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Agricultural & Food Policy Center

at Texas A&M University

Representative Farms Economic Outlook for the January 2004 FAPRI/AFPC Baseline

AFPC Working Paper 04-1

February 2004

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A policy working paper is designed to provide economic research on a timely basis. It is an interim product of a larger AFPC research project which will eventually be published as a policy research report. These results are published at this time because they are believed to contain relevant information to the resolution of current policy issues. AFPC welcomes comments and discussions of these results and their implications. Address such comments to the author(s) at:

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REPRESENTATIVE FARMS ECONOMIC OUTLOOK FOR THE JANUARY 2004 FAPRI/AFPC BASELINE

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Executive Summary

The Agricultural and Food Policy Center (AFPC) at Texas A&M University develops and maintains data to simulate more than 100 representative crop and livestock operations in major production areas in 29 states. The chief purpose of this analysis is to determine those farms' economic viability for 2004 through 2008. The data necessary to simulate the economic activity of these operations is developed through ongoing cooperation with panels of agricultural producers in each of the states. The Food and Agricultural Policy Research Institute (FAPRI) provided projected prices, policy variables, and input inflation rates in their January 2004 Baseline.

Under the January 2004 Baseline, 18 of the 62 crop farms are considered in excellent liquidity condition (they have less than a 25 percent chance of a cash flow deficit during 2004-2008). Twenty crop farms have between a 25 percent and a 50 percent likelihood of a cash flow deficit, with the remaining 25 crop farms having greater than a 50 percent chance of a cash flow deficit.

- FEEDGRAIN FARMS: Eight of the 18 feedgrain farms are in good overall financial condition. Nine can be classified as marginal with one considered to be in poor condition.

- WHEAT FARMS: Three of the ten wheat farms are classified in good financial condition, six are marginal, and one is poor. The marginal farms have greater than a 80 percent chance of cash flow deficits during the analysis period (2004-2008).

- COTTON FARMS: Two of the 18 cotton farms are classified in good financial condition, 14 are in marginal condition, and two are poor. Three cotton farms have greater than a 25 percent chance of losing real net worth by 2008.

- RICE FARMS: Eight of the 16 rice farms are projected in poor financial condition through 2008. Five are classified as marginal and three are projected to be in good financial condition. Persistent cash flow pressures are so significant that nine of the 16 farms have greater than a 50 percent chance of cash flow deficits in 2008.

- DAIRY FARMS: Eight of the 23 representative dairies are classified in good financial condition from 2004 through 2008. Seven of the farms are marginal and eight are rated poor. Low projected milk prices bear the brunt of the responsibility for 10 of 23 farms having greater than a 25 percent chance of losing equity during the analysis period.

- BEEF CATTLE RANCHES: Cyclical cattle price increases contribute to six of the ten representative ranches being in good financial shape through 2008. Five are considered marginal and one is classified in poor condition. Three of the operations have persistent cash flow difficulties. For those ranches, each year from 2004 through 2008 has greater than a 45 percent chance of an operating deficit.

- HOG FARMS: One of the four hog farms is rated in good financial condition over the 2004 to 2008 period. Two farms are classified in marginal condition. All four farms have greater than a 35 percent chance of annual cash flow deficits every year, 2003-2008.

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REPRESENTATIVE FARMS ECONOMIC OUTLOOK FOR THE JANUARY 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 2001-2008 planning horizon using FLIPSIM, AFPC's whole farm simulation model. Data to simulate farming and ranching 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.

- Projected prices, policy variables, and input inflation rates from the Food and Agricultural Policy Research Institute (FAPRI) January 2004 Baseline.

The primary objective of the analysis is to determine the farms' economic viability by region and commodity through the life of the 2002 Farm Bill.

The FLIPSIM policy simulation model incorporates the historical risk faced by farmers and ranchers for prices and production. This report presents the results of the January 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 2008.

This report is organized into ten sections. The first section summarizes the process used to develop the representative farms and the key assumptions utilized for the farm level analysis. The second section summarizes the FAPRI January 2004 Baseline and the policy and price assumptions used for the representative farm analyses. The third through sixth sections present the results of the simulation analyses for feed grain, wheat, cotton, and rice farms. The seventh through ninth sections summarize simulation results for dairy, cattle and hog farms. Two appendices constitute the final section of the report. Appendix A provides tables to summarize the physical and financial characteristics for each of the representative farms. Appendix B provides the names of producers, land grant faculty, and industry leaders who cooperated in the panel interview process to develop the representative farms.

Panel Process

AFPC has developed and maintains data to simulate more than 100 representative crop and livestock farms chosen from major production areas across the United States (Figure 1). Characteristics for each of the farms in terms of location, size, crop mix, assets, and average receipts are summarized in Appendix A. The locations of these farms are primarily the results of discussions with staffers for the U.S. House and Senate Agriculture Committees. Information necessary to simulate the economic activity on these representative farms is developed from panels of producers using a consensus-building interview process. Normally two farms are developed in each region using separate panels of producers: one is representative of moderate size full-time farm operations, and the second panel usually represents farms two to three times larger.

The data collected from the panel farms are analyzed in the whole farm simulation model (FLIPSIM) developed by AFPC. The producer panels are provided pro-forma financial statements for their representative farm and are asked to verify the accuracy of simulated results for the past year and the reasonableness of a five-year projection. Each panel must approve the model's ability to reasonably reflect the economic activity on their representative farm prior to using the farm for policy analyses.

Figure 1. Representative Farms and Ranches

Most farms used in the analysis have been updated with the panels since June 2001. All of the crop farms are assumed to begin 2001 with 20 percent intermediate- and long-term debt, based on information provided by ERS-USDA and the panel members. Initial debt levels in 2001 for dairy farms were set at 30 percent; initial debt levels for beef cattle ranches were 1 percent for land and 25 percent for cattle and machinery; and initial debt levels for hog farms were 35 percent. The debt levels the farms have at the outset of 2001 are based on a stratified tabulation of USDA's Farm Cost and Returns Survey for 2000, using the survey data for moderate to large size farms in states where AFPC has representative farms.

Key Assumptions

- All farms classified as moderate scale are the size (acres or number of livestock) considered to be representative of a majority of full-time commercial farming operations in the study area. In many regions a second farm two to three times larger than the moderate scale farm is developed as an indicator of size economies.

- Dairy, hog, and cattle herd sizes are held constant for all farms over the 2001-2008 planning horizon.

- The farms were structured so government payment limits were not effective at reducing direct, counter-cyclical, and loan deficiency payments.

- Minimum family living withdrawals were assumed to be the higher of 10 percent of gross receipts or $20,000 annually. Actual family living withdrawals are determined by historical consumption patterns. Therefore, as the farm's profitability increases so does the level of family living withdrawals.

- The farm is subject to owner/operator federal (income and self-employment) and state income taxes as a sole proprietor, based on the current income tax provisions.

- No off-farm-related income, including family employment, was included in the analyses. Therefore, the farm reflects only the ability of the farm to provide for family living and capital replacement.

- Farm program parameters, average annual prices, crop and livestock yield trends, interest rates, and input cost inflation (deflation) are based on the January 2004 FAPRI Baseline which assumes continuation of the 2002 Farm Bill through 2008.

- Direct payments for participating cotton, wheat, feed grain, oilseed and rice producers are made based on 85 percent of their historical base acreage times farm program yield times a direct payment rate. The direct payment rate is included in the January 2004 FAPRI Baseline.

- Marketing loan provisions for cotton, rice, wheat, feed grains, soybeans, sunflowers, and dry peas were authorized in the 2002 Farm Bill and are assumed to be in place for the farm level analysis.

- Counter-cyclical payments are triggered by marketing year prices included in the January 2004 FAPRI Baseline.

- The farm level simulation model incorporates price and yield risk faced by farmers. Historical yield variability for crops and production for livestock (sale weights, birth rates, and milk per cow) over the past ten years are assumed to prevail for the planning horizon. Random crop, livestock and milk prices are simulated using the January 2004 Baseline by FAPRI as the forecast of average prices. Prices reflect national price volatility caused by international production and demand as well as U.S. production risk.

- Historical crop yields (2001-2003) were held constant based on actual values obtained from the producers. Crop yields for 2004-2008 were simulated stochastically based on the average yields provided by the producers and the historical yield variability for the farm. Prices were held constant at producer-provided values for 2001-2003. FAPRI's August Baseline prices were localized for the farms and used as the average prices for 2004-2008 to simulate stochastic crop and livestock prices.

- The milk support price remains at $9.90/cwt. through 2008.
- Market loss assistance payments and disaster provisions passed in 2001 have been incorporated into the analysis in 2001.
- Disaster payments to livestock producers in 2002 have been incorporated.
- Actual average loan deficiency payment (LDPs) rates in the counties where the representative farms are located are used for 2001-2003.
- All crop farms except rice are assumed to carry Multi-Peril Crop Insurance (MPCI) at the 65/100 level.

FAPRI January 2004 Baseline

Projected crop prices for FAPRI's January 2004 Baseline are summarized in Table 1. Corn prices start at $2.31/bu. in 2003, and are projected to increase in 2004 to $2.35 and then decrease for two years and then rise to $2.35/bu. in 2007. Wheat prices are expected to decrease from $3.36 in 2003 to $3.27 and continue declining in 2004, 2005 and 2006. Slight increase in wheat price is projected by 2008 when prices are projected to reach $3.26/bu. Cotton prices continue to decrease gradually from 2003 to 2008, reaching $0.54/lb. in 2008. Rice prices are expected to decrease from $7.21 in 2003 to $6.12 in 2004 before retreating to the $5.67 to $5.81 range for 2005 and 2006.

Projected livestock and milk prices in the FAPRI's January 2004 Baseline are summarized in Table 2. All cattle prices are projected to decrease in 2004 and increase in 2005 and in 2006. Feeder cattle prices are projected to reach $98.17/cwt. in 2005. Hog prices are expected to decrease in 2004 and increase in 2005 and 2006 reaching $41.80/cwt. in 2005 and $42.40/cwt. by 2006 before falling in 2007 and 2008. Annual milk prices for the 10 states where representative dairy farms are located are summarized in Table 2. The U.S. all milk price is expected to remain below $13.00/cwt. through 2007.

Assumed loan rates and direct payment rates are summarized in Table 1. The annual direct payment rates for 2002-2008 reflect the payment rates authorized in the 2002 farm bill and continuation of the farm bill through 2008.

Projected annual rates of change for variable cash expenses are summarized in Table 3. The rate of change in input prices and interest rates come from FAPRI's January 2004 Baseline which relies on Global Insight (formerly DRI) macroeconomic projections. Annual interest rates paid for long- and intermediate-term loans and earned for savings are also summarized in Table 3. Assumed annual rates of change in land values over the 2004-2008 period are provided by the FAPRI Baseline and indicate a slower rate of growth in land values between 2004 and 2007.

Definitions of Variables in the Summary Tables

- **Overall Financial Position, 2004-2008** -- As a means of summarizing the representative farms' economic efficiency, liquidity, and solvency position AFPC classifies each farm as being in either a good, marginal or poor 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.
- **Net Income Adjustment for Real Net Worth (NIA), 2004-2008 --** NIA is the annual increase or decrease in net cash farm income necessary to insure the farm maintains its real net worth during the 2004-2008 period. A positive NIA indicates the additional annual net income needed to maintain real net worth. A negative NIA indicates the largest possible annual loss in net income the farm can endure and still maintain its real net worth through the period.

- **Net Income Adjustment for Liquidity (NIA), 2004-2008 --** NIA is the annual increase or decrease in net cash farm income necessary to insure the farm maintains its initial cash reserves of zero over the 2004-2008 period. A positive NIA indicates the additional annual net income needed to maintain real net worth. A negative NIA indicates the largest possible annual loss in net income the farm can endure and still maintain its real net worth through the period.

- **Annual Change in Real Net Worth, 2004-2008** -- Annualized percentage change in the operator's net worth from January 1, 2004 through December 31, 2008, after adjusting for inflation. This value reflects the real annualized increase or decrease in net worth or equity for the farm over the planning horizon including changes in real estate values.

- **Government Payments/Receipts, 2004-2008 –** Sum of all farm program payments (CCP, direct and loan deficiency payments) divided by total receipts received from the market plus CCP, direct and loan deficiency payments, crop insurance indemnities, and other farm related receipts.

- **Total Cash Receipts --** Sum of cash receipts from all sources, including market sales, CCP and direct payments, loan deficiency payments, crop insurance indemnities, and other farm related receipts. The values in the tables are the average total receipts for each year in the planning horizon.

- **Government Payments** -- Sum of annual counter cyclical payments, direct payments, and marketing loan gains/LDP for crops and the milk program payment for dairy farms. The values in the tables are the averages for each year in the planning horizon.

- **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 in the tables are the averages for each year in the planning horizon.

- **Probability of a Cash Flow Deficit --** Is the number of times 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 actual machinery replacement expenses (not depreciation). 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.

- **Ending Cash Reserves --** Equals total cash on hand at the end of the year. 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 at the end of each year equals total assets including land minus total debt from all sources. Net worth is not adjusted for inflation and averages are reported for each year in the planning horizon.

- **Probability of Decreasing Real Net Worth Over 2001-2008 --** Is the number of times out of 100 that real net worth in 2008 is less than the net worth for the farm at the beginning of 2001.

New and Updated Farms and Ranches Since the August 2003 Baseline Update

Since publication of the August 2003 AFPC Representative Farms Baseline Update, the following representative farms and ranches have been added:

NEG1960	A moderate-sized irrigated feedgrain farm located in south central Nebraska (Dawson County).
NEG4300	A large-sized irrigated feedgrain farm located in south central Nebraska (Dawson County).
SDB450	A 450-head cow-calf ranch located west of the Missouri River in west central South Dakota (Meade County).
TXSB250	A 250-head cow-calf ranch located in south central Texas (Gonzales County).

Since publication of the August 2003 AFPC Baseline update, the moderate-sized central Texas feedgrain farm, TXBG2700, has been removed. Also, the Williamson County, Texas, cotton farm (formerly TXBC1400) has been moved to the feedgrain category and renamed TXWG1400.

Also, the following farms and ranches have been updated since publication of the August 2003 Baseline update:

MOCG1700	No change in size.
MOCG3630	No change in size.
MONG1850	Renamed from MONG2050, no change in planted acres.
MOCG1700	No change in size.
MOCG3630	No change in size.
TXHG2000	Renamed from TXBG2000.
CAD1710	No change in size.
MOD85	No change in size.
MOD400	No change in size.
TXED550	Increased in size from 330 cows.
TXED1000	Increased in size from 750 cows.
WAD250	Increased in size from 185 cows.
WAD850	Decreased in size from 900 cows.
FLB1155	No change in size.
NVB700	Increased in size from 680 cows.

Table 1. FAPRI January 2004 Baseline Projections of Crop Prices, Loan Rates, and AMTA Payment Rates, 2001-2008

	2001	2002	2003	2004	2005	2006	2007	2008
Crop Prices								
Corn ($/bu.)	1.97	2.32	2.31	2.35	2.32	2.31	2.35	2.37
Wheat ($/bu.)	2.78	3.56	3.36	3.27	3.23	3.17	3.23	3.26
Cotton ($/lb.)	0.2980	0.4450	0.6303	0.5737	0.5546	0.5460	0.5415	0.5418
Sorghum ($/bu.)	1.94	2.32	2.33	2.16	2.17	2.15	2.18	2.19
Soybeans ($/bu.)	4.38	5.53	7.24	5.63	5.06	5.19	5.21	5.23
Barley ($/bu.)	2.22	2.72	2.81	2.57	2.60	2.59	2.60	2.60
Oats ($/bu.)	1.59	1.81	1.43	1.49	1.44	1.40	1.40	1.40
Rice ($/cwt.)	4.25	4.22	7.21	6.12	5.67	5.81	6.20	6.15
Soybean Meal ($/ton)	159.97	173.19	219.58	178.01	168.44	173.57	176.47	177.75
All Hay ($/ton)	96.50	92.40	86.40	84.86	84.66	84.21	84.65	85.54
Peanuts ($/ton)	468.00	364.00	375.95	384.54	384.34	383.97	385.18	384.78
Loan Rates								
Corn ($/bu.)	1.89	1.98	1.98	1.95	1.95	1.95	1.95	1.95
Wheat ($/bu.)	2.58	2.80	2.80	2.75	2.75	2.75	2.75	2.75
Cotton ($/lb.)	0.5192	0.5200	0.5200	0.5200	0.5200	0.5200	0.5200	0.5200
Sorghum ($/bu.)	1.71	1.98	1.98	1.95	1.95	1.95	1.95	1.95
Soybeans ($/bu.)	5.26	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Barley ($/bu.)	1.65	1.88	1.88	1.85	1.85	1.85	1.85	1.85
Oats ($/bu.)	1.21	1.35	1.35	1.33	1.33	1.33	1.33	1.33
Rice ($/cwt.)	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50
Peanuts ($/ton)	610.00	355.00	355.00	355.00	355.00	355.00	355.00	355.00
Direct Payment Rates								
Corn ($/bu.)	0.5670	0.28	0.28	0.28	0.28	0.28	0.28	0.28
Wheat ($/bu.)	0.9952	0.52	0.52	0.52	0.52	0.52	0.52	0.52
Cotton ($/lb.)	0.1209	0.0667	0.0667	0.0667	0.0667	0.0667	0.0667	0.0667
Sorghum ($/bu.)	0.6795	0.35	0.35	0.35	0.35	0.35	0.35	0.35
Soybeans ($/bu.)	0.1195	0.44	0.44	0.44	0.44	0.44	0.44	0.44
Barley ($/bu.)	0.4268	0.24	0.24	0.24	0.24	0.24	0.24	0.24
Oats ($/bu.)	0.0453	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Rice ($/cwt.)	4.4323	2.35	2.35	2.35	2.35	2.35	2.35	2.35
Peanuts ($/ton)	0.00	36.00	36.00	36.00	36.00	36.00	36.00	36.00

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

Table 2. FAPRI January 2004 Baseline Projections of Livestock and Milk Prices, 2001-2008

	2001	2002	2003	2004	2005	2006	2007	2008
Cattle Prices								
Feeder Cattle ($/cwt)	95.29	86.11	94.99	85.81	98.17	103.59	97.50	92.94
Fat Cattle ($/cwt)	72.71	67.04	84.69	75.46	80.44	83.55	82.03	79.19
Culled Cows ($/cwt)	44.39	39.23	46.48	41.18	47.81	49.11	47.27	45.58
Hog Prices								
Barrows/Gilts ($/cwt)	45.81	34.92	39.45	38.17	41.80	42.40	40.92	39.11
Culled Sows ($/cwt)	33.98	23.71	28.25	26.92	30.16	31.04	30.58	28.62
Milk Prices -- National and State								
All Milk Price ($/cwt)	15.04	12.11	12.51	12.71	12.62	12.81	12.92	13.05
California ($/cwt)	13.94	10.89	11.32	11.50	11.44	11.63	11.76	11.89
Florida ($/cwt)	17.80	15.20	15.44	15.60	15.52	15.72	15.85	16.00
Idaho ($/cwt)	13.50	11.30	11.58	11.75	11.68	11.88	12.01	12.16
Missouri ($/cwt)	14.90	12.30	12.69	12.86	12.78	12.98	13.12	13.26
New Mexico ($/cwt)	14.80	11.90	12.03	12.22	12.15	12.36	12.49	12.64
New York ($/cwt)	15.80	12.80	13.15	13.33	13.26	13.47	13.60	13.75
Texas ($/cwt)	15.80	12.90	13.13	13.32	13.25	13.45	13.59	13.74
Vermont ($/cwt)	15.80	12.60	13.01	13.19	13.12	13.33	13.46	13.61
Washington ($/cwt)	15.00	12.10	12.14	12.34	12.28	12.49	12.62	12.77
Wisconsin ($/cwt)	14.80	12.20	12.87	13.04	12.96	13.16	13.29	13.44

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

Table 3. FAPRI January 2004 Baseline Assumed Rates of Change in Input Prices, Annual Interest Rates, and Annual Changes in Land Values, 2002-2008

	2002	2003	2004	2005	2006	2007	2008
Annual Rate of Change for Input Prices Paid							
Seed Prices (%)	1.30	7.12	1.21	0.45	0.74	1.00	0.89
Fertilizer Prices (%)	0.07	20.60	-8.83	-4.84	-1.17	2.02	1.56
Chemical Prices (%)	1.64	6.36	-0.16	2.90	2.03	1.09	0.77
Machinery Prices (%)	1.95	0.30	0.39	0.40	0.31	0.34	0.34
Fuel and Lube Prices (%)	0.14	20.60	-8.83	-4.84	-1.17	2.02	1.56
Labor (%)	4.38	0.76	0.73	0.73	0.68	0.69	0.67
Other Input Prices (%)	2.31	1.51	1.78	2.17	2.15	2.19	2.24
Non-Feed Dairy Costs (%)	0.56	4.86	-0.76	0.12	0.56	0.96	0.82
Non-Feed Beef Costs (%)	0.56	4.86	-0.76	0.12	0.56	0.96	0.82
Non-Feed Hog Costs (%)	0.56	4.86	-0.76	0.12	0.56	0.96	0.82
Annual Change in Consumer Price Index (%)	2.32	1.51	1.78	2.17	2.15	2.19	2.24
Annual Interest Rates							
Long-Term (%)	5.40	4.99	5.47	5.85	5.71	5.71	5.98
Intermediate-Term (%)	4.53	3.65	4.34	5.10	5.24	5.36	5.84
Savings Account (%)	1.70	1.11	1.11	1.80	2.17	2.44	3.18
Annual Rate of Change for U.S. Land Prices (%)	5.22	4.96	5.83	3.28	1.76	2.76	4.00

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

FIGURE 2. REPRESENTATIVE FARMS PRODUCING FEED GRAINS AND OILSEEDS

Feedgrain and Oilseed Farm Impacts

Corn prices are expected to hold relatively steady in the $2.31/bu. to $2.37/bu. range throughout the 2004 to 2008 period. Soybean prices are expected to drop sharply from $7.24/bu. in 2003 to $5.63/bu. in 2004. Soybean prices dip to the projected period low of $5.06/bu. in 2005 before turning around in 2006. Overall, 8 feed grain farms are characterized as good, 9 are moderate and one is in poor condition. Only three of eighteen farms will be under cash flow stress with only one in poor condition in terms of maintaining real wealth.

Iowa: Land values are high ($2,300 to $2,700 per acre) on the three Iowa farms, and the 20 percent assumed land debt results in large cash requirements to service debt. The IAG1350 farm owns a moderate quantity (21.6 percent) of its 1350 acres. IAG2750 owns the least (16 percent) of its cultivated acres, which helps it maintain the lowest cost-to-receipts (C/R) ratio of the three Iowa farms. IAG4200 has the highest percentage of land ownership (25 percent of cultivated acres), which increases its cash needs for debt service.

Nebraska: Both farms have a similar crop mix; however, the larger farm plants proportionately less food-grade corn than the moderate-sized farm. NEG1960 plants 56 percent of its total corn acreage to food-grade corn and enjoys corn yields that are 20 bushels/acre higher than the larger farm. For the NEG4300 farm, only 40 percent of total corn planted is food-grade corn. Soybean and alfalfa yields are similar to the smaller farm.

Missouri: The two central farms are very efficient as they have the lowest cost-to-receipts ratios of all of the representative feed grain farms. MOCG1700 has a low cost-to-receipts ratio (54.9 percent), despite the fact that it has lower soybean yields than the larger central farm. MOCG3630 is the most cost-efficient feed grain farm in the set (as measured by a cost-to-receipts ratio of 51.5 percent) due in part to having a higher expected soybean yield than the other two Missouri farms (MOCG1700 and MONG1850).

Indiana: Both farms have similarly high probabilities of a cash flow deficit; however, the large farm owns more land and thus has a higher probability of maintaining real net worth due to appreciation in land values over the period. The assumed 20 percent land debt results in large cash requirements for land debt service because land values on ING1000 and ING2200 are $3,600 and $3,500 per acre, respectively. ING1000 owns 25 percent of its cultivated land. ING2200 owns 40 percent of its land and enjoys slightly higher expected corn and soybean yields than the smaller farm. Some economies of size are evident as the larger farm has a slightly lower cost-to-receipts ratio.

Texas: Land values on these farms are not so excessive that land ownership jeopardizes liquidity position (land values are under $1,000/acre in 2001). The TXNP7000 farm has an expected grain sorghum yield 2000 lbs/acre higher than TXNP1750. TXNP7000 also owns a greater percentage of its cropland, so it has a lower probability of losing real net worth than the smaller farm due to appreciation in land values. The TXWG1400 feed grain farm is the only Texas feed grain farm that has a good overall financial position ranking, due largely to its ability to cash flow.

Tennessee: TNG900 keeps its probability of experiencing a cash flow deficit below 25 percent, resulting in its "good" ranking. Both Tennessee farms (TNG900 and TNG2400) are in good condition with respect to their equity positions. The smaller farm owns just less than 17 percent of its planted acres. Lower land ownership helps this farm avoid cash flow deficits under the 20 percent debt assumption on all crop farms.

South Carolina: The moderate-sized farm (SCG1500) irrigates 17.5 percent of its corn, while the larger farm grows strictly dryland corn. Both SCG1500 and SCG3500 maintain cotton base acres (600 and 840 acres, respectively). SCG3500 has higher expected yields and a higher percentage of owned land than the smaller farm. Economies of size hold as this farm has a cost-to-receipts ratio about 10 percent lower than the smaller farm.

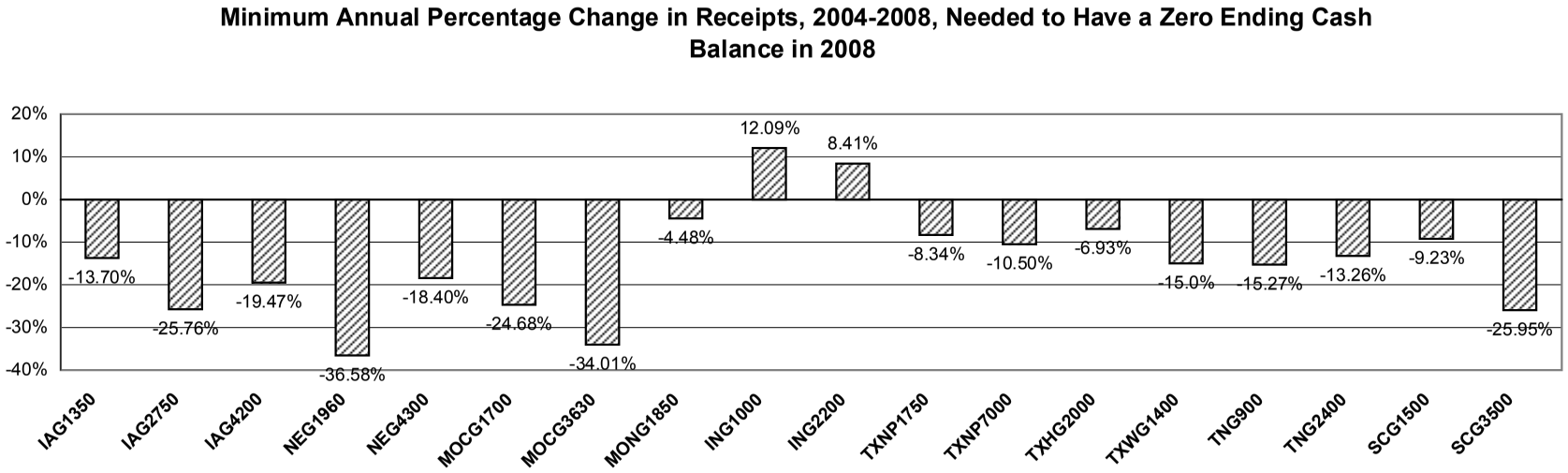
Table 4. Implications of the January 2004 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Feed Grains and Oilseeds.

	IAG1350	IAG2750	IAG4200	NEG1960	NEG4300	MOCG1700	MOCG3630	MONG1850	ING1000	ING2200
Overall Financial Position 2004-2008 Ranking	Marginal	Good	Marginal	Good	Good	Good	Good	Marginal	Poor	Marginal
Change Real Net Worth (%) 2004-2008 Average	2.40	5.16	2.97	5.81	3.23	3.02	3.97	2.17	-0.26	0.44
NIA to Maintain Real Net Worth (%/Rec.)	-9.57	-22.05	-15.00	-24.66	-15.00	-30.50	-36.14	-16.60	0.00	-4.10
NIA for Zero Ending Cash Balance (%/Rec.)	-13.69	-25.76	-19.47	-36.58	-18.40	-24.68	-34.01	-4.48	12.09	8.41
Govt Payments/Receipts (%) 2004-2008 Average	11.90	11.92	12.18	10.03	9.66	11.31	11.22	8.56	11.45	11.78
Cost to Receipts Ratio (%) 2004-2008 Average	76.55	64.90	73.03	65.72	74.81	54.88	51.47	73.49	85.73	83.63
Total Cash Receipts ($1000)										
2001	413.00	704.11	1,380.32	1,133.30	1,814.15	470.85	853.75	604.48	321.18	738.19
2002	446.66	769.11	1,494.41	1,114.02	1,967.73	476.07	959.74	518.08	345.09	792.96
2003	442.36	762.71	1,480.35	955.02	1,935.42	398.90	947.32	641.88	341.54	782.76
2004	458.20	789.45	1,533.33	966.73	1,855.86	488.97	907.91	669.88	316.50	741.13
2005	442.99	762.14	1,480.68	1,014.46	1,867.84	474.42	871.66	636.72	302.27	707.32
2006	442.38	760.87	1,476.12	1,025.16	1,874.33	478.95	877.56	647.77	300.29	702.70
2007	443.20	762.38	1,483.05	1,022.77	1,873.97	472.68	865.97	660.51	301.64	705.69
2008	450.19	774.17	1,503.10	1,037.02	1,898.06	484.65	886.58	663.47	305.58	714.91
2004-2008 Average	447.39	769.80	1,495.26	1,013.23	1,874.01	479.93	881.94	655.67	305.26	714.35
Government Payments ($1000)										
2001	96.32	165.96	319.98	188.68	333.52	103.14	200.91	110.43	73.68	175.82
2002	67.05	115.75	225.53	183.92	286.75	70.25	132.36	81.17	49.99	119.88
2003	30.47	53.06	104.54	65.36	117.27	30.34	56.64	72.74	21.41	51.44
2004	28.48	49.78	98.42	59.55	106.45	29.09	53.07	28.69	19.68	47.78
2005	45.37	78.38	156.24	93.64	162.26	46.35	84.28	47.59	30.24	72.94
2006	62.33	107.25	215.61	116.87	210.64	63.83	116.94	67.15	40.83	98.27
2007	60.62	104.28	208.21	117.95	208.46	61.85	112.92	64.80	39.78	95.69
2008	58.85	101.31	201.66	112.15	200.97	60.13	109.97	62.36	38.80	93.32
2004-2008 Average	51.13	88.20	176.03	100.03	177.76	52.25	95.44	54.12	33.87	81.60
Net Cash Farm Income ($1000)										
2001	88.04	228.41	346.31	438.51	399.37	182.41	338.91	121.83	82.50	179.61
2002	123.17	290.86	462.49	436.51	576.28	205.71	470.64	60.64	107.42	232.05
2003	106.07	269.56	411.26	266.06	502.47	135.23	479.55	171.91	90.48	191.20
2004	125.80	298.88	477.85	299.19	460.61	228.26	457.14	212.18	62.96	161.90
2005	110.45	276.50	416.81	359.12	478.20	216.32	427.53	177.02	48.84	129.34
2006	112.03	279.98	418.55	377.98	493.56	224.24	437.39	192.04	47.63	120.50
2007	109.83	278.85	420.30	364.55	484.15	221.09	427.78	198.93	43.00	114.67
2008	116.79	290.24	435.49	369.80	495.88	232.06	452.43	202.77	39.09	111.37
2004-2008 Average	114.98	284.89	433.80	354.13	482.48	224.40	440.45	196.59	48.31	127.55
Prob. of a Cash Flow Deficit (%)										
2003	1	1	1	1	1	99	1	99	1	99
2004	15	18	13	1	1	8	9	39	59	54
2005	33	24	38	1	4	14	17	56	83	83
2006	36	14	26	1	6	14	6	46	91	90
2007	35	20	40	1	21	24	12	53	98	95
2008	33	11	28	1	20	20	7	54	99	97
Ending Cash Reserves ($1000)										
2001	24.30	92.26	169.33	196.11	164.05	46.48	77.78	-7.10	19.10	31.49
2002	58.82	179.20	370.01	376.11	418.42	96.93	220.22	-68.13	38.49	65.34
2003	75.36	226.47	489.07	458.58	558.73	93.08	319.03	-40.64	40.80	36.70
2004	119.82	302.57	668.03	618.10	740.19	174.59	445.51	14.24	28.67	23.56
2005	143.34	368.10	723.31	800.44	902.08	228.71	536.68	22.52	5.54	-22.14
2006	164.06	453.49	815.79	985.76	1,033.86	281.63	663.53	61.89	-23.13	-77.74
2007	184.18	525.15	867.66	1,150.26	1,112.35	321.43	774.27	77.97	-73.80	-136.28
2008	209.67	632.38	949.91	1,302.46	1,201.26	369.33	908.60	97.75	-127.88	-190.59
Nominal Net Worth ($1000)										
2001	850.59	1,421.17	3,055.73	1,677.06	3,612.14	2,241.20	3,383.72	2,599.76	1,212.55	3,299.86
2002	890.49	1,531.40	3,277.05	1,868.81	3,906.65	2,341.61	3,612.05	2,597.77	1,262.18	3,405.41
2003	916.94	1,625.48	3,437.38	1,969.85	4,123.50	2,389.44	3,826.42	2,704.01	1,299.64	3,459.76
2004	953.60	1,711.49	3,602.27	2,103.44	4,313.94	2,500.53	4,033.07	2,797.63	1,310.16	3,507.07
2005	979.96	1,814.21	3,675.49	2,262.95	4,500.69	2,589.87	4,209.47	2,841.12	1,313.72	3,526.15
2006	1,005.07	1,933.71	3,834.02	2,427.85	4,684.53	2,686.72	4,438.10	2,958.78	1,312.95	3,547.89
2007	1,033.95	2,028.17	3,978.93	2,575.79	4,840.23	2,780.44	4,630.54	3,044.31	1,306.67	3,570.22
2008	1,072.34	2,160.96	4,153.89	2,726.57	5,033.55	2,890.11	4,854.02	3,114.22	1,298.81	3,599.52
Prob. of Decreasing Real Net Worth Over 2001-2008 (%)	1	1	1	1	1	1	1	1	10	2

Table 5. Implications of the January 2004 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Feed Grains and Oilseeds.

	TXNP1750	TXNP7000	TXHG2000	TXWG1400	TNG900	TNG2400	SCG1500	SCG3500
Overall Financial Position 2004-2008 Ranking	Marginal	Marginal	Marginal	Good	Good	Marginal	Marginal	Good
Change Real Net Worth (%) 2004-2008 Average	7.93	5.06	4.53	4.48	4.58	2.55	2.91	3.88
NIA to Maintain Real Net Worth (%/Rec.)	-8.92	-11.20	-7.57	-11.26	-14.23	-11.34	-6.73	-18.69
NIA for Zero Ending Cash Balance (%/Rec.)	-8.34	-10.50	-6.93	-15.00	-15.27	-13.26	-9.23	-25.95
Govt Payments/Receipts (%) 2004-2008 Average	10.37	10.66	14.10	16.06	11.03	10.96	17.94	15.14
Cost to Receipts Ratio (%) 2004-2008 Average	82.19	78.74	79.15	73.44	70.90	74.33	82.47	73.74
Total Cash Receipts ($1000)								
2001	541.20	1,856.96	378.67	284.07	258.97	768.46	473.75	1,588.78
2002	662.47	2,288.38	419.20	297.65	256.65	739.73	544.34	1,458.70
2003	545.14	1,812.11	392.22	292.71	248.89	741.56	530.75	1,391.43
2004	597.28	1,913.58	406.49	275.47	258.56	767.23	507.81	1,357.45
2005	624.22	2,033.49	419.47	291.91	252.57	734.77	512.69	1,364.66
2006	629.24	2,056.99	425.38	297.86	252.75	732.94	520.34	1,379.72
2007	635.00	2,060.31	424.34	298.68	253.06	735.80	523.29	1,380.02
2008	650.06	2,091.49	428.63	302.13	257.33	747.97	531.62	1,398.78
2004-2008 Average	627.16	2,031.17	420.86	293.21	254.86	743.74	519.15	1,376.13
Government Payments ($1000)								
2001	105.91	360.86	110.02	80.41	56.32	179.23	122.96	424.69
2002	124.24	425.00	92.60	68.28	36.23	95.20	126.69	356.07
2003	46.00	145.47	64.22	59.24	16.15	45.19	97.37	211.40
2004	36.71	127.27	29.82	27.58	14.88	41.68	53.08	113.94
2005	60.85	204.08	57.62	45.01	24.53	69.57	85.17	191.17
2006	71.39	243.26	67.22	52.03	33.07	96.93	105.42	236.17
2007	74.60	251.05	69.15	53.39	32.74	94.98	106.82	238.57
2008	69.39	238.16	68.64	52.54	31.57	91.60	105.22	236.43
2004-2008 Average	62.59	212.77	58.49	46.11	27.36	78.95	91.14	203.26
Net Cash Farm Income ($1000)								
2001	89.36	389.84	68.81	86.87	92.09	256.93	80.01	624.44
2002	207.14	818.89	96.76	100.39	86.67	233.00	146.67	513.75
2003	43.48	203.04	65.44	78.42	63.35	191.49	105.34	380.58
2004	110.70	351.47	86.58	67.12	79.22	228.47	91.94	373.17
2005	138.88	474.05	93.69	84.10	74.66	196.62	97.27	384.10
2006	143.72	495.48	97.74	87.74	76.86	193.46	103.39	398.25
2007	142.04	480.20	96.39	90.03	77.15	197.88	99.22	384.27
2008	150.03	491.02	93.69	92.05	81.01	200.78	102.53	394.39
2004-2008 Average	137.07	458.44	93.62	84.21	77.78	203.44	98.87	386.84
Prob. of a Cash Flow Deficit (%)								
2003	99	99	99	1	1	1	1	1
2004	39	26	28	30	24	16	46	16
2005	50	24	43	22	25	36	41	22
2006	45	34	29	33	36	43	33	18
2007	48	34	28	23	16	46	36	28
2008	48	34	38	23	9	39	37	24
Ending Cash Reserves ($1000)								
2001	24.32	107.20	12.68	17.50	32.51	116.27	23.24	317.14
2002	115.29	449.56	29.65	43.07	55.88	192.20	68.41	510.31
2003	69.65	300.33	15.65	55.37	56.66	211.00	69.81	606.19
2004	99.58	379.64	37.74	72.18	71.49	283.42	78.44	734.10
2005	113.39	493.27	45.93	96.37	82.30	310.33	91.36	864.92
2006	142.86	562.41	71.08	117.28	89.59	324.75	115.54	1,006.45
2007	169.26	630.82	94.12	140.49	108.20	329.15	135.04	1,117.25
2008	197.63	704.66	107.75	166.31	139.83	352.21	159.96	1,248.35
Nominal Net Worth ($1000)								
2001	388.25	2,260.39	420.05	458.02	416.02	1,560.14	634.84	2,936.37
2002	488.68	2,659.79	420.46	485.19	443.07	1,656.31	691.02	3,171.18
2003	457.60	2,592.12	424.82	509.75	458.22	1,702.40	707.48	3,319.48
2004	485.77	2,681.08	444.76	519.65	479.37	1,784.87	719.93	3,478.64
2005	524.47	2,852.92	461.61	542.41	500.23	1,830.92	739.17	3,644.91
2006	575.37	3,003.45	500.98	572.04	519.51	1,878.25	772.06	3,835.72
2007	626.18	3,181.68	530.10	604.52	554.67	1,933.78	794.32	3,985.25
2008	674.00	3,372.09	547.41	638.39	591.65	2,021.07	827.75	4,171.38
Prob. of Decreasing Real Net Worth Over 2001-2008 (%)	10	1	6	1	1	1	1	1

Figure 3. Feed Grain and Oilseed Farms



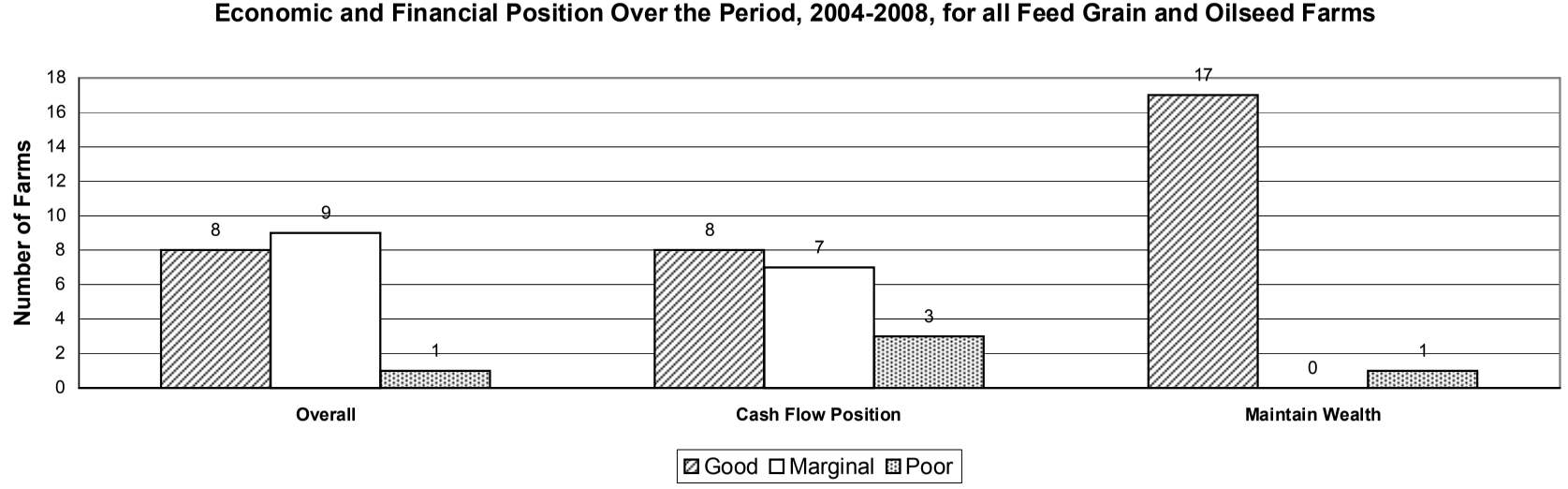


Figure 4. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Feed Grain and Oilseed Farms

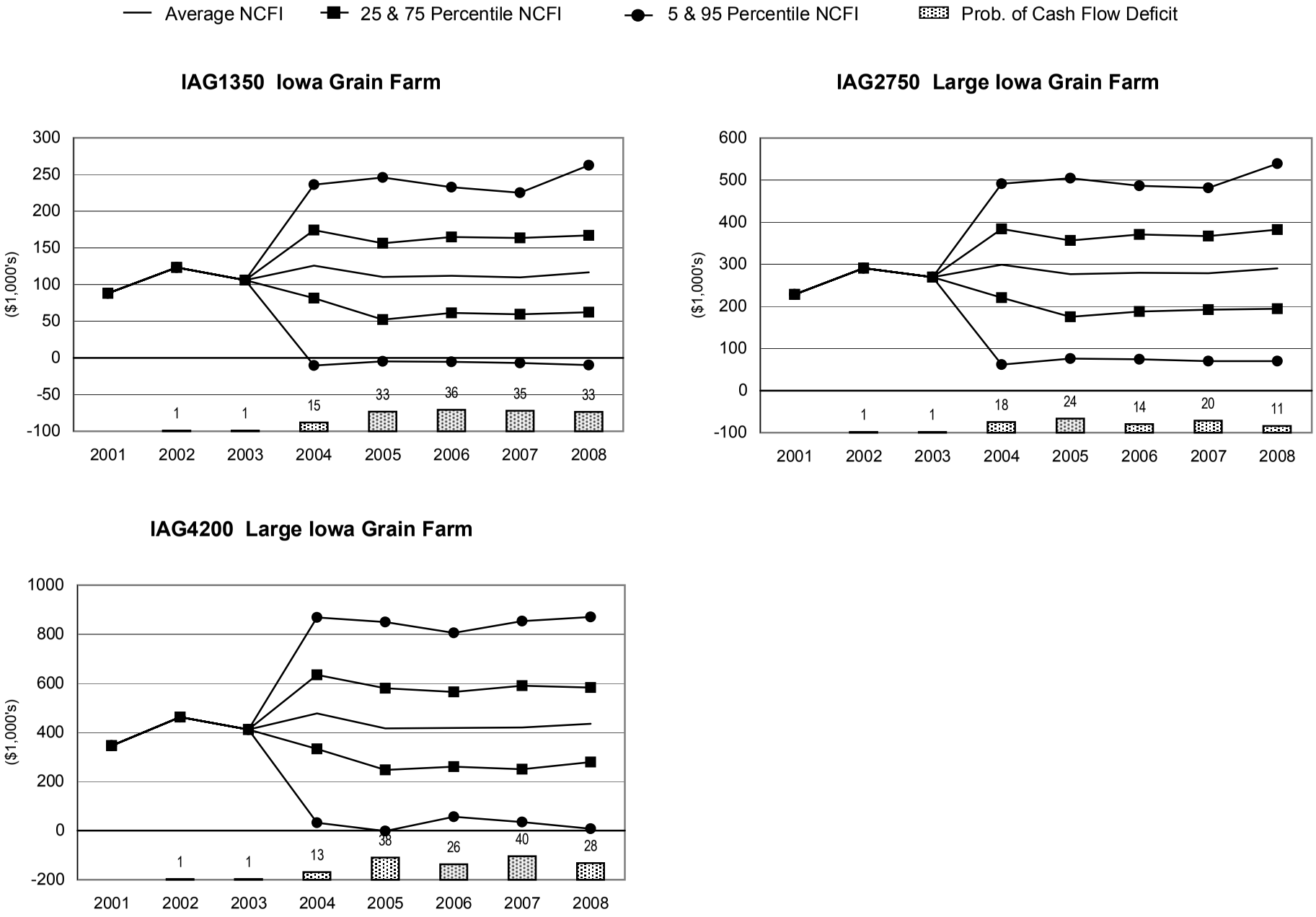


Figure 5. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Feed Grain and Oilseed Farms

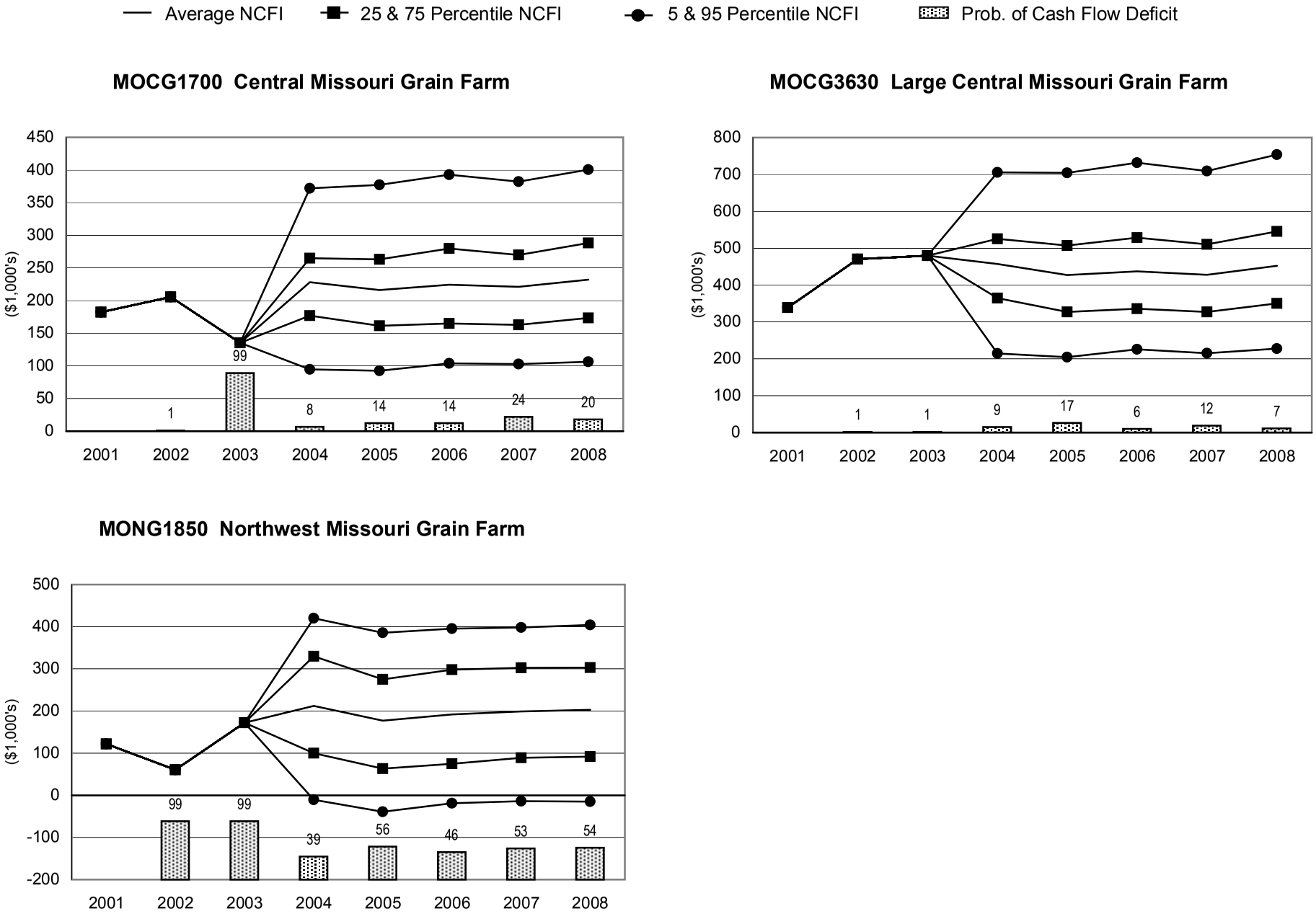


Figure 6. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Feed Grain and Oilseed Farms

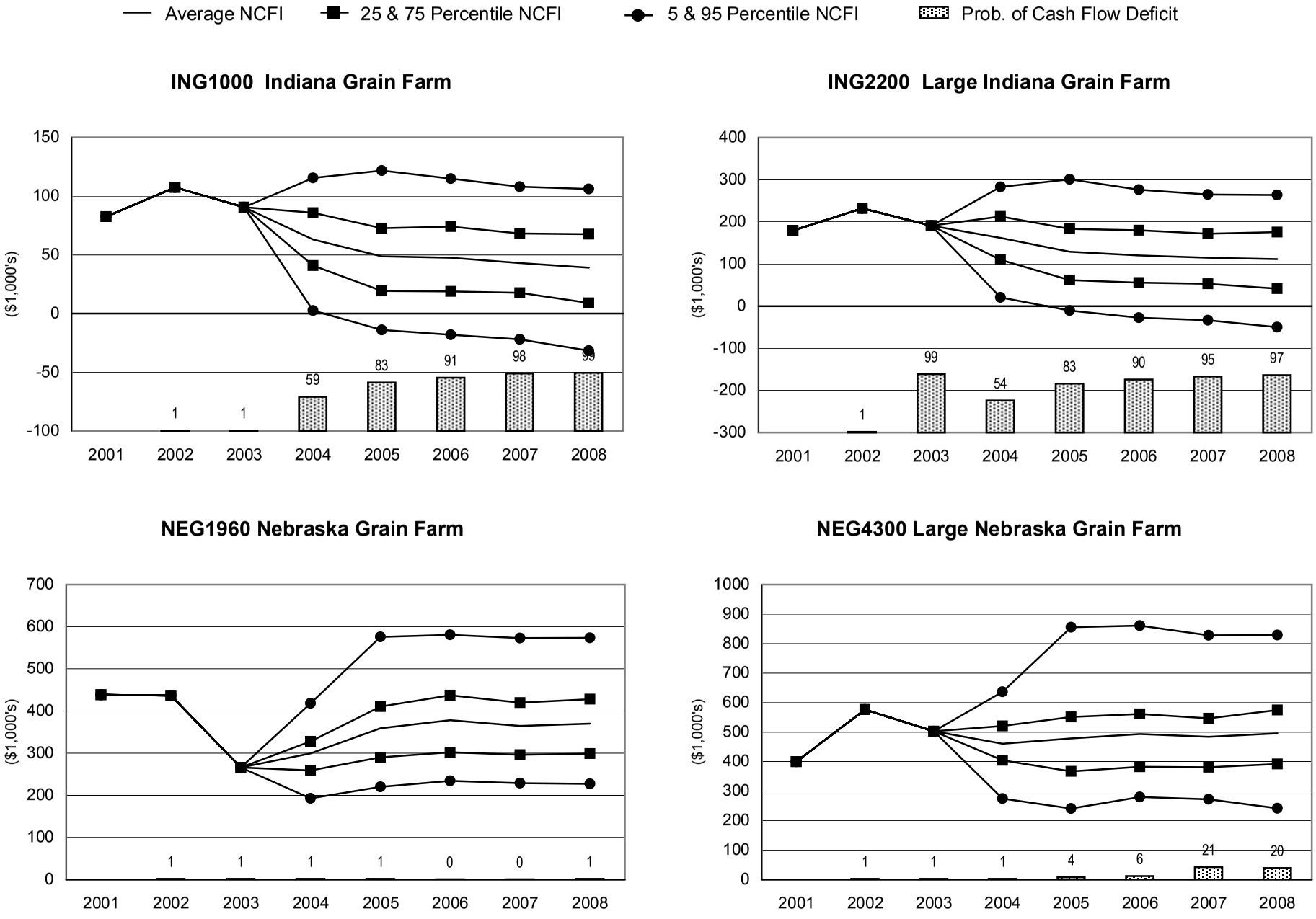


Figure 7. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Feed Grain and Oilseed Farms

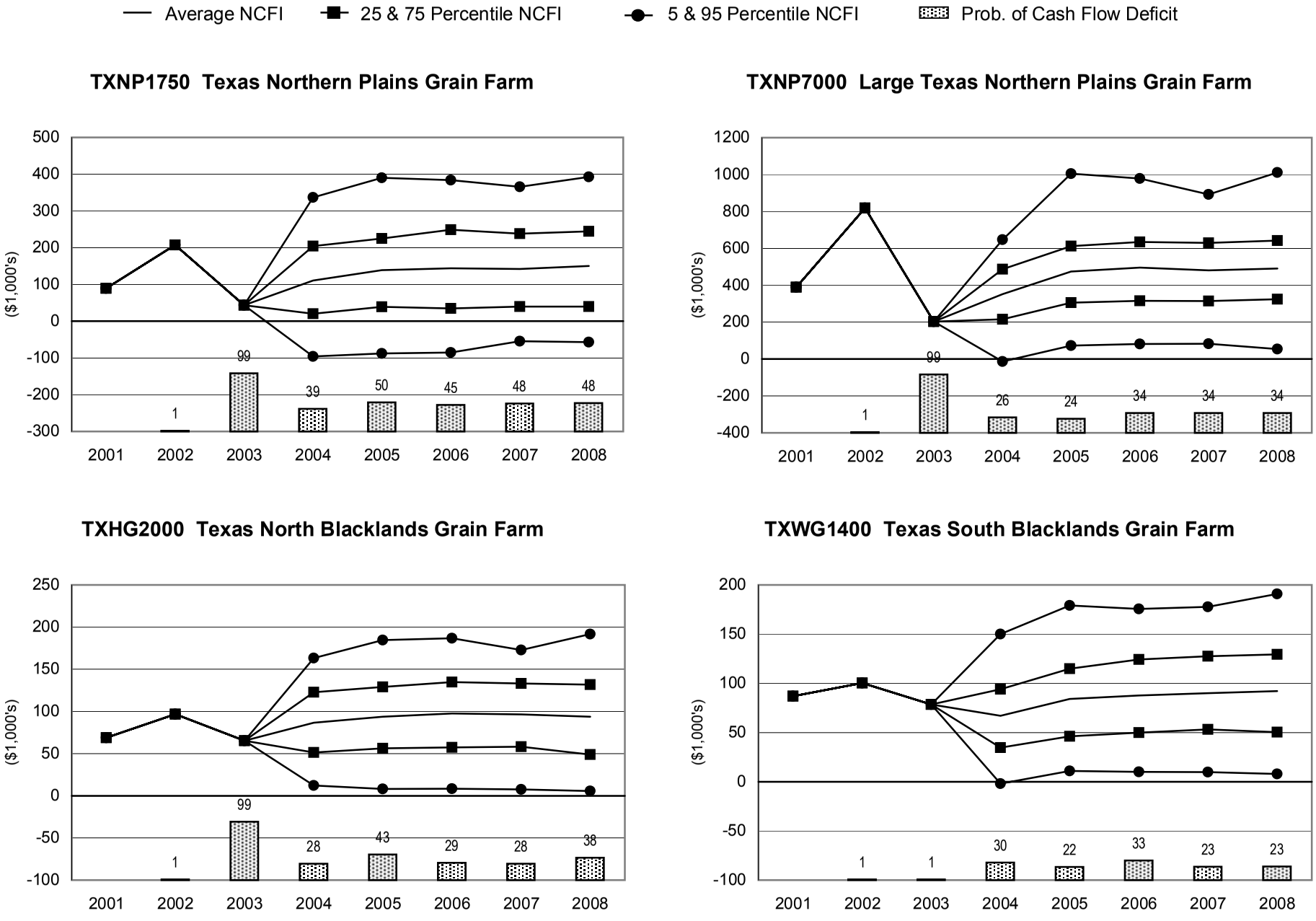


Figure 8. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Feed Grain and Oilseed Farms

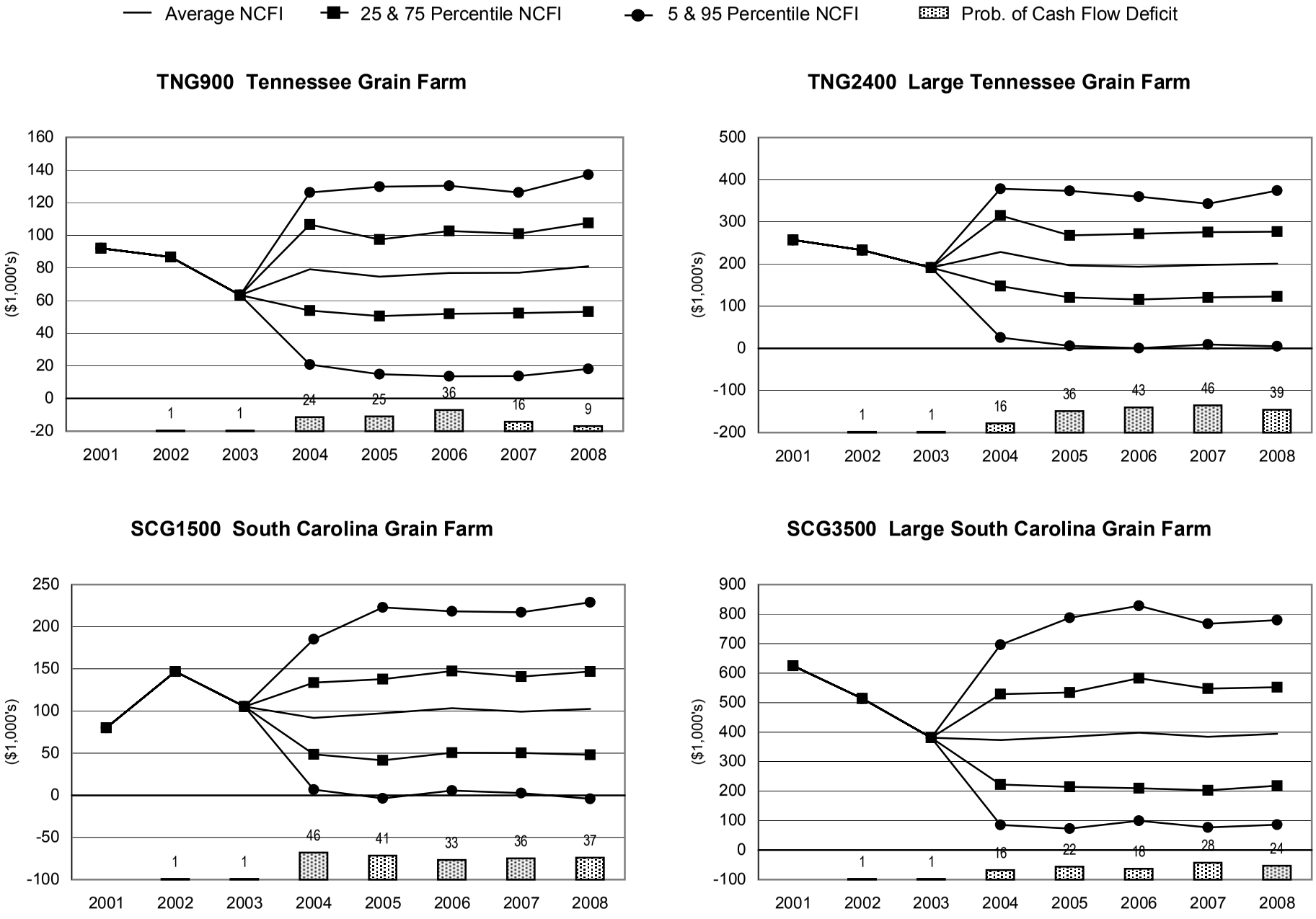
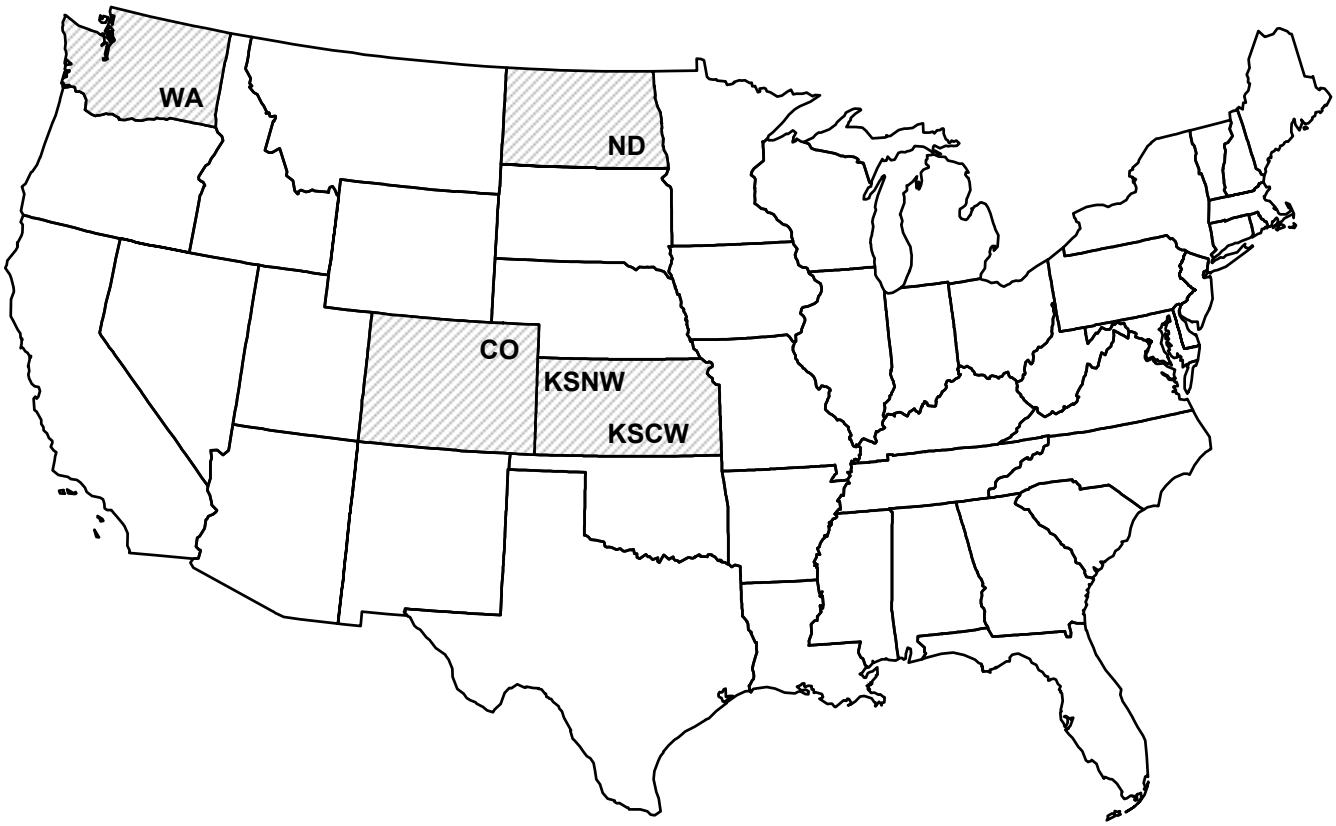


FIGURE 9. REPRESENTATIVE FARMS PRODUCING WHEAT



Wheat Farm Impacts

Wheat prices are expected to decrease slightly in the first three projected years (2004 to 2006) before turning around in 2007. Three wheat farms are projected to be in good overall financial condition with six in moderate condition and only one in poor condition. Only one of the ten wheat farms (KSNW2800) will feel severe liquidity pressure over the period and has a significant chance of losing real equity.

Washington: Both farms have a similar crop mix of winter and spring wheat, barley, and lentils. WAW1725 spends nearly $145/acre to produce winter wheat, but yields for all four crops are higher than they are for the larger farm. WAW4675 has lower costs of production which more than compensates for lower wheat yields.

North Dakota: These farms plant roughly one-third of their acres to winter wheat, with the balance planted to soybeans, barley, sunflowers, and corn. The large farm (NDW6250) also plants 5 percent of its acres to dry edible beans. NDW6250 has a lower probability of a cash flow deficit than the moderate-size farm (NDW2180) over the projected period (2004 to 2008), attributed largely to higher expected yields on all crops except for corn.

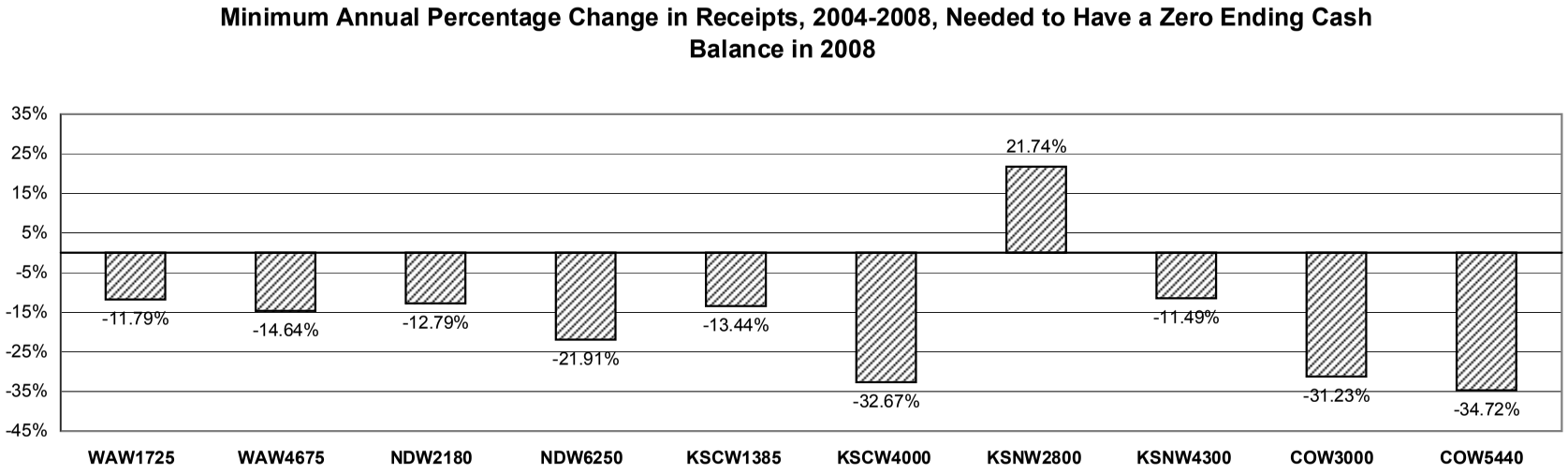
Kansas: Costs of production for dryland wheat are similar across the state. The moderate-sized farms own a higher percentage of their cropland than the larger farms, so their cash flows are reduced more for debt servicing. Additionally, expected yields for wheat, grain sorghum, and soybeans are significantly higher for KSCW4000 than those for KSCW1385. Similarly, the larger northwest farm (KSNW4300) leases a higher proportion of its land and has higher crop yields than the moderate-sized northwest farm (KSNW2800).

Colorado: Both farms have only a slight probability of a cash flow deficit. The costs of production for these farms are lower than the other eight representative wheat farms. Innovative intensive dryland cropping systems maximize the effect of limited moisture and reduce input costs. The COW3000 farm annually leaves 525 of 2,700 cropland acres fallow. Millet and corn are planted in a wheat-summer crop-fallow rotation on this farm. Fallow land annually accounts for 1,100 of 5,010 cropland acres on COW5440. This farm plants millet, corn, and sunflowers after wheat before fallowing.

Table 6. Implications of the January 2004 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Wheat.

	WAW1725	WAW4675	NDW2180	NDW6250	KSCW1385	KSCW4000	KSNW2800	KSNW4300	COW3000	COW5440
Overall Financial Position 2004-2008 Ranking	Marginal	Marginal	Marginal	Marginal	Marginal	Good	Poor	Marginal	Good	Good
Change Real Net Worth (%) 2004-2008 Average	2.27	2.38	2.01	3.83	2.09	4.84	-1.73	2.60	4.24	4.12
NIA to Maintain Real Net Worth (%/Rec.)	-9.39	-13.16	-6.57	-15.97	-9.82	-24.46	7.33	-10.00	-27.83	-28.45
NIA for Zero Ending Cash Balance (%/Rec.)	-11.79	-14.64	-12.79	-21.91	-13.44	-32.67	21.74	-11.48	-31.23	-34.72
Govt Payments/Receipts (%) 2004-2008 Average	10.77	12.99	11.80	10.64	15.29	13.39	12.07	11.72	9.56	11.04
Cost to Receipts Ratio (%) 2004-2008 Average	75.62	74.58	79.86	71.61	63.09	56.26	89.52	78.31	57.04	55.84
Total Cash Receipts ($1000)										
2001	409.93	1,118.49	380.27	1,340.55	154.28	480.09	304.00	572.35	302.75	481.40
2002	493.23	1,243.74	390.56	1,374.50	215.58	609.68	378.70	726.44	340.09	626.97
2003	427.95	1,071.75	374.13	1,281.23	193.04	548.71	318.28	624.86	298.63	530.12
2004	437.42	1,027.87	398.62	1,344.22	192.88	544.27	328.94	639.00	299.77	530.54
2005	442.41	1,037.87	371.19	1,277.33	194.01	555.07	337.00	650.18	294.46	523.72
2006	446.89	1,044.34	368.09	1,272.34	196.53	565.56	342.49	657.07	299.26	524.20
2007	447.73	1,048.38	370.63	1,274.82	196.32	569.49	345.85	663.68	303.74	527.00
2008	452.63	1,058.94	375.15	1,292.43	199.40	572.76	347.78	666.37	303.76	534.50
2004-2008 Average	445.42	1,043.48	376.74	1,292.23	195.83	561.43	340.41	655.26	300.20	527.99
Government Payments ($1000)										
2001	79.83	243.05	94.43	274.05	44.19	110.84	63.84	125.49	54.21	112.56
2002	90.01	261.97	67.34	226.48	40.39	97.96	79.16	148.57	67.80	140.74
2003	44.43	148.06	24.38	89.57	24.19	63.18	32.04	61.71	20.69	43.34
2004	26.08	82.88	23.14	73.87	17.66	44.31	23.60	44.67	15.93	32.27
2005	45.40	128.22	38.88	122.50	28.58	72.45	39.04	71.51	26.59	53.88
2006	52.70	146.65	51.90	160.23	32.49	81.49	45.47	85.02	32.98	66.09
2007	56.61	156.23	51.49	159.10	34.38	86.90	46.98	87.24	33.99	68.05
2008	53.48	148.24	49.92	153.91	32.78	82.67	44.67	83.93	32.45	65.62
2004-2008 Average	46.86	132.44	43.07	133.92	29.18	73.57	39.95	74.47	28.39	57.18
Net Cash Farm Income ($1000)										
2001	99.53	369.63	101.58	460.06	42.65	179.77	43.16	95.02	132.06	195.76
2002	180.32	499.39	112.71	498.36	104.67	312.46	112.55	248.74	169.76	343.40
2003	93.60	297.80	80.99	357.68	71.51	230.54	39.51	122.91	123.02	230.66
2004	112.90	265.97	110.13	443.28	76.09	238.33	45.23	148.18	124.79	237.11
2005	118.08	281.17	84.24	386.91	73.76	246.34	48.58	158.74	124.18	231.58
2006	123.18	293.01	76.70	382.90	78.95	261.67	50.38	162.86	133.11	234.03
2007	116.49	287.30	74.50	374.79	73.75	264.11	44.69	165.00	135.58	238.45
2008	116.65	295.18	76.30	365.44	77.31	257.75	38.66	164.72	136.95	248.51
2004-2008 Average	117.46	284.53	84.38	390.66	75.97	253.64	45.51	159.90	130.92	237.94
Prob. of a Cash Flow Deficit (%)										
2003	99	1	1	1	1	1	99	99	1	1
2004	14	28	13	12	10	1	99	32	1	1
2005	41	25	30	27	23	11	98	37	5	6
2006	12	30	41	24	17	1	98	34	1	9
2007	49	40	40	31	43	7	99	43	1	13
2008	33	27	45	36	38	12	99	41	1	2
Ending Cash Reserves ($1000)										
2001	21.35	89.58	33.46	230.60	-8.73	62.92	-40.14	-8.93	20.08	64.41
2002	75.89	278.02	60.79	409.39	20.32	180.74	-14.31	101.94	72.07	204.10
2003	75.56	299.59	66.33	464.27	25.72	209.01	-68.09	89.12	91.06	252.22
2004	118.53	342.77	114.94	619.68	50.63	291.78	-108.78	134.06	127.35	331.66
2005	128.49	407.82	140.76	714.04	72.73	354.28	-147.06	169.67	155.99	391.50
2006	172.66	458.66	155.56	818.18	91.93	441.35	-173.27	214.24	201.85	444.97
2007	176.49	474.78	172.02	897.65	97.72	515.50	-226.41	240.99	249.90	493.25
2008	194.55	530.69	184.68	968.44	107.38	586.28	-284.70	273.54	300.71	576.86
Nominal Net Worth ($1000)										
2001	963.76	2,967.08	461.20	1,996.19	549.02	1,180.22	844.02	1,316.07	868.55	1,455.48
2002	1,052.18	3,207.05	490.43	2,221.92	582.91	1,303.75	882.87	1,442.62	938.40	1,615.22
2003	1,062.16	3,292.37	500.38	2,332.67	601.45	1,363.17	864.64	1,472.24	988.19	1,689.59
2004	1,099.78	3,376.68	536.84	2,501.29	617.51	1,427.63	836.75	1,513.67	1,032.63	1,775.83
2005	1,138.27	3,475.32	552.37	2,618.69	634.17	1,484.56	817.46	1,549.99	1,071.75	1,854.44
2006	1,173.36	3,572.80	566.38	2,765.38	651.93	1,592.44	825.67	1,617.85	1,143.96	1,934.98
2007	1,200.61	3,657.74	580.12	2,887.54	667.58	1,679.86	795.90	1,664.43	1,202.34	2,020.47
2008	1,229.87	3,794.54	593.44	2,992.06	685.18	1,780.86	768.59	1,717.53	1,257.15	2,151.48
Prob. of Decreasing Real Net Worth Over 2001-2008 (%)	1	1	5	1	3	1	77	2	1	1

Figure 10. Wheat Farms



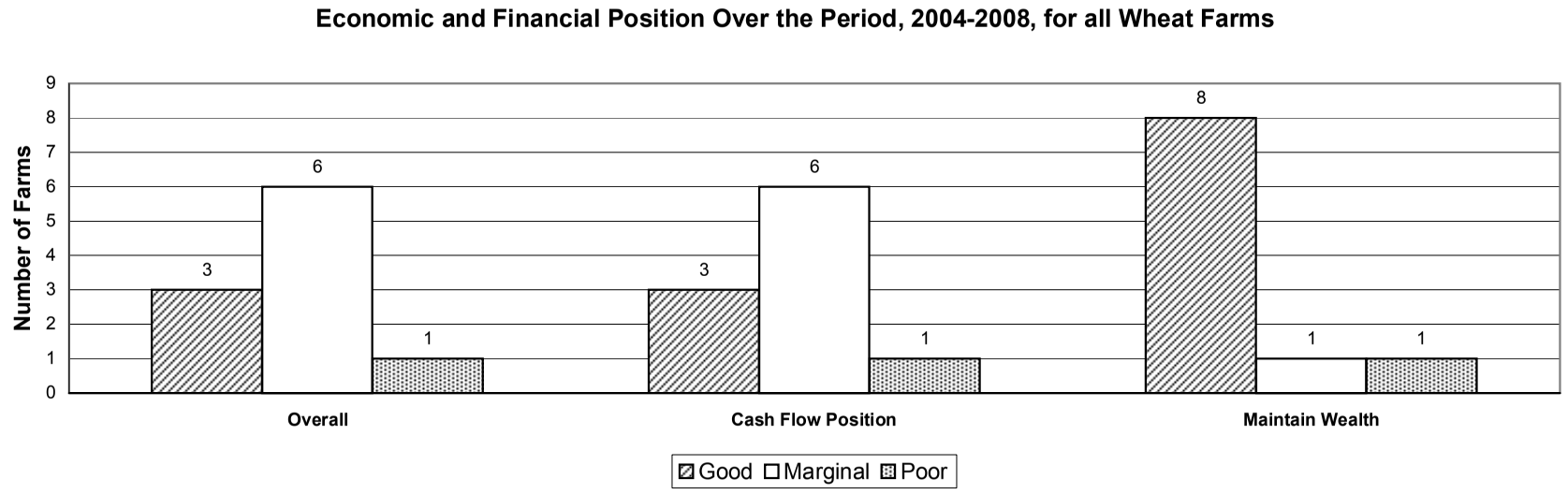


Figure 11. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Wheat Farms

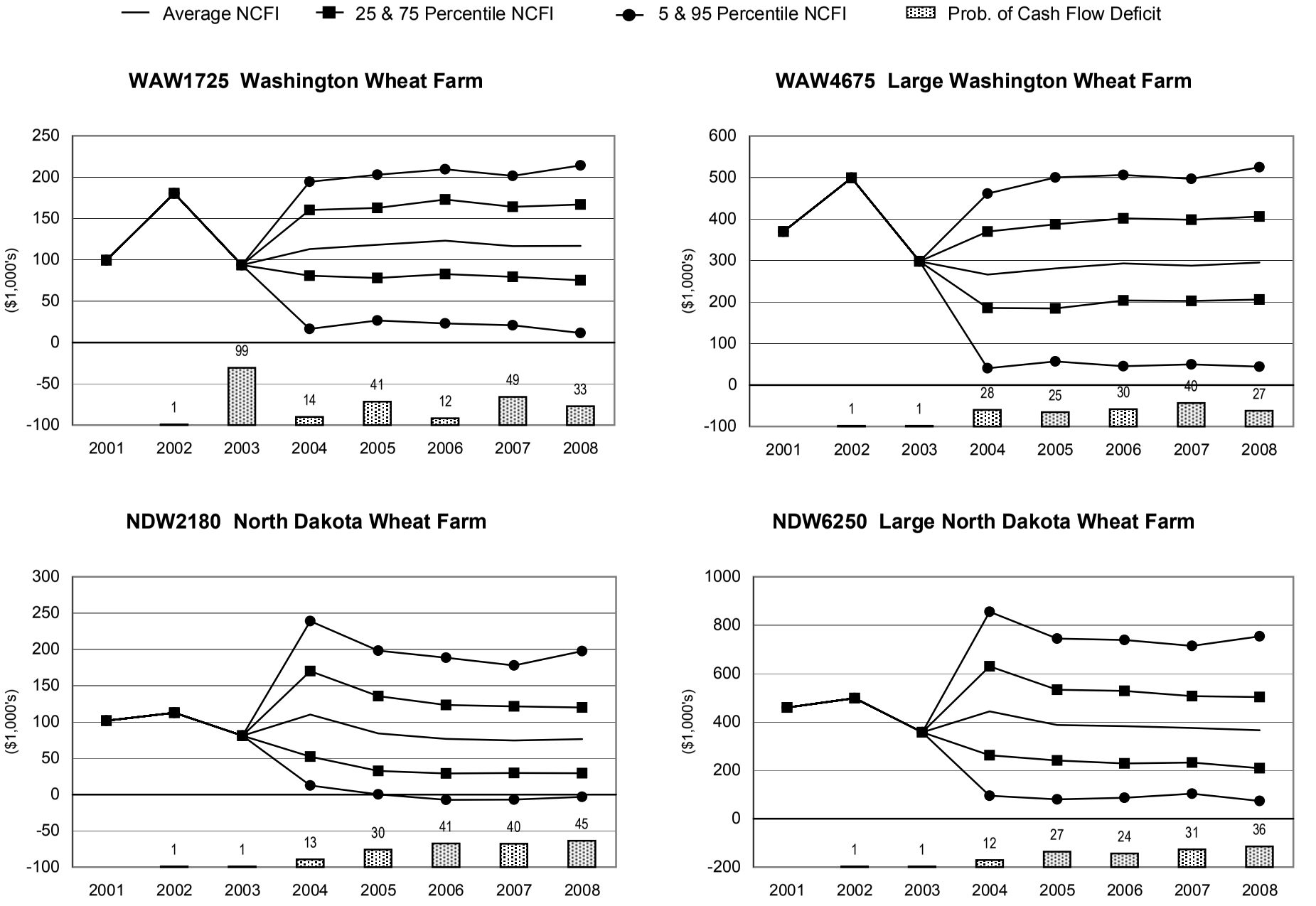


Figure 12. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Wheat Farms

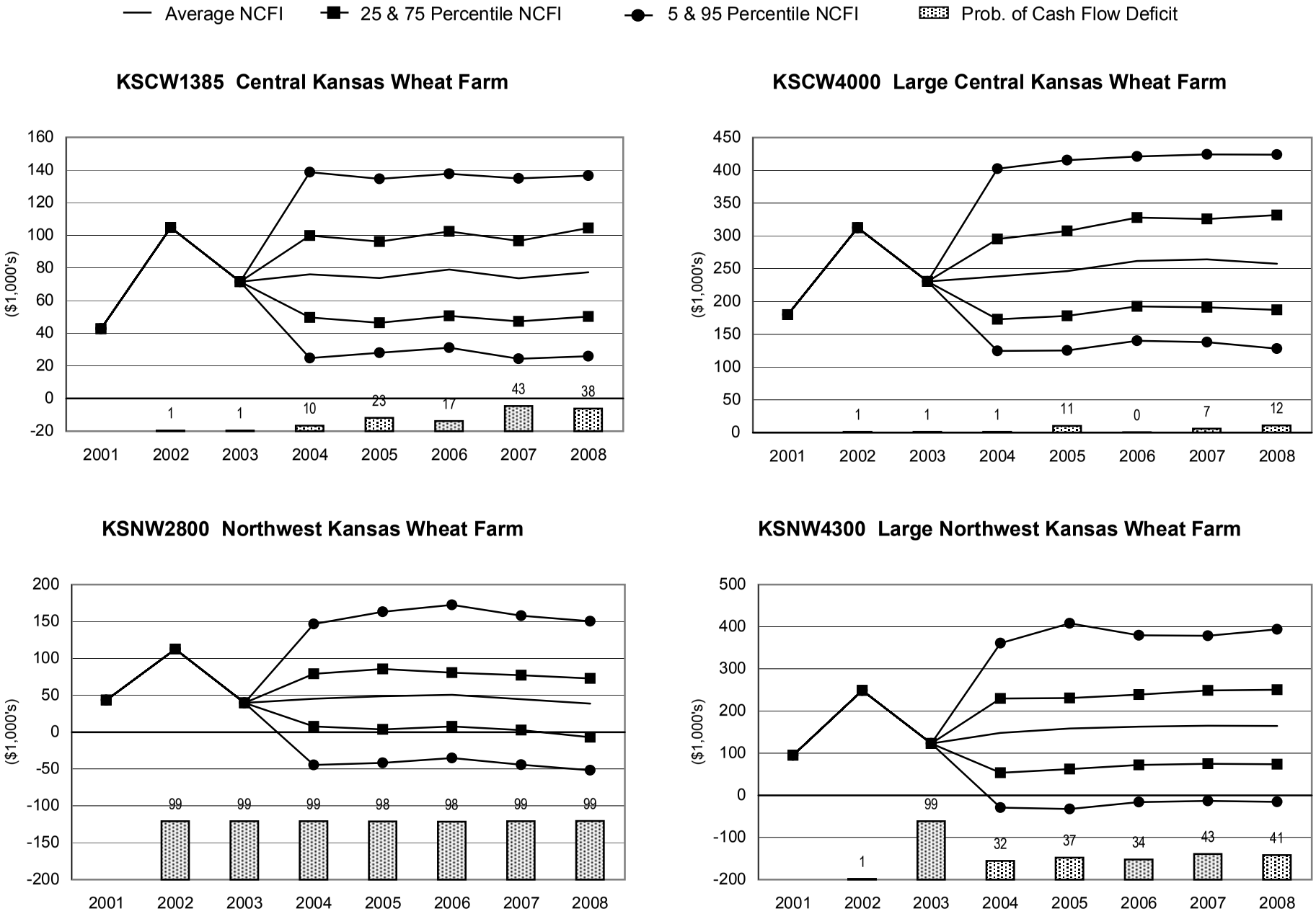


Figure 13. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Wheat Farms

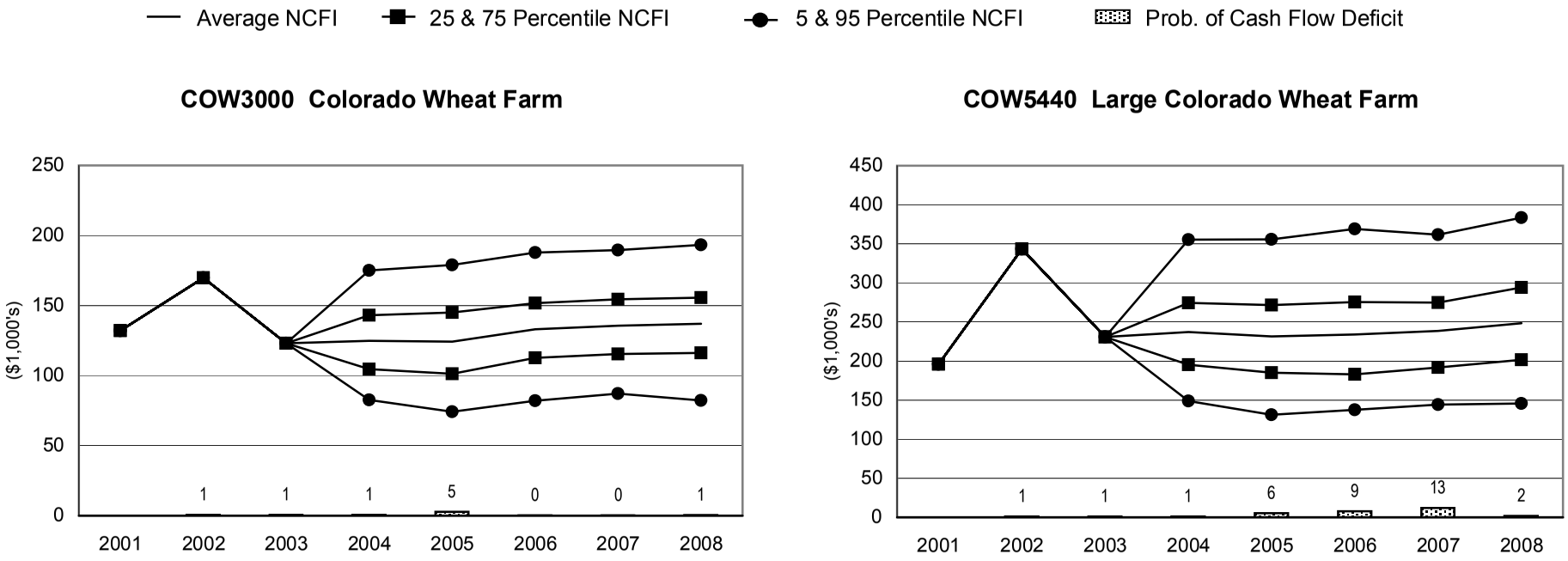
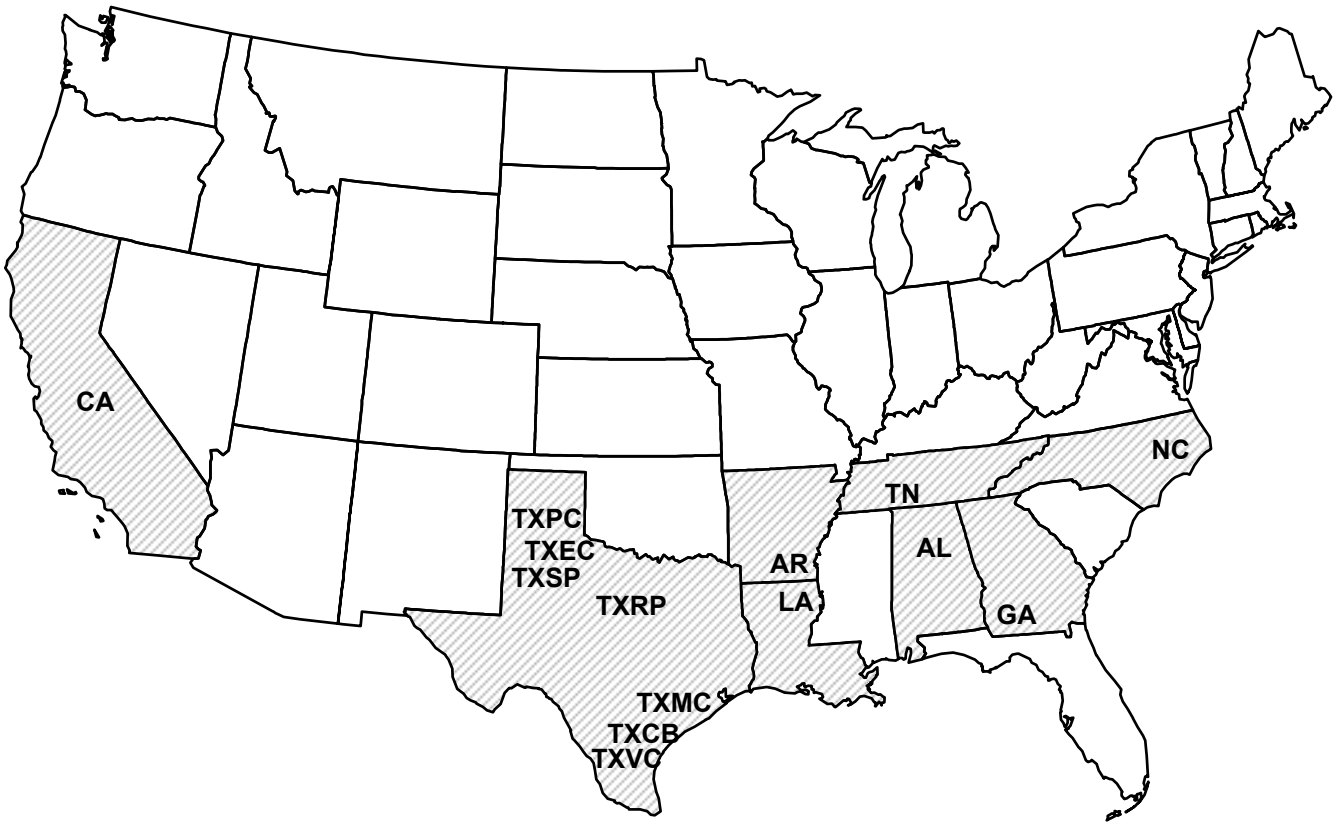


FIGURE 14. REPRESENTATIVE FARMS PRODUCING COTTON



Cotton Farm Impacts

Cotton prices are expected to drop sharply from $0.63/lb. in 2003 to $0.57/lb. in 2004. Prices continue to decline slightly in each of the subsequent years before turning around in 2008. Two of 18 cotton farms are characterized as being in good overall condition, with 14 farms characterized in moderate and 2 in poor condition. Nearly one-half of the farms are projected to have severe cash flow problems over the period; however, only two of the 18 cotton farms have more than a 45 percent chance of losing real equity.

California: High land values on CAC2400 and CAC9000 ($3500 and $2000 per acre, respectively) put some pressure on these two farms' liquidity position, but allow them to maintain their real net worth. CAC9000 grows the same crops as the smaller farm along with tomatoes, garlic, and pima cotton. Wheat is grown for grain on CAC9000 as opposed to silage on the smaller farm.

Texas: All of the Texas cotton farms are in a marginal overall financial condition, yet exhibit a relatively high probability of maintaining real net worth due to inflation in land values projected in the Baseline. The moderate-sized South Plains farm (TXSP2239) has about the same cost-to-receipts ratio as the larger farm (TXSP3745). Expected yields for both irrigated and dryland cotton on TXSP2239 are slightly higher than the large farm, but peanut expected yields are slightly lower. The larger South Plains farm (TXSP3745) has a slightly higher cost-to-receipts ratio than the small farm due in part to lower expected yields and owning 44 percent of its planted acres. TXEC5000 is the least efficient Texas cotton farm growing at least some portion of irrigated cotton. The low efficiency is attributed to overhead, because cotton production cost per acre and per yield unit are among the lowest of the Texas farms. The Rolling Plains farm (TXRP2500) achieves relatively high probability (2nd best in Texas) of positive cash flow due to extremely low production costs.

TXMC3500 has high expected cotton yields, but its 10-year actual production history reveals that the farm fails to achieve 50 percent of its expected yield 4 out of 10 years. With respect to cotton production, TXMC3500 is the highest cost per acre and cost per yield unit farm of all the representative Texas dryland farms. TXCB1850 is more efficient than the larger Coastal Bend farm as its cost-to-receipts ratio is almost 11 percent lower. Variable production cost per pound of cotton for TXCB5500 is only about $0.03 higher than the smaller farm, indicating that overhead costs are where the inefficiencies lie. This farm also has a higher probability of losing real net worth than the moderate-sized Coastal Bend farm due to lower percent of land ownership. The Lower Rio Grande Valley farm (TXVC4500) has relatively risky irrigated cotton yields due to a lack of irrigation water in the Lower Rio Grande Valley of Texas. Dryland yields are the riskiest of all of the Texas farms, evidenced by a coefficient of variation (CV) of almost 80 percent.

Louisiana: The Louisiana cotton farm (LAC2640) owns no cropland, so maintenance of real net worth is extremely difficult. This farm is the highest cost cotton farm in the representative set with a cost-to-receipts ratio in excess of 91 percent.

Arkansas: ARC5000 receives the highest percentage of government payments of all representative cotton farms due in part to the 1500 acres of rice planted on this farm.

Tennessee: The moderate-sized Tennessee farm (TNC1900) has the lowest cost-to-receipts ratio of all of the cotton farms in the representative set. TNC4050 has a higher probability of losing real net worth than the smaller farm due to a higher percentage of assets being tied up in depreciable assets (machinery).

Alabama: The Alabama farm (ALC3000) has an impressive equity position, yet it owns no land. Real net worth is maintained by building cash reserves and not tying up cash in servicing long-term debt.

Georgia: GAC1700 owns 30 percent of its land, contributing to its favorable ending equity position; however, moderately high initial land values and a 20 percent debt assumption tend to impede this farm's ability to cash flow.

North Carolina: Although NCC1500 only owns 15 percent of its cultivated acres, the high land values (approaching $4,000/acre in 2001) and a 20 percent debt assumption contribute to this farm's cash flow problems.

Table 7. Implications of the January 2004 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Cotton.

	CAC2400	CAC9000	TXSP2239	TXSP3745	TXPC2500	TXEC5000
Overall Financial Position 2004-2008 Ranking	Marginal	Marginal	Marginal	Marginal	Marginal	Marginal
Change Real Net Worth (%) 2004-2008 Average	2.57	4.30	2.64	2.12	3.16	3.22
NIA to Maintain Real Net Worth (%/Rec.)	-9.91	-9.39	-3.78	-4.44	-8.80	-2.43
NIA for Zero Ending Cash Balance (%/Rec.)	-16.59	-13.73	-4.03	-5.29	-16.59	-2.61
Govt Payments/Receipts (%) 2004-2008 Average	9.61	8.38	13.96	15.79	20.45	21.72
Cost to Receipts Ratio (%) 2004-2008 Average	84.04	83.76	84.54	84.61	80.14	88.12
Total Cash Receipts ($1000)						
2001	2,116.04	10,704.49	481.64	579.71	957.07	932.23
2002	2,121.60	10,622.87	575.21	772.63	1,136.37	969.54
2003	2,404.66	12,142.62	695.15	965.96	992.97	1,492.46
2004	2,105.04	10,991.18	611.08	836.64	866.63	1,178.11
2005	2,113.17	11,085.95	626.15	849.37	897.25	1,209.85
2006	2,113.26	11,142.84	621.82	840.84	898.31	1,206.81
2007	2,116.58	11,214.13	625.67	846.15	896.76	1,215.17
2008	2,137.93	11,374.75	633.44	856.48	903.14	1,225.90
2004-2008 Average	2,117.20	11,161.78	623.63	845.89	892.42	1,207.17
Government Payments ($1000)						
2001	499.31	1,723.59	141.40	204.10	392.60	517.29
2002	288.57	1,241.55	123.81	183.58	320.15	277.52
2003	402.27	1,718.84	158.44	245.29	283.69	498.44
2004	92.56	447.29	39.29	63.05	94.76	121.79
2005	195.73	895.74	84.67	128.92	180.35	256.12
2006	233.80	1,054.01	100.47	152.08	208.57	304.92
2007	240.66	1,087.91	103.30	156.40	216.40	312.00
2008	250.10	1,123.63	106.31	160.59	219.42	319.80
2004-2008 Average	202.57	921.72	86.81	132.21	183.90	262.92
Net Cash Farm Income ($1000)						
2001	450.87	2,105.15	37.17	-27.40	228.38	-43.81
2002	447.30	1,928.85	83.29	97.82	412.91	-5.59
2003	617.74	2,874.76	168.57	251.36	267.85	417.16
2004	368.83	1,940.99	99.01	145.04	163.40	153.44
2005	386.01	2,063.57	111.60	156.72	198.53	186.20
2006	382.86	2,105.52	102.73	144.93	196.25	177.19
2007	368.30	2,087.18	102.73	144.31	185.75	166.43
2008	372.80	2,151.35	102.92	146.77	180.11	165.03
2004-2008 Average	375.76	2,069.72	103.80	147.55	184.81	169.66
Prob. of a Cash Flow Deficit (%)						
2003	1	1	1	1	1	1
2004	22	30	44	45	34	57
2005	23	25	45	46	18	49
2006	25	25	49	47	26	54
2007	28	30	47	50	28	59
2008	29	28	60	52	42	56
Ending Cash Reserves ($1000)						
2001	202.02	813.86	-8.69	-113.79	89.03	-163.40
2002	366.13	1,397.79	2.10	-97.66	261.14	-263.24
2003	614.64	2,542.14	80.69	49.88	318.78	37.15
2004	727.40	3,045.59	86.04	88.84	343.17	20.12
2005	867.34	3,690.75	96.59	125.03	405.58	67.50
2006	982.98	4,358.67	100.50	153.84	450.60	92.85
2007	1,092.61	4,976.46	105.32	171.13	493.35	101.10
2008	1,197.37	5,626.38	96.74	187.80	517.50	118.67
Nominal Net Worth ($1000)						
2001	3,678.34	11,907.42	522.19	1,080.99	1,162.38	708.06
2002	3,870.49	12,596.57	553.65	1,114.22	1,365.13	623.58
2003	4,154.99	13,858.24	646.33	1,285.78	1,454.44	956.54
2004	4,268.91	14,483.91	654.43	1,310.14	1,474.08	925.30
2005	4,418.97	15,260.39	682.05	1,356.25	1,541.49	970.82
2006	4,562.34	16,072.19	697.49	1,385.46	1,606.61	1,006.63
2007	4,697.35	16,846.29	725.60	1,416.53	1,670.36	1,031.83
2008	4,835.74	17,664.30	743.66	1,453.16	1,714.17	1,076.10
Prob. of Decreasing Real Net Worth Over 2001-2008 (%)	1	2	4	12	1	22

Table 8. Implications of the January 2004 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Cotton.

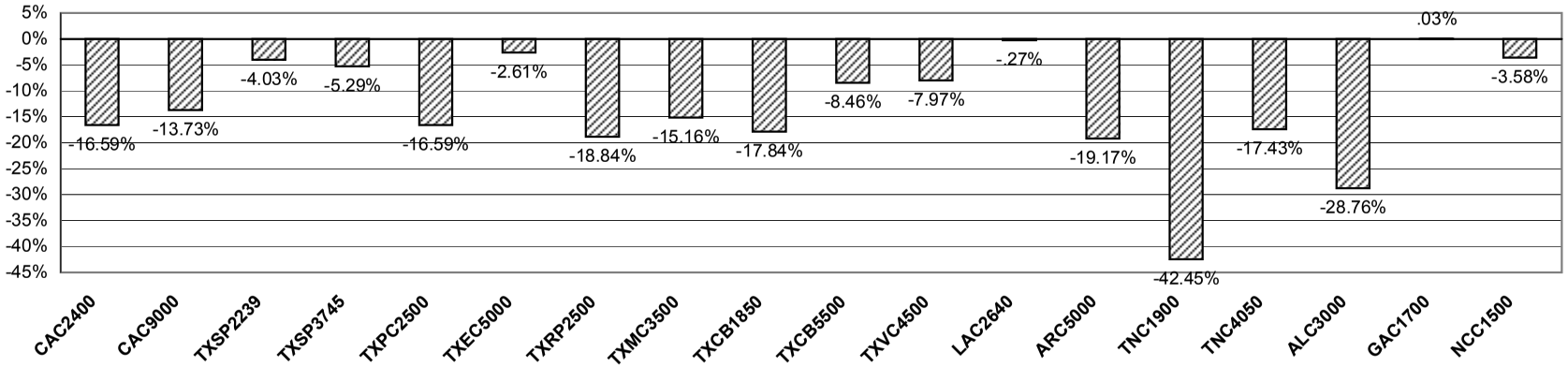
	TXRP2500	TXMC3500	TXCB1850	TXCB5500	TXVC4500	LAC2640
Overall Financial Position 2004-2008 Ranking	Marginal	Marginal	Marginal	Marginal	Marginal	Poor
Change Real Net Worth (%) 2004-2008 Average	6.34	10.44	6.01	4.02	6.56	-0.40
NIA to Maintain Real Net Worth (%/Rec.)	-14.55	-12.77	-13.07	-4.33	-11.96	0.76
NIA for Zero Ending Cash Balance (%/Rec.)	-18.84	-15.16	-17.84	-8.46	-7.97	-0.27
Govt Payments/Receipts (%) 2004-2008 Average	23.90	17.01	17.29	20.88	18.86	16.76
Cost to Receipts Ratio (%) 2004-2008 Average	71.44	80.34	77.59	88.08	80.96	91.93
Total Cash Receipts ($1000)						
2001	225.59	1,059.69	493.68	1,347.44	863.16	930.48
2002	253.88	1,057.49	542.35	1,281.98	890.69	945.58
2003	294.59	1,373.32	590.47	1,431.36	1,428.55	1,018.89
2004	249.61	1,296.66	557.09	1,304.03	1,358.38	951.79
2005	259.01	1,326.06	565.26	1,339.83	1,372.86	972.70
2006	259.92	1,326.75	567.04	1,340.37	1,370.86	977.70
2007	263.52	1,323.35	566.24	1,346.67	1,381.28	979.11
2008	266.16	1,357.24	581.24	1,355.78	1,402.38	991.94
2004-2008 Average	259.64	1,326.01	567.37	1,337.34	1,377.15	974.65
Government Payments ($1000)						
2001	105.04	402.90	202.26	530.33	334.16	382.95
2002	73.80	292.88	141.34	398.94	266.27	251.07
2003	99.49	270.34	114.36	351.02	316.84	179.89
2004	31.39	100.51	43.06	129.40	126.00	79.67
2005	57.66	214.08	91.59	271.28	245.84	155.87
2006	67.93	255.64	108.26	320.10	281.68	189.84
2007	69.83	259.95	110.20	326.42	292.99	193.51
2008	70.90	267.36	113.21	335.90	303.29	198.08
2004-2008 Average	59.54	219.51	93.26	276.62	249.96	163.40
Net Cash Farm Income ($1000)						
2001	57.43	113.10	102.61	277.73	-13.62	124.88
2002	81.40	138.64	146.26	188.40	12.44	116.07
2003	121.42	346.49	176.81	279.18	344.63	151.49
2004	78.97	292.39	145.22	177.33	310.37	91.14
2005	87.42	306.79	153.65	210.36	325.91	104.53
2006	88.40	307.21	157.38	198.98	319.05	103.11
2007	87.89	298.98	156.15	193.68	317.27	93.84
2008	90.32	320.80	166.43	176.93	324.32	64.43
2004-2008 Average	86.60	305.24	155.77	191.46	319.39	91.41
Prob. of a Cash Flow Deficit (%)						
2003	1	1	1	1	1	1
2004	33	37	43	45	40	54
2005	31	38	40	39	45	53
2006	28	38	42	50	52	56
2007	38	38	44	48	45	51
2008	29	31	40	55	46	81
Ending Cash Reserves ($1000)						
2001	1.02	-0.15	47.95	154.93	-106.08	65.90
2002	22.20	38.06	109.84	213.98	-185.18	36.87
2003	62.62	192.99	173.40	346.67	21.50	65.13
2004	90.81	302.23	208.63	376.35	97.50	58.02
2005	121.55	387.16	255.45	436.42	196.16	69.75
2006	150.35	491.38	298.90	457.70	231.48	70.50
2007	172.77	594.12	346.06	488.87	308.91	94.45
2008	201.34	722.59	398.68	481.30	393.23	11.55
Nominal Net Worth ($1000)						
2001	306.95	664.93	639.51	894.94	1,330.70	774.95
2002	330.91	707.94	748.70	962.02	1,271.08	779.35
2003	384.04	878.87	825.12	1,117.73	1,515.07	837.24
2004	407.48	977.40	856.62	1,136.52	1,614.34	826.43
2005	437.67	1,079.06	915.88	1,212.58	1,740.41	837.51
2006	469.50	1,200.71	977.67	1,256.61	1,853.42	843.60
2007	501.78	1,328.71	1,046.28	1,329.86	1,997.49	887.44
2008	538.80	1,478.05	1,116.39	1,362.25	2,140.96	816.58
Prob. of Decreasing Real Net Worth Over 2001-2008 (%)	2	1	1	5	6	34

Table 9. Implications of the January 2004 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Cotton.

	ARC5000	TNC1900	TNC4050	ALC3000	GAC1700	NCC1500
Overall Financial Position 2004-2008 Ranking	Good	Good	Marginal	Marginal	Marginal	Poor
Change Real Net Worth (%) 2004-2008 Average	5.31	6.43	3.81	7.51	1.97	-0.10
NIA to Maintain Real Net Worth (%/Rec.)	-15.76	-31.75	-11.56	-17.83	-2.39	-0.72
NIA for Zero Ending Cash Balance (%/Rec.)	-19.17	-42.45	-17.43	-28.76	0.03	-3.58
Govt Payments/Receipts (%) 2004-2008 Average	24.89	16.42	15.65	18.52	12.77	15.95
Cost to Receipts Ratio (%) 2004-2008 Average	73.72	59.27	80.31	72.52	87.75	86.14
Total Cash Receipts ($1000)						
2001	2,421.99	773.05	1,543.68	1,303.23	1,197.50	834.04
2002	2,511.70	699.44	1,664.30	1,316.94	1,127.37	540.17
2003	2,967.92	844.94	2,062.89	1,638.31	1,358.87	863.53
2004	2,762.88	722.12	1,810.33	1,354.54	1,152.84	772.16
2005	2,675.31	727.28	1,811.41	1,391.60	1,199.65	764.79
2006	2,641.02	725.15	1,804.64	1,398.23	1,203.85	761.81
2007	2,653.55	728.07	1,804.90	1,399.97	1,211.80	768.24
2008	2,684.55	739.08	1,829.92	1,418.20	1,231.77	776.93
2004-2008 Average	2,683.46	728.34	1,812.24	1,392.51	1,199.98	768.79
Government Payments ($1000)						
2001	1,221.43	174.98	374.13	567.08	285.35	346.58
2002	897.99	160.54	383.87	360.53	224.46	137.08
2003	747.22	199.27	495.73	462.92	294.14	215.16
2004	470.99	58.35	122.25	124.81	58.61	51.87
2005	665.67	113.88	260.66	245.71	149.64	115.92
2006	746.19	137.60	316.19	292.01	182.59	143.60
2007	733.30	140.25	324.44	298.41	188.18	146.68
2008	724.10	144.14	337.52	307.07	196.62	151.77
2004-2008 Average	668.05	118.85	272.21	253.60	155.13	121.97
Net Cash Farm Income ($1000)						
2001	535.31	353.03	236.57	388.08	122.21	215.22
2002	618.26	289.19	363.20	394.90	133.88	-31.85
2003	972.03	408.75	687.82	674.67	308.46	222.84
2004	814.60	309.50	470.58	410.99	119.47	143.60
2005	731.42	306.87	467.16	440.13	160.01	129.17
2006	693.12	305.88	461.88	435.95	159.76	119.11
2007	678.87	299.44	449.70	422.70	155.00	105.22
2008	693.66	309.75	465.01	426.59	162.32	103.67
2004-2008 Average	722.33	306.29	462.87	427.27	151.31	120.15
Prob. of a Cash Flow Deficit (%)						
2003	1	1	1	1	1	1
2004	3	1	26	28	99	34
2005	9	8	29	20	78	51
2006	12	3	30	26	68	55
2007	24	7	32	32	65	74
2008	22	8	32	37	61	70
Ending Cash Reserves ($1000)						
2001	274.40	169.15	79.82	200.82	12.82	145.77
2002	515.94	267.80	236.08	366.75	16.69	23.12
2003	860.61	445.10	548.84	684.16	105.56	170.30
2004	1,144.62	579.32	695.54	837.22	26.23	217.62
2005	1,345.40	686.44	822.95	1,038.02	-10.49	224.01
2006	1,516.62	813.73	958.82	1,218.92	-16.02	219.85
2007	1,618.25	932.68	1,073.99	1,365.04	-13.83	158.15
2008	1,749.55	1,050.51	1,204.64	1,512.24	-1.04	108.60
Nominal Net Worth ($1000)						
2001	2,765.33	1,311.91	2,707.81	1,206.23	1,388.32	1,439.43
2002	3,069.03	1,442.73	2,911.91	1,392.06	1,413.85	1,323.15
2003	3,509.90	1,653.40	3,294.94	1,742.36	1,533.05	1,482.93
2004	3,827.89	1,799.71	3,436.79	1,879.98	1,500.05	1,519.26
2005	4,096.29	1,940.06	3,578.32	2,064.69	1,526.30	1,536.99
2006	4,368.17	2,084.28	3,762.34	2,251.52	1,606.19	1,542.95
2007	4,589.09	2,228.65	3,917.47	2,415.90	1,618.84	1,519.23
2008	4,865.91	2,387.92	4,101.60	2,587.47	1,654.92	1,518.19
Prob. of Decreasing Real Net Worth Over 2001-2008 (%)	1	1	3	1	3	16

Figure 15. Cotton Farms

Minimum Annual Percentage Change in Receipts, 2004-2008, Needed to Have a Zero Ending Cash Balance in 2008



Economic and Financial Position Over the Period, 2004-2008, for all Cotton Farms

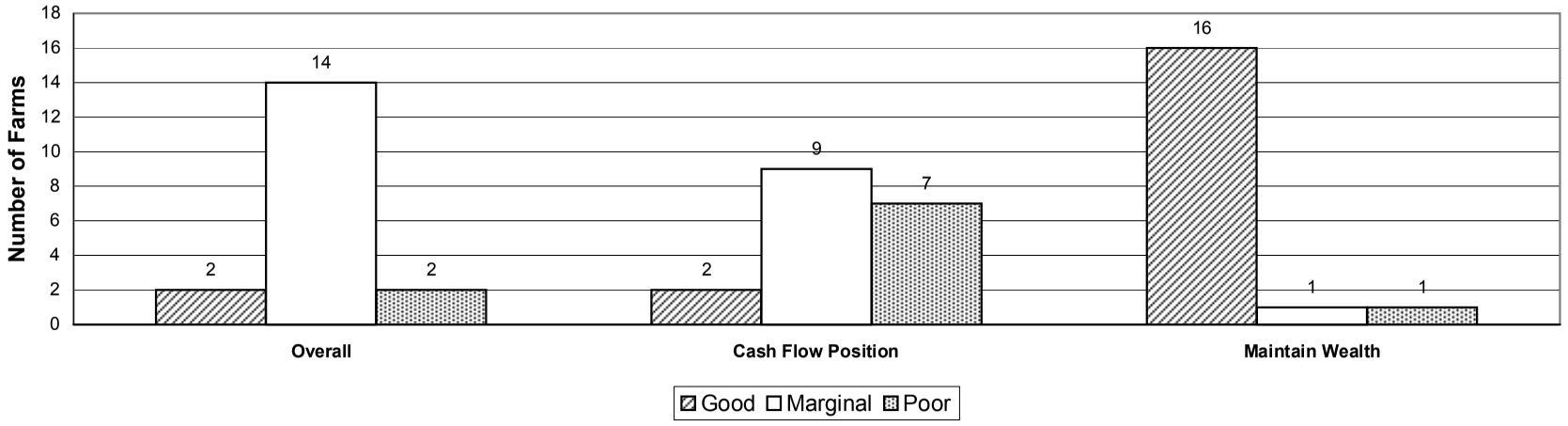


Figure 16. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Cotton Farms

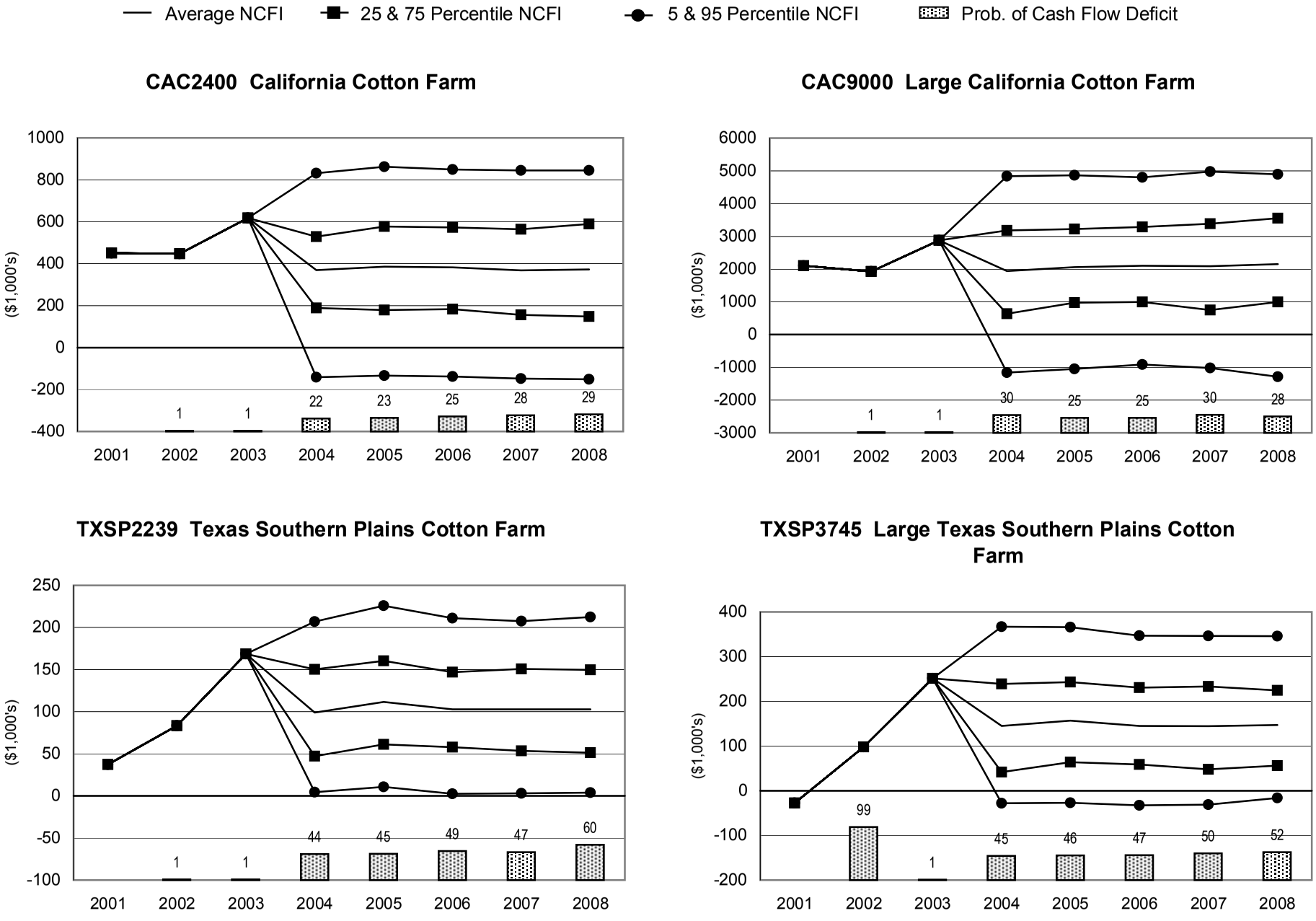


Figure 17. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Cotton Farms

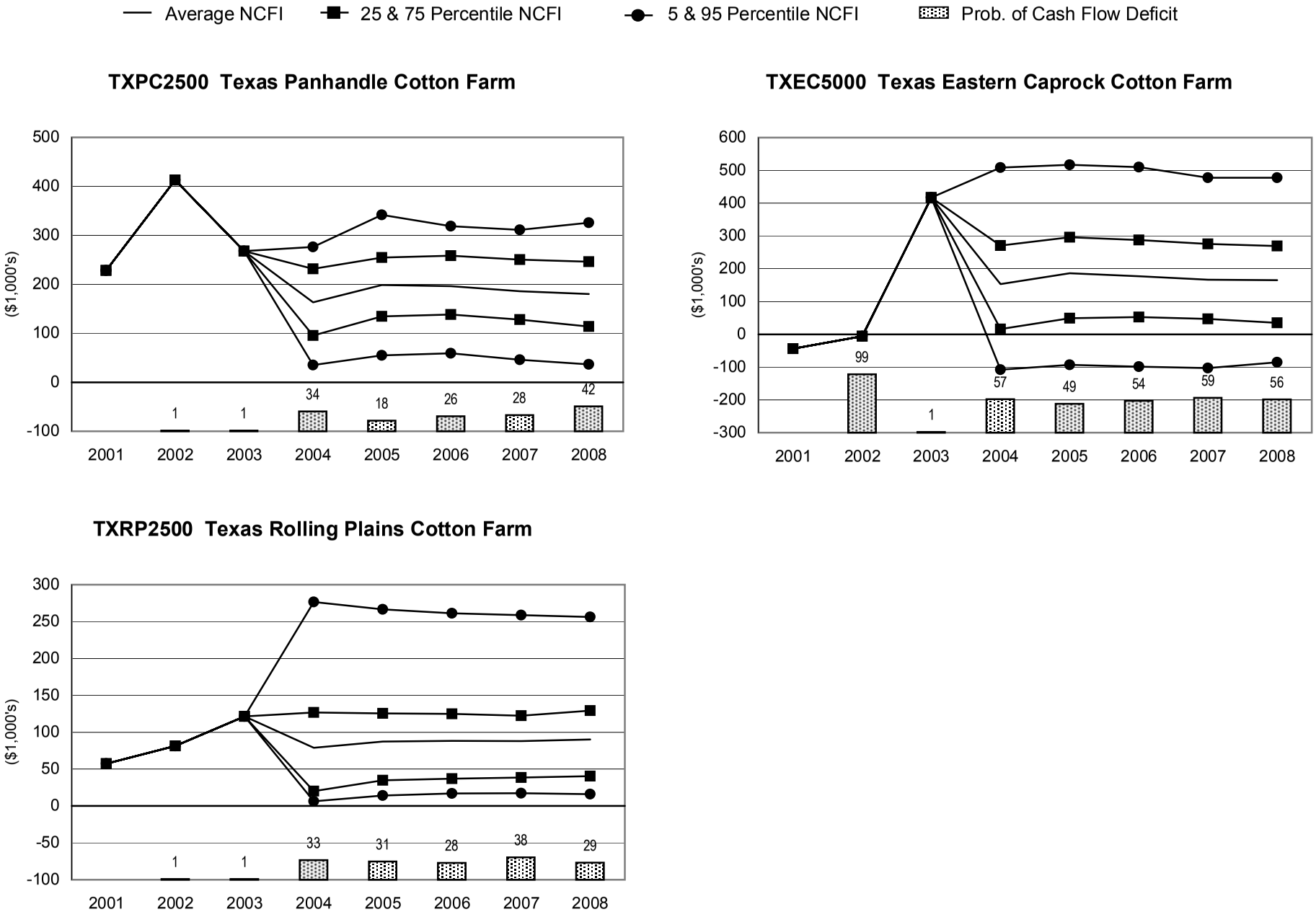


Figure 18. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Cotton Farms

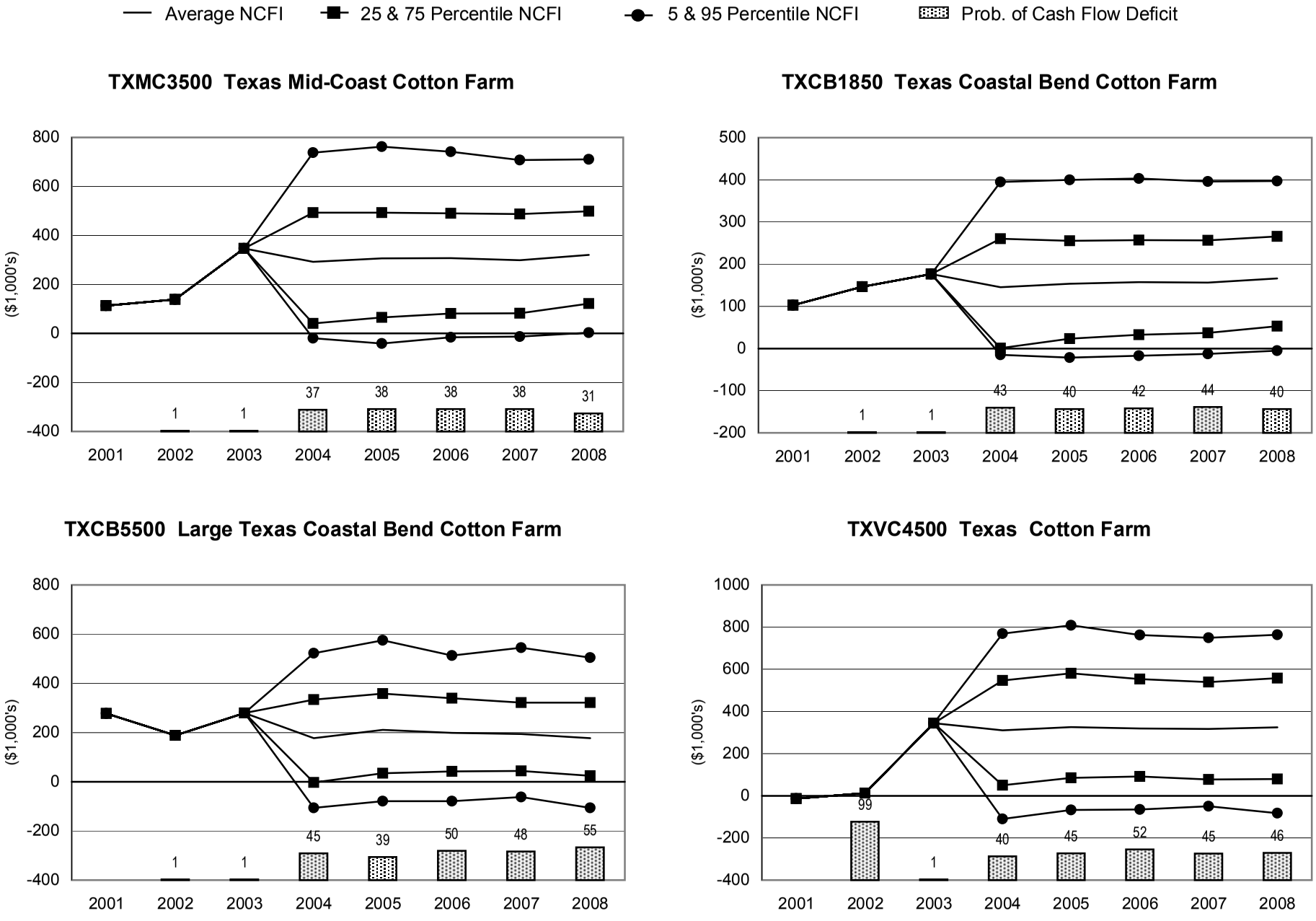


Figure 19. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Cotton Farms

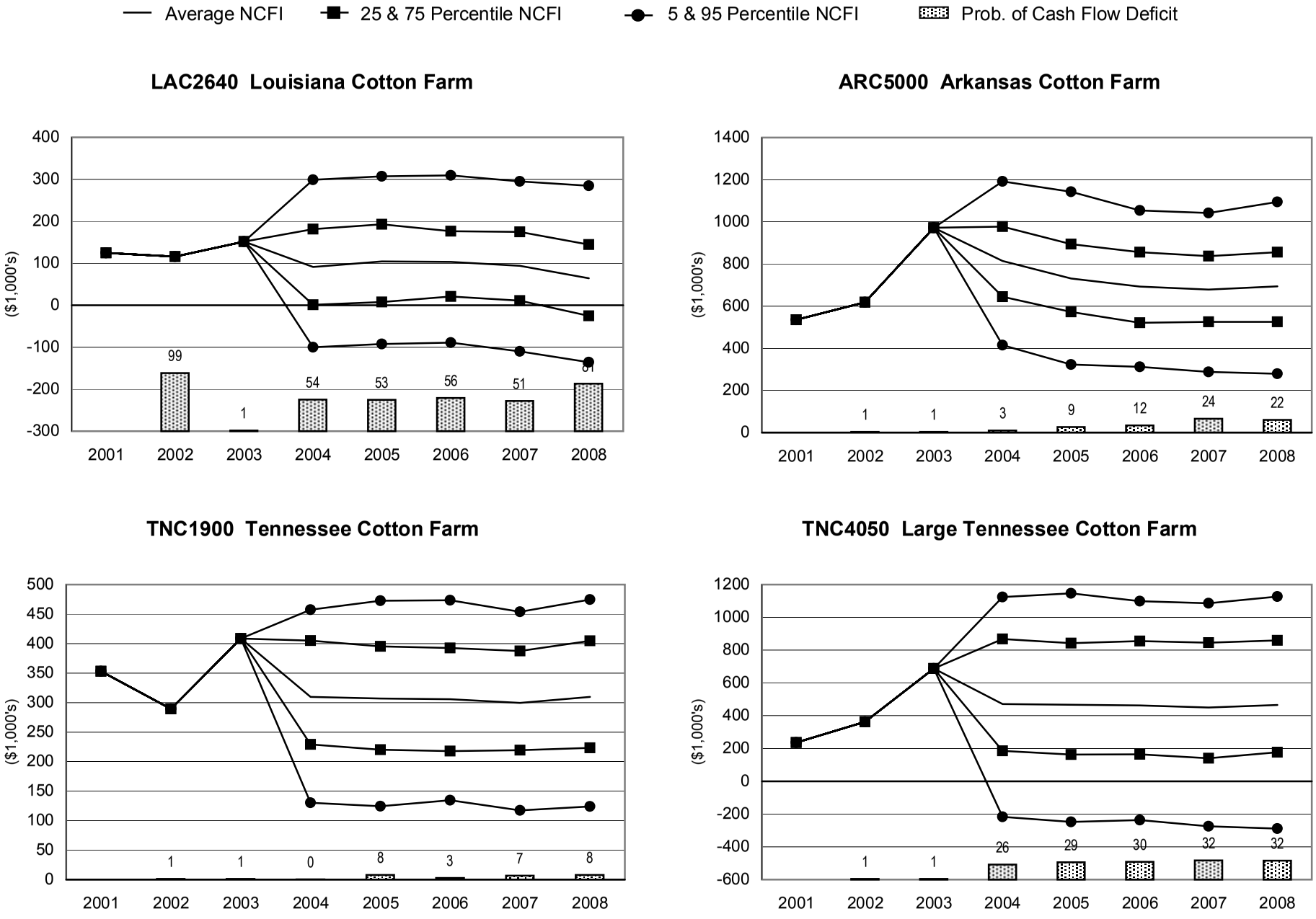


Figure 20. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Cotton Farms

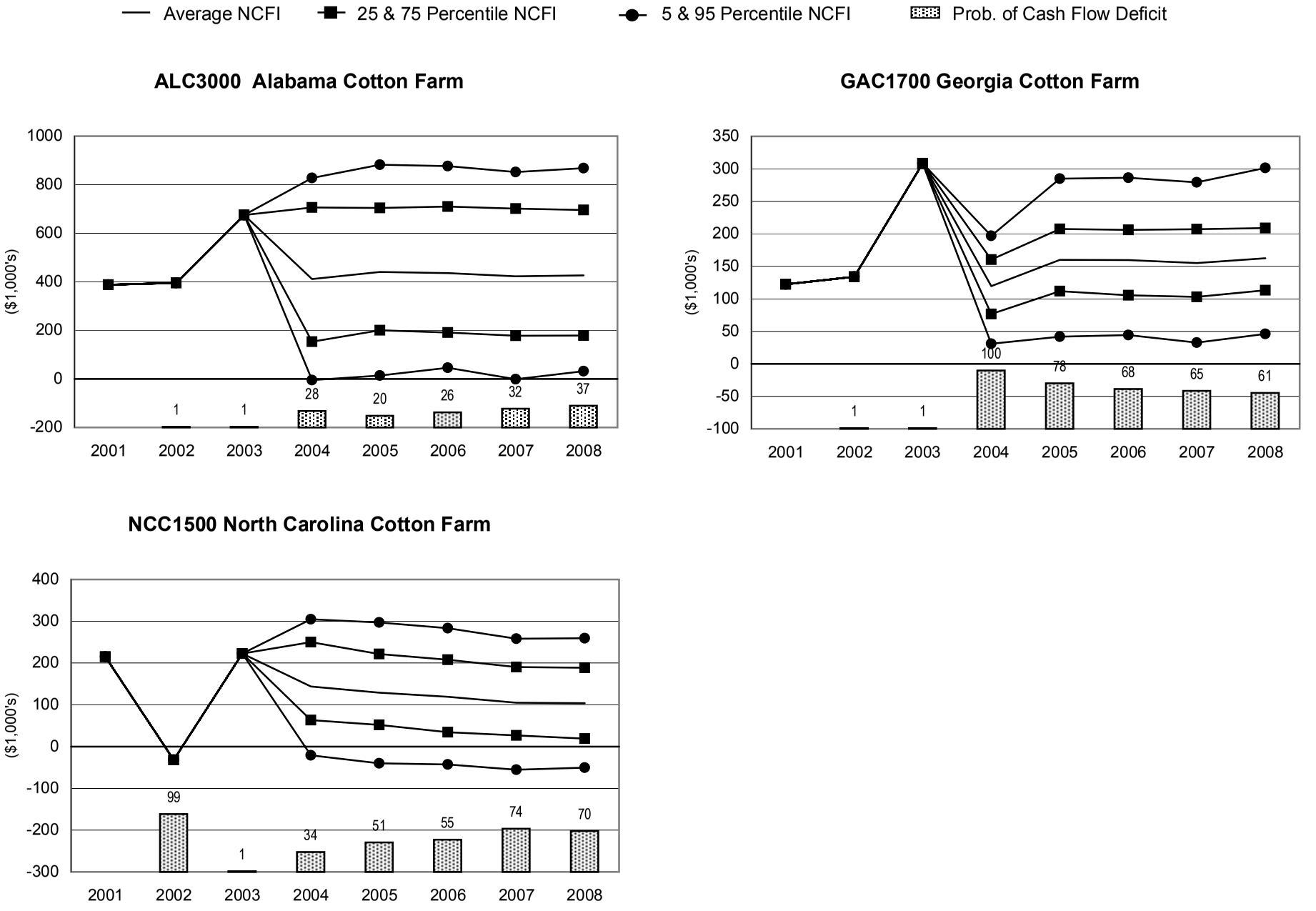
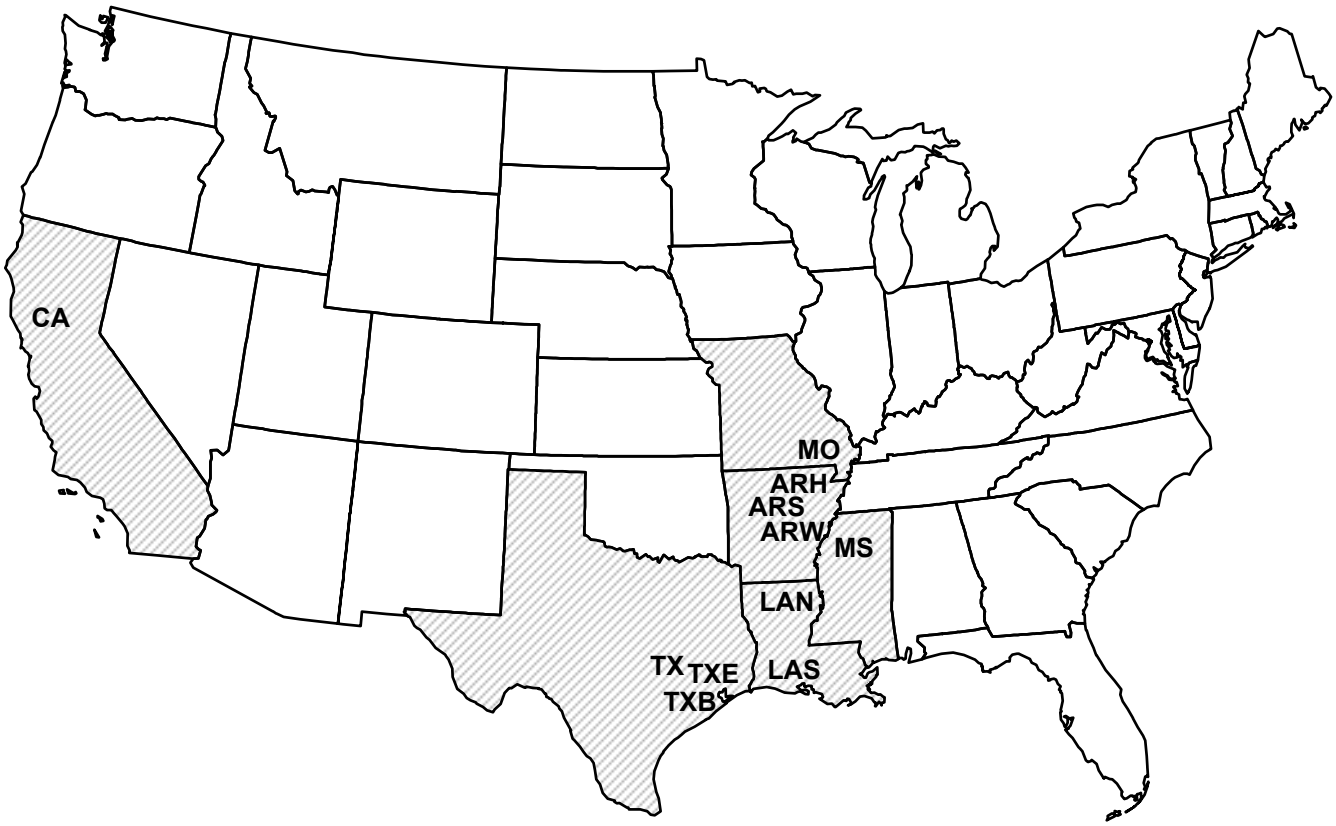


FIGURE 21. REPRESENTATIVE FARMS PRODUCING RICE



Rice Farm Impacts

Rice prices are expected to drop significantly from $7.21/cwt. in 2003 to 6.12/cwt. in 2004 before dropping to the projected period low of $5.67/cwt. in 2005. Prices then hold between $5.81/cwt. and $6.20/cwt. throughout the 2006 to 2008 projection period. Three of the 16 rice farms are projected to be in good overall financial condition with 5 in moderate and 8 in poor condition. Slightly more than one-half of the rice farms are expected to face severe cash flow problems and 6 of 16 have high probabilities of real equity losses.

California: The California rice farms plant only rice. All four receive an average of over 46 percent of their total receipts in government payments over the 2004-2008 period. For the CAR424 farm, labor costs are relatively low ($47/acre). The larger farm (CAR2365) enjoys some economies of size as its cost-to-receipts ratio is just over 3 percent lower than the smaller farm. Of the California farms, CAR2365 has the highest probability of a positive cash flow by 2008. CABR2365 plants 1000 acres of rice, of which 23 percent of those acres are owned, so land debt may jeopardize cash flow given land values are in excess of $3300/acre. CACR1420 plants 1278 acres of rice. This farm is extremely inefficient with a cost-to-receipts ratio exceeding 115 percent.

Texas: All four Texas representative rice farms receive over 40 percent of their total receipts in government payments over the 2004-2008 period. The TXR1553 farm expects slightly lower yields than the larger Eagle Lake rice farm (TXR3774). The farm is significantly less efficient than the large farm, with a cost-to-receipts ratio over 10 percentage points higher. TXR3774 owns no land, so maintenance of real net worth is achieved by building cash reserves and having no long-term debt. TXBR1650 has the highest rice yields of the four representative Texas rice farms. The TXER3200 farm is the only representative Texas rice farm that grows other crops in addition to rice, and it share leases 90 percent of it land.

Louisiana: LASR1200 owns just over 4 percent of total planted acres. The farm plants over half (55 percent) of its land to rice and is more efficient than the Northern Louisiana representative rice farm (LANR2500) with a cost-to-receipts ratio approximately 5 percentage points lower. The LANR2500 farm owns 50 percent of its planted acres. It plants a lower percentage (40 percent) of its land to rice than the Southern Louisiana farm. Cash requirements for servicing long-term debt obligations jeopardize its liquidity position.

Missouri: The MOER4500 farm is the low-cost leader of all representative rice farms in the set as measured by the cost-to-receipts ratio. It owns 35 percent of its cropland, so maintenance of real net worth is not a problem given favorable inflation rates in the Baseline. As compared to the other Missouri rice farm, MOWR4000 must pay higher irrigation fuel costs since they are farther from the Mississippi River and the water table is lower. Higher costs for irrigation increases the chances of cash flow deficits on the MOWR4000 farm.

Arkansas: Economies of size are evident as ARSR3640 has a cost-to-receipts ratio that is over 10 percentage points lower than the other two Arkansas farms and plants the most total acres of rice. ARSR3640 is the only Arkansas representative rice farm that is in good overall financial condition. The other two farms grow non-irrigated wheat and dryland and irrigated soybeans. ARWR1200 grows 600 acres of rice, while ARHR3000 grows 1500 acres of rice and has the highest cost-to-receipts ratio of the Arkansas rice farms.

Mississippi: The MSR4735 farm receives the lowest portion of its receipts in the form of government payments (27.4 percent) due to the farm not being solely dependent on rice. The farm cash leases all acreage and owns no land, so it does not benefit from appreciation of cropland values.

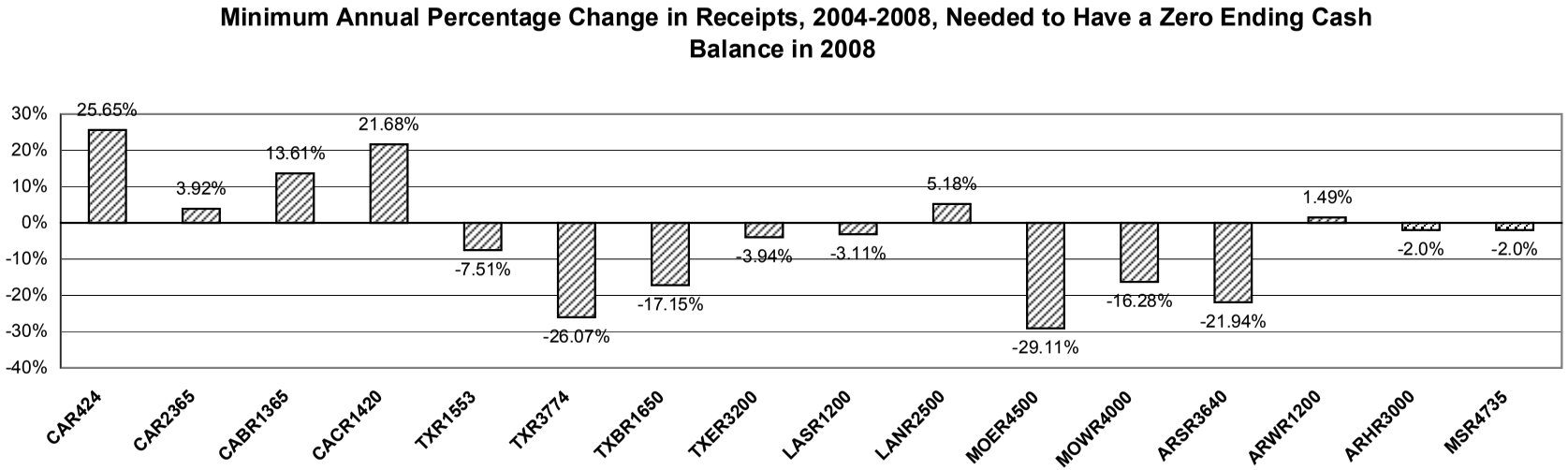
Table 10. Implications of the January 2004 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Rice.

	CAR424	CAR2365	CABR1365	CACR1420	TXR1553	TXR3774	TXBR1650	TXER3200
Overall Financial Position 2004-2008 Ranking	Poor	Poor	Poor	Poor	Marginal	Good	Marginal	Marginal
Change Real Net Worth (%) 2004-2008 Average	-5.99	-1.14	-3.84	-13.33	1.95	9.70	2.15	2.18
NIA to Maintain Real Net Worth (%/Rec.)	14.08	2.33	6.36	16.73	-4.75	-19.75	-7.12	-3.61
NIA for Zero Ending Cash Balance (%/Rec.)	25.65	3.92	13.61	21.68	-7.51	-26.07	-17.15	-3.94
Govt Payments/Receipts (%) 2004-2008 Average	46.23	46.22	46.85	46.98	41.42	40.29	41.75	41.58
Cost to Receipts Ratio (%) 2004-2008 Average	99.90	96.75	97.73	115.43	81.11	70.48	79.64	89.89
Total Cash Receipts ($1000)								
2001	318.72	1,866.50	777.12	1,027.74	446.70	1,124.65	593.55	1,127.03
2002	297.32	1,728.84	724.38	958.29	418.34	1,060.75	551.92	1,063.32
2003	350.70	2,047.10	863.56	1,150.24	488.58	1,276.63	654.46	1,272.07
2004	336.19	1,961.65	828.66	1,102.23	462.41	1,205.67	621.07	1,197.07
2005	320.90	1,872.29	789.76	1,049.96	440.28	1,146.56	589.10	1,138.35
2006	315.23	1,839.15	775.39	1,030.67	430.30	1,119.85	575.80	1,116.41
2007	315.75	1,842.17	776.65	1,032.59	430.46	1,120.23	575.82	1,117.67
2008	319.02	1,861.23	785.12	1,043.96	434.26	1,130.30	581.42	1,123.75
2004-2008 Average	321.42	1,875.30	791.11	1,051.88	439.54	1,144.52	588.64	1,138.65
Government Payments ($1000)								
2001	202.28	1,180.23	499.86	663.79	264.88	644.83	357.40	657.07
2002	179.83	1,044.31	442.94	586.17	231.73	568.11	309.17	579.11
2003	152.00	886.66	377.25	504.08	196.62	500.90	266.31	514.92
2004	138.47	806.96	344.72	459.42	171.69	433.26	232.66	441.15
2005	151.41	883.06	376.90	502.48	186.82	474.28	252.39	485.73
2006	155.99	909.92	388.48	517.52	191.02	485.70	258.81	501.83
2007	149.18	870.01	371.54	494.87	182.36	462.36	246.83	478.69
2008	140.90	821.36	350.62	467.11	171.24	432.32	231.70	448.45
2004-2008 Average	147.19	858.26	366.45	488.28	180.63	457.58	244.48	471.17
Net Cash Farm Income ($1000)								
2001	49.79	229.90	99.29	-6.51	118.15	364.81	154.65	195.66
2002	21.14	65.04	35.33	-97.68	89.92	288.06	113.62	118.34
2003	55.67	280.43	134.88	23.65	137.20	463.92	188.90	257.57
2004	42.36	233.74	111.61	-10.49	120.57	425.03	172.87	208.27
2005	20.88	143.87	63.66	-79.00	98.22	368.12	134.70	152.05
2006	7.24	96.11	34.80	-121.12	86.53	350.49	122.52	125.96
2007	-3.22	73.82	21.85	-159.87	80.17	333.30	110.80	111.02
2008	-10.46	58.72	3.93	-197.79	79.62	336.79	113.33	102.44
2004-2008 Average	11.36	121.26	47.17	-113.65	93.02	362.75	130.84	139.95
Prob. of a Cash Flow Deficit (%)								
2003	99	1	99	99	1	1	1	1
2004	99	30	99	99	12	3	2	18
2005	99	70	99	99	42	11	5	47
2006	99	84	99	99	38	7	15	46
2007	99	88	99	99	52	13	24	54
2008	99	88	99	99	50	10	40	43
Ending Cash Reserves ($1000)								
2001	-3.56	85.85	0.55	-86.72	30.34	159.02	81.01	64.68
2002	-45.81	-19.37	-95.19	-272.02	30.67	204.91	101.57	53.88
2003	-52.60	39.42	-96.09	-350.12	65.21	387.65	177.09	118.82
2004	-66.39	56.67	-108.22	-393.16	99.88	558.53	264.87	163.76
2005	-114.63	-2.21	-185.04	-511.13	109.89	667.14	315.92	160.63
2006	-178.08	-81.75	-249.52	-673.91	119.86	795.76	353.44	163.77
2007	-246.40	-158.59	-312.50	-890.23	117.08	897.93	375.81	153.82
2008	-320.40	-242.95	-404.03	-1,153.33	115.45	1,026.55	390.40	161.15
Nominal Net Worth ($1000)								
2001	662.38	2,657.03	1,142.93	1,649.02	400.67	688.88	628.72	711.25
2002	631.65	2,584.47	1,075.33	1,473.23	407.67	776.95	652.39	723.39
2003	642.44	2,699.97	1,120.36	1,418.70	453.30	995.41	736.46	832.12
2004	627.95	2,725.77	1,122.72	1,333.45	480.87	1,166.27	797.39	888.47
2005	591.87	2,700.87	1,073.39	1,177.72	494.46	1,298.46	823.55	913.42
2006	549.01	2,672.97	1,054.99	983.51	511.66	1,455.92	849.23	949.35
2007	501.71	2,638.25	1,003.31	741.91	513.89	1,601.01	863.34	967.59
2008	443.97	2,589.29	918.05	465.95	529.25	1,730.69	886.08	991.31
Prob. of Decreasing Real Net Worth Over 2001-2008 (%)	99	36	99	99	6	1	1	8

Table 11. Implications of the January 2004 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Rice.

	LASR1200	LANR2500	MOER4500	MOWR4000	ARSR3640	ARWR1200	ARHR3000	MSR4735
Overall Financial Position 2004-2008 Ranking	Poor	Poor	Good	Marginal	Good	Poor	Marginal	Poor
Change Real Net Worth (%) 2004-2008 Average	-0.06	-0.94	3.67	2.05	2.45	-0.22	0.65	-0.94
NIA to Maintain Real Net Worth (%/Rec.)	-1.57	2.15	-23.04	-13.79	-15.00	0.00	-3.62	-0.73
NIA for Zero Ending Cash Balance (%/Rec.)	-3.11	5.18	-29.10	-16.28	-21.94	1.49	-2.00	-2.00
Govt Payments/Receipts (%) 2004-2008 Average	36.03	30.15	27.58	36.12	35.39	34.72	35.87	27.42
Cost to Receipts Ratio (%) 2004-2008 Average	86.29	91.61	66.73	76.48	70.90	81.08	84.77	88.58
Total Cash Receipts ($1000)								
2001	378.73	1,007.77	1,828.72	1,845.92	1,302.73	535.18	1,287.48	1,687.20
2002	367.98	1,001.05	1,741.86	1,668.95	1,265.74	516.16	1,228.41	1,700.39
2003	444.35	1,197.58	1,809.11	1,920.56	1,508.15	633.33	1,521.03	2,093.82
2004	420.15	1,124.98	1,763.79	1,835.78	1,432.22	602.67	1,449.69	2,020.20
2005	396.35	1,074.39	1,703.23	1,683.93	1,337.63	554.46	1,340.62	1,868.45
2006	390.53	1,059.62	1,686.99	1,649.36	1,314.48	544.35	1,315.90	1,837.88
2007	391.78	1,065.56	1,690.00	1,652.11	1,321.56	547.62	1,323.90	1,849.41
2008	396.61	1,080.20	1,714.95	1,669.58	1,339.07	554.60	1,342.23	1,872.63
2004-2008 Average	399.08	1,080.95	1,711.79	1,698.15	1,348.99	560.74	1,354.47	1,889.72
Government Payments ($1000)								
2001	200.88	484.73	709.99	884.65	689.85	279.49	678.52	788.61
2002	169.48	389.15	672.15	808.90	558.71	223.89	551.21	574.06
2003	153.24	350.43	467.50	631.33	493.85	202.23	501.85	531.23
2004	131.56	275.66	404.48	543.24	424.82	173.87	436.75	426.77
2005	145.97	329.54	470.32	610.46	480.53	195.62	490.31	512.49
2006	153.36	355.55	511.58	650.53	511.46	209.91	524.03	570.35
2007	145.91	341.91	489.73	617.55	489.72	199.60	498.85	545.55
2008	138.22	326.81	463.90	584.74	461.96	189.67	471.47	526.35
2004-2008 Average	143.00	325.90	468.00	601.30	473.70	193.73	484.28	516.30
Net Cash Farm Income ($1000)								
2001	71.06	108.28	762.69	677.90	393.27	116.59	218.18	136.23
2002	58.18	88.48	669.81	495.93	352.49	94.89	152.53	127.60
2003	111.49	230.21	682.94	678.47	538.86	187.33	374.79	447.05
2004	93.96	170.60	655.61	618.49	498.73	164.40	331.12	392.32
2005	64.79	110.16	594.24	473.25	413.52	118.70	221.60	231.06
2006	57.83	86.27	577.66	431.13	396.93	104.00	198.67	185.44
2007	54.70	79.53	574.04	414.47	394.22	96.35	189.87	161.76
2008	52.04	72.58	583.31	414.35	403.72	96.22	179.74	155.40
2004-2008 Average	64.66	103.83	596.97	470.34	421.42	115.93	224.20	225.20
Prob. of a Cash Flow Deficit (%)								
2003	1	1	1	1	1	1	1	1
2004	17	26	4	25	10	10	13	8
2005	56	75	11	36	14	64	62	46
2006	74	91	11	42	16	79	58	60
2007	83	95	11	50	19	84	69	78
2008	61	95	22	48	18	82	74	79
Ending Cash Reserves ($1000)								
2001	29.38	12.88	356.17	306.54	140.96	13.83	76.88	-4.62
2002	39.73	-29.68	594.69	467.12	192.95	-14.09	38.30	-59.34
2003	73.74	10.24	809.25	682.92	360.42	34.42	174.34	173.58
2004	95.18	20.89	1,059.38	871.08	544.96	63.86	246.07	364.92
2005	87.51	-23.53	1,232.89	956.79	666.54	52.28	214.31	366.47
2006	73.70	-85.69	1,404.64	999.63	772.77	27.70	192.66	336.63
2007	54.37	-149.69	1,581.80	1,003.25	860.13	-2.15	146.17	258.89
2008	42.85	-202.53	1,715.48	1,011.48	973.44	-27.69	92.28	174.15
Nominal Net Worth ($1000)								
2001	277.64	1,791.09	4,620.60	4,898.89	3,464.01	1,369.99	2,587.24	1,276.88
2002	291.73	1,773.43	4,950.64	5,158.12	3,566.53	1,363.51	2,593.32	1,249.13
2003	332.28	1,883.07	5,283.37	5,504.41	3,789.83	1,449.17	2,804.34	1,535.17
2004	355.14	1,899.21	5,567.20	5,773.13	3,952.95	1,471.98	2,895.92	1,690.69
2005	351.16	1,873.36	5,809.64	5,951.98	4,065.69	1,467.73	2,907.99	1,685.79
2006	349.75	1,847.15	6,078.29	6,113.93	4,184.59	1,470.06	2,958.74	1,683.39
2007	345.90	1,827.54	6,366.19	6,240.67	4,321.21	1,460.67	2,983.18	1,647.14
2008	357.02	1,819.65	6,615.89	6,391.25	4,456.18	1,462.44	3,003.58	1,619.29
Prob. of Decreasing Real Net Worth Over 2001-2008 (%)	9	36	1	1	1	14	6	10

Figure 22. Rice Farms



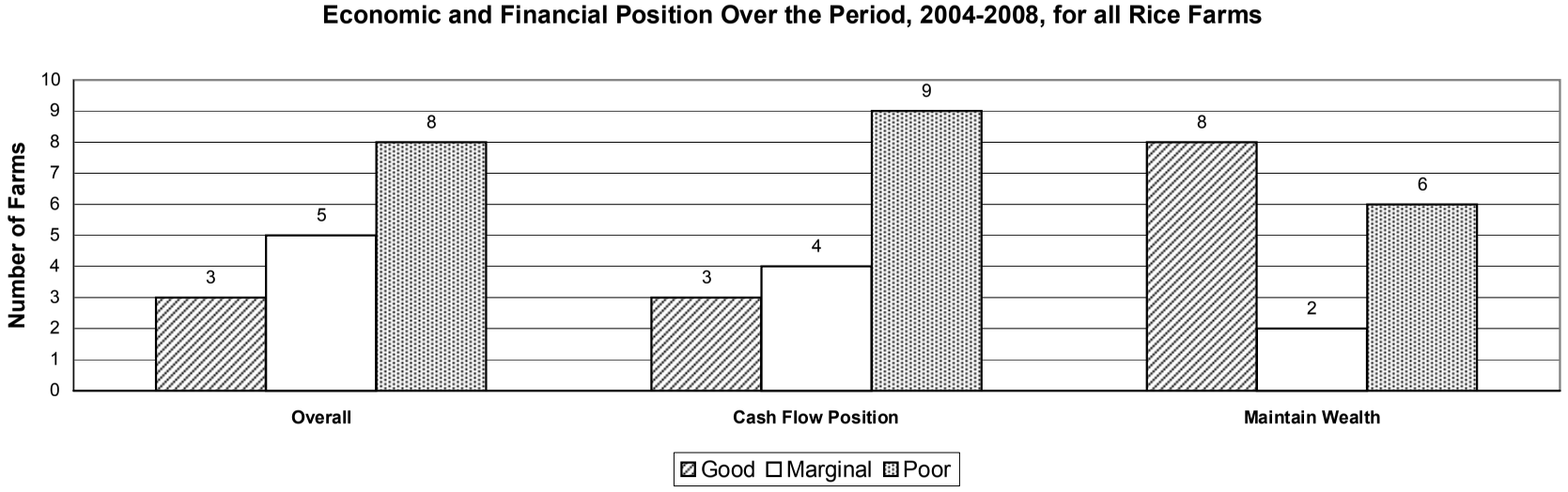


Figure 23. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Rice Farms

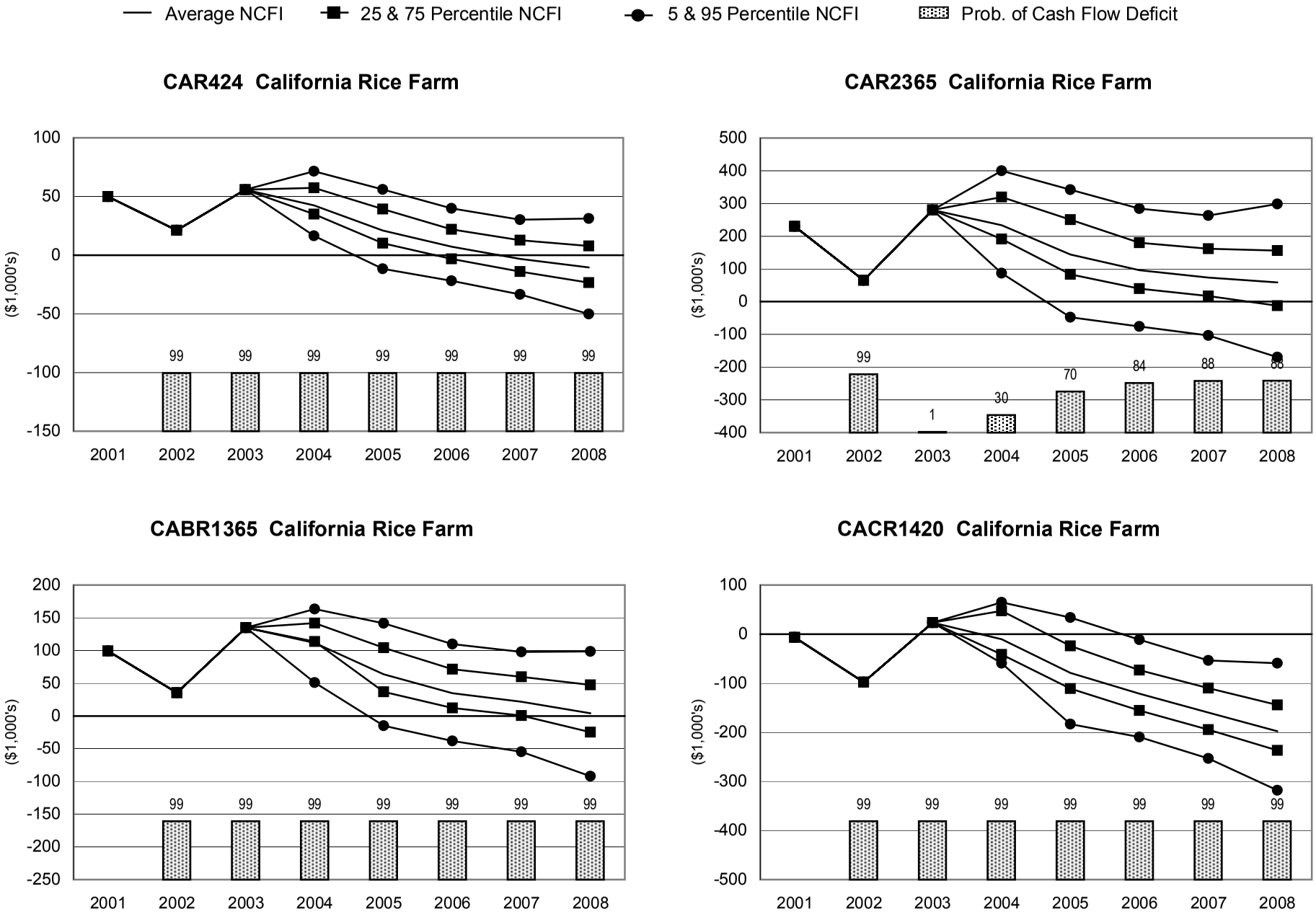


Figure 24. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Rice Farms

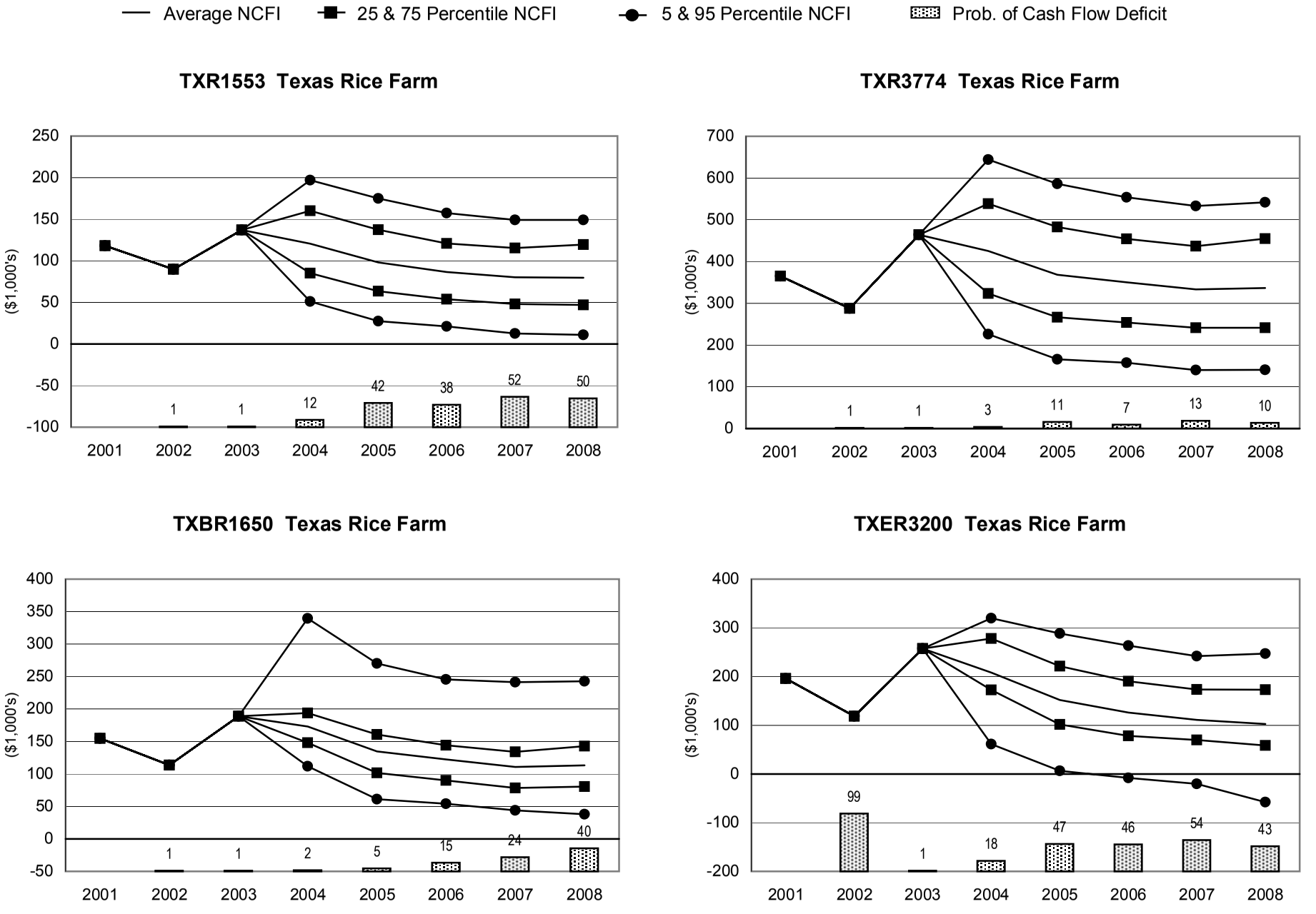


Figure 25. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Rice Farms

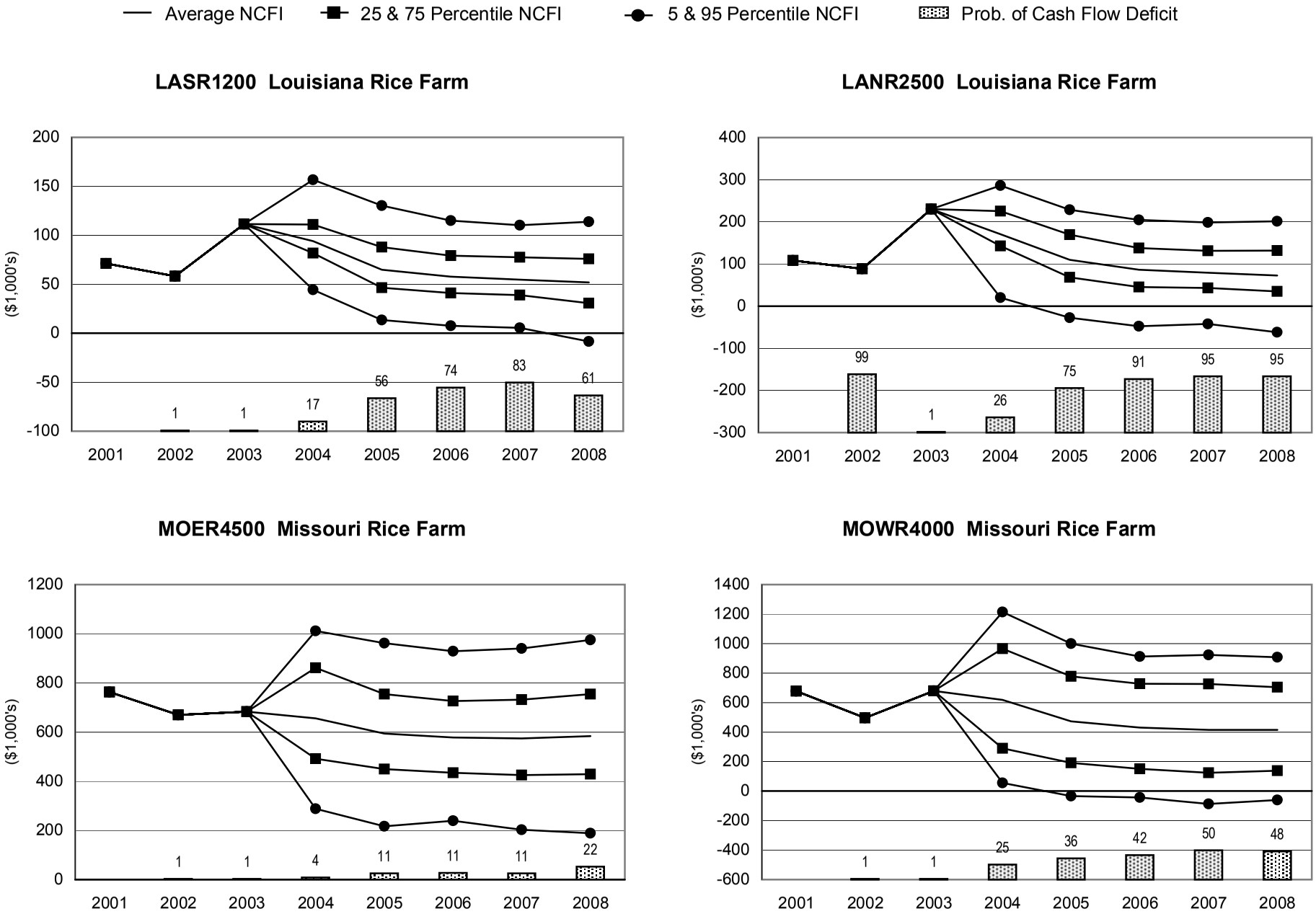


Figure 26. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Rice Farms

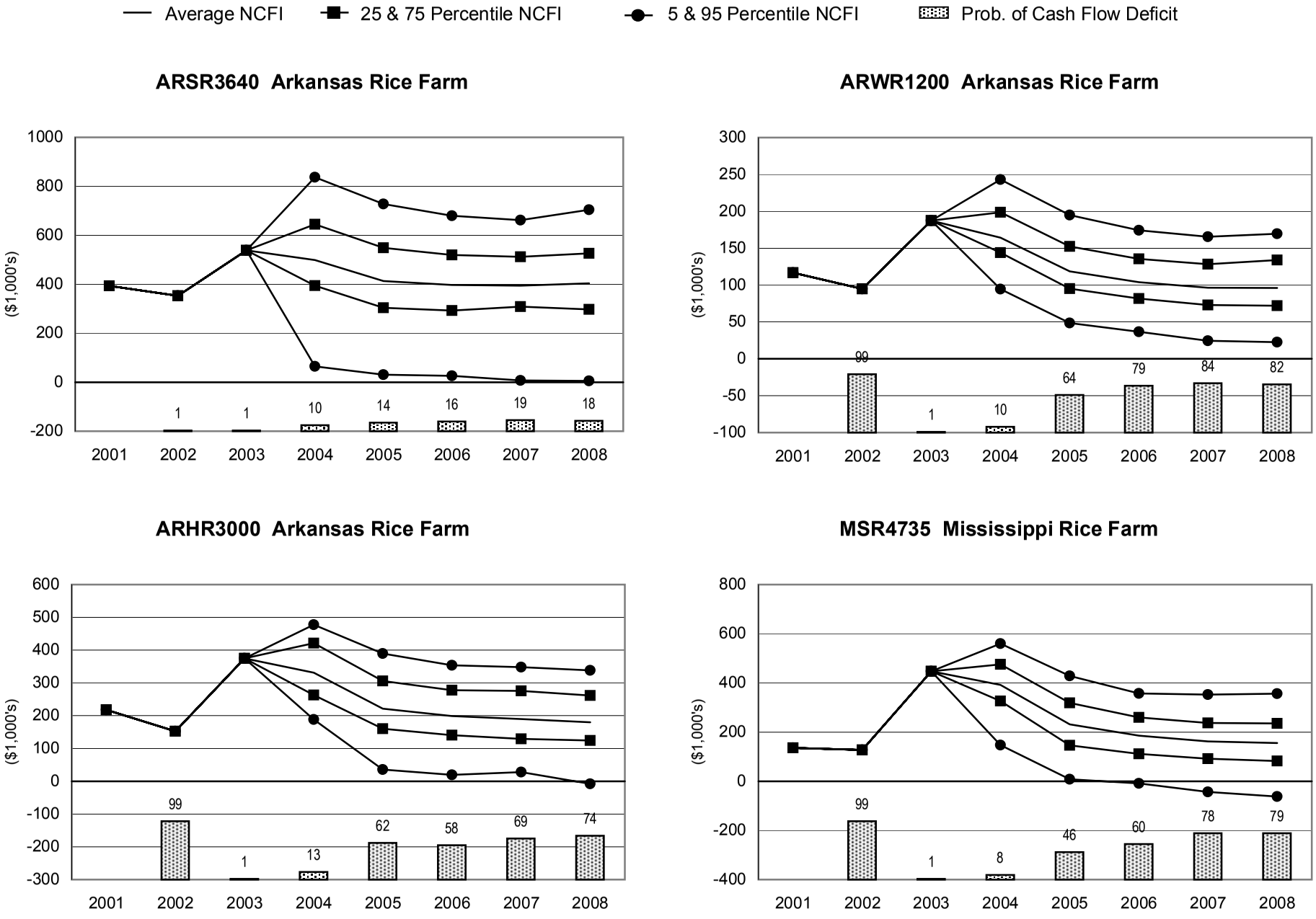


FIGURE 27. REPRESENTATIVE FARMS PRODUCING MILK

Dairy Impacts

The national milk price had a high in 2001 at $15.04 and then dropped to $12.11 in 2002 (Table 2). The national milk price increases each year except 2005 and the 2008 price is $13.05. The corn price is expected to be relatively level from 2002 through 2008. The high price is in 2008 at $2.37 (Table 1). The soybean meal price has a high of $219.58 in 2003 and the falls to $178.01 in 2004 and $168.44 in 2005. The price then increases to $177.75 in 2008. The alfalfa price is $96.50 in 2001 and then falls each year to a low in 1006 of $84.21. Overall, 8 dairies are characterized as good, 7 are moderate and 8 are in poor condition. Eleven of twenty-three dairies will be under cash flow stress with five in poor condition in terms maintaining real net worth.

California: The California dairy receives the lowest milk price of any of the representative dairies. CAD1710 slowly recovers from the sharp price decline in 2002 (the probability of a cash flow deficit declines from 99 percent in 2003 to 26 percent in 2008).

New Mexico: The New Mexico dairy recovers from the low milk price in 2002 as the probably of a cash flow deficit decreases from 99 percent in 2003 to 44 percent in 2008. The alfalfa price in New Mexico was the 2nd lowest, at $96.90 per ton, only behind the large Idaho dairy, at $92.50 per ton.

Washington: The large Washington dairy (WAD850) has the second highest cost producer. They employ 15 people on the dairy compared to only 2 on the moderate Washington dairy (WAD250). The percent of hired labor costs to receipts cost is 20% for the large dairy and 10% for the moderate dairy. Other costs that are proportionally higher for the large dairy compared to the moderate dairy include maintenance, $180,000 for the large and $26,000 for the moderate-size, and environmental compliance, $40,000 for the large and $2,000 for the moderate dairy.

Idaho: The large Idaho dairy (IDD2100) grows 560 acres of silage compared to no cropland acres for the moderate Idaho dairy (IDD750). The moderate dairy has a cost-to-receipts ratio of 96% compared to 80% for the large dairy which is due in part to the lower feed costs on the large dairy.

Wisconsin: Both dairies are in a marginal financial condition, however, there is improvement in their cash flow over the 2003 to 2008 period. Both dairies have large equipment debts in the first three years, which coupled with low milk prices in 2002 lead to cash flow short falls for the period of 2002-2008. The large Wisconsin dairy (WID700) has high costs associated with complying with environmental regulations.

Texas: The dairies in Texas cover the entire range of financial condition (3 marginal, a good and a poor). The moderate Central Texas dairy (TXCD500) is in poor financial condition. The large Central Texas (TXCD500) has the highest feed cost among the Texas dairies and the third highest cost-to-receipts ratio of all dairies across the country. The large East Texas dairy (TXED1000) is the low cost leader among the Texas dairies as measure by the cost-to-receipts ratio.

New York: The Western New York dairies are in poor financial condition. Both Western New York dairies have large equipment debts in the first three years, which coupled with low milk prices in 2002 lead to cash flow shortfalls for the period of 2002-2008. Both Central New York dairies are in good financial condition. The central New York dairies grow a large portion of their feed. The dairies have very little cash flow problems and increase net worth across the 2004-2008 period.

Vermont: The moderate Vermont dairy (VTD134) has the second lowest cost-to-receipts ratio. The large Vermont dairy (VTD350) is in poor financial condition due in part to high labor costs associated with having 6 employees.

Missouri: The Missouri dairies are in marginal financial position due to cash flow problems over the period. The large Missouri dairy (MOD400) improves its ending cash position from a negative $6,000 in 2002 to $261,000 in 2008 by retiring a large portion of its intermediate debt after the first three years. The moderate Missouri dairy (MOD85) has a low cost-to-receipts ratio due to low labor and dairy production costs.

Florida: The two Florida dairies are not in the same region of the state and are in different financial situations. The milk prices received by the South Florida dairy (FLSD1500) are the highest in the country with the price received by the North Florida dairy (FLND500) the second highest. FLSD1500 has high costs associated with complying with environmental regulations, which negate the benefits of the high milk price.

Table 12. Implications of the January 2004 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Milk.

	CAD1710	NMD2000	WAD250	WAD850	IDD750	IDD2100	WID135	WID700
Overall Financial Position								
2004-2008 Ranking	Good	Good	Poor	Poor	Poor	Good	Marginal	Marginal
Change Real Net Worth (%)								
2004-2008 Average	3.03	5.58	1.72	-6.76	0.15	7.12	1.02	3.59
NIA to Maintain Real								
Net Worth (%/Rec.)	-6.13	-5.11	-2.46	8.25	0.78	-16.69	-4.39	-6.99
NIA for Zero Ending								
Cash Balance (%/Rec.)	-3.18	-1.32	6.10	14.88	7.68	-17.51	2.48	-5.97
Govt Payments/Receipts (%)								
2004-2008 Average	0.67	0.21	2.15	1.43	0.53	0.58	3.63	1.20
Cost to Receipts Ratio (%)								
2004-2008 Average	90.31	91.93	91.22	106.91	98.66	80.13	83.54	88.04
Total Cash Receipts ($1000)								
2001	6,003.75	6,991.05	972.49	3,307.96	2,666.95	7,223.66	508.83	2,549.71
2002	4,790.35	5,750.28	798.80	2,710.04	2,303.09	6,176.63	436.82	2,137.82
2003	5,109.06	6,028.63	843.76	2,786.46	2,441.04	6,505.85	494.19	2,308.40
2004	5,175.82	6,099.86	848.83	2,817.86	2,449.72	6,543.16	496.14	2,345.81
2005	5,356.96	6,308.14	878.90	2,932.54	2,528.88	6,783.52	505.97	2,424.61
2006	5,479.15	6,439.26	896.06	2,992.68	2,579.88	6,918.04	517.69	2,472.57
2007	5,594.86	6,573.51	896.96	3,045.03	2,620.11	7,062.83	508.64	2,508.52
2008	5,686.62	6,685.17	912.91	3,097.47	2,664.95	7,186.52	516.34	2,551.48
2004-2008 Average	5,458.68	6,421.19	886.74	2,977.12	2,568.71	6,898.81	508.96	2,460.60
Government Payments ($1000)								
2001	48.43	0.00	11.60	56.12	0.00	56.24	10.41	33.96
2002	46.89	40.00	11.19	50.16	32.32	89.98	10.66	31.23
2003	45.96	31.10	34.65	50.43	31.10	47.10	34.08	40.55
2004	40.08	24.52	28.24	43.43	24.52	41.91	27.64	34.79
2005	42.03	19.58	24.94	48.11	19.58	44.55	24.26	34.56
2006	46.17	20.45	26.60	52.60	20.45	49.90	26.51	38.17
2007	26.81	0.00	6.42	32.97	0.00	30.03	6.05	18.09
2008	25.51	0.00	6.10	31.68	0.00	28.54	5.80	17.30
2004-2008 Average	36.12	12.91	18.46	41.76	12.91	38.99	18.05	28.58
Net Cash Farm Income ($1000)								
2001	1,431.52	1,517.10	245.75	624.44	334.03	2,096.87	112.82	574.80
2002	228.19	133.74	53.09	-101.09	-43.23	1,036.03	39.51	155.60
2003	301.46	254.29	67.75	-186.02	10.97	1,145.01	80.79	244.19
2004	212.71	150.31	36.80	-298.42	-37.20	1,026.58	77.15	220.03
2005	404.67	339.45	69.01	-209.11	15.84	1,236.60	85.58	277.30
2006	636.02	691.85	112.48	-100.97	105.03	1,542.34	100.23	353.37
2007	754.27	842.48	113.93	-81.92	129.75	1,699.20	89.85	380.62
2008	780.98	870.81	111.86	-113.24	133.12	1,764.41	92.11	398.73
2004-2008 Average	557.73	578.98	88.81	-160.73	69.31	1,453.83	88.99	326.01
Prob. of a Cash Flow Deficit (%)								
2003	99	99	99	99	99	1	99	99
2004	99	99	99	99	99	16	99	46
2005	85	83	97	99	99	15	89	45
2006	57	67	94	99	96	9	79	40
2007	36	54	91	99	95	6	79	38
2008	28	44	90	99	93	7	76	35
Ending Cash Reserves ($1000)								
2001	345.99	470.33	50.68	163.81	4.36	652.12	15.39	188.41
2002	-113.83	-109.52	-49.96	-282.72	-302.32	615.32	-58.51	42.60
2003	-439.53	-521.30	-117.70	-742.94	-521.02	671.57	-87.61	-10.47
2004	-442.38	-624.22	-164.26	-1,113.24	-622.40	1,129.84	-75.95	44.80
2005	-309.88	-594.24	-183.59	-1,408.70	-704.01	1,720.64	-63.60	136.06
2006	-46.90	-334.56	-179.84	-1,628.62	-716.42	2,480.06	-47.42	261.93
2007	267.23	-13.95	-178.23	-1,850.03	-737.82	3,283.86	-45.26	388.96
2008	580.62	296.78	-194.93	-2,099.65	-767.55	4,114.19	-41.37	530.39
Nominal Net Worth ($1000)								
2001	7,926.31	5,832.79	1,369.90	3,468.82	2,797.60	7,713.26	1,510.52	3,091.74
2002	7,671.46	4,416.26	1,319.16	3,112.76	2,583.84	7,936.15	1,510.87	3,011.12
2003	7,997.65	4,819.76	1,367.57	2,973.16	2,681.49	8,876.93	1,566.11	3,218.41
2004	8,021.91	4,757.60	1,345.68	2,608.75	2,602.54	9,364.78	1,581.62	3,280.65
2005	8,014.26	4,632.05	1,326.90	2,229.78	2,456.83	9,766.10	1,582.49	3,306.80
2006	8,539.25	5,256.92	1,396.08	2,142.37	2,584.47	10,901.16	1,630.42	3,544.52
2007	8,971.17	5,754.29	1,446.60	1,995.17	2,634.05	11,888.31	1,653.71	3,737.14
2008	9,278.38	6,094.55	1,466.94	1,747.33	2,629.83	12,743.06	1,669.44	3,882.63
Prob. of Decreasing Real Net Worth								
Over 2001-2008 (%)	1	24	15	95	49	1	1	1

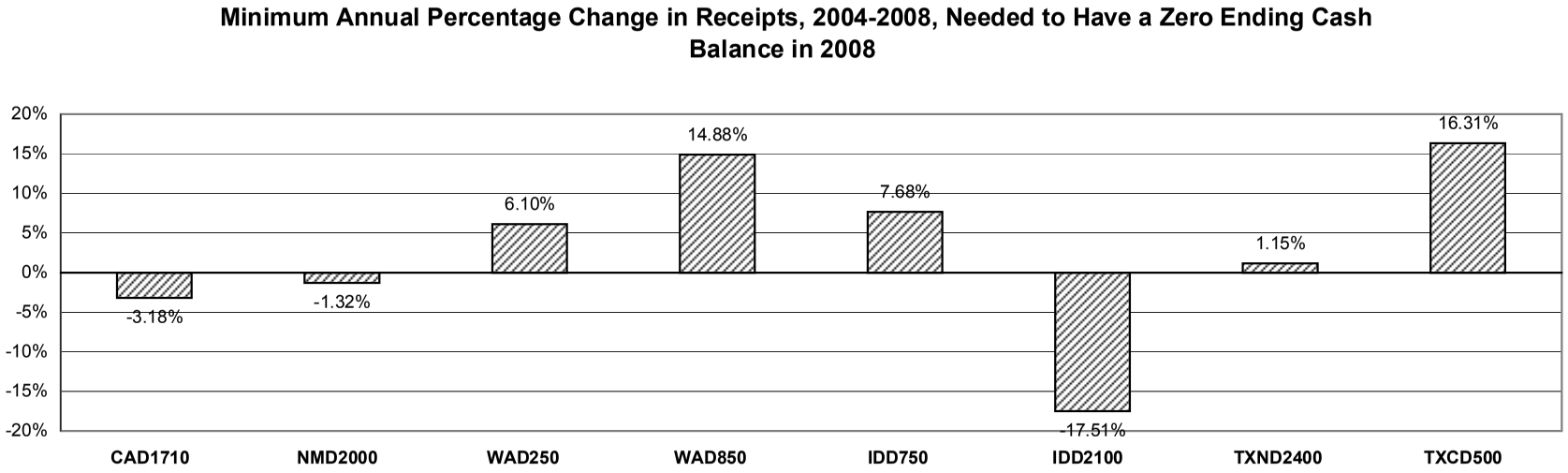
Table 13. Implications of the January 2004 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Milk.

	TXND2400	TXCD500	TXCD1300	TXED550	TXED1000	NYWD800	NYWD1200	NYCD110	NYCD500
Overall Financial Position 2004-2008 Ranking	Marginal	Poor	Marginal	Marginal	Good	Poor	Poor	Good	Good
Change Real Net Worth (%) 2004-2008 Average	2.08	-7.68	4.09	5.16	6.58	-1.29	0.25	7.93	4.04
NIA to Maintain Real Net Worth (%/Rec.)	-1.95	8.30	-5.47	-7.14	-13.25	2.68	0.80	-26.26	-9.58
NIA for Zero Ending Cash Balance (%/Rec.)	1.15	16.31	-4.70	-6.07	-15.14	7.58	4.96	-31.28	-6.29
Govt Payments/Receipts (%) 2004-2008 Average	0.19	0.96	0.30	1.00	0.45	0.97	0.89	1.09	0.81
Cost to Receipts Ratio (%) 2004-2008 Average	95.76	105.23	90.84	86.41	83.15	98.58	96.47	64.16	84.78
Total Cash Receipts ($1000)									
2001	7,733.92	1,500.17	4,853.35	1,448.47	3,246.54	3,060.84	4,539.03	472.66	2,005.81
2002	6,336.50	1,249.52	4,061.33	1,195.42	2,692.66	2,527.78	3,773.81	400.72	1,683.34
2003	6,667.43	1,337.65	4,269.18	1,297.45	2,881.50	2,606.46	3,903.20	410.60	1,735.43
2004	6,753.56	1,349.15	4,321.69	1,290.46	2,874.25	2,642.89	3,957.10	416.14	1,759.58
2005	6,974.41	1,386.49	4,457.39	1,328.70	2,965.25	2,741.11	4,101.44	430.65	1,823.38
2006	7,130.11	1,417.67	4,550.59	1,357.17	3,026.05	2,797.32	4,184.73	439.10	1,858.76
2007	7,283.23	1,430.53	4,636.37	1,368.53	3,075.13	2,864.35	4,283.74	448.98	1,902.06
2008	7,402.23	1,453.72	4,713.55	1,391.43	3,126.13	2,913.02	4,356.20	456.27	1,934.51
2004-2008 Average	7,108.71	1,407.51	4,535.92	1,347.26	3,013.36	2,791.74	4,176.64	438.23	1,855.66
Government Payments ($1000)									
2001	0.00	0.00	0.00	0.00	0.00	68.72	66.74	8.55	26.97
2002	40.00	0.00	0.00	0.00	0.00	73.71	94.32	12.88	42.50
2003	31.10	31.10	31.10	49.30	71.10	19.54	26.82	3.44	10.84
2004	24.52	24.52	24.52	24.52	24.52	21.14	29.02	3.70	11.72
2005	19.58	19.58	19.58	19.58	19.58	26.79	36.84	4.71	14.86
2006	20.45	20.45	20.45	20.45	20.45	29.08	40.00	5.12	16.13
2007	0.00	0.00	0.00	0.00	0.00	29.43	40.49	5.18	16.32
2008	0.00	0.00	0.00	0.00	0.00	28.57	39.29	5.03	15.84
2004-2008 Average	12.91	12.91	12.91	12.91	12.91	27.00	37.13	4.75	14.98
Net Cash Farm Income ($1000)									
2001	1,420.54	169.25	1,038.15	338.03	925.77	615.29	942.29	220.58	578.41
2002	45.37	-79.19	234.88	91.72	404.36	81.91	175.45	145.44	245.61
2003	74.43	-77.47	275.77	156.56	469.09	16.23	109.58	137.26	208.69
2004	26.18	-111.29	237.95	143.89	422.30	-42.69	20.11	132.70	191.13
2005	143.94	-80.92	363.46	174.90	477.25	-4.40	92.58	147.09	247.53
2006	432.20	-35.99	498.66	215.42	564.36	85.45	208.03	164.66	315.46
2007	585.97	-34.63	562.73	223.55	608.26	123.67	272.34	173.51	350.90
2008	607.76	-51.84	574.40	231.91	635.08	121.98	265.61	175.71	355.26
2004-2008 Average	359.21	-62.93	447.44	197.93	541.45	56.80	171.74	158.73	292.06
Prob. of a Cash Flow Deficit (%)									
2003	99	99	99	99	1	99	99	1	99
2004	92	99	48	40	22	99	99	1	18
2005	87	99	45	41	20	99	98	1	29
2006	87	99	34	32	15	99	94	1	20
2007	72	99	30	33	13	99	93	1	21
2008	64	99	28	30	14	97	89	1	20
Ending Cash Reserves ($1000)									
2001	650.84	-14.56	321.29	107.60	336.13	216.55	341.54	80.06	166.55
2002	200.26	-250.19	58.72	-0.55	248.85	-69.18	-16.13	109.68	98.96
2003	-79.77	-470.46	-88.20	-34.32	257.65	-371.15	-413.89	127.29	6.65
2004	-443.61	-611.84	-33.03	2.42	463.23	-510.68	-602.11	173.82	43.26
2005	-770.84	-731.54	100.58	62.12	714.26	-671.08	-749.13	234.58	102.55
2006	-897.60	-812.79	302.80	142.19	1,013.61	-756.43	-805.34	298.03	189.38
2007	-601.83	-899.22	532.40	218.49	1,334.93	-845.94	-850.60	362.47	271.72
2008	-317.25	-1,021.84	759.47	294.64	1,675.00	-935.85	-873.42	433.31	360.13
Nominal Net Worth ($1000)									
2001	7,144.70	1,514.26	4,264.77	1,169.83	3,153.84	3,545.70	5,639.76	583.62	2,406.92
2002	6,621.10	1,313.96	3,982.86	1,082.53	3,160.69	3,359.20	5,414.33	638.15	2,418.88
2003	7,022.93	1,265.73	4,263.25	1,254.21	3,611.10	3,392.98	5,502.96	714.99	2,577.49
2004	6,912.47	1,112.15	4,309.43	1,284.81	3,801.55	3,248.30	5,332.28	762.86	2,638.14
2005	6,568.49	928.13	4,304.85	1,271.70	3,915.58	3,015.85	5,101.97	812.67	2,677.08
2006	7,083.45	907.37	4,697.89	1,446.83	4,386.16	3,089.57	5,292.62	905.07	2,886.68
2007	7,481.59	834.33	4,998.87	1,555.49	4,759.90	3,104.84	5,386.11	990.36	3,054.44
2008	7,658.38	691.45	5,210.08	1,620.53	5,068.17	3,052.50	5,421.58	1,069.90	3,184.59
Prob. of Decreasing Real Net Worth Over 2001-2008 (%)	16	99	1	11	1	62	37	1	1

Table 14. Implications of the January 2004 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Milk.

	VTD134	VTD350	MOD85	MOD400	FLND500	FLSD1500
Overall Financial Position 2004-2008 Ranking	Good	Poor	Marginal	Marginal	Good	Poor
Change Real Net Worth (%) 2004-2008 Average	5.31	-1.41	2.13	4.65	7.00	-7.92
NIA to Maintain Real Net Worth (%/Rec.)	-15.70	3.85	-9.06	-12.83	-14.29	8.97
NIA for Zero Ending Cash Balance (%/Rec.)	-16.27	10.53	-0.87	-6.87	-16.03	18.68
Govt Payments/Receipts (%) 2004-2008 Average	0.80	0.11	3.59	1.16	0.69	0.30
Cost to Receipts Ratio (%) 2004-2008 Average	75.78	99.17	77.38	81.17	81.95	108.73
Total Cash Receipts ($1000)						
2001	509.58	1,409.72	259.80	1,255.62	1,966.31	4,710.56
2002	421.49	1,164.22	220.35	1,060.94	1,758.19	4,118.55
2003	431.07	1,203.61	244.75	1,113.94	1,846.53	4,298.33
2004	439.96	1,229.09	243.18	1,122.12	1,869.65	4,362.98
2005	455.03	1,271.88	246.42	1,156.40	1,914.54	4,480.73
2006	465.28	1,297.51	252.67	1,179.30	1,952.15	4,574.61
2007	476.58	1,328.47	244.16	1,186.52	1,972.70	4,656.15
2008	483.69	1,351.36	247.75	1,207.41	2,004.94	4,733.13
2004-2008 Average	464.11	1,295.66	246.83	1,170.35	1,942.80	4,561.52
Government Payments ($1000)						
2001	8.01	2.91	0.00	0.00	0.00	0.00
2002	12.77	17.46	3.31	14.74	0.00	0.00
2003	2.28	0.83	20.38	31.10	31.10	31.10
2004	2.48	0.90	16.30	24.52	24.52	24.52
2005	3.56	1.29	13.21	19.58	19.58	19.58
2006	4.20	1.53	14.01	20.45	20.45	20.45
2007	4.28	1.56	0.00	0.00	0.00	0.00
2008	4.07	1.48	0.00	0.00	0.00	0.00
2004-2008 Average	3.72	1.35	8.71	12.91	12.91	12.91
Net Cash Farm Income ($1000)						
2001	200.77	265.95	76.91	341.82	667.88	447.13
2002	107.82	11.32	48.36	154.80	398.92	-234.87
2003	93.71	-21.04	71.84	218.69	326.93	-361.02
2004	82.23	-31.18	50.70	180.22	186.05	-498.99
2005	96.48	-6.85	46.75	189.05	245.00	-441.23
2006	124.31	32.71	68.09	257.28	438.28	-271.85
2007	135.36	52.06	62.39	268.36	476.36	-256.12
2008	135.98	49.87	61.24	273.53	474.63	-318.28
2004-2008 Average	114.87	19.32	57.84	233.69	364.07	-357.29
Prob. of a Cash Flow Deficit (%)						
2003	99	99	99	99	1	99
2004	20	99	59	51	29	99
2005	16	99	81	53	22	99
2006	5	99	62	31	4	99
2007	3	99	61	29	6	99
2008	4	99	55	32	8	99
Ending Cash Reserves ($1000)						
2001	74.46	51.25	12.71	65.85	248.88	-34.69
2002	75.07	-116.40	-0.12	-5.59	294.67	-679.31
2003	67.81	-291.04	-2.55	-38.01	318.71	-1,416.82
2004	86.88	-375.22	-7.97	-7.34	353.52	-1,995.45
2005	114.10	-461.53	-17.63	20.87	443.21	-2,524.88
2006	158.63	-506.06	-6.54	110.65	654.10	-2,901.37
2007	206.48	-543.19	-0.02	191.13	859.00	-3,272.09
2008	253.23	-582.66	7.76	261.16	1,060.80	-3,707.52
Nominal Net Worth ($1000)						
2001	703.78	2,288.50	716.81	1,867.02	2,038.48	4,911.95
2002	722.47	2,153.02	721.65	1,880.77	2,210.16	4,443.68
2003	782.84	2,138.52	752.53	1,931.75	2,441.37	4,260.49
2004	810.32	2,049.46	761.66	2,002.83	2,500.77	3,732.87
2005	828.07	1,919.55	758.64	2,035.07	2,569.20	3,099.80
2006	914.47	1,956.96	803.68	2,231.72	2,887.20	2,958.94
2007	980.89	1,963.39	829.10	2,369.49	3,157.14	2,699.11
2008	1,029.96	1,913.51	846.37	2,478.05	3,388.77	2,281.90
Prob. of Decreasing Real Net Worth Over 2001-2008 (%)	1	17	1	1	1	99

Figure 28. Dairy Farms



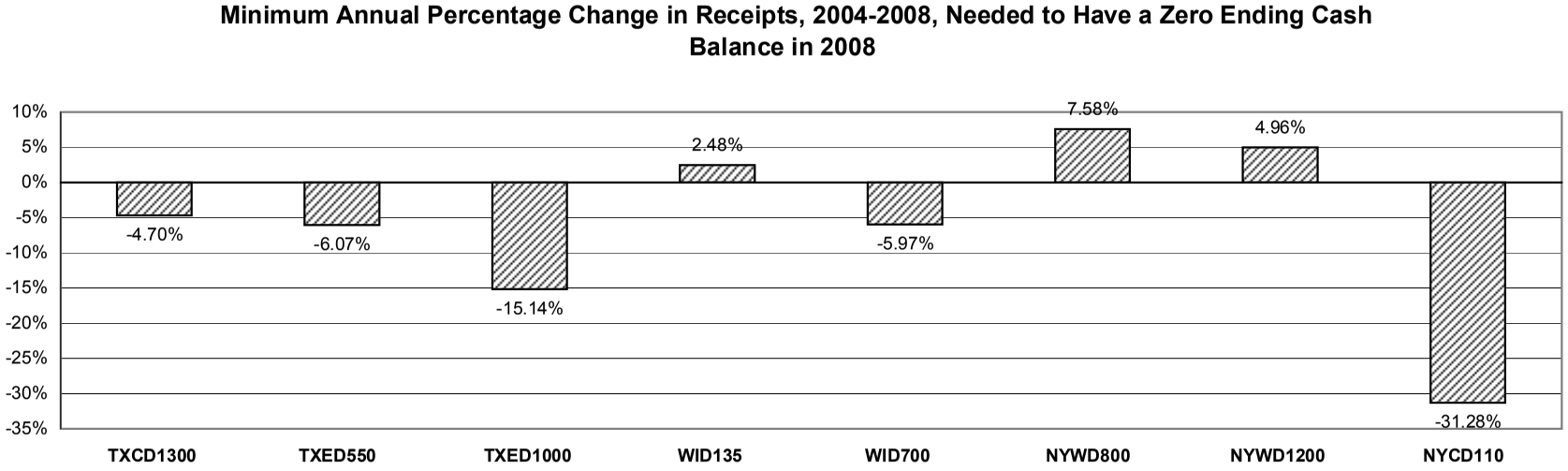
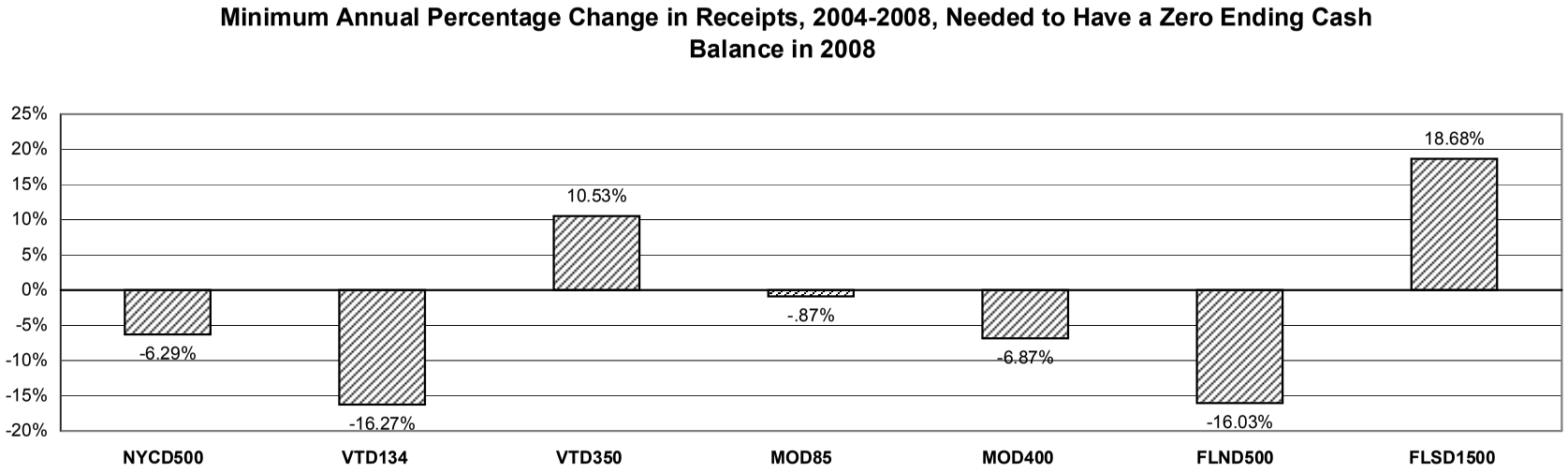


Figure 29. Dairy Farms



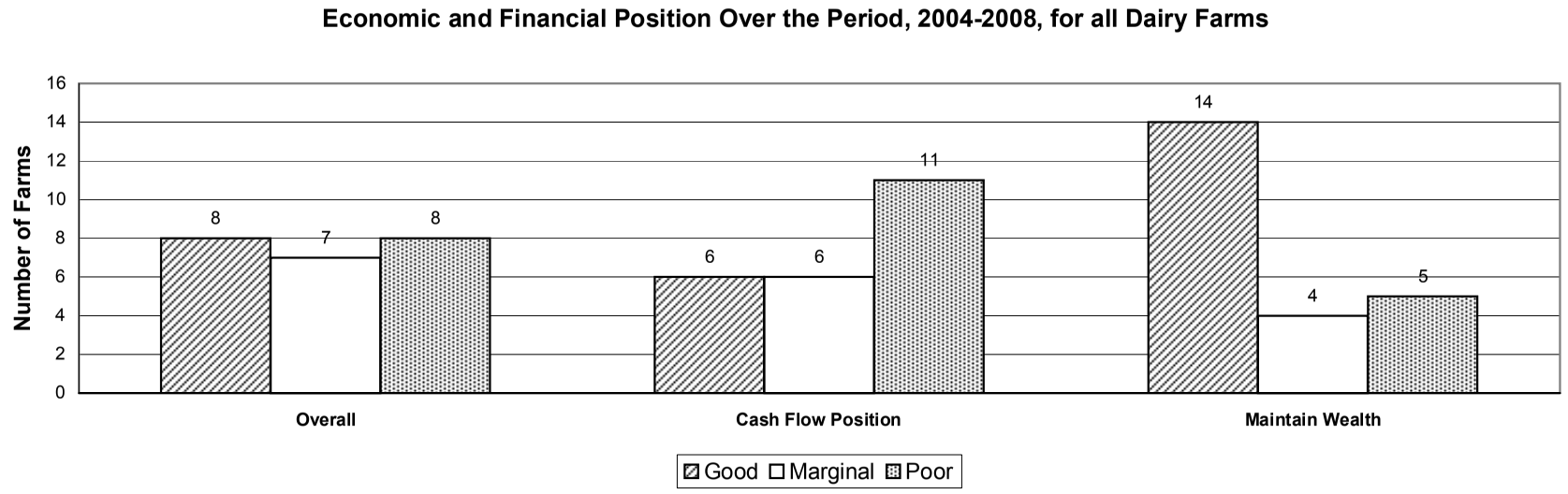


Figure 30. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Dairy Farms

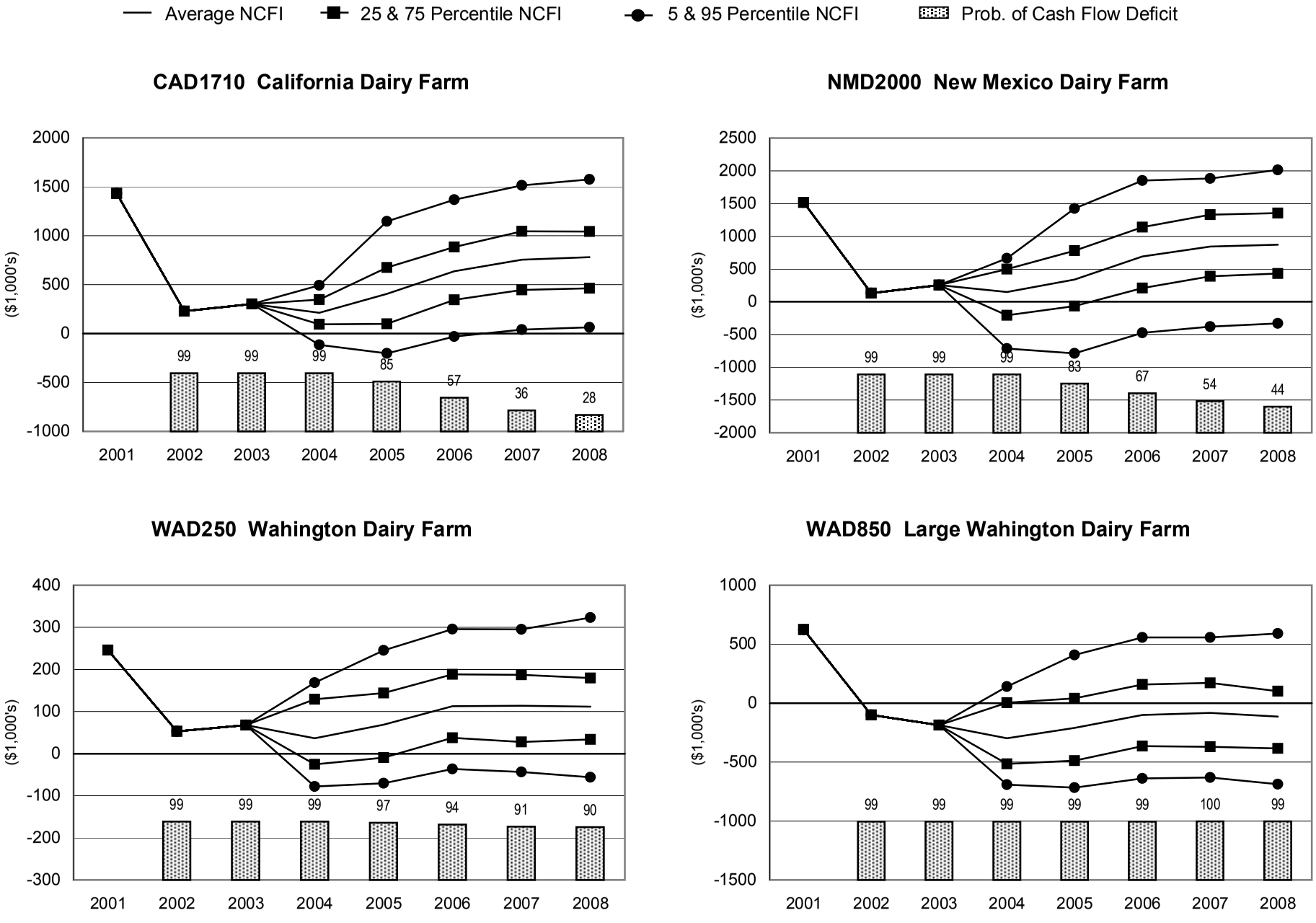


Figure 31. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Dairy Farms

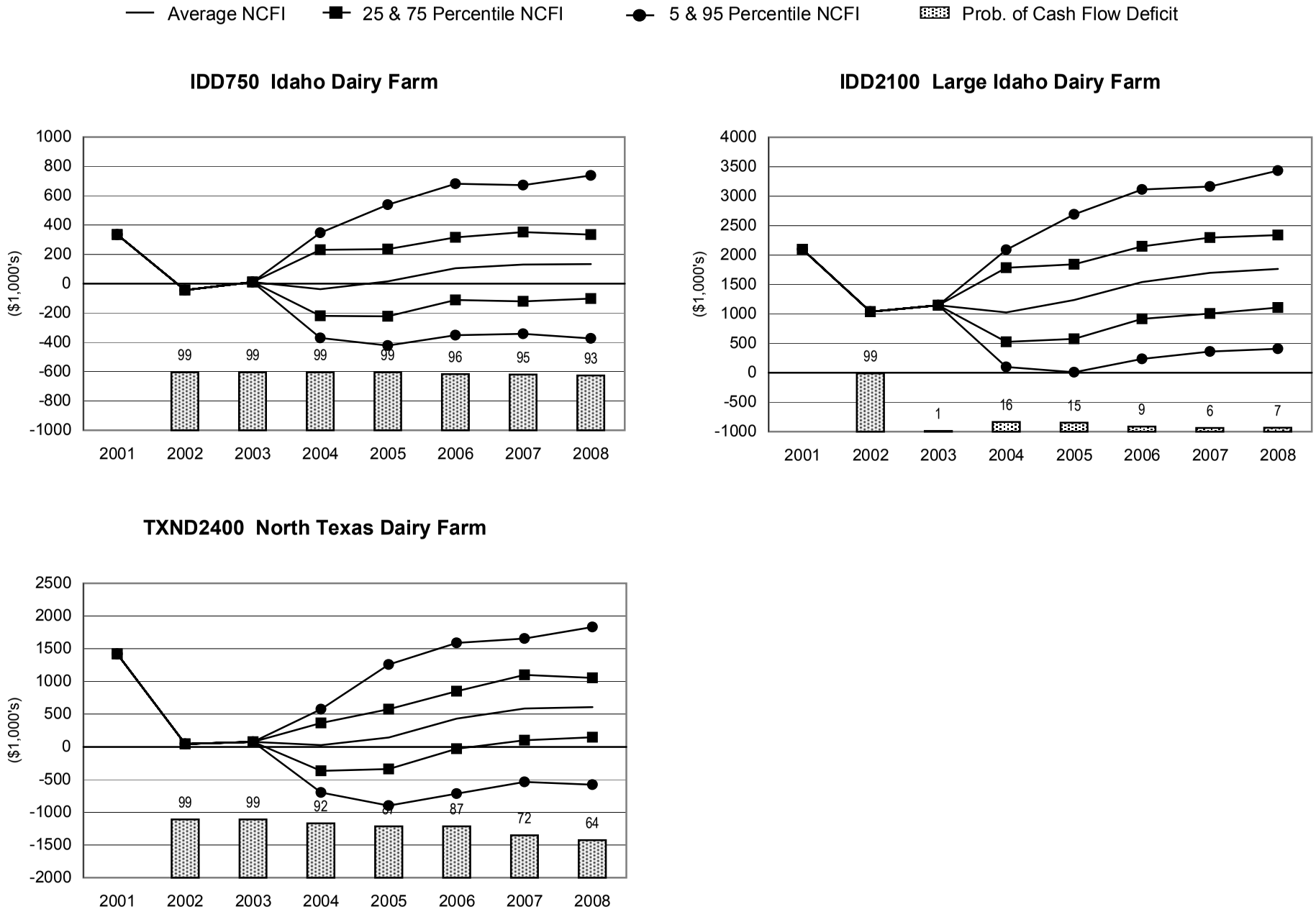


Figure 32. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Dairy Farms

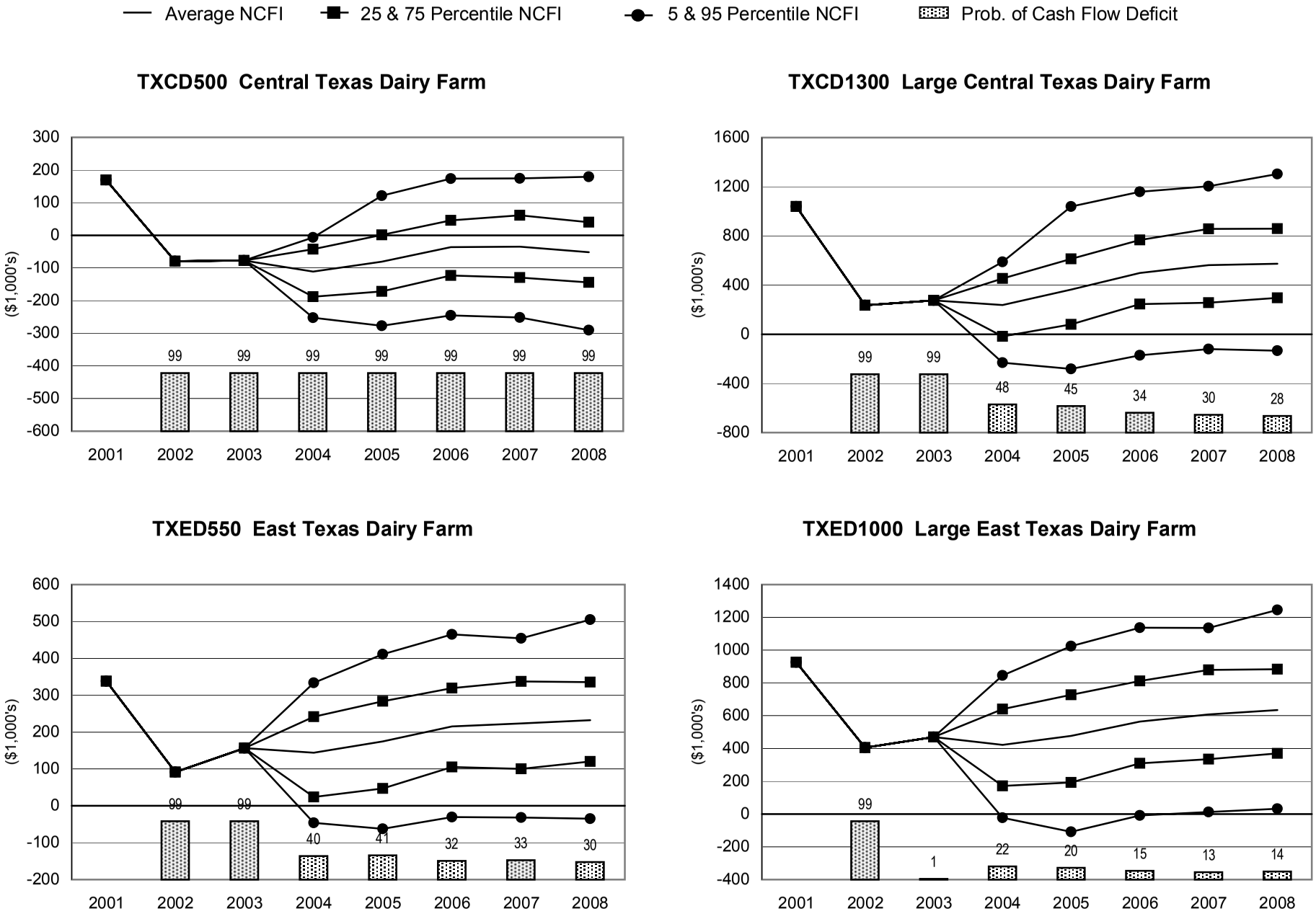


Figure 33. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Dairy Farms

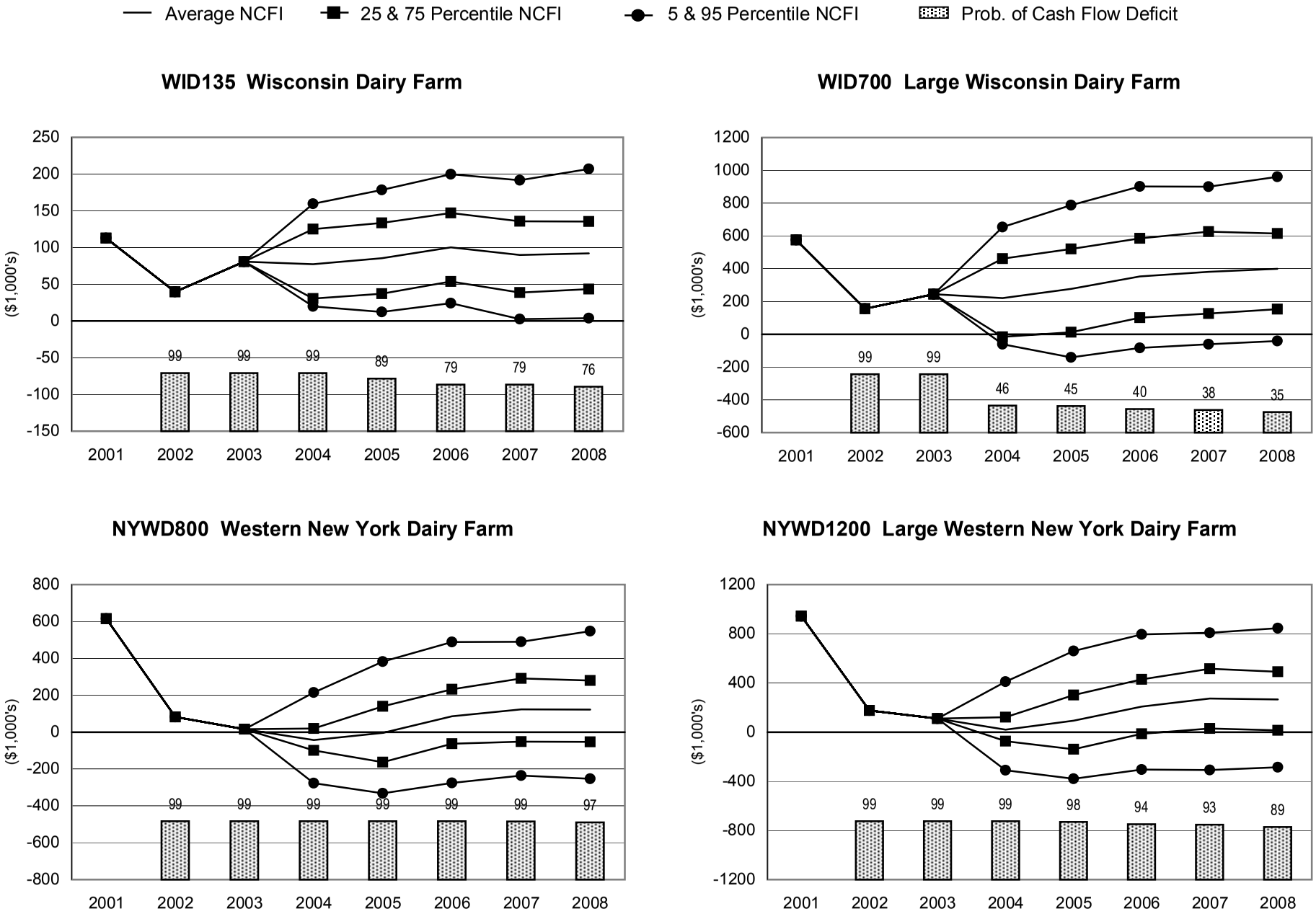


Figure 34. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Dairy Farms

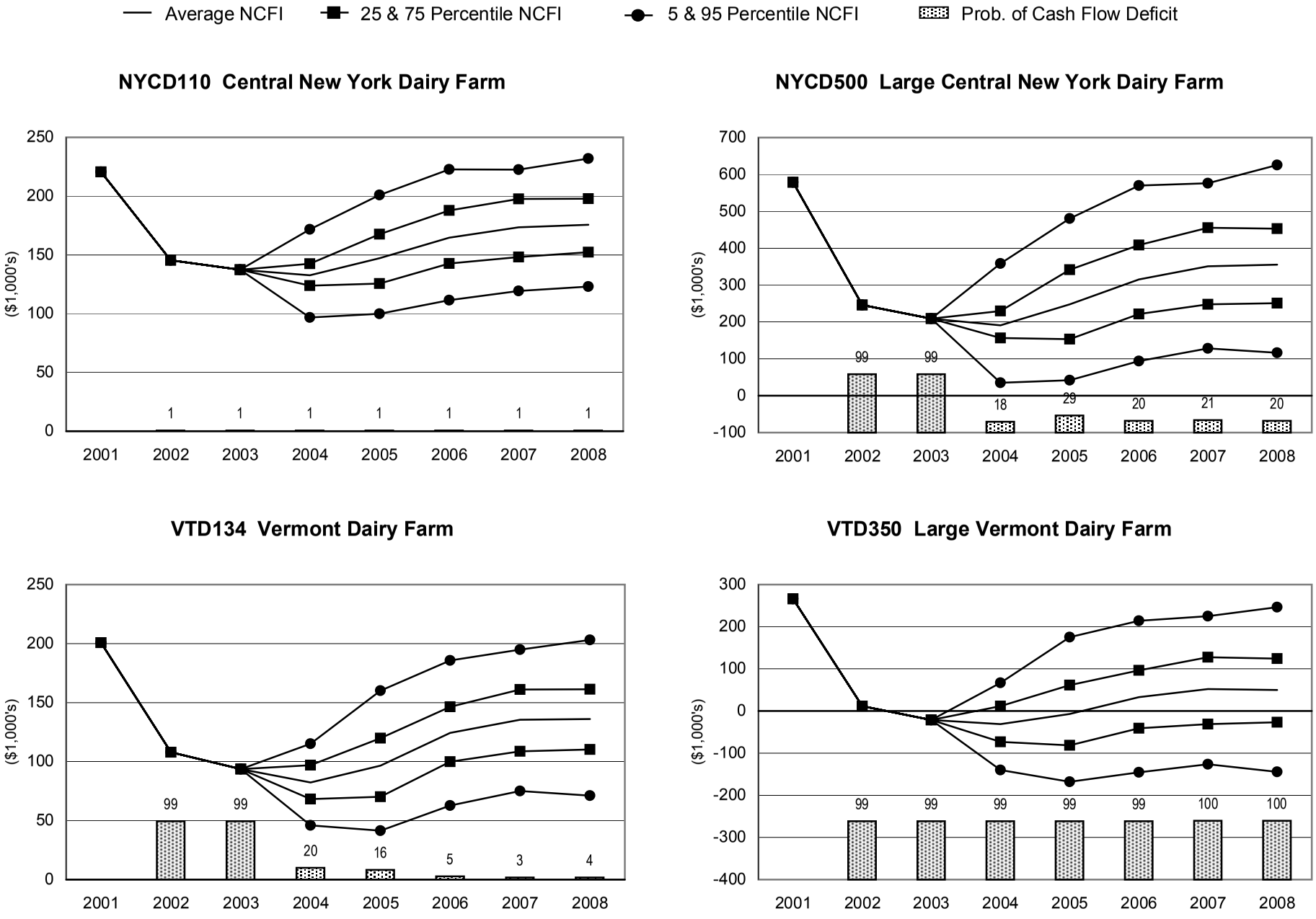


Figure 35. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Dairy Farms

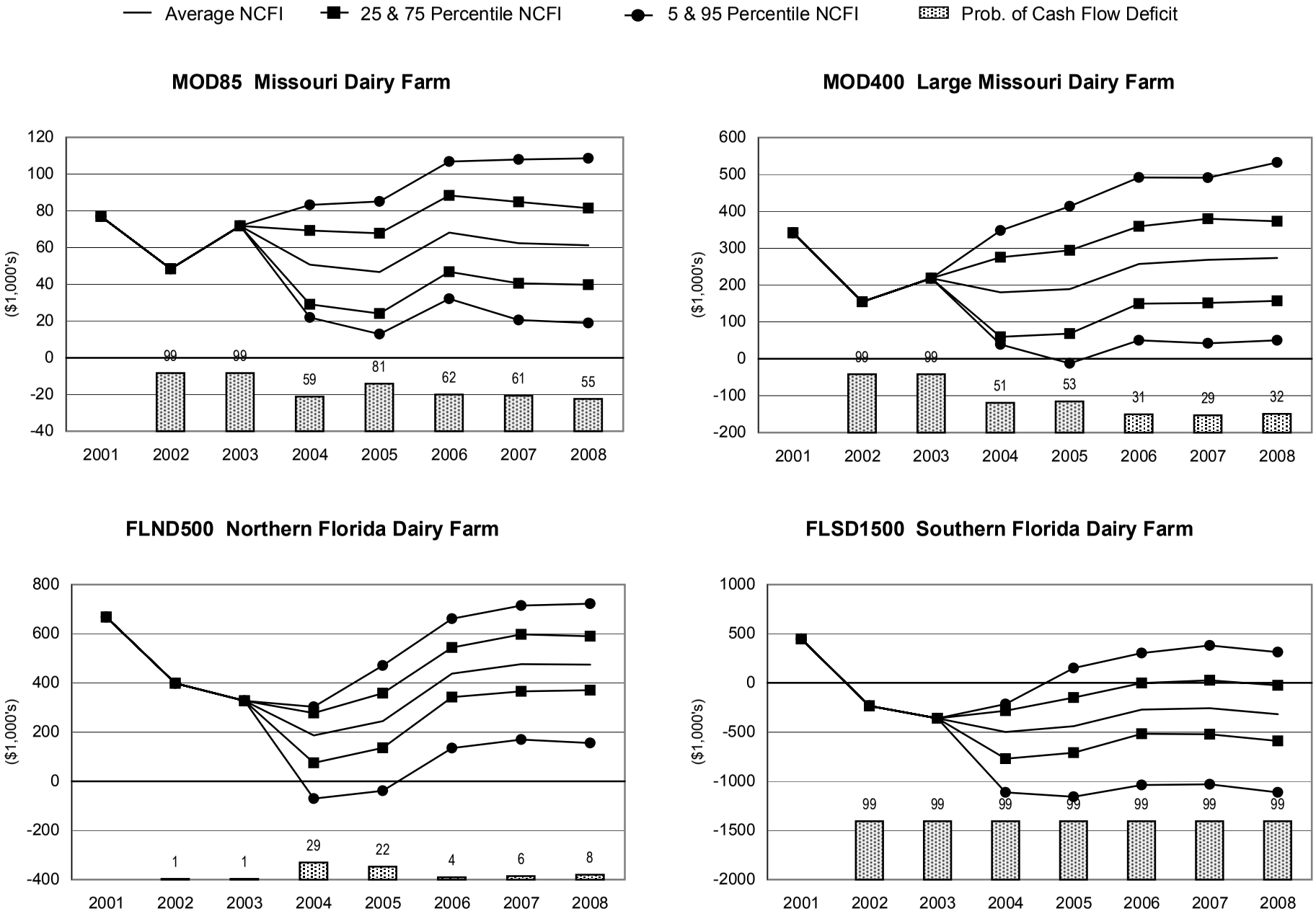


FIGURE 36. REPRESENTATIVE FARMS PRODUCING BEEF CATTLE

Beef Cattle Impacts

Beef cattle price outlook is projected to suffer a BSE-induced decline in 2004 but recover and increase through 2006 to $103.59 per cwt (Table 2). Cyclical price movements reduce feeder cattle price to $92.94 by 2008. Similar price movements are seen for culled cows, a significant contributor of income for a cow-calf operation. Of the twelve representative ranches, six are classified in overall good financial condition (Figure 37 and Table 15). Five are marginal, and only COB250 is in poor condition.

Average annual cash farm income generally increases for the representative cattle ranches through 2004, decreases in 2005, and increases again in 2006 and 2007, following cattle prices. Ending cash reserves grow for all ranches except WYB500 through 2008. However, if that ranch could generate only 2.51 percent more receipts per year, average ending cash would not be negative. Probabilities of cash flow deficits in 2008 exceed 50 percent for WYB500 and COB250. CAB500, COB250, and NMB250 are the only three ranches with probabilities of losing real net worth greater than 35 percent. For the other nine ranches the average increases in net worth from 2004 to 2008 ranged from 0.29 percent for FLB1155 to 2.97 percent for MOB150.

California: CAB500 suffers from the accumulative cash flow effects of lower than average weaning weights in 2001 and 2002. Compared with other AFPC ranches, this ranch has the highest hauling expenses—incurred transporting cows from summer highland grazing to winter pasture at lower altitudes.

Nevada: NVB700 is recovering from a sizable drought-induced cash flow deficit in 2001. Future economic viability is closely tied to rainfall and access to summer BLM permits.

Montana: MTB500 has the smallest probability of cash flow deficits, largely because it has the lowest cow-calf production and feed costs.

Wyoming: WYB500 grew from a 300- to a 500-cow operation in recent years. Best compared with the Montana ranch in terms of size and geographic location, this ranch has a higher probability of cash flow difficulty because of higher labor costs.

Colorado: COB250 is in an area where agricultural land is quickly being subdivided and developed for residential properties. Ranchers in the area have sold development rights and pursued other avenues to continue running cows on land that is fast increasing in value.

New Mexico: Drought-forced liquidation reduced cowherd size by 20 percent on the northeast New Mexico beef cattle operation in 2002. Unable to reduce fixed costs, this ranch is expected to have cash flow problems until it is able to restock cows.

Texas: TXBB150 generates more receipts than any other AFPC ranch due to running 2,000 head of stocker calves each year. Economic viability of this ranch is far more dependent on stockers than on cow-calf receipts. TXSB250 nets $20,000 per year from contract broiler production. This is characteristic of full-time moderate-size ranchers in south Texas. If contract broiler production is removed due to avian influenza concerns, this ranch will suffer cash flow difficulties.

Florida: FLB1155 faces land development pressure similar to the Colorado ranch, albeit to a less severe degree. This ranch is subject to cash flow pressures because it consists of 100 percent owned land and has the attendant risk of servicing land debt.

Table 15. Implications of the January 2004 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Beef Cattle.

	CAB500	NVB700	MTB500	WYB500	COB250	NMB240
Overall Financial Position 2004-2008 Ranking	Marginal	Marginal	Good	Marginal	Poor	Marginal
Change Real Net Worth (%) 2004-2008 Average	0.06	0.93	2.57	0.41	0.02	0.14
NIA to Maintain Real Net Worth (%/Rec.)	0.00	-10.15	-39.67	-5.10	0.00	-4.51
NIA for Zero Ending Cash Balance (%/Rec.)	-0.77	-5.74	-50.68	2.51	-22.86	-15.56
Govt Payments/Receipts (%) 2004-2008 Average	0.00	0.00	0.00	0.00	0.00	0.00
Cost to Receipts Ratio (%) 2004-2008 Average	83.28	80.89	52.51	81.95	68.16	71.34
Total Cash Receipts ($1000)						
2001	230.39	264.77	268.80	246.22	130.03	178.34
2002	247.67	307.29	240.57	216.89	141.51	106.25
2003	271.90	315.74	274.91	264.43	142.22	121.24
2004	290.98	308.09	286.02	274.86	146.31	125.56
2005	261.48	278.37	259.10	249.86	135.27	114.31
2006	288.77	316.00	292.17	280.79	150.14	128.64
2007	300.39	331.86	306.44	295.65	156.74	134.91
2008	291.59	316.56	293.65	282.29	151.52	128.90
2004-2008 Average	286.64	310.18	287.48	276.69	147.99	126.46
Government Payments ($1000)						
2001	0.00	0.00	0.00	0.00	0.00	0.00
2002	10.41	14.69	11.42	10.33	5.22	5.40
2003	0.00	0.00	0.00	0.00	0.00	0.00
2004	0.00	0.00	0.00	0.00	0.00	0.00
2005	0.00	0.00	0.00	0.00	0.00	0.00
2006	0.00	0.00	0.00	0.00	0.00	0.00
2007	0.00	0.00	0.00	0.00	0.00	0.00
2008	0.00	0.00	0.00	0.00	0.00	0.00
2004-2008 Average	0.00	0.00	0.00	0.00	0.00	0.00
Net Cash Farm Income ($1000)						
2001	6.32	-28.80	120.19	42.81	40.54	95.88
2002	17.88	74.89	99.57	7.65	49.96	26.98
2003	35.85	73.20	129.00	49.62	46.84	34.48
2004	54.98	62.07	135.90	52.72	48.29	38.63
2005	28.92	33.65	110.32	31.81	38.33	26.63
2006	50.40	66.88	143.37	55.85	49.81	39.18
2007	62.63	82.03	157.93	66.64	55.10	42.50
2008	50.19	65.30	143.20	54.46	48.94	38.32
2004-2008 Average	49.42	61.98	138.14	52.30	48.09	37.05
Prob. of a Cash Flow Deficit (%)						
2003	99	99	1	99	1	1
2004	99	11	1	99	76	1
2005	99	73	1	99	40	75
2006	87	24	1	93	25	14
2007	49	18	1	80	36	15
2008	47	31	1	78	68	29
Ending Cash Reserves ($1000)						
2001	-33.48	-70.85	65.64	7.10	110.60	56.37
2002	-49.46	-29.50	118.18	-29.99	128.04	56.46
2003	-50.98	-9.70	185.08	-39.94	139.72	57.94
2004	-29.98	10.64	264.66	-36.39	136.91	70.96
2005	-36.71	-0.71	323.66	-51.67	140.83	66.33
2006	-22.31	25.55	405.20	-44.02	150.56	76.67
2007	-0.71	58.43	488.81	-32.11	158.25	88.23
2008	8.99	74.68	567.76	-29.26	156.09	95.87
Nominal Net Worth ($1000)						
2001	7,969.82	1,795.60	2,260.69	2,137.39	8,148.10	2,357.41
2002	7,936.30	1,863.30	2,266.02	2,082.44	8,180.76	2,327.15
2003	7,996.19	1,971.96	2,399.98	2,130.19	8,208.96	2,346.06
2004	8,040.60	2,020.69	2,506.27	2,157.78	8,230.85	2,363.77
2005	7,973.76	1,950.57	2,510.31	2,101.90	8,206.42	2,337.26
2006	8,066.95	2,066.59	2,667.46	2,178.79	8,250.30	2,372.50
2007	8,120.80	2,134.40	2,784.24	2,219.52	8,277.84	2,393.33
2008	8,100.47	2,122.70	2,841.45	2,211.59	8,273.79	2,390.70
Prob. of Decreasing Real Net Worth Over 2001-2008 (%)	93	4	1	10	73	99

Table 16. Implications of the January 2004 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Beef Cattle.

	SDB450	MOB150	MOCB350	TXBB150	TXSB250	FLB1155
Overall Financial Position						
2004-2008 Ranking	Good	Good	Good	Good	Good	Marginal
Change Real Net Worth (%)						
2004-2008 Average	0.65	2.97	1.66	2.31	0.88	0.29
NIA to Maintain Real						
Net Worth (%/Rec.)	-11.30	-21.35	-30.93	-2.90	-18.09	-5.39
NIA for Zero Ending						
Cash Balance (%/Rec.)	-15.78	-10.55	-21.75	-3.02	-31.67	-6.96
Govt Payments/Receipts (%)						
2004-2008 Average	0.51	4.95	0.00	0.14	0.00	0.00
Cost to Receipts Ratio (%)						
2004-2008 Average	74.51	58.24	72.75	94.31	62.84	83.44
Total Cash Receipts ($1000)						
2001	226.04	151.49	192.51	1,153.29	133.86	472.39
2002	224.28	140.85	191.94	1,146.78	137.53	456.61
2003	229.43	140.73	187.54	1,226.23	155.08	506.42
2004	242.00	151.30	193.11	1,264.17	160.00	530.40
2005	222.89	142.80	176.00	1,139.98	147.16	485.03
2006	248.89	152.93	197.88	1,293.40	163.33	542.89
2007	261.10	157.37	207.53	1,366.16	170.40	568.45
2008	252.97	154.40	198.30	1,298.20	163.53	543.97
2004-2008 Average	245.57	151.76	194.56	1,272.38	160.88	534.15
Government Payments ($1000)						
2001	3.35	13.75	0.00	2.30	0.00	0.00
2002	7.97	12.81	7.29	5.51	0.00	0.00
2003	0.00	4.34	0.00	12.88	0.00	0.00
2004	1.07	4.26	0.00	0.00	0.00	0.00
2005	0.90	6.96	0.00	1.50	0.00	0.00
2006	1.30	8.77	0.00	2.65	0.00	0.00
2007	1.52	8.77	0.00	2.55	0.00	0.00
2008	1.52	8.48	0.00	2.44	0.00	0.00
2004-2008 Average	1.26	7.45	0.00	1.83	0.00	0.00
Net Cash Farm Income ($1000)						
2001	57.90	61.02	41.47	-30.77	38.02	63.76
2002	56.98	57.48	58.64	59.88	38.39	41.85
2003	58.39	55.31	51.37	65.90	53.45	55.51
2004	65.10	64.93	54.35	80.28	61.03	88.57
2005	43.83	55.80	38.44	42.00	48.34	50.46
2006	68.49	65.90	59.44	80.92	62.14	103.87
2007	80.43	70.33	67.59	99.88	70.36	123.95
2008	70.48	66.96	57.86	77.25	61.92	96.06
2004-2008 Average	65.67	64.79	55.54	76.07	60.76	92.58
Prob. of a Cash Flow Deficit (%)						
2003	1	99	1	1	1	99
2004	10	9	7	1	1	1
2005	47	32	22	40	1	48
2006	15	19	7	9	1	10
2007	9	20	7	9	1	10
2008	15	17	14	23	3	27
Ending Cash Reserves ($1000)						
2001	24.69	8.61	6.20	-55.16	11.28	20.24
2002	36.55	15.09	34.61	-20.25	22.72	11.31
2003	49.36	7.46	51.86	3.03	46.73	11.37
2004	75.80	21.59	76.38	41.03	81.64	52.78
2005	78.65	25.65	89.24	42.92	105.11	54.49
2006	102.63	37.34	115.91	75.66	138.20	102.13
2007	136.55	47.98	148.62	116.43	173.59	156.27
2008	162.53	62.49	173.04	137.14	202.93	184.32
Nominal Net Worth ($1000)						
2001	2,435.02	688.38	2,080.50	725.20	1,896.23	9,139.48
2002	2,421.36	700.52	2,118.75	710.45	1,905.18	9,066.14
2003	2,467.37	731.38	2,191.49	754.06	1,942.22	9,150.99
2004	2,507.77	760.15	2,271.10	797.92	1,975.60	9,206.57
2005	2,464.16	764.76	2,276.22	758.37	1,966.76	9,108.68
2006	2,545.24	810.41	2,354.59	834.44	2,019.21	9,284.13
2007	2,601.80	849.62	2,424.76	893.48	2,058.99	9,391.53
2008	2,600.64	876.96	2,470.29	893.85	2,071.66	9,382.34
Prob. of Decreasing Real Net Worth						
Over 2001-2008 (%)	2	1	1	1	1	33

Figure 37. Beef Cattle Ranches

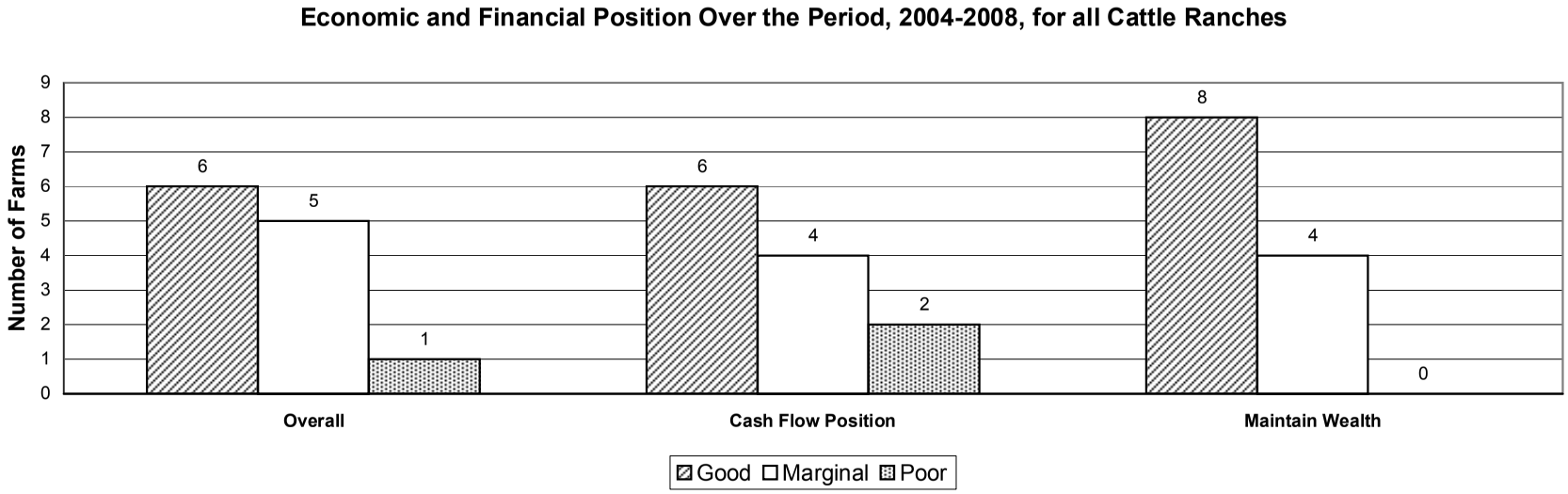


Figure 38. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Beef Cattle Ranches

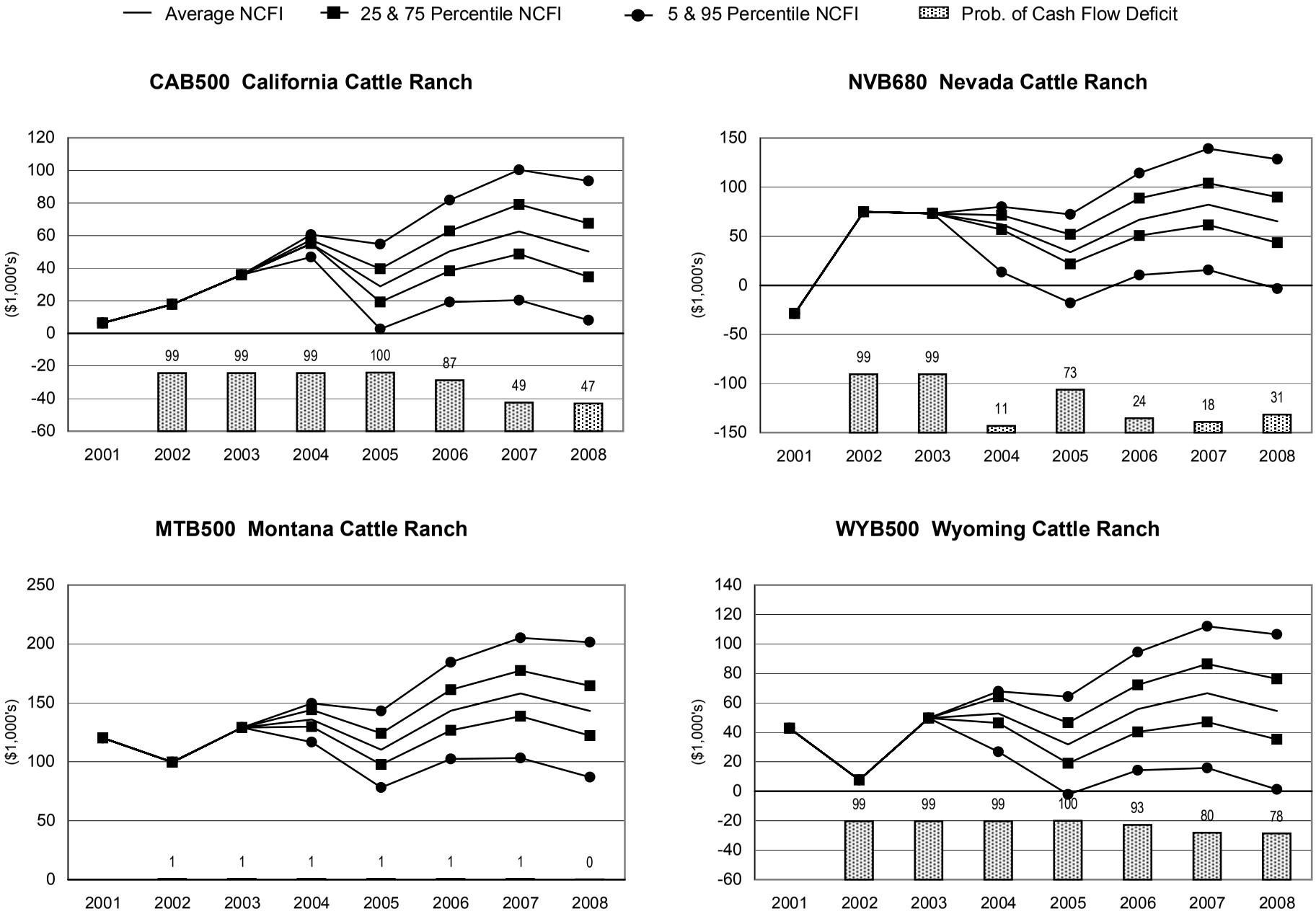


Figure 39. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Beef Cattle Ranches

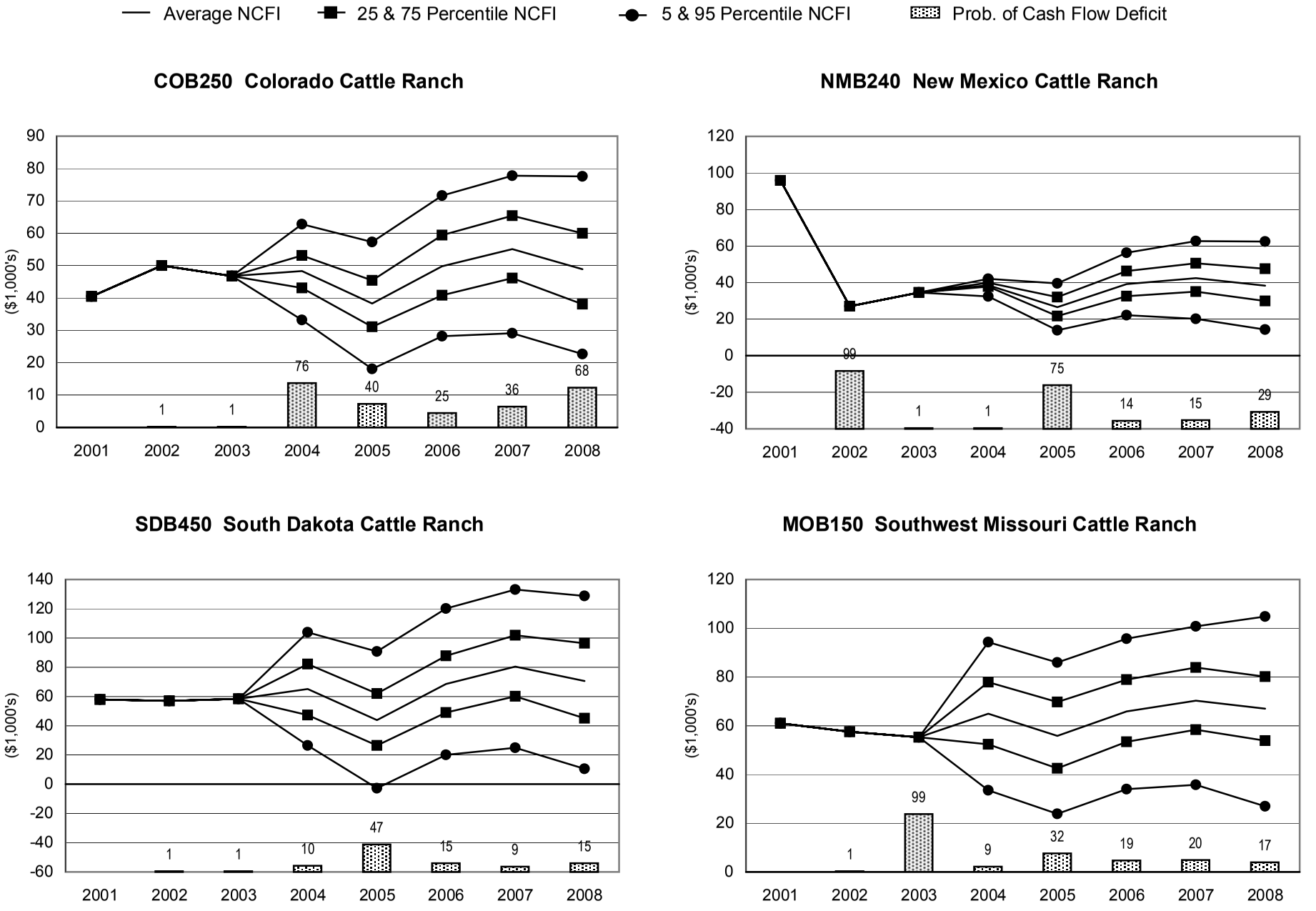


Figure 40. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Beef Cattle Ranches

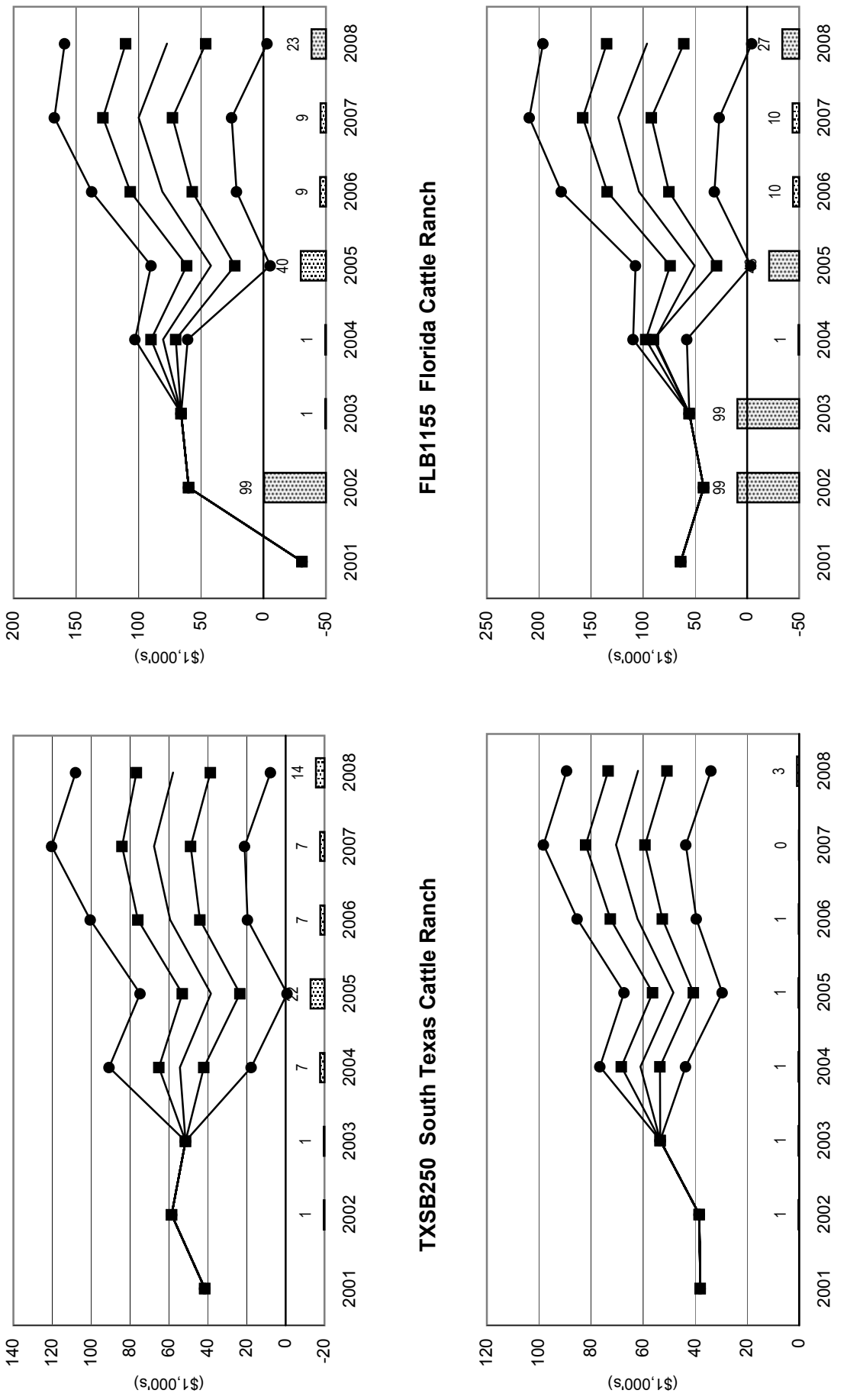
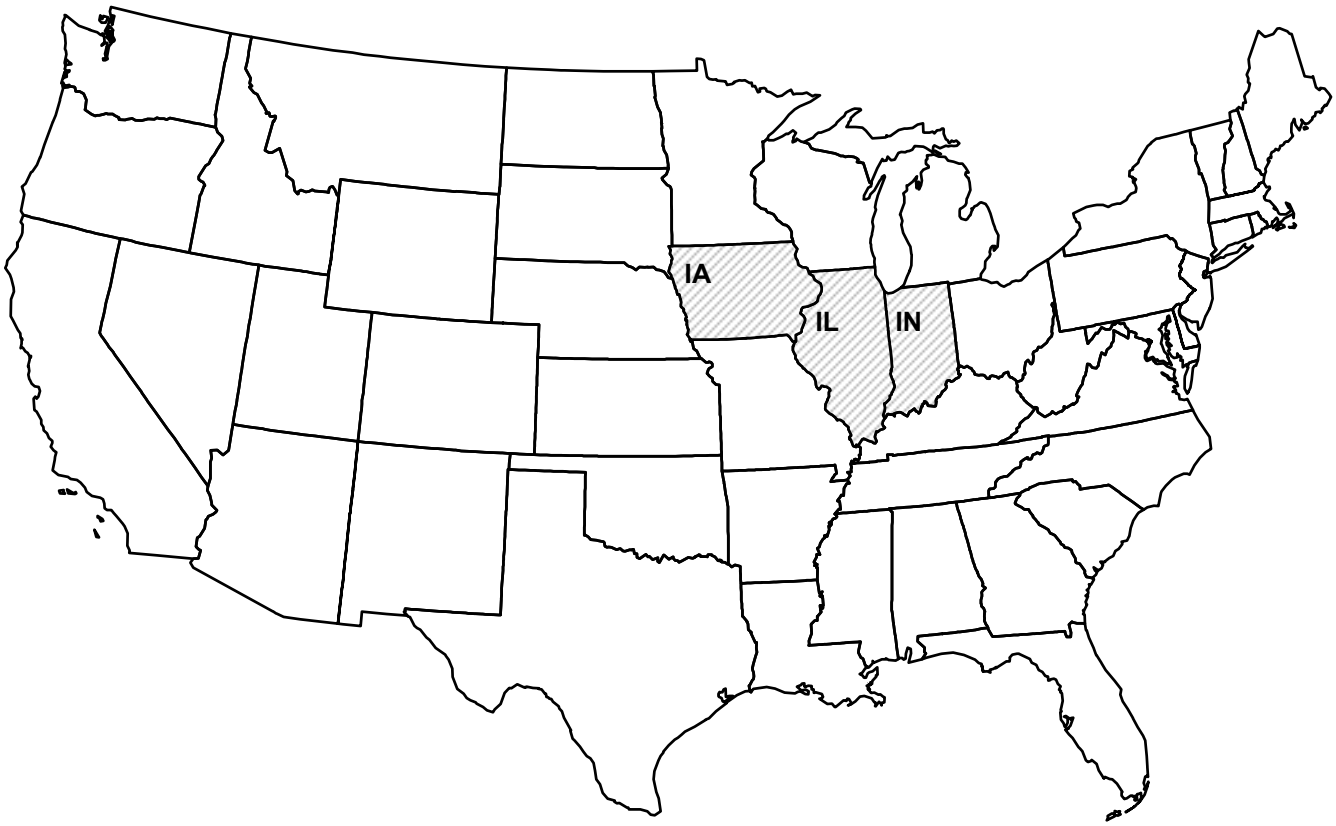


FIGURE 41. REPRESENTATIVE FARMS PRODUCING HOGS



Hog Farm Impacts

The hog price hit a low in 2002 at $34.92 per cwt and a high in 2006 at $42.40 per cwt (Table 2). A similar price movement can be seen in the cull sow prices. The corn price is expected to be relatively level from 2002 through 2008. The high price is in 2008 at $2.37 (Table 1). Overall, 1 hog farm is characterized as good, 2 are moderate and 1 is in poor condition. Three of four hog farms will be under cash flow stress with none of the four in poor condition in terms maintaining real net worth.

Illinois: The large Illinois hog farm is the low cost leader with a cost-to-receipts ratio of 75.25%. The moderate Illinois hog farm (ILH200) only owns 140 acres while it leases 1,260 acres. ILH200 has significant equipment debt in the first three years, which coupled with low hog prices in 2002 lead to cash flow shortfalls for the period of 2002-2008. The large Illinois hog farm (ILH750) has cash flow problems starting in 2001 from the purchase of a large amount of equipment. The low hog prices in 2002 combined with the carryover of a $90,000 shortfall cause the farm to have a cash flow deficit until 2006.

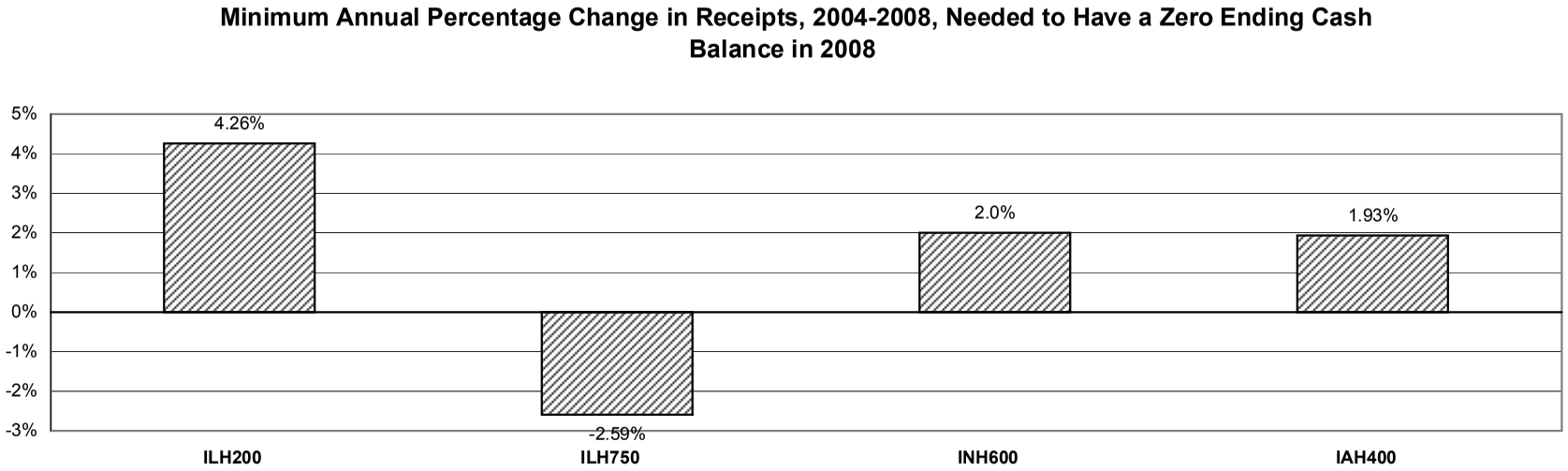
Indiana: The Indiana hog farm (INH600) is in marginal financial position. This is the only hog farm that plants wheat for manure spreading purposes. INH600 has large equipment debts in the first three years, which coupled with low hog prices in 2002 lead to cash flow shortfalls for the period of 2002-2008.

Iowa: The Iowa Hog Farm (IAH400) is in poor financial position and has a cost-to-receipts ratio of 95 percent. This means that there is very little margin left before the farm experiences cash flow problems. IAH400 is a weaning to finish operation, while the other three hog farms are farrow to finish. IAH400 purchases weaned hogs for $30 each. This farm owns 60 acres and leases 607 acres.

Table 17. Implications of the January 2004 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Hogs.

	ILH200	ILH750	INH600	IAH400
Overall Financial Position				
2004-2008 Ranking	Marginal	Good	Marginal	Poor
Change Real Net Worth (%)				
2004-2008 Average	1.98	4.60	4.04	0.59
NIA to Maintain Real				
Net Worth (%/Rec.)	-4.07	-16.07	-10.74	-0.17
NIA for Zero Ending				
Cash Balance (%/Rec.)	4.26	-2.59	2.00	1.93
Govt Payments/Receipts (%)				
2004-2008 Average	6.93	4.07	6.25	2.74
Cost to Receipts Ratio (%)				
2004-2008 Average	82.35	75.25	82.02	93.35
Total Cash Receipts ($1000)				
2001	655.10	2,045.40	2,218.01	1,001.10
2002	531.76	1,642.83	2,022.47	787.08
2003	580.14	1,863.51	2,075.19	882.79
2004	587.66	1,875.41	2,129.71	887.34
2005	559.87	1,788.16	2,090.86	846.69
2006	588.36	1,930.85	2,213.67	918.89
2007	595.54	1,958.07	2,237.29	931.77
2008	587.88	1,906.11	2,213.04	905.08
2004-2008 Average	583.86	1,891.72	2,176.91	897.95
Government Payments ($1000)				
2001	79.99	149.49	250.36	46.59
2002	49.78	100.14	210.81	32.36
2003	24.33	46.74	81.85	15.00
2004	22.57	43.17	75.77	13.75
2005	35.54	68.27	123.07	21.54
2006	48.98	93.43	162.12	29.90
2007	47.45	91.20	161.28	28.95
2008	46.41	88.92	154.92	28.33
2004-2008 Average	40.19	77.00	135.43	24.49
Net Cash Farm Income ($1000)				
2001	209.61	624.15	553.29	235.75
2002	100.30	318.10	391.10	32.24
2003	125.25	478.78	355.88	80.73
2004	103.79	403.42	342.32	39.91
2005	78.70	342.12	304.07	-7.06
2006	118.64	532.99	472.20	100.24
2007	126.84	585.66	495.49	119.35
2008	109.68	525.62	448.40	81.12
2004-2008 Average	107.53	477.96	412.50	66.71
Prob. of a Cash Flow Deficit (%)				
2003	99	99	99	99
2004	99	99	92	93
2005	97	98	92	91
2006	91	68	82	73
2007	83	38	75	67
2008	89	35	72	80
Ending Cash Reserves ($1000)				
2001	39.39	-84.73	96.03	64.87
2002	-4.26	-198.97	25.72	-8.37
2003	-36.71	-223.23	-144.49	-25.59
2004	-47.98	-183.81	-165.14	-33.99
2005	-79.40	-222.97	-238.51	-94.38
2006	-69.81	-71.05	-176.35	-59.51
2007	-59.79	72.33	-146.95	-33.00
2008	-79.15	158.84	-128.19	-61.78
Nominal Net Worth ($1000)				
2001	836.92	3,453.13	3,110.16	781.42
2002	810.51	3,419.89	3,121.50	687.40
2003	855.57	3,701.00	3,248.89	743.33
2004	854.02	3,854.34	3,352.35	731.98
2005	844.25	3,952.44	3,410.43	661.09
2006	899.35	4,303.01	3,673.00	721.51
2007	933.98	4,564.34	3,866.78	762.09
2008	942.76	4,761.61	4,046.02	756.50
Prob. of Decreasing Real Net Worth				
Over 2001-2008 (%)	5	1	1	3

Figure 42. Hog Farms



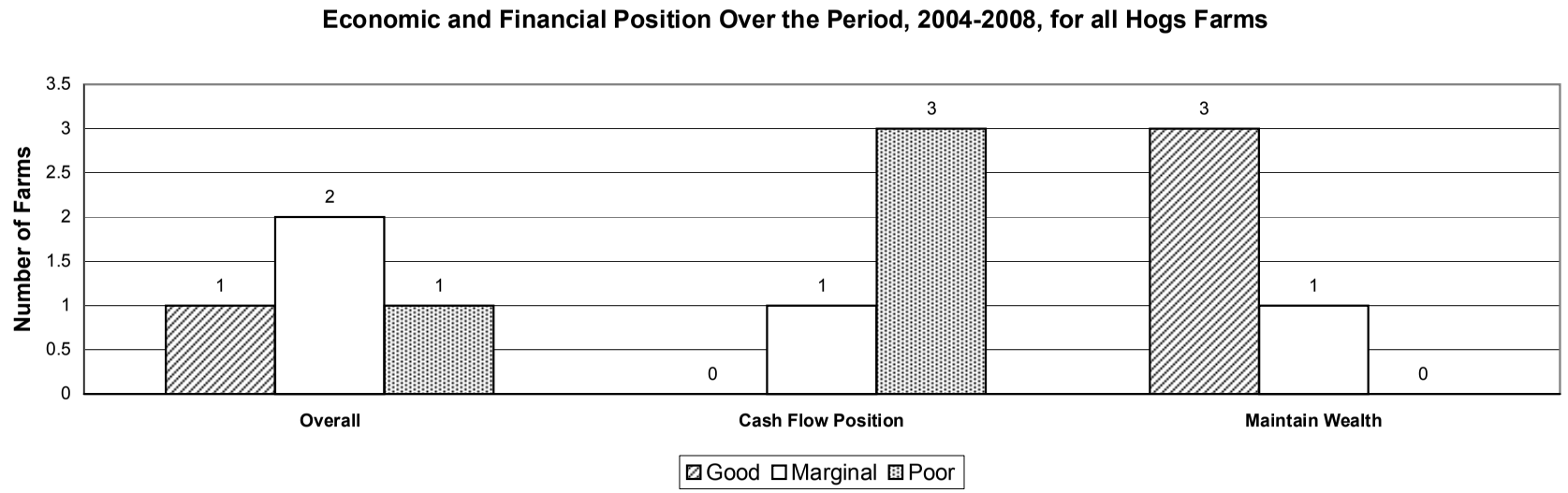
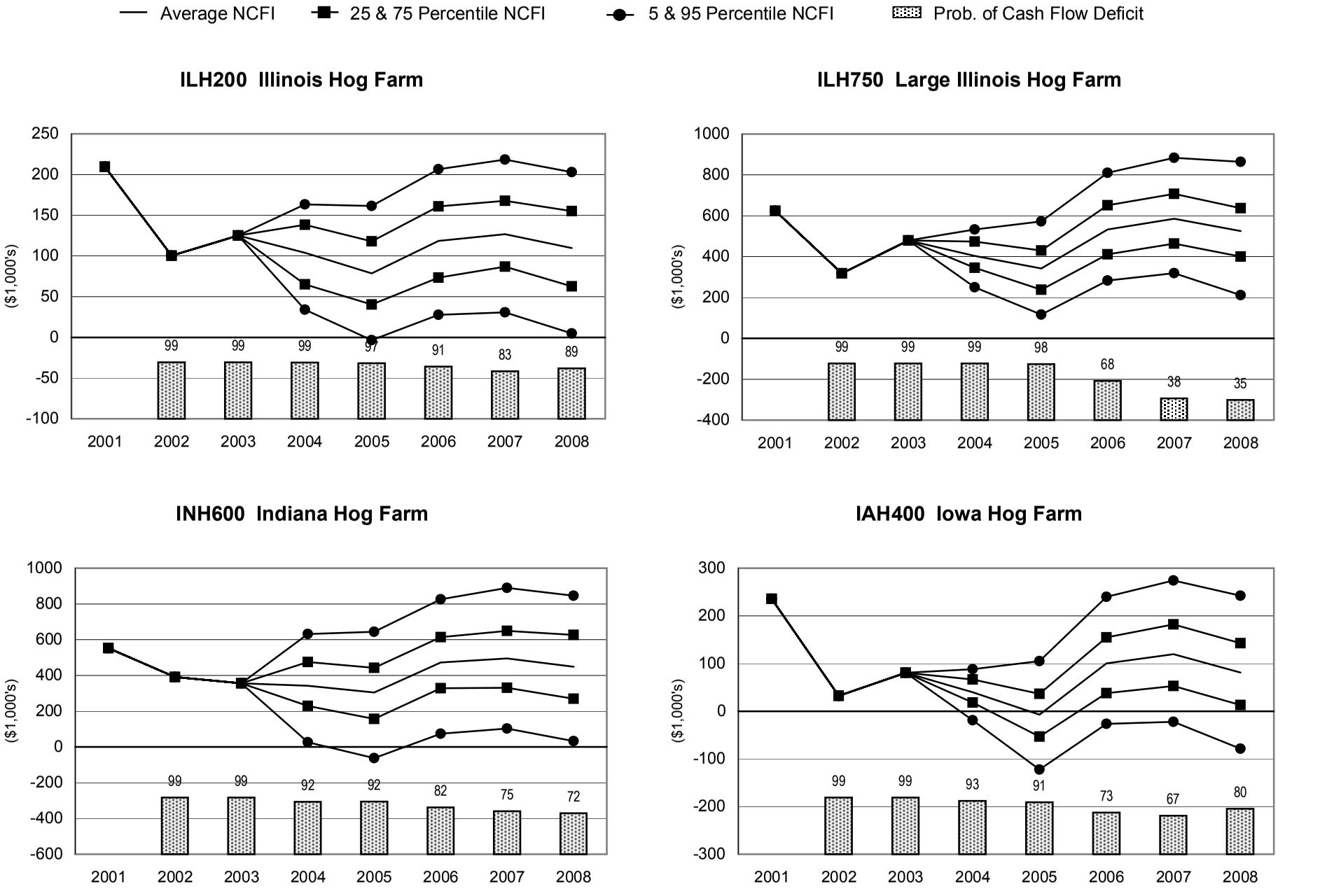


Figure 43. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Hog Farms



APPENDIX A: CHARACTERISTICS OF REPRESENTATIVE FARMS

2003 CHARACTERISTICS OF PANEL FARMS PRODUCING FEED GRAINS AND OILSEEDS

IAG1350 IAG1350 is a 1,350-acre northwestern Iowa (Webster County) grain farm. The farm is moderate-sized for the region and plants 675 acres of corn and 675 acres of soybeans annually. Fifty-two percent of this farm's 2003 receipts come from corn production.

IAG2750 This 2,750-acre large-sized grain farm is located in northwestern Iowa (Webster County). It plants 1,375 acres of corn and 1,375 acres of soybeans each year, realizing 51 percent of receipts from corn production.

IAG4200 A 4,200-acre large-sized grain farm located in northwestern Iowa (Webster County). Annually, 2,100 acres are planted to corn and 2,100 acres are planted to soybeans (of which one half are grown for seed under a production contract). In 2003, 52 percent of the farm's receipts were realized from corn production.

NEG1960 South central Nebraska (Dawson County) is home to this 1960-acre grain farm. This farm plants eighty-four percent of cultivated acres to corn and 9 percent to soybeans. Alfalfa is grown on the remaining land. The farm produces both yellow and white food-grade corn on 56 percent of the corn acres. Ninety percent of gross receipts are derived from corn sales.

NEG4300 This is a 4,300-acre grain farm located in south central Nebraska (Dawson County). This operation plants 2,666 acres of corn and 1,118 acres of soybeans each year. Remaining acres are planted to alfalfa. A portion (40 percent) of the corn acreage is food-grade corn. In 2003, 71 percent of total receipts were generated from corn production.

MOCG1700 MOCG1700 is a 1,700-acre grain farm located in central Missouri (Carroll County) and plants 825 acres of corn, 825 acres of soybeans, and 50 acres of wheat annually. This farm is located in the Missouri River bottom, an area with a large concentration of livestock production. This proximity allows grain producers in this area to supply feed to livestock producers at a premium to other areas of Missouri. This farm generated 57 percent of its total revenue from corn and 41 percent from soybeans during 2003.

MOCG3630 A 3,630-acre central Missouri (Carroll County) grain farm with 1,650 acres of corn, 1,880 acres of soybeans, and 100 acres of wheat. This farm is located in the Missouri River bottom, an area with a large concentration of livestock production. This proximity allows area grain producers to supply feed to livestock producers at a premium to other areas of Missouri. Corn sales accounted for 57 percent of farm receipts and soybeans accounted for 41 percent in 2003.

MONG1850 MONG1850 is a 1,850-acre diversified northwest Missouri grain farm centered in Nodaway County. MONG1850 plants 900 acres of corn, 900 acres of soybeans, and 200 acres of hay annually. The farm also has a 200-head cow-calf herd. Proximity to the Missouri River increases marketing options for area grain farmers due to easily accessible river grain terminals. In 2003, 43 percent of the farm's total receipts were from corn, 37 percent from soybeans, and 19 percent from cattle sales.

ING1000 Shelby County, Indiana, is home to this 1,000-acre moderate-sized feedgrain farm. This farm annually plants corn and soybeans in a 50/50 rotation. Due to this farm's proximity to Indianapolis, land development pressures will likely constrain further expansion of this farm's operations. Fifty-three percent of 2003 receipts came from corn sales.

ING2200 ING2200 is a large-sized grain farm located in east central Indiana (Shelby County). This farm plants 1,100 acres to corn and 1,100 acres to soybeans each year. In 2003, 53 percent of gross receipts were generated by corn sales.

Appendix Table A1. Characteristics of Panel Farms Producing Feed Grains.

	IAG1350	IAG2750	IAG4200	NEG1960	NEG4300	MOCG1700	MOCG3630	MONG1850	ING1000	ING2200
County	Webster	Webster	Webster	Dawson	Dawson	Carroll	Carroll	Nodaway	Shelby	Shelby
Total Cropland	1,350.00	2,750.00	4,200.00	1,960.00	4,300.00	1,700.00	3,630.00	1,850.00	1,000.00	2,200.00
Acres Owned	240.00	380.00	840.00	490.00	1,500.00	1,020.00	1,600.00	950.00	250.00	880.00
Acres Leased	1,110.00	2,370.00	3,360.00	1,470.00	2,800.00	680.00	2,030.00	900.00	750.00	1,320.00
Pastureland										
Acres Owned	0.00	0.00	0.00	0.00	0.00	0.00	0.00	600.00	0.00	0.00
Acres Leased	0.00	0.00	0.00	0.00	0.00	0.00	0.00	400.00	0.00	0.00
Assets ($1000)										
Total	1,092.00	2,012.00	4,167.00	2,218.00	5,069.00	2,961.00	4,810.00	3,412.00	1,530.00	4,387.00
Real Estate	797.00	1,086.00	2,855.00	1,235.00	3,392.00	2,263.00	3,357.00	2,738.00	1,048.00	3,589.00
Machinery	244.00	743.00	902.00	597.00	1,232.00	467.00	880.00	368.00	220.00	603.00
Other & Livestock	52.00	183.00	410.00	386.00	444.00	231.00	572.00	305.00	262.00	194.00
Debt/Asset Ratios										
Total	0.12	0.17	0.13	0.10	0.15	0.13	0.15	0.14	0.10	0.14
Intermediate	0.05	0.17	0.08	0.00	0.13	0.14	0.23	0.19	0.04	0.26
Long Run	0.15	0.16	0.16	0.17	0.16	0.13	0.13	0.13	0.11	0.13
Number of Livestock										
Beef Cows	0.00	0.00	0.00	0.00	0.00	0.00	0.00	200.00	0.00	0.00
2003 Gross Receipts ($1,000)*										
Total	443.10	764.00	1,483.00	957.00	1,938.40	399.80	948.80	642.70	342.00	783.90
Cattle	0.00	0.00	0.00	0.00	0.00	0.00	0.00	123.40	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00
Corn	230.80	390.90	772.50	865.00	1,372.40	225.80	541.80	273.10	179.70	414.00
	0.52	0.51	0.52	0.90	0.71	0.57	0.57	0.43	0.53	0.53
Wheat	0.00	0.00	0.00	0.00	0.00	10.00	15.80	0.00	1.10	0.00
	0.00	0.00	0.00	0.00	0.00	0.03	0.02	0.00	0.00	0.00
Soybeans	210.30	363.00	710.50	70.00	461.40	164.00	391.20	234.50	161.30	369.90
	0.48	0.48	0.48	0.07	0.24	0.41	0.41	0.37	0.47	0.47
Hay	0.00	0.00	0.00	21.90	104.50	0.00	0.00	8.00	0.00	0.00
	0.00	0.00	0.00	0.02	0.05	0.00	0.00	0.01	0.00	0.00
Other Receipts	2.00	10.00	0.00	0.00	0.00	0.00	0.00	3.80	0.00	0.00
	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
2003 Planted Acres**										
Total	1,350.00	2,750.00	4,200.00	1,960.00	4,300.00	1,700.00	3,630.00	2,850.00	1,000.00	2,200.00
Corn	675.00	1,375.00	2,100.00	1,646.00	2,666.00	825.00	1,650.00	900.00	500.00	1,100.00
	0.50	0.50	0.50	0.84	0.62	0.49	0.46	0.32	0.50	0.50
Wheat	0.00	0.00	0.00	0.00	0.00	50.00	100.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.00	0.00	0.00
Soybeans	675.00	1,375.00	2,100.00	177.00	1,118.00	825.00	1,880.00	900.00	500.00	1,100.00
	0.50	0.50	0.50	0.09	0.26	0.49	0.52	0.32	0.50	0.50
Hay	0.00	0.00	0.00	137.00	516.00	0.00	0.00	200.00	0.00	0.00
	0.00	0.00	0.00	0.07	0.12	0.00	0.00	0.07	0.00	0.00
CRP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	50.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00
Improved Pasture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	800.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.00	0.00

*Receipts for 2003 are included to indicate the relative importance of each enterprise to the farm. Percents indicate the percentage of the total receipts accounted for by the livestock categories and the crops.

**Acreages for 2003 are included to indicate the relative importance of each enterprise to the farm. Total planted acreage may exceed total cropland available due to double cropping. Percents indicate the percentage of total planted acreage accounted for by the crop.

2003 PANEL FARMS PRODUCING FEED GRAINS AND OILSEEDS (CONTINUED)

TXNP1750 This is a 1,750-acre grain farm located on the northern High Plains of Texas (Moore County). This 100 percent irrigated farm is moderate-sized for the region and plants 640 acres of corn, 240 acres of sorghum, and 870 acres of wheat annually. Seventy percent of total receipts are generated from feedgrain sales.

TXNP7000 TXNP7000 is a large-sized, 80 percent irrigated, grain farm located in the northern Texas Panhandle (Moore County). This farm annually plants 3,350 acres of irrigated corn, 930 acres of sorghum (350 irrigated and 580 dryland), 2,130 acres of wheat (1,550 irrigated and 580 acres dryland). Dryland wheat is planted on the corners of all pivot-irrigated fields. Eighty-four percent of 2003 cash receipts were derived from feedgrain sales.

TXHG2000 This 2,000-acre grain farm is located on the Blackland Prairie of Texas (Hill County). On this farm, 600 acres of corn, 750 acres of sorghum, 400 acres of cotton, and 250 acres of wheat are planted annually. Feedgrain sales accounted for 57 percent of 2003 receipts with cotton accounting for 31 percent of sales. Forty beef cows live on 150 acres of improved pasture and contribute approximately five percent of total receipts.

TXWG1400 This 1,400-acre farm is located on the Blackland Prairie of Texas (Williamson County). TXWG1400 plants 900 acres of corn, 250 acres of sorghum, 150 acres of cotton, and 100 acres of winter wheat annually. Additionally, this farm has a 50-head beef cow herd that is pastured on rented ground that cannot be farmed. Feedgrain sales accounted for 70 percent of 2003 receipts with cotton accounting for 18 percent of sales. .

TNG900 This is a 900-acre, moderate-sized grain farm in West Tennessee (Henry County). Annually, this farm plants 450 acres of corn, 450 acres of soybeans, and 200 acres of wheat (planted before soybeans) in a region of Tennessee recognized for the high level of implementation of conservation practices by farmers. Eighty-seven percent of 2003 farm receipts were from sales of corn and soybeans.

TNG2400 West Tennessee (Henry County) is home to this 2,400-acre, large-sized grain farm. Farmers in this part of Tennessee are known for their early and continued adoption of conservation practices, including widespread implementation of no-till farming. TNG2400 plants 1,080 acres of corn, 500 acres of wheat, and 1,320 acres of soybeans (500 of which are double-cropped after wheat). The farm generated 90 percent of its 2003 gross receipts from sales of feedgrains and oilseeds.

SCG1500 SCG1500 is a moderate-sized, 1500-acre grain farm in South Carolina (Clarendon County) consisting of 698 acres of dryland corn, 148 acres of irrigated corn, 654 acres of soybeans (454 acres double-cropped after wheat), and 454 acres of wheat. Eighty percent of the farm's receipts were realized from corn and soybean sales during 2003. This farm enjoys significant returns on double-cropped acreage, but timing does not allow for more than 454 acres.

SCG3500 A 3,500-acre, large-sized South Carolina (Clarendon County) grain farm with 1,840 acres of corn, 900 acres of wheat, 1,260 acres of soybeans (900 double-cropped after wheat), and 400 acres of cotton. The farm generated 67 percent of 2003 receipts from corn and soybean sales, with an additional 20 percent coming from cotton sales. Timing precludes further expansion of relatively lucrative double-cropped acres.

Appendix Table A2. Characteristics of Panel Farms Producing Feed Grains.

	TXNP1750	TXNP7000	TXHG2000	TXWG1400	TNG900	TNG2400	SCG1500	SCG3500
County	Moore	Moore	Hill	Williamson	Henry	Henry	Clarendon	Clarendon
Total Cropland	1,750.00	7,000.00	2,000.00	1,400.00	900.00	2,400.00	1,500.00	3,500.00
Acres Owned	160.00	1,150.00	200.00	150.00	150.00	600.00	500.00	1,400.00
Acres Leased	1,590.00	5,850.00	1,800.00	1,250.00	750.00	1,800.00	1,000.00	2,100.00
Pastureland								
Acres Owned	0.00	0.00	30.00	30.00	0.00	0.00	0.00	1,400.00
Acres Leased	0.00	0.00	270.00	210.00	0.00	0.00	0.00	0.00
Assets ($1000)								
Total	486.00	2,931.00	521.00	585.00	618.00	2,109.00	874.00	4,071.00
Real Estate	190.00	1,375.00	223.00	312.00	279.00	1,175.00	519.00	3,074.00
Machinery	287.00	1,443.00	272.00	210.00	272.00	692.00	339.00	551.00
Other & Livestock	9.00	113.00	27.00	64.00	67.00	242.00	16.00	446.00
Debt/Asset Ratios								
Total	0.16	0.14	0.18	0.13	0.24	0.16	0.20	0.15
Intermediate	0.18	0.15	0.18	0.09	0.33	0.21	0.26	0.16
Long Run	0.13	0.12	0.18	0.16	0.14	0.13	0.15	0.15
Number of Livestock								
Beef Cows	0.00	0.00	40.00	50.00	0.00	0.00	0.00	0.00
2003 Gross Receipts ($1,000)*								
Total	546.00	1,815.80	379.00	269.20	249.60	743.40	489.80	1,301.20
Cattle	0.00	0.00	18.80	21.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.05	0.08	0.00	0.00	0.00	0.00
Corn	292.40	1,323.90	84.90	147.10	118.10	310.60	229.00	543.60
	0.54	0.73	0.22	0.55	0.47	0.42	0.47	0.42
Sorghum	85.40	203.40	131.50	39.20	0.00	0.00	0.00	0.00
	0.16	0.11	0.35	0.15	0.00	0.00	0.00	0.00
Wheat	165.20	283.50	26.40	11.00	30.00	77.60	65.80	180.70
	0.30	0.16	0.07	0.04	0.12	0.10	0.13	0.14
Soybeans	0.00	0.00	0.00	0.00	99.00	355.20	159.10	321.10
	0.00	0.00	0.00	0.00	0.40	0.48	0.33	0.25
Cotton	0.00	0.00	117.40	49.00	0.00	0.00	35.80	255.90
	0.00	0.00	0.31	0.18	0.00	0.00	0.07	0.20
Other Receipts	3.00	5.00	0.00	2.00	2.50	0.00	0.00	0.00
	0.01	0.00	0.00	0.01	0.01	0.00	0.00	0.00
2003 Planted Acres**								
Total	1,750.00	6,410.00	2,150.00	1,400.00	1,100.00	2,900.00	1,954.00	4,400.00
Corn	640.00	3,350.00	600.00	900.00	450.00	1,080.00	846.00	1,840.00
	0.37	0.52	0.28	0.64	0.41	0.37	0.43	0.42
Sorghum	240.00	930.00	750.00	250.00	0.00	0.00	0.00	0.00
	0.14	0.15	0.35	0.18	0.00	0.00	0.00	0.00
Wheat	870.00	2,130.00	250.00	100.00	200.00	500.00	454.00	900.00
	0.50	0.33	0.12	0.07	0.18	0.17	0.23	0.21
Soybeans	0.00	0.00	0.00	0.00	450.00	1,320.00	654.00	1,260.00
	0.00	0.00	0.00	0.00	0.41	0.46	0.34	0.29
Cotton	0.00	0.00	400.00	150.00	0.00	0.00	0.00	400.00
	0.00	0.00	0.19	0.11	0.00	0.00	0.00	0.09
Improved Pasture	0.00	0.00	150.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00

*Receipts for 2003 are included to indicate the relative importance of each enterprise to the farm. Percents indicate the percentage of the total receipts accounted for by the livestock categories and the crops.

**Acreages for 2003 are included to indicate the relative importance of each enterprise to the farm. Total planted acreage may exceed total cropland available due to double cropping. Percents indicate the percentage of total planted acreage accounted for by the crop.

2003 CHARACTERISTICS OF PANEL FARMS PRODUCING WHEAT

WAW1725 This is a 1,725-acre moderate-sized grain farm in the Palouse of southeastern Washington (Whitman County). It plants 1,035 acres of wheat and 345 acres each of barley and dry peas. Disease concerns dictate rotating a minimum acreage of barley and peas to maintain wheat yields. This farm generated 69 percent of 2003 receipts from wheat.

WAW4675 A 4,675-acre, large-sized grain farm in the Palouse of southeastern Washington (Whitman County). Annually, this farm allocates 3,042 acres to wheat, 340 acres to barley, and 1,293 acres to dry peas. Diseases that inhibit wheat yield dictate the rotation of a minimum acreage of barley and peas. Wheat sales accounted for 73 percent of 2003 receipts.

NDW2180 NDW2180 is a 2,180-acre, moderate-sized, south central North Dakota (Barnes County) grain farm that plants 700 acres of wheat, 240 acres of corn, 100 acres of barley, 800 acres of soybeans, and 240 acres of sunflowers. The farm generated 32 percent of 2003 receipts from small grains sales (wheat and barley) and about 56 percent from oilseeds.

NDW6250 This is a 6,250-acre, large-sized grain farm in south central North Dakota (Barnes County) that grows 2,700 acres of wheat, 300 acres of barley, 1,600 acres of soybeans, 600 acres of corn, 500 acres of sunflowers, and 300 acres of dry edible beans annually. Small grains (wheat and barley) sales total 40 percent of 2003 receipts with oilseeds (soybeans and sunflowers) making up 41 percent.

KSCW1385 South central Kansas (Sumner County) is home to this 1,385-acre, moderate-sized grain farm. KSCW1385 plants 928 acres of winter wheat, 319 acres of sorghum, and 138 acres of soybeans each year. For 2003, 66 percent of gross receipts came from wheat.

KSCW4000 A 4,000-acre, large-sized grain farm in south central Kansas (Sumner County) that plants 2,845 acres of winter wheat, 975 acres of sorghum, 50 acres of corn, 55 acres of soybeans, and 75 acres of hay. KSCW4000 also runs 67 head of beef cows. Sixty-eight percent of this farm's 2003 total receipts were generated from sales of winter wheat.

KSNW2800 This is a 2,800-acre, moderate-sized northwest Kansas (Thomas County) grain farm. This farm plants 935 acres of winter wheat (wheat-fallow rotation), 470 acres of corn, 280 acres of sorghum, and 185 acres of sunflowers. KSNW2800 also owns 60 head of beef cows. This farm generated 41 percent of 2003 receipts from wheat and 26 percent of its receipts from corn.

KSNW4300 KSNW4300 is a 4,300-acre, large-sized northwest Kansas (Thomas County) grain farm that annually plants 2,000 acres of winter wheat, 532 acres of corn, 281 acres of sorghum, 282 acres of sunflowers, 130 acres of soybeans, 75 acres of hay, and has 1,000 acres that lie fallow. This farm also runs 100 head of beef cows. The farm generated 45 percent of receipts from wheat, 26 percent from corn, and seven percent from cattle during 2003.

COW3000 A 3,000-acre northeast Colorado (Washington County), moderate-sized grain farm that plants 1,125 acres of winter wheat, 605 acres of millet, and 445 acres of corn each year. COW3000 has adopted minimum tillage practices on most of its acres and has a 65 head beef cow herd. This farm generated 40 percent of its receipts from wheat, 21 percent from millet, and 14 percent from cattle.

COW5440 A 5,440-acre, large-sized northeast Colorado (Washington County) grain farm. It plants 1,900 acres of wheat, 1,100 acres of millet, 650 acres of corn, and 260 acres of sunflowers. During 2003, 49 percent of gross receipts came from wheat sales and 22 percent came from millet sales.

Appendix Table A3. Characteristics of Panel Farms Producing Wheat.

	WAW1725	WAW4675	NDW2180	NDW6250	KSCW1385	KSCW4000	KSNW2800	KSNW4300	COW3000	COW5440
County	Whitman	Whitman	Barnes	Barnes	Sumner	Sumner	Thomas	Thomas	Washington	Washington
Total Cropland	1,725.00	4,675.00	2,180.00	6,250.00	1,385.00	4,000.00	2,800.00	4,300.00	3,000.00	5,440.00
Acres Owned	518.00	2,125.00	276.00	1,800.00	485.00	500.00	1,170.00	1,135.00	1,137.00	1,815.00
Acres Leased	1,207.00	2,550.00	1,904.00	4,450.00	900.00	3,500.00	1,630.00	3,165.00	1,863.00	3,625.00
Pastureland										
Acres Owned	0.00	0.00	0.00	0.00	0.00	50.00	0.00	500.00	960.00	0.00
Acres Leased	0.00	0.00	0.00	0.00	0.00	400.00	0.00	500.00	0.00	0.00
Assets ($1000)										
Total	1,257.00	4,056.00	540.00	2,903.00	778.00	1,629.00	1,218.00	1,785.00	1,218.00	2,043.00
Real Estate	860.00	3,053.00	276.00	1,320.00	427.00	572.00	783.00	1,114.00	826.00	1,147.00
Machinery	370.00	835.00	218.00	1,200.00	342.00	822.00	372.00	551.00	249.00	655.00
Other & Livestock	28.00	167.00	46.00	383.00	9.00	235.00	62.00	121.00	143.00	241.00
Debt/Asset Ratios										
Total	0.14	0.15	0.09	0.19	0.20	0.16	0.27	0.15	0.16	0.16
Intermediate	0.10	0.19	0.01	0.21	0.25	0.16	0.47	0.15	0.16	0.20
Long Run	0.16	0.14	0.16	0.16	0.16	0.16	0.16	0.16	0.15	0.13
Number of Livestock										
Beef Cows	0.00	0.00	0.00	0.00	0.00	67.00	60.00	100.00	65.00	0.00
2003 Gross Receipts ($1,000)*										
Total	428.60	1,076.60	375.10	1,285.80	193.00	548.70	318.50	625.10	298.80	529.70
Cattle	0.00	0.00	0.00	0.00	0.00	35.30	27.90	46.00	42.40	0.00
	0.00	0.00	0.00	0.00	0.00	0.06	0.09	0.07	0.14	0.00
Wheat	295.80	783.70	99.80	453.70	128.20	372.30	131.70	280.80	118.70	260.60
	0.69	0.73	0.27	0.35	0.66	0.68	0.41	0.45	0.40	0.49
Sorghum	0.00	0.00	0.00	0.00	44.00	122.50	45.30	44.80	0.00	0.00
	0.00	0.00	0.00	0.00	0.23	0.22	0.14	0.07	0.00	0.00
Barley	78.40	81.40	18.20	65.10	0.00	0.00	0.00	0.00	0.00	0.00
	0.18	0.08	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00
Corn	0.00	0.00	46.40	115.40	0.00	6.40	81.30	164.40	59.60	82.10
	0.00	0.00	0.12	0.09	0.00	0.01	0.26	0.26	0.20	0.16
Soybeans	0.00	0.00	167.70	400.60	20.90	7.90	0.00	51.90	0.00	0.00
	0.00	0.00	0.45	0.31	0.11	0.01	0.00	0.08	0.00	0.00
Dry Peas	54.40	211.50	0.00	110.50	0.00	0.00	0.00	0.00	0.00	0.00
	0.13	0.20	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00
Sunflowers	0.00	0.00	39.60	127.80	0.00	0.00	28.40	37.20	0.00	54.40
	0.00	0.00	0.11	0.10	0.00	0.00	0.09	0.06	0.00	0.10
Millet	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	61.70	117.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.22
Hay	0.00	0.00	0.00	0.00	0.00	4.30	0.00	0.10	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
Other Receipts	0.00	0.00	3.50	12.80	0.00	0.00	4.00	0.00	16.50	15.70
	0.00	0.00	0.01	0.01	0.00	0.00	0.01	0.00	0.06	0.03
2003 Planted Acres**										
Total	1,725.00	4,675.50	2,080.00	6,000.00	1,385.00	4,000.00	1,870.00	3,300.00	2,475.00	4,340.00
Wheat	1,035.00	3,042.50	700.00	2,700.00	928.00	2,845.00	935.00	2,000.00	1,125.00	1,900.00
	0.60	0.65	0.34	0.45	0.67	0.71	0.50	0.61	0.46	0.44
Sorghum	0.00	0.00	0.00	0.00	319.00	975.00	280.00	281.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.23	0.24	0.15	0.09	0.00	0.00
Barley	345.00	340.00	100.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.20	0.07	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00
Corn	0.00	0.00	240.00	600.00	0.00	50.00	470.00	532.00	445.00	650.00
	0.00	0.00	0.12	0.10	0.00	0.01	0.25	0.16	0.18	0.15
Soybeans	0.00	0.00	800.00	1,600.00	138.00	55.00	0.00	130.00	0.00	0.00
	0.00	0.00	0.39	0.27	0.10	0.01	0.00	0.04	0.00	0.00
Dry Peas	345.00	1,293.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.20	0.28	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00
Sunflowers	0.00	0.00	240.00	500.00	0.00	0.00	185.00	282.00	0.00	260.00
	0.00	0.00	0.12	0.08	0.00	0.00	0.10	0.09	0.00	0.06
Millet	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	605.00	1,100.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.25
Hay	0.00	0.00	0.00	0.00	0.00	75.00	0.00	75.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.02	0.00	0.00
CRP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	300.00	430.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.10

*Receipts for 2003 are included to indicate the relative importance of each enterprise to the farm. Percents indicate the percentage of the total receipts accounted for by the livestock categories and the crops.

**Acreages for 2003 are included to indicate the relative importance of each enterprise to the farm. Total planted acreage may exceed total cropland available due to double cropping. Percents indicate the percentage of total planted acreage accounted for by the crop.

2003 CHARACTERISTICS OF PANEL FARMS PRODUCING COTTON

CAC2400 CAC2400 is a 2,400-acre, moderate-sized cotton farm located in the central San Joaquin Valley of California (Kings County). This farm plants 1,000 acres of cotton and 1,400 acres of hay. During 2003, CAC2000 generated 58 percent of total receipts from cotton and 42 percent from hay.

CAC9000 California's central San Joaquin Valley (Kings County) is home to this 9,000-acre farm. Cotton is planted on 4,500 acres, 1,260 acres to wheat, 720 acres of hay, and 2,520 acres of vegetables. Fifty-five percent of 2003 receipts were generated from cotton and 36 percent came from vegetable sales.

TXSP2239 A 2,239-acre Texas South Plains (Dawson County) cotton farm that is moderate-sized for the area. TXSP2239 plants 1,616 acres of cotton (1,250 dryland, 366 irrigated), 270 acres of peanuts, and has 183 acres in CRP. For 2003, 59 percent of receipts came from cotton.

TXSP3745 The Texas South Plains (Dawson County) is home to this 3,745-acre, large-sized cotton farm that grows 2,625 acres of cotton (2,120 dryland, 505 irrigated), 245 acres of peanuts, and has 288 acres in CRP. Cotton sales comprised 74 percent of 2003 receipts.

TXPC2500 The Texas Panhandle is home to this 2,500-acre farm (Deaf Smith County). Annually, cotton is planted on 1,184 acres (1,000 irrigated and 184 dryland), 308 acres to sorghum (125 irrigated and 183 dryland), 883 acres planted to wheat (700 irrigated and 183 dryland), and 125 irrigated acres are planted to corn. Sixty-four percent of 2003 cash receipts were generated by cotton sales.

TXEC5000 This 5,000-acre farm is located on the Eastern Caprock of the Texas South Plains (Crosby County). Annually, 4,300 acres are planted to cotton (2,800 irrigated and 1,500 dryland), 400 acres of wheat (100 irrigated and 300 dryland), and 300 acres of dryland sorghum. In 2003, cotton sales accounted for 96 percent of gross receipts.

Appendix Table A4. Characteristics of Panel Farms Producing Cotton.

	CAC2400	CAC9000	TXSP2239	TXSP3745	TXPC2500	TXEC5000
County	Kings	Kings	Dawson	Dawson	Deaf Smtih	Crosby
Total Cropland	2,000.00	9,000.00	2,239.00	3,745.00	2,500.00	5,000.00
Acres Owned	1,000.00	6,750.00	670.00	1,650.00	1,250.00	640.00
Acres Leased	1,000.00	2,250.00	1,569.00	2,095.00	1,250.00	4,360.00
Assets ($1000)						
Total	5,058.00	17,150.00	764.00	1,455.00	1,622.00	1,134.00
Real Estate	4,148.00	15,217.00	354.00	868.00	681.00	343.00
Machinery	444.00	8.00	329.00	587.00	776.00	792.00
Other & Livestock	466.00	1,924.00	81.00	0.00	166.00	0.00
Debt/Asset Ratios						
Total	0.13	0.14	0.11	0.12	0.16	0.39
Intermediate	0.00	0.00	0.09	0.10	0.16	0.50
Long Run	0.16	0.16	0.14	0.14	0.16	0.14
2003 Gross Receipts ($1,000)*						
Total	2,098.80	10,899.60	632.10	828.60	811.20	1,120.40
Cotton	1,207.90	5,944.40	374.90	616.60	515.20	1,075.00
	0.58	0.55	0.59	0.74	0.64	0.96
Sorghum	0.00	0.00	0.00	0.00	36.60	0.00
	0.00	0.00	0.00	0.00	0.05	0.00
Wheat	0.00	430.40	0.00	0.00	116.00	20.10
	0.00	0.04	0.00	0.00	0.14	0.02
Corn	0.00	0.00	0.00	0.00	75.70	0.00
	0.00	0.00	0.00	0.00	0.09	0.00
Hay	890.80	553.40	0.00	0.00	0.00	0.00
	0.42	0.05	0.00	0.00	0.00	0.00
Peanuts	0.00	0.00	252.00	202.50	0.00	0.00
	0.00	0.00	0.40	0.24	0.00	0.00
Sorghum	0.00	0.00	0.00	0.00	0.00	25.30
	0.00	0.00	0.00	0.00	0.00	0.02
Other Receipts	0.00	3,971.40	5.10	9.50	67.70	0.00
	0.00	0.36	0.01	0.01	0.08	0.00
2003 Planted Acres**						
Total	2,400.00	9,000.00	2,069.00	3,158.00	2,500.00	5,000.00
Cotton	1,000.00	4,500.00	1,616.00	2,625.00	1,184.00	4,300.00
	0.42	0.50	0.78	0.83	0.47	0.86
Sorghum	0.00	0.00	0.00	0.00	308.00	0.00
	0.00	0.00	0.00	0.00	0.12	0.00
Wheat	0.00	1,260.00	0.00	0.00	883.00	400.00
	0.00	0.14	0.00	0.00	0.35	0.08
Corn	0.00	0.00	0.00	0.00	125.00	0.00
	0.00	0.00	0.00	0.00	0.05	0.00
Hay	1,400.00	720.00	0.00	0.00	0.00	0.00
	0.58	0.08	0.00	0.00	0.00	0.00
Peanuts	0.00	0.00	270.00	245.00	0.00	0.00
	0.00	0.00	0.13	0.08	0.00	0.00
Sorghum	0.00	0.00	0.00	0.00	0.00	300.00
	0.00	0.00	0.00	0.00	0.00	0.06
Vegetables	0.00	2,520.00	0.00	0.00	0.00	0.00
	0.00	0.28	0.00	0.00	0.00	0.00
CRP	0.00	0.00	183.00	288.00	0.00	0.00
	0.00	0.00	0.09	0.09	0.00	0.00

*Receipts for 2003 are included to indicate the relative importance of each enterprise to the farm. Percents indicate the percentage of the total receipts accounted for by the livestock categories and the crops.

**Acreages for 2003 are included to indicate the relative importance of each enterprise to the farm. Total planted acreage may exceed total cropland available due to double cropping. Percents indicate the percentage of total planted acreage accounted for by the crop.

2003 CHARACTERISTICS OF PANEL FARMS PRODUCING COTTON (continued)

TXRP2500 TXRP2500 is a 2,500-acre cotton farm located in the Rolling Plains of Texas (Jones County). This farm plants 1,122 acres of cotton and 825 acres of winter wheat each year. Seventy-nine percent of 2003 farm receipts came from cotton sales. Twelve head of beef cows generated approximately two percent of farm receipts.

TXMC3500 A 3,500-acre cotton farm located on the middle Texas Gulf Coast (Jackson County) that farms 1,750 acres of cotton and 875 acres each of sorghum and corn. In 2003, cotton sales comprised 72 percent of total cash receipts on this operation.

TXCB1850 A 1,850-acre cotton farm located on the Texas Coastal Bend (San Patricio County) that farms 925 acres of cotton, 775 acres of sorghum, and 150 acres of corn annually. Seventy-three percent of 2003 cash receipts were generated by cotton.

TXCB5500 Nueces County, Texas is home to this 5,500-acre farm. Annually, 2,750 acres are planted to cotton and 2,750 acres to sorghum. Cotton sales accounted for 75 percent of 2003 receipts.

TXVC4500 This 4,500-acre farm is located in the lower Rio Grande Valley of Texas (Willacy County) and plants 2,388 acres to cotton (500 irrigated and 1,888 acres dryland), 1,887 acres to sorghum, and 225 acres of sugarcane. In 2003, 72 percent of TXVC4500's cash receipts were generated by cotton sales.

LAC2640 This is a 2,640 cotton farm located in north Louisiana (Morehouse Parish). LAC2640 plants 1,498 acres of cotton, 686 acres of corn, and 456 acres of soybeans each year. During 2003, 49 percent of farm receipts were generated from cotton sales.

Appendix Table A5. Characteristics of Panel Farms Producing Cotton.

	TXRP2500	TXMC3500	TXCB1850	TXCB5500	TXVC4500	LAC2640
County	Jones	Jackson	San Patricio	Nueces	Willacy	Morehouse
Total Cropland	2,500.00	3,500.00	1,850.00	5,500.00	4,500.00	2,640.00
Acres Owned	400.00	350.00	360.00	225.00	900.00	0.00
Acres Leased	2,100.00	3,150.00	1,490.00	5,275.00	3,600.00	2,640.00
Pastureland						
Acres Leased	500.00	0.00	0.00	0.00	0.00	0.00
Assets ($1000)						
Total	424.00	1,003.00	964.00	1,258.00	2,031.00	971.00
Real Estate	195.00	313.00	496.00	248.00	1,416.00	188.00
Machinery	188.00	545.00	277.00	754.00	615.00	716.00
Other & Livestock	41.00	146.00	191.00	256.00	0.00	67.00
Debt/Asset Ratios						
Total	0.13	0.15	0.12	0.17	0.24	0.22
Intermediate	0.10	0.14	0.09	0.17	0.44	0.24
Long Run	0.15	0.15	0.16	0.16	0.15	0.14
Number of Livestock						
Beef Cows	12.00	0.00	0.00	0.00	0.00	0.00
2003 Gross Receipts ($1,000)*						
Total	229.30	1,281.50	549.30	1,293.90	1,314.00	952.70
Cattle	4.40	0.00	0.00	0.00	0.00	0.00
	0.02	0.00	0.00	0.00	0.00	0.00
Cotton	182.00	917.80	400.70	963.50	948.00	468.50
	0.79	0.72	0.73	0.75	0.72	0.49
Sorghum	0.00	169.10	128.10	330.50	243.60	0.00
	0.00	0.13	0.23	0.26	0.19	0.00
Wheat	42.90	0.00	0.00	0.00	0.00	0.00
	0.19	0.00	0.00	0.00	0.00	0.00
Soybeans	0.00	0.00	0.00	0.00	0.00	230.80
	0.00	0.00	0.00	0.00	0.00	0.24
Corn	0.00	188.50	20.50	0.00	0.00	253.40
	0.00	0.15	0.04	0.00	0.00	0.27
Rice	0.00	6.20	0.00	0.00	0.00	0.00
	0.00	0.01	0.00	0.00	0.00	0.00
Sugar Cane	0.00	0.00	0.00	0.00	122.40	0.00
	0.00	0.00	0.00	0.00	0.09	0.00
2003 Planted Acres**						
Total	1,947.00	3,500.00	1,850.00	5,500.00	4,500.00	2,640.00
Cotton	1,122.00	1,750.00	925.00	2,750.00	2,387.50	1,498.00
	0.58	0.50	0.50	0.50	0.53	0.57
Sorghum	0.00	875.00	775.00	2,750.00	1,887.50	0.00
	0.00	0.25	0.42	0.50	0.42	0.00
Wheat	825.00	0.00	0.00	0.00	0.00	0.00
	0.42	0.00	0.00	0.00	0.00	0.00
Soybeans	0.00	0.00	0.00	0.00	0.00	456.00
	0.00	0.00	0.00	0.00	0.00	0.17
Corn	0.00	875.00	150.00	0.00	0.00	686.00
	0.00	0.25	0.08	0.00	0.00	0.26
Sugar Cane	0.00	0.00	0.00	0.00	225.00	0.00
	0.00	0.00	0.00	0.00	0.05	0.00

*Receipts for 2003 are included to indicate the relative importance of each enterprise to the farm. Percents indicate the percentage of the total receipts accounted for by the livestock categories and the crops.

**Acreages for 2003 are included to indicate the relative importance of each enterprise to the farm. Total planted acreage may exceed total cropland available due to double cropping. Percents indicate the percentage of total planted acreage accounted for by the crop.

2003 CHARACTERISTICS OF PANEL FARMS PRODUCING COTTON (continued)

ARC5000 ARC5000 is a 5,000-acre cotton farm in northeast Arkansas (Desha County) that plants 1,800 acres of cotton, 1,500 acres of rice, 1,400 acres of soybeans, and 300 acres of corn. For 2003, 50 percent of gross receipts came from cotton sales, 35 percent from rice sales, and 14 percent from soybean sales.

TNC1900 A 1,900-acre, moderate-sized West Tennessee (Fayette County) cotton farm. TNC1900 consists of 915 acres of cotton, 370 acres each of soybeans and corn, 150 acres of sorghum, 65 acres of wheat, and 30 acres enrolled in CRP. Cotton accounted for 71 percent of 2003 gross receipts, with corn and soybeans contributing 12 percent and 11 percent, respectively.

TNC4050 TNC4050 is a 4,050-acre, large-sized West Tennessee (Haywood County) cotton farm. This farm plants 2,670 acres of cotton, 820 acres of soybeans, 560 acres of corn, and 328 acres of wheat each year. During 2003, cotton sales generated 80 percent of gross receipts.

ALC3000 A 3,000-acre cotton farm located in north central Alabama (Lawrence County) that plants 2,075 acres to cotton, 750 acres to corn, and 175 acres to soybeans annually. ALC3000 has been under a no-till regime for several years. Additionally, cotton produced on this farm is marketed through a cooperative gin. This gin has implemented ginning and marketing innovations that return a higher lint price than would be realized through conventional marketing channels. Cotton sales accounted for 80 percent of total farm receipts during 2003.

GAC1700 Southwest Georgia (Decatur County) is home to a 1,700-acre cotton farm that plants 1,020 acres to cotton, 510 acres to peanuts, and 170 acres to soybeans. This farm was added during 2001 to represent resurgent cotton production in the Deep South. In 2003, farm receipts were comprised largely of cotton sales (56 percent) and peanut sales (38 percent).

NCC1500 This is a 1,500-acre cotton farm located on the upper coastal plain of North Carolina (Wayne County). NCC1500 plants 1,000 acres of cotton, 500 acres of wheat, and 500 acres of double-cropped soybeans annually. This farm was added during 2001 to reflect the return of large-scale cotton production to North Carolina. Cotton accounted for 70 percent of this farm's 2003 receipts with 15 percent coming from soybean sales.

Appendix Table A6. Characteristics of Panel Farms Producing Cotton.

	ARC5000	TNC1900	TNC4050	ALC3000	GAC1700	NCC1500
County	Desha	Fayette	Haywood	Lawrence	Decatur	Wayne
Total Cropland	5,000.00	1,900.00	4,050.00	3,000.00	1,700.00	1,500.00
Acres Owned	1,000.00	225.00	1,000.00	0.00	510.00	225.00
Acres Leased	4,000.00	1,675.00	3,050.00	3,000.00	1,190.00	1,275.00
Pastureland						
Acres Owned	0.00	0.00	0.00	0.00	90.00	0.00
Assets ($1000)						
Total	4,259.00	1,750.00	3,740.00	1,761.00	2,175.00	1,690.00
Real Estate	1,779.00	733.00	1,854.00	141.00	1,320.00	1,152.00
Machinery	1,714.00	323.00	1,367.00	1,093.00	742.00	504.00
Other & Livestock	767.00	693.00	518.00	527.00	113.00	34.00
Debt/Asset Ratios						
Total	0.17	0.06	0.14	0.12	0.23	0.15
Intermediate	0.19	0.02	0.14	0.11	0.34	0.12
Long Run	0.14	0.09	0.14	0.15	0.16	0.16
2003 Gross Receipts ($1,000)*						
Total	2,772.90	707.10	1,696.30	1,308.60	1,240.30	702.90
Cotton	1,393.70	503.80	1,350.70	1,041.40	694.70	490.90
	0.50	0.71	0.80	0.80	0.56	0.70
Sorghum	0.00	27.60	0.00	0.00	0.00	0.00
	0.00	0.04	0.00	0.00	0.00	0.00
Wheat	0.00	13.00	63.90	0.00	0.00	56.30
	0.00	0.02	0.04	0.00	0.00	0.08
Soybeans	384.20	79.60	156.40	102.30	77.80	104.60
	0.14	0.11	0.09	0.08	0.06	0.15
Corn	37.10	81.70	121.20	164.80	0.00	0.00
	0.01	0.12	0.07	0.13	0.00	0.00
Peanuts	0.00	0.00	0.00	0.00	467.70	0.00
	0.00	0.00	0.00	0.00	0.38	0.00
Rice	957.90	0.00	0.00	0.00	0.00	0.00
	0.35	0.00	0.00	0.00	0.00	0.00
Other Receipts	0.00	1.40	4.00	0.00	0.00	51.00
	0.00	0.00	0.00	0.00	0.00	0.07
2003 Planted Acres**						
Total	5,000.50	1,900.00	4,378.00	3,000.00	1,700.00	2,000.00
Cotton	1,800.50	915.00	2,670.00	2,075.00	1,020.00	1,000.00
	0.36	0.48	0.61	0.69	0.60	0.50
Sorghum	0.00	150.00	0.00	0.00	0.00	0.00
	0.00	0.08	0.00	0.00	0.00	0.00
Wheat	0.00	65.00	328.00	0.00	0.00	500.00
	0.00	0.03	0.08	0.00	0.00	0.25
Soybeans	1,400.00	370.00	820.00	175.00	170.00	500.00
	0.28	0.20	0.19	0.06	0.10	0.25
Corn	300.00	370.00	560.00	750.00	0.00	0.00
	0.06	0.20	0.13	0.25	0.00	0.00
Peanuts	0.00	0.00	0.00	0.00	510.00	0.00
	0.00	0.00	0.00	0.00	0.30	0.00
CRP	0.00	30.00	0.00	0.00	0.00	0.00
	0.00	0.02	0.00	0.00	0.00	0.00
Rice	1,500.00	0.00	0.00	0.00	0.00	0.00
	0.30	0.00	0.00	0.00	0.00	0.00

*Receipts for 2003 are included to indicate the relative importance of each enterprise to the farm. Percents indicate the percentage of the total receipts accounted for by the livestock categories and the crops.

**Acreages for 2003 are included to indicate the relative importance of each enterprise to the farm. Total planted acreage may exceed total cropland available due to double cropping. Percents indicate the percentage of total planted acreage accounted for by the crop.

2003 CHARACTERISTICS OF PANEL FARMS PRODUCING RICE

CAR424 CAR424 is a 424-acre moderate-sized rice farm in the Sacramento Valley of California (Sutter and Yuba Counties) that plants 400 acres of rice annually. This farm generated 98 percent of 2003 gross receipts from rice sales.

CAR2365 This is a 2,365-acre rice farm located in the Sacramento Valley of California (Sutter and Yuba Counties) that is large-sized for the region. CAR2365 plants 2,240 acres of rice annually. Ninety-eight of 2003's total receipts were generated from rice sales.

CABR1365 The Sacramento Valley (Butte County) is home to CABR1365, a 1,000-acre rice farm. CABR1000 harvests 1,000 acres of rice annually, generating more than 99 percent of 2003 farm receipts from rice sales.

CACR1420 CACR1420 is a 1,420-acre rice farm located in the Sacramento Valley of California (Colusa County). This farm harvests 1,278 acres of rice each year. During 2003, more than 99 percent of farm receipts were realized from rice sales.

TXR1553 This 1,553-acre rice farm located west of Houston, Texas (Colorado County) is moderate-sized for the region. TXR1553 harvests 450 acres of first-crop rice and 405 acres of ratoon rice. The farm generated 98 percent of its receipts from rice during 2003.

TXR3774 TXR3774 is a 3,774-acre, large-sized rice farm located west of Houston, Texas (Colorado County). This farm harvests 1,589 acres of first-crop rice and 1,351 acres of ratoon rice annually. TXR3774 realized 98 percent of 2003 gross receipts from rice sales.

TXBR1650 The Texas Gulf Coast (Matagorda County) is home to this 1,650-acre rice farm. TXBR1650 harvests 550 acres of rice annually (550 acres of first-crop rice and 475 acres of ratoon rice) and realized 100 percent of 2003 farm receipts from sales of rice.

TXER3200 This 3,200-acre rice farm is large for the Texas Gulf Coast (Wharton County). TXER3200 harvests 1,280 acres of first-crop rice and 1,024 acres of ratoon rice each year. The farm also grows 160 acres each of soybeans and grain sorghum annually. Ninety-six percent of 2003 receipts came from rice sales.

Appendix Table A7. Characteristics of Panel Farms Producing Rice.

	CAR424	CAR2365	CABR1365	CACR1420	TXR1553	TXR3774	TXBR1650	TXER3200
County	Sutter	Sutter	Butte	Colusa	Colorado	Colorado	Matagorda	Wharton
Total Cropland	424.00	2,365.00	1,000.00	1,420.00	1,553.00	3,774.00	1,650.00	3,200.00
Acres Owned	212.00	769.00	230.00	412.00	129.00	0.00	110.00	320.00
Acres Leased	212.00	1,596.00	770.00	1,008.00	1,424.00	3,774.00	1,540.00	2,880.00
Assets ($1000)								
Total	917.00	3,576.00	1,692.00	2,156.00	525.00	1,142.00	733.00	1,066.00
Real Estate	616.00	2,457.00	882.00	1,376.00	122.00	16.00	175.00	348.00
Machinery	301.00	1,118.00	810.00	779.00	370.00	802.00	426.00	678.00
Other & Livestock	0.00	0.00	0.00	0.00	33.00	324.00	133.00	39.00
Debt/Asset Ratios								
Total	0.28	0.22	0.35	0.35	0.18	0.18	0.04	0.27
Intermediate	0.53	0.36	0.54	0.67	0.18	0.18	0.00	0.32
Long Run	0.16	0.16	0.17	0.17	0.16	0.18	0.17	0.16
2003 Gross Receipts ($1,000)*								
Total	334.60	1,952.30	823.50	1,097.00	471.00	1,228.70	631.20	1,218.20
Rice	327.10	1,912.30	819.50	1,096.00	460.20	1,208.70	631.20	1,171.10
	0.98	0.98	1.00	1.00	0.98	0.98	1.00	0.96
Soybeans	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.50
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
Sorghum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19.60
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
Other Receipts	7.50	40.00	4.00	1.00	10.70	20.00	0.00	0.00
	0.02	0.02	0.01	0.00	0.02	0.02	0.00	0.00
2003 Planted Acres**								
Total	400.00	2,240.00	1,000.00	1,278.00	855.00	2,940.00	1,025.00	2,624.00
Rice	400.00	2,240.00	1,000.00	1,278.00	855.00	2,940.00	1,025.00	2,304.00
	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.88
Soybeans	0.00	0.00	0.00	0.00	0.00	0.00	0.00	160.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06
Sorghum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	160.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06

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**Acreages for 2003 are included to indicate the relative importance of each enterprise to the farm. Total planted acreage may exceed total cropland available due to double cropping. Percents indicate the percentage of total planted acreage accounted for by the crop.

2003 CHARACTERISTICS OF PANEL FARMS PRODUCING RICE (continued)

LASR1200 A 1,200-acre southwest Louisiana (Acadia, Jeff Davis, and Vermilion parishes) rice farm, LASR1200 is moderate-sized for the area. This farm harvests 660 acres of long grain rice and 324 acres of soybeans. During 2003, 83 percent of gross receipts were generated from rice sales.

LANR2500 This is a 2,500-acre, large-sized northeast Louisiana (Madison Parish) rice farm. This farm harvests 1,000 acres of long grain rice, 750 acres of soybeans, 325 acres of cotton, 200 acres of corn, and 100 acres of sorghum. For 2003, 60 percent of farm receipts came from rice, 15 percent from soybeans, and 16 percent from cotton.

MOER4500 MOER4500 is a 4,500-acre, large-sized rice farm located in southeast Missouri (New Madrid County) that plants 1,500 acres each to rice, corn, and soybeans each year. During 2003, 51 percent of this farm's cash receipts were generated by rice, 28 percent by corn, and 21 percent by soybeans.

MOWR4000 A 4,000-acre rice farm located in southeast Missouri (Butler County), MOWR4000 is large-sized for the region. Annually, this farm plants 2,000 acres of rice and 2,000 acres of soybeans. Seventy-two percent of receipts for this farm came from rice sales in 2003.

ARSR3640 ARR3640 is a 3,640-acre, large-sized Arkansas (Arkansas County) rice farm that harvests 122 acres of medium grain rice, 1620 acres of long grain rice, 1,498 acres of soybeans, and 615 acres of wheat each year. Seventy-one percent of this farm's 2003 receipts came from rice sales.

ARWR1200 East central Arkansas (Cross County) is home to this 1,200-acre rice farm. Moderate-sized for the region, ARWR1200 annually plants 600 acres to rice, 600 acres to soybeans, and 60 acres of double-cropped wheat. During 2003, rice sales generated 70 percent of gross receipts.

ARHR3000 ARHR3000 is a 3,000-acre large-sized northeast Arkansas (Lawrence County) rice farm that annually harvests 1,500 acres of rice, 1,350 acres of soybeans, and 150 acres of corn. Rice sales accounted for 74 percent of 2003 farm receipts.

MSR4735 This is a 4,735-acre Mississippi Delta (Tunica County, MS) rice farm that plants 1,335 acres of rice, 2,700 acres of soybeans, and 500 acres of cotton annually. During 2003, MSR4735 realized 51 percent of total receipts from rice, 32 percent from soybeans, and 17 percent from cotton.

Appendix Table A8. Characteristics of Panel Farms Producing Rice.

	LASR1200	LANR2500	MOER4500	MOWR4000	ARSR3640	ARWR1200	ARHR3000	MSR4735
County	Acadia	Madison	New Madrid	Butler	Arkansas	Cross	Lawrence	Tunica
Total Cropland	1,200.00	2,500.00	4,500.00	4,000.00	3,640.00	1,200.00	3,000.00	4,736.00
Acres Owned	50.00	1,250.00	1,575.00	2,000.00	1,456.00	360.00	1,000.00	0.00
Acres Leased	1,150.00	1,250.00	2,925.00	2,000.00	2,184.00	840.00	2,000.00	4,735.00
Assets ($1000)								
Total	418.00	2,435.00	6,188.00	6,774.00	4,620.00	1,754.00	3,510.00	1,750.00
Real Estate	78.00	1,469.00	3,701.00	4,659.00	3,096.00	957.00	2,240.00	219.00
Machinery	290.00	966.00	1,502.00	1,582.00	1,228.00	777.00	1,146.00	1,441.00
Other & Livestock	50.00	0.00	985.00	532.00	296.00	20.00	125.00	89.00
Debt/Asset Ratios								
Total	0.25	0.21	0.12	0.15	0.14	0.16	0.17	0.17
Intermediate	0.27	0.31	0.09	0.18	0.10	0.19	0.23	0.17
Long Run	0.17	0.14	0.14	0.14	0.16	0.14	0.14	0.18
2003 Gross Receipts ($1,000)*								
Total	428.60	1,146.70	1,773.00	1,859.40	1,461.50	613.30	1,469.00	2,017.80
Rice	355.80	683.70	907.50	1,330.30	1,031.10	431.60	1,092.40	1,026.90
	0.83	0.60	0.51	0.72	0.71	0.70	0.74	0.51
Soybeans	57.80	175.10	367.60	529.10	329.10	170.80	355.80	646.80
	0.14	0.15	0.21	0.29	0.23	0.28	0.24	0.32
Corn	0.00	75.20	497.90	0.00	0.00	0.00	20.80	0.00
	0.00	0.07	0.28	0.00	0.00	0.00	0.01	0.00
Sorghum	0.00	24.60	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
Wheat	0.00	0.00	0.00	0.00	101.40	11.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.07	0.02	0.00	0.00
Cotton	0.00	188.00	0.00	0.00	0.00	0.00	0.00	344.10
	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.17
Other Receipts	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2003 Planted Acres**								
Total	1,044.00	2,375.00	4,500.00	4,000.00	3,855.00	1,260.00	3,000.00	4,535.00
Rice	660.00	1,000.00	1,500.00	2,000.00	1,742.00	600.00	1,500.00	1,335.00
	0.63	0.42	0.33	0.50	0.45	0.48	0.50	0.29
Soybeans	324.00	750.00	1,500.00	2,000.00	1,498.00	600.00	1,350.00	2,700.00
	0.31	0.32	0.33	0.50	0.39	0.48	0.45	0.60
Corn	0.00	200.00	1,500.00	0.00	0.00	0.00	150.00	0.00
	0.00	0.08	0.33	0.00	0.00	0.00	0.05	0.00
Sorghum	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00
Wheat	0.00	0.00	0.00	0.00	615.00	60.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.16	0.05	0.00	0.00
Cotton	0.00	325.00	0.00	0.00	0.00	0.00	0.00	500.00
	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.11
Fallow	60.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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**Acreages for 2003 are included to indicate the relative importance of each enterprise to the farm. Total planted acreage may exceed total cropland available due to double cropping. Percents indicate the percentage of total planted acreage accounted for by the crop.

2003 CHARACTERISTICS OF PANEL FARMS PRODUCING MILK

CAD1710 A 1,710-cow, large-sized central California (Tulare County) dairy. The farm plants 525 acres of hay/silage for which it employs custom harvesting. Milk sales generated 91 percent of 2003 total receipts.

NMD2000 A 2,000 cow, large-sized southern New Mexico (Dona Ana and Chaves Counties) dairy. This farm purchases all commodities necessary for blending its own total mixed ration and plants no crops. Milk sales accounted for 92 percent of 2003 total receipts.

WAD250 A 250-cow, moderate-sized northern Washington (Whatcom County) dairy. This farm plants 200 acres of silage and generated 91 percent of its 2003 gross receipts from milk sales.

WAD850 An 850-cow, large-sized northern Washington (Whatcom County) dairy. This farm plants 605 acres for silage annually. During 2003, 92 percent of this farm's gross receipts came from milk.

IDD750 A 750-cow, moderate-sized Idaho (Twin Falls County) dairy. This farm plants no crops. Milk sales accounted for 89 percent of IDD750's gross receipts for 2003.

IDD2100 A 2,1000-cow, large-sized Idaho (Twin Falls County) dairy. This farm plants 560 acres for silage annually. During 2003, milk sales accounted for 92 percent of this farm's gross receipts.

TXND2400 A 2,4000-cow, large-sized diary located in the South Plains of Texas (Bailey County). This farm plants 360 acres for silage annually. Milk sales account for 90 percent of 2003 gross receipts.

TXCD500 A 500-cow, moderate-sized central Texas (Erath County) dairy. TXCD500 plants 500 acres of hay each year. Milk sales represented 90 percent of this farm's 2003 gross receipts.

TXCD1300 A 1,300-cow, large-sized central Texas (Erath County) dairy. TXCD1300 plants 215 acres of silage annually. During 2003, milk sales accounted for 92 percent of receipts.

Appendix Table A9. Characteristics of Panel Farms Producing Milk.

	CAD1710	NMD2000	WAD250	WAD850	IDD750	IDD2100	TXND2400	TXCD500	TXCD1300
County	Tulare	Chaves	Whatcom	Whatcom	Twin Falls	Twin Falls	Bailey	Erath	Erath
Total Cropland	800.00	400.00	200.00	605.00	240.00	560.00	260.00	250.00	460.00
Acres Owned	800.00	400.00	100.00	300.00	240.00	560.00	260.00	250.00	460.00
Acres Leased	0.00	0.00	100.00	305.00	0.00	0.00	0.00	0.00	0.00
Pastureland									
Acres Owned	0.00	0.00	0.00	0.00	0.00	0.00	0.00	75.00	0.00
Assets ($1000)									
Total	10,548.00	6,267.00	1,863.00	4,612.00	3,681.00	10,036.00	8,829.00	2,027.00	5,175.00
Real Estate	6,774.00	2,908.00	1,157.00	2,559.00	1,753.00	4,321.00	2,770.00	977.00	2,618.00
Machinery	317.00	334.00	172.00	571.00	259.00	505.00	387.00	233.00	386.00
Other & Livestock	3,457.00	3,026.00	534.00	1,482.00	1,670.00	5,210.00	5,672.00	818.00	2,171.00
Debt/Asset Ratios									
Total	0.21	0.21	0.23	0.33	0.24	0.10	0.20	0.35	0.17
Intermediate	0.13	0.17	0.27	0.43	0.30	0.00	0.17	0.43	0.06
Long Run	0.25	0.25	0.21	0.24	0.19	0.21	0.26	0.26	0.26
2003 Gross Receipts ($1,000)*									
Total	5,103.40	6,022.00	837.40	2,780.00	2,434.40	6,500.00	6,660.80	1,331.10	4,262.60
Milk	4,642.00	5,521.50	761.60	2,550.60	2,172.20	5,962.80	5,991.10	1,198.00	3,913.10
	0.91	0.92	0.91	0.92	0.89	0.92	0.90	0.90	0.92
Dairy Cattle	421.10	476.00	47.50	185.40	189.70	495.90	645.20	108.50	325.00
	0.08	0.08	0.06	0.07	0.08	0.08	0.10	0.08	0.08
Other Receipts	15.80	0.00	3.80	19.40	48.00	16.80	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00
2003 Planted Acres**									
Total	525.00	0.00	200.00	605.00	0.00	560.00	360.00	500.00	215.00
Hay	200.00	0.00	0.00	0.00	0.00	0.00	0.00	500.00	0.00
	0.38	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Silage	325.00	0.00	200.00	605.00	0.00	560.00	360.00	0.00	215.00
	0.62	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00

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**Acreages for 2003 are included to indicate the relative importance of each enterprise to the farm. Total planted acreage may exceed total cropland available due to double cropping. Percents indicate the percentage of total planted acreage accounted for by the crop.

2003 CHARACTERISTICS OF PANEL FARMS PRODUCING MILK (continued)

TXED550 A 550-cow, moderate-sized northeast Texas (Hopkins County) dairy. This farm has 300 acres of improved pasture and 50 acres of hay. During 2003, milk sales represented 88 percent of annual receipts.

TXED1000 A 1,000-cow, large-sized northeast Texas (Hopkins County) dairy. This farm plants 825 acres of hay/silage. This farm generated 87 percent of 2003 receipts from milk sales.

WID135 A 135-cow, moderate-sized eastern Wisconsin (Winnebago County) dairy. The farm plants 297 acres of hay, 184 acres of corn, and 99 acres of soybeans. Milk constituted 84 percent of this farm's 2003 receipts.

WID700 A 700-cow, large-sized eastern Wisconsin (Winnebago County) dairy. The farm plants 696 acres of hay and 454 acres of silage each year. Milk sales comprised 92 percent of the farm's 2003 receipts.

NYWD800 An 800-cow, moderate-sized western New York (Wyoming County) dairy. This farm plants 690 acres of silage and 750 acres of haylage annually. Milk sales accounted for 92 percent of the gross receipts for this farm in 2003.

NYWD1200 A 1,200-cow, large-sized western New York (Wyoming County) dairy. This farm plants 2,160 acres for silage annually. Milk sales accounted for 92 percent of the gross receipts for this farm in 2003.

NYCD110 A 110-cow, moderate-sized central New York (Cayuga County) dairy. The farm plants 80 acres for hay, 64 acres for corn, and 131 acres for silage annually. Milk accounted for 85 percent of the gross receipts for 2003 on this dairy.

NYCD500 A 500-cow, large-sized central New York (Cayuga County) dairy. This farm plants 714 acres of hay and haylage and 386 acres of silage. Milk sales make up 92 percent of the 2003 total receipts for this dairy.

Appendix Table A10. Characteristics of Panel Farms Producing Milk.

	TXED550	TXED1000	WID135	WID700	NYWD800	NYWD1200	NYCD110	NYCD500
County	Hopkins	Lamar	Winnebago	Winnebago	Wyoming	Wyoming	Cayuga	Cayuga
Total Cropland	300.00	875.00	600.00	1,200.00	1,440.00	2,160.00	296.00	1,100.00
Acres Owned	150.00	375.00	330.00	480.00	1,040.00	1,440.00	250.00	841.00
Acres Leased	150.00	500.00	270.00	720.00	400.00	720.00	46.00	259.00
Pastureland								
Acres Owned	0.00	75.00	40.00	0.00	100.00	50.00	20.00	400.00
Acres Leased	0.00	80.00	0.00	0.00	0.00	0.00	0.00	0.00
Assets ($1000)								
Total	1,525.00	4,082.00	2,136.00	4,022.00	4,712.00	7,537.00	890.00	3,217.00
Real Estate	530.00	1,323.00	1,462.00	2,381.00	2,532.00	4,151.00	355.00	1,771.00
Machinery	114.00	350.00	294.00	328.00	885.00	1,380.00	107.00	486.00
Other & Livestock	882.00	2,409.00	379.00	1,313.00	1,295.00	2,007.00	428.00	960.00
Debt/Asset Ratios								
Total	0.16	0.09	0.21	0.17	0.24	0.24	0.14	0.15
Intermediate	0.03	0.02	0.16	0.05	0.24	0.23	0.07	0.08
Long Run	0.41	0.25	0.23	0.25	0.24	0.24	0.25	0.22
2003 Gross Receipts ($1,000)*								
Total	1,290.90	2,874.90	487.80	2,302.40	2,631.60	3,928.60	435.20	1,760.30
Milk	1,140.70	2,514.00	410.80	2,114.00	2,425.30	3,599.50	367.80	1,611.80
	0.88	0.87	0.84	0.92	0.92	0.92	0.85	0.92
Dairy Cattle	107.40	296.40	37.70	153.90	161.70	276.80	39.30	112.80
	0.08	0.10	0.08	0.07	0.06	0.07	0.09	0.06
Hay	0.00	0.00	4.90	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00
Corn	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Soybeans	0.00	0.00	6.70	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00
2003 Planted Acres**								
Total	350.00	875.00	600.00	1,200.00	1,440.00	2,160.00	275.00	1,100.00
Hay	50.00	350.00	297.00	696.00	750.00	0.00	80.00	714.00
	0.14	0.40	0.50	0.58	0.52	0.00	0.29	0.65
Silage	0.00	525.00	0.00	454.00	690.00	2,160.00	131.00	386.00
	0.00	0.60	0.00	0.38	0.48	1.00	0.48	0.35
Improved Pasture	300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Corn	0.00	0.00	184.00	0.00	0.00	0.00	64.00	0.00
	0.00	0.00	0.31	0.00	0.00	0.00	0.23	0.00
Soybeans	0.00	0.00	99.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.00

*Receipts for 2003 are included to indicate the relative importance of each enterprise to the farm. Percents indicate the percentage of the total receipts accounted for by the livestock categories and the crops.

**Acreages for 2003 are included to indicate the relative importance of each enterprise to the farm. Total planted acreage may exceed total cropland available due to double cropping. Percents indicate the percentage of total planted acreage accounted for by the crop.

2003 CHARACTERISTICS OF PANEL FARMS PRODUCING MILK (continued)

VTD134 A 134-cow, moderate-sized Vermont (Washington County) dairy. VTD134 plants 26 acres of hay, and 193 acres of silage annually. Milk accounted for 83 percent of the 2003 receipts for this farm.

VTD350 A 350-cow, large-sized Vermont (Washington County) dairy. This farm plants 40 acres of hay and 660 acres of silage annually. Milk sales represent 92 percent of VTD350's gross receipts in 2003.

MOD85 An 85-cow, moderate-sized southwest Missouri (Christian County) diary. The farm plants 200 acres of hay and 30 acres of silage. Milk accounted for 79 percent of gross farm receipts for 2003.

MOD400 A 400-cow, large-sized southwest Missouri (Christian County) dairy. The farm plants 315 acres of hay, 135 acres of silage, and 150 acres of improved pasture annually. Milk accounted for 91 percent of gross farm receipts for 2003.

FLND500 A 500-cow, moderate-sized north Florida (Lafayette County) dairy. The diary grows 130 acres of hay each year. All other feed requirements are purchased in a pre-mixed ration. Milk sales accounted for 93 percent of the farm receipts.

FLSD1500 A 1,500-cow, large-sized south central Florida (Okeechobee County) dairy. FLSD1500 plants 500 acres of hay annually. Milk sales represent 95 percent of 2003 total receipts.

Appendix Table A11. Characteristics of Panel Farms Producing Milk.

	VTD134	VTD350	MOD85	MOD400	FLND500	FLSD1500
County	Washington	Washington	Christian	Dade	Lafayette	Okeechobee
Total Cropland	220.00	700.00	230.00	450.00	600.00	400.00
Acres Owned	100.00	525.00	230.00	450.00	450.00	400.00
Acres Leased	120.00	175.00	0.00	0.00	150.00	0.00
Pastureland						
Acres Owned	120.00	50.00	55.00	150.00	60.00	470.00
Acres Leased	0.00	50.00	55.00	0.00	0.00	0.00
Assets ($1000)						
Total	950.00	2,920.00	923.00	2,379.00	2,879.00	6,698.00
Real Estate	374.00	1,868.00	575.00	1,256.00	1,397.00	3,001.00
Machinery	162.00	345.00	145.00	320.00	93.00	314.00
Other & Livestock	414.00	707.00	203.00	803.00	1,389.00	3,383.00
Debt/Asset Ratios						
Total	0.13	0.21	0.15	0.16	0.11	0.33
Intermediate	0.09	0.29	0.17	0.12	0.02	0.50
Long Run	0.17	0.17	0.14	0.19	0.21	0.20
2003 Gross Receipts ($1,000)*						
Total	455.70	1,228.20	240.40	1,107.30	1,839.90	4,291.70
Milk	379.50	1,125.90	188.70	1,002.70	1,713.50	4,054.90
	0.83	0.92	0.79	0.91	0.93	0.95
Dairy Cattle	43.80	76.90	35.70	80.20	101.90	212.30
	0.10	0.06	0.15	0.07	0.06	0.05
Other Receipts	7.90	0.90	0.00	0.00	0.00	0.00
	0.01	0.00	0.00	0.00	0.00	0.00
2003 Planted Acres**						
Total	220.00	700.00	230.00	600.00	130.00	500.00
Hay	26.20	40.00	200.00	315.00	130.00	500.00
	0.12	0.06	0.87	0.53	1.00	1.00
Silage	193.80	660.00	30.00	135.00	0.00	0.00
	0.88	0.94	0.13	0.23	0.00	0.00
Improved Pasture	0.00	0.00	0.00	150.00	0.00	0.00
	0.00	0.00	0.00	0.25	0.00	0.00

*Receipts for 2003 are included to indicate the relative importance of each enterprise to the farm. Percents indicate the percentage of the total receipts accounted for by the livestock categories and the crops.

**Acreages for 2003 are included to indicate the relative importance of each enterprise to the farm. Total planted acreage may exceed total cropland available due to double cropping. Percents indicate the percentage of total planted acreage accounted for by the crop.

2003 CHARACTERISTICS OF PANEL RANCHES PRODUCING BEEF CATTLE

CAB500 Located in the northern Sacramento Valley (Tehama County, California), this 500-cow operation covers 13,125 acres of deeded and privately owned leased range. Additionally, 2,000 AUMs are leased from the BLM. All 2003 receipts were generated by the cow-calf operation.

NVB700 NVB680 is a 700-cow ranch located in northeastern Nevada (Elko County). The operation consists of 1,300 acres of owned hay meadow and 8,725 acres of owned range, supplemented by acreage leased from the U.S. Forest. Each year, the farm harvests 1,300 acres of hay. Annually, cattle sales represent all of the ranch's receipts.

MTB500 A 500-cow ranch located on the eastern plains of Montana (Custer County), MTB500 runs cows on a combination of owned land and land leased from federal, state, and private sources. Federal land satisfies one quarter of total grazing needs. The ranch owns 14,000 acres of pasture. 640 acres of hay are produced annually on the owned land. Sales of high-quality replacement females comprise a significant portion of receipts for this ranch. Also, all deeded acres are leased for hunting. Cattle sales represent 98 percent of this ranch's receipts.

WYB500 This 500-cow ranch is located in north central Wyoming (Washakie County). The ranch leases 42 percent of its required grazing acreage from the U.S. Forest Service and owns 1,000 acres of range. Annually, the ranch harvests 300 acres of alfalfa and grass hay on owned ground. In recent years, cowherd size has increased in an effort to realize benefits of economies of size. In 2003, cattle sales account for 100 percent of gross receipts on this ranch.

COB250 This 250-cow ranch is located in northwestern Colorado (Routt County). Federal land provides seven percent of the ranch's grazing needs. The ranch owns 2,300 acres of rangeland, and the cattle graze federal land during the summer. COB250 harvests 450 acres of hay each year. The ranch retains ownership of 75 percent of its steers through the backgrounding stage. Since 1999, the cowherd has decreased by 50 head as land development pressures have reduced grazing capacity. Cattle sales accounted for 79 percent of the ranch's 2003 total receipts.

NMB240 NMB240 is a 240-cow ranch located in northeastern New Mexico (Union County) that consists of 10,072 owned acres of pastureland. This ranch harvests no hay. All forage and concentrate feed requirements are purchased from outside sources. In 2002, this ranch liquidated 20 percent of its mature cowherd in response to oppressive drought, culling 60 of its 300 cows to arrive at the current inventory. During 2003, 92 percent of gross receipts were derived from cattle sales with limited receipts from fee hunting.

Appendix Table A12. Characteristics of Panel Farms Producing Beef Cattle.

	CAB500	NVB700	MTB500	WYB500	COB250	NMB240
County	Tehama	Elko	Custer	Washakie	Routt	Union
Total Cropland	0.00	1,300.00	0.00	330.00	450.00	0.00
Acres Owned	0.00	1,300.00	0.00	330.00	450.00	0.00
Acres Leased	0.00	0.00	0.00	0.00	0.00	0.00
Pastureland						
Acres Owned	13,125.00	8,725.00	14,000.00	1,000.00	2,300.00	10,072.00
Acres Leased	0.00	0.00	0.00	0.00	0.00	2.00
Federal AUMs Lea	2,000.00	4,450.00	1,350.00	4,000.00	200.00	0.00
State/Private AUMs	3,000.00	0.00	5,180.00	0.00	520.00	0.00
Assets ($1000)						
Total	8,893.00	2,130.00	2,591.00	2,392.00	9,088.00	2,566.00
Real Estate	8,306.00	1,385.00	1,684.00	1,695.00	8,553.00	2,248.00
Machinery	80.00	91.00	129.00	196.00	152.00	85.00
Other & Livestock	507.00	653.00	778.00	501.00	383.00	233.00
Debt/Asset Ratios						
Total	0.01	0.01	0.01	0.04	0.01	0.01
Intermediate	0.09	0.02	0.02	0.13	0.01	0.04
Long Run	0.01	0.01	0.01	0.01	0.01	0.01
Number of Livestock						
Beef Cows	500.00	700.00	500.00	500.00	250.00	240.00
2003 Gross Receipts ($1,000)*						
Total	271.90	315.70	274.90	264.40	142.20	121.20
Cattle	271.90	315.70	267.90	264.40	112.00	112.00
	1.00	1.00	0.98	1.00	0.79	0.92
Hay	0.00	0.00	0.00	0.00	21.30	0.00
	0.00	0.00	0.00	0.00	0.15	0.00
Other Receipts	0.00	0.00	7.00	0.00	9.00	9.20
	0.00	0.00	0.03	0.00	0.06	0.08
2003 Planted Acres**						
Total	0.00	1,300.00	640.00	300.00	450.00	0.00
Hay	0.00	1,300.00	640.00	300.00	450.00	0.00
	0.00	1.00	1.00	1.00	1.00	0.00

*Receipts for 2003 are included to indicate the relative importance of each enterprise to the farm. Percents indicate the percentage of the total receipts accounted for by the livestock categories and the crops.

**Acreages for 2003 are included to indicate the relative importance of each enterprise to the farm. Total planted acreage may exceed total cropland available due to double cropping. Percents indicate the percentage of total planted acreage accounted for by the crop.

2003 PANEL RANCHES PRODUCING BEEF CATTLE (continued)

SDB450 SDB450 is a 450-cow West River (Meade County, South Dakota) beef cattle ranch. This operation produces hay and oats on 1,150 acres of owned cropland, and runs its cows on 6,700 acres of owned native range. Grazing needs are supplemented with 2,100 AUMs leased from federal and state sources. In 2003, calf and culled cow/bull sales accounted for 90 percent of gross receipts.

MOB150 A 150-cow beef cattle operation is the focal point of this diversified livestock and crop farm located in southwest Missouri (Dade County). This farm operates on 840 acres of owned and leased land. MOB150 plants 100 acres each of corn, 24 acres of sorghum, 58 acres of wheat, 116 acres of soybeans, and 400 acres of hay. During 2003, cattle sales comprised 54 percent of gross receipts and crop sales generated 46 percent.

MOCB350 MOCB350 is a 350-cow beef cattle farm located in central Missouri (Phelps County). This farm consists of 1,060 acres of owned ground and 500 acres of leased ground. Annually, 560 acres of hay are harvested on owned land. 2003 cattle sales represented 89 percent of MOCB350's cash receipts.

TXBB150 TXBB150 runs 150 mother cows and 2,000 stockers annually in the Blackland Prairie of central Texas (McLennan County). The ranch operates on 3,000 acres (400 owned and 2,600 leased) of improved pasture and oat pasture. Additionally, 100 acres of coastal Bermuda hay is harvested for use on the ranch. In 2003, 96 percent of gross receipts were generated by the cow-calf and stocker cattle sales.

TXSB250 A 250-head cow-calf operation is the central focus of this full-time agricultural operation in south central Texas (Gonzales County). High-intensity best describes the grazing philosophy of the region, with cows deriving most of their forage needs from improved coastal Bermuda pasture. Native pasture serves as fallback pasturage and is host to this operation's fledgling lease hunting program. Contract broiler production is an important source of agricultural revenue for this ranch; even so, cattle sales accounted for 82 percent of 2003 gross receipts.

FLB1155 This is a 1,155-cow ranch located in central Florida (Osceola County). FLB1155 runs cows on 5,400 acres of owned improved pasture, from which 3,560 acres of hay are harvested annually. Sales of sod are a burgeoning source of agricultural income for area ranches. During 2003, cattle sales represented 88 percent of total receipts.

OTHERS Eight other representative farms have beef cattle operations along with their crop production (MONG1850, TXHG2000, TXWG1400, KSCW4000, KSNW2800 KSNW4300, COW3000, and TXRP2500). These farming operations have from 12 to 200 cows. Cattle contributed from two to 19 percent of gross receipts for these farms in 2003.

Appendix Table A13. Characteristics of Panel Farms Producing Beef Cattle.

	SDB450	MOB150	MOCB350	TXBB150	TXSB250	FLB1155
County	Meade	Dade	Phelps	McLennan	Gonzales	Osceola
Total Cropland	1,150.00	240.00	40.00	200.00	0.00	5,400.00
Acres Owned	1,150.00	175.00	40.00	200.00	0.00	5,400.00
Acres Leased	0.00	65.00	0.00	0.00	0.00	0.00
Pastureland						
Acres Owned	6,700.00	465.00	1,020.00	200.00	900.00	0.00
Acres Leased	0.00	80.00	500.00	2,000.00	775.00	0.00
Federal AUMs Lea	1,800.00	0.00	0.00	0.00	0.00	0.00
State/Private AUMs	300.00	0.00	0.00	0.00	0.00	0.00
Assets ($1000)						
Total	2,679.00	922.00	2,307.00	782.00	2,085.00	10,113.00
Real Estate	2,004.00	612.00	1,086.00	313.00	1,740.00	9,157.00
Machinery	181.00	206.00	114.00	121.00	88.00	143.00
Other & Livestock	495.00	105.00	1,106.00	348.00	256.00	813.00
Debt/Asset Ratios						
Total	0.01	0.15	0.01	0.01	0.01	0.01
Intermediate	0.04	0.19	0.02	0.00	0.00	0.03
Long Run	0.01	0.14	0.00	0.01	0.01	0.01
Number of Livestock						
Beef Cows	450.00	150.00	350.00	150.00	250.00	1,155.00
2003 Gross Receipts ($1,000)*						
Total	230.50	140.80	187.50	1,226.10	155.10	506.40
Cattle	207.60	75.90	166.80	1,176.50	127.60	445.20
	0.90	0.54	0.89	0.96	0.82	0.88
Corn	0.00	22.50	0.00	0.00	0.00	0.00
	0.00	0.16	0.00	0.00	0.00	0.00
Sorghum	0.00	4.30	0.00	0.00	0.00	0.00
	0.00	0.03	0.00	0.00	0.00	0.00
Soybeans	0.00	17.90	0.00	0.00	0.00	0.00
	0.00	0.13	0.00	0.00	0.00	0.00
Wheat	0.00	9.50	0.00	0.00	0.00	0.00
	0.00	0.07	0.00	0.00	0.00	0.00
Hay	21.70	10.70	16.40	15.00	0.00	0.00
	0.09	0.08	0.09	0.01	0.00	0.00
Oats	1.10	0.00	0.00	22.20	0.00	0.00
	0.01	0.00	0.00	0.02	0.00	0.00
Improved Pasture	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00
Other Receipts	0.00	0.00	4.30	0.00	27.50	61.20
	0.00	0.00	0.02	0.00	0.18	0.12
2003 Planted Acres**						
Total	960.00	1,098.00	1,560.00	3,000.00	0.00	3,560.00
Corn	0.00	100.00	0.00	0.00	0.00	0.00
	0.00	0.09	0.00	0.00	0.00	0.00
Sorghum	0.00	24.00	0.00	0.00	0.00	0.00
	0.00	0.02	0.00	0.00	0.00	0.00
Soybeans	0.00	116.00	0.00	0.00	0.00	0.00
	0.00	0.11	0.00	0.00	0.00	0.00
Wheat	0.00	58.00	0.00	0.00	0.00	0.00
	0.00	0.05	0.00	0.00	0.00	0.00
Hay	840.00	400.00	560.00	1,000.00	0.00	3,560.00
	0.88	0.36	0.36	0.33	0.00	1.00
Oats	120.00	0.00	0.00	2,000.00	0.00	0.00
	0.13	0.00	0.00	0.67	0.00	0.00
Improved Pasture	0.00	400.00	1,000.00	0.00	0.00	0.00
	0.00	0.36	0.64	0.00	0.00	0.00

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2003 CHARACTERISTICS OF PANEL FARMS PRODUCING HOGS

ILH200 A 200-sow hog farm located in western Illinois (Knox County). The farm plants 700 acres each of corn and soybeans each year. This farm weans an average of 17 pigs per sow per year and feeds about 3.5 pounds of feed per pound of pork sold in a year. The hog operation generated 53 percent of ILH200's cash receipts 2003 with the remainder of the receipts coming from crop sales.

ILH750 A 750-sow hog farm located in western Illinois (Knox County). The farm plants1,072 acres of corn and 878 acres of soybeans each year. The farm weans an average of 22 pigs per sow per year and feeds about 3.1 pounds of feed per pound of pork sold. The hog enterprise accounted for 82 percent of the 2003 gross receipts.

INH600 A 600-sow hog farm in north central Indiana (Carroll County). This large-sized diversified farm plants 2,016 acres of corn, 984 acres of soybeans, and 200 acres of wheat annually. The farm weans 20 pigs per sow per year and feeds about 3.3 pounds of feed per pound of pork sold. The hog operation accounted for 55 percent of the total receipts for 2003.

IAH400 A weaning-to-finish operation located in northwestern Iowa (Cherokee County). The farm purchased 8,000 weaned pigs from other producers and develops them through the finishing stage. IAH400 plants 333 acres of corn and soybeans annually. The hog operation generated 86 percent of gross receipts during 2003.

Appendix Table A14. Characteristics of Panel Farms Producing Hogs.

	ILH200	ILH750	INH600	IAH400
County	Knox	Knox	Carroll	Cherokee
Total Cropland	1,400.00	1,950.00	3,200.00	667.00
Acres Owned	140.00	975.00	800.00	60.00
Acres Leased	1,260.00	975.00	2,400.00	607.00
Assets ($1000)				
Total	1,263.00	5,422.00	4,956.00	881.00
Real Estate	738.00	4,090.00	3,525.00	457.00
Machinery	412.00	803.00	1,068.00	198.00
Other & Livestock	114.00	529.00	363.00	226.00
Debt/Asset Ratios				
Total	0.30	0.28	0.31	0.15
Intermediate	0.32	0.36	0.41	0.15
Long Run	0.29	0.26	0.26	0.15
Number of Livestock				
Sows	200.00	750.00	600.00	400.00
2003 Gross Receipts ($1,000)*				
Total	580.70	1,864.60	2,078.10	883.10
Hogs	307.90	1,509.80	1,148.90	754.80
	0.53	0.81	0.55	0.86
Corn	87.20	34.80	511.40	10.90
	0.15	0.02	0.25	0.01
Soybeans	183.10	320.00	375.70	112.40
	0.32	0.17	0.18	0.13
Wheat	0.00	0.00	42.20	0.00
	0.00	0.00	0.02	0.00
Other Receipts	2.50	0.00	0.00	5.00
	0.00	0.00	0.00	0.01
2003 Planted Acres**				
Total	1,400.00	1,950.00	3,200.00	667.00
Corn	700.00	1,072.50	2,016.00	333.50
	0.50	0.55	0.63	0.50
Soybeans	700.00	877.50	984.00	333.50
	0.50	0.45	0.31	0.50
Wheat	0.00	0.00	200.00	0.00
	0.00	0.00	0.06	0.00

*Receipts for 2003 are included to indicate the relative importance of each enterprise to the farm. Percents indicate the percentage of the total receipts accounted for by the livestock categories and the crops.

**Acreages for 2003 are included to indicate the relative importance of each enterprise to the farm. Total planted acreage may exceed total cropland available due to double cropping. Percents indicate the percentage of total planted acreage accounted for by the crop.

APPENDIX B:
LIST OF PANEL FARM COOPERATORS

FEED GRAIN FARMS

Indiana

Facilitator

Mr. Scott Gabbard - Extension Educator, Shelby County, Purdue Cooperative Extension

Panel

Mr. David Brown
Mr. Jerry Drake
Mr. Richard Fix
Mr. Mark Nigh
Mr. Gary Robards
Mr. Kevin Carson
Mr. Gary Everhart
Mr. Darrell Linville
Mr. Jeff Pfaff
Mr. Keith Theobald

Iowa

Facilitator

Mr. Jim Patton - County Extension Director, Webster County

Panel

Mr. Dennis Amman
Mr. Dean Black
Mr. Keith Bowden
Mr. and Mrs. Jim Carver
Mr. David Hanson
Mr. Don Sandell
Mr. Larry Sorensen
Mr. Dennis Vorrie
Mr. Robert Anderson
Mr. Perry Black
Mr. Jason Carver
Mr. Jim Corey
Mr. Joe Horan
Mr. Britt Shelton
Mr. Doug Stanek

Missouri - Central

Facilitator

Mr. Parman Green - Farm Management Specialist, University of Missouri-Columbia

Panel

Mr. Mark Casner
Mr. Todd Gibson
Mr. Dennis Hensiek
Mr. Ron Jenkins
Mr. Gerald Kitchen
Mr. Ron Linneman
Mr. Mike Ritchhart
Mr. Ron Venable
Mr. Kyle Durham
Mr. Jack Harriman
Mr. Mike Hisle
Mr. Glenn Kaiser
Mr. Rob Korff
Mr. Charles Reid
Mr. Fred Utlaut
Mr. James Wheeler

Missouri - Northwest

Facilitator

Mr. Mike Killingsworth - Farm Management Consultant

Panel

Mr. Jack Baldwin
Mr. Kevin Rosenbohm
Mr. Gary Ecker
Mr. Roger Vest

Nebraska - Central

Facilitator

Mr. David Stenberg - Dawson County Extension Educator

Panel

Mr. Jim Aden
Mr. Jeremy Geiger
Mr. Pat Luther
Mr. Scott McPheeters
Mr. Paul Stieb
Mr. Rob Anderson
Mr. Greg Hueftle
Mr. Tim Maline
Mr. Dave Rowe
Mr. Dan Strauss

FEED GRAIN FARMS (CONTINUED)

South Carolina

Facilitator

Mr. Toby Boring - Extension Economist, Clemson University
Dr. Todd Davis - Assistant Professor/Extension Economist, Clemson University
Ms. Corey Risch - Extension Economist, Clemson University

Panel

Mr. Tim Barnes
Mr. Sammy Burrows
Mr. Billy Davis
Mr. John Ducworth
Mr. Charles Horger
Mr. Steve Lowder
Ms. Vikki Brogdon
Mr. Chris Cogdill
Mr. John DesChamps
Mr. Harry DuRant
Mr. Tom Jackson
Mr. Leslie McIntosh

Tennessee

Facilitator

Mr. Ken J. Goddard - County Extension Agent, Henry County
Mr. Timothy R. Smith - County Extension Agent, Obion County
Dr. Kelly Tiller - Agricultural Policy Analysis Center, University of Tennessee
Mr. Bob Williams - Extension Area Specialist, Weakley County

Panel

Mr. James D. Davis
Mr. Mike Freeman
Mr. Wayne Grant
Mr. Jamie Tuck
Mr. John Erwin
Mr. David Grant
Mr. Bob Grooms
Mr. Gilbert Workman, Jr.

Texas - Northern Blackland Prairie

Facilitator

Mr. Marty Jungman - County Extension Agent, Hill County

Panel

Mr. Kenneth Machac
Mr. Barney Pustejovsky
Mr. Aaron Walters
Mr. Lanny Neil
Mr. John Sawyer

Texas - Northern High Plains

Facilitator

Dr. Steve Amosson - Extension Economist - Management, Texas A&M University
Mr. Robert Harris - County Extension Agent, Moore County

Panel

Mr. Kerry Cartrite
Mr. Kelly Hays
Mr. Tom Moore
Mr. David Tims
Mr. Brent Clark
Mr. Rick May
Mr. Clyde Tims

Texas - Southern Blackland Prairie

Facilitator

Mr. Ronnie Leps - County Extension Agent, Williamson County

Panel

Mr. Bob Bartosh
Mr. Lonny Rinderknecht
Mr. Ken Seggern
Mr. Herbert Raesz
Mr. Doug Schernik
Mr. Donald Stolte

WHEAT FARMS

Colorado

Facilitator

Mr. Dennis Kaan - Director, Golden Plains Area Extension, Colorado State University

Panel

Mr. Marvin Brandon
Mr. Terry Kuntz
Mr. Ken Remington
Mr. Dave Wagers
Mr. John Wright
Mr. David Foy
Mr. Rick Lewton
Mr. Calvin Schaffert
Mr. Monte Willeke

Kansas - Northwest

Facilitator

Dr. Dan O'Brien - Area Extension Director, Kansas State University
Mr. Mark Wood - Extension Agricultural Economist, Kansas Farm Mgmt Association

Panel

Mr. Vernon Akers
Mr. Sam Crouse
Mr. Lyman Goetsch
Mr. Brian Laufer
Mr. Harold Mizell
Mr. Rich Calliham
Mr. Dennis Franklin
Mr. Lee Jueneman
Mr. Lance Leebrick
Mr. Steve Schertz

Kansas - South Central

Facilitator

Mr. Gerald LeValley - County Extension Agent, Sumner County
Mr. Steve Westfahl - County Extension Agent, Sedgwick County

Panel

Mr. Donald Applegate
Mr. Nick Steffen
Mr. Tim Turek
Mr. Rae Reusser
Mr. Jim Stuhlsatz
Mr. Robert White

North Dakota

Facilitator

Dr. Dwight Aakre - Extension Associate-Farm Management, North Dakota State

Panel

Mr. Jim Broten
Mr. Mike Clemens
Mr. Raymond Haugen
Mr. Anthony Thilmony
Mr. Wade Bruns
Mr. Leland Guscette
Mr. Greg Shanenko
Mr. Arvid Winkler

Washington - Palouse

Facilitator

Mr. Randy Baldree - County Extension Agent, Whitman County
Mr. John Burns - Extension Agronomist, Washington State University
Dr. Herb Hinman - Extension Economist, Washington State University

Panel

Mr. Asa Clark
Mr. Gary Largent
Mr. Randy Suess
Mr. Steve Teade
Mr. Brian Largent
Mr. Bruce Nelson
Mr. Del Teade
Mr. Jon Whitman

COTTON FARMS

Alabama

Panel

Mr. James Blythe
Dr. Steve Ford
Ms. Larkin Martin
Mr. Paul Clark
Mr. William Lee
Mr. Ron Terry

Arkansas

Panel

Mr. Phillip Baugh
Mr. Jeff Keeter
Mr. Jim Whitaker
Mr. Gregg Day
Mr. Joe Mencer
Mr. Sam Whitaker

California

Facilitator

Mr. Bruce Roberts - County Extension Director and Farm Advisor, Kings County

Panel

Mr. Bo Champlin
Mr. Matt Gilkey
Mr. John Newton
Mr. Bob Prys
Mr. Dave Smith
Mr. Bill Tos
Mr. Carlton Duty
Mr. Kevin Lehar
Mr. Craig Pedersen
Mr. Ted Sheely
Mr. Bill Stone
Mr. Mark Watte

Georgia - Southwest

Facilitator

Mr. Eddie McGriff - County Extension Coordinator, Decatur County
Mr. Brad Mitchell - County Extension Coordinator, Mitchell County
Dr. Don Shurley - Professor, University of Georgia

Panel

Mr. John Bridges, Jr.
Mr. Charles A. Collins
Mr. Scott E. Vann
Mr. Bryant Collins
Mr. Keith Griffin

Louisiana

Facilitator

Mr. John Barnett - Director, LSU Ag Center, Central Region
Dr. Gene Johnson - Professor, Agricultural Marketing, Louisiana State University

Panel

Mr. Jess Barr
Mr. J. Macon LaFoe, Sr.
Mr. Buddy Page
Mr. Buddy Davis
Mr. Randy Miller
Mr. Jerry Stutts

North Carolina

Facilitator

Mr. R. H. "Bob" Pleasants - County Extension Agent, Wayne County

Panel

Mr. Landis Brantham, Jr.
Mr. Danny C. Pierce
Mr. Bryant Worley
Mr. Julian B. Nelms
Mr. Craig West

COTTON FARMS (CONTINUED)

Tennessee

Facilitator

Mr. Jim Castellaw - Extension Area Specialist, Farm Management, Fayette County
Mr. Chuck Danehower - Extension Area Specialist, Farm Management, Lauderdale
Mr. Jamie H. Jenkins - County Extension Director, Fayette County
Mr. Tim Roberts - County Extension Director, Crockett County
Dr. Kelly Tiller - Agricultural Policy Analysis Center, University of Tennessee

Panel

Mr. Harris Armour, III
Mr. Tom Karcher
Mr. Travis Lonon
Mr. Dewayne Hendrix
Mr. Allen King
Mr. Eugene McFerren

Texas - Coastal Bend

Facilitator

Dr. Larry Falconer - Extension Economist - Management, Texas A&M University
Mr. Mark Miller - Chief Operations Officer, Texas AgFinance
Mr. Jeffrey Stapper - County Extension Agent, San Patricio County and Aransas County

Panel

Mr. Marvin Beyer, Jr.
Mr. Clarence Chopelas
Mr. Joel Hoskinson
Mr. Larry McNair
Mr. Darby Salge
Mr. Brad Bickham
Mr. Jimmy Dodson
Mr. Wayne Lambert
Mr. Mark Morris

Texas - Eastern Caprock

Facilitator

Mr. Jason Cox - Vice President, Ag Texas Farm Credit Services

Panel

Mr. Lloyd Arthur
Mr. Edwin Moore
Mr. Brooks Ellison
Mr. Marvin Schoepf

Texas - Mid Coast

Facilitator

Mr. Jeff Nunley - Executive Director, South Texas Cotton & Grain Assn.

Panel

Mr. Daniel Gavaronic
Mr. Keith Johnson
Mr. Mark Malaer
Mr. Joe Jenkins
Mr. Rob Kainer
Mr. Dwain Nunley

Texas - Panhandle

Facilitator

Mr. Sean Smith - Credit Office President, First Ag Credit

Panel

Mr. Michael Carlson
Mr. Steve Hoffman
Mr. Roy Carlson
Mr. Harold Sides

Texas - Rio Grande Valley

Facilitator

Mr. Reagan Florence - Exec. VP - Chief Lending Officer, Ag Credit of South Texas

Panel

Mr. Derrick Swanberg
Ms. Mitzi Swanberg-Anzaldua
Mr. Marshall Swanberg
Mr. Mark Willis

COTTON FARMS (CONTINUED)

Texas - Rolling Plains

Facilitator

Mr. Stan Bevers - Extension Economist - Management, Texas A&M University
Mr. Mike Sloan - Regional Vice President, First Ag Credit
Mr. Todd Vineyard - County Extension Agent, Jones County

Panel

Mr. Dennis Olson
Mr. Ronnie Riddle
Mr. Ferdie Walker
Mr. Ronnie Richmond
Mr. Dale Spurgin

Texas - Southern High Plains

Facilitator

Mr. John Farris - County Extension Agent, Dawson County
Dr. Jackie Smith - Extension Economist - Management, Texas A&M University

Panel

Mr. Steven Archer
Mr. Jerry Chapman
Mr. Kent Nix
Mr. Brad Boyd
Mr. Mark Furlow
Mr. Donald Vogler

RICE FARMS

Arkansas - East Central-Arkansas County

Facilitator

Mr. Bill Free - Riceland Foods, Inc.

Panel

Mr. Derek Bohanan
Mr. Monty Bohanan
Mr. Jerry Burkett
Mr. Dusty Hoskyn
Mr. David Jessup

Arkansas - East Central-Cross County

Panel

Mr. Bryan Holmes, Jr.
Mr. Bryan Moery
Mr. Roger Pohlner
Mr. Steve Wilson

Arkansas - Northeast-Lawrence County

Panel

Mr. Bernard Boltz
Mr. Kyle Boltz
Mr. Michael Curetor
Mr. Terry Gray
Mr. Marvin Hare, Jr.
Mr. Dwain Morris

California - Butte County

Facilitator

Dr. Chris Greer - Farm Advisor, University of California
Dr. Cass Mutters - Farm Advisor, University of California

Panel

Mr. Ken Anderson
Mr. Mike Boeger
Mr. Mike Bryant
Mr. Lee Carrico
Mr. Tom Coleman
Mr. Rod Rold
Mr. Steve Rystrom
Mr. George Sligar
Mr. Lance Tennis

California - Colusa County

Facilitator

Dr. Chris Greer - Farm Advisor, University of California
Dr. Cass Mutters - Farm Advisor, University of California

Panel

Mr. Don Bransford
Mr. Bob Freed
Mr. Francis Hickel
Mr. Leo LaGrande
Mr. Mike Lux
Mr. Charles Marsh
Mr. Joe Struckmeyer
Mr. Robert Sutton

California - Sutter County

Facilitator

Dr. Cass Mutters - Farm Advisor, University of California

Panel

Mr. Bill Baggett
Mr. Steve Butler
Mr. Jack DeWitt
Mr. Scott Leathers
Mr. Ned Lemenager
Mr. Paul Lowery
Mr. Walt Trevethan
Mr. Scott Tucker
Mr. Bob Van Dyke
Mr. Wayne Vineyard

RICE FARMS (CONTINUED)

Louisiana - Northeast

Facilitator

Dr. Gene Johnson - Professor, Agricultural Marketing, Louisiana State University

Panel

Mr. Damian Bollich
Mr. Marvin Colvin
Mr. Steve Henderson
Mr. John Owen
Mr. Buford Perry
Mr. Mark Brown
Mr. Fred Franklin
Ms. Lindy Lingo
Mr. Ed Patrick
Mr. Morgan Smith

Louisiana - Southwest-Acadiana

Facilitator

Mr. Howard J. Cormier - County Extension Agent, Vermilion Parish
Mr. Eddie Eskew - County Extension Agent, Jeff Davis Parish
Dr. Gene Johnson - Professor, Agricultural Marketing, Louisiana State University
Mr. Ronnie Levy

Panel

Mr. Tommy Faulk
Mr. Jackie Loewer
Mr. Alden Horten
Mr. Brian Wild

Mississippi

Facilitator

Mr. Nolen Canon

Panel

Mr. David Arant
Mr. Scott A. Arnold, III
Mr. Hugh Arant
Mr. Abbott R. Myers

Missouri - Bootheel East

Facilitator

Mr. David Guethle - Area Agronomy Specialist, University of Missouri

Panel

Mr. Dick Burnett
Mr. Terry Scott
Mr. Tom Jennings
Mr. Scott Wheeler

Missouri - Bootheel West

Facilitator

Mr. Bruce Beck - Area Agronomy Specialist, University of Missouri

Panel

Mr. Jim Bieller
Mr. C.P. Johnson
Mr. Rodney Eaker
Mr. Frank Smody

Texas - Bay City-Matagorda County

Panel

Mr. Lee Bossley
Mr. Mike Burnside
Mr. Joey Sliva
Mr. Donnie Bulanek
Mr. Curt Mowery
Mr. Paul Sliva

RICE FARMS (CONTINUED)

Texas - Eagle Lake-Colorado County

Panel

Mr. Andy Anderson
Mr. Kenneth Danklefs
Mr. Jason Hlavinka
Mr. John Waligura
Mr. Steve Balas
Mr. W.A. "Billy" Hefner, III
Mr. Kenneth "Peter" Stelzel
Mr. Brian Wiese

Texas - El Campo-Wharton County

Panel

Mr. L.G. Raun
Mr. Glen Rod
Mr. Layton Raun
Mr. Robert Shoemate

DAIRY FARMS

California

Facilitator

Mr. Larry Serpa - Director of Member Relations, Land O' Lakes, Western Region

Panel

Mr. David Ribeiro
Mr. Mike Santos
Mr. Art Van Beek

Florida - North

Facilitator

Mr. Chris Vann - County Extension Agent, Lafayette County

Panel

Mr. Morris Jackson
Mr. Dwayne Koon
Mr. Kevin Koon
Mr. Keith Shiver
Mr. Pete Shurter

Florida - South

Facilitator

Mr. Art Darling - Sunshine State Milk

Panel

Mr. Bob Butler
Mr. Woody Larson
Mr. Ray MeLear
Mr. Charles Ruck
Mr. Glynn Rutledge
Mr. Bob Rydzewski

Idaho

Facilitator

Mr. Dean Falk - Extension Dairy Specialist, Twin Falls R&E Center, Univ. of Idaho
Dr. Wilson Gray - Extension Agricultural Economist, Twin Falls R&E Center, Univ. of

Panel

Mr. William Bokma
Mr. Dave Gandolfo
Mr. Alan Gerratt
Mr. Reagon Hatch
Mr. Harry Hogland
Mr. & Mrs. Martin Lee
Mr. Michael Quesnell
Mr. Mike Roth
Mr. & Mrs. Rick Thompson
Mr. John Wright

Missouri

Facilitator

Mr. Stacey Hamilton - Dairy Specialist and County Program Director, Dade County

Panel

Mr. Steve Gallivan
Mr. Freddie Martin
Mr. John McArthur
Mr. Doug Owen
Mr. Joe Peebles
Mr. Allen Sulgrove
Mr. Wayne Whitehead
Mr. Larry Winfree

New Mexico

Panel

Mr. Isaak Bos
Mr. Arie Breedyk
Mr. Joe Gonzalez
Mr. Jim Hoffman
Mr. John McCatharn
Mr. Marc Reischman
Mr. Jerry Vaz

DAIRY FARMS (CONTINUED)

New York - Central

Facilitator

Dr. Wayne Knoblauch - Department of Ag. Economics, Cornell University

Panel

Mr. Chuck Benson
Mr. Bill Kilcer
Mr. and Mrs. Mike McMahon
Mr. Kenton Patchen
Mr. Martin Young
Mr. and Mrs. Robert Howland
Mr. Mike Learn
Mr. Gary Mutschler
Mr. Robert Space

New York - Western

Facilitator

Mr. Steve Richards

Panel

Mr. Collin Broughton
Mr. Walter Faryns
Mr. Tom Fitch
Mr. John Noble
Ms. Kitty Dziedzic
Mr. Bill Fitch
Mr. Todd Galton

Texas - Central

Facilitator

Mr. Joe Pope - County Extension Agent, Erath County

Panel

Ms. Cheri DeJong
Mr. Lane Jones
Ms. Leeann Moos
Mr. Owen Sieperda
Mr. Lonnie Hammonds
Mr. Leonard Moncrief
Mr. Jack Parks

Texas - Northeast

Facilitator

Mr. G. H. Cain - Dairy Farmers of America
Mr. Larry Spradlin - County Agent, Texas Cooperative Extension
Mr. Ron Tosh - Field Supervisor, Dairy Farmers of America

Panel

Mr. Allen Bullock
Mr. Rene Couman
Mr. Jack Kempenaar
Mr. Scott Opitz
Mr. Pete Van Ryn
Mr. Burke Bullock
Mr. Okle Jongsma
Mr. Luke Oosterloo
Mr. Douwe Plantinga

Texas - South Plains

Facilitator

Dr. Robert Schwart - Professor and Extension Economist, Texas A&M University

Panel

Mr. Brian Boehning
Mr. Larry Hancock
Mr. Randy Martin
Mr. Curtis Preston
Mr. Mark Cummings
Mr. Mark Long
Mr. Reed Mulliken
Mr. John D. Young

DAIRY FARMS (CONTINUED)

Vermont

Facilitator

Mr. Ken Becker
Mr Bob Parsons - Assistant Professor-Farm Management, Community Development and

Panel

Mr. Paul Bourbeau
Mr. Ashley Farr
Mr. Kim Harvey
Mr. Steven Jones
Mr. Roger Rainville
Mr. Onan Whitcomb
Mr. David Conant
Mr. Ted Foster
Mr. Steve Hurd
Mrs Polly McEwing
Mr. Stanley Scribner

Washington

Facilitator

Mr. Robert Dyk - County Extension Agent, Whatcom County

Panel

Mr. Dick Bengen
Mr. Larry DeHaan
Mr. Jeff Rainey
Mr. Peter Vlas
Mr. Ron Bronsema
Mr. Ed Pomeroy
Mr. John Steensma

Wisconsin

Facilitator

Mr. Jeff Key - County Extension Agent, Winnebago County

Panel

Mr. Larry Engel
Ms. Linda Hodorff
Mr. Dalton Korth
Mr. Joe Kuehnl
Mr. Rob Stone
Mr. Jerry Evers
Mr. and Mrs. Charlie Knigge
Mr. Kevin Krentz
Mr. Larry Pollack

BEEF PRODUCERS

California

Facilitator

Mr. Larry Forero - Farm Advisor, Livestock and Natl. Res., California Cooperative
Dr. Marc Horney - Certified Range Manager, California State University, Chico
Mr. Glenn Nader - Farm Advisor, Livestock and Natl. Res., California Cooperative
Dr. Jim Oltjen - Cooperative Extension Scientist, UC-Davis Animal Science

Panel

Mr. Dick O'Sullivan
Mr. Louis Venturini
Mr. Wally Roney

Colorado

Facilitator

Mr. C.J. Mucklow - County Extension Agent, Routt County

Panel

Mr. Geoff Blakesley
Mr. Jay Fetcher
Mr. Jim Rossi
Mr. Doug Carlson
Mr. Larry Monger
Mr. Wayne Shoemaker

Florida

Facilitator

Mr. John Earman

Panel

Mr. Mike Adams
Mr. Alan Kelley
Mr. Bert Tucker
Mr. Wes Williamson
Dr. Judy Lisle Bozeman
Ms. Doris Lisle
Dr. Fred Tucker

Missouri - Central

Facilitator

Mr. Brent Carpenter - FAPRI, University of Missouri
Mr. Jerry Terrill - Livestock Specialist and County Program Director, Dent County
Mr. Peter Zimmel - FAPRI, University of Missouri

Panel

Mr. George A. Barnitz
Mr. Tom Gollhofer
Mr. G. Douglas Black
Mr. Ken Lenox

Missouri - Southwest

Facilitator

Mr. Brian Gillen - Agricultural Science Instructor, Lockwood High School

Panel

Mr. Steve Allison
Mr. Randall Erisman
Mr. James A. Nivens
Mr. Gary D. Wolf
Mr. Chuck Daniel
Mr. Ray Dean Hunter
Mr. Mike Theurer

Montana

Facilitator

Mr. Kent Williams - County Extension Agent, Custer County

Panel

Mr. Clarence Brown
Mr. Alyn Haughian
Mr. Scot Robinson
Mr. Art Drange
Mr. Jeff Okerman

BEEF PRODUCERS (CONTINUED)

Nevada

Facilitator

Dr. Kynda Curtis - Department of Resource Economics, University of Nevada
Dr. Tom Harris - Department of Resource Economics, University of Nevada
Mr. Willie Riggs - County Extension Agent, Eureka County
Dr. Ron Torell - Area Extension Specialist-Livestock, University of Nevada

Panel

Mr. and Mrs. Scott Ballard
Mr. Peter Church
Mr. and Mrs. Wilde Brough
Mr. Craig Spratling

New Mexico

Facilitator

Mr. David Graham - County Extension Director, Union County
Dr. Allen Torell - Professor, NMSU Agricultural Economics

Panel

Mr. Justin Bennett
Mr. John Gilbert
Mr. John Vincent
Mr. Damon Brown
Mr. Eugene Like
Mr. Derek Walker

South Dakota

Facilitator

Dr. Marty Beutler - Director, West River Agricultural Center, South Dakota State
Dr. John Cole - Research Assistant, South Dakota State University
Ms. Stacy Hadrick - Extension Educator, South Dakota State University
Dr. Larry Janssen - Professor, South Dakota State University

Panel

Mr. Lynn C. Frey
Mr. Wayne Oedekoven
Mr. Leo E. Grubl
Mr. Scott Phillips

Texas - Blackland Prairie

Facilitator

Mr. Donald Kelm - County Extension Agent, McLennan County
Mr. Steven Swaner, Jr. - County Extension Agent, Falls County

Panel

Mr. Keith Drews
Mr. Tommy Long
Mr. Harlan Huffman
Mr. Billy Don Van Cleave

Texas - South

Facilitator

Mr. Will Phinizy - Extension Economist, Texas Cooperative Extension
Mr. Dwight Sexton - County Extension Agent, Gonzales County

Panel

Mr. Steve Breitschopf
Mr. Michael Kuck
Mr. Brian Fink
Mr. William L. Quinney

Wyoming

Facilitator

Mr. Jim Gill - Senior University Extension Educator, Washakie County

Panel

Mr. Tom Brewster
Mr. Dan Rice
Mr. Tim Flitner
Mr. Gary Rice

HOG FARMS

Illinois

Panel

Mr. Dale Carlson
Mr. John Gustafson
Mr. Steve Maine
Mr. Don Erickson
Mr. Lance Humphreys
Mr. Sterling Saline

Indiana

Facilitator

Mr. Steve Nichols - County Extension Agent, Carroll County

Panel

Mr. Brad Burton
Mr. Phil Hunt
Mr. Trent Odell
Mr. Jim Yost
Mr. Levi Huffman
Mr. Mark Martin
Mr. Lynn Peters

Iowa

Facilitator

Mr. David Stender - Extension Swine Specialist, Iowa State University

Panel

Mr. Bruce Amundson
Mr. Duane Cave
Mr. Joe Rotta
Mr. Tim Bierman
Mr. Kent Ohlson

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