# REPRESENTATIVE FARMS ECONOMIC OUTLOOK FOR THE NOVEMBER 1999 FAPRI/AFPC BASELINE

AFPC Working Paper 99-11

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December 1999

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## Executive Summary

The primary objective of the analysis is to determine the representative crop and livestock farms' economic viability by region and commodity throughout the life of the 1996 Farm Bill. The representative farm economic data is developed in cooperation with a panel of producers to describe and simulate representative crop, livestock, and dairy farms. Projected prices, policy variables, and input inflation rates are from the Food and Agricultural Policy Research Institute (FAPRI) November 1999 Baseline. Additionally, many farmers accumulated debt since 1996 due to low yields from the 1996 and 1998 droughts in the South and Southwest and the drought in parts of the Midwest in 1999.

- Thirty-five of the 43 crop farms have more than a 40 percent chance of cash flow deficits over the 2000-2004 period. Low crop prices for 1998 and 1999 and the prospect for a slow recovery of prices are the major factors behind the poor performance of the crop farms.

- Thirteen of the 15 feedgrain farms have probabilities greater than 40 percent that they will experience cash flow problems in 2000-2004. Seven of the 15 will likely have high probabilities of having to refinance cash flow deficits. Eleven of the 15 farms have probabilities greater than 40 percent of losing real net worth by 2004. In summary, the financial condition of the 15 feedgrain farms is rated as follows: eleven in poor, three in cautionary, and one in good financial condition by 2004.

- Six of the 10 wheat farms have a greater than 40 percent probability they will experience cash flow problems in 2000-2004, yet only three wheat farms monitored have high probabilities of refinancing due to cash reserves. In summary, six of the 10 wheat farms are likely to be in poor financial condition by 2004, one in cautionary financial condition, and three in good financial condition by 2004.

- Seven of the 9 cotton farms are projected to have greater than a 40 percent chance of cash flow deficits in 2000-2004. Three of the 9 will face high probabilities of refinancing deficits. Three of the 9 cotton farms will be in poor financial condition by 2004, four in cautionary financial condition, and two in good financial condition by 2004.

- Seven of the 9 rice farms are projected to have greater than a 40 percent chance of cash flow deficits over the 2000-2004 planning horizon. Five of the farms will likely have high probabilities of refinancing deficits and six will face high probabilities of losing real net worth. Overall, seven farms will be in poor financial shape, and two will be in good shape by 2004.

- The dairy farms appear in good financial shape over the 2000-2004 period. Low feed costs and higher cattle prices tend to offset lower milk prices such that only six of the 26 farms have high probabilities of cash flow deficits. In summary, five of the 26 dairy farms are classified in poor financial condition, one in cautionary condition, and 20 in good financial condition by 2004.

- Increasing cattle prices over the planning horizon help to improve the financial viability of cattle operations. Two of the four cattle operations will likely be in poor financial condition in 2004, one in cautionary shape, and one in good financial condition by 2004.

- Higher hog prices following the low prices in 1998 and 1999 improve the financial condition of the representative hog farms over the recent past. Three of the 6 farms are expected to have high probabilities of cash flow deficits over the 2000-2004 planning horizon. In summary, two of the 6 farms is classified as being in poor financial condition in 2004, one in cautionary shape, and three in good financial condition by 2004.

# REPRESENTATIVE FARMS ECONOMIC OUTLOOK FOR THE NOVEMBER 1999 FAPRI/AFPC BASELINE

The farm level economic impacts of projected long term prices under the Federal Agriculture Improvement and Reform Act of 1996 (FAIR) on representative crop and livestock operations are projected in this report. For this report the FAIR Act will be referred to as the 1996 Farm Bill. The analysis was conducted over the 1996-2004 planning horizon using FLIPSIM, AFPC's whole farm simulation model. Data to simulate farming operations in the nation's major production regions came from two sources:

- Producer panel cooperation to develop economic information to describe and simulate representative crop, livestock, and dairy farms.

- Projected prices, policy variables, and input inflation rates from the Food and Agricultural Policy Research Institute (FAPRI) November 1999 Baseline.

The primary objective of the analysis is to determine the farms' economic viability by region and commodity throughout the life of the 1996 Farm Bill and beyond.

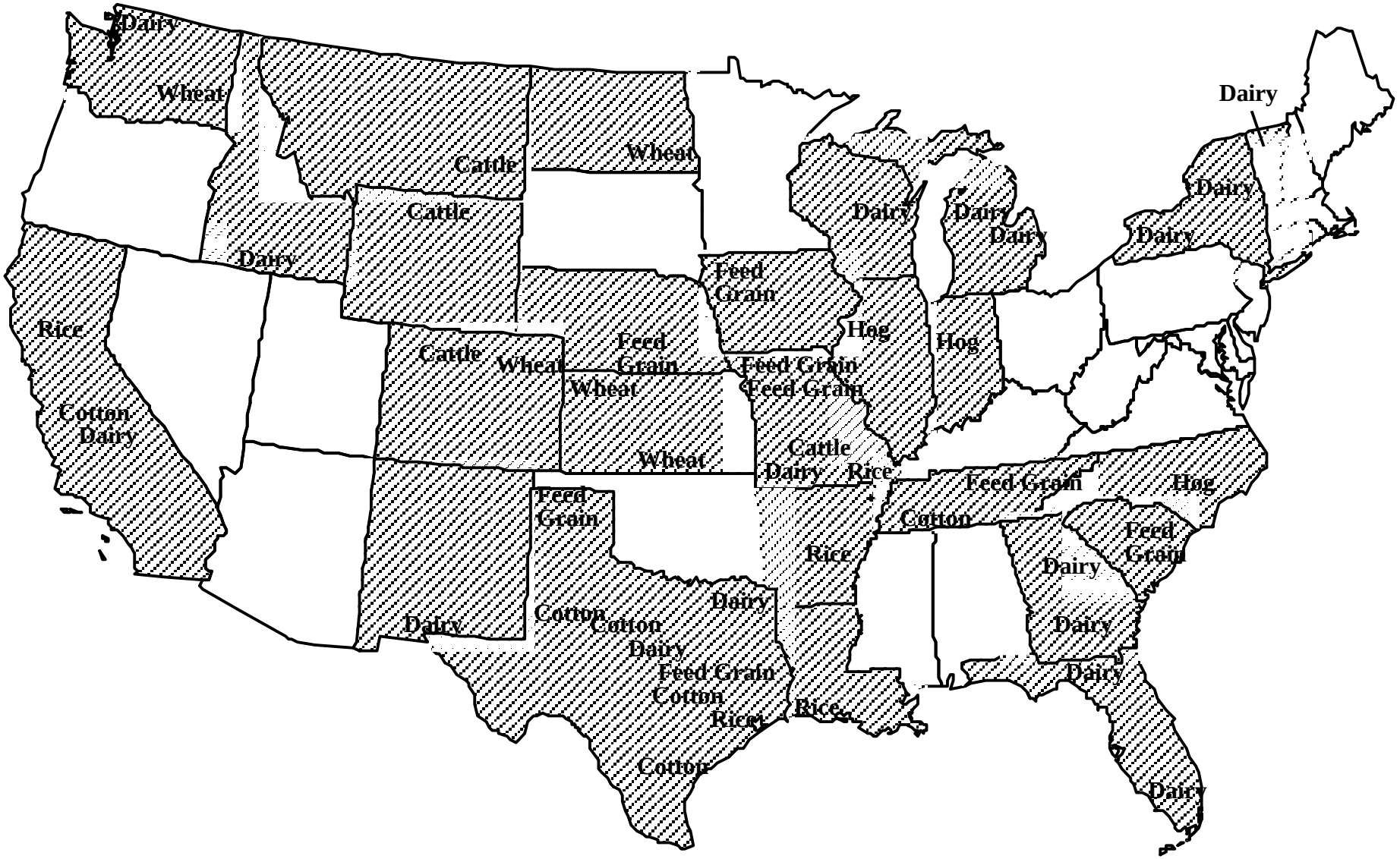
The FLIPSIM policy simulation model incorporates the historical risk faced by farmers for prices and production. This report presents the results of the November 1999 Baseline in a risk context using selected simulated probabilities and ranges for annual net cash farm income values. The probability of a farm experiencing annual cash flow deficits and the probability of having to refinance cash flow deficits are provided to show the financial risk faced by the representative farms. The probability of a farm losing real net worth is included as an indicator of the equity risk facing farms through the year 2004.

This report is organized into ten sections. The first section summarizes the process used to develop the representative farms and the key assumptions for the farm level analysis. The second section summarizes the FAPRI November 1999 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.

## Panel Process

AFPC has developed and maintains data to simulate more than 80 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 location of these farms is primarily the result of discussions with staffers for the 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.

# Figure 1. Representative Farms and Ranches



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 four to five year projection. Each panel must approve of the model's ability to reasonably reflect the economic activity on their representative farm prior to using the farm for policy analyses.

Most of the farms used in the analysis have all been updated with the panels through 1999. All of the crop farms are assumed to begin 1996 with 20 percent intermediate- and long-term debt, based on information provided by ERS-USDA and the panel members. Initial debt levels in 1996 for dairy farms were set at 30 percent; initial debt levels for beef cattle ranches were 1 percent for land and 5 percent for cattle and machinery; and initial debt levels for hog farms were 45 percent.

**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 1996-2004 planning horizon.

- The farm was structured so government payment limits were not effective at reducing contract payments and loan deficiency payments.

- Minimum family living withdrawals were assumed at a base rate of 10 percent of gross receipts or $25,000 annually, whichever is lower. 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 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 November 1999 FAPRI Baseline which assumes implementation of the 1996 Farm Bill through 2004.

- Contract payments for participating cotton, wheat, feed grain, and rice producers are made based on 85 percent of their historical base acreage times farm program yield times a contract payment rate. The contract payment rate is included in the November 1999 FAPRI Baseline.

- The farms are assumed to be enrolled in the production flexibility program and take full advantage of the flexibility provisions in the 1996 Farm Bill (within the current crop mix). PFC payments are held constant in 2003 and 2004 at their 2002 levels. Crop mix changes after 1999 were estimated based on projected net returns for each of the enterprises currently produced on the farms. During the

update process most of the crop farm panels indicated that they would flex out of their current crop mix, but only if expected net returns per acre from the change exceeded $40, due to rotation and/or other cultural concerns.

- Marketing loan provisions for cotton, rice, wheat, feed grains, and soybeans were authorized in the 1996 Farm Bill and are assumed to be in place for the farm level analysis.

- The farm level simulation model incorporates price and yield risk faced by farmers. Historical yield variability for crops and production for livestock (sale weights and milk/cow) over the past ten years are assumed to prevail for the planning horizon. Market prices for crops and feedstuffs are assumed to be more variable than over the past ten years due to the 1996 Farm Bill provisions, based on recent research by FAPRI. The assumed increase in relative price variability is: 57 percent for feed grains, 40 percent for wheat, 57 percent for soybeans, 34 percent for cotton, 10 percent for rice, 10 percent for cattle and hogs and 50 percent for milk. Random prices are appropriately correlated based on historical correlations, among crop and livestock prices, both within year and across years.

- To simulate the historical portion of the planning horizon (1996-1999) crop yields were held constant based on actual values obtained from the producers. Average yields for 2000-2004 were simulated 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 1996-1999. FAPRI's November Baseline prices were localized for the farms and used as the average prices for 2000-2004.

- The 1996 Farm Bill eliminated the dairy assessments after 1996 and provides for a reduction in the milk support price starting in 1997. Each year the dairy support price falls 15 cents per hundred weight until the support price reaches $9.90 per hundred weight in 1999. Support price remains at $9.90/cwt. in 2000 and is eliminated thereafter.

- Market loss assistance payments and disaster provisions passed in late 1998 and again in 1999 have been incorporated.

- All farms are assumed to carry MPCI at the 50/100 level.

## FAPRI November 1999 Baseline

Projected crop prices for FAPRI's November 1999 Baseline are summarized in Table 1. Corn prices decline from the high of $2.71/bu. in 1996 to a low of $1.85/bu. in 1999, but are projected to increase marginally until they reach $2.16/bu. in 2004. Wheat prices have declined to $2.46/bu. in 1999, but are expected to increase through 2003 when wheat prices are projected at $3.19/bu. Cotton prices will likely continue their decline until 1999 reaching a low of $0.4842/lb. and then increase gradually to $0.5636/lb. in 2004. Rice prices have declined from the $9.96/cwt. level realized in 1996 to $6.31/cwt. in 1999, but are expected to recover to $7.46/cwt. by 2004.

Assumed loan rates and projected annual contract (AMTA) payment rates, net of 1995 deficiency repayments in 1996 and 1997, are also summarized in Table 1. The farms growing contract commodities were assumed to have accepted the 1995 advance deficiency payments and had the repayments offset against 1996 contract payments for wheat, barley, oats, and upland cotton and the 1997 contract payments for corn and soybeans. The assumed contract or AMTA payment rates for 1998 and 1999 reflect the increase for the 1998 and 1999 market loss assistance payments authorized in those years. Annual contract payments for 2002 are assumed to remain constant for 2003 and 2004.

Projected livestock prices for FAPRI's January 1999 Baseline are summarized in Table 2. Beef cattle prices are projected to increase throughout most of the planning horizon after the drought induced decline in 1998. Actual feeder cattle prices were $61.31 and $81.34/cwt. for 1996 and 1997, but declined to $77.70/cwt. in 1998. Following this one year adjustment prices increased in 1999 to $81.48/cwt. The recovery of beef prices is projected to continue through 2003, reaching $93.14/cwt. Hog prices declined after 1996 reaching a low of $32.34/cwt. in 1999. Hog prices are projected to recover to $43.52/cwt. in 2002 and then fall to $40.61/cwt. in 2004. Annual milk prices for the 12 states, where representative dairy farms are located, are summarized in Table 2. The U.S. all milk price increased dramatically in 1998 to $15.41/cwt. but is projected to decrease to $12.87/cwt. by 2002 and increase slightly to $13.12/cwt. by 2004.

Projected annual rates of change for variable cash expenses are presented in Table 3. The rate of change in input prices and interest rates come from FAPRI's November 1999 Baseline which relies on WEFA's 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 2000-2004 period are provided by the FAPRI Baseline and indicate a decrease in nominal land values for 2000-2004 (Table 3).

## Definitions of Variables in the Summary Tables

**#** **Annual Change in Real Net Worth, 1996-2004** -- annualized percentage change in the operator's net worth from January 1, 1996 through December 31, 2004, 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.

**#** **Net Income Adjustment (NIA), 1996-2004 --** NIA is the annual increase or decrease in net cash farm income necessary to cause the change in real net worth, including land inflation, to equal zero over the planning horizon. If the change in net worth is negative, the NIA is the annual increase in net income necessary to prevent a loss in total real net worth. NIAs are expressed both as total dollars per year and as a percent of average annual cash receipts.

**Table 1. FAPRI November 1999 Baseline Projections of Crop Prices, Loan Rates, and AMTA Payment Rates, 1996-2004**

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 |
|---|---|---|---|---|---|---|---|---|---|
| **Crop Prices** | | | | | | | | | |
| Corn ($/bu.) | 2.71 | 2.43 | 1.95 | 1.85 | 1.96 | 2.00 | 2.06 | 2.12 | 2.16 |
| Wheat ($/bu.) | 4.30 | 3.38 | 2.65 | 2.46 | 2.91 | 2.99 | 3.09 | 3.19 | 3.16 |
| Cotton ($/lb.) | 0.6930 | 0.6520 | 0.6020 | 0.4842 | 0.4884 | 0.5011 | 0.5185 | 0.5409 | 0.5636 |
| Sorghum ($/bu.) | 2.34 | 2.21 | 1.70 | 1.56 | 1.81 | 1.89 | 1.95 | 2.00 | 2.04 |
| Soybeans ($/bu.) | 7.35 | 6.47 | 5.02 | 4.77 | 4.52 | 4.71 | 4.87 | 5.02 | 5.13 |
| Barley ($/bu.) | 2.74 | 2.38 | 1.98 | 1.96 | 1.97 | 1.99 | 2.05 | 2.11 | 2.14 |
| Oats ($/bu.) | 1.96 | 1.60 | 1.10 | 1.07 | 1.20 | 1.22 | 1.25 | 1.28 | 1.30 |
| Rice ($/cwt.) | 9.96 | 9.70 | 8.83 | 6.31 | 6.67 | 6.81 | 7.11 | 7.32 | 7.46 |
| Soybean Meal ($/ton) | 259.50 | 175.10 | 127.00 | 140.00 | 132.40 | 138.40 | 144.50 | 147.70 | 150.80 |
| All Hay ($/ton) | 95.80 | 102.50 | 85.10 | 78.90 | 79.70 | 81.80 | 82.30 | 82.90 | 83.80 |
| All Peanuts (cents/lb.) | 28.10 | 28.30 | 25.00 | 26.90 | 27.00 | 28.10 | 27.90 | 27.90 | 27.90 |
| Additional Peanuts (cents/lb.) | 19.00 | 19.30 | 17.00 | 18.40 | 18.40 | 19.30 | 19.10 | 19.10 | 19.10 |
| **Loan Rates** | | | | | | | | | |
| Corn ($/bu.) | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.71 | 1.59 | 1.59 | 1.62 |
| Wheat ($/bu.) | 2.58 | 2.58 | 2.58 | 2.58 | 2.58 | 2.28 | 2.18 | 2.18 | 2.29 |
| Cotton ($/lb.) | 0.5192 | 0.5192 | 0.5192 | 0.5192 | 0.5000 | 0.5000 | 0.5000 | 0.5000 | 0.5000 |
| Sorghum ($/bu.) | 1.81 | 1.76 | 1.74 | 1.74 | 1.74 | 1.57 | 1.47 | 1.47 | 1.49 |
| Soybeans ($/bu.) | 4.97 | 5.26 | 5.26 | 5.26 | 5.16 | 4.92 | 4.92 | 4.92 | 4.92 |
| Barley ($/bu.) | 1.55 | 1.57 | 1.56 | 1.56 | 1.56 | 1.41 | 1.31 | 1.31 | 1.34 |
| Oats ($/bu.) | 1.03 | 1.11 | 1.11 | 1.11 | 1.11 | 1.00 | 0.93 | 0.93 | 0.95 |
| Rice ($/cwt.) | 6.50 | 6.50 | 6.50 | 6.50 | 6.50 | 6.50 | 6.50 | 6.50 | 6.50 |
| **AMTA Payment Rates** | | | | | | | | | |
| Corn ($/bu.) | 0.25 | 0.49 | 0.56 | 0.73 | 0.33 | 0.27 | 0.26 | 0.26 | 0.26 |
| Wheat ($/bu.) | 0.87 | 0.63 | 0.99 | 1.27 | 0.59 | 0.47 | 0.46 | 0.46 | 0.46 |
| Cotton ($/lb.) | 0.0890 | 0.0760 | 0.1230 | 0.1570 | 0.0710 | 0.0570 | 0.0560 | 0.0560 | 0.0560 |
| Sorghum ($/bu.) | 0.32 | 0.54 | 0.68 | 0.87 | 0.40 | 0.32 | 0.31 | 0.31 | 0.31 |
| Barley ($/bu.) | 0.33 | 0.28 | 0.43 | 0.54 | 0.25 | 0.20 | 0.20 | 0.20 | 0.20 |
| Oats ($/bu.) | 0.03 | 0.03 | 0.05 | 0.06 | 0.03 | 0.02 | 0.02 | 0.02 | 0.02 |
| Rice ($/cwt.) | 2.77 | 2.71 | 4.37 | 5.68 | 2.60 | 2.10 | 2.04 | 2.04 | 2.04 |

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

**Table 2. FAPRI November 1999 Baseline Projections of Livestock and Milk Prices, 1996-2004**

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 |
|---|---|---|---|---|---|---|---|---|---|
| **Cattle Prices** | | | | | | | | | |
| Feeder Cattle ($/cwt) | 61.31 | 81.34 | 77.70 | 81.48 | 87.65 | 89.91 | 91.83 | 93.14 | 90.35 |
| Fat Cattle ($/cwt) | 65.05 | 66.32 | 61.48 | 65.00 | 70.09 | 73.31 | 74.83 | 75.26 | 73.73 |
| Culled Cows ($/cwt) | 30.33 | 34.27 | 36.19 | 38.80 | 43.33 | 44.98 | 45.17 | 46.01 | 43.00 |
| **Hog Prices** | | | | | | | | | |
| Barrows/Gilts ($/cwt) | 56.53 | 54.30 | 34.72 | 32.34 | 37.70 | 42.23 | 43.52 | 43.05 | 40.61 |
| Culled Sows ($/cwt) | 44.61 | 44.51 | 24.28 | 19.18 | 25.72 | 28.41 | 29.56 | 28.71 | 26.21 |
| **Milk Prices -- National and State** | | | | | | | | | |
| All Milk Price ($/cwt) | 14.75 | 13.36 | 15.41 | 14.35 | 13.00 | 12.89 | 12.87 | 13.07 | 13.12 |
| California ($/cwt) | 13.66 | 12.62 | 15.01 | 13.48 | 12.45 | 12.42 | 12.40 | 12.60 | 12.66 |
| Florida ($/cwt) | 18.00 | 16.50 | 18.20 | 17.88 | 16.85 | 16.82 | 16.80 | 17.00 | 17.06 |
| Georgia ($/cwt) | 16.30 | 14.70 | 16.60 | 15.85 | 14.83 | 14.79 | 14.77 | 14.97 | 15.03 |
| Idaho ($/cwt) | 13.90 | 12.30 | 14.50 | 12.86 | 11.93 | 11.75 | 11.79 | 12.04 | 12.07 |
| Michigan ($/cwt) | 15.00 | 13.60 | 15.30 | 14.64 | 13.62 | 13.58 | 13.56 | 13.77 | 13.82 |
| Missouri ($/cwt) | 15.10 | 13.70 | 15.60 | 14.41 | 13.39 | 13.34 | 13.33 | 13.53 | 13.59 |
| New Mexico ($/cwt) | 13.80 | 12.90 | 14.80 | 13.78 | 12.25 | 12.10 | 12.13 | 12.37 | 12.41 |
| New York ($/cwt) | 14.90 | 13.40 | 15.40 | 14.27 | 12.91 | 12.84 | 12.84 | 13.05 | 13.10 |
| Texas ($/cwt) | 15.10 | 13.70 | 15.70 | 14.72 | 13.22 | 13.14 | 13.14 | 13.35 | 13.40 |
| Vermont ($/cwt) | 15.30 | 14.30 | 16.00 | 15.11 | 14.60 | 13.49 | 13.48 | 13.69 | 13.75 |
| Washington ($/cwt) | 14.50 | 13.20 | 15.40 | 14.03 | 13.10 | 12.92 | 12.97 | 13.21 | 13.24 |
| Wisconsin ($/cwt) | 14.75 | 13.33 | 15.50 | 13.83 | 12.82 | 12.76 | 12.75 | 12.96 | 13.02 |

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

**Table 3. FAPRI November 1999 Baseline Assumed Rates of Change in Input Prices, Annual Interest Rates, and Annual Changes in Land Values, 1997-2004**

| | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 |
|---|---|---|---|---|---|---|---|---|
| **Annual Rate of Change for Input Prices Paid** | | | | | | | | |
| Seed Prices (%) | 7.73 | 4.56 | -0.08 | -3.66 | 2.03 | 1.84 | 1.77 | 1.80 |
| Fertilizer Prices (%) | -1.76 | -10.32 | -1.51 | 1.61 | 2.43 | 1.33 | 1.36 | 1.52 |
| Chemical Prices (%) | -2.01 | 1.82 | -1.42 | 1.80 | 2.39 | 2.12 | 2.12 | 2.11 |
| Machinery Prices (%) | 2.47 | 2.97 | -0.87 | 1.50 | 0.75 | 0.54 | -0.06 | 0.28 |
| Fuel and Lube Prices (%) | 0.49 | -6.48 | -1.67 | 1.99 | 3.09 | 1.59 | 1.63 | 1.84 |
| Labor (%) | 2.48 | 3.91 | 0.89 | 5.82 | 4.64 | 3.82 | 3.47 | 4.01 |
| Other Input Prices (%) | -0.06 | -2.48 | -0.47 | 1.88 | 1.52 | 2.14 | 2.40 | 2.37 |
| Non-Feed Dairy Costs (%) | 4.04 | -1.24 | 0.92 | 0.00 | 0.08 | 0.78 | 0.76 | 1.02 |
| Non-Feed Beef Costs (%) | 5.52 | -2.17 | 0.22 | 3.46 | 2.09 | 2.19 | 2.20 | 1.35 |
| Non-Feed Hog Costs (%) | -0.89 | 2.69 | -0.04 | 3.39 | 1.63 | 2.39 | 2.21 | 2.39 |
| **Annual Change in Consumer Price Index (%)** | 2.34 | 1.56 | 2.18 | 2.50 | 2.55 | 2.28 | 2.38 | 2.39 |
| **Annual Interest Rates** | | | | | | | | |
| Long-Term (%) | 7.69 | 7.10 | 7.53 | 7.74 | 7.77 | 7.60 | 7.45 | 7.42 |
| Intermediate-Term (%) | 8.44 | 8.35 | 7.95 | 8.23 | 8.23 | 8.23 | 8.23 | 8.23 |
| Savings Account (%) | 4.44 | 4.35 | 3.95 | 4.23 | 4.23 | 4.23 | 4.23 | 4.23 |
| **Annual Rate of Change for U.S. Land Prices (%)** | 4.40 | 5.18 | 1.85 | -0.83 | -0.72 | -2.78 | -2.13 | -0.98 |

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

- **Cost to Receipts Ratio, 1996-2004 --** average ratio of total cash expenses to total receipts (from all sources). Cash expenses include interest costs, fixed cash costs, and variable costs but exclude principal payments, depreciation, income taxes, and family living expenses. Total receipts include crop and livestock receipts plus government payments and insurance indemnities.

- **Government Payments/Receipts, 1996-2004 –** sum of all farm program payments (AMTA and marketing loan deficiency payments) divided by total receipts received from the market plus contract payments, marketing loans, crop insurance indemnities, and other farm related income.

- **Total Cash Receipts --** sum of cash receipts from all sources, including market sales, AMTA (or contract) payments, CCC loans, marketing loan deficiency payments, crop insurance indemnities, and other farm related income. The values in the tables are the average total receipts 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).

- **Probability of Refinancing Deficits --** is the number of times out of 100 that cash flow deficits are greater than available cash reserves. This probability is reported for each year of the planning horizon to indicate whether the financial risk for a farm increases or decreases over the planning horizon.

- **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 Losing Real Net Worth --** is the number of times out of 100 that real net worth is less than the net worth for the farm at the beginning of 2000. The probability is reported for each year of the planning horizon to indicate whether the equity risk is increasing or decreasing from the base year of 1999.

# FIGURE 2. REPRESENTATIVE FARMS PRODUCING FEED GRAINS

**Feed Grain and Oilseed Farm Notes**

Table 4. Implications of the 1996 Farm Bill and the November 1999 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Feed Grains.

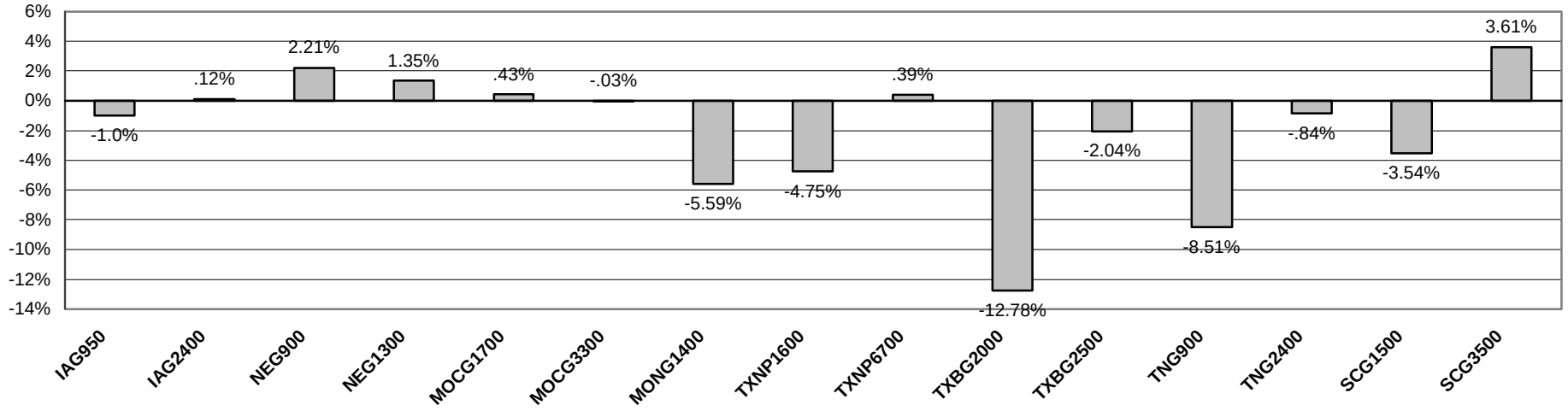
| | IAG950 | IAG2400 | NEG900 | NEG1300 | MOCG1700 | MOCG3300 | MONG1400 |
|---|---|---|---|---|---|---|---|
| Annual Change Real Net Worth (%) | | | | | | | |
| 1999-2004 Average | -0.995 | 0.118 | 2.207 | 1.347 | 0.428 | -0.034 | -5.589 |
| Net Income Adjustment (NIA) | | | | | | | |
| 1999-2004 ($1,000) | 12.07 | 0 | -26.99 | -23.19 | -11.59 | 0 | 95.29 |
| Net Income Adjustment (NIA) | | | | | | | |
| 1999-2004 (% Receipts) | 4.77 | 0 | -8.6 | -5.19 | -3.42 | 0 | 25.5 |
| Cost to Receipts Ratio (%) | | | | | | | |
| 2000-2004 Average | 81.53 | 81.58 | 68.09 | 70.77 | 68.40 | 73.09 | 106.63 |
| Govt Payments/Receipts (%) | | | | | | | |
| 2000-2004 Average | 12.70 | 12.95 | 13.55 | 12.29 | 11.04 | 12.22 | 6.85 |
| Total Cash Receipts ($1000) | | | | | | | |
| 1996 | 351.85 | 761.36 | 408.97 | 569.17 | 430.48 | 725.96 | 482.26 |
| 1997 | 296.68 | 643.87 | 402.56 | 550.11 | 415.77 | 740.12 | 580.82 |
| 1998 | 213.54 | 464.65 | 296.55 | 404.23 | 351.47 | 613.07 | 366.61 |
| 1999 | 275.83 | 616.44 | 328.09 | 446.58 | 347.46 | 632.73 | 352.8 |
| 2000 | 250.69 | 553.31 | 309.3 | 437.73 | 339.16 | 642.4 | 363.38 |
| 2001 | 247.07 | 545.17 | 304.48 | 435.01 | 332.22 | 628.12 | 363.4 |
| 2002 | 251.66 | 555.49 | 308.16 | 439.2 | 340.3 | 642.81 | 373.16 |
| 2003 | 260.01 | 574.26 | 320.34 | 454.68 | 353.3 | 665.27 | 382.52 |
| 2004 | 265.49 | 586.49 | 327.55 | 468.52 | 354.67 | 667.78 | 386.28 |
| Net Cash Farm Income ($1000) | | | | | | | |
| 1996 | 143.5 | 367.83 | 194.74 | 235.76 | 231.45 | 312.74 | 84.65 |
| 1997 | 93.62 | 238.58 | 189.59 | 229.96 | 206.27 | 320.16 | 143.92 |
| 1998 | 21.47 | 43 | 94.02 | 99.33 | 153.7 | 205.18 | 21.41 |
| 1999 | 80.66 | 187.89 | 122.75 | 146.18 | 134.31 | 200.24 | 17.47 |
| 2000 | 58.07 | 127.47 | 107.58 | 139.54 | 122.25 | 207.22 | 12.17 |
| 2001 | 53.49 | 113.19 | 104.03 | 135.95 | 106.21 | 180.72 | -1.45 |
| 2002 | 55.68 | 118.01 | 109.26 | 141.28 | 115.28 | 187.64 | -5.52 |
| 2003 | 57.67 | 131.09 | 121.74 | 150.76 | 129.35 | 206.6 | -5.82 |
| 2004 | 58 | 134.89 | 118.6 | 154.61 | 123.02 | 202.88 | -15.02 |
| Prob. of a Cash Flow Deficit (%) | | | | | | | |
| 2000 | 43 | 50 | 46 | 16 | 24 | 41 | 99 |
| 2001 | 52 | 47 | 53 | 26 | 38 | 57 | 99 |
| 2002 | 61 | 51 | 30 | 28 | 49 | 56 | 99 |
| 2003 | 69 | 52 | 38 | 27 | 48 | 57 | 99 |
| 2004 | 78 | 66 | 42 | 38 | 55 | 61 | 99 |
| Ending Cash Reserves ($1000) | | | | | | | |
| 1996 | 62.88 | 175.76 | 85.56 | 96.95 | 99.07 | 104.46 | -25.94 |
| 1997 | 77.62 | 196.24 | 137.61 | 175.57 | 174.89 | 213.98 | -6.63 |
| 1998 | 30.71 | 118.34 | 139.73 | 166.5 | 203.93 | 231.29 | -87.5 |
| 1999 | 49.99 | 177 | 158.11 | 199.76 | 255.16 | 273.65 | -133.95 |
| 2000 | 50.64 | 173.86 | 167.17 | 241.83 | 288.73 | 306.54 | -220.67 |
| 2001 | 51.91 | 181.6 | 173.78 | 279.53 | 307.46 | 298.28 | -315.16 |
| 2002 | 44.41 | 175.51 | 197.6 | 314.82 | 321.26 | 287.9 | -424.65 |
| 2003 | 33.37 | 178.55 | 224.13 | 350.58 | 341.29 | 277.3 | -535.33 |
| 2004 | 13.98 | 155.59 | 241.48 | 375.07 | 350.72 | 259.52 | -657.9 |
| Prob. of Refinancing Deficits (%) | | | | | | | |
| 2000 | 12 | 3 | 1 | 1 | 1 | 1 | 99 |
| 2001 | 18 | 5 | 1 | 1 | 1 | 1 | 99 |
| 2002 | 27 | 10 | 1 | 1 | 1 | 5 | 99 |
| 2003 | 34 | 16 | 3 | 1 | 1 | 9 | 99 |
| 2004 | 49 | 19 | 4 | 1 | 1 | 9 | 99 |
| Nominal Net Worth ($1000) | | | | | | | |
| 1996 | 833.55 | 1387.98 | 832.01 | 1104.52 | 1678.51 | 2810.27 | 1544.15 |
| 1997 | 889.46 | 1494.37 | 918.81 | 1200.27 | 1826.64 | 3056.5 | 1684.73 |
| 1998 | 899.34 | 1501.2 | 950.74 | 1219.55 | 1954.5 | 3247.31 | 1630.85 |
| 1999 | 946.59 | 1603.91 | 991.85 | 1268.74 | 2029.69 | 3345.37 | 1628.12 |
| 2000 | 962.45 | 1614.86 | 1008.79 | 1286.02 | 2056.77 | 3370.69 | 1573.14 |
| 2001 | 964.01 | 1635.02 | 1027.82 | 1308 | 2069.86 | 3378.39 | 1503.3 |
| 2002 | 941.08 | 1612.18 | 1057.68 | 1314.41 | 2054.14 | 3332.45 | 1385.32 |
| 2003 | 916.36 | 1614 | 1078.48 | 1333.65 | 2061.76 | 3318.93 | 1279.58 |
| 2004 | 901.37 | 1616.7 | 1103.58 | 1356.99 | 2077.45 | 3346.5 | 1175.54 |
| Prob. of Losing Real Net Worth (%) | | | | | | | |
| 2000 | 32 | 43 | 44 | 37 | 31 | 45 | 74 |
| 2001 | 34 | 37 | 33 | 32 | 26 | 40 | 82 |
| 2002 | 55 | 50 | 25 | 31 | 39 | 55 | 92 |
| 2003 | 63 | 47 | 22 | 28 | 42 | 58 | 97 |
| 2004 | 64 | 50 | 18 | 23 | 38 | 51 | 99 |

Table 5. Implications of the 1996 Farm Bill and the November 1999 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Feed Grains.

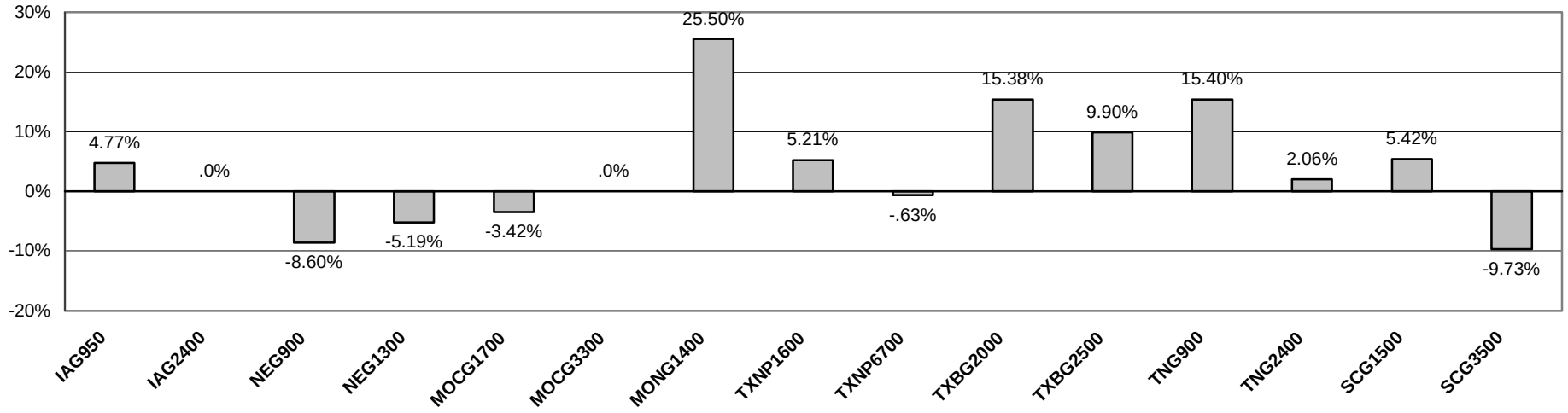
| | TXNP1600 | TXNP6700 | TXBG2000 | TXBG2500 | TNG900 | TNG2400 | SCG1500 | SCG3500 |
|---|---|---|---|---|---|---|---|---|
| Annual Change Real Net Worth (%) | | | | | | | | |
| 1999-2004 Average | -4.749 | 0.392 | -12.778 | -2.043 | -8.509 | -0.842 | -3.538 | 3.609 |
| Net Income Adjustment (NIA) | | | | | | | | |
| 1999-2004 ($1,000) | 21.88 | -9.95 | 51.04 | 24.42 | 40.6 | 13.82 | 26.34 | -126.69 |
| Net Income Adjustment (NIA) | | | | | | | | |
| 1999-2004 (% Receipts) | 5.21 | -0.63 | 15.38 | 9.9 | 15.4 | 2.06 | 5.42 | -9.73 |
| Cost to Receipts Ratio (%) | | | | | | | | |
| 2000-2004 Average | 92.573 | 88.187 | 101.63 | 92.988 | 98.935 | 87.368 | 92.451 | 76.577 |
| Govt Payments/Receipts (%) | | | | | | | | |
| 2000-2004 Average | 9.834 | 9.185 | 13.418 | 8.21 | 7.981 | 10.259 | 11.174 | 10.301 |
| Total Cash Receipts ($1000) | | | | | | | | |
| 1996 | 385.45 | 2044.45 | 230.66 | 263.48 | 323.01 | 875.71 | 615.53 | 1633.87 |
| 1997 | 337.08 | 1763.97 | 509.95 | 472.3 | 322.14 | 818.59 | 633.66 | 1656.14 |
| 1998 | 329.6 | 1344.08 | 343.73 | 466.58 | 227.38 | 576.29 | 315.59 | 873.38 |
| 1999 | 412.22 | 1643.44 | 373.65 | 398.19 | 210.72 | 534.81 | 386.32 | 1025.8 |
| 2000 | 409.96 | 1547.12 | 320.59 | 306.95 | 288.27 | 715.05 | 481.17 | 1268.96 |
| 2001 | 401.62 | 1544.2 | 323.35 | 296.73 | 257.92 | 636.45 | 467.13 | 1253.08 |
| 2002 | 418.76 | 1569.19 | 326.86 | 297.53 | 261.54 | 652.53 | 479.77 | 1285.35 |
| 2003 | 431.58 | 1636.26 | 340.54 | 310.24 | 270.81 | 673.8 | 495.56 | 1339.32 |
| 2004 | 438.43 | 1673.66 | 347.61 | 265.18 | 274.73 | 684.04 | 506.02 | 1363.21 |
| Net Cash Farm Income ($1000) | | | | | | | | |
| 1996 | 110.49 | 801.24 | -62.28 | -10.2 | 82.86 | 333.59 | 213.15 | 681.59 |
| 1997 | 76.7 | 561.52 | 188.1 | 193.5 | 81.76 | 286.45 | 228.64 | 709.45 |
| 1998 | 18.56 | 140.16 | 42.94 | 197.11 | -8.5 | 46.3 | -65.78 | -42.07 |
| 1999 | 79.19 | 340.86 | 68.21 | 133.1 | -28.31 | 3.69 | -11.99 | 100.91 |
| 2000 | 73.89 | 235.99 | 13.91 | 49.42 | 42.8 | 169.39 | 66.03 | 318.86 |
| 2001 | 57.41 | 208.52 | 5.66 | 37.38 | 9.88 | 83.2 | 42.79 | 291.09 |
| 2002 | 64.96 | 216.85 | 4.78 | 34.89 | 6.08 | 86.47 | 42.31 | 316.67 |
| 2003 | 64.23 | 257.8 | 11.04 | 44.38 | 4.48 | 103.3 | 50.54 | 360.98 |
| 2004 | 64.07 | 266.92 | 4.01 | 22.46 | 0.91 | 100.29 | 52.89 | 378.03 |
| Prob. of a Cash Flow Deficit (%) | | | | | | | | |
| 2000 | 56 | 57 | 90 | 66 | 99 | 25 | 71 | 23 |
| 2001 | 66 | 55 | 95 | 67 | 96 | 80 | 87 | 38 |
| 2002 | 63 | 57 | 96 | 53 | 99 | 74 | 87 | 41 |
| 2003 | 76 | 54 | 93 | 51 | 99 | 74 | 88 | 38 |
| 2004 | 75 | 58 | 97 | 72 | 99 | 78 | 91 | 35 |
| Ending Cash Reserves ($1000) | | | | | | | | |
| 1996 | 55.1 | 390.62 | -95.18 | -47.61 | 27.63 | 187.73 | 97.55 | 324.76 |
| 1997 | 78.55 | 566 | 39.62 | 80.63 | 44.56 | 325.28 | 193.13 | 627.69 |
| 1998 | 47.67 | 428.09 | 13.11 | 177.55 | -19.53 | 244.68 | 54.01 | 391.15 |
| 1999 | 72.67 | 547.27 | 17.13 | 237.1 | -79 | 183.7 | -38.64 | 296.97 |
| 2000 | 65.2 | 531.73 | -28.74 | 229.7 | -75.03 | 266.96 | -37.31 | 420.32 |
| 2001 | 37 | 515.66 | -85.41 | 216.96 | -110.49 | 199.13 | -85.95 | 454.28 |
| 2002 | 19.02 | 479.97 | -135.94 | 212.01 | -157.03 | 125.66 | -145.87 | 500.52 |
| 2003 | -17.31 | 463.1 | -166.38 | 212.3 | -223.43 | 76.66 | -196.31 | 564.68 |
| 2004 | -57.45 | 448.41 | -236.45 | 181.53 | -299.66 | 8.04 | -230.27 | 665.58 |
| Prob. of Refinancing Deficits (%) | | | | | | | | |
| 2000 | 16 | 1 | 79 | 1 | 99 | 1 | 71 | 1 |
| 2001 | 31 | 3 | 93 | 1 | 96 | 6 | 79 | 1 |
| 2002 | 41 | 11 | 94 | 1 | 99 | 31 | 84 | 4 |
| 2003 | 49 | 10 | 91 | 4 | 99 | 37 | 85 | 4 |
| 2004 | 56 | 22 | 95 | 11 | 99 | 50 | 88 | 2 |
| Nominal Net Worth ($1000) | | | | | | | | |
| 1996 | 381.49 | 2024.42 | 241.73 | 637.62 | 553.25 | 1315.51 | 770.72 | 2432.19 |
| 1997 | 398.98 | 2253.81 | 377.34 | 808.74 | 599.69 | 1490.45 | 893.63 | 2825.65 |
| 1998 | 370.86 | 2218.06 | 352.46 | 933.5 | 561.47 | 1462.16 | 787.52 | 2713.31 |
| 1999 | 394.31 | 2363.13 | 362.49 | 953.96 | 502 | 1401.63 | 726.24 | 2712.81 |
| 2000 | 390.26 | 2369.04 | 322.24 | 940.19 | 503.47 | 1478.86 | 731.15 | 2845.53 |
| 2001 | 371.08 | 2384.51 | 274 | 929 | 465.37 | 1432.59 | 693.29 | 2920 |
| 2002 | 347.9 | 2369.68 | 221.9 | 904.06 | 409.37 | 1373.94 | 641.88 | 2976.17 |
| 2003 | 322.26 | 2378.07 | 193.97 | 890.18 | 350.86 | 1367.23 | 606.1 | 3063.21 |
| 2004 | 301.31 | 2414.4 | 131.16 | 858.28 | 289.03 | 1345.36 | 599.02 | 3208.92 |
| Prob. of Losing Real Net Worth (%) | | | | | | | | |
| 2000 | 53 | 51 | 85 | 68 | 46 | 25 | 50 | 23 |
| 2001 | 59 | 50 | 93 | 67 | 70 | 47 | 69 | 16 |
| 2002 | 54 | 45 | 95 | 77 | 86 | 52 | 74 | 19 |
| 2003 | 56 | 55 | 92 | 74 | 88 | 55 | 74 | 12 |
| 2004 | 59 | 45 | 95 | 82 | 96 | 53 | 76 | 4 |

# Figure 3. Feed Grain Farms

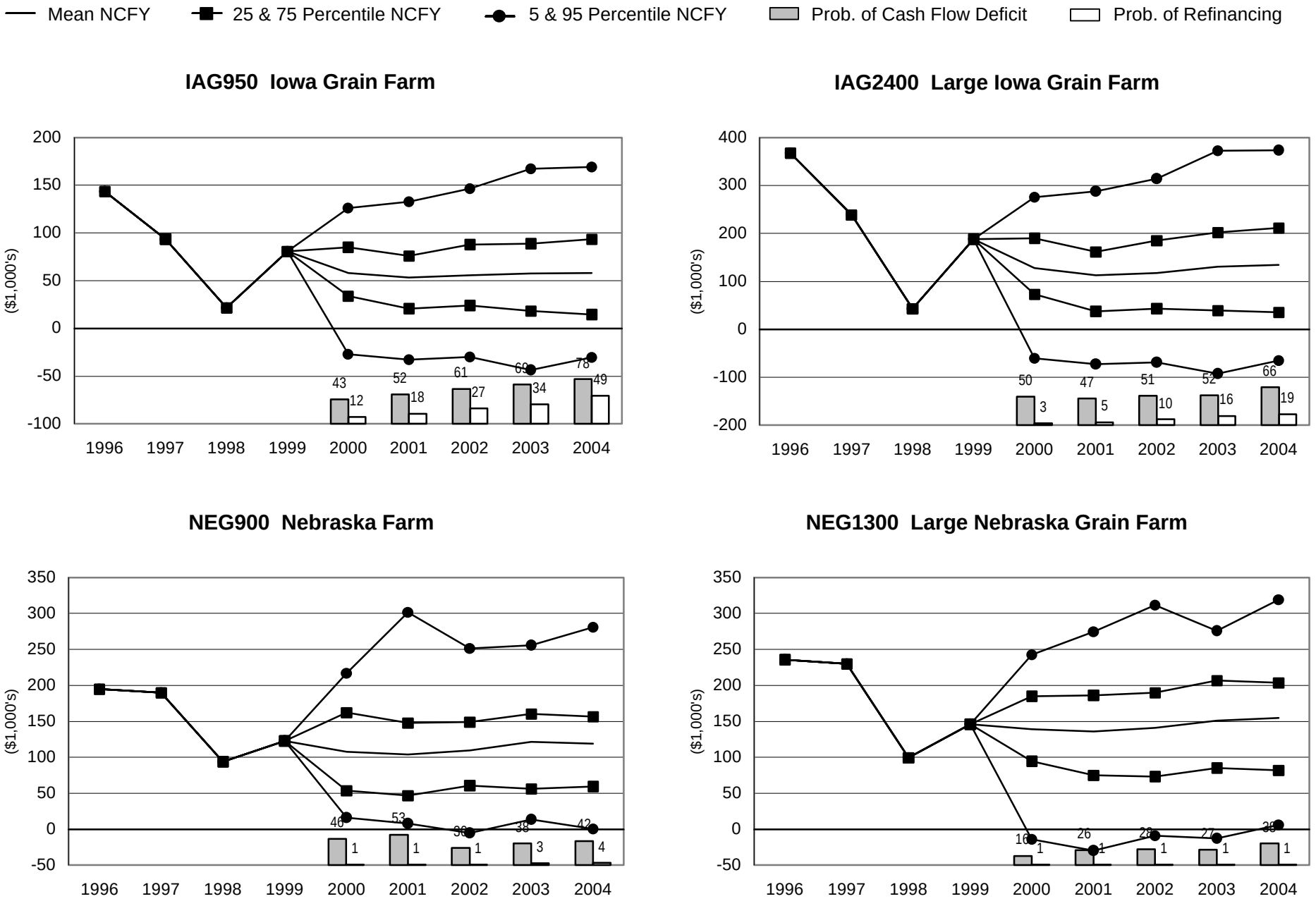
**Average Annual Percentage Change in Real Net Worth 1999-2002**



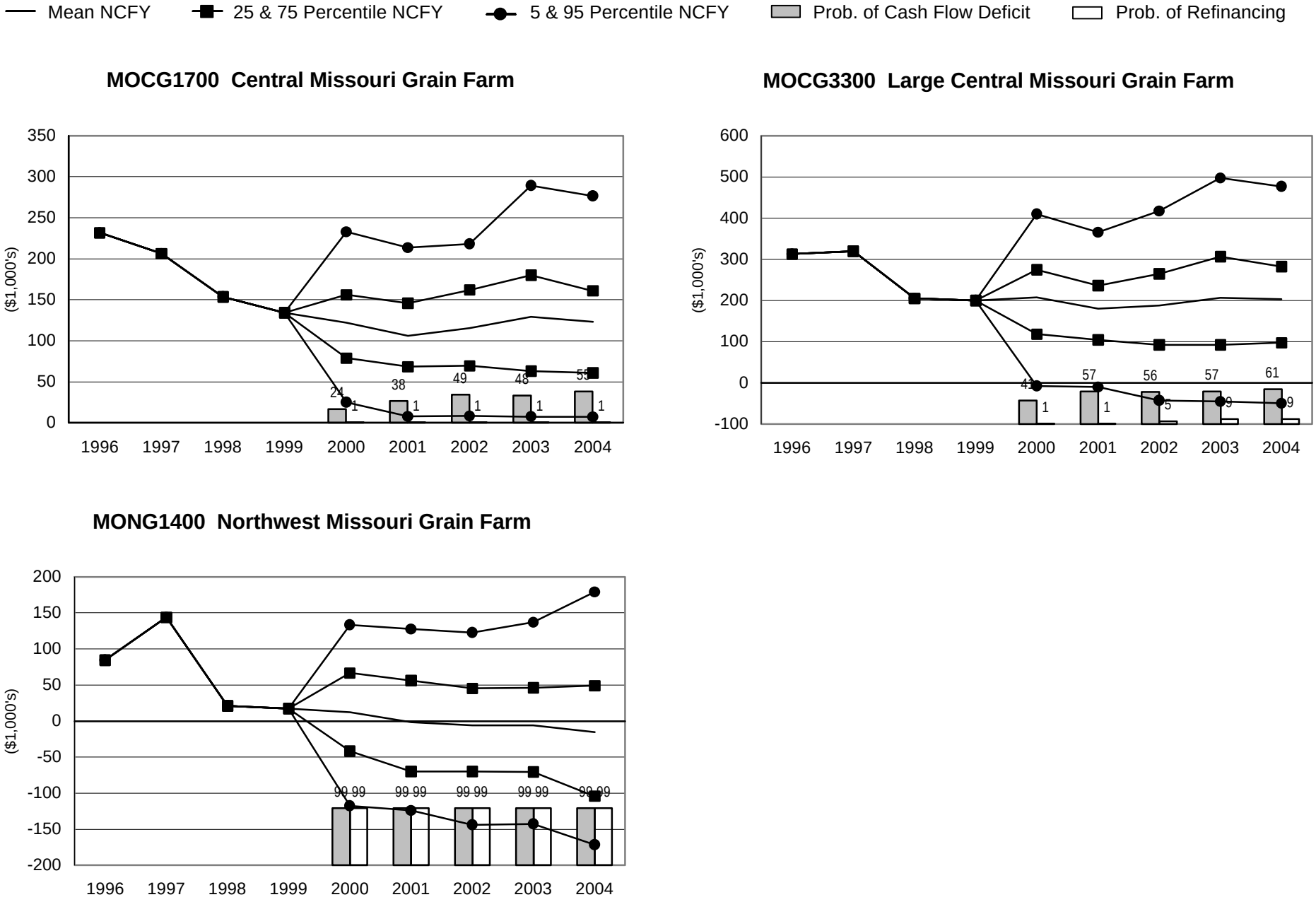

**Average Annual Percentage Change in Receipts 1999-2002 Needed to Maintain 1999 Net Worth**



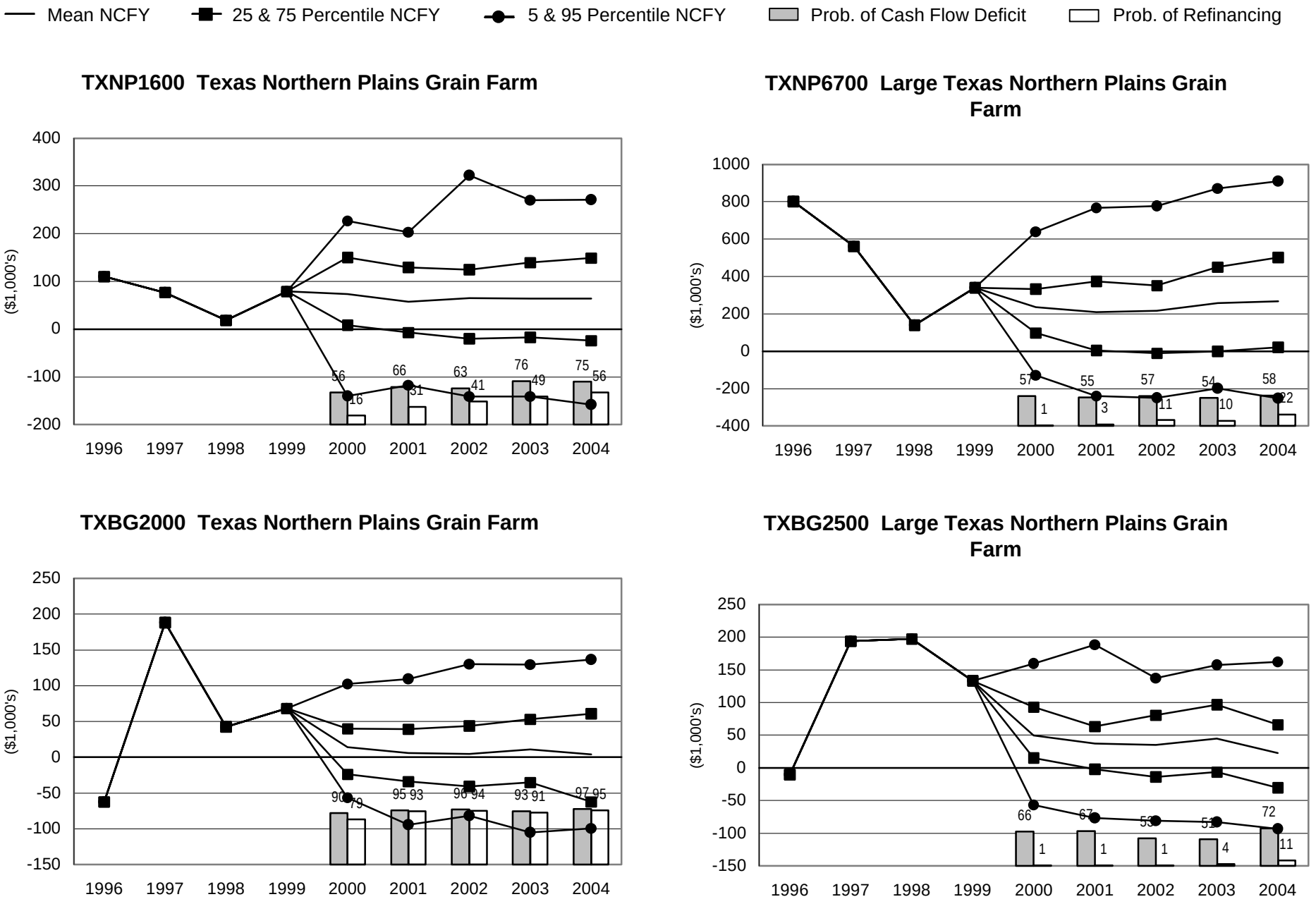
## Figure 4. Net Cash Farm Income and Probabilities of a Cash Flow Deficit and Refinancing: Feed Grain Farms



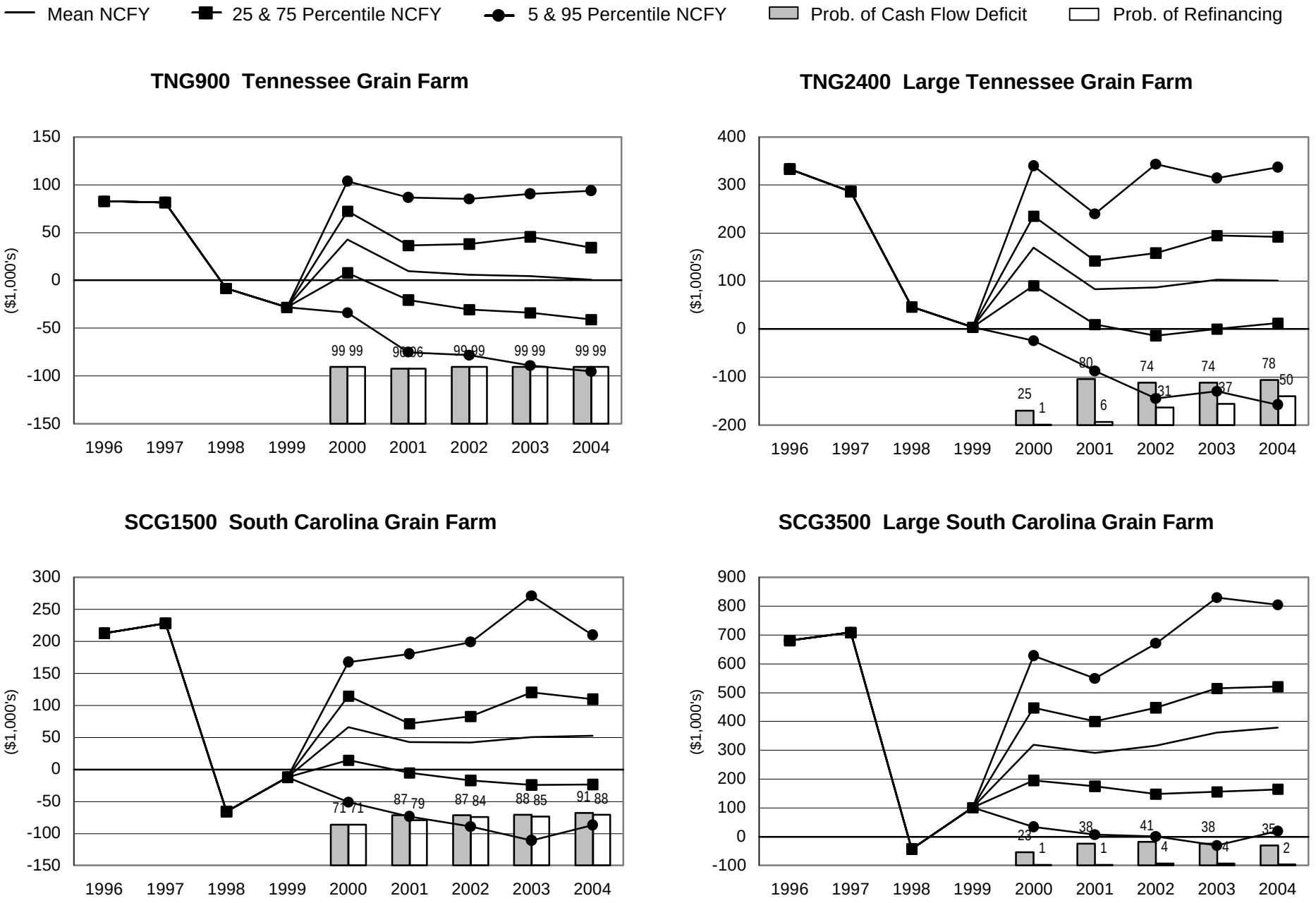
## Figure 5. Net Cash Farm Income and Probabilities of a Cash Flow Deficit and Refinancing: Feed Grain Farms



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



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



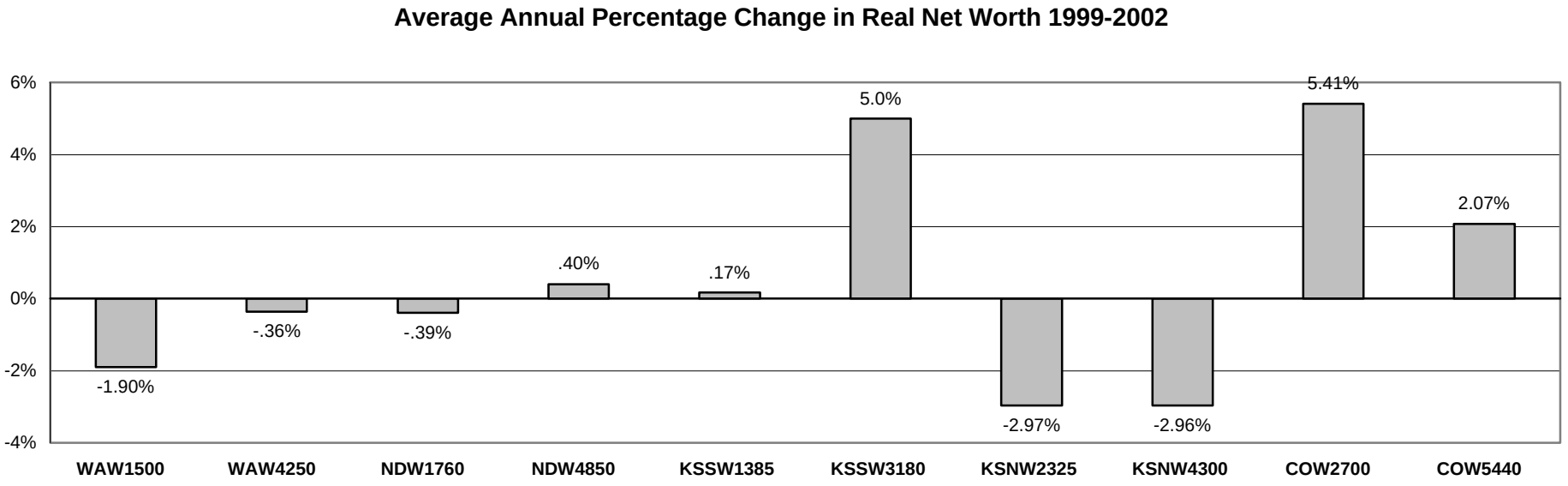
# FIGURE 8. REPRESENTATIVE FARMS PRODUCING WHEAT

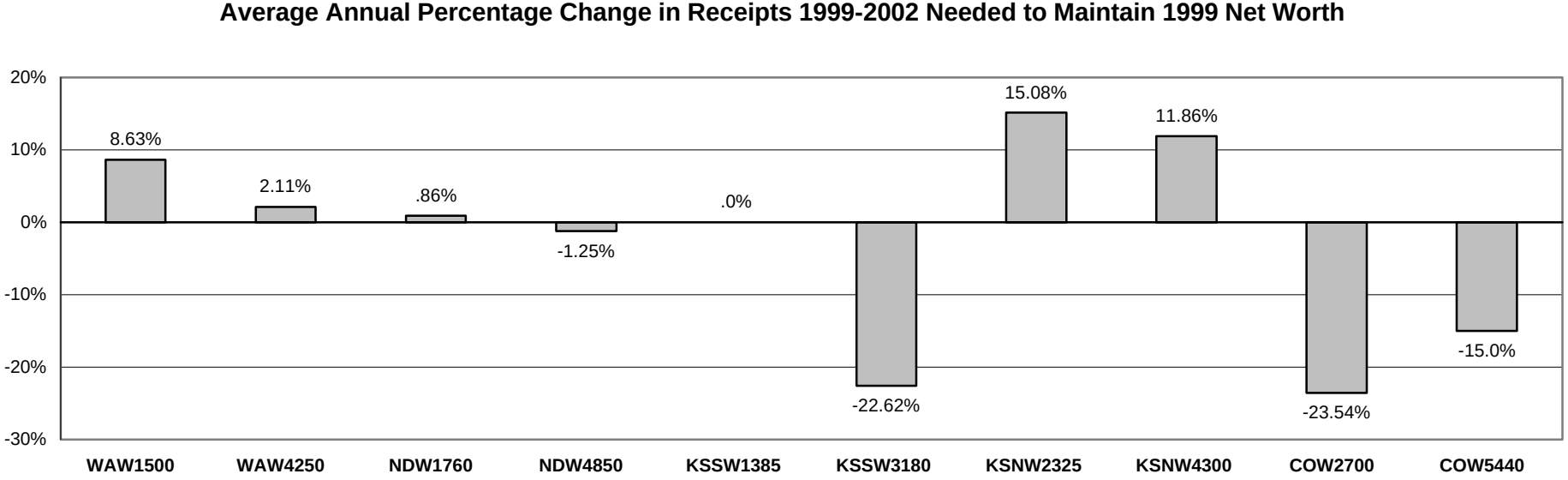
**Wheat Farm Notes**

Table 6. Implications of the 1996 Farm Bill and the November 1999 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Wheat.

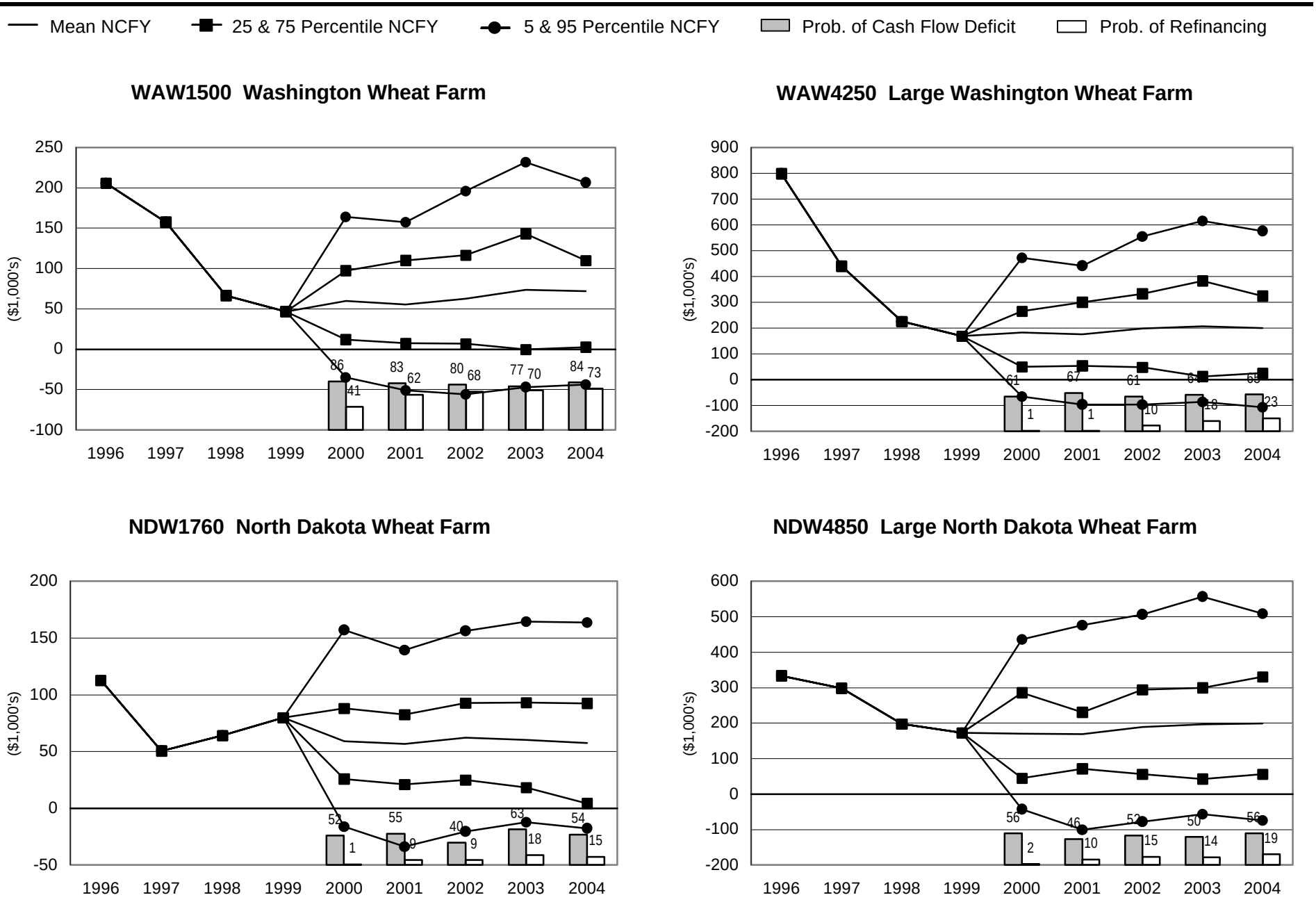
| | WAW1500 | WAW4250 | NDW1760 | NDW4850 | KSSW1385 | KSSW3180 | KSNW2325 | KSNW4300 | COW2700 | COW5440 |
|---|---|---|---|---|---|---|---|---|---|---|
| Annual Change Real Net Worth (%) | | | | | | | | | | |
| 1999-2004 Average | -1.903 | -0.357 | -0.391 | 0.402 | 0.17 | 4.995 | -2.965 | -2.959 | 5.41 | 2.073 |
| Net Income Adjustment (NIA) | | | | | | | | | | |
| 1999-2004 ($1,000) | 29.98 | 18.58 | 1.99 | -8.85 | 0 | -84.76 | 30.45 | 55.58 | -51.24 | -68.14 |
| Net Income Adjustment (NIA) | | | | | | | | | | |
| 1999-2004 (% Receipts) | 8.63 | 2.11 | 0.86 | -1.25 | 0 | -22.62 | 15.08 | 11.86 | -23.54 | -15 |
| Cost to Receipts Ratio (%) | | | | | | | | | | |
| 2000-2004 Average | 85.317 | 82.077 | 78.457 | 78.607 | 60.871 | 57.818 | 88.84 | 91.302 | 56.307 | 61.356 |
| Govt Payments/Receipts (%) | | | | | | | | | | |
| 2000-2004 Average | 7.699 | 7.605 | 9.73 | 7.28 | 16.129 | 11.878 | 11.392 | 10.732 | 8.679 | 7.804 |
| Total Cash Receipts ($1000) | | | | | | | | | | |
| 1996 | 480.96 | 1466.82 | 273.58 | 861.94 | 131.84 | 304.03 | 260.3 | 512.8 | 227.01 | 381.81 |
| 1997 | 440.98 | 1113.23 | 210.27 | 824.77 | 257 | 563.3 | 293.04 | 604.69 | 188.83 | 371.61 |
| 1998 | 344.2 | 915.4 | 231.34 | 725.02 | 154.32 | 380.5 | 276.18 | 442.76 | 191.26 | 370.17 |
| 1999 | 320.01 | 846.29 | 246.79 | 687.69 | 163.33 | 347.94 | 276.21 | 585.21 | 272.13 | 554.16 |
| 2000 | 338.49 | 858.35 | 224.75 | 683.63 | 138.28 | 371.47 | 217.31 | 462.45 | 218.78 | 445.42 |
| 2001 | 336.41 | 853.16 | 224.96 | 685.51 | 135.7 | 364.95 | 211.46 | 453.81 | 215.83 | 439.41 |
| 2002 | 344.73 | 877.21 | 231.09 | 710.45 | 137.6 | 369.88 | 219.53 | 470.44 | 222.49 | 448.94 |
| 2003 | 357.52 | 904.57 | 238.47 | 733.96 | 142.79 | 385.03 | 223.6 | 479.63 | 230.23 | 468.93 |
| 2004 | 359.63 | 912.58 | 239.22 | 744.38 | 142.17 | 382.35 | 227.62 | 484.92 | 231.45 | 468.54 |
| Net Cash Farm Income ($1000) | | | | | | | | | | |
| 1996 | 205.91 | 798.7 | 112.65 | 333.92 | 48.05 | 84 | 86.18 | 146.08 | 121.25 | 176.93 |
| 1997 | 157.46 | 440.49 | 50.5 | 298.77 | 166.15 | 340.8 | 116.99 | 219.41 | 81.38 | 150.78 |
| 1998 | 66.55 | 225.35 | 64.03 | 198.02 | 70.38 | 177.4 | 105.08 | 72.96 | 77.81 | 125.55 |
| 1999 | 46.8 | 168.75 | 79.78 | 172.69 | 82.91 | 147.05 | 96.92 | 184.89 | 150.5 | 284.78 |
| 2000 | 59.81 | 182.24 | 58.87 | 170.76 | 56.8 | 173.62 | 43.88 | 71.75 | 97.21 | 178.44 |
| 2001 | 55.22 | 175.99 | 56.68 | 169.42 | 53.88 | 160.64 | 35.78 | 51.54 | 94.49 | 169 |
| 2002 | 62.51 | 198.78 | 62.44 | 189.53 | 56.42 | 163.33 | 41.5 | 62.19 | 101.78 | 178.28 |
| 2003 | 73.67 | 206.52 | 60.15 | 196.01 | 62.53 | 175.51 | 36.59 | 61.35 | 109.72 | 199.99 |
| 2004 | 72.05 | 200.19 | 57.61 | 198.7 | 62.47 | 168.79 | 35.53 | 58.33 | 110.69 | 201.1 |
| Prob. of a Cash Flow Deficit (%) | | | | | | | | | | |
| 2000 | 86 | 61 | 52 | 56 | 63 | 1 | 73 | 78 | 52 | 31 |
| 2001 | 83 | 67 | 55 | 46 | 73 | 20 | 76 | 65 | 9 | 37 |
| 2002 | 80 | 61 | 40 | 52 | 57 | 13 | 83 | 68 | 16 | 32 |
| 2003 | 77 | 64 | 63 | 50 | 69 | 24 | 93 | 74 | 18 | 33 |
| 2004 | 84 | 65 | 54 | 56 | 51 | 25 | 85 | 77 | 15 | 29 |
| Ending Cash Reserves ($1000) | | | | | | | | | | |
| 1996 | 89.26 | 360.04 | 47.46 | 155.82 | 6.51 | 15.81 | 26.01 | 53.23 | 36.62 | 81.77 |
| 1997 | 136.1 | 443.61 | 52.72 | 254.82 | 82.97 | 210 | 61.08 | 144.25 | 56.53 | 126.02 |
| 1998 | 115.64 | 463.91 | 67.3 | 254.43 | 97.05 | 264.55 | 80.19 | 122.89 | 70.07 | 145.29 |
| 1999 | 71.94 | 449.52 | 88.86 | 228.99 | 117.92 | 307.97 | 80.05 | 190.66 | 129.03 | 256.71 |
| 2000 | 15.66 | 428.5 | 90.12 | 223.94 | 116.74 | 396.6 | 55.98 | 146.49 | 135.09 | 292.09 |
| 2001 | -27.86 | 375.07 | 85.69 | 228.3 | 111.02 | 453.38 | 22.72 | 121.95 | 170.05 | 321.64 |
| 2002 | -60.63 | 337.27 | 96.64 | 237.2 | 110.48 | 528.51 | -15.4 | 90.73 | 206.35 | 362.52 |
| 2003 | -74.45 | 288.23 | 85.87 | 257.69 | 106.9 | 605.83 | -72.85 | 41.9 | 246.52 | 411.22 |
| 2004 | -88.43 | 258.03 | 87.4 | 265.4 | 112.95 | 670.55 | -105.81 | -9.57 | 290.74 | 468.57 |
| Prob. of Refinancing Deficits (%) | | | | | | | | | | |
| 2000 | 41 | 1 | 1 | 2 | 1 | 1 | 7 | 1 | 1 | 1 |
| 2001 | 62 | 1 | 9 | 10 | 1 | 1 | 39 | 7 | 1 | 1 |
| 2002 | 68 | 10 | 9 | 15 | 1 | 1 | 55 | 23 | 1 | 1 |
| 2003 | 70 | 18 | 18 | 14 | 1 | 1 | 75 | 36 | 1 | 1 |
| 2004 | 73 | 23 | 15 | 19 | 1 | 1 | 75 | 45 | 1 | 1 |
| Nominal Net Worth ($1000) | | | | | | | | | | |
| 1996 | 1147.75 | 3192.03 | 345.74 | 1549.94 | 446.39 | 829.62 | 828.81 | 1184.45 | 496.18 | 1637.67 |
| 1997 | 1221.74 | 3434.69 | 346.53 | 1682.6 | 543.2 | 1047.21 | 908.59 | 1317.45 | 537.37 | 1738.03 |
| 1998 | 1244.33 | 3605.65 | 361.12 | 1745.83 | 575.43 | 1113.65 | 922.96 | 1340.34 | 579 | 1839.29 |
| 1999 | 1238.32 | 3673.92 | 382.18 | 1780.88 | 606.27 | 1176.85 | 946.95 | 1432.99 | 661.96 | 2000.27 |
| 2000 | 1215.9 | 3679.33 | 381.43 | 1776.63 | 612.01 | 1246.21 | 925.2 | 1400.41 | 692.85 | 2030.32 |
| 2001 | 1183.95 | 3669.4 | 379.88 | 1802.41 | 613.05 | 1294.85 | 899.5 | 1365.62 | 737.82 | 2070.24 |
| 2002 | 1140.29 | 3612.44 | 379.04 | 1806.46 | 605.67 | 1356.05 | 860.48 | 1317.87 | 762.77 | 2099.77 |
| 2003 | 1123 | 3596.79 | 377.99 | 1813.06 | 600.73 | 1415.73 | 824.73 | 1270.75 | 797.11 | 2142.72 |
| 2004 | 1122.81 | 3615.72 | 375.48 | 1820.47 | 612.7 | 1473.82 | 808.22 | 1223.49 | 842.77 | 2212.17 |
| Prob. of Losing Real Net Worth (%) | | | | | | | | | | |
| 2000 | 73 | 51 | 53 | 56 | 44 | 6 | 73 | 70 | 10 | 33 |
| 2001 | 75 | 52 | 52 | 42 | 46 | 5 | 80 | 80 | 1 | 20 |
| 2002 | 85 | 59 | 51 | 38 | 51 | 1 | 80 | 83 | 3 | 17 |
| 2003 | 81 | 62 | 53 | 38 | 58 | 2 | 88 | 88 | 1 | 11 |
| 2004 | 79 | 56 | 53 | 35 | 47 | 1 | 84 | 91 | 1 | 4 |

# Figure 9. Wheat Farms

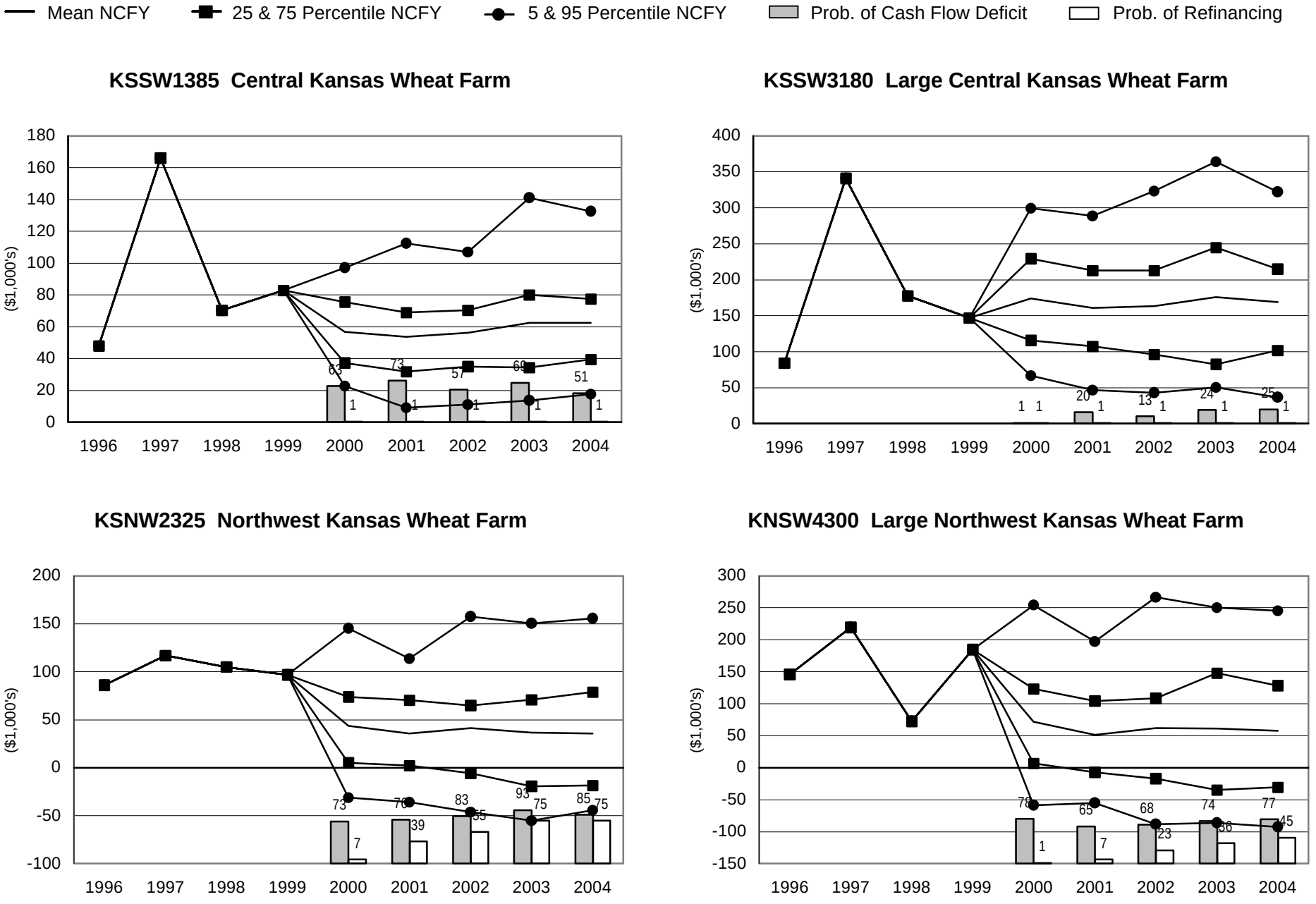


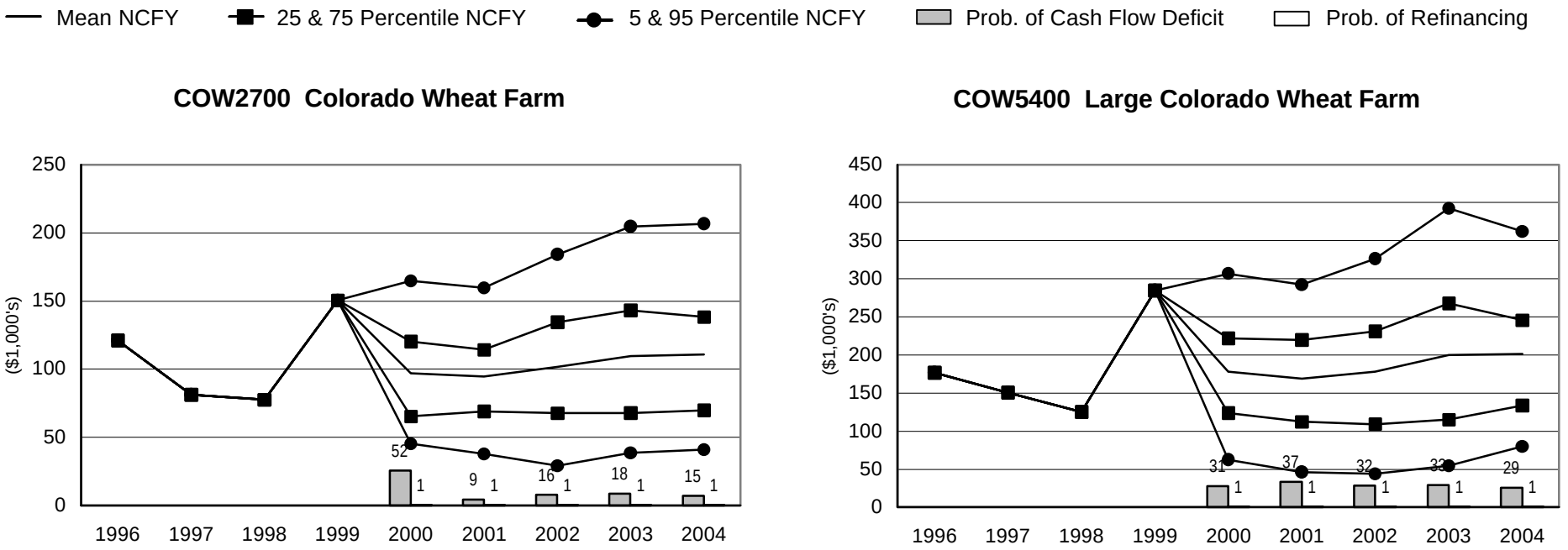
## Figure 10. Net Cash Farm Income and Probabilities of a Cash Flow Deficit and Refinancing: Wheat Farms



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



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



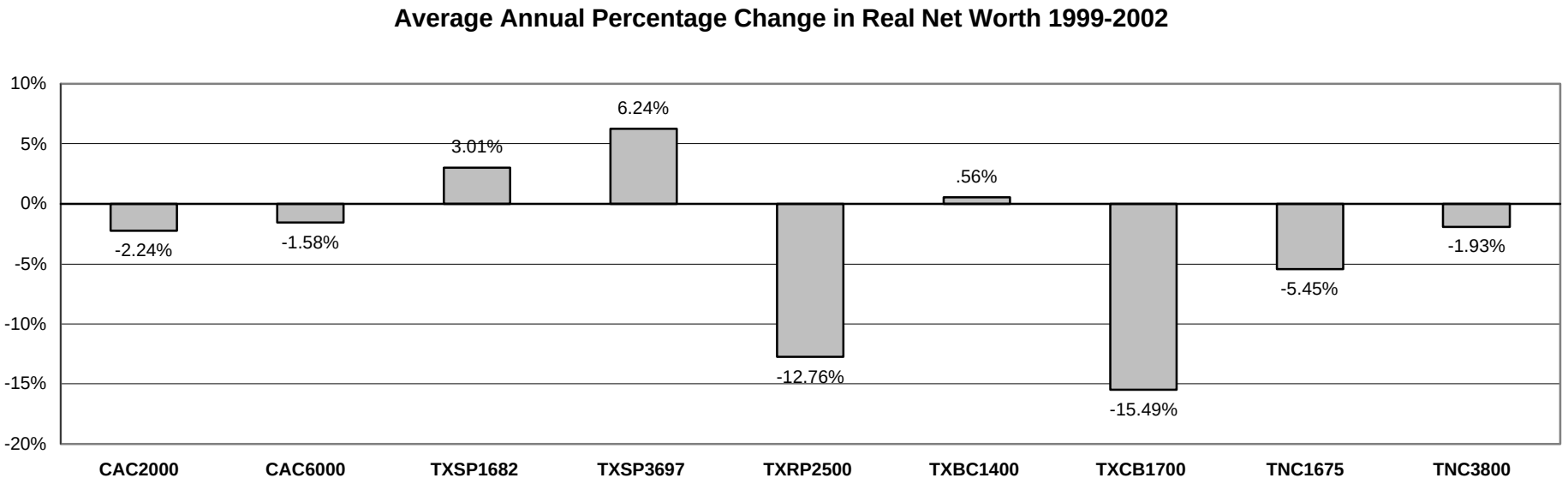
# FIGURE 13. REPRESENTATIVE FARMS PRODUCING COTTON

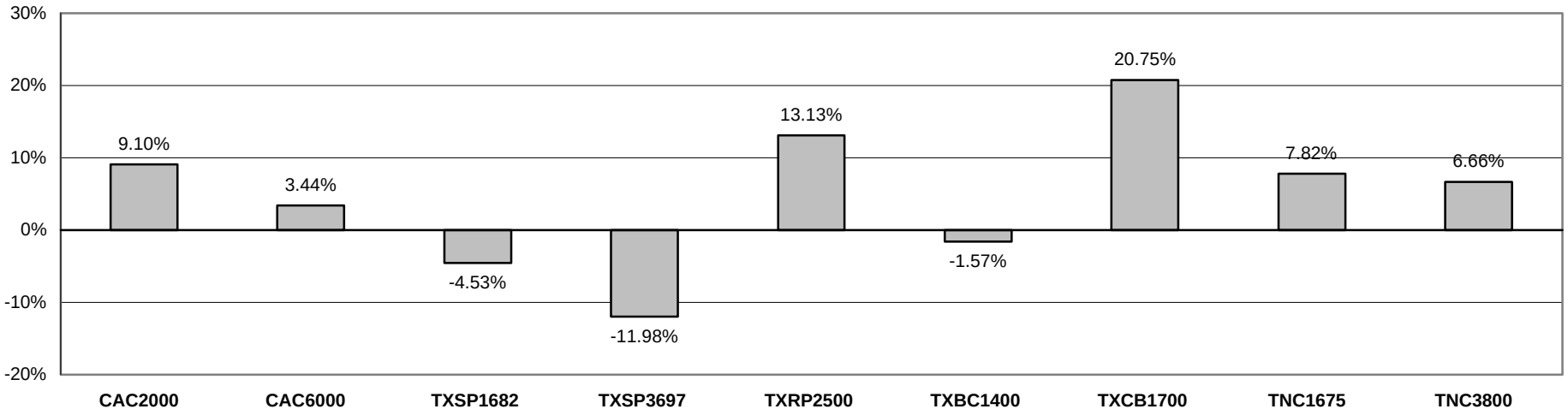
**Cotton Farm Notes**

Table 7. Implications of the 1996 Farm Bill and the November 1999 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Cotton.

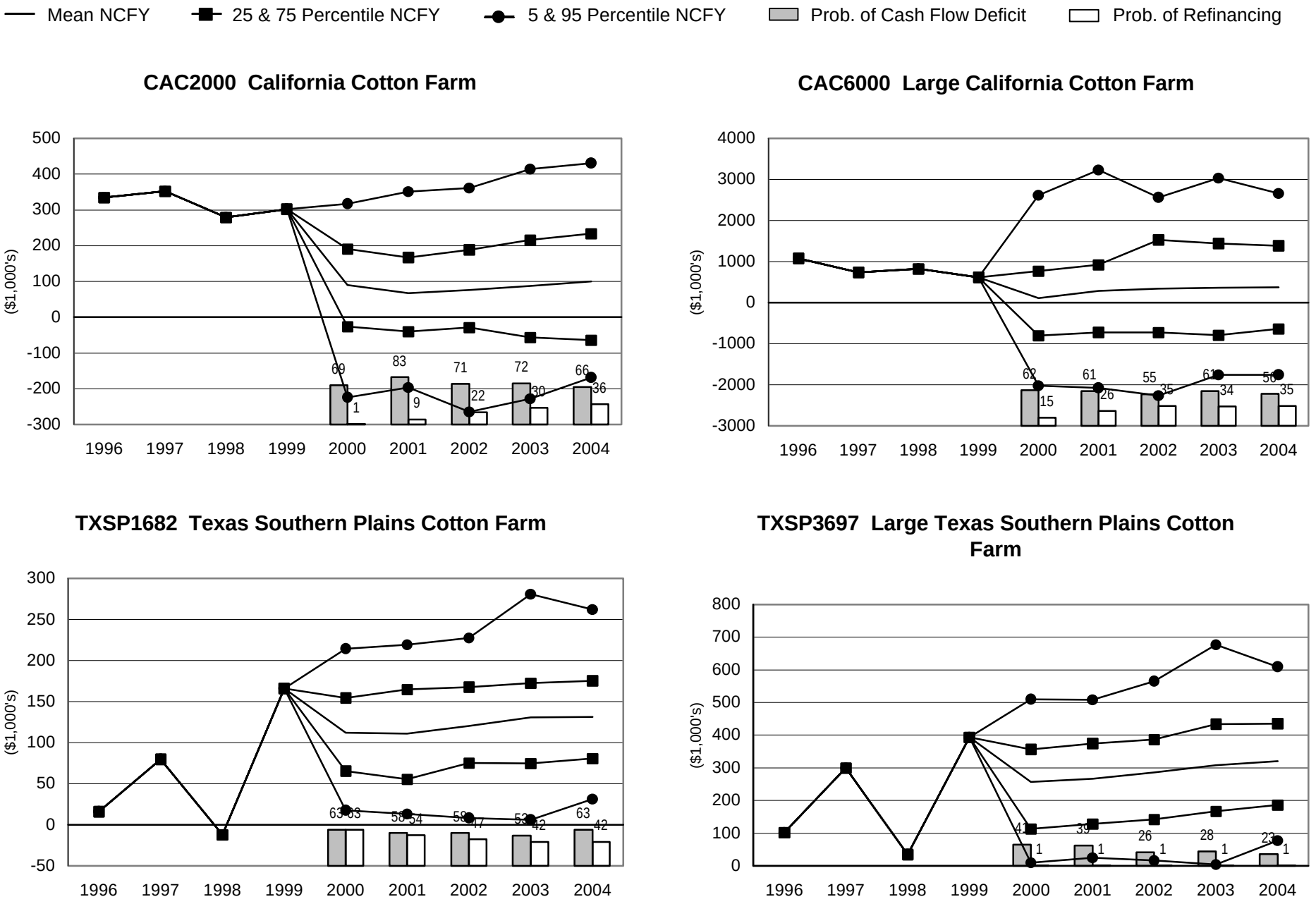
| | CAC2000 | CAC6000 | TXSP1682 | TXSP3697 | TXRP2500 | TXBC1400 | TXCB1700 | TNC1675 | TNC3800 |
|---|---|---|---|---|---|---|---|---|---|
| Annual Change Real Net Worth (%) | | | | | | | | | |
| 1999-2004 Average | -2.241 | -1.583 | 3.01 | 6.238 | -12.759 | 0.557 | -15.487 | -5.454 | -1.927 |
| Net Income Adjustment (NIA) | | | | | | | | | |
| 1999-2004 ($1,000) | 128.73 | 262.56 | -22.97 | -120.94 | 29.73 | -3.61 | 73.88 | 42.15 | 87.69 |
| Net Income Adjustment (NIA) | | | | | | | | | |
| 1999-2004 (% Receipts) | 9.1 | 3.44 | -4.53 | -11.98 | 13.13 | -1.57 | 20.75 | 7.81 | 6.66 |
| Cost to Receipts Ratio (%) | | | | | | | | | |
| 2000-2004 Average | 95.686 | 99.829 | 78.071 | 73.961 | 101.836 | 74.631 | 107.599 | 95.247 | 99.374 |
| Govt Payments/Receipts (%) | | | | | | | | | |
| 2000-2004 Average | 8.279 | 3.913 | 7.309 | 10.096 | 15.554 | 11.2 | 14.553 | 11.406 | 11.137 |
| Total Cash Receipts ($1000) | | | | | | | | | |
| 1996 | 1650.11 | 8296.44 | 203.24 | 739.54 | 179.37 | 145.64 | 227.77 | 578.93 | 1528.16 |
| 1997 | 1638.87 | 7771.16 | 303.33 | 1002.03 | 231.96 | 290.15 | 414.08 | 644.09 | 1542.76 |
| 1998 | 1556.11 | 7831.98 | 181.21 | 663.53 | 151.73 | 198.13 | 257.31 | 551.46 | 1339.14 |
| 1999 | 1580.85 | 7879.94 | 534.93 | 1074.33 | 199.96 | 313 | 670.48 | 384.64 | 1129.04 |
| 2000 | 1371.15 | 7312.56 | 495.55 | 964.42 | 213.55 | 224.27 | 342.59 | 533.16 | 1253.58 |
| 2001 | 1383.95 | 7535.95 | 504.65 | 984.45 | 219.53 | 224.02 | 344.21 | 511.73 | 1269.57 |
| 2002 | 1408 | 7637.37 | 514.88 | 1003.33 | 223.91 | 228.97 | 352.55 | 529.31 | 1308.09 |
| 2003 | 1439.7 | 7779.69 | 526.14 | 1034.31 | 233.42 | 236.34 | 364.37 | 550.92 | 1360.15 |
| 2004 | 1473.05 | 7917.24 | 537.26 | 1060.4 | 241.59 | 243.09 | 376.61 | 572.01 | 1425.16 |
| Net Cash Farm Income ($1000) | | | | | | | | | |
| 1996 | 334.11 | 1079.85 | 16.31 | 102.37 | 12.73 | -19.87 | -53.5 | 90.95 | 353.65 |
| 1997 | 352.1 | 742.63 | 79.81 | 299.45 | 50.36 | 120.28 | 68.89 | 169.23 | 393.62 |
| 1998 | 278.82 | 824.94 | -11.86 | 36.01 | -12.27 | 32.83 | -35.38 | 75.37 | 196.32 |
| 1999 | 302.43 | 622.63 | 166.11 | 393.34 | 22.73 | 135.42 | 245.81 | -80.36 | 7.23 |
| 2000 | 90.27 | 109.37 | 112.5 | 257.11 | 17.58 | 60.91 | 4.05 | 50.11 | 101.49 |
| 2001 | 67.86 | 284.32 | 111.23 | 266.38 | 25.02 | 57.9 | -7.17 | 14.32 | 92.56 |
| 2002 | 76.76 | 344.96 | 120.71 | 286.5 | 26.62 | 63.71 | -8.28 | 18.47 | 112.18 |
| 2003 | 88.33 | 367.93 | 130.78 | 308.92 | 24.63 | 70.32 | -8.57 | 55.9 | 218.44 |
| 2004 | 100.64 | 373.52 | 131.48 | 321.29 | 21.24 | 64.5 | -13.63 | 67.21 | 251.9 |
| Prob. of a Cash Flow Deficit (%) | | | | | | | | | |
| 2000 | 69 | 62 | 63 | 41 | 88 | 46 | 98 | 58 | 57 |
| 2001 | 83 | 61 | 58 | 39 | 92 | 53 | 97 | 94 | 71 |
| 2002 | 71 | 55 | 58 | 26 | 84 | 26 | 95 | 93 | 70 |
| 2003 | 72 | 61 | 53 | 28 | 91 | 30 | 98 | 92 | 66 |
| 2004 | 66 | 56 | 63 | 23 | 94 | 64 | 98 | 91 | 65 |
| Ending Cash Reserves ($1000) | | | | | | | | | |
| 1996 | 147.53 | 448.49 | -46.79 | 1.25 | -22.25 | -54.26 | -85.68 | 30.13 | 223.51 |
| 1997 | 288.97 | 715.25 | -32.04 | 158.23 | -7.13 | 18.29 | -50.35 | 109.51 | 401.64 |
| 1998 | 373.88 | 1066.17 | -106.62 | 55.7 | -56.34 | 10.13 | -129.41 | 110.66 | 418.22 |
| 1999 | 463.3 | 1289.46 | -7.95 | 277.39 | -72.3 | 73.87 | 41.38 | -11.48 | 242.73 |
| 2000 | 404.78 | 1046.68 | -20.61 | 310.25 | -87.87 | 77.43 | -39.74 | -23.91 | 165.61 |
| 2001 | 284.06 | 935.92 | -8.68 | 360 | -102.54 | 79.89 | -102.64 | -108.56 | -5.85 |
| 2002 | 207.81 | 830.87 | 8.75 | 449.82 | -115.71 | 98.96 | -157.65 | -164 | -94.61 |
| 2003 | 123.4 | 757.07 | 24.62 | 537.19 | -144.74 | 122.07 | -219.57 | -200.24 | -107.03 |
| 2004 | 48.22 | 684.76 | 32.86 | 640.22 | -199.69 | 116.2 | -295.29 | -238.7 | -133.69 |
| Prob. of Refinancing Deficits (%) | | | | | | | | | |
| 2000 | 1 | 15 | 63 | 1 | 88 | 1 | 78 | 58 | 24 |
| 2001 | 9 | 26 | 54 | 1 | 90 | 1 | 93 | 84 | 46 |
| 2002 | 22 | 35 | 47 | 1 | 80 | 1 | 94 | 90 | 50 |
| 2003 | 30 | 34 | 42 | 1 | 88 | 1 | 97 | 87 | 52 |
| 2004 | 36 | 35 | 42 | 1 | 85 | 7 | 98 | 88 | 48 |
| Nominal Net Worth ($1000) | | | | | | | | | |
| 1996 | 3175.22 | 9775.43 | 485.42 | 1025.73 | 264.9 | 411.26 | 293.8 | 728.57 | 3326.55 |
| 1997 | 3457.97 | 10612.48 | 524.19 | 1222.04 | 273.85 | 495.77 | 333.17 | 817.47 | 3584.76 |
| 1998 | 3725.99 | 11658.2 | 472.64 | 1176.1 | 231.52 | 497.54 | 262.37 | 835.68 | 3734.53 |
| 1999 | 3906.71 | 12199.3 | 588.64 | 1447.99 | 226.67 | 566.17 | 441.73 | 718.55 | 3628.61 |
| 2000 | 3836.24 | 11946.61 | 593.63 | 1489.93 | 208.36 | 569.73 | 359.66 | 711.61 | 3575.61 |
| 2001 | 3751.36 | 11849.22 | 611.95 | 1572.54 | 185.24 | 572.95 | 301.18 | 648.26 | 3462.8 |
| 2002 | 3625.83 | 11512.35 | 631.77 | 1684.05 | 160.63 | 574.42 | 236.74 | 579.59 | 3333.97 |
| 2003 | 3525.1 | 11307.2 | 653.37 | 1775.65 | 124.56 | 583.28 | 172.72 | 546.23 | 3294.87 |
| 2004 | 3476.19 | 11256.7 | 678.62 | 1903.53 | 82.23 | 583.13 | 99.88 | 523.67 | 3285.73 |
| Prob. of Losing Real Net Worth (%) | | | | | | | | | |
| 2000 | 74 | 60 | 47 | 39 | 64 | 49 | 98 | 50 | 56 |
| 2001 | 85 | 59 | 38 | 21 | 62 | 46 | 99 | 78 | 68 |
| 2002 | 91 | 56 | 26 | 12 | 71 | 44 | 99 | 85 | 70 |
| 2003 | 93 | 57 | 28 | 6 | 76 | 41 | 98 | 85 | 64 |
| 2004 | 88 | 57 | 22 | 3 | 81 | 39 | 98 | 83 | 59 |

# Figure 14. Cotton Farms

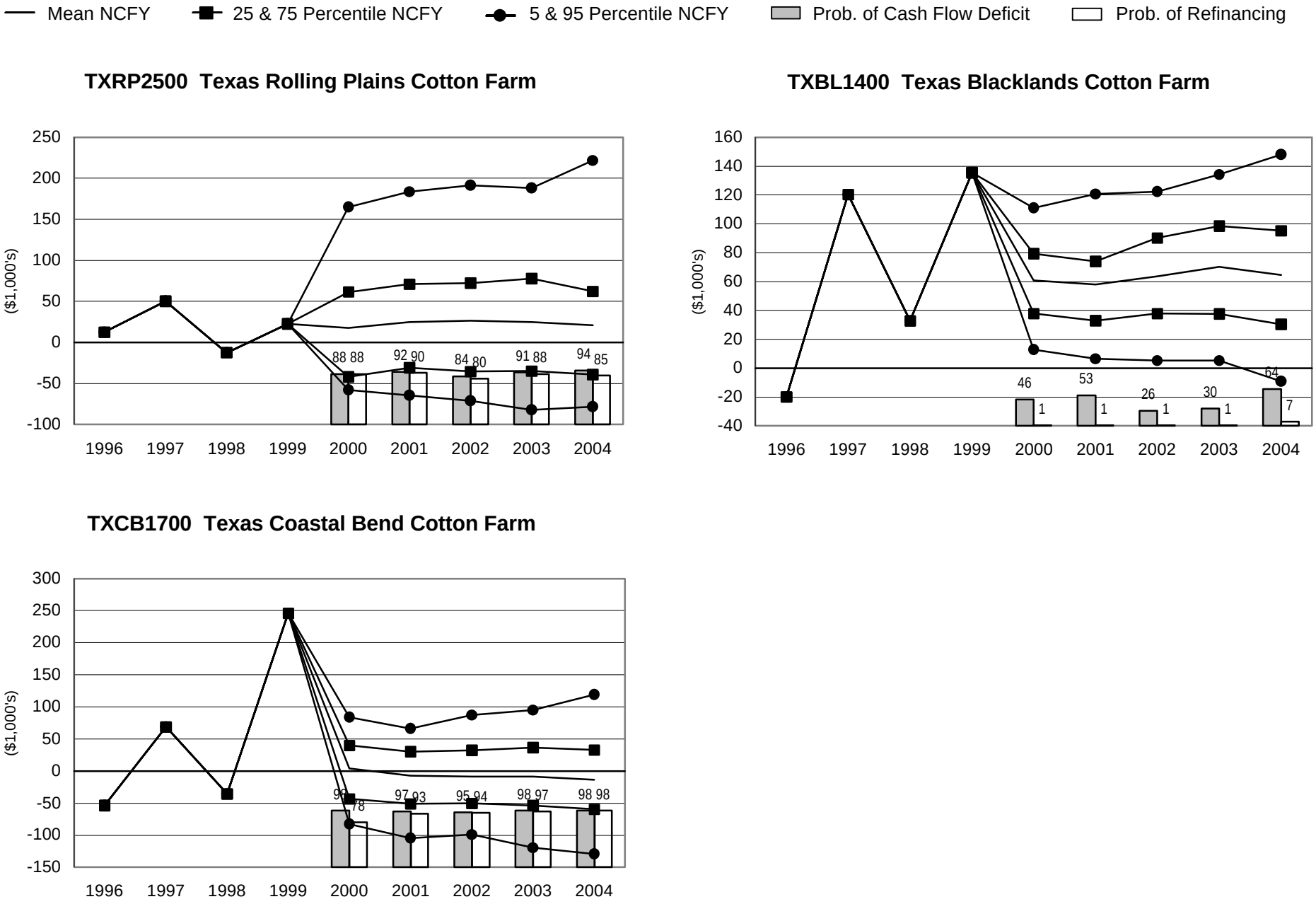


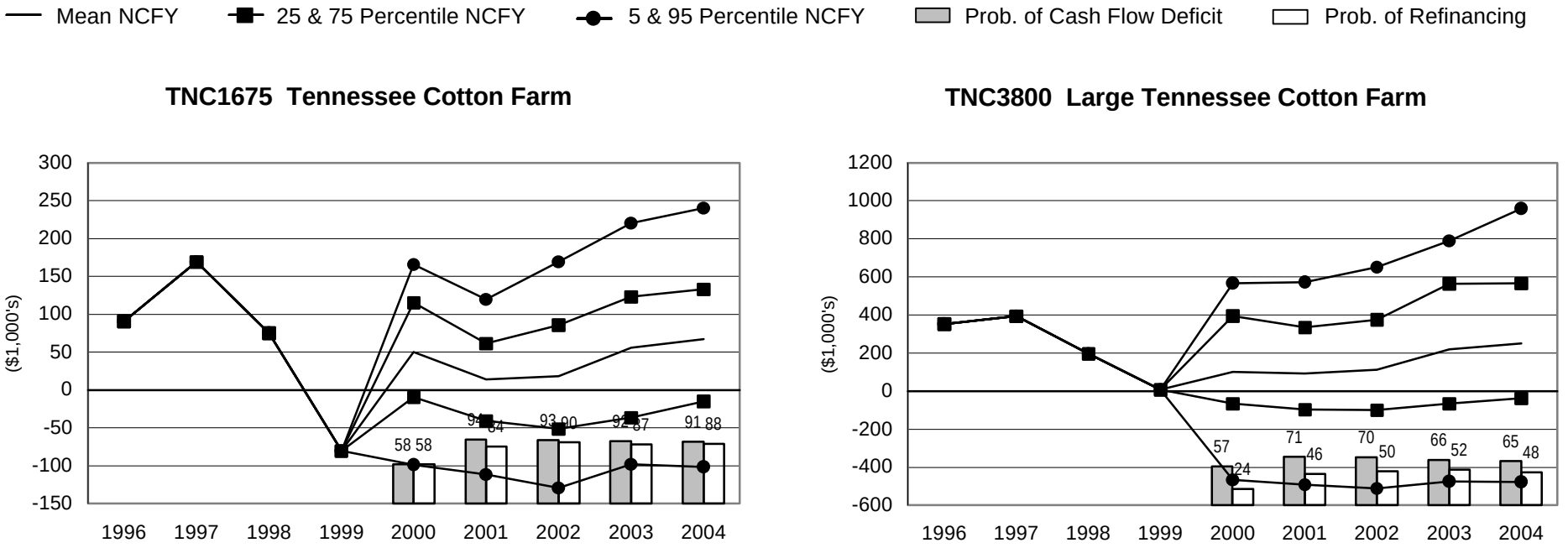
## Figure 15. Net Cash Farm Income and Probabilities of a Cash Flow Deficit and Refinancing: Cotton Farms



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



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



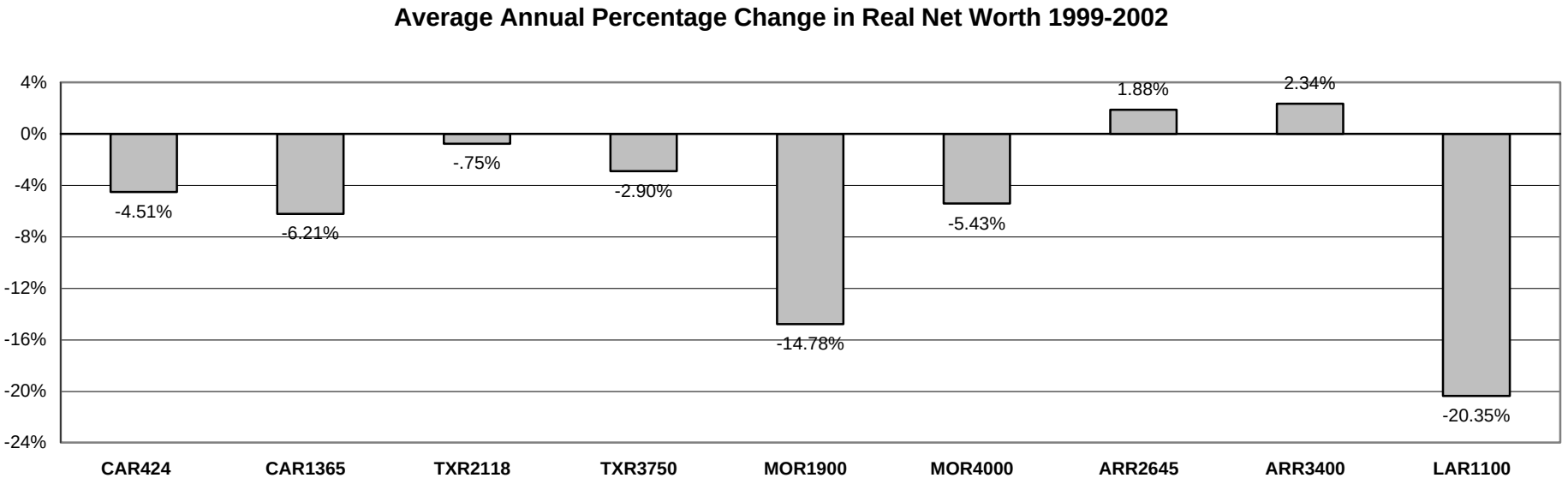
# FIGURE 18. REPRESENTATIVE FARMS PRODUCING RICE

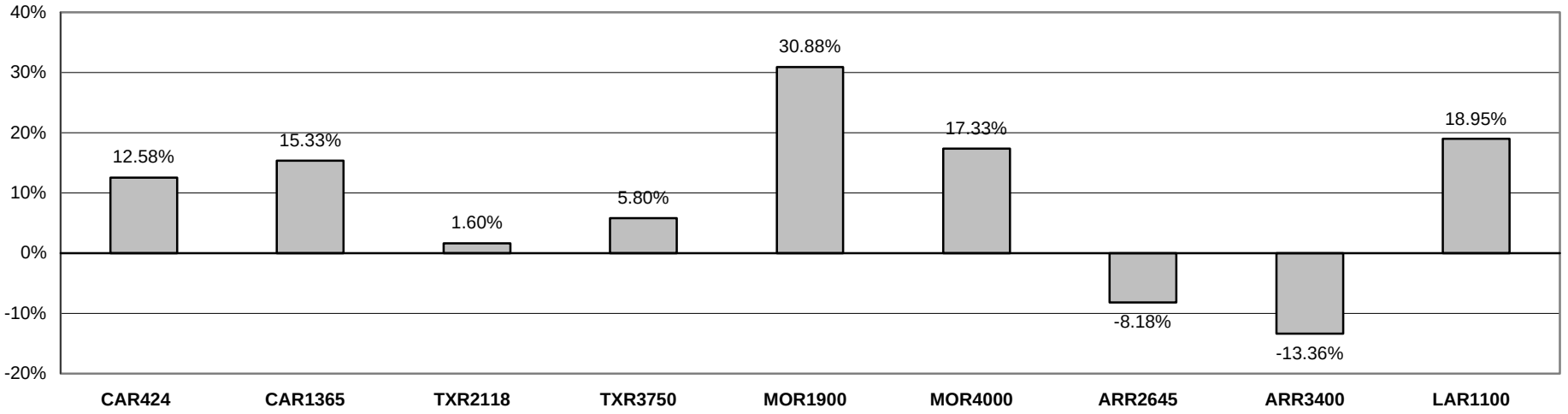
**Rice Farm Notes**

Table 8. Implications of the 1996 Farm Bill and the November 1999 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Rice.

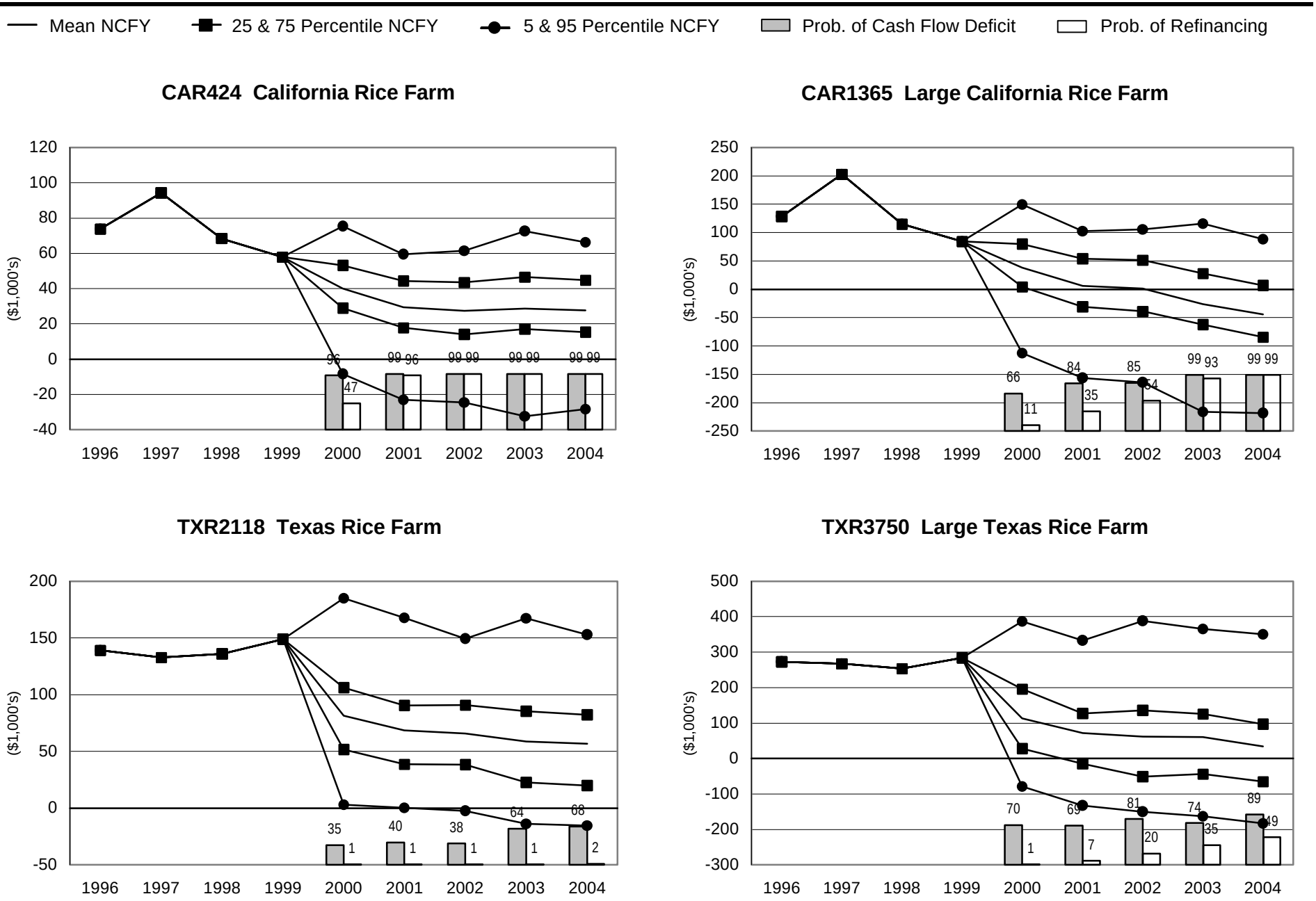
| | CAR424 | CAR1365 | TXR2118 | TXR3750 | MOR1900 | MOR4000 | ARR2645 | ARR3400 | LAR1100 |
|---|---|---|---|---|---|---|---|---|---|
| Annual Change Real Net Worth (%) | | | | | | | | | |
| 1999-2004 Average | -4.505 | -6.208 | -0.747 | -2.898 | -14.776 | -5.425 | 1.876 | 2.341 | -20.351 |
| Net Income Adjustment (NIA) | | | | | | | | | |
| 1999-2004 ($1,000) | 35.28 | 138.82 | 6.22 | 66.18 | 166.03 | 274.77 | -49.62 | -108.99 | 50.42 |
| Net Income Adjustment (NIA) | | | | | | | | | |
| 1999-2004 (% Receipts) | 12.58 | 15.32 | 1.6 | 5.8 | 30.88 | 17.33 | -8.18 | -13.36 | 18.95 |
| Cost to Receipts Ratio (%) | | | | | | | | | |
| 2000-2004 Average | 90.562 | 101.525 | 84.638 | 95.713 | 114.923 | 101.669 | 72.998 | 66.046 | 101.435 |
| Govt Payments/Receipts (%) | | | | | | | | | |
| 2000-2004 Average | 24.142 | 24.43 | 25.282 | 23.089 | 17.39 | 16.516 | 17.013 | 22.205 | 20.247 |
| Total Cash Receipts ($1000) | | | | | | | | | |
| 1996 | 324.76 | 1012.62 | 482.24 | 1371.09 | 691.5 | 2007.29 | 842.25 | 1118.92 | 342 |
| 1997 | 354.94 | 1112 | 472.21 | 1358.38 | 658.18 | 1917.77 | 748.01 | 1008.67 | 319.82 |
| 1998 | 317.8 | 982.05 | 465.41 | 1325.98 | 577.76 | 1679.96 | 578.48 | 815.71 | 287.16 |
| 1999 | 306.7 | 939.29 | 473.81 | 1344.02 | 600.39 | 1741.95 | 733.84 | 1039.1 | 310.47 |
| 2000 | 299.43 | 925.65 | 402.01 | 1170.89 | 534.86 | 1561.86 | 599.92 | 809.9 | 267.11 |
| 2001 | 292.79 | 906.16 | 391.02 | 1142.05 | 522.95 | 1547.98 | 594.95 | 794.21 | 262.45 |
| 2002 | 296.11 | 917.26 | 393.07 | 1152.55 | 533.03 | 1573.23 | 607.49 | 806.53 | 267.96 |
| 2003 | 301.2 | 933.87 | 398.15 | 1167.46 | 542.41 | 1606.71 | 620.15 | 830.75 | 272.3 |
| 2004 | 304.43 | 944.43 | 399.78 | 1171.06 | 555.24 | 1638.65 | 629.38 | 838.95 | 275.24 |
| Net Cash Farm Income ($1000) | | | | | | | | | |
| 1996 | 73.76 | 128.56 | 139.1 | 273.05 | 133.55 | 493.26 | 381.51 | 564.55 | 98.08 |
| 1997 | 94.3 | 202.9 | 132.88 | 267.51 | 104.56 | 387.9 | 295.84 | 460.51 | 76.96 |
| 1998 | 68.42 | 114.82 | 136.14 | 253.66 | 26.54 | 167.78 | 138.69 | 281.03 | 42.96 |
| 1999 | 57.81 | 83.93 | 149 | 284.07 | 46.34 | 228.51 | 292.18 | 511.53 | 64.57 |
| 2000 | 40.03 | 38.17 | 81.69 | 113.51 | -26.87 | 48.59 | 172.4 | 297.82 | 17.92 |
| 2001 | 29.29 | 5.93 | 68.53 | 71.66 | -62.15 | -0.46 | 162.48 | 276.65 | 9.45 |
| 2002 | 27.44 | 0.99 | 65.95 | 61.37 | -71.66 | -5.72 | 174.05 | 287.43 | 7 |
| 2003 | 28.72 | -25.96 | 58.6 | 60.61 | -88.02 | -6.41 | 178.12 | 295.13 | -2.24 |
| 2004 | 27.64 | -44.15 | 56.92 | 34.17 | -103.29 | -23.55 | 179.46 | 298.67 | -9.81 |
| Prob. of a Cash Flow Deficit (%) | | | | | | | | | |
| 2000 | 96 | 66 | 35 | 70 | 99 | 88 | 27 | 28 | 88 |
| 2001 | 99 | 84 | 40 | 69 | 99 | 98 | 30 | 28 | 97 |
| 2002 | 99 | 85 | 38 | 81 | 99 | 98 | 26 | 21 | 99 |
| 2003 | 99 | 99 | 64 | 74 | 99 | 99 | 27 | 39 | 99 |
| 2004 | 99 | 99 | 68 | 89 | 99 | 99 | 29 | 28 | 99 |
| Ending Cash Reserves ($1000) | | | | | | | | | |
| 1996 | 17.28 | 42.11 | 53.11 | 95.43 | 40.91 | 240.79 | 192.21 | 256.57 | 32.96 |
| 1997 | 39.27 | 129.57 | 96.95 | 196.64 | 49.93 | 350.13 | 299.57 | 409.41 | 46.65 |
| 1998 | 36.46 | 132.51 | 136.81 | 252.81 | -23.78 | 253.77 | 302.06 | 453.1 | 33.69 |
| 1999 | 23.96 | 105.95 | 183.4 | 333.36 | -83.91 | 222.57 | 415.6 | 634.48 | 28.6 |
| 2000 | -2.34 | 77.74 | 193.38 | 295.78 | -206.13 | -23.24 | 447.15 | 687.44 | -21.45 |
| 2001 | -41.37 | 23.91 | 203.36 | 253.47 | -379.63 | -360.65 | 486.57 | 752.32 | -82.53 |
| 2002 | -79.63 | -38.33 | 214.74 | 175.64 | -587.01 | -671.35 | 532.06 | 839.05 | -155.16 |
| 2003 | -117.29 | -192.84 | 205.5 | 124.41 | -803.13 | -975.25 | 576.86 | 895.39 | -247.61 |
| 2004 | -147.2 | -350.68 | 192.32 | 13.6 | -1026.62 | -1300.5 | 629.37 | 975.36 | -330.73 |
| Prob. of Refinancing Deficits (%) | | | | | | | | | |
| 2000 | 47 | 11 | 1 | 1 | 99 | 59 | 1 | 1 | 67 |
| 2001 | 96 | 35 | 1 | 7 | 99 | 93 | 1 | 1 | 87 |
| 2002 | 99 | 54 | 1 | 20 | 99 | 97 | 1 | 1 | 98 |
| 2003 | 99 | 93 | 1 | 35 | 99 | 99 | 1 | 1 | 99 |
| 2004 | 99 | 99 | 2 | 49 | 99 | 99 | 1 | 1 | 99 |
| Nominal Net Worth ($1000) | | | | | | | | | |
| 1996 | 532.09 | 1536.03 | 442.44 | 1515.41 | 1189.47 | 4356.34 | 1477.62 | 2366.07 | 242.05 |
| 1997 | 576.66 | 1677.85 | 492.06 | 1694.12 | 1222.31 | 4600.66 | 1633.81 | 2611.8 | 256.79 |
| 1998 | 602.23 | 1754.74 | 544.01 | 1841.05 | 1189.29 | 4721.05 | 1701.27 | 2766.36 | 250.01 |
| 1999 | 607.84 | 1775.63 | 600.3 | 1983.34 | 1163.41 | 4810.8 | 1848.39 | 3026.75 | 258.98 |
| 2000 | 587.5 | 1722.12 | 601.72 | 1957.86 | 1036.91 | 4605.15 | 1875.7 | 3083.81 | 212.4 |
| 2001 | 559.8 | 1649.17 | 605.57 | 1931.4 | 876.06 | 4356.51 | 1909.83 | 3175.45 | 167.47 |
| 2002 | 526.29 | 1540.54 | 604.96 | 1846.15 | 685.52 | 4023.94 | 1932.98 | 3241.03 | 114.43 |
| 2003 | 491.42 | 1375.41 | 587.29 | 1801.4 | 500.87 | 3755.97 | 1965.79 | 3301.59 | 60.39 |
| 2004 | 471.89 | 1226.96 | 579.09 | 1699.48 | 304.49 | 3513.19 | 2025.98 | 3387.97 | -4.56 |
| Prob. of Losing Real Net Worth (%) | | | | | | | | | |
| 2000 | 90 | 87 | 52 | 63 | 98 | 85 | 30 | 22 | 86 |
| 2001 | 98 | 98 | 50 | 60 | 99 | 95 | 23 | 9 | 91 |
| 2002 | 99 | 99 | 49 | 72 | 99 | 99 | 21 | 7 | 98 |
| 2003 | 99 | 99 | 58 | 75 | 99 | 99 | 12 | 3 | 97 |
| 2004 | 99 | 99 | 61 | 83 | 99 | 99 | 9 | 2 | 99 |

# Figure 19. Rice Farms

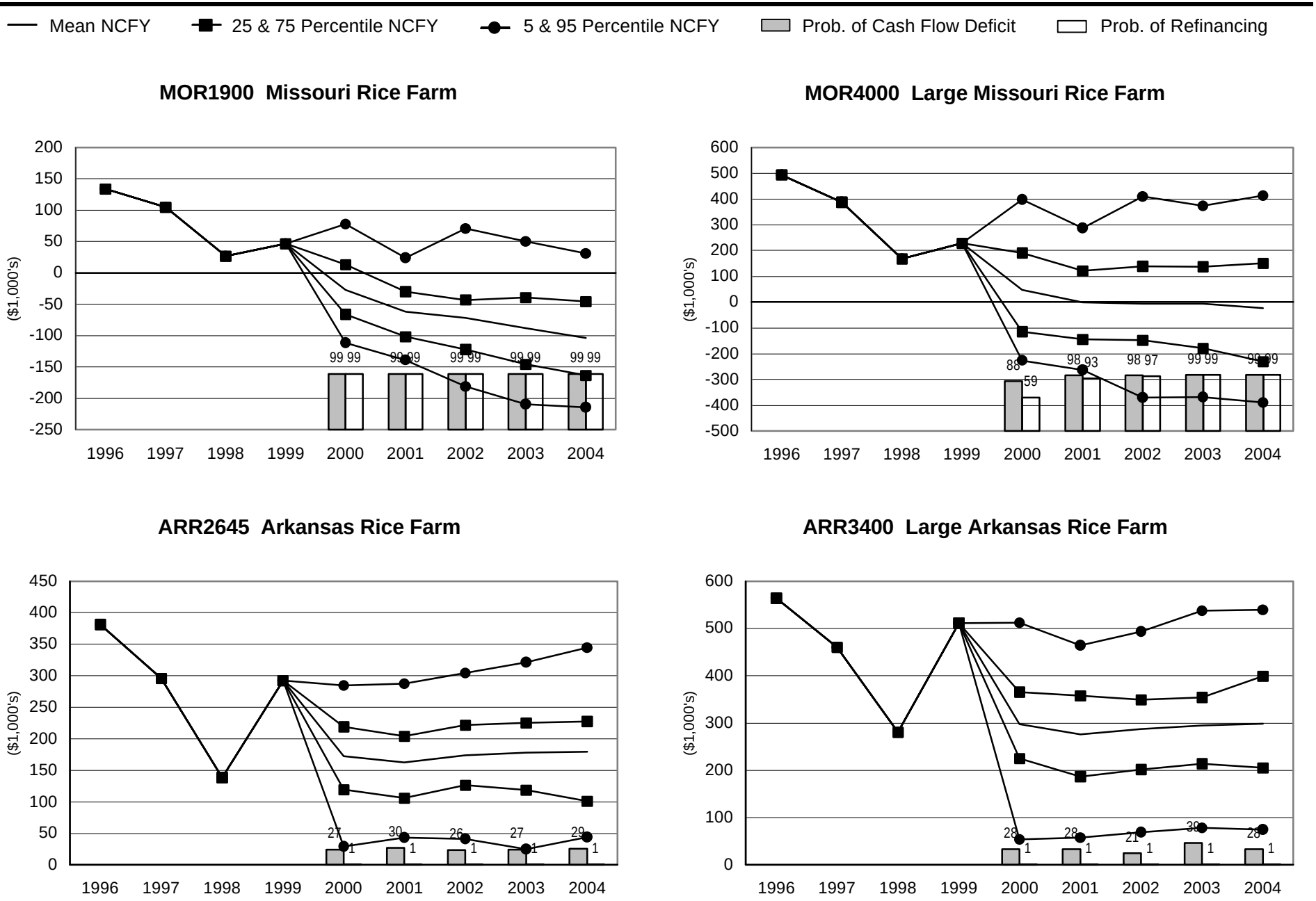


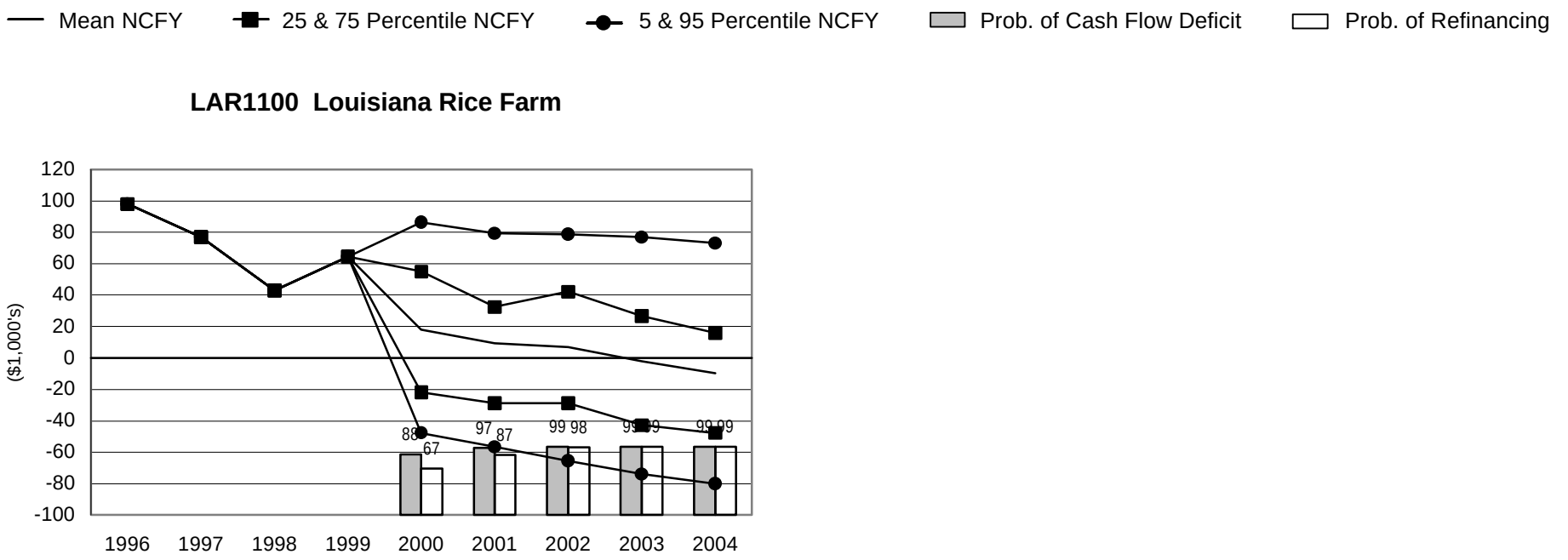
## Figure 20. Net Cash Farm Income and Probabilities of a Cash Flow Deficit and Refinancing: Rice Farms



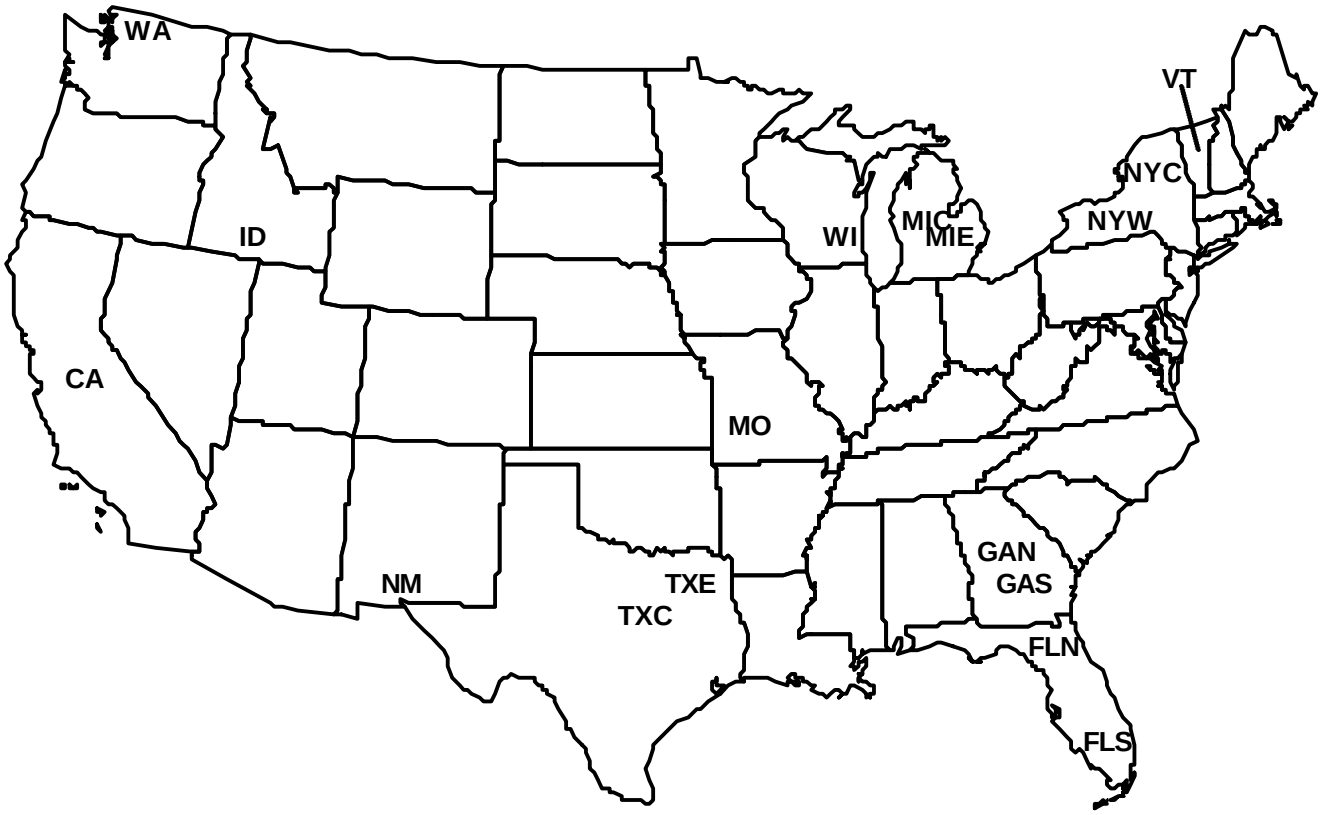
## Figure 21. Net Cash Farm Income and Probabilities of a Cash Flow Deficit and Refinancing: Rice Farms



## Figure 22. Net Cash Farm Income and Probabilities of a Cash Flow Deficit and Refinancing: Rice Farms



# FIGURE 23. REPRESENTATIVE FARMS PRODUCING MILK



**Dairy Notes**

Table 9. Implications of the 1996 Farm Bill and the November 1999 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Milk.

| | CAD1710 | NMD2000 | WAD185 | WAD900 | IDD750 | IDD2100 | TXCD400 | TXCD825 | TXED210 | TXED650 |
|---|---|---|---|---|---|---|---|---|---|---|
| Annual Change Real Net Worth (%) | | | | | | | | | | |
| 1999-2004 Average | 8.853 | 0.23 | 7.351 | 6.134 | 7.93 | 11.38 | -8.947 | 11.896 | 8.111 | 8.998 |
| Net Income Adjustment (NIA) | | | | | | | | | | |
| 1999-2004 ($1,000) | -1315.65 | -13.09 | -137.29 | -395.2 | -391.81 | -1989.58 | 95.94 | -867.88 | -107.28 | -330.47 |
| Net Income Adjustment (NIA) | | | | | | | | | | |
| 1999-2004 (% Receipts) | -24.07 | -0.23 | -19.92 | -12.37 | -16.62 | -30.39 | 8.99 | -24.13 | -19.26 | -18.78 |
| Cost to Receipts Ratio (%) | | | | | | | | | | |
| 2000-2004 Average | 71.557 | 96.538 | 72.443 | 82.951 | 79.485 | 65.594 | 104.454 | 71.486 | 72.39 | 76.607 |
| Govt Payments/Receipts (%) | | | | | | | | | | |
| 2000-2004 Average | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Cash Receipts ($1000) | | | | | | | | | | |
| 1996 | 5296.79 | 5632.94 | 755.85 | 3335.89 | 2368.79 | 6509.09 | 1018.91 | 3510.88 | 558.04 | 1772.49 |
| 1997 | 5048.24 | 5440.8 | 711.53 | 3138.77 | 2180.83 | 5966.74 | 957.79 | 3291.11 | 525.85 | 1663.26 |
| 1998 | 6052.6 | 6278.79 | 830.11 | 3668.36 | 2615.65 | 7379.16 | 1174.5 | 3929.31 | 603.84 | 1918.82 |
| 1999 | 5568.89 | 5992.05 | 698.6 | 3412.03 | 2391.66 | 6668.04 | 1121.34 | 3767.83 | 580.71 | 1841.3 |
| 2000 | 5281.34 | 5509.5 | 671.05 | 3172.4 | 2291.77 | 6362.68 | 1032.41 | 3479.67 | 539.44 | 1702.53 |
| 2001 | 5360.07 | 5523.25 | 671.56 | 3096.14 | 2293.81 | 6361.67 | 1044.44 | 3519.55 | 545.8 | 1722.56 |
| 2002 | 5424.89 | 5645.81 | 685.28 | 3159.77 | 2344.6 | 6505.14 | 1061.23 | 3576.54 | 554.33 | 1750.39 |
| 2003 | 5598.93 | 5805.74 | 705.38 | 3253.26 | 2422.18 | 6723.88 | 1092.52 | 3681.87 | 569.88 | 1800.65 |
| 2004 | 5668.94 | 5886.29 | 713.45 | 3291.33 | 2438.52 | 6783.84 | 1106.68 | 3727 | 575.59 | 1821.56 |
| Net Cash Farm Income ($1000) | | | | | | | | | | |
| 1996 | 956.44 | 113.77 | 208.96 | 392.21 | 327.53 | 1683.64 | -72.34 | 700.68 | 121.42 | 306.59 |
| 1997 | 691.02 | -386.18 | 165.4 | 137.32 | 133.35 | 1108.87 | -140.68 | 479.86 | 101.64 | 220.43 |
| 1998 | 2101.29 | 935.42 | 346.79 | 927.63 | 727.74 | 2944.24 | 112.58 | 1285.64 | 201.12 | 565.8 |
| 1999 | 1788.72 | 956.64 | 256.99 | 714.4 | 595.91 | 2585.28 | 82.69 | 1319.49 | 192.86 | 551.53 |
| 2000 | 1520.3 | 355.02 | 199.37 | 656.36 | 502.96 | 2269.89 | -11.77 | 1027.04 | 152.69 | 416.47 |
| 2001 | 1557.74 | 235.86 | 192.29 | 544.95 | 486.18 | 2223.57 | -25.92 | 1027.68 | 153.93 | 422.42 |
| 2002 | 1534.93 | 228.56 | 192.55 | 547.37 | 493.64 | 2266.04 | -40.57 | 1029.14 | 156.75 | 423.98 |
| 2003 | 1625.12 | 267.36 | 198.55 | 585.26 | 529.18 | 2400.88 | -46.56 | 1079.81 | 165.77 | 447.78 |
| 2004 | 1597.99 | 207.95 | 196.78 | 550.09 | 511.46 | 2358.95 | -69.13 | 1065.94 | 163.64 | 439.77 |
| Prob. of a Cash Flow Deficit (%) | | | | | | | | | | |
| 2000 | 1 | 50 | 5 | 8 | 7 | 1 | 99 | 1 | 10 | 11 |
| 2001 | 1 | 55 | 2 | 14 | 9 | 1 | 99 | 1 | 8 | 11 |
| 2002 | 1 | 54 | 10 | 19 | 12 | 1 | 99 | 1 | 7 | 14 |
| 2003 | 1 | 57 | 18 | 19 | 17 | 1 | 99 | 1 | 7 | 13 |
| 2004 | 1 | 62 | 17 | 28 | 11 | 1 | 98 | 1 | 12 | 14 |
| Ending Cash Reserves ($1000) | | | | | | | | | | |
| 1996 | 368.43 | -32.49 | 103.8 | 168.26 | 128.08 | 841.71 | -126.65 | 389.54 | 47.07 | 145.9 |
| 1997 | 610.68 | -514.83 | 165.82 | 156.42 | 118.65 | 1257.99 | -315.62 | 599.62 | 79.75 | 218.05 |
| 1998 | 1757.92 | 123.58 | 350.05 | 687.33 | 512.54 | 2870.25 | -254.36 | 1365.05 | 179.15 | 520.08 |
| 1999 | 2629.08 | 532.09 | 456.73 | 1006.28 | 789.74 | 4145.65 | -242.58 | 2068.97 | 258.4 | 763.41 |
| 2000 | 3416.46 | 531.9 | 544.09 | 1349.36 | 1035.47 | 5307.75 | -310.22 | 2615.22 | 317.79 | 948.93 |
| 2001 | 4256.02 | 489.24 | 634.3 | 1616.94 | 1265.92 | 6448.45 | -386.52 | 3199.45 | 385.36 | 1155.6 |
| 2002 | 5101.78 | 443.39 | 717.27 | 1892.98 | 1481.12 | 7600.22 | -478.57 | 3789.69 | 454.84 | 1365.12 |
| 2003 | 6020.7 | 418.47 | 795.33 | 2206.97 | 1690.17 | 8829.72 | -588.95 | 4415.22 | 530.27 | 1595.68 |
| 2004 | 6933.19 | 314.1 | 874.56 | 2451.59 | 1956.24 | 10214.05 | -738.68 | 5041.17 | 602.57 | 1821.82 |
| Prob. of Refinancing Deficits (%) | | | | | | | | | | |
| 2000 | 1 | 11 | 1 | 1 | 1 | 1 | 99 | 1 | 1 | 1 |
| 2001 | 1 | 18 | 1 | 1 | 1 | 1 | 99 | 1 | 1 | 1 |
| 2002 | 1 | 21 | 1 | 1 | 1 | 1 | 99 | 1 | 1 | 1 |
| 2003 | 1 | 34 | 1 | 1 | 1 | 1 | 98 | 1 | 1 | 1 |
| 2004 | 1 | 37 | 1 | 1 | 1 | 1 | 98 | 1 | 1 | 1 |
| Nominal Net Worth ($1000) | | | | | | | | | | |
| 1996 | 6887.39 | 4394.31 | 852.44 | 3600.18 | 2385.54 | 7259.24 | 1103.42 | 2963.94 | 628.09 | 1711.69 |
| 1997 | 7470.29 | 4170.59 | 952.76 | 3756.39 | 2539.04 | 8130.61 | 961.52 | 3314.91 | 709.25 | 1883.01 |
| 1998 | 8862.17 | 4901.28 | 1159.72 | 4383.23 | 3013.22 | 10009.15 | 1039.75 | 4113.99 | 828.35 | 2254.29 |
| 1999 | 9931.57 | 5446.37 | 1286.3 | 4751.12 | 3395.24 | 11583.15 | 1078.06 | 4885 | 930.27 | 2576.61 |
| 2000 | 10867.16 | 5626.45 | 1389.18 | 5154.75 | 3740.44 | 13041.14 | 1036.53 | 5522.44 | 1010.62 | 2828.14 |
| 2001 | 11768.19 | 5667.39 | 1489.13 | 5425.99 | 4021.97 | 14350.6 | 964.22 | 6128.39 | 1092.29 | 3068.68 |
| 2002 | 12591.3 | 5659.58 | 1583.58 | 5694.88 | 4273.94 | 15622.61 | 868.35 | 6716.82 | 1162.32 | 3288.67 |
| 2003 | 13517.42 | 5694.65 | 1680.87 | 6010.9 | 4550.79 | 17017.2 | 759.86 | 7247.93 | 1244 | 3541.99 |
| 2004 | 14357.29 | 5520.36 | 1762.74 | 6221.12 | 4751.3 | 18211.42 | 597.01 | 7806.66 | 1310.22 | 3743.59 |
| Prob. of Losing Real Net Worth (%) | | | | | | | | | | |
| 2000 | 1 | 32 | 4 | 9 | 5 | 1 | 65 | 1 | 9 | 9 |
| 2001 | 1 | 33 | 1 | 3 | 1 | 1 | 82 | 1 | 2 | 3 |
| 2002 | 1 | 33 | 1 | 1 | 1 | 1 | 85 | 1 | 1 | 2 |
| 2003 | 1 | 39 | 1 | 1 | 1 | 1 | 88 | 1 | 1 | 1 |
| 2004 | 1 | 41 | 1 | 3 | 2 | 1 | 91 | 1 | 1 | 1 |

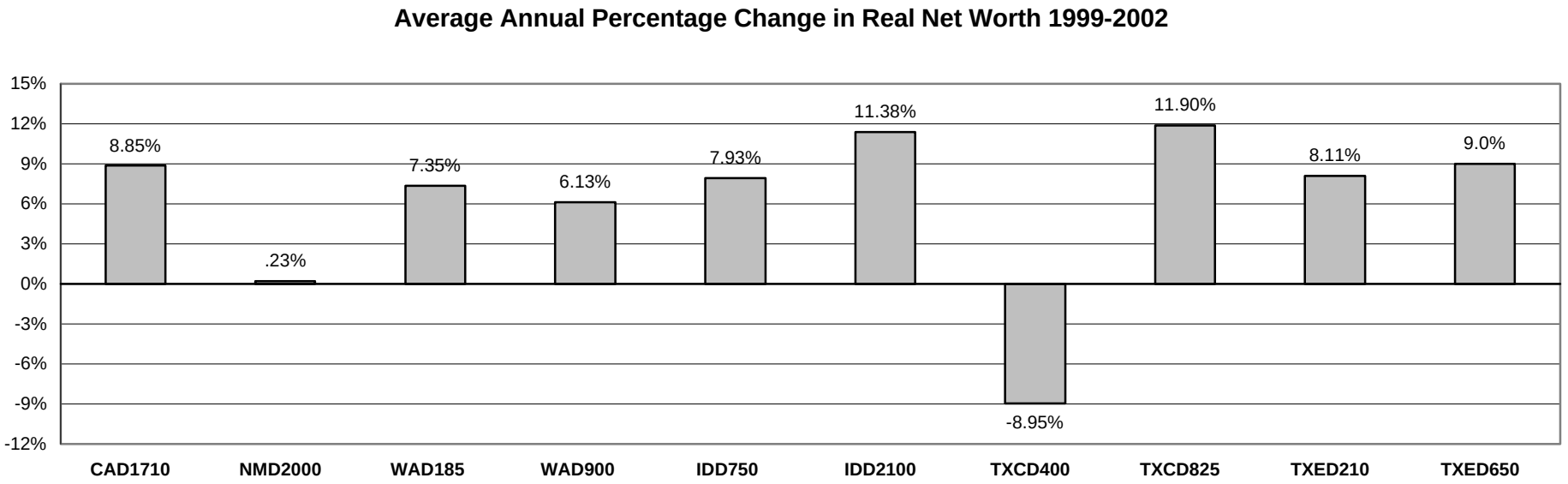
Table 10. Implications of the 1996 Farm Bill and the November 1999 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Milk.

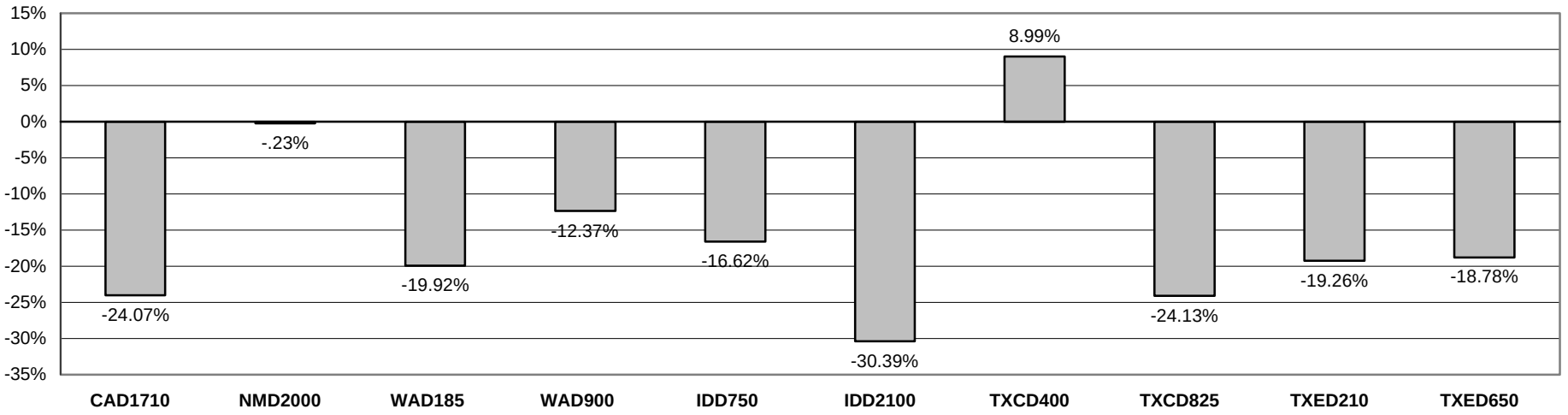
| | WID70 | WID600 | MIED200 | MICD140 | NYWD800 | NYWD1200 | NYCD110 | NYCD400 | VTD134 | VTD350 |
|---|---|---|---|---|---|---|---|---|---|---|
| Annual Change Real Net Worth (%) | | | | | | | | | | |
| 1999-2004 Average | 4.258 | -2.427 | 2.282 | 0.966 | 6.726 | 8.244 | 7.869 | 9.443 | 3.493 | 3.783 |
| Net Income Adjustment (NIA) | | | | | | | | | | |
| 1999-2004 ($1,000) | -30.21 | 64.9 | -53.7 | -15.21 | -405.15 | -716.24 | -89.05 | -440.68 | -27.7 | -113.31 |
| Net Income Adjustment (NIA) | | | | | | | | | | |
| 1999-2004 (% Receipts) | -12.37 | 3.55 | -7.7 | -3.21 | -14.18 | -16.59 | -22.86 | -30.33 | -7.05 | -9.15 |
| Cost to Receipts Ratio (%) | | | | | | | | | | |
| 2000-2004 Average | 68.725 | 97.429 | 81.541 | 80.791 | 80.094 | 79.215 | 65.345 | 63.68 | 79.206 | 82.617 |
| Govt Payments/Receipts (%) | | | | | | | | | | |
| 2000-2004 Average | 0 | 0 | 0.109 | 0.057 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Cash Receipts ($1000) | | | | | | | | | | |
| 1996 | 233.76 | 1853.63 | 682.21 | 458.18 | 3007.16 | 4370.39 | 391.47 | 1443.88 | 394.86 | 1242.79 |
| 1997 | 218.56 | 1731.63 | 639.29 | 433.98 | 2690.78 | 4084.71 | 364.79 | 1352.05 | 381.36 | 1191.06 |
| 1998 | 253.82 | 2025.21 | 724.93 | 487.41 | 3048.9 | 4687.71 | 420.6 | 1548.97 | 426.54 | 1346.78 |
| 1999 | 247.36 | 1854.47 | 708.24 | 476.86 | 2947.99 | 4464.74 | 399.63 | 1472.15 | 408.22 | 1283.94 |
| 2000 | 235.84 | 1761.67 | 675.05 | 458.61 | 2769.26 | 4189.52 | 376.65 | 1405.84 | 404.43 | 1272.2 |
| 2001 | 238.77 | 1782.4 | 682.79 | 464.21 | 2801.38 | 4227.28 | 381.89 | 1426.46 | 380.57 | 1192.13 |
| 2002 | 242.44 | 1812.12 | 692.74 | 470.64 | 2846.72 | 4298.3 | 388.5 | 1447.33 | 386.98 | 1212.29 |
| 2003 | 250.78 | 1875.53 | 713.87 | 484.83 | 2922.05 | 4412.41 | 398.55 | 1486.05 | 398.65 | 1249.26 |
| 2004 | 253.39 | 1898.6 | 722.33 | 488.72 | 2949.22 | 4457.42 | 401.96 | 1498.88 | 402.9 | 1265.96 |
| Net Cash Farm Income ($1000) | | | | | | | | | | |
| 1996 | 52.24 | 47.99 | 72.06 | 47.73 | 597.84 | 855.7 | 115.01 | 459.13 | 44.77 | 150.32 |
| 1997 | 52.9 | -99.07 | 49.17 | 37.33 | 300.63 | 575.86 | 89.33 | 371.16 | 35.36 | 107.05 |
| 1998 | 105.86 | 283.25 | 182.42 | 117.95 | 801.62 | 1346.89 | 169.84 | 642.08 | 120.45 | 346.62 |
| 1999 | 90.79 | 208.2 | 180.13 | 118.04 | 776.46 | 1198.98 | 159.7 | 600.37 | 114.4 | 317.36 |
| 2000 | 72.5 | 84.98 | 132.32 | 88.96 | 555.16 | 896.54 | 130.53 | 517.3 | 101.78 | 281.51 |
| 2001 | 74.19 | 72.78 | 132.04 | 90.12 | 578.6 | 894.34 | 134.45 | 526.39 | 76.06 | 191.94 |
| 2002 | 77.66 | 61.75 | 133.63 | 91.55 | 577.57 | 912.36 | 136.1 | 528.82 | 76.27 | 197.28 |
| 2003 | 84.01 | 87.54 | 143.09 | 100.94 | 610.74 | 959.96 | 140.97 | 551.94 | 83.06 | 219.97 |
| 2004 | 85.61 | 58.93 | 141.71 | 92.7 | 592.07 | 921.22 | 141.08 | 542.14 | 81.93 | 216.12 |
| Prob. of a Cash Flow Deficit (%) | | | | | | | | | | |
| 2000 | 26 | 67 | 26 | 28 | 11 | 5 | 1 | 1 | 8 | 9 |
| 2001 | 34 | 79 | 36 | 29 | 1 | 2 | 1 | 1 | 38 | 27 |
| 2002 | 31 | 83 | 47 | 41 | 11 | 1 | 1 | 1 | 38 | 30 |
| 2003 | 25 | 75 | 35 | 28 | 2 | 1 | 1 | 1 | 27 | 19 |
| 2004 | 26 | 87 | 38 | 54 | 10 | 3 | 2 | 1 | 31 | 26 |
| Ending Cash Reserves ($1000) | | | | | | | | | | |
| 1996 | 8.8 | -71.9 | 24.01 | 5.7 | 280.33 | 445.75 | 40.2 | 215.67 | -10.39 | 32.64 |
| 1997 | 14.43 | -267.41 | 24.34 | -1.89 | 348.35 | 676.94 | 61.5 | 365.49 | -27.86 | 41.03 |
| 1998 | 52.23 | -88.11 | 110.8 | 51.45 | 779.96 | 1407.27 | 135.46 | 692.82 | 12.88 | 204.92 |
| 1999 | 74.63 | -48.39 | 177.38 | 89.12 | 1134.95 | 1993.64 | 193.99 | 966.91 | 31.38 | 315.16 |
| 2000 | 87.88 | -92.52 | 213.32 | 106.57 | 1354.94 | 2408.95 | 245.8 | 1214.43 | 62.24 | 405.39 |
| 2001 | 99.52 | -156.5 | 249.34 | 123.1 | 1621.43 | 2867.3 | 297 | 1479.13 | 68.52 | 446.93 |
| 2002 | 112.55 | -244.68 | 277.69 | 131.1 | 1877.09 | 3339.81 | 346.37 | 1738.35 | 80.31 | 493.78 |
| 2003 | 128.71 | -305.28 | 314.64 | 144.58 | 2162.55 | 3856.61 | 400.44 | 2014.93 | 96.63 | 556.08 |
| 2004 | 147.71 | -421.36 | 352.86 | 145.51 | 2420.09 | 4329.4 | 448.28 | 2270.15 | 110.34 | 613.48 |
| Prob. of Refinancing Deficits (%) | | | | | | | | | | |
| 2000 | 1 | 67 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2001 | 1 | 71 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 |
| 2002 | 1 | 74 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 1 |
| 2003 | 2 | 71 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 |
| 2004 | 2 | 79 | 2 | 1 | 1 | 1 | 1 | 1 | 3 | 1 |
| Nominal Net Worth ($1000) | | | | | | | | | | |
| 1996 | 438.91 | 2094.49 | 1335.46 | 1105.71 | 3032.7 | 4190.53 | 547.75 | 1886.93 | 437.18 | 1518.63 |
| 1997 | 472.02 | 1997.29 | 1389.75 | 1160 | 3274.97 | 4675.71 | 604.06 | 2121.23 | 479.54 | 1656.76 |
| 1998 | 535.18 | 2213.64 | 1513.86 | 1199.57 | 3816.59 | 5561.9 | 691.62 | 2494.1 | 542.26 | 1852.61 |
| 1999 | 579.21 | 2302.99 | 1606.08 | 1241.45 | 4273.61 | 6308.01 | 766.22 | 2808.8 | 594.07 | 2017.71 |
| 2000 | 607.94 | 2317.55 | 1661.86 | 1269.23 | 4584.15 | 6877.92 | 836.41 | 3085.97 | 638.86 | 2153.28 |
| 2001 | 635 | 2274.61 | 1706.97 | 1288.94 | 4900.13 | 7419.61 | 899.01 | 3361.99 | 655.14 | 2218.31 |
| 2002 | 652.26 | 2202.44 | 1727.15 | 1292.79 | 5169.93 | 7926.81 | 958.52 | 3620.29 | 669.92 | 2274.27 |
| 2003 | 677.99 | 2157.39 | 1767.05 | 1307.39 | 5479.77 | 8499.65 | 1022.27 | 3898.94 | 691.87 | 2353.43 |
| 2004 | 703.96 | 2027.67 | 1793.06 | 1304.11 | 5722.53 | 8926.57 | 1069.91 | 4143.5 | 699.25 | 2404.34 |
| Prob. of Losing Real Net Worth (%) | | | | | | | | | | |
| 2000 | 14 | 44 | 25 | 33 | 11 | 4 | 1 | 1 | 15 | 13 |
| 2001 | 5 | 53 | 12 | 22 | 1 | 1 | 1 | 1 | 13 | 4 |
| 2002 | 5 | 55 | 14 | 20 | 1 | 1 | 1 | 1 | 9 | 6 |
| 2003 | 2 | 63 | 9 | 14 | 1 | 1 | 1 | 1 | 4 | 2 |
| 2004 | 2 | 63 | 9 | 23 | 1 | 1 | 1 | 1 | 7 | 4 |

Table 11. Implications of the 1996 Farm Bill and the November 1999 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Milk.

| | MOD85 | MOD330 | GAND200 | GASD700 | FLND500 | FLSD1650 |
|---|---|---|---|---|---|---|
| Annual Change Real Net Worth (%) | | | | | | |
| 1999-2004 Average | 0.762 | 9.181 | 4.127 | 8.162 | 13.404 | -16.741 |
| Net Income Adjustment (NIA) | | | | | | |
| 1999-2004 ($1,000) | -4.39 | -309.64 | -60.19 | -586.54 | -482.99 | 491.21 |
| Net Income Adjustment (NIA) | | | | | | |
| 1999-2004 (% Receipts) | -1.76 | -30.46 | -8.74 | -23.22 | -27.37 | 9.11 |
| Cost to Receipts Ratio (%) | | | | | | |
| 2000-2004 Average | 79.24 | 60.549 | 81.206 | 69.778 | 65.819 | 99.233 |
| Govt Payments/Receipts (%) | | | | | | |
| 2000-2004 Average | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Cash Receipts ($1000) | | | | | | |
| 1996 | 227.47 | 936.32 | 675.27 | 2440.05 | 1804.29 | 5075.95 |
| 1997 | 215.04 | 903.87 | 633.57 | 2298.05 | 1718.95 | 4840.59 |
| 1998 | 244.58 | 1061.03 | 714.28 | 2579.48 | 1896.03 | 5344.99 |
| 1999 | 251.14 | 1029.34 | 691.42 | 2528.01 | 1756.63 | 5363.46 |
| 2000 | 240.92 | 982.5 | 667.48 | 2446.62 | 1707.26 | 5211.05 |
| 2001 | 244.21 | 995.74 | 676.13 | 2478.98 | 1730.88 | 5284.49 |
| 2002 | 247.84 | 1011.1 | 685.44 | 2513.36 | 1757.92 | 5368.57 |
| 2003 | 255.12 | 1041.99 | 703.43 | 2578.22 | 1800.5 | 5501.01 |
| 2004 | 257.01 | 1052.3 | 712.16 | 2610.12 | 1826.9 | 5582.69 |
| Net Cash Farm Income ($1000) | | | | | | |
| 1996 | 3.63 | 247.11 | -52.07 | 600.78 | 48.69 | -391.04 |
| 1997 | -9.35 | 227.28 | -91.76 | 438.96 | -32.23 | -856.8 |
| 1998 | 48.13 | 443.08 | 116.49 | 840.36 | 494.97 | 160.48 |
| 1999 | 68.35 | 458.4 | 145.27 | 809.29 | 501.16 | 369.64 |
| 2000 | 49.73 | 393.76 | 124.85 | 749.69 | 587.1 | 99.11 |
| 2001 | 53.83 | 405.96 | 138.51 | 764.71 | 617.93 | 107.84 |
| 2002 | 53.42 | 406.06 | 133.23 | 772.31 | 610.21 | 69.68 |
| 2003 | 57.22 | 421.53 | 138.44 | 798.57 | 621.8 | 74.25 |
| 2004 | 56.35 | 418.71 | 133.53 | 796.16 | 621.5 | 67.22 |
| Prob. of a Cash Flow Deficit (%) | | | | | | |
| 2000 | 99 | 2 | 83 | 1 | 1 | 99 |
| 2001 | 99 | 1 | 40 | 1 | 1 | 99 |
| 2002 | 99 | 1 | 26 | 1 | 1 | 99 |
| 2003 | 97 | 1 | 31 | 2 | 1 | 99 |
| 2004 | 98 | 3 | 25 | 2 | 1 | 99 |
| Ending Cash Reserves ($1000) | | | | | | |
| 1996 | -35.13 | 99.91 | -86.07 | 270.53 | -20.03 | -670.56 |
| 1997 | -86.17 | 176.15 | -213.61 | 419.88 | -96.4 | -1671.77 |
| 1998 | -88.46 | 380.13 | -135.07 | 813.29 | 198.88 | -1981.64 |
| 1999 | -76.23 | 558.34 | -77.14 | 1148.45 | 438.79 | -2165.57 |
| 2000 | -84.2 | 714.24 | -39.85 | 1474.53 | 742.84 | -2528.45 |
| 2001 | -87.8 | 886.64 | 8.73 | 1816.72 | 1063.13 | -2886.83 |
| 2002 | -94.05 | 1056.18 | 50.4 | 2156.02 | 1374.05 | -3280.14 |
| 2003 | -93.77 | 1234.5 | 92.28 | 2505.76 | 1688.83 | -3671.7 |
| 2004 | -96.77 | 1398.31 | 129.56 | 2859.95 | 2015.05 | -4076.78 |
| Prob. of Refinancing Deficits (%) | | | | | | |
| 2000 | 99 | 1 | 83 | 1 | 1 | 99 |
| 2001 | 99 | 1 | 40 | 1 | 1 | 99 |
| 2002 | 99 | 1 | 22 | 1 | 1 | 99 |
| 2003 | 97 | 1 | 19 | 1 | 1 | 99 |
| 2004 | 97 | 1 | 13 | 1 | 1 | 99 |
| Nominal Net Worth ($1000) | | | | | | |
| 1996 | 546.58 | 1393.53 | 896.4 | 3118.99 | 1603.4 | 3173.9 |
| 1997 | 527.02 | 1530.04 | 820.06 | 3361.92 | 1599.36 | 2352.05 |
| 1998 | 555.11 | 1774.76 | 939.66 | 3810.02 | 1937.9 | 2203.38 |
| 1999 | 593.67 | 1996.37 | 1025.67 | 4198.21 | 2213.53 | 2140.38 |
| 2000 | 602.73 | 2185.49 | 1080.23 | 4564.89 | 2550.19 | 1866.64 |
| 2001 | 614.17 | 2381.16 | 1134.76 | 4915.49 | 2880.19 | 1553.78 |
| 2002 | 611.79 | 2559.08 | 1169.47 | 5240.24 | 3181.13 | 1152.2 |
| 2003 | 618.61 | 2754.61 | 1209.68 | 5600.4 | 3400.89 | 782.16 |
| 2004 | 617.57 | 2918.79 | 1239.89 | 5923.64 | 3704.73 | 349.54 |
| Prob. of Losing Real Net Worth (%) | | | | | | |
| 2000 | 40 | 3 | 15 | 2 | 1 | 82 |
| 2001 | 26 | 1 | 6 | 1 | 1 | 92 |
| 2002 | 35 | 1 | 9 | 1 | 1 | 96 |
| 2003 | 31 | 1 | 5 | 1 | 1 | 92 |
| 2004 | 38 | 1 | 4 | 1 | 1 | 96 |

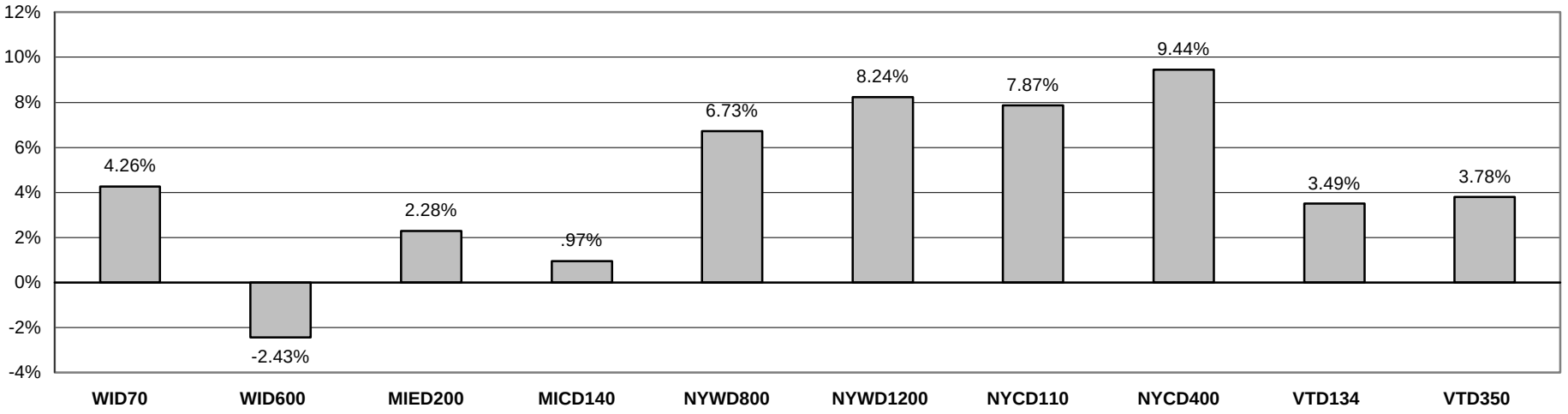
# Figure 24. Dairy Farms



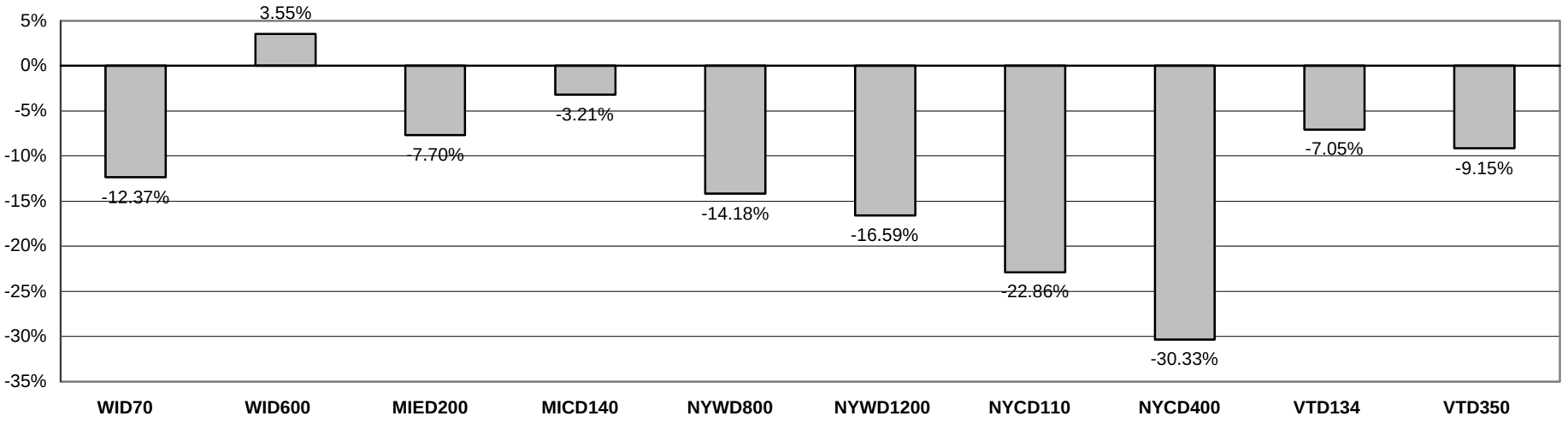



# Figure 25. Dairy Farms

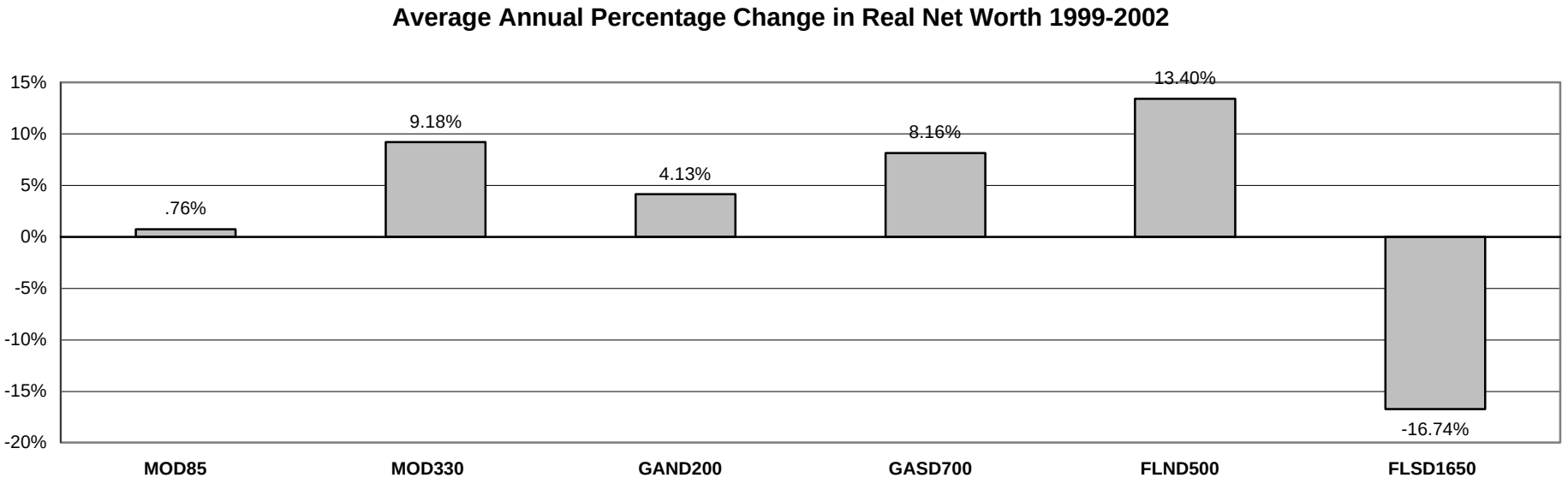
**Average Annual Percentage Change in Real Net Worth 1999-2002**

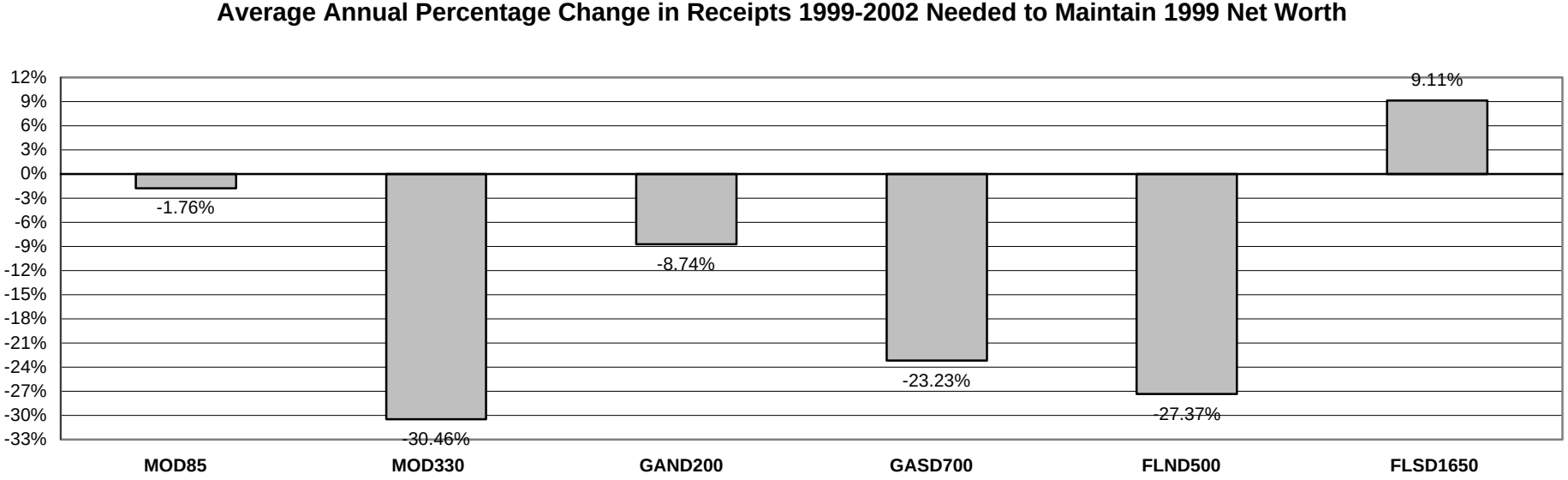



**Average Annual Percentage Change in Receipts 1999-2002 Needed to Maintain 1999 Net Worth**

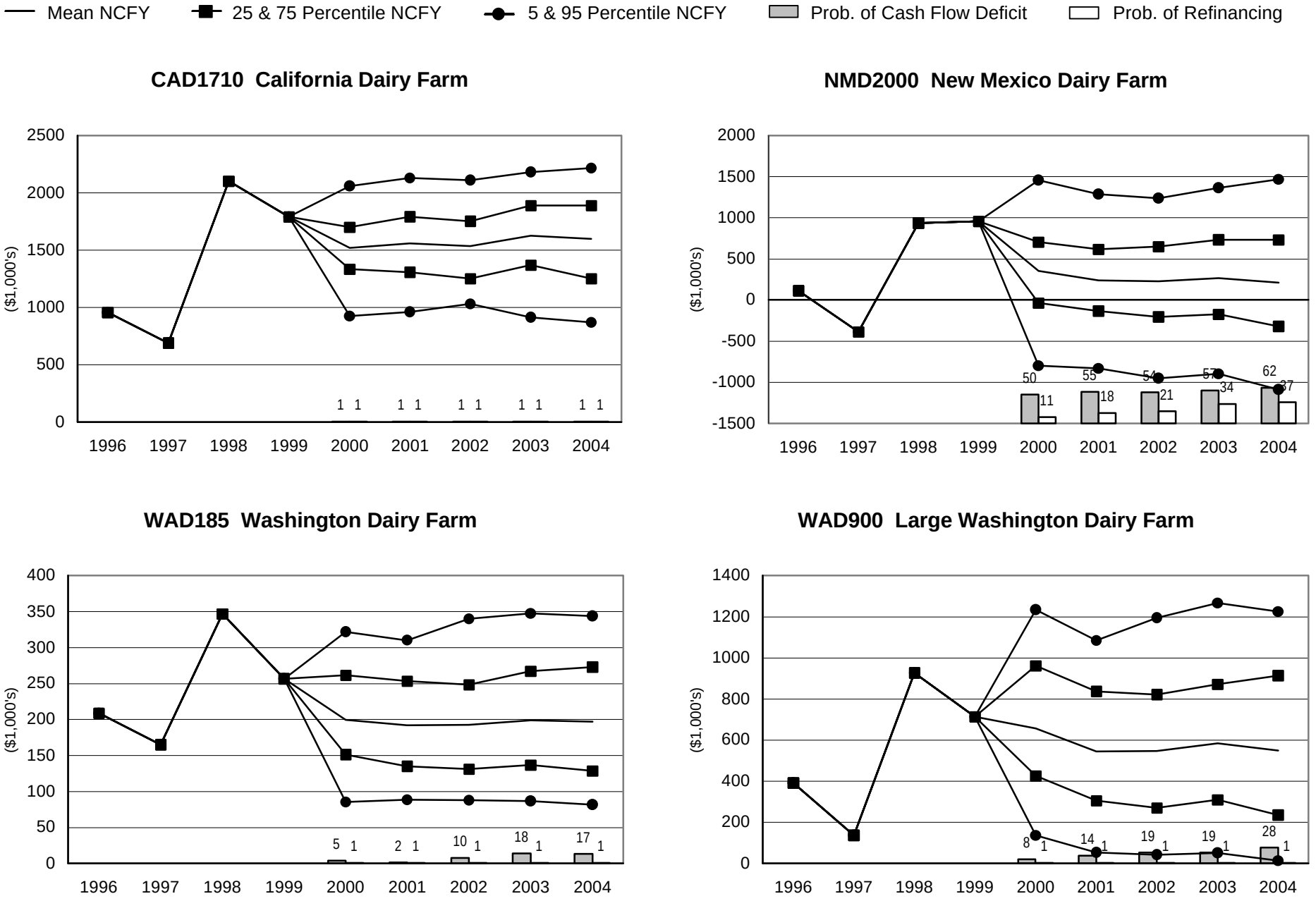


# Figure 26. Dairy Farms

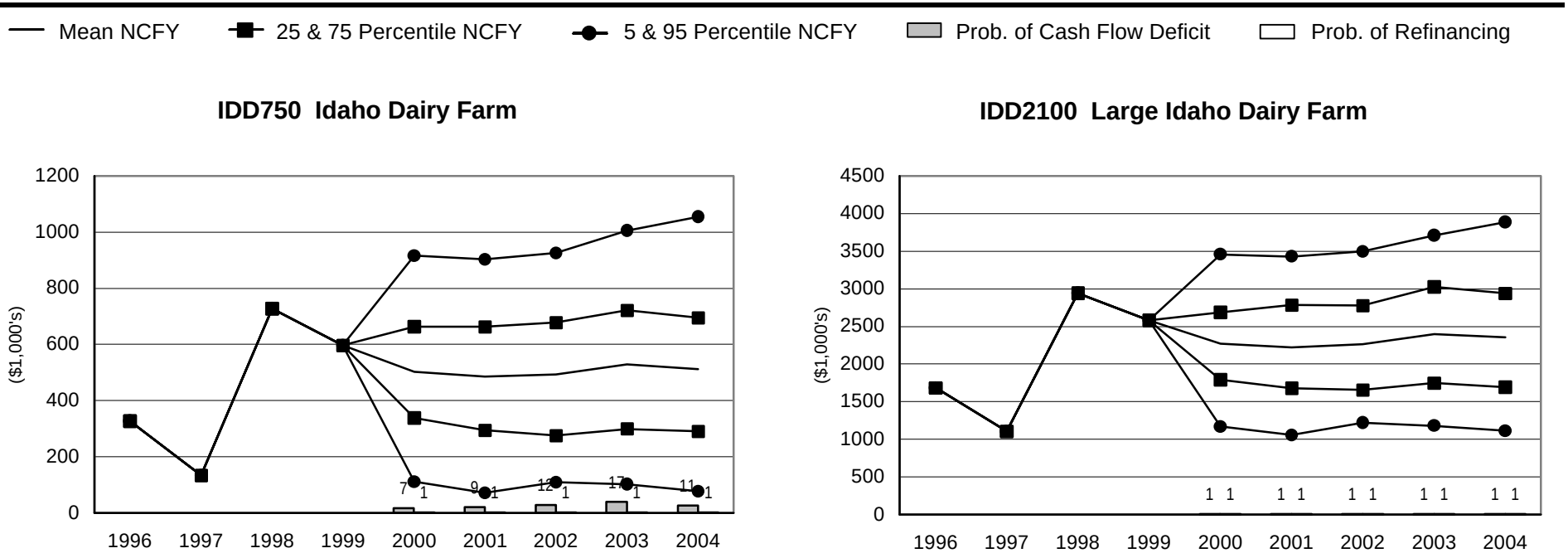


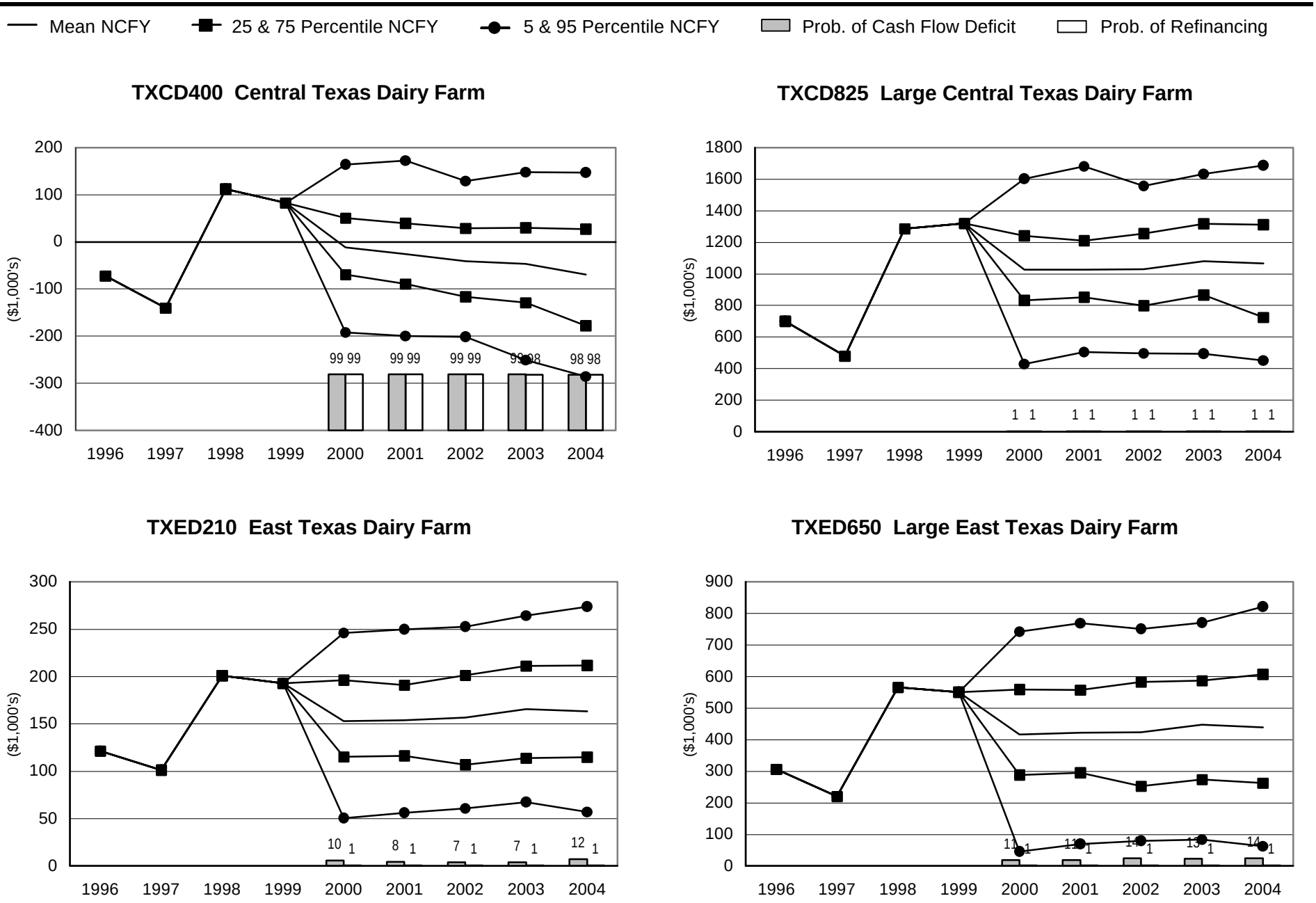
## Figure 27. Net Cash Farm Income and Probabilities of a Cash Flow Deficit and Refinancing: Dairy Farms



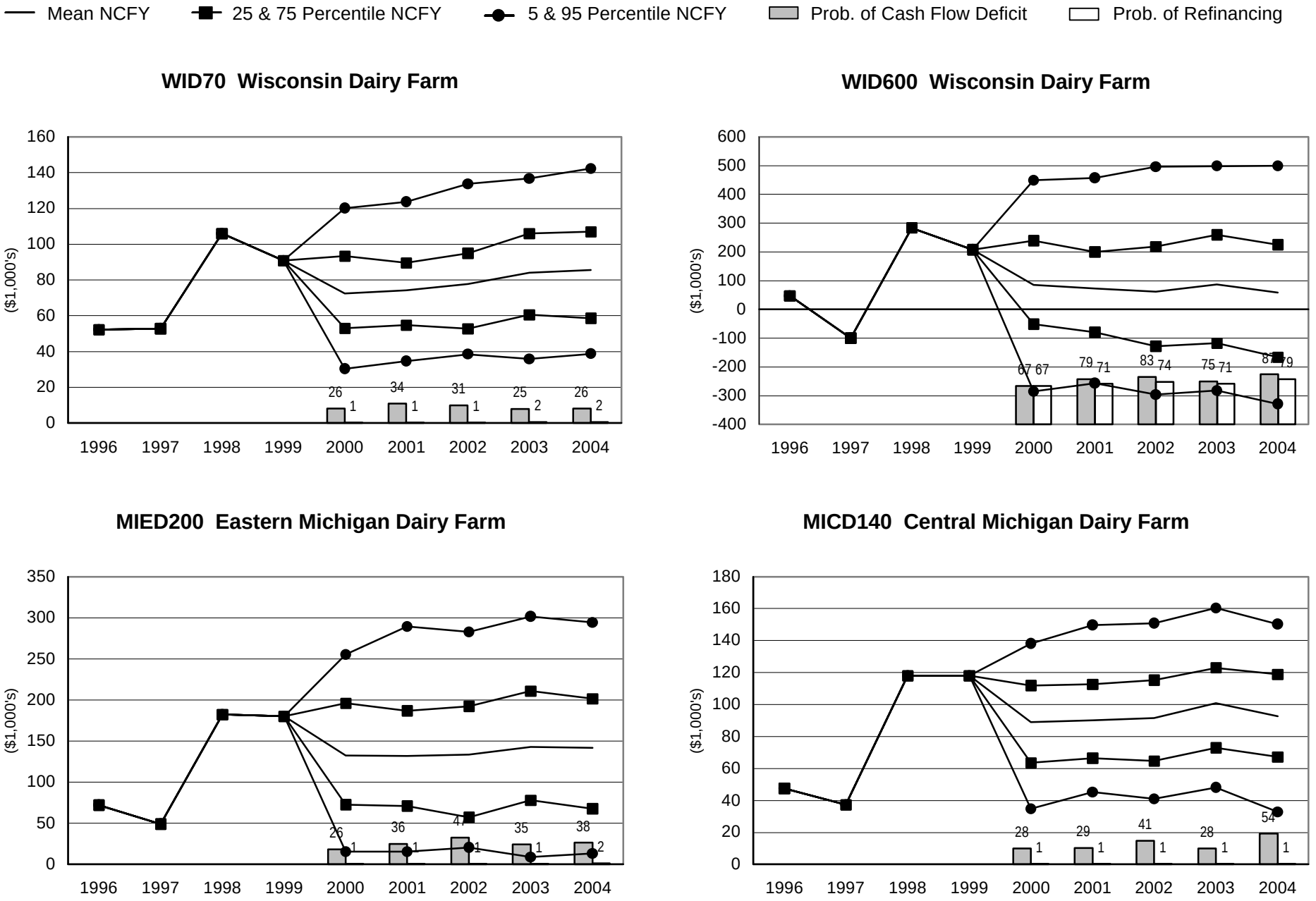
## Figure 28. Net Cash Farm Income and Probabilities of a Cash Flow Deficit and Refinancing: Dairy Farms



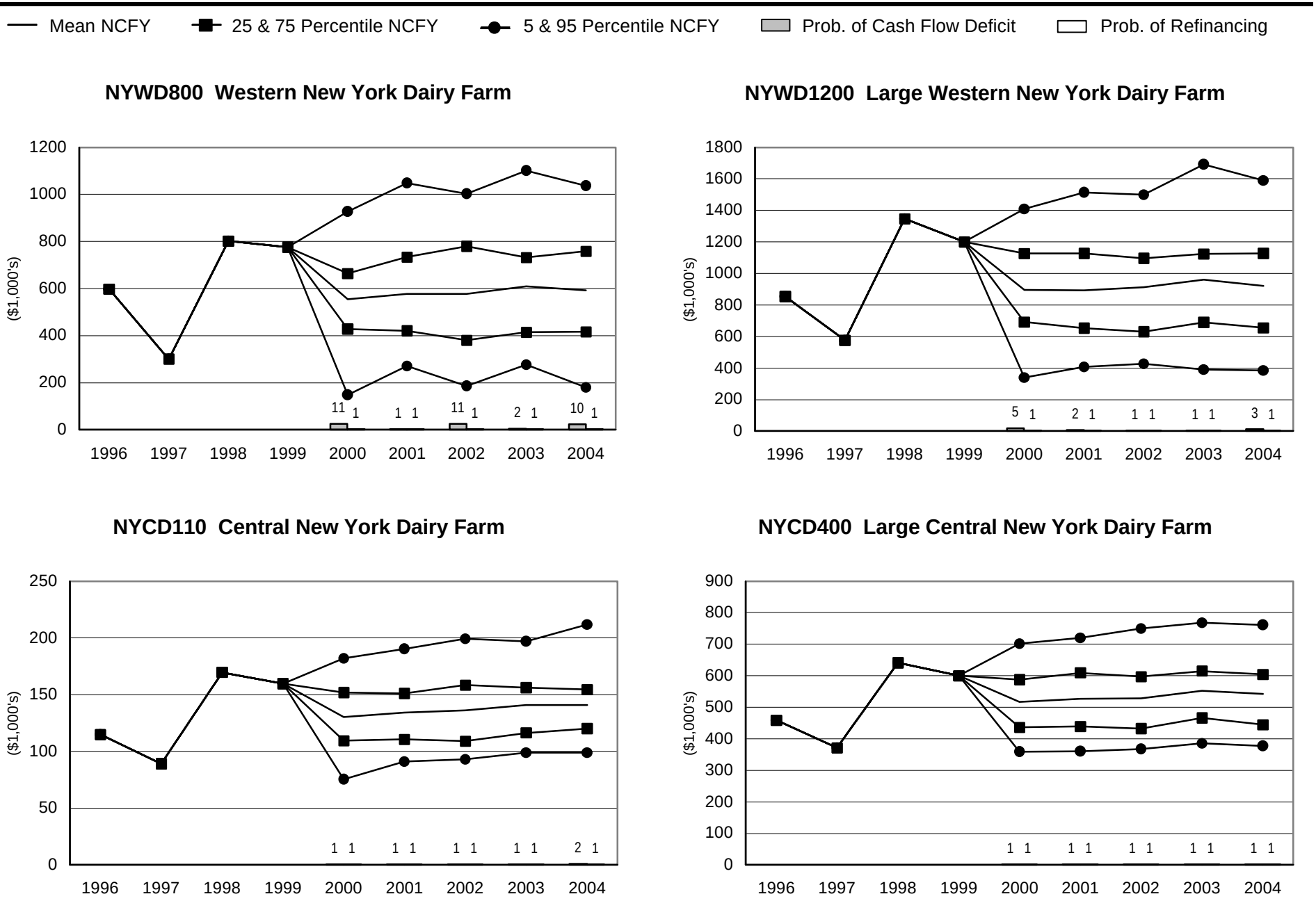
## Figure 29. Net Cash Farm Income and Probabilities of a Cash Flow Deficit and Refinancing: Dairy Farms



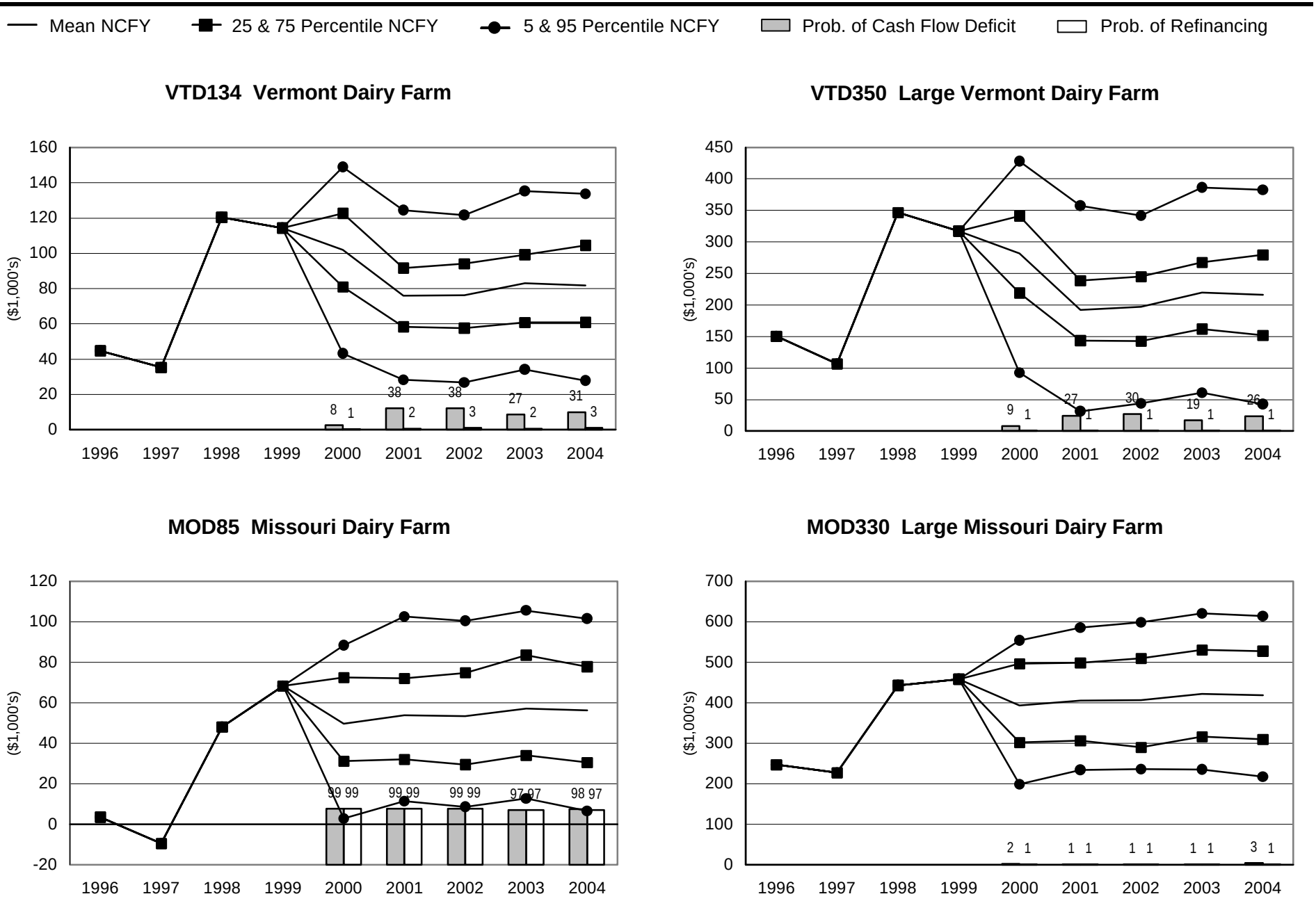
## Figure 30. Net Cash Farm Income and Probabilities of a Cash Flow Deficit and Refinancing: Dairy Farms



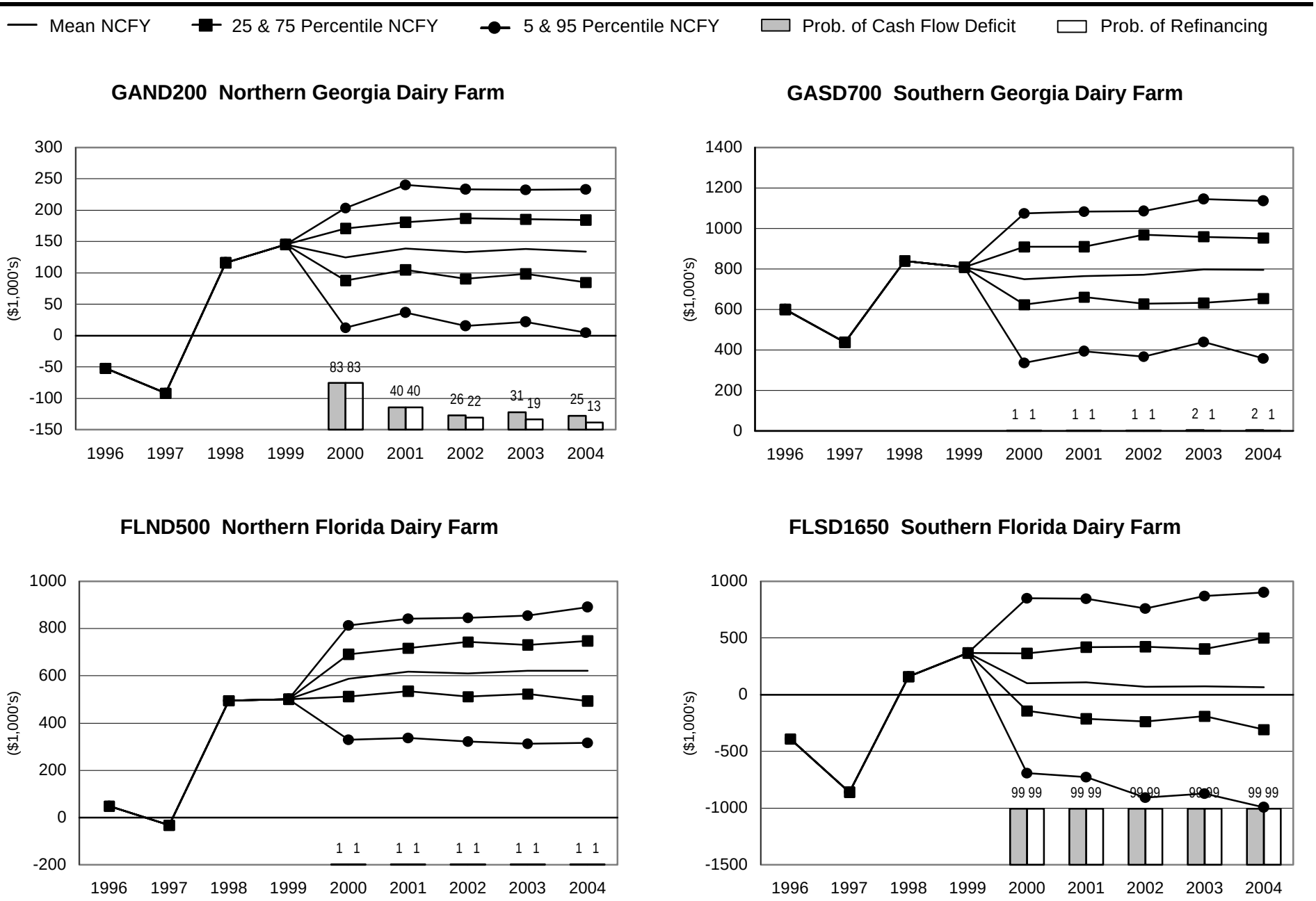
## Figure 31. Net Cash Farm Income and Probabilities of a Cash Flow Deficit and Refinancing: Dairy Farms



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



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



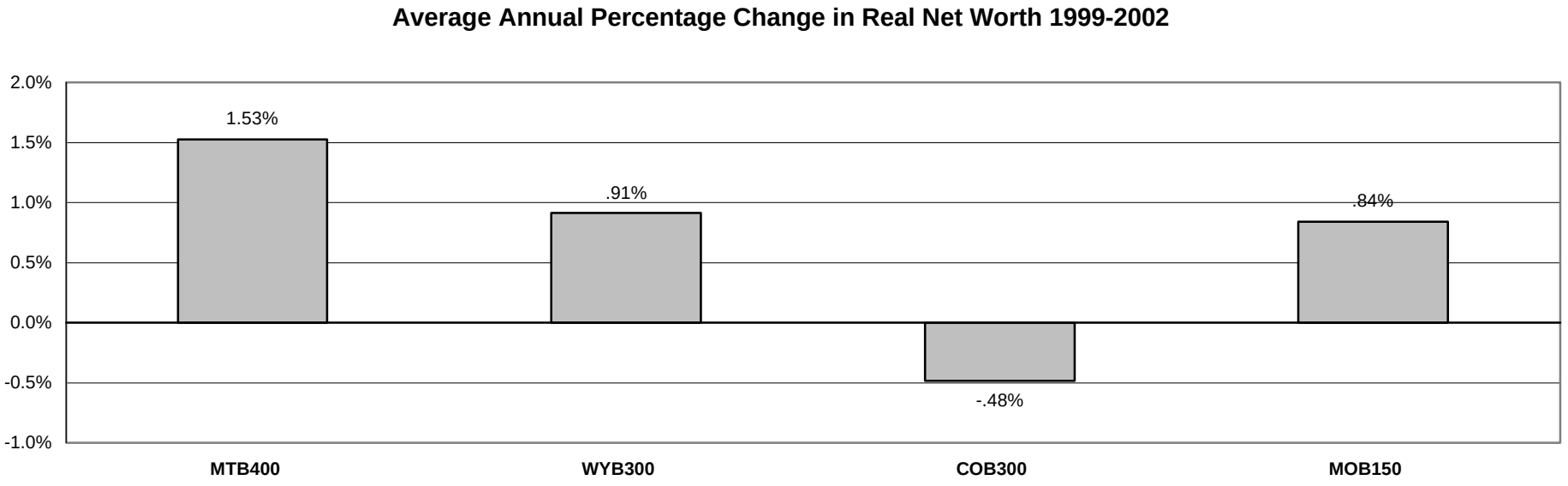
# FIGURE 34. REPRESENTATIVE FARMS PRODUCING BEEF CATTLE

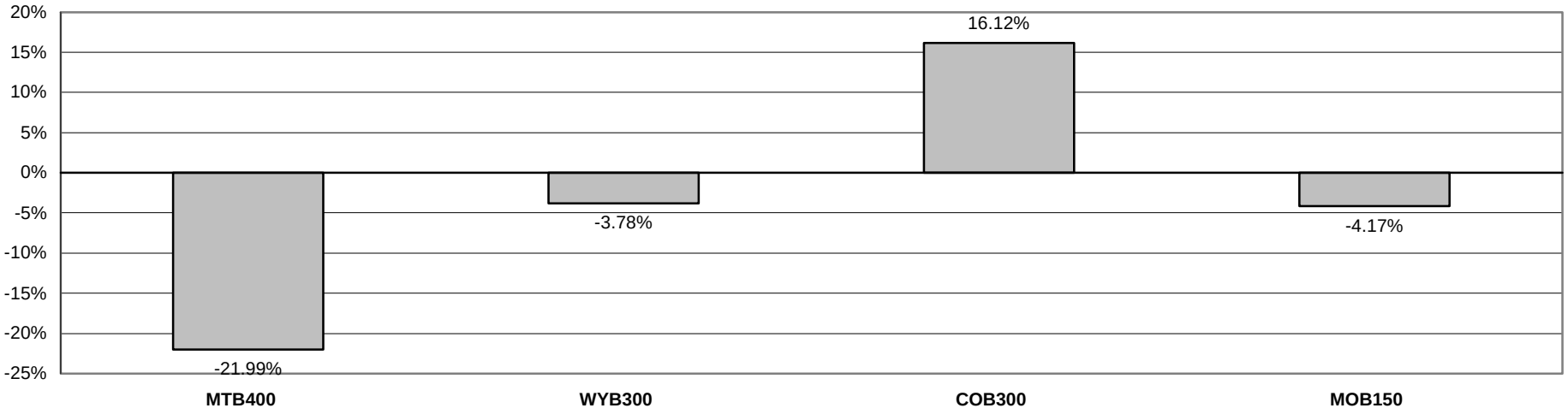
**Beef Cattle Notes**

Table 12. Implications of the 1996 Farm Bill and the November 1999 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Beef Cattle.

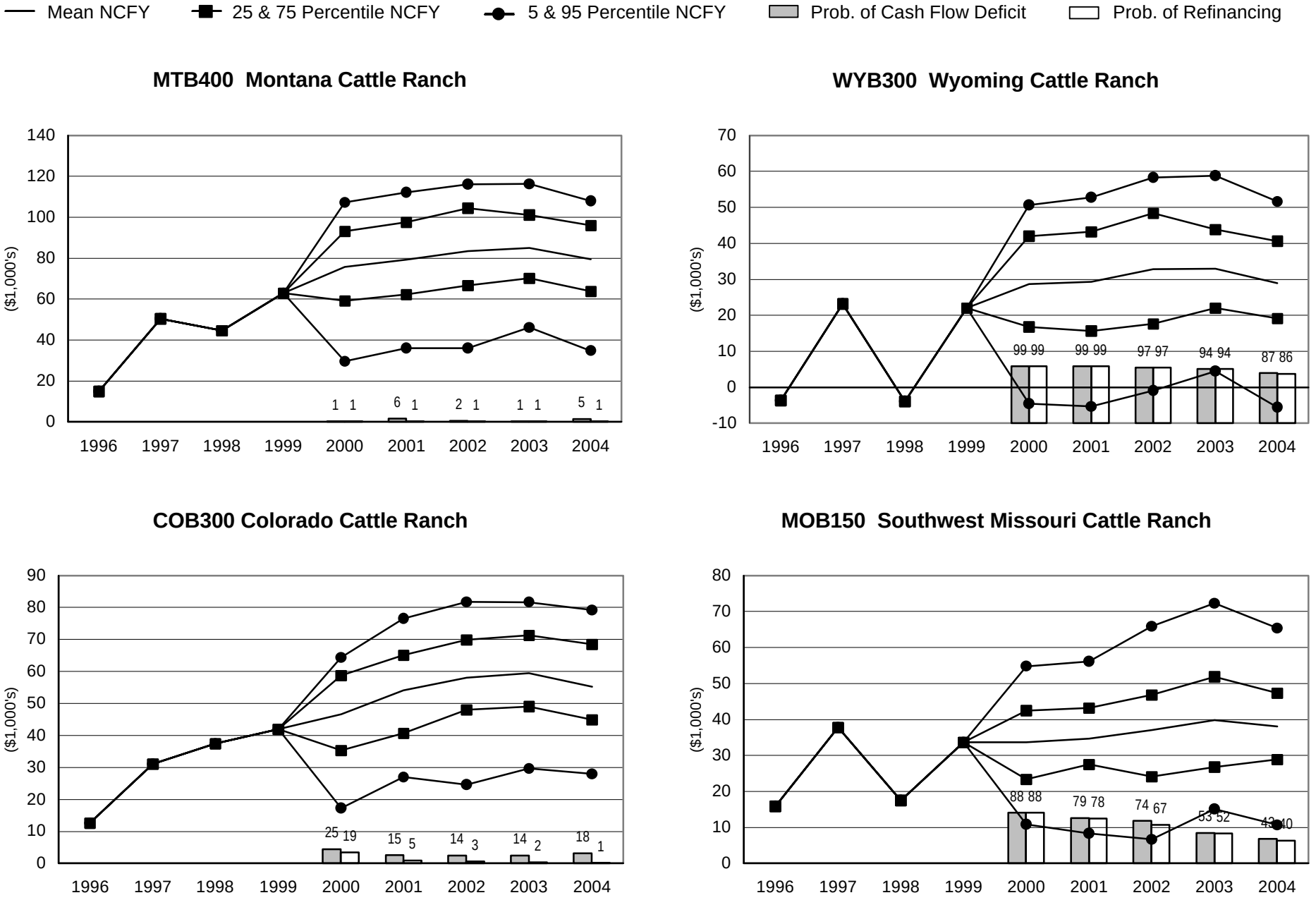
| | MTB400 | WYB300 | COB300 | MOB150 |
|---|---|---|---|---|
| Annual Change Real Net Worth (%) | | | | |
| 1999-2004 Average | 1.525 | 0.912 | -0.484 | 0.841 |
| Net Income Adjustment (NIA) | | | | |
| 1999-2004 ($1,000) | -36.07 | -5.01 | 26 | -4.96 |
| Net Income Adjustment (NIA) | | | | |
| 1999-2004 (% Receipts) | -21.99 | -3.78 | 16.12 | -4.17 |
| Cost to Receipts Ratio (%) | | | | |
| 2000-2004 Average | 51.959 | 78.353 | 69.085 | 70.39 |
| Govt Payments/Receipts (%) | | | | |
| 2000-2004 Average | 0 | 0 | 0 | 4.556 |
| Total Cash Receipts ($1000) | | | | |
| 1996 | 103.08 | 87.35 | 135.71 | 97.27 |
| 1997 | 139.54 | 114.94 | 151.57 | 119.45 |
| 1998 | 134.39 | 111.12 | 153.2 | 107.83 |
| 1999 | 142.32 | 117.17 | 155.81 | 114.92 |
| 2000 | 157.76 | 127.75 | 166.7 | 116.37 |
| 2001 | 162.84 | 131.72 | 172.45 | 117.04 |
| 2002 | 166.67 | 134.69 | 175.96 | 119.87 |
| 2003 | 170.16 | 137.21 | 178.16 | 121.85 |
| 2004 | 162.52 | 131.4 | 173.3 | 119.61 |
| Net Cash Farm Income ($1000) | | | | |
| 1996 | 14.89 | -3.63 | 12.59 | 15.88 |
| 1997 | 50.38 | 23.17 | 31.1 | 37.75 |
| 1998 | 44.58 | -3.87 | 37.41 | 17.52 |
| 1999 | 63 | 21.97 | 42.05 | 33.57 |
| 2000 | 75.83 | 28.71 | 46.73 | 33.73 |
| 2001 | 79.26 | 29.35 | 54.08 | 34.72 |
| 2002 | 83.44 | 32.79 | 57.99 | 37.08 |
| 2003 | 84.92 | 33 | 59.45 | 39.88 |
| 2004 | 79.57 | 29.02 | 55.31 | 38.14 |
| Prob. of a Cash Flow Deficit (%) | | | | |
| 2000 | 1 | 99 | 25 | 88 |
| 2001 | 6 | 99 | 15 | 79 |
| 2002 | 2 | 97 | 14 | 74 |
| 2003 | 1 | 94 | 14 | 53 |
| 2004 | 5 | 87 | 18 | 43 |
| Ending Cash Reserves ($1000) | | | | |
| 1996 | -9.21 | -22.89 | -13.71 | -7.41 |
| 1997 | 5.35 | -21.99 | -13.5 | 2.1 |
| 1998 | 14.21 | -49.46 | -11.26 | -18.91 |
| 1999 | 43.77 | -46.79 | 2.75 | -17.98 |
| 2000 | 84.97 | -48.72 | 11.12 | -17.68 |
| 2001 | 119.84 | -48.06 | 28.37 | -15.65 |
| 2002 | 159.59 | -50.8 | 44.52 | -14.64 |
| 2003 | 198.03 | -49.49 | 59.52 | -2.68 |
| 2004 | 232.29 | -50.63 | 72.13 | 8.88 |
| Prob. of Refinancing Deficits (%) | | | | |
| 2000 | 1 | 99 | 19 | 88 |
| 2001 | 1 | 99 | 5 | 78 |
| 2002 | 1 | 97 | 3 | 67 |
| 2003 | 1 | 94 | 2 | 52 |
| 2004 | 1 | 86 | 1 | 40 |
| Nominal Net Worth ($1000) | | | | |
| 1996 | 1504.21 | 533.08 | 2634 | 580.51 |
| 1997 | 1641.9 | 594.01 | 2810 | 630.44 |
| 1998 | 1721.07 | 583.72 | 2946.34 | 636.19 |
| 1999 | 1789.61 | 602.57 | 3022.59 | 653.35 |
| 2000 | 1845.82 | 627.11 | 3035.37 | 662.92 |
| 2001 | 1887.4 | 635.11 | 3043.43 | 672.98 |
| 2002 | 1899.88 | 635.89 | 2997.59 | 672.68 |
| 2003 | 1920.71 | 642.26 | 2971.87 | 682.81 |
| 2004 | 1930.02 | 631.35 | 2955.58 | 682.22 |
| Prob. of Losing Real Net Worth (%) | | | | |
| 2000 | 20 | 28 | 36 | 32 |
| 2001 | 9 | 27 | 37 | 29 |
| 2002 | 8 | 27 | 65 | 28 |
| 2003 | 4 | 24 | 81 | 21 |
| 2004 | 5 | 26 | 91 | 25 |

# Figure 35. Cattle Ranches



## Figure 36. Net Cash Farm Income and Probabilities of a Cash Flow Deficit and Refinancing: Cattle Ranches



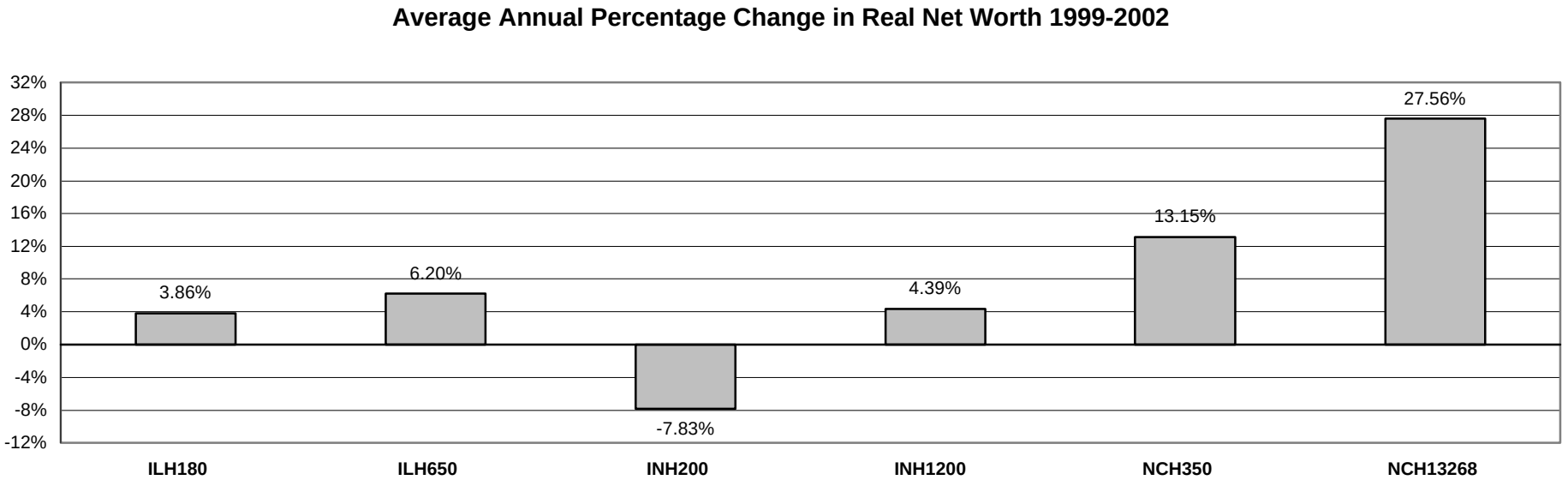
# FIGURE 37. REPRESENTATIVE FARMS PRODUCING HOGS

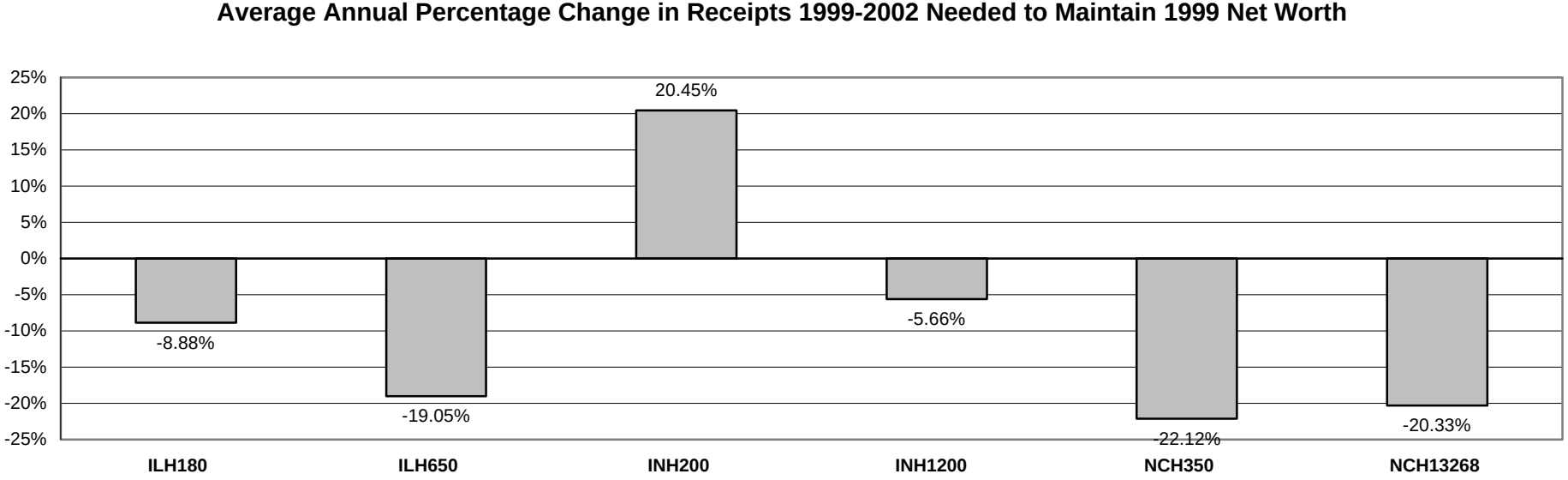
**Hog Farm Notes**

Table 13. Implications of the 1996 Farm Bill and the November 1999 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Hogs.

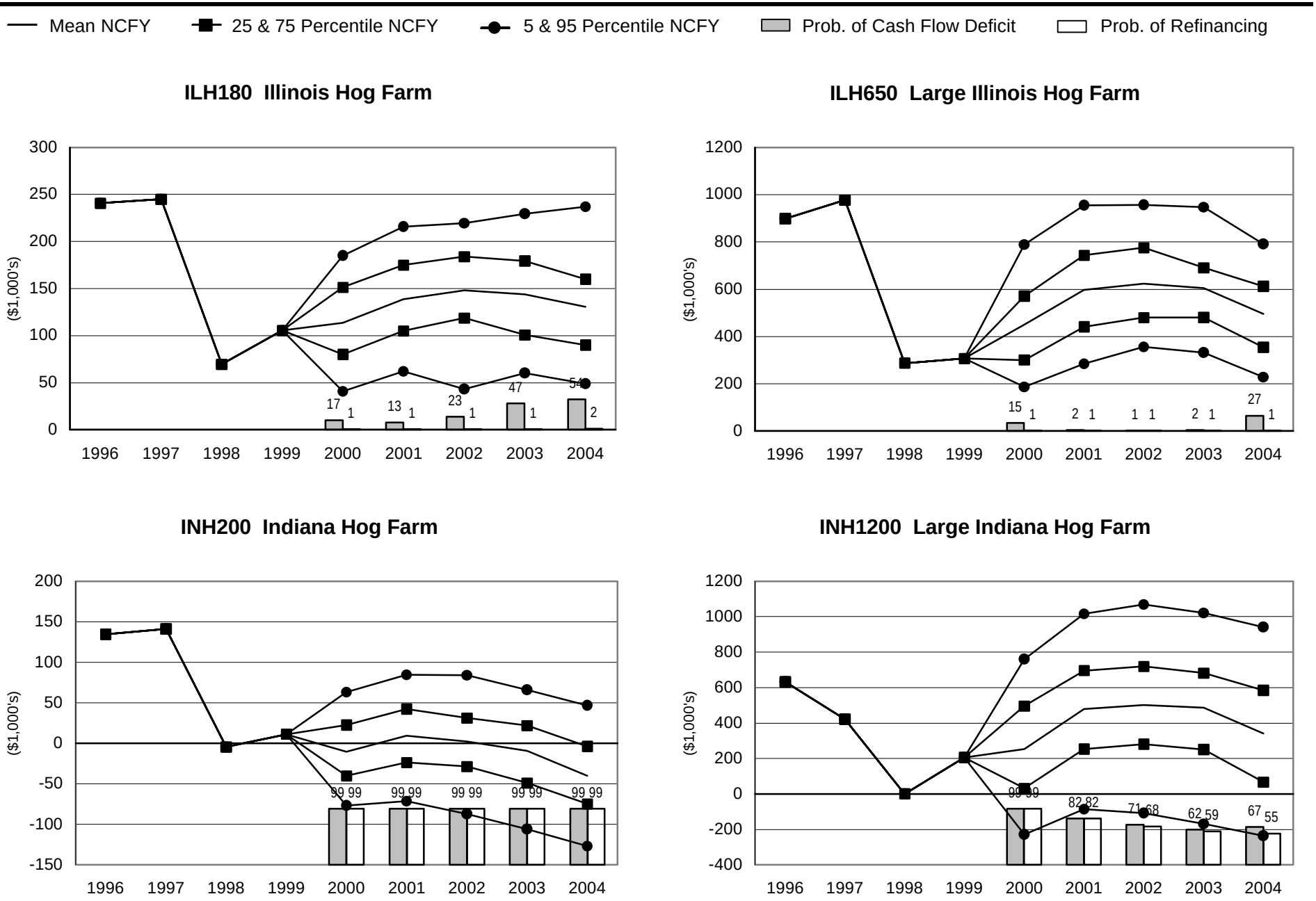
| | ILH180 | ILH650 | INH200 | INH1200 | NCH350 | NCH13268 |
|---|---|---|---|---|---|---|
| Annual Change Real Net Worth (%) | | | | | | |
| 1999-2004 Average | 3.862 | 6.199 | -7.826 | 4.391 | 13.146 | 27.562 |
| Net Income Adjustment (NIA) | | | | | | |
| 1999-2004 ($1,000) | -45.13 | -339.98 | 91.45 | -174 | -164.78 | -5596.09 |
| Net Income Adjustment (NIA) | | | | | | |
| 1999-2004 (% Receipts) | -8.88 | -19.04 | 20.45 | -5.66 | -22.12 | -20.33 |
| Cost to Receipts Ratio (%) | | | | | | |
| 2000-2004 Average | 74.348 | 69.715 | 103.391 | 87.619 | 69.751 | 79.823 |
| Govt Payments/Receipts (%) | | | | | | |
| 2000-2004 Average | 4.005 | 3.601 | 5.88 | 3.139 | 0 | 0 |
| Total Cash Receipts ($1000) | | | | | | |
| 1996 | 710.05 | 2424.98 | 611.23 | 3252.97 | 999.94 | 36969.22 |
| 1997 | 708.95 | 2412.37 | 606.05 | 3986.94 | 964.25 | 35634.61 |
| 1998 | 484.89 | 1477.5 | 401.39 | 2598.95 | 634.78 | 23433.1 |
| 1999 | 487.94 | 1533.58 | 421.99 | 2672.12 | 592.54 | 21884.03 |
| 2000 | 474.73 | 1662.94 | 417 | 2852.6 | 683.71 | 25254.86 |
| 2001 | 506.49 | 1812.05 | 450.26 | 3109.78 | 759.31 | 28067.19 |
| 2002 | 520.94 | 1849.72 | 460.86 | 3190.4 | 778.87 | 28792.13 |
| 2003 | 531.82 | 1843.51 | 462.58 | 3185.06 | 771.64 | 28526.71 |
| 2004 | 519.09 | 1757.42 | 445.17 | 3041.92 | 730.41 | 26999 |
| Net Cash Farm Income ($1000) | | | | | | |
| 1996 | 240.72 | 898.97 | 134.67 | 632.21 | 268.89 | 10293.82 |
| 1997 | 244.78 | 976.61 | 141.17 | 422.94 | 327.29 | 10154.74 |
| 1998 | 69.5 | 287.39 | -4.36 | 0.68 | 91.74 | 1051.68 |
| 1999 | 105.64 | 307.53 | 11.22 | 206.13 | 98.62 | 1328.59 |
| 2000 | 113.67 | 449.71 | -10.63 | 252.52 | 184.38 | 4347.49 |
| 2001 | 138.7 | 597.01 | 9.64 | 479.98 | 253.23 | 6860.48 |
| 2002 | 148.21 | 624.15 | 1.89 | 503.07 | 265.47 | 7123.12 |
| 2003 | 143.99 | 604.62 | -9.05 | 486.63 | 251.75 | 6420.94 |
| 2004 | 130.57 | 496.04 | -40.04 | 340.85 | 205.29 | 4484.51 |
| Prob. of a Cash Flow Deficit (%) | | | | | | |
| 2000 | 17 | 15 | 99 | 99 | 5 | 6 |
| 2001 | 13 | 2 | 99 | 82 | 1 | 1 |
| 2002 | 23 | 1 | 99 | 71 | 1 | 1 |
| 2003 | 47 | 2 | 99 | 62 | 1 | 2 |
| 2004 | 54 | 27 | 99 | 67 | 12 | 19 |
| Ending Cash Reserves ($1000) | | | | | | |
| 1996 | 68.8 | 317.41 | 5.67 | 76.25 | 69.69 | 4755.17 |
| 1997 | 142.71 | 626.6 | -0.58 | 29.1 | 169.25 | 9251.83 |
| 1998 | 81.77 | 522.08 | -120.62 | -352.06 | 120.78 | 8046.42 |
| 1999 | 55.78 | 418.88 | -213.89 | -516.01 | 99.85 | 7193.48 |
| 2000 | 86.55 | 565.47 | -283.61 | -487.53 | 170.43 | 9887.17 |
| 2001 | 123.07 | 799.83 | -337.36 | -319.82 | 276.11 | 14153.06 |
| 2002 | 151.69 | 1035.05 | -422.31 | -182.61 | 388.38 | 18587.68 |
| 2003 | 160.86 | 1264.24 | -523.05 | -54.21 | 487.89 | 22696.44 |
| 2004 | 163.43 | 1385.65 | -672.66 | -44.87 | 566.99 | 25723.04 |
| Prob. of Refinancing Deficits (%) | | | | | | |
| 2000 | 1 | 1 | 99 | 99 | 1 | 1 |
| 2001 | 1 | 1 | 99 | 82 | 1 | 1 |
| 2002 | 1 | 1 | 99 | 68 | 1 | 1 |
| 2003 | 1 | 1 | 99 | 59 | 1 | 1 |
| 2004 | 2 | 1 | 99 | 55 | 1 | 1 |
| Nominal Net Worth ($1000) | | | | | | |
| 1996 | 764.18 | 3284.23 | 1066.26 | 2980.55 | 762.85 | 13645.61 |
| 1997 | 872.76 | 3897.64 | 1152.74 | 3507.51 | 894.55 | 19115.43 |
| 1998 | 801.05 | 3726.67 | 1081.34 | 3028.29 | 773.83 | 14711.36 |
| 1999 | 826.48 | 3861.86 | 1059.94 | 3070.67 | 784.72 | 14769.25 |
| 2000 | 870.89 | 4117.39 | 1010.21 | 3226.87 | 890.39 | 18808.8 |
| 2001 | 918.73 | 4442.32 | 976.31 | 3515.37 | 1024 | 24054.78 |
| 2002 | 950.75 | 4700.94 | 884.33 | 3643.16 | 1140.82 | 28768.09 |
| 2003 | 968.94 | 4911.87 | 778.62 | 3770.27 | 1236.3 | 32762.36 |
| 2004 | 988.11 | 5069.38 | 646.54 | 3752.63 | 1303.2 | 35195.51 |
| Prob. of Losing Real Net Worth (%) | | | | | | |
| 2000 | 16 | 9 | 79 | 39 | 5 | 6 |
| 2001 | 6 | 1 | 86 | 14 | 1 | 1 |
| 2002 | 3 | 1 | 95 | 12 | 1 | 1 |
| 2003 | 5 | 1 | 99 | 8 | 1 | 1 |
| 2004 | 2 | 1 | 99 | 11 | 1 | 1 |

# Figure 38. Hog Farms

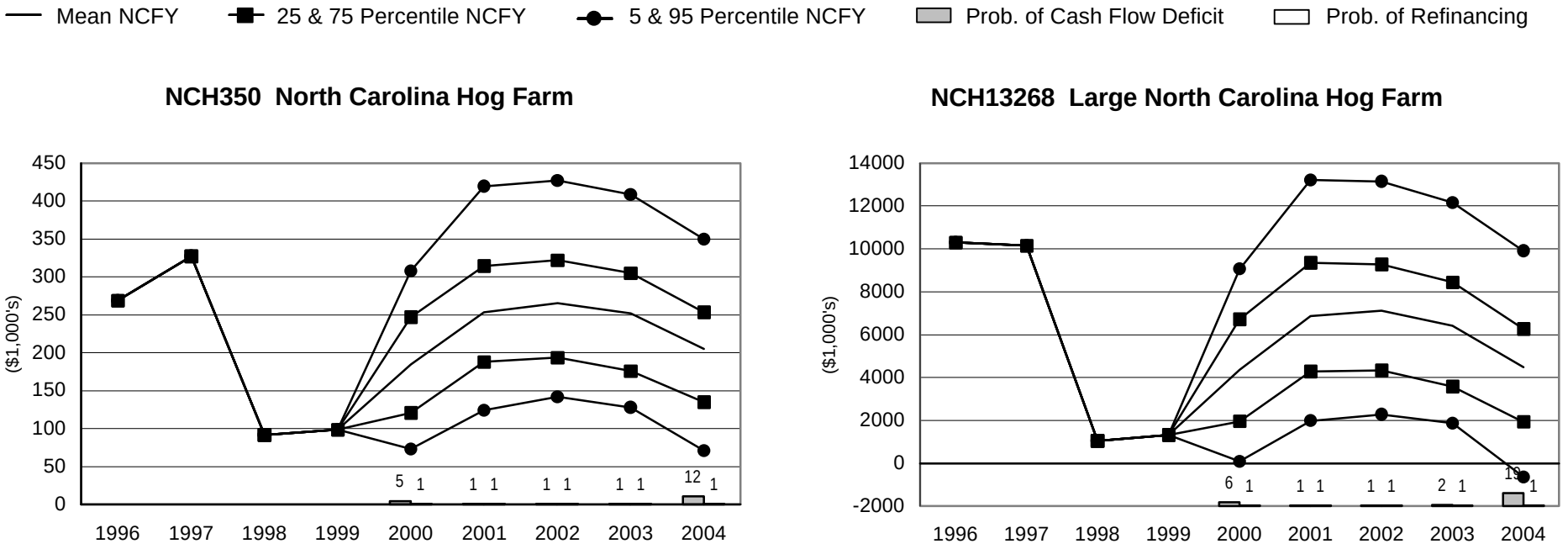


## Figure 39. Net Cash Farm Income and Probabilities of a Cash Flow Deficit and Refinancing: Hog Farms



## Figure 40. Net Cash Farm Income and Probabilities of a Cash Flow Deficit and Refinancing: Hog Farms



# APPENDIX A:

# CHARACTERISTICS OF

# REPRESENTATIVE FARMS

**1999 CHARACTERISTICS OF PANEL FARMS PRODUCING FEED GRAIN AND OILSEEDS**

**IAG950** A 950-acre Northwestern Iowa (Webster County) moderate size grain farm that plants 475 acres of corn, and 475 acres of soybeans. The farm receives 60 percent of its receipts from corn.

**IAG2400** A 2,400-acre Northwestern Iowa (Webster County) large grain farm that plants 1,200 acres of corn, and 1,200 acres of soybeans. The farm generates 63 percent of its receipts from corn.

**NEG900** A 900-acre South Central Nebraska (York County) grain farm that plants 600 acres of corn, and 300 acres of soybeans. The farm generates 74 percent of its receipts from corn.

**NEG1300** A 1,300 South Central Nebraska (Hamilton County) grain farm that plants 871 acres of corn and 429 acres of soybeans. The farm generates about 75 percent of its receipts from corn.

**MOCG1700** A 1,700-acre Central Missouri (Carroll County) moderate size grain farm with 85 acres of wheat, 808 acres of corn, and 808 acres of soybeans. This farm is located in the Missouri river bottom and supplies feed to the livestock producers in the region at a premium to other areas of Missouri. Corn generates 52 percent of the farm's receipts with soybeans included.

**MOCG3300** A 3,300-acre Central Missouri (Carroll County) large grain farm with 100 acres of wheat, 1,319 acres of corn, and 1,881 acres of soybeans. This farm is located in the Missouri river bottom-and supplies feed to the livestock producers in the region at a premium to other areas of Missouri. The farm generates about 46 percent of its total revenue from corn and 49 percent from soybeans.

**MONG1400** A 1,400-acre Northern Missouri (Nodaway County) diversified grain farm with 600 acres of corn, 600 acres of soybeans, and 200 acres of hay. The farm also has 150 breeding cows and in 1996 sold its 80 breeding sows. The farm generates about 68 percent of its total revenue from corn and soybeans and 29 percent from cattle.

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

| | IAG950 | IAG2400 | NEG900 | NEG1300 | MOCG1700 | MOCG3300 | MONG1400 |
|---|---|---|---|---|---|---|---|
| County | Webster | Webster | York | Hamilton | Carroll | Carroll | Nodaway |
| Total Cropland | 950 | 2,400 | 900 | 1,300 | 1,700 | 3,300 | 1,400 |
| Acres Owned | 240 | 380 | 180 | 260 | 850 | 1,600 | 700 |
| Acres Leased | 710 | 2,020 | 720 | 1,040 | 850 | 1,700 | 700 |
| Pastureland | | | | | | | |
| Acres Owned | 0 | 0 | 0 | 0 | 0 | 0 | 400 |
| Acres Leased | 0 | 0 | 0 | 0 | 0 | 0 | 400 |
| Assets ($1000) | | | | | | | |
| Total | 1,170 | 2,056 | 1,218 | 1,411 | 2,462 | 4,186 | 2,134 |
| Real Estate | 866 | 1,304 | 703 | 792 | 1,659 | 3,035 | 1,609 |
| Machinery | 234 | 497 | 426 | 482 | 469 | 704 | 380 |
| Other & Livestock | 69 | 255 | 89 | 136 | 333 | 448 | 144 |
| Debt/Asset Ratios | | | | | | | |
| Total | 0.15 | 0.16 | 0.21 | 0.10 | 0.12 | 0.14 | 0.20 |
| Intermediate | 0.14 | 0.15 | 0.27 | 0.02 | 0.06 | 0.11 | 0.36 |
| Long Run | 0.16 | 0.16 | 0.17 | 0.16 | 0.15 | 0.15 | 0.15 |
| Number of Livestock | | | | | | | |
| Beef Cows | 0 | 0 | 0 | 0 | 0 | 0 | 200 |
| 1999 Gross Receipts ($1,000)* | | | | | | | |
| Total | 267.6 | 590.7 | 265.1 | 369.7 | 350.2 | 643.9 | 343.8 |
| Cattle | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 101.2 |
| | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 29.40% |
| Corn | 161.5 | 372.5 | 195.7 | 275.7 | 183.5 | 293.6 | 154.6 |
| | 60.30% | 63.10% | 73.80% | 74.60% | 52.40% | 45.60% | 45.00% |
| Wheat | 0.0 | 0.0 | 0.0 | 0.0 | 15.6 | 28.6 | 0.0 |
| | 0.00% | 0.00% | 0.00% | 0.00% | 4.50% | 4.40% | 0.00% |
| Soybeans | 99.8 | 204.6 | 66.5 | 90.8 | 142.0 | 312.8 | 80.0 |
| | 37.30% | 34.60% | 25.10% | 24.60% | 40.60% | 48.60% | 23.30% |
| Hay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 |
| | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.20% |
| Other Receipts | 3.4 | 7.6 | 0.0 | 0.0 | 5.0 | 0.0 | 4.3 |
| | 1.30% | 1.30% | 0.00% | 0.00% | 1.40% | 0.00% | 1.20% |
| 1999 Planted Acres** | | | | | | | |
| Total | 950.0 | 2,400.0 | 900.0 | 1,300.0 | 1,700.0 | 3,300.0 | 1,450.0 |
| Corn | 475.0 | 1,200.0 | 600.0 | 871.0 | 807.5 | 1,319.0 | 600.0 |
| | 50.00% | 50.00% | 66.70% | 67.00% | 47.50% | 40.00% | 41.40% |
| Wheat | 0.0 | 0.0 | 0.0 | 0.0 | 85.0 | 100.0 | 0.0 |
| | 0.00% | 0.00% | 0.00% | 0.00% | 5.00% | 3.00% | 0.00% |
| Soybeans | 475.0 | 1,200.0 | 300.0 | 429.0 | 807.5 | 1,881.0 | 600.0 |
| | 50.00% | 50.00% | 33.30% | 33.00% | 47.50% | 57.00% | 41.40% |
| Hay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 200.0 |
| | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 13.80% |

*Receipts for 1999 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 1999 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.

## PANEL FARMS PRODUCING FEED GRAIN AND OILSEEDS (CONTINUED)

**TXNP1600** A 1,600-acre Northern High Plains of Texas (Moore County) moderate size, 100 percent irrigated, grain farm with 528 acres of wheat, 240 acres of sorghum, 800 acres of corn, and 32 acres fallow. The farm generates 83 percent of its total receipts from feed grains.

**TXNP6700** A 6,700-acre Northern High Plains of Texas (Moore County) large, 85 percent irrigated, grain farm with 1,675 acres of irrigated wheat (800 acres of the wheat is in the dryland corners of all pivot irrigated fields), 355 acres of irrigated sorghum, 3,350 acres of irrigated corn, and 670 acres fallow. The farm generates about 83 percent of its receipts from feed grains.

**TXBG2000** A 2,000 acre Texas Blacklands (Hill County) grain farm with 600 acres of corn, 750 acres of sorghum, 250 acres of wheat, 400 acres of cotton and 150 acres of pasture. About 61 percent of the receipts are from feedgrains. The farm has 20 cows and receives only 2 percent of its receipts from cattle.

**TXBG2500** A 2,500 acre Texas Blacklands (Falls County) grain farm with 750 acres of corn, 250 acres of sorghum, 250 acres of wheat, 625 acres of oats and 625 acres of pasture. The feedgrains account for 53 percent of the receipts on the farm. The 125 cows plus stocker steers account for 25 percent of receipts.

**TNG900** A 900-acre Western Tennessee (Henry County) grain and soybean farm with 400 acres of corn, 500 acres of soybeans, 200 acres of wheat, and 250 acres of hay. The farm generates about 67 percent of its receipts from corn and soybeans. Fifty head of beef cattle account for 9 percent of receipts.

**TNG2400** A 2,400-acre Western Tennessee (Henry County) grain and soybean farm with 1,200 acres of corn, 1,200 acres of soybeans, and 600 acres of wheat. The farm generates about 78 percent of its receipts from corn and soybeans.

**SCG1500** A 1,500-acre South Carolina (Clarendon County) moderate size grain farm with 750 acres of double cropped wheat and soybeans, 600 acres of corn, and 150 acres of full season soybeans. The farm generates about 69 percent of its total receipts from corn and soybeans. This farm enjoys high returns on double cropped acreage but timing will not allow more than 750 acres.

**SCG3500** A 3,500-acre South Carolina (Clarendon County) large grain farm with 2,020 acres of double crop wheat and soybeans, 350 acres of cotton, and 1,130 acres of corn. This farm enjoys high returns on double cropped acreage but timing is a limiting factor. The farm generates 57 percent of its receipts from corn and soybeans.

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

| | TXNP1600 | TXNP6700 | TXBG2000 | TXBG2500 | TNG900 | TNG2400 | SCG1500 | SCG3500 |
|---|---|---|---|---|---|---|---|---|
| County | Moore | Moore | Hill | Falls | Henry | Henry | Clarendon | Clarendon |
| Total Cropland | 1,600 | 6,700 | 2,000 | 1,250 | 900 | 2,400 | 1,500 | 3,500 |
| Acres Owned | 160 | 1,100 | 200 | 312 | 207 | 482 | 500 | 1,400 |
| Acres Leased | 1,440 | 5,600 | 1,800 | 938 | 693 | 1,918 | 1,000 | 2,100 |
| Pastureland | | | | | | | | |
| Acres Owned | 0 | 0 | 15 | 312 | 57 | 0 | 300 | 1,400 |
| Acres Leased | 0 | 0 | 135 | 700 | 190 | 0 | 0 | 0 |
| Assets ($1000) | | | | | | | | |
| Total | 504 | 2,926 | 470 | 1,153 | 708 | 1,911 | 1,110 | 3,642 |
| Real Estate | 121 | 853 | 188 | 684 | 422 | 912 | 625 | 2,159 |
| Machinery | 307 | 1,512 | 270 | 164 | 249 | 673 | 417 | 1,012 |
| Other & Livestock | 75 | 561 | 12 | 305 | 37 | 326 | 67 | 470 |
| Debt/Asset Ratios | | | | | | | | |
| Total | 0.14 | 0.13 | 0.20 | 0.11 | 0.21 | 0.16 | 0.22 | 0.18 |
| Intermediate | 0.13 | 0.13 | 0.22 | 0.04 | 0.30 | 0.16 | 0.30 | 0.22 |
| Long Run | 0.16 | 0.14 | 0.16 | 0.16 | 0.15 | 0.15 | 0.16 | 0.16 |
| Number of Livestock | | | | | | | | |
| Beef Cows | 0 | 0 | 20 | 125 | 50 | 0 | 0 | 0 |
| 1999 Gross Receipts ($1,000)* | | | | | | | | |
| Total | 399.3 | 1,587.4 | 357.2 | 401.2 | 213.6 | 539.9 | 419.2 | 1,032.8 |
| Cattle | 0.0 | 0.0 | 7.3 | 101.9 | 20.1 | 0.0 | 0.0 | 0.0 |
| | 0.00% | 0.00% | 2.00% | 25.40% | 9.40% | 0.00% | 0.00% | 0.00% |
| Corn | 286.3 | 1,258.3 | 101.3 | 152.0 | 89.4 | 296.6 | 166.4 | 315.6 |
| | 71.70% | 79.30% | 28.40% | 37.90% | 41.90% | 54.90% | 39.70% | 30.60% |
| Sorghum | 43.6 | 52.9 | 115.1 | 36.2 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 10.90% | 3.30% | 32.20% | 9.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Wheat | 69.3 | 177.9 | 27.6 | 39.3 | 34.5 | 115.4 | 107.6 | 230.1 |
| | 17.40% | 11.20% | 7.70% | 9.80% | 16.20% | 21.40% | 25.70% | 22.30% |
| Soybeans | 0.0 | 0.0 | 0.0 | 0.0 | 53.0 | 125.2 | 121.8 | 273.2 |
| | 0.00% | 0.00% | 0.00% | 0.00% | 24.80% | 23.20% | 29.00% | 26.50% |
| Cotton | 0.0 | 0.0 | 105.8 | 0.0 | 0.0 | 0.0 | 0.0 | 165.9 |
| | 0.00% | 0.00% | 29.60% | 0.00% | 0.00% | 0.00% | 0.00% | 16.10% |
| Hay | 0.0 | 0.0 | 0.0 | 0.0 | 8.5 | 0.0 | 0.0 | 0.0 |
| | 0.00% | 0.00% | 0.00% | 0.00% | 4.00% | 0.00% | 0.00% | 0.00% |
| Oats | 0.0 | 0.0 | 0.0 | 23.2 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.00% | 0.00% | 0.00% | 5.80% | 0.00% | 0.00% | 0.00% | 0.00% |
| Other Receipts | 0.0 | 16.3 | 0.0 | 48.7 | 7.0 | 0.0 | 20.3 | 40.9 |
| | 0.00% | 1.00% | 0.00% | 12.10% | 3.30% | 0.00% | 4.90% | 4.00% |
| 1999 Planted Acres** | | | | | | | | |
| Total | 1,600.0 | 6,030.0 | 2,150.0 | 2,500.0 | 1,350.0 | 3,000.0 | 2,250.0 | 5,169.5 |
| Corn | 800.0 | 3,350.0 | 600.0 | 750.0 | 400.0 | 1,200.0 | 600.0 | 1,130.5 |
| | 50.00% | 55.60% | 27.90% | 30.00% | 29.60% | 40.00% | 26.70% | 21.90% |
| Sorghum | 240.0 | 335.0 | 750.0 | 250.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 15.00% | 5.60% | 34.90% | 10.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Wheat | 528.0 | 1,675.0 | 250.0 | 250.0 | 200.0 | 600.0 | 750.0 | 1,669.5 |
| | 33.00% | 27.80% | 11.60% | 10.00% | 14.80% | 20.00% | 33.30% | 32.30% |
| Soybeans | 0.0 | 0.0 | 0.0 | 0.0 | 500.0 | 1,200.0 | 900.0 | 2,019.5 |
| | 0.00% | 0.00% | 0.00% | 0.00% | 37.00% | 40.00% | 40.00% | 39.10% |
| Cotton | 0.0 | 0.0 | 400.0 | 0.0 | 0.0 | 0.0 | 0.0 | 350.0 |
| | 0.00% | 0.00% | 18.60% | 0.00% | 0.00% | 0.00% | 0.00% | 6.80% |
| Fallow | 32.0 | 670.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 2.00% | 11.10% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Hay | 0.0 | 0.0 | 0.0 | 0.0 | 250.0 | 0.0 | 0.0 | 0.0 |
| | 0.00% | 0.00% | 0.00% | 0.00% | 18.50% | 0.00% | 0.00% | 0.00% |
| Oats | 0.0 | 0.0 | 0.0 | 625.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.00% | 0.00% | 0.00% | 25.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Improved Pasture | 0.0 | 0.0 | 150.0 | 625.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.00% | 0.00% | 7.00% | 25.00% | 0.00% | 0.00% | 0.00% | 0.00% |

*Receipts for 1999 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 1999 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.

## 1999 CHARACTERISTICS OF PANEL FARMS PRODUCING WHEAT

**WAW1500** A 1,500-acre Southeastern Washington (Whitman County) moderate size grain farm that plants 900 acres of wheat, 300 acres of barley, and 300 acres of dry peas. Disease problems require a rotation that includes a minimum amount of barley and peas to maintain wheat yields. The farm generates 69 percent of its receipts from wheat .

**WAW4250** A 4,250-acre Southeastern Washington (Whitman County) large size grain farm that is harvesting 2,763 acres of wheat, 200 acres of barley, and 1,288 acres of peas. Disease problems require a rotation that includes a minimum amount of barley and peas in order to maintain wheat yields. Winter and spring wheat account for 72 percent of receipts.

**NDW1760** A 1,760-acre South Central North Dakota (Barnes County) moderate size grain farm that has 704 acres of wheat, 176 acres of barley, 176 acres of corn, 352 acres of soybeans, and 352 acres of sunflowers. The farm receives about 51 percent of receipts from small grains of wheat and barley.

**NDW4850** A 4,850-acre South Central North Dakota (Barnes County) large grain farm that plants 2,585 acres of wheat, 470 acres of barley, 705 acres of soybeans, 940 acres of sunflowers, and 150 acres of CRP. Wheat accounts for about 55 percent of the farms total gross receipts with barley contributing another 12 percent.

**KSSW1385** A 1,385-acre South Central Kansas (Sumner County) moderate size grain farm that plants 928 acres of wheat, 138 acres of soybeans, and 319 acres of grain-sorghum. The farm generates about 69 percent of its receipts from wheat.

**KSSW3180** A 3,180-acre South Central Kansas (Sumner County) large grain farm harvesting 2,258 acres of wheat, 652 acres of grain sorghum, 56 acres of corn, 87 acres of soybeans, and 127 acres of hay. The farm also has 67 breeding cows. The farm generates 69 percent of its receipts from wheat.

**KSNW2325** A 2,325-acre North Western Kansas (Thomas County) moderate size grain farm that plants 775 acres of wheat, 155 acres of grain sorghum, 620 acres of corn, and has 775 acres of fallow. The farm generates 41 percent of its receipts from wheat.

**KSNW4300** A 4,300-acre North Western Kansas (Thomas County) large grain farm harvesting 1,948 acres of wheat, 465 acres of sorghum, 549 acres of corn, 262 acres of sunflowers, 75 acres of hay, and 1,001 acres of fallow. The farm also has 100 breeding cows. The farm generates about 47 percent of its receipts from wheat.

**COW2700** A 2,700-acre Northeast Colorado (Washington County) moderate size grain farm that plants 1,127 acres of wheat, 608 acres of millet, and 446 acres of corn, and will leave 519 acres fallow. The farm generates 49 percent of its receipts from wheat.

**COW5440** A 5,440-acre Northeast Colorado (Washington County) large size grain farm that plants 1,900 acres of wheat, 500 acres of corn, 1,300 acres of millet, 640 acres of CRP, and 1,100 acres in fallow. Wheat produces 58 percent of the farms gross revenue.

Appendix Table A3. Characteristics of Panel Farms Producing Wheat.

| | WAW1500 | WAW4250 | NDW1760 | NDW4850 | KSSW1385 | KSSW3180 | KSNW2325 | KSNW4300 | COW2700 | COW5440 |
|---|---|---|---|---|---|---|---|---|---|---|
| County | Whitman | Whitman | Barnes | Barnes | Sumner | Sumner | Thomas | Thomas | Washington | Washington |
| Total Cropland | 1,500 | 4,250 | 1,760 | 4,850 | 1,385 | 3,180 | 2,325 | 4,300 | 2,700 | 5,440 |
| Acres Owned | 750 | 2,125 | 176 | 1,701 | 485 | 330 | 930 | 1,147 | 837 | 3,020 |
| Acres Leased | 750 | 2,125 | 1,584 | 3,149 | 900 | 2,850 | 1,395 | 3,153 | 1,863 | 2,420 |
| Pastureland | | | | | | | | | | |
| Acres Owned | 0 | 0 | 0 | 0 | 0 | 25 | 500 | 500 | 0 | 0 |
| Acres Leased | 0 | 0 | 0 | 0 | 0 | 775 | 500 | 500 | 0 | 0 |
| Assets ($1000) | | | | | | | | | | |
| Total | 1,612 | 4,424 | 478 | 2,572 | 736 | 1,435 | 1,220 | 1,720 | 799 | 2,352 |
| Real Estate | 1,028 | 2,968 | 136 | 957 | 426 | 434 | 730 | 902 | 456 | 1,539 |
| Machinery | 522 | 1,195 | 253 | 1,116 | 222 | 580 | 414 | 534 | 217 | 635 |
| Other & Livestock | 62 | 261 | 89 | 499 | 87 | 420 | 76 | 284 | 126 | 178 |
| Debt/Asset Ratios | | | | | | | | | | |
| Total | 0.20 | 0.18 | 0.13 | 0.15 | 0.18 | 0.09 | 0.20 | 0.12 | 0.14 | 0.15 |
| Intermediate | 0.28 | 0.26 | 0.12 | 0.15 | 0.23 | 0.05 | 0.27 | 0.07 | 0.13 | 0.16 |
| Long Run | 0.16 | 0.14 | 0.16 | 0.17 | 0.16 | 0.18 | 0.15 | 0.15 | 0.15 | 0.15 |
| Number of Livestock | | | | | | | | | | |
| Beef Cows | 0 | 0 | 0 | 0 | 0 | 67 | 0 | 100 | 0 | 0 |
| 1999 Gross Receipts ($1,000)* | | | | | | | | | | |
| Total | 256.4 | 685.6 | 238.4 | 678.8 | 154.3 | 330.8 | 247.5 | 515.4 | 268.1 | 483.1 |
| Cattle | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 28.8 | 5.1 | 37.6 | 0.0 | 0.0 |
| | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 8.70% | 2.10% | 7.30% | 0.00% | 0.00% |
| Wheat | 176.4 | 492.1 | 95.1 | 371.2 | 106.0 | 228.9 | 101.3 | 244.1 | 130.7 | 281.9 |
| | 68.80% | 71.80% | 39.90% | 54.70% | 68.70% | 69.20% | 40.90% | 47.40% | 48.80% | 58.40% |
| Sorghum | 0.0 | 0.0 | 0.0 | 0.0 | 36.8 | 50.5 | 25.7 | 59.4 | 0.0 | 0.0 |
| | 0.00% | 0.00% | 0.00% | 0.00% | 23.80% | 15.30% | 10.40% | 11.50% | 0.00% | 0.00% |
| Barley | 40.6 | 31.3 | 27.2 | 84.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 15.80% | 4.60% | 11.40% | 12.40% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Corn | 0.0 | 0.0 | 30.7 | 0.0 | 0.0 | 4.9 | 97.5 | 151.2 | 66.5 | 66.7 |
| | 0.00% | 0.00% | 12.90% | 0.00% | 0.00% | 1.50% | 39.40% | 29.30% | 24.80% | 13.80% |
| Soybeans | 0.0 | 0.0 | 65.1 | 153.2 | 11.3 | 6.7 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.00% | 0.00% | 27.30% | 22.60% | 7.40% | 2.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Dry Peas | 39.4 | 162.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 15.40% | 23.70% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Sunflowers | 0.0 | 0.0 | 18.0 | 56.4 | 0.0 | 0.0 | 0.0 | 20.8 | 0.0 | 0.0 |
| | 0.00% | 0.00% | 7.50% | 8.30% | 0.00% | 0.00% | 0.00% | 4.00% | 0.00% | 0.00% |
| Millet | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 66.6 | 104.7 |
| | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 24.90% | 21.70% |
| Hay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 10.8 | 0.0 | 0.1 | 0.0 | 0.0 |
| | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 3.30% | 0.00% | 0.00% | 0.00% | 0.00% |
| Other Receipts | 0.0 | 0.0 | 0.0 | 9.3 | 0.0 | 0.0 | 18.0 | 1.5 | 4.3 | 29.8 |
| | 0.00% | 0.00% | 0.00% | 1.40% | 0.00% | 0.00% | 7.30% | 0.30% | 1.60% | 6.20% |
| 1999 Planted Acres** | | | | | | | | | | |
| Total | 1,500.0 | 4,250.0 | 1,760.0 | 4,850.0 | 1,385.0 | 3,180.0 | 2,325.0 | 4,300.0 | 2,700.0 | 5,440.0 |
| Wheat | 900.0 | 2,762.5 | 704.0 | 2,585.0 | 928.0 | 2,258.0 | 775.0 | 1,948.0 | 1,127.0 | 1,900.0 |
| | 60.00% | 65.00% | 40.00% | 53.30% | 67.00% | 71.00% | 33.30% | 45.30% | 41.70% | 34.90% |
| Sorghum | 0.0 | 0.0 | 0.0 | 0.0 | 319.0 | 652.0 | 155.0 | 465.0 | 0.0 | 0.0 |
| | 0.00% | 0.00% | 0.00% | 0.00% | 23.00% | 20.50% | 6.70% | 10.80% | 0.00% | 0.00% |
| Barley | 300.0 | 200.0 | 176.0 | 470.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 20.00% | 4.70% | 10.00% | 9.70% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Corn | 0.0 | 0.0 | 176.0 | 0.0 | 0.0 | 56.0 | 620.0 | 549.0 | 446.0 | 500.0 |
| | 0.00% | 0.00% | 10.00% | 0.00% | 0.00% | 1.80% | 26.70% | 12.80% | 16.50% | 9.20% |
| Soybeans | 0.0 | 0.0 | 352.0 | 705.0 | 138.0 | 87.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.00% | 0.00% | 20.00% | 14.50% | 10.00% | 2.70% | 0.00% | 0.00% | 0.00% | 0.00% |
| Dry Peas | 300.0 | 1,287.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 20.00% | 30.30% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Sunflowers | 0.0 | 0.0 | 352.0 | 940.0 | 0.0 | 0.0 | 0.0 | 262.0 | 0.0 | 0.0 |
| | 0.00% | 0.00% | 20.00% | 19.40% | 0.00% | 0.00% | 0.00% | 6.10% | 0.00% | 0.00% |
| Millet | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 608.0 | 1,300.0 |
| | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 22.50% | 23.90% |
| Hay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 127.0 | 0.0 | 75.0 | 0.0 | 0.0 |
| | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 4.00% | 0.00% | 1.70% | 0.00% | 0.00% |
| Fallow | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 775.0 | 1,001.0 | 519.0 | 1,100.0 |
| | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 33.30% | 23.30% | 19.20% | 20.20% |
| CRP | 0.0 | 0.0 | 0.0 | 150.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 640.0 |
| | 0.00% | 0.00% | 0.00% | 3.10% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 11.80% |

*Receipts for 1999 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 1999 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.

## 1999 CHARACTERISTICS OF PANEL FARMS PRODUCING COTTON

**CAC2000** A 2,000-acre Central San Joaquin Valley California (Kings County) moderate size cotton farm that plants 600 acres of cotton, 600 acres of wheat, 400 acres of corn, and 600 acres of hay. The farm generates 54 percent of its gross income from cotton.

**CAC6000** A 6,000-acre Central San Joaquin Valley California (Kings County) large cotton farm harvesting 2,400 acres of cotton, 2,100 acres of vegetables, 600 acres of wheat, 300 acres of corn, and 600 acres of hay. Vegetables on this farm vary from year to year depending on the price of the particular vegetable, however, the returns to this 1,500 acres remain relatively stable over time. Cotton generates about 40 percent of this farm's receipts.

**TXSP1682** A 1,682-acre Texas Southern High Plains (Dawson County) moderate size cotton farm plants 1,185 acres of cotton (866 dryland and 319 irrigated), 196 acres of peanuts, and has 183 acres in CRP. This farm is just now starting to adopt the irrigation practices of its larger counterpart. The farm generates 58 percent of its receipts from cotton.

**TXSP3697** A 3,697-acre Texas Southern High Plains (Dawson County) large cotton farm plants 2,665 acres of cotton (2,095 dryland and 570 irrigated), 285 acres of peanuts, and has 214 acres in CRP. Cotton generates 72 percent of this farm's receipts.

**TXRP2500** A 2,500-acre Texas Rolling Plains (Jones County) cotton farm that plants 1,240 acres of cotton, and 825 acres of wheat. About 65 percent of this farm's receipts are derived from cotton.

**TXBC1400** A 1,400-acre Texas Blacklands (Williamson County) moderate size cotton and grain farm has 350 acres of cotton, 400 acres of sorghum, 550 acres of corn, and 100 acres of wheat. This farm also has 50 breeding cows which are pastured on rented land that cannot be cropped. Cotton generates 44 percent of the farms receipts.

**TXCB1700** A 1,700-acre Texas Coastal Bend (San Patricio County) cotton farm has 765 acres of cotton and 935 acres of grain sorghum. Severe disease problems force this farm to plant at a minimum 50 percent of the land to grain sorghum. About 74 percent of the receipts are cotton receipts.

**TNC1675** A 1,675-acre Southwest Tennessee (Fayette County) cotton farm has 838 acres of cotton, 670 acres of soybeans, and 168 acres of corn. The farm generates about 74 percent of its cash receipts from cotton.

**TNC3800** A 3,800-acre Southwest Tennessee (Haywood County) cotton farm has 2,508 acres of cotton, 760 acres of soybeans, 300 acres of wheat, and 532 acres of corn. The farm generates about 79 percent of its cash receipts from cotton.

Appendix Table A4. Characteristics of Panel Farms Producing Cotton.

| | CAC2000 | CAC6000 | TXSP1682 | TXSP3697 | TXRP2500 | TXBC1400 | TXCB1700 | TNC1675 | TNC3800 |
|---|---|---|---|---|---|---|---|---|---|
| County | Kings | Kings | Dawson | Dawson | Jones | Williamson | San Patricio | Fayette | Haywood |
| Total Cropland | 2,000 | 6,000 | 1,682 | 3,697 | 2,500 | 1,400 | 1,700 | 1,675 | 3,800 |
| Acres Owned | 1,000 | 4,800 | 606 | 1,627 | 400 | 150 | 300 | 225 | 1,520 |
| Acres Leased | 1,000 | 1,200 | 1,076 | 2,070 | 2,100 | 1,250 | 1,400 | 1,450 | 2,280 |
| Pastureland | | | | | | | | | |
| Acres Owned | 0 | 0 | 0 | 0 | 0 | 30 | 0 | 0 | 0 |
| Acres Leased | 0 | 0 | 0 | 0 | 500 | 210 | 0 | 0 | 0 |
| Assets ($1000) | | | | | | | | | |
| Total | 5,014 | 14,294 | 742 | 1,828 | 350 | 664 | 556 | 896 | 4,584 |
| Real Estate | 3,638 | 12,880 | 365 | 781 | 168 | 329 | 295 | 586 | 2,879 |
| Machinery | 505 | 9 | 377 | 758 | 176 | 243 | 261 | 310 | 1,490 |
| Other & Livestock | 872 | 1,406 | 0 | 289 | 7 | 92 | 0 | 0 | 214 |
| Debt/Asset Ratios | | | | | | | | | |
| Total | 0.13 | 0.14 | 0.18 | 0.17 | 0.27 | 0.11 | 0.26 | 0.23 | 0.18 |
| Intermediate | 0.06 | 0.00 | 0.22 | 0.18 | 0.37 | 0.07 | 0.37 | 0.37 | 0.21 |
| Long Run | 0.16 | 0.15 | 0.14 | 0.14 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 |
| Number of Livestock | | | | | | | | | |
| Beef Cows | 0 | 0 | 0 | 0 | 0 | 50 | 0 | 0 | 0 |
| 1999 Gross Receipts ($1,000)* | | | | | | | | | |
| Total | 1,690.3 | 8,027.0 | 499.2 | 980.8 | 203.1 | 294.5 | 564.2 | 377.3 | 1,110.2 |
| Cattle | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 17.1 | 0.0 | 0.0 | 0.0 |
| | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 5.80% | 0.00% | 0.00% | 0.00% |
| Cotton | 914.1 | 3,232.8 | 287.5 | 708.6 | 132.3 | 130.6 | 417.5 | 280.4 | 881.0 |
| | 54.10% | 40.30% | 57.60% | 72.20% | 65.10% | 44.40% | 74.00% | 74.30% | 79.40% |
| Sorghum | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 54.9 | 132.1 | 0.0 | 0.0 |
| | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 18.60% | 23.40% | 0.00% | 0.00% |
| Wheat | 200.4 | 296.9 | 0.0 | 0.0 | 46.0 | 7.1 | 0.0 | 0.0 | 46.9 |
| | 11.90% | 3.70% | 0.00% | 0.00% | 22.60% | 2.40% | 0.00% | 0.00% | 4.20% |
| Soybeans | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 59.1 | 65.3 |
| | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 15.70% | 5.90% |
| Corn | 207.4 | 92.8 | 0.0 | 0.0 | 0.0 | 79.8 | 0.0 | 36.4 | 108.2 |
| | 12.30% | 1.20% | 0.00% | 0.00% | 0.00% | 27.10% | 0.00% | 9.60% | 9.70% |
| Hay | 368.5 | 430.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 21.80% | 5.40% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Quota Peanuts | 0.0 | 0.0 | 76.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.00% | 0.00% | 15.40% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Additional Peanuts | 0.0 | 0.0 | 89.5 | 192.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.00% | 0.00% | 17.90% | 19.60% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Other Receipts | 0.0 | 3,974.0 | 39.6 | 75.3 | 24.8 | 5.0 | 14.6 | 0.0 | 7.0 |
| | 0.00% | 49.50% | 7.90% | 7.70% | 12.20% | 1.70% | 2.60% | 0.00% | 0.60% |
| 1999 Planted Acres** | | | | | | | | | |
| Total | 2,200.0 | 6,000.0 | 1,564.0 | 3,164.0 | 2,065.0 | 1,400.0 | 1,700.0 | 1,675.0 | 4,100.0 |
| Cotton | 600.0 | 2,400.0 | 1,185.0 | 2,665.0 | 1,240.0 | 350.0 | 765.0 | 837.5 | 2,508.0 |
| | 27.30% | 40.00% | 75.80% | 84.20% | 60.00% | 25.00% | 45.00% | 50.00% | 61.20% |
| Sorghum | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 400.0 | 935.0 | 0.0 | 0.0 |
| | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 28.60% | 55.00% | 0.00% | 0.00% |
| Wheat | 600.0 | 600.0 | 0.0 | 0.0 | 825.0 | 100.0 | 0.0 | 0.0 | 300.0 |
| | 27.30% | 10.00% | 0.00% | 0.00% | 40.00% | 7.10% | 0.00% | 0.00% | 7.30% |
| Soybeans | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 670.0 | 760.0 |
| | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 40.00% | 18.50% |
| Corn | 400.0 | 300.0 | 0.0 | 0.0 | 0.0 | 550.0 | 0.0 | 167.5 | 532.0 |
| | 18.20% | 5.00% | 0.00% | 0.00% | 0.00% | 39.30% | 0.00% | 10.00% | 13.00% |
| Hay | 600.0 | 600.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 27.30% | 10.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Quota Peanuts | 0.0 | 0.0 | 65.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.00% | 0.00% | 4.20% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Additional Peanuts | 0.0 | 0.0 | 131.0 | 285.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.00% | 0.00% | 8.40% | 9.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Vegetables | 0.0 | 2,100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.00% | 35.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| CRP | 0.0 | 0.0 | 183.0 | 214.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.00% | 0.00% | 11.70% | 6.80% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |

*Receipts for 1999 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 1999 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.

## 1999 CHARACTERISTICS OF PANEL FARMS PRODUCING RICE

**CAR424** A 424-acre Sacramento Valley California (Sutter and Yuba Counties) moderate size rice farm that plants 400 acres of rice. The farm generates 94 percent of its gross income from rice.

**CAR1365** A 1,365-acre Sacramento Valley California (Sutter and Yuba Counties) large rice farm that plants 1,265 acres of rice. The farm generates about 98 percent of its gross income from rice.

**TXR2118** A 2,118-acre West of Houston, Texas (Wharton County) moderate size rice farm that harvests 600 acres of first crop rice, and 510 acres of ratoon rice. The farm receives 98 percent of its gross receipts from rice.

**TXR3750** A 3,750-acre West of Houston, Texas (Wharton County) large rice farm that harvests 1,500 acres of first-crop rice, 1,275 acres of ratoon rice, and 200 acres of hay. The farm also has 200 breeding cows. About 95 percent of the farm's gross receipts are from rice.

**MOR1900** A 1,900-acre Southeastern Missouri (Butler County) moderate size rice farm with 616 acres of rice, 650 acres of soybeans, and 633 acres of corn. Rice accounts for 50 percent of this farm's receipts.

**MOR4000** A 4,000-acre Southeastern Missouri (Butler County) large rice farm with l,710 acres of rice, 800 acre soybeans, 1,250 acres of corn, and 240 acres of cotton. About 55 percent of this farm's receipts are generated from rice.

**ARR2645** A 2,645-acre Arkansas (Arkansas County) moderate size rice farm with 175 acres of medium grain rice, 512 acres of long grain rice, 958 acres of soybeans, 230 acres of corn, and 450 acres of wheat. About 49 percent of the farm's receipts come from rice.

**ARR3400** A 3,400-acre Arkansas (Arkansas County) moderate size rice farm with 325 acres of medium grain rice, 975 acres of long grain rice, 1,700 acres of soybeans, and 500 acres of wheat. About 60 percent of the farm's receipts come from rice.

**LAR1100** A 1,100-acre Louisiana (Jefferson Davis, Acadia, and Vermilion Parishes) moderate size rice farm harvesting 189 acres of medium grain rice, 351 acres of long grain rice, 362 acres of soybeans, and 198 acres of fallow. About 85 percent of this farm's receipts are generated by rice.

Appendix Table A5. Characteristics of Panel Farms Producing Rice.

| | CAR424 | CAR1365 | TXR2118 | TXR3750 | MOR1900 | MOR4000 | ARR2645 | ARR3400 | LAR1100 |
|---|---|---|---|---|---|---|---|---|---|
| County | Sutter | Sutter | Wharton | Wharton | Butler | Butler | Arkansas | Arkansas | Acadia |
| Total Cropland | 424 | 1,365 | 2,118 | 3,750 | 1,900 | 4,000 | 2,645 | 3,400 | 1,100 |
| Acres Owned | 212 | 515 | 318 | 1,688 | 380 | 2,000 | 815 | 1,020 | 50 |
| Acres Leased | 212 | 850 | 1,800 | 2,062 | 1,520 | 2,000 | 1,830 | 2,380 | 1,050 |
| Pastureland | | | | | | | | | |
| Acres Owned | 0 | 0 | 0 | 200 | 0 | 0 | 0 | 0 | 0 |
| Assets ($1000) | | | | | | | | | |
| Total | 826 | 2,190 | 747 | 2,476 | 1,648 | 6,568 | 2,291 | 3,827 | 394 |
| Real Estate | 495 | 1,476 | 218 | 1,260 | 911 | 4,313 | 1,167 | 1,946 | 83 |
| Machinery | 287 | 569 | 296 | 702 | 738 | 1,973 | 628 | 1,120 | 275 |
| Other & Livestock | 44 | 145 | 233 | 515 | 0 | 282 | 496 | 760 | 37 |
| Debt/Asset Ratios | | | | | | | | | |
| Total | 0.21 | 0.14 | 0.08 | 0.14 | 0.23 | 0.23 | 0.13 | 0.14 | 0.26 |
| Intermediate | 0.27 | 0.08 | 0.05 | 0.12 | 0.33 | 0.37 | 0.10 | 0.13 | 0.29 |
| Long Run | 0.16 | 0.17 | 0.16 | 0.15 | 0.16 | 0.16 | 0.15 | 0.15 | 0.16 |
| Number of Livestock | | | | | | | | | |
| Beef Cows | 0 | 0 | 0 | 200 | 0 | 0 | 0 | 0 | 0 |
| 1999 Gross Receipts ($1,000)* | | | | | | | | | |
| Total | 299.7 | 916.2 | 462.1 | 1,311.1 | 565.1 | 1,636.8 | 702.6 | 1,018.8 | 286.0 |
| Cattle | 0.0 | 0.0 | 0.0 | 48.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.00% | 0.00% | 0.00% | 3.70% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Medium Grain Rice | 281.4 | 896.6 | 0.0 | 0.0 | 0.0 | 0.0 | 123.8 | 174.4 | 85.6 |
| | 93.90% | 97.90% | 0.00% | 0.00% | 0.00% | 0.00% | 17.60% | 17.10% | 29.90% |
| Long Grain Rice | 0.0 | 0.0 | 455.1 | 1,242.7 | 279.7 | 898.5 | 218.9 | 441.2 | 158.9 |
| | 0.00% | 0.00% | 98.50% | 94.80% | 49.50% | 54.90% | 31.20% | 43.30% | 55.60% |
| Soybeans | 0.0 | 0.0 | 0.0 | 0.0 | 92.5 | 141.9 | 188.7 | 283.7 | 37.3 |
| | 0.00% | 0.00% | 0.00% | 0.00% | 16.40% | 8.70% | 26.90% | 27.80% | 13.00% |
| Corn | 0.0 | 0.0 | 0.0 | 0.0 | 190.2 | 445.8 | 59.0 | 0.0 | 0.0 |
| | 0.00% | 0.00% | 0.00% | 0.00% | 33.70% | 27.20% | 8.40% | 0.00% | 0.00% |
| Wheat | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 103.1 | 108.5 | 0.0 |
| | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 14.70% | 10.70% | 0.00% |
| Cotton | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 147.9 | 0.0 | 0.0 | 0.0 |
| | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 9.00% | 0.00% | 0.00% | 0.00% |
| Other Receipts | 18.3 | 19.6 | 7.0 | 20.0 | 0.0 | 0.0 | 4.8 | 1.2 | 3.0 |
| | 6.10% | 2.10% | 1.50% | 1.50% | 0.00% | 0.00% | 0.70% | 0.10% | 1.00% |
| 1999 Planted Acres** | | | | | | | | | |
| Total | 400.0 | 1,265.0 | 1,110.2 | 2,975.0 | 1,899.0 | 4,000.0 | 2,325.0 | 3,500.0 | 1,100.0 |
| Medium Grain Rice | 400.0 | 1,265.0 | 0.0 | 0.0 | 0.0 | 0.0 | 175.0 | 325.0 | 189.1 |
| | 100.00% | 100.00% | 0.00% | 0.00% | 0.00% | 0.00% | 7.50% | 9.30% | 17.20% |
| Long Grain Rice | 0.0 | 0.0 | 1,110.2 | 2,775.0 | 616.0 | 1,710.0 | 512.0 | 975.0 | 350.9 |
| | 0.00% | 0.00% | 100.00% | 93.30% | 32.40% | 42.80% | 22.00% | 27.90% | 31.90% |
| Soybeans | 0.0 | 0.0 | 0.0 | 0.0 | 650.0 | 800.0 | 958.0 | 1,700.0 | 361.9 |
| | 0.00% | 0.00% | 0.00% | 0.00% | 34.20% | 20.00% | 41.20% | 48.60% | 32.90% |
| Corn | 0.0 | 0.0 | 0.0 | 0.0 | 633.0 | 1,250.0 | 230.0 | 0.0 | 0.0 |
| | 0.00% | 0.00% | 0.00% | 0.00% | 33.30% | 31.30% | 9.90% | 0.00% | 0.00% |
| Wheat | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 450.0 | 500.0 | 0.0 |
| | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 19.40% | 14.30% | 0.00% |
| Cotton | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 240.0 | 0.0 | 0.0 | 0.0 |
| | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 6.00% | 0.00% | 0.00% | 0.00% |
| Hay | 0.0 | 0.0 | 0.0 | 200.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.00% | 0.00% | 0.00% | 6.70% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Fallow | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 198.1 |
| | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 18.00% |

*Receipts for 1999 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 1999 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.

## 1999 CHARACTERISTICS OF PANEL FARMS PRODUCING MILK

**CAD1710** A 1,710-cow Central California (Tulare County) large dairy farm that produces 22,800 pounds of milk per cow. The farm plants 200 acres of hay, and 325 acres of silage for which it employs custom harvesting. Milk receipts generate 94 percent of all receipts.

**NMD2000** A 2,000-cow Southern New Mexico (Dona Anna and Chaves County) large dairy farm that averages 20,000 pounds per cow. Rather than plant any crops, this farm purchased all commodities necessary for blending its own total mixed ration. Milk sales account for 93 percent of cash receipts.

**WAD185** A 185-cow Northern Washington (Whatcom County) moderate size dairy farm that produces 23,900 pounds of milk per cow. The farm plants 115 acres of silage and generates 95 percent of its receipts from milk.

**WAD900** A 900-cow Northern Washington (Whatcom County) large dairy farm that produces 24,400 pounds of milk per cow. The farm plants 605 acres of silage and generates 95 percent of its receipts from milk.

**IDD750** A 750-cow Idaho (Twin Falls County) moderate size dairy farm that produces 22,300 pounds of milk per cow. The farm plants no crops. Milk is 89 percent of the farms gross income.

**IDD2100** A 2,100-cow Idaho (Twin Falls County) large dairy farm that produces 22,800 pounds of milk per cow. The farm plants 160 acres of hay and 400 acres of silage. Milk is 92 percent of the farms gross income.

**TXCD400** A 400-cow Central Texas (Erath County) moderate size dairy farm that produces 18,500 pounds of milk per cow. The farm plants 330 acres of hay. Milk is 90 percent of the farms gross income.

**TXCD825** A 825-cow Central Texas (Erath County) large dairy farm that produces 21,000 pounds of milk per cow. The farm plants 430 acres for silage, 20 acres of haylage, and milk accounts for 93 percent of receipts.

**TXED210** A 210-cow East Texas (Hopkins County) moderate size dairy farm that produces 16,700 pounds of milk per cow. The farm plants 195 acres of hay and generates 87 percent of its receipts from milk.

**TXED650** A 650-cow East Texas (Lamar County) large dairy farm that produces 18,000 pounds of milk per cow. The farm plants 140 acres of hay and 360 acres of silage. The farm generates 91 percent of its receipts from milk.

Appendix Table A6. Characteristics of Panel Farms Producing Milk.

| | CAD1710 | NMD2000 | WAD185 | WAD900 | IDD750 | IDD2100 | TXCD400 | TXCD825 | TXED210 | TXED650 |
|---|---|---|---|---|---|---|---|---|---|---|
| County | Tulare | Dona Ana | Whatcom | Whatcom | Twin Falls | Twin Falls | Erath | Erath | Hopkins | Lamar |
| Total Cropland | 800 | 300 | 120 | 605 | 120 | 620 | 165 | 460 | 250 | 500 |
| Acres Owned | 800 | 300 | 60 | 300 | 120 | 620 | 165 | 460 | 200 | 500 |
| Acres Leased | 0 | 0 | 60 | 305 | 0 | 0 | 0 | 0 | 50 | 0 |
| Pastureland | | | | | | | | | | |
| Acres Owned | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 300 |
| Assets ($1000) | | | | | | | | | | |
| Total | 11,609 | 5,739 | 1,512 | 5,431 | 3,773 | 12,529 | 1,557 | 4,920 | 1,075 | 2,926 |
| Real Estate | 6,356 | 2,707 | 574 | 2,490 | 1,392 | 4,360 | 829 | 1,636 | 398 | 1,007 |
| Machinery | 346 | 331 | 108 | 633 | 318 | 531 | 162 | 388 | 123 | 411 |
| Other & Livestock | 4,906 | 2,701 | 830 | 2,308 | 2,062 | 7,637 | 567 | 2,896 | 554 | 1,508 |
| Debt/Asset Ratios | | | | | | | | | | |
| Total | 0.13 | 0.14 | 0.10 | 0.12 | 0.06 | 0.06 | 0.37 | 0.09 | 0.12 | 0.12 |
| Intermediate | 0.00 | 0.03 | 0.02 | 0.02 | 0.00 | 0.00 | 0.50 | 0.00 | 0.04 | 0.06 |
| Long Run | 0.24 | 0.26 | 0.24 | 0.24 | 0.17 | 0.17 | 0.26 | 0.26 | 0.24 | 0.24 |
| 1999 Gross Receipts ($1,000)* | | | | | | | | | | |
| Total | 5,527.4 | 5,347.5 | 653.2 | 3,186.0 | 2,258.4 | 6,287.6 | 991.4 | 3,335.2 | 517.1 | 1,632.3 |
| Milk | 5,200.8 | 4,977.9 | 619.0 | 3,029.1 | 2,015.6 | 5,772.0 | 892.8 | 3,106.1 | 449.4 | 1,478.0 |
| | 94.10% | 93.10% | 94.80% | 95.10% | 89.20% | 91.80% | 90.10% | 93.10% | 86.90% | 90.50% |
| Dairy Cattle | 326.6 | 369.6 | 34.1 | 156.9 | 242.8 | 515.7 | 62.4 | 229.1 | 67.7 | 154.3 |
| | 5.90% | 6.90% | 5.20% | 4.90% | 10.80% | 8.20% | 6.30% | 6.90% | 13.10% | 9.50% |
| Hay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 36.2 | 0.0 | 0.0 | 0.0 |
| | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 3.70% | 0.00% | 0.00% | 0.00% |
| 1999 Planted Acres** | | | | | | | | | | |
| Total | 525.0 | 0.0 | 115.0 | 605.0 | 0.0 | 560.0 | 330.0 | 450.0 | 195.0 | 500.0 |
| Hay | 200.0 | 0.0 | 0.0 | 0.0 | 0.0 | 160.0 | 330.0 | 0.0 | 195.0 | 140.0 |
| | 38.10% | 0.00% | 0.00% | 0.00% | 0.00% | 28.60% | 100.00% | 0.00% | 100.00% | 28.00% |
| Silage | 325.0 | 0.0 | 115.0 | 605.0 | 0.0 | 400.0 | 0.0 | 430.0 | 0.0 | 360.0 |
| | 61.90% | 0.00% | 100.00% | 100.00% | 0.00% | 71.40% | 0.00% | 95.60% | 0.00% | 72.00% |
| Haylage | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 20.0 | 0.0 | 0.0 |
| | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 4.40% | 0.00% | 0.00% |

*Receipts for 1999 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 1999 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.

**1999 CHARACTERISTICS OF PANEL FARM PRODUCING MILK (CONTINUED)**

**WID70** A 70-cow Eastern Wisconsin (Winnebago County) moderate size dairy farm that produces 22,800 pounds of milk per cow. The farm plants 37 acres of hay, 55 acres of corn, 24 acres of silage, and 89 acres of haylage. Milk makes up 91 percent of this farm's receipts.

**WID600** A 600-cow Eastern Wisconsin (Winnebago County) large dairy farm that produces 20,700 pounds of milk per cow. The farm plants 222 acres of hay, 350 acres of silage, and 428 acres of haylage. Milk accounts for 94 percent of the farm's receipts.

**MIED200** A 200-cow Michigan (Sanilac County) moderate size dairy farm that produces 23,000 pounds of milk per cow. The farm plants 220 acres of corn, 50 acres of wheat, and 170 acres of silage. Milk accounts for 92 percent of the farm's receipts.

**MICD140** A 140-cow Michigan (Isabella County) moderate size dairy farm that produces 21,200 pounds of milk per cow. The farm plants 175 acres of corn, 70 acres of hay, 65 acres of silage, and 110 acres of haylage. Milk accounts for 86 percent of the farm's receipts.

**NYWD800** A 800-cow Western New York (Wyoming County) moderate size dairy farm that produces 22,700 pounds of milk per cow. The farm plants 575 acres of silage and 625 acres of haylage. About 94 percent of the farm's receipts come from milk.

**NYWD1200** A 1,200-cow Western New York (Wyoming County) large dairy farm that produces 21,600 pounds of milk per cow. The farm plants 825 acres of silage and 700 acres of haylage. Milk accounts for 95 percent of the farm's receipts.

**NYCD110** A 110-cow Central New York (Cayuga County) moderate size dairy farm that produces 23,000 pounds of milk per cow. The farm plants 80 acres of hay, 64 acres of corn, and 131 acres of silage. Milk accounts for 92 percent of the farms receipts.

**NYCD400** A 400-cow Central New York (Cayuga County) large dairy farm that produces 22,400 pounds of milk per cow. The farm plants 110 acres of hay, 260 acres of silage, and 470 acres of haylage. The farm generates 94 percent of its receipts from milk.

**VTD134** A 134-cow Vermont (Washington County) moderate size dairy farm that averages 19,000 pounds of milk per cow. The farm plants 46 acres of hay, 94 acres of silage, and 81 acres of haylage. Milk accounts for 91 percent of the receipts.

**VTD350** A 350-cow Vermont (Washington County) large dairy farm that averages 23,100 pounds of milk per cow. The farm plants 40 acres of hay, 350 acres of silage, and 310 acres of haylage. Milk accounts for 95 percent of the farm's receipts.

Appendix Table A7. Characteristics of Panel Farms Producing Milk.

| | WID70 | WID600 | MIED200 | MICD140 | NYWD800 | NYWD1200 | NYCD110 | NYCD400 | VTD134 | VTD350 |
|---|---|---|---|---|---|---|---|---|---|---|
| County | Winnebago | Winnebago | Sanilac | Isabella | Wyoming | Wyoming | Cayuga | Cayuga | Washington | Washington |
| Total Cropland | 245 | 1,000 | 590 | 510 | 1,200 | 1,800 | 296 | 850 | 220 | 700 |
| Acres Owned | 200 | 400 | 363 | 300 | 900 | 1,200 | 250 | 650 | 100 | 525 |
| Acres Leased | 45 | 600 | 227 | 210 | 300 | 600 | 46 | 200 | 120 | 175 |
| Pastureland | | | | | | | | | | |
| Acres Owned | 0 | 0 | 50 | 25 | 225 | 300 | 20 | 400 | 120 | 50 |
| Acres Leased | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 50 |
| Assets ($1000) | | | | | | | | | | |
| Total | 726 | 2,903 | 1,873 | 1,465 | 4,923 | 7,218 | 865 | 2,969 | 713 | 2,400 |
| Real Estate | 416 | 1,538 | 929 | 742 | 2,095 | 2,695 | 377 | 1,238 | 364 | 1,445 |
| Machinery | 140 | 336 | 324 | 281 | 669 | 913 | 90 | 380 | 170 | 395 |
| Other & Livestock | 169 | 1,028 | 619 | 442 | 2,159 | 3,610 | 398 | 1,351 | 179 | 560 |
| Debt/Asset Ratios | | | | | | | | | | |
| Total | 0.20 | 0.15 | 0.13 | 0.14 | 0.13 | 0.13 | 0.13 | 0.11 | 0.20 | 0.22 |
| Intermediate | 0.16 | 0.04 | 0.03 | 0.03 | 0.05 | 0.06 | 0.04 | 0.02 | 0.12 | 0.06 |
| Long Run | 0.24 | 0.25 | 0.23 | 0.25 | 0.24 | 0.24 | 0.24 | 0.24 | 0.27 | 0.33 |
| 1999 Gross Receipts ($1,000)* | | | | | | | | | | |
| Total | 249.1 | 1,853.5 | 631.2 | 427.5 | 2,696.6 | 4,088.5 | 364.6 | 1,347.7 | 409.9 | 1,239.5 |
| Milk | 227.5 | 1,749.9 | 583.2 | 367.2 | 2,542.4 | 3,888.5 | 334.8 | 1,270.6 | 371.5 | 1,180.1 |
| | 91.30% | 94.40% | 92.40% | 85.90% | 94.30% | 95.10% | 91.80% | 94.30% | 90.60% | 95.20% |
| Dairy Cattle | 20.8 | 103.6 | 41.6 | 50.1 | 154.2 | 200.0 | 29.8 | 77.1 | 37.0 | 59.4 |
| | 8.40% | 5.60% | 6.60% | 11.70% | 5.70% | 4.90% | 8.20% | 5.70% | 9.00% | 4.80% |
| Corn | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Soybeans | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.30% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Wheat | 0.0 | 0.0 | 6.5 | 10.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.00% | 0.00% | 1.00% | 2.40% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Other Receipts | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.5 | 0.0 |
| | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.40% | 0.00% |
| 1999 Planted Acres** | | | | | | | | | | |
| Total | 245.0 | 1,000.0 | 440.0 | 490.0 | 1,200.0 | 1,525.0 | 275.0 | 840.0 | 220.2 | 700.0 |
| Hay | 37.0 | 222.0 | 0.0 | 70.0 | 0.0 | 0.0 | 80.0 | 110.0 | 45.6 | 40.0 |
| | 15.10% | 22.20% | 0.00% | 14.30% | 0.00% | 0.00% | 29.10% | 13.10% | 20.70% | 5.70% |
| Silage | 24.0 | 350.0 | 170.0 | 65.0 | 575.0 | 825.0 | 131.0 | 260.0 | 93.8 | 350.0 |
| | 9.80% | 35.00% | 38.60% | 13.30% | 47.90% | 54.10% | 47.60% | 31.00% | 42.60% | 50.00% |
| Haylage | 89.0 | 428.0 | 0.0 | 110.0 | 625.0 | 700.0 | 0.0 | 470.0 | 80.8 | 310.0 |
| | 36.30% | 42.80% | 0.00% | 22.40% | 52.10% | 45.90% | 0.00% | 56.00% | 36.70% | 44.30% |
| Corn | 55.0 | 0.0 | 220.0 | 175.0 | 0.0 | 0.0 | 64.0 | 0.0 | 0.0 | 0.0 |
| | 22.40% | 0.00% | 50.00% | 35.70% | 0.00% | 0.00% | 23.30% | 0.00% | 0.00% | 0.00% |
| Soybeans | 40.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 16.30% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Wheat | 0.0 | 0.0 | 50.0 | 70.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.00% | 0.00% | 11.40% | 14.30% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |

*Receipts for 1999 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 1999 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.

**1999 CHARACTERISTICS OF PANEL FARM PRODUCING MILK (CONTINUED)**

**MOD85** A 85-cow Southwestern Missouri (Christian County) moderate size dairy farm that averages 17,800 pounds of milk per cow. The farm plants 220 acres of hay and 40 acres of silage. About 87 percent of the farm's receipts come from milk.

**MOD330** A 330-cow Southwestern Missouri (Christian County) large dairy farm that averages 19,600 pounds of milk per cow. The farm plants 585 acres of hay and 180 acres of silage. Milk accounts for 93 percent of this farm's receipts.

**GAND200** A 200-cow Central Georgia (Putnam County) moderate size dairy farm that produces 18,600 pounds of milk per cow. Rather than plant any crops, this farm opts to purchase all of its feed requirements in the form of a premixed ration. Milk accounts for 95 percent of the farm's gross income.

**GASD700** A 700-cow Southern Georgia (Houston County) large dairy farm that produces 18,600 pounds of milk per cow. The farm plants 150 acres of hay and 400 acres of silage. Milk makes up 96 percent of the farm's receipts.

**FLND500** A 500-cow North Florida (Lafayette County) moderate size dairy farm that averages 16,400 pounds of milk per cow. The farm grows 125 acres of hay. All feed requirements, in addition to hay, are met through a purchased pre-mixed ration. Milk sales account for 94 percent of the farm's receipts.

**FLSD1650** A 1,650-cow South Central Florida (Okeechobee County) large dairy farm that produces 15,400 pounds of milk per cow. The farm grows 800 acres of hay. In addition to grass hay, grass silage, and pasture, cows receive a purchased premixed ration. Milk sales generate 96 percent of its receipts.

Appendix Table A8. Characteristics of Panel Farms Producing Milk.

| | MOD85 | MOD330 | GAND200 | GASD700 | FLND500 | FLSD1650 |
|---|---|---|---|---|---|---|
| County | Christian | Christian | Putnam | Houston | Lafayette | Okeechobee |
| Total Cropland | 260 | 685 | 200 | 507 | 590 | 1,800 |
| Acres Owned | 180 | 450 | 200 | 400 | 440 | 1,800 |
| Acres Leased | 80 | 235 | 0 | 107 | 150 | 0 |
| Pastureland | | | | | | |
| Acres Owned | 55 | 20 | 0 | 150 | 60 | 0 |
| Acres Leased | 55 | 20 | 0 | 0 | 0 | 0 |
| Assets ($1000) | | | | | | |
| Total | 869 | 2,196 | 1,299 | 4,849 | 2,415 | 5,227 |
| Real Estate | 544 | 960 | 786 | 2,296 | 992 | 2,993 |
| Machinery | 163 | 298 | 97 | 395 | 270 | 318 |
| Other & Livestock | 162 | 938 | 416 | 2,158 | 1,153 | 1,916 |
| Debt/Asset Ratios | | | | | | |
| Total | 0.34 | 0.13 | 0.24 | 0.12 | 0.10 | 0.66 |
| Intermediate | 0.50 | 0.05 | 0.24 | 0.01 | 0.00 | 1.51 |
| Long Run | 0.24 | 0.25 | 0.24 | 0.25 | 0.23 | 0.24 |
| 1999 Gross Receipts ($1,000)* | | | | | | |
| Total | 230.1 | 939.3 | 622.9 | 2,288.2 | 1,583.2 | 4,825.2 |
| Milk | 200.9 | 872.6 | 592.6 | 2,189.1 | 1,492.1 | 4,629.5 |
| | 87.30% | 92.90% | 95.10% | 95.70% | 94.20% | 95.90% |
| Dairy Cattle | 29.2 | 66.7 | 30.3 | 99.0 | 91.1 | 195.7 |
| | 12.70% | 7.10% | 4.90% | 4.30% | 5.80% | 4.10% |
| 1999 Planted Acres** | | | | | | |
| Total | 260.0 | 765.0 | 0.0 | 640.0 | 125.0 | 800.0 |
| Hay | 220.0 | 585.0 | 0.0 | 174.0 | 125.0 | 800.0 |
| | 84.60% | 76.50% | 0.00% | 27.20% | 100.00% | 100.00% |
| Silage | 40.0 | 180.0 | 0.0 | 466.0 | 0.0 | 0.0 |
| | 15.40% | 23.50% | 0.00% | 72.80% | 0.00% | 0.00% |

*Receipts for 1999 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 1999 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.

## 1999 CHARACTERISTICS OF PANEL FARMS PRODUCING BEEF CATTLE

**MTB400** A 400-cow ranch located in the eastern plains of Montana (Custer County). The ranch runs cows on a combination of owned, federal, state, and private lease land. One quarter of its total animal unit month grazing needs come from federal land and the ranch owns 14,000 acres of pasture. Of the total land owned, 440 acres are planted for hay. Cattle generates 100 percent of the total receipts on the ranch.

**WYB300** A 300-cow ranch located in North Central Wyoming (Washakie County). The ranch harvests hay from 200 acres of owned cropland, and it owns another 1000 acres of pastureland. Rangeland leased from the Forest Service provides 42 percent of the ranch's grazing needs. Cattle generates 100 percent of the total receipts on the ranch.

**COB300** A 300-cow ranch located in Northwest Colorado (Routt County). Federal land provides 7 percent of the ranch's AUM needs. Hay is produced on 400 acres of the pasture-hay land, of which the ranch owns 300. The ranch owns 1800 acres of pastureland, and the cattle graze the federal land during the summer months. Cattle generates 90 percent of the total receipts on the ranch. This ranch participates in a retained ownership program through the feedlot with 75% of the steers raised.

**MOB150** A 150-cow farm in Southwest Missouri (Dade County). The farm generates 55 percent of its receipts from beef cattle and the remainder from crops. The farm has 80 acres of sorghum, 160 acres of soybeans, 80 acres of wheat, and 400 acres of hay. Surplus hay sales make up only 6 percent of cash receipts.

**OTHER** Eight other representative farms have beef cattle operations in conjunction with their crop production (MONG1400, TXBG2000, TXBG2500, TNG900, KSSW3180, KSNW4300, TXBC1400, and TXR3750). These farming operations have from 20 to 200 mother cows in their cow/calf herds and cattle provide from 4 to 22 percent of the receipts on these farms.

Appendix Table A9. Characteristics of Panel Farms Producing Beef Cattle.

| | MTB400 | WYB300 | COB300 | MOB150 |
|---|---|---|---|---|
| County | Custer | Washakie | Routt | Dade |
| Total Cropland | 0 | 200 | 400 | 440 |
| Acres Owned | 0 | 200 | 300 | 320 |
| Acres Leased | 0 | 0 | 100 | 120 |
| Pastureland | | | | |
| Acres Owned | 14,000 | 1,000 | 1,800 | 320 |
| Acres Leased | 0 | 0 | 0 | 80 |
| Federal AUMs Leased | 1,350 | 1,500 | 250 | 0 |
| State/Private AUMs | 450 | 160 | 630 | 0 |
| Assets ($1000) | | | | |
| Total | 1,826 | 691 | 3,078 | 770 |
| Real Estate | 1,409 | 377 | 2,684 | 451 |
| Machinery | 106 | 100 | 120 | 215 |
| Other & Livestock | 311 | 214 | 274 | 104 |
| Debt/Asset Ratios | | | | |
| Total | 0.01 | 0.11 | 0.01 | 0.12 |
| Intermediate | 0.03 | 0.24 | 0.05 | 0.24 |
| Long Run | 0.01 | 0.01 | 0.01 | 0.04 |
| Number of Livestock | | | | |
| Beef Cows | 400 | 300 | 300 | 150 |
| 1999 Gross Receipts ($1,000)* | | | | |
| Total | 142.3 | 117.2 | 156.1 | 114.1 |
| Cattle | 142.3 | 117.2 | 140.8 | 62.3 |
| | 100.00% | 100.00% | 90.20% | 54.60% |
| Sorghum | 0.0 | 0.0 | 0.0 | 13.1 |
| | 0.00% | 0.00% | 0.00% | 11.50% |
| Soybeans | 0.0 | 0.0 | 0.0 | 18.4 |
| | 0.00% | 0.00% | 0.00% | 16.10% |
| Wheat | 0.0 | 0.0 | 0.0 | 13.1 |
| | 0.00% | 0.00% | 0.00% | 11.50% |
| Hay | 0.0 | 0.0 | 3.3 | 6.3 |
| | 0.00% | 0.00% | 2.10% | 5.50% |
| Other Receipts | 0.0 | 0.0 | 12.0 | 0.0 |
| | 0.00% | 0.00% | 7.70% | 0.00% |
| 1999 Planted Acres** | | | | |
| Total | 440.0 | 200.0 | 400.0 | 720.0 |
| Sorghum | 0.0 | 0.0 | 0.0 | 80.0 |
| | 0.00% | 0.00% | 0.00% | 11.10% |
| Soybeans | 0.0 | 0.0 | 0.0 | 160.0 |
| | 0.00% | 0.00% | 0.00% | 22.20% |
| Wheat | 0.0 | 0.0 | 0.0 | 80.0 |
| | 0.00% | 0.00% | 0.00% | 11.10% |
| Hay | 440.0 | 200.0 | 400.0 | 400.0 |
| | 100.00% | 100.00% | 100.00% | 55.60% |

*Receipts for 1999 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 1999 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.

**1999 CHARACTERISTICS OF PANEL FARMS PRODUCING HOGS**

**ILH180** A 180-sow hog farm located in Western Illinois (Knox County). The farm plants 700 acres of corn and 700 acres of soybeans. This farm weans 17 pigs/sow/year and operates on 3.5 pounds of feed per pound of pork sold. The hog operation produces about 45 percent of the farm's total receipts while the sale of crops accounts for about 53 percent.

**ILH650** A 650-sow hog farm located in Western Illinois (Knox County). The farm plants 1,072 acres of corn and 878 acres of soybeans. This farm will wean an average of 22 pigs per sow in a year, and feeds about 3.1 pounds of feed per pound of pork sold in a year. The hog enterprise generates 75 percent of the total receipts on the farm. Corn and soybean sales account for the remaining 25 percent of receipts.

**INH200** A 200-sow hog farm located in North Central Indiana (Carroll County). The farm plants 600 acres of corn, 145 acres of soybeans, and 25 acres of wheat. The farm feeds 3.3 pounds of feed per pound of pork sold and weans 17 pigs/sow/year. About 58 percent of the farm's receipts comes from hogs, and the remainder of receipts is generated through crop sales.

**INH1200** A 1,200-sow hog farm located in North Central Indiana (Carroll County). The farm plants 2,066 acres of corn, 1,034 acres of soybeans, and 100 acres of wheat. The farm is able to wean 20 pigs per sow per year and feed 3.3 pounds of feed per pound of pork sold. The hog operation accounts for approximately 75 percent of the farm's total receipts. The other quarter of receipts comes from crop sales.

**NCH350** A 350-sow hog farm located in Eastern North Carolina (Wayne County). The farm plants 100 acres of hay to dispose of waste from the farrow-to-finish hog operation, but does not plant any crops for feed. All feed for the operation is purchased. The farm will wean 19.5 pigs per sow per year and will feed 3.0 pounds of feed per pound of pork sold. The sale of hogs produces 100 percent of the farm's receipts.

**NCH13268** A 13,268-sow hog farm located in Eastern North Carolina (Wayne County). The operation contracts with individual farmers who provide on-site management, labor, and facilities. The operation provides hogs, purchased feed and specialized labor for its group of contract farrowing, nursery and finishing farms. On average the farm will wean 20 pigs per sow per year. A measure of feed efficiency for this operation is 2.9 pounds of feed per pound of pork sold. 100 percent of the farm's receipts are produced from the sale of hogs.

Appendix Table A10. Characteristics of Panel Farms Producing Hogs.

| | ILH180 | ILH650 | INH200 | INH1200 | NCH350 | NCH13268 |
|---|---|---|---|---|---|---|
| County | Knox | Knox | Carroll | Carroll | Wayne | Wayne |
| Total Cropland | 1,400 | 1,950 | 770 | 3,200 | 100 | 0 |
| Acres Owned | 140 | 975 | 460 | 1,038 | 100 | 0 |
| Acres Leased | 1,260 | 975 | 310 | 2,162 | 0 | 0 |
| Assets ($1000) | | | | | | |
| Total | 1,293 | 5,783 | 1,945 | 5,257 | 1,109 | 12,030 |
| Real Estate | 684 | 4,091 | 1,588 | 3,470 | 727 | 1 |
| Machinery | 366 | 733 | 274 | 1,137 | 106 | 22 |
| Other & Livestock | 243 | 959 | 82 | 650 | 276 | 12,007 |
| Debt/Asset Ratios | | | | | | |
| Total | 0.26 | 0.30 | 0.37 | 0.41 | 0.31 | 0.00 |
| Intermediate | 0.11 | 0.09 | 0.33 | 0.48 | 0.09 | 0.00 |
| Long Run | 0.39 | 0.38 | 0.38 | 0.38 | 0.42 | 0.36 |
| Number of Livestock | | | | | | |
| Sows | 180 | 650 | 200 | 1,200 | 350 | 13,268 |
| 1999 Gross Receipts ($1,000)* | | | | | | |
| Total | 487.9 | 1,533.6 | 426.1 | 2,641.4 | 592.5 | 21,884.0 |
| Hogs | 221.4 | 1,151.2 | 247.8 | 1,979.5 | 592.5 | 21,884.0 |
| | 45.40% | 75.10% | 58.20% | 74.90% | 100.00% | 100.00% |
| Corn | 120.5 | 104.8 | 137.3 | 324.0 | 0.0 | 0.0 |
| | 24.70% | 6.80% | 32.20% | 12.30% | 0.00% | 0.00% |
| Soybeans | 139.3 | 270.6 | 34.1 | 304.8 | 0.0 | 0.0 |
| | 28.50% | 17.60% | 8.00% | 11.50% | 0.00% | 0.00% |
| Wheat | 0.3 | 0.0 | 5.8 | 24.0 | 0.0 | 0.0 |
| | 0.10% | 0.00% | 1.40% | 0.90% | 0.00% | 0.00% |
| Other Receipts | 2.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.50% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| 1999 Planted Acres** | | | | | | |
| Total | 1,400.0 | 1,950.0 | 770.0 | 3,200.0 | 100.0 | 0.0 |
| Corn | 700.0 | 1,072.5 | 600.0 | 2,066.0 | 0.0 | 0.0 |
| | 50.00% | 55.00% | 77.90% | 64.60% | 0.00% | 0.00% |
| Soybeans | 700.0 | 877.5 | 145.0 | 1,034.0 | 0.0 | 0.0 |
| | 50.00% | 45.00% | 18.80% | 32.30% | 0.00% | 0.00% |
| Wheat | 0.0 | 0.0 | 25.0 | 100.0 | 0.0 | 0.0 |
| | 0.00% | 0.00% | 3.20% | 3.10% | 0.00% | 0.00% |
| Hay | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 |
| | 0.00% | 0.00% | 0.00% | 0.00% | 100.00% | 0.00% |

*Receipts for 1999 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 1999 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

**Iowa**

*Facilitators*

Mr. Jim Patton - Webster County Extension Agent
Dr. William Edwards - Professor and Extension Economist, Iowa State University

*Panel Participants*

Mr. Phil Naeve
Mr. Larry Lynch
Mr. Don Sandell
Mr. Bob Anderson
Mr. Larry Lane
Mr. Perry Black
Mr. Loren Wuebker
Mr. Dennis Ammen
Mr. John Ricke
Mr. Britt Shelton
Mr. Virgil Gordon
Mr. Merv Berg
Mr. and Mrs. Jim Carver

**Nebraska**

*Facilitators*

Mr. Gary Zoubek – York County Extension Educator
Dr. Roger Selley - Extension Farm Management Specialist, University of Nebraska

*Panel Participants*

Mr. Dave Doremus
Mr. Boyd Stur
Mr. Loren Bangs
Mr. Jerry Stahr
Mr. Robert Jensen
Mr. Alan Songster
Mr. Gale Thomsen
Mr. Kurt Goertzen
Mr. Gordon Quiring
Mr. Dave Hutsell
Mr. Andrew Christiansen

**Missouri**

*Facilitator*

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

*Panel Participants*

Mr. Larry Davies
Mr. Ron Gibson
Mr. Ron Venable
Mr. Gerald Kitchen
Mr. John Vogelsmeier
Mr. Mike Hisle
Mr. Clifford Lyons
Mr. Ron Linneman
Mr. Glenn Kaiser
Mr. Jack Harriman
Mr. Jim Wheeler

**Texas - Northern High Plains**

*Facilitators*

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

*Panel Participants*

Mr. Ellis Moore
Mr. Tom Moore
Mr. Brent Clark
Mr. Kelly Hays
Mr. Jerry Trussell
Mr. Kelly Williams
Mr. Kerri Cartwright
Mr. Rick May
Mr. Clyde Tims

**FEED GRAIN FARMS (CONTINUED)**

**Northern Missouri**

*Facilitator*

Mr. Mike Killingsworth - Farm Management Consultant, Maryville, Missouri
Mr. Joe Trujillo-University of Missouri-Columbia

*Panel Participants*

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

**South Carolina**

*Facilitator*

Mr. Toby Boring - Extension Agricultural Economist, Clemson University

*Panel Participants*

Mr. Harry DuRant
Mr. John Ducworth
Mr. Tom Jackson
Mrs. Vikki Brogdon
Mr. Leslie McIntosh
Mr. Steve Lowder
Mr. Billy Davis
Mr. John Spann
Mr. Chris Cogdill

**Tennessee**

*Facilitator*

Dr. Daryll Ray, Professor, University of Tennessee

*Panel Participants*

Edwin Alles
Donald Parker
Greg Story
Paul Wengard
Jack Ogg
Doug Schoolfield
Daniel Wengerd
James Yarbro

## WHEAT FARMS

**Washington**

*Facilitators*

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

*Panel Participants*

Mr. Brian Largent
Mr. Bruce Nelson
Mr. Asa Clark
Mr. David Harlow
Mr. Todd Scholz
Mr. Gary Largent
Mr. John Whitman
Mr. Henry Suess
Mr. Randy Suess

**North Dakota**

*Facilitators*

Mr. Shawn Vachal - Barnes County Extension Agent
Mr. Dwight Aakre - Extension Associate - Farm Management, North Dakota State University

*Panel Participants*

Mr. Mike Clemens
Mr. Arvid Winkler
Mr. Wade Bruns
Mr. Jack Formo
Mr. Jim Broten
Mr. Ray Haugen
Mr. Anthony Thilmony
Mr. Leland Guscette
Mr. Greg Shanenko
Mr. Charles Triebold

**South Central Kansas**

*Facilitators*

Mr. Gerald Le Valley - Sumner County Agricultural Extension Agent
Mr. Brad Goehring - Sedgwick County Extension Agent
Mr. Steve Westfahl - Sedgwick County Extension Agent
Mr. Fred Delano - Administrator of Farm Management Association Program, Kansas State University

*Panel Participants*

Mr. Robert White
Mr. Nick Steffen
Mr. Donald Applegate
Mr. Robert Headley
Mr. Dennis Pettigrew
Mr. Joe Allen
Mr. Tim Turek
Mr. David Messenger
Mr. Rae Reusser
Mr. Jim Stuhlsatz

**Colorado**

*Facilitators*

Mr. Dennis Kaan - Regional Extension Specialist, Colorado State University
Mr. Don Nitchie - Director, Farm Mgmt/Marketing, Colorado State University Cooperative Extension
Dr. Paul H. Gutierrez - Associate Professor, Colorado State University

*Panel Participants*

Mr. Terry Kuntz
Mr. Calvin Schaffert
Mr. John Wright
Mr. Cliff Fletcher
Mr. David Foy
Mr. Leland Willeke
Mr. John Hickert
Mr. Marlin E. Snyder
Mr. Bill Rodwell
Mr. Gerry Ohr
Mr. Rick Lewton
Mr. Ken Remington

**WHEAT FARMS (CONTINUED)**

**Northwestern Kansas**

*Facilitators*

Mr. Scott Docken - Extension Agricultural Economist, Farm Management Association, KSU
Mr. Mark Wood - Extension Agricultural Economist, Farm Management Association, KSU
Mr. Dan Obrien - Extension Agricultural Economist, Farm Management Association, KSU
Mr. Fred Delano - Administrator of Farm Management Association Program, Kansas State University

*Panel Participants*

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

## COTTON FARMS

**California**

*Facilitator*

Mr. Bruce A. Roberts - Kings County Director and Farm Advisor, University of California Cooperative Extension

*Panel Participants*

Mr. Mark Hansen
Mr. Steve Boyett
Mr. Ernie Taylor
Mr. John Diener
Mr. Jeff Hildebrand
Mr. Wayne Wisecarver
Mr. Craig Pedersen
Mr. Dave Smith
Mr. Bill Tos
Mr. David Costa

**Texas - Southern High Plains**

*Facilitators*

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

*Panel Participants*

Mr. Milton Schneider
Mr. Dave Nix
Mr. Glen Phipps
Mr. Donald Vogler
Mr. Kent Nix
Mr. Mark Furlow
Mr. Mark Boardman
Mr. Lonny Ferguson
Mr. Todd Gregory
Mr. Thomas Holder
Mr. Brad Boyd
Mr. Jerry Chapman

**Texas - Rolling Plains**

*Facilitators*

Mr. Todd Vineyard - Ellis County Agricultural Extension Agent
Mr. Stan Bevers - Extension Economist - Management, Texas A&M University

*Panel Participants*

Mr. Ronnie Richmond
Mr. Dennis Olsen
Mr. Ronnie Riddle
Mr. Ferdie Walker

**Texas - Blacklands**

*Facilitator*

Mr. Ronald Leps - Williamson County Agricultural Extension Agent

*Panel Participants*

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

**Texas - Coastal Bend**

*Facilitators*

Dr. Jeffrey Stapper - San Patricio-Aransas County Extension Agent
Dr. Larry Falconer - Extension Economist - Management, Texas A&M University

*Panel Participants*

Mr. Brad Bickham
Mr. Clarence Chopelas
Mr. Darby Salge

**Tennessee**

*Facilitator*

Dr. Daryll Ray, Professor, University of Tennessee

*Panel Participants*

Harris Armour, III
Eugene McFerren
Lee Ann Rhea
Travis London
Tom Karcher
Mark McNabb
Dewayne Hendrix
Ronald Woods

## RICE FARMS

**Arkansas**

*Facilitator*

Mr. Bill Free, Riceland Foods, Inc.

*Panel Participants*

Mr. David Feilkie
Mr. Derek Bohanan
Mr. David Jessup

**Texas**

*Facilitator*

Dr. Ed Rister - Professor, Texas A&M University

*Panel Participants*

Mr. W. A. "Billy" Hefner, III
Mr. Andy Anderson
Mr. Ronald Gertson
Mr. Madison H. Smith
Mr. Jim Wiese
Mr. John Waligur
Mr. Glen Rod
Mr. Layton Raun
Mr. Kenneth "Peter" Stelzel
Mr. Jason Hlavinka
Mr. Steve Balas

**California**

*Facilitator*

Mr. Jack Williams - Farm Advisor, Sutter and Yuba Counties, University of California Cooperative Extension

*Panel Participants*

Mr. Bill Baggett
Mr. Frank Rosa
Mr. Jack DeWitt
Mr. Wayne Vineyard
Mr. Don Staas
Mr. Paul Lower
Mr. Ned Lemenager
Mr. Scott Tucker

**Missouri**

*Facilitators*

Mr. Bruce Beck - Farmer's Agronomy Specialist, University of Missouri - Columbia
Mr. David Reinbott - Farm Management Specialist, University of Missouri - Columbia
Mr. Joe Trujillo-University of Missouri-Columbia

*Panel Participants*

Mr. Sonny Martin
Mr. Fred Tanner
Mr. Bruce Yarbro
Mr. J. D. Sifford
Mr. C. P. Johnson
Mr. Mike Mick
Mr. Davis Minton
Mr. Rick Spargo
Mr. Floyd Page
Mr. Cloyce Sowell
Mr. Dale Conner

**Louisiana**

*Facilitators*

Mr. Eddie Eskew - County Agent, Louisiana Cooperative Extension Service
Mr. Howard J. Cormier - County Agent, Louisiana Cooperative Extension Service
Mr. Ronnie Levy - County Agent/Parrish Chairman, Louisiana Cooperative Extension Service
Mr. D. L. Eugene (Gene) Johnson - Specialist in Marketing, Louisiana Cooperative Extension Service, Natural Resources and Economic Development

*Panel Participants*

Mr. Alden Horten
Mr. Brian Wild
Mr. Tommy Faulk
Mr. Allan McLain
Mr. Jackie Loewes

## DAIRY FARMS

**California**

*Facilitator*

Mr. Larry Serpa

*Panel Participants*

Mr. Dave Rebeiro
Mr. Phillip Rebeiro
Mr. Bill Van Beek
Mr. Jeff Wilbur

**New Mexico**

*Facilitator*

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

*Panel Participants*

Mr. Joe Gonzalez
Mr. Marc Reischman
Mr. Bill Davis
Mr. Mike Visser
Mr. Bob Wade

**Washington**

*Facilitator*

Mr. Robert Dyk

*Panel Participants*

Mr. Ron Bronsema
Mr. Keith Boon
Mr. Rod DeJong
Mr. Dick Bengen
Mr. Greg McKay
Mr. Peter Vlas
Mr. Ed Pomeroy

**Idaho**

*Facilitator*

Mr. Dean Falk - Extension Dairy Specialist, University of Idaho
Dr. Wilson Grey - Farm Management Specialist - University of Idaho

*Panel Participants*

Mr. & Mrs. Martin Lee
Mr. Harry Hogland
Mr. Michael Quesnell
Mr. Greg Ledbetter
Mr. Bill Stouder
Mr. Rick Thompson
Mr. John Beukers
Mr. Jack Van Beek
Mr. Adrian Boer
Mr. Reagon Hatch
Mr. Alan Gerratt
Mr. Hank Hafliger
Mr. Randy Tolman
Mr. Kurt Alberdi
Mr. Dennis Edlund
Ms. Anna Sybrandy

**Texas - Central**

*Facilitator*

Mr. Joe Pope - Erath County Agricultural Extension Agent

*Panel Participants*

Mr. Lane Jones
Mr. Lonnie Hammonds
Mr. Leonard Moncrief
Mr. Jack Parks
Mr. Jake Van Vliet
Mr. Owen Sieperda

**DAIRY FARMS (CONTINUED)**

**Texas - Eastern**

*Facilitator*

Mr. Dale Haygood - Zone Manager, Associated Milk Producers, Inc.

*Panel Participants*

Mr. George Tenberg
Mr. Greg Inman
Mr. Tim Spiva
Mr. Harold Bryant
Mr. Timothy Norris
Mr. Michael Mund
Mr. Hershel Kelsoe
Mr. Larry Ellison
Mr. W.D. Wafford
Mr. Larry Spradlin

**Missouri**

*Facilitator*

Mr. Ron Young - Christian County Extension Dairy Specialist, Retired
Mr. Stacey Hamilton – Green County Dairy Specialist

*Panel Participants*

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

**Michigan**

*Facilitator*

Mr. Mike McFadden - Extension Dairy Agent - Michigan State University
Dr. Craig Thomas - Extension Dairy Agent - Michigan State University Extension
Mr. Wes Lane - Director- Communications Division - Dairy Farmers of Ontario
Dr. Sherrill Nott - Farm Management Specialist - Michigan State University

*Panel Participants*

Mr. Tom Fox
Mr. Keith Moeggenberg
Mr. Bob Pasch
Mr. Jim Wilson
Mr. & Mrs. Don Hopper
Mr. Jason Shinn
Mr. Ron McDonald
Mr. Bryan Neyer
Mr. Jerry Varner
Mr. Mike Fagan
Mr. Jim Reid
Mr. Duane Stuever

**Florida**

*Facilitators*

Mr. Chris Vann - Lafayette County Agricultural Extension Agent
Mr. Art Darling - Dairy Farms, Inc.

*Panel Participants*

Mr. Morris Jackson
Mr. Bobby Koon
Mr. Louis Shiver
Mr. Bob Butler
Mr. Glynn Rutledge
Mr. Everett Kerby
Mr. Terry Reagan
Mr. Roger Butler
Mr. Ray Melear
Mr. Bob Rydzewski

**Georgia**

*Facilitator*

Mr. Bill Thomas - Professor and Extension Economist, University of Georgia

*Panel Participants*

Mr. Carlton McMichael
Mr. Mike Rainey
Mr. Ronny Parham
Mr. Bill Boyce
Mr. Bernard Sims
Mr. Terry Embry
Mr. Lamar Anthony
Mr. Earnest Turk
Mr. Raymond Hunter
Mr. Tom Thompson
Mr. Henry Cabaniss
Mr. Tim Camp

## DAIRY FARMS (CONTINUED)

**Wisconsin**

*Facilitator*

Mr. Jeff Key - Winnebago County Agricultural Extension Agent

*Panel Participants*

Mr. Joe Bonlender
Mr. Fred Kasten
Mr. Dave Bradley
Mr. Micheal Hinz
Mr. Vernon Newhouse
Mr. Larry Pollack
Mr. Pete Knigge
Mr. Dean Hughes
Mr. Gary Frank
Ms. Linda Hodorff
Mr. Jeffery Pollack
Mr. John Ruedinger

**New York - Western**

*Facilitator*

Mr. Steve Richards – Cornell Cooperative Extension

*Panel Participants*

Mr. Walter Faryns
Mr. Collin Broughton
Mr. George Mueller
Mr. John Noble
Mr. Kent Miller
Mr. Bill Fitch
Mr. John Mueller

**New York - Central**

*Facilitator*

Dr. Wayne Knoblauch - Professor, Cornell University

*Panel Participants*

Mr. Gary Mutchler
Mr. Bill Kilcer
Mr. Chuck Benson
Mr. Edie McMahon
Mr. Martin Young
Mr. Robert Howland
Mr. Robert Space
Mr. Mike Learn
Mr. Kenton Patchen

**Vermont**

*Facilitator*

Dr. Rick Wackernagel - Professor, University of Vermont

*Panel Participants*

Mr. Steve Hurd
Mr. Everett Maynard
Mr. Ted Foster
Mr. Onan Whitcomb
Mr. Mark Rodgers
Mr. David Conant
Mr. Dennis Mueller
Mr. Kim Harvey
Mr. Stanley Scribner
Mr. Roger Rainville
Ms. Sally Goodrich
Mr. Steven Jones
Mr. Mitch Montagne

**BEEF PRODUCERS**

**Montana**

*Facilitators*

Mr. Olaf Sherwood - Custer County Agricultural Extension Agent
Dr. Alan Baquet - Farm Management Specialist, Montana State University

*Panel Participants*

Mr. Dee Murray
Mr. Donald Ochsner
Mr. Jean Robinson
Mr. Art Drange

**Colorado**

*Facilitator*

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

*Panel Participants*

Mr. Doug Carlson
Mr. Dean Rossi
Mr. Charlie Cammer
Mr. Wayne Shoemaker
Mr. Jay Fetcher
Mr. Larry Monger
Mr. Pud Stetson
Mr. Jim Rossi

**Wyoming**

*Facilitators*

Mr. Jim Gill, County Extension Agent, Washakie County
Dr. Larry Van Tassell - University of Wyoming

*Panel Participants*

Mr. Bill Greer
Mr. Gary Rice
Mr. Ray Rice
Mr. Jim Foreman

## HOG FARMS

**Illinois**

*Facilitator*

Mr. Don Teel - Retired Knox County Agricultural Extension Agent

*Panel Participants*

Mr. David Hawkinson
Mr. Kevin Maine
Mr. Dale Carlson
Mr. David Bowman
Mr. Mike Hennenfent
Mr. John Gustafson
Mr. Sterling Saline
Mr. Steve Maine
Mr. Don Erickson
Mr. Lance Humphreys
Mr. Bob Hennenfent
Dr. Donald G. Reeder

**Indiana**

*Facilitator*

Mr. Steve Nichols - Carroll County Agricultural Extension Agent
Dr. Chril Hurt - Extension Farm Management Specialist - Purdue University

*Panel Participants*

Mr. Rick Brown
Mr. Larry Trapp
Mr. Sam Zook
Mr. Bill Pickart
Mr. Levi Huffman
Mr. Brad Burton
Mr. Trent Odell
Mr. Mark Martin

**Missouri**

*Facilitator*

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

*Panel Participants*

Mr. Larry Charles
Mr. Dale Miles
Mr. Vernon Thoeni
Mr. John Vogelsmeier
Mr. Herbert Kiehl
Mr. Paul Benedict
Mr. R. David Hemme
Mr. Gary L. Sanders
Mr. Robert S. Mayden
Mr. Matt Reichert
Mr. Richard Clemens

**North Carolina**

*Facilitators*

Mr. Mike Regans - Wayne County Agricultural Extension Agent
Dr. Kelly Zering - Associate Professor and Extension Specialist, North Carolina State University
Mr. Jeff Chandler - Wayne County Agricultural Extension Agent

*Panel Participants*

Mr. Ben Outlaw
Mr. David Harrell Overman
Mr. Charlie McClenny
Mr. Ronald Parks
Mr. David Sanderson
Mr. Frankie Warren
Mr. Jeff Hansen
Mr. John Dawson
Mr. R.H. Mohesky

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