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Research Report

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

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AFPC

Agricultural & Food Policy Center
at Texas A&M University

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



AFPC Briefing Paper 05-6

December 2005

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

AFPC Briefing Paper 05-6

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EXECUTIVE SUMMARY

The Agricultural and Food Policy Center (AFPC) at Texas A&M University develops and maintains data to simulate 102 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 2011. The data necessary to simulate the economic activity of these operations is developed through ongoing cooperation with panels of agricultural producers in each of these states. The Food and Agricultural Policy Research Institute (FAPRI) provided projected prices, policy variables, and input inflation rates in their December 2005 Baseline.

Under the December 2005 Baseline, 12 of the 66 crop farms are considered in good liquidity condition (less than a 25 percent chance of negative ending cash during 2005-2011). Five crop farms have between a 25 percent and a 50 percent likelihood of negative ending cash. The remaining 49 crop farms have greater than a 50 percent of negative ending cash. Additionally, 22 of the 66 crop farms are considered in good equity position (less than a 25 percent chance of decreasing real net worth during 2005-2011). Ten crop farms have between a 25 percent and 50 percent likelihood of losing real net worth, and 34 crop farms have greater than a 50 percent probability of decreasing real net worth.

- **FEEDGRAIN FARMS:** Four of the 18 feedgrain farms are in good overall financial condition. Five can be considered to be in marginal condition, and nine are in poor condition.
- **WHEAT FARMS:** Seven of the 13 wheat farms are classified in good financial condition, two are marginal, and four are in poor condition.
- **COTTON FARMS:** One (TNC1900) of the 20 cotton farms is classified in good condition, one is in moderate condition, and 18 are in poor condition. Also, 14 of these farms have more than a 50 percent chance of losing real net worth by 2011.
- **RICE FARMS:** None of the 15 rice farms are in good condition, two are classified in marginal condition, and 13 farms are projected to be in poor financial condition through 2011.
- **DAIRY FARMS:** 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 December 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 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. 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 DECEMBER 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 2004-2011 planning horizon using FLIPSIM, AFPC's whole farm simulation model. Data to simulate farming operations in the nation's major production regions came from two sources:

- Producer panel cooperation to develop economic information to describe and simulate representative crop, livestock, and dairy farms, and
- Projected prices, policy variables, and input inflation rates from the Food and Agricultural Policy Research Institute (FAPRI) December 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 December 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 2011.

Definitions of Variables in the Summary Tables

- **Overall Financial Position, 2005-2011** -- As a means of summarizing the representative farms' economic efficiency, liquidity, and solvency position AFPC classifies each farm as being in either a good (green), marginal (yellow) or poor (red) position. AFPC 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** -- 2005-2011 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** -- 2005-2011 average of annual counter cyclical payments, direct payments, and marketing loan gains/LDP for crops and the milk program payment for dairy farms.
- **NCFI** -- 2005-2011 average net cash farm income equals average total receipts minus average total cash expenses.
- **Reserve 2011** -- equals total cash on hand at the end of year 2011. Ending cash equals beginning cash reserves plus net cash farm income and interest earned on cash reserves less principal payments, federal taxes (income and self employment), state income taxes, family living withdrawals, and actual machinery replacement costs (not depreciation).
- **Net Worth 2011** -- equity equals total assets including land minus total debt from all sources and is reported at the end of 2011.
- **CRNW** -- annualized percentage change in the operator's net worth from August 1, 2005 through December 31, 2011, after adjusting for inflation.

Table 1. FAPRI December 2005 Baseline Projections of Crop Prices, Loan Rates, and Direct Payment Rates, 2004-2011

	2004	2005	2006	2007	2008	2009	2010	2011
Crop Prices								
Corn (\$/bu.)	2.06	1.86	2.08	2.16	2.23	2.27	2.33	2.36
Wheat (\$/bu.)	3.40	3.37	3.29	3.35	3.44	3.51	3.55	3.62
Cotton (\$/lb.)	0.4160	0.4782	0.4927	0.5128	0.5174	0.5228	0.5314	0.5451
Sorghum (\$/bu.)	1.79	1.73	1.94	2.01	2.07	2.11	2.17	2.21
Soybeans (\$/bu.)	5.74	5.29	5.64	5.80	5.79	5.77	5.75	5.77
Barley (\$/bu.)	2.48	2.46	2.59	2.65	2.71	2.72	2.75	2.76
Oats (\$/bu.)	1.48	1.54	1.66	1.70	1.74	1.76	1.79	1.81
Rice (\$/cwt.)	7.33	7.95	6.66	6.80	7.15	7.27	7.53	7.84
Soybean Meal (\$/ton)	174.44	157.70	169.65	176.57	174.61	172.91	171.68	171.99
All Hay (\$/ton)	92.00	95.07	94.19	94.93	96.38	97.51	98.63	99.62
Peanuts (\$/ton)	378.00	346.61	395.70	391.87	385.03	384.24	384.67	388.29
Cattle Prices								
Feeder Cattle (\$/cwt)	111.79	118.94	110.40	103.11	98.22	93.47	89.49	85.90
Fat Cattle (\$/cwt)	84.75	85.96	81.58	80.12	77.58	75.37	73.44	72.04
Culled Cows (\$/cwt)	52.35	55.37	50.16	48.01	45.17	43.22	41.53	39.94
Milk Price								
U.S. All Milk Price (\$/cwt)	16.05	15.20	13.29	13.20	13.47	13.83	13.91	13.84

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

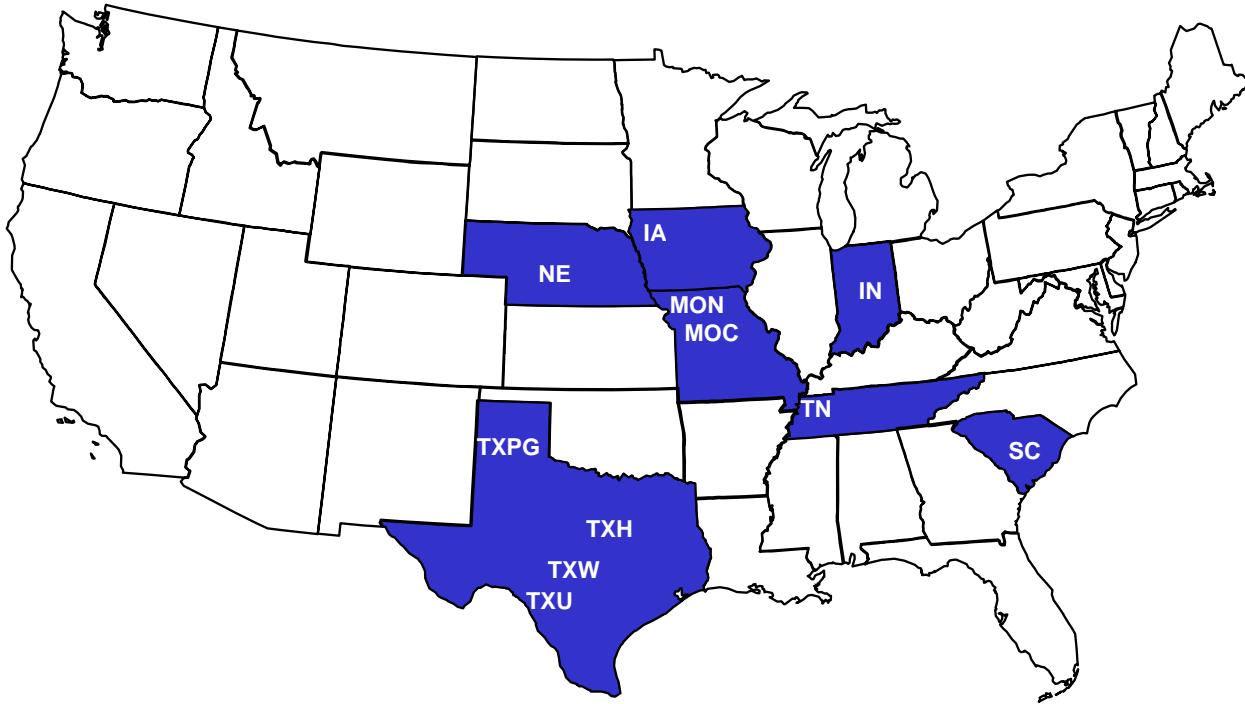
Table 2. FAPRI December 2005 Baseline Assumed Rates of Change in Input Prices, Annual Interest Rates, and Annual Changes in Land Values, 2005-2011

	2005	2006	2007	2008	2009	2010	2011
Annual Rate of Change for Input Prices Paid							
Seed Prices (%)	5.57	3.53	1.3	0.84	1.23	1.03	1.42
All Fertilizer Prices (%)	17.22	13.45	-11.95	-4.88	-4.26	-1.90	0.97
Herbicide Prices (%)	0.93	0.07	-5.07	-3.28	-1.61	-0.88	0.28
Insecticide Prices (%)	0.98	3.81	-3.01	-1.30	0.56	1.13	1.75
Fuel and Lube Prices (%)	31.21	14.41	-18.96	-7.94	-5.67	-2.96	1.32
Machinery Prices (%)	7.09	3.36	0.75	2.32	2.32	1.83	1.90
Wages (%)	2.03	3.01	3.28	2.40	2.29	1.84	2.08
Supplies (%)	9.86	6.34	-2.83	-1.24	-0.46	-0.37	0.52
Repairs (%)	4.46	2.76	0.89	1.66	1.84	1.86	2.07
Services (%)	4.77	4.29	-1.30	1.11	1.93	1.89	2.37
Taxes (%)	7.17	3.34	-1.96	2.07	1.62	1.34	2.14
PPI Items (%)	5.23	3.36	-1.98	0.40	0.87	0.61	1.35
PPI Total (%)	5.23	3.36	-1.98	0.40	0.87	0.61	1.35
Annual Change in Consumer Price Index (%)	3.45	2.66	1.43	1.8	2.14	2.17	2.49
Annual Interest Rates							
Long-Term (%)	5.43	6.02	5.87	5.90	6.04	6.02	6.16
Intermediate-Term (%)	4.40	4.87	4.75	4.78	4.89	4.87	4.99
Savings Account (%)	1.51	1.67	1.63	1.64	1.67	1.67	1.71
Annual Rate of Change for U.S. Land Prices (%)	11.00	8.14	1.33	-0.46	0.73	0.97	1.34

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

Representative Farm: Feed Grain

- Overall by 2011, four feed grain farms are characterized as good, five as moderate, and nine are in poor condition.
- Twelve of eighteen farms will be under cash flow stress, and six have a high probability of losing real wealth.



Characteristics of Panel Farms Producing Feed Grains, 2005.

	Cropland (acres)	Assets (\$1,000)	Deb/Asset (ratio)	Gross Receipts (\$1,000)	Feed Grains (acres)
IAG1350	1,350	1,228.00	0.20	411.10	1,350
IAG2750	2,750	2,154.00	0.20	708.30	2,750
IAG4200	4,200	4,672.00	0.20	1,382.90	4,200
NEG1960	1,960	2,164.00	0.20	984.80	1,823
NEG4300	4,300	5,493.00	0.20	1,808.10	3,784
MOCG1700	1,700	3,433.00	0.20	433.70	1,650
MOCG3630	3,630	5,367.00	0.20	788.60	3,530
MONG1850	1,850	4,057.00	0.20	629.70	1,800
ING1000	1,000	1,877.00	0.20	281.60	1,000
ING2200	2,200	5,082.00	0.20	661.80	2,200
TXPG3760	3,760	2,454.00	0.20	2,168.00	1,344
TXHG2000	2,000	1,062.00	0.20	400.80	1,000
TXWG1400	1,400	684.00	0.20	290.50	900
TXUG1200	1,201	381.00	0.20	623.70	450
TNG900	900	868.00	0.20	238.70	900
TNG2750	2,750	2,729.00	0.20	765.30	2,750
SCG1500	1,500	925.00	0.20	500.40	1,500
SCG3500	3,500	4,250.00	0.20	1,313.00	3,100

Representative Farm: Feed Grains

Economic Viability of Representative Farms over the 2005-2011 Period

Farm Name	Overall Ranking		P(Negative Ending Cash)	P(Real Net Worth Declines)
	2005	2011	2005-2011	2005-2011
4/5/9				
IAG1350			82-80	1-31
IAG2750			34-12	1-1
IAG4200			55-54	1-5
NEG1960			2-1	1-1
NEG4300			72-84	1-1
MOCG1700			46-32	1-1
MOCG3630			9-1	1-1
MONG1850			44-74	1-5
ING1000			99-99	1-93
ING2200			99-99	1-34
TXPG3760			89-85	1-41
TXHG2000			93-98	1-94
TXWG1400			80-99	1-94
TXUG1200			94-99	1-88
TNG900			68-84	1-84
TNG2750			15-44	1-2
SCG1500			93-98	1-68
SCG3500			37-23	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 2011.

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 2004 to 2005 and from 2004 to 2011.

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

	Receipts	Payments	NCFI	Reserve 2011	Net Worth 2011	CRNW
	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(%)
IAG1350	457.59	71.54	56.91	(164.73)	1,002.06	1.21
IAG2750	787.26	122.50	227.22	238.54	2,309.07	4.82
IAG4200	1,538.62	242.34	310.01	(98.52)	4,442.57	3.89
NEG1960	1,042.47	161.75	264.51	585.52	2,577.51	5.79
NEG4300	1,942.48	261.01	291.36	(375.33)	5,261.96	3.03
MOCG1700	494.09	72.04	181.38	80.97	3,650.16	3.94
MOCG3630	906.85	129.17	375.69	565.65	6,041.88	4.50
MONG1850	678.81	75.65	170.52	(163.76)	4,080.43	2.66
ING1000	310.84	45.98	(8.08)	(825.30)	1,183.37	(1.92)
ING2200	729.07	111.73	8.84	(1,175.54)	4,212.44	0.49
TXPG3760	2,314.74	372.85	167.45	(823.62)	1,658.38	0.19
TXHG2000	425.17	81.14	(2.66)	(490.00)	447.94	(6.17)
TXWG1400	306.04	65.76	4.93	(324.74)	335.41	(5.44)
TXUG1200	657.50	120.52	14.80	(470.16)	(93.77)	(35.10)
TNG900	265.13	32.76	24.65	(145.46)	602.52	(2.48)
TNG2750	857.56	98.12	261.45	21.92	2,717.45	3.36
SCG1500	542.32	112.04	29.24	(312.86)	623.72	(1.82)
SCG3500	1,438.10	265.85	268.01	313.51	4,570.44	4.23

1 Receipts are average annual total cash receipts including government payments, 2005-2011 (\$1,000)

2 Payments are average annual total government payments, 2005-2011 (\$1,000)

3 NCFI are average annual net cash farm income, 2005-2011 (\$1,000)

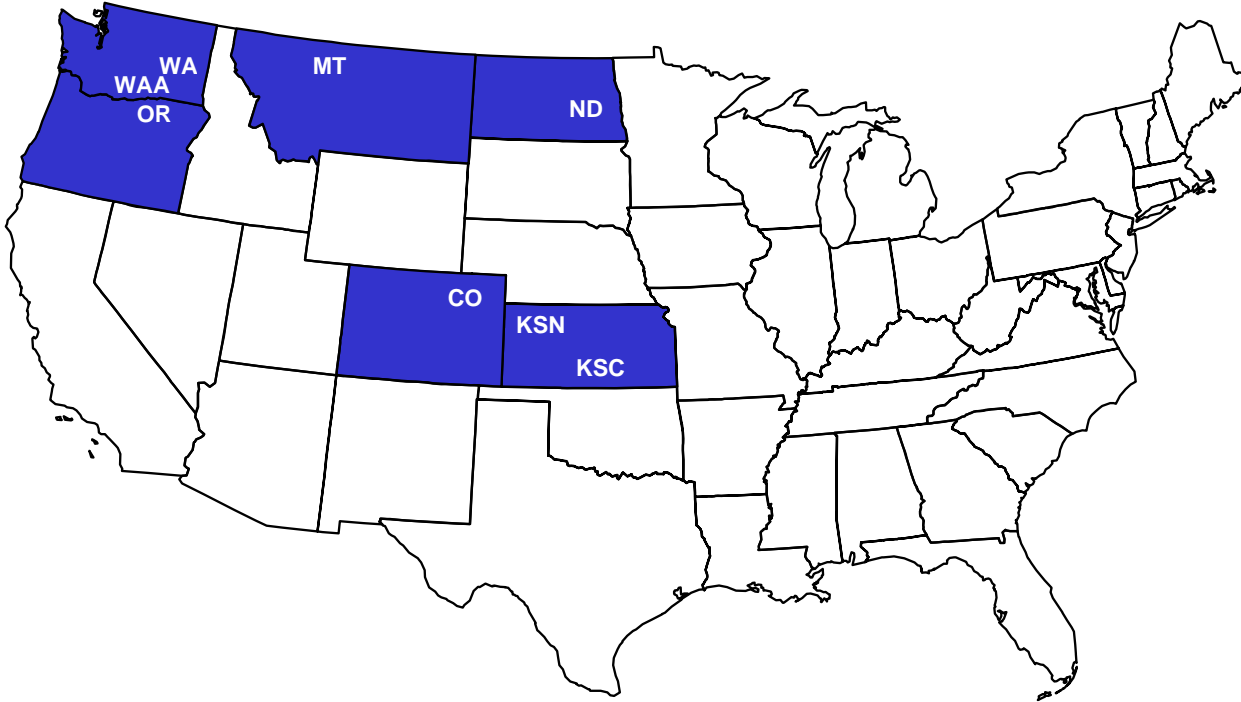
4 Reserve 2011 are average ending cash reserves, 2011 (\$1,000)

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

6 CRNW are average percentage in real net worth over 2005-2011 period, (%)

Representative Farm: Wheat

- Seven wheat farms are projected to be in good overall financial condition with two in moderate condition, and four in poor condition by 2011.
- Five 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, 2005.

	Cropland (acres)	Assets (\$1,000)	Deb/Asset (ratio)	Gross Receipts (\$1,000)	Wheat (acres)
WAW1725	1,725	1,186.00	0.20	378.00	1,121
WAW5000	5,000	4,312.00	0.20	1,158.40	2,915
WAAW3500	3,500	1,044.00	0.20	226.00	1,500
ORW4000	3,600	1,166.00	0.20	290.00	1,600
MTW4500	4,500	2,136.00	0.20	327.40	2,475
NDW2180	2,180	528.00	0.20	330.60	700
NDW6250	6,250	2,716.00	0.20	1,168.90	2,700
KSCW1385	1,385	898.00	0.20	183.50	928
KSCW4000	4,000	1,682.00	0.20	540.20	2,845
KSNW2800	2,800	1,477.00	0.20	327.20	935
KSNW4300	4,300	2,009.00	0.20	618.50	2,000
COW3000	3,000	1,285.00	0.20	255.70	970
COW5640	5,640	2,124.00	0.20	489.20	1,900

Representative Farm: Wheat

Economic Viability of Representative Farms over the 2005-2011 Period

Farm Name	Overall Ranking		P(Negative Ending Cash)	P(Real Net Worth Declines)
	2005	2011	2005-2011	2005-2011
7/2/4				
WAW1725			32-10	1-3
WAW5000			36-52	1-4
WAAW3500			51-9	1-1
MTW4500			1-5	1-1
ORW4000			29-7	1-5
NDW2180			70-83	1-59
NDW6250			42-44	1-14
KSCW1385			81-86	1-37
KSCW4000			35-17	1-1
KSNW2800			96-99	1-66
KSNW4300			64-77	1-32
COW3000			1-1	1-1
COW5640			2-4	1-1

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

<25

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 2005 and 2011.

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 2004 to 2005 and from 2004 to 2011.

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

	Receipts	Payments	NCFI	Reserve 2011	Net Worth 2011	CRNW
	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(%)
WAW1725	410.62	58.40	96.16	152.17	1,182.66	3.01
WAW5000	1,244.62	156.36	237.63	(58.53)	4,241.71	2.53
WAAW3500	243.94	38.77	80.55	112.63	1,099.17	3.53
ORW4000	304.41	45.35	121.93	192.25	1,210.19	2.90
MTW4500	378.66	70.43	164.84	375.04	2,311.33	4.08
NDW2180	396.69	42.33	39.39	(273.07)	283.17	(4.59)
NDW6250	1,351.18	141.15	287.75	29.69	2,799.27	3.11
KSCW1385	203.25	34.16	47.70	(111.56)	674.72	0.47
KSCW4000	583.39	87.53	187.48	196.59	1,652.96	3.44
KSNW2800	357.16	50.09	30.85	(483.99)	927.33	(1.52)
KSNW4300	680.51	93.45	88.83	(228.24)	1,726.63	1.06
COW3000	276.98	34.02	146.83	461.26	1,629.43	6.68
COW5640	535.78	61.80	188.04	228.19	2,312.74	4.27

1 Receipts are average annual total cash receipts including government payments, 2005-2011 (\$1,000)

2 Payments are average annual total government payments, 2005-2011 (\$1,000)

3 NCFI are average annual net cash farm income, 2005-2011 (\$1,000)

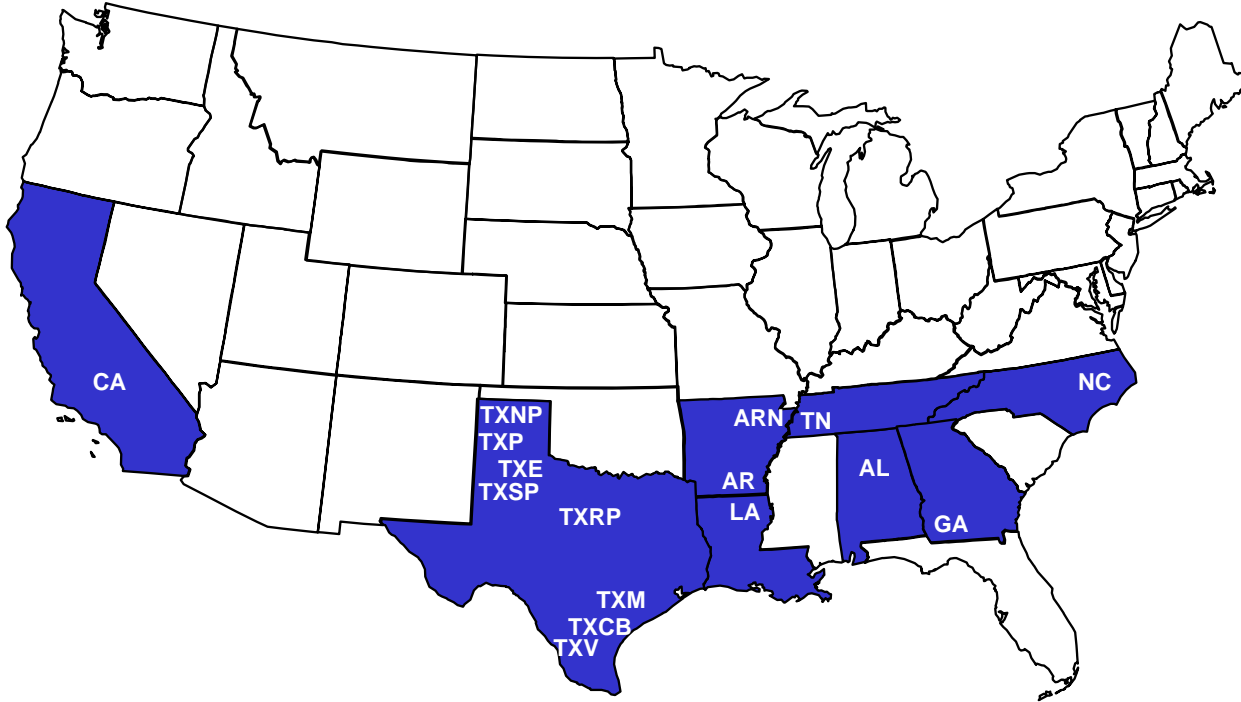
4 Reserve 2011 are average ending cash reserves, 2011 (\$1,000)

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

6 CRNW are average percentage in real net worth over 2005-2011 period, (%)

Representative Farm: Cotton

- One of the eighteen cotton farms is characterized as being in good overall condition, with one farm characterized in moderate, and eighteen in poor condition, by 2011.
- Eighteen of the twenty farms are projected to experience severe cash flow problems over the period.
- Fourteen of the twenty cotton farms have more than a 50 percent chance of losing real equity.



Characteristics of Panel Farms Producing Cotton, 2005.

	Cropland (acres)	Assets (\$1,000)	Deb/Asset (ratio)	Gross Receipts (\$1,000)	Cotton (acres)
TXNP3000	3,000	814.00	0.20	1,081.90	1,500
TXNP7000	7,000	2,596.00	0.20	2,460.80	2,850
TXSP2239	2,239	850.00	0.20	529.90	1,800
TXSP3745	3,745	2,045.00	0.20	903.60	3,036
TXPC2500	2,500	1,638.00	0.20	869.10	1,184
TXEC5000	5,000	1,203.00	0.20	1,208.30	4,300
TXRP2500	2,500	471.00	0.20	248.00	1,122
TXMC3500	3,500	1,156.00	0.20	1,260.10	1,750
TXCB2250	2,250	1,074.00	0.20	666.90	1,350
TXCB5500	5,500	1,213.00	0.20	1,565.40	2,750
TXVC4500	4,500	2,436.00	0.20	1,311.50	2,388
CAC4000	4,000	12,009.00	0.20	6,324.50	2,000
LAC2640	2,640	725.00	0.20	1,203.00	924
ARC6000	6,000	5,725.00	0.20	2,985.40	2,000
ARNC5000	5,000	4,898.00	0.20	2,822.70	5,000
TNC1900	1,900	2,070.00	0.20	875.50	990
TNC4050	4,050	3,883.00	0.20	1,629.20	2,670
ALC3000	3,000	1,637.00	0.20	1,142.30	2,100
GAC1700	1,700	2,381.00	0.20	1,277.00	1,020
NCC1100	1,100	1,545.00	0.20	548.70	700

Representative Farm: Cotton

Economic Viability of Representative Farms over the 2005-2011 Period

Farm Name	Overall Ranking		P(Negative Ending Cash)	P(Real Net Worth Declines)
	2005	2011	2005-2011	2005-2011
1/1/18				
TXNP3000			60-87	1-84
TXNP7000			82-67	1-27
TXSP2239			75-77	1-61
TXSP3745			35-73	1-54
TXPC2500			99-99	1-96
TXEC5000			95-99	1-95
TXRP2500			75-66	1-41
TXMC3500			73-62	1-44
TXCB2250			61-72	1-61
TXCB5500			59-87	1-81
TXVC4500			73-94	1-57
CAC4000			14-26	1-8
LAC2640			71-83	1-62
ARC6000			39-99	1-59
ARNC5000			67-91	1-61
TNC1900			1-1	1-1
TNC4050			64-93	1-75
ALC3000			94-92	1-73
GAC1700			99-99	1-49
NCC1100			82-99	1-92

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

<25

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 2005 and 2011.

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 2004 to 2005 and from 2004 to 2011.

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

	Receipts	Payments	NCFI	Reserve 2011	Net Worth 2011	CRNW
	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(%)
TXNP3000	1,202.96	184.64	81.83	(530.66)	299.47	(8.36)
TXNP7000	2,709.01	427.08	311.54	(485.62)	2,143.95	3.50
TXSP2239	584.55	137.23	67.16	(320.08)	490.73	(3.06)
TXSP3745	998.95	234.29	130.44	(256.00)	1,687.02	(0.61)
TXPC2500	922.98	238.53	(13.36)	(1,147.17)	448.32	(8.21)
TXEC5000	1,258.50	323.26	(67.87)	(1,654.42)	(404.13)	(25.78)
TXRP2500	267.57	73.30	52.22	(86.05)	363.22	1.54
TXMC3500	1,348.17	299.98	116.47	(276.84)	697.31	0.33
TXCB2250	712.99	169.41	71.01	(321.33)	678.67	(2.63)
TXCB5500	1,591.14	376.24	30.99	(985.71)	123.51	(14.27)
TXVC4500	1,397.10	348.54	48.86	(990.68)	1,457.53	(2.19)
CAC4000	6,213.45	245.78	913.92	1,275.68	12,650.92	4.29
LAC2640	1,260.90	295.56	105.90	(324.62)	457.99	(3.70)
ARC6000	3,102.75	695.28	270.27	(1,683.99)	4,274.81	(0.65)
ARNC5000	2,875.15	578.04	268.53	(1,641.70)	3,127.48	(1.54)
TNC1900	914.01	163.66	314.72	901.72	2,745.08	7.46
TNC4050	1,711.57	414.60	76.21	(1,400.74)	2,570.43	(2.75)
ALC3000	1,168.00	292.77	76.92	(956.46)	328.69	(8.54)
GAC1700	1,349.60	310.91	81.01	(561.68)	1,757.90	0.03
NCC1100	562.58	114.03	12.78	(766.65)	861.36	(4.22)

1 Receipts are average annual total cash receipts including government payments, 2005-2011 (\$1,000)

2 Payments are average annual total government payments, 2005-2011 (\$1,000)

3 NCFI are average annual net cash farm income, 2005-2011 (\$1,000)

4 Reserve 2011 are average ending cash reserves, 2011 (\$1,000)

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

6 CRNW are average percentage in real net worth over 2005-2011 period, (%)

Representative Farm: Rice

- Two of the fifteen rice farms are projected to be in moderate overall financial condition, with thirteen in poor condition. None of the fifteen rice farms are projected to be in good overall financial condition by 2011.
- Fourteen 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, 2005.

	Cropland (acres)	Assets (\$1,000)	Deb/Asset (ratio)	Gross Receipts (\$1,000)	Rice (acres)
CAR550	550	1,560.00	0.20	451.00	500
CAR2365	2,365	4,550.00	0.20	1,966.80	2,240
CABR1100	1,100	1,932.00	0.20	845.20	1,000
CACR715	715	1,759.00	0.20	593.70	650
TXR1350	1,350	920.00	0.20	356.60	855
TXR2400	2,400	993.00	0.20	742.30	2,280
TXBR1800	1,800	840.00	0.20	614.60	1,200
TXER3200	3,200	1,048.00	0.20	977.10	2,240
LASR1200	1,200	417.00	0.20	357.20	660
LANR2500	2,500	3,098.00	0.20	1,080.50	1,000
MOER4500	4,500	6,771.00	0.20	1,667.80	1,500
MOWR4000	4,000	7,638.00	0.20	1,695.90	2,000
ARSR3640	3,640	2,917.00	0.20	1,017.70	1,620
ARWR1200	1,200	1,944.00	0.20	489.30	600
ARHR3000	3,000	4,354.00	0.20	1,334.70	1,750

Representative Farm: Rice

Economic Viability of Representative Farms over the 2005-2011 Period

Farm Name	Overall Ranking		P(Negative Ending Cash)	P(Real Net Worth Declines)
	2005	2011	2005-2011	2005-2011
0/2/13				
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			90-99	1-99
TXBR1800			83-99	1-91
TXER3200			93-99	1-99
LASR1200			99-99	1-99
LANR2500			95-99	1-99
MOER4500			41-49	1-1
MOWR4000			45-66	1-3
ARSR3640			32-86	1-34
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

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 2005 and 2011.

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 2004 to 2005 and from 2004 to 2011.

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

	Receipts	Payments	NCFI	Reserve 2011	Net Worth 2011	CRNW
	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(%)
CAR550	457.06	122.54	(37.38)	(928.32)	535.50	(6.70)
CAR2365	1,997.42	579.07	(539.93)	(5,597.28)	(1,184.07)	(21.30)
CABR1100	858.00	254.53	(230.32)	(2,895.60)	(876.93)	(26.85)
CACR715	602.42	173.68	(189.03)	(2,009.19)	(287.67)	(18.30)
TXR1350	365.12	107.55	5.28	(551.82)	376.79	(6.01)
TXR2400	759.09	208.23	12.75	(836.91)	17.77	(15.63)
TXBR1800	628.86	173.06	35.08	(409.01)	312.69	(6.32)
TXER3200	1,004.46	288.07	(70.72)	(1,553.92)	(371.63)	(27.78)
LASR1200	371.20	95.58	(78.51)	(1,016.44)	(684.14)	(349.25)
LANR2500	1,127.92	273.75	18.16	(1,541.68)	1,565.40	(4.51)
MOER4500	1,761.94	386.72	386.39	(17.72)	6,977.29	3.26
MOWR4000	1,782.28	425.49	434.22	(296.82)	7,492.86	3.31
ARSR3640	1,079.98	258.58	244.25	(466.74)	2,553.83	0.38
ARWR1200	518.83	128.90	(142.48)	(2,380.46)	(311.67)	(18.00)
ARHR3000	1,406.72	359.26	(107.29)	(3,151.19)	1,417.98	(7.36)

1 Receipts are average annual total cash receipts including government payments, 2005-2011 (\$1,000)

2 Payments are average annual total government payments, 2005-2011 (\$1,000)

3 NCFI are average annual net cash farm income, 2005-2011 (\$1,000)

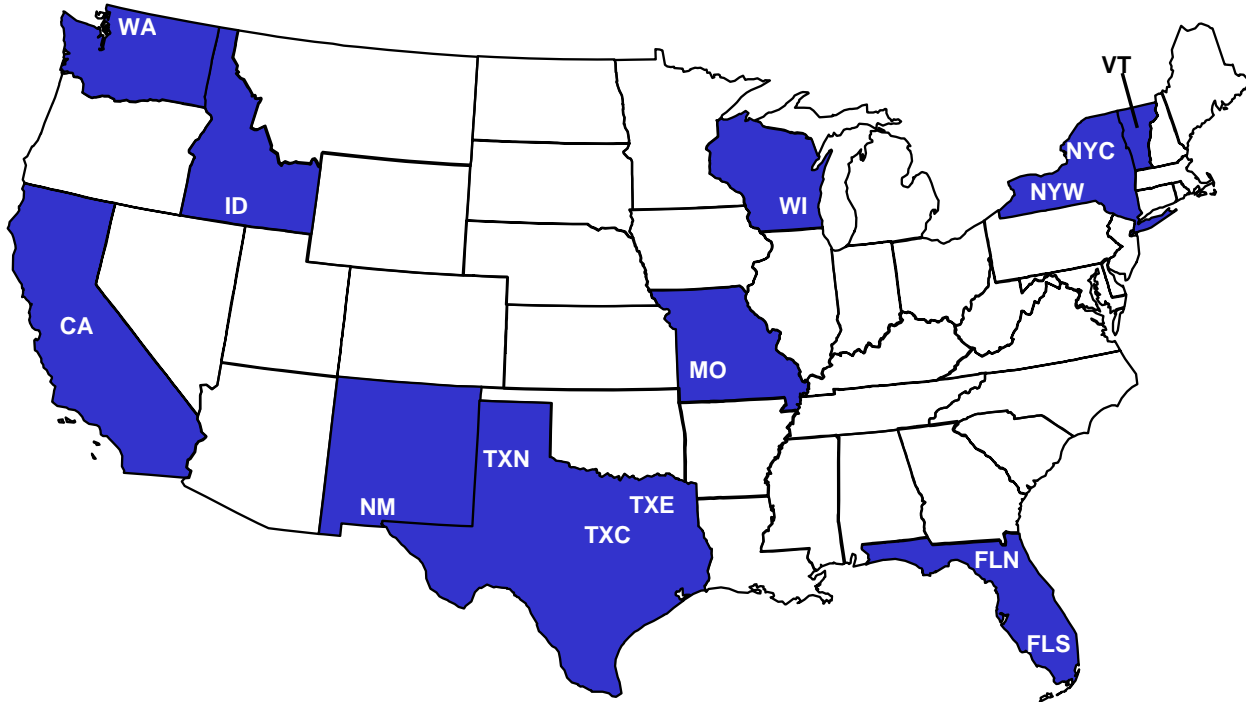
4 Reserve 2011 are average ending cash reserves, 2011 (\$1,000)

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

6 CRNW are average percentage in real net worth over 2005-2011 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.
- Seven of the dairies are projected to experience moderate or severe liquidity pressure with eight experiencing greater than a 25 percent probability in losing real equity.



Characteristics of Panel Farms Producing Milk, 2005.

	Cropland (acres)	Assets (\$1,000)	Deb/Asset (ratio)	Gross Receipts (\$1,000)	Cows (number)
CAD1710	700	13,327.00	0.30	6,013.80	1,710
NMD2125	370	10,942.00	0.30	7,364.30	2,125
WAD250	200	2,782.00	0.30	949.20	250
WAD850	605	6,743.00	0.30	3,245.80	850
IDD1000	360	6,407.00	0.30	3,900.00	1,000
IDD3000	1,500	21,355.00	0.30	11,436.60	3,000
TXND2400	260	11,465.00	0.30	8,176.50	2,400
TXCD550	250	2,683.00	0.30	1,696.40	550
TXCD1300	460	6,911.00	0.30	4,473.00	1,300
TXED550	300	2,030.00	0.30	1,523.60	550
TXED1000	875	5,147.00	0.30	3,412.60	1,000
WID145	600	2,692.00	0.30	624.60	145
WID775	1,200	5,750.00	0.30	3,321.20	775
NYWD800	1,440	6,010.00	0.30	3,221.70	800
NYWD1200	2,160	9,175.00	0.30	4,807.80	1,200
NYCD110	296	1,011.00	0.30	501.20	110
NYCD500	1,100	3,946.00	0.30	2,124.10	500
VTD134	220	1,227.00	0.30	599.90	134
VTD350	800	3,732.00	0.30	1,425.20	350
MOD85	230	1,088.00	0.30	284.30	85
MOD400	450	3,060.00	0.30	1,374.60	400
FLND550	600	3,881.00	0.30	1,989.90	550
FLSD1500	400	8,598.00	0.30	5,125.00	1,500

Representative Farm: Dairy

Economic Viability of Representative Farms over the 2005-2011 Period

Farm Name	Overall Ranking		P(Negative Ending Cash)	P(Real Net Worth Declines)
	2005	2011	2005-2011	2005-2011
14/3/6				
CAD1710			1-1	1-1
NMD2125			1-1	1-3
WAD250			2-18	1-6
WAD850			14-65	1-64
IDD1000			1-21	1-35
IDD3000			1-2	1-5
TXND2400			1-1	1-18
TXCD550			11-91	1-89
TXCD1300			1-1	1-7
TXED550			1-12	1-50
TXED1000			1-1	1-6
WID145			1-20	1-4
WID775			1-1	1-1
NYWD800			3-67	1-63
NYWD1200			1-60	1-62
NYCD110			1-1	1-1
NYCD500			1-12	1-6
VTD134			1-1	1-3
VTD350			4-59	1-50
MOD85			1-46	1-9
MOD400			1-7	1-6
FLND550			1-1	1-1
FLSD1500			26-92	1-91

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

<25	25-50	>50
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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 2011.

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 2004 to 2005 and from 2004 to 2011.

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

	Receipts	Payments	NCFI	Reserve 2011	Net Worth 2011	CRNW
	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(%)
CAD1710	5,766.11	38.03	1,189.58	3,923.04	14,389.81	3.91
NMD2125	6,922.72	0.28	1,467.97	4,549.93	12,499.12	4.51
WAD250	895.51	4.16	183.62	199.05	2,672.36	2.77
WAD850	3,055.31	25.28	154.40	(609.19)	4,799.76	(1.68)
IDD1000	3,563.63	0.28	369.50	690.99	5,945.86	0.77
IDD3000	10,425.28	50.57	2,036.52	5,464.79	22,516.94	3.08
TXND2400	7,672.47	0.28	1,150.35	4,660.24	12,091.49	2.67
TXCD550	1,597.55	0.28	(45.68)	(933.80)	1,331.22	(6.05)
TXCD1300	4,237.06	0.28	771.93	2,664.99	7,459.86	3.36
TXED550	1,434.59	0.28	178.71	407.41	1,824.91	0.06
TXED1000	3,220.54	0.28	649.79	2,369.57	5,945.24	4.12
WID145	571.34	7.61	140.06	162.16	2,506.24	2.14
WID775	3,065.60	24.52	912.85	3,073.67	7,075.40	6.17
NYWD800	3,056.79	34.93	148.63	(556.12)	4,281.23	(1.22)
NYWD1200	4,566.88	47.97	277.59	(296.48)	7,013.54	(0.73)
NYCD110	477.16	6.41	168.55	536.42	1,274.81	6.78
NYCD500	2,025.20	19.50	324.22	500.37	3,899.22	2.60
VTD134	573.24	4.20	135.53	346.66	1,312.99	3.75
VTD350	1,355.73	18.26	109.71	(116.73)	2,962.85	(0.27)
MOD85	265.60	0.19	67.89	5.39	1,034.20	2.37
MOD400	1,290.17	0.28	285.37	623.34	3,223.23	3.45
FLND550	1,905.28	0.28	687.79	2,153.30	5,230.59	7.90
FLSD1500	4,888.25	0.28	(297.29)	(3,013.60)	4,285.58	(5.92)

1 Receipts are average annual total cash receipts including government payments, 2005-2011 (\$1,000)

2 Payments are average annual total government payments, 2005-2011 (\$1,000)

3 NCFI are average annual net cash farm income, 2005-2011 (\$1,000)

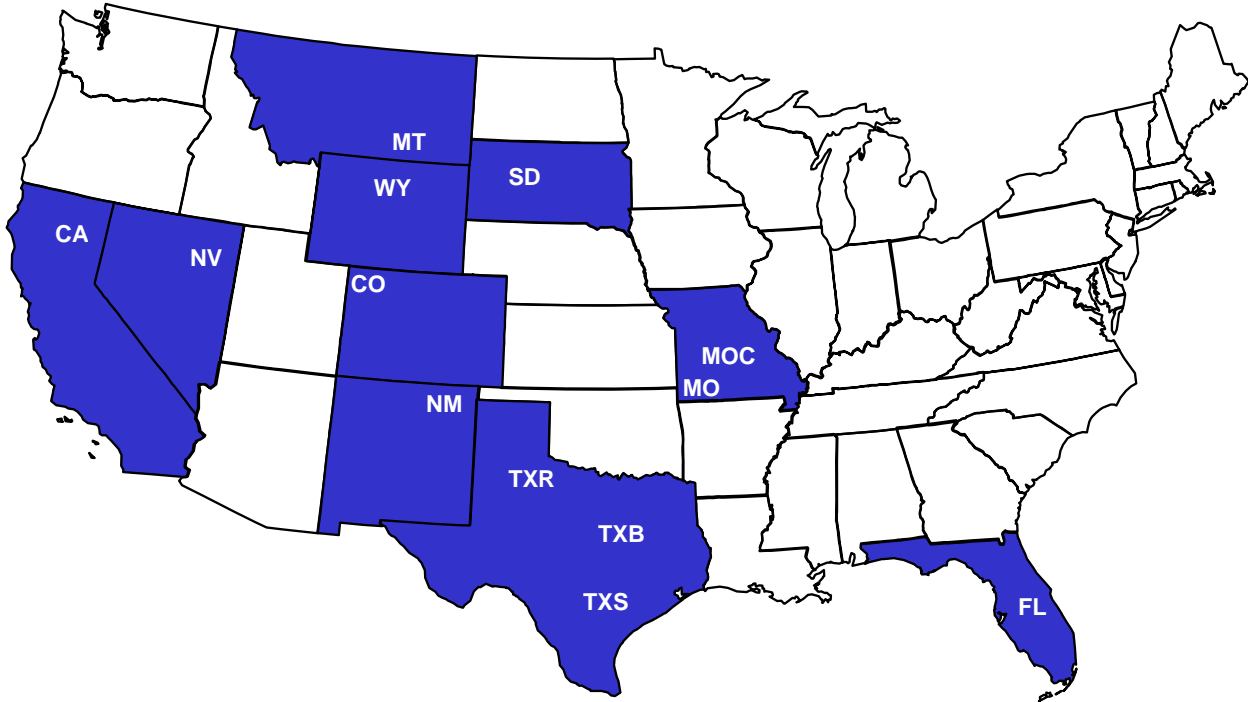
4 Reserve 2011 are average ending cash reserves, 2011 (\$1,000)

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

6 CRNW are average percentage in real net worth over 2005-2011 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.
- Five of the operations will face significant liquidity pressure over the period, as their likelihoods of experiencing negative ending cash exceed 50 percent.
- Two 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, 2005.

	Cropland (acres)	Assets (\$1,000)	Deb/Asset (ratio)	Gross Receipts (\$1,000)	Cows (number)
CAB500	0	10,763.00	0.01	314.40	500
NVB700	1,300	2,752.00	0.01	379.70	700
MTB500	0	3,099.00	0.01	331.80	500
WYB500	330	2,878.00	0.01	303.00	500
COB250	450	12,083.00	0.01	198.10	250
NMB240	0	4,228.00	0.01	297.10	240
SDB450	1,150	3,264.00	0.01	289.10	450
MOB150	240	1,157.00	0.02	164.60	150
MOCB350	40	2,791.00	0.01	236.30	350
TXRB500	0	4,297.00	0.01	339.50	500
TXBB150	200	1,045.00	0.02	1,573.00	150
TXSB250	0	2,454.00	0.01	191.50	250
FLB1155	5,400	12,211.00	0.01	644.40	1,155

Representative Farm: Cow/Calf

Economic Viability of Representative Farms over the 2005-2011 Period

Farm Name	Overall Ranking		P(Negative Ending Cash)	P(Real Net Worth Declines)
	2005	2011	2005-2011	2005-2011
6/5/2				
CAB500			48-99	1-1
NVB700			2-39	1-49
MTB500			1-1	1-1
WYB500			11-99	1-90
COB250			1-1	1-1
NMB240			1-82	1-1
SDB450			1-8	1-8
MOB150			1-4	1-2
MOCB350			1-26	1-2
TXRB500			1-1	1-2
TXBB150			11-72	1-87
TXSB250			1-1	1-1
FLB1155			3-57	1-1

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

<25

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 2005 and 2011.

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 2004 to 2005 and from 2004 to 2011.

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

	Receipts	Payments	NCFI	Reserve 2011	Net Worth 2011	CRNW
	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(%)
CAB500	274.29	0.00	(13.00)	(316.64)	11,386.21	1.12
NVB700	321.07	0.00	44.60	41.77	2,642.46	(0.02)
MTB500	282.15	0.00	114.59	475.55	3,445.42	2.00
WYB500	257.04	0.00	(0.59)	(331.92)	2,612.04	(1.03)
COB250	176.91	0.00	58.42	200.29	13,349.17	1.80
NMB240	265.95	0.00	22.76	(40.69)	4,473.79	1.12
SDB450	256.30	0.40	63.77	188.50	3,387.19	0.98
MOB150	159.04	9.68	64.43	138.38	1,284.70	2.16
MOCB350	201.78	0.00	37.19	57.93	2,933.06	1.01
TXRB500	309.47	0.00	101.37	299.37	4,650.87	1.45
TXBB150	1,326.90	3.12	15.99	(170.93)	701.67	(4.30)
TXSB250	165.70	0.00	66.42	227.66	2,691.67	1.73
FLB1155	552.11	0.00	35.08	(56.27)	12,935.08	1.14

1 Receipts are average annual total cash receipts including government payments, 2005-2011 (\$1,000)

2 Payments are average annual total government payments, 2005-2011 (\$1,000)

3 NCFI are average annual net cash farm income, 2005-2011 (\$1,000)

4 Reserve 2011 are average ending cash reserves, 2011 (\$1,000)

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

6 CRNW are average percentage in real net worth over 2005-2011 period, (%)