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AFPC

Agricultural & Food Policy Center
at Texas A&M University

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



AFPC Working Paper 04-1

February 2004

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

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

AFPC Working Paper 04-1

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Executive Summary

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

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

- **FEEDGRAIN FARMS:** Eight of the 18 feedgrain farms are in good overall financial condition. Nine can be classified as marginal with one considered to be in poor condition.
- **WHEAT FARMS:** Three of the ten wheat farms are classified in good financial condition, six are marginal, and one is poor. The marginal farms have greater than a 80 percent chance of cash flow deficits during the analysis period (2004-2008).
- **COTTON FARMS:** Two of the 18 cotton farms are classified in good financial condition, 14 are in marginal condition, and two are poor. Three cotton farms have greater than a 25 percent chance of losing real net worth by 2008.
- **RICE FARMS:** Eight of the 16 rice farms are projected in poor financial condition through 2008. Five are classified as marginal and three are projected to be in good financial condition. Persistent cash flow pressures are so significant that nine of the 16 farms have greater than a 50 percent chance of cash flow deficits in 2008.
- **DAIRY FARMS:** Eight of the 23 representative dairies are classified in good financial condition from 2004 through 2008. Seven of the farms are marginal and eight are rated poor. Low projected milk prices bear the brunt of the responsibility for 10 of 23 farms having greater than a 25 percent chance of losing equity during the analysis period.
- **BEEF CATTLE RANCHES:** Cyclical cattle price increases contribute to six of the ten representative ranches being in good financial shape through 2008. Five are considered marginal and one is classified in poor condition. Three of the operations have persistent cash flow difficulties. For those ranches, each year from 2004 through 2008 has greater than a 45 percent chance of an operating deficit.
- **HOG FARMS:** One of the four hog farms is rated in good financial condition over the 2004 to 2008 period. Two farms are classified in marginal condition. All four farms have greater than a 35 percent chance of annual cash flow deficits every year, 2003-2008.

**Economic Viability of Representative Feed Grain Farms
January 2004 Baseline**

| Farm Name | P(Cash Flow Deficit) | | P(Real Net Worth Declines) | |
|-----------|----------------------|-----------|----------------------------|-----------|
| | 2004-2008 | 2004-2008 | 2004-2008 | 2004-2008 |
| 8/9/1 | | | | |
| IAG1350 | 14-33 | | 1-10 | |
| IAG2750 | 18-11 | | 1-1 | |
| IAG4200 | 13-28 | | 1-1 | |
| NEG1960 | 1-1 | | 1-1 | |
| NEG4300 | 1-19 | | 1-1 | |
| MOCG1700 | 7-20 | | 1-1 | |
| MOCG3630 | 9-7 | | 1-1 | |
| MONG1850 | 39-53 | | 1-6 | |
| ING1000 | 58-99 | | 1-59 | |
| ING2200 | 54-97 | | 1-24 | |
| TXNP1750 | 38-48 | | 1-16 | |
| TXNP7000 | 26-33 | | 1-2 | |
| TXHG2000 | 27-37 | | 1-9 | |
| TXWG1400 | 29-23 | | 1-5 | |
| TNG900 | 23-8 | | 1-1 | |
| TNG2400 | 15-38 | | 1-5 | |
| SCG1500 | 45-37 | | 1-12 | |
| SCG3500 | 16-23 | | 1-1 | |



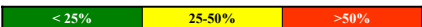
**Economic Viability of Representative Cotton Farms
January 2004 Baseline**

| Farm Name | P(Cash Flow Deficit) | | P(Real Net Worth Declines) | |
|-----------|----------------------|-----------|----------------------------|-----------|
| | 2004-2008 | 2004-2008 | 2004-2008 | 2004-2008 |
| 2/14/2 | | | | |
| CAC2400 | 22-29 | | 1-5 | |
| CAC9000 | 30-27 | | 1-11 | |
| TXSP2239 | 44-59 | | 1-18 | |
| TXSP3745 | 45-52 | | 1-23 | |
| TXPC2500 | 33-42 | | 1-2 | |
| TXEC 5000 | 56-56 | | 1-24 | |
| TXRP2500 | 33-29 | | 1-10 | |
| TXMC3500 | 37-30 | | 1-4 | |
| TXCB1850 | 42-40 | | 1-7 | |
| TXCB5500 | 45-55 | | 1-20 | |
| TXVC4500 | 40-46 | | 1-8 | |
| LAC2640 | 53-81 | | 1-51 | |
| ARC5000 | 3-21 | | 1-1 | |
| TNC1900 | 1-8 | | 1-1 | |
| TNC4050 | 25-32 | | 1-12 | |
| ALC3000 | 28-37 | | 1-1 | |
| GAC1700 | 99-61 | | 1-6 | |
| NCC1500 | 34-69 | | 1-47 | |



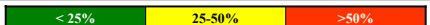
**Economic Viability of Representative Wheat Farms
January 2004 Baseline**

| Farm Name | P(Cash Flow Deficit) | | P(Real Net Worth Declines) | |
|-----------|----------------------|-----------|----------------------------|-----------|
| | 2004-2008 | 2004-2008 | 2004-2008 | 2004-2008 |
| 3/6/1 | | | | |
| WAW1725 | 14-32 | | 1-8 | |
| WAW4675 | 28-27 | | 1-2 | |
| NDW2180 | 13-45 | | 1-25 | |
| NDW6250 | 12-35 | | 1-1 | |
| KSCW1385 | 9-38 | | 1-11 | |
| KSCW4000 | 1-12 | | 1-1 | |
| KSNW2800 | 98-99 | | 1-72 | |
| KSNW4300 | 31-41 | | 1-9 | |
| COW3000 | 1-1 | | 1-1 | |
| COW5440 | 1-2 | | 1-1 | |



**Economic Viability of Representative Rice Farms
January 2004 Baseline**

| Farm Name | P(Cash Flow Deficit) | | P(Real Net Worth Declines) | |
|-----------|----------------------|-----------|----------------------------|-----------|
| | 2004-2008 | 2004-2008 | 2004-2008 | 2004-2008 |
| 3/5/8 | | | | |
| CAR424 | 99-99 | | 1-99 | |
| CAR2365 | 29-88 | | 1-64 | |
| CABR1365 | 99-99 | | 1-99 | |
| CACR1420 | 99-99 | | 1-99 | |
| TXR1553 | 12-49 | | 1-19 | |
| TXR3774 | 2-9 | | 1-1 | |
| TXBR1650 | 2-39 | | 1-10 | |
| TXER3200 | 17-43 | | 1-17 | |
| LASR1200 | 16-60 | | 1-37 | |
| LANR2500 | 25-95 | | 1-65 | |
| MOER4500 | 3-21 | | 1-1 | |
| MOWR4000 | 25-47 | | 1-9 | |
| ARSR3640 | 10-17 | | 1-2 | |
| ARWR1200 | 9-81 | | 1-47 | |
| ARHR3000 | 13-74 | | 1-19 | |
| MSR4735 | 7-78 | | 1-61 | |



Economic Viability of Representative Dairy Farms January 2004 Baseline

| Farm Name | P(Cash Flow Deficit) | P(Real Net Worth Declines) |
|-----------|----------------------|----------------------------|
| 8/7/8 | 2004-2008 | 2004-2008 |
| CAD1710 | 99-28 | 1-2 |
| NMD2000 | 99-44 | 1-12 |
| WAD250 | 99-89 | 1-25 |
| WAD850 | 99-99 | 1-83 |
| IDD750 | 99-93 | 1-46 |
| IDD2100 | 16-6 | 1-1 |
| TXND2400 | 92-63 | 1-25 |
| TXCD500 | 99-99 | 1-91 |
| TXCD1300 | 47-28 | 1-9 |
| TXED550 | 40-29 | 1-10 |
| TXED1000 | 22-13 | 1-1 |



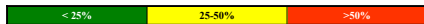
Economic Viability of Representative Cow Calf Ranches January 2004 Baseline

| Farm Name | P(Cash Flow Deficit) | P(Real Net Worth Declines) |
|-----------|----------------------|----------------------------|
| 6/5/1 | 2004-2008 | 2004-2008 |
| CAB500 | 99-47 | 1-40 |
| NVB700 | 11-30 | 1-23 |
| MTB500 | 1-1 | 1-1 |
| WYB500 | 99-78 | 1-28 |
| COB250 | 76-68 | 1-44 |
| NMB240 | 1-29 | 1-32 |
| SDB450 | 10-15 | 1-15 |
| MOB150 | 8-16 | 1-1 |
| MOCB350 | 7-13 | 1-1 |
| TXBB150 | 1-23 | 1-12 |
| TXSB250 | 1-3 | 1-2 |
| FLB1155 | 1-26 | 1-18 |



Economic Viability of Representative Dairy Farms January 2004 Baseline

| Farm Name | P(Cash Flow Deficit) | P(Real Net Worth Declines) |
|-----------|----------------------|----------------------------|
| 8/7/8 | 2004-2008 | 2004-2008 |
| WID115 | 99-75 | 1-18 |
| WID700 | 45-34 | 1-9 |
| NYWD800 | 99-96 | 1-64 |
| NYWD1200 | 99-89 | 1-46 |
| NYCD110 | 1-1 | 1-1 |
| NYCD500 | 18-19 | 1-1 |
| VTD134 | 19-3 | 1-1 |
| YTD350 | 99-99 | 1-69 |
| MOD85 | 59-54 | 1-2 |
| MOD400 | 50-31 | 1-1 |
| FLND500 | 39-8 | 1-1 |
| FLSD1500 | 99-99 | 1-93 |



Economic Viability of Representative Hog Farms January 2004 Baseline

| Farm Name | P(Cash Flow Deficit) | P(Real Net Worth Declines) |
|-----------|----------------------|----------------------------|
| 1/2/1 | 2004-2008 | 2004-2008 |
| ILH200 | 98-88 | 1-13 |
| ILH750 | 99-35 | 1-1 |
| INH600 | 91-71 | 1-1 |
| IAH400 | 93-79 | 1-39 |

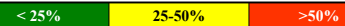


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REPRESENTATIVE FARMS ECONOMIC OUTLOOK FOR THE JANUARY 2004 FAPRI/AFPC BASELINE

The farm level economic impacts of the Farm Security and Rural Investment Act of 2002 on representative crop and livestock operations are projected in this report. The analysis was conducted over the 2001-2008 planning horizon using FLIPSIM, AFPC's whole farm simulation model. Data to simulate farming and ranching operations in the nation's major production regions came from two sources:

- Producer panel cooperation to develop economic information to describe and simulate representative crop, livestock, and dairy farms.
- Projected prices, policy variables, and input inflation rates from the Food and Agricultural Policy Research Institute (FAPRI) January 2004 Baseline.

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

The FLIPSIM policy simulation model incorporates the historical risk faced by farmers and ranchers for prices and production. This report presents the results of the January 2004 Baseline in a risk context using selected simulated probabilities and ranges for annual net cash farm income values. The probability of a farm experiencing annual cash flow deficits and the probability of a farm losing real net worth are included as indicators of the cash flow and equity risks facing farms through the year 2008.

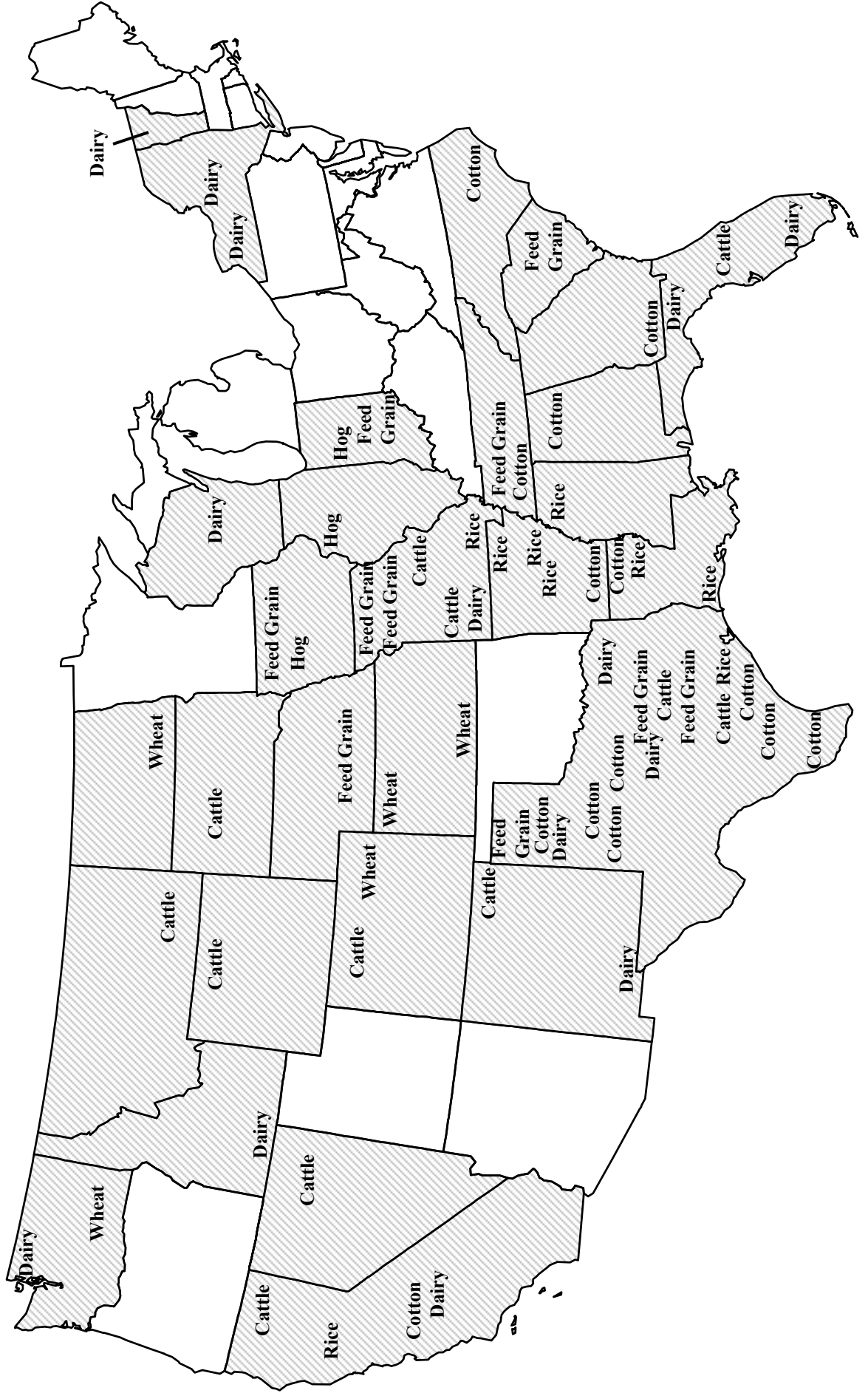
This report is organized into ten sections. The first section summarizes the process used to develop the representative farms and the key assumptions utilized for the farm level analysis. The second section summarizes the FAPRI January 2004 Baseline and the policy and price assumptions used for the representative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

Panel Process

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

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

Figure 1. Representative Farms and Ranches



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

Key Assumptions

- All farms classified as moderate scale are the size (acres or number of livestock) considered to be representative of a majority of full-time commercial farming operations in the study area. In many regions a second farm two to three times larger than the moderate scale farm is developed as an indicator of size economies.
- Dairy, hog, and cattle herd sizes are held constant for all farms over the 2001-2008 planning horizon.
- The farms were structured so government payment limits were not effective at reducing direct, counter-cyclical, and loan deficiency payments.
- Minimum family living withdrawals were assumed to be the higher of 10 percent of gross receipts or \$20,000 annually. Actual family living withdrawals are determined by historical consumption patterns. Therefore, as the farm's profitability increases so does the level of family living withdrawals.
- The farm is subject to owner/operator federal (income and self-employment) and state income taxes as a sole proprietor, based on the current income tax provisions.
- No off-farm-related income, including family employment, was included in the analyses. Therefore, the farm reflects only the ability of the farm to provide for family living and capital replacement.
- Farm program parameters, average annual prices, crop and livestock yield trends, interest rates, and input cost inflation (deflation) are based on the January 2004 FAPRI Baseline which assumes continuation of the 2002 Farm Bill through 2008.
- Direct payments for participating cotton, wheat, feed grain, oilseed and rice producers are made based on 85 percent of their historical base acreage times farm program yield times a direct payment rate. The direct payment rate is included in the January 2004 FAPRI Baseline.
- Marketing loan provisions for cotton, rice, wheat, feed grains, soybeans, sunflowers, and dry peas were authorized in the 2002 Farm Bill and are assumed to be in place for the farm level analysis.
- Counter-cyclical payments are triggered by marketing year prices included in the January 2004 FAPRI Baseline.
- The farm level simulation model incorporates price and yield risk faced by farmers. Historical yield variability for crops and production for livestock (sale weights, birth rates, and milk per cow) over the past ten years are assumed to prevail for the planning horizon. Random crop, livestock and milk prices are simulated using the January 2004 Baseline by FAPRI as the forecast of average prices. Prices reflect national price volatility caused by international production and demand as well as U.S. production risk.
- Historical crop yields (2001-2003) were held constant based on actual values obtained from the producers. Crop yields for 2004-2008 were simulated stochastically based on the average yields provided by the producers and the historical yield variability for the farm. Prices were held constant at producer-provided values for 2001-2003. FAPRI's August Baseline prices were localized for the farms and used as the average prices for 2004-2008 to simulate stochastic crop and livestock prices.

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

FAPRI January 2004 Baseline

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

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

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

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

Definitions of Variables in the Summary Tables

- **Overall Financial Position, 2004-2008** -- As a means of summarizing the representative farms' economic efficiency, liquidity, and solvency position AFPC classifies each farm as being in either a good, marginal or poor position. AFPC assumes a farm is in a good financial position when it has less than a 25 percent chance each of a cash flow deficit and a 25 percent chance of losing real net worth. If the probabilities of these events are between 25 and 50 percent the farm is classified as marginal. A probability greater than 50 percent places the farm in a poor financial position.
- **Net Income Adjustment for Real Net Worth (NIA), 2004-2008** -- NIA is the annual increase or decrease in net cash farm income necessary to insure the farm maintains its real net worth during the 2004-2008 period. A positive NIA indicates the additional annual net income needed to maintain real net worth. A negative NIA indicates the largest possible annual loss in net income the farm can endure and still maintain its real net worth through the period.

- **Net Income Adjustment for Liquidity (NIA), 2004-2008** -- NIA is the annual increase or decrease in net cash farm income necessary to insure the farm maintains its initial cash reserves of zero over the 2004-2008 period. A positive NIA indicates the additional annual net income needed to maintain real net worth. A negative NIA indicates the largest possible annual loss in net income the farm can endure and still maintain its real net worth through the period.
- **Annual Change in Real Net Worth, 2004-2008** -- Annualized percentage change in the operator's net worth from January 1, 2004 through December 31, 2008, after adjusting for inflation. This value reflects the real annualized increase or decrease in net worth or equity for the farm over the planning horizon including changes in real estate values.
- **Government Payments/Receipts, 2004-2008** -- Sum of all farm program payments (CCP, direct and loan deficiency payments) divided by total receipts received from the market plus CCP, direct and loan deficiency payments, crop insurance indemnities, and other farm related receipts.
- **Total Cash Receipts** -- Sum of cash receipts from all sources, including market sales, CCP and direct payments, loan deficiency payments, crop insurance indemnities, and other farm related receipts. The values in the tables are the average total receipts for each year in the planning horizon.
- **Government Payments** -- Sum of annual counter cyclical payments, direct payments, and marketing loan gains/LDP for crops and the milk program payment for dairy farms. The values in the tables are the averages for each year in the planning horizon.
- **Net Cash Farm Income** -- Equals total cash receipts minus all cash expenses. Net cash farm income is used to pay family living expenses, principal payments, income taxes, self employment taxes, and machinery replacement costs. The values in the tables are the averages for each year in the planning horizon.
- **Probability of a Cash Flow Deficit** -- Is the number of times out of 100 that the farm's annual net cash farm income does not exceed cash requirements for family living, principal payments, taxes (income and self-employment), and actual machinery replacement expenses (not depreciation). This probability is reported for each year of the planning horizon to indicate whether the cash flow risk for a farm increases or decreases over the planning horizon.
- **Ending Cash Reserves** -- Equals total cash on hand at the end of the year. Ending cash equals beginning cash reserves plus net cash farm income and interest earned on cash reserves less principal payments, federal taxes (income and self employment), state income taxes, family living withdrawals, and actual machinery replacement costs (not depreciation).
- **Nominal Net Worth** -- Equity at the end of each year equals total assets including land minus total debt from all sources. Net worth is not adjusted for inflation and averages are reported for each year in the planning horizon.
- **Probability of Decreasing Real Net Worth Over 2001-2008** -- Is the number of times out of 100 that real net worth in 2008 is less than the net worth for the farm at the beginning of 2001.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

FIGURE 2. REPRESENTATIVE FARMS PRODUCING FEED GRAINS AND OILSEEDS



Feedgrain and Oilseed Farm Impacts

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

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

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

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

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

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

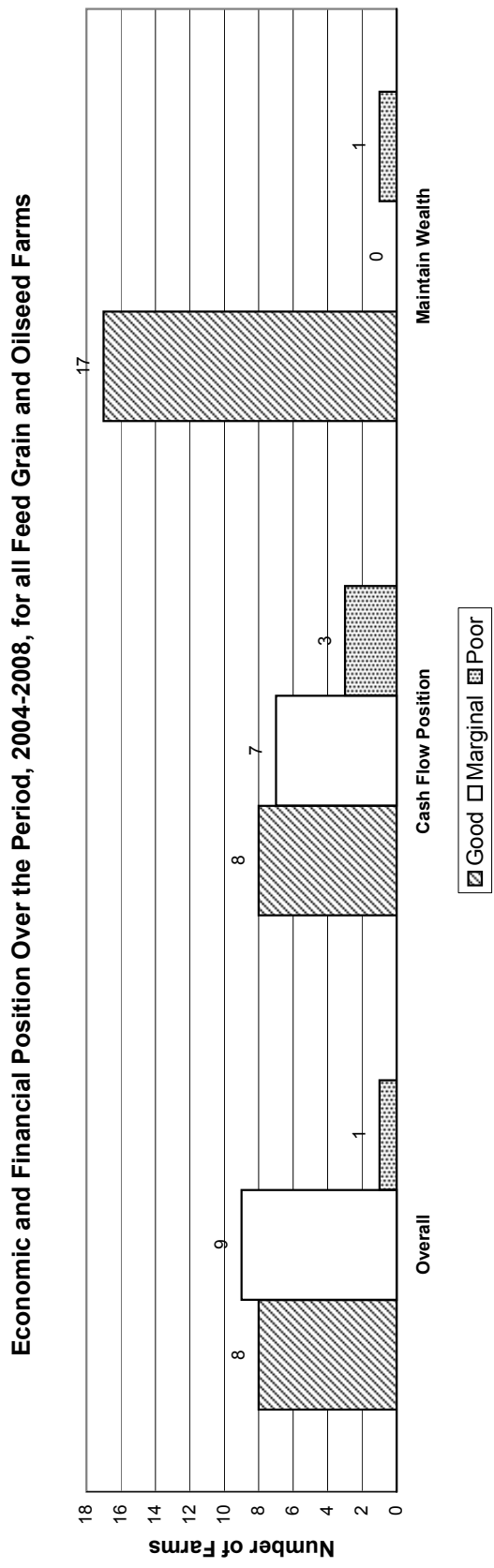
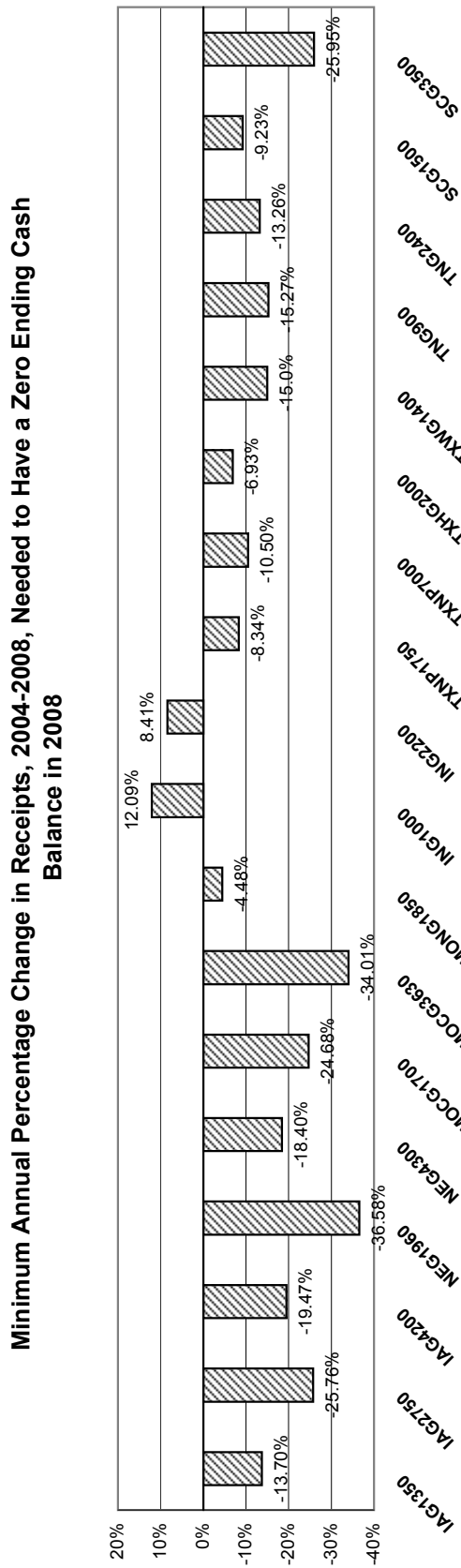
Tennessee: TNG900 keeps its probability of experiencing a cash flow deficit below 25 percent, resulting in its "good" ranking. Both Tennessee farms (TNG900 and TNG2400) are in good condition with respect to their equity positions. The smaller farm owns just less than 17 percent of its planted acres.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

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

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

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

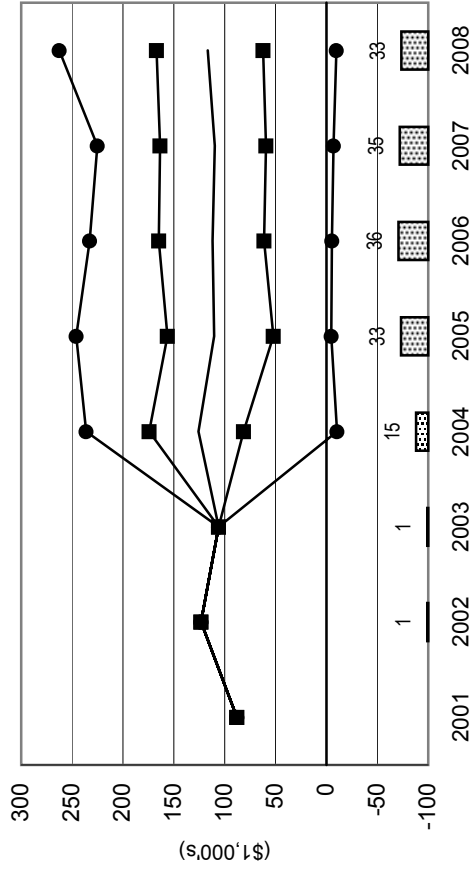
Figure 3. Feed Grain and Oilseed Farms



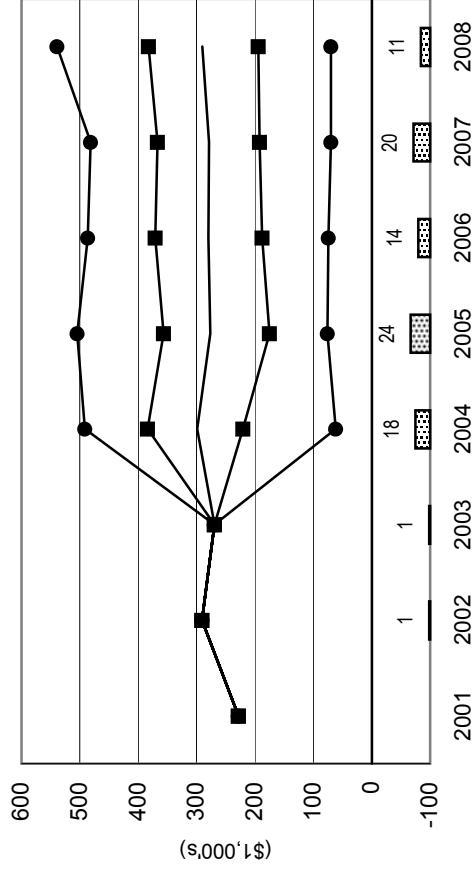
**Figure 4. Net Cash Farm Income and Probabilities of a Cash Flow Deficit:
Feed Grain and Oilseed Farms**

— Average NCFI ■ 25 & 75 Percentile NCFI ● 5 & 95 Percentile NCFI ▨ Prob. of Cash Flow Deficit

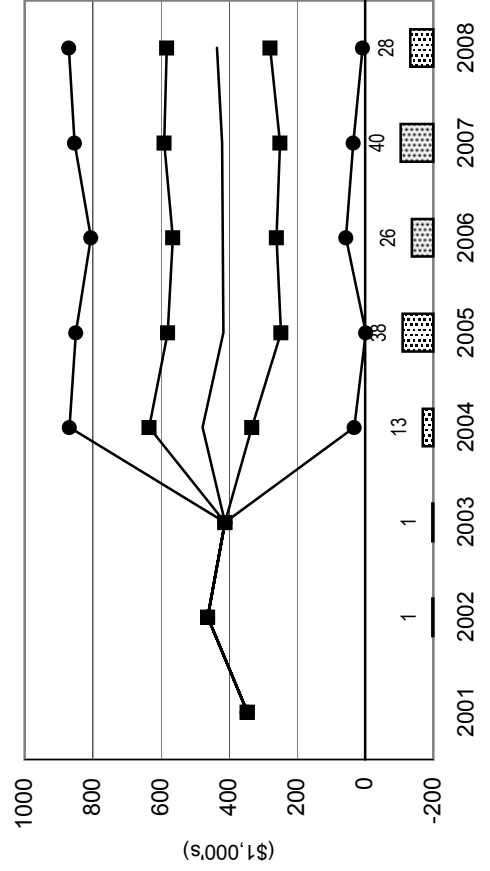
IAG1350 Iowa Grain Farm



IAG2750 Large Iowa Grain Farm



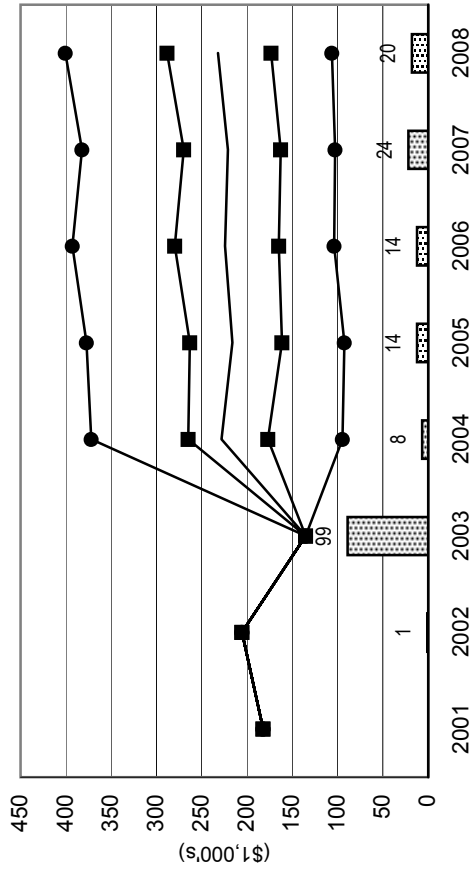
IAG4200 Large Iowa Grain Farm



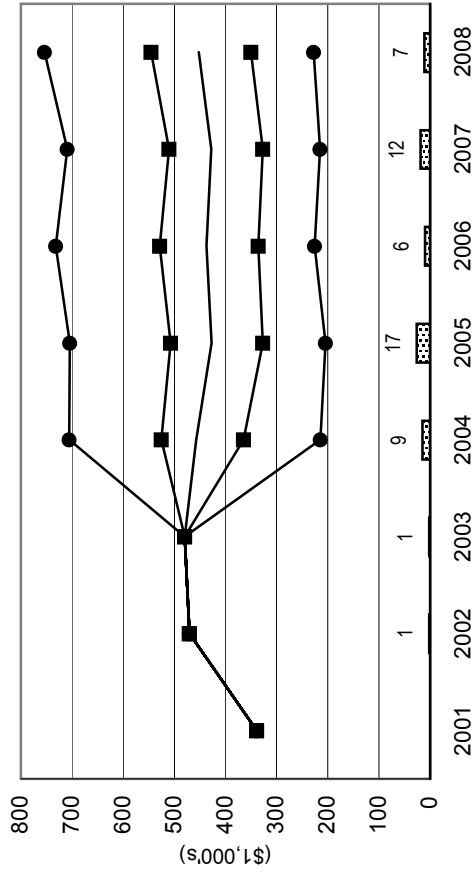
**Figure 5. Net Cash Farm Income and Probabilities of a Cash Flow Deficit:
Feed Grain and Oilseed Farms**

— Average NCFI ■ 25 & 75 Percentile NCFI ● Prob. of Cash Flow Deficit

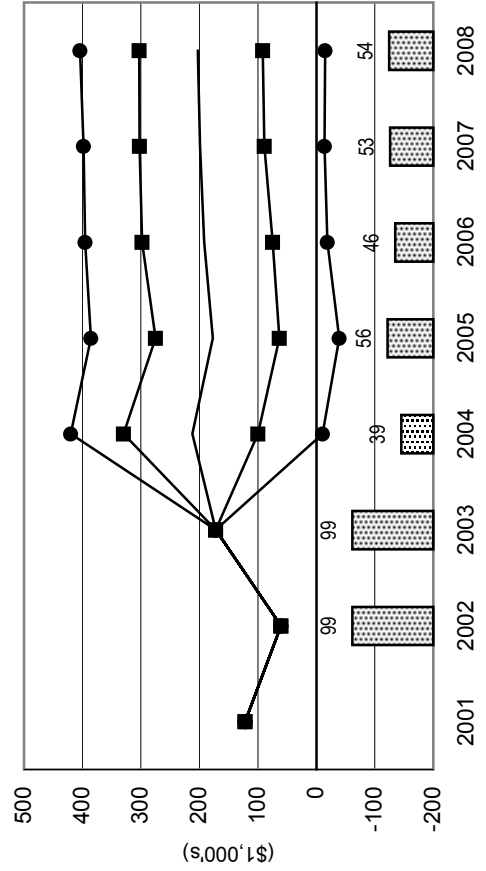
MOCG1700 Central Missouri Grain Farm



MOCG3630 Large Central Missouri Grain Farm



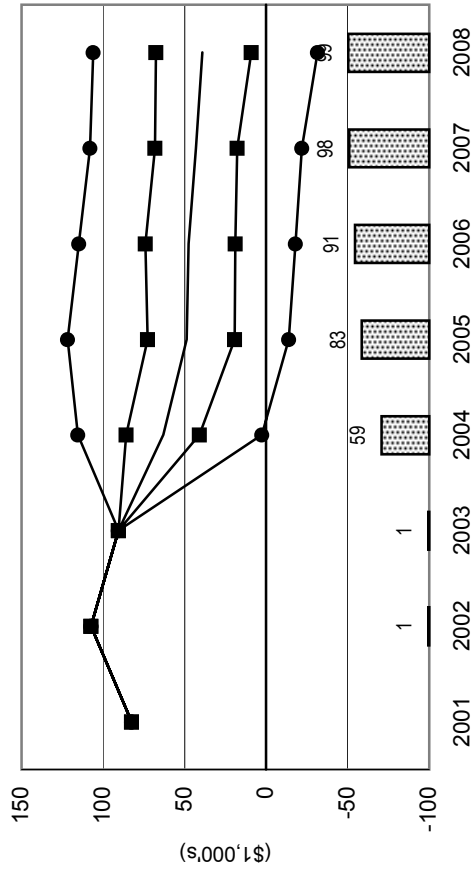
MONG1850 Northwest Missouri Grain Farm



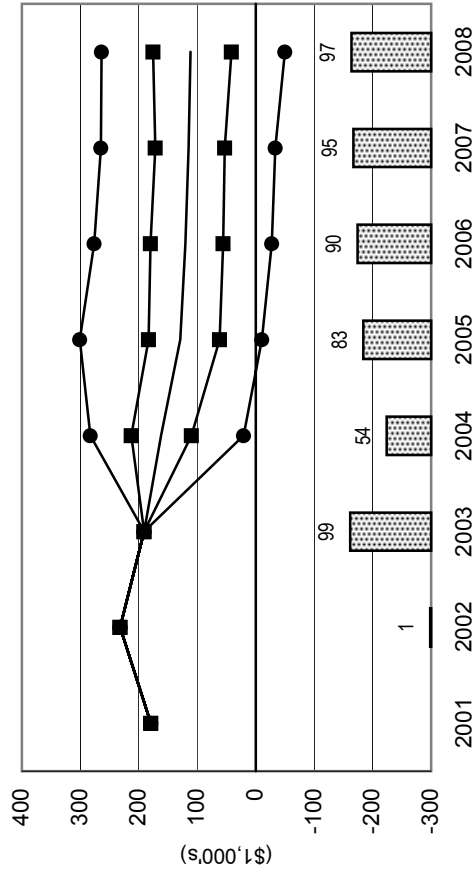
**Figure 6. Net Cash Farm Income and Probabilities of a Cash Flow Deficit:
Feed Grain and Oilseed Farms**

— Average NCFI ■ 25 & 75 Percentile NCFI ● 5 & 95 Percentile NCFI ▨ Prob. of Cash Flow Deficit

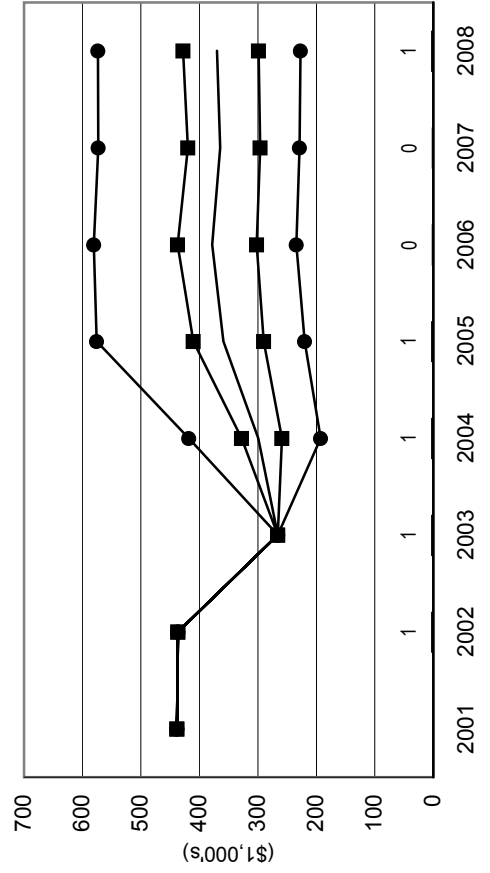
ING1000 Indiana Grain Farm



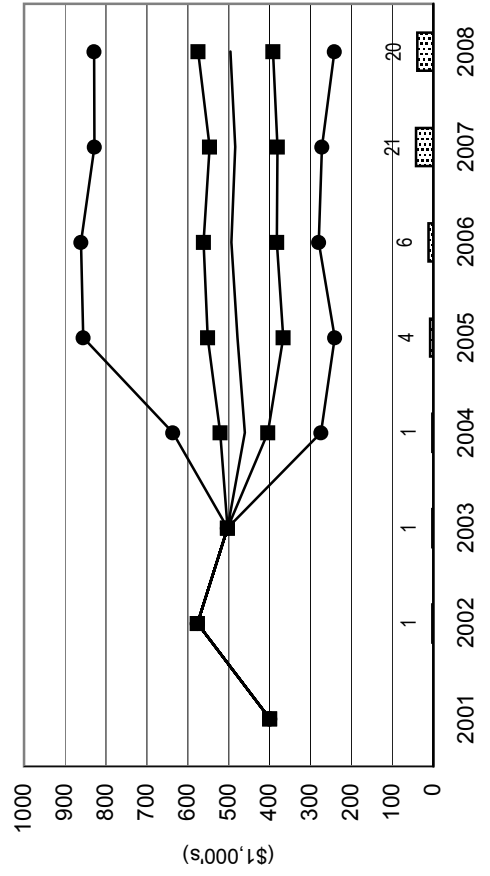
ING2200 Large Indiana Grain Farm



NEG1960 Nebraska Grain Farm

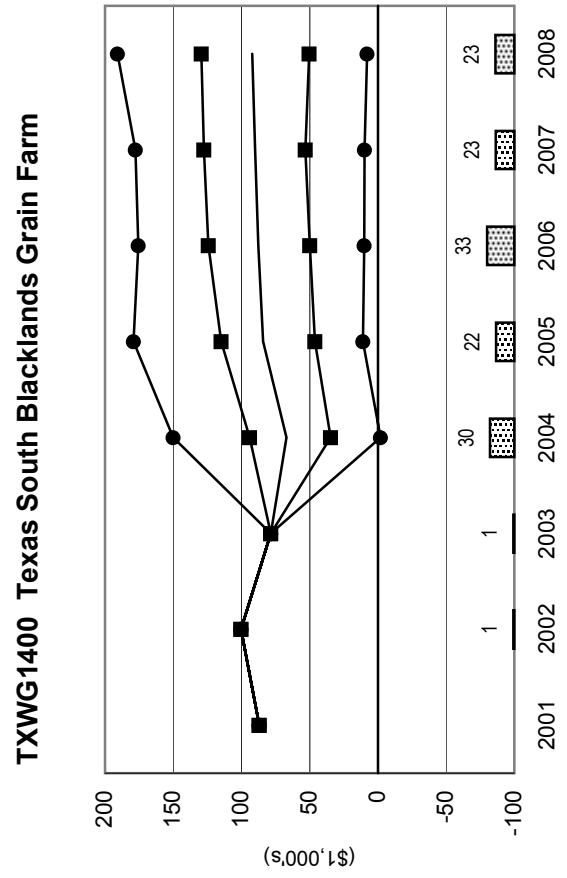
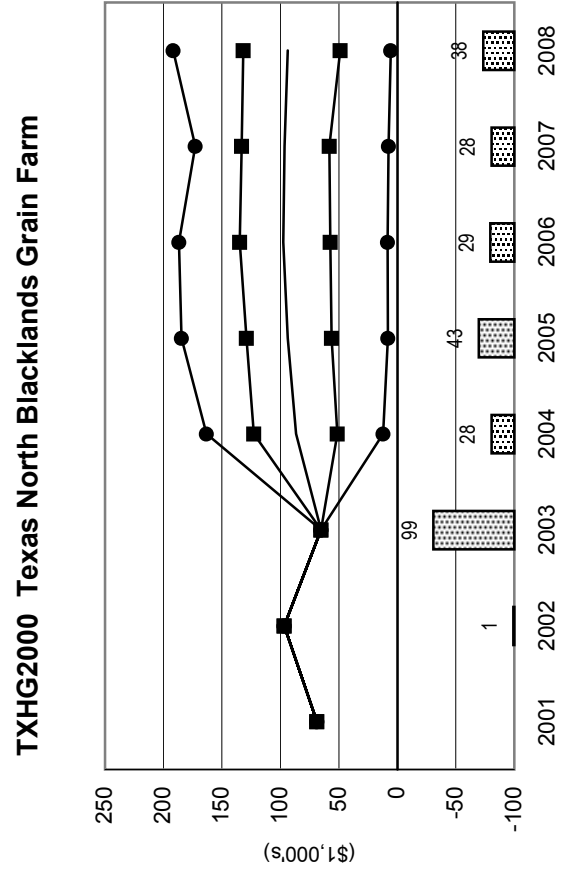
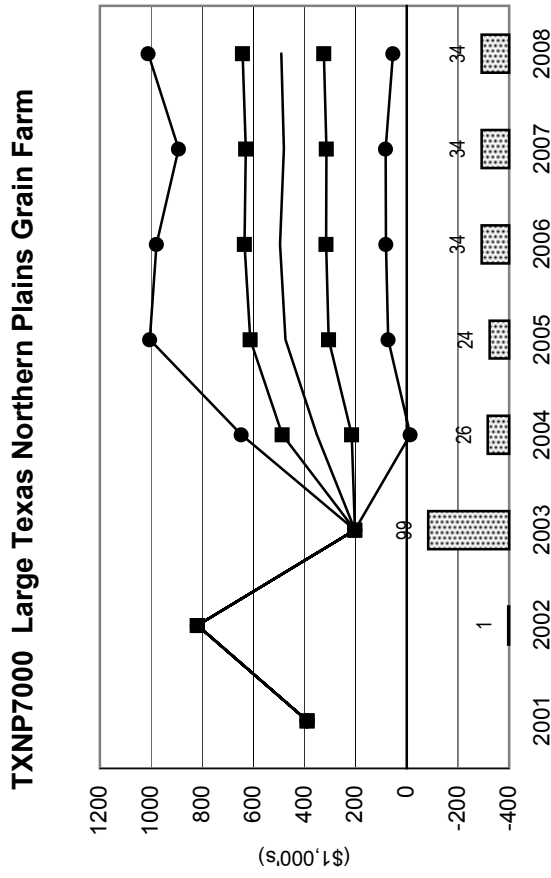
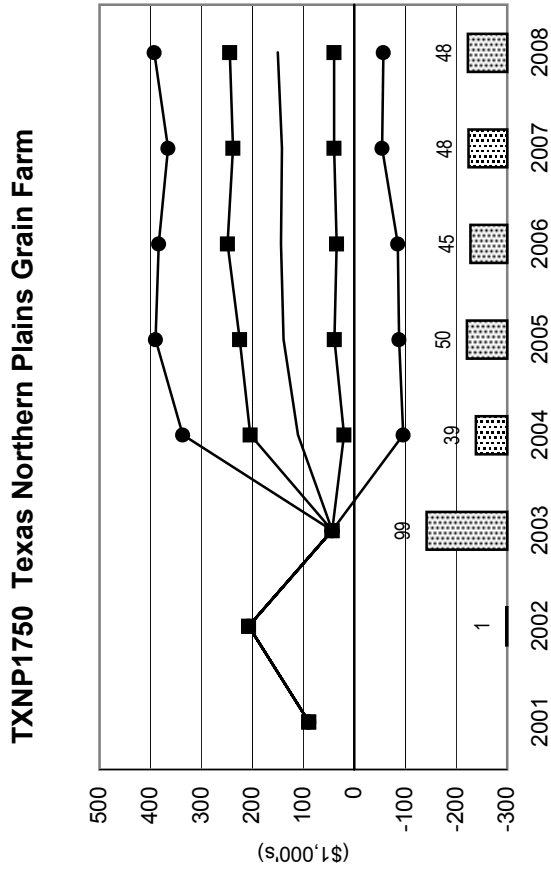


NEG4300 Large Nebraska Grain Farm



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

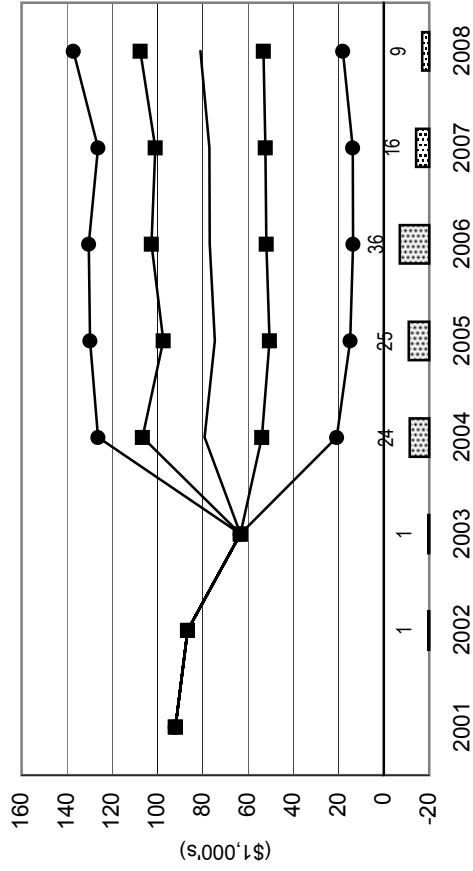
— Average NCFI ■ 25 & 75 Percentile NCFI ● Prob. of Cash Flow Deficit



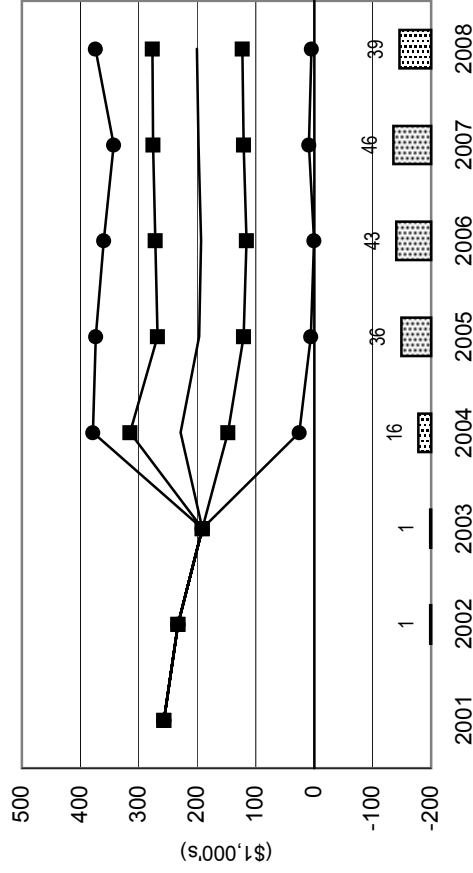
**Figure 8. Net Cash Farm Income and Probabilities of a Cash Flow Deficit:
Feed Grain and Oilseed Farms**

— Average NCFI ■ 25 & 75 Percentile NCFI ● Prob. of Cash Flow Deficit

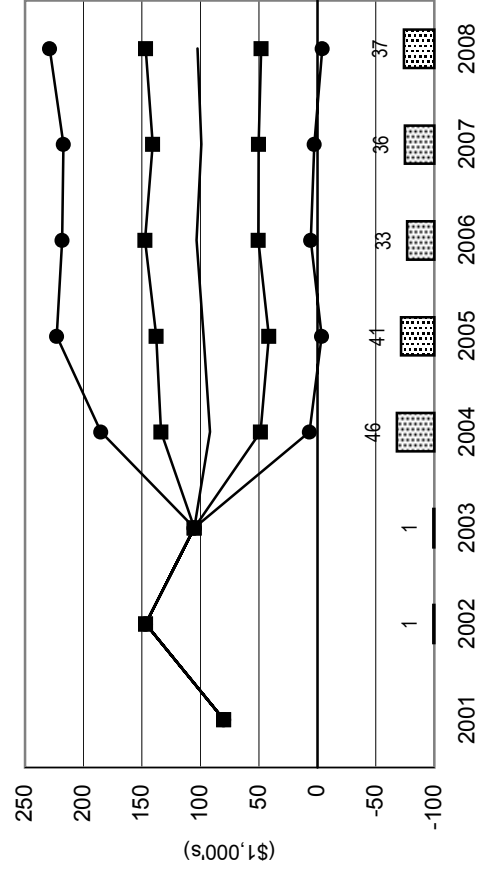
TNG900 Tennessee Grain Farm



TNG2400 Large Tennessee Grain Farm



SCG1500 South Carolina Grain Farm



SCG3500 Large South Carolina Grain Farm

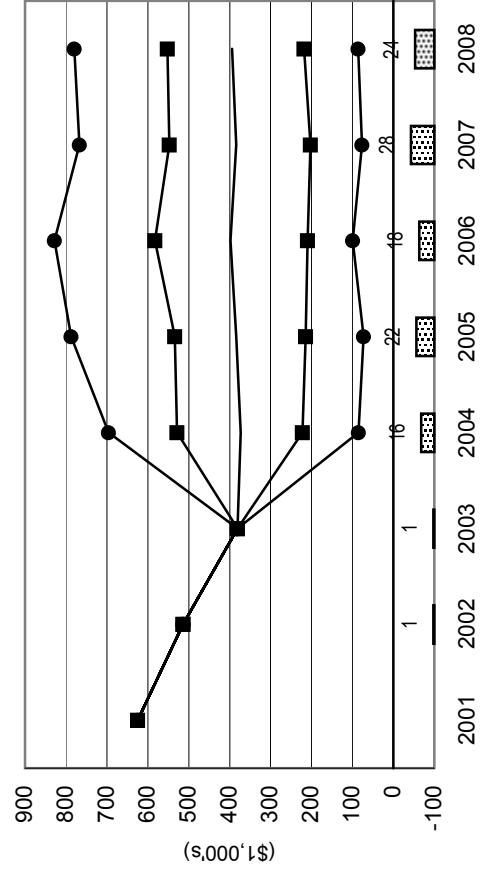


FIGURE 9. REPRESENTATIVE FARMS PRODUCING WHEAT



Wheat Farm Impacts

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

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

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

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

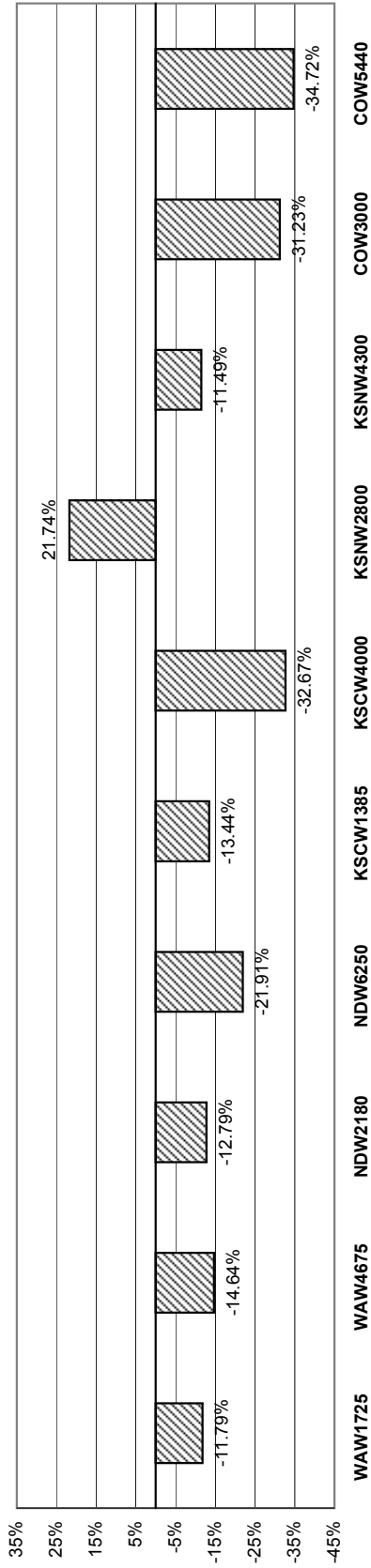
Colorado: Both farms have only a slight probability of a cash flow deficit. The costs of production for these farms are lower than the other eight representative wheat farms. Innovative intensive dryland cropping systems maximize the effect of limited moisture and reduce input costs. The COW3000 farm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

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

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

Figure 10. Wheat Farms

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



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

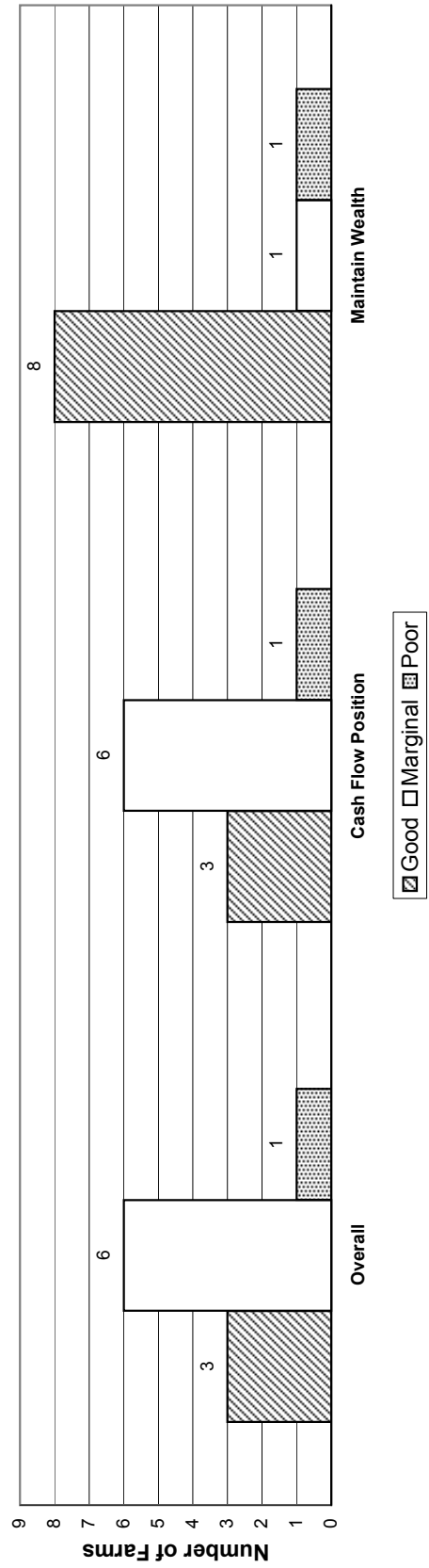
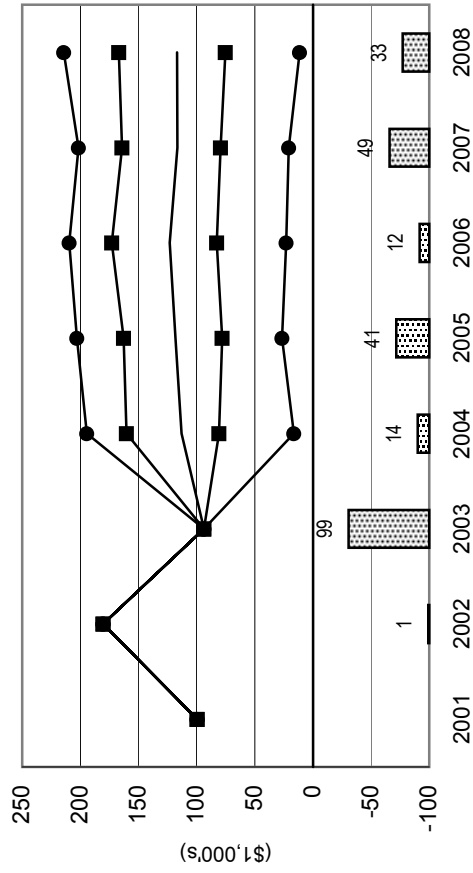


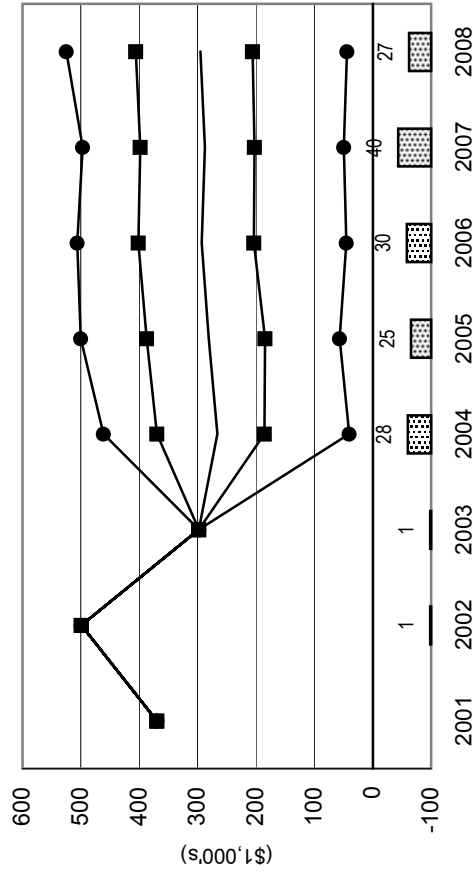
Figure 11. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Wheat Farms

— Average NCFI ■ 25 & 75 Percentile NCFI ● Prob. of Cash Flow Deficit

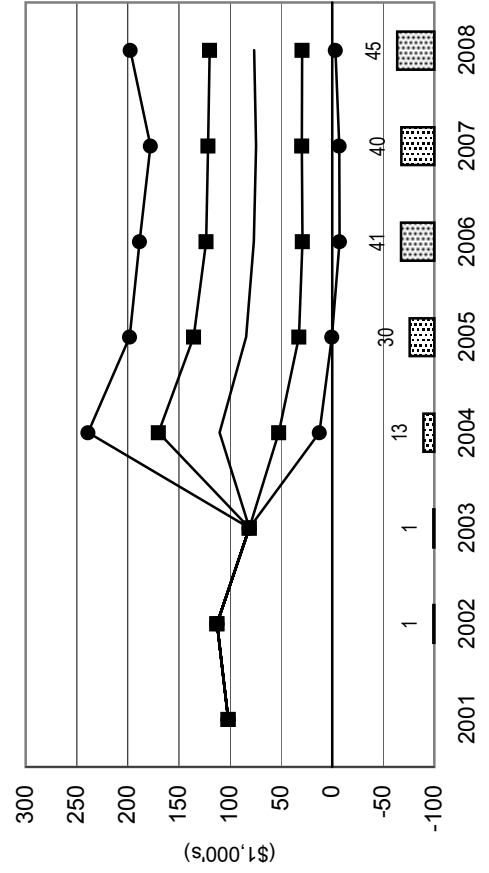
WAW1725 Washington Wheat Farm



WAW4675 Large Washington Wheat Farm



NDW2180 North Dakota Wheat Farm



NDW6250 Large North Dakota Wheat Farm

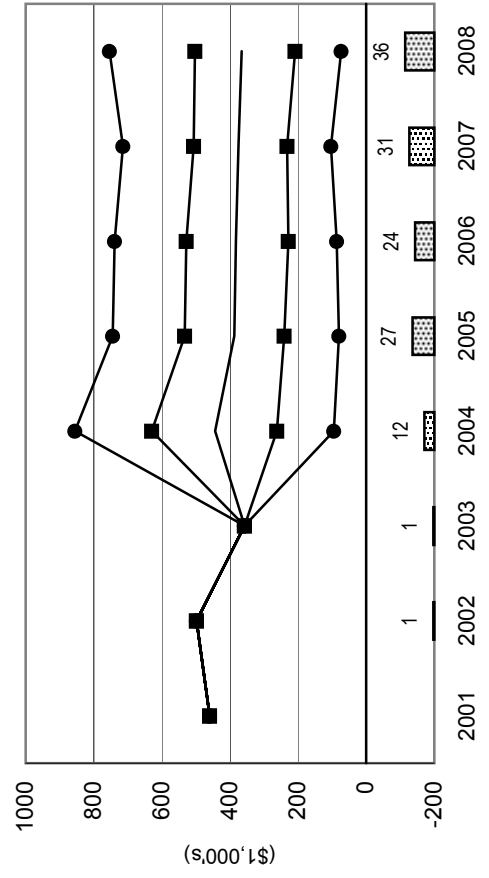
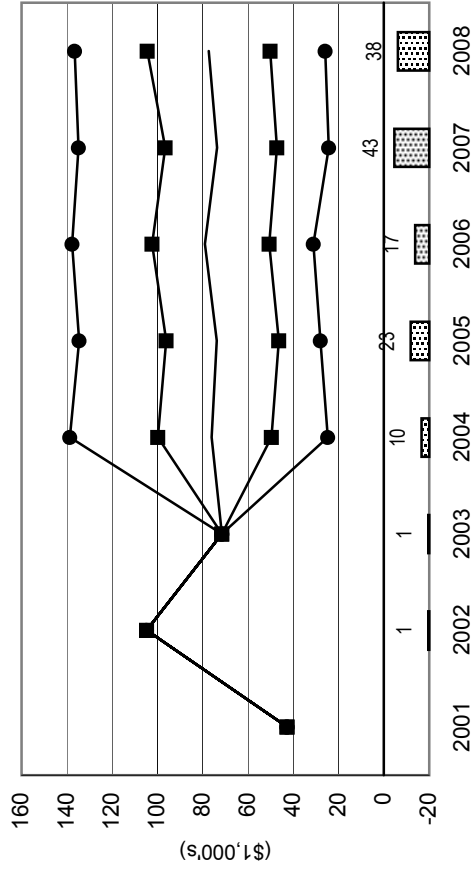


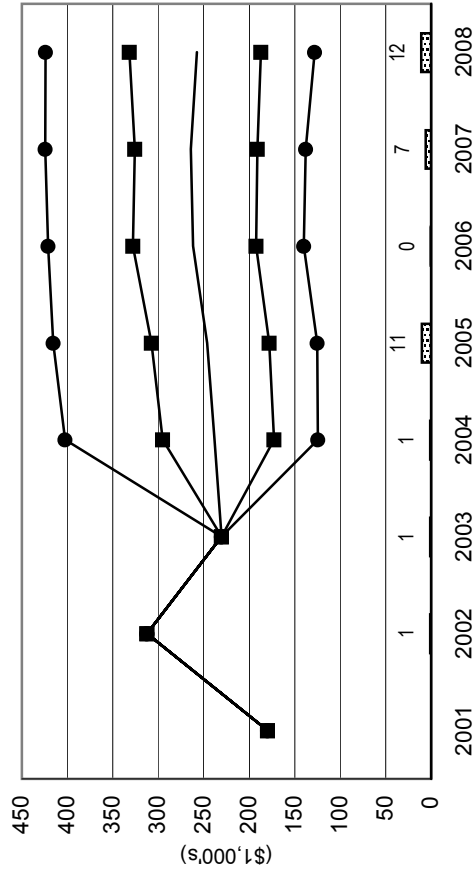
Figure 12. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Wheat Farms

— Average NCFI ■ 25 & 75 Percentile NCFI ● Prob. of Cash Flow Deficit

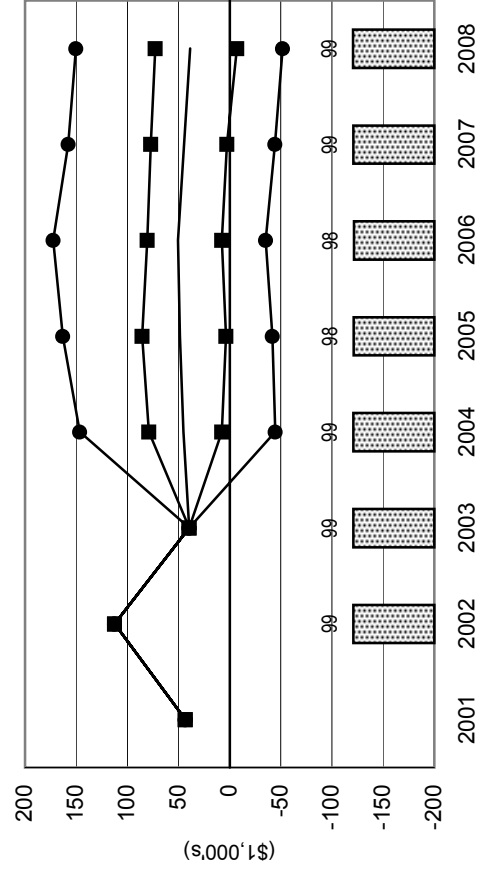
KSCW1385 Central Kansas Wheat Farm



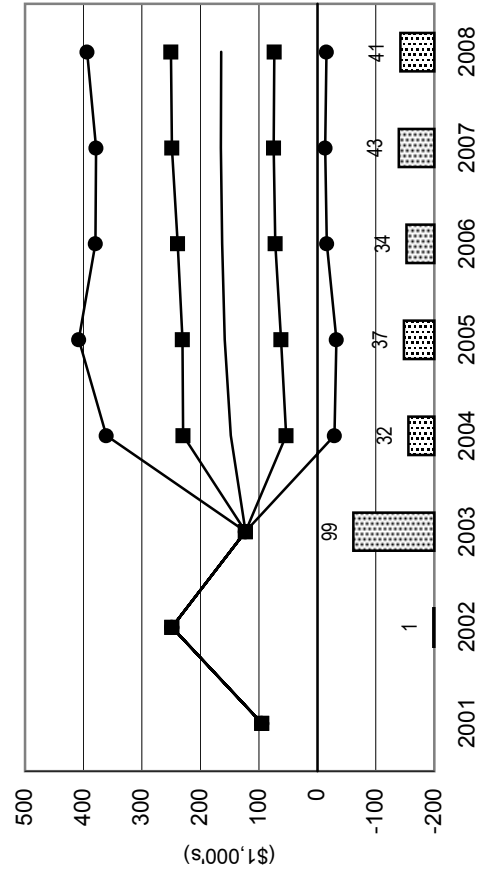
KSCW4000 Large Central Kansas Wheat Farm



KSNW2800 Northwest Kansas Wheat Farm



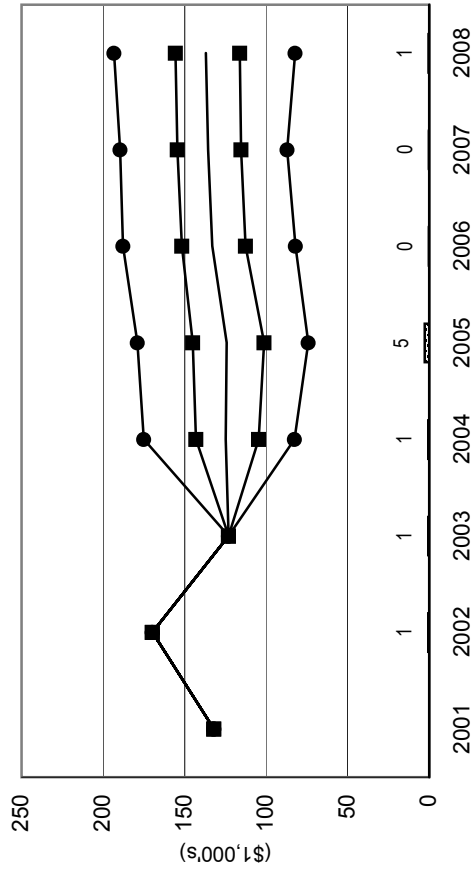
KSNW4300 Large Northwest Kansas Wheat Farm



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

— Average NCFI ■ 25 & 75 Percentile NCFI ● Prob. of Cash Flow Deficit

COW3000 Colorado Wheat Farm



COW5440 Large Colorado Wheat Farm

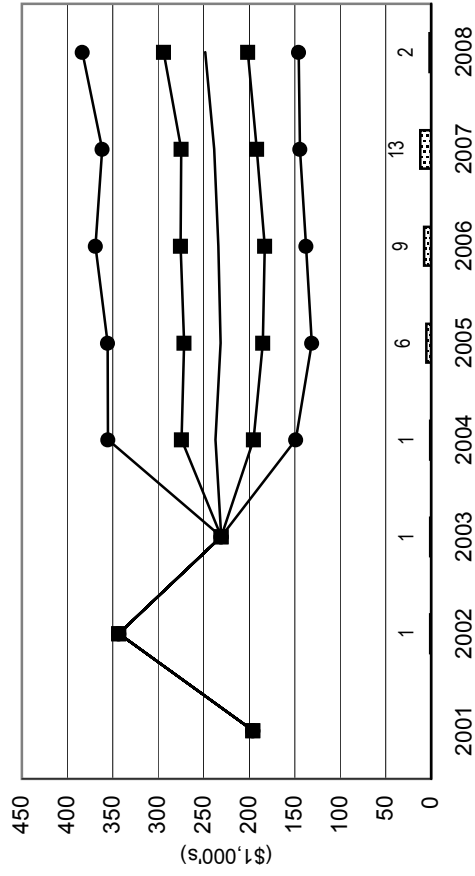
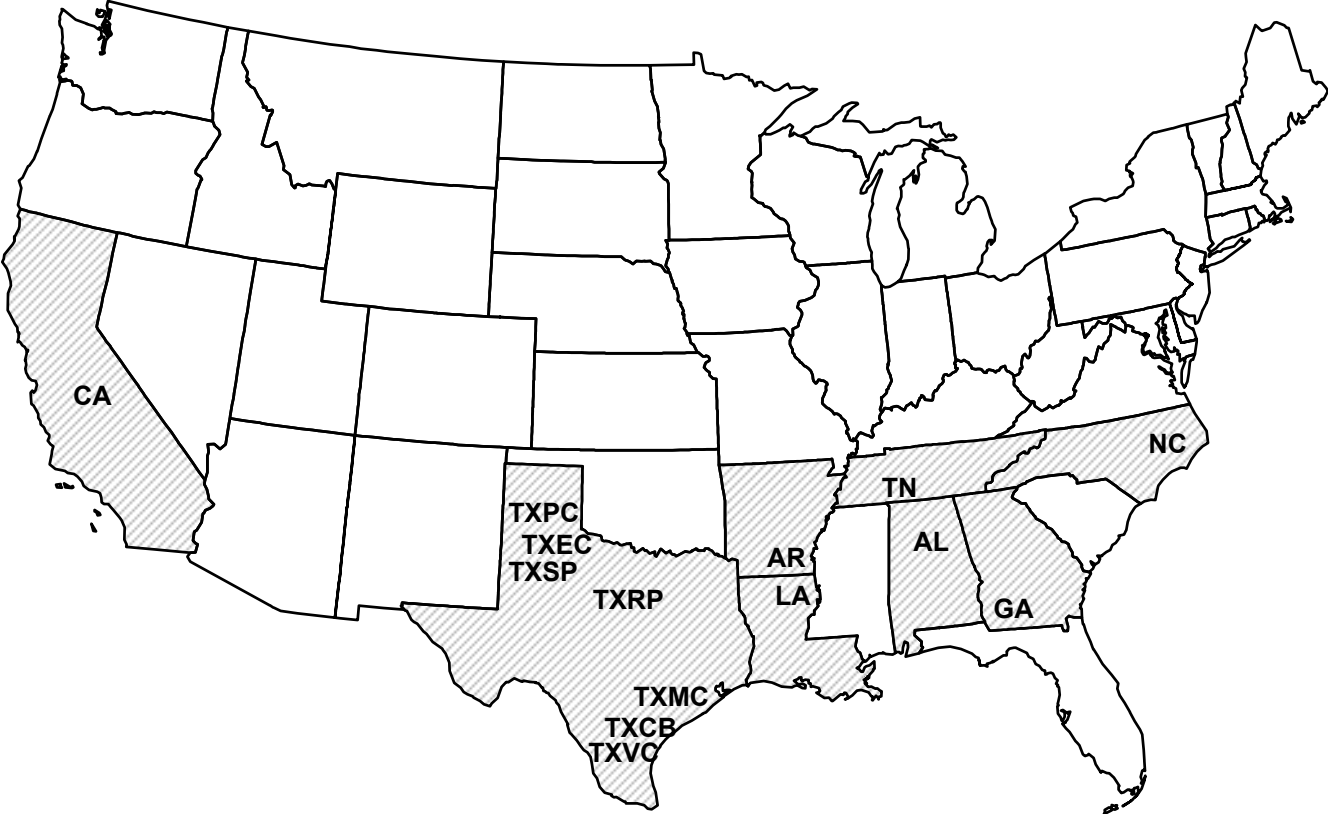


FIGURE 14. REPRESENTATIVE FARMS PRODUCING COTTON



Cotton Farm Impacts

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

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

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

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

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

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

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

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

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

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

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

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

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

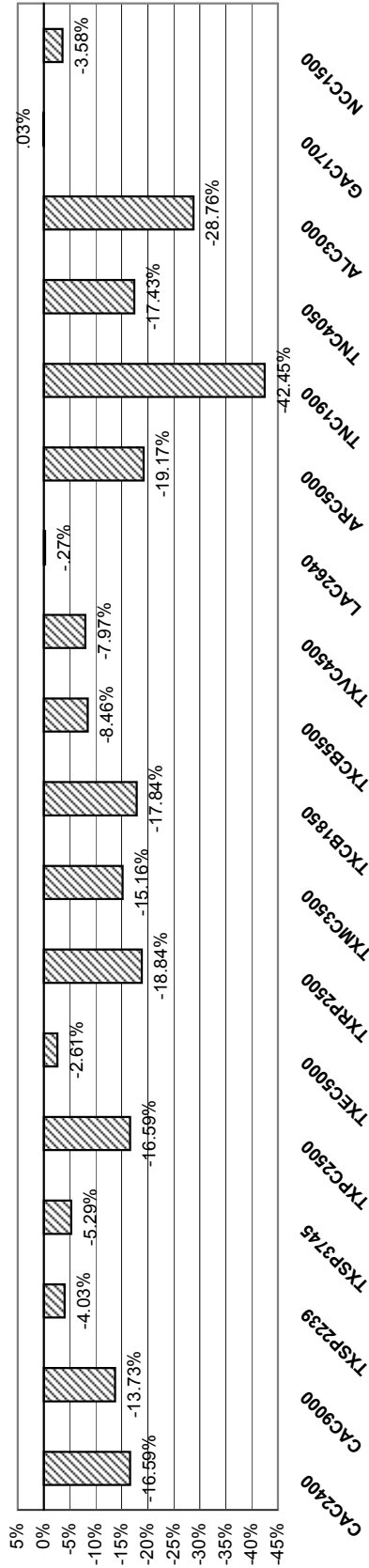
| | TXRP2500 | TXMC3500 | TXCB1850 | TXCB5500 | TXVC4500 | LAC2640 |
|---|----------|----------|----------|----------|----------|----------|
| Overall Financial Position | | | | | | |
| 2004-2008 Ranking | Marginal | Marginal | Marginal | Marginal | Marginal | Poor |
| Change Real Net Worth (%) | | |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

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

| | ARC5000 | TNC1900 | TNC4050 | ALC3000 | GAC1700 | NCC1500 |
|---|----------|----------|----------|----------|----------|----------|
| Overall Financial Position | | | | | | |
| 2004-2008 Ranking | Good | Good | Marginal | Marginal | Marginal | Poor |
| Change Real Net Worth (%) | | | | | | |
| 2004-2008 Average | 5.31 | 6.43 | 3.81 | 7.51 | 1.97 | -0.10 |
| NIA to Maintain Real Net Worth (%/Rec.) | -15.76 | -31.75 | -11.56 | -17.83 | -2.39 | -0.72 |
| NIA for Zero Ending Cash Balance (%/Rec.) | -19.17 | -42.45 | -17.43 | -28.76 | 0.03 | -3.58 |
| Govt Payments/Receipts (%) | | | | | | |
| 2004-2008 Average | 24.89 | 16.42 | 15.65 | 18.52 | 12.77 | 15.95 |
| Cost to Receipts Ratio (%) | | | | | | |
| 2004-2008 Average | 73.72 | 59.27 | 80.31 | 72.52 | 87.75 | 86.14 |
| Total Cash Receipts (\$1000) | | | | | | |
| 2001 | 2,421.99 | 773.05 | 1,543.68 | 1,303.23 | 1,197.50 | 834.04 |
| 2002 | 2,511.70 | 699.44 | 1,664.30 | 1,316.94 | 1,127.37 | 540.17 |
| 2003 | 2,967.92 | 844.94 | 2,062.89 | 1,638.31 | 1,358.87 | 863.53 |
| 2004 | 2,762.88 | 722.12 | 1,810.33 | 1,354.54 | 1,152.84 | 772.16 |
| 2005 | 2,675.31 | 727.28 | 1,811.41 | 1,391.60 | 1,199.65 | 764.79 |
| 2006 | 2,641.02 | 725.15 | 1,804.64 | 1,398.23 | 1,203.85 | 761.81 |
| 2007 | 2,653.55 | 728.07 | 1,804.90 | 1,399.97 | 1,211.80 | 768.24 |
| 2008 | 2,684.55 | 739.08 | 1,829.92 | 1,418.20 | 1,231.77 | 776.93 |
| 2004-2008 Average | 2,683.46 | 728.34 | 1,812.24 | 1,392.51 | 1,199.98 | 768.79 |
| Government Payments (\$1000) | | | | | | |
| 2001 | 1,221.43 | 174.98 | 374.13 | 567.08 | 285.35 | 346.58 |
| 2002 | 897.99 | 160.54 | 383.87 | 360.53 | 224.46 | 137.08 |
| 2003 | 747.22 | 199.27 | 495.73 | 462.92 | 294.14 | 215.16 |
| 2004 | 470.99 | 58.35 | 122.25 | 124.81 | 58.61 | 51.87 |
| 2005 | 665.67 | 113.88 | 260.66 | 245.71 | 149.84 | 115.92 |
| 2006 | 746.19 | 137.60 | 316.19 | 292.01 | 182.59 | 143.60 |
| 2007 | 733.30 | 140.25 | 324.44 | 298.41 | 188.18 | 146.68 |
| 2008 | 724.10 | 144.14 | 337.52 | 307.07 | 196.62 | 151.77 |
| 2004-2008 Average | 668.05 | 118.85 | 272.21 | 253.60 | 155.13 | 121.97 |
| Net Cash Farm Income (\$1000) | | | | | | |
| 2001 | 535.31 | 353.03 | 236.57 | 388.08 | 122.21 | 215.22 |
| 2002 | 618.26 | 289.19 | 363.20 | 394.90 | 133.88 | -31.85 |
| 2003 | 972.03 | 408.75 | 687.82 | 674.67 | 308.46 | 222.84 |
| 2004 | 814.60 | 309.50 | 470.58 | 410.99 | 119.47 | 143.60 |
| 2005 | 731.42 | 306.87 | 467.16 | 440.13 | 160.01 | 129.17 |
| 2006 | 693.12 | 305.88 | 461.88 | 435.95 | 159.76 | 119.11 |
| 2007 | 678.87 | 299.44 | 449.70 | 422.70 | 155.00 | 105.22 |
| 2008 | 693.66 | 309.75 | 465.01 | 426.59 | 162.32 | 103.67 |
| 2004-2008 Average | 722.33 | 306.29 | 462.87 | 427.27 | 151.31 | 120.15 |
| Prob. of a Cash Flow Deficit (%) | | | | | | |
| 2003 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2004 | 3 | 1 | 26 | 28 | 99 | 34 |
| 2005 | 9 | 8 | 29 | 20 | 78 | 51 |
| 2006 | 12 | 3 | 30 | 26 | 68 | 55 |
| 2007 | 24 | 7 | 32 | 32 | 65 | 74 |
| 2008 | 22 | 8 | 32 | 37 | 61 | 70 |
| Ending Cash Reserves (\$1000) | | | | | | |
| 2001 | 274.40 | 169.15 | 79.82 | 200.82 | 12.82 | 145.77 |
| 2002 | 515.94 | 267.80 | 236.08 | 366.75 | 16.69 | 23.12 |
| 2003 | 860.61 | 445.10 | 548.84 | 684.16 | 105.56 | 170.30 |
| 2004 | 1,144.62 | 579.32 | 695.54 | 837.22 | 26.23 | 217.62 |
| 2005 | 1,345.40 | 686.44 | 822.95 | 1,038.02 | -10.49 | 224.01 |
| 2006 | 1,516.62 | 813.73 | 958.82 | 1,218.92 | -16.02 | 219.85 |
| 2007 | 1,618.25 | 932.68 | 1,073.99 | 1,365.04 | -13.83 | 158.15 |
| 2008 | 1,749.55 | 1,050.51 | 1,204.64 | 1,512.24 | -1.04 | 108.60 |
| Nominal Net Worth (\$1000) | | | | | | |
| 2001 | 2,765.33 | 1,311.91 | 2,707.81 | 1,206.23 | 1,388.32 | 1,439.43 |
| 2002 | 3,069.03 | 1,442.73 | 2,911.91 | 1,392.06 | 1,413.85 | 1,323.15 |
| 2003 | 3,509.90 | 1,653.40 | 3,294.94 | 1,742.36 | 1,533.05 | 1,482.93 |
| 2004 | 3,827.89 | 1,799.71 | 3,436.79 | 1,879.98 | 1,500.05 | 1,519.26 |
| 2005 | 4,096.29 | 1,940.06 | 3,578.32 | 2,064.69 | 1,526.30 | 1,536.99 |
| 2006 | 4,368.17 | 2,084.28 | 3,762.34 | 2,251.52 | 1,606.19 | 1,542.95 |
| 2007 | 4,589.09 | 2,228.65 | 3,917.47 | 2,415.90 | 1,618.84 | 1,519.23 |
| 2008 | 4,865.91 | 2,387.92 | 4,101.60 | 2,587.47 | 1,654.92 | 1,518.19 |
| Prob. of Decreasing Real Net Worth Over 2001-2008 (%) | 1 | 1 | 3 | 1 | 3 | 16 |

Figure 15. Cotton Farms

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



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

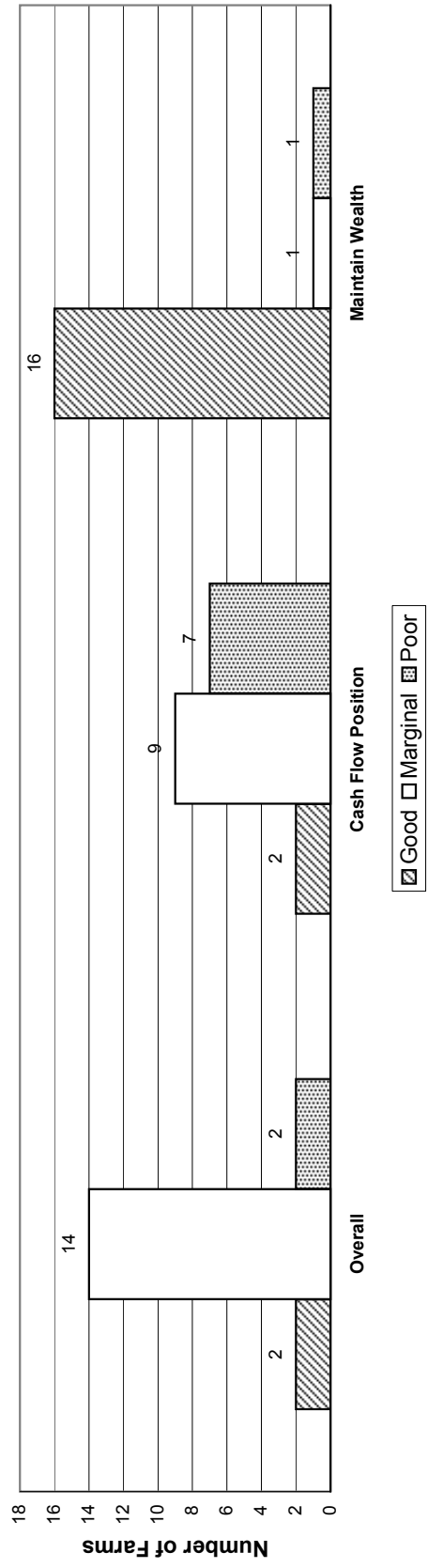
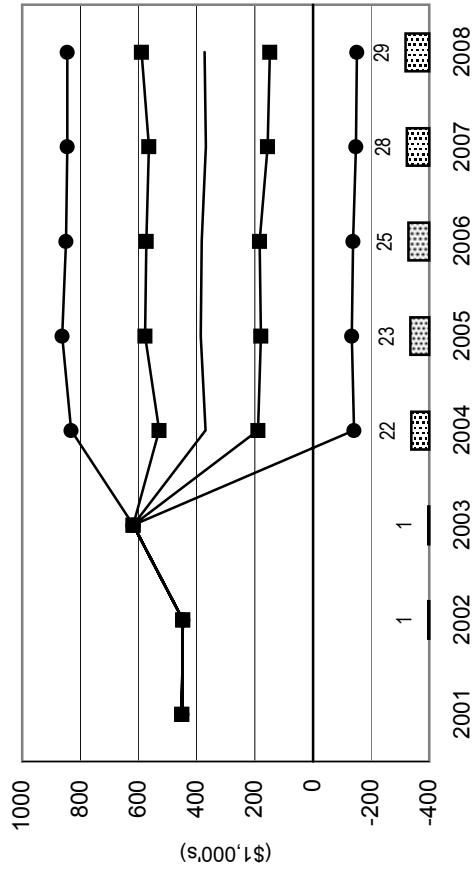


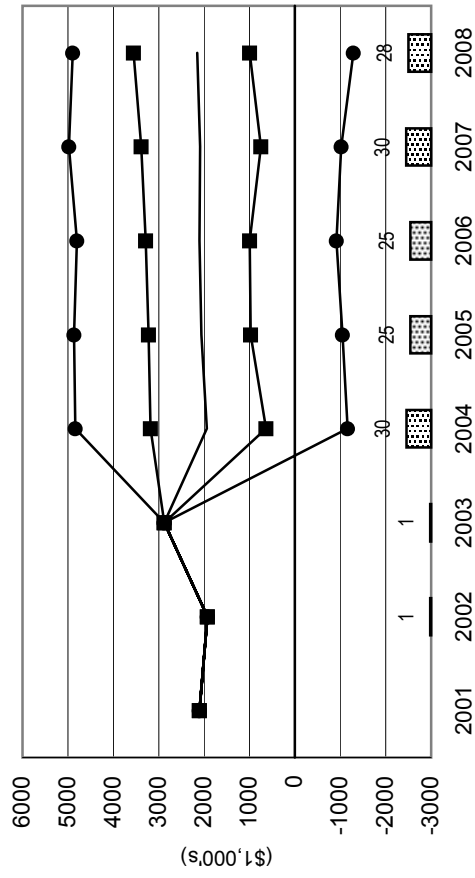
Figure 16. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Cotton Farms

— Average NCFI ■ 25 & 75 Percentile NCFI ● Prob. of Cash Flow Deficit

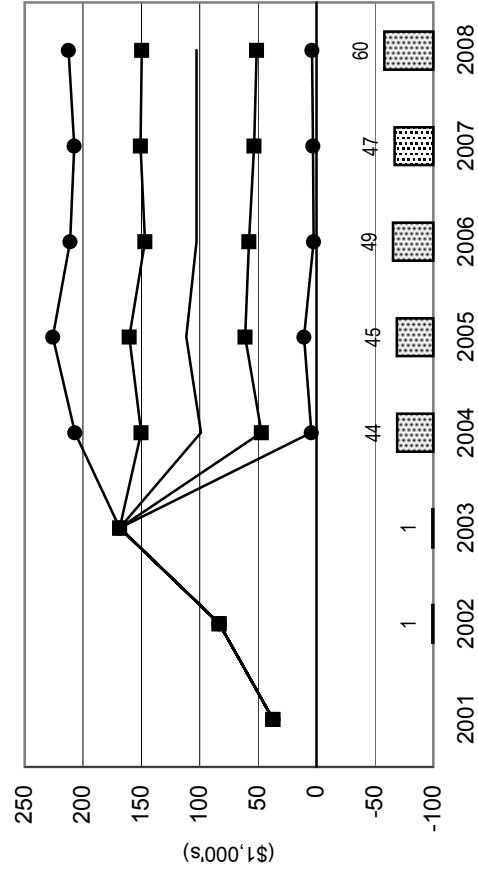
CAC2400 California Cotton Farm



CAC9000 Large California Cotton Farm



TXSP2239 Texas Southern Plains Cotton Farm



TXSP3745 Large Texas Southern Plains Cotton Farm

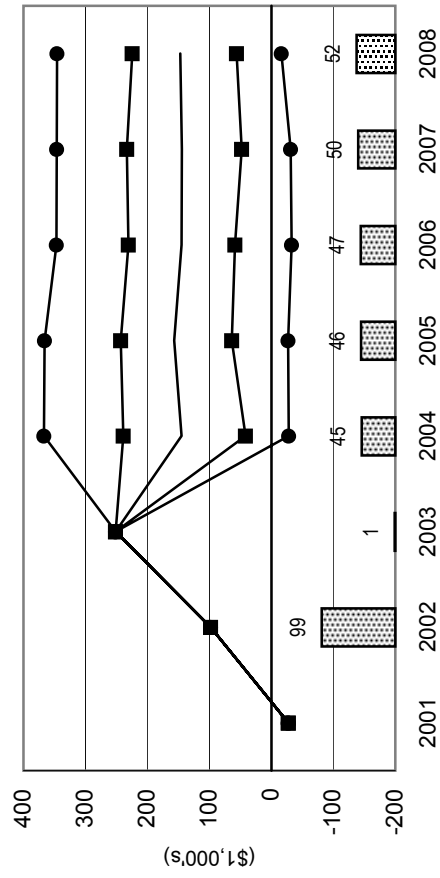
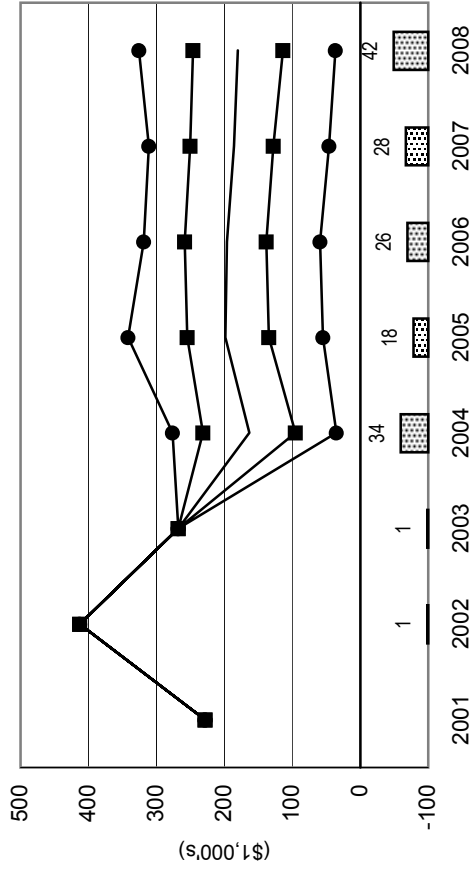


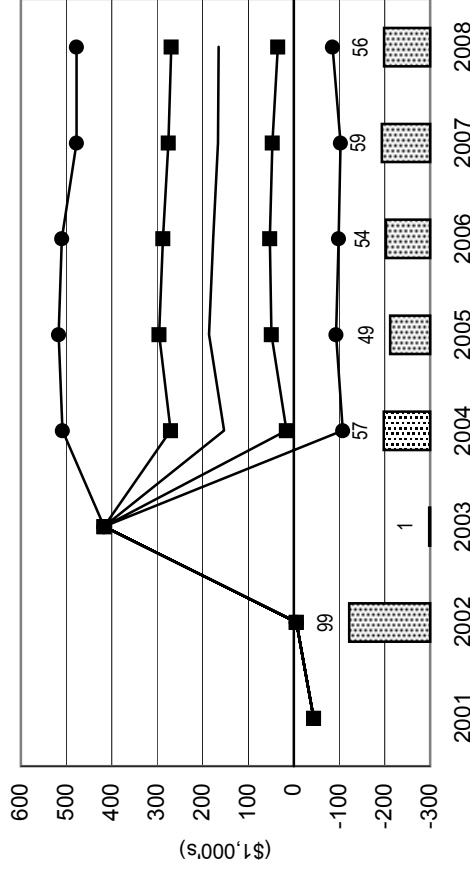
Figure 17. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Cotton Farms

— Average NCFI ■ 25 & 75 Percentile NCFI ● Prob. of Cash Flow Deficit

TXPC2500 Texas Panhandle Cotton Farm



TXEC5000 Texas Eastern Caprock Cotton Farm



TXRP2500 Texas Rolling Plains Cotton Farm

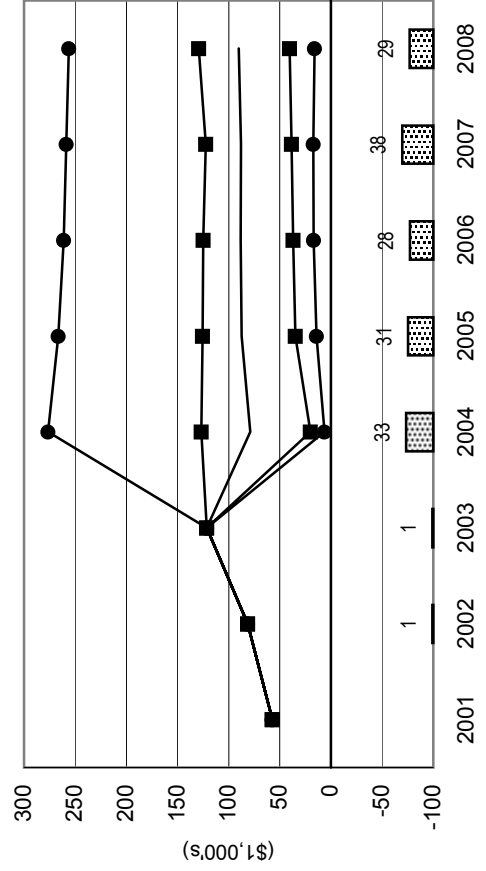
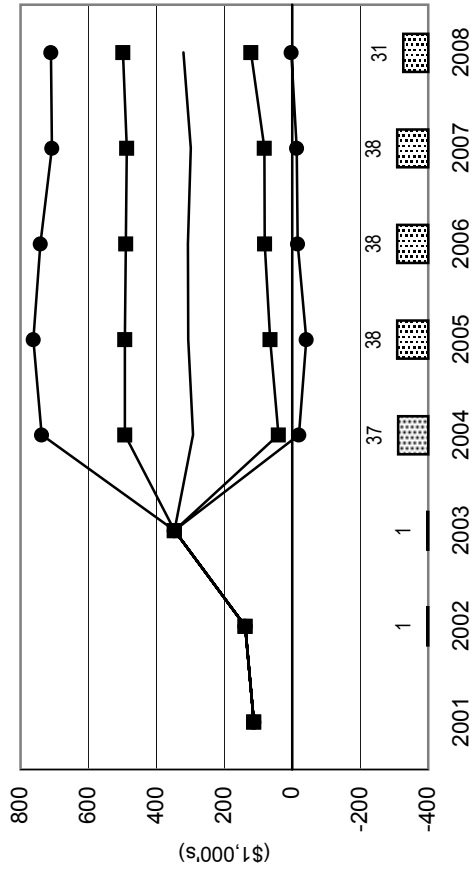


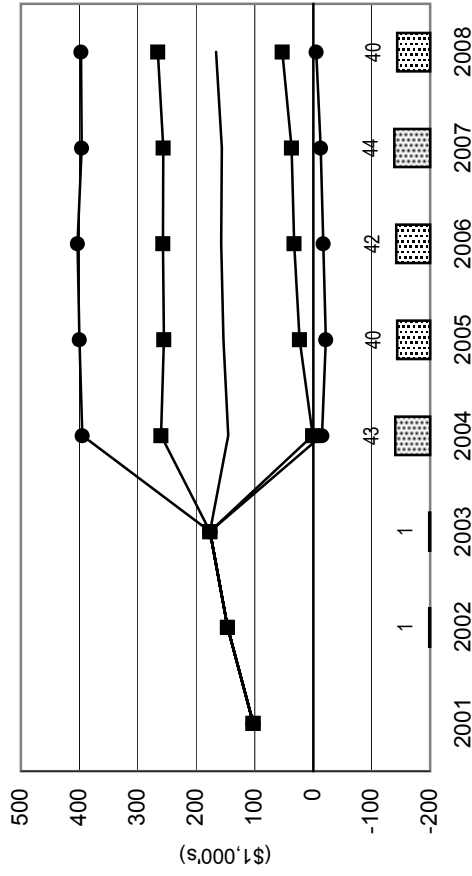
Figure 18. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Cotton Farms

— Average NCFI ■ 25 & 75 Percentile NCFI ● Prob. of Cash Flow Deficit

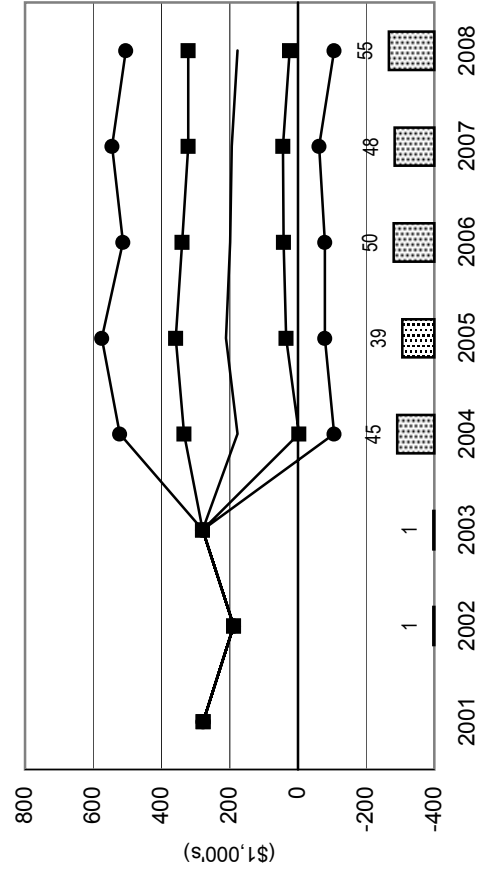
TXMC3500 Texas Mid-Coast Cotton Farm



TXCB1850 Texas Coastal Bend Cotton Farm



TXCB5500 Large Texas Coastal Bend Cotton Farm



TXVC4500 Texas Cotton Farm

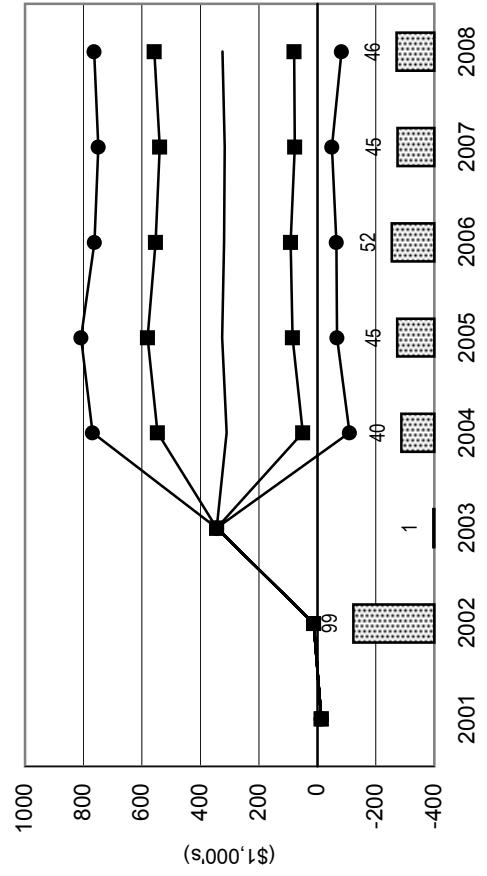
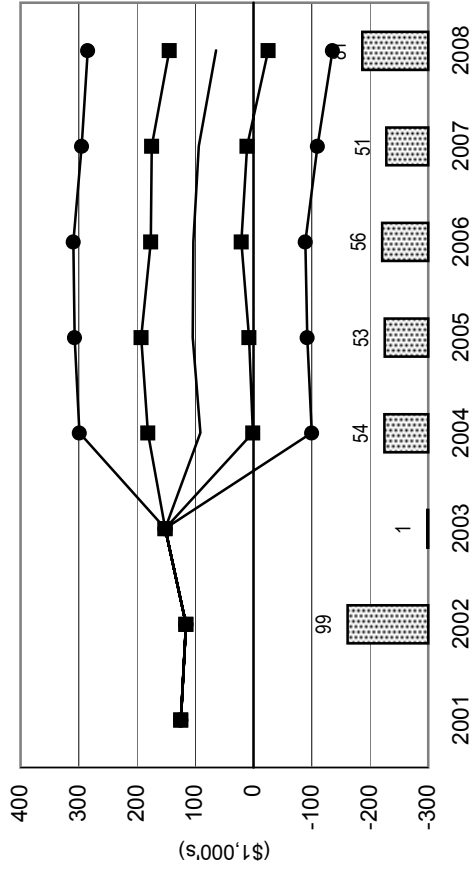


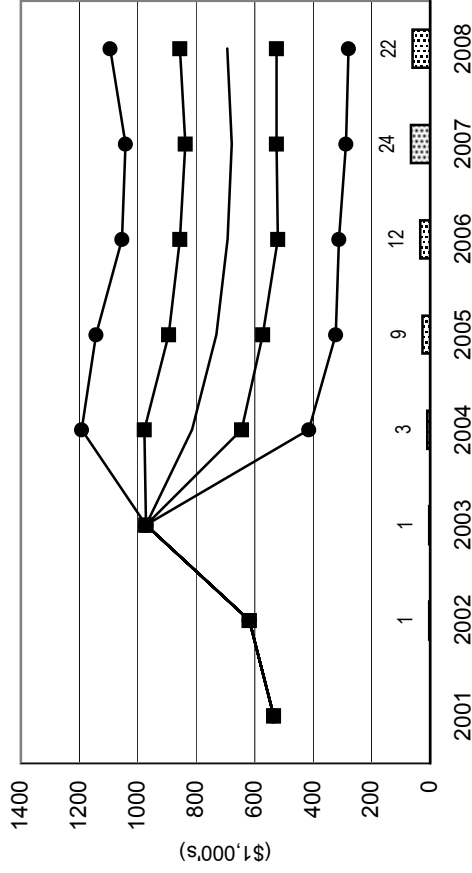
Figure 19. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Cotton Farms

— Average NCFI ■ 25 & 75 Percentile NCFI ● Prob. of Cash Flow Deficit

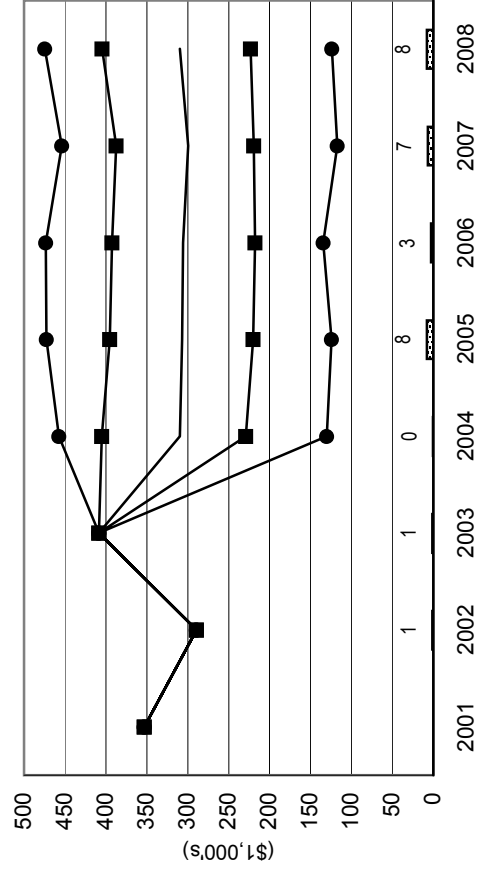
LAC2640 Louisiana Cotton Farm



ARC5000 Arkansas Cotton Farm



TNC1900 Tennessee Cotton Farm



TNC4050 Large Tennessee Cotton Farm

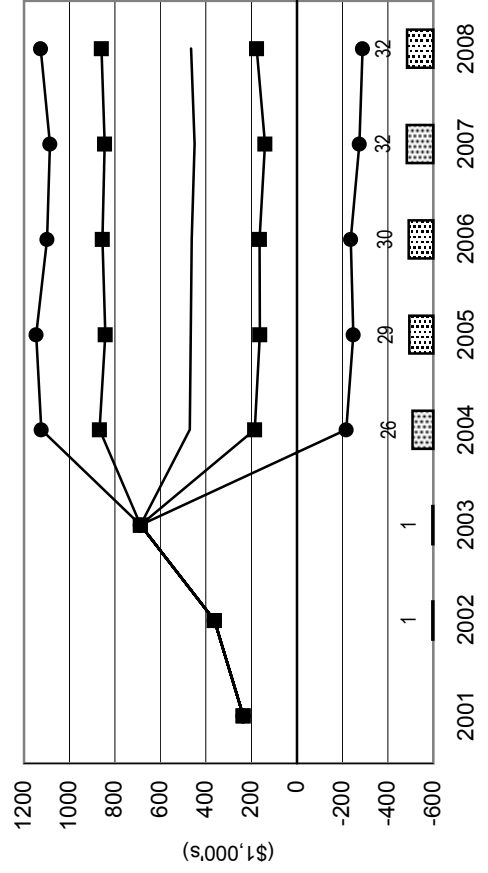
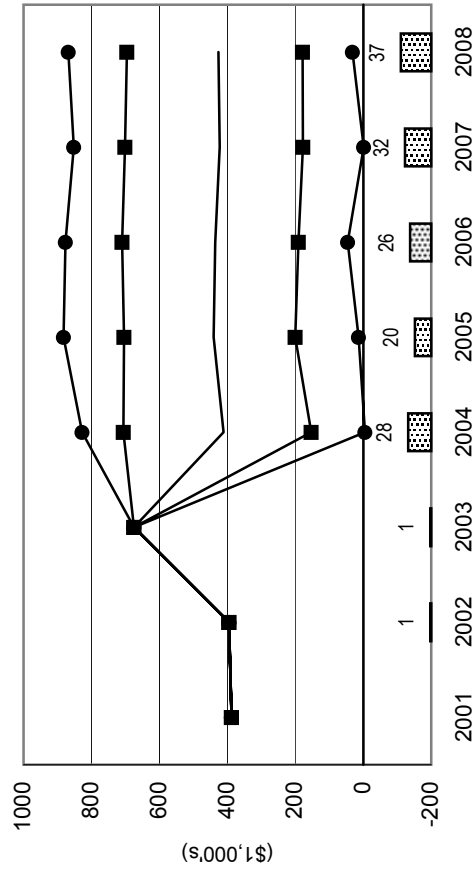


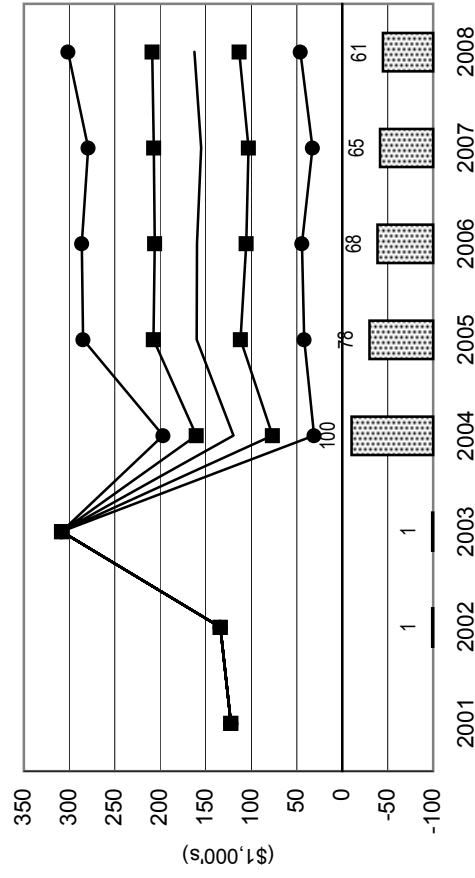
Figure 20. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Cotton Farms

— Average NCFI ■ 25 & 75 Percentile NCFI ● Prob. of Cash Flow Deficit

ALC3000 Alabama Cotton Farm



GAC1700 Georgia Cotton Farm



NCC1500 North Carolina Cotton Farm

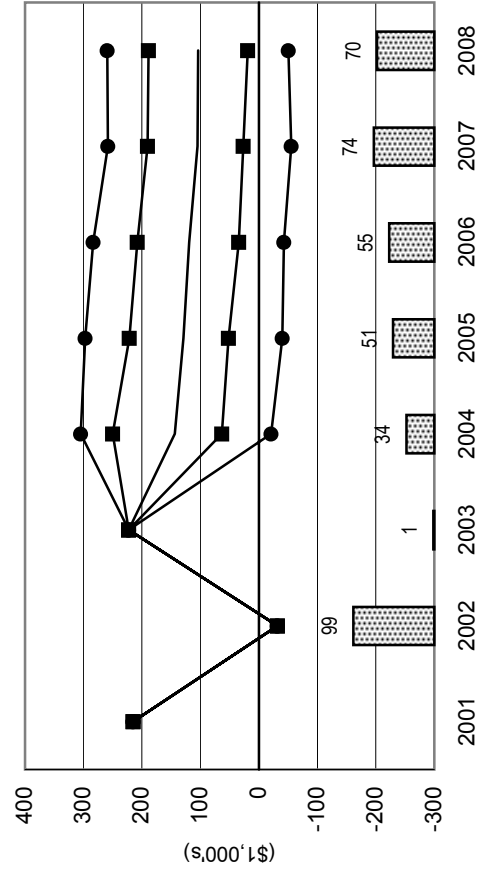
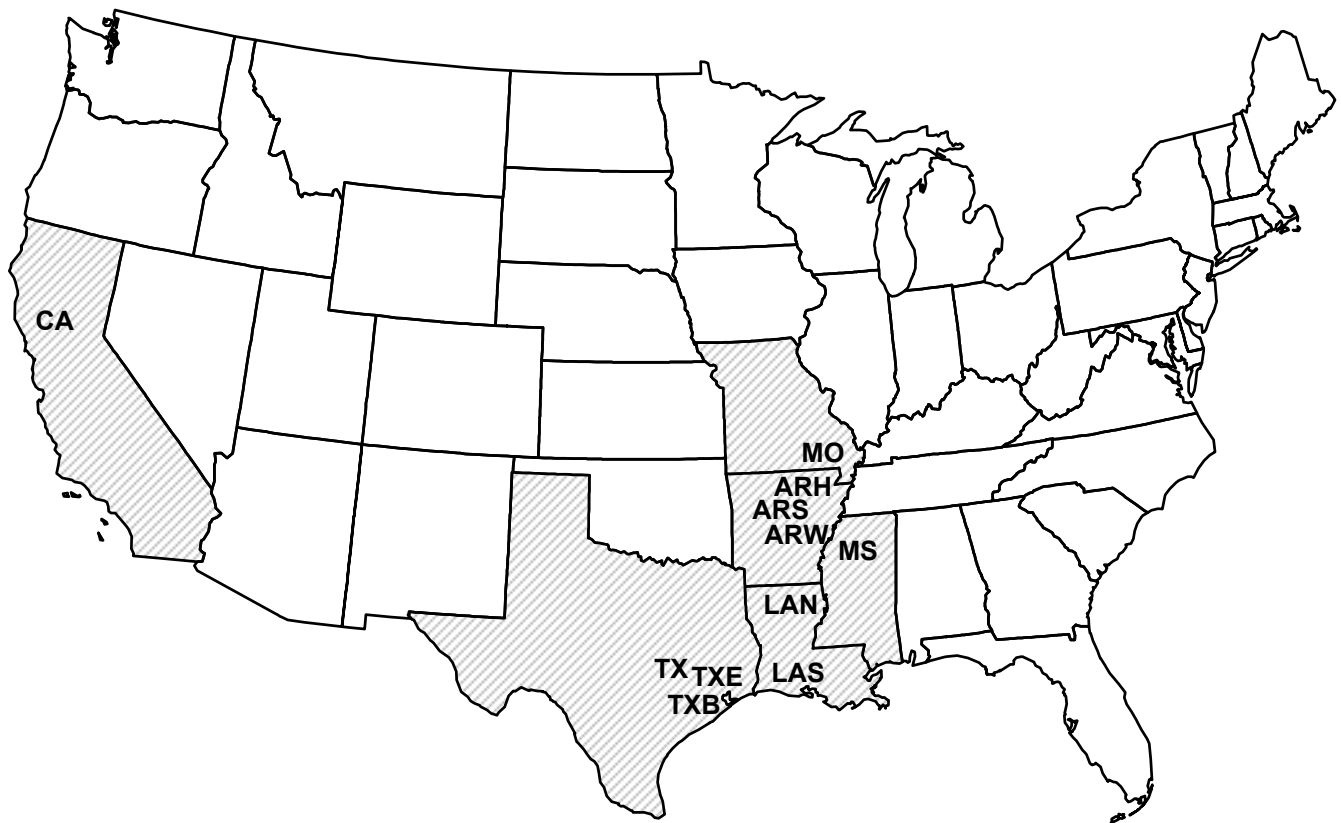


FIGURE 21. REPRESENTATIVE FARMS PRODUCING RICE



Rice Farm Impacts

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

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

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

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

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

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

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

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

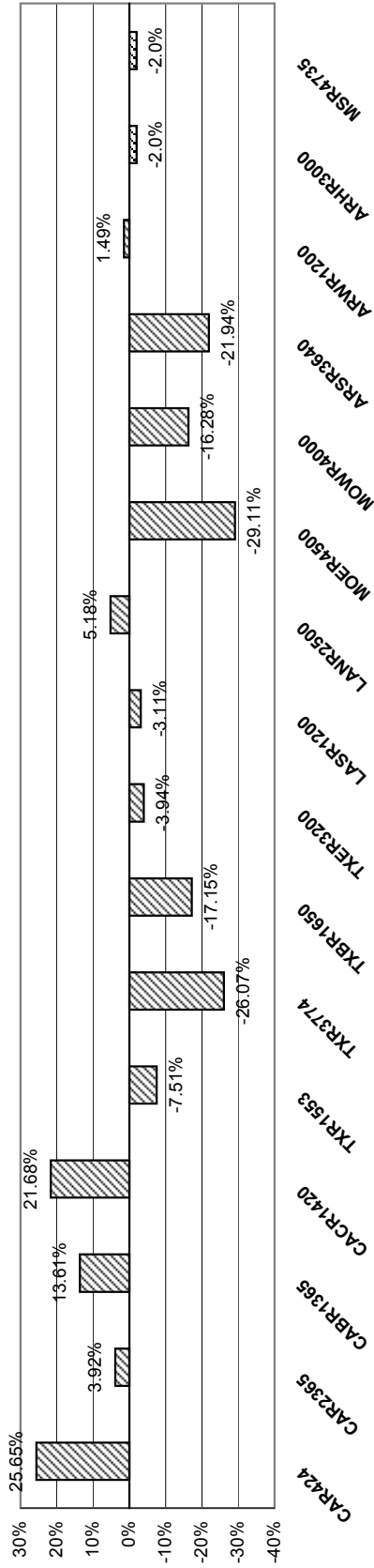
| | CAR424 | CAR2365 | CABR1365 | CACR1420 | TXR1553 | TXR3774 | TXBR1650 | TXER3200 |
|---|---------|----------|----------|-----------|----------|----------|----------|----------|
| Overall Financial Position | | | | | | | | |
| 2004-2008 Ranking | Poor | Poor | Poor | Poor | Marginal | Good | Marginal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

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

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

Figure 22. Rice Farms

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



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

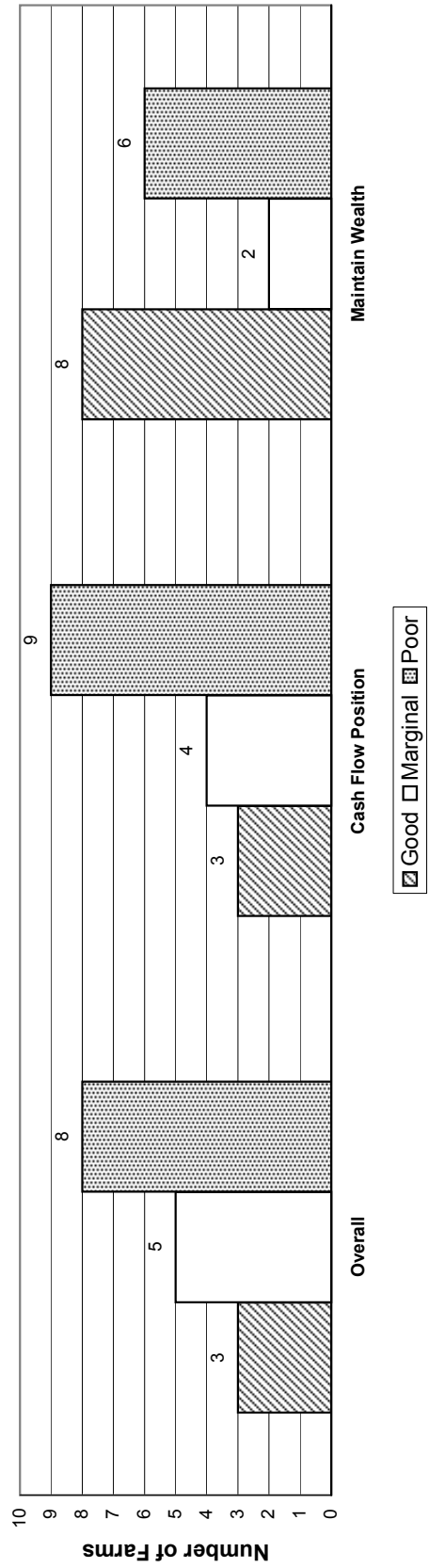
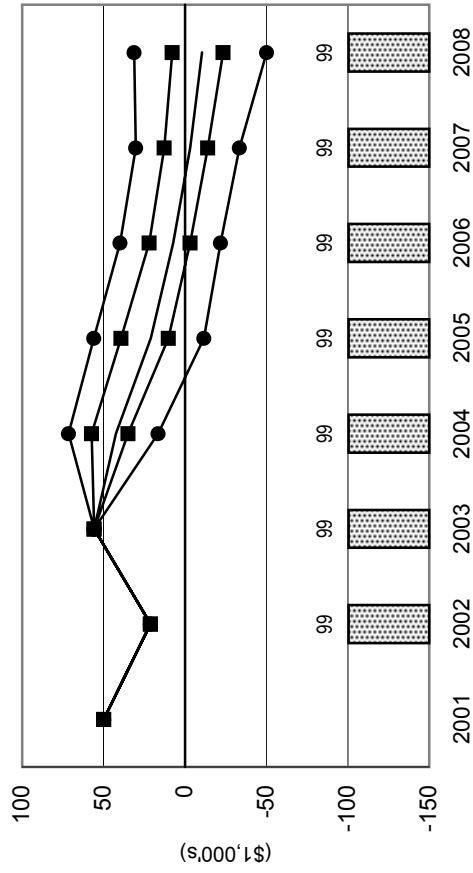


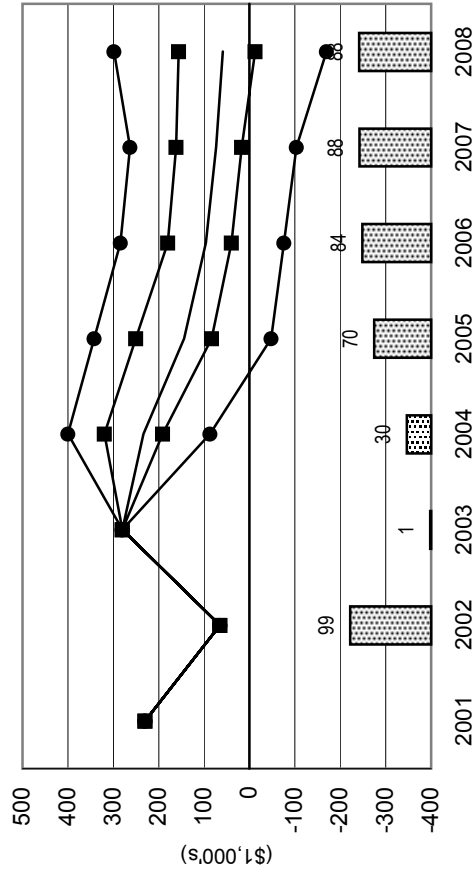
Figure 23. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Rice Farms

— Average NCFI ■ 25 & 75 Percentile NCFI ● 5 & 95 Percentile NCFI ▨ Prob. of Cash Flow Deficit

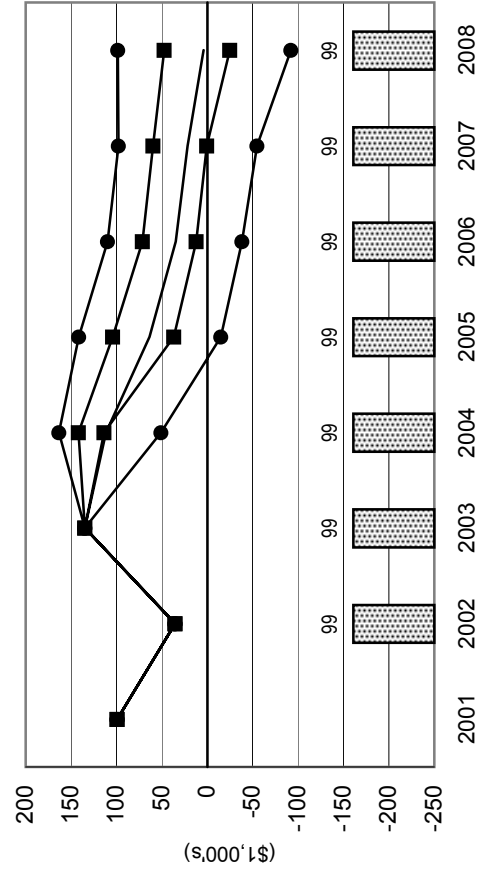
CAR424 California Rice Farm



CAR2365 California Rice Farm



CABR1365 California Rice Farm



CACR1420 California Rice Farm

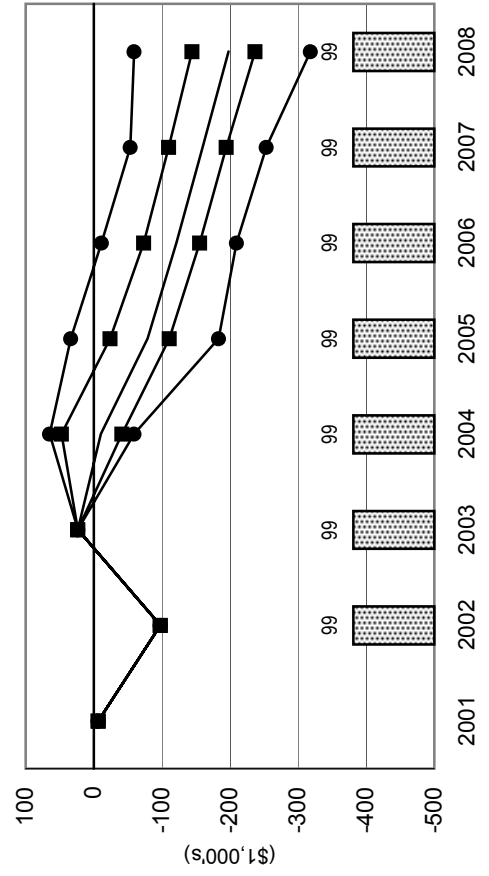
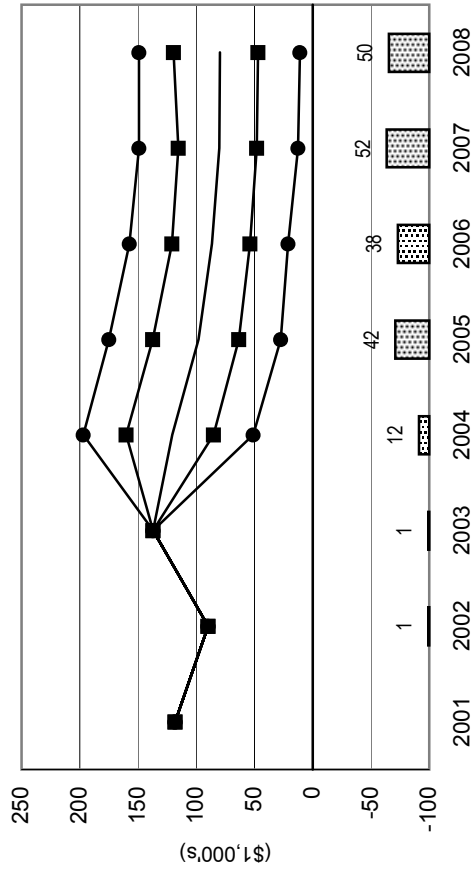


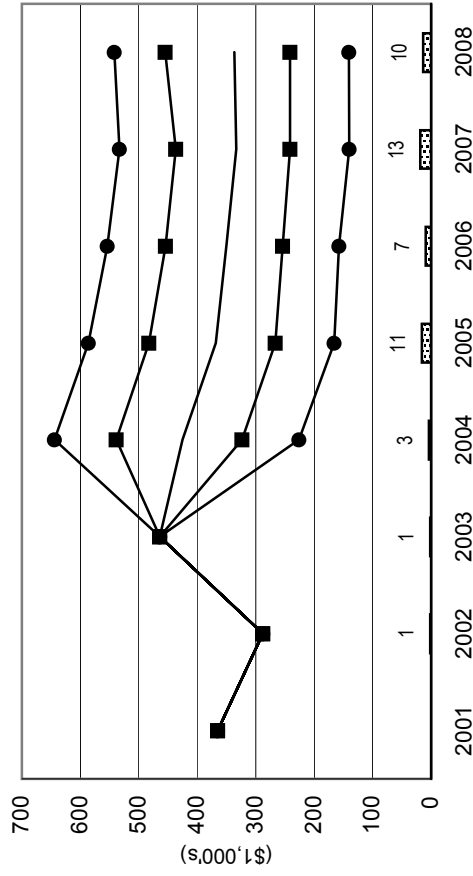
Figure 24. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Rice Farms

— Average NCFI ■ 25 & 75 Percentile NCFI ● Prob. of Cash Flow Deficit

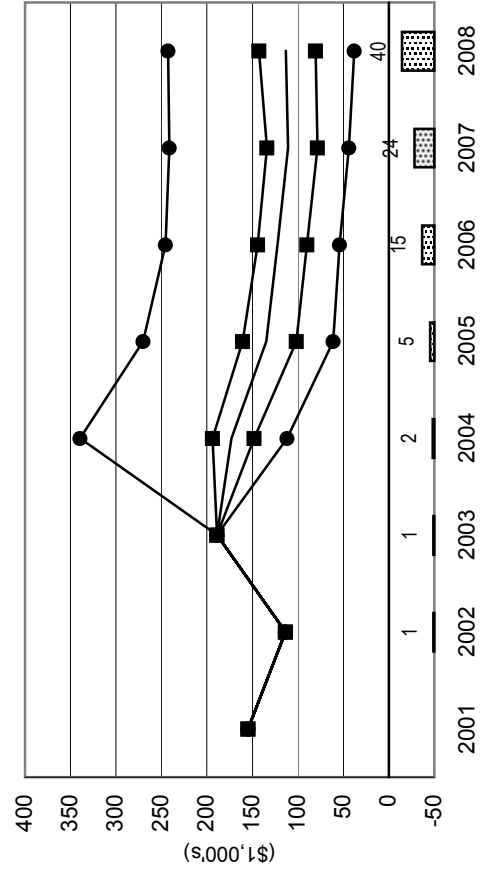
TXR1553 Texas Rice Farm



TXR3774 Texas Rice Farm



TXBR1650 Texas Rice Farm



TXER3200 Texas Rice Farm

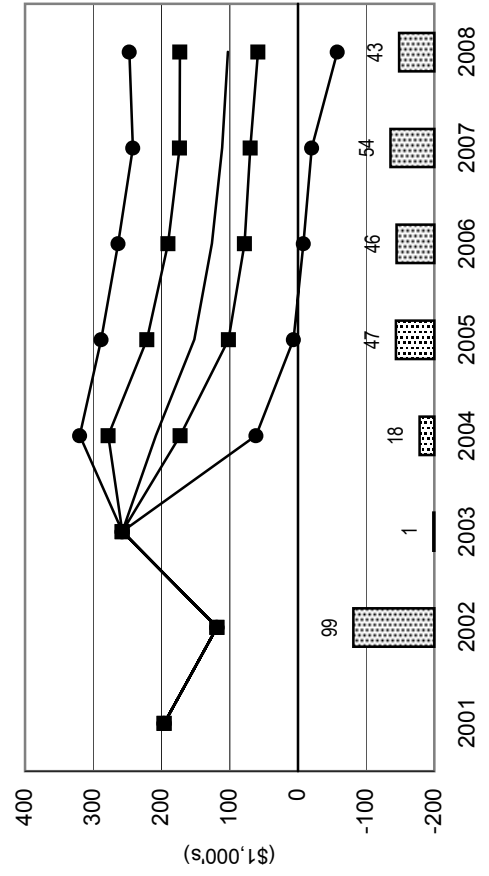
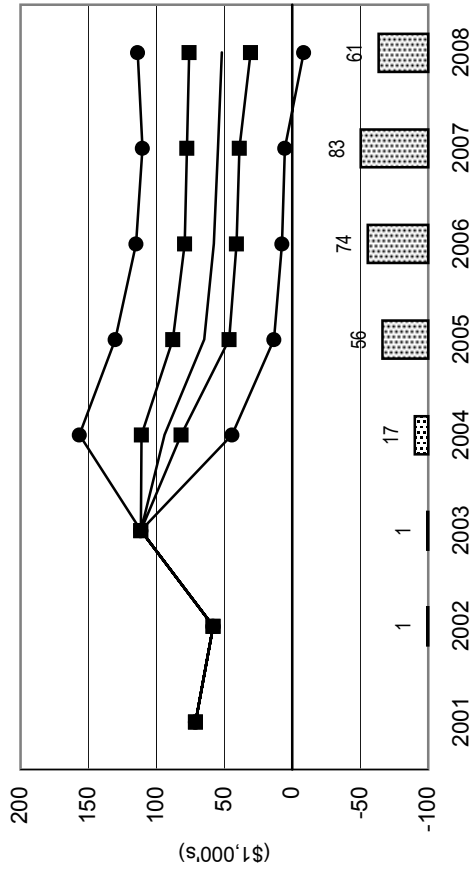


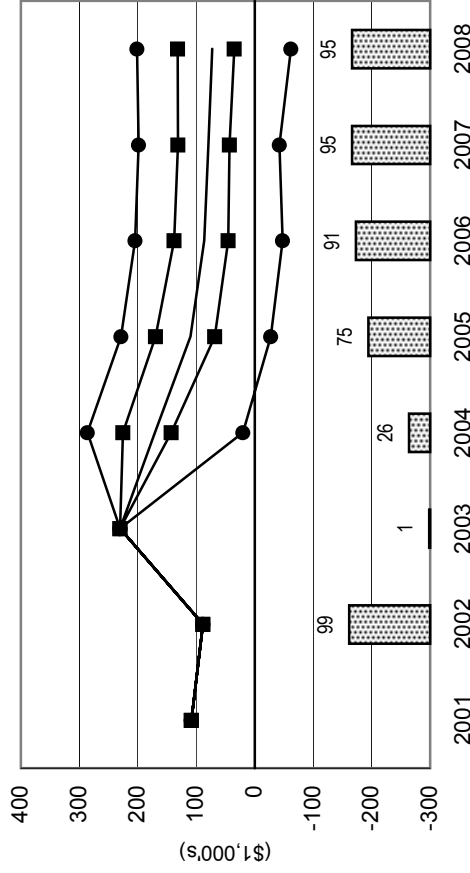
Figure 25. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Rice Farms

— Average NCFI ■ 25 & 75 Percentile NCFI ● 5 & 95 Percentile NCFI ▨ Prob. of Cash Flow Deficit

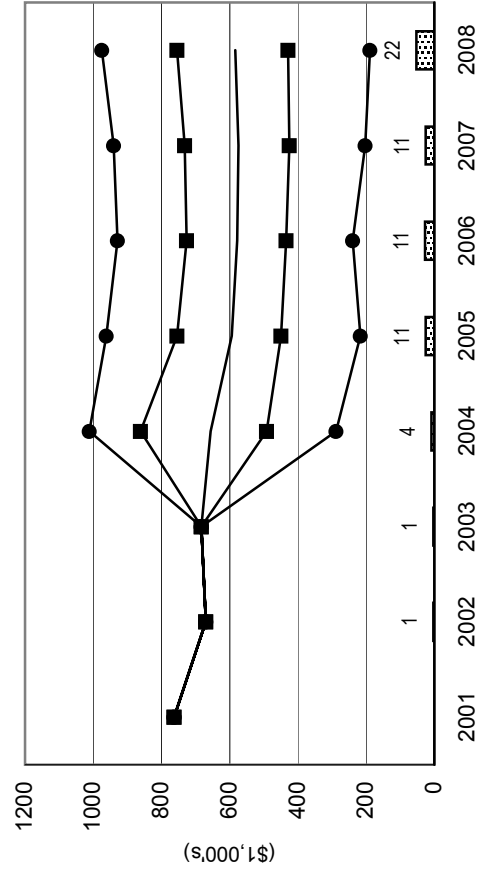
LASR1200 Louisiana Rice Farm



LANR2500 Louisiana Rice Farm



MOER4500 Missouri Rice Farm



MOWR4000 Missouri Rice Farm

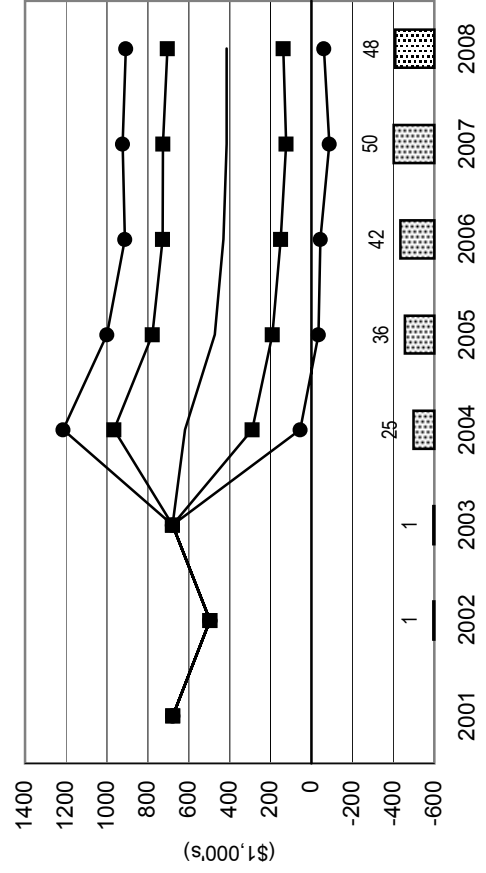
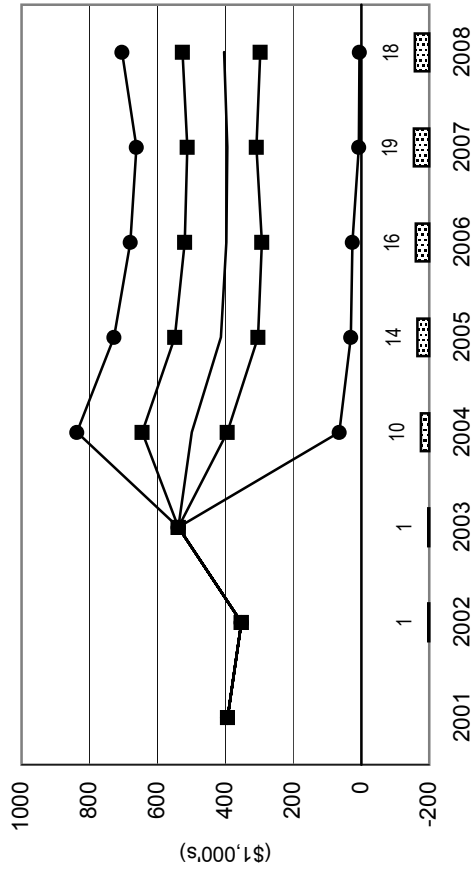


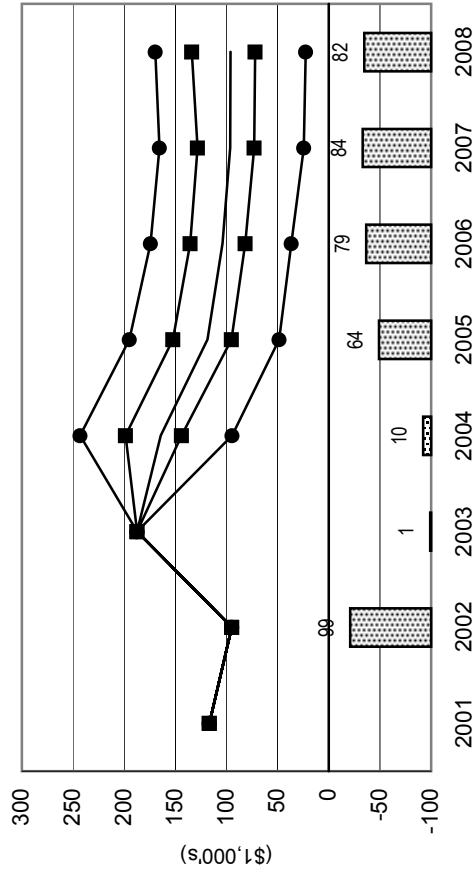
Figure 26. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Rice Farms

— Average NCFI ■ 25 & 75 Percentile NCFI ● 5 & 95 Percentile NCFI ▨ Prob. of Cash Flow Deficit

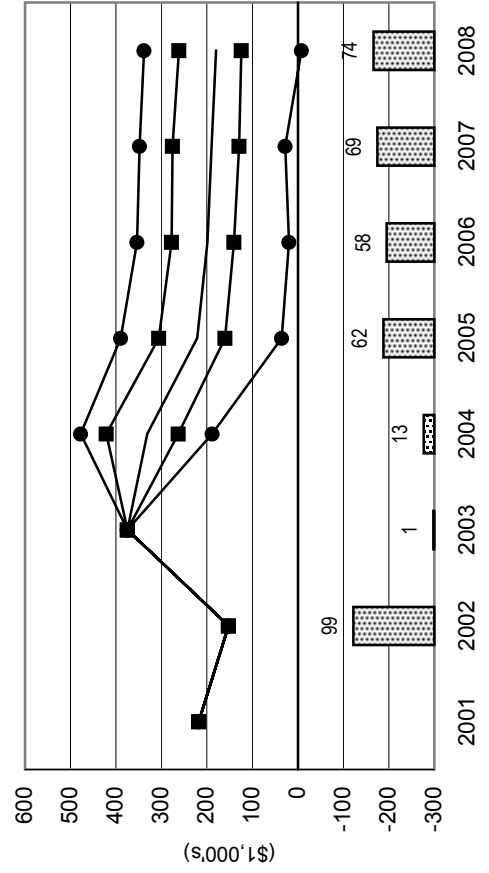
ARSR3640 Arkansas Rice Farm



ARWR1200 Arkansas Rice Farm



ARHR3000 Arkansas Rice Farm



MSR4735 Mississippi Rice Farm

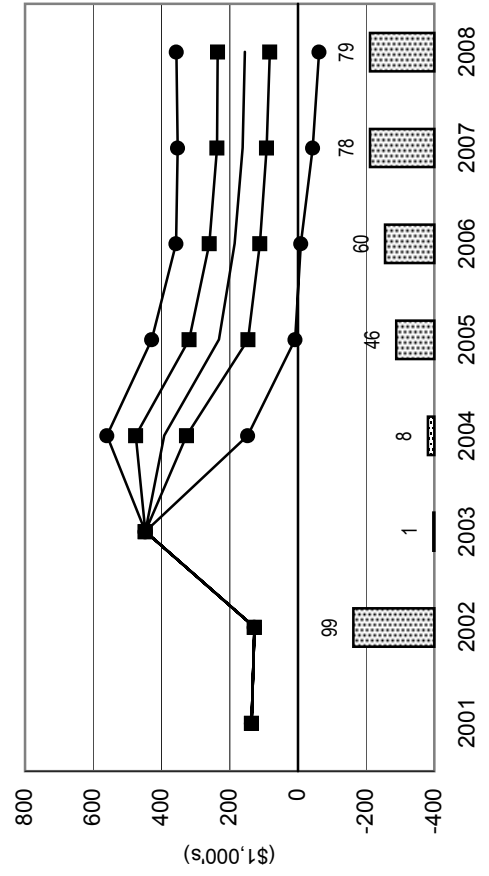


FIGURE 27. REPRESENTATIVE FARMS PRODUCING MILK



Dairy Impacts

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

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

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

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

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

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

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

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

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

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

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

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

| | CAD1710 | NMD2000 | WAD250 | WAD850 | IDD750 | IDD2100 | WID135 | WID700 |
|---|----------|----------|----------|-----------|----------|-----------|----------|----------|
| Overall Financial Position | | | | | | | | |
| 2004-2008 Ranking | Good | Good | Poor | Poor | Poor | Good | Marginal | Marginal |
| Change Real Net Worth (%) | | | | | | | | |
| 2004-2008 Average | 3.03 | 5.58 | 1.72 | -6.76 | 0.15 | 7.12 | 1.02 | 3.59 |
| NIA to Maintain Real Net Worth (%/Rec.) | -6.13 | -5.11 | -2.46 | 8.25 | 0.78 | -16.69 | -4.39 | -6.99 |
| NIA for Zero Ending Cash Balance (%/Rec.) | -3.18 | -1.32 | 6.10 | 14.88 | 7.68 | -17.51 | 2.48 | -5.97 |
| Govt Payments/Receipts (%) | | | | | | | | |
| 2004-2008 Average | 0.67 | 0.21 | 2.15 | 1.43 | 0.53 | 0.58 | 3.63 | 1.20 |
| Cost to Receipts Ratio (%) | | | | | | | | |
| 2004-2008 Average | 90.31 | 91.93 | 91.22 | 106.91 | 98.66 | 80.13 | 83.54 | 88.04 |
| Total Cash Receipts (\$1000) | | | | | | | | |
| 2001 | 6,003.75 | 6,991.05 | 972.49 | 3,307.96 | 2,666.95 | 7,223.66 | 508.83 | 2,549.71 |
| 2002 | 4,790.35 | 5,750.28 | 798.80 | 2,710.04 | 2,303.09 | 6,176.63 | 436.82 | 2,137.82 |
| 2003 | 5,109.06 | 6,028.63 | 843.76 | 2,786.46 | 2,441.04 | 6,505.85 | 494.19 | 2,308.40 |
| 2004 | 5,175.82 | 6,099.86 | 848.83 | 2,817.86 | 2,449.72 | 6,543.16 | 496.14 | 2,345.81 |
| 2005 | 5,356.96 | 6,308.14 | 878.90 | 2,932.54 | 2,528.88 | 6,783.52 | 505.97 | 2,424.61 |
| 2006 | 5,479.15 | 6,439.26 | 896.06 | 2,992.68 | 2,579.88 | 6,918.04 | 517.69 | 2,472.57 |
| 2007 | 5,594.86 | 6,573.51 | 896.96 | 3,045.03 | 2,620.11 | 7,062.83 | 508.64 | 2,508.52 |
| 2008 | 5,686.62 | 6,685.17 | 912.91 | 3,097.47 | 2,664.95 | 7,186.52 | 516.34 | 2,551.48 |
| 2004-2008 Average | 5,458.68 | 6,421.19 | 886.74 | 2,977.12 | 2,568.71 | 6,898.81 | 508.96 | 2,460.60 |
| Government Payments (\$1000) | | | | | | | | |
| 2001 | 48.43 | 0.00 | 11.60 | 56.12 | 0.00 | 56.24 | 10.41 | 33.96 |
| 2002 | 46.89 | 40.00 | 11.19 | 50.16 | 32.32 | 89.98 | 10.66 | 31.23 |
| 2003 | 45.96 | 31.10 | 34.65 | 50.43 | 31.10 | 47.10 | 34.08 | 40.55 |
| 2004 | 40.08 | 24.52 | 28.24 | 43.43 | 24.52 | 41.91 | 27.64 | 34.79 |
| 2005 | 42.03 | 19.58 | 24.94 | 48.11 | 19.58 | 44.55 | 24.26 | 34.56 |
| 2006 | 46.17 | 20.45 | 26.60 | 52.60 | 20.45 | 49.90 | 26.51 | 38.17 |
| 2007 | 26.81 | 0.00 | 6.42 | 32.97 | 0.00 | 30.03 | 6.05 | 18.09 |
| 2008 | 25.51 | 0.00 | 6.10 | 31.68 | 0.00 | 28.54 | 5.80 | 17.30 |
| 2004-2008 Average | 36.12 | 12.91 | 18.46 | 41.76 | 12.91 | 38.99 | 18.05 | 28.58 |
| Net Cash Farm Income (\$1000) | | | | | | | | |
| 2001 | 1,431.52 | 1,517.10 | 245.75 | 624.44 | 334.03 | 2,096.87 | 112.82 | 574.80 |
| 2002 | 228.19 | 133.74 | 53.09 | -101.09 | -43.23 | 1,036.03 | 39.51 | 155.60 |
| 2003 | 301.46 | 254.29 | 67.75 | -186.02 | 10.97 | 1,145.01 | 80.79 | 244.19 |
| 2004 | 212.71 | 150.31 | 36.80 | -298.42 | -37.20 | 1,026.58 | 77.15 | 220.03 |
| 2005 | 404.67 | 339.45 | 69.01 | -209.11 | 15.84 | 1,236.60 | 85.58 | 277.30 |
| 2006 | 636.02 | 691.85 | 112.48 | -100.97 | 105.03 | 1,542.34 | 100.23 | 353.37 |
| 2007 | 754.27 | 842.48 | 113.93 | -81.92 | 129.75 | 1,699.20 | 89.85 | 380.62 |
| 2008 | 780.98 | 870.81 | 111.86 | -113.24 | 133.12 | 1,764.41 | 92.11 | 398.73 |
| 2004-2008 Average | 557.73 | 578.98 | 88.81 | -160.73 | 69.31 | 1,453.83 | 88.99 | 326.01 |
| Prob. of a Cash Flow Deficit (%) | | | | | | | | |
| 2003 | 99 | 99 | 99 | 99 | 99 | 1 | 99 | 99 |
| 2004 | 99 | 99 | 99 | 99 | 99 | 16 | 99 | 46 |
| 2005 | 85 | 83 | 97 | 99 | 99 | 15 | 89 | 45 |
| 2006 | 57 | 67 | 94 | 99 | 96 | 9 | 79 | 40 |
| 2007 | 36 | 54 | 91 | 99 | 95 | 6 | 79 | 38 |
| 2008 | 28 | 44 | 90 | 99 | 93 | 7 | 76 | 35 |
| Ending Cash Reserves (\$1000) | | | | | | | | |
| 2001 | 345.99 | 470.33 | 50.68 | 163.81 | 4.36 | 652.12 | 15.39 | 188.41 |
| 2002 | -113.83 | -109.52 | -49.96 | -282.72 | -302.32 | 615.32 | -58.51 | 42.60 |
| 2003 | -439.53 | -521.30 | -117.70 | -742.94 | -521.02 | 671.57 | -87.61 | -10.47 |
| 2004 | -442.38 | -624.22 | -164.26 | -1,113.24 | -622.40 | 1,129.84 | -75.95 | 44.80 |
| 2005 | -309.88 | -594.24 | -183.59 | -1,408.70 | -704.01 | 1,720.64 | -63.60 | 136.06 |
| 2006 | -46.90 | -334.56 | -179.84 | -1,628.62 | -716.42 | 2,480.06 | -47.42 | 261.93 |
| 2007 | 267.23 | -13.95 | -178.23 | -1,850.03 | -737.82 | 3,283.86 | -45.26 | 388.96 |
| 2008 | 580.62 | 296.78 | -194.93 | -2,099.65 | -767.55 | 4,114.19 | -41.37 | 530.39 |
| Nominal Net Worth (\$1000) | | | | | | | | |
| 2001 | 7,926.31 | 5,832.79 | 1,369.90 | 3,468.82 | 2,797.60 | 7,713.26 | 1,510.52 | 3,091.74 |
| 2002 | 7,671.46 | 4,416.26 | 1,319.16 | 3,112.76 | 2,583.84 | 7,936.15 | 1,510.87 | 3,011.12 |
| 2003 | 7,997.65 | 4,819.76 | 1,367.57 | 2,973.16 | 2,681.49 | 8,876.93 | 1,566.11 | 3,218.41 |
| 2004 | 8,021.91 | 4,757.60 | 1,345.68 | 2,608.75 | 2,602.54 | 9,364.78 | 1,581.62 | 3,280.65 |
| 2005 | 8,014.26 | 4,632.05 | 1,326.90 | 2,229.78 | 2,456.83 | 9,766.10 | 1,582.49 | 3,306.80 |
| 2006 | 8,539.25 | 5,256.92 | 1,396.08 | 2,142.37 | 2,584.47 | 10,901.16 | 1,630.42 | 3,544.52 |
| 2007 | 8,971.17 | 5,754.29 | 1,446.60 | 1,995.17 | 2,634.05 | 11,888.31 | 1,653.71 | 3,737.14 |
| 2008 | 9,278.38 | 6,094.55 | 1,466.94 | 1,747.33 | 2,629.85 | 12,743.06 | 1,669.44 | 3,882.63 |
| Prob. of Decreasing Real Net Worth Over 2001-2008 (%) | 1 | 24 | 15 | 95 | 49 | 1 | 1 | 1 |

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

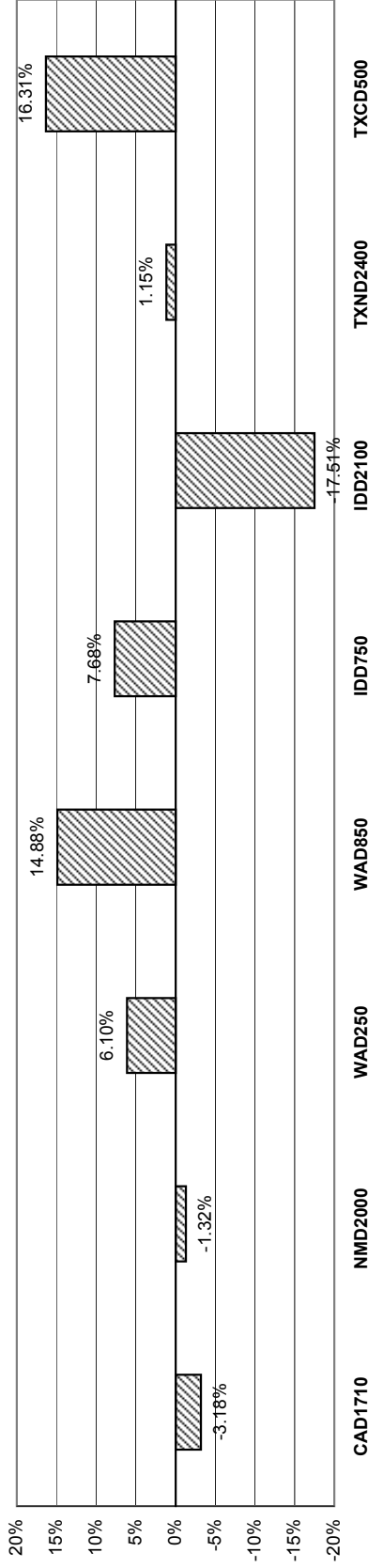
| | TXND2400 | TXCD500 | TXCD1300 | TXED550 | TXED1000 | NYWD800 | NYWD1200 | NYCD110 | NYCD500 |
|---|----------|-----------|----------|----------|----------|----------|----------|----------|----------|
| Overall Financial Position | | | | | | | | | |
| 2004-2008 Ranking | Marginal | Poor | Marginal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

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

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

Figure 28. Dairy Farms

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



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

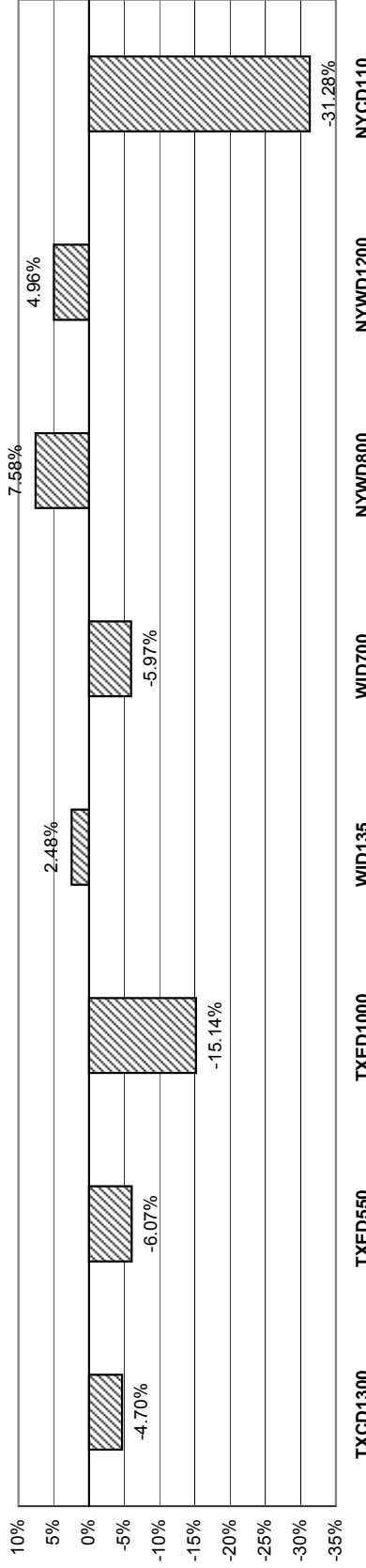
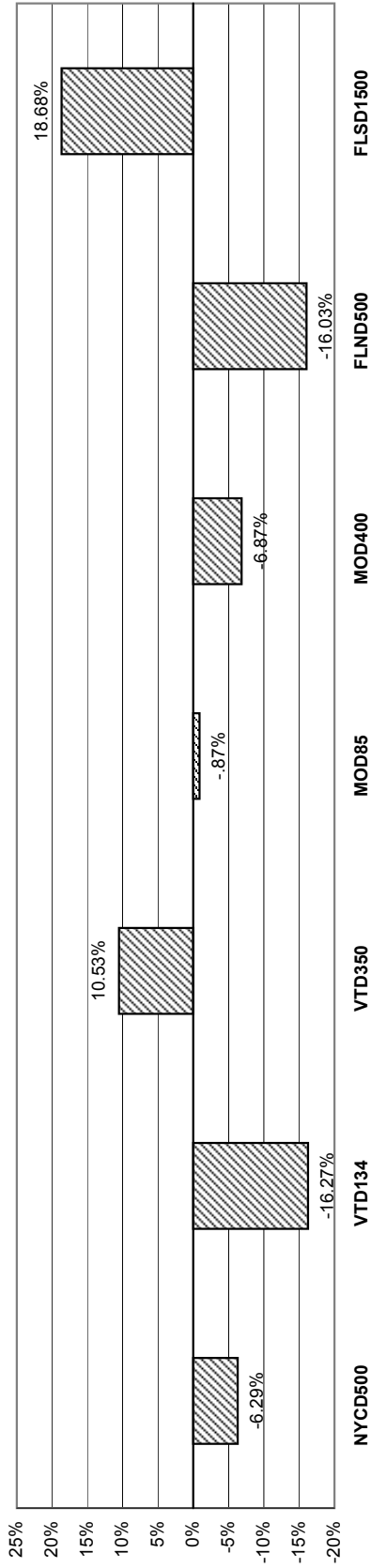


Figure 29. Dairy Farms

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



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

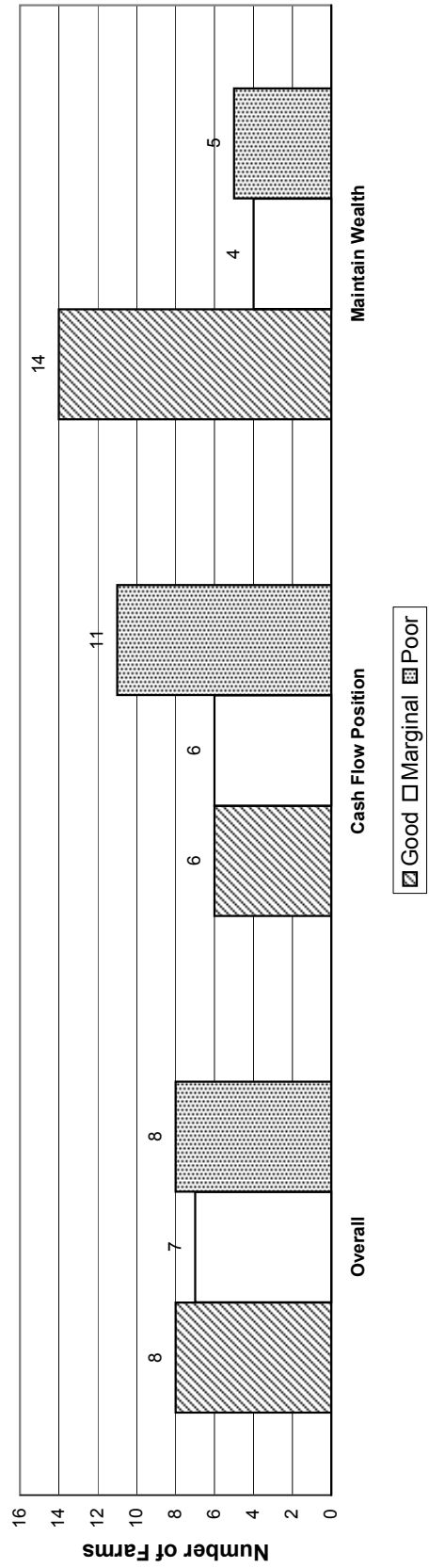
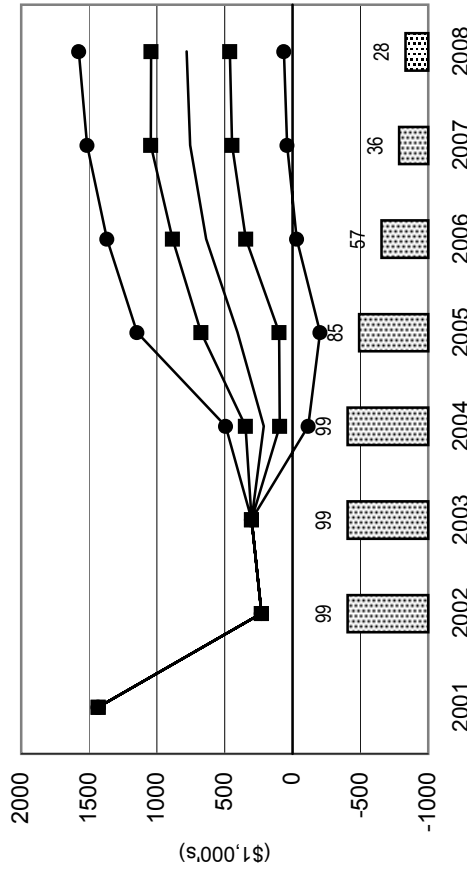


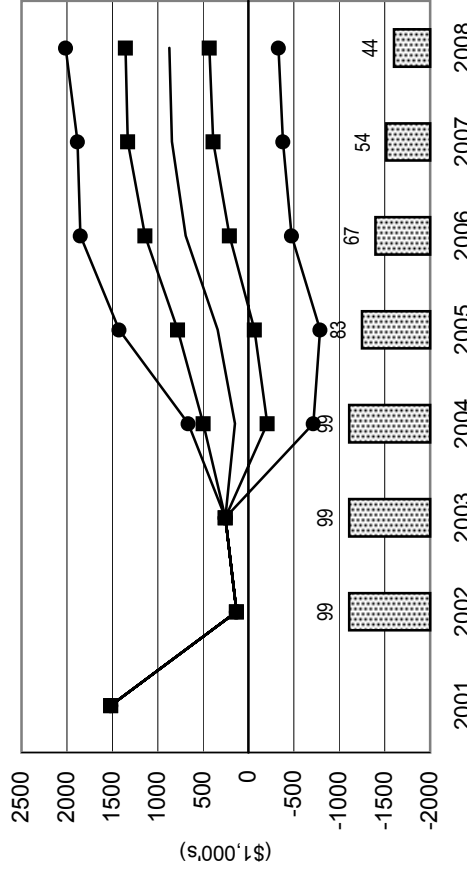
Figure 30. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Dairy Farms

— Average NCFI ■ 25 & 75 Percentile NCFI ● Prob. of Cash Flow Deficit

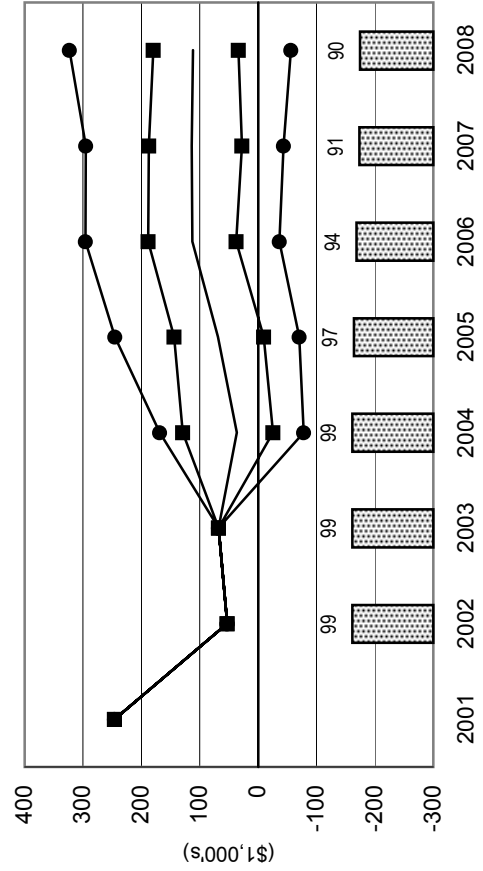
CAD1710 California Dairy Farm



NMD2000 New Mexico Dairy Farm



WAD250 Wahington Dairy Farm



WAD850 Large Wahington Dairy Farm

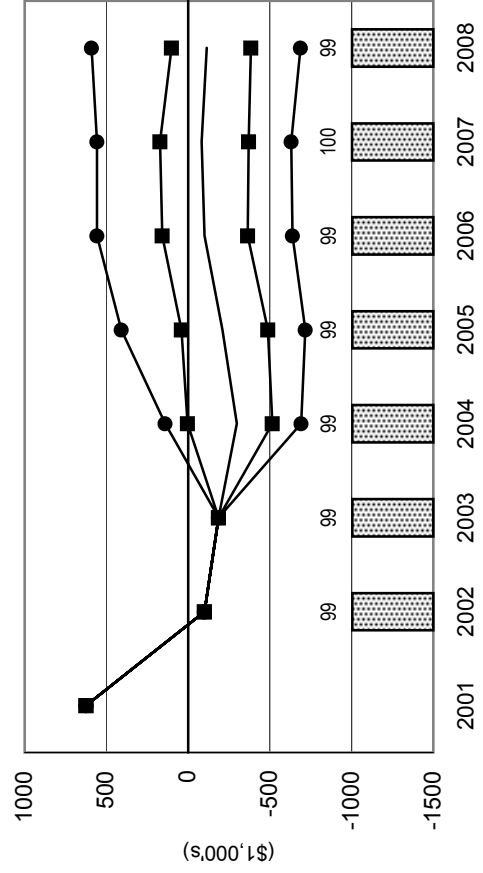


Figure 31. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Dairy Farms

— Average NCFI ■ 25 & 75 Percentile NCFI ● 5 & 95 Percentile NCFI ▨ Prob. of Cash Flow Deficit

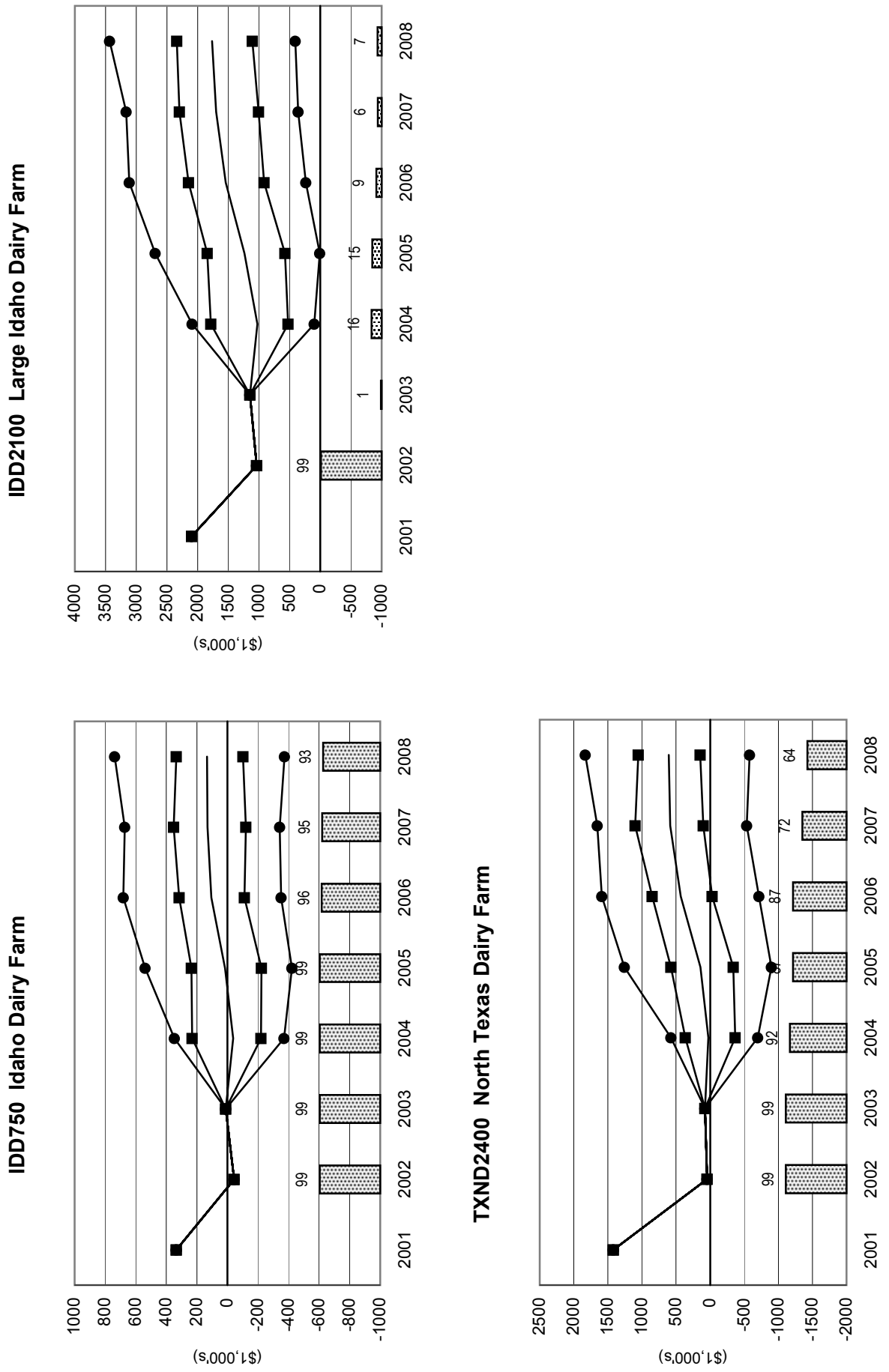
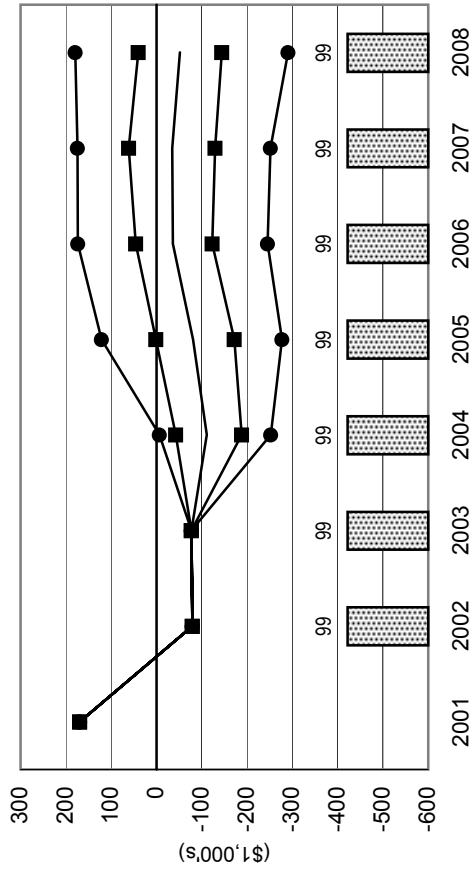


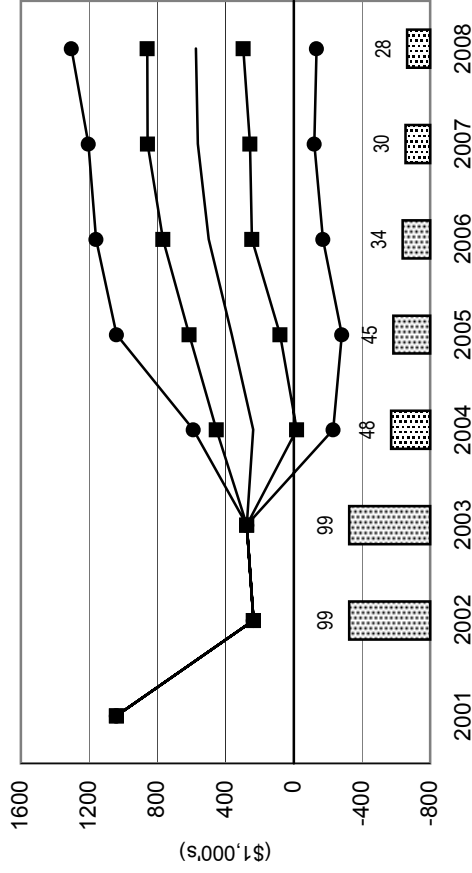
Figure 32. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Dairy Farms

— Average NCFI ■ 25 & 75 Percentile NCFI ● Prob. of Cash Flow Deficit

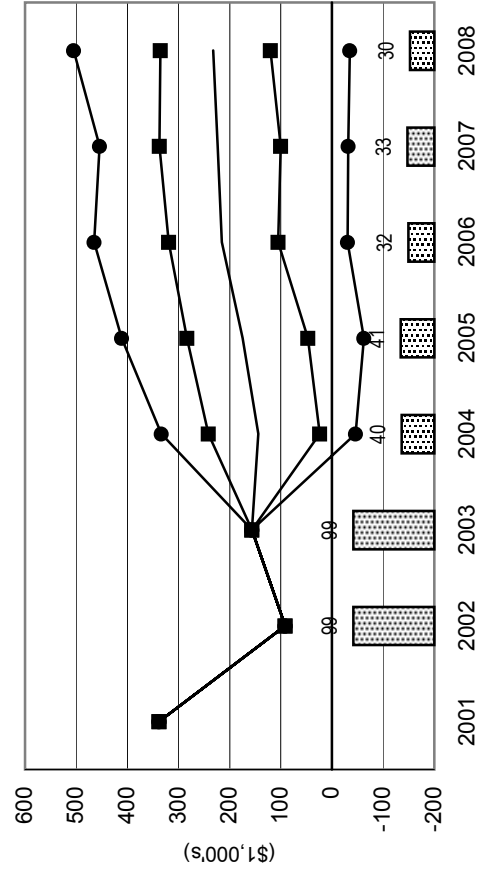
TXCD500 Central Texas Dairy Farm



TXCD1300 Large Central Texas Dairy Farm



TXED550 East Texas Dairy Farm



TXED1000 Large East Texas Dairy Farm

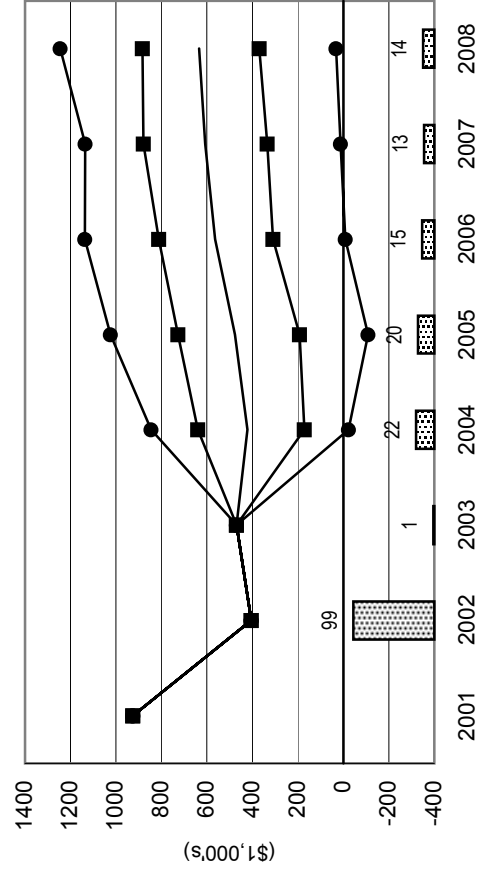


Figure 33. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Dairy Farms

— Average NCFI ■ 25 & 75 Percentile NCFI ● Prob. of Cash Flow Deficit

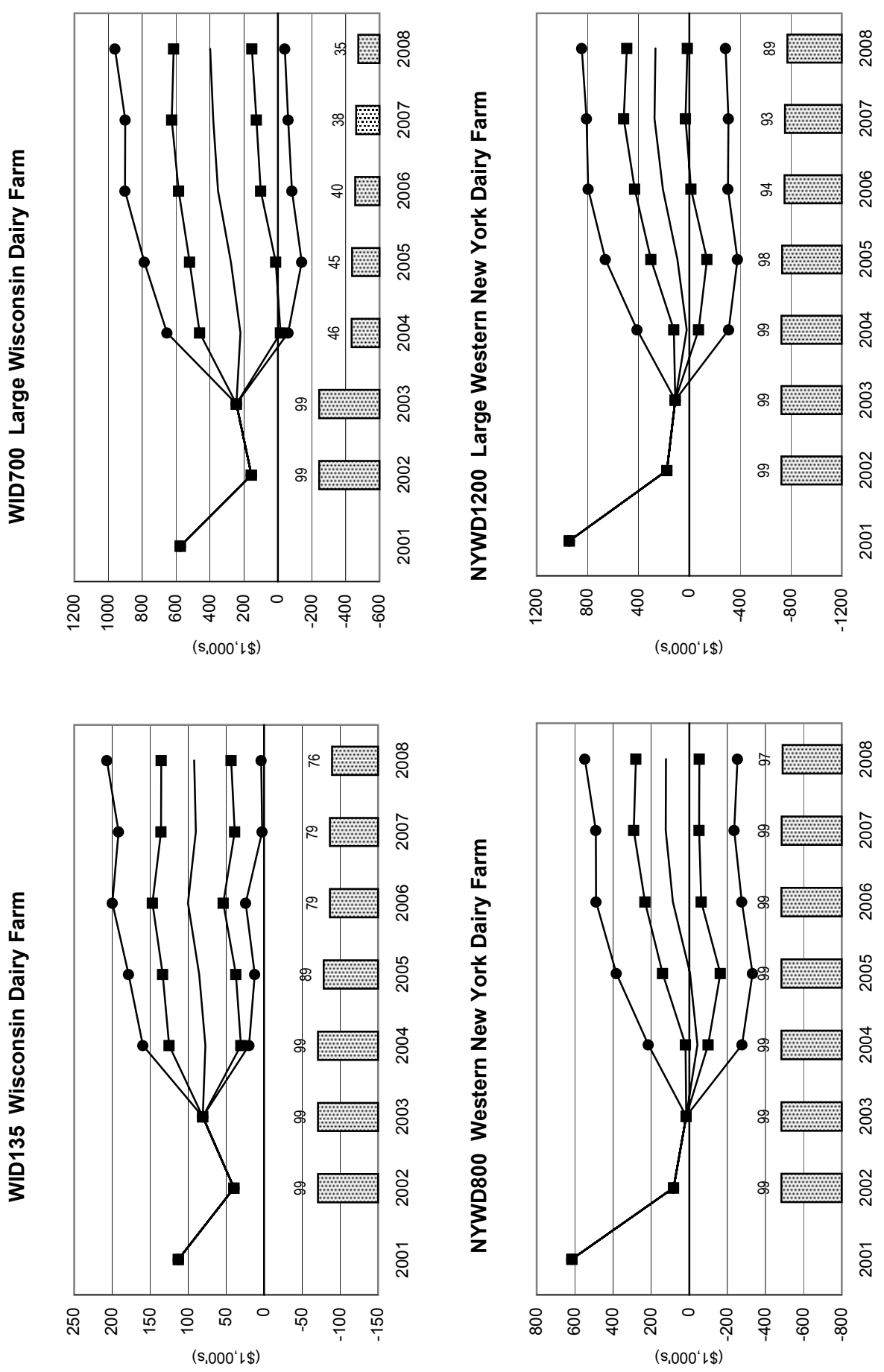


Figure 34. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Dairy Farms

— Average NCFI ■ 25 & 75 Percentile NCFI ● Prob. of Cash Flow Deficit

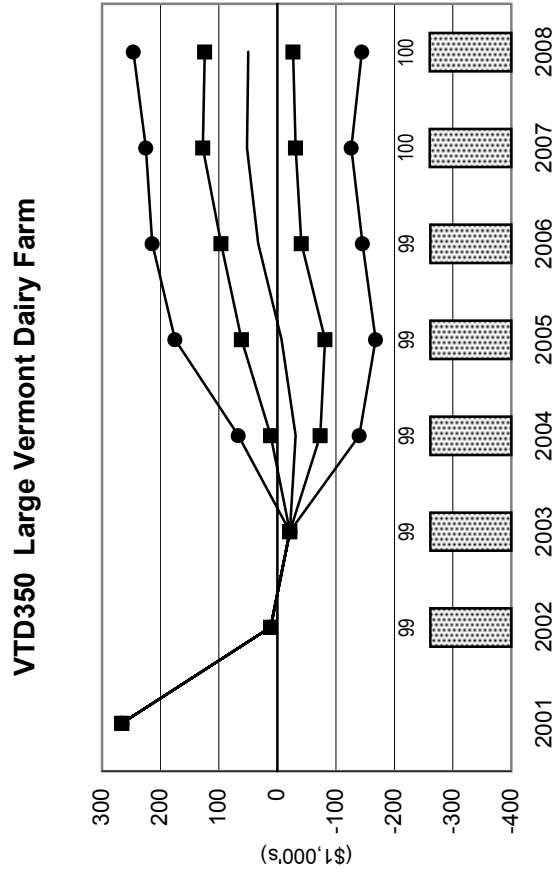
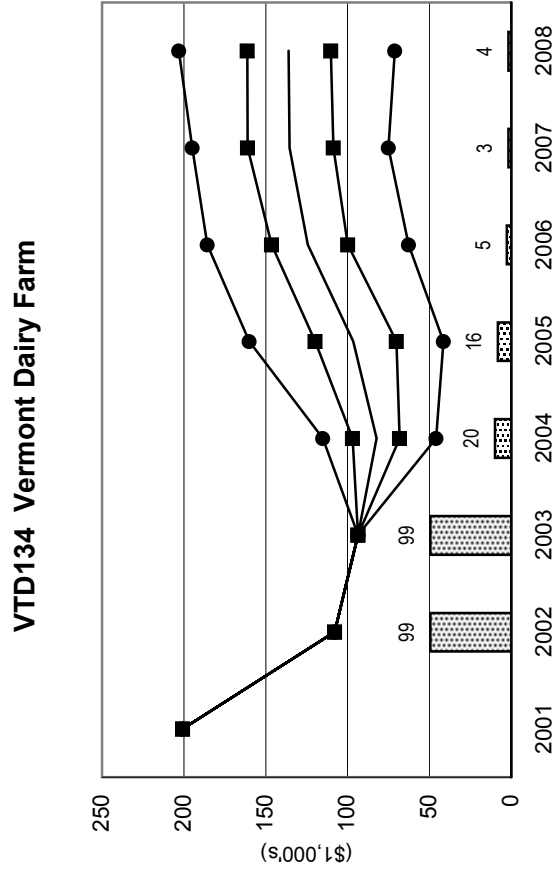
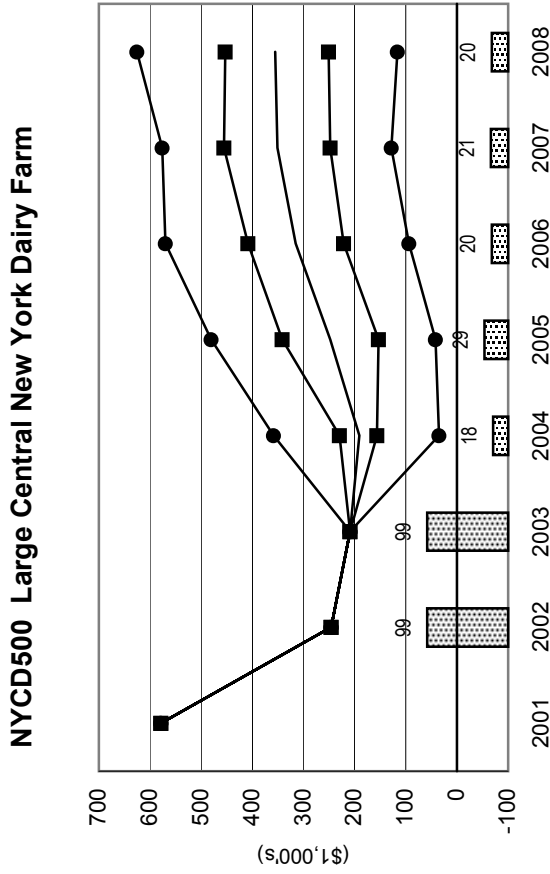
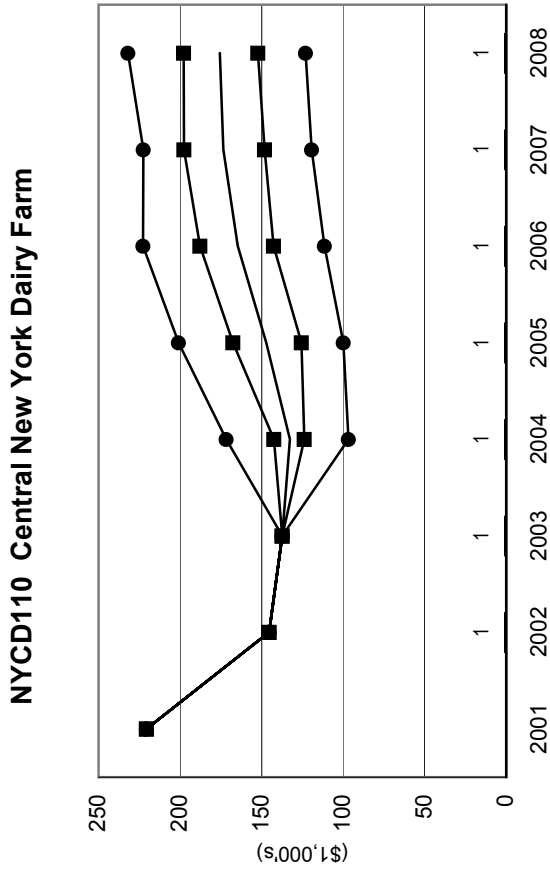
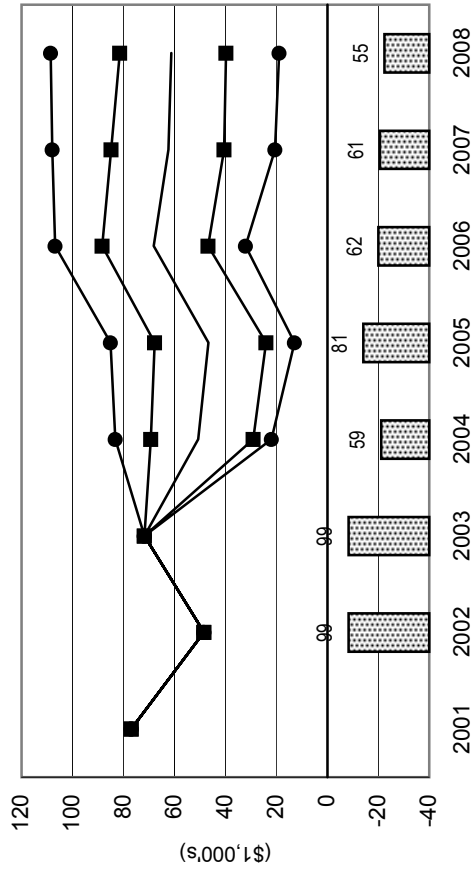


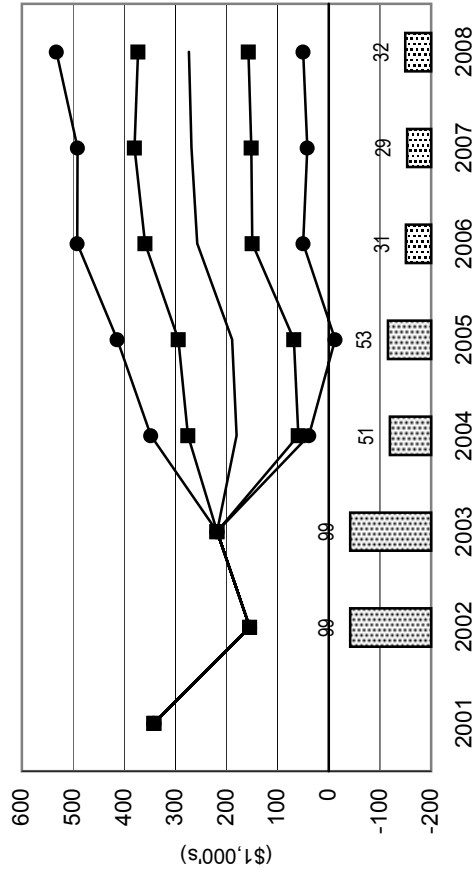
Figure 35. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Dairy Farms

— Average NCFI ■ 25 & 75 Percentile NCFI ● 5 & 95 Percentile NCFI ▨ Prob. of Cash Flow Deficit

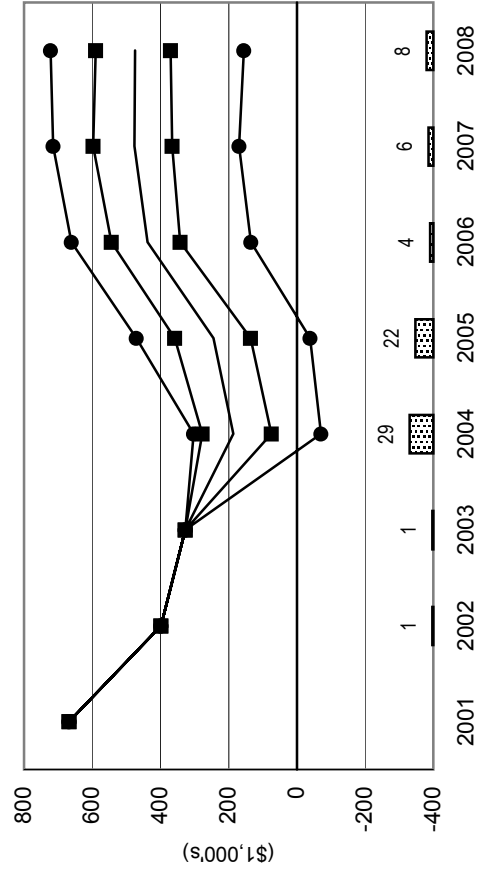
MOD85 Missouri Dairy Farm



MOD400 Large Missouri Dairy Farm



FLND500 Northern Florida Dairy Farm



FLSD1500 Southern Florida Dairy Farm

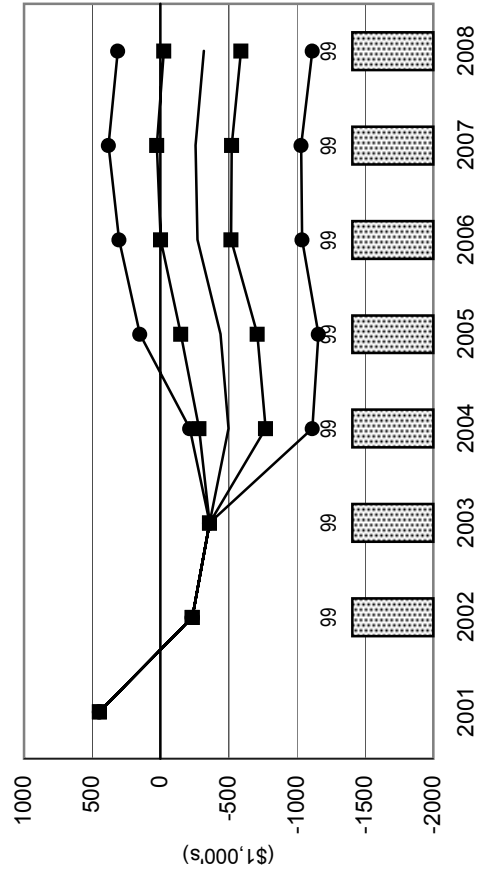
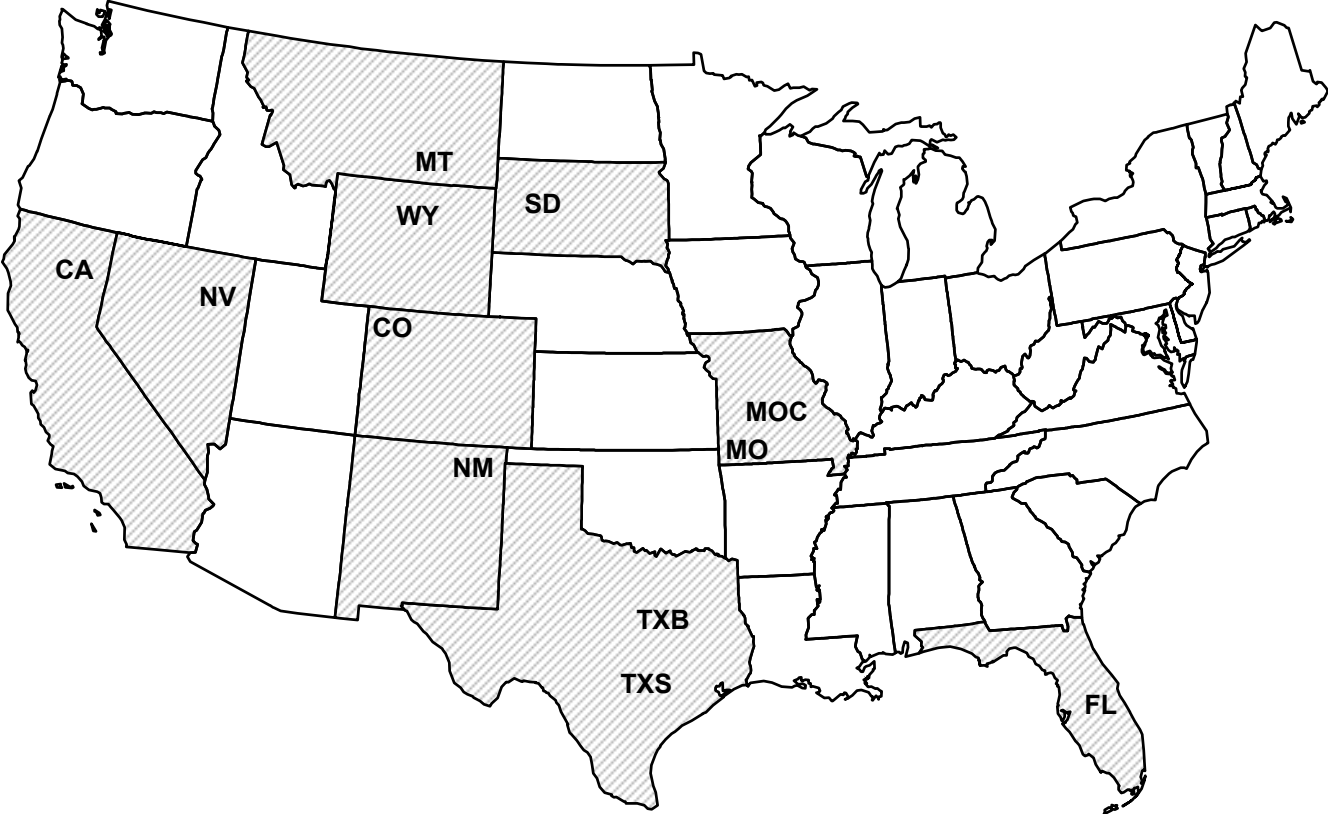


FIGURE 36. REPRESENTATIVE FARMS PRODUCING BEEF CATTLE



Beef Cattle Impacts

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Figure 37. Beef Cattle Ranches

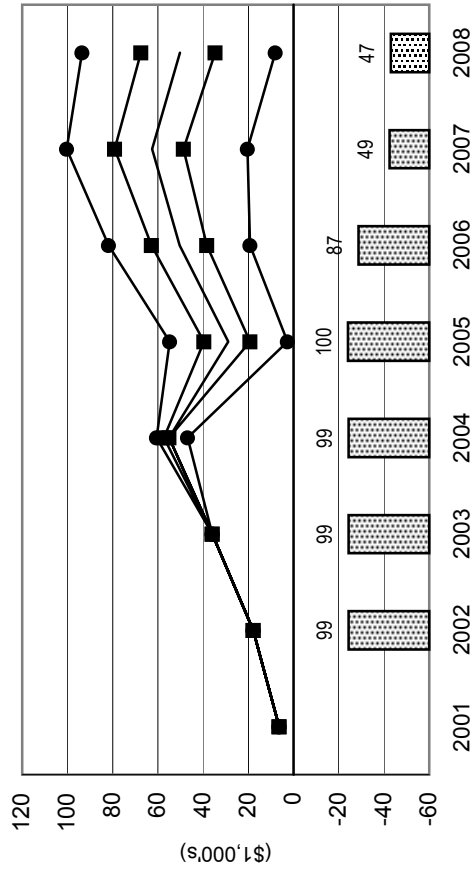
Economic and Financial Position Over the Period, 2004-2008, for all Cattle Ranches



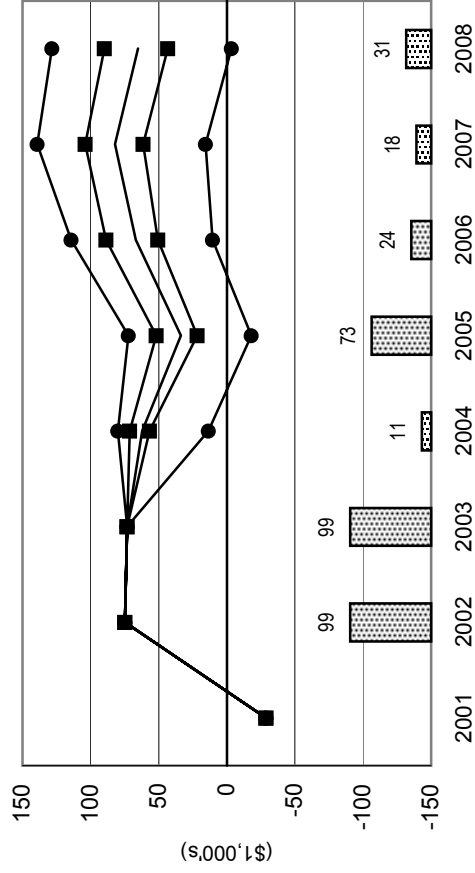
Figure 38. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Beef Cattle Ranches

— Average NCFI ■ 25 & 75 Percentile NCFI ● 5 & 95 Percentile NCFI ▨ Prob. of Cash Flow Deficit

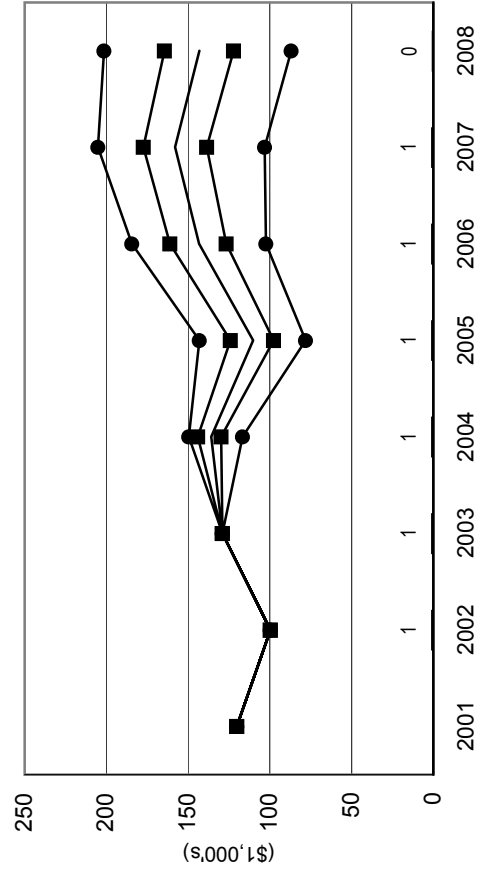
CAB500 California Cattle Ranch



NVB680 Nevada Cattle Ranch



MTB500 Montana Cattle Ranch



WYB500 Wyoming Cattle Ranch

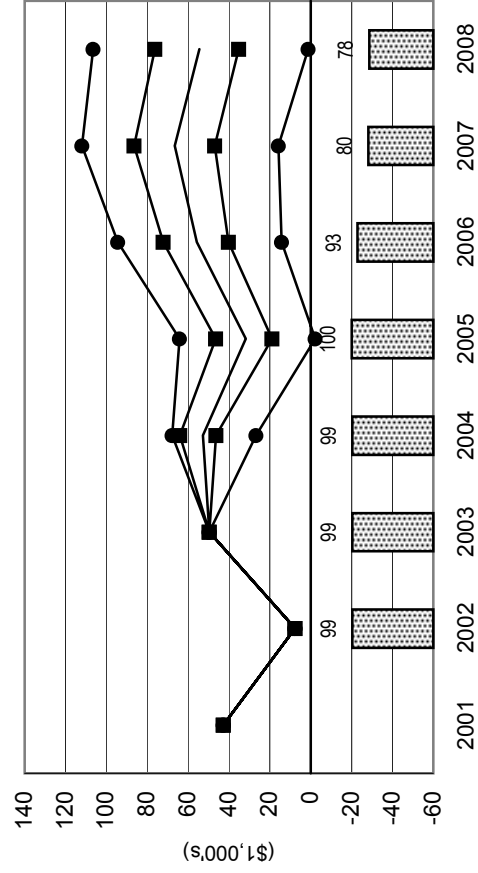
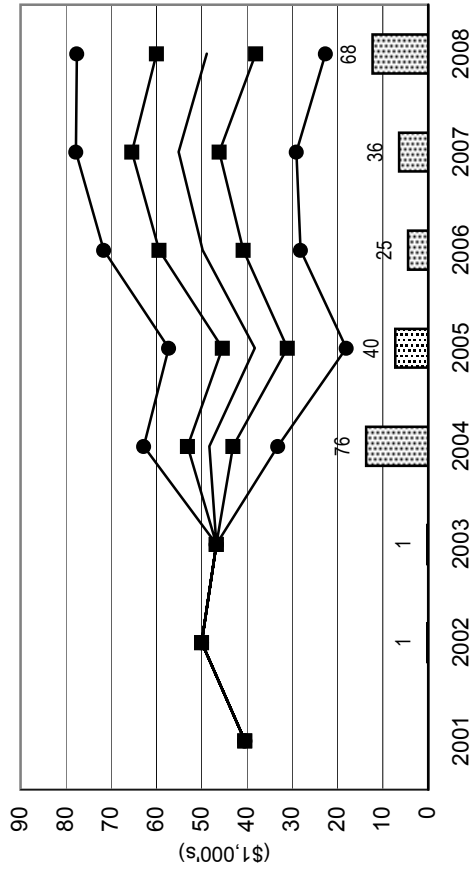


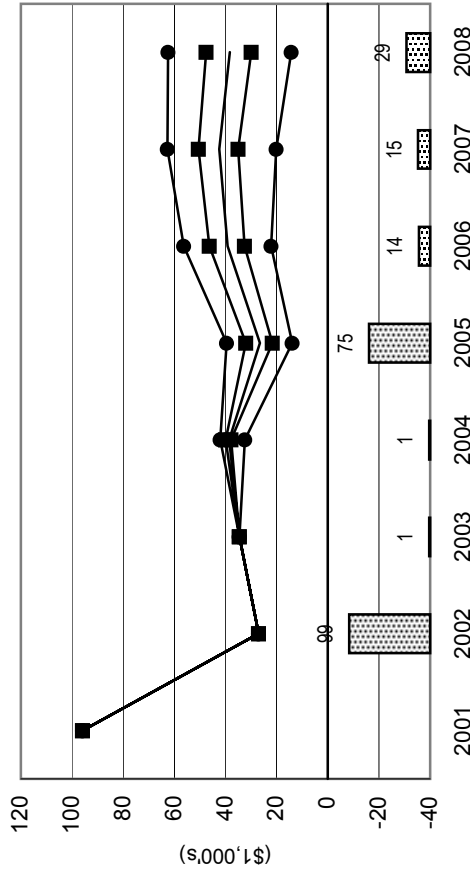
Figure 39. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Beef Cattle Ranches

— Average NCFI ■ 25 & 75 Percentile NCFI ● 5 & 95 Percentile NCFI ▨ Prob. of Cash Flow Deficit

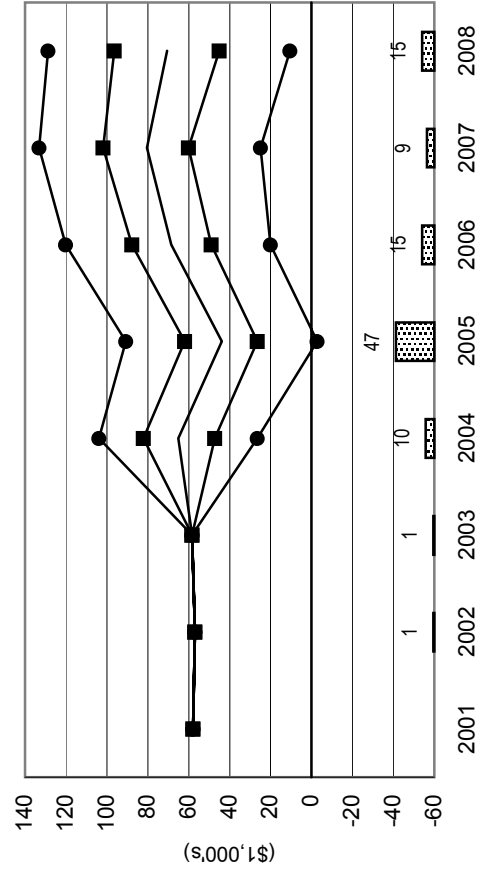
COB250 Colorado Cattle Ranch



NMB240 New Mexico Cattle Ranch



SDB450 South Dakota Cattle Ranch



MOB150 Southwest Missouri Cattle Ranch

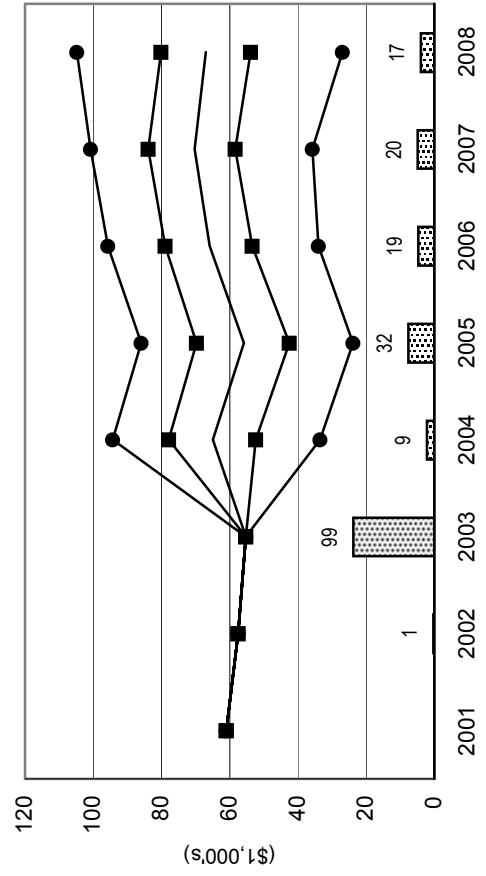
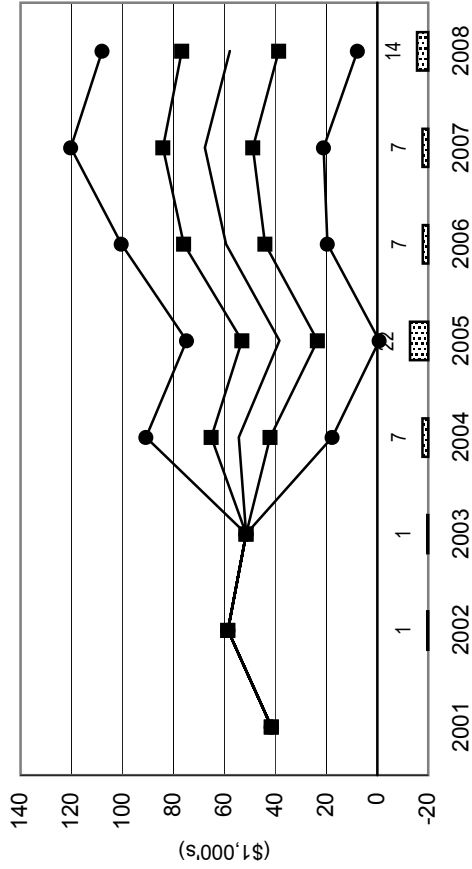


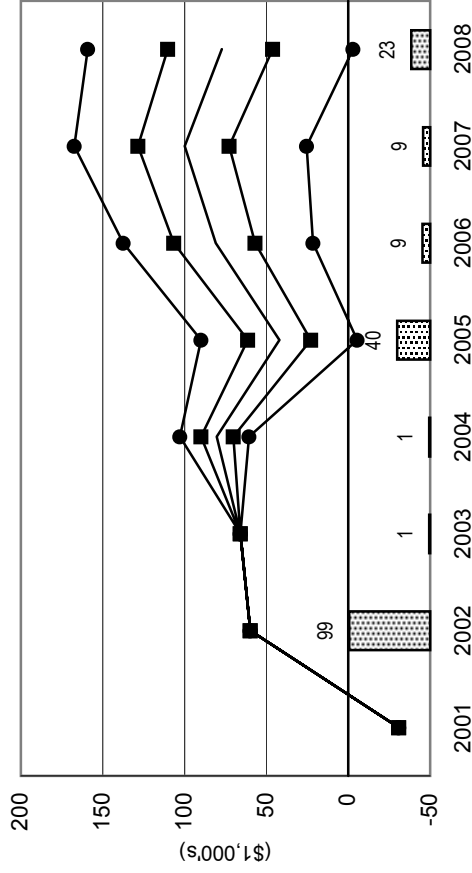
Figure 40. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Beef Cattle Ranches

— Average NCFI ■ 25 & 75 Percentile NCFI ● 5 & 95 Percentile NCFI ▨ Prob. of Cash Flow Deficit

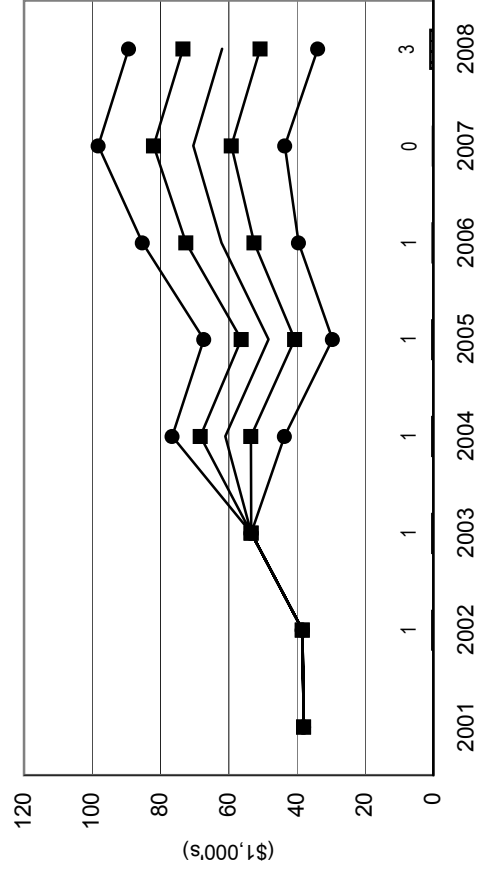
MOCB350 Central Missouri Cattle Ranch



TXBB150 Central Texas Cattle Ranch



TXSB250 South Texas Cattle Ranch



FLB1155 Florida Cattle Ranch

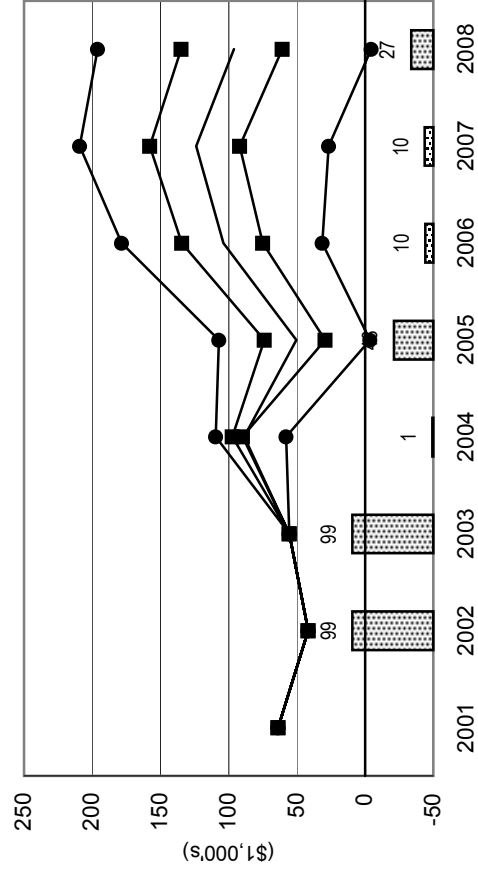
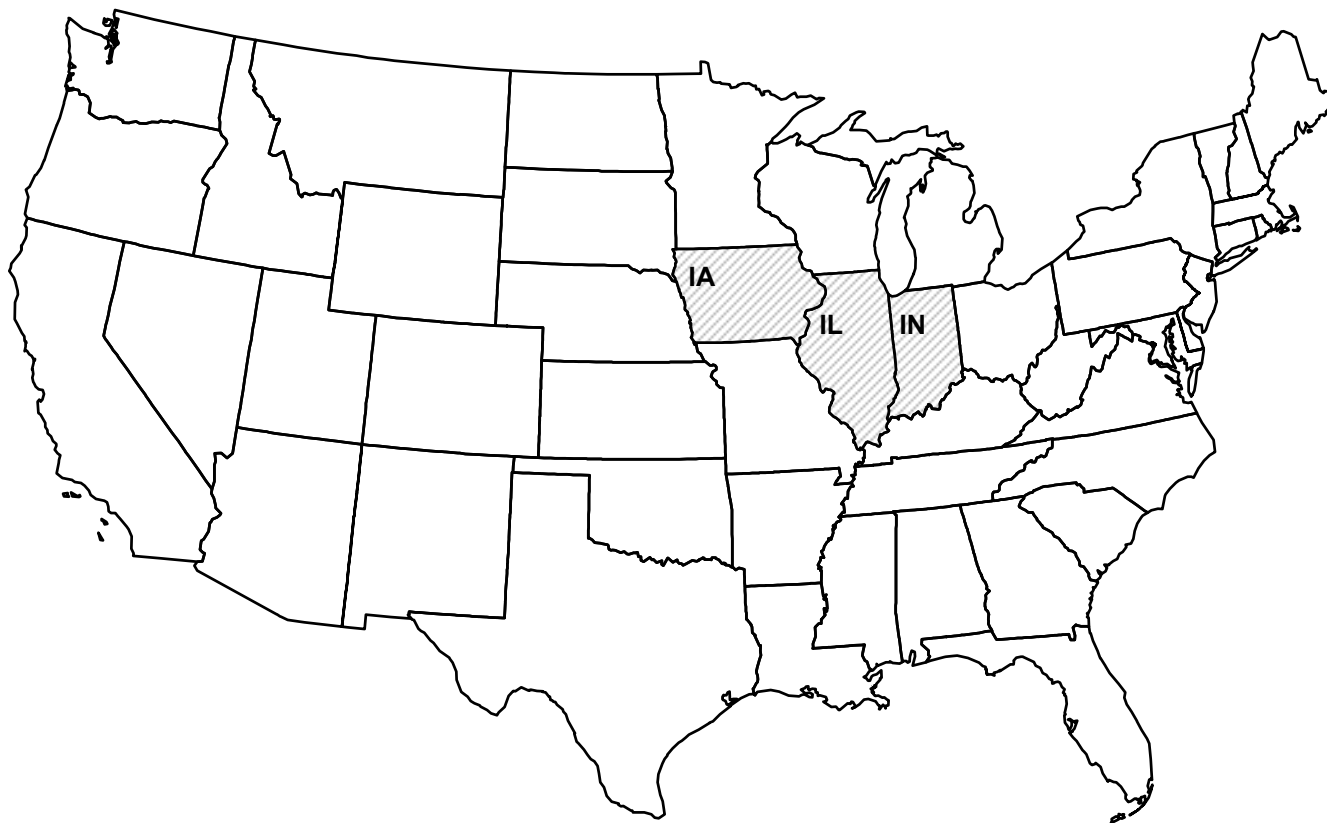


FIGURE 41. REPRESENTATIVE FARMS PRODUCING HOGS



Hog Farm Impacts

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

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

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

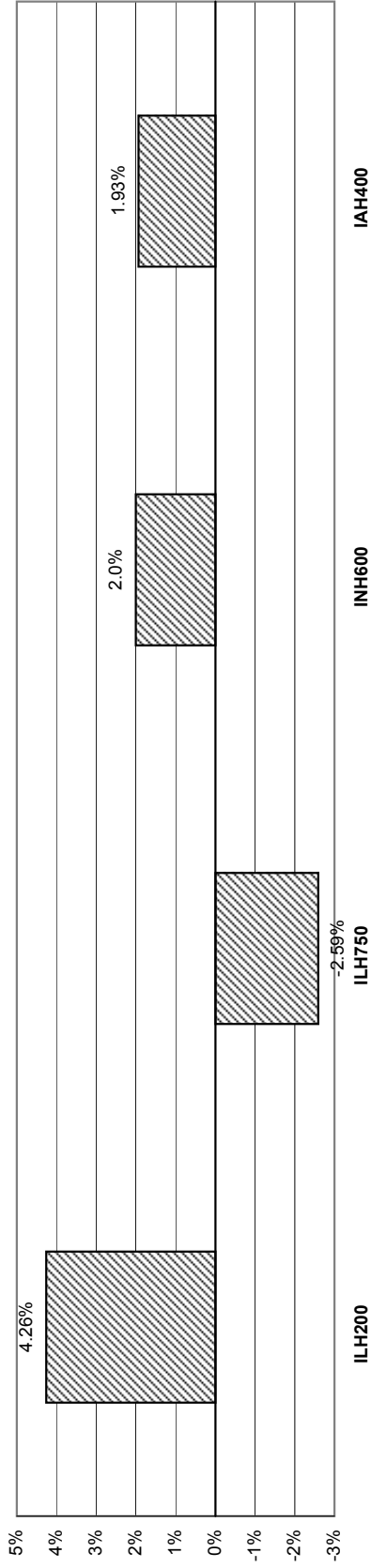
Iowa: The Iowa Hog Farm (IAH400) is in poor financial position and has a cost-to-receipts ratio of 95 percent. This means that there is very little margin left before the farm experiences cash flow problems. IAH400 is a weaning to finish operation, while the other three hog farms are farrow to finish.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

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

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

Figure 42. Hog Farms

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



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

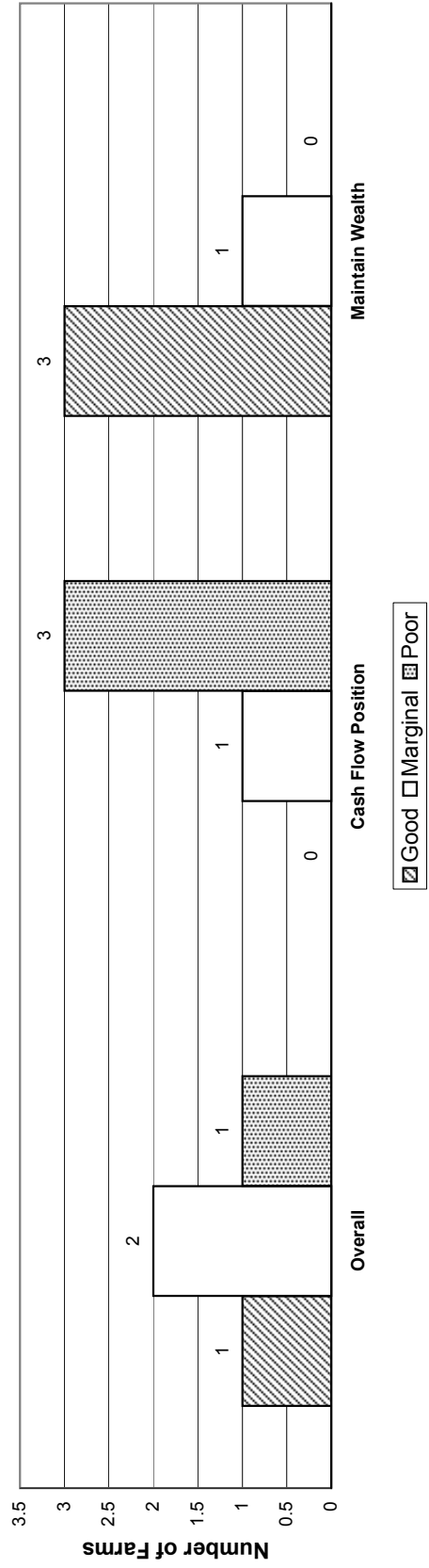
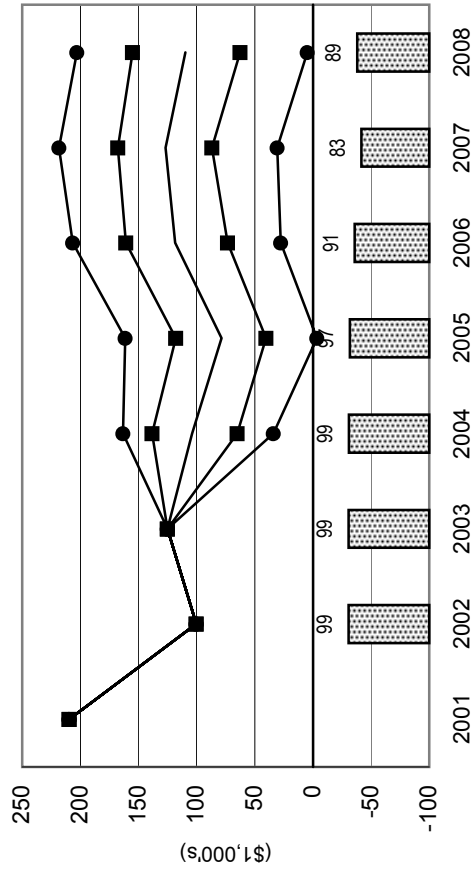


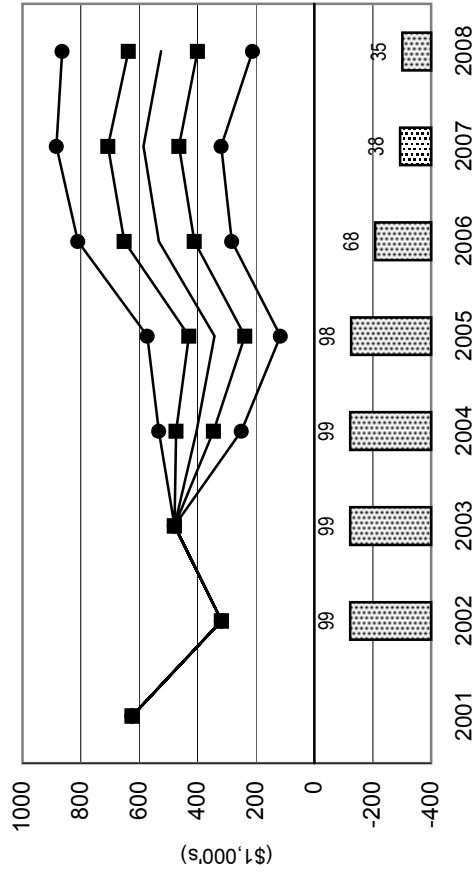
Figure 43. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Hog Farms

— Average NCFI ■ 25 & 75 Percentile NCFI ● 5 & 95 Percentile NCFI ▨ Prob. of Cash Flow Deficit

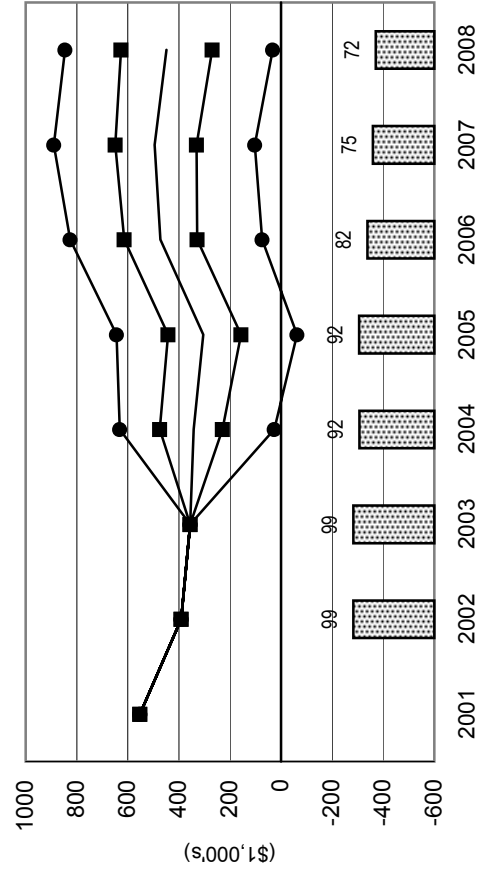
ILH200 Illinois Hog Farm



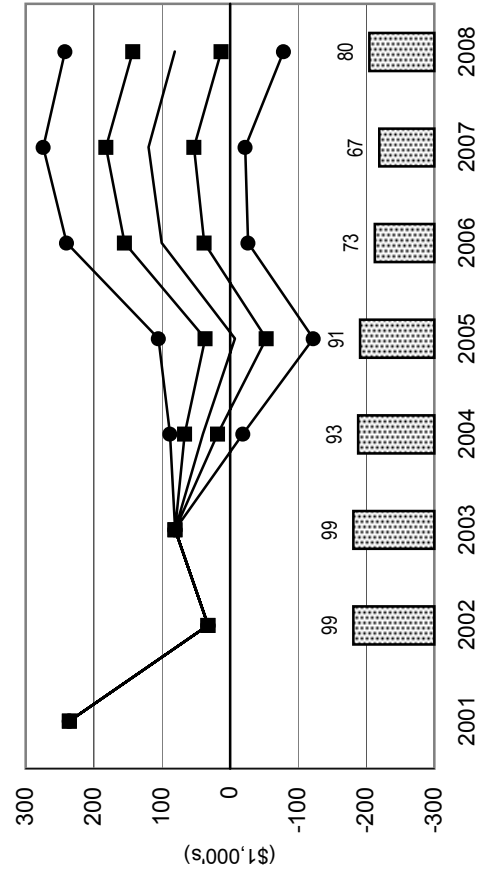
ILH750 Large Illinois Hog Farm



INH600 Indiana Hog Farm



IAH400 Iowa Hog Farm



**APPENDIX A:
CHARACTERISTICS OF
REPRESENTATIVE FARMS**

2003 CHARACTERISTICS OF PANEL FARMS PRODUCING FEED GRAINS AND OILSEEDS

- IAG1350** IAG1350 is a 1,350-acre northwestern Iowa (Webster County) grain farm. The farm is moderate-sized for the region and plants 675 acres of corn and 675 acres of soybeans annually. Fifty-two percent of this farm's 2003 receipts come from corn production.
- IAG2750** This 2,750-acre large-sized grain farm is located in northwestern Iowa (Webster County). It plants 1,375 acres of corn and 1,375 acres of soybeans each year, realizing 51 percent of receipts from corn production.
- IAG4200** A 4,200-acre large-sized grain farm located in northwestern Iowa (Webster County). Annually, 2,100 acres are planted to corn and 2,100 acres are planted to soybeans (of which one half are grown for seed under a production contract). In 2003, 52 percent of the farm's receipts were realized from corn production.
- NEG1960** South central Nebraska (Dawson County) is home to this 1960-acre grain farm. This farm plants eighty-four percent of cultivated acres to corn and 9 percent to soybeans. Alfalfa is grown on the remaining land. The farm produces both yellow and white food-grade corn on 56 percent of the corn acres. Ninety percent of gross receipts are derived from corn sales.
- NEG4300** This is a 4,300-acre grain farm located in south central Nebraska (Dawson County). This operation plants 2,666 acres of corn and 1,118 acres of soybeans each year. Remaining acres are planted to alfalfa. A portion (40 percent) of the corn acreage is food-grade corn. In 2003, 71 percent of total receipts were generated from corn production.
- MOCG1700** MOCG1700 is a 1,700-acre grain farm located in central Missouri (Carroll County) and plants 825 acres of corn, 825 acres of soybeans, and 50 acres of wheat annually. This farm is located in the Missouri River bottom, an area with a large concentration of livestock production. This proximity allows grain producers in this area to supply feed to livestock producers at a premium to other areas of Missouri. This farm generated 57 percent of its total revenue from corn and 41 percent from soybeans during 2003.
- MOCG3630** A 3,630-acre central Missouri (Carroll County) grain farm with 1,650 acres of corn, 1,880 acres of soybeans, and 100 acres of wheat. This farm is located in the Missouri River bottom, an area with a large concentration of livestock production. This proximity allows area grain producers to supply feed to livestock producers at a premium to other areas of Missouri. Corn sales accounted for 57 percent of farm receipts and soybeans accounted for 41 percent in 2003.
- MONG1850** MONG1850 is a 1,850-acre diversified northwest Missouri grain farm centered in Nodaway County. MONG1850 plants 900 acres of corn, 900 acres of soybeans, and 200 acres of hay annually. The farm also has a 200-head cow-calf herd. Proximity to the Missouri River increases marketing options for area grain farmers due to easily accessible river grain terminals. In 2003, 43 percent of the farm's total receipts were from corn, 37 percent from soybeans, and 19 percent from cattle sales.
- ING1000** Shelby County, Indiana, is home to this 1,000-acre moderate-sized feedgrain farm. This farm annually plants corn and soybeans in a 50/50 rotation. Due to this farm's proximity to Indianapolis, land development pressures will likely constrain further expansion of this farm's operations. Fifty-three percent of 2003 receipts came from corn sales.
- ING2200** ING2200 is a large-sized grain farm located in east central Indiana (Shelby County). This farm plants 1,100 acres to corn and 1,100 acres to soybeans each year. In 2003, 53 percent of gross receipts were generated by corn sales.

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

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

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

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

2003 PANEL FARMS PRODUCING FEED GRAINS AND OILSEEDS (CONTINUED)

- TXNP1750** This is a 1,750-acre grain farm located on the northern High Plains of Texas (Moore County). This 100 percent irrigated farm is moderate-sized for the region and plants 640 acres of corn, 240 acres of sorghum, and 870 acres of wheat annually. Seventy percent of total receipts are generated from feedgrain sales.
- TXNP7000** TXNP7000 is a large-sized, 80 percent irrigated, grain farm located in the northern Texas Panhandle (Moore County). This farm annually plants 3,350 acres of irrigated corn, 930 acres of sorghum (350 irrigated and 580 dryland), 2,130 acres of wheat (1,550 irrigated and 580 acres dryland). Dryland wheat is planted on the corners of all pivot-irrigated fields. Eighty-four percent of 2003 cash receipts were derived from feedgrain sales.
- TXHG2000** This 2,000-acre grain farm is located on the Blackland Prairie of Texas (Hill County). On this farm, 600 acres of corn, 750 acres of sorghum, 400 acres of cotton, and 250 acres of wheat are planted annually. Feedgrain sales accounted for 57 percent of 2003 receipts with cotton accounting for 31 percent of sales. Forty beef cows live on 150 acres of improved pasture and contribute approximately five percent of total receipts.
- TXWG1400** This 1,400-acre farm is located on the Blackland Prairie of Texas (Williamson County). TXWG1400 plants 900 acres of corn, 250 acres of sorghum, 150 acres of cotton, and 100 acres of winter wheat annually. Additionally, this farm has a 50-head beef cow herd that is pastured on rented ground that cannot be farmed. Feedgrain sales accounted for 70 percent of 2003 receipts with cotton accounting for 18 percent of sales. .
- TNG900** This is a 900-acre, moderate-sized grain farm in West Tennessee (Henry County). Annually, this farm plants 450 acres of corn, 450 acres of soybeans, and 200 acres of wheat (planted before soybeans) in a region of Tennessee recognized for the high level of implementation of conservation practices by farmers. Eighty-seven percent of 2003 farm receipts were from sales of corn and soybeans.
- TNG2400** West Tennessee (Henry County) is home to this 2,400-acre, large-sized grain farm. Farmers in this part of Tennessee are known for their early and continued adoption of conservation practices, including widespread implementation of no-till farming. TNG2400 plants 1,080 acres of corn, 500 acres of wheat, and 1,320 acres of soybeans (500 of which are double-cropped after wheat). The farm generated 90 percent of its 2003 gross receipts from sales of feedgrains and oilseeds.
- SCG1500** SCG1500 is a moderate-sized, 1500-acre grain farm in South Carolina (Clarendon County) consisting of 698 acres of dryland corn, 148 acres of irrigated corn, 654 acres of soybeans (454 acres double-cropped after wheat), and 454 acres of wheat. Eighty percent of the farm's receipts were realized from corn and soybean sales during 2003. This farm enjoys significant returns on double-cropped acreage, but timing does not allow for more than 454 acres.
- SCG3500** A 3,500-acre, large-sized South Carolina (Clarendon County) grain farm with 1,840 acres of corn, 900 acres of wheat, 1,260 acres of soybeans (900 double-cropped after wheat), and 400 acres of cotton. The farm generated 67 percent of 2003 receipts from corn and soybean sales, with an additional 20 percent coming from cotton sales. Timing precludes further expansion of relatively lucrative double-cropped acres.

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

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

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

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

2003 CHARACTERISTICS OF PANEL FARMS PRODUCING WHEAT

- WAW1725** This is a 1,725-acre moderate-sized grain farm in the Palouse of southeastern Washington (Whitman County). It plants 1,035 acres of wheat and 345 acres each of barley and dry peas. Disease concerns dictate rotating a minimum acreage of barley and peas to maintain wheat yields. This farm generated 69 percent of 2003 receipts from wheat.
- WAW4675** A 4,675-acre, large-sized grain farm in the Palouse of southeastern Washington (Whitman County). Annually, this farm allocates 3,042 acres to wheat, 340 acres to barley, and 1,293 acres to dry peas. Diseases that inhibit wheat yield dictate the rotation of a minimum acreage of barley and peas. Wheat sales accounted for 73 percent of 2003 receipts.
- NDW2180** NDW2180 is a 2,180-acre, moderate-sized, south central North Dakota (Barnes County) grain farm that plants 700 acres of wheat, 240 acres of corn, 100 acres of barley, 800 acres of soybeans, and 240 acres of sunflowers. The farm generated 32 percent of 2003 receipts from small grains sales (wheat and barley) and about 56 percent from oilseeds.
- NDW6250** This is a 6,250-acre, large-sized grain farm in south central North Dakota (Barnes County) that grows 2,700 acres of wheat, 300 acres of barley, 1,600 acres of soybeans, 600 acres of corn, 500 acres of sunflowers, and 300 acres of dry edible beans annually. Small grains (wheat and barley) sales total 40 percent of 2003 receipts with oilseeds (soybeans and sunflowers) making up 41 percent.
- KSCW1385** South central Kansas (Sumner County) is home to this 1,385-acre, moderate-sized grain farm. KSCW1385 plants 928 acres of winter wheat, 319 acres of sorghum, and 138 acres of soybeans each year. For 2003, 66 percent of gross receipts came from wheat.
- KSCW4000** A 4,000-acre, large-sized grain farm in south central Kansas (Sumner County) that plants 2,845 acres of winter wheat, 975 acres of sorghum, 50 acres of corn, 55 acres of soybeans, and 75 acres of hay. KSCW4000 also runs 67 head of beef cows. Sixty-eight percent of this farm's 2003 total receipts were generated from sales of winter wheat.
- KSNW2800** This is a 2,800-acre, moderate-sized northwest Kansas (Thomas County) grain farm. This farm plants 935 acres of winter wheat (wheat-fallow rotation), 470 acres of corn, 280 acres of sorghum, and 185 acres of sunflowers. KSNW2800 also owns 60 head of beef cows. This farm generated 41 percent of 2003 receipts from wheat and 26 percent of its receipts from corn.
- KSNW4300** KSNW4300 is a 4,300-acre, large-sized northwest Kansas (Thomas County) grain farm that annually plants 2,000 acres of winter wheat, 532 acres of corn, 281 acres of sorghum, 282 acres of sunflowers, 130 acres of soybeans, 75 acres of hay, and has 1,000 acres that lie fallow. This farm also runs 100 head of beef cows. The farm generated 45 percent of receipts from wheat, 26 percent from corn, and seven percent from cattle during 2003.
- COW3000** A 3,000-acre northeast Colorado (Washington County), moderate-sized grain farm that plants 1,125 acres of winter wheat, 605 acres of millet, and 445 acres of corn each year. COW3000 has adopted minimum tillage practices on most of its acres and has a 65 head beef cow herd. This farm generated 40 percent of its receipts from wheat, 21 percent from millet, and 14 percent from cattle.
- COW5440** A 5,440-acre, large-sized northeast Colorado (Washington County) grain farm. It plants 1,900 acres of wheat, 1,100 acres of millet, 650 acres of corn, and 260 acres of sunflowers. During 2003, 49 percent of gross receipts came from wheat sales and 22 percent came from millet sales.

Appendix Table A3. Characteristics of Panel Farms Producing Wheat.

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

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

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

2003 CHARACTERISTICS OF PANEL FARMS PRODUCING COTTON

- CAC2400** CAC2400 is a 2,400-acre, moderate-sized cotton farm located in the central San Joaquin Valley of California (Kings County). This farm plants 1,000 acres of cotton and 1,400 acres of hay. During 2003, CAC2000 generated 58 percent of total receipts from cotton and 42 percent from hay.
- CAC9000** California's central San Joaquin Valley (Kings County) is home to this 9,000-acre farm. Cotton is planted on 4,500 acres, 1,260 acres to wheat, 720 acres of hay, and 2,520 acres of vegetables. Fifty-five percent of 2003 receipts were generated from cotton and 36 percent came from vegetable sales.
- TXSP2239** A 2,239-acre Texas South Plains (Dawson County) cotton farm that is moderate-sized for the area. TXSP2239 plants 1,616 acres of cotton (1,250 dryland, 366 irrigated), 270 acres of peanuts, and has 183 acres in CRP. For 2003, 59 percent of receipts came from cotton.
- TXSP3745** The Texas South Plains (Dawson County) is home to this 3,745-acre, large-sized cotton farm that grows 2,625 acres of cotton (2,120 dryland, 505 irrigated), 245 acres of peanuts, and has 288 acres in CRP. Cotton sales comprised 74 percent of 2003 receipts.
- TXPC2500** The Texas Panhandle is home to this 2,500-acre farm (Deaf Smith County). Annually, cotton is planted on 1,184 acres (1,000 irrigated and 184 dryland), 308 acres to sorghum (125 irrigated and 183 dryland), 883 acres planted to wheat (700 irrigated and 183 dryland), and 125 irrigated acres are planted to corn. Sixty-four percent of 2003 cash receipts were generated by cotton sales.
- TXEC5000** This 5,000-acre farm is located on the Eastern Caprock of the Texas South Plains (Crosby County). Annually, 4,300 acres are planted to cotton (2,800 irrigated and 1,500 dryland), 400 acres of wheat (100 irrigated and 300 dryland), and 300 acres of dryland sorghum. In 2003, cotton sales accounted for 96 percent of gross receipts.

Appendix Table A4. Characteristics of Panel Farms Producing Cotton.

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

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

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

2003 CHARACTERISTICS OF PANEL FARMS PRODUCING COTTON (continued)

- TXRP2500** TXRP2500 is a 2,500-acre cotton farm located in the Rolling Plains of Texas (Jones County). This farm plants 1,122 acres of cotton and 825 acres of winter wheat each year. Seventy-nine percent of 2003 farm receipts came from cotton sales. Twelve head of beef cows generated approximately two percent of farm receipts.
- TXMC3500** A 3,500-acre cotton farm located on the middle Texas Gulf Coast (Jackson County) that farms 1,750 acres of cotton and 875 acres each of sorghum and corn. In 2003, cotton sales comprised 72 percent of total cash receipts on this operation.
- TXCB1850** A 1,850-acre cotton farm located on the Texas Coastal Bend (San Patricio County) that farms 925 acres of cotton, 775 acres of sorghum, and 150 acres of corn annually. Seventy-three percent of 2003 cash receipts were generated by cotton.
- TXCB5500** Nueces County, Texas is home to this 5,500-acre farm. Annually, 2,750 acres are planted to cotton and 2,750 acres to sorghum. Cotton sales accounted for 75 percent of 2003 receipts.
- TXVC4500** This 4,500-acre farm is located in the lower Rio Grande Valley of Texas (Willacy County) and plants 2,388 acres to cotton (500 irrigated and 1,888 acres dryland), 1,887 acres to sorghum, and 225 acres of sugarcane. In 2003, 72 percent of TXVC4500's cash receipts were generated by cotton sales.
- LAC2640** This is a 2,640 cotton farm located in north Louisiana (Morehouse Parish). LAC2640 plants 1,498 acres of cotton, 686 acres of corn, and 456 acres of soybeans each year. During 2003, 49 percent of farm receipts were generated from cotton sales.

Appendix Table A5. Characteristics of Panel Farms Producing Cotton.

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

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

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

2003 CHARACTERISTICS OF PANEL FARMS PRODUCING COTTON (continued)

- ARC5000** ARC5000 is a 5,000-acre cotton farm in northeast Arkansas (Desha County) that plants 1,800 acres of cotton, 1,500 acres of rice, 1,400 acres of soybeans, and 300 acres of corn. For 2003, 50 percent of gross receipts came from cotton sales, 35 percent from rice sales, and 14 percent from soybean sales.
- TNC1900** A 1,900-acre, moderate-sized West Tennessee (Fayette County) cotton farm. TNC1900 consists of 915 acres of cotton, 370 acres each of soybeans and corn, 150 acres of sorghum, 65 acres of wheat, and 30 acres enrolled in CRP. Cotton accounted for 71 percent of 2003 gross receipts, with corn and soybeans contributing 12 percent and 11 percent, respectively.
- TNC4050** TNC4050 is a 4,050-acre, large-sized West Tennessee (Haywood County) cotton farm. This farm plants 2,670 acres of cotton, 820 acres of soybeans, 560 acres of corn, and 328 acres of wheat each year. During 2003, cotton sales generated 80 percent of gross receipts.
- ALC3000** A 3,000-acre cotton farm located in north central Alabama (Lawrence County) that plants 2,075 acres to cotton, 750 acres to corn, and 175 acres to soybeans annually. ALC3000 has been under a no-till regime for several years. Additionally, cotton produced on this farm is marketed through a cooperative gin. This gin has implemented ginning and marketing innovations that return a higher lint price than would be realized through conventional marketing channels. Cotton sales accounted for 80 percent of total farm receipts during 2003.
- GAC1700** Southwest Georgia (Decatur County) is home to a 1,700-acre cotton farm that plants 1,020 acres to cotton, 510 acres to peanuts, and 170 acres to soybeans. This farm was added during 2001 to represent resurgent cotton production in the Deep South. In 2003, farm receipts were comprised largely of cotton sales (56 percent) and peanut sales (38 percent).
- NCC1500** This is a 1,500-acre cotton farm located on the upper coastal plain of North Carolina (Wayne County). NCC1500 plants 1,000 acres of cotton, 500 acres of wheat, and 500 acres of double-cropped soybeans annually. This farm was added during 2001 to reflect the return of large-scale cotton production to North Carolina. Cotton accounted for 70 percent of this farm's 2003 receipts with 15 percent coming from soybean sales.

Appendix Table A6. Characteristics of Panel Farms Producing Cotton.

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

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

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

2003 CHARACTERISTICS OF PANEL FARMS PRODUCING RICE

- CAR424** CAR424 is a 424-acre moderate-sized rice farm in the Sacramento Valley of California (Sutter and Yuba Counties) that plants 400 acres of rice annually. This farm generated 98 percent of 2003 gross receipts from rice sales.
- CAR2365** This is a 2,365-acre rice farm located in the Sacramento Valley of California (Sutter and Yuba Counties) that is large-sized for the region. CAR2365 plants 2,240 acres of rice annually. Ninety-eight of 2003's total receipts were generated from rice sales.
- CABR1365** The Sacramento Valley (Butte County) is home to CABR1365, a 1,000-acre rice farm. CABR1000 harvests 1,000 acres of rice annually, generating more than 99 percent of 2003 farm receipts from rice sales.
- CACR1420** CACR1420 is a 1,420-acre rice farm located in the Sacramento Valley of California (Colusa County). This farm harvests 1,278 acres of rice each year. During 2003, more than 99 percent of farm receipts were realized from rice sales.
- TXR1553** This 1,553-acre rice farm located west of Houston, Texas (Colorado County) is moderate-sized for the region. TXR1553 harvests 450 acres of first-crop rice and 405 acres of ratoon rice. The farm generated 98 percent of its receipts from rice during 2003.
- TXR3774** TXR3774 is a 3,774-acre, large-sized rice farm located west of Houston, Texas (Colorado County). This farm harvests 1,589 acres of first-crop rice and 1,351 acres of ratoon rice annually. TXR3774 realized 98 percent of 2003 gross receipts from rice sales.
- TXBR1650** The Texas Gulf Coast (Matagorda County) is home to this 1,650-acre rice farm. TXBR1650 harvests 550 acres of rice annually (550 acres of first-crop rice and 475 acres of ratoon rice) and realized 100 percent of 2003 farm receipts from sales of rice.
- TXER3200** This 3,200-acre rice farm is large for the Texas Gulf Coast (Wharton County). TXER3200 harvests 1,280 acres of first-crop rice and 1,024 acres of ratoon rice each year. The farm also grows 160 acres each of soybeans and grain sorghum annually. Ninety-six percent of 2003 receipts came from rice sales.

Appendix Table A7. Characteristics of Panel Farms Producing Rice.

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

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

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

2003 CHARACTERISTICS OF PANEL FARMS PRODUCING RICE (continued)

- LASR1200** A 1,200-acre southwest Louisiana (Acadia, Jeff Davis, and Vermilion parishes) rice farm, LASR1200 is moderate-sized for the area. This farm harvests 660 acres of long grain rice and 324 acres of soybeans. During 2003, 83 percent of gross receipts were generated from rice sales.
- LANR2500** This is a 2,500-acre, large-sized northeast Louisiana (Madison Parish) rice farm. This farm harvests 1,000 acres of long grain rice, 750 acres of soybeans, 325 acres of cotton, 200 acres of corn, and 100 acres of sorghum. For 2003, 60 percent of farm receipts came from rice, 15 percent from soybeans, and 16 percent from cotton.
- MOER4500** MOER4500 is a 4,500-acre, large-sized rice farm located in southeast Missouri (New Madrid County) that plants 1,500 acres each to rice, corn, and soybeans each year. During 2003, 51 percent of this farm's cash receipts were generated by rice, 28 percent by corn, and 21 percent by soybeans.
- MOWR4000** A 4,000-acre rice farm located in southeast Missouri (Butler County), MOWR4000 is large-sized for the region. Annually, this farm plants 2,000 acres of rice and 2,000 acres of soybeans. Seventy-two percent of receipts for this farm came from rice sales in 2003.
- ARRS3640** ARRS3640 is a 3,640-acre, large-sized Arkansas (Arkansas County) rice farm that harvests 122 acres of medium grain rice, 1620 acres of long grain rice, 1,498 acres of soybeans, and 615 acres of wheat each year. Seventy-one percent of this farm's 2003 receipts came from rice sales.
- ARWR1200** East central Arkansas (Cross County) is home to this 1,200-acre rice farm. Moderate-sized for the region, ARWR1200 annually plants 600 acres to rice, 600 acres to soybeans, and 60 acres of double-cropped wheat. During 2003, rice sales generated 70 percent of gross receipts.
- ARHR3000** ARHR3000 is a 3,000-acre large-sized northeast Arkansas (Lawrence County) rice farm that annually harvests 1,500 acres of rice, 1,350 acres of soybeans, and 150 acres of corn. Rice sales accounted for 74 percent of 2003 farm receipts.
- MSR4735** This is a 4,735-acre Mississippi Delta (Tunica County, MS) rice farm that plants 1,335 acres of rice, 2,700 acres of soybeans, and 500 acres of cotton annually. During 2003, MSR4735 realized 51 percent of total receipts from rice, 32 percent from soybeans, and 17 percent from cotton.

Appendix Table A8. Characteristics of Panel Farms Producing Rice.

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

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

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

2003 CHARACTERISTICS OF PANEL FARMS PRODUCING MILK

- CAD1710** A 1,710-cow, large-sized central California (Tulare County) dairy. The farm plants 525 acres of hay/silage for which it employs custom harvesting. Milk sales generated 91 percent of 2003 total receipts.
- NMD2000** A 2,000 cow, large-sized southern New Mexico (Dona Ana and Chaves Counties) dairy. This farm purchases all commodities necessary for blending its own total mixed ration and plants no crops. Milk sales accounted for 92 percent of 2003 total receipts.
- WAD250** A 250-cow, moderate-sized northern Washington (Whatcom County) dairy. This farm plants 200 acres of silage and generated 91 percent of its 2003 gross receipts from milk sales.
- WAD850** An 850-cow, large-sized northern Washington (Whatcom County) dairy. This farm plants 605 acres for silage annually. During 2003, 92 percent of this farm's gross receipts came from milk.
- IDD750** A 750-cow, moderate-sized Idaho (Twin Falls County) dairy. This farm plants no crops. Milk sales accounted for 89 percent of IDD750's gross receipts for 2003.
- IDD2100** A 2,1000-cow, large-sized Idaho (Twin Falls County) dairy. This farm plants 560 acres for silage annually. During 2003, milk sales accounted for 92 percent of this farm's gross receipts.
- TXND2400** A 2,4000-cow, large-sized dairy located in the South Plains of Texas (Bailey County). This farm plants 360 acres for silage annually. Milk sales account for 90 percent of 2003 gross receipts.
- TXCD500** A 500-cow, moderate-sized central Texas (Erath County) dairy. TXCD500 plants 500 acres of hay each year. Milk sales represented 90 percent of this farm's 2003 gross receipts.
- TXCD1300** A 1,300-cow, large-sized central Texas (Erath County) dairy. TXCD1300 plants 215 acres of silage annually. During 2003, milk sales accounted for 92 percent of receipts.

Appendix Table A9. Characteristics of Panel Farms Producing Milk.

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

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

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

2003 CHARACTERISTICS OF PANEL FARMS PRODUCING MILK (continued)

- TXED550** A 550-cow, moderate-sized northeast Texas (Hopkins County) dairy. This farm has 300 acres of improved pasture and 50 acres of hay. During 2003, milk sales represented 88 percent of annual receipts.
- TXED1000** A 1,000-cow, large-sized northeast Texas (Hopkins County) dairy. This farm plants 825 acres of hay/silage. This farm generated 87 percent of 2003 receipts from milk sales.
- WID135** A 135-cow, moderate-sized eastern Wisconsin (Winnebago County) dairy. The farm plants 297 acres of hay, 184 acres of corn, and 99 acres of soybeans. Milk constituted 84 percent of this farm's 2003 receipts.
- WID700** A 700-cow, large-sized eastern Wisconsin (Winnebago County) dairy. The farm plants 696 acres of hay and 454 acres of silage each year. Milk sales comprised 92 percent of the farm's 2003 receipts.
- NYWD800** An 800-cow, moderate-sized western New York (Wyoming County) dairy. This farm plants 690 acres of silage and 750 acres of haylage annually. Milk sales accounted for 92 percent of the gross receipts for this farm in 2003.
- NYWD1200** A 1,200-cow, large-sized western New York (Wyoming County) dairy. This farm plants 2,160 acres for silage annually. Milk sales accounted for 92 percent of the gross receipts for this farm in 2003.
- NYCD110** A 110-cow, moderate-sized central New York (Cayuga County) dairy. The farm plants 80 acres for hay, 64 acres for corn, and 131 acres for silage annually. Milk accounted for 85 percent of the gross receipts for 2003 on this dairy.
- NYCD500** A 500-cow, large-sized central New York (Cayuga County) dairy. This farm plants 714 acres of hay and haylage and 386 acres of silage. Milk sales make up 92 percent of the 2003 total receipts for this dairy.

Appendix Table A10. Characteristics of Panel Farms Producing Milk.

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

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

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

2003 CHARACTERISTICS OF PANEL FARMS PRODUCING MILK (continued)

- VTD134** A 134-cow, moderate-sized Vermont (Washington County) dairy. VTD134 plants 26 acres of hay, and 193 acres of silage annually. Milk accounted for 83 percent of the 2003 receipts for this farm.
- VTD350** A 350-cow, large-sized Vermont (Washington County) dairy. This farm plants 40 acres of hay and 660 acres of silage annually. Milk sales represent 92 percent of VTD350's gross receipts in 2003.
- MOD85** An 85-cow, moderate-sized southwest Missouri (Christian County) dairy. The farm plants 200 acres of hay and 30 acres of silage. Milk accounted for 79 percent of gross farm receipts for 2003.
- MOD400** A 400-cow, large-sized southwest Missouri (Christian County) dairy. The farm plants 315 acres of hay, 135 acres of silage, and 150 acres of improved pasture annually. Milk accounted for 91 percent of gross farm receipts for 2003.
- FLND500** A 500-cow, moderate-sized north Florida (Lafayette County) dairy. The dairy grows 130 acres of hay each year. All other feed requirements are purchased in a pre-mixed ration. Milk sales accounted for 93 percent of the farm receipts.
- FLSD1500** A 1,500-cow, large-sized south central Florida (Okeechobee County) dairy. FLSD1500 plants 500 acres of hay annually. Milk sales represent 95 percent of 2003 total receipts.

Appendix Table A11. Characteristics of Panel Farms Producing Milk.

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

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

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

2003 CHARACTERISTICS OF PANEL RANCHES PRODUCING BEEF CATTLE

- CAB500** Located in the northern Sacramento Valley (Tehama County, California), this 500-cow operation covers 13,125 acres of deeded and privately owned leased range. Additionally, 2,000 AUMs are leased from the BLM. All 2003 receipts were generated by the cow-calf operation.
- NVB700** NVB680 is a 700-cow ranch located in northeastern Nevada (Elko County). The operation consists of 1,300 acres of owned hay meadow and 8,725 acres of owned range, supplemented by acreage leased from the U.S. Forest. Each year, the farm harvests 1,300 acres of hay. Annually, cattle sales represent all of the ranch's receipts.
- MTB500** A 500-cow ranch located on the eastern plains of Montana (Custer County), MTB500 runs cows on a combination of owned land and land leased from federal, state, and private sources. Federal land satisfies one quarter of total grazing needs. The ranch owns 14,000 acres of pasture. 640 acres of hay are produced annually on the owned land. Sales of high-quality replacement females comprise a significant portion of receipts for this ranch. Also, all deeded acres are leased for hunting. Cattle sales represent 98 percent of this ranch's receipts.
- WYB500** This 500-cow ranch is located in north central Wyoming (Washakie County). The ranch leases 42 percent of its required grazing acreage from the U.S. Forest Service and owns 1,000 acres of range. Annually, the ranch harvests 300 acres of alfalfa and grass hay on owned ground. In recent years, cowherd size has increased in an effort to realize benefits of economies of size. In 2003, cattle sales account for 100 percent of gross receipts on this ranch.
- COB250** This 250-cow ranch is located in northwestern Colorado (Routt County). Federal land provides seven percent of the ranch's grazing needs. The ranch owns 2,300 acres of rangeland, and the cattle graze federal land during the summer. COB250 harvests 450 acres of hay each year. The ranch retains ownership of 75 percent of its steers through the backgrounding stage. Since 1999, the cowherd has decreased by 50 head as land development pressures have reduced grazing capacity. Cattle sales accounted for 79 percent of the ranch's 2003 total receipts.
- NMB240** NMB240 is a 240-cow ranch located in northeastern New Mexico (Union County) that consists of 10,072 owned acres of pastureland. This ranch harvests no hay. All forage and concentrate feed requirements are purchased from outside sources. In 2002, this ranch liquidated 20 percent of its mature cowherd in response to oppressive drought, culling 60 of its 300 cows to arrive at the current inventory. During 2003, 92 percent of gross receipts were derived from cattle sales with limited receipts from fee hunting.

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

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

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

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

2003 PANEL RANCHES PRODUCING BEEF CATTLE (continued)

- SDB450** SDB450 is a 450-cow West River (Meade County, South Dakota) beef cattle ranch. This operation produces hay and oats on 1,150 acres of owned cropland, and runs its cows on 6,700 acres of owned native range. Grazing needs are supplemented with 2,100 AUMs leased from federal and state sources. In 2003, calf and culled cow/bull sales accounted for 90 percent of gross receipts.
- MOB150** A 150-cow beef cattle operation is the focal point of this diversified livestock and crop farm located in southwest Missouri (Dade County). This farm operates on 840 acres of owned and leased land. MOB150 plants 100 acres each of corn, 24 acres of sorghum, 58 acres of wheat, 116 acres of soybeans, and 400 acres of hay. During 2003, cattle sales comprised 54 percent of gross receipts and crop sales generated 46 percent.
- MOCB350** MOCB350 is a 350-cow beef cattle farm located in central Missouri (Phelps County). This farm consists of 1,060 acres of owned ground and 500 acres of leased ground. Annually, 560 acres of hay are harvested on owned land. 2003 cattle sales represented 89 percent of MOCB350's cash receipts.
- TXBB150** TXBB150 runs 150 mother cows and 2,000 stockers annually in the Blackland Prairie of central Texas (McLennan County). The ranch operates on 3,000 acres (400 owned and 2,600 leased) of improved pasture and oat pasture. Additionally, 100 acres of coastal Bermuda hay is harvested for use on the ranch. In 2003, 96 percent of gross receipts were generated by the cow-calf and stocker cattle sales.
- TXSB250** A 250-head cow-calf operation is the central focus of this full-time agricultural operation in south central Texas (Gonzales County). High-intensity best describes the grazing philosophy of the region, with cows deriving most of their forage needs from improved coastal Bermuda pasture. Native pasture serves as fallback pasturage and is host to this operation's fledgling lease hunting program. Contract broiler production is an important source of agricultural revenue for this ranch; even so, cattle sales accounted for 82 percent of 2003 gross receipts.
- FLB1155** This is a 1,155-cow ranch located in central Florida (Osceola County). FLB1155 runs cows on 5,400 acres of owned improved pasture, from which 3,560 acres of hay are harvested annually. Sales of sod are a burgeoning source of agricultural income for area ranches. During 2003, cattle sales represented 88 percent of total receipts.
- OTHERS** Eight other representative farms have beef cattle operations along with their crop production (MONG1850, TXHG2000, TXWG1400, KSCW4000, KSNW2800 KSNW4300, COW3000, and TXRP2500). These farming operations have from 12 to 200 cows. Cattle contributed from two to 19 percent of gross receipts for these farms in 2003.

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

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

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

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

2003 CHARACTERISTICS OF PANEL FARMS PRODUCING HOGS

- ILH200** A 200-sow hog farm located in western Illinois (Knox County). The farm plants 700 acres each of corn and soybeans each year. This farm weans an average of 17 pigs per sow per year and feeds about 3.5 pounds of feed per pound of pork sold in a year. The hog operation generated 53 percent of ILH200's cash receipts 2003 with the remainder of the receipts coming from crop sales.
- ILH750** A 750-sow hog farm located in western Illinois (Knox County). The farm plants 1,072 acres of corn and 878 acres of soybeans each year. The farm weans an average of 22 pigs per sow per year and feeds about 3.1 pounds of feed per pound of pork sold. The hog enterprise accounted for 82 percent of the 2003 gross receipts.
- INH600** A 600-sow hog farm in north central Indiana (Carroll County). This large-sized diversified farm plants 2,016 acres of corn, 984 acres of soybeans, and 200 acres of wheat annually. The farm weans 20 pigs per sow per year and feeds about 3.3 pounds of feed per pound of pork sold. The hog operation accounted for 55 percent of the total receipts for 2003.
- IAH400** A weaning-to-finish operation located in northwestern Iowa (Cherokee County). The farm purchased 8,000 weaned pigs from other producers and develops them through the finishing stage. IAH400 plants 333 acres of corn and soybeans annually. The hog operation generated 86 percent of gross receipts during 2003.

Appendix Table A14. Characteristics of Panel Farms Producing Hogs.

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

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

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

**APPENDIX B:
LIST OF PANEL FARM
COOPERATORS**

FEED GRAIN FARMS**Indiana***Facilitator*

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

Panel

Mr. David Brown
Mr. Jerry Drake
Mr. Richard Fix
Mr. Mark Nigh
Mr. Gary Robards

Mr. Kevin Carson
Mr. Gary Everhart
Mr. Darrell Linville
Mr. Jeff Pfaff
Mr. Keith Theobald

Iowa*Facilitator*

Mr. Jim Patton - County Extension Director, Webster County

Panel

Mr. Dennis Amman
Mr. Dean Black
Mr. Keith Bowden
Mr. and Mrs. Jim Carver
Mr. David Hanson
Mr. Don Sandell
Mr. Larry Sorensen
Mr. Dennis Vorrie

Mr. Robert Anderson
Mr. Perry Black
Mr. Jason Carver
Mr. Jim Corey
Mr. Joe Horan
Mr. Britt Shelton
Mr. Doug Stanek

Missouri - Central*Facilitator*

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

Panel

Mr. Mark Casner
Mr. Todd Gibson
Mr. Dennis Hensiek
Mr. Ron Jenkins
Mr. Gerald Kitchen
Mr. Ron Linneman
Mr. Mike Ritchhart
Mr. Ron Venable

Mr. Kyle Durham
Mr. Jack Harriman
Mr. Mike Hisle
Mr. Glenn Kaiser
Mr. Rob Korff
Mr. Charles Reid
Mr. Fred Utlaut
Mr. James Wheeler

Missouri - Northwest*Facilitator*

Mr. Mike Killingsworth - Farm Management Consultant

Panel

Mr. Jack Baldwin
Mr. Kevin Rosenbohm

Mr. Gary Ecker
Mr. Roger Vest

Nebraska - Central*Facilitator*

Mr. David Stenberg - Dawson County Extension Educator

Panel

Mr. Jim Aden
Mr. Jeremy Geiger
Mr. Pat Luther
Mr. Scott McPheeters
Mr. Paul Stieb

Mr. Rob Anderson
Mr. Greg Hueftle
Mr. Tim Maline
Mr. Dave Rowe
Mr. Dan Strauss

FEED GRAIN FARMS (CONTINUED)**South Carolina***Facilitator*

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

Panel

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

Tennessee*Facilitator*

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

Panel

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

Texas - Northern Blackland Prairie*Facilitator*

Mr. Marty Jungman - County Extension Agent, Hill County

Panel

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

Texas - Northern High Plains*Facilitator*

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

Panel

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

Texas - Southern Blackland Prairie*Facilitator*

Mr. Ronnie Leps - County Extension Agent, Williamson County

Panel

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

WHEAT FARMS**Colorado***Facilitator*

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

Panel

Mr. Marvin Brandon
 Mr. Terry Kuntz
 Mr. Ken Remington
 Mr. Dave Wagers
 Mr. John Wright

Mr. David Foy
 Mr. Rick Lewton
 Mr. Calvin Schaffert
 Mr. Monte Willeke

Kansas - Northwest*Facilitator*

Dr. Dan O'Brien - Area Extension Director, Kansas State University

Mr. Mark Wood - Extension Agricultural Economist, Kansas Farm Mgmt Association

Panel

Mr. Vernon Akers
 Mr. Sam Crouse
 Mr. Lyman Goetsch
 Mr. Brian Laufer
 Mr. Harold Mizell

Mr. Rich Calliham
 Mr. Dennis Franklin
 Mr. Lee Jueneman
 Mr. Lance Leebrick
 Mr. Steve Schertz

Kansas - South Central*Facilitator*

Mr. Gerald LeValley - County Extension Agent, Sumner County

Mr. Steve Westfahl - County Extension Agent, Sedgwick County

Panel

Mr. Donald Applegate
 Mr. Nick Steffen
 Mr. Tim Turek

Mr. Rae Reusser
 Mr. Jim Stuhlsatz
 Mr. Robert White

North Dakota*Facilitator*

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

Panel

Mr. Jim Broten
 Mr. Mike Clemens
 Mr. Raymond Haugen
 Mr. Anthony Thilmony

Mr. Wade Bruns
 Mr. Leland Guscette
 Mr. Greg Shanenko
 Mr. Arvid Winkler

Washington - Palouse*Facilitator*

Mr. Randy Baldree - County Extension Agent, Whitman County

Mr. John Burns - Extension Agronomist, Washington State University

Dr. Herb Hinman - Extension Economist, Washington State University

Panel

Mr. Asa Clark
 Mr. Gary Largent
 Mr. Randy Suess
 Mr. Steve Teade

Mr. Brian Largent
 Mr. Bruce Nelson
 Mr. Del Teade
 Mr. Jon Whitman

COTTON FARMS

Alabama

Panel

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

Arkansas

Panel

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

California

Facilitator

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

Panel

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

Georgia - Southwest

Facilitator

Mr. Eddie McGriff - County Extension Coordinator, Decatur County

Mr. Brad Mitchell - County Extension Coordinator, Mitchell County

Dr. Don Shurley - Professor, University of Georgia

Panel

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

Louisiana

Facilitator

Mr. John Barnett - Director, LSU Ag Center, Central Region

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

Panel

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

North Carolina

Facilitator

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

Panel

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

COTTON FARMS (CONTINUED)**Tennessee***Facilitator*

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

Panel

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

Texas - Coastal Bend*Facilitator*

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

Panel

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

Texas - Eastern Caprock*Facilitator*

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

Panel

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

Texas - Mid Coast*Facilitator*

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

Panel

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

Texas - Panhandle*Facilitator*

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

Panel

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

Texas - Rio Grande Valley*Facilitator*

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

Panel

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

COTTON FARMS (CONTINUED)**Texas - Rolling Plains***Facilitator*

Mr. Stan Bevers - Extension Economist - Management, Texas A&M University

Mr. Mike Sloan - Regional Vice President, First Ag Credit

Mr. Todd Vineyard - County Extension Agent, Jones County

Panel

Mr. Dennis Olson

Mr. Ronnie Richmond

Mr. Ronnie Riddle

Mr. Dale Spurgin

Mr. Ferdie Walker

Texas - Southern High Plains*Facilitator*

Mr. John Farris - County Extension Agent, Dawson County

Dr. Jackie Smith - Extension Economist - Management, Texas A&M University

Panel

Mr. Steven Archer

Mr. Brad Boyd

Mr. Jerry Chapman

Mr. Mark Furlow

Mr. Kent Nix

Mr. Donald Vogler

RICE FARMS**Arkansas - East Central-Arkansas County***Facilitator*

Mr. Bill Free - Riceland Foods, Inc.

Panel

Mr. Derek Bohanan

Mr. Jerry Burkett

Mr. David Jessup

Mr. Monty Bohanan

Mr. Dusty Hoskyn

Arkansas - East Central-Cross County*Panel*

Mr. Bryan Holmes, Jr.

Mr. Roger Pohlner

Mr. Bryan Moery

Mr. Steve Wilson

Arkansas - Northeast-Lawrence County*Panel*

Mr. Bernard Boltz

Mr. Michael Curetor

Mr. Marvin Hare, Jr.

Mr. Kyle Boltz

Mr. Terry Gray

Mr. Dwain Morris

California - Butte County*Facilitator*

Dr. Chris Greer - Farm Advisor, University of California

Dr. Cass Mutters - Farm Advisor, University of California

Panel

Mr. Ken Anderson

Mr. Mike Bryant

Mr. Tom Coleman

Mr. Steve Rystrom

Mr. Lance Tennis

Mr. Mike Boeger

Mr. Lee Carrico

Mr. Rod Rold

Mr. George Sligar

California - Colusa County*Facilitator*

Dr. Chris Greer - Farm Advisor, University of California

Dr. Cass Mutters - Farm Advisor, University of California

Panel

Mr. Don Bransford

Mr. Francis Hickel

Mr. Mike Lux

Mr. Joe Struckmeyer

Mr. Bob Freed

Mr. Leo LaGrande

Mr. Charles Marsh

Mr. Robert Sutton

California - Sutter County*Facilitator*

Dr. Cass Mutters - Farm Advisor, University of California

Panel

Mr. Bill Baggett

Mr. Jack DeWitt

Mr. Ned Lemenager

Mr. Walt Trevethan

Mr. Bob Van Dyke

Mr. Steve Butler

Mr. Scott Leathers

Mr. Paul Lowery

Mr. Scott Tucker

Mr. Wayne Vineyard

RICE FARMS (CONTINUED)**Louisiana - Northeast***Facilitator*

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

Panel

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

Louisiana - Southwest-Acadiana*Facilitator*

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

Panel

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

Mississippi*Facilitator*

Mr. Nolen Canon

Panel

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

Missouri - Bootheel East*Facilitator*

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

Panel

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

Missouri - Bootheel West*Facilitator*

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

Panel

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

Texas - Bay City-Matagorda County*Panel*

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

RICE FARMS (CONTINUED)

Texas - Eagle Lake-Colorado County

Panel

Mr. Andy Anderson
Mr. Kenneth Danklefs
Mr. Jason Hlavinka
Mr. John Waligura

Mr. Steve Balas
Mr. W.A. "Billy" Hefner, III
Mr. Kenneth "Peter" Stelzel
Mr. Brian Wiese

Texas - El Campo-Wharton County

Panel

Mr. L.G. Raun
Mr. Glen Rod

Mr. Layton Raun
Mr. Robert Shoemate

DAIRY FARMS

California

Facilitator

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

Panel

Mr. David Ribeiro
Mr. Art Van Beek

Mr. Mike Santos

Florida - North

Facilitator

Mr. Chris Vann - County Extension Agent, Lafayette County

Panel

Mr. Morris Jackson
Mr. Kevin Koon
Mr. Pete Shurter

Mr. Dwayne Koon
Mr. Keith Shiver

Florida - South

Facilitator

Mr. Art Darling - Sunshine State Milk

Panel

Mr. Bob Butler
Mr. Ray MeLear
Mr. Glynn Rutledge

Mr. Woody Larson
Mr. Charles Ruck
Mr. Bob Rydzewski

Idaho

Facilitator

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

Panel

Mr. William Bokma
Mr. Alan Gerratt
Mr. Harry Hogland
Mr. Michael Quesnell
Mr. & Mrs. Rick Thompson

Mr. Dave Gandolfo
Mr. Reagon Hatch
Mr. & Mrs. Martin Lee
Mr. Mike Roth
Mr. John Wright

Missouri

Facilitator

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

Panel

Mr. Steve Gallivan
Mr. John McArthur
Mr. Joe Peebles
Mr. Wayne Whitehead

Mr. Freddie Martin
Mr. Doug Owen
Mr. Allen Sulgrove
Mr. Larry Winfree

New Mexico

Panel

Mr. Isaak Bos
Mr. Joe Gonzalez
Mr. John McCatharn
Mr. Jerry Vaz

Mr. Arie Breedyk
Mr. Jim Hoffman
Mr. Marc Reischman

DAIRY FARMS (CONTINUED)**New York - Central***Facilitator*

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

Panel

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

New York - Western*Facilitator*

Mr. Steve Richards

Panel

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

Texas - Central*Facilitator*

Mr. Joe Pope - County Extension Agent, Erath County

Panel

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

Texas - Northeast*Facilitator*

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

Panel

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

Texas - South Plains*Facilitator*

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

Panel

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

DAIRY FARMS (CONTINUED)**Vermont***Facilitator*

Mr. Ken Becker

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

Panel

Mr. Paul Bourbeau

Mr. Ashley Farr

Mr. Kim Harvey

Mr. Steven Jones

Mr. Roger Rainville

Mr. Onan Whitcomb

Mr. David Conant

Mr. Ted Foster

Mr. Steve Hurd

Mrs Polly McEwing

Mr. Stanley Scribner

Washington*Facilitator*

Mr. Robert Dyk - County Extension Agent, Whatcom County

Panel

Mr. Dick Bengen

Mr. Larry DeHaan

Mr. Jeff Rainey

Mr. Peter Vlas

Mr. Ron Bronsema

Mr. Ed Pomeroy

Mr. John Steensma

Wisconsin*Facilitator*

Mr. Jeff Key - County Extension Agent, Winnebago County

Panel

Mr. Larry Engel

Ms. Linda Hodorff

Mr. Dalton Korth

Mr. Joe Kuehnl

Mr. Rob Stone

Mr. Jerry Evers

Mr. and Mrs. Charlie Knigge

Mr. Kevin Krentz

Mr. Larry Pollack

BEEF PRODUCERS**California***Facilitator*

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

Panel

Mr. Dick O'Sullivan
 Mr. Louis Venturini

Mr. Wally Roney

Colorado*Facilitator*

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

Panel

Mr. Geoff Blakesley
 Mr. Jay Fetcher
 Mr. Jim Rossi

Mr. Doug Carlson
 Mr. Larry Monger
 Mr. Wayne Shoemaker

Florida*Facilitator*

Mr. John Earman

Panel

Mr. Mike Adams
 Mr. Alan Kelley
 Mr. Bert Tucker
 Mr. Wes Williamson

Dr. Judy Lisle Bozeman
 Ms. Doris Lisle
 Dr. Fred Tucker

Missouri - Central*Facilitator*

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

Panel

Mr. George A. Barnitz
 Mr. Tom Gollhofer

Mr. G. Douglas Black
 Mr. Ken Lenox

Missouri - Southwest*Facilitator*

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

Panel

Mr. Steve Allison
 Mr. Randall Erisman
 Mr. James A. Nivens
 Mr. Gary D. Wolf

Mr. Chuck Daniel
 Mr. Ray Dean Hunter
 Mr. Mike Theurer

Montana*Facilitator*

Mr. Kent Williams - County Extension Agent, Custer County

Panel

Mr. Clarence Brown
 Mr. Alyn Haughian
 Mr. Scot Robinson

Mr. Art Drange
 Mr. Jeff Okerman

BEEF PRODUCERS (CONTINUED)**Nevada***Facilitator*

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

Panel

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

New Mexico*Facilitator*

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

Panel

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

South Dakota*Facilitator*

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

Panel

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

Texas - Blackland Prairie*Facilitator*

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

Panel

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

Texas - South*Facilitator*

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

Panel

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

Wyoming*Facilitator*

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

Panel

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

HOG FARMS**Illinois***Panel*

Mr. Dale Carlson
Mr. John Gustafson
Mr. Steve Maine

Mr. Don Erickson
Mr. Lance Humphreys
Mr. Sterling Saline

Indiana*Facilitator*

Mr. Steve Nichols - County Extension Agent, Carroll County

Panel

Mr. Brad Burton
Mr. Phil Hunt
Mr. Trent Odell
Mr. Jim Yost

Mr. Levi Huffman
Mr. Mark Martin
Mr. Lynn Peters

Iowa*Facilitator*

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

Panel

Mr. Bruce Amundson
Mr. Duane Cave
Mr. Joe Rotta

Mr. Tim Bierman
Mr. Kent Ohlson

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