Representative Farms Economic Outlook for the December 2016 FAPRI/AFPC Baseline

Working Paper 16-4

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AFPC

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EXECUTIVE SUMMARY

The Agricultural and Food Policy Center (AFPC) at Texas A&M University develops and maintains data to simulate 95 representative crop, dairy, and livestock operations in major production areas in 29 states. The chief purpose of this analysis is to project the economic viability of those farms by region and commodity for 2016 through 2021. The data necessary to simulate the economic activity of these operations is developed through ongoing cooperation with panels of agricultural producers in selected states. The Food and Agricultural Policy Research Institute (FAPRI) provided projected prices, policy variables, and input inflation rates in their December 2016 Baseline.

Under the December 2016 Baseline, 17 of the 64 crop farms are considered in good liquidity condition (less than a 25 percent chance of negative ending cash by 2021). Eight crop farms have between a 25 percent and a 50 percent likelihood of negative ending cash, and the remaining 39 crop farms have greater than a 50 percent chance of negative ending cash. Additionally, 28 of the 64 crop farms are considered in good equity position (less than a 25 percent chance of decreasing real net worth during the study period). Six crop farms have between a 25 percent and 50 percent likelihood of losing real net worth, and 30 crop farms have greater than a 50 percent probability of decreasing real net worth by 2021. The following discussion provides an overall evaluation by commodity considering both liquidity and equity measures.

- FEEDGRAIN FARMS: Nine of the 23 feedgrain farms are in good overall financial condition. Four farms are classified in marginal condition, and ten are in poor condition.

- WHEAT FARMS: Three representative wheat farms are classified in good overall financial condition, none are in marginal condition, and eight are in poor condition.

- COTTON FARMS: Four of the 15 cotton farms are classified in good condition, five are in marginal condition, and six are in poor condition.

- RICE FARMS: Four of the 15 rice farms are projected to be in good financial condition. Four rice farms are projected to be in marginal condition; seven are in poor condition.

- DAIRY FARMS: Fifteen of the 20 dairies are in good overall financial condition. One dairy is classified in marginal condition, and four are in poor condition.

- BEEF CATTLE RANCHES: Three of the 11 cattle ranches are classified in good financial condition, five are in marginal condition, and three are projected to be in poor condition.

REPRESENTATIVE FARMS ECONOMIC OUTLOOK FOR THE DECEMBER 2016 FAPRI/AFPC BASELINE

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REPRESENTATIVE FARMS ECONOMIC OUTLOOK FOR THE DECEMBER 2016 FAPRI/AFPC BASELINE

The farm level economic impacts of the FAPRI December 2016 Baseline on representative crop and livestock operations are projected in this report. The analysis was conducted over the 2014-2021 planning horizon using FLIPSIM, AFPC's whole farm simulation model. Data to simulate farming operations in the nation's major production regions came from two sources:

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

- Projected prices, policy variables, and input inflation rates from the Food and Agricultural Policy Research Institute (FAPRI) December 2016 Baseline.

The FLIPSIM policy simulation model incorporates the historical risk faced by farmers for prices and production. This report presents the results of the December 2016 Baseline in a risk context using selected simulated probabilities and ranges for annual net cash farm income values. The probability of a farm experiencing negative ending cash reserves 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 2021.

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 December 2016 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 and eighth sections summarize simulation results for dairy and cattle. Two appendices constitute the final sections 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.

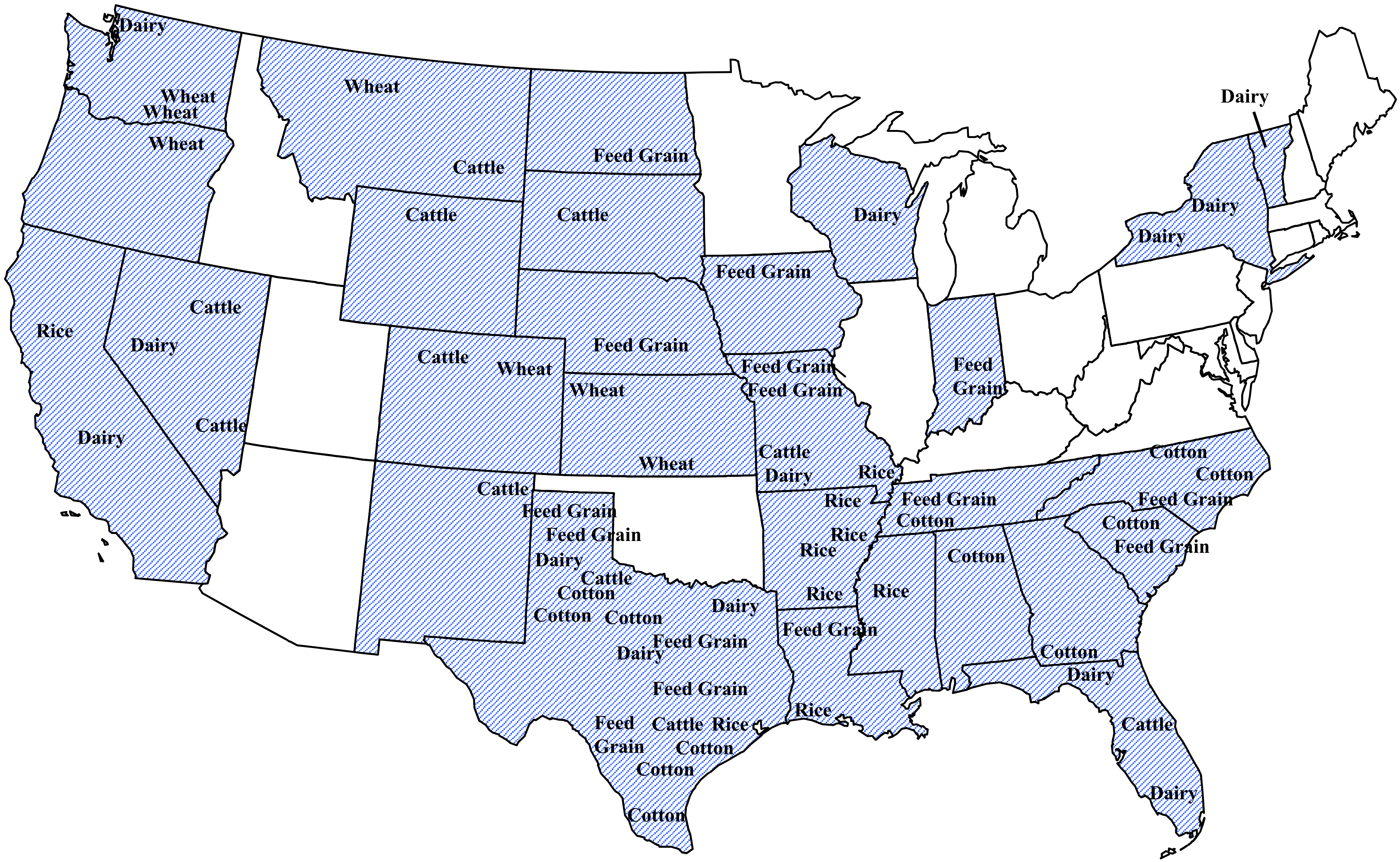
Panel Process

AFPC has developed and maintains data to simulate 95 representative crop farms, dairies, and livestock operations chosen from major production areas across the United States (Figure 7). Characteristics for each of the operations 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. Often, 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 using 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 analysis.

All farms used in the analysis have been updated through panel discussions since February 2011, with the majority being updated in the last two years. All of the crop farms are assumed to begin 2014 with 20 percent intermediate-term and long-term debt. Initial debt levels in 2014 for dairy farms were set at 30 percent and initial debt levels for beef cattle ranches were 1 percent for land and 5 percent for cattle and machinery. The debt levels the farms have at the outset of 2014 are based on a stratified tabulation of the ERS-USDA Farm Cost and Returns Survey (using the survey data for moderate to large size farms in states where AFPC has representative farms) and panel member input.

Figure 1. Representative Farms and Ranches



Key Assumptions of Report

- 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.

- 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 December 2016 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 (2014-2015) were held constant based on actual values obtained from the producers. Crop yields for 2016-2021 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 2014 and 2015. FAPRI's December 2016 Baseline prices were localized for the farms and used as the average prices for 2016-2021 to simulate stochastic crop and livestock prices.

- Dairy and beef cattle herd sizes were held constant for all farms over the 2016-2021 planning horizon.

- Starting in 2014, all farms are subject to 4 payment limits on ARC, PLC, and Marketing Loan combined payments.

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

- No off-farm 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 December 2016 FAPRI Baseline which incorporates the provisions of the 2014 Farm Bill.

- Marketing loan provisions for covered commodities were authorized in the 2008 Farm Bill and continued in the 2014 Farm Bill and are assumed to be in place for the farm level analysis.

- Program selection was crop by crop and based on highest simulated ending cash for each program. Farms are assumed to enroll in either PLC or ARC in 2014 and beyond.

- Dairies are assumed to enroll in the Margin Protection Plan at the Base $4.00 margin level.

- Actual average loan deficiency payment (LDP) rates in the counties where the representative farms are located are used when applicable.

- All crop farms are assumed to carry Multi-Peril Crop Insurance (MPCI), Crop Revenue Coverage (CRC), or Catastrophic coverage (CAT) at levels common to the area.

Table 1. FAPRI December 2016 Baseline Projections of Crop Prices, Loan Rates, and Reference Prices, 2014-2021

	2014	2015	2016	2017	2018	2019	2020	2021
Crop Prices								
Corn ($/bu.)	3.70	3.61	3.31	3.62	3.81	3.86	3.85	3.84
Wheat ($/bu.)	5.99	4.89	3.73	4.47	4.90	5.09	5.23	5.22
Cotton ($/lb.)	0.6130	0.6120	0.6464	0.6278	0.6118	0.6209	0.6218	0.6249
Sorghum ($/bu.)	4.03	3.31	2.97	3.29	3.41	3.46	3.49	3.50
Soybeans ($/bu.)	10.10	8.95	9.39	9.42	9.71	9.88	9.76	9.70
Barley ($/bu.)	5.30	5.52	4.71	4.52	4.76	4.89	4.95	4.95
Oats ($/bu.)	3.21	2.12	1.91	2.08	2.18	2.23	2.25	2.25
Rice ($/cwt.)	13.40	12.10	10.52	11.04	11.48	11.57	11.71	11.92
Soybean Meal ($/ton)	351	310	302	307	315	324	323	325
All Hay ($/ton)	172	145	131	148	157	161	162	161
Peanuts ($/ton)	440	386	382	365	361	362	363	363
Loan Rates								
Corn ($/bu.)	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95
Wheat ($/bu.)	2.94	2.94	2.94	2.94	2.94	2.94	2.94	2.94
Cotton ($/lb.)	0.5200	0.5200	0.4850	0.4732	0.4837	0.5164	0.5200	0.5200
Sorghum ($/bu.)	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95
Soybeans ($/bu.)	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Barley ($/bu.)	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95
Oats ($/bu.)	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39
Rice ($/cwt.)	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50
Peanuts ($/ton)	355.00	355.00	355.00	355.00	355.00	355.00	355.00	355.00
Reference Prices								
Corn ($/bu.)	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70
Wheat ($/bu.)	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50
Cotton ($/lb.)	0	0	0	0	0	0	0	0
Sorghum ($/bu.)	3.95	3.95	3.95	3.95	3.95	3.95	3.95	3.95
Soybeans ($/bu.)	8.40	8.40	8.40	8.40	8.40	8.40	8.40	8.40
Barley ($/bu.)	4.95	4.95	4.95	4.95	4.95	4.95	4.95	4.95
Oats ($/bu.)	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40
Rice ($/cwt.)	14	14	14	14	14	14	14	14
Peanuts ($/ton)	535	535	535	535	535	535	535	535

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

Table 2. FAPRI December 2016 Baseline Projections of Livestock and Milk Prices, 2014-2021

	2014	2015	2016	2017	2018	2019	2020	2021
Cattle Prices								
Feeder Cattle ($/cwt)	225.07	226.52	160.60	150.53	141.38	135.04	134.94	140.38
Fed Cattle ($/cwt)	154.56	148.12	126.42	119.23	114.02	111.09	110.90	113.16
Culled Cows ($/cwt)	104.09	99.76	77.95	72.41	70.36	67.71	67.28	69.35
Milk Prices -- National and State								
All Milk Price ($/cwt)	24.07	17.21	16.09	16.92	17.96	18.35	18.49	18.59
California ($/cwt)	22.12	15.40	14.65	15.38	16.40	16.79	16.94	17.06
Florida ($/cwt)	28.20	21.30	19.61	20.31	21.29	21.67	21.79	21.88
Idaho ($/cwt)	23.10	16.70	15.12	15.81	16.84	17.24	17.38	17.47
Missouri ($/cwt)	24.60	18.50	17.19	18.09	19.10	19.49	19.62	19.71
Nevada ($/cwt)	24.80	17.70	16.51	17.40	18.44	18.84	18.98	19.07
New York ($/cwt)	25.40	18.20	17.03	17.90	19.03	19.46	19.62	19.73
Texas ($/cwt)	24.60	17.70	16.46	17.35	18.37	18.76	18.90	18.99
Vermont ($/cwt)	25.50	18.60	17.43	18.30	19.43	19.86	20.02	20.13
Washington ($/cwt)	24.70	17.20	16.14	17.00	18.19	18.64	18.80	18.93
Wisconsin ($/cwt)	24.50	17.80	16.68	17.59	18.53	18.90	19.02	19.09

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

Table 3. FAPRI December 2016 Baseline Assumed Rates of Change in Input Prices, Annual Interest Rates, and Annual Changes in Land Values, 2015-2021

	2015	2016	2017	2018	2019	2020	2021
Annual Rate of Change for Input Prices Paid							
Seed Prices (%)	0.70	-2.48	-1.55	-1.13	0.32	1.44	1.68
All Fertilizer Prices (%)	-10.86	-21.45	12.18	3.98	1.27	1.95	2.17
Herbicide Prices (%)	-2.10	2.50	-6.34	2.02	6.11	5.28	3.74
Insecticide Prices (%)	-4.37	1.23	-4.47	1.70	4.96	4.25	2.86
Fuel and Lube Prices (%)	-35.14	-12.28	6.14	6.54	15.21	8.85	7.16
Machinery Prices (%)	2.32	-0.08	-0.80	3.21	3.88	3.52	2.96
Wages (%)	3.61	1.97	3.03	3.10	3.21	3.24	3.27
Supplies (%)	0.19	0.16	1.59	1.72	1.91	1.91	1.82
Repairs (%)	0.09	-0.13	3.05	2.64	2.72	2.62	2.53
Services (%)	4.22	2.74	0.49	2.93	3.18	3.12	3.00
Taxes (%)	6.28	3.88	-1.06	2.01	0.87	0.89	0.76
PPI Items (%)	-3.24	-5.37	-2.16	1.72	2.34	2.23	2.17
PPI Total (%)	-2.12	-4.25	-1.81	1.98	2.48	2.30	2.21
Annual Change in Consumer Price Index (%)	0.12	1.22	2.36	2.39	2.45	2.56	2.66
Annual Rate of Change for U.S. Land Prices (%)	2.37	-0.33	-2.15	-0.62	-0.04	0.55	1.67

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

FAPRI DECEMBER 2016 BASELINE

Projected crop prices for FAPRI's December 2016 Baseline are summarized in Table 1. Many crops are projected to bottom in 2016. From 2017-2021, most prices are projected to mildly increase. Individual crop prices are projected to move as follows:

- Corn prices are projected to decline to $3.31/bu in 2016 before increasing slightly in the latter projected years and ending at 3.84/bu in 2021.
- Wheat prices are projected to bottom in 2016 at $3.73/bu. Prices are expected to then rise to $5.22/bu by 2021.
- Cotton prices are expected to rise to $0.6464/lb in 2016 before falling to $0.6118/lb in 2018 and then increasing to $0.6249/lb in 2021.
- Rice prices fall from a high of $13.40/cwt in 2014 to a low of $10.52/cwt in 2016 before slowly increasing and ending 2021 at $11.92/cwt.
- Sorghum prices decline from a high of $4.03/bu. in 2014, ending the projection period at $3.50/bu.
- Prices for Soybeans are expected to fall from $10.10/bu. in 2014 to a low of $8.95/bu in 2015 and finish 2021 at $9.70/bu.

Assumed loan rates and reference prices are reported in Table 1 and reflect the rates authorized in the 2014 Farm Bills. Cotton Transition Assistance Program Payments are only assumed for 2014.

Projected livestock prices and state and national milk prices for FAPRI's December 2016 Baseline are summarized in Table 2. Feeder cattle prices are projected to peak in 2015, while milk prices are projected to have hit their high in 2014. Cattle and milk prices are projected to move as follows:

- Feeder cattle prices are projected to reach a high of $226.52/cwt in 2015 and then fall to a low of $134.94/cwt in 2020.
- Fed cattle prices are expected to decrease from the high in 2014 of $154.56/cwt, ending 2021 at $113.16/cwt.
- Culled cow prices range between $67.71/cwt and $104.09/cwt.
- Milk prices are expected to range from $16.09/cwt to $24.07/cwt for the 2014-2021 study period.

Projected annual rates of change for variable cash expenses are summarized in Table 3. The rates of change in input prices come from FAPRI's December 2016 Baseline. Fertilizer prices are projected to decline in 2015-2016 before increasing in 2017. Fuel prices are projected to decline sharply in 2015 and another 12 percent in 2016 before reversing course and increasing at approximately 6-15 percent annually through 2021. Projected annual rates of change in land values over the 2015 – 2021 period were provided by the December 2016 FAPRI Baseline and exhibit an overall decline after an increase in 2015 till an increase in 2020.

Definitions of Variables in the Summary Tables

- **Overall Financial Position, 2016-2021 --** 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 of a negative ending cash balance and a less than 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.

- **Change in Real Net Worth, 2016-2021 --** Annualized percentage change in the operator's net worth from January 1, 2016 through December 31, 2021, after adjusting for inflation. This value reflects the real annualized increase or decrease in net worth or equity for the farm over the planning horizon including changes in real estate values.

- **Net Income Adjustment (NIA) to Maintain Real Net Worth, 2016-2021 --** NIA is the annual change in net cash farm income necessary to insure the farm maintains its real net worth during 2016-2021. A positive NIA indicates the additional annual net income needed to maintain real net worth. A negative NIA indicates the annual loss in net income the farm can endure and still maintain real net worth.

- **Net Income Adjustment (NIA) for Zero Ending Cash Balance in 2021 --** NIA is the loss in annual net cash farm income a farm can withstand and have a zero-ending cash balance in 2021. A positive NIA indicates the annual increase in receipts necessary for a zero ending cash balance, while a negative NIA indicates the annual decrease in receipts that results in a zero ending cash balance.

- **Government Payments/Receipts, 2016-2021 --** Sum of all farm program payments (PLC or ARC and marketing loan gains/loan deficiency payments) divided by total receipts received from the market plus PLC or ARC, marketing loan gains/loan deficiency payments, Dairy Margin Protection Plan (DMPP) payments, crop insurance indemnities, and other farm related receipts.

- **Total Cash Receipts --** Sum of annual cash receipts from all sources, including market sales, PLC or ARC payments, marketing loan gains/loan deficiency payments, DMPP payments, crop insurance indemnities, and other farm related receipts.

- **Government Payments --** Sum of annual PLC or ARC payments and marketing loan gains/loan deficiency payments for crops. Also included are lump sum disaster payments for livestock.

- **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 Negative Ending Cash Balance --** The number of times out of 100 that the farm's ending cash reserves before borrowing are less than zero. This probability is reported for each year to indicate how the cash flow risk for the farm changes 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. Nominal 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 2014-2021 --** The number of times out of 100 that real net worth at the end of 2021 is less than real net worth at the start of 2014.

Figure 2. Representative Farms Producing Feed Grains and Oilseeds

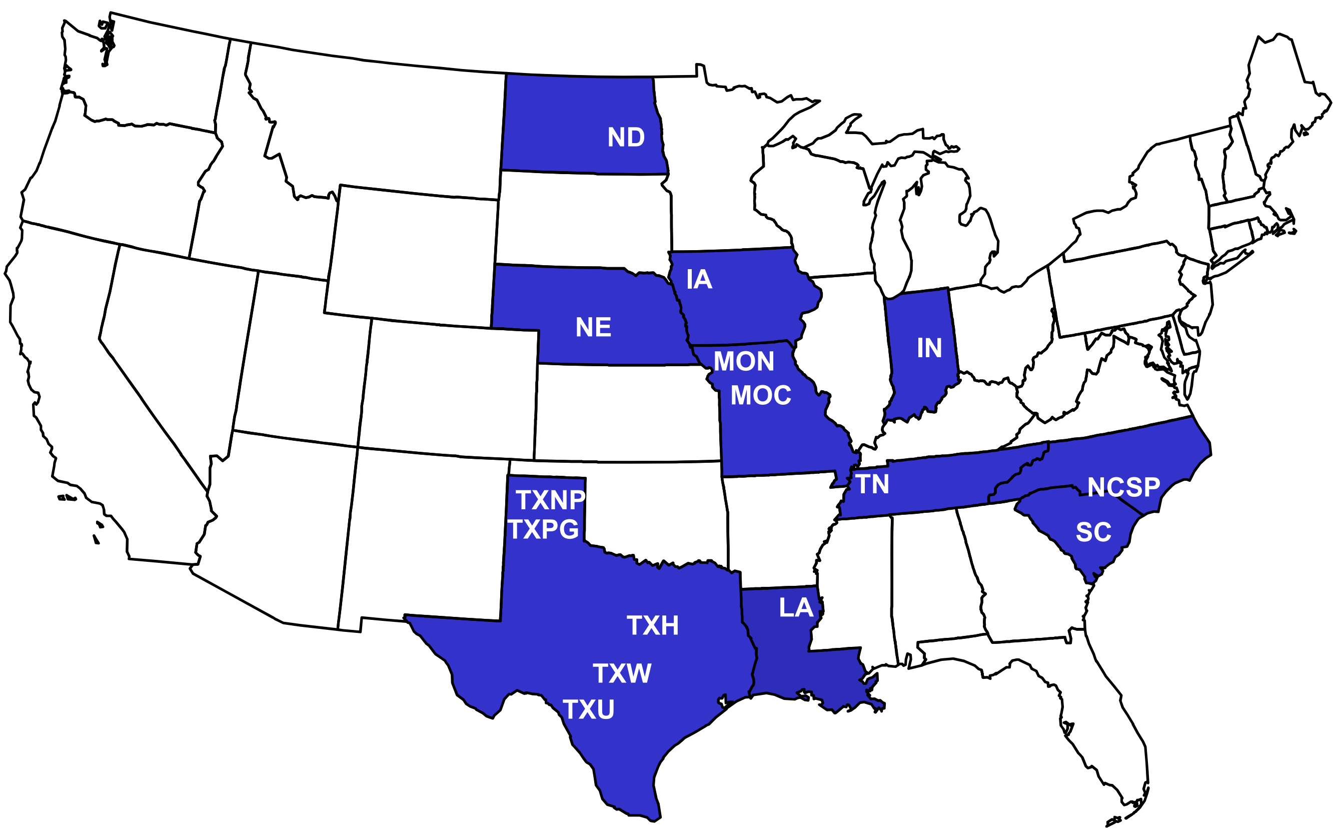


Table 4. Implications of the December 2016 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Feed Grains and Oilseeds.

	IAG1350	IAG3400	NEG2400	NEG4300	NDG3000	NDG8000	ING1000	ING2200
Overall Financial Position								
2016-2021 Average	Poor	Good	Poor	Poor	Poor	Good	Marginal	Marginal
Change Real Net Worth (%)								
2016-2021 Average	-5.83	0.89	0.06	-0.31	-0.15	1.76	1.41	0.83
NIA to Maintain Real								
Net Worth (%/Rec.)	18.93	-3.73	0.00	2.88	1.62	-8.76	-8.85	-2.40
NIA for Zero Ending								
Cash Balance (%/Rec.)	24.98	-2.26	3.77	7.79	3.17	-4.38	1.70	11.23
Govt Payments/Receipts (%)								
2016-2021 Average	3.09	3.16	2.31	2.20	4.00	2.92	4.74	4.46
Cost to Receipts Ratio (%)								
2016-2021 Average	109.78	83.49	90.85	91.02	87.51	76.35	68.17	82.27
Total Cash Receipts ($1000)								
2014	963.79	1,942.62	1,988.99	3,627.59	1,304.11	3,527.13	616.84	1,481.37
2015	989.53	2,095.69	2,077.50	3,572.87	1,189.18	3,518.86	538.42	1,302.09
2016	833.79	1,866.34	1,891.16	3,319.68	1,078.61	3,201.87	541.34	1,311.81
2017	858.28	1,907.09	1,959.82	3,469.33	1,157.33	3,429.67	600.39	1,443.60
2018	888.28	1,970.36	2,025.50	3,591.40	1,194.30	3,580.51	614.63	1,474.57
2019	902.81	2,002.86	2,050.78	3,634.24	1,217.41	3,659.01	618.95	1,484.27
2020	907.72	2,010.76	2,048.09	3,634.22	1,220.77	3,679.39	618.71	1,485.36
2021	911.71	2,018.96	2,048.00	3,633.34	1,225.93	3,702.68	619.88	1,487.72
2016-2021 Average	883.76	1,962.73	2,003.89	3,547.03	1,182.39	3,542.19	602.32	1,447.89
Government Payments ($1000)								
2014	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2015	71.60	156.70	157.39	253.75	59.91	138.99	6.22	14.34
2016	64.10	145.54	109.20	182.72	70.32	172.18	17.88	40.15
2017	31.46	71.07	56.63	94.71	67.87	139.16	46.50	105.97
2018	17.34	39.92	30.81	51.27	41.22	86.95	33.70	76.48
2019	12.25	28.47	18.86	32.89	31.67	64.21	24.26	55.44
2020	13.91	31.77	20.75	35.45	28.33	54.69	23.09	52.76
2021	13.93	31.57	22.47	39.83	27.02	55.39	22.39	50.92
2016-2021 Average	25.50	58.06	43.12	72.81	44.41	95.43	27.97	63.62
Net Cash Farm Income ($1000)								
2014	4.85	287.45	115.03	330.87	252.54	766.19	184.34	286.07
2015	78.74	509.89	349.45	525.43	198.86	890.87	133.72	162.75
2016	-37.66	351.25	261.48	406.03	138.98	707.68	158.98	212.64
2017	-25.09	388.13	298.41	499.46	202.82	923.60	213.76	332.67
2018	-15.93	432.76	323.73	555.84	221.33	1,035.69	225.57	345.81
2019	-34.63	424.95	280.61	487.53	216.37	1,052.57	223.95	320.12
2020	-62.92	398.32	218.57	388.32	193.82	996.10	214.34	295.67
2021	-88.24	378.67	174.58	294.77	166.92	968.37	209.66	273.80
2016-2021 Average	-44.08	395.68	259.56	438.66	190.04	947.34	207.71	296.79
Ending Cash Reserves ($1000)								
2014	-137.86	-41.74	-120.64	-233.47	11.05	78.51	0.26	-130.48
2015	-243.42	92.75	-91.53	-356.99	-60.73	162.41	-55.74	-382.42
2016	-475.48	49.79	-154.80	-665.96	-156.95	-31.34	-78.34	-596.72
2017	-646.65	158.15	-109.52	-795.77	-152.85	199.48	-49.96	-660.07
2018	-810.82	281.35	-102.72	-916.20	-146.33	433.75	-40.96	-731.49
2019	-998.73	346.43	-191.70	-1,117.85	-147.52	709.20	-31.96	-786.04
2020	-1,199.72	347.27	-335.67	-1,403.88	-182.84	857.38	-28.14	-857.80
2021	-1,427.34	277.03	-492.28	-1,820.74	-241.22	989.04	-47.89	-971.41
Nominal Net Worth ($1000)								
2014	2,763.86	9,962.88	4,669.56	16,035.17	3,229.83	19,353.45	2,882.53	7,967.81
2015	2,700.51	10,194.52	4,742.68	16,096.96	3,228.98	19,667.01	2,896.08	7,898.40
2016	2,492.25	10,232.58	4,754.97	15,921.16	3,176.31	19,797.17	2,921.60	7,827.29
2017	2,284.60	10,181.74	4,741.80	15,585.80	3,128.24	19,821.66	2,951.34	7,769.92
2018	2,130.46	10,326.38	4,794.64	15,601.31	3,138.99	20,207.70	3,010.54	7,853.02
2019	1,979.16	10,486.08	4,806.67	15,671.09	3,159.92	20,846.90	3,091.19	8,020.38
2020	1,825.64	10,664.79	4,854.22	15,728.95	3,172.71	21,444.65	3,148.44	8,148.76
2021	1,649.33	10,929.59	4,841.02	15,852.73	3,194.96	22,199.49	3,211.18	8,331.66
Prob. of Negative Ending Cash (%)								
2016	99	50	69	85	77	58	78	99
2017	99	41	62	83	70	44	66	97
2018	99	36	57	81	67	36	67	95
2019	98	33	61	79	64	30	60	93
2020	99	34	65	81	64	29	57	94
2021	99	38	67	83	66	30	61	94
Prob. of Decreasing Real Net Worth								
Over 2014-2021 (%)	1	1	1	1	1	1	1	1

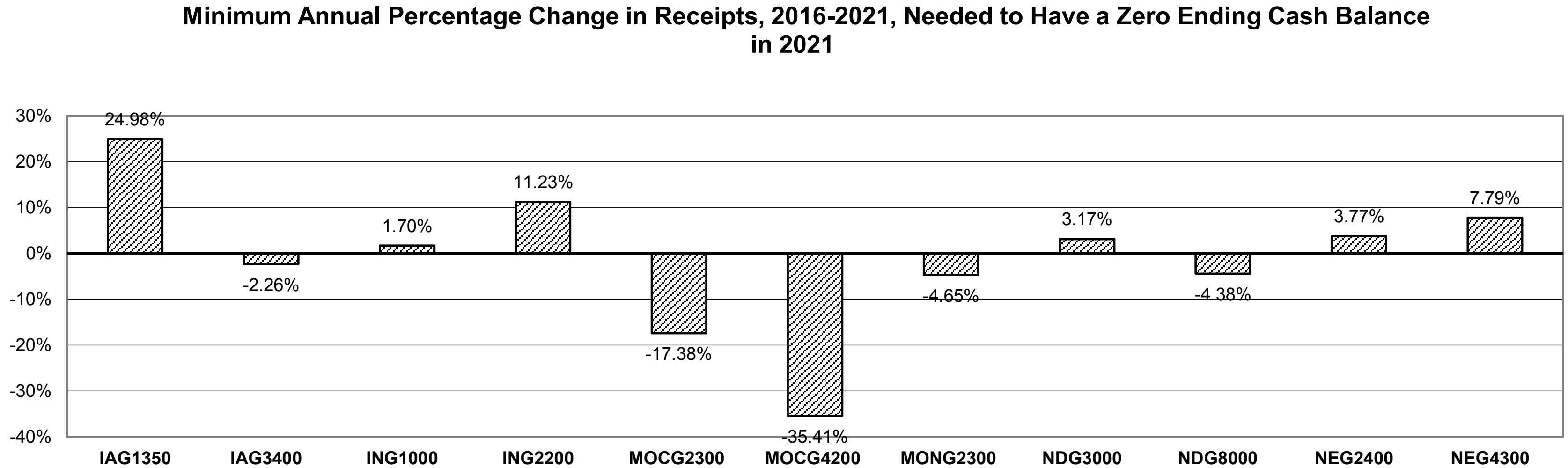
Table 5. Implications of the December 2016 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Feed Grains and Oilseeds.

	MOCG2300	MOCG4200	MONG2300	LAG2640	LANG2500	TNG900	TNG2200	NCSP1800	SCG3500
Overall Financial Position 2016-2021 Average	Good	Good	Good	Poor	Good	Poor	Poor	Poor	Marginal
Change Real Net Worth (%) 2016-2021 Average	2.83	4.15	1.90	-0.34	3.08	-0.54	-0.04	-6.84	1.56
NIA to Maintain Real Net Worth (%/Rec.)	-27.91	-36.89	-8.44	-0.13	-9.35	3.48	2.27	17.98	-4.73
NIA for Zero Ending Cash Balance (%/Rec.)	-17.38	-35.41	-4.65	4.51	-3.68	14.53	16.67	31.97	1.18
Govt Payments/Receipts (%) 2016-2021 Average	3.87	2.26	3.93	5.52	10.03	2.49	3.65	10.36	7.23
Cost to Receipts Ratio (%) 2016-2021 Average	53.84	49.87	75.14	93.59	77.38	80.40	84.04	106.01	84.87
Total Cash Receipts ($1000)									
2014	1,300.25	2,262.70	1,779.47	1,657.19	1,817.42	442.77	943.95	986.65	2,339.83
2015	1,221.45	2,162.65	1,609.75	1,616.14	1,792.63	447.94	967.19	1,054.49	2,172.61
2016	1,312.15	2,402.76	1,491.77	1,659.36	1,822.97	423.31	912.81	1,052.65	2,147.72
2017	1,423.38	2,501.08	1,581.98	1,729.56	1,972.84	456.64	985.82	1,097.79	2,311.53
2018	1,464.07	2,599.34	1,602.15	1,767.77	1,994.02	476.77	1,022.97	1,134.06	2,340.50
2019	1,484.11	2,649.48	1,603.44	1,791.04	1,993.92	487.07	1,040.34	1,154.11	2,370.70
2020	1,486.46	2,647.94	1,599.15	1,802.04	2,000.31	491.39	1,048.49	1,162.53	2,395.65
2021	1,488.29	2,648.12	1,612.48	1,816.58	2,005.66	495.87	1,058.20	1,171.38	2,414.45
2016-2021 Average	1,443.08	2,574.79	1,581.83	1,761.06	1,964.95	471.84	1,011.44	1,128.75	2,330.09
Government Payments ($1000)									
2014	0.00	0.00	0.00	10.64	11.15	0.00	0.00	0.00	41.30
2015	41.05	152.85	46.69	78.66	82.46	26.39	74.71	84.16	126.15
2016	47.85	122.66	53.89	139.05	186.28	15.46	47.05	119.62	206.91
2017	83.63	71.57	94.10	128.00	257.72	17.32	54.95	117.22	233.01
2018	58.07	46.54	69.93	90.35	214.05	11.31	37.69	113.08	166.26
2019	45.92	39.45	52.05	70.11	180.93	7.61	23.95	112.70	128.27
2020	44.19	27.71	47.31	63.47	174.59	7.56	23.35	109.56	121.25
2021	41.66	18.82	46.08	62.03	165.49	7.28	23.31	109.41	112.94
2016-2021 Average	53.55	54.46	60.56	92.17	196.51	11.09	35.05	113.60	161.44
Net Cash Farm Income ($1000)									
2014	470.16	900.63	527.36	-22.59	179.54	70.26	74.17	-164.98	294.97
2015	448.44	895.59	429.67	59.04	300.50	88.80	141.39	-59.84	226.47
2016	574.74	1,208.39	360.59	177.01	395.79	83.76	136.23	-19.45	292.80
2017	695.96	1,304.01	454.96	222.43	534.49	106.88	207.04	11.66	441.10
2018	738.65	1,386.07	462.39	230.10	539.67	119.77	231.08	9.72	445.27
2019	731.60	1,411.85	445.06	183.76	492.93	116.62	217.12	-39.45	424.76
2020	725.97	1,385.75	421.24	129.59	445.20	112.90	192.64	-81.75	382.53
2021	717.94	1,366.55	416.41	88.34	408.60	105.24	180.72	-122.04	360.86
2016-2021 Average	697.48	1,343.77	426.78	171.87	469.45	107.53	194.14	-40.22	391.22
Ending Cash Reserves ($1000)									
2014	34.35	440.92	177.07	-208.76	-111.91	-72.98	-227.32	-417.86	-1.79
2015	65.09	810.55	259.91	-340.21	-131.32	-199.25	-471.79	-773.56	-206.80
2016	160.72	1,264.78	166.32	-405.32	-169.60	-294.27	-726.56	-1,102.83	-360.24
2017	369.54	1,875.47	262.71	-383.36	47.51	-369.55	-826.49	-1,319.65	-303.20
2018	566.92	2,473.03	331.28	-345.71	249.31	-413.34	-934.93	-1,573.06	-269.71
2019	804.83	2,984.70	372.33	-350.46	392.91	-443.17	-989.30	-1,853.95	-238.25
2020	971.56	3,511.97	360.59	-424.97	449.08	-451.38	-1,083.05	-2,134.85	-211.24
2021	1,126.76	3,997.88	397.61	-549.22	494.32	-486.47	-1,157.30	-2,477.47	-173.95
Nominal Net Worth ($1000)									
2014	10,363.47	14,027.42	8,695.80	1,149.34	6,772.62	1,780.15	3,492.61	3,187.74	8,832.71
2015	10,587.34	14,608.98	9,055.46	1,055.90	6,857.68	1,770.77	3,466.81	2,980.21	9,028.81
2016	10,832.84	15,251.63	8,935.97	1,067.01	6,943.63	1,730.49	3,355.31	2,766.76	9,042.98
2017	11,000.15	15,812.62	8,997.03	1,116.97	7,123.15	1,664.75	3,281.53	2,537.84	9,047.79
2018	11,342.14	16,617.63	9,182.87	1,188.05	7,415.47	1,652.35	3,272.58	2,336.23	9,202.47
2019	11,841.41	17,424.96	9,430.40	1,247.57	7,714.88	1,672.96	3,365.89	2,149.84	9,436.82
2020	12,278.66	18,327.93	9,673.29	1,201.43	7,977.48	1,705.06	3,372.10	1,937.23	9,715.89
2021	12,848.10	19,315.63	10,091.62	1,126.61	8,342.07	1,699.44	3,396.89	1,659.32	10,031.63
Prob. of Negative Ending Cash (%)									
2016	19	1	24	88	80	99	99	99	88
2017	6	1	22	77	45	99	99	99	74
2018	2	1	17	73	27	98	99	99	67
2019	2	1	20	69	19	97	98	99	63
2020	1	1	20	69	20	95	97	99	60
2021	2	1	20	70	20	95	96	99	56
Prob. of Decreasing Real Net Worth Over 2014-2021 (%)	1	1	1	1	1	1	1	1	1

Table 6. Implications of the December 2016 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Feed Grains and Oilseeds.

	TXNP3450	TXNP10640	TXPG2500	TXHG2500	TXWG1600	TXUG1600
Overall Financial Position						
2016-2021 Average	Good	Good	Good	Poor	Poor	Marginal
Change Real Net Worth (%)						
2016-2021 Average	4.78	6.02	4.27	-15.69	-9.73	6.77
NIA to Maintain Real						
Net Worth (%/Rec.)	-26.09	-17.32	-10.26	29.23	18.76	-3.57
NIA for Zero Ending						
Cash Balance (%/Rec.)	-32.12	-18.14	-3.68	48.23	30.26	-1.63
Govt Payments/Receipts (%)						
2016-2021 Average	5.97	5.44	6.83	12.20	9.54	7.02
Cost to Receipts Ratio (%)						
2016-2021 Average	64.91	76.25	75.25	114.78	104.76	86.24
Total Cash Receipts ($1000)						
2014	1,973.26	6,885.06	1,623.92	627.49	706.36	1,343.90
2015	2,123.97	7,089.24	1,552.41	611.71	496.07	1,341.43
2016	2,065.38	6,617.54	1,499.47	623.78	502.05	1,341.01
2017	2,278.90	6,760.79	1,741.94	696.93	547.47	1,329.22
2018	2,305.92	6,846.06	1,751.08	691.40	542.13	1,330.94
2019	2,315.99	6,891.62	1,750.47	695.95	542.57	1,342.44
2020	2,325.72	6,884.79	1,756.80	694.67	543.75	1,348.94
2021	2,322.33	6,916.39	1,754.32	695.32	543.03	1,361.59
2016-2021 Average	2,269.04	6,819.53	1,709.01	683.01	536.83	1,342.35
Government Payments ($1000)						
2014	5.96	123.11	8.93	5.56	11.86	61.95
2015	131.79	441.68	11.20	12.12	8.66	117.04
2016	164.26	555.17	63.74	83.31	50.82	139.19
2017	207.61	421.30	196.68	112.77	69.41	99.89
2018	132.77	342.20	139.38	84.90	53.59	90.43
2019	102.62	289.83	108.59	76.65	46.09	73.90
2020	92.20	268.05	101.65	71.89	43.85	72.12
2021	82.48	255.53	94.23	69.02	41.82	71.11
2016-2021 Average	130.32	355.35	117.38	83.09	50.93	91.11
Net Cash Farm Income ($1000)						
2014	303.63	1,398.28	210.20	-97.68	154.24	142.22
2015	791.77	1,963.02	320.05	-102.03	-19.59	220.97
2016	754.72	1,815.14	351.91	-71.29	-2.82	261.23
2017	932.82	1,930.61	563.60	-7.55	24.60	237.35
2018	924.69	1,928.46	540.54	-38.15	7.90	204.43
2019	859.44	1,786.20	474.57	-84.85	-12.83	182.37
2020	808.17	1,614.22	424.54	-129.60	-43.94	150.67
2021	756.00	1,503.61	368.78	-161.95	-65.35	133.48
2016-2021 Average	839.31	1,763.04	453.99	-82.23	-15.41	194.92
Ending Cash Reserves ($1000)						
2014	104.49	589.85	-141.71	-276.30	-6.62	-23.37
2015	625.35	1,685.62	-160.01	-607.19	-169.13	33.19
2016	1,010.30	2,539.06	-176.98	-912.86	-314.47	101.76
2017	1,662.15	3,750.45	43.21	-1,101.90	-423.15	189.74
2018	2,218.03	4,859.58	202.83	-1,344.28	-555.91	202.13
2019	2,736.55	5,776.93	373.96	-1,626.95	-707.88	235.32
2020	3,158.44	6,429.80	464.74	-1,960.39	-927.04	172.27
2021	3,522.17	6,996.95	395.07	-2,306.08	-1,119.94	128.83
Nominal Net Worth ($1000)						
2014	7,697.32	12,677.43	3,834.28	1,669.51	1,166.98	351.85
2015	7,879.20	13,594.28	4,004.93	1,437.56	1,087.28	412.62
2016	8,301.61	14,851.72	4,118.54	1,196.61	969.01	498.37
2017	8,793.94	16,010.46	4,335.33	1,013.50	853.80	575.26
2018	9,310.54	17,304.47	4,588.46	817.56	759.26	635.92
2019	9,837.79	18,456.37	4,914.56	611.20	660.48	690.73
2020	10,332.97	19,446.29	5,098.08	360.63	532.38	714.88
2021	10,834.80	20,471.23	5,239.29	74.62	410.54	708.56
Prob. of Negative Ending Cash (%)						
2016	1	1	81	99	99	12
2017	1	1	46	99	99	13
2018	1	1	29	99	99	15
2019	1	1	19	99	99	17
2020	1	1	15	99	99	27
2021	1	1	20	99	99	36
Prob. of Decreasing Real Net Worth						
Over 2014-2021 (%)	1	1	1	1	1	1

Figure 3. Feed Grain and Oilseed Farms



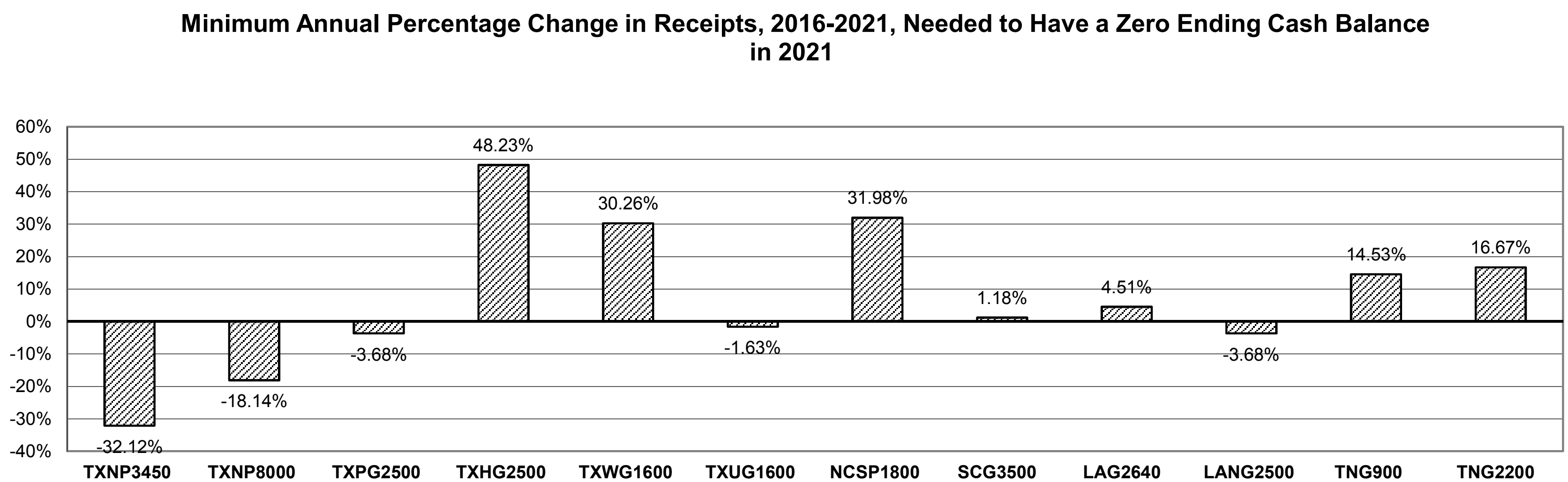


Figure 4. Feed Grain and Oilseed Farms

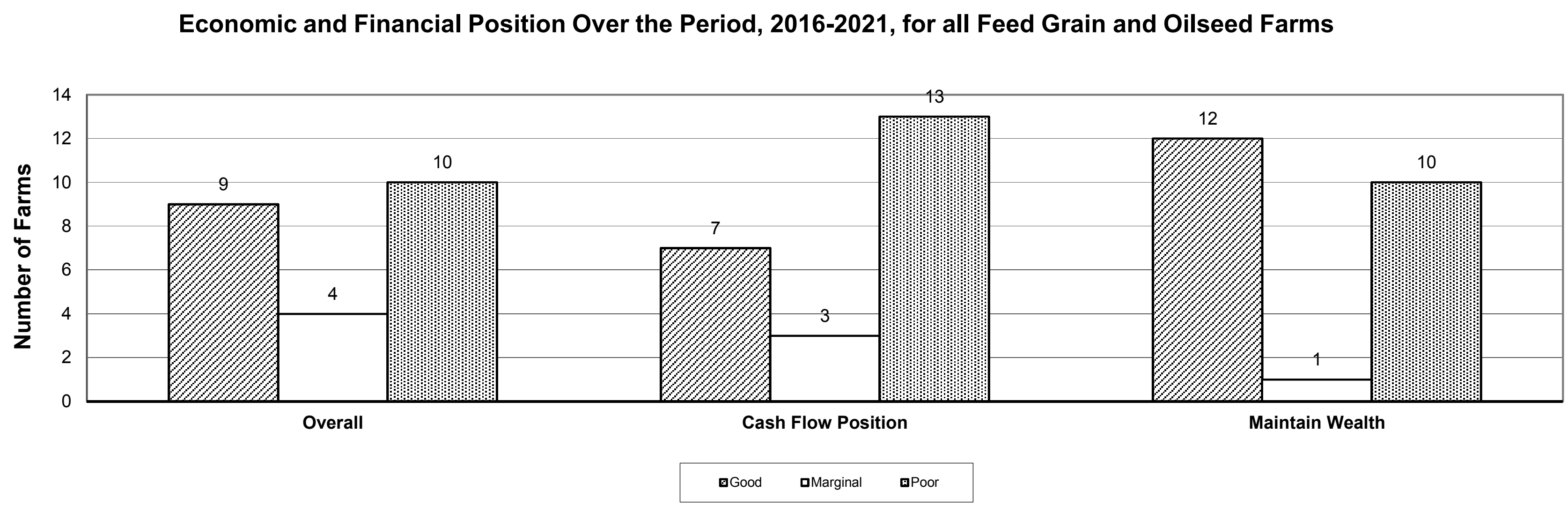


Figure 5. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Feed Grain and Oilseed Farms

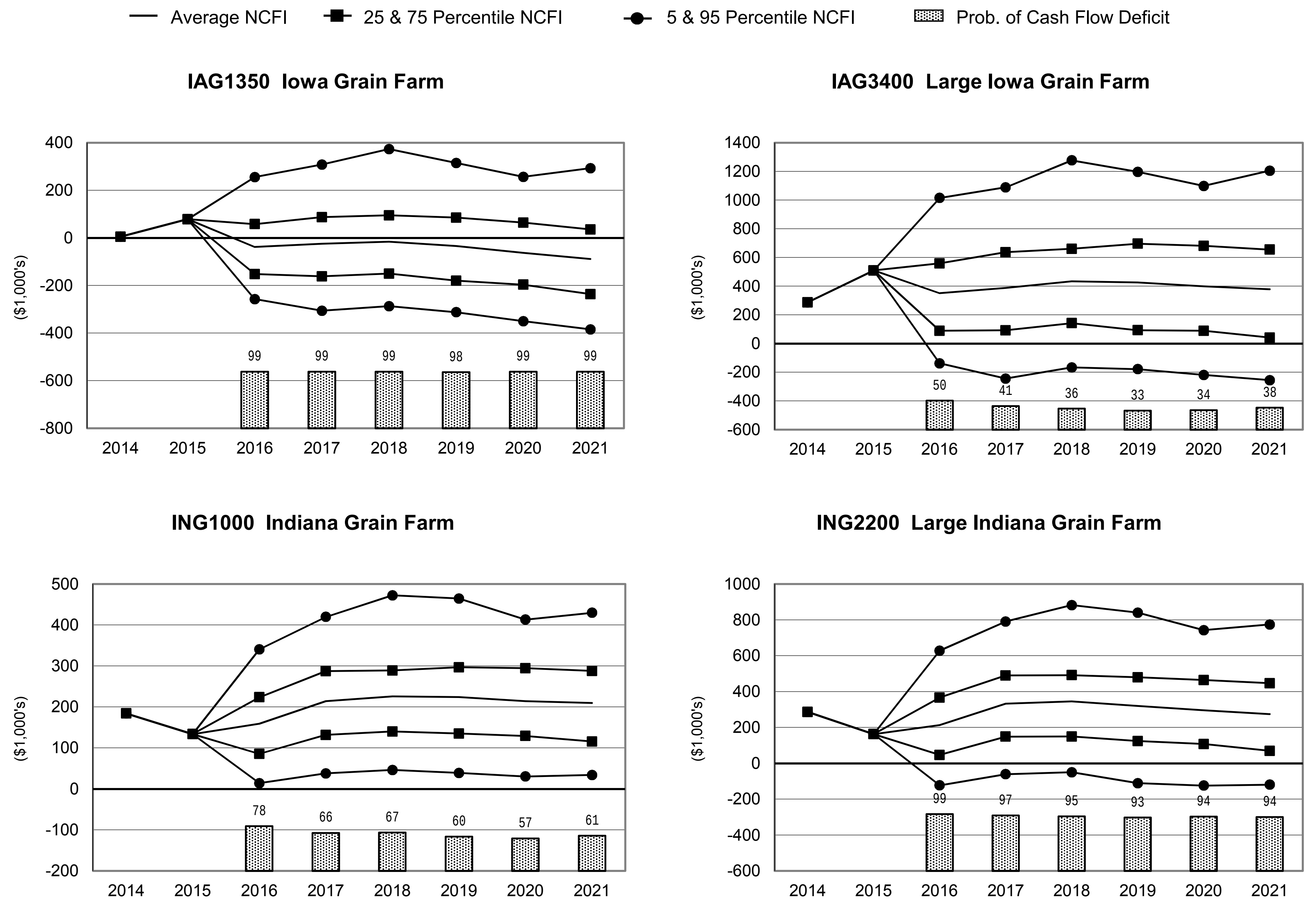
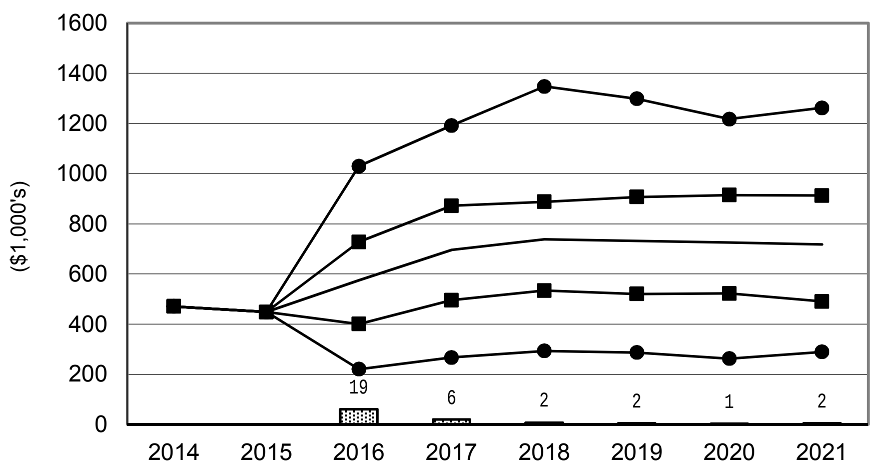


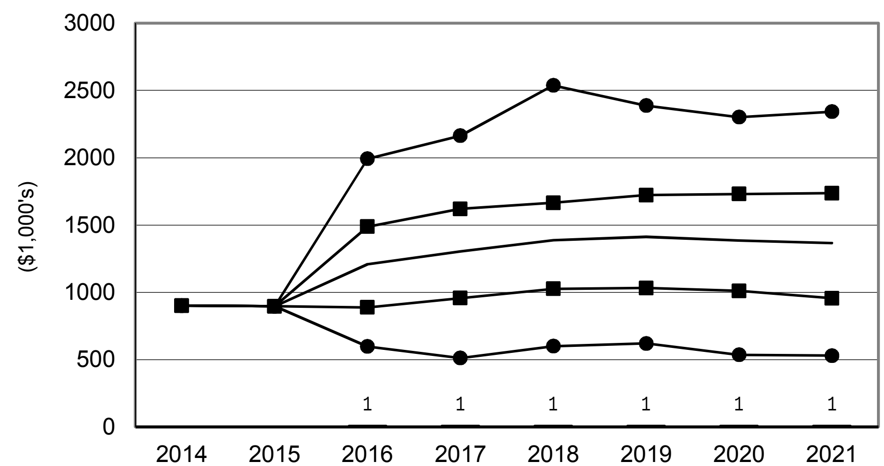
Figure 6. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Feed Grain and Oilseed Farms

Average NCFI   25 & 75 Percentile NCFI   5 & 95 Percentile NCFI   Prob. of Cash Flow Deficit

MOCG2300 Central Missouri Grain Farm



MOCG4200 Large Central Missouri Grain Farm



MONG2300 Northwest Missouri Grain Farm

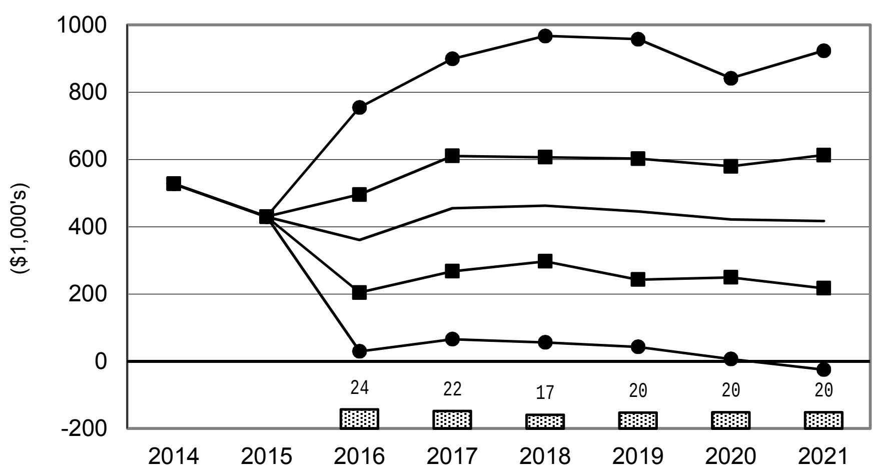


Figure 7. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Feed Grain and Oilseed Farms

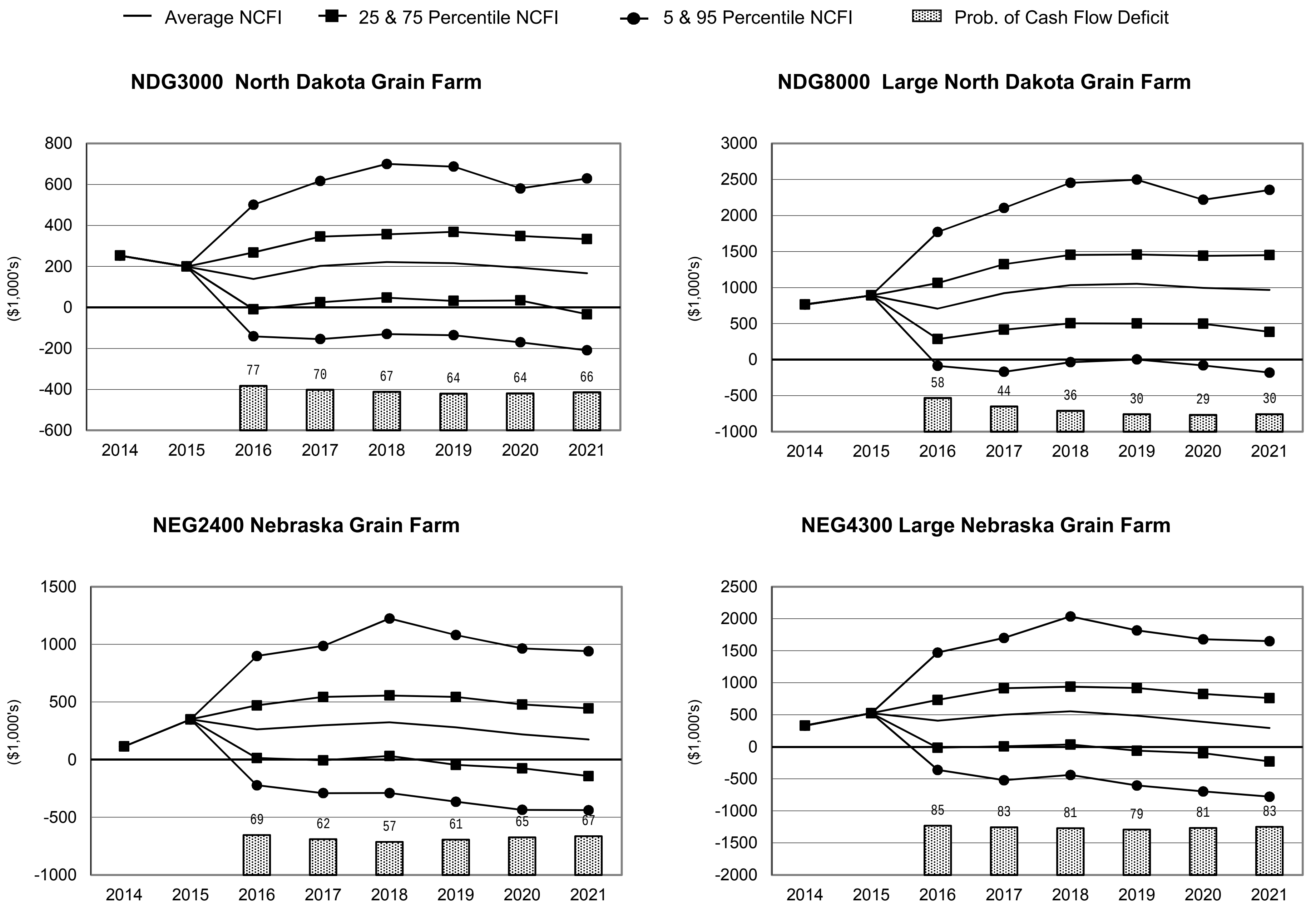
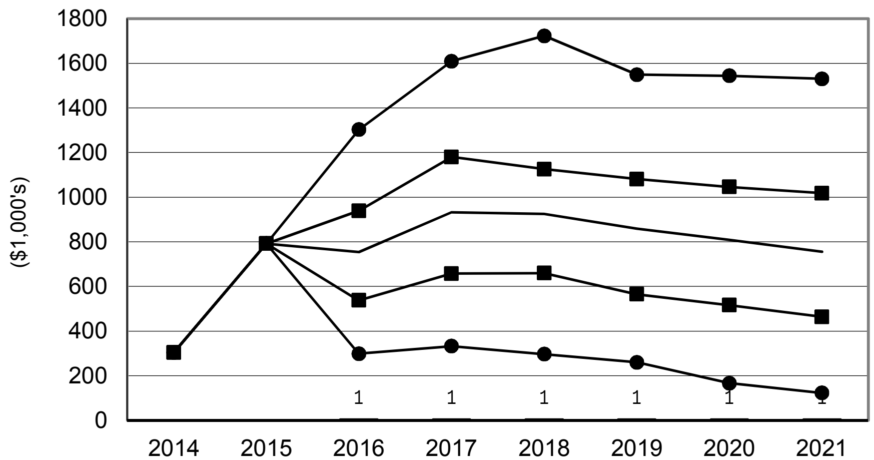


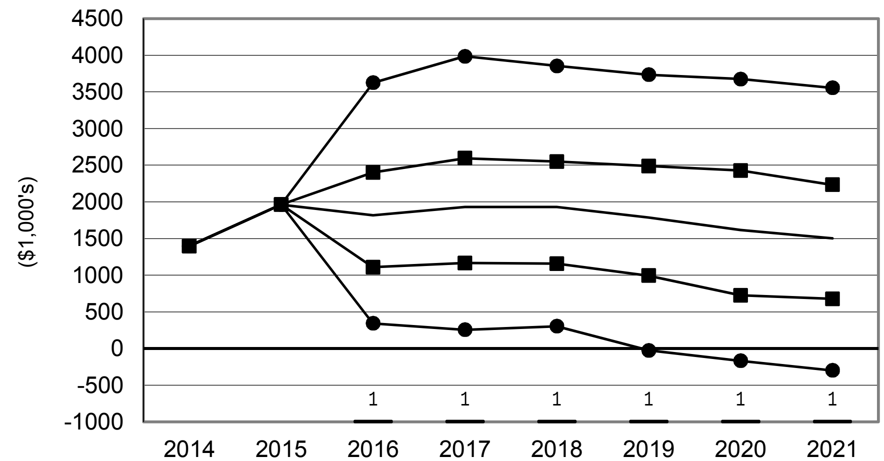
Figure 8. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Feed Grain and Oilseed Farms

Average NCFI | 25 & 75 Percentile NCFI | 5 & 95 Percentile NCFI | Prob. of Cash Flow Deficit

TXNP3450 Texas North Plains Grain Farm



TXNP10640 Large Texas North Plains Grain Farm



TXPG2500 Texas Panhandle Grain Farm

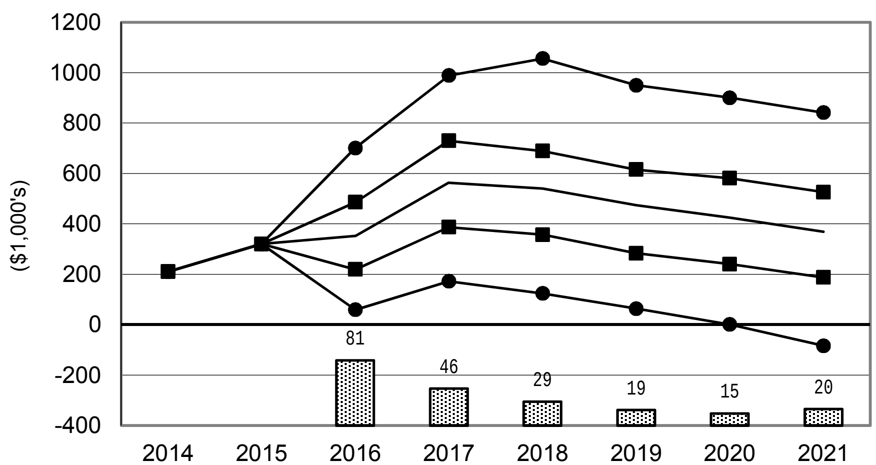
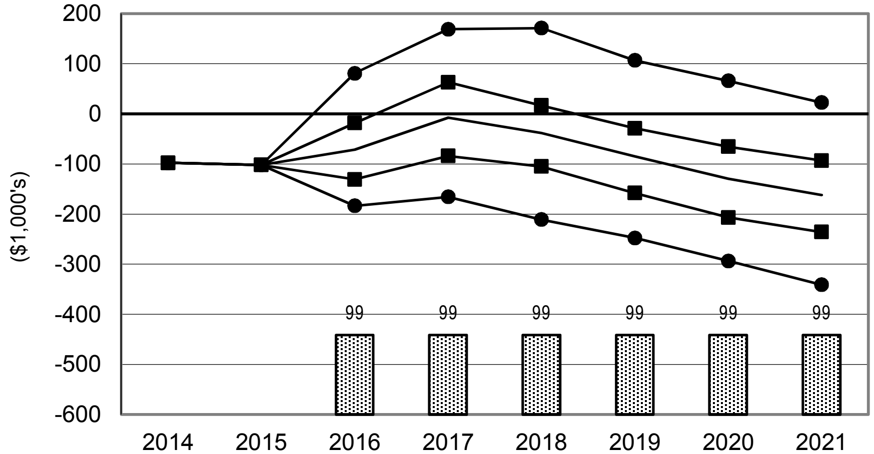


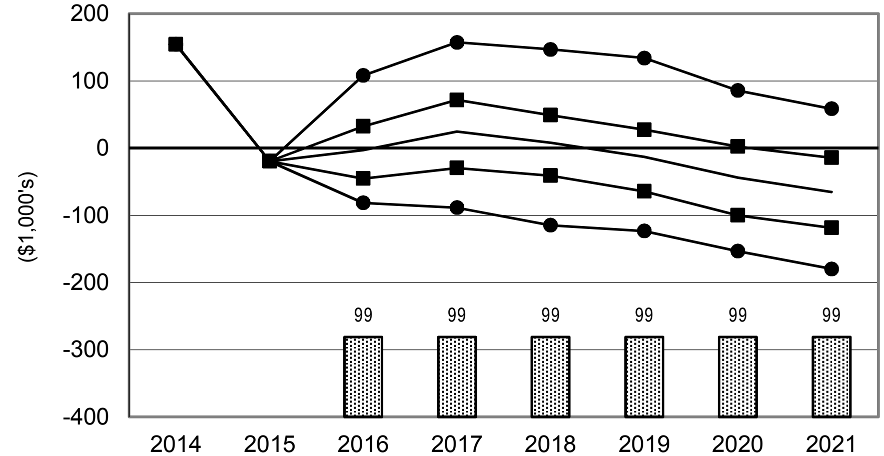
Figure 9. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Feed Grain and Oilseed Farms

Average NCFI | 25 & 75 Percentile NCFI | 5 & 95 Percentile NCFI | Prob. of Cash Flow Deficit

TXHG2500 Texas North Blacklands Grain Farm



TXWG1600 Texas South Blacklands Grain Farm



TXUG1600 Uvalde Texas Grain Farm

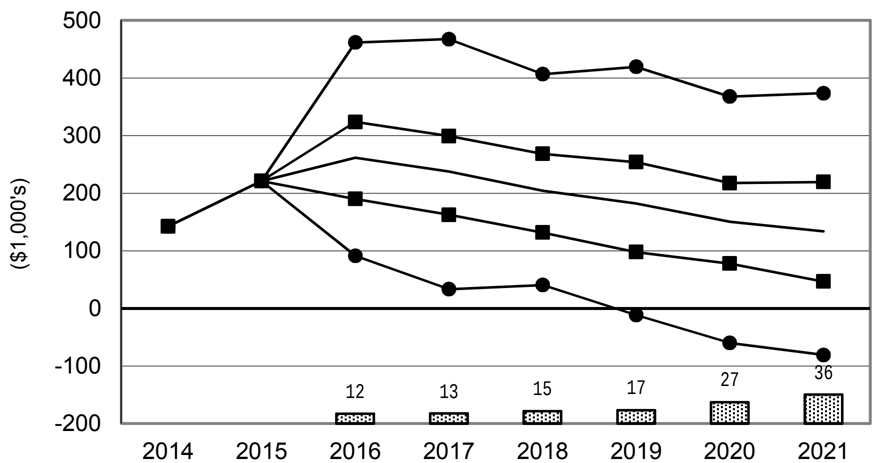


Figure 10. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Feed Grain and Oilseed Farms

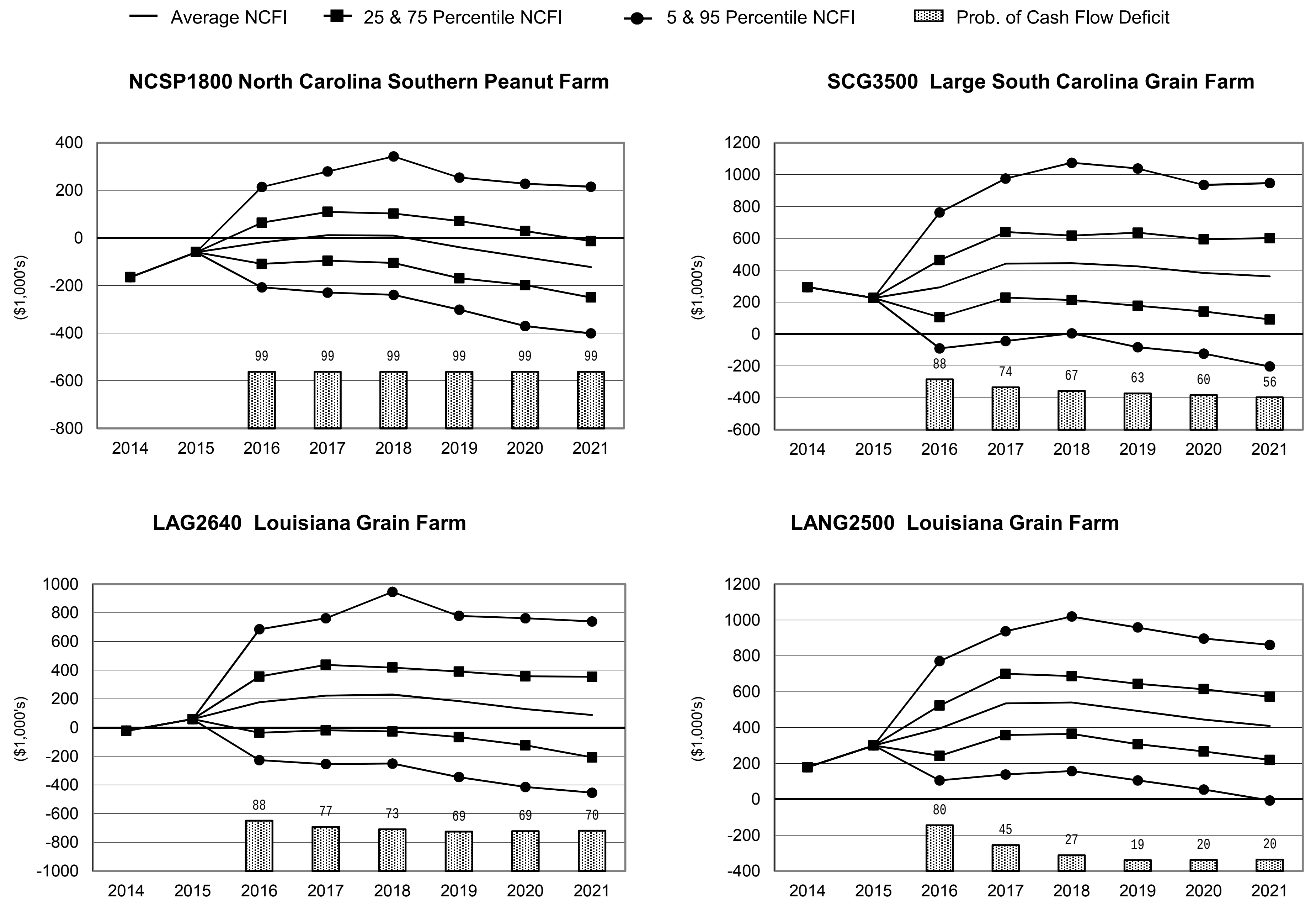


Figure 11. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Feed Grain and Oilseed Farms

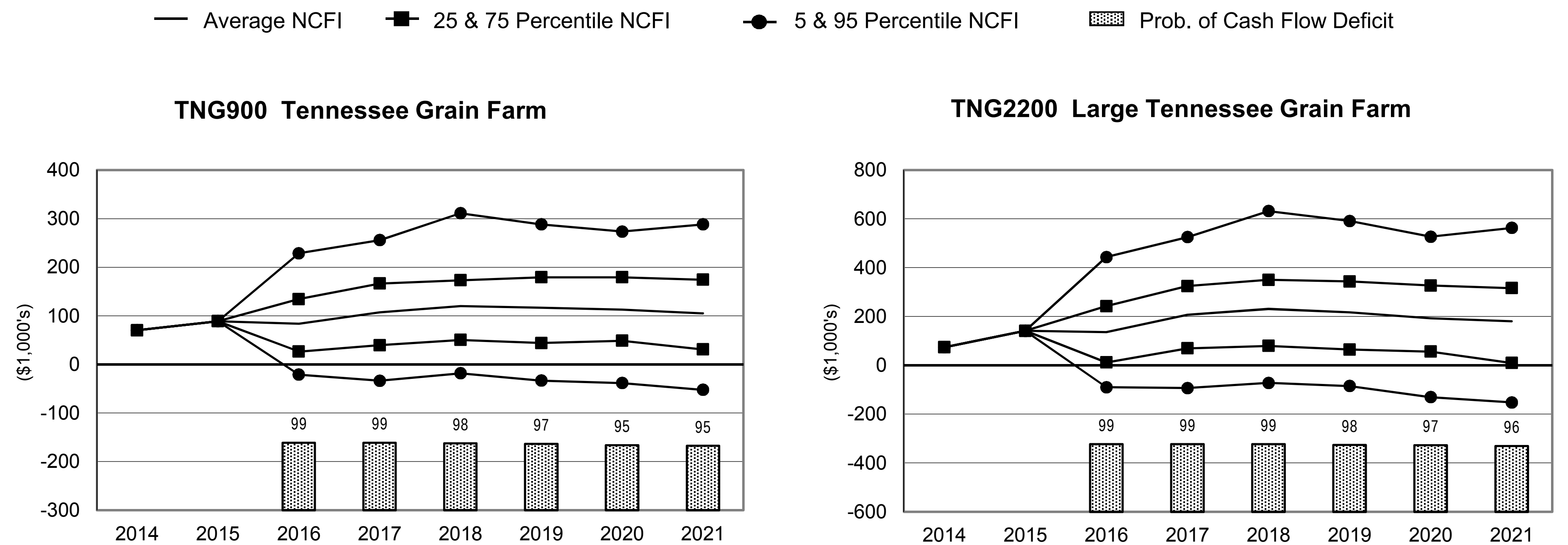


Figure 12. Representative Farms Producing Wheat

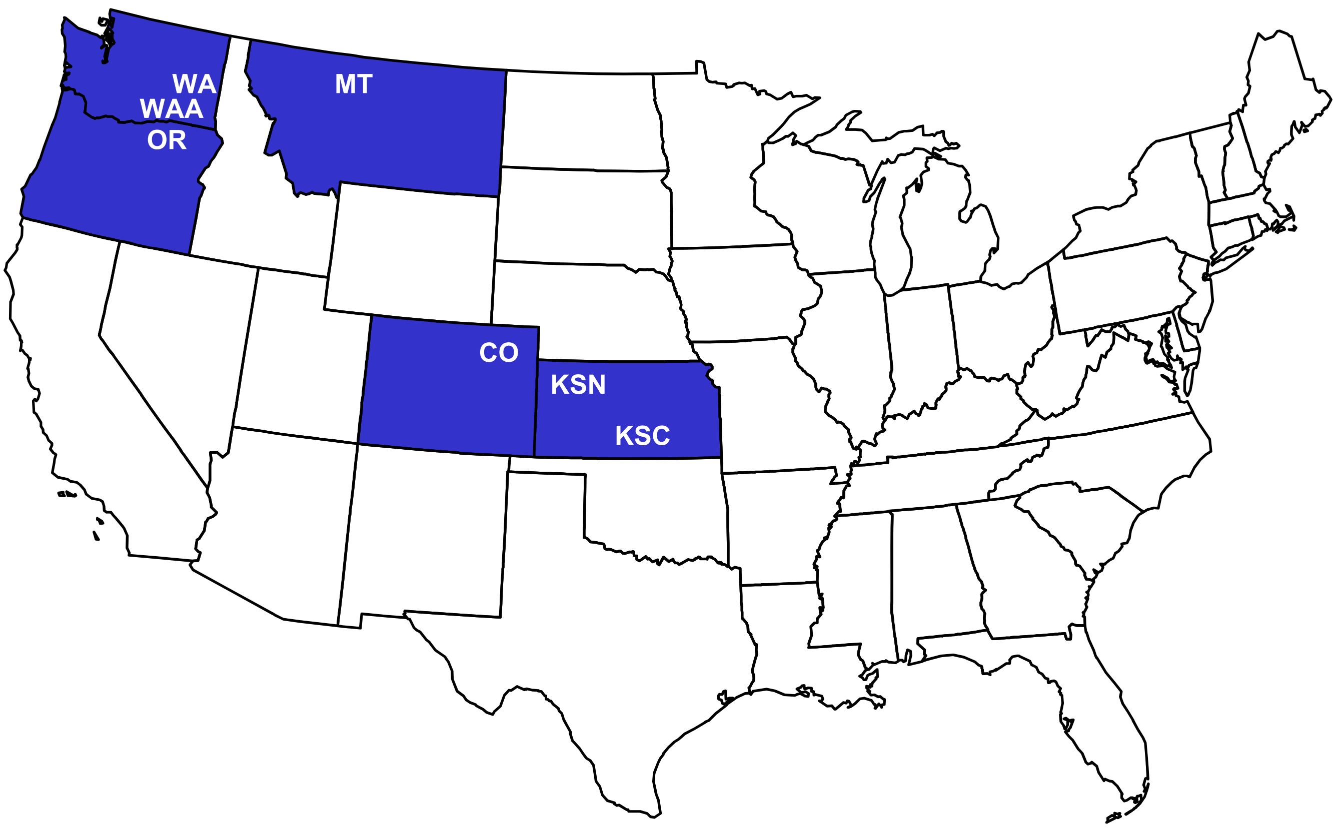
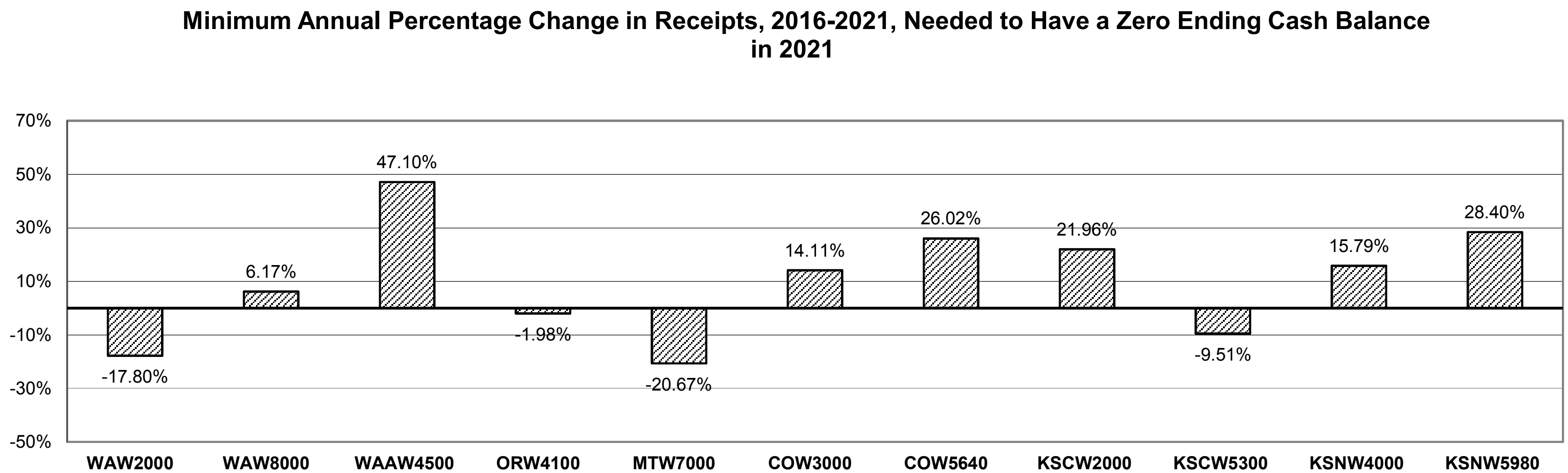


Table 7. Implications of the December 2016 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Wheat.

	WAW2000	WAW8000	WAAW4500	ORW4100	MTW7000	COW3000	COW5640	KSCW2000	KSCW5300	KSNW4000	KSNW5980
Overall Financial Position 2016-2021 Average	Good	Poor	Poor	Poor	Good	Poor	Poor	Poor	Good	Poor	Poor
Change Real Net Worth (%) 2016-2021 Average	4.94	0.75	-7.79	-0.45	3.64	-0.36	-2.44	-1.38	3.07	-0.56	-2.51
NIA to Maintain Real Net Worth (%/Rec.)	-16.69	0.00	30.79	-4.09	-20.53	9.61	12.25	8.59	-11.55	5.26	15.08
NIA for Zero Ending Cash Balance (%/Rec.)	-17.80	6.17	47.10	-1.98	-20.67	14.11	26.02	21.96	-9.51	15.79	28.40
Govt Payments/Receipts (%) 2016-2021 Average	4.73	4.17	7.21	11.08	12.45	8.84	9.09	4.89	5.76	9.50	7.80
Cost to Receipts Ratio (%) 2016-2021 Average	65.85	88.98	113.73	79.79	58.75	74.50	91.75	87.03	71.33	86.03	101.79
Total Cash Receipts ($1000)											
2014	894.44	3,337.78	486.47	479.40	1,154.62	431.37	762.32	472.99	1,063.45	812.95	1,348.52
2015	620.31	2,521.87	389.11	372.94	1,003.55	377.18	644.81	458.76	1,053.16	713.74	1,238.39
2016	655.09	2,764.59	335.72	320.28	859.30	294.03	578.06	407.39	926.85	659.75	1,181.96
2017	747.11	3,182.77	407.21	426.58	1,169.34	369.19	730.48	460.00	1,055.59	810.76	1,393.01
2018	784.55	3,369.27	425.33	428.54	1,188.92	377.55	733.68	481.15	1,105.07	828.81	1,416.41
2019	802.64	3,439.97	430.80	430.04	1,188.39	383.43	735.25	493.20	1,135.30	842.55	1,433.18
2020	816.02	3,496.90	434.41	434.50	1,197.46	389.53	742.46	501.34	1,154.75	853.22	1,446.25
2021	818.55	3,507.76	433.81	429.62	1,183.28	389.83	737.05	505.12	1,162.95	854.30	1,450.15
2016-2021 Average	770.66	3,293.54	411.21	411.59	1,131.12	367.26	709.50	474.70	1,090.09	808.23	1,386.83
Government Payments ($1000)											
2014	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2015	0.00	0.00	0.00	0.00	0.00	2.67	0.00	26.14	65.57	7.08	29.15
2016	45.16	124.32	29.71	28.49	72.33	23.20	37.07	28.70	74.54	61.08	101.13
2017	54.68	192.37	46.69	81.44	239.36	54.61	115.98	32.01	85.74	119.65	177.10
2018	37.17	158.65	33.10	52.21	174.38	35.90	75.74	21.61	59.37	80.77	112.29
2019	27.83	120.25	24.05	39.68	134.34	28.21	57.79	16.89	47.18	66.99	87.23
2020	20.63	95.92	17.04	33.97	115.93	24.23	50.73	15.07	41.92	59.31	76.31
2021	17.76	85.66	15.74	28.43	99.18	21.01	43.81	14.64	40.62	53.66	67.64
2016-2021 Average	33.87	129.53	27.72	44.04	139.25	31.19	63.52	21.49	58.23	73.58	103.61
Net Cash Farm Income ($1000)											
2014	357.46	359.01	58.18	157.94	438.68	150.02	150.76	72.61	251.61	118.84	-41.58
2015	121.30	-264.52	-18.44	69.89	331.30	115.00	55.68	78.46	292.54	56.65	-87.47
2016	184.15	84.45	-61.58	28.99	248.84	44.90	6.72	39.59	222.84	38.74	-60.90
2017	270.19	462.55	-3.87	127.95	552.53	117.29	142.51	83.81	335.75	177.03	114.92
2018	300.81	581.83	-3.18	123.51	567.59	120.90	127.56	90.94	372.98	175.16	96.53
2019	307.16	556.68	-22.35	114.19	545.67	119.04	88.85	87.99	378.60	165.45	40.94
2020	308.46	512.90	-55.01	108.43	536.26	116.41	63.87	83.52	373.64	145.30	1.56
2021	297.83	452.09	-85.94	88.55	516.87	109.02	33.12	72.28	351.40	120.59	-46.54
2016-2021 Average	278.10	441.75	-38.65	98.60	494.63	104.59	77.10	76.35	339.20	137.04	24.42
Ending Cash Reserves ($1000)											
2014	145.38	-189.45	-83.72	-42.00	204.25	36.53	-88.58	-106.25	34.16	-128.70	-331.64
2015	82.47	-1,008.55	-261.75	-108.54	153.96	30.44	-281.47	-167.16	87.98	-295.12	-770.82
2016	86.34	-1,504.13	-437.22	-218.04	123.73	-48.89	-530.10	-304.45	57.84	-495.54	-1,196.73
2017	198.57	-1,384.40	-531.58	-184.96	406.83	-61.54	-624.75	-362.00	181.86	-498.47	-1,344.21
2018	325.90	-1,226.38	-628.29	-158.77	603.10	-75.15	-756.66	-435.72	338.85	-581.75	-1,566.50
2019	444.78	-1,173.12	-757.09	-147.55	823.62	-111.99	-909.74	-506.92	501.26	-612.47	-1,911.48
2020	552.15	-1,257.46	-1,012.54	-155.94	994.91	-166.40	-1,099.63	-590.38	598.66	-687.51	-2,265.92
2021	645.59	-1,359.64	-1,254.67	-201.76	1,088.89	-237.15	-1,339.90	-664.25	637.65	-851.07	-2,690.06
Nominal Net Worth ($1000)											
2014	1,898.33	8,852.75	1,684.15	1,534.44	5,035.24	3,345.47	3,185.26	1,967.33	3,970.83	3,567.89	7,582.84
2015	1,897.20	8,403.97	1,615.79	1,509.45	5,141.62	3,461.63	3,072.85	1,989.65	4,172.18	3,542.26	7,423.45
2016	1,937.83	8,180.55	1,458.48	1,418.54	5,146.25	3,412.73	2,900.50	1,901.54	4,219.34	3,415.31	7,124.96
2017	2,011.24	8,125.49	1,328.29	1,407.48	5,349.71	3,362.00	2,814.44	1,828.08	4,302.19	3,363.48	6,856.34
2018	2,123.24	8,242.46	1,226.32	1,410.93	5,550.23	3,359.17	2,757.97	1,789.56	4,478.83	3,340.30	6,674.00
2019	2,242.48	8,375.06	1,112.07	1,409.43	5,826.00	3,359.60	2,722.17	1,762.61	4,688.48	3,377.68	6,433.88
2020	2,373.55	8,464.38	952.99	1,400.88	6,099.03	3,359.33	2,618.76	1,743.00	4,898.30	3,371.18	6,317.53
2021	2,549.51	8,689.12	791.77	1,401.05	6,355.63	3,387.17	2,511.92	1,770.81	5,068.76	3,347.92	6,140.32
Prob. of Negative Ending Cash (%)											
2016	12	99	99	99	20	84	99	99	38	99	99
2017	9	97	99	94	2	76	99	99	25	99	99
2018	4	87	99	84	1	79	99	99	19	98	99
2019	2	82	99	81	1	85	99	98	15	96	99
2020	2	79	99	77	1	90	99	98	13	97	99
2021	2	76	99	79	1	93	99	99	15	97	99
Prob. of Decreasing Real Net Worth Over 2014-2021 (%)	1	1	1	1	1	1	1	1	1	1	1

Figure 13. Wheat Farms



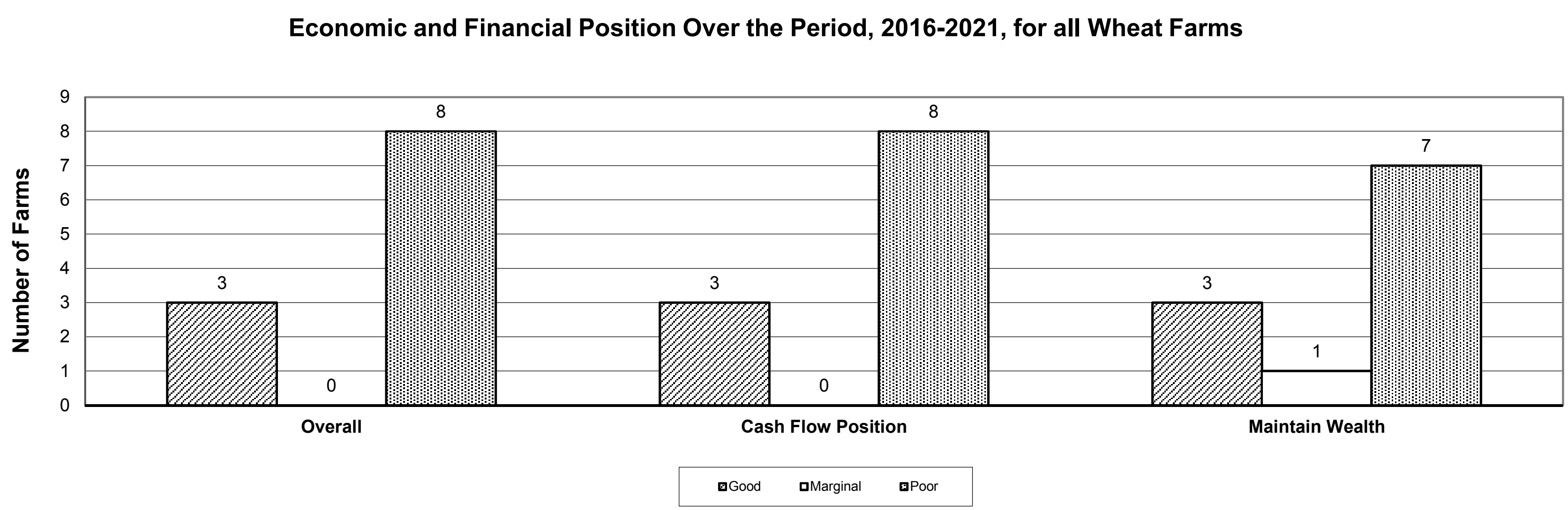
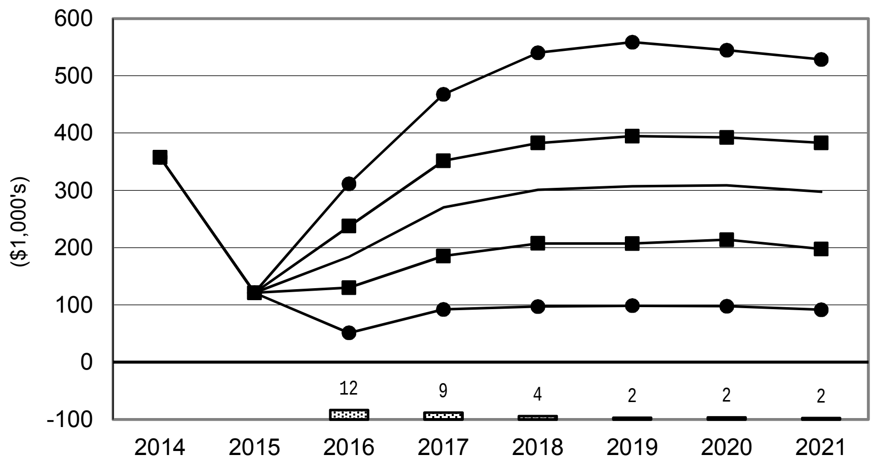


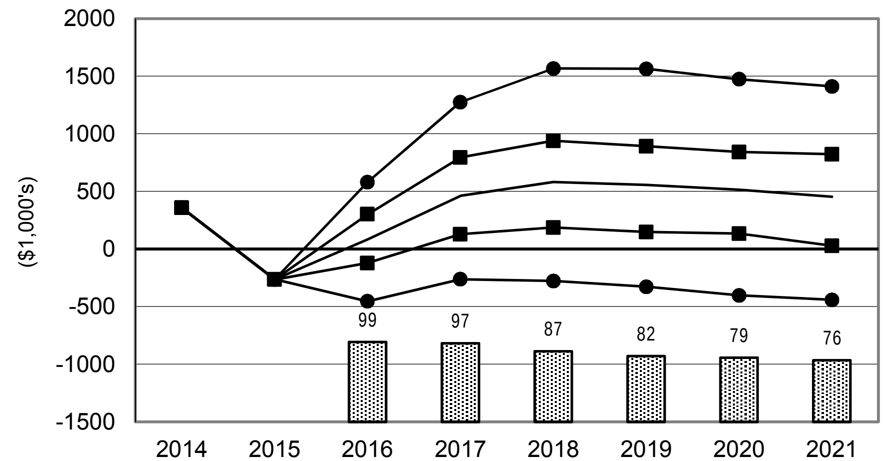
Figure 14. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Wheat Farms

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

WAW2000 Washington Wheat Farm



WAW8000 Large Washington Wheat Farm



WAAW4500 Southern Washington Wheat Farm

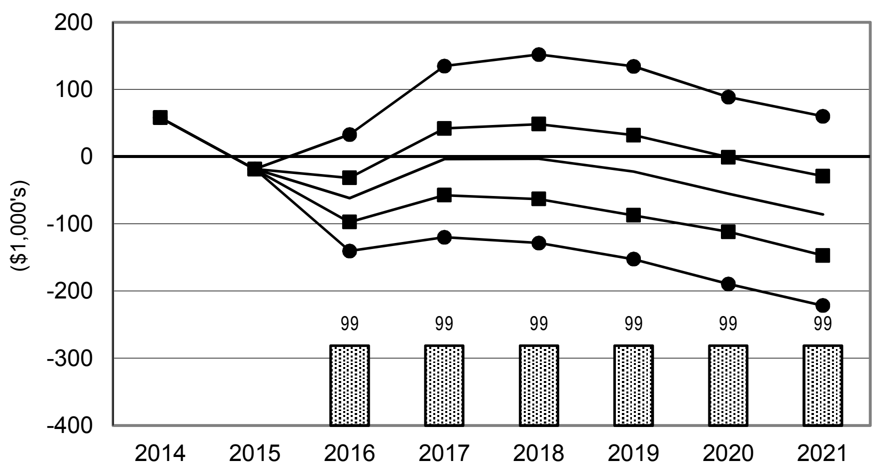


Figure 15. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Wheat Farms

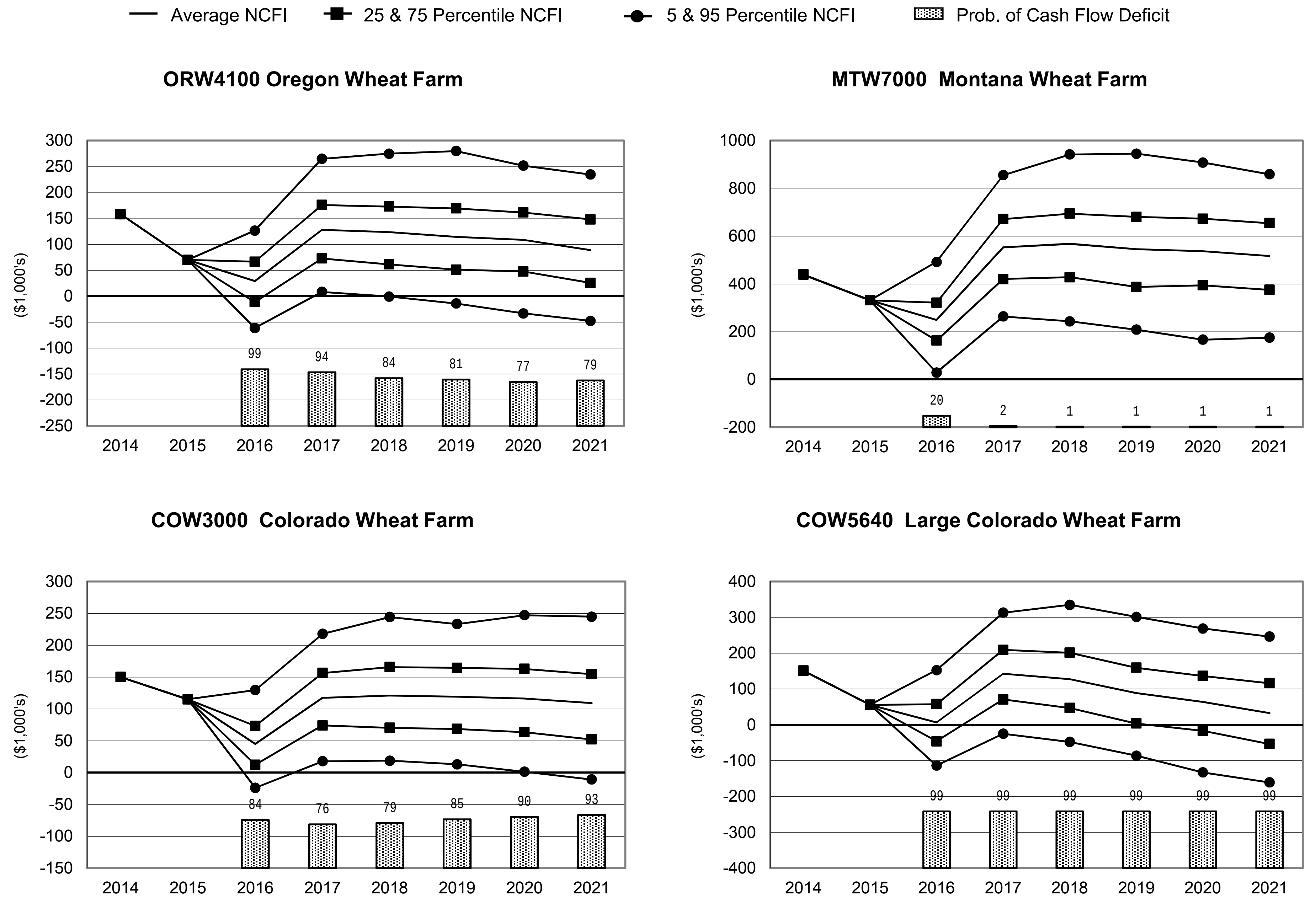


Figure 16. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Wheat Farms

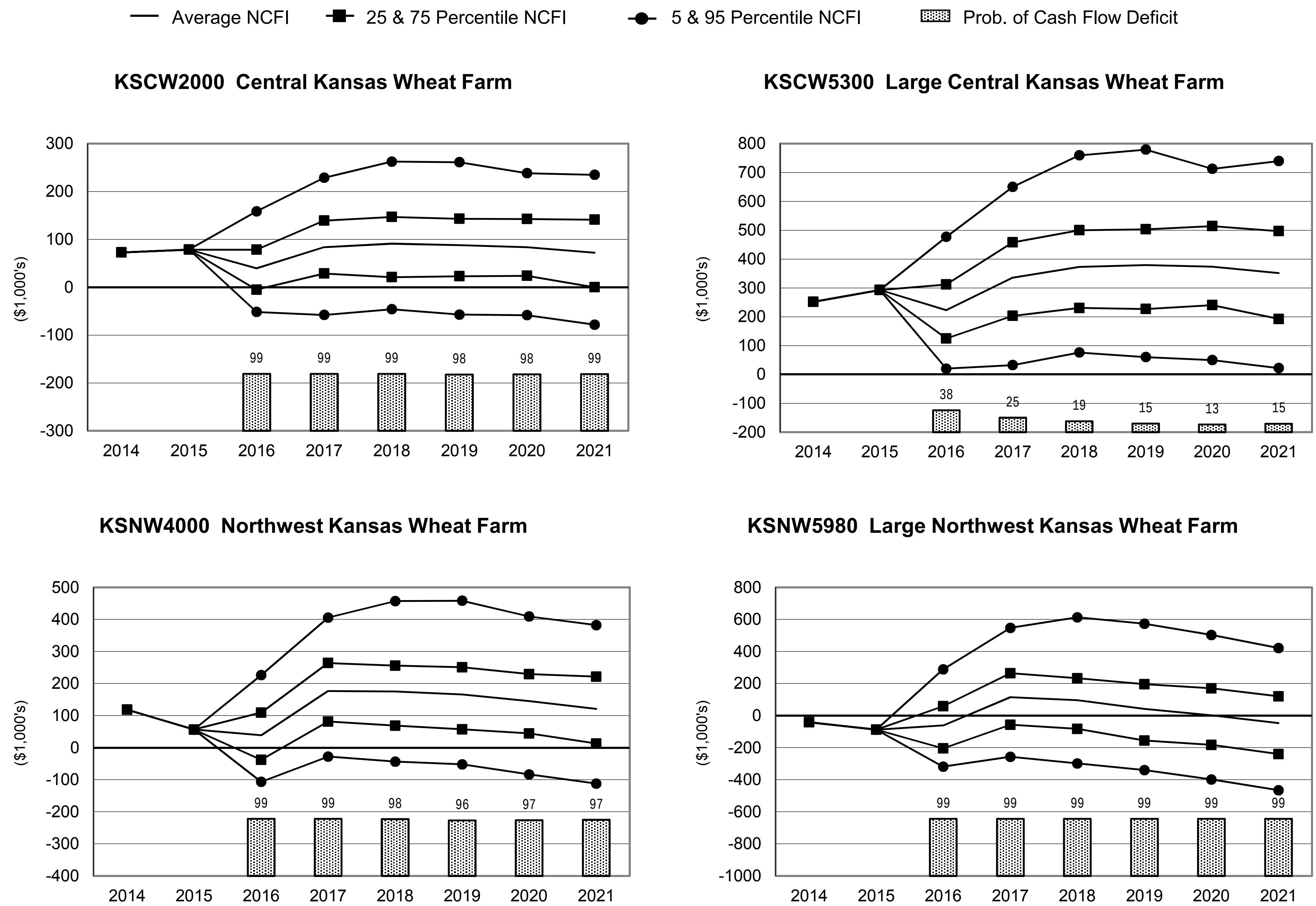


Figure 17. Representative Farms Producing Cotton

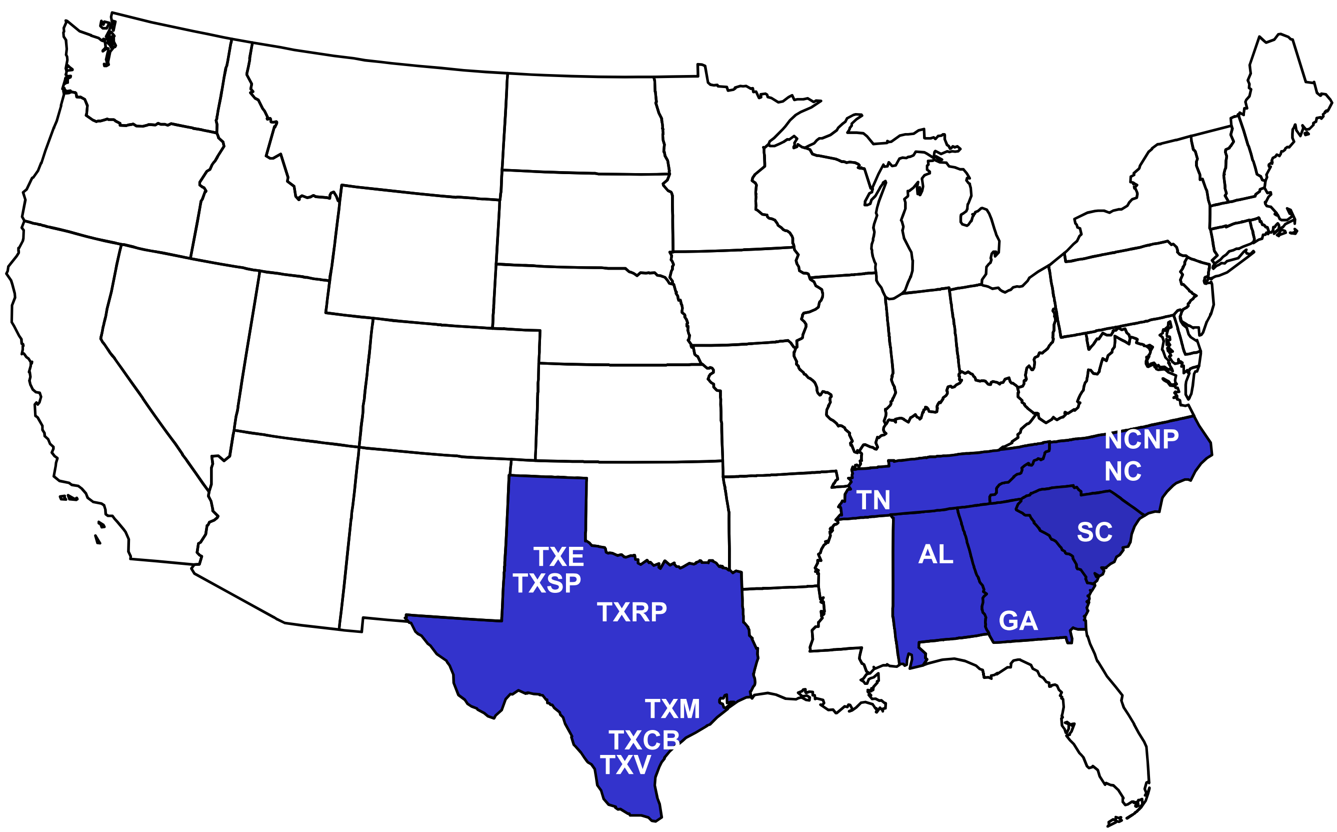


Table 8. Implications of the December 2016 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Cotton.

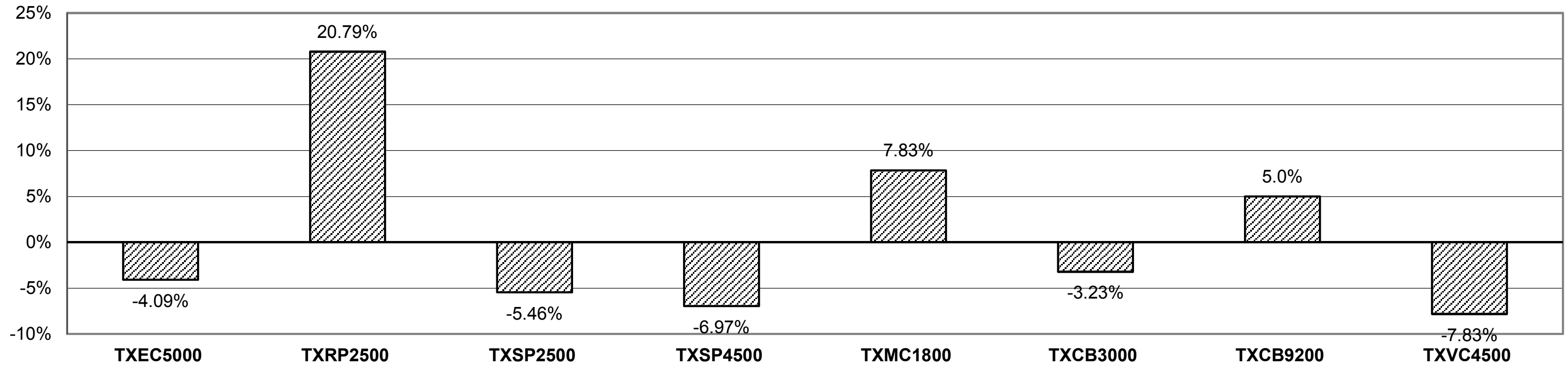
	TXSP2500	TXSP4500	TXEC5000	TXRP2500	TXMC1800	TXCB3000	TXCB9200	TXVC4500
Overall Financial Position 2016-2021 Average	Marginal	Good	Good	Poor	Poor	Marginal	Poor	Good
Change Real Net Worth (%) 2016-2021 Average	6.87	5.49	4.06	-5.07	-3.16	1.64	-2.53	2.69
NIA to Maintain Real Net Worth (%/Rec.)	-10.96	-9.90	-7.70	14.55	4.30	-3.65	2.26	-7.98
NIA for Zero Ending Cash Balance (%/Rec.)	-5.46	-6.97	-4.09	20.79	7.83	-3.22	5.00	-7.83
Govt Payments/Receipts (%) 2016-2021 Average	22.63	8.19	7.46	10.05	10.07	12.10	10.14	10.80
Cost to Receipts Ratio (%) 2016-2021 Average	76.07	77.12	78.74	91.93	92.59	84.80	95.29	80.23
Total Cash Receipts ($1000)								
2014	768.88	1,998.50	1,949.48	367.27	1,199.68	1,219.85	3,859.22	1,880.22
2015	892.59	1,956.53	2,116.40	402.90	694.53	1,103.12	3,786.00	1,785.48
2016	937.11	2,034.65	2,311.34	416.57	888.59	1,111.62	3,795.74	1,900.62
2017	893.43	1,939.64	2,182.17	422.21	939.67	1,144.43	3,864.49	2,002.64
2018	905.90	1,947.91	2,178.52	413.85	936.42	1,126.33	3,847.81	1,983.89
2019	915.66	1,971.19	2,200.39	410.37	939.38	1,128.44	3,879.47	2,000.79
2020	918.93	1,984.07	2,212.12	412.49	941.21	1,127.71	3,879.08	2,000.40
2021	924.33	1,998.10	2,228.83	412.93	939.23	1,135.34	3,912.14	2,002.56
2016-2021 Average	915.89	1,979.26	2,218.89	414.74	930.75	1,128.98	3,863.12	1,981.82
Government Payments ($1000)								
2014	21.33	84.14	87.23	10.35	43.57	39.84	102.13	46.99
2015	124.52	20.91	104.59	12.51	20.45	41.81	139.20	52.37
2016	227.86	225.58	277.75	63.27	93.45	160.30	488.44	233.31
2017	187.33	139.08	144.27	53.82	115.93	158.61	421.74	258.65
2018	199.09	151.95	148.12	40.61	97.27	134.31	365.55	213.14
2019	195.16	139.92	131.59	32.40	83.63	120.57	335.93	193.81
2020	193.55	139.06	129.12	29.41	81.52	116.30	323.74	187.38
2021	192.93	137.28	126.80	26.60	78.81	112.59	318.89	180.46
2016-2021 Average	199.32	155.48	159.61	41.02	91.77	133.78	375.71	211.12
Net Cash Farm Income ($1000)								
2014	60.66	357.04	227.09	-14.72	275.86	244.82	255.78	274.78
2015	248.41	458.86	451.00	42.08	-78.39	164.97	203.01	247.75
2016	326.43	652.14	656.51	69.13	97.27	222.77	418.11	416.79
2017	279.73	554.36	540.37	69.03	141.40	257.40	469.22	498.69
2018	272.52	516.47	508.25	50.65	122.65	213.57	388.21	449.38
2019	246.96	459.79	442.69	28.82	98.32	191.49	305.94	421.75
2020	201.90	402.73	402.47	11.22	72.55	167.89	183.38	385.77
2021	187.63	355.99	358.80	-5.07	27.44	151.55	112.77	363.53
2016-2021 Average	252.53	490.25	484.85	37.30	93.27	200.78	312.94	422.65
Ending Cash Reserves ($1000)								
2014	-97.49	20.74	-120.69	-83.89	109.24	118.14	-87.21	59.99
2015	0.57	131.15	-52.77	-128.30	-125.11	125.15	-357.88	82.11
2016	134.48	438.65	104.02	-184.75	-231.34	187.60	-475.65	242.46
2017	240.40	681.26	317.60	-228.05	-235.02	309.43	-404.81	541.78
2018	327.40	796.28	464.78	-289.42	-266.74	317.13	-438.96	753.99
2019	395.38	921.09	532.27	-321.88	-293.83	303.92	-620.38	889.20
2020	317.60	963.61	588.52	-381.34	-352.11	283.26	-886.95	953.49
2021	296.18	878.40	598.80	-461.09	-490.30	222.72	-1,217.61	975.02
Nominal Net Worth ($1000)								
2014	769.49	2,011.79	2,889.62	919.35	1,321.59	1,824.22	3,915.73	4,933.57
2015	916.97	2,243.38	3,087.83	915.08	1,131.01	1,892.00	3,736.21	5,100.27
2016	1,096.34	2,657.34	3,424.17	849.02	1,068.65	1,987.69	3,745.63	5,312.57
2017	1,219.45	2,929.24	3,636.68	782.31	1,060.04	2,079.60	3,781.61	5,494.51
2018	1,338.28	3,132.92	3,848.68	714.69	1,041.74	2,110.38	3,768.84	5,685.85
2019	1,483.05	3,392.86	4,037.42	684.70	1,045.44	2,153.40	3,653.18	5,863.71
2020	1,509.34	3,519.56	4,188.26	646.34	986.39	2,197.21	3,526.53	6,036.06
2021	1,550.97	3,572.51	4,317.23	600.65	884.17	2,209.49	3,291.69	6,255.55
Prob. of Negative Ending Cash (%)								
2016	25	17	33	99	93	24	70	21
2017	19	10	12	99	86	14	65	6
2018	17	10	9	99	85	15	64	4
2019	14	9	8	99	82	19	66	4
2020	22	11	7	99	83	26	70	4
2021	26	17	10	99	87	33	75	6
Prob. of Decreasing Real Net Worth Over 2014-2021 (%)	1	1	1	1	1	1	1	1

Table 9. Implications of the December 2016 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Cotton.

	TNC2500	TNC4050	ALC3000	GAC2300	SCC1800	NCC1700	NCNP1500
Overall Financial Position							
2016-2021 Average	Good	Marginal	Poor	Marginal	Marginal	Poor	Poor
Change Real Net Worth (%)							
2016-2021 Average	7.14	0.66	-35.02	1.31	1.87	-3.85	-6.54
NIA to Maintain Real							
Net Worth (%/Rec.)	-13.98	-1.21	15.19	-3.36	-3.80	9.53	14.22
NIA for Zero Ending							
Cash Balance (%/Rec.)	-16.13	4.40	25.31	2.30	2.70	17.10	28.64
Govt Payments/Receipts (%)							
2016-2021 Average	3.53	7.37	6.52	15.56	12.52	3.46	14.47
Cost to Receipts Ratio (%)							
2016-2021 Average	77.07	91.94	104.54	86.24	86.24	93.13	99.77
Total Cash Receipts ($1000)							
2014	1,384.79	2,538.60	1,523.13	2,290.83	1,308.39	1,003.73	935.38
2015	1,299.63	2,407.16	1,525.43	2,412.45	1,322.06	937.99	943.81
2016	1,313.29	2,566.46	1,522.33	2,527.35	1,398.13	956.59	992.57
2017	1,350.79	2,604.78	1,557.08	2,491.20	1,381.56	982.68	990.56
2018	1,377.86	2,619.89	1,585.95	2,534.10	1,406.26	998.87	1,009.56
2019	1,398.65	2,648.73	1,600.42	2,567.98	1,425.89	1,014.14	1,021.07
2020	1,408.32	2,664.89	1,616.35	2,596.14	1,440.27	1,017.17	1,026.01
2021	1,422.58	2,692.05	1,636.44	2,635.76	1,448.83	1,022.44	1,032.15
2016-2021 Average	1,378.58	2,632.80	1,586.43	2,558.76	1,416.82	998.65	1,011.99
Government Payments ($1000)							
2014	10.28	82.23	35.60	61.03	38.45	9.40	14.75
2015	73.84	100.19	112.01	285.75	126.45	33.50	98.21
2016	93.65	249.68	172.54	441.64	200.53	44.82	162.71
2017	67.96	226.89	118.27	383.19	171.65	46.39	143.82
2018	39.95	195.95	95.88	397.96	174.32	34.70	145.23
2019	24.49	157.50	71.56	384.46	164.90	25.91	139.48
2020	24.72	152.34	68.09	381.64	163.44	24.71	136.66
2021	24.79	147.02	67.51	382.07	162.73	22.96	136.11
2016-2021 Average	45.93	188.23	98.97	395.16	172.93	33.25	144.00
Net Cash Farm Income ($1000)							
2014	280.99	97.29	-28.17	-27.27	63.80	100.81	-40.49
2015	250.78	26.67	15.27	214.29	143.89	66.48	1.00
2016	321.46	261.52	44.07	438.28	257.88	96.13	74.04
2017	356.59	302.37	39.93	395.40	243.35	114.96	63.61
2018	371.73	287.79	15.60	402.03	245.98	112.40	49.17
2019	360.34	249.09	-42.37	352.86	220.03	98.79	6.17
2020	339.79	186.02	-91.80	310.06	191.60	62.02	-31.86
2021	333.21	138.51	-131.08	293.46	165.78	30.41	-60.48
2016-2021 Average	347.19	237.55	-27.61	365.35	220.77	85.78	16.77
Ending Cash Reserves ($1000)							
2014	81.68	-210.41	-337.43	-374.98	-137.39	-66.54	-244.75
2015	153.97	-481.00	-610.35	-495.15	-254.44	-205.33	-472.21
2016	297.03	-523.20	-947.39	-402.96	-283.36	-356.56	-704.95
2017	505.06	-495.10	-1,232.38	-407.08	-260.43	-437.95	-875.21
2018	703.42	-500.62	-1,588.75	-412.17	-270.47	-533.79	-1,104.82
2019	899.18	-494.62	-1,967.75	-404.90	-250.14	-626.40	-1,423.72
2020	1,061.40	-580.83	-2,394.95	-390.88	-246.96	-765.25	-1,722.47
2021	1,181.34	-735.67	-2,817.33	-405.59	-259.57	-929.99	-1,989.35
Nominal Net Worth ($1000)							
2014	1,731.41	4,911.42	1,249.97	7,356.86	2,846.73	1,927.73	2,349.63
2015	1,848.87	4,878.71	1,037.67	7,320.68	2,888.25	1,848.38	2,225.00
2016	2,013.18	4,951.38	816.96	7,413.14	2,961.63	1,761.41	2,090.00
2017	2,172.91	4,959.43	564.27	7,405.09	2,988.87	1,669.94	1,937.06
2018	2,349.72	5,032.21	293.21	7,540.64	3,056.15	1,607.75	1,776.48
2019	2,547.19	5,195.75	58.84	7,761.56	3,177.16	1,570.62	1,606.26
2020	2,729.59	5,226.28	-286.28	7,904.39	3,258.78	1,492.07	1,436.45
2021	2,911.88	5,221.90	-619.59	8,108.91	3,343.26	1,378.84	1,292.34
Prob. of Negative Ending Cash (%)							
2016	2	96	99	97	88	99	99
2017	2	87	99	91	79	99	99
2018	1	85	99	88	74	98	99
2019	1	79	99	84	71	97	99
2020	2	82	99	81	66	97	99
2021	2	83	99	78	67	98	99
Prob. of Decreasing Real Net Worth							
Over 2014-2021 (%)	1	1	1	1	1	1	1

Figure 18. Cotton Farms

Minimum Annual Percentage Change in Receipts, 2016-2021, Needed to Have a Zero Ending Cash Balance in 2021



Minimum Annual Percentage Change in Receipts, 2016-2021, Needed to Have a Zero Ending Cash Balance in 2021

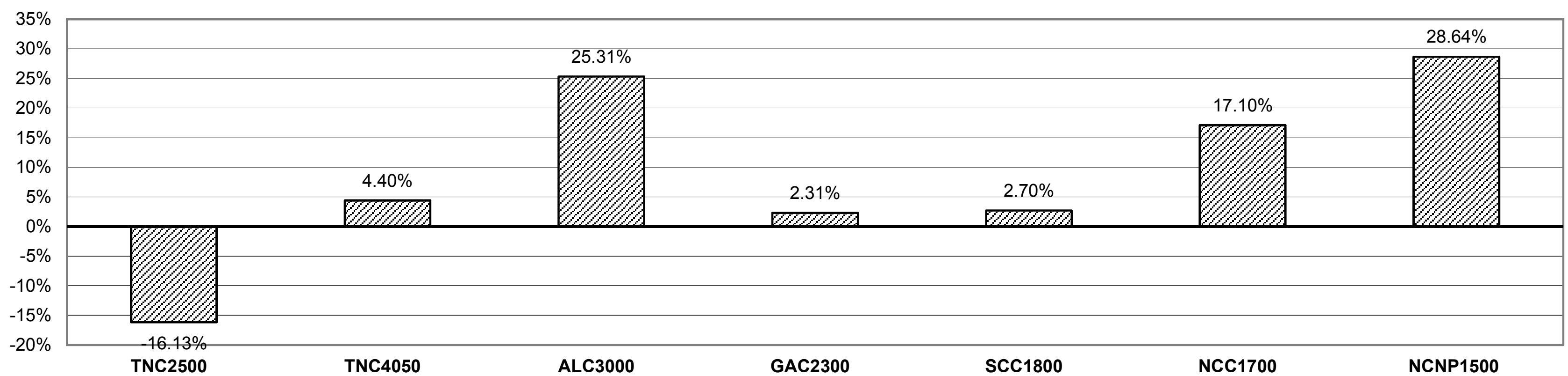


Figure 19. Cotton Farms

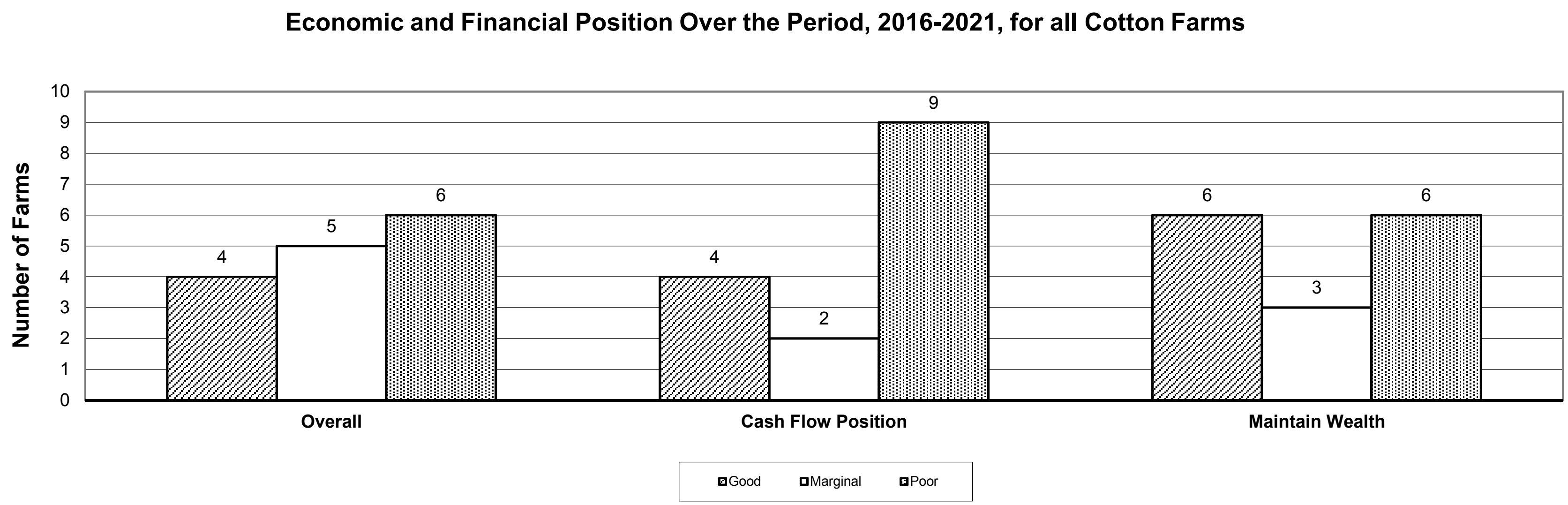


Figure 20. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Cotton Farms

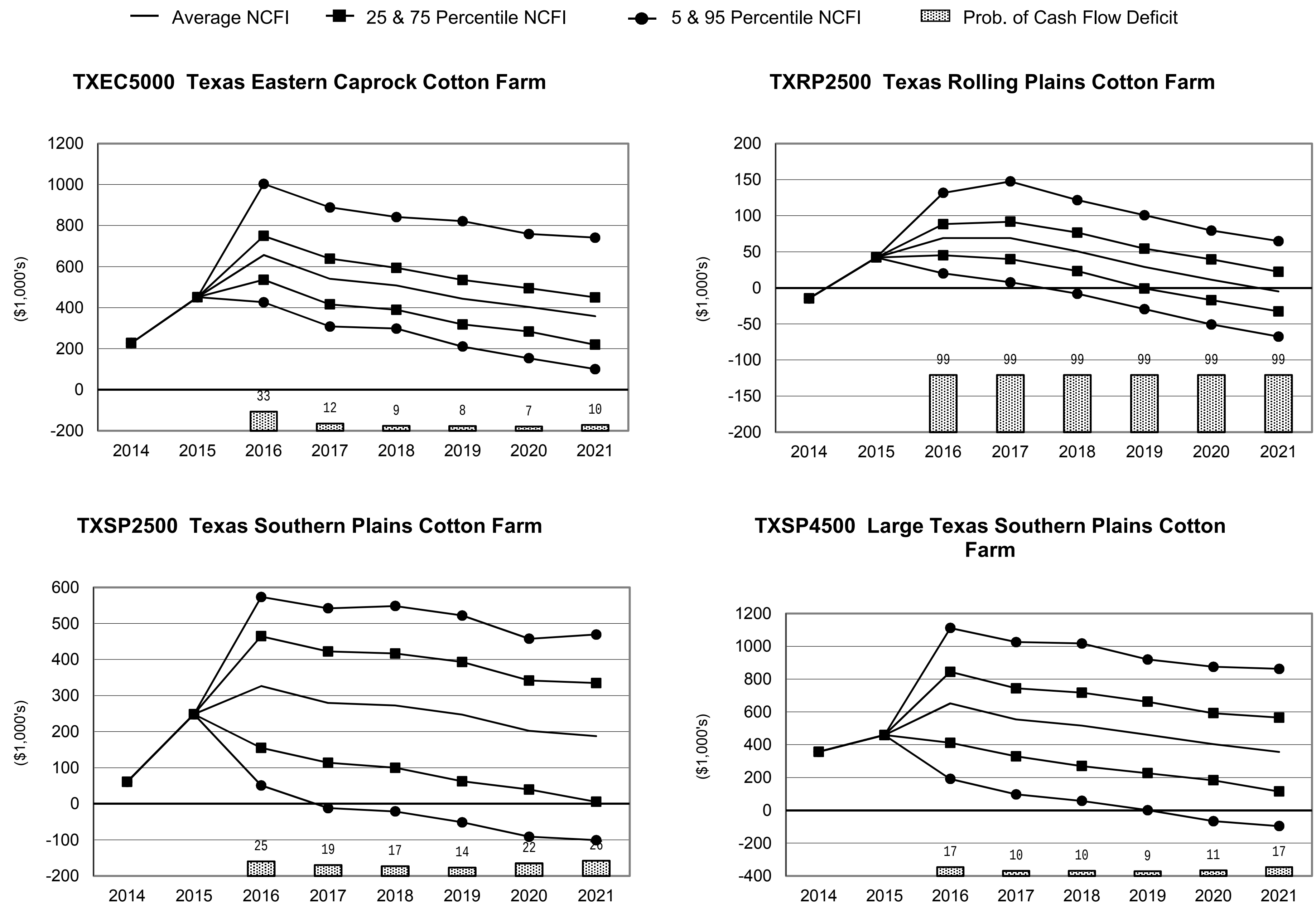


Figure 21. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Cotton Farms

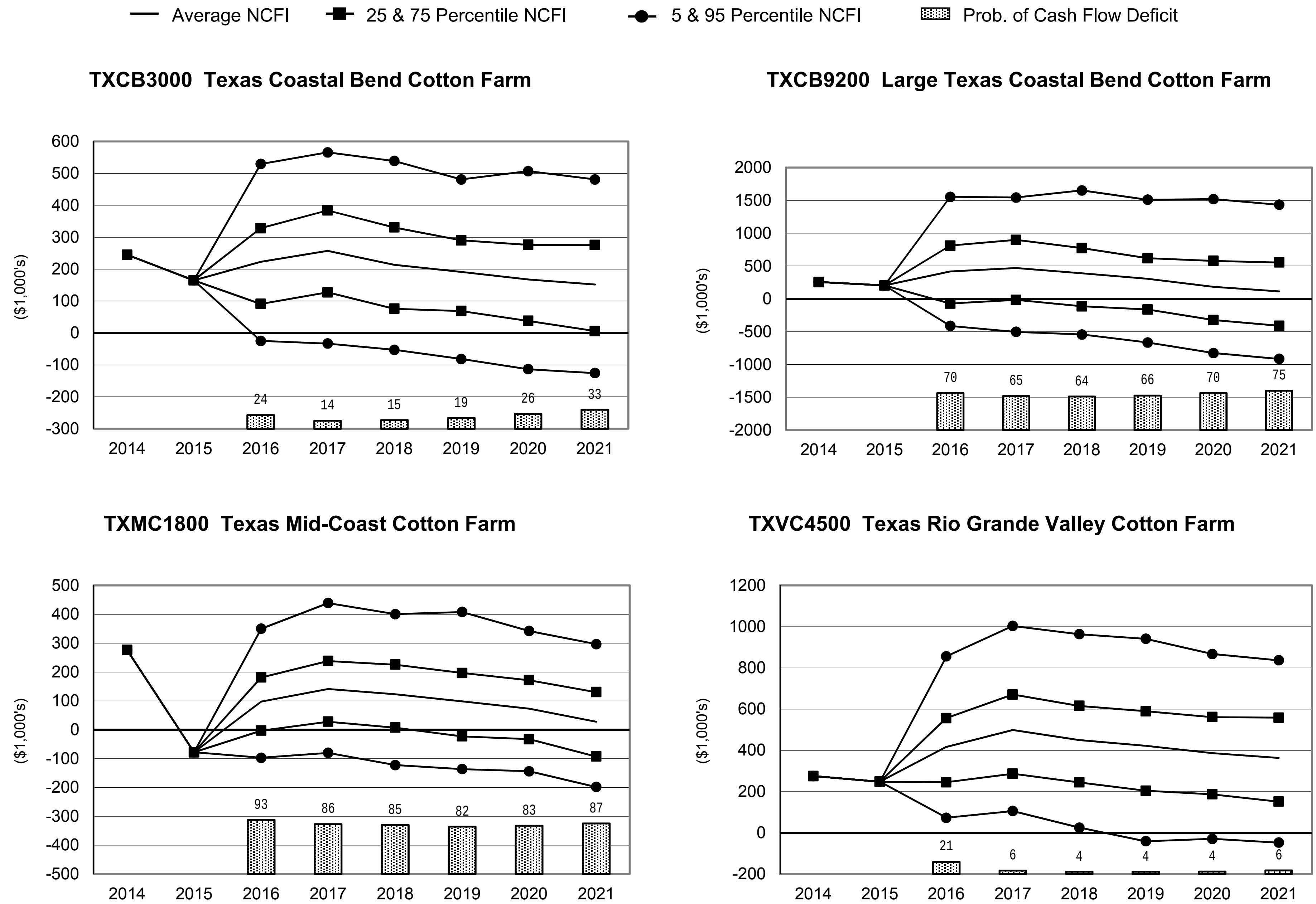


Figure 22. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Cotton Farms

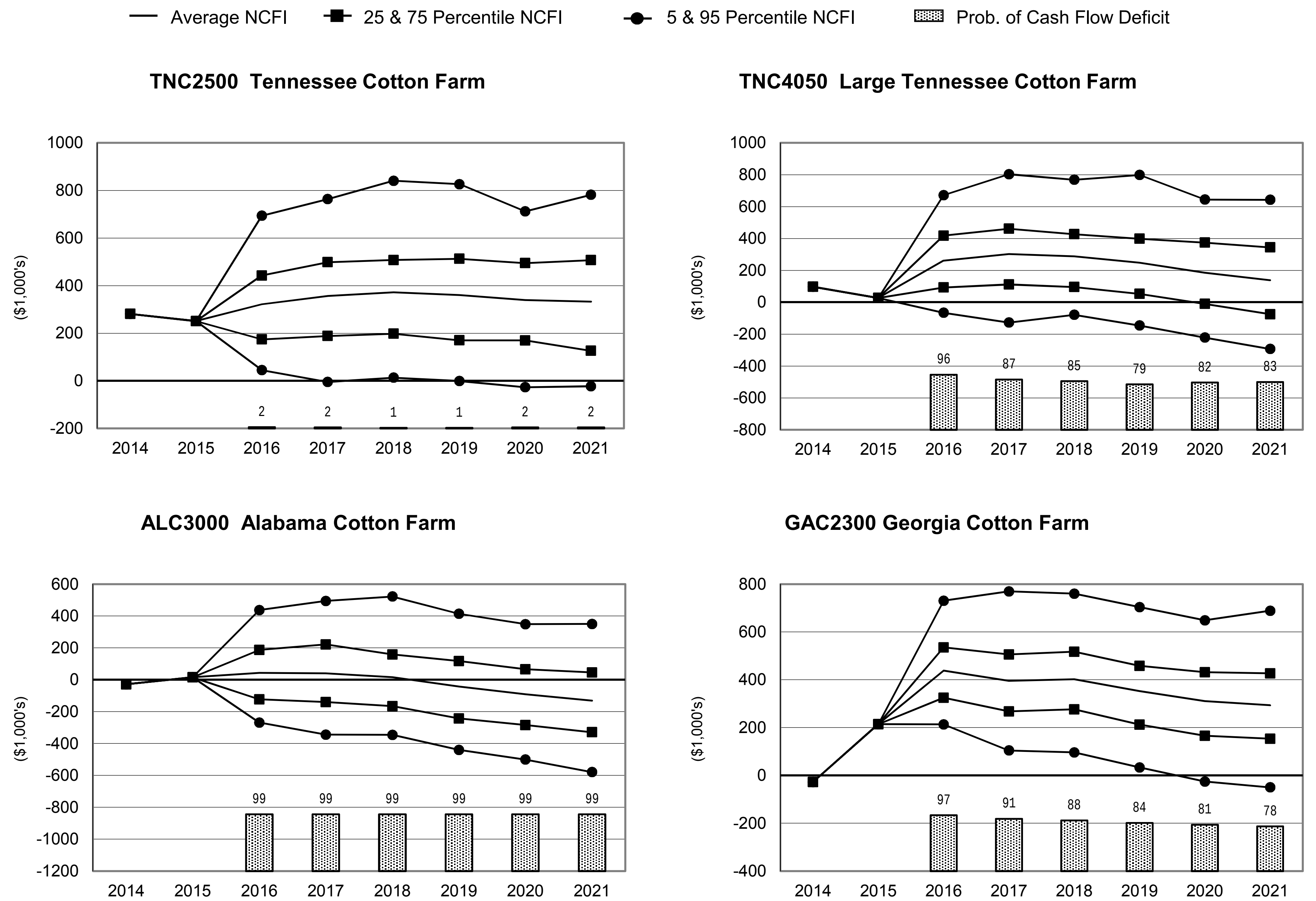
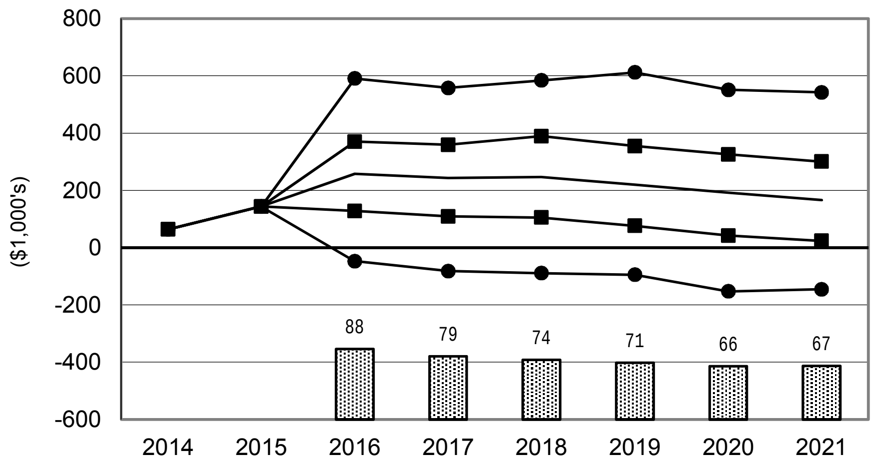


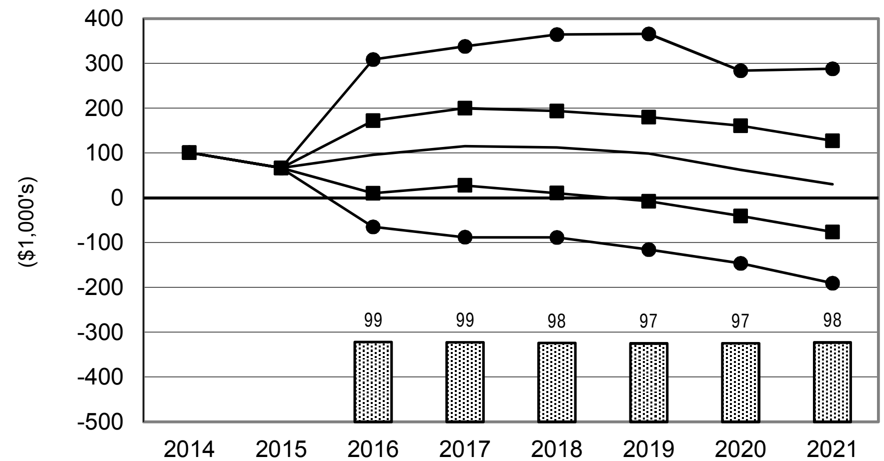
Figure 23. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Cotton Farms

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

SCC1800 South Carolina Cotton Farm



NCC1700 North Carolina Cotton Farm



NCNP1500 North Carolina Northern Peanut Farm

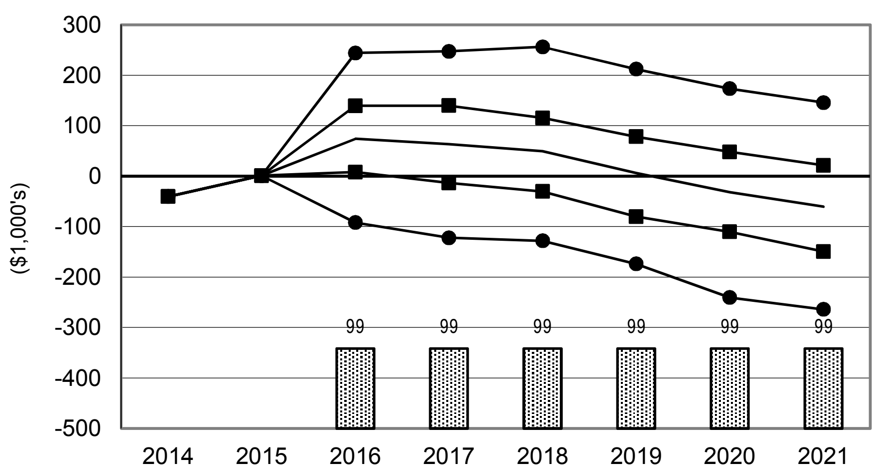


Figure 24. Representative Farms Producing Rice

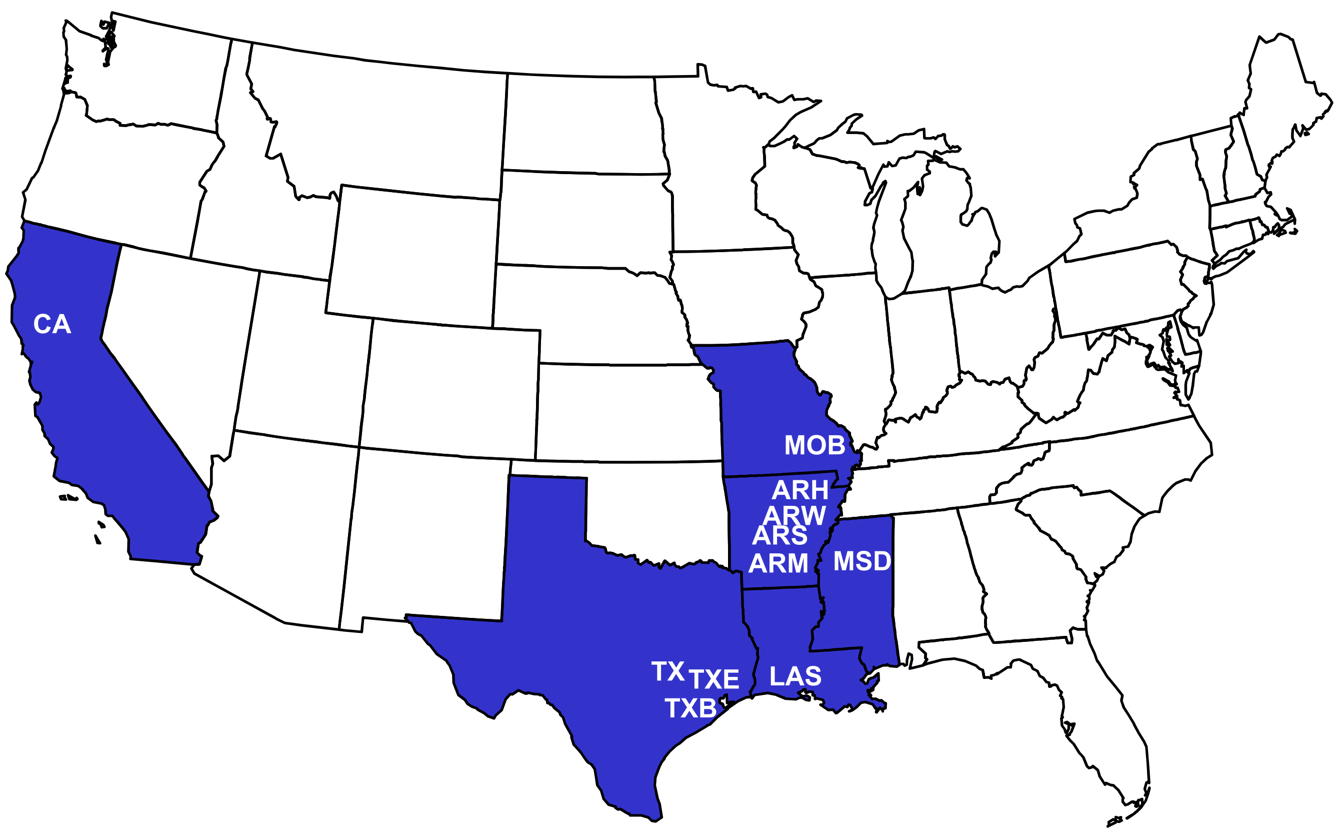


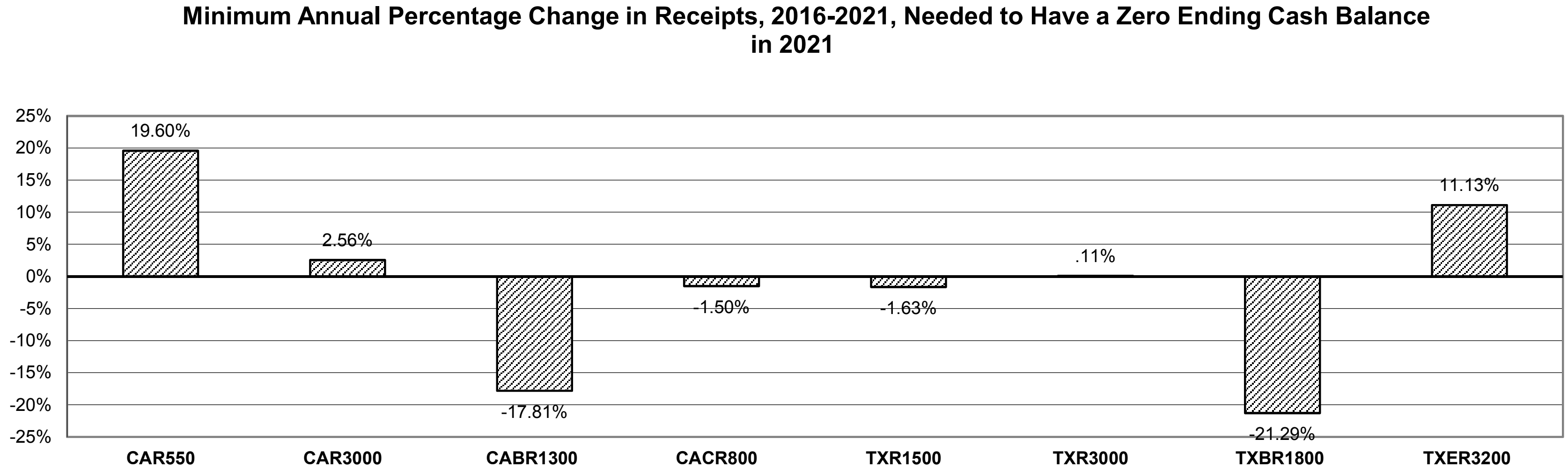
Table 10. Implications of the December 2016 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Rice.

	CAR550	CAR3000	CABR1300	CACR800	TXR1500	TXR3000	TXBR1800	TXER3200
Overall Financial Position 2016-2021 Average	Poor	Marginal	Good	Good	Good	Marginal	Good	Poor
Change Real Net Worth (%) 2016-2021 Average	-3.42	0.68	3.50	0.60	2.83	3.81	14.08	-6.66
NIA to Maintain Real Net Worth (%/Rec.)	12.03	-0.76	-16.39	-1.39	-6.06	-2.50	-17.74	7.10
NIA for Zero Ending Cash Balance (%/Rec.)	19.60	2.56	-17.81	-1.50	-1.63	0.11	-21.29	11.13
Govt Payments/Receipts (%) 2016-2021 Average	9.69	9.72	9.17	10.86	14.94	12.36	13.61	11.87
Cost to Receipts Ratio (%) 2016-2021 Average	92.96	23172.10	71.89	5985.93	76.57	86.90	73.20	99.28
Total Cash Receipts ($1000)								
2014	753.57	4,545.22	1,912.04	1,262.43	844.92	1,711.25	0.11	1,991.47
2015	721.35	4,307.90	1,836.42	1,186.59	760.22	1,553.94	923.28	1,399.22
2016	698.41	4,160.52	1,772.89	1,147.15	739.23	1,471.03	892.14	1,471.85
2017	765.80	4,436.44	1,937.62	1,255.47	851.30	1,672.82	1,017.51	1,676.24
2018	770.19	4,498.17	1,950.85	1,263.02	855.96	1,696.96	1,026.61	1,701.34
2019	764.24	4,498.57	1,936.57	1,254.38	846.61	1,687.77	1,017.03	1,691.07
2020	769.63	4,527.78	1,951.44	1,263.63	855.38	1,708.59	1,029.00	1,709.61
2021	775.78	4,573.13	1,967.91	1,273.83	865.88	1,735.17	1,042.17	1,727.90
2016-2021 Average	757.34	4,449.10	1,919.55	1,242.91	835.73	1,662.06	1,004.08	1,663.00
Government Payments ($1000)								
2014	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2015	17.05	96.93	40.97	27.10	29.34	48.00	32.08	45.53
2016	54.01	306.96	129.74	85.80	92.91	152.00	101.59	145.41
2017	98.81	446.90	237.36	156.98	169.99	277.40	185.86	268.60
2018	84.12	395.96	202.08	133.65	144.72	236.27	158.24	228.09
2019	71.88	354.93	172.65	114.20	123.66	202.03	135.21	194.73
2020	69.78	340.67	167.65	110.87	120.06	196.17	131.27	189.06
2021	65.74	326.10	157.94	104.45	113.11	184.98	123.67	178.22
2016-2021 Average	74.06	361.92	177.90	117.66	127.41	208.14	139.31	200.69
Net Cash Farm Income ($1000)								
2014	51.41	252.81	439.65	137.95	121.85	115.41	222.76	207.31
2015	74.55	363.39	505.42	177.79	153.54	198.99	211.62	-133.19
2016	73.44	357.25	486.32	180.52	175.22	209.54	226.88	11.43
2017	119.92	586.82	645.68	274.41	274.80	370.03	342.71	170.74
2018	103.03	566.85	628.04	253.88	255.04	347.62	333.76	148.46
2019	64.70	408.75	564.78	201.12	201.15	253.72	295.20	45.27
2020	30.70	302.04	540.11	174.89	186.08	179.65	264.11	-32.73
2021	4.05	228.87	507.29	154.25	171.13	141.35	248.60	-102.54
2016-2021 Average	65.97	408.43	562.04	206.51	210.57	250.32	285.21	40.10
Ending Cash Reserves ($1000)								
2014	-119.22	-205.25	175.64	16.78	2.46	3.84	134.33	36.34
2015	-227.56	-322.89	426.68	2.36	-10.54	51.69	230.74	-321.90
2016	-343.07	-490.69	586.79	-13.89	-22.02	114.73	339.39	-531.54
2017	-462.03	-327.90	967.90	70.82	137.40	290.99	565.33	-529.64
2018	-544.55	-234.29	1,280.36	148.07	196.80	428.84	756.07	-559.12
2019	-658.36	-304.82	1,475.41	160.08	140.09	427.71	889.95	-685.77
2020	-831.92	-476.15	1,611.29	137.97	131.67	209.47	1,049.21	-934.38
2021	-1,071.83	-737.23	1,822.98	95.49	86.52	-12.53	1,160.30	-1,297.43
Nominal Net Worth ($1000)								
2014	2,766.50	9,240.67	6,479.98	4,464.84	1,755.17	942.09	727.20	2,075.66
2015	2,689.36	9,262.13	6,785.12	4,464.81	1,801.66	992.08	833.20	1,801.88
2016	2,599.79	9,215.41	6,983.83	4,440.69	1,842.31	1,064.40	970.31	1,647.07
2017	2,488.55	9,277.27	7,279.30	4,435.54	1,970.13	1,255.59	1,178.85	1,623.07
2018	2,420.13	9,462.82	7,617.19	4,503.58	2,052.62	1,416.76	1,357.93	1,600.61
2019	2,344.77	9,616.42	7,913.23	4,554.70	2,068.16	1,484.05	1,492.36	1,492.97
2020	2,221.19	9,663.93	8,163.82	4,590.02	2,142.59	1,404.51	1,660.58	1,284.87
2021	2,096.25	9,731.92	8,568.13	4,664.01	2,183.22	1,305.04	1,795.92	1,005.18
Prob. of Negative Ending Cash (%)								
2016	99	87	3	39	57	28	1	99
2017	99	61	1	13	12	12	1	99
2018	99	47	1	8	9	7	1	99
2019	99	47	1	11	18	10	1	98
2020	99	56	1	13	22	26	1	99
2021	99	64	1	15	30	49	1	99
Prob. of Decreasing Real Net Worth Over 2014-2021 (%)	1	1	1	1	1	1	1	1

Table 11. Implications of the December 2016 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Rice.

	LASR2000	ARMR6500	ARSR3240	ARWR2500	ARHR4000	MSDR5000	MOBR4000
Overall Financial Position							
2016-2021 Average	Marginal	Poor	Poor	Poor	Poor	Marginal	Poor
Change Real Net Worth (%)							
2016-2021 Average	2.69	-31.88	-0.73	0.15	-0.99	2.14	-2.46
NIA to Maintain Real							
Net Worth (%/Rec.)	-2.11	31.63	2.23	0.00	2.93	-8.46	8.76
NIA for Zero Ending							
Cash Balance (%/Rec.)	4.46	48.43	7.66	12.63	6.36	-3.02	21.35
Govt Payments/Receipts (%)							
2016-2021 Average	11.66	7.70	10.00	11.86	11.66	6.97	7.93
Cost to Receipts Ratio (%)							
2016-2021 Average	87.81	129.29	91.18	5002.71	91.88	74.94	95.75
Total Cash Receipts ($1000)							
2014	1,309.21	3,691.29	1,956.77	1,491.92	2,876.65	4,095.37	2,268.60
2015	1,191.88	3,499.20	1,826.52	1,511.58	2,712.40	3,271.89	2,152.54
2016	1,152.09	3,699.91	1,817.73	1,510.86	2,460.34	3,251.32	2,143.83
2017	1,286.15	3,890.25	1,986.46	1,653.24	2,702.47	3,450.33	2,335.47
2018	1,302.71	3,975.31	2,021.05	1,674.74	2,762.75	3,535.27	2,390.05
2019	1,296.52	4,003.75	2,017.68	1,667.42	2,770.04	3,559.69	2,398.09
2020	1,310.45	3,975.54	2,028.63	1,676.48	2,797.01	3,570.23	2,408.11
2021	1,327.39	3,987.85	2,042.59	1,693.08	2,841.98	3,595.56	2,423.93
2016-2021 Average	1,279.22	3,922.10	1,985.69	1,645.97	2,722.43	3,493.73	2,349.91
Government Payments ($1000)							
2014	0.00	14.32	0.00	0.00	0.00	0.00	0.00
2015	50.78	103.98	64.54	72.98	125.43	114.62	73.90
2016	117.10	320.27	181.93	171.81	275.34	225.16	155.45
2017	201.65	370.44	265.98	257.29	401.35	309.53	248.04
2018	170.43	309.31	218.41	215.06	342.78	257.99	207.04
2019	144.44	255.12	178.85	178.55	301.27	219.47	175.46
2020	139.85	237.42	169.94	170.83	289.22	209.83	168.45
2021	131.79	224.49	159.36	160.62	275.27	199.73	159.11
2016-2021 Average	150.88	286.18	195.75	192.36	314.21	236.95	185.59
Net Cash Farm Income ($1000)							
2014	105.35	-957.94	76.19	-59.13	149.70	1,280.29	-61.87
2015	117.29	-869.24	114.98	128.32	352.64	795.01	42.53
2016	137.88	-547.41	193.19	196.17	249.31	875.65	122.24
2017	247.37	-464.15	330.68	315.09	453.06	1,072.73	280.96
2018	237.37	-587.54	325.88	301.28	436.68	1,103.63	276.95
2019	179.47	-881.33	243.35	221.69	305.81	1,024.93	172.77
2020	147.20	-1,234.18	171.21	168.21	208.04	932.68	69.49
2021	123.67	-1,556.83	122.02	114.48	119.06	882.23	-32.13
2016-2021 Average	178.83	-878.57	231.06	219.48	295.33	981.97	148.38
Ending Cash Reserves ($1000)							
2014	-156.84	-1,787.42	-292.14	-368.44	-268.53	478.06	-451.24
2015	-283.16	-3,498.30	-565.57	-576.72	-360.75	446.81	-925.50
2016	-378.55	-4,975.26	-801.57	-803.40	-580.48	318.63	-1,428.66
2017	-373.29	-6,161.55	-776.15	-843.22	-421.78	543.07	-1,675.43
2018	-383.57	-7,607.06	-789.71	-894.10	-350.56	668.65	-1,967.41
2019	-354.22	-9,193.73	-810.72	-992.50	-440.93	771.81	-2,395.95
2020	-353.32	-11,196.58	-939.27	-1,145.53	-710.53	705.46	-2,871.19
2021	-386.45	-13,595.41	-1,105.53	-1,388.52	-1,171.13	650.01	-3,449.42
Nominal Net Worth ($1000)							
2014	1,388.18	6,856.71	3,994.21	5,582.15	7,196.87	14,132.15	7,440.09
2015	1,352.44	5,386.40	3,811.30	5,658.58	7,212.72	14,712.79	7,095.02
2016	1,342.21	4,207.42	3,699.94	5,623.64	7,195.63	14,865.35	6,765.18
2017	1,394.92	3,045.20	3,689.16	5,596.54	7,197.32	15,070.46	6,525.90
2018	1,466.21	1,800.68	3,711.51	5,660.70	7,229.99	15,477.63	6,407.70
2019	1,590.01	534.39	3,780.52	5,734.19	7,199.77	16,007.89	6,242.80
2020	1,604.04	-1,253.42	3,694.56	5,749.20	7,079.21	16,418.74	6,095.69
2021	1,577.85	-3,394.12	3,599.60	5,755.82	6,868.10	17,005.51	5,852.34
Prob. of Negative Ending Cash (%)							
2016	98	99	99	99	97	24	99
2017	96	99	97	99	82	21	99
2018	93	99	93	99	71	24	99
2019	90	99	90	99	72	23	99
2020	86	99	90	99	82	28	99
2021	85	99	89	99	91	30	99
Prob. of Decreasing Real Net Worth							
Over 2014-2021 (%)	1	1	1	1	1	1	1

Figure 25. Rice Farms



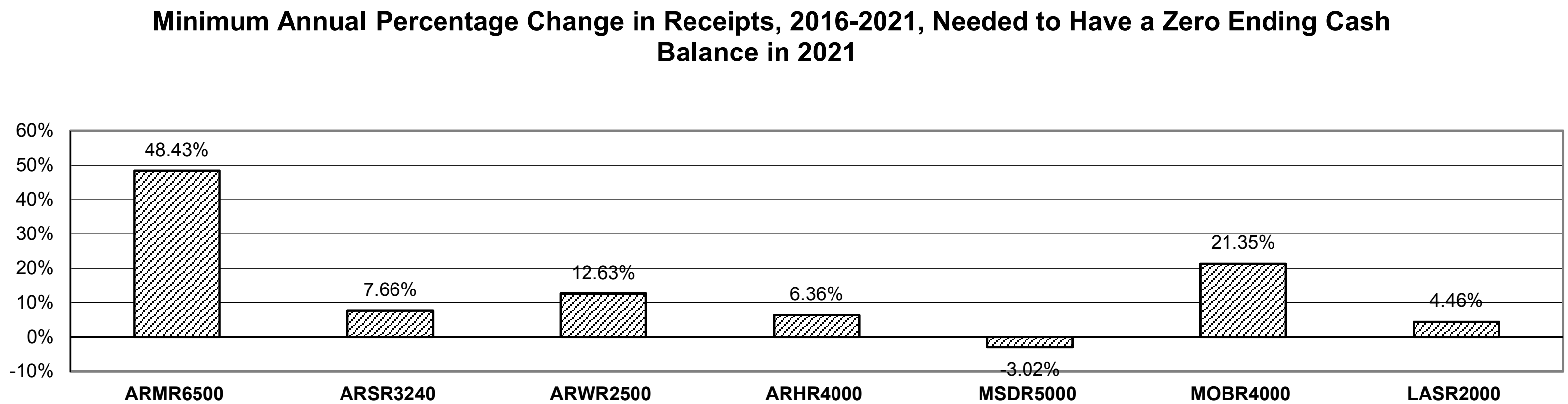


Figure 26. Rice Farms

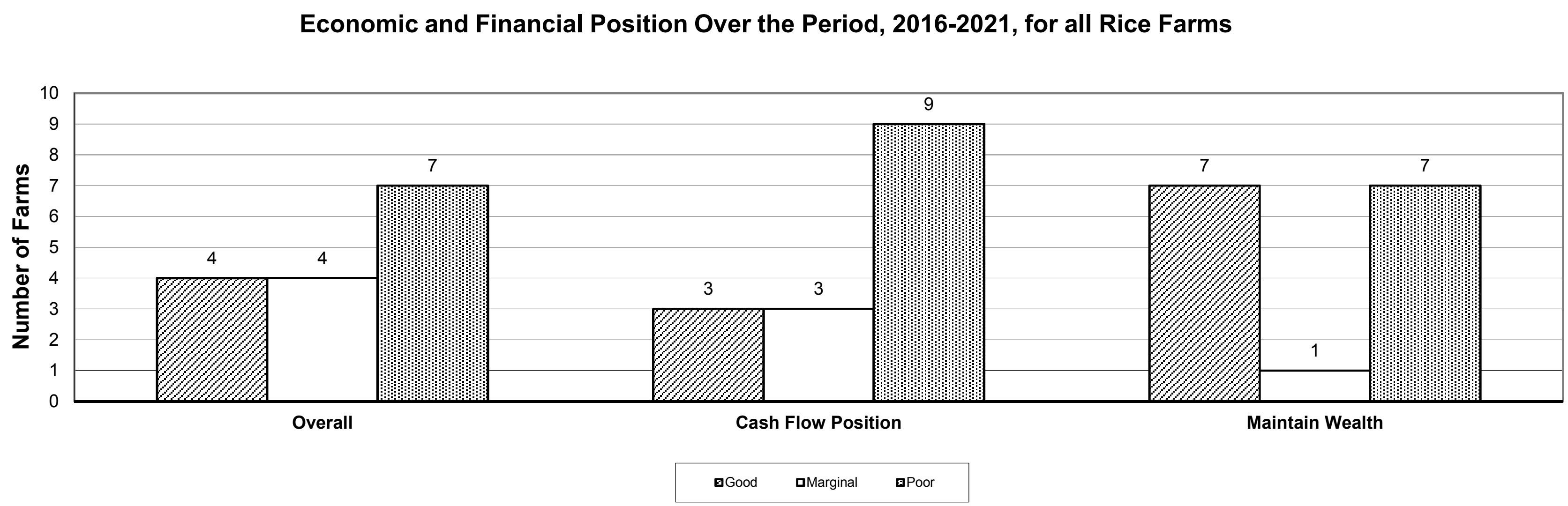


Figure 27. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Rice Farms

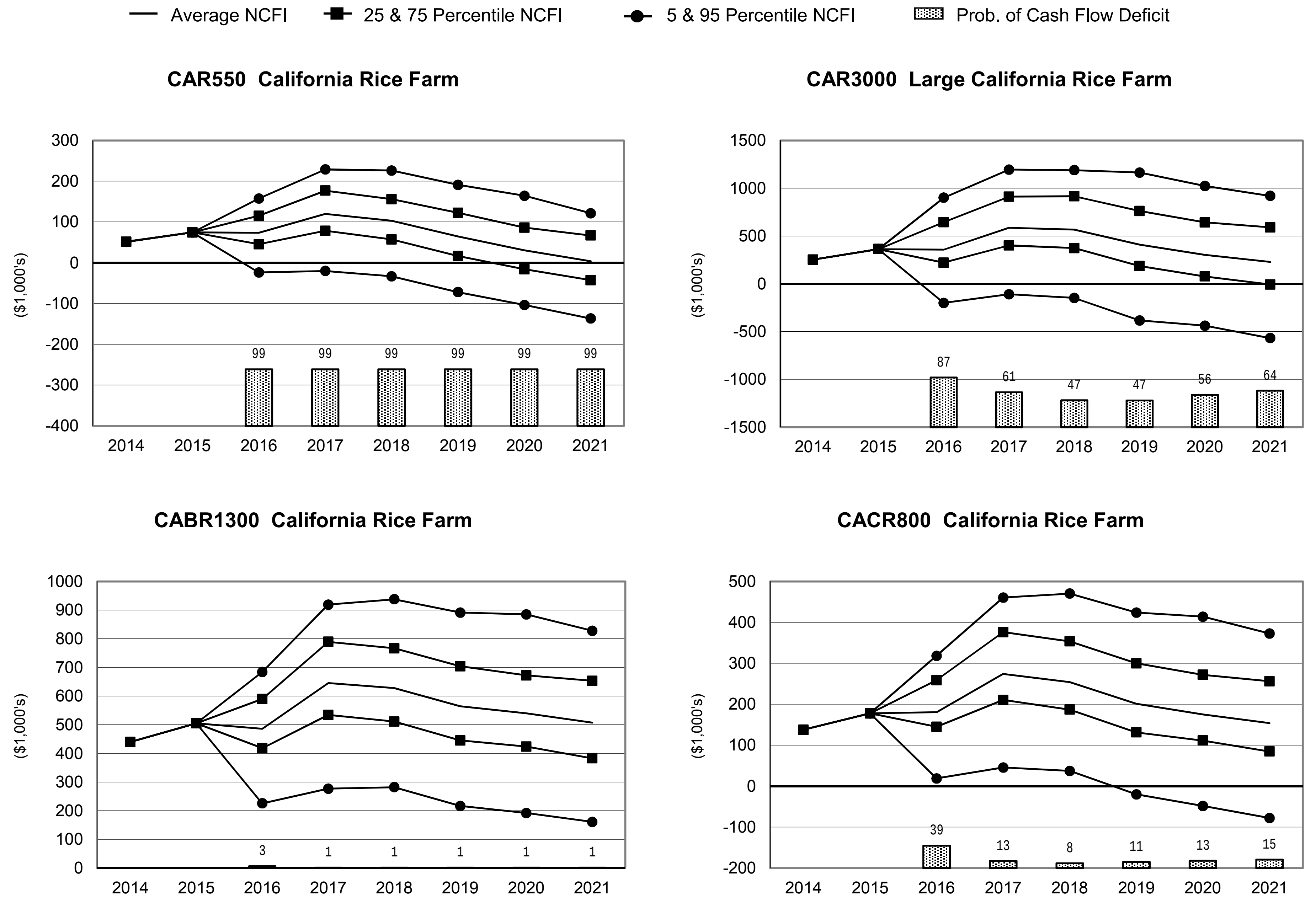
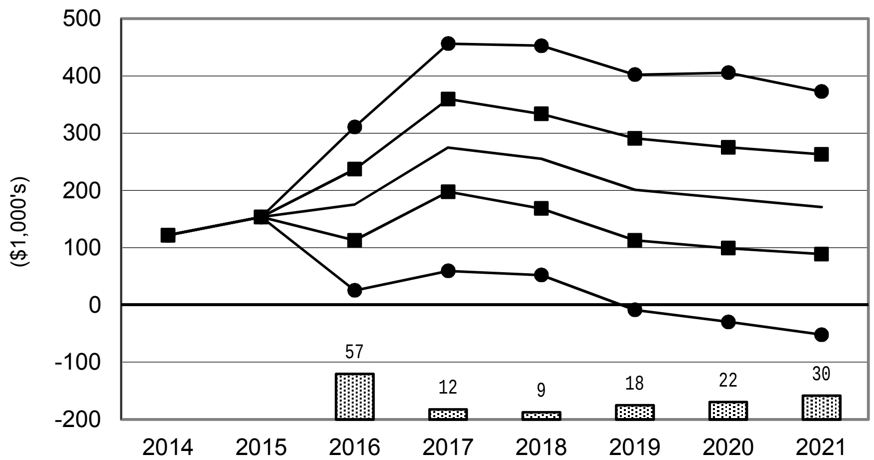


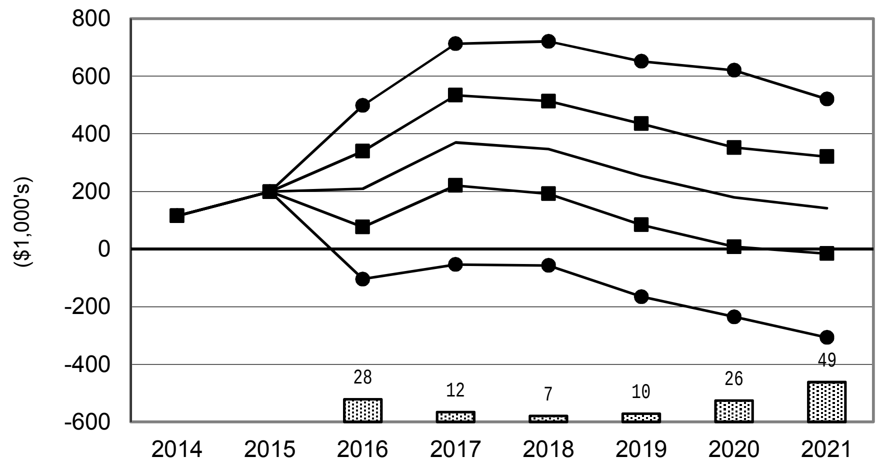
Figure 28. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Rice Farms

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

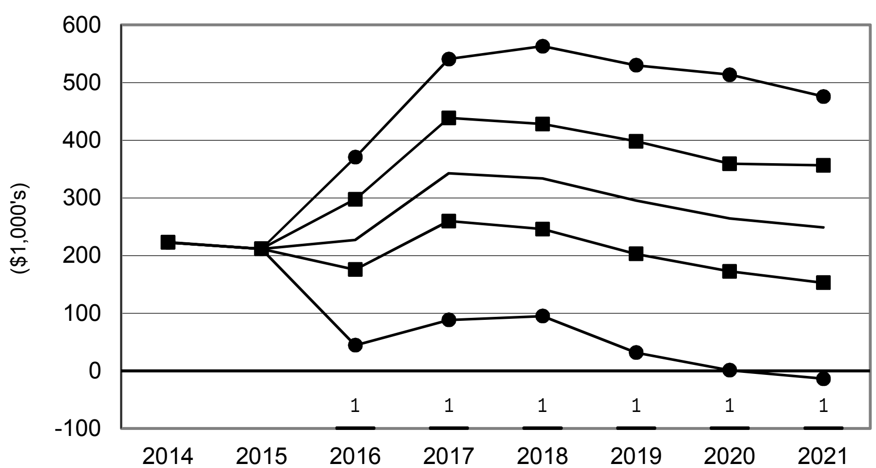
TXR1500 Texas Rice Farm



TXR3000 Large Texas Rice Farm



TXBR1800 Texas Bay City Rice Farm



TXER3200 Texas El Campo Rice Farm

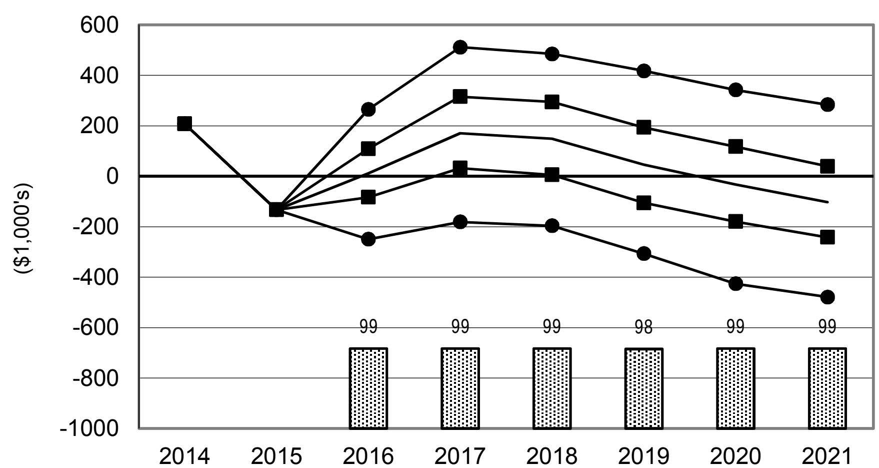


Figure 29. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Rice Farms

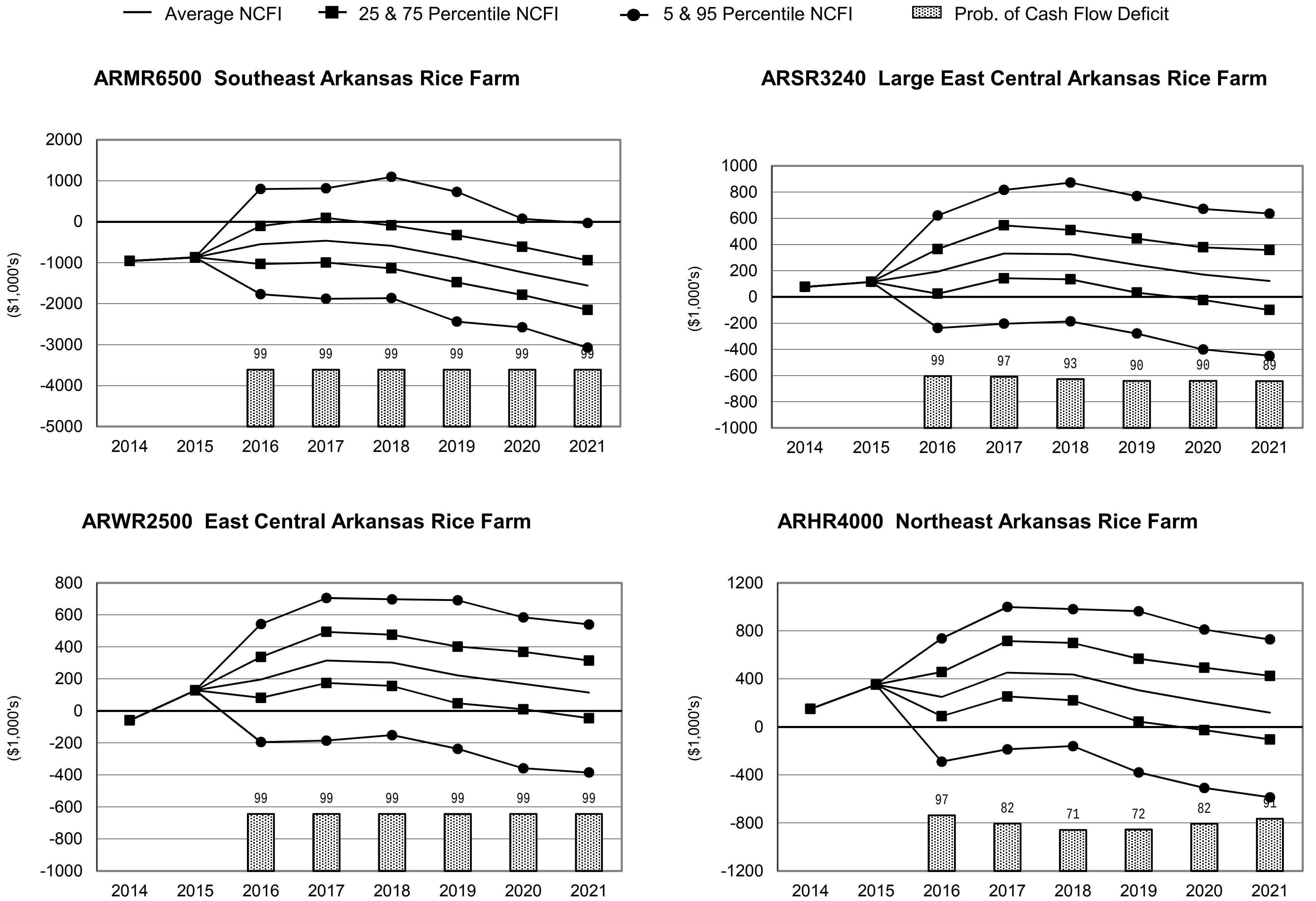
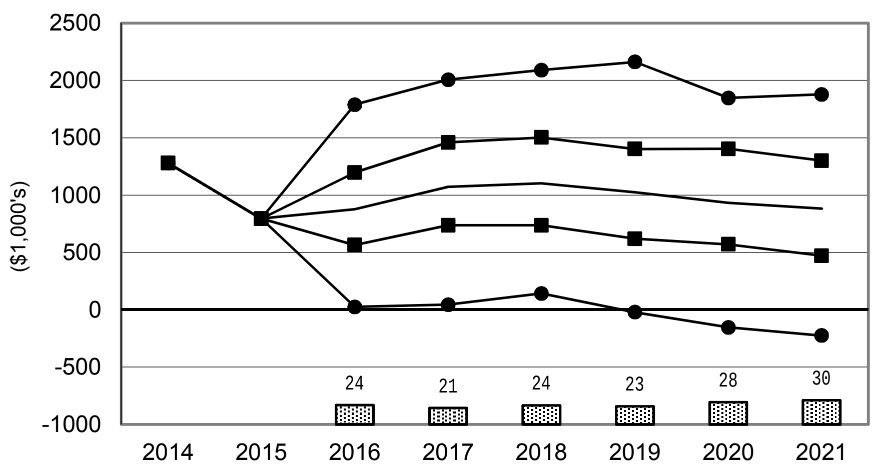


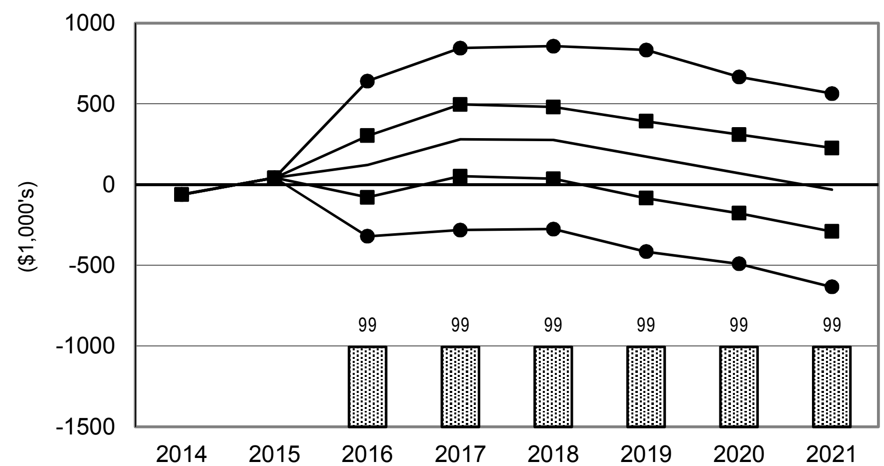
Figure 30. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Rice Farms

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

MSDR5000 Mississippi Delta Rice Farm



MOBR4000 Missouri Bootheel Rice Farm



LASR2000 Southwest Louisiana Rice Farm

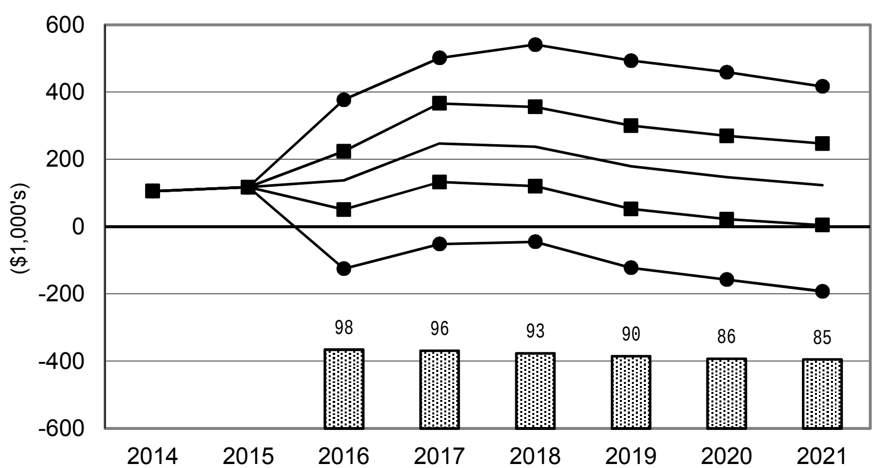


Figure 31. Representative Farms Producing Milk

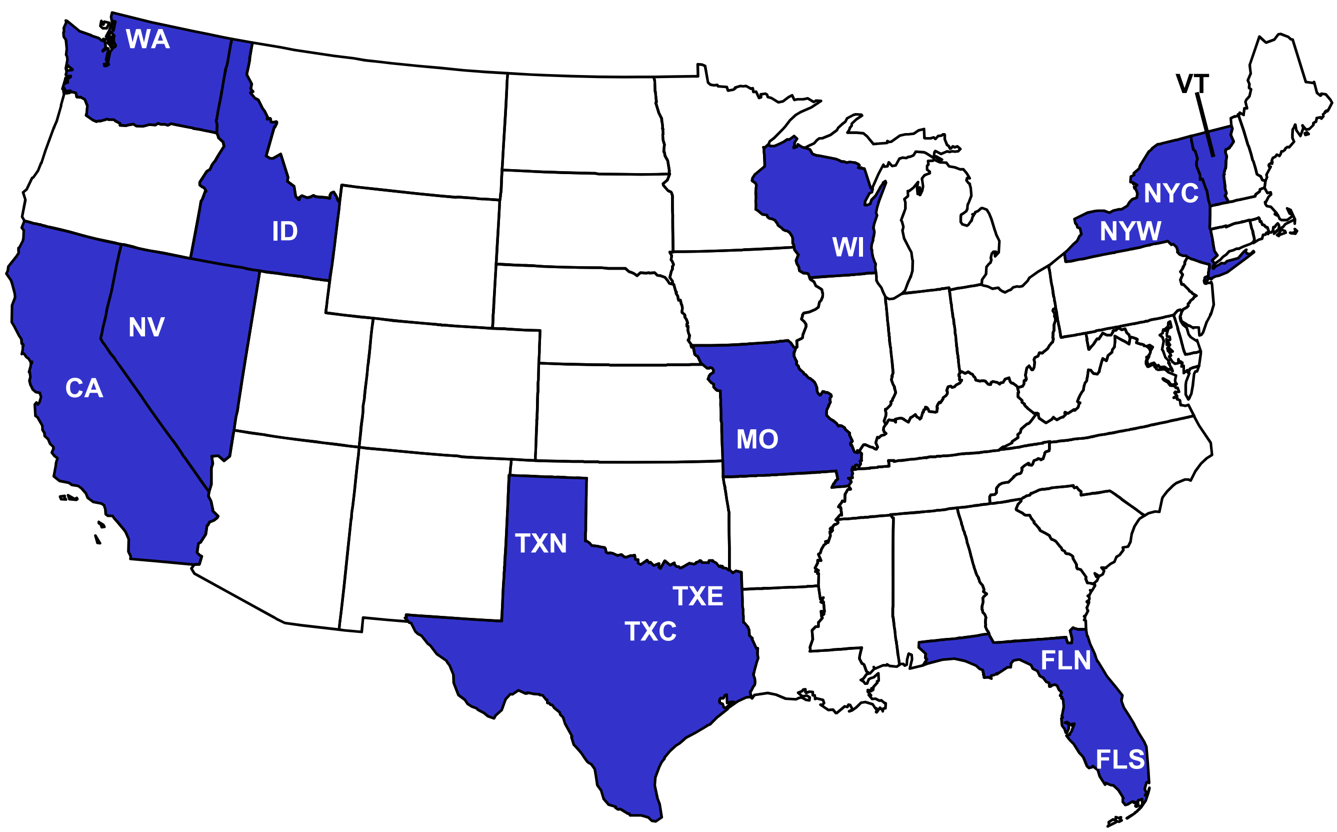


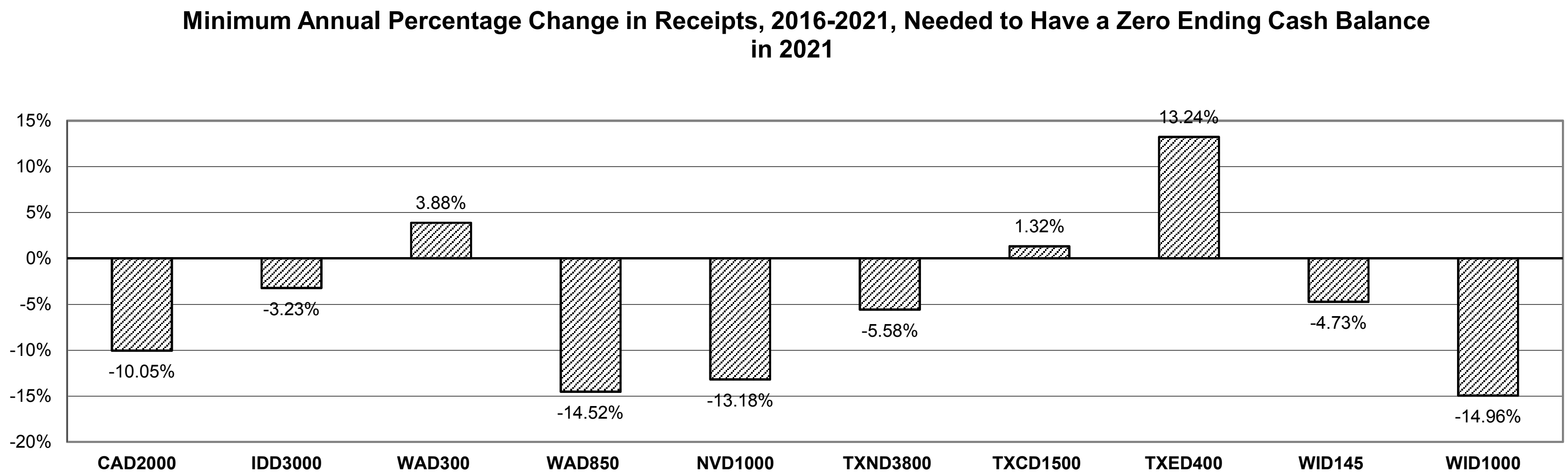
Table 12. Implications of the December 2016 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Milk.

	CAD2000	WAD300	WAD850	IDD3000	NVD1000	TXND3800	TXCD1500	TXED400	WID145	WID1000
Overall Financial Position										
2016-2021 Average	Good	Poor	Good	Marginal	Good	Good	Poor	Poor	Good	Good
Change Real Net Worth (%)										
2016-2021 Average	3.19	-0.83	4.88	1.69	4.50	2.10	-1.16	-4.52	1.89	6.04
NIA to Maintain Real										
Net Worth (%/Rec.)	-5.80	8.13	-10.38	-0.68	-5.98	-1.01	4.91	12.84	-4.62	-9.91
NIA for Zero Ending										
Cash Balance (%/Rec.)	-10.05	3.88	-14.52	-3.22	-13.18	-5.58	1.32	13.24	-4.73	-14.96
Govt Payments/Receipts (%)										
2016-2021 Average	0.01	0.25	0.05	0.00	0.00	0.00	0.00	0.00	0.32	0.11
Cost to Receipts Ratio (%)										
2016-2021 Average	83.67	94.57	80.27	91.61	84.45	89.56	96.39	101.09	74.43	81.93
Total Cash Receipts ($1000)										
2014	12,765.68	1,693.03	6,011.27	19,741.30	6,816.03	23,548.73	8,616.97	1,637.91	1,089.75	7,696.42
2015	9,362.99	1,191.77	4,307.70	14,775.40	4,946.43	17,626.09	6,543.85	1,213.81	837.58	5,861.76
2016	8,823.27	1,105.17	4,004.38	13,292.26	4,587.94	16,163.19	6,036.55	1,110.65	775.93	5,451.01
2017	9,279.51	1,171.75	4,250.78	13,975.30	4,840.77	17,067.26	6,362.41	1,170.74	821.27	5,783.26
2018	9,936.89	1,261.05	4,580.21	14,955.91	5,172.48	18,185.37	6,763.33	1,245.94	868.16	6,141.15
2019	10,265.23	1,309.02	4,751.64	15,487.83	5,335.90	18,726.03	6,960.70	1,283.94	893.40	6,317.21
2020	10,488.21	1,337.85	4,853.53	15,813.83	5,445.57	19,110.44	7,103.49	1,309.98	909.98	6,436.67
2021	10,723.53	1,369.66	4,965.56	16,156.25	5,560.86	19,505.85	7,249.55	1,337.09	925.50	6,552.04
2016-2021 Average	9,919.44	1,259.08	4,567.68	14,946.90	5,157.26	18,126.36	6,746.00	1,243.05	865.71	6,113.55
Government Payments ($1000)										
2014	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2015	0.00	7.37	0.00	0.00	0.00	0.00	0.00	0.00	5.47	0.00
2016	0.00	7.48	0.00	0.00	0.00	0.00	0.00	0.00	5.99	0.00
2017	0.00	5.08	2.39	0.00	0.00	0.00	0.00	0.00	4.38	6.22
2018	0.41	1.67	4.40	0.73	0.00	0.36	0.00	0.00	2.00	18.21
2019	1.35	0.95	2.81	1.07	0.00	0.52	0.00	0.00	1.11	8.75
2020	1.20	0.85	1.77	1.32	0.00	1.51	0.00	0.00	0.94	4.20
2021	1.36	0.93	0.91	1.30	0.00	1.35	0.00	0.00	0.96	3.65
2016-2021 Average	0.72	2.83	2.05	0.74	0.00	0.62	0.00	0.00	2.56	6.84
Net Cash Farm Income ($1000)										
2014	4,503.32	551.76	2,211.37	6,348.37	2,434.31	7,618.18	2,295.28	397.32	453.96	2,594.14
2015	1,659.42	104.84	783.38	2,063.76	905.61	2,585.11	782.07	125.29	225.86	953.90
2016	1,243.78	16.65	513.83	959.83	693.44	1,607.61	213.81	-2.62	177.23	578.68
2017	1,459.09	56.52	671.98	1,117.96	758.67	1,809.58	272.75	15.67	215.41	838.49
2018	1,835.28	112.62	874.28	1,624.46	915.15	2,294.86	416.91	38.33	249.79	1,080.35
2019	1,883.01	124.20	1,243.59	1,772.91	914.82	2,275.62	374.87	15.20	257.11	1,621.56
2020	1,925.88	127.07	1,297.65	1,872.82	916.41	2,315.68	344.95	0.26	257.02	1,649.45
2021	1,973.68	135.82	1,350.07	2,023.75	928.10	2,365.72	329.32	-20.58	256.54	1,657.67
2016-2021 Average	1,720.12	95.48	991.90	1,561.95	854.43	2,111.51	325.44	7.71	235.51	1,237.70
Ending Cash Reserves ($1000)										
2014	2,101.17	267.56	1,073.94	2,775.47	1,199.30	3,991.12	961.71	67.06	149.27	1,265.54
2015	2,092.86	235.86	1,047.95	2,466.24	1,251.33	4,306.01	717.65	-83.61	119.11	1,286.20
2016	1,626.58	102.17	812.07	1,267.76	1,133.60	3,827.86	-44.03	-362.60	14.96	981.45
2017	2,031.03	7.56	1,069.46	1,166.75	1,447.00	3,463.65	-148.47	-445.72	39.57	1,255.39
2018	2,636.92	-53.56	1,449.60	1,373.30	1,889.17	3,362.61	-189.78	-518.21	50.29	1,681.06
2019	3,352.75	-117.16	2,070.55	1,701.90	2,313.32	3,294.35	-236.59	-625.20	85.28	2,525.49
2020	4,101.70	-179.61	2,678.65	2,052.81	2,783.31	4,081.07	-331.46	-754.24	142.96	3,382.70
2021	4,866.96	-246.45	3,352.33	2,443.63	3,242.09	4,907.57	-474.87	-923.92	189.57	4,293.63
Nominal Net Worth ($1000)										
2014	20,724.82	3,901.45	9,561.10	27,456.86	7,147.21	25,593.98	8,654.81	2,494.71	2,681.79	9,711.01
2015	21,368.63	3,865.22	9,845.56	28,121.32	7,466.61	26,223.55	8,938.16	2,330.95	2,750.17	10,037.15
2016	20,520.07	3,597.87	9,547.26	26,357.83	7,112.98	24,418.66	7,984.79	2,024.54	2,670.63	9,538.61
2017	20,610.59	3,455.21	9,655.75	25,890.79	7,264.63	24,368.85	7,658.98	1,868.65	2,667.32	9,662.96
2018	21,346.72	3,414.59	10,063.50	26,268.35	7,660.27	24,961.35	7,584.82	1,778.48	2,704.68	10,107.28
2019	22,285.67	3,390.39	10,768.84	26,920.59	8,056.93	25,673.89	7,523.56	1,671.36	2,784.68	11,021.20
2020	23,386.97	3,415.06	11,535.06	27,916.12	8,565.17	26,597.17	7,490.24	1,581.67	2,894.23	11,994.03
2021	24,776.33	3,465.65	12,502.82	29,409.96	9,141.78	27,821.21	7,517.98	1,499.77	3,014.15	13,144.09
Prob. of Negative Ending Cash (%)										
2016	1	26	7	24	1	1	53	98	47	9
2017	5	49	10	33	1	8	55	97	42	13
2018	4	56	8	36	1	13	55	95	39	10
2019	4	62	5	34	1	19	54	95	37	4
2020	2	65	2	33	1	18	56	96	30	2
2021	2	71	1	31	1	15	59	97	25	1
Prob. of Decreasing Real Net Worth										
Over 2014-2021 (%)	1	1	1	1	1	1	1	1	1	1

Table 13. Implications of the December 2016 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Milk.

	NYWD500	NYWD1200	NYCD180	NYCD675	VTD160	VTD400	MOGD550	MOGD180	FLND550	FLSD1750
Overall Financial Position										
2016-2021 Average	Good	Good	Good	Good	Poor	Good	Good	Good	Good	Good
Change Real Net Worth (%)										
2016-2021 Average	7.92	5.09	1.34	3.72	-3.24	2.78	8.52	6.80	2.39	1.39
NIA to Maintain Real										
Net Worth (%/Rec.)	-19.16	-12.47	-3.52	-15.00	14.53	-5.08	-26.31	-13.42	-1.22	0.46
NIA for Zero Ending										
Cash Balance (%/Rec.)	-27.34	-19.61	-3.80	-17.66	15.28	-6.87	-33.12	-17.88	-4.27	-3.78
Govt Payments/Receipts (%)										
2016-2021 Average	0.24	0.02	0.00	0.00	0.03	0.05	0.00	0.00	0.00	0.00
Cost to Receipts Ratio (%)										
2016-2021 Average	71.42	78.08	77.27	73.37	95.72	82.80	57.40	62.87	89.14	93.85
Total Cash Receipts ($1000)										
2014	3,674.41	8,529.86	1,186.15	4,719.29	986.05	3,125.13	1,874.49	682.46	3,603.05	11,039.59
2015	2,793.29	6,340.64	863.82	3,424.12	753.48	2,323.12	1,499.41	543.43	2,813.38	8,651.17
2016	2,616.07	5,892.80	799.09	3,170.21	701.68	2,184.41	1,376.63	500.91	2,565.82	7,918.13
2017	2,766.81	6,224.66	841.52	3,349.38	737.80	2,301.85	1,444.68	526.99	2,670.20	8,250.75
2018	2,938.69	6,676.18	899.86	3,592.98	787.66	2,452.29	1,527.76	558.17	2,821.12	8,722.18
2019	3,026.31	6,892.57	928.25	3,711.98	812.20	2,525.09	1,571.59	574.80	2,897.19	8,963.76
2020	3,086.93	7,035.28	946.88	3,788.97	828.80	2,570.30	1,602.27	586.29	2,962.19	9,168.55
2021	3,154.61	7,192.96	968.12	3,875.02	846.49	2,617.52	1,630.92	596.57	3,016.81	9,337.55
2016-2021 Average	2,931.57	6,652.41	897.29	3,581.43	785.77	2,441.91	1,525.64	557.29	2,822.22	8,726.82
Government Payments ($1000)										
2014	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2015	0.00	0.00	0.00	0.00	0.78	3.88	0.00	0.00	0.00	0.00
2016	4.71	0.00	0.00	0.00	0.63	3.14	0.00	0.00	0.00	0.00
2017	19.40	0.00	0.00	0.00	0.33	1.47	0.00	0.00	0.00	0.00
2018	8.02	5.66	0.00	0.00	0.15	0.68	0.00	0.00	0.00	0.00
2019	3.59	1.54	0.00	0.00	0.12	0.55	0.00	0.00	0.00	0.00
2020	2.95	1.02	0.00	0.00	0.12	0.56	0.00	0.00	0.00	0.00
2021	2.60	0.71	0.00	0.00	0.14	0.61	0.00	0.00	0.00	0.00
2016-2021 Average	6.88	1.49	0.00	0.00	0.25	1.17	0.00	0.00	0.00	0.00
Net Cash Farm Income ($1000)										
2014	1,621.33	3,502.08	501.72	2,117.83	265.10	1,121.17	984.77	345.69	1,097.97	2,833.63
2015	839.07	1,525.29	215.40	968.94	76.34	466.62	655.49	210.34	471.49	1,135.16
2016	683.30	1,104.38	151.67	723.68	16.79	306.98	570.85	186.01	247.87	389.02
2017	789.67	1,317.72	183.60	865.07	37.08	388.07	617.06	198.17	293.80	530.17
2018	903.75	1,614.80	224.22	1,044.26	60.55	481.34	675.45	216.65	371.48	745.99
2019	917.90	1,668.85	232.57	1,081.67	53.96	492.96	698.43	223.01	365.34	706.34
2020	925.33	1,694.12	237.62	1,093.52	45.65	491.39	710.05	227.26	381.69	764.65
2021	936.11	1,727.11	243.70	1,116.15	35.66	483.14	723.45	228.66	382.65	750.03
2016-2021 Average	859.34	1,521.17	212.23	987.39	41.61	440.65	665.88	213.29	340.47	647.70
Ending Cash Reserves ($1000)										
2014	943.09	1,892.97	194.88	946.04	61.89	450.48	430.79	146.51	460.81	1,319.46
2015	1,212.63	2,321.14	155.45	1,059.38	-59.47	439.54	578.81	175.18	447.35	1,292.91
2016	1,356.76	2,333.41	72.45	928.76	-216.26	255.11	670.10	178.24	246.44	650.15
2017	1,780.75	2,958.48	83.98	1,249.33	-284.75	310.54	940.16	234.75	286.78	721.90
2018	2,239.09	3,755.42	101.27	1,601.04	-343.03	440.84	1,246.61	302.18	360.18	952.12
2019	2,813.15	4,586.26	118.34	1,947.56	-410.95	543.75	1,562.82	383.81	431.29	1,184.16
2020	3,354.17	5,431.20	129.00	2,368.16	-485.45	646.14	1,891.61	468.05	505.62	1,436.04
2021	3,909.16	6,333.43	161.51	2,803.40	-561.20	780.25	2,207.94	553.97	587.02	1,683.60
Nominal Net Worth ($1000)										
2014	4,818.49	12,631.28	3,003.17	10,257.53	1,632.94	5,074.94	2,969.05	980.57	3,601.31	11,405.42
2015	5,328.97	13,634.90	3,132.61	11,068.66	1,576.20	5,036.12	3,241.55	1,052.91	3,825.23	11,768.07
2016	5,415.86	13,517.87	3,066.17	10,987.41	1,328.53	4,855.91	3,298.01	1,050.70	3,549.07	10,830.85
2017	5,761.06	13,929.92	3,033.45	11,197.12	1,240.43	4,897.57	3,546.40	1,102.38	3,535.33	10,698.58
2018	6,224.84	14,739.82	3,071.75	11,634.73	1,190.06	5,076.66	3,884.34	1,182.50	3,632.78	10,888.04
2019	6,827.61	15,648.78	3,131.10	12,134.29	1,137.56	5,277.22	4,250.29	1,281.35	3,745.36	11,103.60
2020	7,418.58	16,669.11	3,208.17	12,797.63	1,099.23	5,462.58	4,631.39	1,381.34	3,894.36	11,424.08
2021	8,094.37	17,883.23	3,358.53	13,622.18	1,083.70	5,740.89	5,046.81	1,496.50	4,105.49	11,876.18
Prob. of Negative Ending Cash (%)										
2016	1	1	18	1	99	9	1	1	19	24
2017	1	1	19	1	99	13	1	1	24	30
2018	1	1	21	1	99	11	1	2	23	29
2019	1	1	22	1	99	9	1	1	22	28
2020	1	1	22	1	99	8	1	1	22	28
2021	1	1	20	1	99	6	1	1	21	24
Prob. of Decreasing Real Net Worth										
Over 2014-2021 (%)	1	1	1	1	1	1	1	1	1	1

Figure 32. Dairy Farms



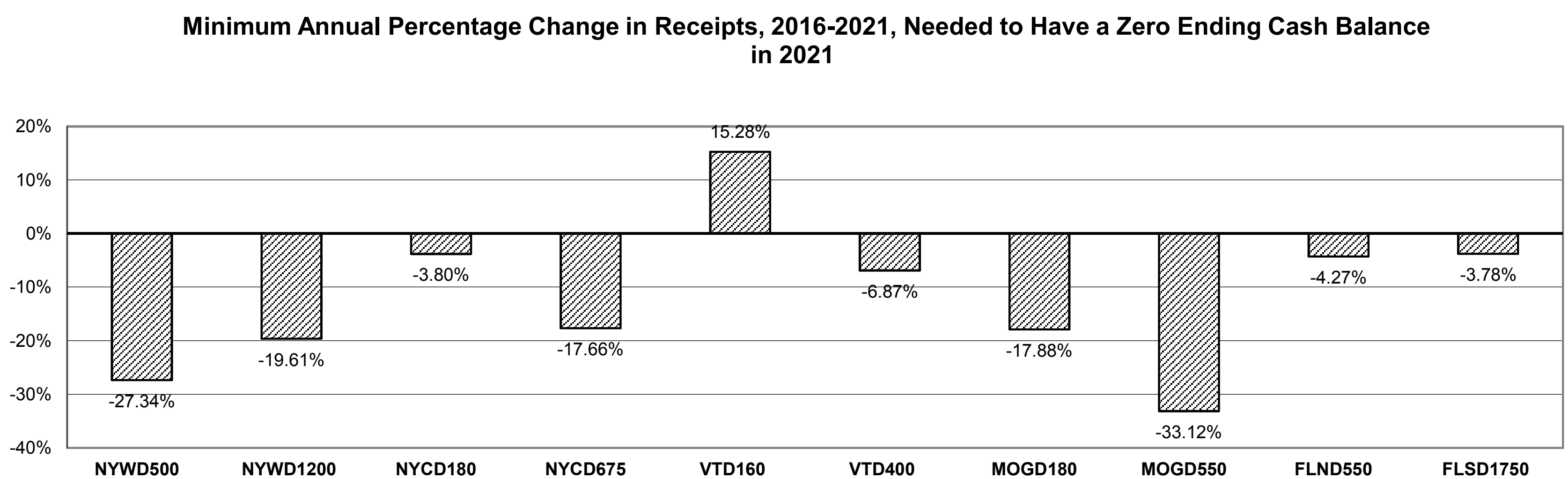


Figure 33. Dairy Farms

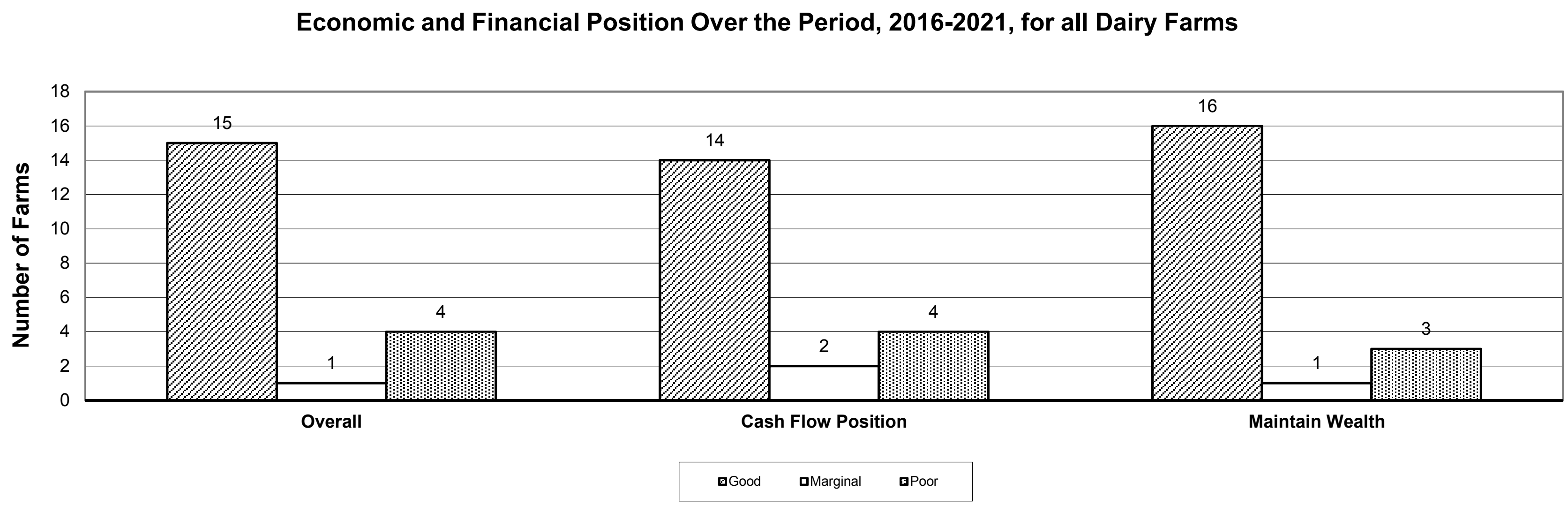


Figure 34. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Dairy Farms

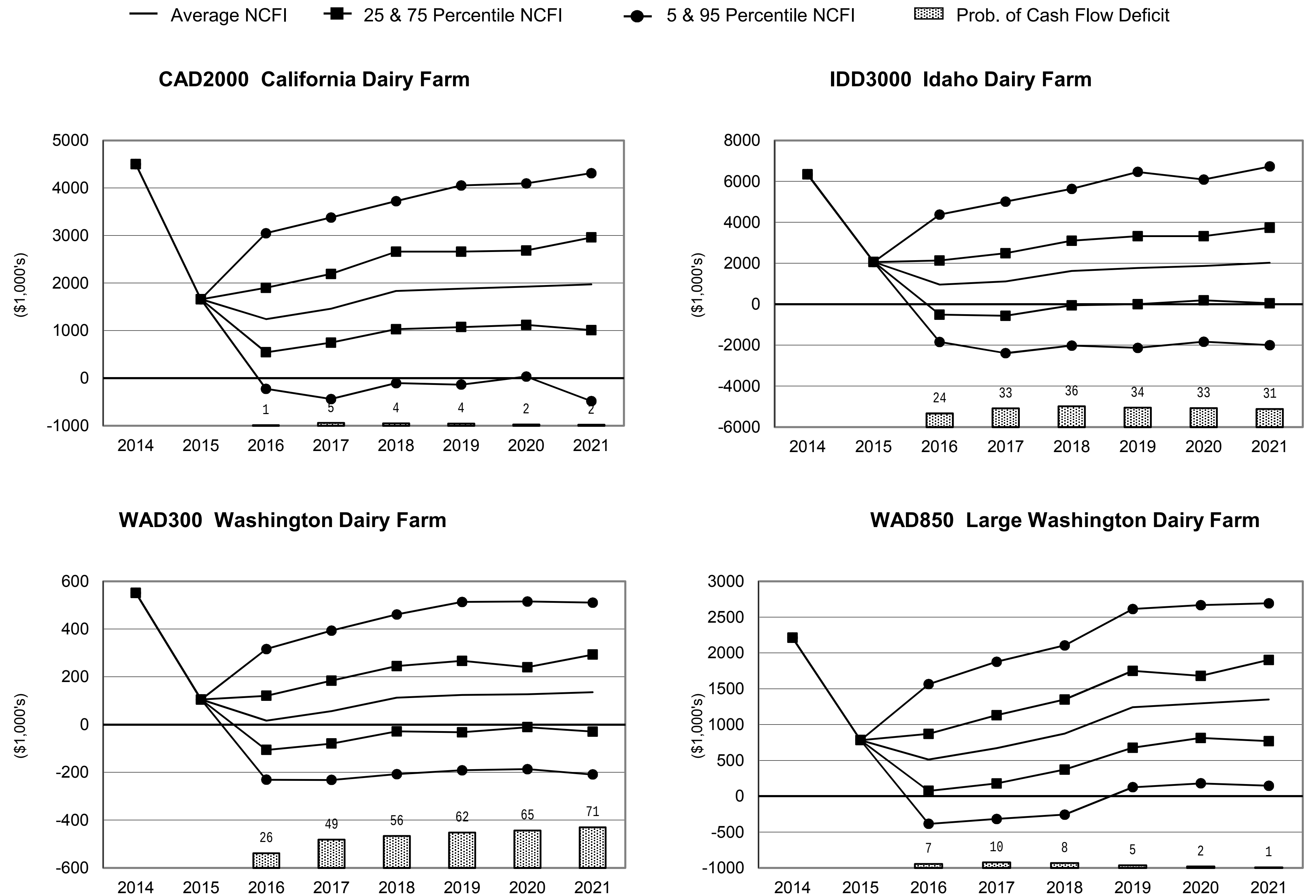


Figure 35. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Dairy Farms

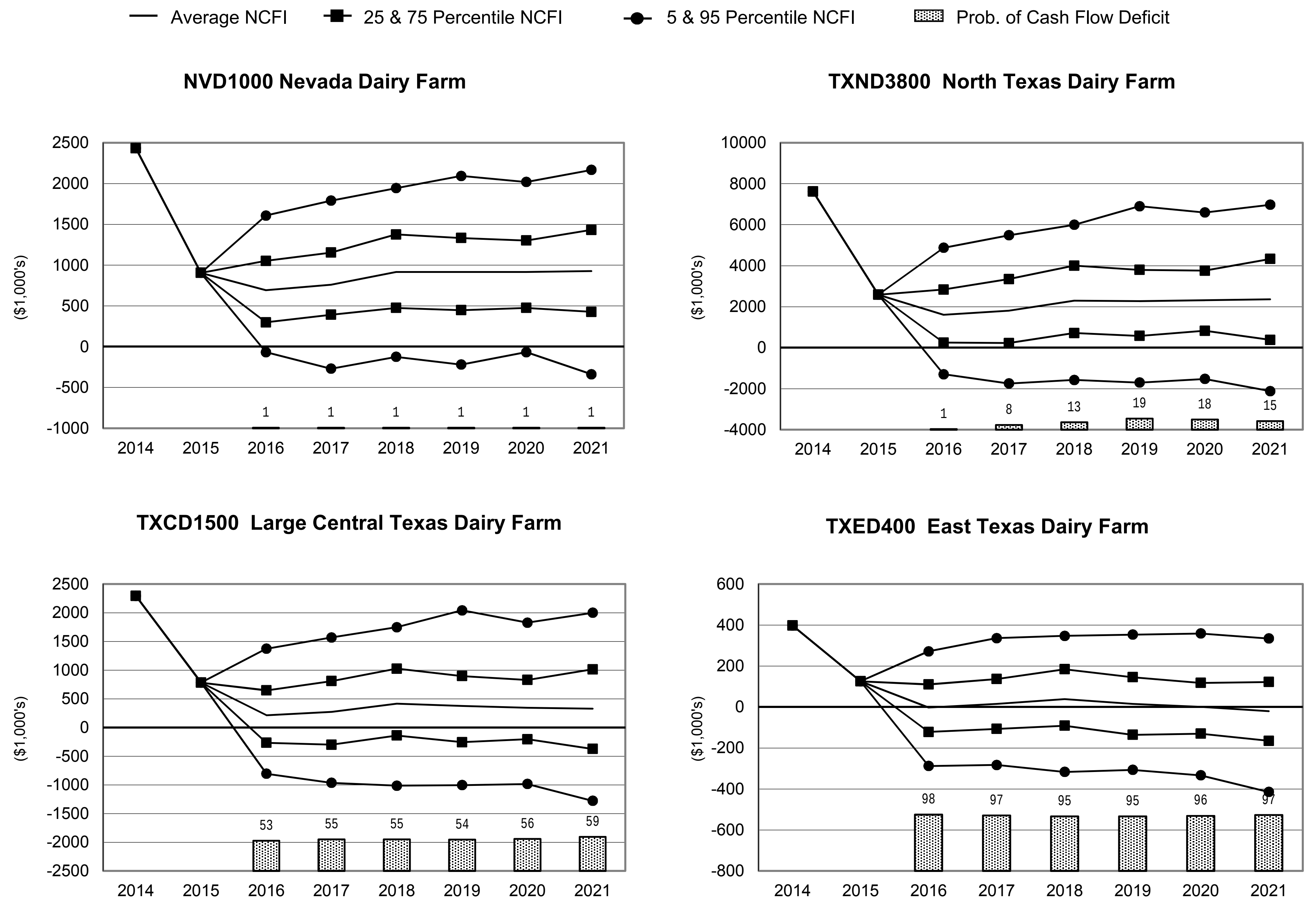


Figure 36. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Dairy Farms

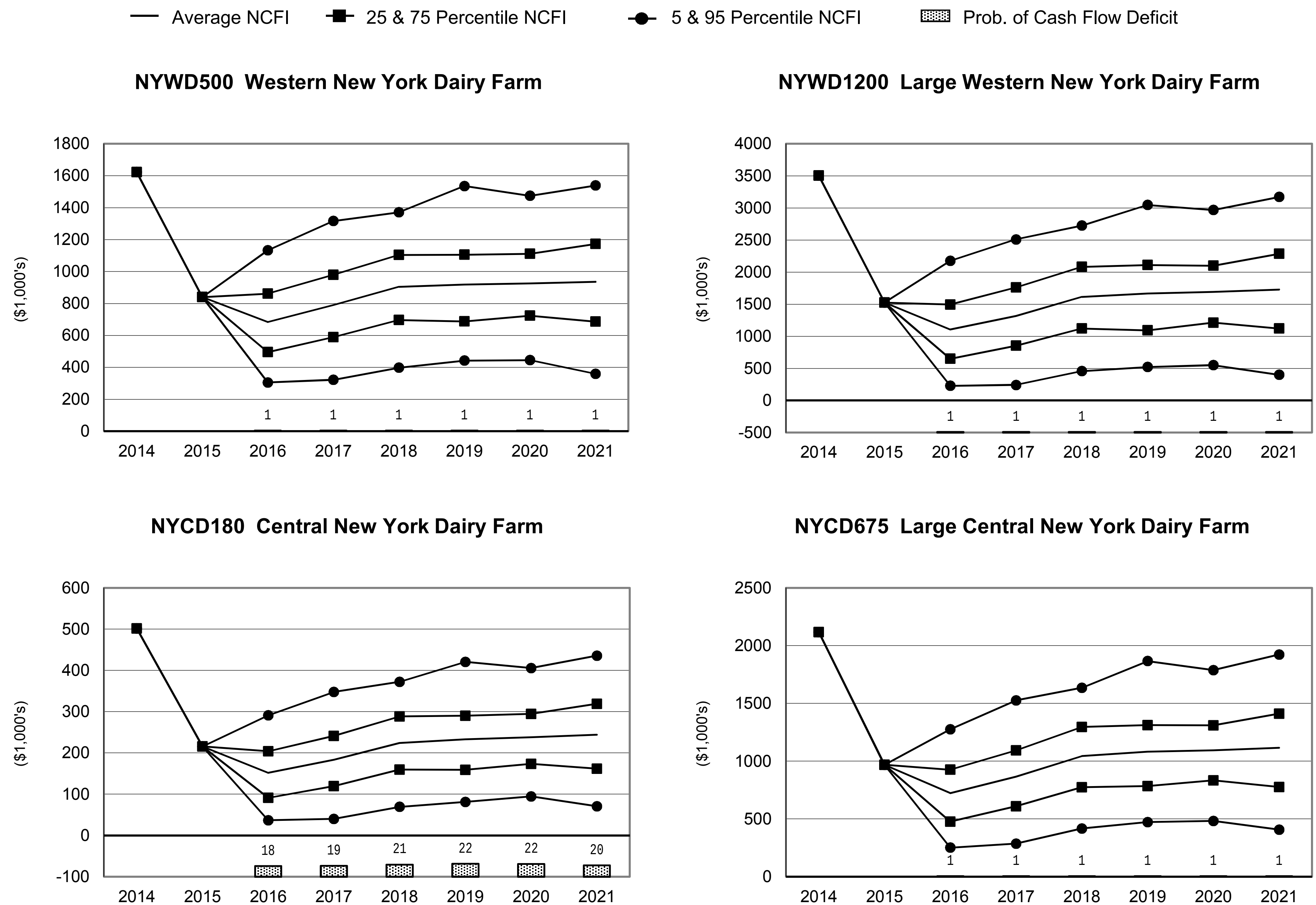


Figure 37. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Dairy Farms

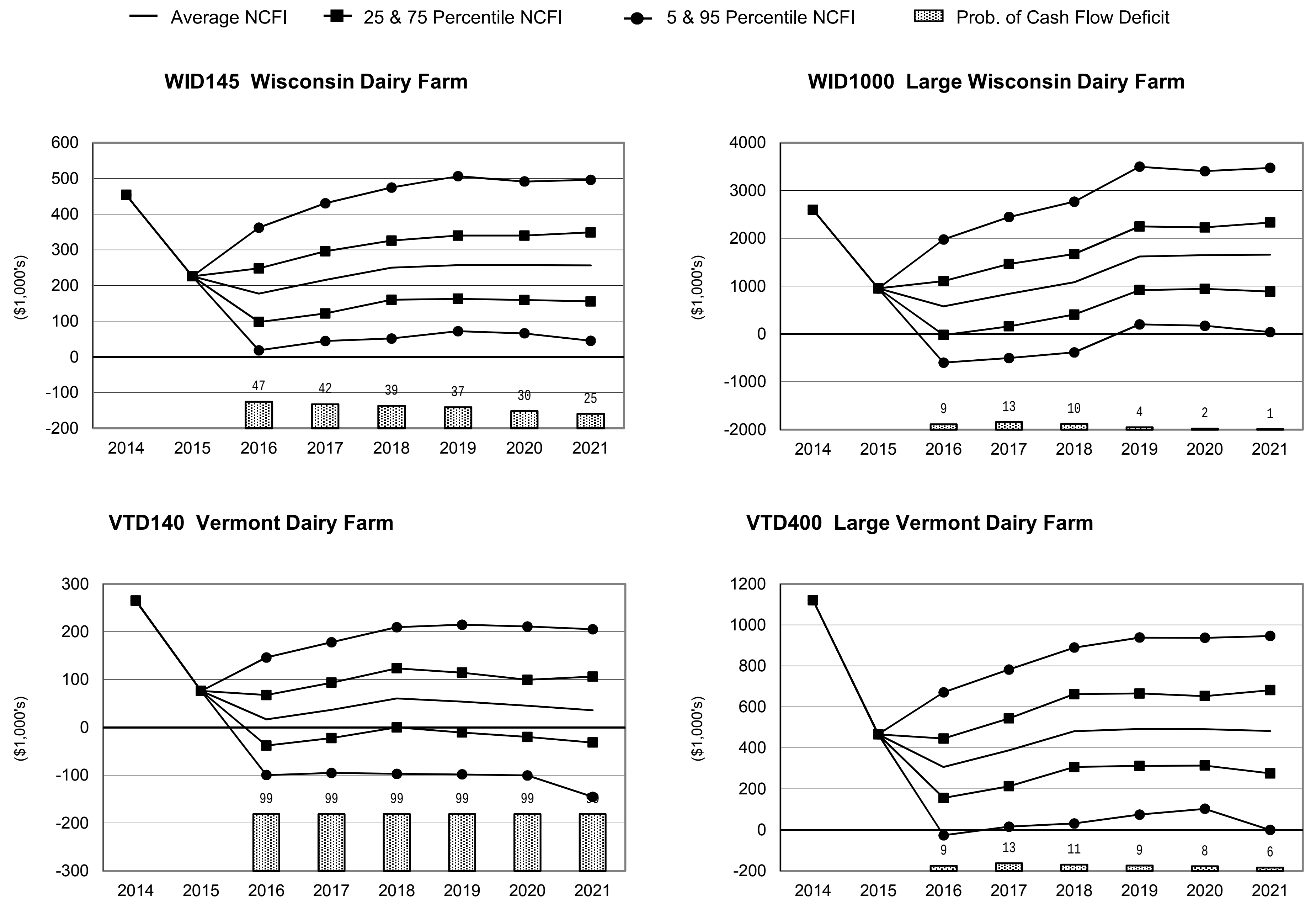
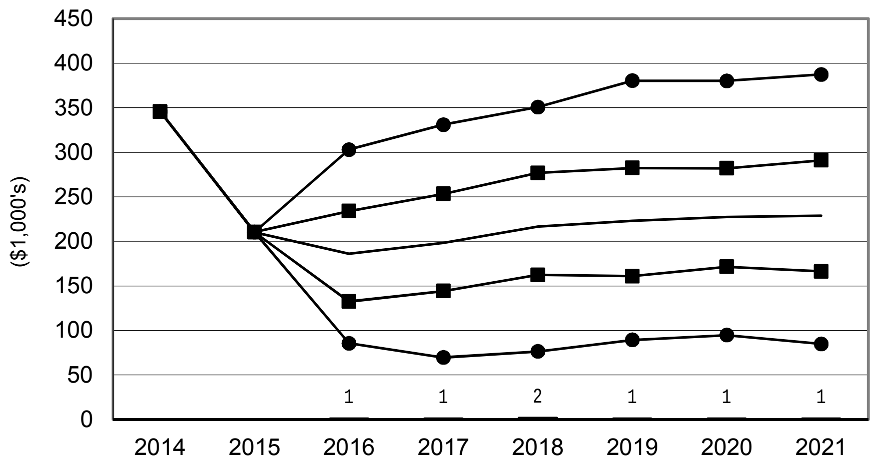


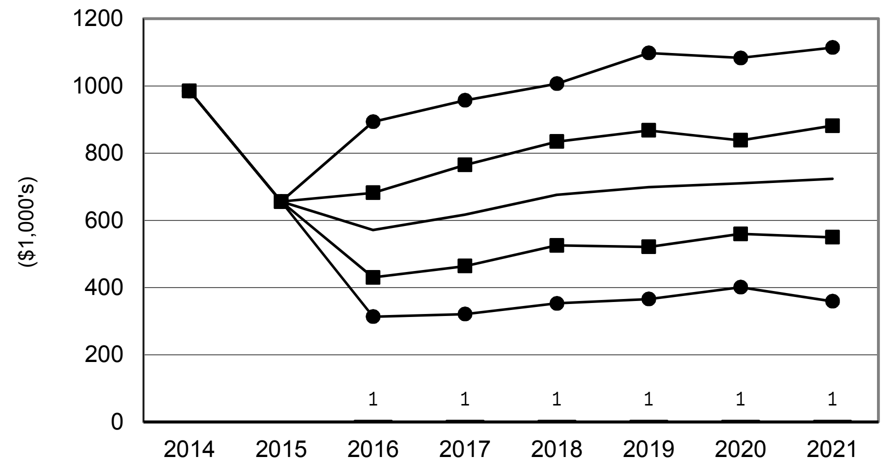
Figure 38. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Dairy Farms

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

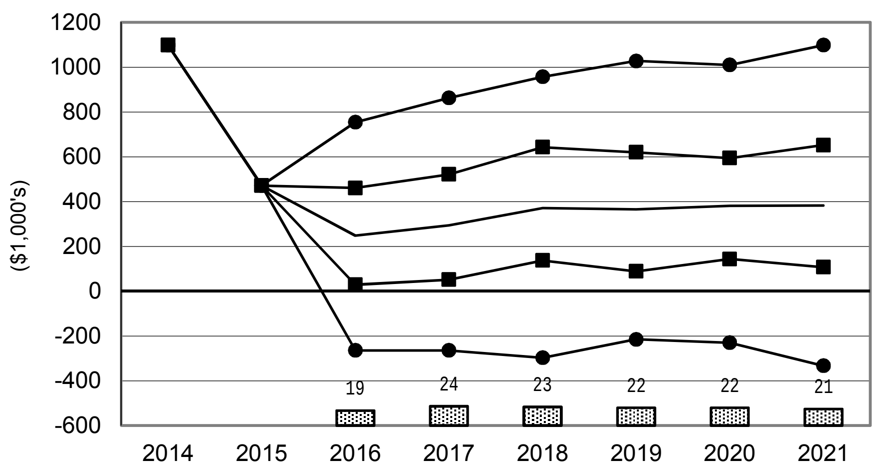
MOGD180 Missouri Grazing Dairy Farm



MOGD550 Missouri Confinement Dairy Farm



FLND550 Northern Florida Dairy Farm



FLSD1750 Southern Florida Dairy Farm

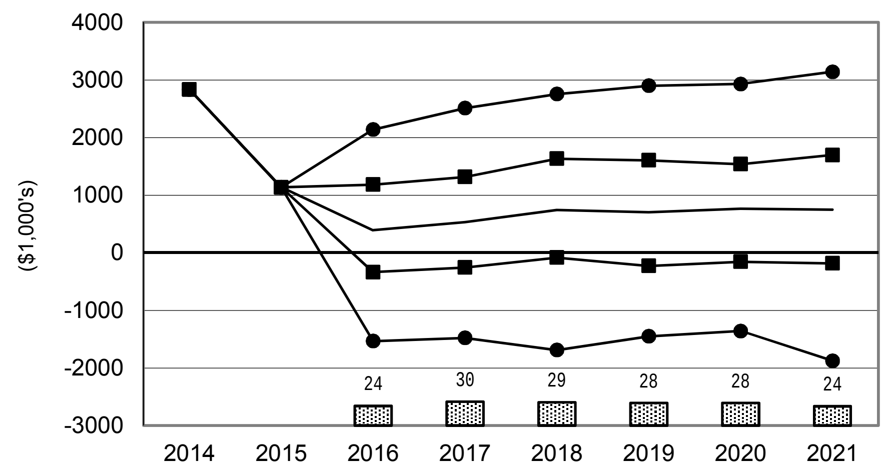


Figure 39. Representative Ranches Producing Beef Cattle

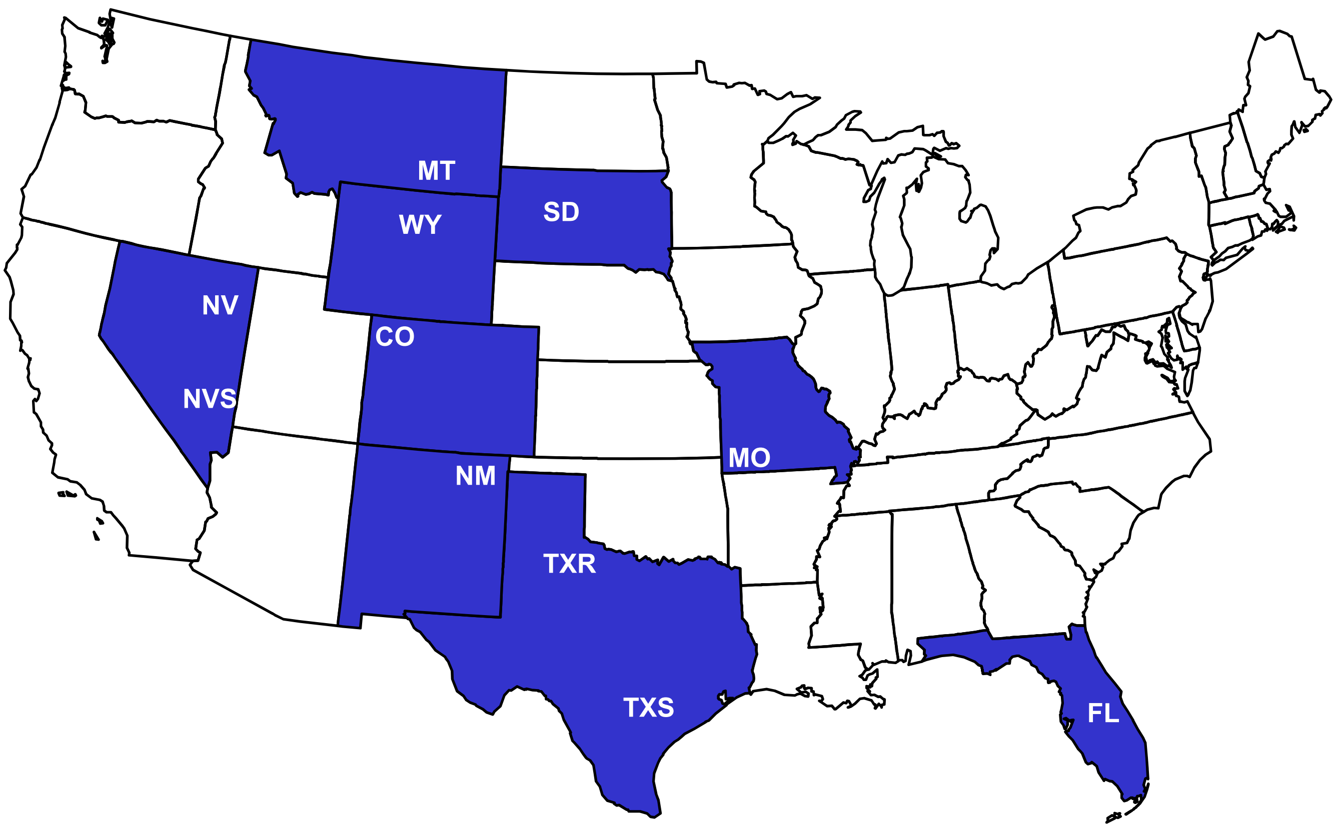


Table 14. Implications of the December 2016 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Beef Cattle.

	NVB650	NVSB550	MTB600	WYB475	COB275	NMB240	SDB375	MOB250	TXRB400	TXSB275	FLB1155
Overall Financial Position											
2016-2021 Average	Marginal	Good	Marginal	Poor	Marginal	Marginal	Poor	Good	Marginal	Poor	Good
Change Real Net Worth (%)											
2016-2021 Average	-0.36	1.49	-0.83	-4.23	-0.47	-0.60	-0.77	0.27	-0.71	-1.15	-0.08
NIA to Maintain Real											
Net Worth (%/Rec.)	21.78	0.00	41.30	53.47	80.45	38.01	48.68	5.56	35.28	51.50	27.32
NIA for Zero Ending											
Cash Balance (%/Rec.)	-17.19	-31.47	-4.13	16.73	-14.59	-5.80	5.30	-20.77	-6.94	15.36	-30.51
Govt Payments/Receipts (%)											
2016-2021 Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.80	0.00	0.00	0.00
Cost to Receipts Ratio (%)											
2016-2021 Average	71.62	60.32	80.82	97.81	73.03	57.32	75.18	51.22	77.01	80.98	68.32
Total Cash Receipts ($1000)											
2014	831.32	735.28	688.01	769.23	402.99	343.93	458.21	477.25	650.25	350.25	1,195.71
2015	812.27	734.58	676.14	696.67	398.27	346.29	456.80	462.98	643.12	350.55	1,194.47
2016	620.73	565.56	481.82	477.01	260.55	263.05	328.96	367.15	477.25	265.86	889.09
2017	587.75	543.96	449.08	447.41	255.75	251.49	307.52	366.86	450.98	249.72	837.73
2018	562.14	522.87	422.30	424.52	250.93	238.92	290.67	358.12	428.90	239.97	797.64
2019	543.70	507.12	403.82	407.95	242.89	232.59	277.84	351.94	412.47	229.30	766.72
2020	542.08	506.96	403.19	409.33	243.20	230.61	277.39	352.24	413.68	229.11	764.96
2021	558.28	522.57	419.66	427.21	250.43	239.18	288.01	360.22	425.82	238.31	791.54
2016-2021 Average	569.11	528.17	429.98	432.24	250.63	242.64	295.07	359.42	434.85	242.04	807.95
Government Payments ($1000)											
2014	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2015	0.00	0.00	0.00	0.00	25.00	0.00	0.00	1.53	0.00	0.00	0.00
2016	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.69	0.00	0.00	0.00
2017	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.43	0.00	0.00	0.00
2018	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.12	0.00	0.00	0.00
2019	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.45	0.00	0.00	0.00
2020	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.87	0.00	0.00	0.00
2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.54	0.00	0.00	0.00
2016-2021 Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.35	0.00	0.00	0.00
Net Cash Farm Income ($1000)											
2014	315.51	408.42	324.55	398.36	211.15	203.32	229.21	273.24	257.42	153.13	584.88
2015	411.30	423.29	318.37	324.37	217.85	202.27	234.43	273.95	260.52	161.93	619.52
2016	236.39	269.83	151.70	88.18	93.71	134.08	125.05	196.96	156.36	85.01	372.74
2017	203.33	239.93	119.98	60.65	83.91	115.62	102.76	192.46	131.29	75.73	314.77
2018	168.22	215.29	93.61	23.61	75.15	101.27	79.58	177.15	104.18	46.73	260.90
2019	135.14	190.20	61.69	-9.38	60.45	91.87	61.31	167.85	83.82	36.04	213.84
2020	123.03	180.04	47.66	-32.69	56.59	92.27	46.71	164.56	69.65	28.34	201.53
2021	127.53	178.22	54.78	-31.92	52.31	94.44	47.97	167.89	76.80	21.91	215.59
2016-2021 Average	165.61	212.25	88.23	16.41	70.35	104.92	77.23	177.81	103.68	48.96	263.23
Ending Cash Reserves ($1000)											
2014	146.11	209.48	141.85	179.02	152.69	60.78	73.43	126.98	102.21	17.48	247.93
2015	365.56	459.34	265.59	279.81	288.60	149.03	177.23	246.13	205.74	57.63	537.07
2016	434.76	566.63	270.43	199.03	302.06	173.18	156.54	291.33	233.98	16.28	710.08
2017	500.13	665.01	265.32	110.48	292.06	172.95	134.82	345.42	244.31	-29.71	877.26
2018	523.66	735.84	234.29	-16.49	267.43	160.10	108.10	365.09	231.43	-76.28	1,002.40
2019	515.04	783.46	186.15	-152.52	239.34	127.04	41.16	384.58	197.62	-122.50	1,072.45
2020	518.87	833.11	143.14	-279.21	206.47	105.99	-32.59	401.57	150.97	-175.75	1,121.06
2021	503.25	883.65	92.85	-404.47	162.79	87.99	-79.62	415.26	105.91	-234.43	1,193.07
Nominal Net Worth ($1000)											
2014	8,541.03	2,715.33	8,408.65	3,335.43	16,423.17	7,387.97	7,941.64	3,250.96	8,850.32	5,240.40	25,413.69
2015	8,502.68	2,991.18	8,667.17	3,222.78	14,699.29	7,633.36	8,242.71	3,364.97	9,143.97	5,372.42	26,262.23
2016	8,123.14	2,781.46	8,256.18	2,803.08	14,405.87	7,458.89	7,949.65	3,247.43	8,830.71	5,163.56	25,766.41
2017	7,984.72	2,810.87	8,037.77	2,629.77	14,079.92	7,284.44	7,763.26	3,223.91	8,625.66	4,997.13	25,317.68
2018	7,930.07	2,845.48	7,921.17	2,461.62	13,959.46	7,211.81	7,681.95	3,222.84	8,524.81	4,920.58	25,235.01
2019	7,884.50	2,879.03	7,843.29	2,305.26	13,934.82	7,163.78	7,595.72	3,237.88	8,461.66	4,876.89	25,264.63
2020	7,925.67	2,950.24	7,850.26	2,189.86	13,997.02	7,185.35	7,594.08	3,271.17	8,462.50	4,849.52	25,460.77
2021	8,060.64	3,067.34	7,953.33	2,117.41	14,200.81	7,290.62	7,688.79	3,346.45	8,574.33	4,875.42	26,000.00
Prob. of Negative Ending Cash (%)											
2016	1	1	1	1	1	1	1	1	1	32	1
2017	1	1	1	5	1	1	1	1	1	74	1
2018	1	1	1	59	1	1	2	1	1	93	1
2019	1	1	2	95	1	1	26	1	1	98	1
2020	1	1	6	99	1	2	70	1	2	99	1
2021	1	1	17	99	1	5	87	1	11	99	1
Prob. of Decreasing Real Net Worth											
Over 2014-2021 (%)	1	1	1	1	1	1	1	1	1	1	1

Figure 40. Beef Cattle Ranches

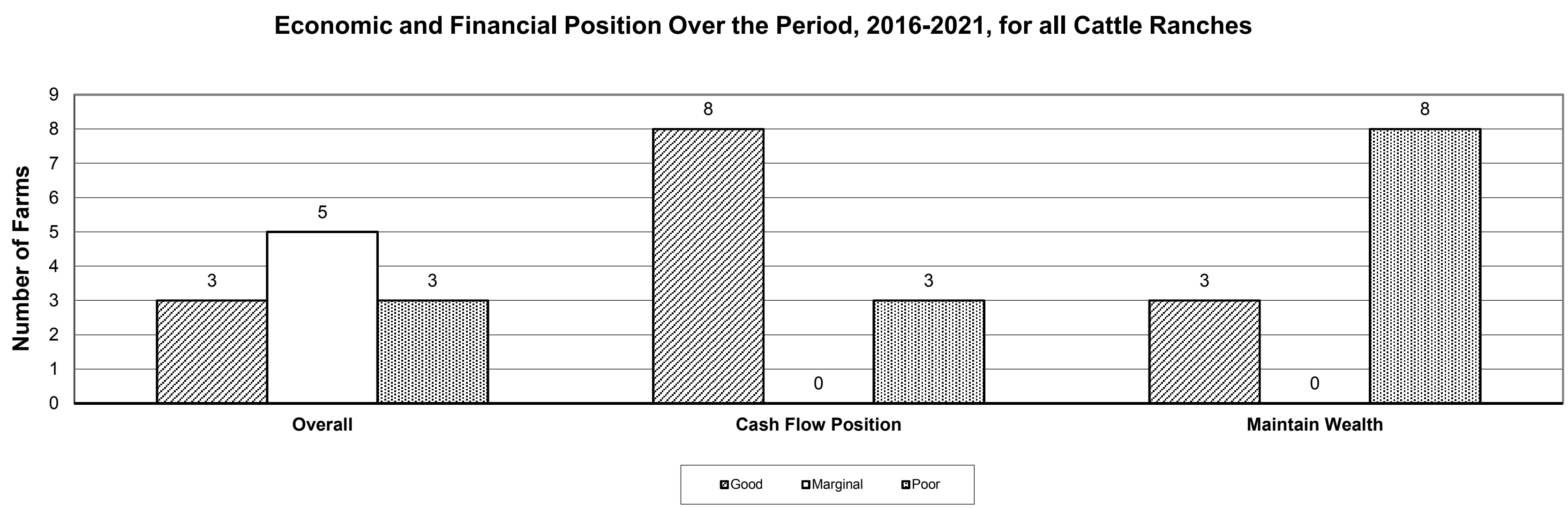


Figure 41. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Beef Cattle Ranches

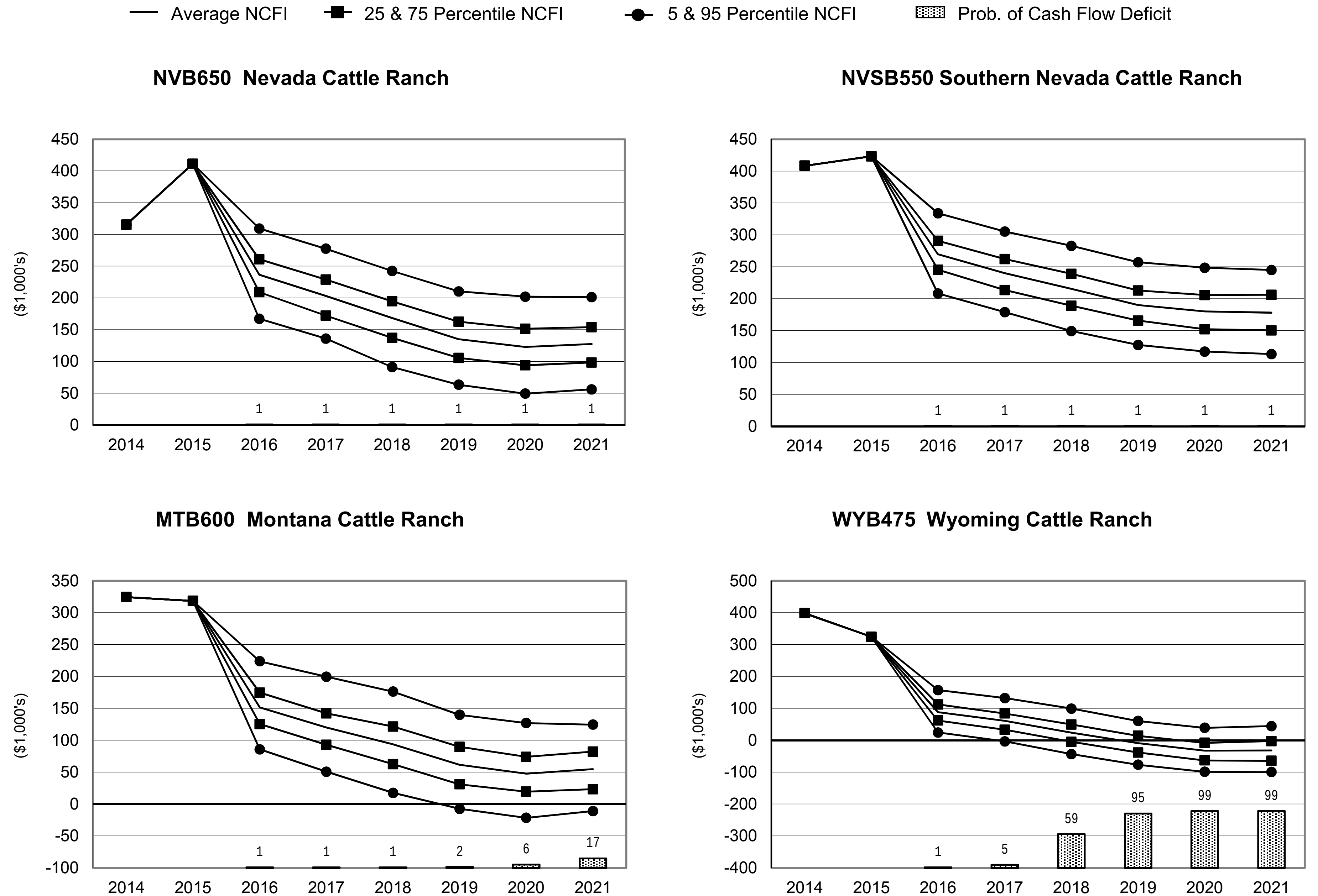
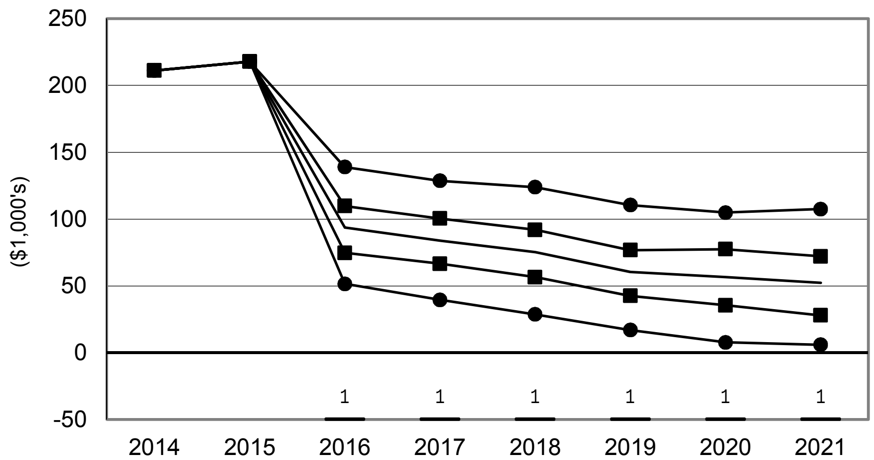


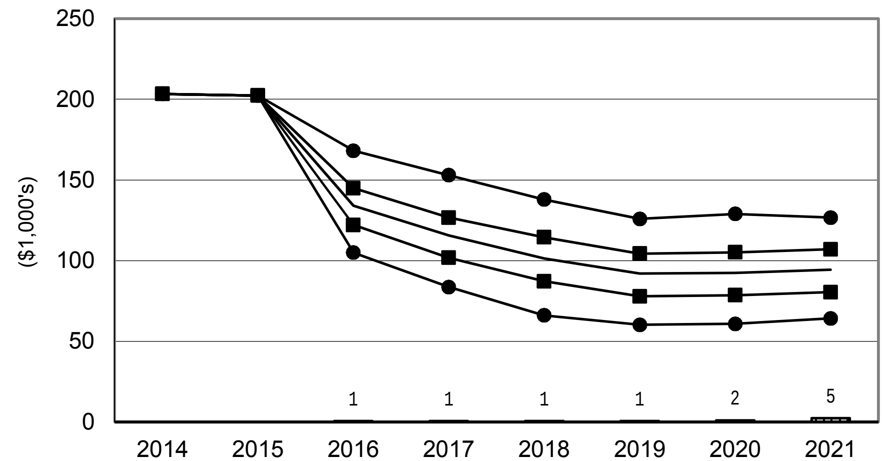
Figure 42. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Beef Cattle Ranches

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

COB275 Colorado Cattle Ranch



NMB240 New Mexico Cattle Ranch



SDB375 South Dakota Cattle Ranch

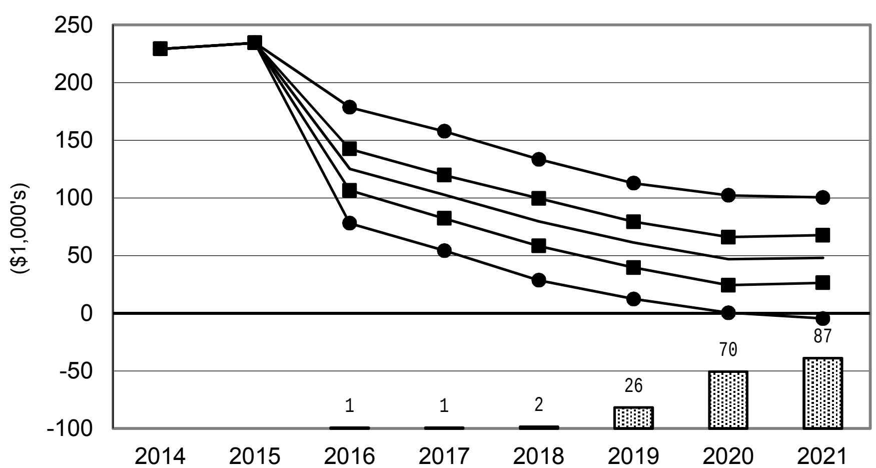
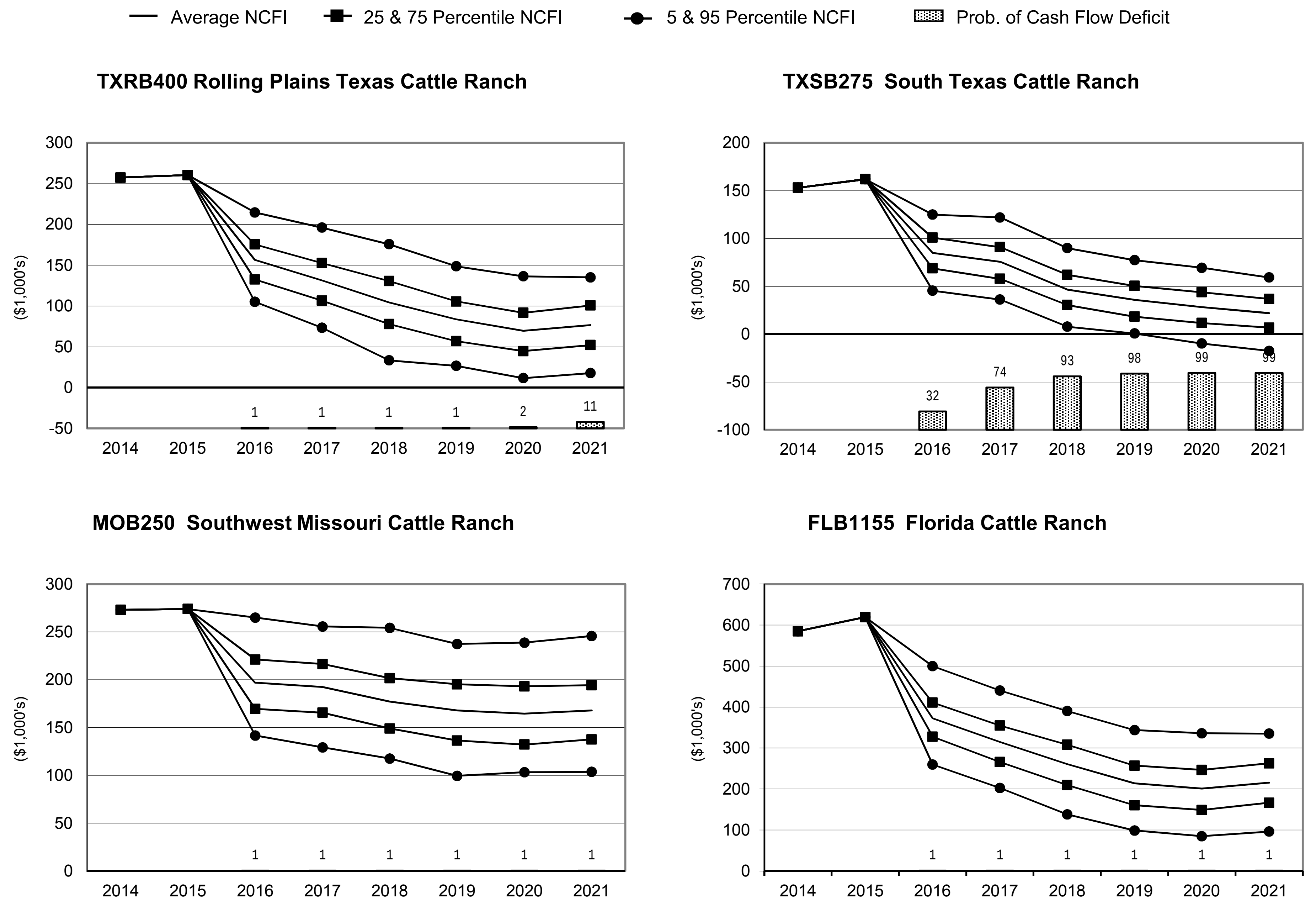


Figure 43. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Beef Cattle Ranches



APPENDIX A:

CHARACTERISTICS OF REPRESENTATIVE FARMS

2015 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 880 acres of corn and 470 acres of soybeans annually. Sixty-nine percent of this farm's 2015 receipts come from corn production.

IAG3400 This 3,400-acre large-sized grain farm is located in northwestern Iowa (Webster County). It plants 2,040 acres of corn and 1,360 acres of soybeans each year, realizing 60 percent of receipts from corn production.

NEG2400 South-central Nebraska (Dawson County) is home to this 2,400-acre grain farm. This farm plants sixty-seven percent of cultivated acres to corn and thirty-three percent to soybeans. The farm splits its corn acres evenly between yellow and white food-grade corn. Sixty-seven 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 3,000 acres of corn and 1,000 acres of soybeans each year. Remaining acres are planted to alfalfa. A portion (25 percent) of the corn acreage is food-grade corn. In 2015, 71 percent of total receipts were generated from corn production.

NDG3000 NDG3000 is a 3,000-acre, moderate-sized, south central North Dakota (Barnes County) grain farm that plants 500 acres of wheat, 1,000 acres of corn, and 1,500 acres of soybeans. One hundred acres are enrolled in the Conservation Reserve Program. The farm generated 40 percent of 2015 receipts from soybean sales and 40 percent from corn sales.

NDG8000 This is an 8,000-acre, large-sized grain farm in south central North Dakota (Barnes County) that grows 3,000 acres of soybeans, 2,250 acres of corn, 2,000 acres of wheat, and 300 acres of sunflowers annually. The remaining acreage is enrolled in the Conservation Reserve Program. Soybean and corn sales accounted for 74 percent of 2015 receipts.

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 operation. Fifty-five percent of 2015 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 2015, 58 percent of gross receipts were generated by corn sales.

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

	IAG1350	IAG3400	NEG2400	NEG4300	NDG3000	NDG8000	ING1000	ING2200
County	Webster	Webster	Dawson	Dawson	Barnes	Barnes	Shelby	Shelby
Total Cropland	1,350.00	3,400.00	2,400.00	4,300.00	3,000.00	8,000.00	1,000.00	2,200.00
Acres Owned	290.00	1,100.00	600.00	2,150.00	720.00	4,000.00	300.00	770.00
Acres Leased	1,060.00	2,300.00	1,800.00	2,150.00	2,280.00	4,000.00	700.00	1,430.00
Assets ($1000)								
Total	3,584.00	12,493.00	6,190.00	20,173.00	4,181.00	24,532.00	3,588.00	10,121.00
Real Estate	2,810.00	10,333.00	4,460.00	16,500.00	2,873.00	19,600.00	2,514.00	8,122.00
Machinery	774.00	1,977.00	1,730.00	3,673.00	1,269.00	4,733.00	611.00	1,501.00
Other & Livestock	0.00	183.00	0.00	0.00	39.00	199.00	464.00	499.00
Debt/Asset Ratios								
Total	0.23	0.18	0.23	0.21	0.24	0.21	0.19	0.22
Intermediate	0.17	0.18	0.32	0.20	0.29	0.28	0.36	0.33
Long Run	0.18	0.18	0.18	0.18	0.18	0.19	0.14	0.16
2015 Gross Receipts ($1,000)*								
Total	1,036.70	2,188.80	2,125.50	3,341.80	1,120.40	3,221.50	547.00	1,309.80
Corn	716.60	1,318.80	1,413.10	2,385.70	448.80	1,462.50	302.40	760.90
	0.69	0.60	0.67	0.71	0.40	0.45	0.55	0.58
Wheat	0.00	0.00	0.00	0.00	169.50	551.20	0.00	0.00
	0.00	0.00	0.00	0.00	0.15	0.17	0.00	0.00
Soybeans	248.50	713.30	555.00	589.70	442.10	945.00	238.40	534.50
	0.24	0.33	0.26	0.18	0.40	0.29	0.44	0.41
Hay	0.00	0.00	0.00	112.60	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00
Other Receipts	0.00	0.00	0.00	0.00	0.00	17.50	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
2015 Planted Acres**								
Total	1,350.00	3,400.00	2,400.00	4,300.00	3,100.00	8,000.00	1,000.00	2,200.00
Corn	880.00	1,870.00	1,600.00	3,000.00	1,000.00	3,000.00	500.00	1,100.00
	0.65	0.55	0.67	0.70	0.32	0.38	0.50	0.50
Wheat	0.00	0.00	0.00	0.00	500.00	1,500.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.16	0.19	0.00	0.00
Soybeans	470.00	1,530.00	800.00	1,000.00	1,500.00	3,000.00	500.00	1,100.00
	0.35	0.45	0.33	0.23	0.48	0.38	0.50	0.50
Hay	0.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00
CRP	0.00	0.00	0.00	0.00	100.00	250.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.03	0.03	0.00	0.00

*Receipts for 2015 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 2015 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.

2015 PANEL FARMS PRODUCING FEED GRAINS AND OILSEEDS

MOCG2300 MOCG2300 is a 2,300-acre grain farm located in central Missouri (Carroll County) and plants 1,150 acres of corn and 1,150 acres of soybeans annually. This farm is located in the Missouri River bottom, an area with a large concentration of livestock production. This farm generated 57 percent of its total revenue from corn and 39 percent from soybeans during 2015.

MOCG4000 This is a 4,000-acre central Missouri (Carroll County) grain farm with 2,000 acres of corn and 2,000 acres of soybeans. This farm is located in the Missouri River bottom, an area with a large concentration of livestock production. Corn sales accounted for 62 percent of farm receipts and soybeans accounted for 29 percent in 2015.

MONG2300 MONG2300 is a 2,300-acre diversified northwest Missouri grain farm centered in Nodaway County. MONG2300 plants 1,125 acres of corn, 1,125 acres of soybeans, and 200 acres of hay annually. The farm also has a 300-head cow-calf herd. Proximity to the Missouri River increases marketing options for area grain farmers due to easily accessible river grain terminals. In 2015, 38 percent of the farm's total receipts were from corn, 32 percent from soybeans, and 26 percent from cattle sales.

LAG2640 This is a 2,640-acre diversified farm located in north Louisiana (Morehouse Parish). LAG2640 plants 264 acres of cotton and wheat, 1,056 acres of corn, and 1,188 acres of soybeans each year. During 2015, 78 percent of farm receipts were generated from corn and soybean sales.

LANG2500 This is a 2,500-acre northeast Louisiana (Madison Parish) diversified grain farm. This farm harvests 500 acres of rice, 800 acres of soybeans, 250 acres of cotton, and 950 acres of corn. For 2015, 51 percent of farm receipts came from corn and soybean sales.

TNG900 This is a 900-acre, moderate-sized grain farm in West Tennessee (Henry County). Annually, this farm plants 500 acres of corn, 400 acres of soybeans, and 100 acres of wheat (planted before soybeans) in a region of Tennessee recognized for the high level of implementation of conservation practices by farmers. Fifty-six percent of 2015 farm receipts were from sales of corn.

TNG2200 West Tennessee (Henry County) is home to this 2,200-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. TNG2200 plants 1,100 acres of corn, 300 acres of wheat, and 1,100 acres of soybeans (300 of which are double-cropped after wheat). The farm generated 49 percent of its 2015 gross receipts from sales of corn and 35 percent from soybeans.

NCSP1800 A 1,800-acre diversified farm located in southern North Carolina (Bladen County). NCSP1800 plants 360 acres of peanuts, 1,224 acres of corn, and 216 acres of soybeans. Sixty percent of receipts for this farm came from corn and soybean sales in 2015; the balance of receipts came from peanut sales.

SCG3500 A 3,500-acre, large-sized South Carolina (Clarendon County) grain farm with 1,400 acres of corn, 875 acres of cotton, 1,225 acres of wheat, and 1,225 acres of soybeans double-cropped after wheat. The farm generated 29 percent of 2015 receipts from corn sales and 18 percent from soybean sales.

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

	MOCG2300	MOCG4200	MONG2300	LAG2640	LANG2500	TNG900	TNG2200	NCSP1800	SCG3500
County	Carroll	Carroll	Nodaway	Morehouse	Madison	Henry	Henry	Bladen	Clarendon
Total Cropland	2,300.00	4,200.00	2,300.00	2,640.00	2,500.00	900.00	2,200.00	1,800.00	3,500.00
Acres Owned	1,380.00	1,800.00	1,150.00	0.00	1,250.00	150.00	550.00	630.00	1,400.00
Acres Leased	920.00	2,400.00	1,150.00	2,640.00	1,250.00	750.00	1,650.00	1,170.00	2,100.00
Pastureland									
Acres Owned	0.00	0.00	450.00	0.00	0.00	0.00	0.00	0.00	1,400.00
Acres Leased	0.00	0.00	150.00	0.00	0.00	0.00	0.00	0.00	0.00
Assets ($1000)									
Total	12,748.00	16,988.00	10,817.00	1,896.00	8,441.00	2,577.00	5,164.00	4,885.00	11,774.00
Real Estate	10,700.00	13,350.00	8,627.00	553.00	6,680.00	1,403.00	3,045.00	2,524.00	10,062.00
Machinery	1,448.00	2,103.00	1,025.00	1,176.00	1,761.00	1,047.00	1,923.00	1,822.00	1,712.00
Other & Livestock	600.00	1,535.00	1,164.00	167.00	0.00	126.00	196.00	539.00	0.00
Debt/Asset Ratios									
Total	0.19	0.16	0.16	0.45	0.18	0.31	0.33	0.40	0.23
Intermediate	0.30	0.26	0.17	0.34	0.18	0.34	0.37	0.38	0.44
Long Run	0.16	0.15	0.16	0.14	0.17	0.16	0.16	0.14	0.18
Number of Livestock									
Beef Cows	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
2015 Gross Receipts ($1,000)*									
Total	994.40	1,759.30	1,642.10	1,602.80	1,857.80	443.00	955.90	1,021.40	2,275.10
Cattle	0.00	0.00	424.40	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.26	0.00	0.00	0.00	0.00	0.00	0.00
Corn	561.70	1,088.80	620.80	693.40	650.60	249.50	469.10	540.40	660.10
	0.57	0.62	0.38	0.43	0.35	0.56	0.49	0.53	0.29
Wheat	0.00	0.00	0.00	75.10	0.00	27.40	74.70	0.00	450.10
	0.00	0.00	0.00	0.05	0.00	0.06	0.08	0.00	0.20
Soybeans	391.60	517.70	526.50	553.10	289.20	137.20	337.40	68.90	401.60
	0.39	0.29	0.32	0.35	0.16	0.31	0.35	0.07	0.18
Cotton	0.00	0.00	0.00	213.80	211.70	0.00	0.00	0.00	681.20
	0.00	0.00	0.00	0.13	0.11	0.00	0.00	0.00	0.30
Peanuts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	327.90	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	0.00
Other Receipts	0.00	0.00	12.80	0.00	0.00	2.50	0.00	0.00	0.00
	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00
2015 Planted Acres**									
Total	2,300.00	4,200.00	2,900.00	2,772.00	2,500.00	1,000.00	2,500.00	1,800.00	4,725.00
Corn	1,150.00	2,310.00	1,125.00	1,056.00	950.00	500.00	1,100.00	1,224.00	1,400.00
	0.50	0.55	0.39	0.38	0.38	0.50	0.44	0.68	0.30
Wheat	0.00	0.00	0.00	264.00	0.00	100.00	300.00	0.00	1,225.00
	0.00	0.00	0.00	0.10	0.00	0.10	0.12	0.00	0.26
Soybeans	1,150.00	1,890.00	1,125.00	1,188.00	800.00	400.00	1,100.00	216.00	1,225.00
	0.50	0.45	0.39	0.43	0.32	0.40	0.44	0.12	0.26
Cotton	0.00	0.00	0.00	264.00	250.00	0.00	0.00	0.00	875.00
	0.00	0.00	0.00	0.10	0.10	0.00	0.00	0.00	0.19
Peanuts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	360.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00
CRP	0.00	0.00	50.00	0.00	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
Improved Pasture	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00

*Receipts for 2015 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 2015 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.

2015 PANEL FARMS PRODUCING FEED GRAINS AND OILSEEDS

TXNP3450 This is a 3,450-acre diversified grain farm located on the northern High Plains of Texas (Moore County). This farm plants 160 acres of cotton, 1,430 acres of irrigated corn, 345 acres of irrigated sorghum for seed production, and 1,170 acres of irrigated wheat annually. Seventy percent of total receipts are generated from corn sales.

TXNP10640 TXNP10640 is a large-sized diversified grain farm located in the Texas Panhandle (Moore County). This farm annually plants 3,113 acres of cotton (2,640 irrigated/473 dryland); 4,000 acres of irrigated corn; 2,105 acres of grain sorghum (530 irrigated for seed production/1,102 dryland/473 irrigated for commercial use); and 713 acres of winter wheat (240 irrigated/473 dryland). Forty-three percent of 2015 cash receipts were derived from corn sales.

TXPG2500 The Texas Panhandle is home to this 2,500-acre farm (Deaf Smith County). Annually, wheat is planted on 847 acres (480 irrigated and 367 dryland), 1270 acres planted to irrigated corn, 200 irrigated acres are planted to cotton, and grain sorghum is planted on 183 dryland acres. Seventy-four percent of 2015 cash receipts were generated by corn sales.

TXHG2500 This 2,500-acre grain farm is located on the Blackland Prairie of Texas (Hill County). On this farm, 800 acres of corn, 900 acres of sorghum, 300 acres of cotton, and 500 acres of wheat are planted annually. Grain sales accounted for 73 percent of 2015 receipts with cotton accounting for 20 percent of sales. Forty beef cows live on 300 acres of improved pasture and contribute approximately seven percent of total receipts.

TXWG1600 This 1,600-acre farm is located on the Blackland Prairie of Texas (Williamson County). TXWG1600 plants 750 acres of corn, 300 acres of sorghum, 400 acres of cotton, and 150 acres of winter wheat annually. Additionally, this farm has a 40-head beef cow herd that is pastured on rented ground that cannot be farmed. Grain sales accounted for 54 percent of 2015 receipts with cotton accounting for 37 percent of sales.

TXUG1600 TXUG1600 is a diversified cotton and grain farm located in Uvalde County, Texas. This farm plants 150 acres of corn, 700 acres of cotton, and 750 acres of wheat (500 irrigated/250 dryland) each year. All crops except the dryland wheat are grown under irrigation. In 2015, grain sales accounted for 18 percent of farm receipts; the balance came from cotton sales.

Appendix Table A3. Characteristics of Panel Farms Producing Feed Grains.

	TXNP3450	TXNP10640	TXPG2500	TXHG2500	TXWG1600	TXUG1600
County	Moore	Moore	Deaf Smith	Hill	Williamson	Uvalde
Total Cropland	3,450.00	10,640.00	2,500.00	2,500.00	1,600.00	1,600.00
Acres Owned	2,590.00	3,511.00	1,875.00	400.00	150.00	0.00
Acres Leased	860.00	7,129.00	625.00	2,100.00	1,450.00	1,600.00
Pastureland						
Acres Owned	0.00	0.00	0.00	60.00	30.00	0.00
Acres Leased	0.00	0.00	0.00	240.00	170.00	0.00
Assets ($1000)						
Total	8,148.00	16,362.00	5,415.00	2,835.00	1,605.00	577.00
Real Estate	6,311.00	8,966.00	3,324.00	1,500.00	1,006.00	0.00
Machinery	1,326.00	5,596.00	2,090.00	1,253.00	514.00	500.00
Other & Livestock	511.00	1,800.00	0.00	82.00	84.00	77.00
Debt/Asset Ratios						
Total	0.05	0.16	0.25	0.49	0.31	0.21
Intermediate	0.14	0.17	0.31	0.39	0.29	0.24
Long Run	0.03	0.19	0.18	0.18	0.18	0.00
Number of Livestock						
Beef Cows	0.00	0.00	0.00	40.00	40.00	0.00
2015 Gross Receipts ($1,000)*						
Total	1,945.20	7,221.60	1,580.90	612.20	534.50	1,411.50
Cattle	0.00	0.00	0.00	40.40	45.80	0.00
	0.00	0.00	0.00	0.07	0.09	0.00
Corn	1,368.90	3,130.60	1,169.30	184.40	194.30	103.00
	0.70	0.43	0.74	0.30	0.36	0.07
Grain Sorghum	163.30	1,113.90	20.10	174.90	64.30	0.00
	0.08	0.15	0.01	0.29	0.12	0.00
Wheat	209.80	116.00	172.10	84.60	32.70	160.90
	0.11	0.02	0.11	0.14	0.06	0.11
Cotton	0.00	2,554.00	154.40	122.00	197.40	1,095.80
	0.00	0.35	0.10	0.20	0.37	0.78
Other Receipts	0.00	0.00	65.00	0.00	0.00	0.00
	0.00	0.00	0.04	0.00	0.00	0.00
2015 Planted Acres**						
Total	3,105.00	9,931.00	2,500.00	2,800.00	1,600.00	1,600.00
Corn	1,430.00	4,000.00	1,270.00	800.00	750.00	150.00
	0.46	0.40	0.51	0.29	0.47	0.09
Grain Sorghum	345.00	2,105.00	183.00	900.00	300.00	0.00
	0.11	0.21	0.07	0.32	0.19	0.00
Wheat	1,170.00	713.00	847.00	500.00	150.00	750.00
	0.38	0.07	0.34	0.18	0.09	0.47
Cotton	160.00	3,113.00	200.00	300.00	400.00	700.00
	0.05	0.31	0.08	0.11	0.25	0.44
Improved Pasture	0.00	0.00	0.00	300.00	0.00	0.00
	0.00	0.00	0.00	0.11	0.00	0.00

*Receipts for 2015 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 2015 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.

2015 CHARACTERISTICS OF PANEL FARMS PRODUCING WHEAT

WAW2000 This is a 2,000-acre moderate-sized grain farm in the Palouse of southeastern Washington (Whitman County). It plants 1,320 acres of wheat, 140 acres of barley, and 540 acres of dry peas. Disease concerns dictate rotating a minimum acreage of barley and peas to maintain wheat yields. This farm generated 73 percent of 2015 receipts from wheat.

WAW8000 A 8,000-acre, large-sized grain farm in the Palouse of southeastern Washington (Whitman County). Annually, this farm allocates 4,950 acres to wheat and 2,400 acres to dry peas. Diseases that inhibit wheat yield dictate the rotation of a minimum acreage of peas. Wheat sales accounted for 73 percent of 2015 receipts.

WAAW4500 South-central Washington (Adams County) is home to this 4,500-acre, large-sized wheat farm. Annually, this farm plants 2,000 acres of wheat in a wheat-fallow rotation. Additionally, 500 acres are enrolled in CRP. In 2015, 96 percent of the farm's income came from wheat.

ORW4100 ORW3600 is a 4,100-acre large-sized grain farm located in northeastern Oregon (Morrow County). This farm plants 1,950 acres annually in a wheat-fallow rotation, with 200 additional acres enrolled in a CRP contract. Ninety-seven percent of this farm's 2015 total receipts came from wheat sales.

MTW7000 North-central Montana (Chouteau County) is home to this 7,000-acre farm on which 4,200 acres of wheat (2,800 acres of winter wheat, 1,400 acres of spring wheat) are planted each year. MTW4500 uses no-till production practices. In 2015, 100 percent of cash income came from wheat.

COW3000 A 3,000-acre northeast Colorado (Washington County), moderate-sized farm that plants 1,012 acres of winter wheat and 675 acres of corn each year. COW3000 has adopted minimum tillage practices on most of its acres. This farm generated 55 percent of its receipts from wheat and 41 percent from corn.

COW5640 A 5,640-acre, large-sized northeast Colorado (Washington County) wheat farm. It plants 1,900 acres of wheat, 890 acres of millet, and 890 acres of corn. During 2015, 54 percent of gross receipts came from wheat sales and 23 percent came from corn sales.

KSCW2000 South central Kansas (Sumner County) is home to this 2,000-acre, moderate-sized grain farm. KSCW2000 plants 1,000 acres of winter wheat, 333 acres of soybeans, 333 acres of sorghum, and 334 acres of corn each year. For 2015, 40 percent of gross receipts came from wheat.

KSCW5300 A 5,300-acre, large-sized grain farm in south central Kansas (Sumner County) that plants 3,445 acres of winter wheat, 795 acres of corn, 795 acres of soybeans, and 265 acres of sorghum. Fifty-seven percent of this farm's 2015 total receipts were generated from sales of winter wheat.

KSNW4000 This is a 4,000-acre, moderate-sized northwest Kansas (Thomas County) grain farm. This farm plants 1,500 acres of winter wheat (wheat-fallow rotation), 1,000 acres of corn, and 500 acres of sorghum. This farm generated 45 percent of 2015 receipts from wheat and 54 percent of its receipts from feedgrains.

KSNW5980 KSNW5980 is a 5,980-acre, large-sized northwest Kansas (Thomas County) grain farm that annually plants 1,820 acres of winter wheat, 2,290 acres of corn, 740 acres of sorghum, and 130 acres of soybeans. The farm generated 23 percent of receipts from wheat and 73 percent from feedgrains during 2015.

Appendix Table A4. Characteristics of Panel Farms Producing Wheat.

	WAW2000	WAW8000	WAAW4500	ORW4100	MTW7000	COW3000	COW5640	KSCW2000	KSCW5300	KSNW4000	KSNW5980
County	Whitman	Whitman	Adams	Morrow	Chouteau	Washington	Washington	Sumner	Sumner	Thomas	Thomas
Total Cropland	2,000.00	8,000.00	4,000.00	4,100.00	7,000.00	3,000.00	5,640.00	2,000.00	5,300.00	4,000.00	5,980.00
Acres Owned	800.00	2,310.00	2,000.00	1,600.00	4,200.00	2,100.00	1,880.00	700.00	1,325.00	1,170.00	1,800.00
Acres Leased	1,200.00	5,690.00	2,000.00	2,500.00	2,800.00	900.00	3,760.00	1,300.00	3,975.00	2,830.00	4,180.00
Pastureland											
Acres Owned	0.00	0.00	0.00	0.00	0.00	200.00	0.00	0.00	0.00	400.00	500.00
Assets ($1000)											
Total	2,234.00	11,376.00	2,325.00	1,952.00	6,488.00	4,141.00	4,247.00	2,799.00	5,214.00	4,827.00	10,251.00
Real Estate	1,667.00	7,453.00	1,796.00	937.00	4,709.00	3,660.00	2,989.00	2,093.00	3,724.00	3,714.00	8,249.00
Machinery	481.00	3,892.00	512.00	805.00	1,419.00	350.00	1,098.00	663.00	1,344.00	1,096.00	1,971.00
Other & Livestock	86.00	31.00	17.00	210.00	361.00	131.00	160.00	43.00	146.00	17.00	31.00
Debt/Asset Ratios											
Total	0.15	0.26	0.29	0.22	0.21	0.17	0.27	0.28	0.19	0.26	0.27
Intermediate	0.10	0.19	0.25	0.21	0.35	0.16	0.35	0.42	0.25	0.30	0.30
Long Run	0.18	0.16	0.17	0.14	0.17	0.17	0.16	0.17	0.18	0.18	0.18
2015 Gross Receipts ($1,000)*											
Total	622.40	2,489.10	419.50	378.20	994.80	343.40	684.10	482.40	1,125.50	754.50	1,307.10
Wheat	455.30	1,824.80	402.00	367.20	994.80	190.00	370.20	193.10	643.90	339.30	304.10
	0.73	0.73	0.96	0.97	1.00	0.55	0.54	0.40	0.57	0.45	0.23
Grain Sorghum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	86.00	53.80	124.80	185.40
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.05	0.17	0.14
Barley	30.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Corn	0.00	0.00	0.00	0.00	0.00	141.70	158.10	101.50	216.90	277.80	711.30
	0.00	0.00	0.00	0.00	0.00	0.41	0.23	0.21	0.19	0.37	0.54
Soybeans	0.00	0.00	0.00	0.00	0.00	0.00	0.00	75.70	145.30	0.00	69.80
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.13	0.00	0.05
Dry Peas	136.50	643.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.22	0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Millet	0.00	0.00	0.00	0.00	0.00	0.00	146.80	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.00	0.00	0.00	0.00
Other Receipts	0.00	20.70	17.50	11.00	0.00	9.00	9.00	0.00	0.00	5.60	7.50
	0.00	0.01	0.04	0.03	0.00	0.03	0.01	0.00	0.00	0.01	0.01
2015 Planted Acres**											
Total	2,000.00	7,600.00	2,500.00	2,150.00	4,200.00	1,987.50	3,930.00	2,000.00	5,300.00	3,000.00	4,980.00
Wheat	1,320.00	4,950.00	2,000.00	1,950.00	4,200.00	1,012.50	1,900.00	1,000.00	3,445.00	1,500.00	1,820.00
	0.66	0.65	0.80	0.91	1.00	0.51	0.48	0.50	0.65	0.50	0.37
Grain Sorghum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	333.00	265.00	500.00	740.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.05	0.17	0.15
Barley	140.00	0.00	0.00	0.00	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	0.00	0.00	0.00	0.00	0.00
Corn	0.00	0.00	0.00	0.00	0.00	675.00	890.00	333.00	795.00	1,000.00	2,290.00
	0.00	0.00	0.00	0.00	0.00	0.34	0.23	0.17	0.15	0.33	0.46
Soybeans	0.00	0.00	0.00	0.00	0.00	0.00	0.00	334.00	795.00	0.00	130.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.15	0.00	0.03
Dry Peas	540.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.27	0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Millet	0.00	0.00	0.00	0.00	0.00	0.00	890.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.00	0.00
CRP	0.00	250.00	500.00	200.00	0.00	300.00	250.00	0.00	0.00	0.00	0.00
	0.00	0.03	0.20	0.09	0.00	0.15	0.06	0.00	0.00	0.00	0.00

*Receipts for 2015 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 2015 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.

2015 CHARACTERISTICS OF PANEL FARMS PRODUCING COTTON

TXSP2500 A 2,500-acre Texas South Plains (Dawson County) cotton farm that is moderate-sized for the area. TXSP2500 plants 1,297 acres of cotton (1,012 dryland, 285 irrigated), 500 acres of grain sorghum (405 dryland, 95 irrigated), and 702 acres of peanuts (607 dryland, 95 irrigated). For 2015, 62 percent of receipts came from cotton.

TXSP4500 The Texas South Plains (Dawson County) is home to this 4,500-acre, large-sized cotton farm that grows 4,047 acres of cotton (2,667 dryland, 1,380 irrigated) and 120 acres of wheat. Cotton sales comprised 98 percent of 2015 receipts.

TXEC5000 This 5,000-acre farm is located on the Eastern Caprock of the Texas South Plains (Crosby County). Annually, 4,150 acres are planted to cotton (2,100 irrigated and 2,050 dryland), 550 acres to sorghum (250 irrigated and 300 dryland), and 300 acres to dryland wheat. In 2015, cotton sales accounted for 95 percent of gross receipts.

TXRP2500 TXRP2500 is a 2,500-acre cotton farm located in the Rolling Plains of Texas (Jones County). This farm plants 1,000 acres of cotton and 1,000 acres of winter wheat each year. The area is limited by rainfall, and the farm uses a conservative level of inputs. Sixty-four percent of 2015 farm receipts came from cotton sales. Fifty head of beef cows generated fourteen percent of farm receipts.

TXMC1800 This 1,800-acre cotton farm is located on the Coastal Plain of southeast Texas (Wharton County). TXMC1800 farms 540 acres of sorghum, 810 acres of cotton, and 450 acres of corn. In 2015, cotton sales comprised 44 percent of total cash receipts on this operation.

TXCB3000 A 3,000-acre cotton farm located on the Texas Coastal Bend (San Patricio County) that farms 1,350 acres of cotton, 1,500 acres of sorghum, and 150 acres of corn annually. Sixty percent of 2015 cash receipts were generated by cotton.

TXCB9200 Nueces County, Texas is home to this 9,200-acre farm. Annually, 3,680 acres are planted to cotton, 3,680 acres to sorghum, and 1,840 acres of corn. Cotton sales accounted for 61 percent of 2015 receipts.

TXVC4500 This 4,500-acre farm is located in the lower Rio Grande Valley of Texas (Willacy County) and plants 1,395 acres to cotton (500 irrigated and 995 acres dryland), 2,880 acres to sorghum, and 225 acres to sugarcane. In 2015, 44 percent of TXVC4500's cash receipts were generated by cotton sales.

Appendix Table A5. Characteristics of Panel Farms Producing Cotton.

	TXSP2500	TXSP4500	TXEC5000	TXRP2500	TXMC1800	TXCB3000	TXCB9200	TXVC4500
County	Dawson	Dawson	Crosby	Jones	Wharton	San Patricio	Nueces	Willacy
Total Cropland	2,500.00	4,500.00	5,000.00	2,500.00	1,800.00	3,000.00	9,200.00	4,500.00
Acres Owned	500.00	900.00	1,000.00	875.00	180.00	600.00	920.00	1,500.00
Acres Leased	2,000.00	3,600.00	4,000.00	1,625.00	1,620.00	2,400.00	8,280.00	3,000.00
Pastureland								
Acres Leased	0.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00
Assets ($1000)								
Total	1,228.00	3,011.00	4,105.00	1,252.00	1,582.00	2,499.00	5,487.00	6,070.00
Real Estate	449.00	1,030.00	1,408.00	944.00	669.00	1,533.00	2,450.00	4,340.00
Machinery	779.00	1,879.00	2,698.00	210.00	913.00	680.00	2,885.00	1,598.00
Other & Livestock	0.00	102.00	0.00	97.00	0.00	286.00	152.00	131.00
Debt/Asset Ratios								
Total	0.27	0.26	0.28	0.30	0.30	0.18	0.24	0.15
Intermediate	0.31	0.33	0.27	0.13	0.23	0.27	0.30	0.09
Long Run	0.16	0.16	0.16	0.18	0.18	0.18	0.17	0.18
Number of Livestock								
Beef Cows	0.00	0.00	0.00	50.00	0.00	0.00	0.00	0.00
2015 Gross Receipts ($1,000)*								
Total	876.60	1,955.80	1,972.90	445.60	677.40	1,268.20	4,326.50	1,841.20
Cattle	0.00	0.00	0.00	62.30	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00
Cotton	543.80	1,923.80	1,872.50	283.10	296.10	754.80	2,631.60	801.60
	0.62	0.98	0.95	0.64	0.44	0.60	0.61	0.44
Grain Sorghum	51.30	0.00	83.00	0.00	159.80	463.10	1,103.20	807.70
	0.06	0.00	0.04	0.00	0.24	0.37	0.26	0.44
Wheat	0.00	32.00	17.40	100.10	0.00	0.00	0.00	0.00
	0.00	0.02	0.01	0.23	0.00	0.00	0.00	0.00
Corn	0.00	0.00	0.00	0.00	131.70	50.30	591.60	0.00
	0.00	0.00	0.00	0.00	0.19	0.04	0.14	0.00
Peanuts	185.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2015 Planted Acres**								
Total	2,500.00	4,167.00	5,000.00	2,000.00	1,800.00	3,000.00	9,200.00	4,500.00
Cotton	1,297.50	4,047.00	4,150.00	1,000.00	810.00	1,350.00	3,680.00	1,395.00
	0.52	0.97	0.83	0.50	0.45	0.45	0.40	0.31
Grain Sorghum	500.00	0.00	550.00	0.00	540.00	1,500.00	3,680.00	2,880.00
	0.20	0.00	0.11	0.00	0.30	0.50	0.40	0.64
Wheat	0.00	120.00	300.00	1,000.00	0.00	0.00	0.00	0.00
	0.00	0.03	0.06	0.50	0.00	0.00	0.00	0.00
Corn	0.00	0.00	0.00	0.00	450.00	150.00	1,840.00	0.00
	0.00	0.00	0.00	0.00	0.25	0.05	0.20	0.00
Peanuts	702.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00

*Receipts for 2015 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 2015 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.

2015 CHARACTERISTICS OF PANEL FARMS PRODUCING COTTON

TNC2500 A 2,500-acre, moderate-sized West Tennessee (Fayette County) cotton farm. TNC2500 consists of 250 acres of cotton, 250 acres of grain sorghum, 1,250 acres of soybeans, 500 acres of corn, and 30 acres enrolled in CRP. Cotton accounted for 16 percent of 2015 gross receipts, with corn and soybeans contributing 19 percent and 37 percent, respectively.

TNC4050 TNC4050 is a 4,050-acre, large-sized West Tennessee (Haywood County) cotton farm. This farm plants 2,025 acres of cotton, 1,425 acres of soybeans, 600 acres of corn, and 475 acres of wheat each year. During 2015, cotton sales generated 64 percent of gross receipts.

ALC3000 A 3,000-acre cotton farm located in northern Alabama (Lawrence County) that plants 1,050 acres to cotton, 1,350 acres to corn, 150 acres of soybeans and 450 acres to wheat annually. This farm was early to adopt no-till cropping practices. Cotton sales accounted for 43 percent of total farm receipts during 2015.

GAC2300 Southwest Georgia (Decatur County) is home to a 2,300-acre cotton farm that plants 1,200 acres to cotton, 550 acres to peanuts, and 550 acres to corn. In 2015, farm receipts were comprised of cotton sales (44 percent), corn (18 percent), and peanut sales (23 percent). The farm also runs a 125-head beef cow herd, generating 6 percent of 2015 receipts.

SCC1800 SCC1800 is a moderate-sized, 1,800-acre grain farm in South Carolina (Calhoun County) consisting of 360 acres of corn, 900 acres of cotton, 360 acres of peanuts, 180 acres of soybeans (double cropped behind wheat), and 180 acres of wheat. Forty-nine percent of the farm's receipts were from cotton sales during 2015.

NCC1700 This is a 1,700-acre cotton farm located on the upper coastal plain of North Carolina (Wayne County). NCC1700 plants 225 acres of cotton, 230 acres of wheat, and 1,325 acres of soybeans annually. Cotton accounted for 16 percent of this farm's 2015 receipts.

NCNP1500 A 1,500-acre diversified farm located in northern North Carolina (Edgecombe County). NCNP1500 plants 375 acres of peanuts, 375 acres of corn, 375 acres of cotton, 150 acres of full season soybeans and double crops wheat and soybeans on 225 acres. Thirty percent of receipts for this farm came from peanut sales in 2015; the balance came from cotton and feedgrain/oilseed sales.

Appendix Table A6. Characteristics of Panel Farms Producing Cotton.

	TNC2500	TNC4050	ALC3000	GAC2300	SCC1800	NCC1700	NCNP1500
County	Fayette	Haywood	Lawrence	Decatur	Calhoun	Wayne	Edgecombe
Total Cropland	2,500.00	4,050.00	3,000.00	2,300.00	1,800.00	1,700.00	1,500.00
Acres Owned	250.00	1,000.00	0.00	1,150.00	450.00	225.00	500.00
Acres Leased	2,250.00	3,050.00	3,000.00	1,150.00	1,350.00	1,475.00	1,000.00
Pastureland							
Acres Owned	0.00	0.00	0.00	100.00	200.00	0.00	0.00
Acres Leased	0.00	0.00	0.00	100.00	0.00	0.00	0.00
Assets ($1000)							
Total	2,028.00	6,795.00	2,315.00	9,969.00	4,175.00	2,673.00	3,539.00
Real Estate	808.00	4,870.00	362.00	7,355.00	2,884.00	1,389.00	2,090.00
Machinery	713.00	1,326.00	1,892.00	1,801.00	1,291.00	1,218.00	1,350.00
Other & Livestock	508.00	599.00	62.00	813.00	0.00	66.00	99.00
Debt/Asset Ratios							
Total	0.10	0.28	0.57	0.27	0.31	0.30	0.37
Intermediate	0.09	0.44	0.32	0.40	0.40	0.31	0.35
Long Run	0.11	0.16	0.16	0.17	0.18	0.17	0.17
Number of Livestock							
Beef Cows	0.00	0.00	0.00	125.00	0.00	0.00	0.00
2015 Gross Receipts ($1,000)*							
Total	1,309.80	2,453.00	1,508.50	2,430.30	1,324.30	950.30	949.80
Cattle	0.00	0.00	0.00	144.80	0.00	0.00	0.00
	0.00	0.00	0.00	0.06	0.00	0.00	0.00
Cotton	212.50	1,563.70	644.80	1,071.80	651.30	154.40	257.20
	0.16	0.64	0.43	0.44	0.49	0.16	0.27
Grain Sorghum	97.50	0.00	0.00	0.00	0.00	0.00	0.00
	0.07	0.00	0.00	0.00	0.00	0.00	0.00
Wheat	0.00	156.50	127.00	0.00	40.50	96.00	68.80
	0.00	0.06	0.08	0.00	0.03	0.10	0.07
Soybeans	479.90	450.60	47.80	0.00	55.90	466.50	129.20
	0.37	0.18	0.03	0.00	0.04	0.49	0.14
Corn	250.30	266.20	615.40	443.20	162.90	0.00	131.10
	0.19	0.11	0.41	0.18	0.12	0.00	0.14
Peanuts	0.00	0.00	0.00	551.00	328.80	0.00	281.80
	0.00	0.00	0.00	0.23	0.25	0.00	0.30
Other Receipts	206.80	4.00	0.00	0.00	0.00	210.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.22	0.00
2015 Planted Acres**							
Total	2,280.00	4,525.00	3,000.00	2,500.00	1,980.00	1,880.00	1,725.00
Cotton	250.00	2,025.00	1,050.00	1,200.00	900.00	225.00	375.00
	0.11	0.45	0.35	0.48	0.46	0.12	0.22
Grain Sorghum	250.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.11	0.00	0.00	0.00	0.00	0.00	0.00
Wheat	0.00	475.00	450.00	0.00	180.00	330.00	225.00
	0.00	0.11	0.15	0.00	0.09	0.18	0.13
Soybeans	1,250.00	1,425.00	150.00	0.00	180.00	1,325.00	375.00
	0.55	0.32	0.05	0.00	0.09	0.71	0.22
Corn	500.00	600.00	1,350.00	550.00	360.00	0.00	375.00
	0.22	0.13	0.45	0.22	0.18	0.00	0.22
Peanuts	0.00	0.00	0.00	550.00	360.00	0.00	375.00
	0.00	0.00	0.00	0.22	0.18	0.00	0.22
CRP	30.00	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

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**Acreages for 2015 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.

2015 CHARACTERISTICS OF PANEL FARMS PRODUCING RICE

CAR550 CAR550 is a 550-acre moderate-sized rice farm in the Sacramento Valley of California (Sutter and Yuba Counties) that plants 500 acres of rice annually. This farm generated 98 percent of 2015 gross receipts from rice sales.

CAR3000 This is a 3,000-acre rice farm located in the Sacramento Valley of California (Sutter and Yuba Counties) that is large-sized for the region. CAR3000 plants 3,000 acres of rice annually. In 2015, 98 percent of total receipts were generated from rice sales.

CABR1300 The Sacramento Valley (Butte County) is home to CABR1300, a 1,300-acre rice farm. CABR1300 harvests 1,200 acres of rice annually, generating 98 percent of 2015 farm receipts from rice sales.

CACR800 CACR800 is a 800-acre rice farm located in the Sacramento Valley of California (Colusa County). This farm harvests 800 acres of rice each year. During 2015, 98 percent of farm receipts were realized from rice sales.

TXR1500 This 1,500-acre rice farm located west of Houston, Texas (Colorado County) is moderate-sized for the region. TXR1500 harvests 600 acres of rice. The farm generated 96 percent of its receipts from rice during 2015.

TXR3000 TXR3000 is a 3,000-acre, large-sized rice farm located west of Houston, Texas (Colorado County). This farm harvests 1,500 acres of rice annually. TXR3000 realized 97 percent of 2015 gross receipts from rice sales.

TXBR1800 The Texas Gulf Coast (Matagorda County) is home to this 1,800-acre rice farm. TXBR1800 generally plants a third of its acres to rice annually and fallows the remainder. The farm generated 97 percent of its receipts from rice during 2015.

TXER3200 This 3,200-acre rice farm is located in the Texas Gulf Coast (Wharton County). TXER3200 harvests 1,067 acres of rice each year. The farm also grows 320 acres of soybeans and 747 acres of grain sorghum annually. Seventy-nine percent of 2015 receipts came from rice sales.

Appendix Table A7. Characteristics of Panel Farms Producing Rice.

	CAR550	CAR3000	CABR1300	CACR800	TXR1500	TXR3000	TXBR1800	TXER3200
County	Sutter	Sutter	Butte	Colusa	Colorado	Colorado	Matagorda	Wharton
Total Cropland	550.00	3,000.00	1,300.00	800.00	1,500.00	3,000.00	1,800.00	3,200.00
Acres Owned	275.00	769.00	520.00	320.00	405.00	0.00	0.00	640.00
Acres Leased	275.00	2,231.00	780.00	480.00	1,095.00	3,000.00	1,800.00	2,560.00
Assets ($1000)								
Total	3,592.00	12,175.00	8,479.00	5,421.00	2,319.00	1,510.00	1,134.00	2,651.00
Real Estate	2,800.00	9,211.00	6,516.00	3,929.00	1,071.00	64.00	0.00	1,468.00
Machinery	793.00	2,842.00	1,373.00	378.00	963.00	1,079.00	812.00	1,183.00
Other & Livestock	0.00	121.00	590.00	1,114.00	285.00	367.00	322.00	0.00
Debt/Asset Ratios								
Total	0.23	0.20	0.18	0.15	0.18	0.13	0.18	0.34
Intermediate	0.21	0.28	0.21	0.20	0.23	0.18	0.26	0.23
Long Run	0.18	0.18	0.19	0.15	0.15	0.16	0.00	0.18
2015 Gross Receipts ($1,000)*								
Total	790.00	4,759.10	2,002.20	1,322.00	865.80	1,874.40	1,013.70	1,361.90
Rice	773.00	4,662.10	1,961.20	1,294.90	826.50	1,821.40	981.70	1,071.70
	0.98	0.98	0.98	0.98	0.96	0.97	0.97	0.79
Soybeans	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.80
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Corn	0.00	0.00	0.00	0.00	0.00	0.00	0.00	227.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17
Other Receipts	0.00	0.00	0.00	0.00	10.00	5.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
2015 Planted Acres**								
Total	500.00	3,000.00	1,200.00	800.00	600.00	1,500.00	1,200.00	2,134.00
Rice	500.00	3,000.00	1,200.00	800.00	600.00	1,500.00	1,200.00	1,067.00
	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.50
Soybeans	0.00	0.00	0.00	0.00	0.00	0.00	0.00	107.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05
Corn	0.00	0.00	0.00	0.00	0.00	0.00	0.00	960.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45

*Receipts for 2015 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 2015 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.

2015 CHARACTERISTICS OF PANEL FARMS PRODUCING RICE

LASR2000 A 2,000-acre southwest Louisiana (Acadia, Jeff Davis, and Vermilion parishes) rice farm, LASR2000 is moderate-sized for the area. This farm harvests 1,000 acres of rice and 500 acres of soybeans. During 2015, 67 percent of gross receipts were generated from rice sales.

ARMR6500 ARMR6500 is a 6,500-acre diversified rice farm in southeast Arkansas (Desha County) that plants 325 acres of rice, 4,050 acres of soybeans (150 double cropped behind wheat), 325 acres of cotton, 1,800 acres of corn, and 150 acres of wheat. For 2015, 8 percent of gross receipts came from rice sales, 8 percent from cotton sales, 31 percent from corn sales, and 50 percent from soybean sales.

ARSR3240 ARSR3240 is a 3,240-acre, large-sized Arkansas (Arkansas County) rice farm that harvests 1,296 acres of rice, 1,620 acres of soybeans, 324 acres of corn, and 324 acres of wheat (planted before soybeans) each year. Fifty-six percent of this farm's 2015 receipts came from rice sales.

ARWR2500 East central Arkansas (Cross County) is home to this 2,500-acre rice farm. Moderate-sized for the region, ARWR2500 annually plants 1,250 acres each to rice and soybeans. During 2015, rice sales generated 66 percent of gross receipts.

ARHR3000 ARHR3000 is a 3,000-acre large-sized northeast Arkansas (Lawrence County) rice farm that annually harvests 1,800 acres of rice, 1,050 acres of soybeans, and 150 acres of corn. Rice sales accounted for 73 percent of 2015 farm receipts.

MSDR5000 MSDR5000 is a 5,000-acre Mississippi Delta (Bolivar County) rice farm that annually harvests 1,667 acres of rice, 2,833 acres of soybeans, and 500 acres of corn. Rice sales accounted for 38 percent of 2015 farm receipts. Soybeans account for 50 percent and corn 9 percent of receipts.

MOBR4000 MOBR4000 is a 4,000-acre Missouri Bootheal (Pemiscot County) rice farm. The farm annually harvests 1,320 acres of rice, 1,800 acres of soybeans and 880 acres of corn. Rice sales accounted for 43 percent of farm receipts in 2015.

Appendix Table A8. Characteristics of Panel Farms Producing Rice.

	LASR2000	ARMR6500	ARSR3240	ARWR2500	ARHR4000	MSDR5000	MOBR4000
County	Acadia	Desha	Arkansas	Cross	Lawrence	Bolivar	Pemiscot
Total Cropland	2,000.00	6,500.00	3,240.00	2,500.00	4,000.00	5,000.00	4,000.00
Acres Owned	200.00	1,200.00	648.00	1,250.00	1,000.00	3,000.00	1,000.00
Acres Leased	1,800.00	5,300.00	2,592.00	1,250.00	3,000.00	2,000.00	3,000.00
Assets ($1000)							
Total	2,416.00	11,526.00	5,696.00	7,591.00	8,896.00	17,987.00	10,104.00
Real Estate	1,277.00	6,365.00	3,049.00	5,999.00	5,892.00	14,200.00	7,100.00
Machinery	1,138.00	5,120.00	2,647.00	1,547.00	2,950.00	3,258.00	3,004.00
Other & Livestock	0.00	41.00	0.00	45.00	55.00	529.00	0.00
Debt/Asset Ratios							
Total	0.37	0.53	0.30	0.23	0.19	0.18	0.30
Intermediate	0.48	0.31	0.29	0.25	0.11	0.27	0.30
Long Run	0.18	0.17	0.18	0.16	0.17	0.16	0.17
2015 Gross Receipts ($1,000)*							
Total	1,356.10	3,573.50	1,987.20	1,689.50	2,732.00	3,354.80	2,131.90
Rice	913.50	282.20	1,117.20	1,120.20	1,989.00	1,266.70	926.30
	0.67	0.08	0.56	0.66	0.73	0.38	0.43
Soybeans	143.60	1,774.00	526.80	496.30	464.70	1,665.80	657.40
	0.11	0.50	0.27	0.29	0.17	0.50	0.31
Corn	0.00	1,095.90	181.30	0.00	152.90	307.70	474.30
	0.00	0.31	0.09	0.00	0.06	0.09	0.22
Wheat	0.00	43.30	97.40	0.00	0.00	0.00	0.00
	0.00	0.01	0.05	0.00	0.00	0.00	0.00
Cotton	0.00	290.30	0.00	0.00	0.00	0.00	0.00
	0.00	0.08	0.00	0.00	0.00	0.00	0.00
2015 Planted Acres**							
Total	1,500.00	6,650.00	3,564.00	2,500.00	4,000.00	5,000.00	4,000.00
Rice	1,000.00	325.00	1,296.00	1,250.00	2,400.00	1,667.00	1,320.00
	0.67	0.05	0.36	0.50	0.60	0.33	0.33
Soybeans	500.00	4,050.00	1,620.00	1,250.00	1,350.00	2,833.00	1,800.00
	0.33	0.61	0.46	0.50	0.34	0.57	0.45
Corn	0.00	1,800.00	324.00	0.00	250.00	500.00	880.00
	0.00	0.27	0.09	0.00	0.06	0.10	0.22
Wheat	0.00	150.00	324.00	0.00	0.00	0.00	0.00
	0.00	0.02	0.09	0.00	0.00	0.00	0.00
Cotton	0.00	325.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.05	0.00	0.00	0.00	0.00	0.00

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**Acreages for 2015 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.

2015 CHARACTERISTICS OF PANEL FARMS PRODUCING MILK

CAD2000	A 2,000-cow, large-sized central California (Tulare County) dairy, the farm plants 1,750 acres of hay/silage for which it employs custom harvesting. Milk sales generated 88 percent of 2015 total receipts.
WAD300	A 300-cow, moderate-sized northern Washington (Whatcom County) dairy. This farm plants 250 acres of silage and generated 91 percent of its 2015 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 2015, 90 percent of this farm's gross receipts came from milk.
IDD3000	A 3,000-cow, large-sized dairy located in the Magic Valley of Idaho (Twin Falls County). This farm plants 1,250 acres of corn silage annually. Milk sales account for 90 percent of 2015 gross receipts.
NVD1000	A 1,000-cow, moderate-sized Nevada (Churchill County) dairy. This farm plants 375 acres of hay and 250 acres of corn silage annually. Milk sales accounted for 89 percent of NVD1000's gross receipts for 2015.
TXND3800	A 3,800-cow, large-sized dairy located in the South Plains of Texas (Bailey County). This farm plants 1,920 acres of corn silage annually. Milk sales account for 85 percent of 2015 gross receipts.
TXCD1500	A 1,500-cow, large-sized central Texas (Erath County) dairy, TXCD1500 plants 466 acres of silage and 308 acres of hay annually. During 2015, milk sales accounted for 87 percent of receipts.
TXED400	A 400-cow, moderate-sized northeast Texas (Hopkins County) dairy. This farm has 400 acres of silage and 125 acres of hay. During 2015, milk sales represented 83 percent of annual receipts.
WID145	A 145-cow, moderate-sized eastern Wisconsin (Winnebago County) dairy, the farm plants 210 acres of silage, 70 acres for hay, 140 acres of corn, and 130 acres of soybeans. Milk constituted 82 percent of this farm's 2015 receipts.
WID1000	A 1000-cow, large-sized eastern Wisconsin (Winnebago County) dairy, the farm plants 650 acres of hay, 650 acres of silage, and 600 acres of corn. Milk sales comprised 89 percent of the farm's 2015 receipts.

Appendix Table A9. Characteristics of Panel Farms Producing Milk.

	CAD2000	WAD300	WAD850	IDD3000	NVD1000	TXND3800	TXCD1500	TXED400	WID145	WID1000
County	Tulare	Whatcom	Whatcom	Twin Falls	Churchill	Bailey	Erath	Hopkins	Winnebago	Winnebago
Total Cropland	1,200.00	250.00	605.00	1,500.00	200.00	1,920.00	616.00	950.00	600.00	2,000.00
Acres Owned	700.00	125.00	300.00	1,500.00	150.00	1,920.00	253.00	475.00	330.00	800.00
Acres Leased	500.00	125.00	305.00	0.00	50.00	0.00	363.00	475.00	270.00	1,200.00
Pastureland										
Acres Owned	0.00	0.00	0.00	0.00	0.00	0.00	264.00	0.00	40.00	0.00
Assets ($1000)										
Total	27,010.00	4,387.00	12,385.00	34,138.00	8,997.00	33,610.00	10,839.00	3,227.00	3,695.00	12,780.00
Real Estate	16,110.00	3,063.00	7,425.00	18,729.00	3,411.00	12,906.00	3,705.00	1,602.00	2,207.00	7,266.00
Machinery	1,668.00	278.00	856.00	1,108.00	662.00	2,258.00	1,573.00	380.00	804.00	1,247.00
Other & Livestock	9,231.00	1,046.00	4,104.00	14,301.00	4,924.00	18,447.00	5,561.00	1,244.00	685.00	4,268.00
Debt/Asset Ratios										
Total	0.21	0.13	0.20	0.17	0.16	0.22	0.17	0.22	0.25	0.21
Intermediate	0.19	0.06	0.14	0.13	0.14	0.24	0.15	0.13	0.26	0.18
Long Run	0.24	0.16	0.26	0.21	0.23	0.26	0.25	0.26	0.26	0.27
Number of Livestock										
Dairy Cows	2,000.00	300.00	850.00	3,000.00	1,000.00	3,800.00	1,500.00	400.00	145.00	1,000.00
Cwt Milk/Cow	263.00	223.00	277.00	269.00	257.00	233.00	208.00	150.00	272.00	286.00
2015 Gross Receipts ($1,000)*										
Total	9,360.50	1,192.20	4,309.20	14,780.40	5,066.10	17,612.80	6,538.80	1,233.70	841.40	5,845.40
Milk	8,214.80	1,078.80	3,875.70	13,282.90	4,488.50	14,927.10	5,702.70	1,022.40	686.30	5,180.10
	0.88	0.91	0.90	0.90	0.89	0.85	0.87	0.83	0.82	0.89
Dairy Cattle	1,145.70	106.00	433.40	1,497.50	577.50	2,685.60	836.10	211.40	91.60	562.50
	0.12	0.09	0.10	0.10	0.11	0.15	0.13	0.17	0.11	0.10
Hay	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19.80	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00
Corn	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	71.50
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Soybeans	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.10	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00
2015 Planted Acres**										
Total	1,750.00	250.00	605.00	1,250.00	625.00	1,920.00	774.00	600.00	600.00	2,000.00
Hay	750.00	0.00	0.00	0.00	375.00	0.00	308.00	200.00	70.00	650.00
	0.43	0.00	0.00	0.00	0.60	0.00	0.40	0.33	0.12	0.33
Silage	1,000.00	250.00	605.00	1,250.00	250.00	1,920.00	466.00	400.00	210.00	650.00
	0.57	1.00	1.00	1.00	0.40	1.00	0.60	0.67	0.35	0.33
Corn	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	140.00	600.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.30
Soybeans	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	130.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.00

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**Acreages for 2015 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.

2015 CHARACTERISTICS OF PANEL FARMS PRODUCING MILK (continued)

NYWD500 A 500-cow, moderate-sized western New York (Wyoming County) dairy. This farm plants 50 acres of corn, 950 acres of silage, and double crops 450 acres of haylage annually. Milk sales accounted for 90 percent of the gross receipts for this farm in 2015.

NYWD1200 A 1,200-cow, large-sized western New York (Wyoming County) dairy. This farm plants 1,900 acres of silage and 200 acres of corn annually. Milk sales accounted for 90 percent of the gross receipts for this farm in 2015.

NYCD180 A 180-cow, moderate-sized central New York (Cayuga County) dairy. This farm plants 50 acres of corn, and 350 acres of silage annually. Milk sales accounted for 86 percent of the gross receipts for this farm in 2015.

NYCD675 A 675-cow, large-sized central New York (Cayuga County) dairy. This farm plants 1,225 acres of silage and 275 acres of corn annually. Milk sales accounted for 89 percent of the gross receipts for this farm in 2015.

VTD140 A 140-cow, moderate-sized Vermont (Washington County) dairy. VTD140 plants 20 acres of hay and 200 acres of silage annually. Milk accounted for 88 percent of the 2015 receipts for this farm.

VTD400 A 400-cow, large-sized Vermont (Washington County) dairy. This farm plants 100 acres of hay and 900 acres of silage annually. Milk sales represent 77 percent of VTD400's gross receipts in 2015.

MOGD550 A 550-cow, grazing dairy in southwest Missouri (Dade County), the farm grazes cows on 385 acres of improved pasture. Milk accounted for 86 percent of gross farm receipts for 2015.

MOGD180 A 180-cow, grazing dairy in southwest Missouri (Dade County), the farm grazes cows on 285 acres of improved pasture. Milk accounted for 88 percent of gross farm receipts for 2015.

FLND550 A 550-cow, moderate-sized north Florida (Lafayette County) dairy. The dairy grows 130 acres of hay and 600 acres of silage each year. All other feed requirements are purchased in a pre-mixed ration. Milk sales accounted for 89 percent of the farm receipts.

FLSD1750 A 1,750-cow, large-sized south central Florida (Okeechobee County) dairy, FLSD1750 plants 300 acres of hay and 300 acres of silage annually. Milk sales represent 91 percent of 2015 total receipts.

Appendix Table A10. Characteristics of Panel Farms Producing Milk.

	NYWD500	NYWD1200	NYCD180	NYCD675	VTD160	VTD400	MOGD550	MOGD180	FLND550	FLSD1750
County	Wyoming	Wyoming	Cayuga	Cayuga	Washington	Washington	Dade	Dade	Lafayette	Okeechobee
Total Cropland	1,000.00	2,100.00	400.00	1,500.00	260.00	1,000.00	0.00	0.00	600.00	400.00
Acres Owned	600.00	1,400.00	320.00	1,125.00	120.00	525.00	0.00	0.00	450.00	400.00
Acres Leased	400.00	700.00	80.00	375.00	140.00	475.00	0.00	0.00	150.00	0.00
Pastureland										
Acres Owned	0.00	50.00	0.00	50.00	60.00	50.00	385.00	180.00	60.00	470.00
Acres Leased	0.00	0.00	0.00	0.00	0.00	50.00	0.00	50.00	0.00	0.00
Assets ($1000)										
Total	6,515.00	17,024.00	3,999.00	13,283.00	2,070.00	6,924.00	3,987.00	1,324.00	4,678.00	14,177.00
Real Estate	2,816.00	9,168.00	2,702.00	6,632.00	996.00	3,982.00	2,022.00	643.00	2,130.00	6,072.00
Machinery	957.00	1,975.00	425.00	1,698.00	343.00	986.00	331.00	116.00	455.00	722.00
Other & Livestock	2,742.00	5,881.00	872.00	4,954.00	731.00	1,956.00	1,634.00	565.00	2,093.00	7,382.00
Debt/Asset Ratios										
Total	0.18	0.20	0.22	0.17	0.24	0.23	0.19	0.19	0.18	0.17
Intermediate	0.20	0.17	0.15	0.15	0.18	0.23	0.18	0.21	0.16	0.14
Long Run	0.24	0.26	0.25	0.20	0.21	0.25	0.24	0.24	0.24	0.23
Number of Livestock										
Dairy Cows	500.00	1,200.00	180.00	675.00	160.00	400.00	550.00	180.00	550.00	1,750.00
Cwt Milk/Cow	256.00	265.00	233.00	259.00	220.00	255.00	118.00	135.00	220.00	213.00
2015 Gross Receipts ($1,000)*										
Total	2,793.30	6,340.80	863.80	3,424.20	740.80	2,343.50	1,495.60	542.00	2,806.90	8,630.60
Milk	2,525.70	5,682.90	740.90	3,031.20	650.60	1,813.70	1,280.10	474.10	2,491.10	7,879.40
	0.90	0.90	0.86	0.89	0.88	0.77	0.86	0.88	0.89	0.91
Dairy Cattle	267.60	657.80	123.00	393.00	83.90	258.10	215.50	67.90	315.80	751.30
	0.10	0.10	0.14	0.12	0.11	0.11	0.14	0.13	0.11	0.09
Silage	0.00	0.00	0.00	0.00	0.00	267.90	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.00
Other Receipts	0.00	0.00	0.00	0.00	5.50	0.00	0.00	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
2015 Planted Acres**										
Total	1,000.00	2,100.00	400.00	1,500.00	260.00	1,000.00	358.00	285.00	730.00	600.00
Hay	0.00	0.00	0.00	0.00	25.00	75.00	0.00	285.00	130.00	300.00
	0.00	0.00	0.00	0.00	0.10	0.08	0.00	1.00	0.18	0.50
Silage	950.00	1,900.00	350.00	1,225.00	235.00	925.00	0.00	0.00	600.00	300.00
	0.95	0.91	0.88	0.82	0.90	0.93	0.00	0.00	0.82	0.50
Improved Pasture	0.00	0.00	0.00	0.00	0.00	0.00	358.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
Corn	50.00	200.00	50.00	275.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.05	0.10	0.13	0.18	0.00	0.00	0.00	0.00	0.00	0.00

*Receipts for 2015 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 2015 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.

2015 CHARACTERISTICS OF PANEL RANCHES PRODUCING BEEF CATTLE

NVB650	NVB650 is a 650-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 3,560 AUMs of public land. Each year, the ranch harvests 975 acres of hay. Annually, cattle sales represent all of the ranch's receipts.
NVSB550	NVSB550 is a 550-cow ranch located in southeastern Nevada (Lincoln County). The operation consists of 125 acres of owned hay meadow and 275 acres of owned range, supplemented by 6,600 AUMs of public land. Annually, cattle sales represent 95 percent of the ranch's receipts.
MTB600	A 600-cow ranch located on the eastern plains of Montana (Custer County), MTB600 runs cows on a combination of owned land and land leased from federal, state, and private sources. The ranch owns 14,000 acres of pasture. 800 acres of hay are produced annually. Also, all deeded acres are leased for hunting. Cattle sales represented 99 percent of this ranch's 2015 receipts.
WYB475	This 475-cow ranch is located in north central Wyoming (Washakie County). The ranch leases 2000 AUMs from the U.S. Forest Service and owns 1,500 acres of range. Annually, the ranch harvests 330 acres of alfalfa and grass hay on owned ground. In 2015, cattle sales accounted for 86 percent of gross receipts.
COB275	This 275-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. Cattle sales accounted for 65 percent of the ranch's 2015 total receipts.
NMB240	NMB240 is a 240-cow ranch located in northeastern New Mexico (Union County). During 2015, 95 percent of gross receipts were derived from cattle sales with the balance of receipts generated from fee hunting.
SDB375	SDB375 is a 375-cow West River (Meade County, South Dakota) beef cattle ranch. This operation produces hay on 1,150 acres of owned cropland, and runs its cows on 6,700 acres of owned native range. In 2015, cattle sales accounted for 100 percent of gross receipts.
MOB250	A 250-cow beef cattle operation is the focal point of this diversified livestock and crop farm located in southwest Missouri (Dade County). MOB250 plants 120 acres of corn, 120 acres of wheat, 160 acres of soybeans, and 280 acres of hay. Improved pasture makes up another 570 acres of this ranch. During 2015, cattle sales comprised 68 percent of gross receipts.
TXRB400	The western Rolling Plains of Texas (King County) is home to this 400-head cow-calf operation. This ranch operates on 20,000 acres (half owned, half leased) of native range. Eighty-eight percent of 2015 receipts came from cattle sales, while 12 percent came from fee hunting.
TXSB275	A 275-head cow-calf operation is the central focus of this full-time agricultural operation in south central Texas (Gonzales County). Contract broiler production and hunting income are vital to the ranch's viability. Cattle sales accounted for 91 percent of 2015 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 2015, cattle sales represented 92 percent of total receipts.
OTHERS	Five other representative farms have beef cattle operations along with their crop production (MONG2300, TXHG2500, TXWG1600, TXRP2500, and GAC2300). These farming operations have from 40 to 300 cows. Cattle contributed from 6 to 26 percent of gross receipts for these farms in 2015.

Appendix Table A11. Characteristics of Panel Farms Producing Beef Cattle.

	NVB650	NVSB550	MTB600	WYB475	COB275	NMB240	SDB375	MOB250	TXRB400	TXSB275	FLB1155
County	Elko	Lincoln	Custer	Washakie	Routt	Union	Meade	Dade	King	Gonzales	Osceola
Total Cropland	1,300.00	125.00	0.00	330.00	650.00	0.00	1,150.00	280.00	0.00	0.00	5,400.00
Acres Owned	1,300.00	125.00	0.00	330.00	450.00	0.00	1,150.00	175.00	0.00	0.00	5,400.00
Acres Leased	0.00	0.00	0.00	0.00	200.00	0.00	0.00	105.00	0.00	0.00	0.00
Pastureland											
Acres Owned	8,725.00	275.00	14,000.00	1,500.00	2,300.00	10,072.00	6,700.00	570.00	10,000.00	900.00	0.00
Acres Leased	0.00	0.00	0.00	0.00	0.00	2,261.00	700.00	280.00	15,000.00	775.00	0.00
Federal AUMs Lease	3,560.00	6,600.00	1,350.00	2,750.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
State/Private AUMs	2,000.00	0.00	7,600.00	700.00	750.00	0.00	0.00	0.00	0.00	0.00	0.00
Assets ($1000)											
Total	8,672.00	3,158.00	8,820.00	3,327.00	14,907.00	7,738.00	8,381.00	3,463.00	9,265.00	5,479.00	26,548.00
Real Estate	6,693.00	1,194.00	6,836.00	1,601.00	13,700.00	6,812.00	6,770.00	1,904.00	7,706.00	4,703.00	23,634.00
Machinery	450.00	398.00	376.00	357.00	463.00	167.00	305.00	333.00	155.00	148.00	201.00
Other & Livestock	1,529.00	1,566.00	1,609.00	1,369.00	744.00	759.00	1,305.00	1,225.00	1,405.00	628.00	2,713.00
Debt/Asset Ratios											
Total	0.02	0.05	0.02	0.05	0.02	0.01	0.01	0.03	0.01	0.02	0.01
Intermediate	0.07	0.10	0.05	0.09	0.13	0.07	0.05	0.09	0.04	0.09	0.03
Long Run	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Number of Livestock											
Beef Cows	650.00	550.00	600.00	475.00	275.00	240.00	375.00	250.00	400.00	275.00	1,155.00
2015 Gross Receipts ($1,000)*											
Total	812.60	737.80	676.30	618.60	406.70	345.60	456.90	469.50	643.10	350.60	1,194.90
Cattle	812.60	704.30	671.30	528.80	263.10	326.60	456.90	321.30	563.10	318.10	1,100.90
	1.00	0.95	0.99	0.86	0.65	0.95	1.00	0.68	0.88	0.91	0.92
Corn	0.00	0.00	0.00	0.00	0.00	0.00	0.00	70.10	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.00	0.00	0.00
Soybeans	0.00	0.00	0.00	0.00	0.00	0.00	0.00	41.80	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00
Wheat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.80	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00
Hay	0.00	33.60	0.00	79.80	110.10	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.05	0.00	0.13	0.27	0.00	0.00	0.00	0.00	0.00	0.00
Other Receipts	0.00	0.00	5.00	10.00	8.50	19.00	0.00	6.00	80.00	32.50	94.00
	0.00	0.00	0.01	0.02	0.02	0.06	0.00	0.00	0.12	0.09	0.08
2015 Planted Acres**											
Total	975.00	125.00	800.00	330.00	650.00	0.00	1,150.00	1,250.00	0.00	500.00	3,560.00
Corn	0.00	0.00	0.00	0.00	0.00	0.00	0.00	120.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00
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	0.00	0.00	0.00	0.13	0.00	0.00	0.00
Wheat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	120.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00
Hay	975.00	125.00	800.00	330.00	650.00	0.00	1,150.00	280.00	0.00	100.00	3,560.00
	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.22	0.00	0.20	1.00

*Receipts for 2015 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 2015 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 (CONTINUED)

Indiana

Facilitators

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

Panel Participants

Mr. David Brown
Mr. Kevin Carson
Mr. Jerry Drake
Mr. Gary Everhart
Mr. Richard Fix
Mr. Darrell Linville
Mr. Mark Nigh
Mr. Gary Robards
Mr. Ken Simpson
Mr. Doug Theobald
Mr. Keith Theobald
Mr. Jeremy Weaver

Iowa

Facilitators

Mr. Jerry Chizek - County Extension Director, Webster County

Panel Participants

Mr. Robert Anderson
Mr. Dean Black
Mr. Perry Black
Mr. A.J. Blair
Mr. Brian Carver
Mr. Jason Carver
Mr. and Mrs. Jim Carver
Mr. Kevin Carver
Mr. Gregg Hora
Mr. Larry Lane
Mr. Todd Lundgren
Mr. Robert Lynch
Mr. William Secor
Mr. Doug Stanek
Mr. Jason Stanek
Mr. Loren Wuebker

Louisiana

Facilitators

Mr. Kurt Guidry - Professor, LSU Ag Center

Panel Participants

Mr. R. Berry Barham
Mr. Jess Barr
Mr. John Carroll
Mr. Randy Miller
Mr. Buddy Page

Louisiana - Northeast

Facilitators

Mr. Kurt Guidry - Professor, LSU Ag Center

Panel Participants

Mr. Damian Bollich
Mr. Mark Brown
Mr. Fred Franklin
Mr. Ed Greer
Mr. Lindy Lingo
Mr. Ed Patrick

FEED GRAIN FARMS (CONTINUED)

Missouri - Central

Facilitators

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

Panel Participants

Mr. Joe Brockmeier
Mr. Mark Casner
Mr. Kyle Durham
Mr. Dennis Germann
Mr. Ron Gibson
Mr. Todd Gibson
Mr. Dale Griffith
Mr. Jack Harriman
Mr. Mike Hisle
Mr. Preston Hisle
Mr. Glenn Kaiser
Mr. David Kipping
Mr. Robert Kipping
Mr. Gerald Kitchen
Mr. Rob Korff
Mr. Craig Linneman
Mr. Ron Linneman
Mr. Terry Reimer
Mr. Mike Ritchhart
Mr. James Wheeler

Missouri - Northwest

Panel Participants

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

Nebraska - Central

Facilitators

Mr. Bruce Treffer - Extension Educator, Dawson County

Panel Participants

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

North Dakota

Facilitators

Dr. Dwight Aakre - Extension Associate-Farm Management, North Dakota State University
Mr. Randy Grueneich - County Extension Agent, North Dakota State University

Panel Participants

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

FEED GRAIN FARMS (CONTINUED)

South Carolina

Facilitators

Dr. Todd Davis - Assistant Professor/Extension Economist, Clemson University
Mr. Scott Mickey

Panel Participants

Mr. Troy Allen
Mr. Cag Brunson
Mr. Harry DuRant
Mr. Jason Gamble
Mr. Barry Hutto
Mr. Joe McKeower
Ms. Vikki Brogdon
Mr. Chris Cogdill
Mr. Sam DuRant
Mr. Steven Gamble
Mr. Tommy Lee
Mr. John Michael Parimuha

Tennessee

Facilitators

Mr. Ranson Goodman - Extension Agent & County Director, Henry County
Mr. Jeff Lannom - Extension Agent & County Director, Weakley County
Mr. Tim Smith - County Extension Agent, Obion County

Panel Participants

Mr. Jason Crabtree
Mr. John Erwin
Mr. David Grant
Mr. Bob Grooms
Mr. Doug Schoolfield
Mr. Gilbert Workman, Jr.
Mr. James S. Davis
Mr. Mike Freeman
Mr. Wayne Grant
Mr. Donald Parker
Mr. Jamie Tuck

Texas - Northern Blackland Prairie

Facilitators

Mr. Ryan Collett - County Extension Agent, Hill County
Mr. Marty Jungman - County Extension Agent, Hill County

Panel Participants

Mr. Justin Kaska
Mr. Chad Radke
Mr. Aaron Walters
Mr. Kenneth Machac
Mr. John Sawyer

Texas - Northern High Plains

Facilitators

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

Panel Participants

Mr. Kerry Cartrite
Mr. Brent Clark
Mr. Kelly Hays
Mr. Tom Moore
Mr. Stan Spain
Mr. Darren Stallwitz
Mr. Willie Wieck
Mr. Tommy Cartrite
Mr. Justin Garrett
Mr. Casey Kimbrell
Mr. H.D. Morton
Mr. Wesley Spurlock
Mr. Dee Vaughan
Ms. Linda Williams

FEED GRAIN FARMS (CONTINUED)

Texas - Panhandle

Facilitators

Mr. Rick Auckerman - County Extension Agent, Texas Cooperative Extension
Mr. Michael Clayman - Regional Vice President, First Ag Credit

Panel Participants

Mr. Michael Carlson
Mr. Greg Chavez
Mr. Bob Meyer
Mr. Roy Carlson
Mr. Steve Hoffman
Mr. Harold Sides

Texas - Southern Blackland Prairie

Facilitators

Mr. Dustin Coufal - County Extension Agent, Williamson County

Panel Participants

Mr. Terry Pekar
Mr. Doug Schernik
Mr. Donald Stolte
Mr. Herbert Raesz
Mr. Ken Seggern

Texas - Southwest

Facilitators

Mr. Chet Smith - County Extension Agent, Uvalde County

Panel Participants

Mr. Jimmy Carnes
Mr. Mark Landry
Mr. Ralph Hesse
Mr. Danny Parker

WHEAT FARMS

Colorado

Facilitators

Mr. John Deering - Ag Business Agent, Colorado State University
Mr. Dennis Kaan - Director, Golden Plains Area Extension, Colorado State University

Panel Participants

Mr. Rollie Deering
Mr. Ward Deering
Mr. David Foy
Mr. William Harman
Ms. Gisele Jefferson
Mr. Terry Kuntz
Mr. Dave Lillich
Mr. Max Olsen
Ms. Sara Olsen
Mr. Ken Remington
Mr. Craig Saxton
Mr. Calvin Schaffert
Mr. Harlan Schaffert
Mr. Dave Wagers
Mr. John Wright

Kansas - Northwest

Facilitators

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

Panel Participants

Mr. Steve Busse
Rich Calliham
Mr. Richard Calliham
Mr. Sam Crouse
Mr. Dennis Franklin
Mr. Lyman Goetsch
Mr. Lee Juenemann
Mr. Brian Laufer
Mr. Lance Leebrick
Mr. Harold Mizell
Mr. Steve Schertz

Kansas - South Central

Facilitators

Mr. Gary Cramer - County Extension Agent, Sedgwick County
Mr. Johnny Roberts - County Extension Agent, Sumner County

Panel Participants

Mr. Dennis Gruenbacher
Mr. Doug Hisken
Mr. Kent Ott
Mr. David Reichenberger
Mr. Nick Steffen
Troy & Julia Strnad
Mr. Jim Stuhlsatz
Mr. Tim Turek
Mr. Robert White

Montana - North Central

Facilitators

Mr. Lochiel Edwards

Panel Participants

Mr. Darin Arganbright
Mr. Steve Bahnmiller
Mr. Duane Beirwagen
Mr. Will Roehm
Mr. Dan Works

Oregon - North Central

Facilitators

Jon Farquharson

Panel Participants

Mr. Dana Heideman
Mr. Bill Jepsen
Mr. Joe McElligott
Mr. Craig Miles
Mrs. Shannon Rust
Mr. Tim Rust

WHEAT FARMS (CONTINUED)

Washington

Facilitators

Mr. Aaron Esser - County Director, WSU Extension

Panel Participants

Mr. Dan Hille
Mr. Mike Miller
Mr. Steve Taylor
Mr. Allan Koch
Mr. Tim Smith

Washington - Palouse

Facilitators

Dr. Janet Schmidt - Extension Faculty, Washington State University
Mr. Steve Van Vleet - Extension Agronomist, Washington State University

Panel Participants

Mr. Ben Barstow
Mr. Asa Clark
Mr. Scot Cocking
Mr. David Harlow
Mr. Dean Kinzer
Mr. Gary Largent
Mr. Steve Mader
Mr. Bruce Nelson
Mr. David Swannack
Mr. Steve Teade
Mr. Steve Camp
Mr. Gavin Clark
Mr. Tom Cocking
Ms. Kenda Hergert
Mr. Brian Largent
Mr. Michael Largent
Mr. Clark Miller
Mr. Randy Suess
Mr. Del Teade
Mr. Jon Whitman

COTTON FARMS

Alabama

Panel Participants

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

Arkansas - Adams Land Co. Gin

Facilitators

Mr. Dave Freeze - CEA Mississippi County, U of Arkansas Cooperative Extension
Mr. Ronnie Kennett
Mr. Blake McClelland
Ms. Jenny Stacks
Dr. Brad Watkins - Research Assistant Professor, U. of Arkansas Cooperative Extension

Panel Participants

Mr. Chad Costner
Mr. Todd Edwards
Mr. Justin Hawkins
Mr. David Wildy
Mr. Heath Donner
Mr. Cole Hawkins
Mr. Randy Jackson

Georgia - Southwest

Facilitators

Mr. Rome Ethredge - County Extension Coordinator, Seminole County
Mr. Mitchell May - County Extension Coordinator, Decatur County
Dr. Don Shurley - Professor/Economist - Cotton, University of Georgia
Dr. Nathan Smith - Assistant Professor, Extension Economist, University of Georgia

Panel Participants

Mr. Andy Bell
Mr. Willard Mims
Mr. Jerry Jones
Mr. Raymond Thompson

North Carolina

Facilitators

Dr. Blake Brown
Mr. Gary Bullen
Mr. Kevin Johnson - County Extension Agent, Wayne County

Panel Participants

Mr. Landis Brantham, Jr.
Mr. David B. Mitchell, Sr.
Mr. Craig West
Mr. Willie Howell
Mr. Danny C. Pierce
Mr. Bryant Worley

South Carolina

Facilitators

Dr. Todd Davis - Assistant Professor/Extension Economist, Clemson University
Mr. Scott Mickey

Panel Participants

Mr. Corrin F. "Bud" Bowers
Mr. Jimmie Griner
Mr. Bates Houck
Mr. Doug Jarrell
Mr. Jeff Sandifer
Mr. James Bookhart
Mr. Johnny & Debbie Crider
Mr. Henry Herndon
Mr. Dean & Richard Hutto
Mr. J. O. Patterson
Mr. Stephen Still

COTTON FARMS (CONTINUED)

Tennessee

Facilitators

Mr. Jim Castellaw - Extension Area Specialist, Farm Management
Dr. Chism Craig - University of Tennessee
Mr. Chuck Danehower - Extension Area Specialist, Farm Management
Mr. Chris Main - Cotton Specialist
Ms. Tracey Sullivan - County Extension Agent, Haywood County
Mr. Jeff Via - County Extension Director, Fayette County

Panel Participants

Mr. Harris Armour, III
Mr. R. Morris English, Jr.
Mr. Dewayne Hendrix
Mr. Allen King
Mr. Travis Lonon
Mr. Ronald Woods
Mr. Chuck Dacus
Mr. Lee Graves
Mr. Tom Karcher
Mr. John King
Mr. William E. Powers

Texas - Coastal Bend

Facilitators

Mr. Duane Campion - County Extension Agent, San Patricio County and Aransas County
Mr. Mark Miller - Chief Operations Officer, Texas AgFinance
Mr. Jeff Nunley - Executive Director, South Texas Cotton & Grain Association
Mr. John Parker - Vice President, Texas AgFinance
Mr. Jeff Stapper - County Extension Agent, Nueces County
Mr. Mac Young - Extension Specialist-Risk Management, Texas AgriLife Extension

Panel Participants

Mr. Travis Adams
Mr. Brad Bickham
Mr. Jon Gwynn
Mr. Larry McNair
Mr. Toby Robertson
Mr. David Weaver
Mr. Marvin Beyer, Jr.
Mr. Jimmy Dodson
Mr. Darrell Lawhon
Mr. Andrew Miller
Mr. Darby Salge
Mr. Jon Whatley

Texas - Eastern Caprock

Facilitators

Mr. Clay Miller - Vice President, Ag Texas Farm Credit Services

Panel Participants

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

Texas - Mid Coast

Facilitators

Mr. Jeff Nunley - Executive Director, South Texas Cotton & Grain Association
Mr. Jimmy Roppolo - General Manager, Farmers Co-op of El Campo
Mr. Jimmy Schulz - Sales Coordinator, Farmers Co-op of El Campo

Panel Participants

Mr. Jimmy Barosh
Mr. Brent Cerny
Mr. Daniel Gavranovic
Mr. Cedric Popp
Mr. Keith Bram
Mr. Glenn Emshosf
Mr. Rob Kainer
Mr. Michael Popp

COTTON FARMS (CONTINUED)

Texas - Rio Grande Valley

Facilitators

Mr. Omar Gonzales - County Extension Agent
Mr. Luis Ribera - District Economist, Texas Cooperative Extension

Panel Participants

Mr. Gary Busse
Mr. Derrick Swanberg
Mr. Marshall Swanberg
Mr. Mark Willis

Texas - Rolling Plains

Facilitators

Mr. Steven Estes - County Extension Agent, Texas AgriLife Extension

Panel Participants

Mr. Rex Ford
Mr. Kelly Head
Mr. Michael McLellan
Mr. Brian Sandbothe
Mr. Mike Sloan
Mr. Dale Spurgin
Mr. Ferdie Walker
Mr. Terry White

Texas - Southern High Plains

Facilitators

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

Panel Participants

Mr. Steven Archer
Mr. Brad Boyd
Mr. Andy Bratcher
Mr. Terry Coleman
Mr. Will Cozart
Mr. Kirk Tidwell
Mr. Johnny Ray Todd
Mr. Donald Vogler
Mr. David Warren

RICE FARMS

Arkansas

Facilitators

Mr. Steve Kelley
Mr. Wes Kirkpatrick - County Agent, U. of Arkansas Cooperative Extension
Dr. Brad Watkins - Research Assistant Professor, U. of Arkansas Cooperative Extension

Panel Participants

Mr. Jeff Keeter
Mr. Joe Mencer
Mr. Matt Miles
Mr. Jim Whitaker
Mr. Sam Whitaker

Arkansas - East Central-Arkansas County

Facilitators

Mr. Chuck Capps
Mr. Bill Free - Riceland Foods, Inc.
Dr. Brad Watkins - Research Assistant Professor, U. of Arkansas Cooperative Extension

Panel Participants

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

Arkansas - East Central-Cross County

Facilitators

Dr. Brad Watkins - Research Assistant Professor, U. of Arkansas Cooperative Extension
Mr. Rick Wimberley - County Extension Agent - Staff Chair, U. of Arkansas Cooperative Exte

Panel Participants

Mr. Corbin Brown
Mr. John Cooper
Mr. Byron Holmes, Jr.
Mr. Keith Lockley
Mr. Bryan Moery
Mr. Roger Pohlner

Arkansas - Northeast-Lawrence County

Facilitators

Mr. Mike Andrews
Mr. Herb Ginn
Dr. Brad Watkins - Research Assistant Professor, U. of Arkansas Cooperative Extension

Panel Participants

Mr. Greg Baltz
Mr. Jeremy Baltz
Mr. Kyle Baltz
Mr. Hunter Burris
Mr. Ricky Burris
Mr. Terry Gray
Mr. Tori Hicks
Mr. Aaron Manning
Mr. Bruce Manning
Mr. Dwain Morris
Mr. Ray Stone

California - Butte County

Facilitators

Dr. Cass Mutters - Farm Advisor, University of California

Panel Participants

Mr. Ken Anderson
Mr. Mike Boeger
Mr. Lee Carrico
Mr. Tom Coleman
Mr. Eric Larrabee
Mr. Brad Mattson
Mr. Steve Rystrom
Mr. Josh Sheppard
Mr. Lance Tennis
Mr. Eric Waterbury

RICE FARMS (CONTINUED)

California - Colusa County

Facilitators

Dr. Cass Mutters - Farm Advisor, University of California

Panel Participants

Mr. Don Bransford
Mr. Charles Marsh
Mr. Robert Sutton
Mr. Mike Lux
Mr. Joe Struckmeyer

California - Sutter County

Facilitators

Dr. Chris Greer - Farm Advisor, University of California

Panel Participants

Mr. Paul 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

Louisiana - Southwest-Acadiana

Facilitators

Mr. Barrett Courville - County Extension Agent, Acadia Parish
Mr. Stuart Gauthier - County Extension Agent, Vermilion Parish
Mr. Kurt Guidry - Professor, LSU Ag Center
Mr. Allen Hogan - County Extension Agent, Jeff Davis Parish

Panel Participants

Mr. Tommy Faulk
Mr. Jackie Loewer
Mr. Brian Wild
Mr. David Lacour
Mr. Christian Richard
Mr. Fred Zaunbrecher

Missouri - Bootheel West

Panel Participants

Mr. Rodney Eaker
Mr. John French
Mr. Frank Smody
Mr. Brian Yarbro
Mr. Rusty Eaker
Mr. Eric Patterson
Mr. Mike Smody

Texas - Bay City-Matagorda County

Facilitators

Mr. Brent Batchelor - County Extension Agent, Matagorda County

Panel Participants

Mr. Donnie Bulanek
Mr. Barrett Franz
Mr. Curt Mowery
Mr. Paul Sliva
Mr. Mike Burnside
Mr. Billy Mann
Mr. Joey Sliva

Texas - Eagle Lake-Colorado County

Panel Participants

Mr. Andy Anderson
Mr. Kenneth Danklefs
Mr. Jason Hlavinka
Mr. Patrick Pavlu
Mr. Steve Balas
Mr. W.A. "Billy" Hefner, III
Mr. Ira Lapham
Mr. Bryan Wiese

RICE FARMS (CONTINUED)

Texas - El Campo-Wharton County

Panel Participants

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

DAIRY FARMS

California

Facilitators

Mrs. Carol Collar - County Dairy Specialist, California Cooperative Extension
Mr. Carl Matz

Panel Participants

Mr. Chuck Draxler
Mr. James Netto
Mr. Jeff Wilbur
Mr. Dino Giacomazzi
Mr. Jason Starr
Mr. John Zonneveld

Florida - North

Facilitators

Ms. Mary Sowerby - Regional Dairy Extension Specialist, UofF Extension
Mr. Chris Vann - County Extension Agent, Lafayette County

Panel Participants

Mr. Eddie Fredriksson
Mr. Brack Jackson
Mr. Terry Reagan
Mr. Johan Heijkoop
Mr. Seth Jackson

Florida - South

Facilitators

Mr. Ray Hodge

Panel Participants

Mr. Ben Butler
Mr. Woody Larson
Mr. Sutton Rucks, Jr.
Mr. Bob Rydzewski
Mr. Bob Butler
Mr. Keith Rucks
Mr. Glynn Rutledge
Mr. Tom Watkins

Idaho

Facilitators

Mr. Bob Naerebout - Executive Director, Idaho Dairymen's Association
Mr. Rick Naerebout

Panel Participants

Mr. Mike Aardema
Mr. Scott Haag
Mr. Arie Roeloffs
Mr. James Boer
Mr. Dan Kluth
Ms. Jeannie Wolverton

Missouri

Facilitators

Mr. Stacey Hamilton - Dairy Specialist and Dade Co. Program Director

Panel Participants

Mr. Dale Carter
Mr. Charles Fletcher
Mr. Clay McQuiddy
Mr. Brian Patton
Mr. Kevin Vanderpoel
Mr. Tony Finch
Mr. Kevin Fletcher
Mr. Mike Meier
Mr. Bernie Van Dalfsen

Nevada - Fallon

Facilitators

Mr. Bob Fletcher
Dr. Tom Harris - Dept. of Resource Econ, University of Nevada
Ms. Pam Powell - Extension Agent

Panel Participants

Mr. Pete Homma
Mr. Alan Perazzo
Mr. Charles Turner
Mr. Newell Mills
Mr. David Perazzo
Mr. Jeff Whitaker

New York - Western

Facilitators

Ms. Joan Petzen - Farm Business Mngt Specialist, Cornell Cooperative Extension

Panel Participants

Ms. Tammy Andrews
Mr. Malachy Coyne
Ms. Kitty Dziedzic
Mr. Walter Faryna
Mr. Craig Harkins
Mr. Jeff Mulligan
Mr. John Noble
Mr. Ken Van Slyke
Mr. Gerry Coyne
Mr. Peter Dueppengiesser
Mr. John Emerling
Mr. Tom and Bill Fitch
Mr. John Knopf
Ed & Jody Neal
Mr. Steve Sondericker

Texas - Central

Facilitators

Dr. Jason Johnson - Area Economist, TexasAgriLIfe Extension
Mr. Whit Weems - County Extension Agent, Erath County

Panel Participants

Mr. Frans Beukeboom
Mr. Stanley Haedge
Mr. Clemens Kuiper
Mr. Pete Whitefield
Mr. Johann DeBoer
Mr. Johan Koke
Mr. Henk Postmus

Texas - Northeast

Facilitators

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

Panel Participants

Mr. Alan Bullock
Mr. Don Smith
Mr. Mark Sustaire
Mr. Blake Fisher
Mr. Jerry Spencer

Texas - South Plains

Facilitators

Ms. Janet Claborn - Director of Economic Development
Mr. Curtis Preston - County Extension Agent Bailey County

Panel Participants

Mr. Tom Alger
Mr. David Lawerence
Mr. Joe Osterkamp
Mr. Larry Hancock
Mr. Reed Mulliken
Mr. Bob Wade

DAIRY FARMS (CONTINUED)

Vermont

Facilitators

Dr. Bob Parsons - Asst. Professor-Farm Management, University of Vermont

Panel Participants

Mr. Paul Bourbeau
Mr. David Conant
Mr. Ted Foster
Mr. Kim Harvey
Mr. Steven Jones
Mrs. Polly McEwing
Mr. Les Pike
Mr. & Mrs. Stanley Scribner
Mr. Onan Whitcomb

Washington

Facilitators

Mr. Chris Benedict - Extension Faculty, Whatcom County

Panel Participants

Mr. Ed Blok
Mr. Ron Bronsema
Mr. Rod & Jon De Jong
Mr. Larry DeHaan
Mr. Ed Pomeroy
Mr. Jeff Rainey
Mr. Galen Smith
Mr. John Steensma
Mr. Harold Van Berkum
Mr. Peter Vlas

Wisconsin

Facilitators

Mr. Nick Schneider - County Agent, Winnebago County Agriculture Agent

Panel Participants

Mr. Ben Hesselink
Mr. Mike Hesselink
Ms. Linda Hodorff
Mr. Matt Hunter
Mr. Jim Kasten
Mr. and Mrs. Charlie Knigge
Mr. Pete Knigge
Mr. Joe Kuehnl
Mr. Larry Pollack
Mr. John Ruedinger
Mr. Rob Stone
Mr. Dean Strauss
Mr. Jason Vorpahl

BEEF PRODUCERS

Colorado

Facilitators

Mr. Todd Hagenbuch - County Extension Agent, Routt County

Panel Participants

Mr. Doug Carlson
Mr. Kurt Frentress
Mr. Jim Rossi
Mr. Jay Fetcher
Mr. Larry Monger
Mr. Wayne Shoemaker

Florida

Panel Participants

Mr. Mike Adams
Mr. Alan Kelley
Mr. Ralph Pelaez
Dr. Fred Tucker
Mr. Wes Carlton
Mr. Cary Lightsey
Mr. Bert Tucker
Mr. Wes Williamson

Missouri - Southwest

Facilitators

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

Panel Participants

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

Montana

Facilitators

Mr. Michael Schuldt - County Extension Agent, Custer County

Panel Participants

Mr. Clarence Brown
Mr. Levi Foreman
Mr. Jeff Okerman
Mr. Andy Zook
Mr. Art Drange
Mr. Alyn Haughian
Mr. Scot Robinson

Nevada

Facilitators

Dr. Tom Harris - Dept. of Resource Econ, University of Nevada
Ms. Desiree Seal
Dr. Ron Torell - Custom A.I. & Ranch Consulting

Panel Participants

Mr. Tom Barnes
Mr. and Mrs. Jay Dalton
Mr. and Mrs. Mitch & Rhonda H
Mr. and Mrs. Ed Sarman
Mr. and Mrs. Brad & Dani Dalto
Mr. Jon Griggs
Mr. and Mrs. Sam Mori
Mr. and Mrs. Craig Spratling

New Mexico

Facilitators

Mr. Blair Clavel - County Extension Director, Harding County
Dr. Manny Encinias - Extension Beef Cattle Specialist, New Mexico State University

Panel Participants

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

BEEF PRODUCERS (CONTINUED)

South Dakota

Facilitators

Adele Harty
Mr. Dan Oedekoven - Director, West River Agricultural Center, South Dakota State University
Mr. Dave Ollila
Mr. Ken Olson
Ms. Shannon Sand

Panel Participants

Alan & Jill Bishop
Mr. Lynn C. Frey
Mr. Wayne Oedekoven
John & Lance Frei
Mr. Leo E. Grubl
Mr. Larry Stomprud

Texas - Rolling Plains

Facilitators

Mr. Stan Bevers - Extension Economist - Management, Texas A&M University
Mr. Kevin Brendle - County Extension Agent, Dickens County
Mr. Ryan Martin - County Extension Agent, Motley County
Mr. Toby Oliver - County Extension Agent, King County

Panel Participants

Mr. Greg Arnold
Mr. Steve Drennan
Mr. Glenn Springer
Hon. Duane Daniel
Mr. Leland Foster

Texas - South

Facilitators

Mr. Dwight Sexton - County Extension Agent, Gonzales County

Panel Participants

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

Wyoming

Facilitators

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

Panel Participants

Mr. Hugh Baird
Mr. Vance Lungren
Mr. Gary Rice
Mr. Tim Flitner
Mr. Dan Rice

PEANUT FARMS

North Carolina - Elizabethtown

Facilitators

Dr. Blake Brown
Mr. Gary Bullen
Mr. Bob Sutter

Panel Participants

Mr. Robert Byrd
Mr. Les Galloway
Mr. Alex Jordan
Mr. Dan Ward

North Carolina - Rocky Mount

Facilitators

Dr. Blake Brown
Mr. Gary Bullen
Mr. Bob Sutter

Panel Participants

Mr. Clarke Fox
Mr. Wayne Harrell
Mr. Donnie White