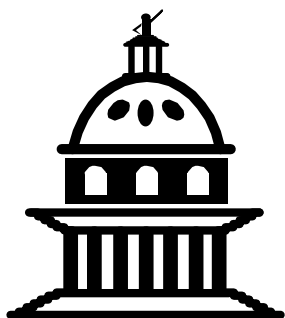


**REPRESENTATIVE FARMS ECONOMIC
OUTLOOK: UPDATE TO THE
1998 FAPRI/AFPC BASELINE**

AFPC Policy Briefing Series 98-5

July 1998



AFPC

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TEXAS A&M UNIVERSITY SYSTEM**

Agricultural and Food Policy Center
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Texas Agricultural Experiment Station
Texas Agricultural Extension Service
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REPRESENTATIVE FARMS ECONOMIC OUTLOOK: UPDATE TO THE 1998 FAPRI/AFPC BASELINE

An update of the January 1998 FAPRI/AFPC Baseline for the representative crop and hog operations is provided in this Briefing Paper. FAPRI's update of prices in the January 1998 Baseline for 1998 conditions are projected at the farm level in terms of their likely impacts on net farm income.

The analysis was conducted over the 1996-2002 planning horizon using AFPC's whole farm simulation model (FLIPSIM). Emphasis is placed on the projected net farm income values for 1997 and 1998. These values reflect the impacts of lower feed grain, wheat, and soybean prices in 1998. Additionally, the crop yields for 1998 have been updated for higher than average 1998 wheat yields in the Great Plains and the effects of the current drought in Texas. Data to simulate representative farming operations in the nation's major production regions came from two sources:

- # Producer panel cooperation to develop economic information to describe representative crop, livestock, and dairy farms. Wheat yields for 1998 were updated based on preliminary information from USDA-NASS and Texas crop yields in 1998 were updated based on information from Texas Agricultural Statistical Service.
- # Projected prices, policy variables, and input inflation rates from the Food and Agricultural Policy Research Institute (FAPRI) January 1998 Baseline, with updates for 1998 market conditions.

The primary objective of the analysis is to provide an update to the 1998 January Baseline for selected representative farms.

The FLIPSIM model incorporates the historical risk faced by farmers for prices and production. This Briefing Paper presents the results in a risk context using selected probabilities. The probability that a farm will experience an annual cash flow deficit and the probability of having to refinance these cash flow deficits using outside capital are provided as indicators of the financial risk faced by selected representative farms.

Average annual values for net cash farm income are reported for each farm. Net cash farm income equals total cash receipts minus all cash expenses. Net cash farm income is used to pay family living expenses, principal payments, income taxes, self employment taxes, and machinery replacement costs. The values are the averages for each year in the planning horizon.

The probability of a farm experiencing a cash flow deficit is the number of years out of 100 that the farm's annual net cash farm income does not exceed cash requirements for family living, principal payments, taxes (income and self-employment), and machinery replacement expenses. This probability is reported for each year of the planning horizon to indicate whether the cash flow risk for a farm increases or decreases over the planning horizon.

The probability of a farm refinancing deficits is the number of years out of 100 that cash flow deficits are greater than cash reserves. This probability is reported for each year of the planning horizon to indicate whether the financial risk for a farm increases or decreases over the planning horizon.

Results

- Texas Southern High Plains cotton farms have been hard hit by the 1998 drought. This is particularly important to economic viability for non-irrigated Texas farms because the 1998 drought came on the heels of the 1996 drought. Projected 1998 net cash farm income for a large cotton farm in the Texas Southern High Plains (TXSP3697) shows \$325,000 decline from 1997 when yield was about equal to its 10 year average. The probability that the farm would have a cash flow deficit on 1998 is 99 percent. Net cash farm income during the 1996 drought was more than \$177,000 greater than the projected income for 1998. If yields return to normal after 1998 and mean prices follow the January Baseline, the farm will continue to experience cash flow deficits more than 60 percent of the time.
- South Central Kansas wheat farms experienced above average (record) yields in 1998. However, wheat prices for 1998 have been lower than 1997 levels by \$0.50 per bushel. The large representative wheat farm in South Central Kansas (KSSC3080) was used to demonstrate the economic impacts of these two opposing forces on net cash farm income. The benefit of the higher yields more than offset the lower prices for the representative farm, as average net income is projected to be \$50,000 greater than 1997. The increased yield contributed to reducing the farm's probability of having a cash flow deficit and refinancing deficits. Assuming prices return to the levels in the January Baseline the farm will experience increases in the probability of experiencing cash flow deficits.
- The North Dakota wheat farms are expected to harvest slightly below average wheat yields for 1998. Lower wheat and barley prices will reduce net cash farm incomes from their 1997 levels. The probability of the large representative North Dakota wheat farm (NDW4600) experiencing cash flow deficits is projected to increase over the 1997, 1998 and 1999 period due to lower than normal income levels. Net cash farm incomes for these years are almost \$200,000 less than the value for 1996 when grain prices were at record levels. Higher wheat prices in 1999 will likely raise net cash farm income about \$15,000, but not enough to reduce the probability of cash flow deficits in 1999.
- Hog producers are presently experiencing much lower prices for barrows and gilts than they had in 1997. Additionally, hog prices are expected to remain at their current level for another year. The large Missouri hog farm (MOH225) is projected to have substantially lower (64 percent) net cash farm incomes for 1998 and 1999 than it experienced for 1997. Lower incomes increase the farm's probability of cash flow deficits to about 90 percent in 1998 and 1999. Consecutive bad years will increase the farm's probability of refinancing, but not substantially. Smaller hog farms in the

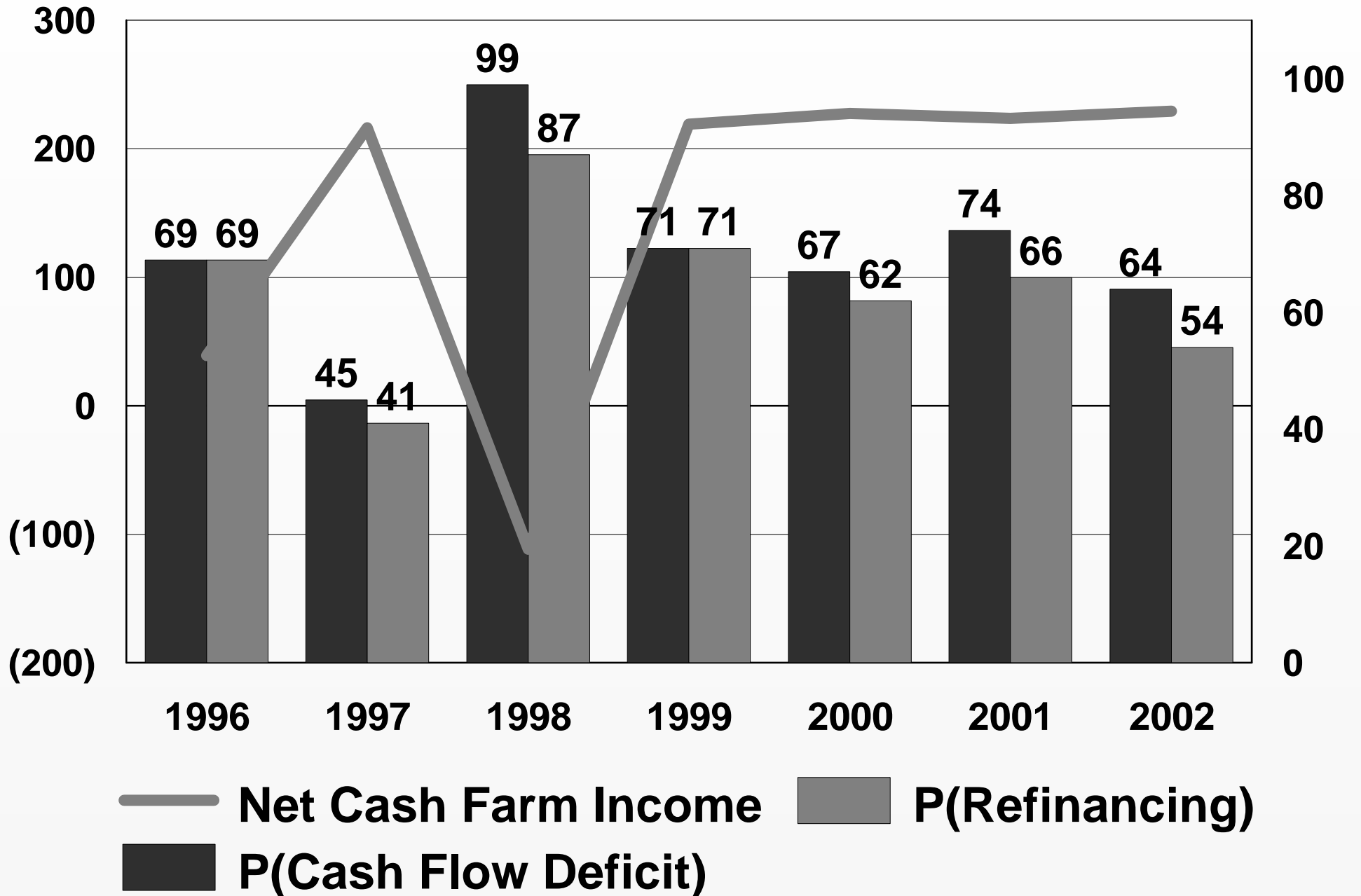
Midwest (MOH100) will, however, experience substantial cash flow problems in the future as a result of low hog prices in 1998 and 1999.

- Grain farms in the Midwest are expected to have average yields in 1998, however, they are presently experiencing lower corn and soybean prices. Corn prices are down \$0.25 per bushel from 1997 levels and soybean prices are down \$1.00 per bushel. These lower prices are projected to reduce net cash farm income for a large Iowa grain farm (IAG2200) about \$30,000 in 1998 from the \$220,000 level in 1997. Lower net cash farm income results in a small increase in the farm's probability of having a cash flow deficit, relative to 1997. If grain and oilseed prices return to the levels in the FAPRI January Baseline after 1999, the farm will see its probability of a cash flow deficit fall 10 percentage points from its high in 1998.

Texas Southern Plains Cotton Farm (TXSP3697)

(\$1,000)

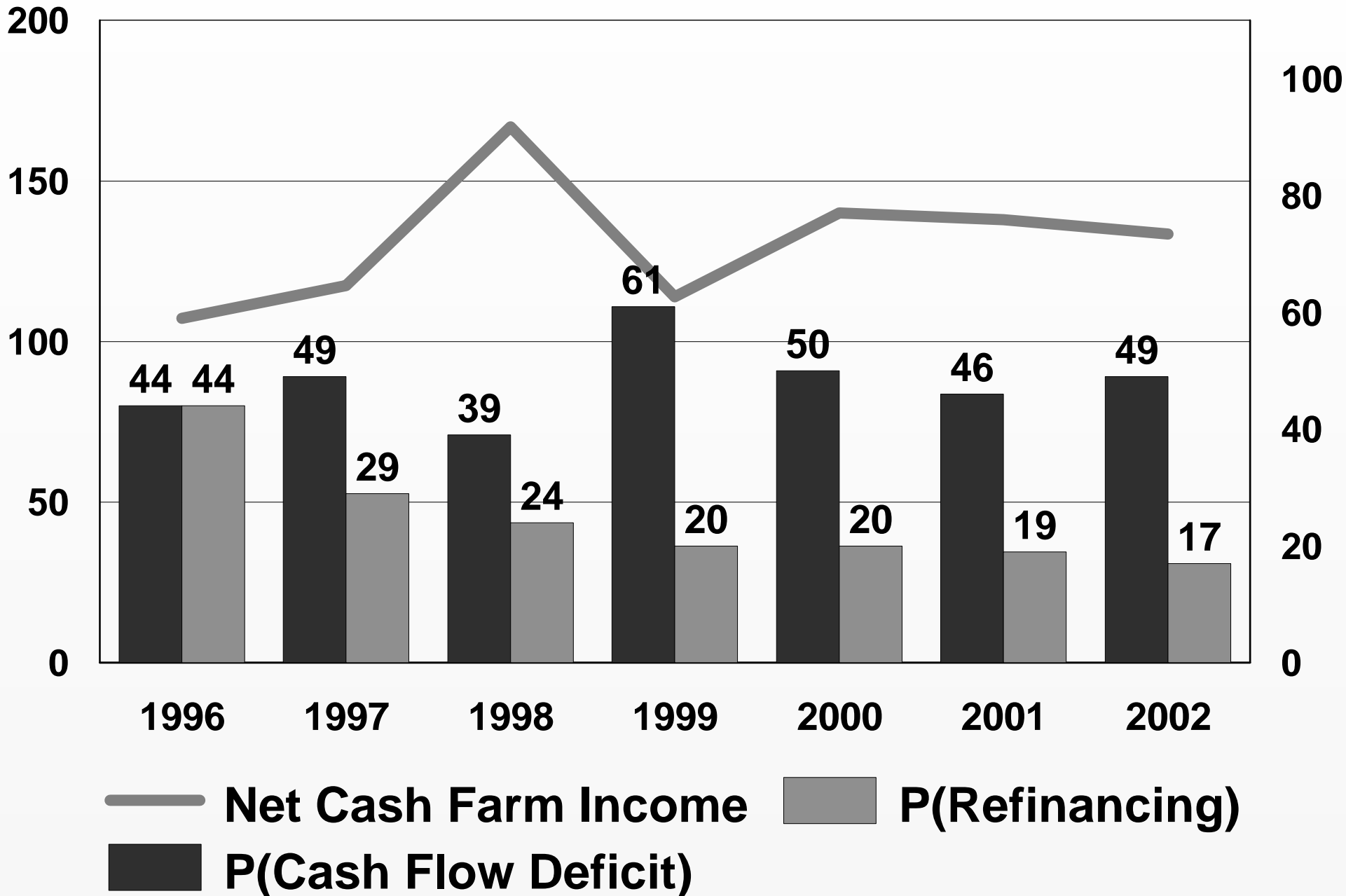
Probability



Central Kansas Wheat Farms (KSSC3080)

(\$1,000)

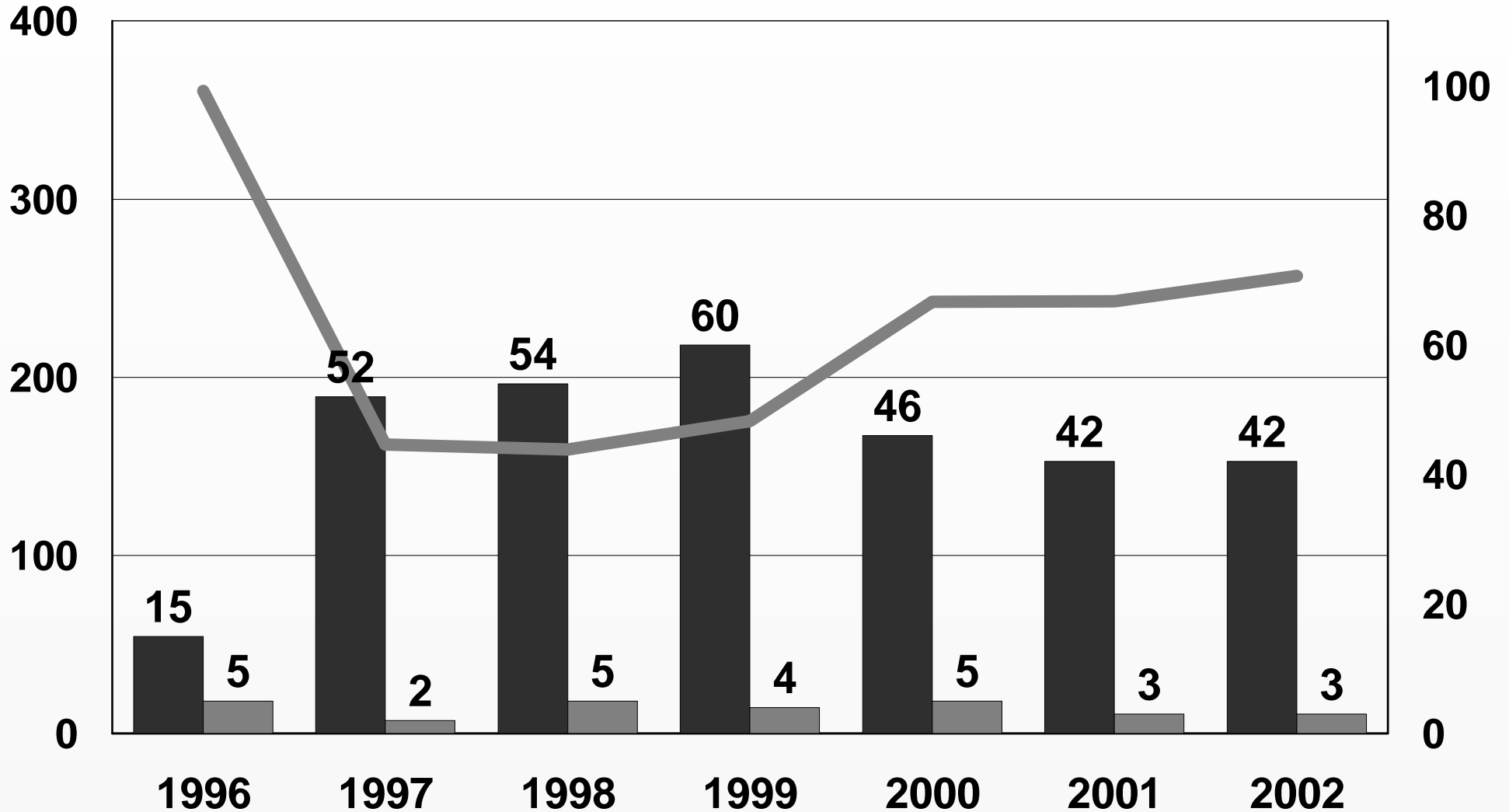
Probability



North Dakota Wheat Farm (NDW4600)

(\$1,000)

Probability

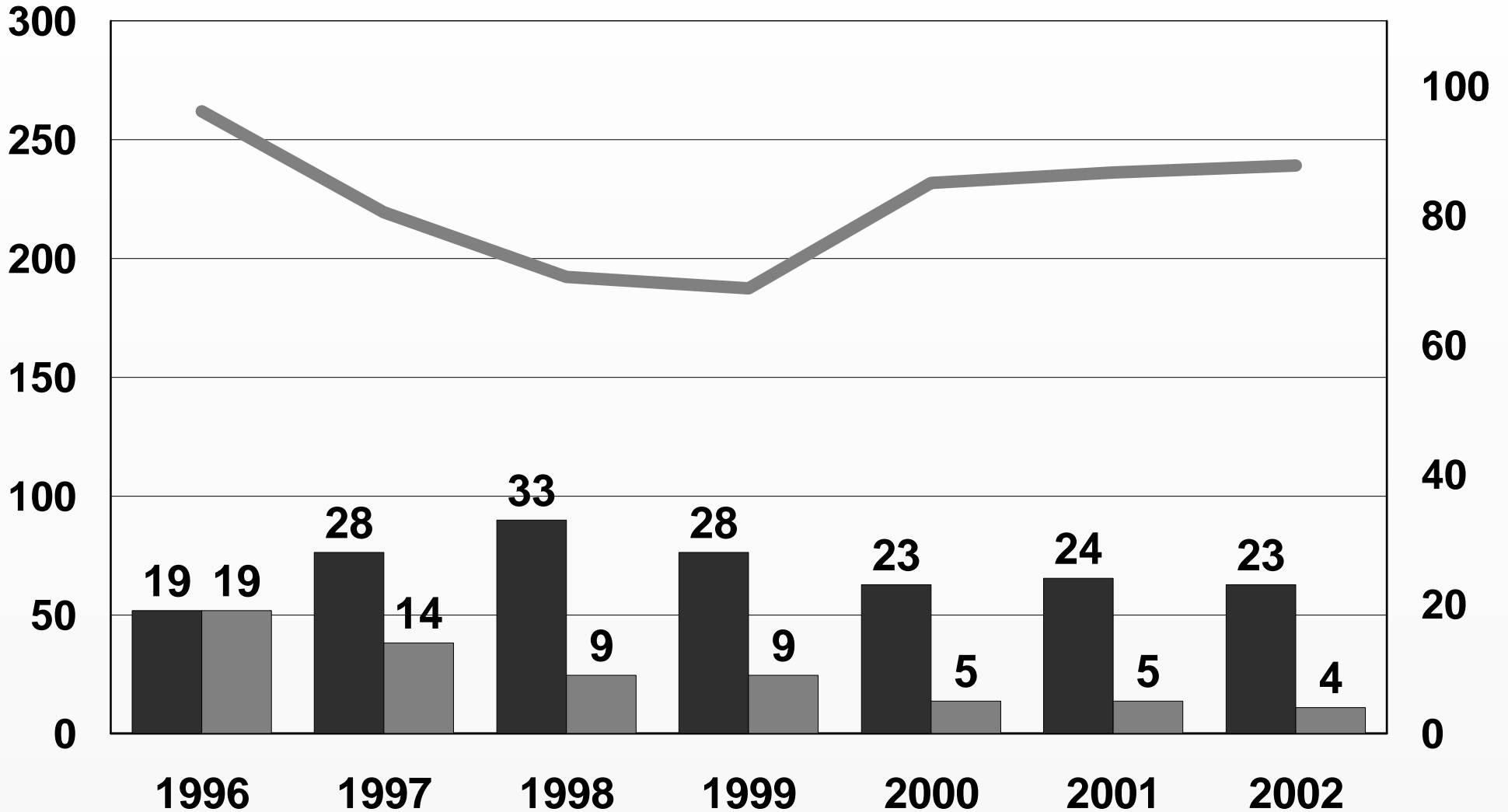


— Net Cash Farm Income P(Refinancing)
■ P(Cash Flow Deficit)

Iowa Feed Grain Farm (IAG2200)

(\$1,000)

Probability

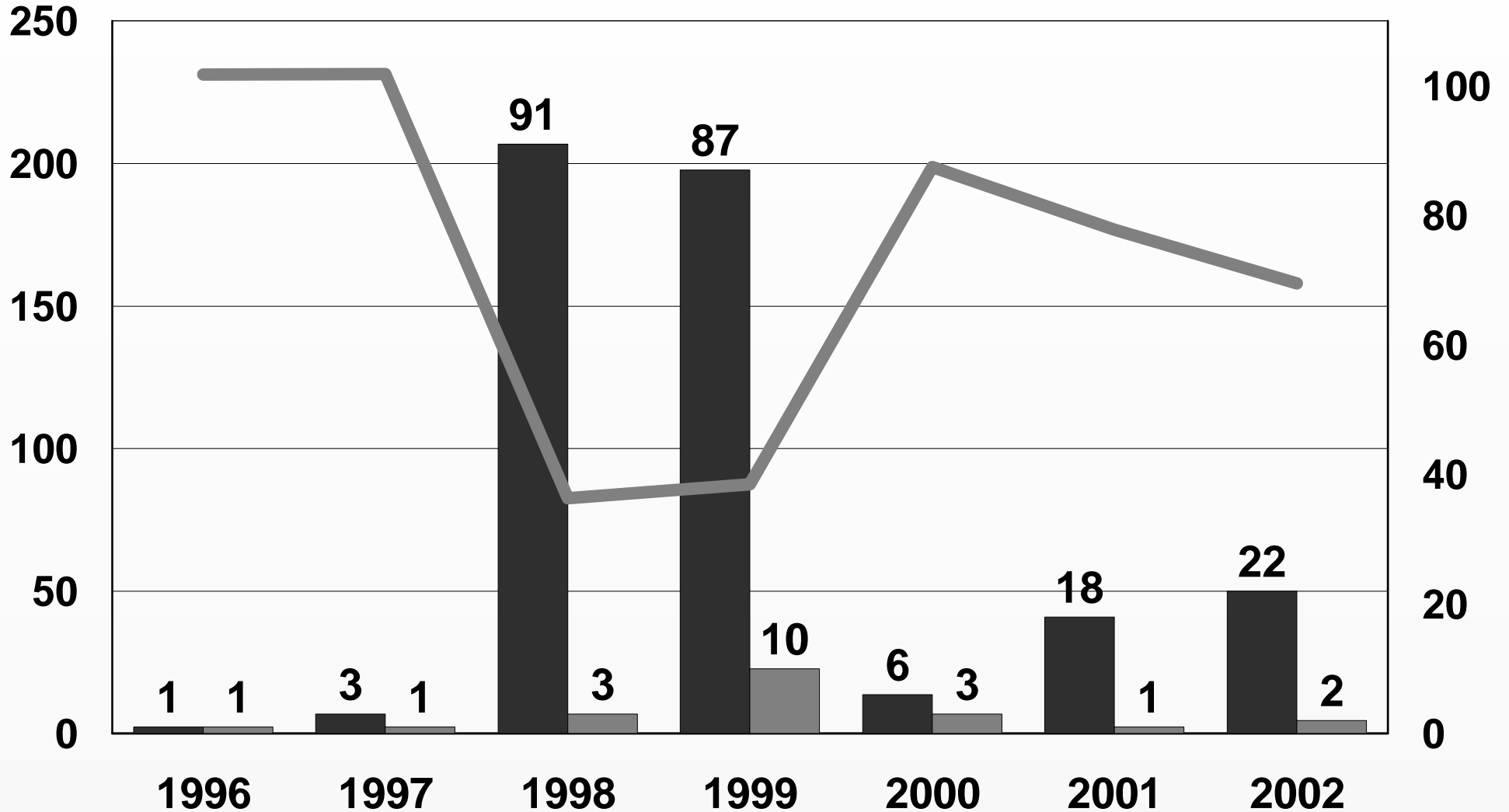


— Net Cash Farm Income P(Refinancing)
■ P(Cash Flow Deficit)

Missouri Hog Farm (MOH225)

(\$1,000)

Probability



Net Cash Farm Income
 P(Cash Flow Deficit)
 P(Refinancing)

Missouri Hog Farm (MOH100)

(\$1,000)

Probability

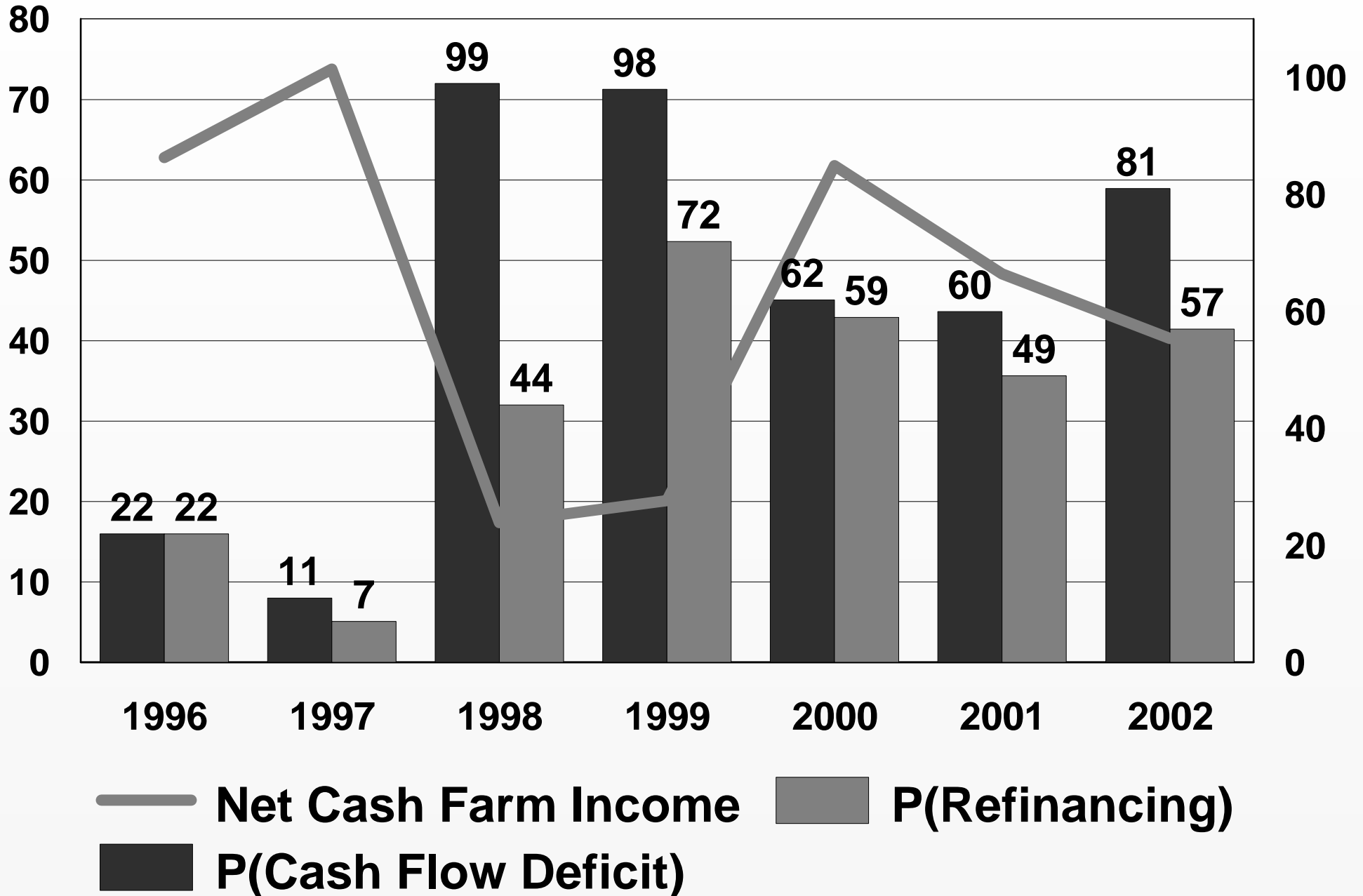


Table 1. Update FAPRI January 1998 Baseline for Representative Feed Grain Farms.

	IAG950	IAG2200	MOCG1500	MOCG3000	MONG1200	NEG800	NEG1575
Total Cash Receipts (\$1000)							
1996	329.34	589.81	391.26	859.61	476.67	376.03	781.17
1997	300.76	541.65	353.99	824.86	471.22	364.16	743.39
1998	280.45	508.42	346.21	756.00	406.87	351.76	711.55
1999	278.06	503.40	351.93	751.20	416.31	356.44	710.84
2000	304.45	549.26	385.15	815.92	471.48	392.24	774.51
2001	308.36	554.24	391.71	823.28	462.54	392.72	781.60
2002	312.36	558.93	409.99	849.22	453.55	395.74	797.55
1996-2002 Average	301.97	543.67	375.75	811.44	451.23	375.59	757.23
Total Govt Payments (\$1000)							
1996	12.87	29.96	12.52	28.28	7.60	21.77	46.85
1997	17.24	38.68	16.61	39.15	10.80	29.02	61.31
1998	31.22	65.47	31.83	68.72	21.36	42.28	90.28
1999	31.60	65.66	32.62	69.59	21.73	42.76	91.40
2000	21.38	47.22	21.44	46.51	13.63	32.45	70.00
2001	17.97	39.18	18.79	39.99	11.09	27.34	59.32
2002	16.33	36.17	16.19	34.90	9.99	26.47	56.80
1996-2002 Average	21.23	46.05	21.43	46.73	13.74	31.72	67.99
Net Cash Farm Income (\$1000)							
1996	135.21	262.01	197.45	448.80	113.61	75.68	200.67
1997	107.77	219.49	160.77	405.85	117.47	55.011	59.45
1998	90.21	192.33	154.51	349.37	53.82	40.29	124.83
1999	88.41	187.44	160.78	350.20	58.15	35.95	120.68
2000	113.17	231.82	195.23	412.71	105.81	66.47	181.36
2001	114.71	236.30	197.22	415.16	94.61	60.78	180.78
2002	118.87	239.07	209.54	437.02	78.77	58.00	192.47
1996-2002 Average	109.76	224.07	182.22	402.73	88.89	56.02	165.75
Prob. of a Cash Flow Deficit (%)							
1996	21.00	19.00	6.00	4.00	37.00	44.00	39.00
1997	39.00	28.00	24.00	14.00	44.00	74.00	52.00
1998	47.00	33.00	28.00	21.00	81.00	88.00	65.00
1999	43.00	28.00	11.00	6.00	73.00	93.00	76.00
2000	31.00	23.00	17.00	13.00	63.00	85.00	65.00
2001	36.00	24.00	11.00	12.00	69.00	83.00	65.00
2002	37.00	23.00	15.00	12.00	78.00	87.00	60.00
Ending Cash Reserves (\$1000)							
1996	48.66	90.97	73.77	179.65	14.57	1.25	47.42
1997	65.47	143.81	118.85	320.86	31.41	-26.59	51.29
1998	70.16	180.95	154.55	421.44	-8.66	-60.27	22.13
1999	79.91	220.80	209.24	550.39	-30.92	-106.35	-13.92
2000	110.32	291.64	278.19	705.08	-24.56	-121.24	6.15
2001	138.51	366.87	354.05	855.78	-38.97	-150.24	9.82
2002	156.70	435.71	428.03	1018.66	-67.97	-175.09	30.04
1996-2002 Average	95.68	247.25	230.95	578.84	-17.87	-91.22	21.85

Prob. of Refinancing Deficits (%)

1996	21.00	19.00	6.00	4.00	37.00	44.00	39.00
1997	22.00	14.00	4.00	2.00	32.00	60.00	32.00
1998	18.00	9.00	6.00	1.00	51.00	71.00	42.00
1999	22.00	9.00	3.00	1.00	56.00	76.00	53.00
2000	14.00	5.00	1.00	1.00	51.00	80.00	47.00
2001	15.00	5.00	1.00	1.00	55.00	80.00	48.00
2002	17.00	4.00	1.00	1.00	64.00	81.00	43.00

Prob. of Losing Real Net Worth (%)

1996	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1997	12.00	10.00	1.00	1.00	12.00	37.00	25.00
1998	5.00	4.00	1.00	1.00	22.00	39.00	20.00
1999	5.00	2.00	1.00	1.00	22.00	38.00	15.00
2000	4.00	2.00	1.00	1.00	15.00	43.00	10.00
2001	3.00	2.00	1.00	1.00	20.00	48.00	11.00
2002	5.00	2.00	1.00	1.00	26.00	46.00	10.00

Table 2. Update FAPRI January 1998 Baseline for Representative Feed Grain Farms.

	TXNP1600	TXNP5500	SCG1500	SCG3500
Total Cash Receipts (\$1000)				
1996	393.03	1476.10	620.641	630.81
1997	348.17	1312.15	551.45	1477.61
1998	288.08	1058.43	518.22	1407.61
1999	345.43	1298.05	524.84	1420.55
2000	355.14	1329.64	574.60	1526.65
2001	355.73	1339.79	584.86	1571.13
2002	362.13	1363.91	594.80	1598.39
1996-2002 Average	349.67	1311.15	567.06	1518.97
Total Govt Payments (\$1000)				
1996	27.74	84.85	25.82	60.87
1997	32.20	102.87	32.35	74.68
1998	39.14	125.51	57.51	127.50
1999	39.37	128.00	53.11	118.15
2000	35.42	115.29	38.12	85.69
2001	29.15	96.04	31.29	70.92
2002	27.85	90.87	28.81	63.48
1996-2002 Average	32.98	106.21	38.14	85.90
Net Cash Farm Income (\$1000)				
1996	137.96	592.93	211.94	688.11
1997	107.68	462.69	142.41	536.62
1998	40.91	196.53	109.65	473.47
1999	103.99	459.76	106.64	483.85
2000	111.44	487.33	153.32	586.57
2001	110.80	497.56	157.43	622.18
2002	113.02	511.27	157.74	644.30
1996-2002 Average	103.68	458.30	148.45	576.44
Prob. of a Cash Flow Deficit (%)				
1996	6.00	9.00	13.00	2.00
1997	24.00	27.00	30.00	15.00
1998	69.00	72.00	42.00	14.00
1999	25.00	16.00	64.00	23.00
2000	38.00	23.00	37.00	15.00
2001	39.00	13.00	38.00	8.00
2002	32.00	20.00	47.00	12.00
Ending Cash Reserves (\$1000)				
1996	71.41	260.51	91.65	328.16
1997	113.45	393.2	1124.87	526.69
1998	90.84	307.15	141.78	690.68
1999	127.91	498.66	140.25	830.81
2000	159.18	672.83	183.93	1053.66
2001	180.45	862.93	216.39	1286.60
2002	207.69	1041.54	239.82	1535.88
1996-2002 Average	135.85	576.69	162.67	893.21

Prob. of Refinancing Deficits (%)

1996	6.00	9.00	13.00	2.00
1997	4.00	6.00	12.00	1.00
1998	18.00	20.00	17.00	1.00
1999	10.00	9.00	15.00	1.00
2000	9.00	6.00	15.00	1.00
2001	7.00	1.00	16.00	1.00
2002	8.00	3.00	15.00	1.00

Prob. of Losing Real Net Worth (%)

1996	1.00	1.00	1.00	1.00
1997	24.00	16.00	21.00	5.00
1998	38.00	23.00	19.00	1.00
1999	19.00	9.00	14.00	1.00
2000	13.00	1.00	9.00	1.00
2001	10.00	1.00	13.00	1.00
2002	10.00	2.00	13.00	1.00

Table 3. Update FAPRI January 1998 Baseline for Representative Wheat Farms.

	WAW1500	WAW4250	NDW1760	NDW4600	COW2700	COW4000
Total Cash Receipts (\$1000)						
1996	403.55	1155.75	295.54	895.06	245.64	392.30
1997	349.75	929.44	227.42	692.20	209.25	331.90
1998	344.68	911.30	229.04	690.81	190.45	305.08
1999	355.84	935.86	234.11	706.93	193.46	311.79
2000	391.09	1029.50	256.05	775.02	211.23	339.62
2001	393.91	1038.76	257.53	781.45	210.71	338.59
2002	404.47	1058.44	263.11	799.38	212.09	341.58
1996-2002 Average	377.61	1008.44	251.83	762.98	210.40	337.27
Total Govt Payments (\$1000)						
1996	18.42	47.94	14.33	8.12	15.76	26.17
1997	22.80	58.75	18.70	50.03	18.79	30.91
1998	31.99	86.90	24.52	67.34	24.44	40.40
1999	25.85	66.47	21.03	57.20	20.61	33.48
2000	21.59	55.40	17.88	47.85	17.79	29.17
2001	17.37	44.61	14.42	38.57	14.40	23.48
2002	16.83	43.17	13.98	37.38	13.89	22.78
1996-2002 Average	22.12	57.61	17.84	48.07	17.95	29.48
Net Cash Farm Income (\$1000)						
1996	131.56	563.61	116.65	360.92	139.38	193.02
1997	76.05	323.22	49.73	162.26	108.38	138.53
1998	62.91	311.25	49.59	159.39	89.41	111.54
1999	71.18	329.86	53.25	175.35	95.30	119.00
2000	99.57	423.81	76.14	242.30	113.56	147.12
2001	93.24	423.77	77.95	242.81	116.23	146.56
2002	102.54	441.83	82.60	257.00	118.74	150.87
1996-2002 Average	91.01	402.48	72.27	228.57	111.57	143.81
Prob. of a Cash Flow Deficit (%)						
1996	19.00	1.00	18.00	15.00	5.00	2.00
1997	57.00	31.00	60.00	52.00	11.00	20.00
1998	66.00	30.00	57.00	54.00	34.00	28.00
1999	69.00	31.00	61.00	60.00	35.00	37.00
2000	68.00	18.00	58.00	46.00	24.00	15.00
2001	72.00	26.00	56.00	42.00	9.00	16.00
2002	67.00	23.00	55.00	42.00	10.00	23.00
Ending Cash Reserves (\$1000)						
1996	44.34	261.18	53.06	168.79	45.39	91.75
1997	46.26	334.33	44.30	162.25	76.68	132.10
1998	41.24	427.12	37.76	158.48	88.26	156.18
1999	37.23	522.81	36.83	156.65	100.99	175.13
2000	36.09	662.16	47.34	230.50	122.90	228.67
2001	25.70	776.58	49.12	284.92	160.35	268.35
2002	23.85	915.61	61.17	344.44	196.19	305.86
1996-2002 Average	36.39	557.11	47.08	215.15	112.97	194.01

Prob. of Refinancing Deficits (%)

1996	19.00	1.00	18.00	15.00	5.00	2.00
1997	29.00	2.00	25.00	22.00	2.00	1.00
1998	34.00	1.00	31.00	26.00	5.00	5.00
1999	36.00	1.00	34.00	25.00	4.00	3.00
2000	38.00	1.00	35.00	22.00	5.00	1.00
2001	42.00	1.00	32.00	21.00	3.00	1.00
2002	45.00	1.00	34.00	19.00	3.00	2.00

Prob. of Losing Real Net Worth (%)

1996	1.00	1.00	1.00	1.00	1.00	1.00
1997	26.00	5.00	48.00	40.00	1.00	4.00
1998	31.00	1.00	50.00	43.00	1.00	3.00
1999	24.00	1.00	41.00	31.00	1.00	1.00
2000	18.00	1.00	40.00	22.00	1.00	1.00
2001	16.00	1.00	34.00	22.00	1.00	1.00
2002	18.00	1.00	35.00	17.00	1.00	1.00

Table 4. Update FAPRI January 1998 Baseline for Representative Wheat Farms.

	KSSC1495	KSSC3080	KSNW2325	KSNW4300
<hr/>				
Total Cash Receipts (\$1000)				
1996	148.28	362.45	197.78	424.58
1997	150.06	377.17	287.43	432.77
1998	168.68	423.15	232.84	462.74
1999	144.59	368.94	213.12	419.96
2000	155.31	394.73	231.54	450.87
2001	154.46	393.55	227.05	448.12
2002	156.03	392.16	233.28	457.57
1996-2002 Average	153.92	387.45	231.86	442.37
Total Govt Payments (\$1000)				
1996	17.81	39.51	17.46	36.29
1997	20.44	46.43	24.37	43.47
1998	27.45	60.91	28.36	60.36
1999	23.16	50.67	25.28	52.25
2000	20.03	43.69	21.25	43.60
2001	16.10	35.15	17.77	35.47
2002	15.61	34.07	16.37	34.06
1996-2002 Average	20.08	44.35	21.55	43.64
Net Cash Farm Income (\$1000)				
1996	39.84	107.27	77.03	113.90
1997	35.27	117.40	116.53	113.82
1998	48.38	166.81	101.78	134.99
1999	21.03	114.02	85.92	106.02
2000	30.37	139.97	102.42	129.78
2001	26.67	138.03	98.76	119.73
2002	25.83	133.46	103.54	121.22
1996-2002 Average	32.48	130.99	98.00	119.92
Prob. of a Cash Flow Deficit (%)				
1996	64.00	44.00	17.00	32.00
1997	69.00	49.00	33.00	35.00
1998	72.00	39.00	32.00	35.00
1999	92.00	61.00	42.00	46.00
2000	89.00	50.00	22.00	51.00
2001	93.00	46.00	40.00	43.00
2002	96.00	49.00	42.00	54.00
Ending Cash Reserves (\$1000)				
1996	-7.47	22.14	22.63	32.04
1997	-11.46	45.61	62.18	61.91
1998	-21.25	95.09	87.31	104.34
1999	-50.95	88.23	101.04	119.08
2000	-76.86	115.47	133.04	136.86
2001	-114.93	142.62	150.08	161.54
2002	-153.58	168.19	169.56	168.13
1996-2002 Average	-62.36	96.77	103.69	111.99

Prob. of Refinancing Deficits (%)

1996	64.00	44.00	17.00	32.00
1997	62.00	29.00	19.00	20.00
1998	62.00	24.00	11.00	17.00
1999	75.00	20.00	15.00	16.00
2000	83.00	20.00	9.00	16.00
2001	88.00	19.00	12.00	13.00
2002	89.00	17.00	9.00	16.00

Prob. of Losing Real Net Worth (%)

1996	1.00	1.00	1.00	1.00
1997	46.00	25.00	12.00	19.00
1998	33.00	12.00	3.00	8.00
1999	41.00	10.00	1.00	8.00
2000	48.00	8.00	1.00	4.00
2001	57.00	4.00	1.00	5.00
2002	61.00	5.00	1.00	6.00

Table 5. Update FAPRI January 1998 Baseline for Representative Cotton Farms.

	CAC2000	CAC6000	TXSP1682	TXSP3697	TXRP2065	TXBL1200	TXCB1700
Total Cash Receipts (\$1000)							
1996	1900.33	5388.32	162.95	720.22	209.45	139.51	259.37
1997	1760.96	5256.28	288.71	930.49	223.29	184.44	408.36
1998	1864.24	5402.39	130.93	558.44	134.08	109.13	230.12
1999	1871.92	5395.09	299.17	972.34	233.05	260.34	427.26
2000	1906.69	5556.69	301.22	984.70	243.55	275.95	441.63
2001	1932.86	5661.05	303.57	994.02	243.91	281.17	444.99
2002	1963.87	5681.76	306.77	1008.22	245.05	274.26	447.75
1996-2002 Average	1885.84	5477.37	256.19	881.20	218.91	217.83	379.93
Total Govt Payments (\$1000)							
1996	90.92	172.58	18.58	51.99	25.05	17.27	34.38
1997	99.37	200.22	20.20	57.52	27.47	18.79	37.09
1998	101.11	208.94	20.35	56.95	28.98	22.28	41.60
1999	98.20	197.24	19.77	55.35	27.69	24.54	42.68
2000	89.82	176.83	18.08	50.59	25.08	20.33	37.14
2001	72.36	142.79	14.56	40.75	20.21	16.29	29.92
2002	70.14	138.25	14.11	39.50	19.59	15.88	28.96
1996-2002 Average	88.85	176.69	17.95	50.38	24.87	19.34	35.97
Net Cash Farm Income (\$1000)							
1996	388.27	1148.83	-32.59	39.07	37.57	-49.00	-64.22
1997	276.55	993.40	65.15	216.61	43.39	9.32	15.66
1998	355.83	1133.32	-71.42	-111.72	-32.60	-67.30	-104.97
1999	364.45	1110.61	60.44	219.08	39.98	20.17	9.13
2000	392.42	1204.55	60.69	227.71	48.24	29.55	16.04
2001	381.83	1215.92	54.58	223.55	44.69	24.39	5.65
2002	390.68	1153.57	54.73	229.15	36.26	22.98	-0.78
1996-2002 Average	364.29	1137.17	27.37	149.06	31.08	-1.41	-17.64
Prob. of a Cash Flow Deficit (%)							
1996	9.00	5.00	99.00	69.00	50.00	99.00	99.00
1997	30.00	17.00	88.00	45.00	63.00	99.00	90.00
1998	16.00	14.00	99.00	99.00	99.00	99.00	99.00
1999	28.00	24.00	99.00	71.00	88.00	99.00	97.00
2000	14.00	24.00	92.00	67.00	83.00	99.00	96.00
2001	20.00	18.00	93.00	74.00	78.00	99.00	98.00
2002	16.00	26.00	93.00	64.00	82.00	99.00	99.00
Ending Cash Reserves (\$1000)							
1996	158.82	516.58	-78.50	-81.08	-7.87	-82.56	-102.97
1997	220.31	874.32	-74.63	9.79	-12.12	-108.28	-124.11
1998	336.68	1303.66	-205.17	-250.95	-89.23	-211.99	-272.58
1999	429.84	1642.93	-203.61	-198.35	-109.52	-238.83	-308.36
2000	563.36	2073.22	-202.99	-157.75	-110.70	-261.16	-346.55
2001	662.58	2502.18	-215.17	-144.19	-119.95	-293.17	-401.03
2002	773.18	2856.59	-224.42	-111.68	-144.87	-318.94	-456.31
1996-2002 Average	449.25	1681.35	-172.07	-133.46	-84.90	-216.42	-287.42

Prob. of Refinancing Deficits (%)

1996	9.00	5.00	99.00	69.00	50.00	99.00	99.00
1997	8.00	4.00	88.00	41.00	52.00	99.00	90.00
1998	4.00	2.00	99.00	87.00	84.00	99.00	99.00
1999	3.00	1.00	99.00	71.00	85.00	99.00	97.00
2000	1.00	1.00	92.00	62.00	77.00	99.00	96.00
2001	2.00	2.00	92.00	66.00	74.00	99.00	97.00
2002	2.00	1.00	91.00	54.00	75.00	99.00	99.00

Prob. of Losing Real Net Worth (%)

1996	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1997	5.00	1.00	37.00	21.00	39.00	64.00	53.00
1998	1.00	1.00	89.00	67.00	75.00	99.00	94.00
1999	1.00	1.00	70.00	49.00	67.00	95.00	90.00
2000	1.00	1.00	60.00	37.00	59.00	94.00	87.00
2001	1.00	1.00	61.00	31.00	62.00	94.00	89.00
2002	1.00	1.00	60.00	27.00	66.00	92.00	88.00

Table 6. Update FAPRI January 1998 Baseline for Representative Rice Farms.

	CAR424	CAR1365	TXR2118	TXR3750	MOR1900	MOR4000	ARR2645	ARR3400	LAR1100
Total Cash Receipts (\$1000)									
1996	371.27	1158.04	497.88	1415.01	672.21	1956.61	782.51	1068.72	336.11
1997	362.43	1129.40	485.37	1395.49	638.71	1880.75	726.95	1001.19	323.93
1998	349.15	1085.44	468.00	1347.07	604.19	1807.32	683.33	941.18	309.31
1999	338.42	1050.92	453.24	1313.60	595.31	1766.74	675.59	921.23	301.41
2000	354.11	1103.21	472.88	1373.31	636.23	1883.98	725.02	983.62	319.20
2001	346.64	1081.22	461.53	1341.65	633.71	1881.95	727.32	976.86	317.15
2002	346.82	1082.08	461.26	1337.82	641.58	1902.21	734.69	983.96	319.31
1996-2002 Average	352.69	1098.61	471.45	1360.56	631.71	1868.51	722.20	982.39	318.06
Total Govt Payments (\$1000)									
1996	62.68	190.98	90.23	233.72	65.73	171.97	68.96	130.63	38.96
1997	63.84	194.97	91.70	238.15	71.48	187.21	73.15	137.10	40.48
1998	67.09	204.96	96.27	250.11	87.25	217.93	91.16	194.83	44.83
1999	69.08	211.92	98.60	257.36	89.46	228.30	91.58	164.40	47.01
2000	60.23	184.16	86.25	224.26	72.59	186.00	72.68	134.76	38.90
2001	50.32	154.18	71.84	187.23	60.98	158.80	60.35	111.51	32.70
2002	47.24	144.43	67.67	175.96	55.87	144.48	55.54	102.98	30.26
1996-2002 Average	60.07	183.66	86.08	223.83	71.91	184.96	73.34	134.77	39.02
Net Cash Farm Income (\$1000)									
1996	115.32	255.82	156.34	320.45	123.44	457.15	324.64	518.67	95.95
1997	102.92	225.50	147.68	310.13	87.49	357.09	272.70	450.49	82.94
1998	89.97	183.04	135.81	259.89	46.52	267.23	234.18	396.27	63.05
1999	75.85	146.47	124.68	232.53	27.01	216.95	226.47	385.62	53.95
2000	88.09	193.00	144.77	287.70	56.71	326.55	277.19	456.80	61.49
2001	77.79	161.78	134.60	251.00	39.50	309.02	279.43	445.64	58.74
2002	74.40	146.26	130.34	229.27	34.21	316.80	284.48	449.07	57.16
1996-2002 Average	89.19	187.41	139.17	270.14	59.27	321.54	271.30	443.22	67.61
Prob. of a Cash Flow Deficit (%)									
1996	6.00	10.00	6.00	13.00	36.00	13.00	1.00	1.00	17.00
1997	27.00	27.00	15.00	22.00	61.00	36.00	3.00	1.00	32.00
1998	39.00	35.00	13.00	28.00	87.00	53.00	1.00	1.00	55.00
1999	59.00	56.00	17.00	30.00	92.00	72.00	1.00	1.00	81.00
2000	42.00	30.00	4.00	25.00	87.00	54.00	1.00	1.00	64.00
2001	50.00	29.00	11.00	28.00	94.00	74.00	1.00	1.00	74.00
2002	52.00	37.00	10.00	36.00	96.00	68.00	4.00	1.00	85.00
Ending Cash Reserves (\$1000)									
1996	44.49	117.21	65.19	123.60	25.06	202.67	159.09	226.90	31.26
1997	69.03	197.22	117.07	243.49	18.83	282.74	259.05	377.35	49.37
1998	80.94	243.80	154.84	304.57	-35.35	265.81	330.43	497.24	49.24
1999	78.75	252.50	184.17	353.79	-119.36	200.73	394.64	594.86	35.63
2000	87.62	323.88	244.3	8451.84	-155.59	203.76	505.57	768.50	25.39
2001	86.55	366.50	294.19	526.96	-224.57	139.68	610.45	934.98	7.94
2002	85.61	403.00	347.90	575.51	-319.13	97.41	716.74	1117.74	-17.22
1996-2002 Average	76.14	272.02	201.11	368.54	-115.73	198.97	425.14	645.37	25.95

Prob. of Refinancing Deficits (%)

1996	6.00	10.00	6.00	13.00	36.00	13.00	1.00	1.00	17.00
1997	8.00	8.00	4.00	7.00	40.00	14.00	1.00	1.00	9.00
1998	6.00	7.00	1.00	7.00	57.00	19.00	1.00	1.00	12.00
1999	6.00	6.00	1.00	4.00	81.00	21.00	1.00	1.00	21.00
2000	5.00	4.00	1.00	1.00	85.00	30.00	1.00	1.00	33.00
2001	5.00	4.00	1.00	3.00	86.00	32.00	1.00	1.00	42.00
2002	8.00	4.00	1.00	3.00	94.00	40.00	1.00	1.00	58.00

Prob. of Losing Real Net Worth (%)

1996	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1997	7.00	12.00	9.00	7.00	37.00	14.00	1.00	1.00	23.00
1998	2.00	5.00	1.00	1.00	56.00	12.00	1.00	1.00	20.00
1999	1.00	1.00	1.00	1.00	69.00	9.00	1.00	1.00	21.00
2000	1.00	1.00	1.00	1.00	67.00	7.00	1.00	1.00	32.00
2001	1.00	2.00	1.00	1.00	75.00	10.00	1.00	1.00	29.00
2002	1.00	4.00	1.00	1.00	88.00	11.00	1.00	1.00	34.00

Table 7. Update FAPRI January 1998 Baseline for Representative Hog Farms.

	MOH100	MOH225	ILH200	ILH750	INH150	IAG2200	NCH350	NCH13268
Total Cash Receipts (\$1000)								
1996	262.68	675.67	760.78	2408.09	607.09	588.80	949.06	35069.41
1997	253.47	642.40	737.02	2396.71	588.35	549.69	917.01	33866.91
1998	193.33	480.30	599.10	1793.50	477.72	534.15	663.88	24497.06
1999	194.03	480.29	594.55	1788.62	479.78	535.84	663.33	24469.46
2000	238.63	595.16	709.19	2213.12	566.56	549.59	841.54	31064.64
2001	229.31	571.83	689.36	2124.85	552.14	554.49	806.37	29755.99
2002	219.74	548.47	676.25	2037.84	545.78	559.52	769.96	28406.70
1996-2002 Average	227.31	570.59	680.89	2108.96	545.34	553.16	801.59	29590.02
Total Govt Payments (\$1000)								
1996	4.65	10.21	17.11	28.63	16.71	30.0	60.00	0.00
1997	5.87	13.13	22.77	37.3	821.67	37.15	0.00	0.00
1998	9.28	22.41	40.34	65.11	34.95	54.58	0.00	0.00
1999	9.03	21.77	40.14	65.26	35.31	52.39	0.00	0.00
2000	6.74	15.51	27.95	46.14	25.74	47.28	0.00	0.00
2001	5.68	13.04	23.26	38.85	22.11	39.21	0.00	0.00
2002	5.26	11.78	21.60	35.83	20.34	36.17	0.00	0.00
1996-2002 Average	6.64	15.41	27.60	45.31	25.26	42.41	0.00	0.00
Net Cash Farm Income (\$1000)								
1996	62.75	231.24	295.41	959.16	138.38	261.64	303.10	10278.07
1997	73.77	231.48	290.66	1037.30	144.64	229.52	331.95	11340.94
1998	17.45	82.62	162.90	511.38	48.67	220.40	118.15	3244.55
1999	20.08	87.50	157.04	514.76	44.90	220.62	119.86	3262.06
2000	61.76	198.82	268.81	936.33	119.56	232.90	271.87	8905.05
2001	48.33	176.89	247.44	850.92	103.24	237.81	233.56	7330.37
2002	40.31	157.98	234.48	769.16	95.89	240.74	194.80	5712.37
1996-2002 Average	46.35	166.65	236.68	797.00	99.32	234.81	224.76	7153.35
Prob. of a Cash Flow Deficit (%)								
1996	22.00	1.00	1.00	1.00	21.00	19.00	1.00	1.00
1997	11.00	3.00	1.00	1.00	39.00	27.00	1.00	1.00
1998	99.00	91.00	37.00	13.00	81.00	25.00	52.00	13.00
1999	98.00	87.00	41.00	25.00	88.00	25.00	24.00	9.00
2000	62.00	6.00	4.00	1.00	74.00	22.00	1.00	1.00
2001	60.00	18.00	15.00	1.00	71.00	23.00	1.00	1.00
2002	81.00	22.00	17.00	1.00	73.00	23.00	2.00	1.00
Ending Cash Reserves (\$1000)								
1996	10.04	84.90	124.79	412.22	39.62	90.72	120.86	6021.54
1997	27.05	156.77	244.22	844.37	69.73	149.75	254.60	12690.79
1998	4.02	117.31	267.91	974.68	22.57	203.42	263.83	14469.25
1999	-18.36	89.64	285.35	1067.33	-36.95	261.95	294.94	16642.24
2000	-5.09	157.45	391.13	1537.25	-19.32	331.16	419.59	22429.48
2001	-1.67	193.62	469.12	1920.93	-20.63	408.27	512.42	27228.51
2002	-8.58	230.93	542.34	2278.65	-32.27	479.81	593.41	31204.84
1996-2002 Average	1.06	147.23	332.1	21290.78	3.25	275.01	351.38	18669.52

Prob. of Refinancing Deficits (%)

1996	22.00	1.00	1.00	1.00	21.00	19.00	1.00	1.00
1997	7.00	1.00	1.00	1.00	16.00	14.00	1.00	1.00
1998	44.00	3.00	1.00	1.00	36.00	6.00	1.00	1.00
1999	72.00	10.00	1.00	1.00	63.00	6.00	1.00	1.00
2000	59.00	3.00	1.00	1.00	60.00	4.00	1.00	1.00
2001	49.00	1.00	1.00	1.00	57.00	4.00	1.00	1.00
2002	57.00	2.00	1.00	1.00	56.00	4.00	1.00	1.00

Prob. of Losing Real Net Worth (%)

1996	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1997	6.00	2.00	1.00	1.00	14.00	10.00	1.00	1.00
1998	57.00	26.00	1.00	1.00	39.00	4.00	34.00	6.00
1999	60.00	25.00	1.00	1.00	43.00	2.00	27.00	5.00
2000	25.00	3.00	1.00	1.00	25.00	2.00	1.00	1.00
2001	27.00	1.00	1.00	1.00	23.00	2.00	1.00	1.00
2002	41.00	1.00	1.00	1.00	28.00	2.00	1.00	1.00

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