

# Representative Farms Economic Outlook for the December 2004 FAPRI/AFPC Baseline





### AFPC Briefing Paper 04-4

December 2004

Department of Agricultural Economics Texas Agricultural Experiment Station Texas Cooperative Extension Texas A&M University

### REPRESENTATIVE FARMS ECONOMIC OUTLOOK FOR THE DECEMBER 2004 FAPRI/AFPC BASELINE

AFPC Briefing Paper 04-4

James W. Richardson Joe L. Outlaw David P. Anderson J. Marc Raulston Brian Herbst James D. Sartwelle, III Robert B. Schwart, Jr. Keith Schumann Paul Feldman Steven L. Klose

		ad Livesteel, Duisse, 0000,0000
FAPRI December 2004 Baseline Pro	bjections of Crop an	na Livestock Prices, 2002-2009

	2002	2003	2004	2005	2006	2007	2008	2009
Crop Prices								
Corn (\$/bu.)	2.32	2.42	1.91	2.21	2.25	2.27	2.29	2.30
Wheat (\$/bu.)	3.56	3.40	3.31	3.18	3.25	3.31	3.38	3.43
Cotton (\$/lb.)	0.4450	0.6180	0.4247	0.4365	0.4464	0.4532	0.4584	0.4763
Sorghum (\$/bu.)	2.32	2.39	1.82	2.14	2.14	2.16	2.17	2.19
Soybeans (\$/bu.)	5.53	7.34	4.91	4.63	4.78	5.01	5.17	5.23
Barley (\$/bu.)	2.72	2.83	2.44	2.52	2.60	2.60	2.59	2.58
Oats (\$/bu.)	1.81	1.48	1.40	1.51	1.54	1.57	1.59	1.60
Rice (\$/cwt.)	4.49	7.49	7.00	6.25	6.39	6.71	6.89	7.24
Soybean Meal (\$/ton)	173.18	244.22	151.15	148.27	154.12	160.21	164.40	165.88
All Hay (\$/ton)	92.40	85.50	83.18	84.39	86.80	88.27	89.32	90.33
Peanuts (\$/ton)	364.00	385.00	388.99	401.02	400.47	399.12	399.16	400.78
Cattle Prices								
Feeder Cattle (\$/cwt)	86.34	95.21	111.51	110.95	105.67	98.91	92.53	87.60
Fat Cattle (\$/cwt)	67.04	84.69	84.37	84.89	83.62	81.71	78.91	75.65
Culled Cows (\$/cwt)	39.23	46.62	52.58	53.01	52.23	49.00	47.47	44.95
Hog Prices								
Barrows/Gilts (\$/cwt)	34.92	39.45	51.62	46.09	38.5	40.13	44.06	48.18
Culled Sows (\$/cwt)	23.71	28.24	41.45	35.25	29.46	30.81	34.39	38.12
Milk Price								
U.S. All Milk Price (\$/cwt)	12.18	12.55	15.99	13.91	13.67	13.53	13.52	13.48

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

#### FAPRI December 2004 Baseline Assumed Rates of Change in Input Prices, Annual Interest Rates, and Annual Changes in Land Values, 2003-2009

In Land Values, 2003-2009							
	2003	2004	2005	2006	2007	2008	2009
Annual Rate of Change for Input Prices Paid							
Seed Prices (%)	8.45	7.54	2.64	-0.65	0.05	0.57	0.98
Fertilizer Prices (%)	14.80	1.50	2.47	0.00	-2.00	-2.07	0.86
Chemical Prices (%)	6.56	6.06	3.62	-0.10	0.63	0.88	0.84
Machinery Prices (%)	3.00	1.96	2.46	0.87	1.52	1.73	1.60
Fuel and Lube Prices (%)	21.08	10.38	2.47	0.00	-2.00	-2.07	0.86
Labor (%)	1.38	1.32	1.15	1.19	1.17	1.17	1.09
Other Input Prices (%)	1.47	1.82	2.25	1.92	2.08	2.24	2.25
Non-Feed Dairy Costs (%)	5.33	5.71	1.58	-1.11	-0.29	0.28	0.75
Non-Feed Beef Costs (%)	5.33	5.71	1.58	-1.11	-0.29	0.28	0.75
Non-Feed Hog Costs (%)	5.33	5.71	1.58	-1.11	-0.29	0.28	0.75
Annual Rate of Change for U.S. Land Prices (%)	4.96	7.09	6.33	1.98	1.00	1.09	1.51

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

### REPRESENTATIVE FARMS ECONOMIC OUTLOOK FOR THE DECEMBER 2004 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) December 2004 Baseline.

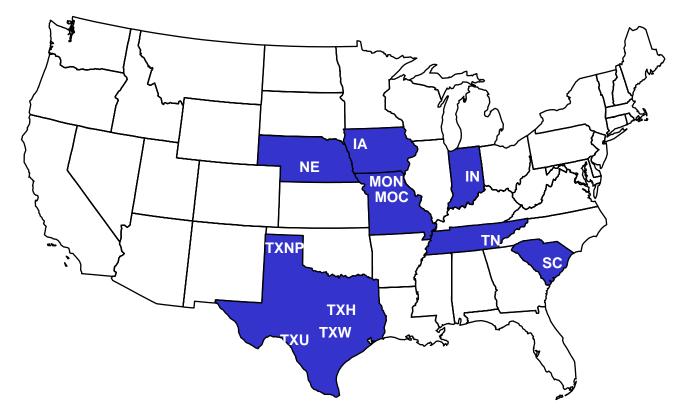
The FLIPSIM policy simulation model incorporates the historical risk faced by farmers for prices and production. This report presents the results of the December 2004 Baseline in a risk context using selected simulated probabilities and ranges for annual net cash farm income values. The probability of a farm experiencing annual cash flow deficits 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, 2004-2009 -- 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 cash flow deficit and 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** -- 2004-2009 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** -- 2004-2009 average of annual counter cyclical payments, direct payments, and marketing loan gains/LDP for crops and the milk program payment for dairy farms.
- NCFI -- 2004-2009 average net cash farm income equals average total receipts minus average total cash expenses.
- **Reserves 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).
- Nominal Net Worth -- 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 December 1, 2004, through December 31, 2009, after adjusting for inflation.

### **Representative Farm: Feed Grain**

- Overall, 8 feed grain farms are characterized as good, and 11 are in moderate condition.
- Only four of nineteen farms will be under cash flow stress, and none are in danger of losing real wealth.



#### Characteristics of Panel Farms Producing Feed Grains, 2004.

	Cropland Assets		nd Assets Debt/Asset Gross Receipts		
	(acres)	(\$1,000)	(ratio)	(\$1,000)	(acres)
IAG1350	1,350	1,138.00	0.16	424.50	675
IAG2750	2,750	2,120.00	0.19	730.60	1,375
IAG4200	4,200	4,355.00	0.15	1,430.50	2,100
NEG1960	1,960	2,256.00	0.10	1,004.90	1,646
NEG4300	4,300	5,384.00	0.15	1,820.80	2,666
MOCG1700	1,700	3,164.00	0.13	446.90	825
MOCG3630	3,630	5,034.00	0.12	811.60	1,650
MONG1850	1,850	3,682.00	0.12	633.70	900
ING1000	1,000	1,725.00	0.19	289.60	500
ING2200	2,200	4,694.00	0.16	681.40	1,100
TXNP1750	1,750	604.00	0.22	575.60	880
TXNP7000	7,000	3,294.00	0.15	1,951.80	4,280
TXHG2000	2,000	570.00	0.10	397.50	1,350
TXWG1400	1,400	645.00	0.20	281.00	1,150
TXUG1200	1,201	414.00	0.22	629.50	650
TNG900	900	580.00	0.24	243.30	450
TNG2400	2,400	2,118.00	0.19	707.10	1,080
SCG1500	1,500	906.00	0.15	504.70	846
SCG3500	3,500	4,228.00	0.14	1,335.60	1,840

### **Representative Farm: Feed Grain**

Economic Viability of Representative Farms over the 2004-2009 Period						
Farm Name	P(Cash Flow Deficit)	P(Real Net Worth Declines)				
8/11/0	2004-2009	2004-2009				
IAG1350	58-35	1-2				
IAG2750	58-21	1-1				
IAG4200	48-24	1-1				
NEG1960	2-1	1-1				
NEG4300	39-31	1-1				
MOCG1700	58-40	1-1				
MOCG3630	41-12	1-1				
MONG1850	56-85	1-2				
ING1000	98-99	1-7				
ING2200	98-99	1-1				
TXNP1750	35-40	1-7				
TXNP7000	35-25	1-1				
TXHG2000	56-53	1-6				
TXWG1400	65-35	1-2				
TXUG1200	65-46	1-20				
TNG900	70-19	1-1				
TNG2400	63-47	1-1				
SCG1500	55-50	1-1				
SCG3500	25-21	1-1				

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

< 25

2 P(Cash Flow Deficit) is the probability that the farm will have a cash flow deficit. Reported values represent the probabilities for 2004 and 2009.

25 - 50

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 2004 and from 2002 to 2009.

#### Implications of the December 2004 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Feed Grains and Oilseeds.

> 50

	Receipts	Payments	NCFI	Reserve 2009	Net Worth 2009	CRNW
	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(%)
IAG1350	440.23	75.46	104.01	82.28	1,150.47	3.41
IAG2750	757.32	129.33	266.75	429.70	2,271.37	5.61
IAG4200	1,477.92	254.20	410.74	609.51	4,706.56	4.70
NEG1960	1,020.84	151.54	349.40	1,037.81	2,814.10	6.57
NEG4300	1,874.73	258.30	448.95	794.52	5,725.12	4.44
MOCG1700	475.27	75.08	196.66	148.53	3,388.75	3.86
MOCG3630	870.33	136.03	390.18	641.60	5,621.31	4.49
MONG1850	657.71	79.84	172.35	(54.46)	3,790.39	2.86
ING1000	299.09	49.18	39.25	(296.62)	1,505.04	1.31
ING2200	700.36	118.53	107.94	(435.10)	4,461.40	2.20
TXNP1750	648.43	88.41	174.29	277.92	824.07	10.42
TXNP7000	2,093.36	306.54	554.91	864.12	3,994.27	6.85
TXHG2000	426.87	83.26	103.34	137.41	653.42	4.31
TXWG1400	297.93	63.92	85.89	95.61	666.59	4.57
TXUG1200	649.22	138.13	80.26	86.64	397.89	5.15
TNG900	253.72	40.03	77.64	51.19	573.41	4.88
TNG2400	735.47	116.59	194.55	99.59	2,117.42	3.87
SCG1500	528.81	125.73	115.10	142.13	961.78	4.04
SCG3500	1,395.49	296.73	417.24	1,029.71	4,905.92	5.57

1 Receipts are average annual total cash receipts including government payments, 2004-2009 (\$1,000)

2 Payments are average annual total government payments, 2004-2009 (\$1,000)

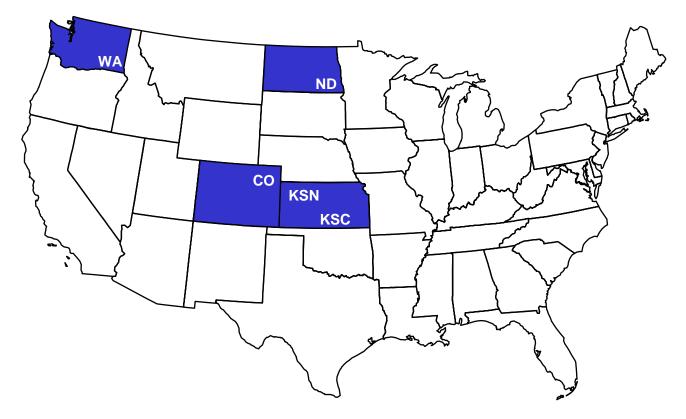
3 NCFI are average annual net cash farm income, 2004-2009 (\$1,000)

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

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

## **Representative Farm: Wheat**

- Two wheat farms are projected to be in good overall financial condition with six in moderate condition and two in poor condition.
- Six of the ten wheat farms will feel severe liquidity pressure over the period.
- Only two wheat farms have a moderate 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	1,323.00	0.14	469.30	1,035	
WAW4675	4,675	4,391.00	0.13	1,108.40	3,043	
NDW2180	2,180	517.00	0.14	335.80	700	
NDW6250	6,250	2,868.00	0.16	1,205.50	2,700	
KSCW1385	1,385	774.00	0.18	184.90	928	
KSCW4000	4,000	1,635.00	0.13	541.50	2,845	
KSNW2800	2,800	1,385.00	0.24	327.00	935	
KSNW4300	4,300	1,944.00	0.12	618.40	2,000	
COW3000	3,000	1,171.00	0.15	260.80	970	
COW5640	5,640	1,895.00	0.23	493.20	1,900	

### **Representative Farm: Wheat**

Farm Name	P(Cash Flow Deficit)	P(Real Net Worth Declines)
2/6/2	2004-2009	2004-2009
WAW1725	40-58	1-9
WAW4675	47-57	1-1
NDW2180	59-73	1-32
NDW6250	38-36	1-1
KSCW1385	52-68	1-1
KSCW4000	16-9	1-1
KSNW2800	82-90	1-30
KSNW4300	30-37	1-2
COW3000	2-2	1-1
COW5640	87-78	1-1

> 50

#### Economic Viability of Representative Farms over the 2004-2009 Period

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

< 25

25 - 50

2 P(Cash Flow Deficit) is the probability that the farm will have a cash flow deficit. Reported values represent the probabilities for 2004 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 2004 and from 2002 to 2009.

	Receipts	Payments	NCFI	Reserve 2009	Net Worth 2009	CRNW
	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(%)
WAW1725	465.12	64.46	99.76	29.41	1,298.63	2.39
WAW4675	1,097.29	180.28	272.13	369.77	4,533.14	3.13
NDW2180	373.83	50.17	77.61	36.11	520.46	2.44
NDW6250	1,292.76	169.67	389.82	737.82	3,149.94	4.91
KSCW1385	201.82	38.17	80.35	40.59	747.42	2.71
KSCW4000	584.67	97.79	280.40	568.32	1,896.06	5.15
KSNW2800	354.37	52.44	66.57	(164.28)	1,132.16	1.07
KSNW4300	673.38	101.16	185.42	327.27	2,108.63	3.63
COW3000	275.65	37.14	156.40	321.94	1,385.95	6.42
COW5640	531.12	71.52	153.64	(40.13)	1,842.99	3.80

Implications of the December 2004 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Wheat.

1 Receipts are average annual total cash receipts including government payments, 2004-2009 (\$1,000)

2 Payments are average annual total government payments, 2004-2009 (\$1,000)

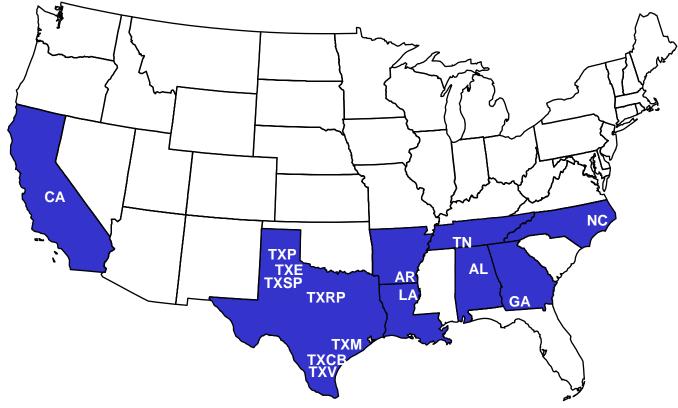
3 NCFI are average annual net cash farm income, 2004-2009 (\$1,000)

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

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

## **Representative Farm: Cotton**

- One of 18 cotton farms is characterized as being in good overall condition, with 10 farms characterized in moderate and seven in poor condition.
- Only two of the farms are projected to avoid severe cash flow problems over the period.
- Four of the 18 cotton farms have more than a 40 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)
TXSP2239	2,239	870.00	0.17	671.80	1,616
TXSP3745	3,745	1,689.00	0.12	888.60	2,625
TXPC2500	2,500	1,642.00	0.18	869.70	1,184
TXEC5000	5,000	1,129.00	0.18	1,233.80	4,300
TXRP2500	2,500	431.00	0.15	256.90	1,122
TXMC3500	3,500	1,000.00	0.16	1,234.10	1,750
TXCB1850	1,850	1,067.00	0.24	530.30	925
TXCB5500	5,500	1,139.00	0.25	1,263.60	2,750
TXVC4500	4,500	2,203.00	0.22	1,287.50	2,388
CAC2400	2,000	5,183.00	0.14	2,091.50	1,000
CAC9000	9,000	17,806.00	0.14	10,945.00	4,500
LAC2640	2,640	875.00	0.07	1,109.70	924
ARC6000	6,000	5,811.00	0.18	2,922.50	2,000
TNC1900	1,900	1,713.00	0.07	722.00	915
TNC4050	4,050	3,962.00	0.14	1,726.50	2,670
ALC3000	3,000	1,774.00	0.24	1,167.20	2,100
GAC1700	1,700	2,442.00	0.19	1,303.50	1,020
NCC1100	1,100	1,488.00	0.18	547.50	700

## **Representative Farm: Cotton**

Economic Viability of Representative Farms over the 2004-2009 Period							
Farm Name	P(Cash Flow Deficit)	P(Real Net Worth Declines)					
1/10/7	2004-2009	2004-2009					
TXSP2239	40-52	1-5					
TXSP3745	40-56	1-11					
TXPC2500	53-58	1-18					
TXEC5000	56-86	1-68					
TXRP2500	57-66	1-21					
TXMC3500	54-51	1-19					
TXCB1850	60-52	1-14					
TXCB5500	71-87	1-66					
TXVC4500	58-60	1-15					
CAC2400	42-53	1-7					
CAC9000	48-65	1-23					
LAC2640	59-85	1-74					
ARC6000	82-88	1-40					
TNC1900	22-20	1-1					
TNC4050	46-64	1-32					
ALC3000	61-56	1-39					
GAC1700	35-40	1-1					
NCC1100	66-95	1-71					

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

2 P(Cash Flow Deficit) is the probability that the farm will have a cash flow deficit. Reported values represent the probabilities for 2004 and 2009.

> 50

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 2004 and from 2002 to 2009.

#### Implications of the December 2004 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)	(%)
TXSP2239	688.56	185.90	112.41	130.53	904.59	3.88
TXSP3745	912.77	255.88	150.36	217.40	1,744.26	2.75
TXPC2500	905.19	275.07	110.69	64.43	1,476.10	1.28
TXEC5000	1,242.42	403.64	68.47	(389.96)	676.59	(4.46)
TXRP2500	266.77	89.76	76.06	74.32	471.17	3.89
TXMC3500	1,319.43	339.17	208.77	339.95	1,201.39	7.20
TXCB1850	566.17	142.11	115.11	196.29	1,070.90	5.02
TXCB5500	1,341.09	422.51	68.58	(351.56)	649.33	(4.85)
TXVC4500	1,372.40	390.40	200.00	5.77	2,166.86	4.25
CAC2400	2,115.24	314.71	176.92	269.77	5,092.39	2.53
CAC9000	11,079.79	1,419.31	971.89	751.38	17,379.05	2.53
LAC2640	1,153.03	338.93	57.85	(201.17)	562.87	(5.33)
ARC6000	3,014.29	822.87	285.48	(368.19)	4,838.86	0.44
TNC1900	724.57	180.71	255.40	589.79	2,177.20	6.16
TNC4050	1,778.86	440.18	284.41	258.25	3,760.51	1.70
ALC3000	1,156.46	353.55	170.25	257.49	1,452.81	1.51
GAC1700	1,298.30	343.49	185.06	268.24	2,340.20	2.96
NCC1100	548.16	141.76	43.00	(284.15)	1,127.16	(1.42)

1 Receipts are average annual total cash receipts including government payments, 2004-2009 (\$1,000)

2 Payments are average annual total government payments, 2004-2009 (\$1,000)

3 NCFI are average annual net cash farm income, 2004-2009 (\$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)

## **Representative Farm: Rice**

- One of the 16 rice farms is projected to be in good overall financial condition with 3 in moderate and 12 in poor condition.
- Fourteen of the rice farms are expected to face severe cash flow problems and 12 of 16 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	1,407.00	0.18	446.20	500
CAR2365 CABR1100	2,365 1,100	4,040.00 1,848.00	0.17 0.20	1,943.30 836.20	2,240 1,000
CACR715	715	1,649.00	0.12	583.40	650
TXR1553	1,553	514.00	0.23	407.00	900
TXR3774	3,774	1,020.00	0.12	1,067.80	3,178
TXBR1650	1,650	627.00	0.05	549.70	1,100
TXER3200	3,200	1,057.00	0.32	1,069.10	2,560
LASR1200	1,200	356.00	0.28	333.20	660
LANR2500	2,500	2,637.00	0.25	1,060.20	1,000
MOER4500	4,500	6,293.00	0.14	1,581.50	1,500
MOWR4000	4,000	6,813.00	0.15	1,533.70	2,000
ARSR3640	3,640	4,634.00	0.16	1,218.70	1,742
ARWR1200	1,200	1,900.00	0.22	475.40	600
ARHR3000	3,000	4,150.00	0.12	1,304.00	1,750
MSR4735	4,736	1,694.00	0.26	1,704.10	1,335

## **Representative Farm: Rice**

Economic Viability of Representative Farms over the 2004-2009 Period						
Farm Name	P(Cash Flow Deficit)	P(Real Net Worth Declines)				
1/3/12	2004-2009	2004-2009				
CAR550	99-99	1-83				
CAR2365	99-99	1-99				
CABR1100	99-99	1-99				
CACR715	99-99	1-99				
TXR1553	85-99	1-98				
TXR3774	54-36	1-8				
TXBR1650	75-93	1-92				
TXER3200	87-99	1-99				
LASR1200	90-99	1-99				
LANR2500	99-99	1-95				
MOER4500	66-36	1-1				
MOWR4000	71-85	1-21				
ARSR3640	76-79	1-9				
ARWR1200	99-99	1-99				
ARHR3000	77-97	1-58				
MSR4735	97-99	1-99				

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

< 25

25 - 50

2 P(Cash Flow Deficit) is the probability that the farm will have a cash flow deficit. Reported values represent the probabilities for 2004 and 2009.

> 50

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 2004 and from 2002 to 2009.

#### Implications of the December 2004 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	451.07	135.61	19.81	(277.41)	1,069.44	(1.06)
CAR2365	1,968.56	643.24	(256.66)	(2,208.98)	1,755.48	(7.93)
CABR1100	845.56	282.39	(67.76)	(907.57)	805.45	(7.53)
CACR715	592.89	192.98	(22.18)	(319.04)	1,218.34	(2.48)
TXR1553	416.82	133.30	18.84	(253.31)	211.96	(7.66)
TXR3774	1,094.47	331.95	216.55	446.23	1,171.75	6.27
TXBR1650	563.32	180.50	34.22	(137.31)	404.95	(5.09)
TXER3200	1,094.58	347.57	(58.27)	(852.34)	84.87	(16.69)
LASR1200	346.22	107.31	(22.98)	(436.58)	(102.49)	(25.64)
LANR2500	1,097.01	306.92	(5.50)	(1,046.02)	1,561.77	(3.40)
MOER4500	1,638.90	411.60	426.64	584.05	6,651.07	3.91
MOWR4000	1,575.74	474.67	213.68	(463.47)	6,270.90	1.72
ARSR3640	1,268.90	376.41	203.19	(0.59)	4,310.38	1.90
ARWR1200	496.01	148.84	(45.09)	(1,027.13)	794.29	(7.75)
ARHR3000	1,351.40	416.95	90.03 <sup>°</sup>	(546.66)	3,449.53	(0.69)
MSR4735	1,750.21	457.64	(93.18)	(1,623.38)	(123.96)	(19.42)

1 Receipts are average annual total cash receipts including government payments, 2004-2009 (\$1,000)

2 Payments are average annual total government payments, 2004-2009 (\$1,000)

3 NCFI are average annual net cash farm income, 2004-2009 (\$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)

### **Representative Farm: Dairy**

- Eleven of 23 dairy operations are in moderate overall financial condition, with 7 classified in good and 5 in poor condition.
- Just over one-third of the dairies are projected to experience liquidity pressure with only three experiencing significant declines in real equity.



#### Characteristics of Panel Farms Producing Milk, 2004.

	Cropland	Assets	Debt/Asset G	Fross Receipts	Cows
	(acres)	(\$1,000)	(ratio)	(\$1,000)	(number)
CAD1710	800	11,855.00	0.16	6,608.30	1,710
NMD2125	370	10,184.00	0.10	7,630.00	2,125
WAD250	200	1,974.00	0.16	1,083.20	250
WAD850	605	4,863.00	0.20	3,695.70	850
IDD1000	360	5,764.00	0.09	3,973.10	1,000
IDD3000	1,500	19,595.00	0.11	11,665.00	3,000
TXND2400	260	10,964.00	0.08	8,409.40	2,400
TXCD500	250	2,176.00	0.23	1,623.10	500
TXCD1300	460	6,129.00	0.12	5,241.70	1,300
TXED550	300	1,936.00	0.08	1,564.40	550
TXED1000	875	5,007.00	0.08	3,505.80	1,000
WID135	600	2,272.00	0.17	614.20	135
WID700	1,200	4,753.00	0.15	3,021.40	700
NYWD800	1,440	5,176.00	0.16	3,363.60	800
NYWD1200	2,160	8,317.00	0.18	5,017.20	1,200
NYCD110	296	959.00	0.13	519.60	110
NYCD500	1,100	3,698.00	0.14	2,212.10	500
VTD134	220	1,087.00	0.12	597.30	134
VTD350	800	3,353.00	0.17	1,423.70	350
MOD85	230	1,020.00	0.12	289.90	85
MOD400	450	2,835.00	0.12	1,412.30	400
FLND500	600	3,267.00	0.11	2,220.70	500
FLSD1500	400	7,079.00	0.18	5,343.20	1,500

## **Representative Farm: Dairy**

#### Economic Viability of Representative Farms over the 2004-2009 Period Farm Name P(Cash Flow Deficit) P(Real Net Worth Declines) 7/11/5 2004-2009 2004-2009 CAD1710 1-36 1-1 NMD2125 1-13 1-1 **WAD250** 42-46 1-4 **WAD850** 1-41 61-76 **IDD1000** 1-9 9-40 1-1 IDD3000 1-20 **TXND2400** 1-23 1-1 1-86 TXCD500 92-93 1-13 **TXCD1300** 1-32 **TXED550** 2-34 1-14 **TXED1000** 1-19 1-2 1-1 **WID135** 44-52 **WID700** 1-25 1-1 NYWD800 44-64 1-27 **NYWD1200** 20-59 1-23 NYCD110 1-1 1-1 NYCD500 1-1 1-30 **VTD134** 1-24 1-1 **VTD350** 68-80 1-53 MOD85 1-1 21-60 **MOD400** 1-34 1-1 FLND500 1-14 1-1 **FLSD1500** 80-88 1-64

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

2 P(Cash Flow Deficit) is the probability that the farm will have a cash flow deficit. Reported values represent the probabilities for 2004 and 2009.

> 50

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 2004 and from 2002 to 2009.

#### Implications of the December 2004 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	5,911.82	32.69	951.81	2,415.23	12,197.94	3.64
NMD2125	6,976.34	0.74	1,763.20	5,485.73	13,300.55	7.64
WAD250	993.99	8.39	205.52	205.05	2,017.55	3.59
WAD850	3,375.53	40.14	262.22	(387.32)	3,937.31	0.49
IDD1000	3,602.90	0.74	544.68	1,216.90	6,277.97	3.32
IDD3000	10,536.29	47.66	2,473.66	6,484.09	23,052.42	5.33
TXND2400	7,652.62	0.74	1,446.88	5,662.64	13,246.46	5.11
TXCD500	1,490.43	0.74	9.22	(693.14)	1,144.01	(5.29)
TXCD1300	4,824.37	0.74	657.52	1,707.17	6,299.19	2.86
TXED550	1,429.34	0.74	257.01	665.50	2,080.51	2.72
TXED1000	3,208.51	0.74	714.25	2,692.96	6,247.86	5.82
WID135	563.14	8.33	129.43	81.22	2,136.53	2.21
WID700	2,774.20	23.61	636.55	1,667.07	5,380.31	5.43
NYWD800	3,077.99	33.08	326.99	97.50	4,658.80	1.34
NYWD1200	4,598.14	45.24	506.69	435.07	7,401.32	1.54
NYCD110	480.01	6.46	194.37	517.48	1,216.45	7.56
NYCD500	2,036.46	18.68	427.09	821.27	4,021.29	4.39
VTD134	551.90	4.38	137.11	256.31	1,157.77	3.46
VTD350	1,302.05	17.47	117.21	(174.04)	2,768.81	(0.06
MOD85	265.41	0.50	84.06	114.60	1,075.75	3.30
MOD400	1,284.45	0.74	350.49	804.41	3,248.98	5.06
FLND500	2,096.59	0.74	589.55	1,836.01	4,443.19	8.78
FLSD1500	4,989.44	0.74	105.40	(1,230.00)	5,243.28	(1.60

1 Receipts are average annual total cash receipts including government payments, 2004-2009 (\$1,000)

2 Payments are average annual total government payments, 2004-2009 (\$1,000)

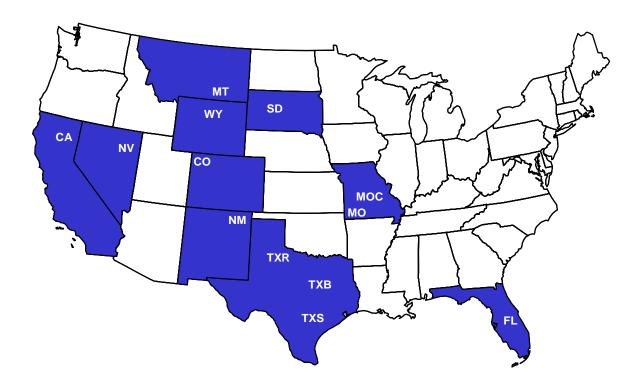
3 NCFI are average annual net cash farm income, 2004-2009 (\$1,000)

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

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

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

- Three of 13 cow-calf operations are projected to be in good overall financial condition. Nine are expected to be in moderate condition and one is in poor condition.
- Nine of the operations will face liquidity pressures over the period.
- One operation is 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	-	9,696.00	0.01	314.90	500
NVB700	1,300	2,529.00	0.01	357.50	700
MTB500	-	2,907.00	0.02	329.40	500
WYB500	330	2,630.00	0.02	316.90	500
COB250	450	9,866.00	0.01	164.70	250
NMB240	-	2,705.00	0.01	144.90	240
SDB450	1,150	2,938.00	0.01	272.00	450
MOB150	240	990.00	0.14	158.70	150
MOCB350	40	2,535.00	0.01	222.40	350
TXRB500	-	3,924.00	0.01	332.50	500
TXBB150	200	989.00	0.02	1,474.70	150
TXSB250	-	2,236.00	0.01	181.70	250
FLB1155	5,400	11,112.00	0.01	609.00	1,155

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

Economic Viability of Representative Farms over the 2004-2009 Period					
Farm Name	P(Cash Flow Deficit)	P(Real Net Worth Declines)			
3/9/1	2004-2009	2004-2009			
CAB500	13-91	1-1			
NVB700	11-58	1-20			
МТВ500	1-2	1-1			
WYB500	17-80	1-16			
COB250	39-91	1-1			
NMB240	13-84	1-1			
SDB450	11-41	1-3			
MOB150	54-72	1-1			
MOCB350	4-58	1-1			
TXRB500	1-1	1-1			
TXBB150	11-74	1-60			
TXSB250	1-12	1-1			
FLB1155	11-56	1-1			

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

 < 25</td>
 25 - 50

2 P(Cash Flow Deficit) is the probability that the farm will have a cash flow deficit. Reported values represent the probabilities for 2004 and 2009.

> 50

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 2004 and from 2002 to 2009.

#### Implications of the December 2004 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	295.57	-	43.91	16.00	10,583.51	1.60
NVB700	327.04	-	75.69	225.44	2,638.42	1.05
MTB500	302.57	-	146.70	624.33	3,369.85	2.93
WYB500	291.08	-	56.60	22.00	2,729.98	0.86
COB250	155.51	-	49.94	134.80	10,865.45	1.85
NMB240	132.98	-	37.02	21.83	2,906.78	1.38
SDB450	258.47	0.90	69.31	152.77	3,116.06	1.21
MOB150	157.25	10.26	61.18	(0.42)	989.31	2.61
MOCB350	204.66	-	56.05	159.71	2,771.36	1.63
TXRB500	322.06	-	124.14	340.14	4,338.52	1.85
TXBB150	1,338.81	3.49	69.66	118.42	937.70	(0.47)
TXSB250	168.32	-	63.37	186.56	2,450.75	1.68
FLB1155	560.39	-	102.81	235.40	12,141.14	1.67

1 Receipts are average annual total cash receipts including government payments, 2004-2009 (\$1,000)

2 Payments are average annual total government payments, 2004-2009 (\$1,000)

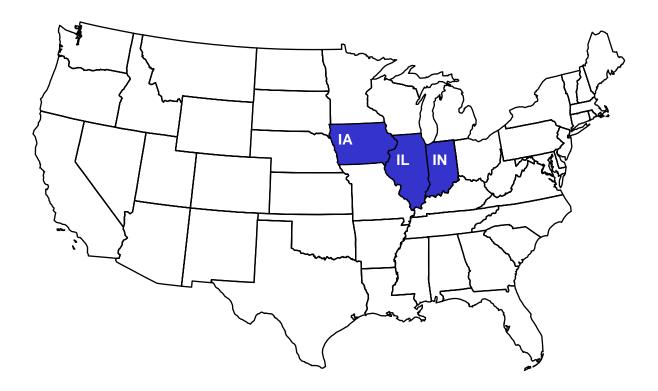
3 NCFI are average annual net cash farm income, 2004-2009 (\$1,000)

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

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

### **Representative Farm: Hog**

- One hog farm is projected to be in good condition over the period with three in moderate financial condition.
- Three of the farms are projected to experience liquidity problems, with only one being severe.
- None of the hog farms are expected to experience significant real equity declines.



<b>Characteristics of Panel Farms</b>	Producing Hogs, 2004.
---------------------------------------	-----------------------

	Cropland	Assets	Debt/Asset	Gross Receipts	Sows
	(acres)	(\$1,000)	(ratio)	(\$1,000)	(number)
ILH200	1,400	1,433.00	0.31	669.10	200
ILH750	1,950	5,902.00	0.21	2,344.80	750
INH600	3,200	5,359.00	0.23	2,486.20	600
IAH400	667	1,140.00	0.15	1,120.50	400

### **Representative Farm: Hog**

Economic Viability of Representative Farms over the 2004-2009 Period

Farm Name	P(Cash Flow Deficit)	P(Real Net Worth Declines)
1/3/0	2004-2009	2004-2009
ILH200	65-58	1-4
ILH750	26-9	1-1
INH600	34-25	1-1
IAH400	5-27	1-13

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

 < 25</td>
 25 - 50

2 P(Cash Flow Deficit) is the probability that the farm will have a cash flow deficit. Reported values represent the probabilities for 2004 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 2004 and from 2002 to 2009.

Implications of the December 2004 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Hogs.

	Receipts	Payments	NCFI	Reserve 2009	Net Worth 2009	CRNW
	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(%)
ILH200	616.61	59.82	150.37	9.06	1,206.01	3.82
ILH750	2,060.13	115.57	717.50	1,019.79	6,407.97	6.35
INH600 IAH400	2,321.73 980.47	208.60 36.90	613.38 196.58	495.16 320.15	5,580.01 1,210.97	5.85 4.53

1 Receipts are average annual total cash receipts including government payments, 2004-2009 (\$1,000)

2 Payments are average annual total government payments, 2004-2009 (\$1,000)

3 NCFI are average annual net cash farm income, 2004-2009 (\$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)

#### **AFPC Briefing Series**

The briefing series is designed to facilitate presentation by AFPC related to requests for specific policy impact analyses. The materials included in this package are intended only as visual support for an oral presentation. The user is cautioned against drawing extraneous conclusions from the material. In most cases AFPC welcomes comments and discussions of these results and their implications. Address such comments to:

Agricultural and Food Policy Center Department of Agricultural Economics 2124 TAMUS Texas A&M University College Station, TX 77843-2124

or call 979-845-5913.