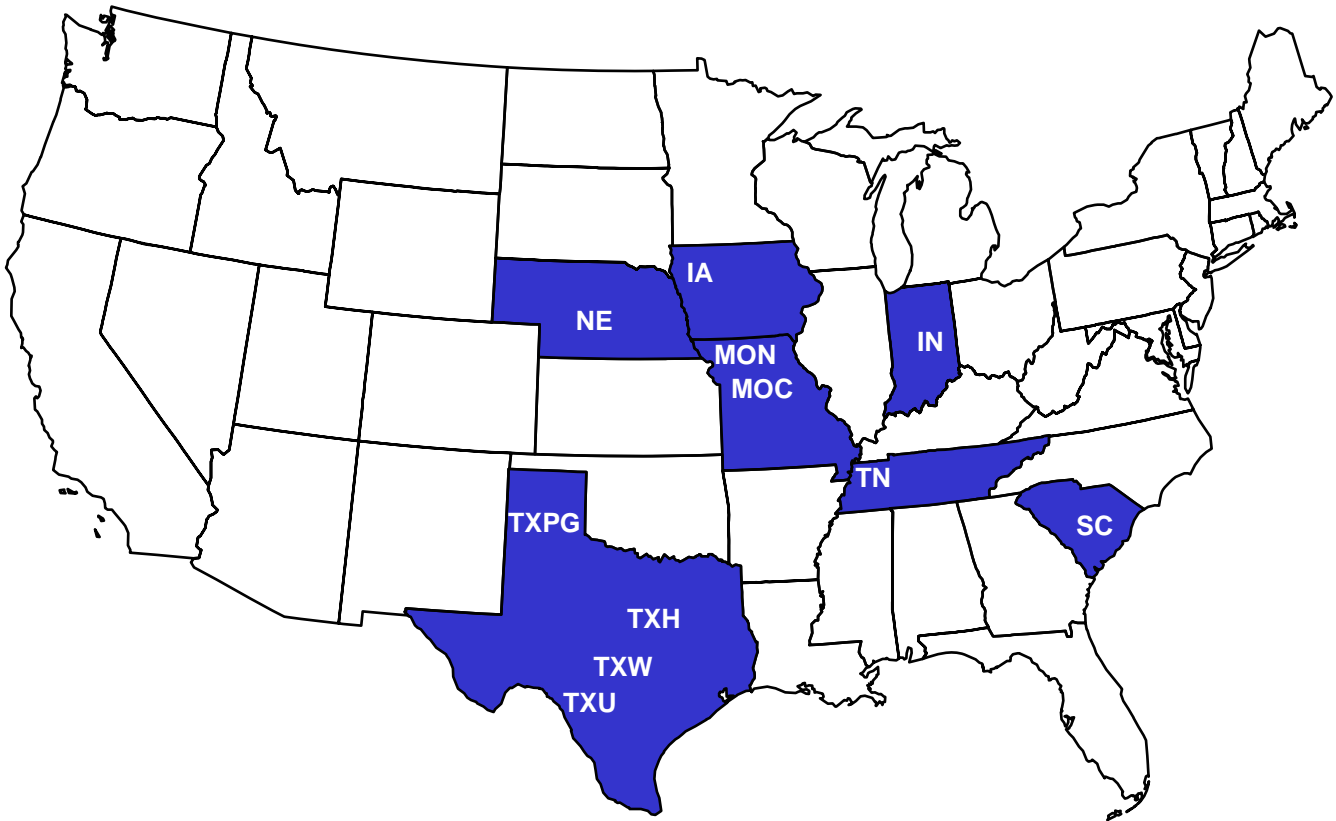
Table 2. FAPRI August 2005 Baseline Assumed Rates of Change in Input Prices, Annual Interest Rates, and Annual Changes in Land Values, 2003-2010

	2003	2004	2005	2006	2007	2008	2009	2010
Annual Rate of Change for Input Prices Paid								
Seed Prices (%)	8.45	2.44	1.18	1.10	1.39	1.16	1.69	1.58
All Fertilizer Prices (%)	25.89	13.83	17.63	11.34	-3.27	-2.69	1.10	2.02
Herbicide Prices (%)	0.00	0.89	0.56	-0.29	-1.07	-0.58	0.80	1.09
Insecticide Prices (%)	4.29	-1.78	-1.01	-1.71	-0.47	0.22	1.38	1.63
Fuel and Lube Prices (%)	32.08	17.26	23.83	7.89	-2.93	-2.58	0.93	1.33
Machinery Prices (%)	-1.96	7.87	2.38	1.28	2.49	3.05	3.49	3.18
Wages (%)	2.61	1.91	1.93	2.61	2.64	2.70	2.48	2.59
Supplies (%)	1.63	1.80	1.63	-1.78	-0.97	-0.33	1.06	1.33
Repairs (%)	2.99	3.02	3.48	1.53	1.68	1.90	2.06	2.18
Services (%)	2.50	0.61	1.91	1.18	2.16	2.81	3.18	2.67
Taxes (%)	1.59	1.56	2.80	-0.17	1.43	1.15	1.85	1.80
PPI Items (%)	4.20	5.24	0.59	0.25	1.10	1.35	1.91	1.54
PPI Total (%)	3.28	4.43	1.12	0.59	1.32	1.54	1.96	1.74
Annual Change in Consumer Price Index (%)	2.27	2.66	2.28	1.63	1.83	1.98	2.29	2.45
Annual Interest Rates								
Long-Term (%)	5.03	5.18	5.43	5.55	5.64	5.76	5.86	6.02
Intermediate-Term (%)	3.68	4.19	4.40	4.49	4.57	4.67	4.74	4.88
Savings Account (%)	1.10	1.44	1.51	1.54	1.57	1.60	1.62	1.67
Annual Rate of Change for U.S. Land Prices (%)	4.96	7.09	11.00	3.28	0.07	0.25	1.34	2.21

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

Representative Farm: Feed Grain

- Overall, eight feed grain farms are characterized as good, one is moderate, and nine are in poor condition.
- Ten of eighteen farms will be under cash flow stress, and eight have a high probability of losing real wealth.



Characteristics of Panel Farms Producing Feed Grains, 2004.

	Cropland	Assets	Debt/Asset	Gross Receipts	Feed Grains
	(acres)	(\$1,000)	(ratio)	(\$1,000)	(acres)
IAG1350	1,350	1,172.00	0.16	444.70	675
IAG2750	2,750	2,187.00	0.21	765.40	1,375
IAG4200	4,200	4,467.00	0.15	1,493.40	2,100
NEG1960	1,960	2,288.00	0.10	1,024.60	1,646
NEG4300	4,300	5,445.00	0.17	1,884.30	2,666
MOCG1700	1,700	3,171.00	0.13	463.20	825
MOCG3630	3,630	5,060.00	0.15	843.50	1,650
MONG1850	1,850	3,709.00	0.13	652.40	900
ING1000	1,000	1,739.00	0.20	304.00	500
ING2200	2,200	4,693.00	0.17	714.50	1,100
TXPG3760	3,760	2,397.00	0.15	1,890.10	1,344
TXHG2000	2,000	987.00	0.36	490.10	1,500
TXWG1400	1,400	639.00	0.16	363.70	1,100
TXUG1200	1,201	429.00	0.23	646.00	650
TNG900	900	856.00	0.10	325.70	500
TNG2750	2,750	2,696.00	0.12	991.30	1,100
SCG1500	1,500	886.00	0.20	532.20	846
SCG3500	3,500	4,033.00	0.16	1,386.90	1,840

Representative Farm: Feed Grain

Economic Viability of Representative Farms over the 2005-2009 Period

Farm Name	P(Negative Ending Cash)	P(Real Net Worth Declines)
8/1/9	2005-2009	2005-2009
IAG1350	28-52	1-38
IAG2750	4-3	1-3
IAG4200	1-20	1-11
NEG1960	1-1	1-1
NEG4300	1-10	1-3
MOCG1700	7-9	1-1
MOCG3630	1-1	1-1
MONG1850	35-56	1-11
ING1000	99-99	1-96
ING2200	99-99	1-71
TXPG3760	44-71	1-64
TXHG2000	99-99	1-96
TXWG1400	97-98	1-91
TXUG1200	62-94	1-92
TNG900	82-88	1-93
TNG2750	1-1	1-4
SCG1500	86-99	1-94
SCG3500	8-20	1-7

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

< 25

25-50

> 50

2 P(Negative Ending Cash) is the probability that the farm will have a cash flow deficit. Reported values represent the probabilities for 2005 and 2009.

3 P(Real Net Worth Decline) is the probability that the farm will have a loss in real net worth relative to the beginning net worth. Reported values represent the probabilities for losing real net worth from 2002 to 2005 and from 2002 to 2009.

Implications of the August 2005 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Feed Grains and Oilseeds.

	Receipts	Payments	NCFI	Reserve 2009	Net Worth 2009	CRNW
	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(%)
IAG1350	452.25	70.54	60.69	(15.43)	1,091.89	0.57
IAG2750	778.15	120.85	227.47	324.94	2,246.51	3.63
IAG4200	1,519.91	238.91	311.16	329.20	4,592.64	2.52
NEG1960	1,026.78	154.28	260.34	850.62	2,701.76	3.68
NEG4300	1,911.21	253.61	296.09	268.34	5,409.68	1.73
MOCG1700	485.75	71.42	183.78	141.63	3,496.95	2.65
MOCG3630	892.85	128.58	374.76	488.53	5,649.31	3.30
MONG1850	671.05	75.39	175.54	(50.46)	3,937.11	1.66
ING1000	307.65	45.63	(1.41)	(518.61)	1,348.86	(2.03)
ING2200	720.75	110.29	8.35	(863.37)	4,186.55	(0.42)
TXPG3760	2,249.16	389.67	116.08	(350.06)	1,946.56	(2.17)
TXHG2000	420.51	83.50	(15.15)	(537.63)	366.14	(8.09)
TXWG1400	303.41	67.94	7.95	(202.69)	413.50	(4.97)
TXUG1200	637.29	124.82	5.27	(232.42)	89.38	(14.31)
TNG900	255.91	33.04	18.75	(99.30)	643.06	(3.37)
TNG2750	830.28	102.54	254.18	403.30	2,839.21	2.01
SCG1500	531.15	115.05	13.10	(262.62)	597.46	(3.91)
SCG3500	1,408.63	274.60	223.14	261.02	4,231.82	2.26

1 Receipts are average annual total cash receipts including government payments, 2005-2009 (\$1,000)

2 Payments are average annual total government payments, 2005-2009 (\$1,000)

3 NCFI are average annual net cash farm income, 2005-2009 (\$1,000)

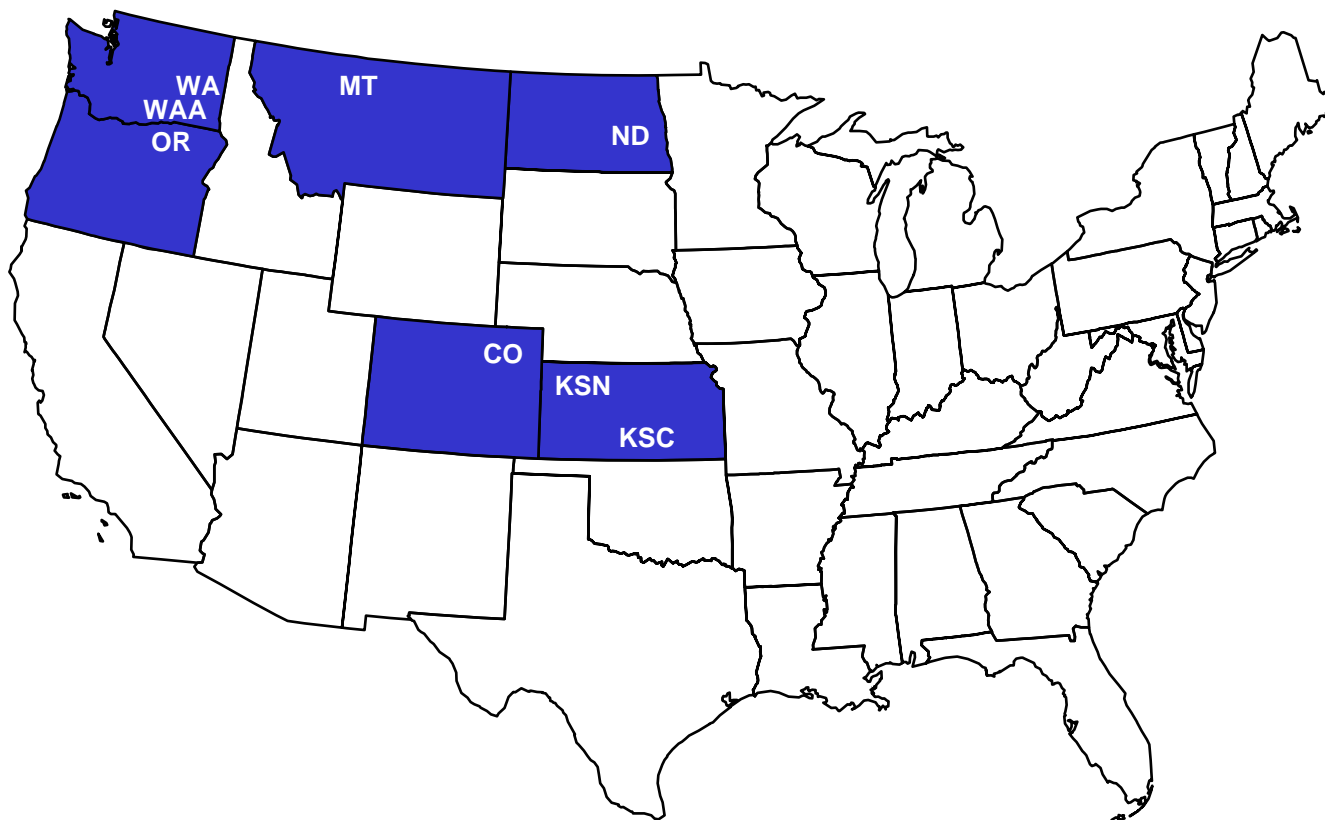
4 Reserve 2009 are average ending cash reserves, 2009 (\$1,000)

5 Net Worth 2009 are average nominal ending net worth, 2009 (\$1,000)

6 CRNW are average percentage in real net worth over 2005-2009 period, (%)

Representative Farm: Wheat

- Nine wheat farms are projected to be in good overall financial condition with one in moderate condition and three in poor condition.
- Three of the thirteen wheat farms will feel severe liquidity pressure over the period.
- Four wheat farms have greater than a 25 percent chance of losing real equity.



Characteristics of Panel Farms Producing Wheat, 2004

	Cropland	Assets	Debt/Asset	Gross Receipts	Wheat
	(acres)	(\$1,000)	(ratio)	(\$1,000)	(acres)
WAW1725	1,725	1,194.00	0.10	489.50	1,121
WAW5000	5,000	4,367.00	0.11	1,281.40	2,915
WAAW3500	3,500	1,059.00	0.11	219.00	1,500
ORW4000	3,600	1,087.00	0.11	299.40	1,600
MTW4500	4,500	1,975.00	0.13	472.50	2,475
NDW2180	2,180	545.00	0.13	359.90	700
NDW6250	6,250	2,902.00	0.16	1,247.20	2,700
KSCW1385	1,385	784.00	0.18	186.60	928
KSCW4000	4,000	1,643.00	0.13	541.60	2,845
KSNW2800	2,800	1,392.00	0.24	336.00	935
KSNW4300	4,300	1,933.00	0.12	641.60	2,000
COW3000	3,000	1,154.00	0.19	263.70	970
COW5640	5,640	1,911.00	0.17	507.00	1,900

Representative Farm: Wheat

Economic Viability of Representative Farms over the 2005-2009 Period

Farm Name	P(Negative Ending Cash)	P(Real Net Worth Declines)
9/1/3	2005-2009	2005-2009
WAW1725	1-1	1-9
WAW4675	1-2	1-8
WAAW3500	1-1	1-1
MTW4500	1-4	1-8
ORW4000	32-10	1-16
NDW2180	37-63	1-69
NDW6250	1-15	1-22
KSCW1385	37-82	1-57
KSCW4000	1-1	1-9
KSNW2800	86-99	1-76
KSNW4300	19-47	1-39
COW3000	1-1	1-1
COW5640	20-13	1-1

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

< 25

25-50

> 50

2 P(Negative Ending Cash) is the probability that the farm will have a cash flow deficit. Reported values represent the probabilities for 2005 and 2009.

3 P(Real Net Worth Decline) is the probability that the farm will have a loss in real net worth relative to the beginning net worth. Reported values represent the probabilities for losing real net worth from 2002 to 2005 and from 2002 to 2009.

Implications of the August 2005 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Wheat.

	Receipts	Payments	NCFI	Reserve 2009	Net Worth 2009	CRNW
	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(%)
WAW1725	406.34	65.94	92.33	254.96	1,256.90	1.61
WAW5000	1,230.28	175.64	240.61	458.81	4,519.53	1.52
WAAW3500	241.31	43.75	84.40	202.61	1,157.85	2.40
ORW4000	301.63	51.19	116.38	143.47	1,150.22	1.72
MTW4500	368.78	78.38	157.24	336.40	2,173.27	2.65
NDW2180	389.37	46.19	41.92	(89.33)	411.67	(3.55)
NDW6250	1,327.35	156.95	282.62	379.74	2,875.22	1.72
KSCW1385	202.59	38.27	48.49	(62.27)	666.69	(0.41)
KSCW4000	584.48	98.86	189.44	313.39	1,681.12	2.43
KSNW2800	355.43	53.34	33.46	(330.77)	1,012.86	(1.85)
KSNW4300	680.29	100.57	95.89	12.78	1,850.48	0.28
COW3000	274.81	37.05	144.50	290.79	1,402.25	6.06
COW5640	530.81	70.27	182.22	112.21	2,064.22	3.52

1 Receipts are average annual total cash receipts including government payments, 2005-2009 (\$1,000)

2 Payments are average annual total government payments, 2005-2009 (\$1,000)

3 NCFI are average annual net cash farm income, 2005-2009 (\$1,000)

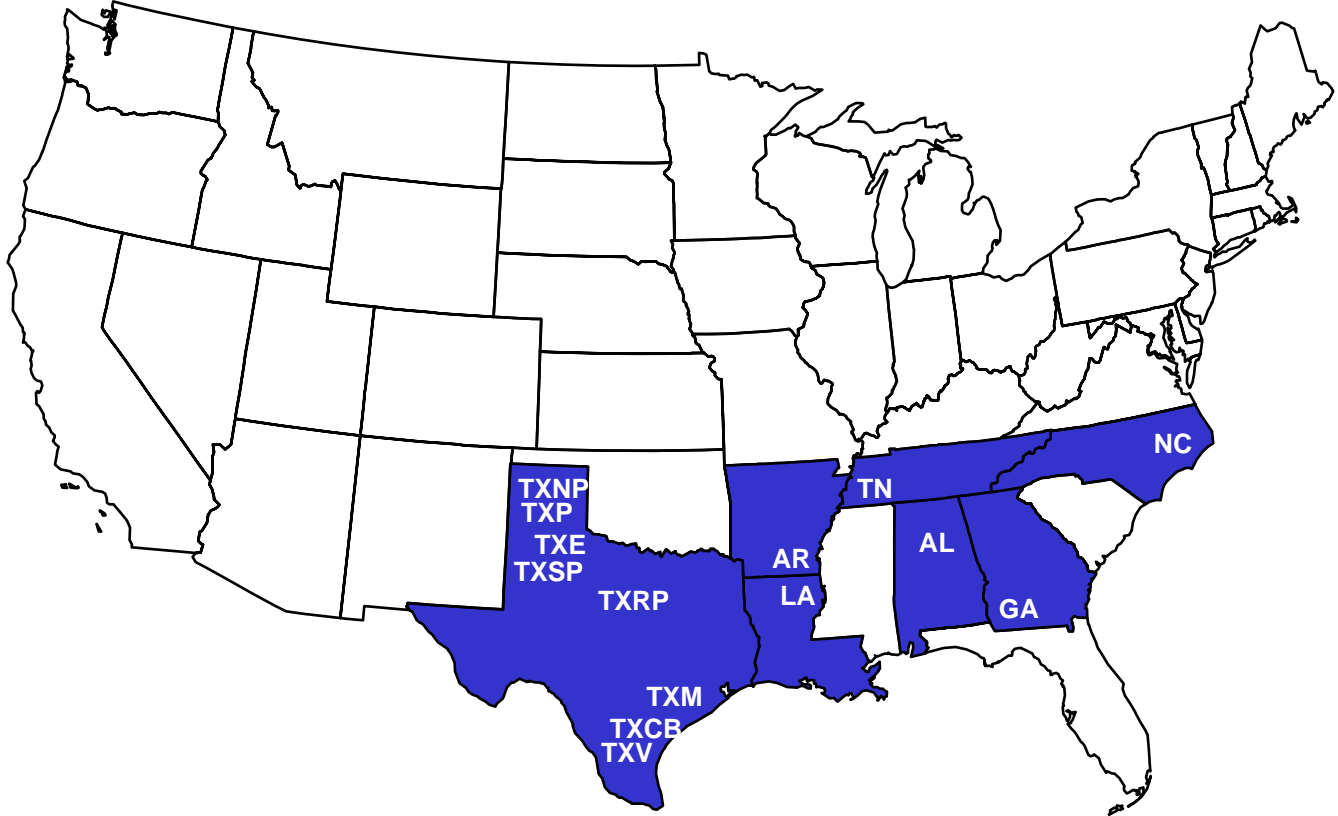
4 Reserve 2009 are average ending cash reserves, 2009 (\$1,000)

5 Net Worth 2009 are average nominal ending net worth, 2009 (\$1,000)

6 CRNW are average percentage in real net worth over 2005-2009 period, (%)

Representative Farm: Cotton

- One of the eighteen cotton farms is characterized as being in good overall condition, with four farms characterized in moderate and thirteen in poor condition.
- Eleven of the farms are projected to experience severe cash flow problems over the period.
- Fourteen of the eighteen cotton farms have more than a 50 percent chance of losing real equity.



Characteristics of Panel Farms Producing Cotton, 2004

	Cropland	Assets	Debt/Asset	Gross Receipts	Cotton
	(acres)	(\$1,000)	(ratio)	(\$1,000)	(acres)
TXNP3000	3,000	942.00	0.09	1,171.00	1,500
TXNP7000	7,000	2,496.00	0.19	2,131.80	2,850
TXSP2239	2,239	902.00	0.18	655.50	1,800
TXSP3745	3,745	2,174.00	0.11	1,341.90	3,036
TXPC2500	2,500	1,652.00	0.18	891.50	1,184
TXEC5000	5,000	1,137.00	0.18	1,251.10	4,300
TXRP2500	2,500	455.00	0.14	255.90	1,122
TXMC3500	3,500	1,073.00	0.16	1,302.50	1,750
TXCB1850	1,850	1,107.00	0.24	554.00	925
TXCB5500	5,500	1,163.00	0.25	1,329.90	2,750
TXVC4500	4,500	2,229.00	0.22	1,337.50	2,388
LAC2640	2,640	1,039.00	0.03	1,230.20	924
ARC6000	6,000	6,438.00	0.17	3,927.20	2,000
TNC1900	1,900	2,212.00	0.12	1,164.40	990
TNC4050	4,050	4,100.00	0.08	1,774.40	2,670
ALC3000	3,000	1,827.00	0.25	1,185.50	2,100
GAC1700	1,700	2,487.00	0.19	1,325.90	1,020
NCC1100	1,100	1,484.00	0.17	569.20	700

Representative Farm: Cotton

Economic Viability of Representative Farms over the 2005-2009 Period

Farm Name	P(Negative Ending Cash)	P(Real Net Worth Declines)
1/4/13	2005-2009	2005-2009
TXNP3000	28-88	1-93
TXNP7000	48-78	1-57
TXSP2239	40-75	1-64
TXSP3745	3-49	1-62
TXPC2500	34-99	1-99
TXEC5000	84-99	1-99
TXRP2500	21-47	1-42
TXMC3500	41-47	1-48
TXCB1850	32-43	1-40
TXCB5500	58-99	1-99
TXVC4500	61-92	1-73
LAC2640	1-19	1-62
ARC6000	1-56	1-66
TNC1900	1-1	1-1
TNC4050	9-45	1-69
ALC3000	5-61	1-62
GAC1700	1-81	1-76
NCC1100	73-99	1-95

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

< 25

25-50

> 50

2 P(Negative Ending Cash) is the probability that the farm will have a cash flow deficit. Reported values represent the probabilities for 2005 and 2009.

3 P(Real Net Worth Decline) is the probability that the farm will have a loss in real net worth relative to the beginning net worth. Reported values represent the probabilities for losing real net worth from 2002 to 2005 and from 2002 to 2009.

Implications of the August 2005 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Cotton.

	Receipts	Payments	NCFI	Reserve 2009	Net Worth 2009	CRNW
	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(%)
TXNP3000	1,152.46	199.54	32.90	(414.17)	348.22	(11.53)
TXNP7000	2,594.38	453.35	202.40	(551.58)	1,908.43	(1.38)
TXSP2239	560.95	150.00	55.00	(177.57)	607.84	(3.67)
TXSP3745	961.35	258.04	107.09	(3.00)	1,833.50	(1.53)
TXPC2500	898.81	251.02	(18.41)	(567.68)	903.02	(6.57)
TXEC5000	1,210.59	342.63	(97.90)	(1,111.89)	(5.13)	(21.11)
TXRP2500	260.68	78.39	50.55	10.20	422.81	0.41
TXMC3500	1,305.94	310.80	95.70	(83.88)	814.02	(2.13)
TXCB1850	556.99	131.10	62.40	(12.70)	900.06	0.25
TXCB5500	1,318.20	390.90	(67.05)	(1,047.82)	1.28	(21.66)
TXVC4500	1,357.64	363.81	20.87	(776.48)	1,478.08	(3.80)
LAC2640	1,243.46	310.86	113.33	253.35	932.34	(1.79)
ARC6000	3,035.28	723.97	254.32	(177.96)	5,181.60	(0.87)
TNC1900	896.24	176.11	304.28	1,054.56	2,735.20	5.27
TNC4050	1,680.14	450.15	114.94	26.22	3,609.49	(1.85)
ALC3000	1,147.39	303.75	101.20	(85.83)	1,160.31	(2.07)
GAC1700	1,312.91	349.12	72.14	(124.07)	2,031.35	(0.88)
NCC1100	552.24	121.44	24.00	(368.45)	1,090.27	(3.33)

1 Receipts are average annual total cash receipts including government payments, 2005-2009 (\$1,000)

2 Payments are average annual total government payments, 2005-2009 (\$1,000)

3 NCFI are average annual net cash farm income, 2005-2009 (\$1,000)

4 Reserve 2009 are average ending cash reserves, 2009 (\$1,000)

5 Net Worth 2009 are average nominal ending net worth, 2009 (\$1,000)

6 CRNW are average percentage in real net worth over 2005-2009 period, (%)

Representative Farm: Rice

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



Characteristics of Panel Farms Producing Rice, 2004

	Cropland	Assets	Debt/Asset	Gross Receipts	Rice
	(acres)	(\$1,000)	(ratio)	(\$1,000)	(acres)
CAR550	550	1,421.00	0.19	448.10	500
CAR2365	2,365	4,055.00	0.17	1,950.40	2,240
CABR1100	1,100	1,863.00	0.25	838.00	1,000
CACR715	715	1,621.00	0.15	586.80	650
TXR1350	1,350	898.00	0.17	321.80	855
TXR2400	2,400	852.00	0.17	709.20	2,280
TXBR1800	1,800	793.00	0.05	583.80	1,200
TXER3200	3,200	1,106.00	0.07	972.90	2,240
LASR1200	1,200	329.00	0.31	367.80	660
LANR2500	2,500	3,135.00	0.17	1,320.60	1,000
MOER4500	4,500	6,592.00	0.14	1,708.30	1,500
MOWR4000	4,000	7,643.00	0.16	1,874.40	2,000
ARSR3640	3,640	3,102.00	0.14	1,096.90	1,620
ARWR1200	1,200	1,909.00	0.23	487.40	600
ARHR3000	3,000	4,118.00	0.13	1,312.90	1,750

Representative Farm: Rice

Economic Viability of Representative Farms over the 2005-2009 Period

Farm Name	P(Negative Ending Cash)	P(Real Net Worth Declines)
2/1/12	2005-2009	2005-2009
CAR550	99-99	1-99
CAR2365	99-99	1-99
CABR1100	99-99	1-99
CACR715	99-99	1-99
TXR1350	60-99	1-98
TXR2400	89-99	1-98
TXBR1800	15-76	1-90
TXER3200	11-99	1-99
LASR1200	99-99	1-99
LANR2500	16-99	1-99
MOER4500	4-13	1-4
MOWR4000	1-17	1-9
ARSR3640	3-25	1-37
ARWR1200	99-99	1-99
ARHR3000	32-99	1-99

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

< 25

25-50

> 50

2 P(Negative Ending Cash) is the probability that the farm will have a cash flow deficit. Reported values represent the probabilities for 2005 and 2009.

3 P(Real Net Worth Decline) is the probability that the farm will have a loss in real net worth relative to the beginning net worth. Reported values represent the probabilities for losing real net worth from 2002 to 2005 and from 2002 to 2009.

Implications of the August 2005 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Rice.

	Receipts	Payments	NCFI	Reserve 2009	Net Worth 2009	CRNW
	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(%)
CAR550	458.02	121.94	(26.72)	(523.87)	878.48	(5.09)
CAR2365	2,002.20	576.31	(479.54)	(3,278.05)	847.49	(14.79)
CABR1100	859.98	253.33	(220.58)	(1,779.06)	9.95	(19.98)
CACR715	603.75	172.89	(167.88)	(1,134.04)	466.45	(13.04)
TXR1350	357.81	105.10	5.31	(278.97)	582.75	(4.85)
TXR2400	743.02	202.84	(4.76)	(616.89)	190.87	(14.66)
TXBR1800	615.75	168.52	25.15	(123.43)	538.36	(5.13)
TXER3200	984.16	281.71	(74.33)	(695.53)	301.84	(14.03)
LASR1200	364.14	93.82	(77.85)	(706.83)	(395.08)	(84.22)
LANR2500	1,105.85	275.11	27.03	(677.75)	2,216.52	(3.31)
MOER4500	1,753.83	379.13	383.04	358.46	6,872.42	2.18
MOWR4000	1,747.96	424.81	436.10	520.15	7,742.06	2.07
ARSR3640	1,055.28	259.75	241.07	129.09	2,854.08	0.07
ARWR1200	512.67	130.17	(106.82)	(1,350.58)	515.71	(12.77)
ARHR3000	1,390.26	360.65	(44.47)	(1,304.52)	2,799.54	(4.78)

1 Receipts are average annual total cash receipts including government payments, 2005-2009 (\$1,000)

2 Payments are average annual total government payments, 2005-2009 (\$1,000)

3 NCFI are average annual net cash farm income, 2005-2009 (\$1,000)

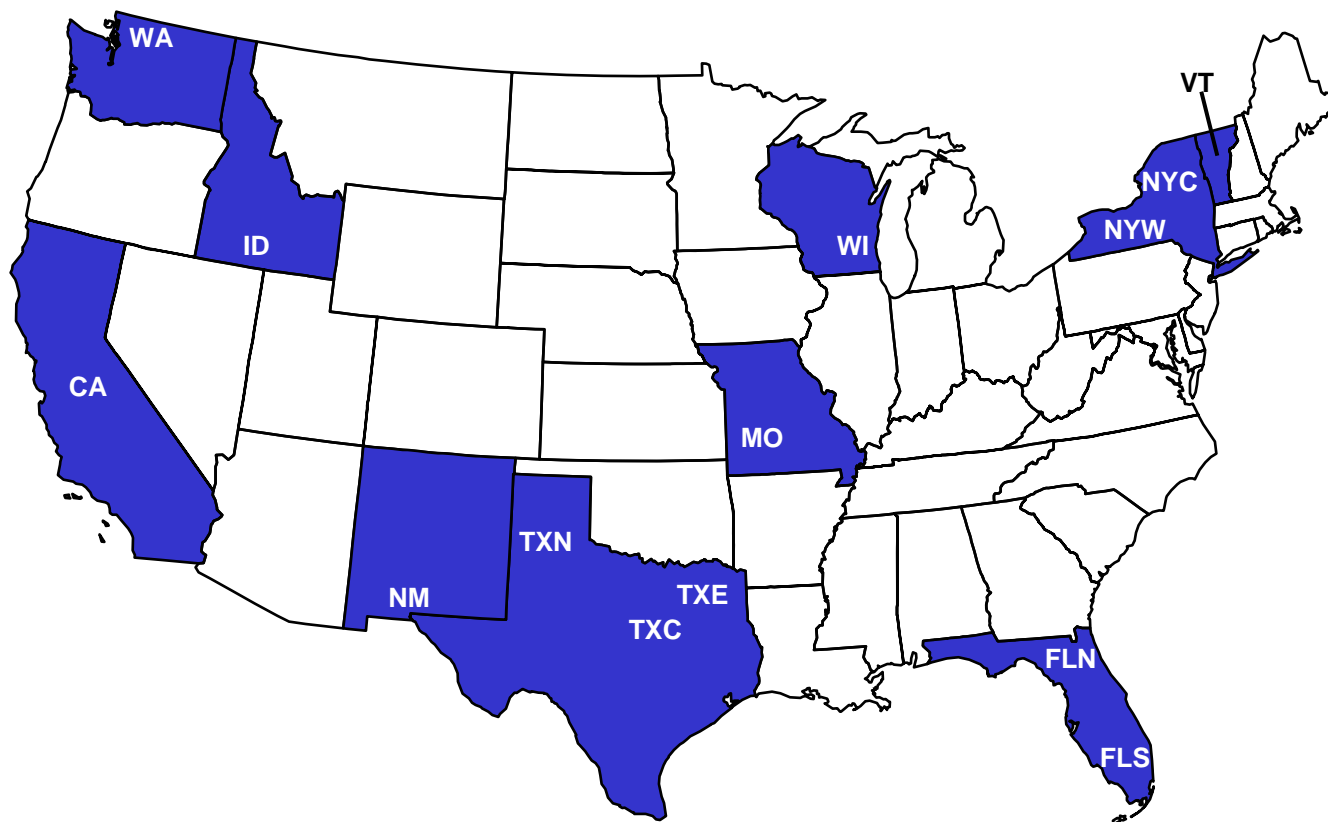
4 Reserve 2009 are average ending cash reserves, 2009 (\$1,000)

5 Net Worth 2009 are average nominal ending net worth, 2009 (\$1,000)

6 CRNW are average percentage in real net worth over 2005-2009 period, (%)

Representative Farm: Dairy

- Three of twenty-three dairy operations are in moderate overall financial condition, with fourteen classified in good and six in poor condition.
- Five of the dairies are projected to experience strong liquidity pressure with eight experiencing greater than a 25 percent probability in losing real equity.



Characteristics of Panel Farms Producing Milk, 2004

	Cropland (acres)	Assets (\$1,000)	Debt/Asset (ratio)	Gross Receipts (\$1,000)	Cows (number)
CAD1710	700	11,989.00	0.15	6,229.40	1,710
NMD2125	370	9,674.00	0.11	7,491.40	2,125
WAD250	200	2,428.00	0.17	980.60	250
WAD850	605	6,208.00	0.30	3,371.50	850
IDD1000	360	5,640.00	0.09	3,965.60	1,000
IDD3000	1,500	19,032.00	0.11	11,634.30	3,000
TXND2400	260	10,487.00	0.08	8,457.30	2,400
TXCD550	250	2,431.00	0.21	1,750.20	550
TXCD1300	460	6,432.00	0.11	4,614.80	1,300
TXED550	300	1,905.00	0.08	1,573.20	550
TXED1000	875	4,835.00	0.08	3,525.10	1,000
WID145	600	2,496.00	0.15	655.10	145
WID775	1,200	5,357.00	0.13	3,496.60	775
NYWD800	1,440	5,127.00	0.17	3,387.20	800
NYWD1200	2,160	8,237.00	0.19	5,052.50	1,200
NYCD110	296	986.00	0.13	522.70	110
NYCD500	1,100	3,659.00	0.14	2,227.70	500
VTD134	220	1,100.00	0.12	614.30	134
VTD350	800	3,349.00	0.18	1,464.80	350
MOD85	230	1,009.00	0.12	292.30	85
MOD400	450	2,788.00	0.13	1,424.70	400
FLND550	600	3,331.00	0.13	2,013.10	550
FLSD1500	400	7,903.00	0.12	5,192.60	1,500

Representative Farm: Dairy

Economic Viability of Representative Farms over the 2005-2009 Period

Farm Name	P(Negative Ending Cash)	P(Real Net Worth Declines)
	2005-2009	2005-2009
14/3/6		
CAD1710	1-1	1-2
NMD2125	1-1	1-5
WAD250	25-42	1-16
WAD850	87-88	1-71
IDD1000	1-25	1-42
IDD3000	1-4	1-11
TXND2400	1-1	1-22
TXCD500	98-98	1-91
TXCD1300	1-1	1-9
TXED550	1-11	1-51
TXED1000	1-1	1-7
WID145	1-1	1-1
WID775	1-1	1-1
NYWD800	17-61	1-60
NYWD1200	2-49	1-52
NYCD110	1-1	1-1
NYCD500	1-2	1-5
VTD134	1-1	1-5
VTD350	57-68	1-64
MOD85	1-12	1-8
MOD400	1-3	1-8
FLND550	1-1	1-1
FLSD1500	56-88	1-87

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

< 25

25-50

> 50

2 P(Negative Ending Cash) is the probability that the farm will have a cash flow deficit. Reported values represent the probabilities for 2005 and 2009.

3 P(Real Net Worth Decline) is the probability that the farm will have a loss in real net worth relative to the beginning net worth. Reported values represent the probabilities for losing real net worth from 2002 to 2005 and from 2002 to 2009.

Implications of the August 2005 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Milk.

	Receipts	Payments	NCFI	Reserve 2009	Net Worth 2009	CRNW
	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(%)
CAD1710	5,570.50	39.36	1,046.88	2,395.77	12,814.81	2.60
NMD2125	6,683.84	0.39	1,346.88	3,225.19	11,242.77	3.27
WAD250	871.11	4.16	176.26	34.25	2,446.67	1.96
WAD850	2,963.96	24.60	91.80	(1,408.09)	3,930.30	(3.26)
IDD1000	3,458.46	0.39	349.26	490.74	5,679.83	0.28
IDD3000	10,103.85	48.04	1,898.23	3,824.92	20,813.62	2.25
TXND2400	7,525.37	0.39	1,160.11	3,978.07	11,713.39	2.27
TXCD550	1,570.03	0.39	(43.72)	(920.41)	1,307.74	(7.30)
TXCD1300	4,160.22	0.39	776.63	2,303.42	7,168.24	2.67
TXED550	1,405.95	0.39	166.09	396.67	1,853.44	(0.40)
TXED1000	3,157.23	0.39	633.61	2,124.77	5,776.14	3.26
WID145	584.14	7.65	171.18	353.87	2,602.87	2.17
WID775	3,129.22	23.53	1,020.62	2,965.50	6,915.96	5.82
NYWD800	3,039.11	33.65	210.04	(310.34)	4,417.12	(0.91)
NYWD1200	4,541.08	46.17	365.91	(19.63)	7,157.55	(0.35)
NYCD110	474.39	6.27	169.79	528.47	1,248.83	5.44
NYCD500	2,012.27	18.84	357.70	603.37	3,900.47	2.36
VTD134	558.79	4.16	130.30	302.85	1,311.75	2.72
VTD350	1,319.80	17.66	109.61	(186.73)	2,839.00	(0.86)
MOD85	262.00	0.27	72.24	82.91	1,077.17	2.09
MOD400	1,267.03	0.39	285.93	580.69	3,102.43	2.82
FLND550	1,851.42	0.39	681.86	1,551.37	4,572.80	6.81
FLSD1500	4,757.58	0.39	(169.86)	(1,853.51)	5,568.77	(4.96)

1 Receipts are average annual total cash receipts including government payments, 2005-2009 (\$1,000)

2 Payments are average annual total government payments, 2005-2009 (\$1,000)

3 NCFI are average annual net cash farm income, 2005-2009 (\$1,000)

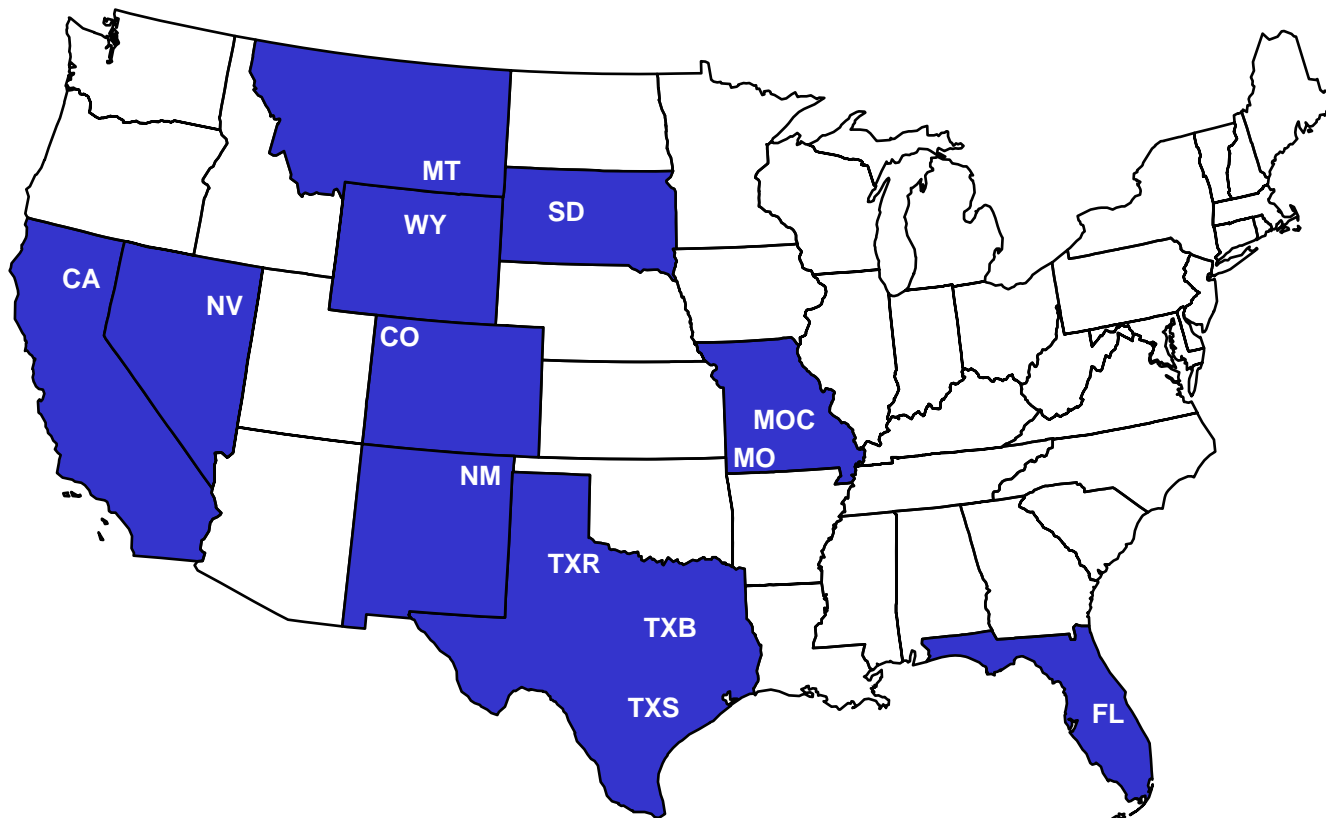
4 Reserve 2009 are average ending cash reserves, 2009 (\$1,000)

5 Net Worth 2009 are average nominal ending net worth, 2009 (\$1,000)

6 CRNW are average percentage in real net worth over 2005-2009 period, (%)

Representative Farm: Cow/Calf

- Six of thirteen cow-calf operations are projected to be in good overall financial condition. Five are expected to be in moderate condition and two are in poor condition.
- Three of the operations will face significant liquidity pressure over the period, as their likelihoods of experiencing negative ending cash exceed 60 percent.
- Three operations are projected to have more than a 50 percent chance of losing real equity over the period.



Characteristics of Panel Farms Producing Beef Cattle, 2004

	Cropland	Assets	Debt/Asset	Gross Receipts	Cows
	(acres)	(\$1,000)	(ratio)	(\$1,000)	(number)
CAB500	-	9,734.00	0.01	301.20	500
NVB700	1,300	2,545.00	0.01	357.90	700
MTB500	-	2,880.00	0.02	313.20	500
WYB500	330	2,602.00	0.02	285.00	500
COB250	450	10,942.00	0.01	186.60	250
NMB240	-	3,825.00	0.01	322.00	240
SDB450	1,150	2,980.00	0.01	274.60	450
MOB150	240	1,026.00	0.14	161.20	150
MOCB350	40	2,562.00	0.01	223.10	350
TXRB500	-	3,952.00	0.01	333.40	500
TXBB150	200	1,001.00	0.03	1,479.60	150
TXSB250	-	2,278.00	0.01	181.90	250
FLB1155	5,400	11,036.00	0.01	609.90	1,155

Representative Farm: Cow/Calf

Economic Viability of Representative Farms over the 2005-2009 Period

Farm Name	P(Negative Ending Cash)	P(Real Net Worth Declines)
6/5/2	2005-2009	2005-2009
CAB500	29-99	1-6
NVB700	1-5	1-54
MTB500	1-1	1-4
WYB500	49-99	1-85
COB250	1-1	1-1
NMB240	1-35	1-5
SDB450	1-1	1-18
MOB150	2-17	1-8
MOCB350	1-3	1-27
TXRB500	1-1	1-10
TXBB150	2-68	1-94
TXSB250	1-1	1-1
FLB1155	1-41	1-16

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

< 25

25-50

> 50

2 P(Negative Ending Cash) is the probability that the farm will have a cash flow deficit. Reported values represent the probabilities for 2005 and 2009.

3 P(Real Net Worth Decline) is the probability that the farm will have a loss in real net worth relative to the beginning net worth. Reported values represent the probabilities for losing real net worth from 2002 to 2005 and from 2002 to 2009.

Implications of the August 2005 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Beef Cattle.

	Receipts	Payments	NCFI	Reserve 2009	Net Worth 2009	CRNW
	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(%)
CAB500	282.31	-	(2.36)	(161.06)	10,849.67	0.38
NVB700	330.41	-	61.56	191.36	2,702.88	(0.26)
MTB500	290.82	-	119.69	502.80	3,349.43	1.44
WYB500	264.71	-	10.02	(187.50)	2,617.89	(1.06)
COB250	180.89	-	65.97	282.76	12,596.66	0.96
NMB240	271.99	-	28.81	10.64	4,266.85	0.48
SDB450	265.42	0.80	76.01	245.42	3,313.27	0.63
MOB150	160.99	9.89	60.47	39.51	1,073.92	1.74
MOCB350	207.44	-	40.47	125.79	2,848.16	0.38
TXRB500	318.46	-	115.90	379.74	4,529.21	0.95
TXBB150	1,357.03	3.31	5.87	(90.22)	765.36	(5.21)
TXSB250	169.80	-	71.45	284.77	2,623.57	1.18
FLB1155	565.84	-	42.47	37.87	12,302.13	0.40

1 Receipts are average annual total cash receipts including government payments, 2005-2009 (\$1,000)

2 Payments are average annual total government payments, 2005-2009 (\$1,000)

3 NCFI are average annual net cash farm income, 2005-2009 (\$1,000)

4 Reserve 2009 are average ending cash reserves, 2009 (\$1,000)

5 Net Worth 2009 are average nominal ending net worth, 2009 (\$1,000)

6 CRNW are average percentage in real net worth over 2005-2009 period, (%)