Representative Farms Economic Outlook for the Preliminary 2021 FAPRI/AFPC Baseline

Working Paper 20-06

December 2020

Agricultural and Food Policy Center

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EXECUTIVE SUMMARY

The Agricultural and Food Policy Center (AFPC) at Texas A&M University develops and maintains data to simulate 94 representative crop, dairy, and livestock operations in major production areas in 30 states. The chief purpose of this analysis is to project the economic viability of those farms by region and commodity for 2020 through 2025. The data necessary to simulate the economic activity of these operations are cultivated through ongoing cooperation with panels of agricultural producers in selected states. The Food and Agricultural Policy Research Institute (FAPRI) provides projected prices, policy variables, and input inflation rates in their Preliminary 2021 Baseline.

Under the Preliminary 2021 Baseline, 30 of the 64 crop farms are in good liquidity condition (less than a 25 percent chance of negative ending cash reserves by 2025). Fourteen crop farms have between a 25 percent and a 50 percent likelihood of negative ending cash reserves, and the remaining 20 crop farms have greater than a 50 percent chance of negative ending cash reserves. Additionally, 51 of the 64 crop farms are in a good equity position (less than a 25 percent chance of decreasing real net worth during the study period). Seven crop farms have between a 25 percent and 50 percent likelihood of losing real net worth, and six crop farms have greater than a 50 percent probability of decreasing real net worth by 2025. The following discussion provides an overall evaluation by commodity considering both liquidity and equity measures.

- FEEDGRAIN FARMS: Thirteen of the 25 feedgrain farms are in good overall financial condition. Ten farms are classified in marginal condition, and two are in poor condition.

- WHEAT FARMS: Six representative wheat farms are classified in good overall financial condition, three are in marginal condition, and two are in poor condition.

- COTTON FARMS: Eight of the 13 cotton farms are classified in good condition, four are in marginal condition, and one is in poor condition.

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

- DAIRY FARMS: Thirteen of the 20 dairies are in good overall financial condition. One of the dairies is classified in marginal condition; six are in poor condition.

- BEEF CATTLE RANCHES: Five of the 10 cattle ranches are classified in good financial condition, four are projected to be in marginal condition, and one is in poor condition.

REPRESENTATIVE FARMS ECONOMIC OUTLOOK FOR THE PRELIMINARY 2021 FAPRI/AFPC BASELINE

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REPRESENTATIVE FARMS ECONOMIC OUTLOOK FOR THE PRELIMINARY 2021 FAPRI/AFPC BASELINE

The farm-level economic impacts of the FAPRI Preliminary 2021 Baseline on representative crop and livestock operations are projected in this report, assuming provisions of the 2018 Farm Bill are in effect and continue throughout the 2020-2025 study period. This iteration of the FAPRI Preliminary 2021 Baseline includes impacts of the U.S.-China Phase 1 trade deal along with current assumptions associated with the COVID-19 pandemic on agricultural markets. The current representative farm analysis output reflects an evaluation of ARC/PLC program elections for the farms given provisions of the 2018 Farm Bill. Producers are currently assumed to enroll in the program resulting in the highest ending cash reserves at the end of the projection period; as farm update meetings are completed, adjustments will be made to program elections as needed. Full Market Facilitation Program (MFP) payments for 2018 and 2019 were included in this analysis along with Coronavirus Food Assistance Program (CFAP) payments for 2020 on eligible inventory and/or production. The analysis was conducted using whole farm simulation models developed by AFPC with necessary data sourced from:

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

- Projected prices, policy variables, and input inflation rates from the Food and Agricultural Policy Research Institute (FAPRI) Preliminary 2021 Baseline Update.

The policy simulation model incorporates the historical risk faced by farmers for prices and production. This report presents the results of the Preliminary 2021 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 2025.

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 Preliminary 2021 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 94 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 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.

A majority of the farms used in the analysis have been updated through panel discussions in the last three years. All of the crop farms are assumed to begin 2017 with 20 percent intermediate-term and long-term debt. Initial debt levels in 2017 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 2017 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 June 2020 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 (2019) were held constant based on actual values obtained from the producers. Crop yields for 2020-2025 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 2018. FAPRI's Preliminary 2021 Baseline prices were localized for the farms and used as the average prices for 2020-2025 to simulate stochastic crop and livestock prices.

- Dairy and beef cattle herd sizes were held constant for all farms over the 2020-2025 planning horizon.

- 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 FAPRI Preliminary 2021 Baseline which incorporates the provisions of the 2018 Farm Bill.

- Marketing loan provisions for covered commodities in the 2018 Farm Bill are assumed to be in place for the farm level analysis.

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

- The current representative farm analysis output reflects an evaluation of ARC/PLC program elections for the farms given provisions of the 2018 Farm Bill. Producers are currently assumed to enroll in the program resulting in the highest ending cash reserves at the end of the projection period; as farm update meetings are completed, adjustments will be made to program elections as needed.

- Dairies are assumed to enroll in Dairy Margin Coverage at the $9.50/cwt for Tier I and $5.00/cwt for Tier II. Tier II was limited to the minimum coverage needed to maximize Tier I production and minimize Tier II coverage expense.

- All crop farms are assumed to carry yield or revenue insurance at levels common to the area.

- Market Facilitation Program (MFP) payments were assumed on all farms and dairies that had eligible acres and/or production in 2018 and 2019.

- Coronavirus Food Assistance Program (CFAP) payments were assumed for all farms, ranches, and dairies for 2020 on eligible inventory and/or production.

Definitions of Variables in the Summary Tables

- **Overall Financial Position, 2020-2025 --** 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, 2020-2025 --** Annualized percentage change in the operator's net worth from January 1, 2020 through December 31, 2025, after adjusting for inflation. This value reflects the real annualized increase or decrease in net worth or equity for the farm over the planning horizon including changes in real estate values.

- **Government Payments/Receipts, 2020-2025 --** Sum of all farm program payments (PLC or ARC and marketing loan gains/loan deficiency payments), recent disaster payments, and Dairy Margin Coverage (DMC) payments divided by total cash 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, DMC payments, MFP payments, CFAP payments, crop insurance indemnities, and other farm related receipts.

- **Government Payments --** Sum of all farm program payments (PLC or ARC and marketing loan gains/loan deficiency payments), recent disaster payments, and DMC payments. 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 2020-2025 --** The number of times out of 100 that real net worth at the end of 2025 is less than real net worth at the start of 2020.

Figure 2. Representative Farms Producing Feed Grains and Oilseeds

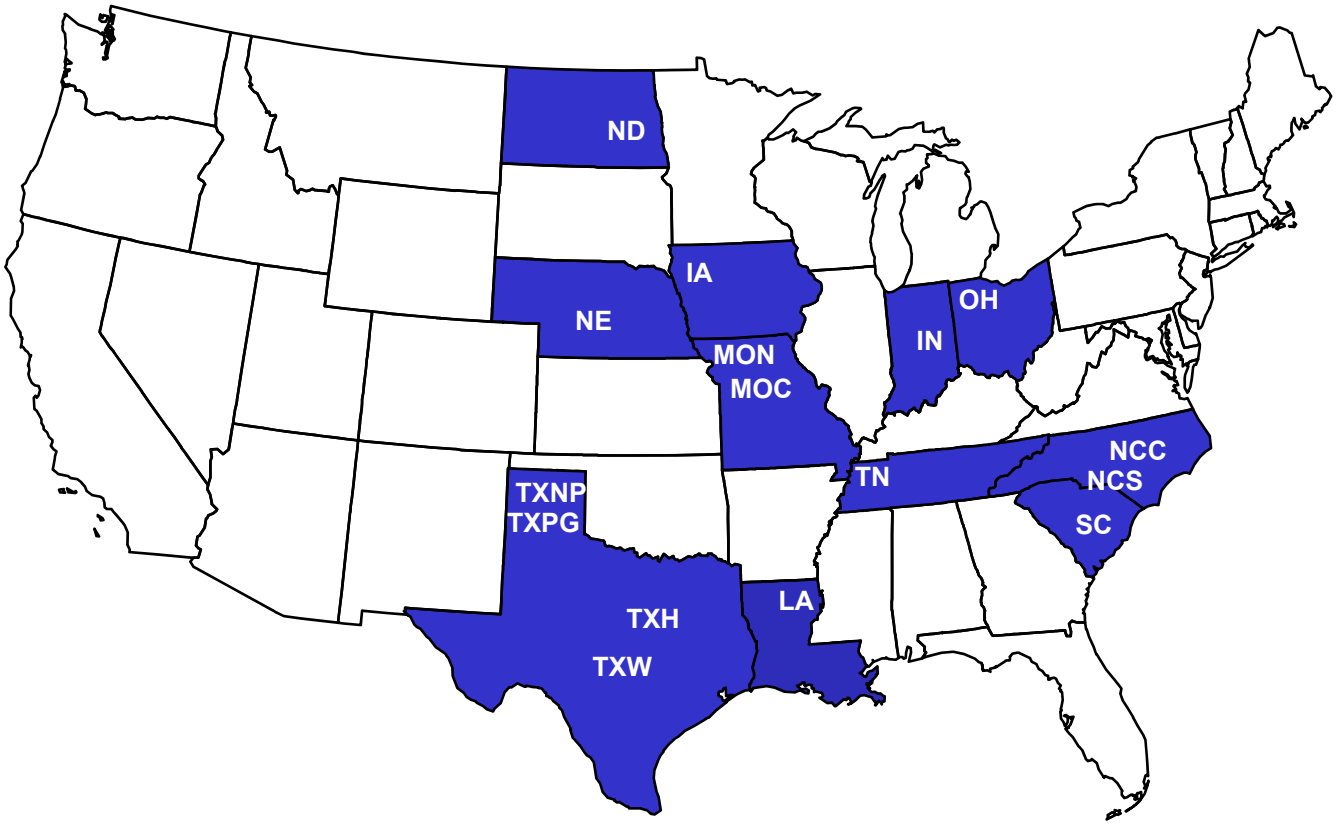


Table 4. Implications of the Preliminary 2021 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Feed Grains and Oilseeds.

	IAG1350	IAG3400	NEG2400	NEG4500	NDG3000	NDG9000	ING1000	ING3250	OHG700	OHG1500
Overall Financial Position										
2020-2025 Ranking	Poor	Marginal	Good	Marginal	Marginal	Good	Good	Good	Marginal	Good
Change Real Net Worth (%)										
2020-2025 Average	-1.25	3.96	5.09	1.70	3.21	5.92	4.60	4.44	1.96	6.16
Govt Payments/Receipts (%)										
2020-2025 Average	4.19	3.87	3.96	3.43	4.17	4.02	3.96	3.37	2.34	3.74
Cost to Receipts Ratio (%)										
2020-2025 Average	97.62	91.89	90.58	103.30	86.34	88.45	71.39	84.18	83.83	74.33
Total Cash Receipts ($1000)										
2019	973.45	2,257.41	2,088.82	3,664.46	1,305.82	4,078.28	651.27	2,275.83	359.37	738.97
2020	1,154.97	2,669.39	2,532.57	4,362.61	1,495.39	4,691.87	760.38	2,605.28	527.45	1,159.63
2021	1,011.79	2,333.34	2,219.98	3,849.61	1,310.80	4,162.11	672.81	2,344.63	462.22	1,016.85
2022	1,022.80	2,355.40	2,225.45	3,863.36	1,317.29	4,184.89	674.17	2,355.98	461.23	1,019.52
2023	1,026.10	2,364.50	2,223.61	3,847.42	1,320.88	4,202.79	676.66	2,358.49	462.81	1,020.09
2024	1,031.61	2,374.97	2,223.23	3,843.46	1,325.57	4,195.64	678.07	2,373.15	463.06	1,023.76
2025	1,034.39	2,384.59	2,225.81	3,861.18	1,340.23	4,232.06	683.02	2,386.71	465.31	1,035.46
2020-2025 Average	1,046.94	2,413.70	2,275.11	3,937.94	1,351.69	4,278.23	690.85	2,404.04	473.68	1,045.88
Government Payments ($1000)										
2019	94.41	227.14	151.09	236.17	184.67	524.15	74.24	223.86	35.64	72.70
2020	95.25	216.16	197.02	316.43	128.70	386.28	59.68	180.72	39.44	101.33
2021	25.13	51.32	52.35	76.90	37.88	124.99	16.36	45.33	5.17	28.00
2022	35.19	72.35	72.86	105.56	43.88	135.68	21.85	63.77	5.87	27.77
2023	36.23	74.57	73.89	106.63	44.66	135.71	22.43	65.53	6.05	27.83
2024	37.70	77.64	77.57	111.28	44.73	133.81	23.23	68.24	5.96	27.61
2025	38.96	81.11	79.04	113.74	46.33	137.65	24.02	71.15	7.26	29.20
2020-2025 Average	44.74	95.52	92.12	138.42	57.70	175.69	27.93	82.46	11.63	40.29
Net Cash Farm Income ($1000)										
2019	93.32	521.59	415.09	458.14	325.83	1,396.06	246.46	617.34	113.74	363.88
2020	267.00	929.48	845.63	1,141.32	512.32	1,983.71	351.72	935.59	208.70	585.42
2021	111.09	562.86	504.05	587.53	308.07	1,401.50	257.57	643.64	138.54	428.93
2022	101.28	543.19	473.58	525.68	286.27	1,365.59	252.53	624.53	131.12	413.23
2023	86.15	534.68	441.92	442.17	273.15	1,356.62	250.79	594.85	123.13	400.08
2024	73.01	518.52	412.09	364.93	259.37	1,303.21	248.37	584.24	116.67	392.51
2025	52.67	497.13	382.80	283.31	256.12	1,295.89	248.00	569.20	114.18	397.53
2020-2025 Average	115.20	597.64	510.01	557.49	315.88	1,451.09	268.16	658.68	138.72	436.28
Ending Cash Reserves ($1000)										
2019	-450.57	3.71	180.58	-910.60	92.94	1,297.04	57.77	222.20	21.78	374.06
2020	-417.80	296.63	458.30	-635.60	251.38	2,176.70	160.92	575.49	78.06	597.67
2021	-505.87	402.91	597.54	-831.22	292.41	2,772.24	212.66	712.00	90.28	736.46
2022	-566.40	459.44	673.64	-1,028.42	259.11	3,229.07	240.44	814.22	73.43	873.86
2023	-664.41	482.00	756.68	-1,416.74	242.15	3,726.93	283.83	915.08	56.37	975.46
2024	-789.05	415.02	724.98	-1,807.94	243.58	4,067.44	317.09	989.36	40.09	1,124.57
2025	-959.03	362.41	665.22	-2,369.73	233.96	4,444.94	334.38	1,024.47	28.35	1,259.89
Nominal Net Worth ($1000)										
2019	2,305.43	8,393.37	4,832.36	14,812.76	3,479.07	16,973.88	2,688.91	8,995.67	2,689.69	3,501.62
2020	2,362.54	8,799.26	5,228.28	15,316.53	3,653.10	18,091.46	2,835.15	9,468.98	2,753.76	3,753.39
2021	2,307.71	9,028.19	5,427.99	15,454.51	3,725.05	18,970.64	2,937.29	9,787.68	2,776.53	3,950.74
2022	2,206.81	9,096.45	5,536.93	15,306.55	3,725.28	19,513.55	2,983.84	9,934.82	2,745.03	4,081.50
2023	2,119.27	9,245.53	5,695.85	15,160.82	3,744.63	20,277.06	3,047.34	10,114.34	2,733.42	4,221.34
2024	2,040.66	9,446.22	5,807.35	15,064.10	3,780.14	21,068.03	3,123.23	10,357.20	2,739.89	4,382.85
2025	1,929.99	9,574.79	5,878.97	14,805.49	3,798.46	21,659.53	3,181.74	10,547.17	2,730.31	4,528.95
Prob. of Negative Ending Cash (%)										
2020	99	18	5	89	5	1	2	5	7	1
2021	99	21	8	86	14	1	2	6	16	1
2022	97	25	9	85	22	1	4	8	29	1
2023	97	25	10	89	28	1	3	6	35	1
2024	97	31	15	92	28	1	3	6	40	1
2025	97	34	20	95	31	1	4	7	41	1
Prob. of Decreasing Real Net Worth										
Over 2020-2025	74	1	1	8	2	1	1	1	1	1

Table 5. Implications of the Preliminary 2021 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Feed Grains and Oilseeds.

	MOCG2300	MOCG4200	MONG2300	LANG2500	TNG2500	TNG5000	NCSP2000	NCC2030	SCC2000	SCG3500
Overall Financial Position										
2020-2025 Ranking	Good	Good	Marginal	Marginal	Marginal	Good	Poor	Good	Poor	Good
Change Real Net Worth (%)										
2020-2025 Average	3.84	5.05	4.04	3.35	4.38	5.90	0.72	10.67	2.85	4.97
Govt Payments/Receipts (%)										
2020-2025 Average	3.38	3.08	3.51	8.43	3.58	3.15	6.22	8.26	7.1	6.41
Cost to Receipts Ratio (%)										
2020-2025 Average	69.24	66.11	71.03	99.83	96.14	87.82	99.42	72.72	91.41	88.04
Total Cash Receipts ($1000)										
2019	1383.6	2454.18	1540.49	1866.4	1499.29	3186.93	1266.21	1101.04	1353.53	2654.57
2020	1590.74	2864.57	1737.11	2064.45	1688.19	3639.99	1677.12	1313.11	1616.58	3410.74
2021	1397.44	2529.32	1530.53	1854.49	1493.29	3208.36	1553.65	1190.26	1469.67	3129.3
2022	1408.08	2564.98	1538.6	1891.02	1511.91	3249.26	1577.12	1195.71	1494.92	3195.35
2023	1413.78	2561.1	1543.46	1905.43	1522.6	3272.04	1589.36	1190.96	1508.09	3214.64
2024	1422.02	2573.49	1545.04	1917.18	1530.69	3291.51	1602.86	1193.11	1527.81	3249.32
2025	1428.73	2616.3	1557.81	1932.53	1551.91	3346.58	1637.8	1194.9	1537.22	3287.15
2020-2025 Average	1443.46	2618.29	1575.42	1927.52	1549.77	3334.62	1606.32	1213.01	1525.72	3247.75
Government Payments ($1000)										
2019	169.13	247.31	213.68	282.51	221.64	421.64	139.13	134.81	115.62	252.53
2020	118.25	205.92	131.75	273.94	137.9	289.54	155.39	169.49	195.31	371.85
2021	25.85	41.62	29.73	148.22	32.43	57.58	86.32	95.68	95.65	183.97
2022	36.66	58.67	41.91	158.25	40.95	72.31	90.17	99.31	98.44	190.87
2023	38.09	60.8	43.53	143.72	41.93	74.23	89.13	87.37	91.23	176.25
2024	39.61	63.41	45.26	133.99	42.94	75.38	90.37	81.17	87.99	170.1
2025	41.64	66.69	47.58	124.41	44.45	78.62	90.98	73.74	86.38	164.72
2020-2025 Average	50.02	82.85	56.63	163.75	56.76	107.94	100.4	101.13	109.17	209.63
Net Cash Farm Income ($1000)										
2019	574.4	1062.07	581.17	314.21	369.84	909.52	6.9	369.7	175.91	261.89
2020	776.28	1480.53	783.2	524.23	546.88	1339.7	375.64	579.67	425.65	968.66
2021	568.23	1125.2	572.11	274.15	321.1	855	226.17	441.82	246	613.4
2022	567.33	1138.02	568.47	257.23	315.06	851.12	217.89	435.95	240.32	608.06
2023	564.25	1106.65	568.19	234.38	310.77	847.86	201.85	423.07	231.41	577.89
2024	565.95	1098.23	566.21	216.16	304.37	822.07	176	415.45	222.68	552
2025	557.43	1106.36	566.49	193.72	302.87	838.22	178.37	406.46	206.96	529.59
2020-2025 Average	599.91	1175.83	604.11	283.31	350.18	925.66	229.32	450.4	262.17	641.6
Ending Cash Reserves ($1000)										
2019	213.89	804.94	-52.16	-18.77	51.61	704.76	-622.36	155.86	-17.15	134.11
2020	477.13	1401.26	98.12	166.15	197.91	1211.29	-574.94	309.21	79.47	488.62
2021	603.73	1817.64	99.05	166.39	215.35	1430.25	-637.47	500.63	100.63	624.47
2022	696.93	2128.88	93.75	135.97	219.27	1622.64	-746.08	687.74	91.1	800.39
2023	805.5	2457.03	83.07	86.68	200.77	1849.73	-937.32	866.13	88.88	919.06
2024	808.1	2740.75	70.77	8.93	208.18	2036.54	-1031.87	1046.86	91.96	1052.45
2025	903.86	3044.11	23.07	-34.45	169.8	2130.61	-1145.24	1208.45	29.29	1091.55
Nominal Net Worth ($1000)										
2019	10058.7	14754.73	10561.46	3027.88	4183.82	9714.05	3505.62	1973.69	2824.9	6055.18
2020	10422.24	15527.71	10969.76	3257.77	4473.24	10462.77	3596.21	2255.79	2976.61	6502.17
2021	10692.85	16130.16	11290.72	3360.34	4588.66	10892.06	3594.12	2542.46	3008.6	6714.67
2022	10758.14	16445.39	11382.5	3344.73	4628.28	11180.58	3514.9	2721.35	2993.92	6835.18
2023	10922.09	16878.68	11580.95	3321.1	4693.57	11566.93	3448.02	2904.14	2999.77	6986.63
2024	11185.23	17432.84	11867.61	3304.65	4821.53	12018.42	3393.6	3094.48	3021.18	7168.35
2025	11395.36	17917.9	12099.7	3330.12	4887.18	12378.12	3305.47	3270.01	3021.45	7317.33
Prob. of Negative Ending Cash (%)										
2020	8	1	35	24	13	1	99	1	31	7
2021	8	1	39	32	24	1	97	1	34	9
2022	9	1	42	36	28	2	94	1	39	6
2023	7	1	47	42	34	2	96	1	39	7
2024	9	1	44	46	34	2	95	1	39	6
2025	9	1	49	47	35	3	95	1	46	8
Prob. of Decreasing Real Net Worth										
Over 2020-2025	1	1	1	11	1	1	42	1	9	1

Table 6. Implications of the Preliminary 2021 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Feed Grains and Oilseeds.

	TXNP3450	TXNP10880	TXPG2500	TXHG3000	TXWG1600
Overall Financial Position					
2020-2025 Ranking	Good	Good	Good	Marginal	Marginal
Change Real Net Worth (%)					
2020-2025 Average	7.13	7.54	5.28	3.68	1.39
Govt Payments/Receipts (%)					
2020-2025 Average	6.08	4.20	7.88	7.48	9.91
Cost to Receipts Ratio (%)					
2020-2025 Average	78.71	90.20	101.45	102.47	101.72
Total Cash Receipts ($1000)					
2019	2,577.89	8,103.39	1,794.27	1,169.15	578.44
2020	3,033.40	9,583.86	2,163.47	1,298.70	693.52
2021	2,683.09	8,316.67	1,935.01	1,125.42	601.20
2022	2,733.94	8,487.30	1,971.86	1,151.13	610.85
2023	2,737.14	8,557.54	1,966.29	1,145.38	607.26
2024	2,772.88	8,630.15	1,979.77	1,159.85	609.92
2025	2,773.32	8,686.42	1,980.64	1,166.74	611.08
2020-2025 Average	2,788.96	8,710.32	1,999.50	1,174.54	622.31
Government Payments ($1000)					
2019	248.66	684.99	137.07	134.25	83.85
2020	341.36	1,032.80	272.59	174.32	113.91
2021	137.40	230.49	140.94	66.61	54.15
2022	145.13	250.30	149.74	77.00	57.94
2023	137.72	248.32	135.37	73.47	52.16
2024	136.04	255.56	131.18	73.14	50.11
2025	135.29	246.52	124.75	71.55	47.16
2020-2025 Average	172.16	377.33	159.10	89.35	62.57
Net Cash Farm Income ($1000)					
2019	671.93	1,712.79	314.24	302.87	102.25
2020	1,140.09	3,203.97	697.84	395.71	218.40
2021	747.94	1,759.80	434.65	200.25	111.17
2022	748.21	1,777.96	420.87	194.95	110.81
2023	719.81	1,707.54	366.98	172.31	78.19
2024	711.62	1,642.51	352.36	164.15	72.18
2025	678.17	1,532.35	317.67	151.79	58.98
2020-2025 Average	790.97	1,937.36	431.73	213.19	108.29
Ending Cash Reserves ($1000)					
2019	375.46	2,351.80	142.25	-250.76	10.77
2020	870.25	3,994.81	448.92	-95.13	25.50
2021	1,095.21	4,655.83	413.01	-116.19	37.34
2022	1,282.72	5,291.50	464.49	-139.37	-145.43
2023	1,456.34	5,898.80	508.16	-184.04	-190.52
2024	1,634.07	6,402.67	544.12	-244.48	-272.63
2025	1,973.86	6,932.58	552.12	-367.22	-402.23
Nominal Net Worth ($1000)					
2019	6,916.85	16,547.62	4,658.58	1,619.27	1,437.04
2020	7,564.85	18,558.59	5,086.90	1,800.94	1,524.68
2021	7,981.90	19,546.79	5,293.87	1,829.07	1,542.08
2022	8,261.25	20,387.30	5,409.43	1,836.70	1,522.82
2023	8,582.95	21,261.22	5,524.52	1,843.44	1,488.70
2024	8,952.01	22,098.05	5,639.21	1,839.59	1,460.68
2025	9,447.87	23,104.88	5,726.31	1,812.31	1,408.27
Prob. of Negative Ending Cash (%)					
2020	1	1	11	73	43
2021	1	1	16	70	41
2022	1	1	18	71	76
2023	1	1	16	71	80
2024	1	1	19	72	85
2025	1	1	20	78	91
Prob. of Decreasing Real Net Worth					
Over 2020-2025	1	1	1	21	22

Figure 12. Wheat Farms

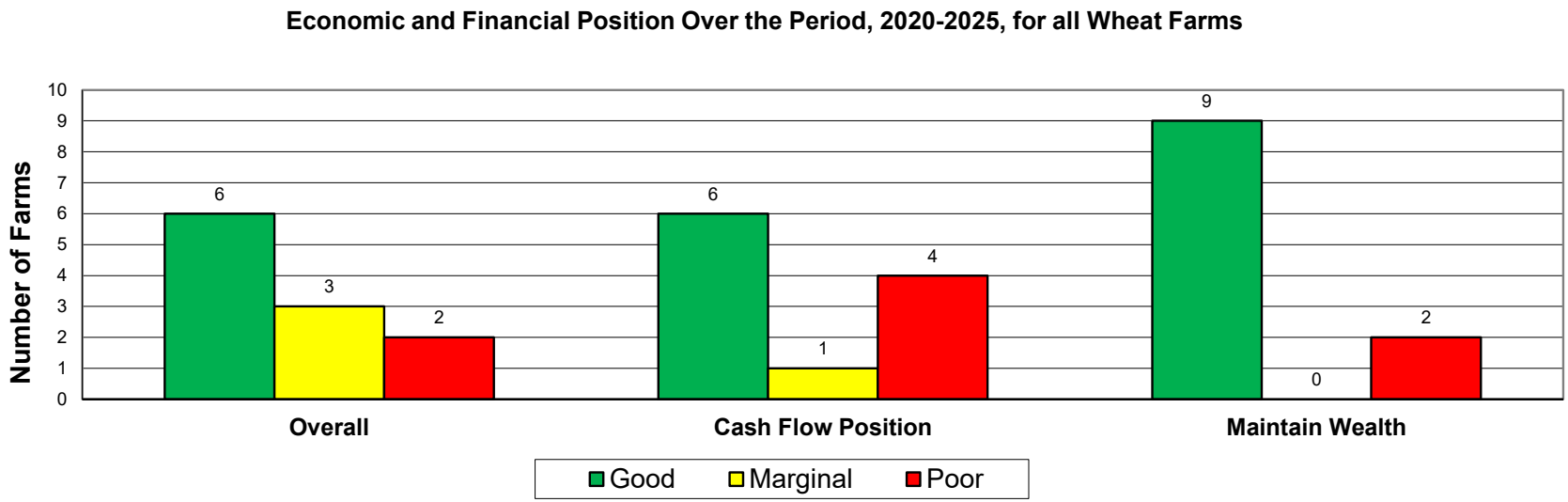


Figure 4. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Feed Grain and Oilseed Farms

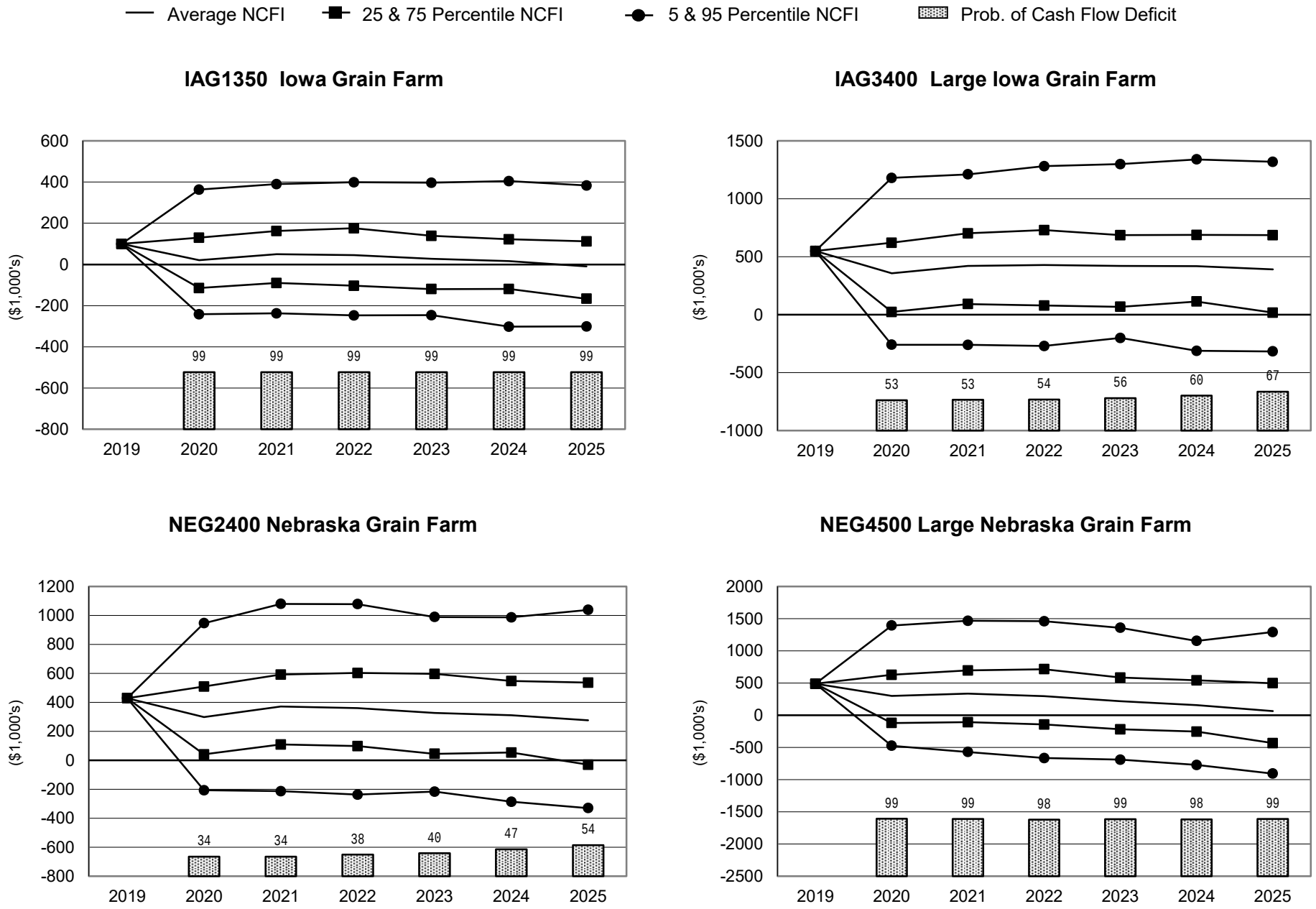


Figure 5. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Feed Grain and Oilseed Farms

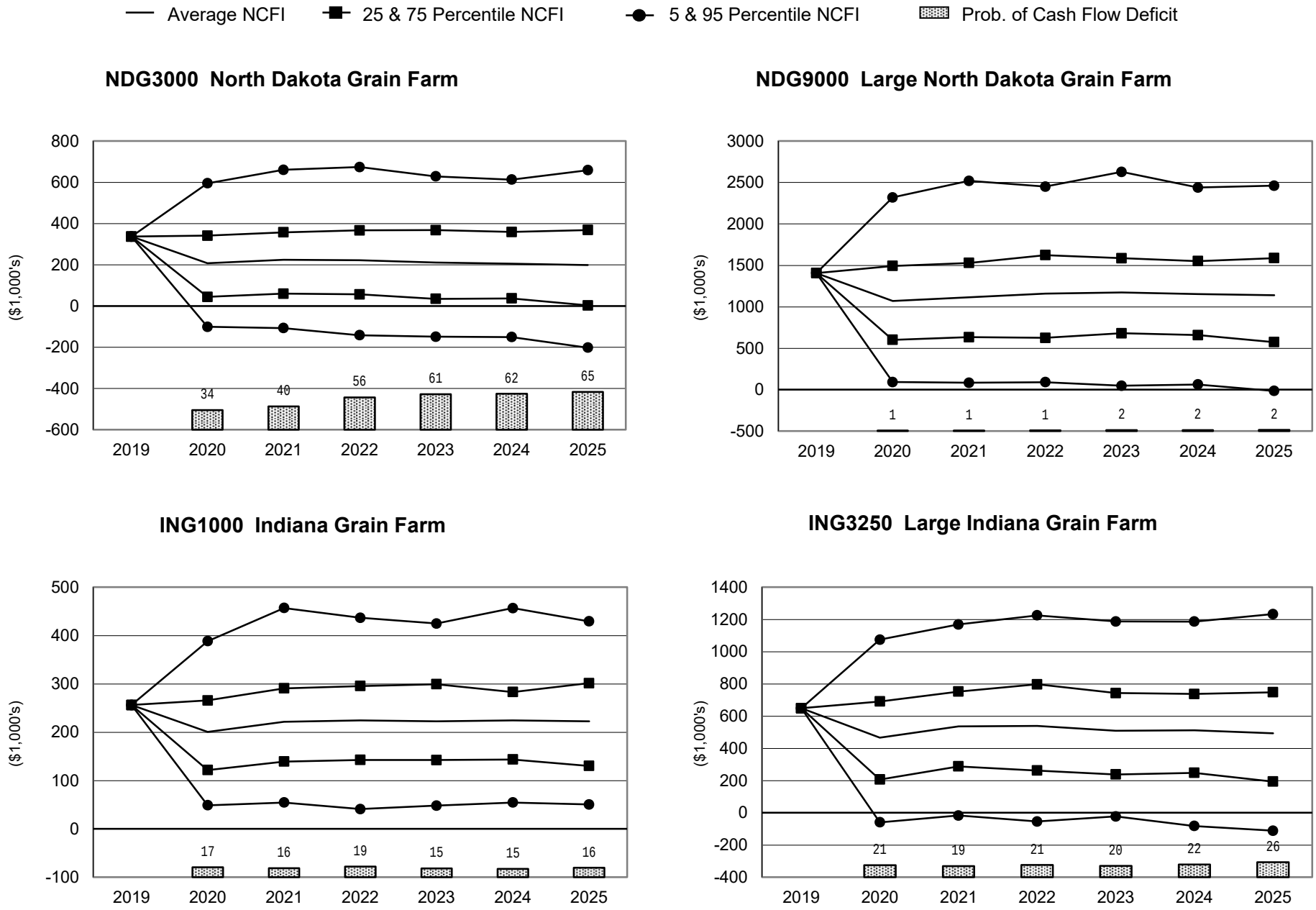


Figure 6. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Feed Grain and Oilseed Farms

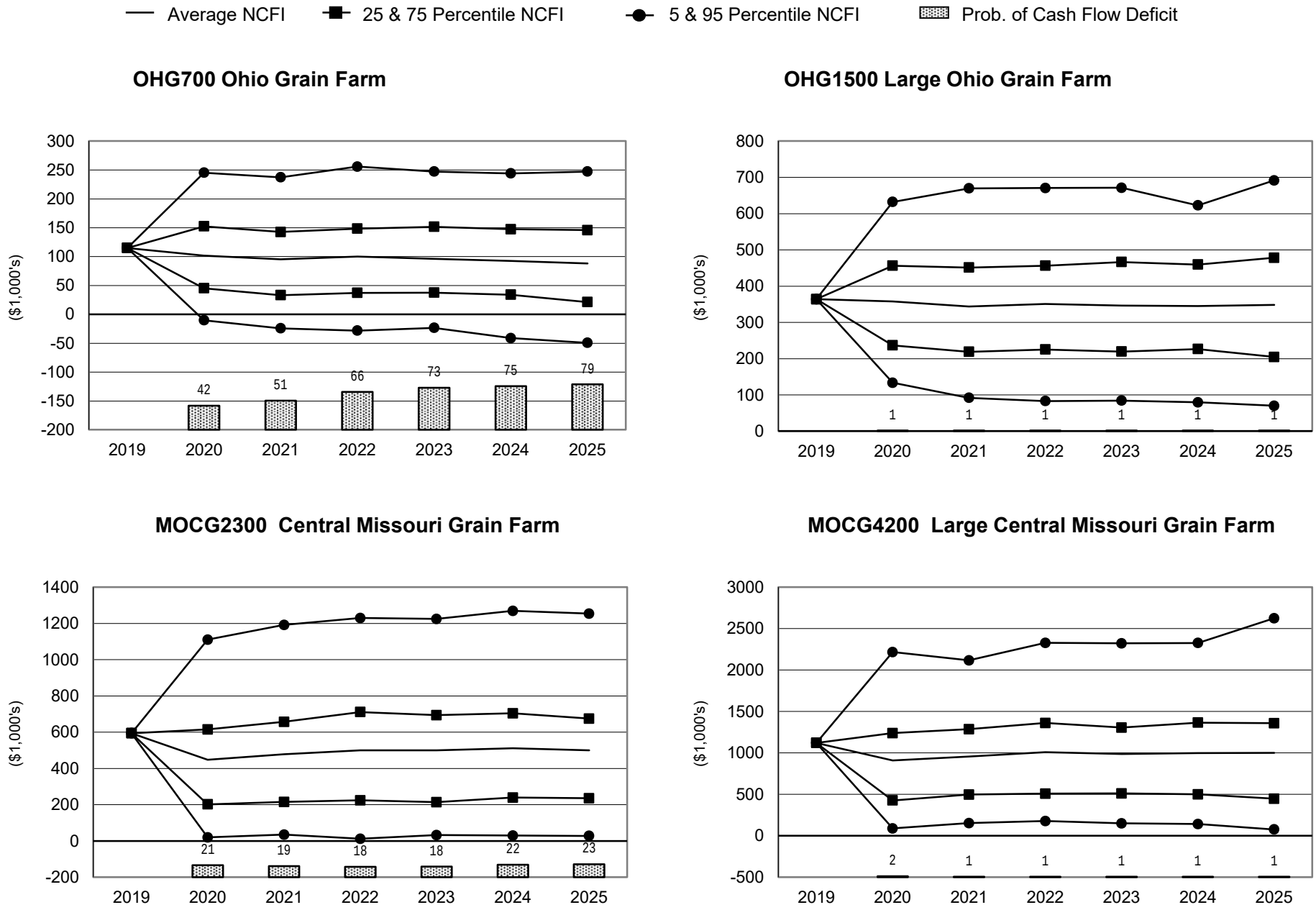


Figure 7. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Feed Grain and Oilseed Farms

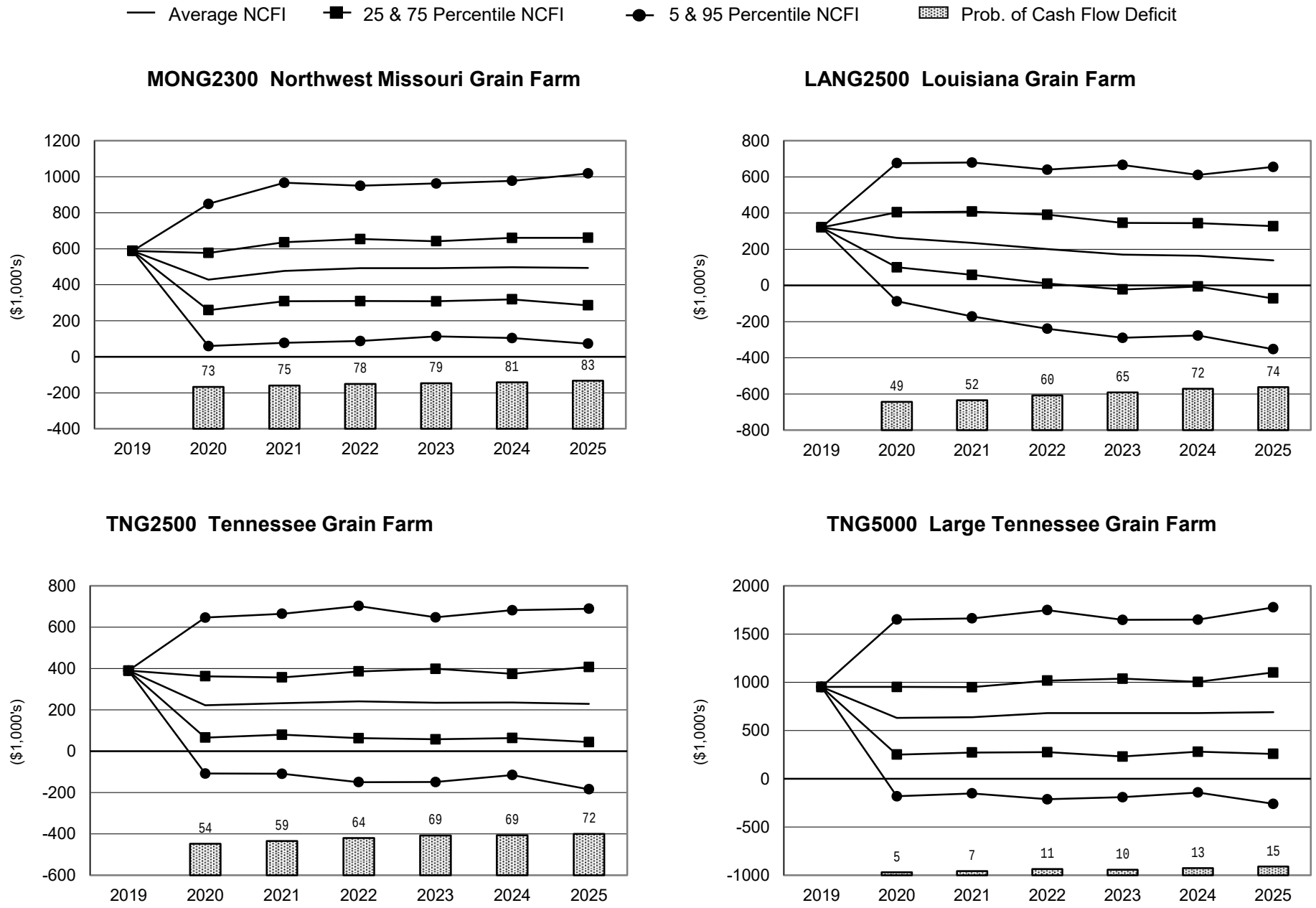


Figure 8. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Feed Grain and Oilseed Farms

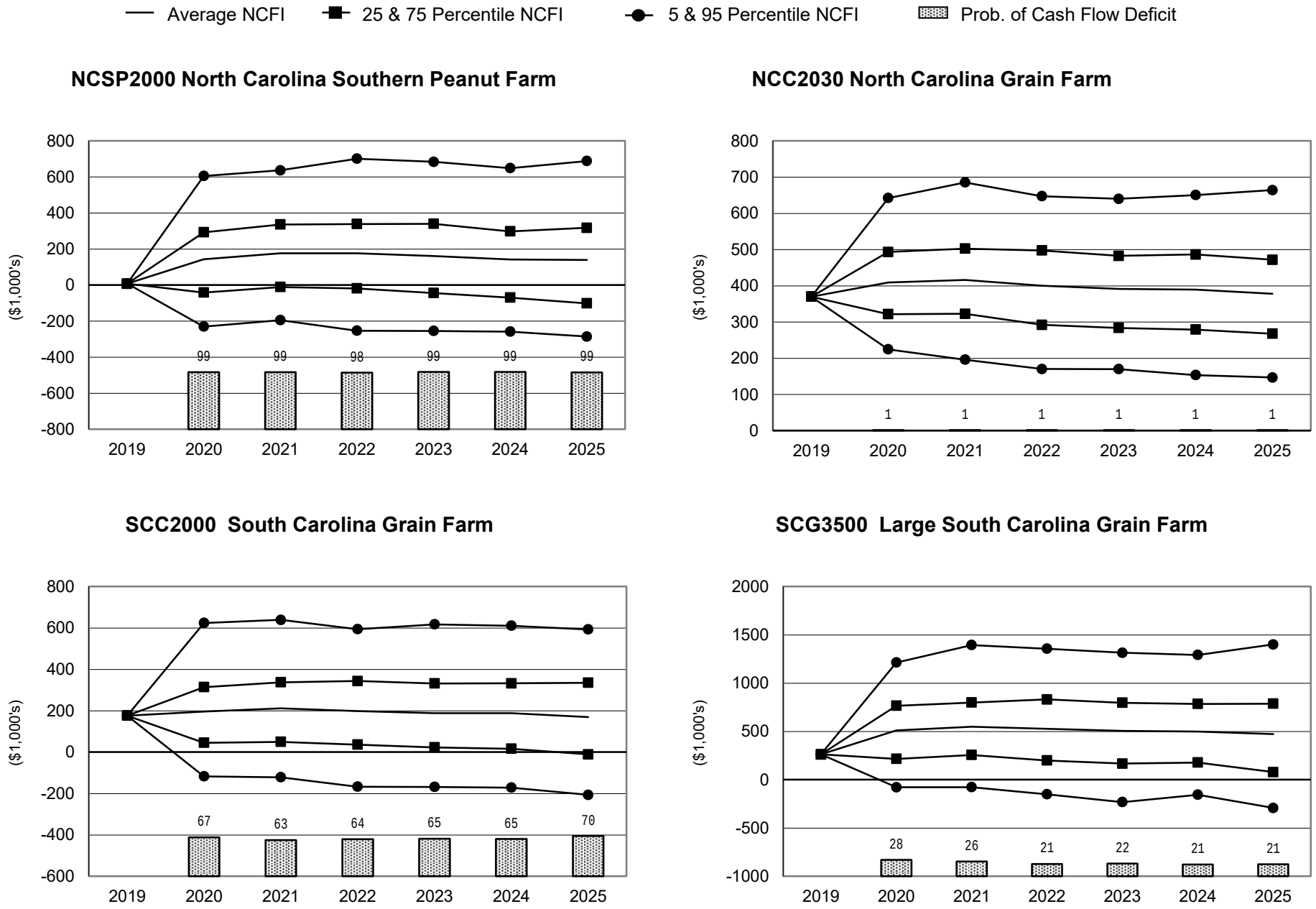


Figure 9. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Feed Grain and Oilseed Farms

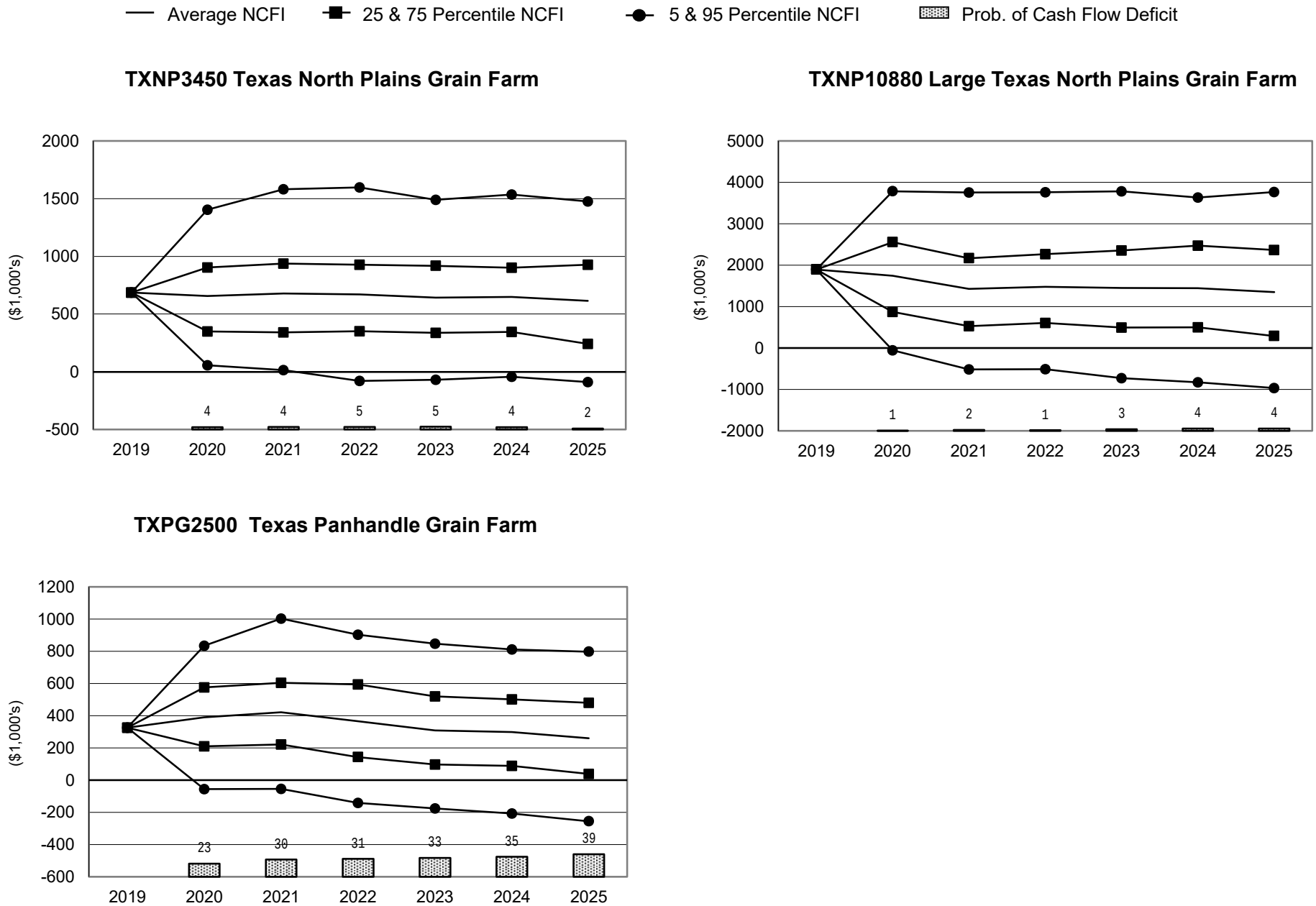


Figure 10. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Feed Grain and Oilseed Farms

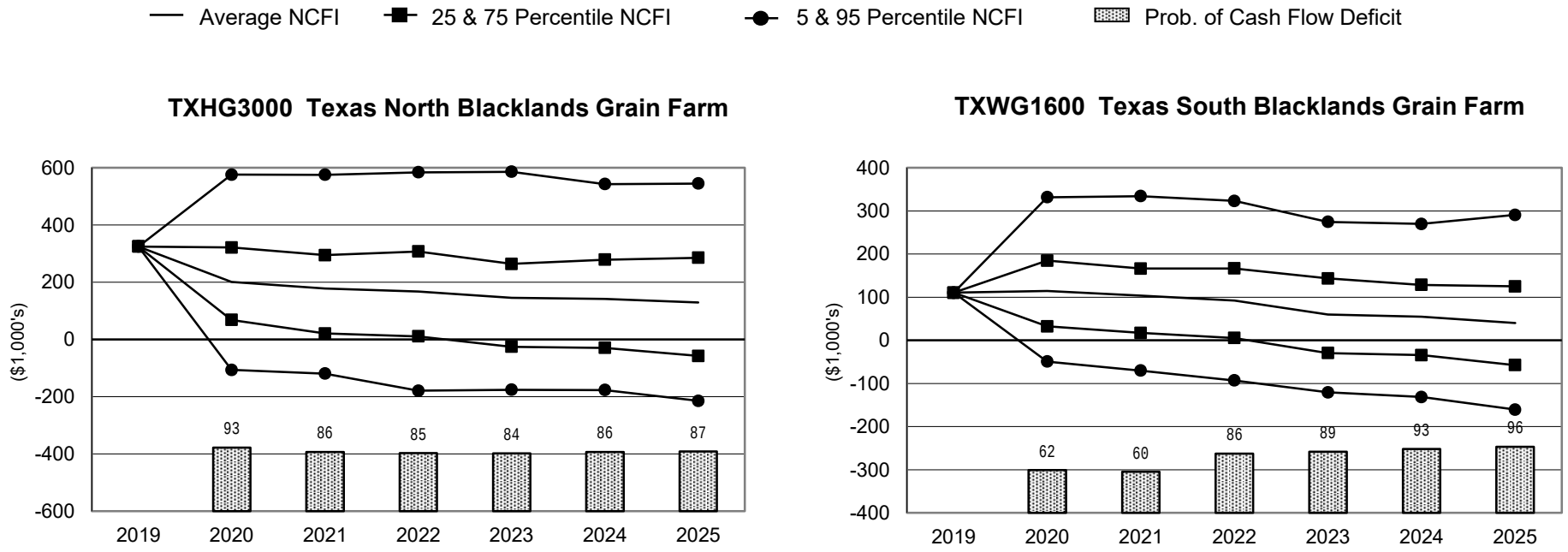


Figure 11. Representative Farms Producing Wheat

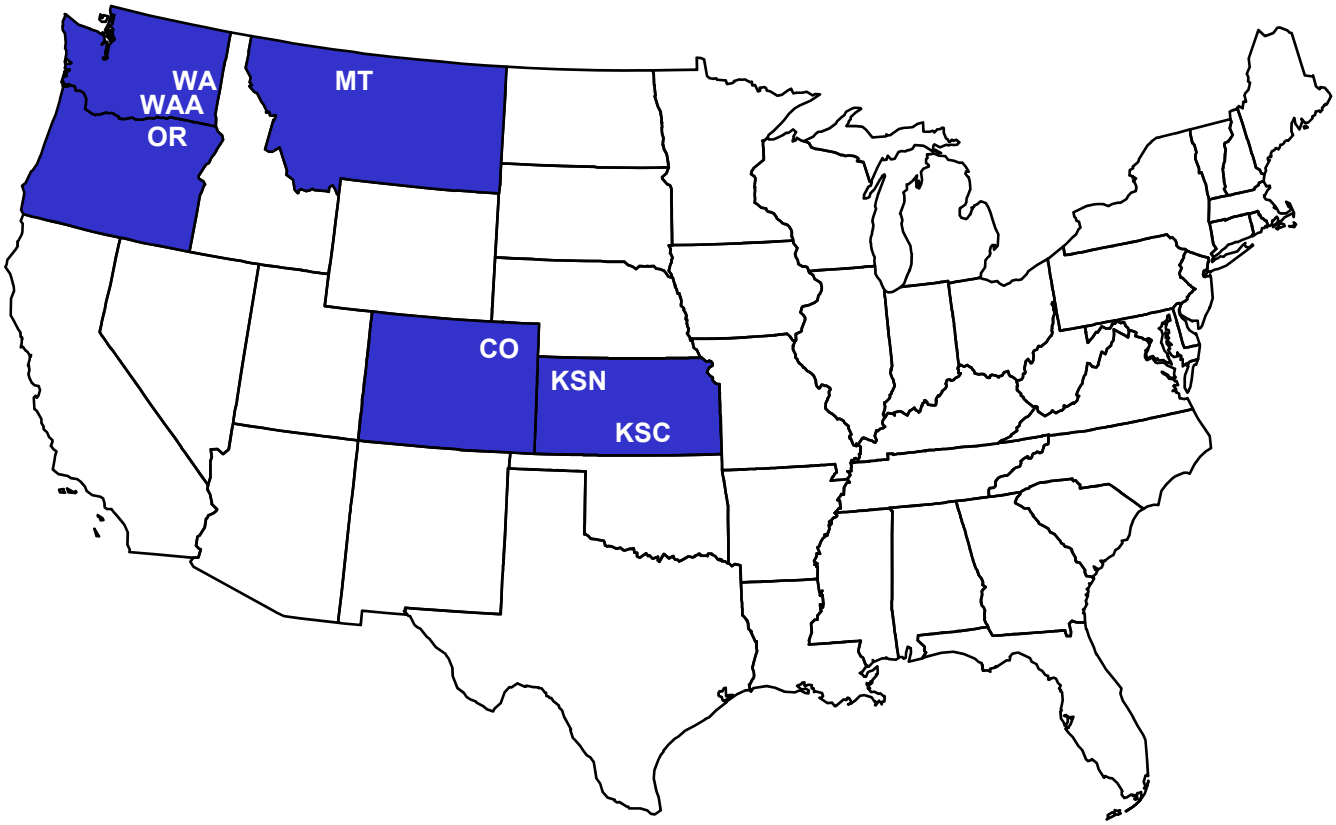


Table 7. Implications of the Preliminary 2021 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Wheat.

	WAW2800	WAW10000	WAAW5500	ORW4500	MTW8000	KSCW2000	KSCW5300	KSNW4000	KSNW7000	COW3000	COW6000
Overall Financial Position											
2020-2025 Ranking	Good	Good	Poor	Marginal	Good	Good	Good	Marginal	Good	Marginal	Poor
Change Real Net Worth (%)											
2020-2025 Average	6.13	5.25	-5.55	2.08	7.68	6.38	7.97	3.91	4.65	3.22	-1.66
Govt Payments/Receipts (%)											
2020-2025 Average	12.70	8.95	11.89	12.10	11.92	4.94	4.93	7.27	5.24	7.43	7.29
Cost to Receipts Ratio (%)											
2020-2025 Average	80.12	91.92	106.56	85.27	63.01	71.66	77.35	88.73	88.11	73.88	124.54
Total Cash Receipts ($1000)											
2019	1,227.92	4,198.07	605.93	451.15	1,441.54	846.02	2,134.23	872.38	1,895.58	385.00	834.25
2020	1,428.60	4,675.19	711.42	539.53	1,623.32	991.02	2,486.55	1,030.16	2,281.82	446.00	970.71
2021	1,361.40	4,420.09	687.90	518.57	1,591.58	886.75	2,205.69	920.56	2,004.92	416.60	909.55
2022	1,359.45	4,439.47	679.90	513.60	1,594.84	901.44	2,211.31	930.20	2,008.38	425.17	917.34
2023	1,364.14	4,462.60	682.63	516.81	1,600.78	910.36	2,224.82	940.92	2,015.49	431.10	939.33
2024	1,375.43	4,515.87	685.03	515.23	1,631.08	921.40	2,245.33	955.67	2,021.52	441.59	954.82
2025	1,376.55	4,530.18	687.73	512.23	1,644.56	934.53	2,253.03	968.42	2,036.68	451.99	970.64
2020-2025 Average	1,377.59	4,507.23	689.10	519.33	1,614.36	924.25	2,271.12	957.66	2,061.47	435.41	943.73
Government Payments ($1000)											
2019	114.80	404.61	46.10	27.61	157.09	101.44	282.77	102.74	175.35	39.55	70.76
2020	207.52	508.54	97.98	75.39	217.84	95.89	231.80	118.20	229.00	45.42	100.24
2021	183.27	400.29	90.28	69.16	203.82	38.14	93.59	60.19	87.89	31.93	67.42
2022	170.47	382.39	80.95	62.04	189.77	37.54	91.94	62.11	88.23	30.51	64.25
2023	167.17	377.49	78.06	59.72	184.72	36.03	90.54	61.30	87.34	29.66	62.48
2024	162.90	378.72	74.16	56.89	180.66	35.09	87.99	60.64	84.99	28.77	60.41
2025	159.23	375.19	70.72	54.25	176.93	34.92	86.91	58.97	82.95	27.72	58.20
2020-2025 Average	175.09	403.77	82.03	62.91	192.29	46.27	113.80	70.24	110.07	32.34	68.83
Net Cash Farm Income ($1000)											
2019	241.92	668.40	27.19	118.77	702.69	298.89	749.25	254.91	500.23	128.49	59.06
2020	442.44	1,142.90	123.18	206.73	879.09	441.53	1,087.09	409.59	875.18	190.94	184.17
2021	354.68	809.17	80.54	178.19	831.50	321.86	774.23	282.73	572.36	159.39	98.08
2022	330.86	763.15	53.81	160.60	824.63	322.96	741.50	281.86	542.99	165.71	81.20
2023	325.83	740.15	29.16	152.79	829.25	322.27	733.09	280.86	536.02	166.34	64.35
2024	316.04	728.77	3.79	144.83	852.51	312.28	732.39	278.18	507.57	175.78	34.66
2025	300.06	683.31	-16.27	133.86	848.90	309.88	714.54	282.17	484.41	176.53	5.80
2020-2025 Average	344.98	811.24	45.70	162.83	844.31	338.46	797.14	302.57	586.42	172.45	78.04
Ending Cash Reserves ($1000)											
2019	229.50	910.33	-209.26	-73.94	806.89	239.72	688.39	12.44	178.68	-66.58	-578.88
2020	391.93	1,349.89	-251.81	-49.15	1,116.22	403.97	1,182.86	124.69	476.99	-39.83	-663.21
2021	466.24	1,509.70	-316.73	-68.92	1,423.36	523.85	1,517.71	180.92	630.44	-35.27	-852.52
2022	573.33	1,525.81	-452.84	-111.24	1,733.64	633.26	1,815.91	190.29	742.08	-67.39	-1,196.01
2023	593.64	1,517.94	-642.57	-148.73	2,038.69	698.28	2,054.11	147.12	805.51	-65.06	-1,616.33
2024	689.67	1,531.09	-807.51	-175.98	2,395.24	760.39	2,334.66	184.09	880.93	-156.86	-2,046.22
2025	747.26	1,584.35	-1,017.94	-233.25	2,679.51	777.86	2,537.87	187.39	921.80	-171.27	-2,560.94
Nominal Net Worth ($1000)											
2019	2,776.66	9,482.29	1,839.82	1,572.47	6,399.78	2,423.12	5,289.22	3,568.24	6,775.69	3,593.51	5,246.14
2020	2,976.71	10,067.14	1,799.61	1,605.96	6,946.80	2,603.17	5,837.19	3,732.92	7,196.60	3,720.25	5,272.86
2021	3,134.51	10,451.98	1,734.57	1,633.51	7,377.32	2,727.37	6,234.71	3,831.19	7,445.08	3,784.98	5,180.05
2022	3,225.95	10,655.95	1,615.61	1,626.78	7,706.83	2,805.42	6,546.61	3,859.91	7,546.32	3,774.86	4,957.51
2023	3,341.80	10,924.30	1,482.40	1,618.76	8,088.14	2,916.35	6,893.03	3,916.20	7,702.63	3,802.41	4,744.98
2024	3,475.30	11,248.75	1,343.06	1,619.52	8,574.83	3,049.85	7,242.05	3,997.95	7,892.17	3,874.19	4,552.91
2025	3,583.84	11,647.34	1,176.24	1,607.10	9,016.21	3,173.40	7,570.78	4,058.10	8,039.54	3,926.58	4,284.15
Prob. of Negative Ending Cash (%)											
2020	3	4	93	70	1	1	1	22	11	72	99
2021	3	6	92	69	1	1	1	19	11	67	99
2022	3	11	95	77	1	1	1	23	11	76	99
2023	4	13	98	80	1	1	1	30	12	72	99
2024	3	15	99	81	1	1	1	29	13	85	99
2025	2	18	99	84	1	1	1	29	14	84	99
Prob. of Decreasing Real Net Worth											
Over 2020-2025	1	1	88	10	1	1	1	1	1	1	76

Figure 3. Feed Grain and Oilseed Farms

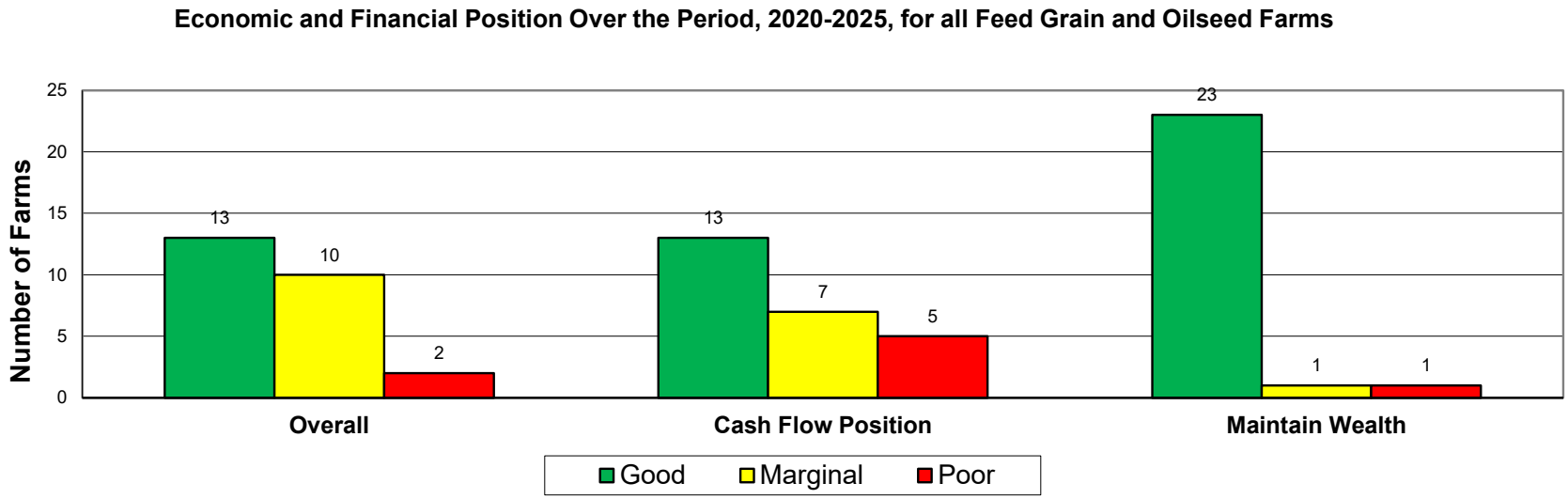


Figure 13. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Wheat Farms

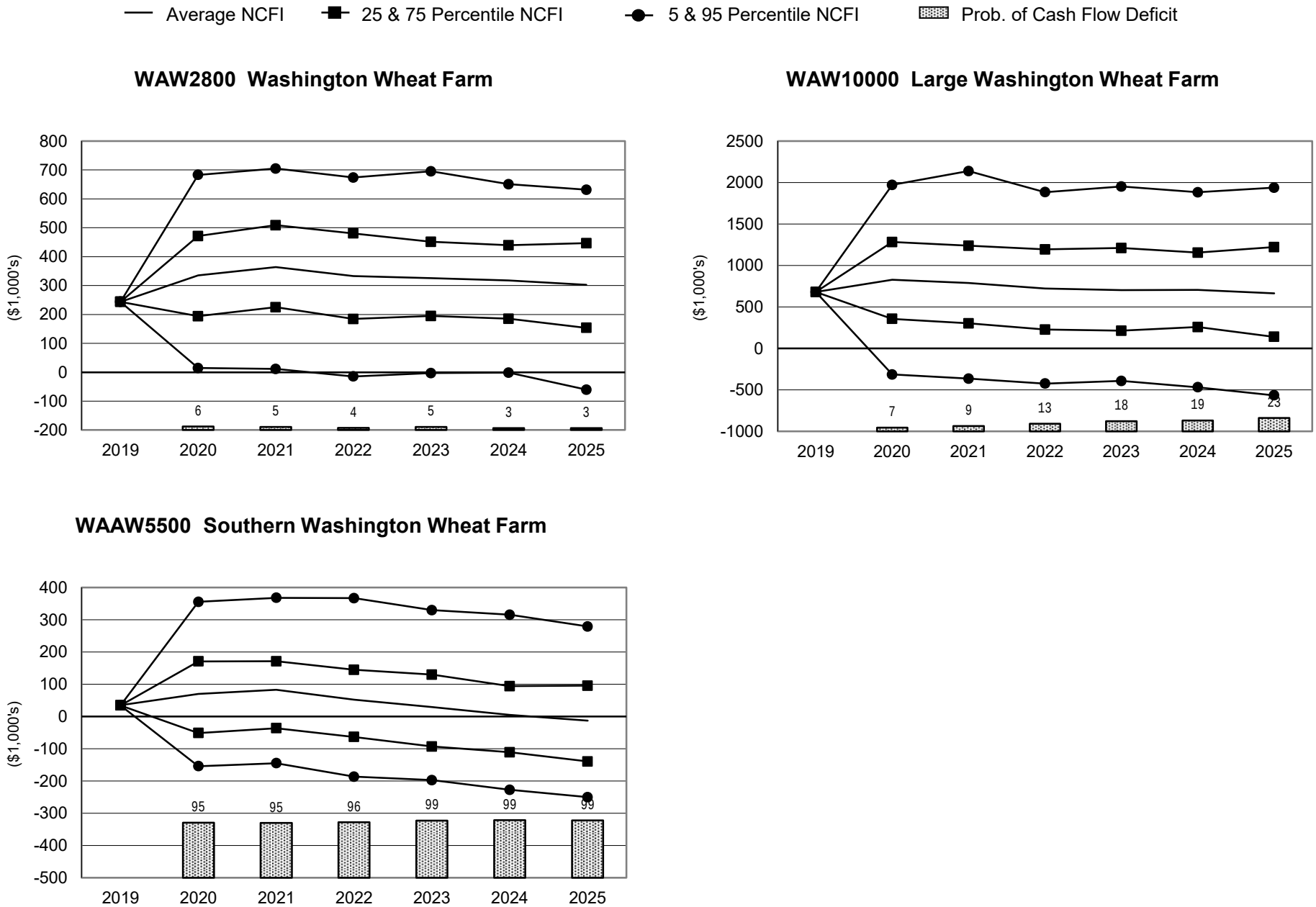


Figure 14. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Wheat Farms

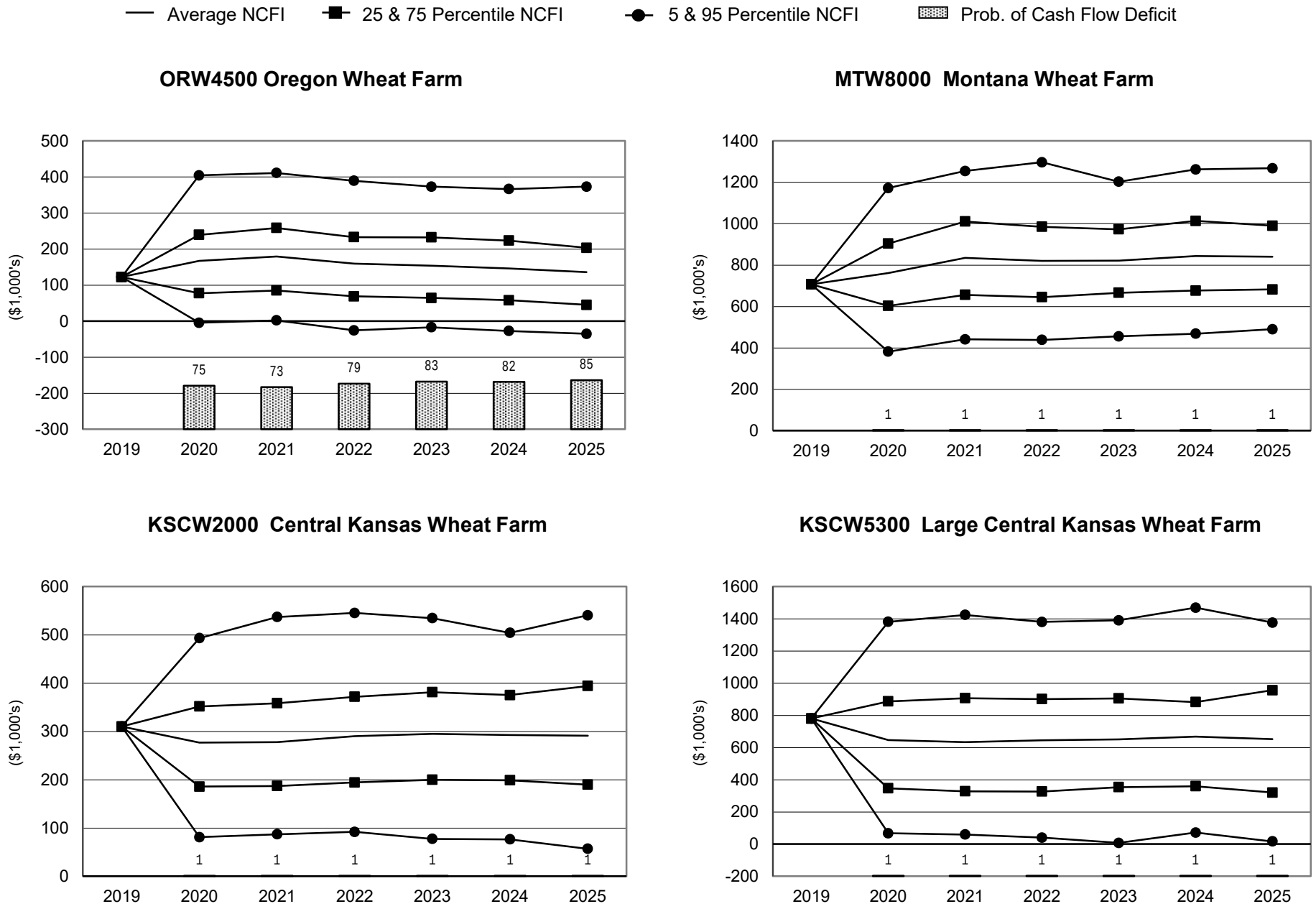


Figure 15. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Wheat Farms

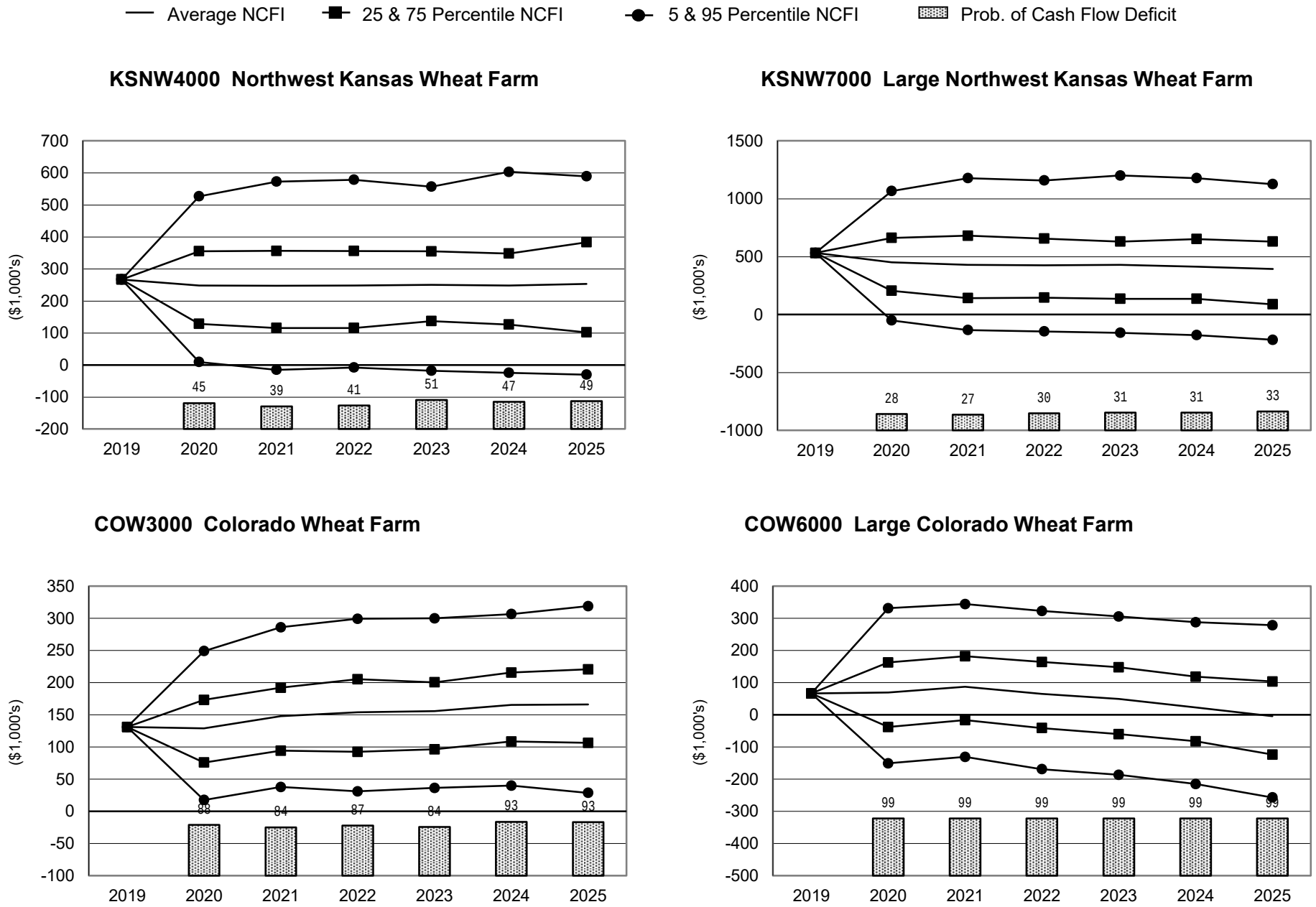


Figure 16. Representative Farms Producing Cotton

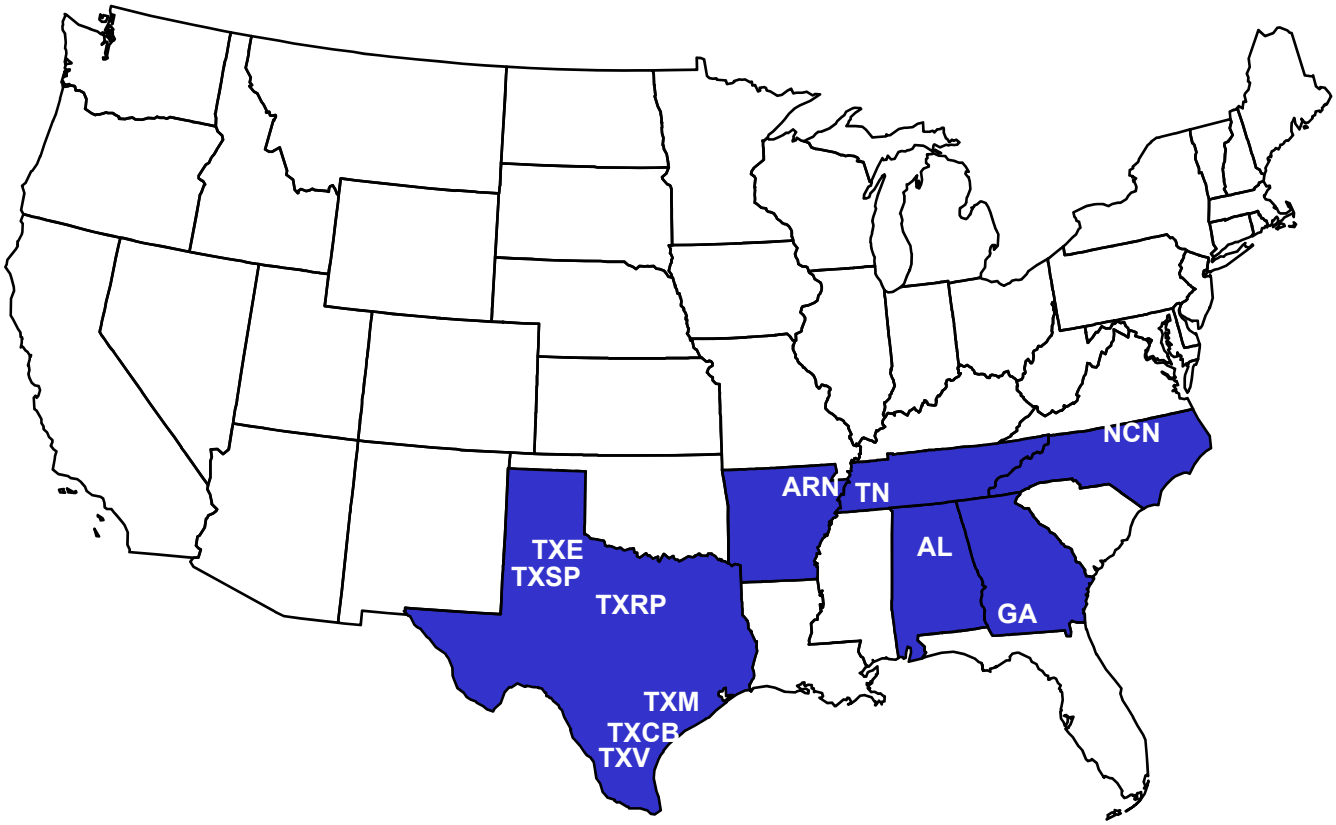


Table 8. Implications of the Preliminary 2021 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Cotton.

	TXSP4500	TXEC5000	TXRP3000	TXMC2500	TXCB3750	TXCB10000	TXVC5500	ARNC5000	TNC3000	TNC4050
Overall Financial Position										
2020-2025 Ranking	Marginal	Good	Poor	Marginal	Marginal	Good	Good	Good	Good	Good
Change Real Net Worth (%)										
2020-2025 Average	5.40	6.98	-3.15	3.00	4.23	7.64	7.31	7.94	13.34	6.55
Govt Payments/Receipts (%)										
2020-2025 Average	8.58	10.86	9.38	6.80	7.50	6.57	7.02	7.26	8.82	9.00
Cost to Receipts Ratio (%)										
2020-2025 Average	98.00	84.88	97.32	104.14	100.92	95.23	87.84	83.72	74.83	85.57
Total Cash Receipts ($1000)										
2019	2,237.57	2,487.50	701.46	1,523.13	2,607.71	6,325.77	3,461.58	4,318.37	2,029.03	2,875.80
2020	2,490.05	2,830.48	809.97	1,704.85	2,597.78	6,843.52	4,198.99	4,939.05	2,352.89	3,256.09
2021	2,149.30	2,330.59	702.37	1,488.54	2,092.88	5,355.00	3,634.77	4,395.82	2,047.67	2,805.91
2022	2,233.14	2,433.76	728.10	1,530.46	2,142.28	5,500.43	3,703.66	4,526.26	2,093.16	2,872.97
2023	2,248.60	2,463.69	733.91	1,542.26	2,153.55	5,532.15	3,729.48	4,547.15	2,098.12	2,881.92
2024	2,270.05	2,492.86	741.21	1,551.20	2,168.90	5,581.92	3,739.03	4,616.36	2,111.39	2,909.31
2025	2,271.37	2,469.28	742.53	1,550.88	2,169.57	5,579.49	3,752.90	4,660.16	2,123.00	2,913.62
2020-2025 Average	2,277.08	2,503.44	743.01	1,561.36	2,220.83	5,732.08	3,793.14	4,614.13	2,137.70	2,939.97
Government Payments ($1000)										
2019	413.74	554.67	108.11	240.56	523.94	669.89	553.01	617.56	366.82	582.92
2020	449.59	637.50	139.04	238.77	442.98	1,008.37	642.63	738.06	379.07	568.98
2021	166.60	225.41	64.18	83.00	127.79	268.82	205.20	287.34	165.37	227.17
2022	170.27	236.32	64.74	91.68	132.96	296.87	221.42	293.89	175.44	237.74
2023	148.34	207.25	55.81	82.04	118.25	273.83	200.61	258.39	153.63	209.44
2024	136.38	193.51	51.60	77.96	113.11	266.65	190.41	240.85	143.32	195.93
2025	123.48	175.10	48.19	75.59	107.03	253.01	177.25	217.17	132.46	178.73
2020-2025 Average	199.11	279.18	70.59	108.17	173.69	394.59	272.92	339.28	191.55	269.66
Net Cash Farm Income ($1000)										
2019	495.12	697.60	64.78	296.82	688.58	1,671.16	628.38	1,395.12	676.42	832.23
2020	762.85	1,056.97	174.32	484.92	707.16	2,126.73	1,347.29	2,020.19	995.42	1,189.30
2021	363.13	507.06	50.76	238.89	247.65	920.09	707.75	1,387.64	649.38	693.22
2022	382.75	555.49	58.53	240.41	269.52	984.29	722.50	1,436.21	664.98	699.27
2023	348.76	530.72	48.95	220.83	246.13	961.02	707.56	1,387.95	649.84	683.98
2024	324.07	513.31	39.31	207.55	229.00	948.63	662.32	1,392.62	633.96	669.20
2025	270.10	437.48	18.55	171.31	196.89	860.42	613.74	1,354.21	618.32	640.02
2020-2025 Average	408.61	600.17	65.07	260.65	316.06	1,133.53	793.53	1,496.47	701.98	762.50
Ending Cash Reserves ($1000)										
2019	53.79	434.08	-261.64	181.10	225.68	1,615.84	594.77	1,379.26	604.41	482.21
2020	366.58	962.05	-240.37	373.80	588.90	2,813.35	1,339.64	2,279.02	1,137.63	1,045.84
2021	358.11	1,082.75	-305.82	346.22	562.22	3,070.94	1,587.68	2,764.21	1,437.23	1,257.61
2022	386.06	1,248.23	-366.40	222.81	541.94	3,364.45	1,808.16	3,208.07	1,773.27	1,499.40
2023	375.31	1,434.66	-441.17	159.26	510.86	3,622.49	2,048.97	3,513.44	1,995.45	1,663.13
2024	294.67	1,610.09	-552.82	60.38	454.89	3,913.54	2,278.91	3,917.59	2,296.88	1,792.18
2025	151.16	1,544.00	-770.23	-27.68	366.44	4,136.82	2,444.12	4,151.63	2,507.92	1,959.63
Nominal Net Worth ($1000)										
2019	2,205.86	3,623.30	967.15	1,855.13	2,596.17	8,069.01	6,126.84	10,088.01	2,350.14	5,993.95
2020	2,569.17	4,172.48	1,018.01	2,057.55	3,000.00	9,455.99	6,935.15	11,174.42	2,883.17	6,579.80
2021	2,628.81	4,335.20	977.74	2,130.33	3,010.65	9,829.29	7,305.62	11,855.13	3,220.67	6,906.13
2022	2,697.13	4,493.38	920.45	2,107.91	3,030.41	10,163.55	7,579.87	12,426.39	3,554.66	7,143.63
2023	2,734.93	4,645.68	863.58	2,071.73	3,034.80	10,579.08	7,891.16	13,060.16	3,873.79	7,426.99
2024	2,764.20	4,804.79	807.40	2,071.81	3,022.04	10,998.15	8,216.69	13,794.43	4,198.39	7,689.53
2025	2,716.86	4,893.05	717.23	1,993.27	2,990.31	11,299.89	8,442.71	14,413.34	4,485.30	7,920.31
Prob. of Negative Ending Cash (%)										
2020	15	2	91	20	1	1	1	1	1	2
2021	24	5	91	26	8	1	1	1	1	2
2022	26	5	91	36	15	1	1	1	1	2
2023	29	5	91	42	23	1	1	1	1	2
2024	33	6	94	46	27	2	1	1	1	3
2025	42	9	97	52	32	2	1	1	1	2
Prob. of Decreasing Real Net Worth										
Over 2020-2025	14	4	73	23	13	1	1	1	1	1

Table 9. Implications of the Preliminary 2021 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Cotton.

	ALC3500	GAC2500	NCNP1600
Overall Financial Position			
2020-2025 Ranking	Good	Good	Marginal
Change Real Net Worth (%)			
2020-2025 Average	10.90	5.45	0.48
Govt Payments/Receipts (%)			
2020-2025 Average	7.31	10.05	11.22
Cost to Receipts Ratio (%)			
2020-2025 Average	74.88	84.86	100.72
Total Cash Receipts ($1000)			
2019	2,715.49	3,268.60	1,285.70
2020	3,130.26	3,440.57	1,312.66
2021	2,797.88	3,156.83	1,189.88
2022	2,867.06	3,247.86	1,220.80
2023	2,882.21	3,279.24	1,221.41
2024	2,921.96	3,313.94	1,234.87
2025	2,955.55	3,358.35	1,242.92
2020-2025 Average	2,925.82	3,299.47	1,237.09
Government Payments ($1000)			
2019	407.26	431.73	189.31
2020	434.67	547.81	228.84
2021	186.89	310.68	132.32
2022	195.73	310.41	134.09
2023	173.11	286.09	120.13
2024	160.61	275.93	114.20
2025	146.99	266.41	108.25
2020-2025 Average	216.33	332.89	139.64
Net Cash Farm Income ($1000)			
2019	931.34	861.85	254.54
2020	1,343.03	1,047.66	289.00
2021	963.17	703.19	143.70
2022	995.85	739.62	149.75
2023	991.37	727.94	131.53
2024	984.79	716.89	121.84
2025	978.47	711.80	96.67
2020-2025 Average	1,042.78	774.52	155.41
Ending Cash Reserves ($1000)			
2019	1,002.27	493.35	-232.29
2020	1,710.94	934.46	-215.17
2021	2,139.16	1,159.62	-294.65
2022	2,601.57	1,340.44	-367.44
2023	3,100.59	1,535.10	-464.12
2024	3,502.37	1,663.09	-623.15
2025	3,930.70	1,856.71	-791.61
Nominal Net Worth ($1000)			
2019	4,692.30	8,688.16	2,940.94
2020	5,395.28	9,236.52	3,028.32
2021	5,891.20	9,600.95	3,008.03
2022	6,363.27	9,823.54	2,938.47
2023	6,894.84	10,124.76	2,878.82
2024	7,392.41	10,483.21	2,831.29
2025	7,881.30	10,793.93	2,733.83
Prob. of Negative Ending Cash (%)			
2020	1	1	92
2021	1	1	92
2022	1	1	92
2023	1	1	94
2024	1	1	97
2025	1	1	99
Prob. of Decreasing Real Net Worth			
Over 2020-2025	1	1	20

Figure 17. Cotton Farms

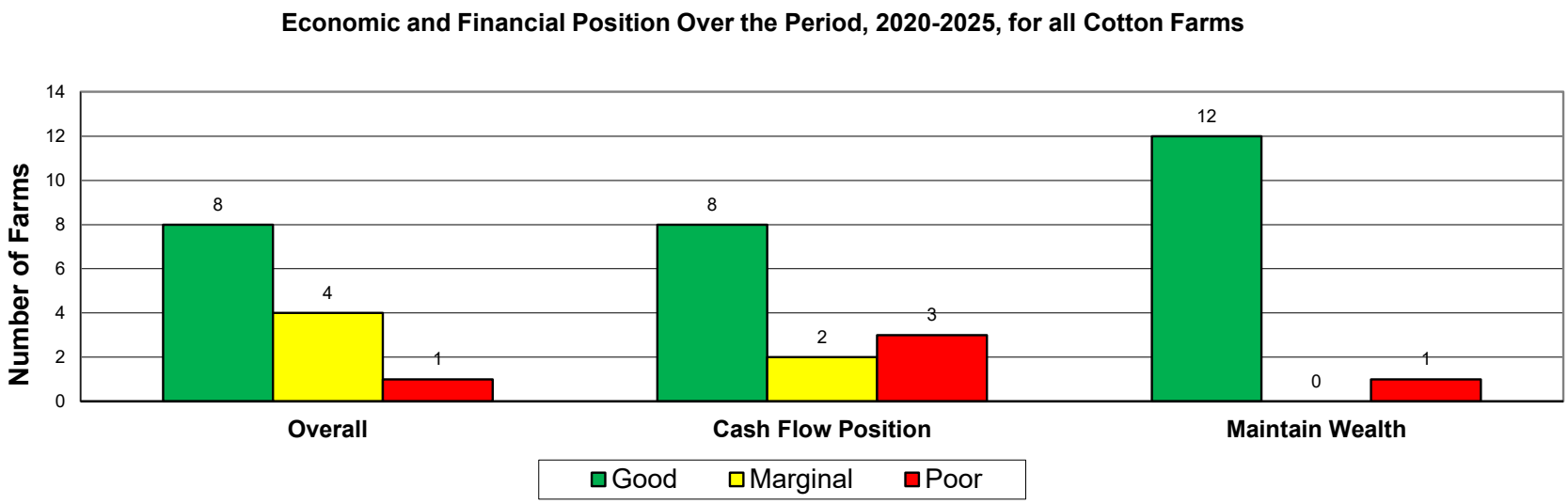
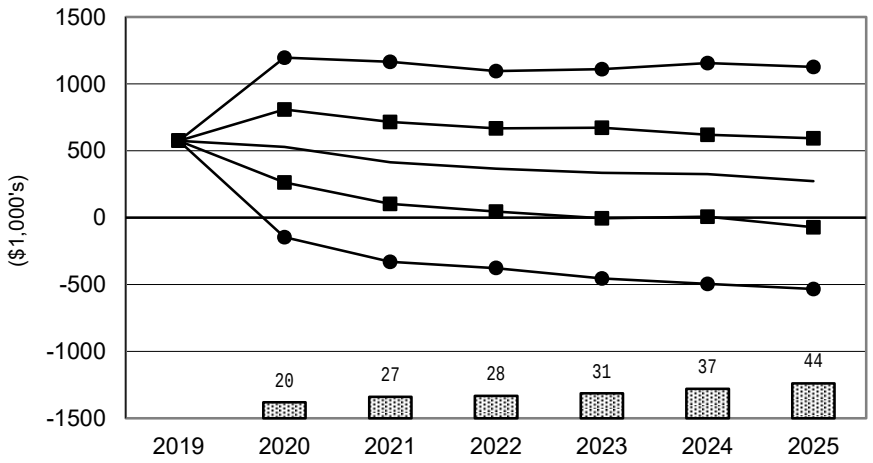


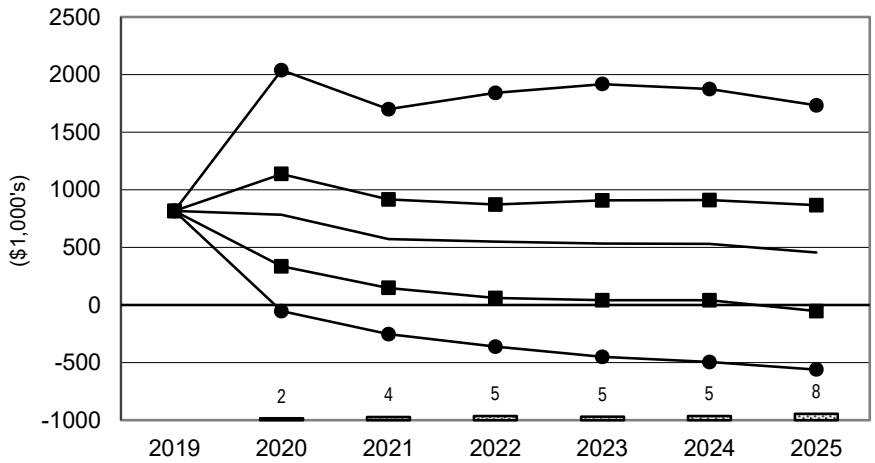
Figure 18. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Cotton Farms

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

TXSP4500 Large Texas Southern Plains Cotton Farm



TXEC5000 Texas Eastern Caprock Cotton Farm



TXRP3000 Texas Rolling Plains Cotton Farm

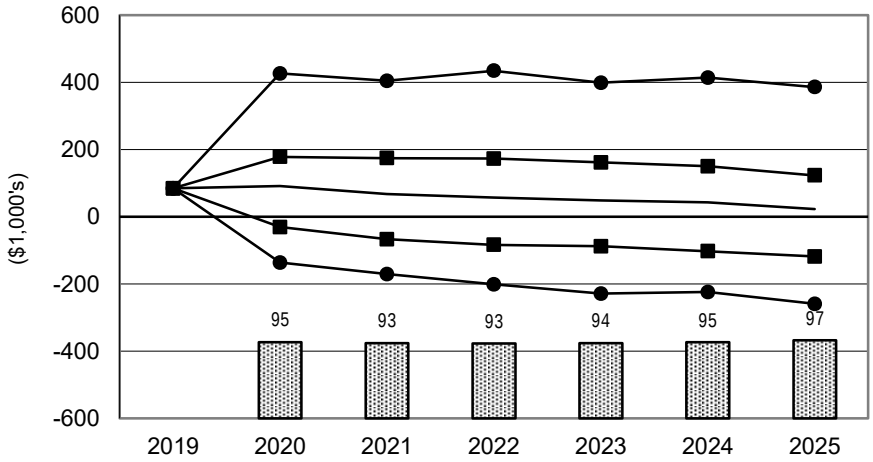


Figure 19. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Cotton Farms

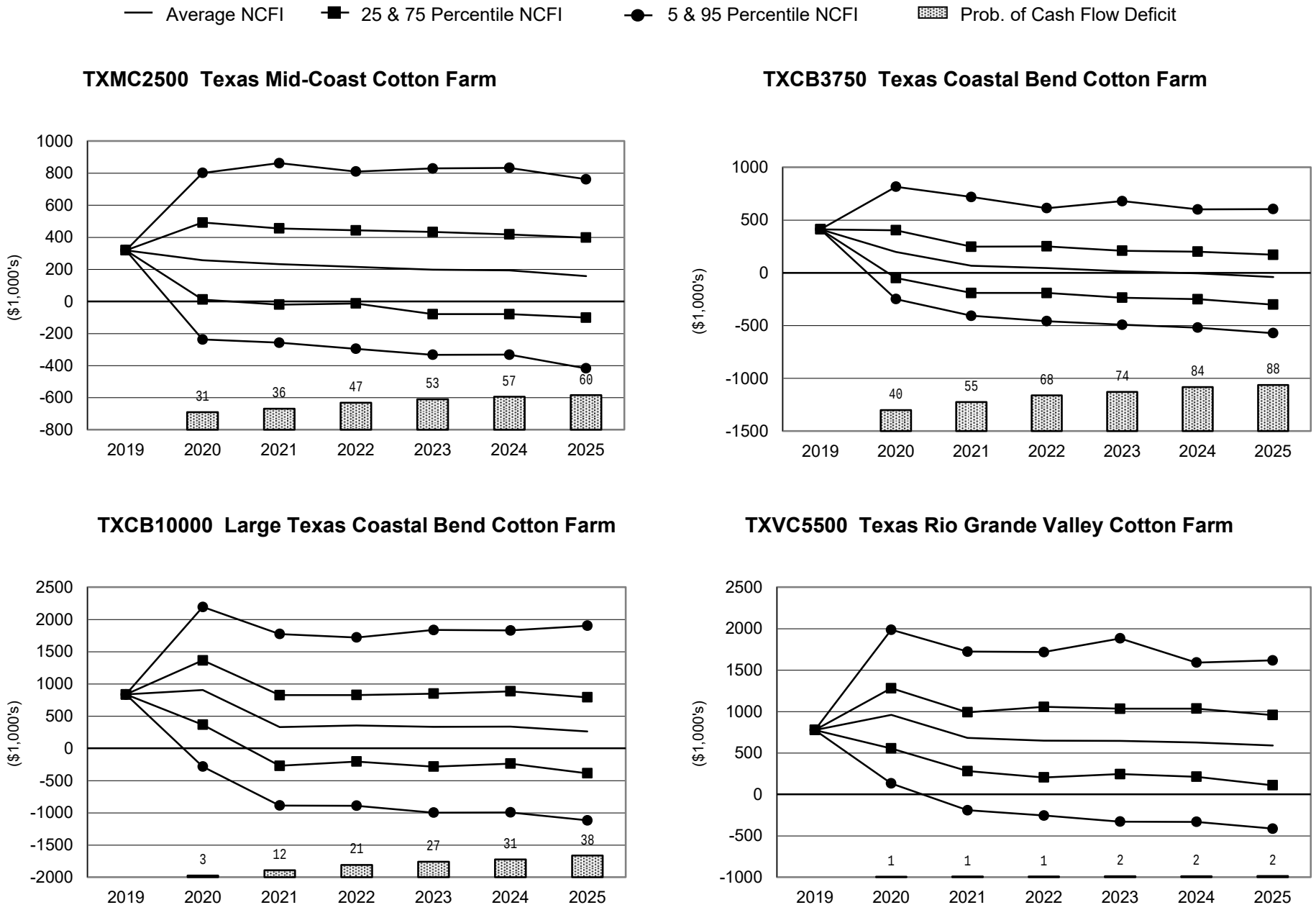


Figure 20. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Cotton Farms

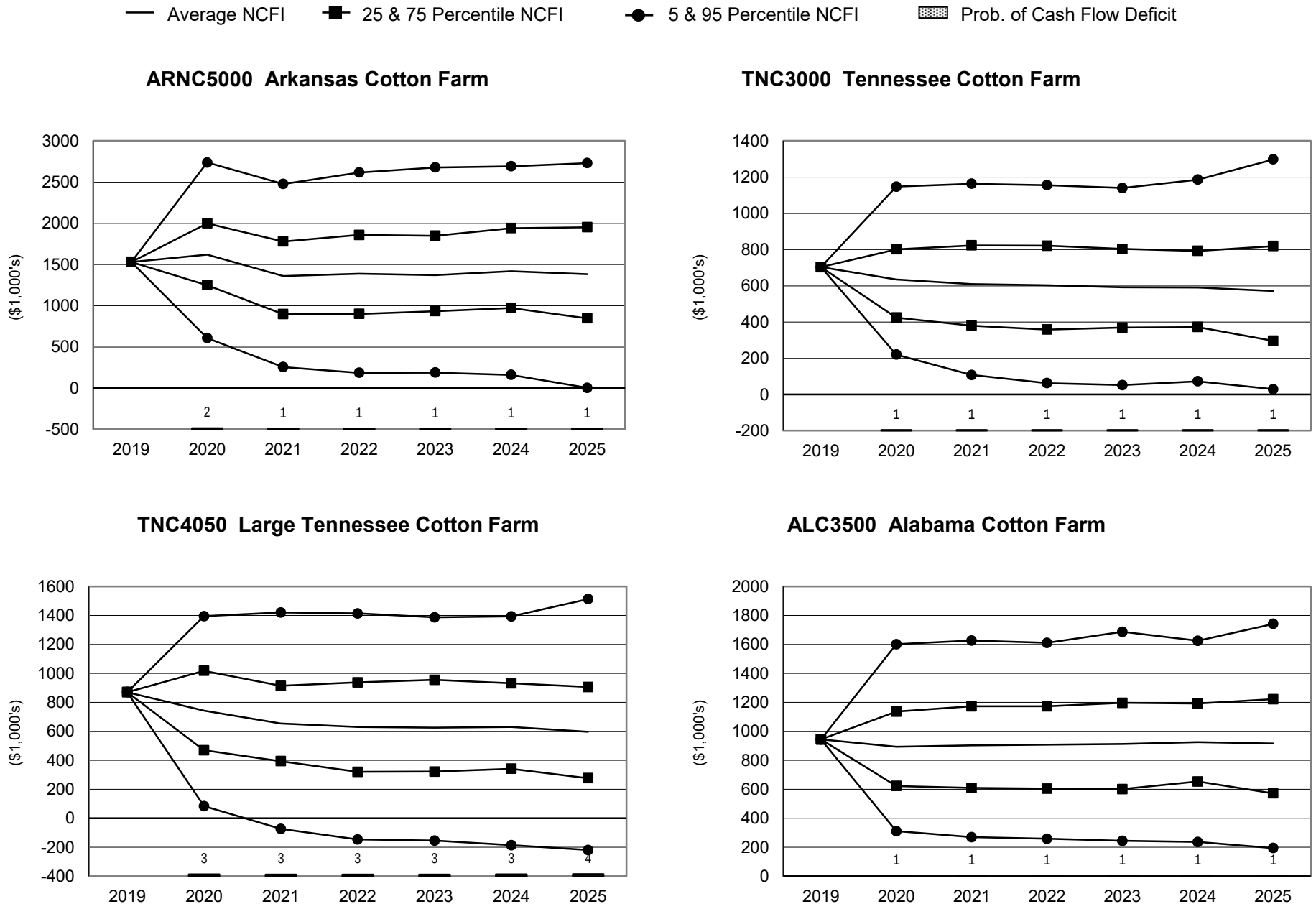


Figure 21. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Cotton Farms

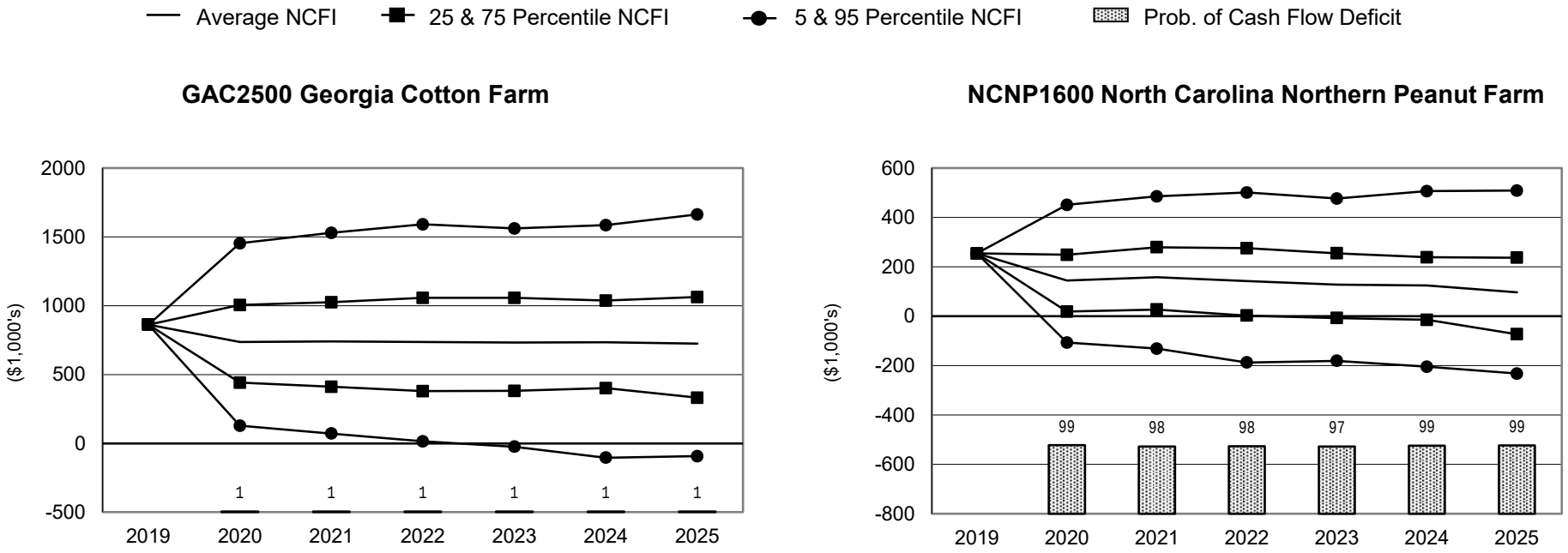


Figure 22. Representative Farms Producing Rice

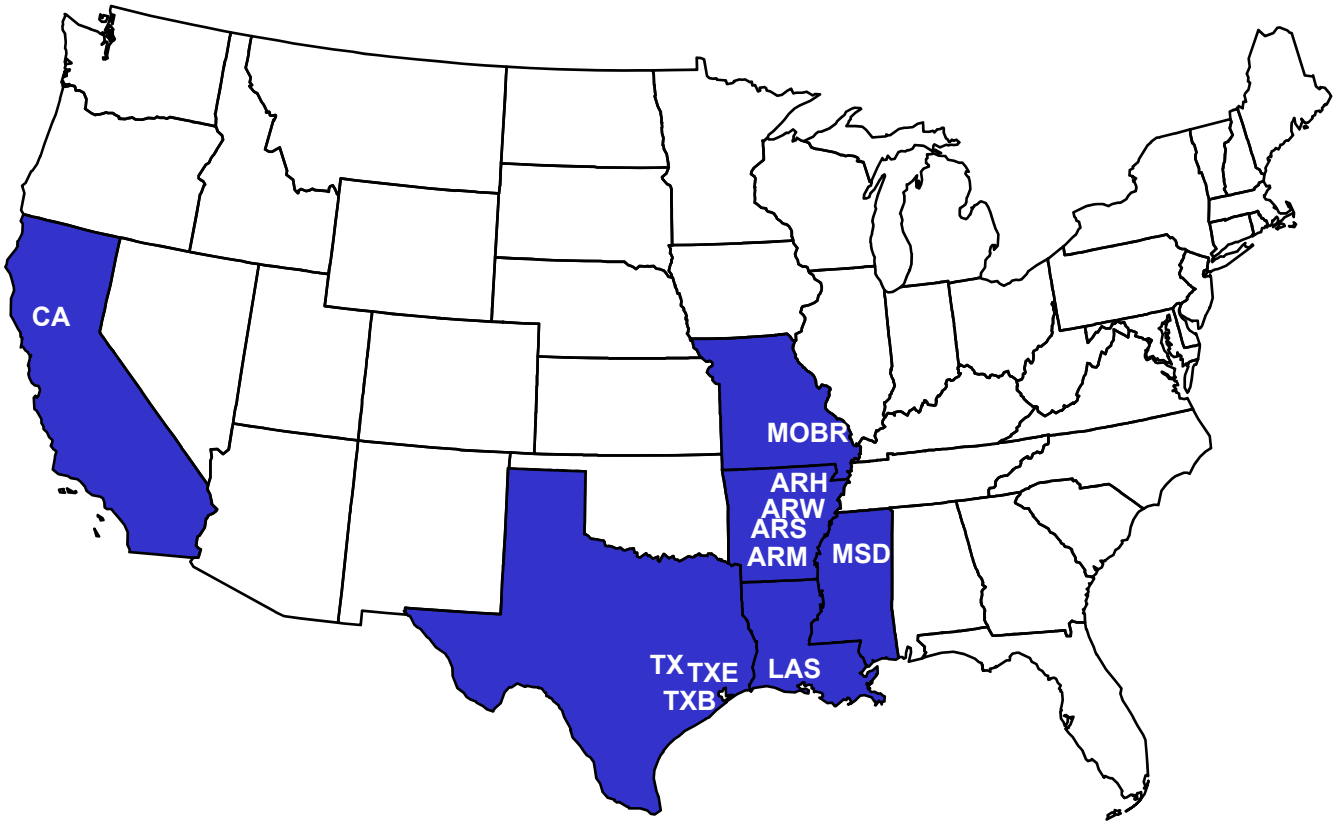


Table 10. Implications of the Preliminary 2021 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Rice.

	CAR1200	CAR3000	CABR1000	CACR800	TXR1500	TXR3000	TXBR1800	TXER2500	LASR2000	ARMR6500
Overall Financial Position										
2020-2025 Ranking	Good	Poor	Marginal	Poor	Poor	Poor	Marginal	Marginal	Poor	Good
Change Real Net Worth (%)										
2020-2025 Average	3.98	-0.05	2.14	-2.81	-3.37	-0.02	0.74	5.29	-0.35	6.32
Govt Payments/Receipts (%)										
2020-2025 Average	11.98	9.04	11.39	11.85	7.90	6.42	7.35	5.26	5.59	6.30
Cost to Receipts Ratio (%)										
2020-2025 Average	83.84	106.57	103.85	104.38	110.48	101.33	99.06	92.82	102.29	90.84
Total Cash Receipts ($1000)										
2019	1,849.55	4,914.20	1,645.20	1,306.14	916.72	2,023.09	1,162.71	2,254.21	1,414.88	4,935.59
2020	1,730.50	4,804.77	1,538.29	1,220.95	835.86	1,855.62	1,050.90	2,456.42	1,429.84	5,657.59
2021	1,718.06	4,580.66	1,524.94	1,211.91	854.64	1,869.59	1,063.61	2,357.51	1,438.86	5,053.70
2022	1,750.35	4,644.80	1,551.67	1,233.79	872.78	1,907.16	1,085.36	2,395.36	1,460.15	5,108.10
2023	1,765.26	4,679.15	1,566.17	1,244.46	889.59	1,945.60	1,105.01	2,423.32	1,475.30	5,132.95
2024	1,775.40	4,722.97	1,573.38	1,252.40	897.26	1,966.71	1,116.67	2,457.89	1,491.76	5,135.29
2025	1,795.28	4,785.49	1,592.66	1,265.24	917.66	2,015.36	1,141.58	2,508.07	1,515.05	5,193.51
2020-2025 Average	1,755.81	4,702.97	1,557.85	1,238.12	877.97	1,926.67	1,093.86	2,433.10	1,468.49	5,213.52
Government Payments ($1000)										
2019	259.11	500.00	222.20	179.94	88.70	171.50	125.71	276.60	134.21	703.29
2020	178.04	500.00	150.49	123.20	31.14	60.00	43.68	126.68	42.46	633.14
2021	208.57	397.48	175.57	145.35	73.56	130.65	83.68	122.13	84.88	282.46
2022	228.72	434.29	192.58	159.66	81.42	144.04	92.63	134.59	94.70	297.44
2023	225.41	417.57	190.17	157.39	82.25	145.74	93.56	136.74	96.10	278.03
2024	215.06	407.74	181.39	150.28	76.35	134.97	86.87	126.46	89.39	259.33
2025	206.76	394.57	174.65	144.97	73.13	128.25	83.13	120.41	86.26	246.23
2020-2025 Average	210.43	425.28	177.47	146.81	69.64	123.94	80.59	127.83	82.30	332.77
Net Cash Farm Income ($1000)										
2019	557.63	726.57	424.63	145.30	173.42	422.31	282.61	274.37	171.57	965.76
2020	444.72	623.97	327.78	65.25	88.87	264.95	177.44	460.20	182.98	1,697.99
2021	401.53	302.79	279.93	23.50	89.77	223.55	163.07	302.62	162.77	996.25
2022	402.20	255.48	268.83	7.79	77.38	200.01	161.34	263.46	142.11	926.34
2023	386.86	185.41	250.66	-18.35	72.66	188.79	159.65	240.70	129.19	856.82
2024	368.16	126.52	232.88	-43.66	52.18	170.69	156.88	226.60	116.24	768.38
2025	349.46	75.19	218.99	-71.73	43.21	171.11	156.83	219.66	100.65	726.64
2020-2025 Average	392.16	261.56	263.18	-6.20	70.68	203.19	162.53	285.54	138.99	995.41
Ending Cash Reserves ($1000)										
2019	430.94	131.25	223.85	-78.55	-69.12	247.40	223.67	117.10	113.54	516.11
2020	538.85	75.33	307.16	-169.04	-153.91	154.13	180.69	233.51	115.22	1,234.00
2021	630.00	-221.09	261.37	-296.26	-254.53	96.30	159.60	242.53	76.98	1,443.74
2022	685.00	-627.88	188.93	-460.53	-342.09	18.21	117.92	291.96	29.31	1,620.94
2023	706.00	-1,087.13	105.89	-648.40	-500.14	-35.15	92.58	331.60	-40.84	1,736.53
2024	681.32	-1,621.30	40.48	-877.61	-665.99	-90.76	44.41	323.15	-142.52	1,772.18
2025	571.45	-2,110.59	-19.76	-1,121.58	-797.83	-235.84	-12.76	217.03	-218.02	1,761.22
Nominal Net Worth ($1000)										
2019	3,472.08	11,676.37	5,025.15	3,693.06	1,977.39	1,295.87	979.34	1,046.13	2,320.53	7,673.35
2020	3,586.67	11,818.89	5,145.33	3,617.40	1,915.10	1,340.07	985.04	1,212.62	2,323.18	8,566.30
2021	3,693.02	11,767.61	5,206.02	3,529.22	1,863.84	1,344.32	978.36	1,266.21	2,304.89	9,011.52
2022	3,736.79	11,440.70	5,170.03	3,343.13	1,769.91	1,320.88	968.99	1,288.61	2,249.69	9,275.99
2023	3,802.51	11,143.68	5,146.31	3,172.27	1,676.83	1,285.78	958.12	1,299.01	2,193.04	9,572.55
2024	3,891.49	10,877.87	5,155.25	3,014.55	1,571.21	1,233.49	945.87	1,297.17	2,127.94	9,833.68
2025	3,963.98	10,518.14	5,155.18	2,810.02	1,453.13	1,167.32	925.02	1,279.92	2,053.02	9,999.05
Prob. of Negative Ending Cash (%)										
2020	1	31	9	92	81	32	16	19	21	11
2021	1	46	15	99	89	37	22	25	32	11
2022	1	60	23	99	93	46	29	25	40	13
2023	1	74	32	99	96	50	34	25	49	14
2024	2	82	42	99	99	54	42	30	64	17
2025	5	86	47	99	99	63	50	35	70	20
Prob. of Decreasing Real Net Worth										
Over 2020-2025	1	25	1	91	77	33	30	34	37	3

Table 11. Implications of the Preliminary 2021 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Rice.

	ARSR3240	ARWR2500	ARHR4000	MSDR5000	MOBR4000
Overall Financial Position					
2020-2025 Ranking	Marginal	Marginal	Poor	Good	Marginal
Change Real Net Worth (%)					
2020-2025 Average	3.11	2.85	-0.62	3.77	1.84
Govt Payments/Receipts (%)					
2020-2025 Average	5.87	6.34	5.58	4.30	4.90
Cost to Receipts Ratio (%)					
2020-2025 Average	94.91	93.84	103.08	86.91	108.91
Total Cash Receipts ($1000)					
2019	2,653.26	1,898.63	3,225.69	3,851.92	2,590.97
2020	2,600.93	1,820.48	3,225.34	3,847.72	2,597.15
2021	2,485.99	1,743.57	3,136.84	3,556.48	2,395.25
2022	2,522.23	1,775.01	3,189.74	3,604.54	2,424.72
2023	2,560.68	1,799.34	3,232.72	3,644.63	2,449.06
2024	2,585.02	1,822.53	3,282.51	3,675.49	2,453.91
2025	2,629.84	1,864.01	3,357.43	3,762.09	2,500.55
2020-2025 Average	2,564.12	1,804.16	3,237.43	3,681.83	2,470.11
Government Payments ($1000)					
2019	352.91	280.64	380.10	636.65	373.68
2020	149.94	101.15	145.10	232.96	167.66
2021	141.52	108.25	176.83	131.55	103.10
2022	157.51	122.16	200.64	150.17	117.04
2023	160.47	124.85	198.66	154.44	119.86
2024	148.61	116.28	185.33	142.80	112.07
2025	145.46	112.84	177.64	141.94	109.33
2020-2025 Average	150.58	114.25	180.70	158.98	121.51
Net Cash Farm Income ($1000)					
2019	600.94	501.76	468.56	1,331.62	553.75
2020	560.36	437.43	483.09	1,374.31	573.50
2021	389.28	330.41	315.48	1,020.74	319.70
2022	357.40	309.11	261.17	1,002.05	273.78
2023	333.70	292.47	222.27	971.51	254.36
2024	309.31	294.13	203.95	970.00	207.80
2025	303.06	300.38	192.08	997.40	198.69
2020-2025 Average	375.52	327.32	279.67	1,056.00	304.64
Ending Cash Reserves ($1000)					
2019	492.25	-104.00	154.92	752.16	34.65
2020	645.06	-104.51	124.44	1,165.65	159.80
2021	659.24	-243.48	-146.37	1,333.04	123.22
2022	662.45	-431.36	-411.44	1,492.55	-61.85
2023	632.26	-564.31	-672.80	1,554.16	-238.57
2024	573.32	-532.76	-999.24	1,495.14	-474.81
2025	509.06	-583.04	-1,349.69	1,588.70	-702.91
Nominal Net Worth ($1000)					
2019	4,956.23	6,676.18	7,722.13	15,359.71	8,000.05
2020	5,146.83	6,828.89	7,729.83	15,995.80	8,266.99
2021	5,237.99	6,927.24	7,642.70	16,391.01	8,421.41
2022	5,290.53	6,885.29	7,394.70	16,567.60	8,271.30
2023	5,305.45	6,882.15	7,161.31	16,727.93	8,155.42
2024	5,324.81	7,119.84	6,959.18	17,065.46	8,141.05
2025	5,382.21	7,137.50	6,721.67	17,334.04	8,061.75
Prob. of Negative Ending Cash (%)					
2020	11	56	31	7	31
2021	13	69	56	7	40
2022	15	80	70	8	55
2023	19	85	79	9	66
2024	23	80	85	13	75
2025	27	81	90	13	80
Prob. of Decreasing Real Net Worth					
Over 2020-2025	7	1	45	1	5

Figure 23. Rice Farms

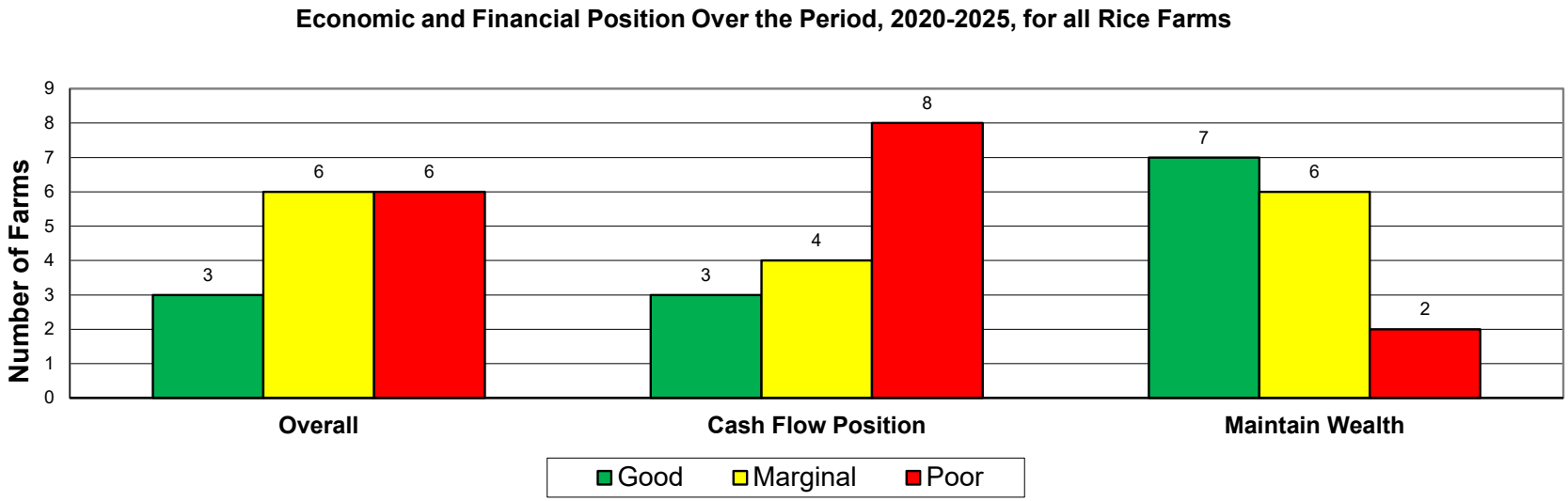


Figure 24. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Rice Farms

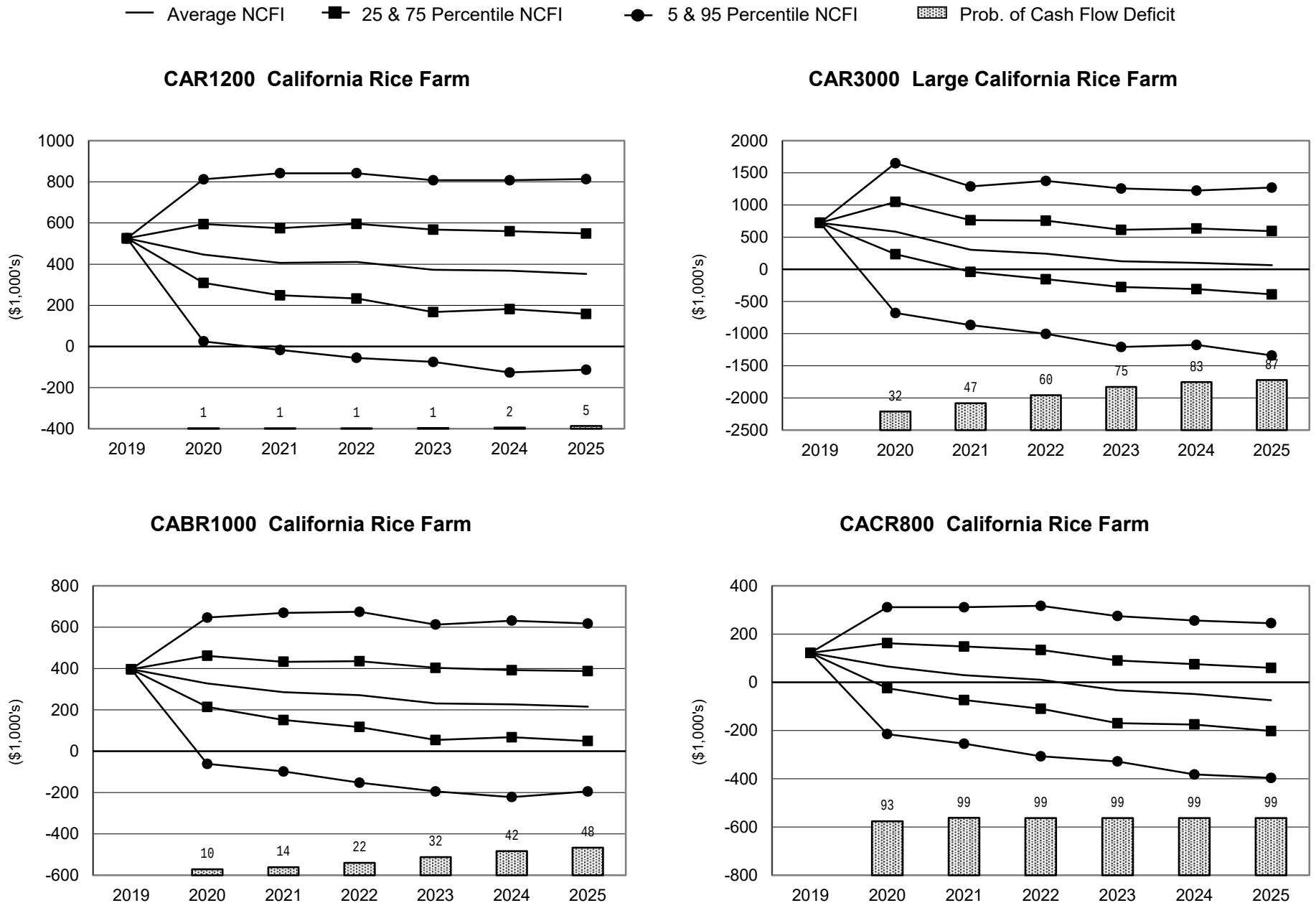


Figure 25. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Rice Farms

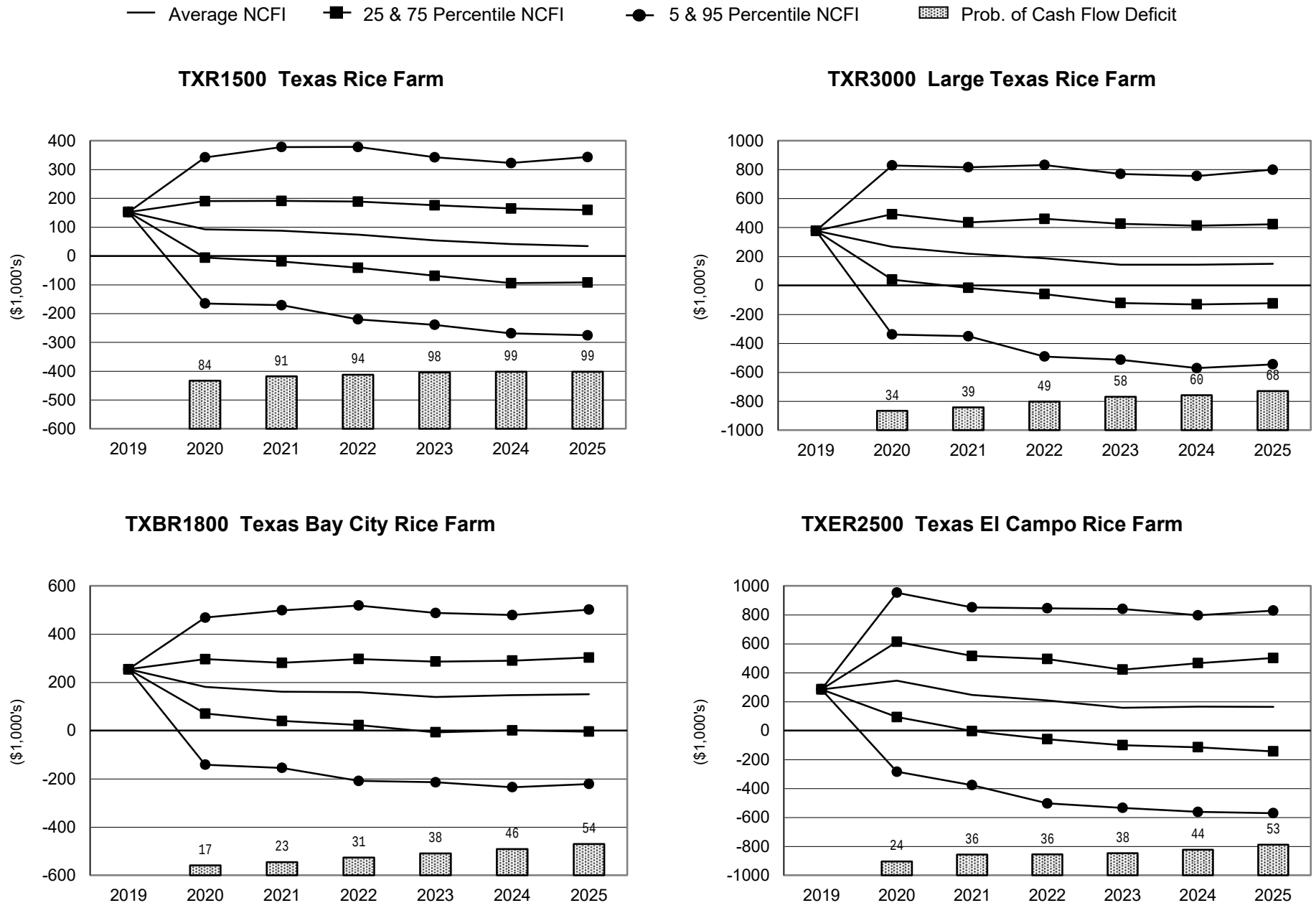


Figure 26. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Rice Farms

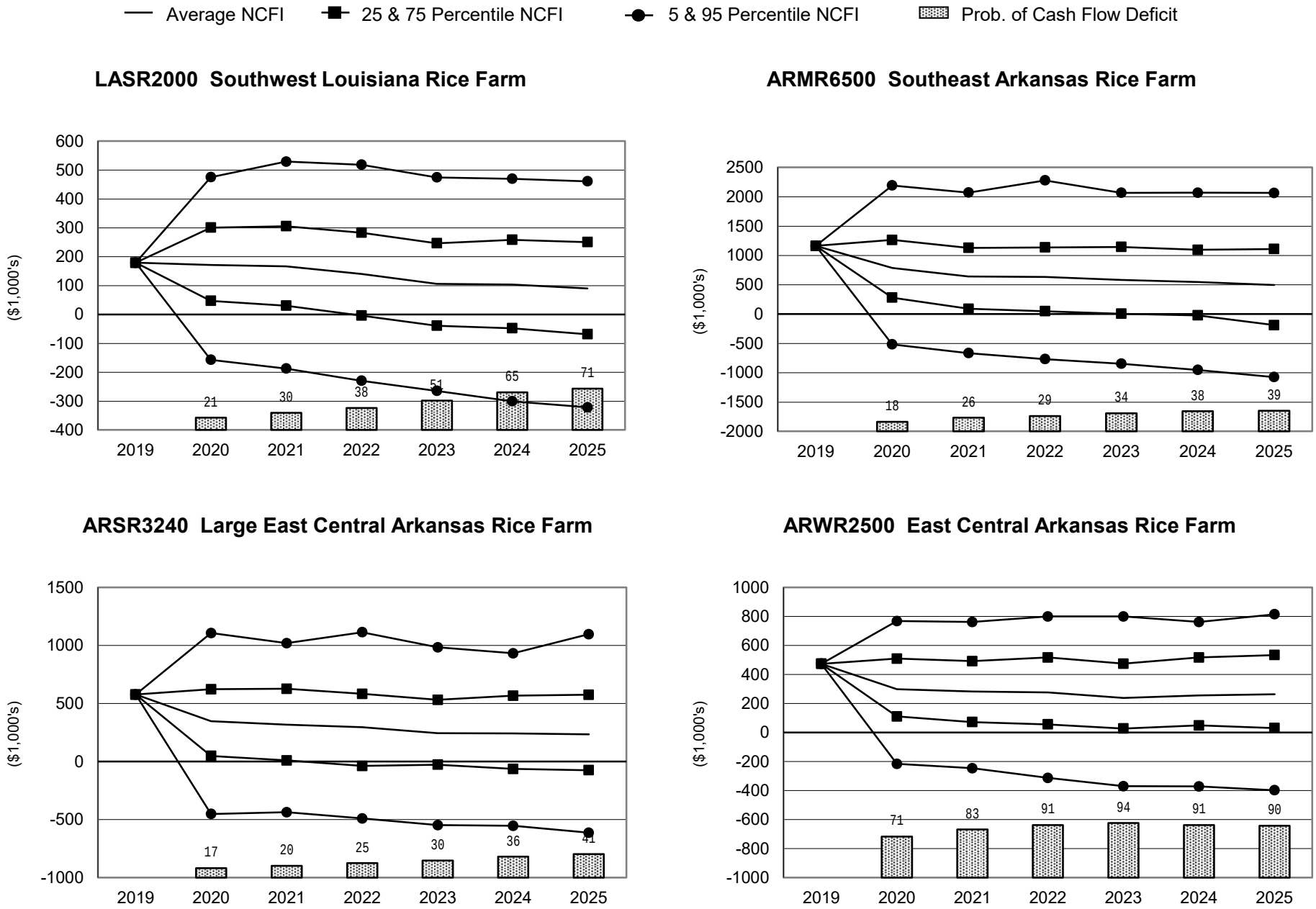


Figure 27. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Rice Farms

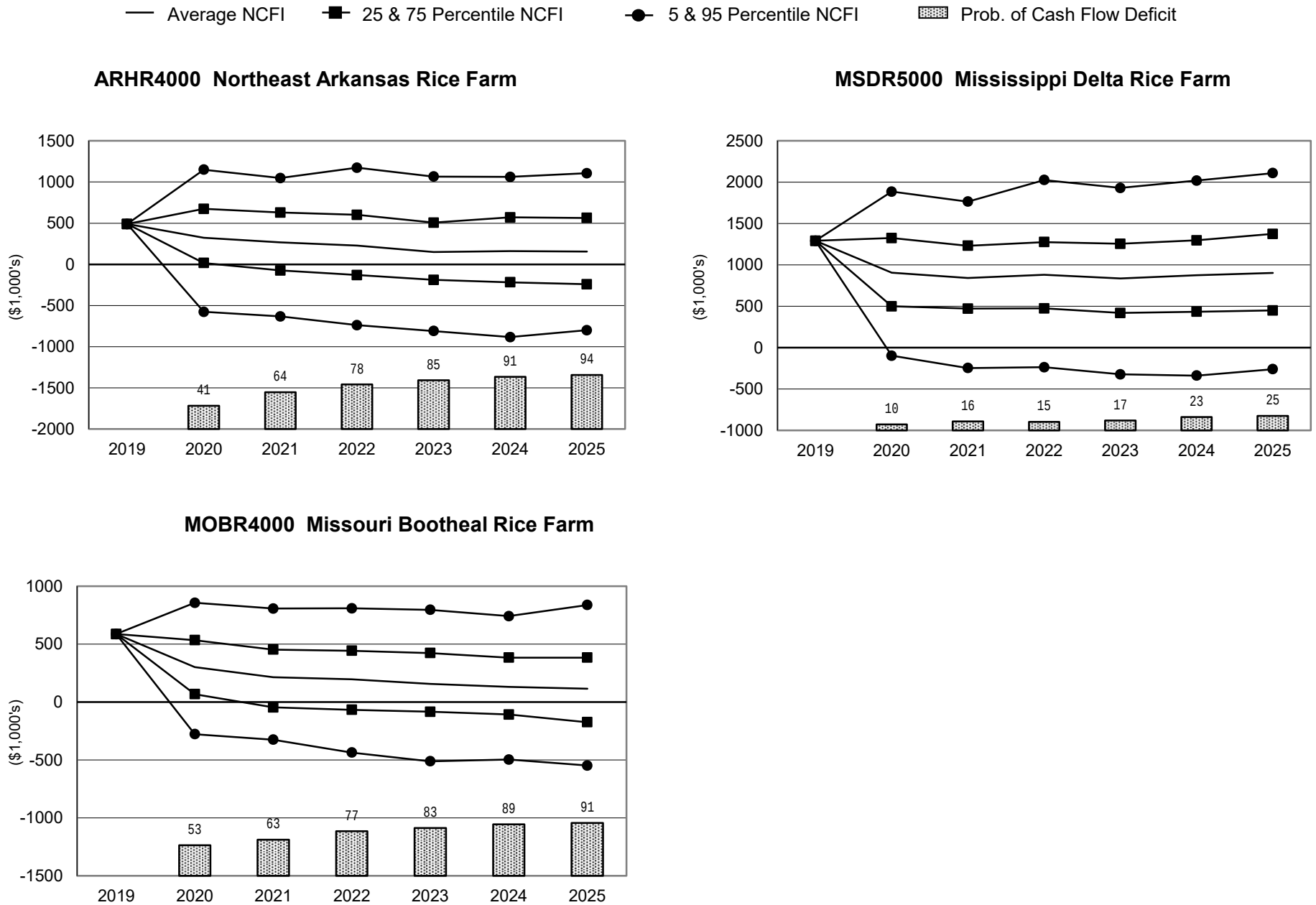


Figure 28. Representative Farms Producing Milk

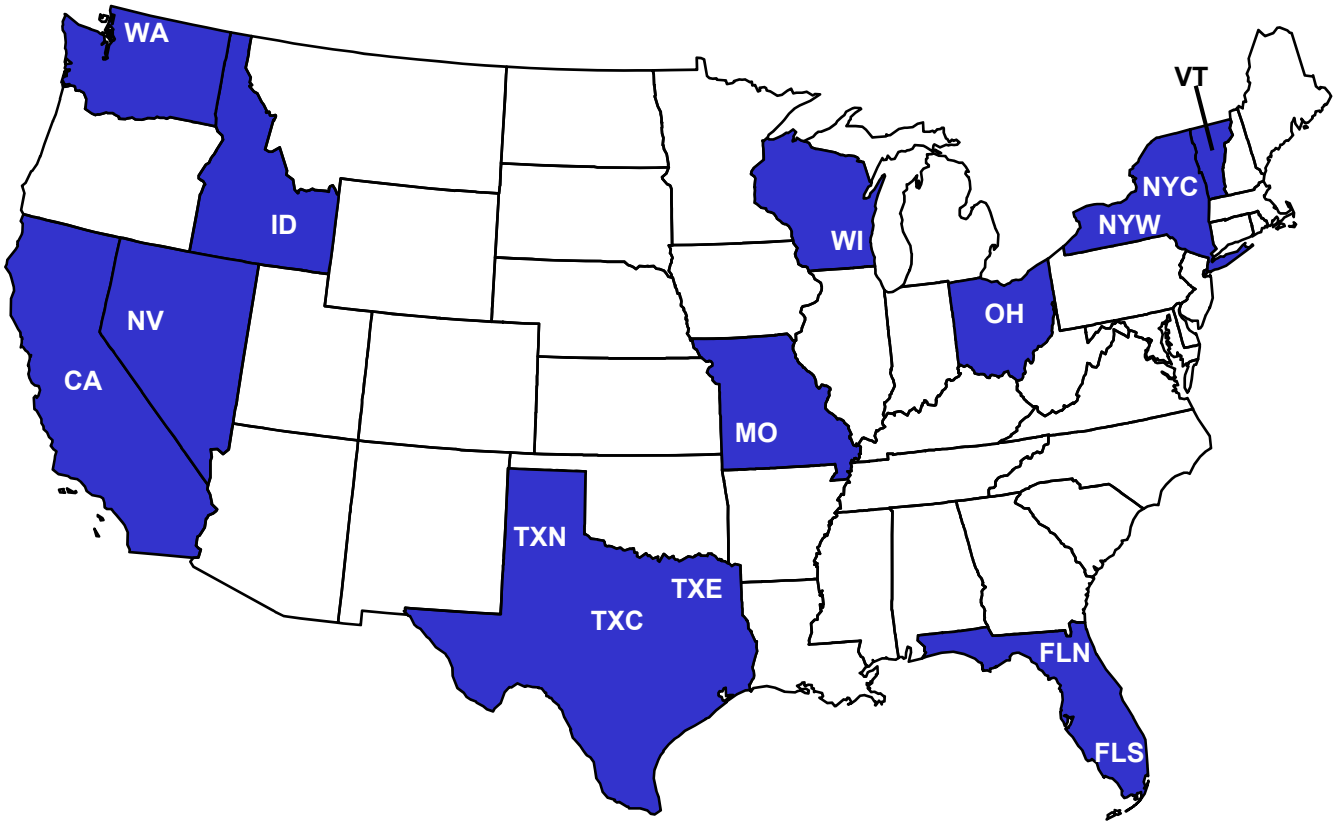


Table 12. Implications of the Preliminary 2021 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Milk.

	CAD2000	WAD300	WAD1200	IDD1500	NVD1000	TXND3800	TXCD1500	TXED400	WID180	WID1700	OHD350
Overall Financial Position											
2020-2025 Ranking	Marginal	Poor	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor
Change Real Net Worth (%)											
2020-2025 Average	3.78	0.14	4.51	5.78	6.43	7.64	101.42	-1.72	5.83	5.71	0.65
Govt Payments/Receipts (%)											
2020-2025 Average	2.17	6.95	2.33	2.21	2.67	1.45	2.28	7.25	6.97	2.05	5.83
Cost to Receipts Ratio (%)											
2020-2025 Average	76.49	99.85	89.87	87.97	74.10	85.12	117.18	104.07	83.14	89.01	103.30
Total Cash Receipts ($1000)											
2019	10,908.34	1,406.27	6,726.86	8,438.27	5,100.29	18,368.65	6,646.52	1,308.27	1,285.33	9,882.09	1,941.02
2020	11,944.64	1,563.55	7,261.77	9,237.45	5,616.56	19,169.00	7,155.95	1,437.72	1,532.61	11,191.31	2,150.61
2021	10,337.06	1,402.48	6,433.54	8,124.63	4,882.94	17,225.34	6,290.18	1,298.38	1,371.51	9,566.12	1,901.61
2022	10,352.54	1,410.75	6,464.29	8,179.30	4,883.89	17,340.48	6,328.42	1,310.19	1,380.61	9,595.20	1,920.01
2023	10,523.25	1,427.80	6,565.77	8,309.72	4,958.83	17,634.29	6,427.49	1,323.73	1,386.34	9,669.22	1,953.06
2024	10,619.10	1,437.73	6,626.83	8,383.28	5,003.97	17,814.67	6,486.56	1,331.87	1,395.36	9,749.12	1,969.97
2025	10,700.82	1,448.08	6,674.97	8,451.80	5,041.79	17,958.82	6,535.78	1,338.81	1,407.26	9,856.22	1,990.76
2020-2025 Average	10,746.24	1,448.40	6,671.20	8,447.70	5,064.66	17,857.10	6,537.40	1,340.11	1,412.28	9,937.86	1,981.00
Government Payments ($1000)											
2019	120.53	15.39	44.28	46.81	28.40	191.36	42.14	25.92	48.47	170.29	43.36
2020	798.32	147.02	460.40	591.27	384.73	890.99	475.39	137.94	132.15	705.47	195.01
2021	136.17	94.07	100.47	112.49	93.19	144.34	92.90	92.18	92.16	112.90	101.04
2022	140.47	98.50	107.05	120.93	97.09	150.22	96.76	95.92	98.25	123.48	107.44
2023	132.96	91.92	100.26	113.75	90.35	141.92	90.07	89.36	92.35	115.31	100.99
2024	127.88	87.79	96.59	110.39	86.11	137.40	85.82	85.07	88.89	111.14	97.16
2025	126.59	87.78	96.46	109.98	86.02	135.97	85.76	85.08	89.04	116.58	97.20
2020-2025 Average	243.73	101.18	160.21	193.14	139.58	266.81	154.45	97.59	98.81	214.15	116.47
Net Cash Farm Income ($1000)											
2019	1,971.83	114.12	1,256.68	1,776.84	945.86	3,811.40	-369.74	105.97	313.55	1,825.80	220.76
2020	2,644.34	218.47	1,540.17	1,979.88	1,343.13	4,049.70	-37.99	152.41	544.34	2,852.87	373.58
2021	1,018.69	60.08	754.94	949.66	594.83	2,191.87	-984.70	30.47	370.71	1,245.89	122.92
2022	905.89	46.05	691.94	927.18	536.76	2,126.39	-1,141.96	7.76	356.67	1,127.80	96.14
2023	959.08	34.60	700.25	974.90	552.42	2,222.53	-1,244.67	-9.79	341.44	1,074.59	81.88
2024	971.41	24.50	703.23	997.76	558.88	2,265.04	-1,357.39	-26.22	336.58	1,053.27	62.21
2025	939.11	11.15	665.43	994.65	540.62	2,214.21	-1,510.38	-52.93	327.46	1,049.09	35.90
2020-2025 Average	1,239.75	65.81	842.66	1,137.34	687.77	2,511.62	-1,046.18	16.95	379.53	1,400.58	128.77
Ending Cash Reserves ($1000)											
2019	1,081.52	-360.48	967.72	1,309.43	802.76	3,046.57	-2,416.37	-213.05	166.31	1,607.00	-322.40
2020	2,104.03	-439.98	1,698.73	2,182.76	1,486.01	4,496.48	-2,918.49	-222.34	342.23	2,980.01	-327.80
2021	2,063.79	-579.55	1,829.49	2,396.33	1,619.93	5,645.71	-4,272.04	-352.85	440.19	3,344.60	-524.48
2022	1,962.74	-788.76	1,863.40	2,558.77	1,750.85	6,722.03	-5,797.96	-488.18	518.36	3,615.63	-745.96
2023	1,881.93	-999.07	1,927.29	2,667.02	1,878.55	7,864.45	-7,407.94	-636.23	602.51	3,815.27	-1,044.92
2024	1,790.97	-1,203.32	1,927.59	2,808.15	2,006.38	9,077.69	-9,152.05	-806.92	651.32	3,951.02	-1,362.21
2025	1,637.11	-1,445.68	1,872.27	2,945.98	2,071.29	10,146.77	-11,047.09	-1,010.11	705.97	4,087.49	-1,685.73
Nominal Net Worth ($1000)											
2019	19,260.91	3,113.78	12,789.35	10,141.77	6,335.89	22,918.09	5,790.76	1,924.90	3,308.00	14,938.11	5,498.17
2020	20,555.60	3,186.47	13,660.67	10,951.05	7,128.87	25,248.73	5,402.87	1,970.37	3,546.87	16,455.07	5,638.98
2021	20,910.07	3,160.07	14,041.34	11,337.95	7,398.83	27,449.75	4,208.77	1,933.36	3,705.80	17,089.24	5,615.19
2022	21,049.16	3,078.75	14,262.56	11,700.12	7,638.46	28,658.76	2,867.33	1,867.26	3,818.64	17,506.00	5,519.80
2023	21,253.93	2,999.35	14,509.04	12,067.84	7,863.80	29,826.43	1,376.18	1,784.75	3,940.35	17,931.39	5,403.78
2024	21,551.47	2,932.58	14,819.09	12,461.15	8,101.61	31,111.93	-213.33	1,688.65	4,080.59	18,408.63	5,303.54
2025	21,736.07	2,836.68	15,057.29	12,836.30	8,309.80	32,178.31	-1,952.48	1,564.26	4,199.11	18,824.30	5,163.44
Prob. of Negative Ending Cash (%)											
2020	3	99	1	1	1	1	99	94	1	1	97
2021	10	99	3	2	1	4	99	96	1	1	99
2022	17	99	7	5	3	4	99	98	1	3	99
2023	21	99	6	6	4	2	99	99	1	4	99
2024	23	99	8	7	4	1	99	99	1	5	99
2025	27	99	12	9	7	2	99	99	1	7	99
Prob. of Decreasing Real Net Worth											
Over 2020-2025	3	40	1	1	1	1	99	66	1	1	32

Table 13. Implications of the Preliminary 2021 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Milk.

	NYWD400	NYWD1200	NYCD180	NYCD800	VTD160	VTD400	MOGD550	FLND550	FLSD1750
Overall Financial Position									
2020-2025 Ranking	Good	Good	Good	Good	Poor	Poor	Good	Good	Good
Change Real Net Worth (%)									
2020-2025 Average	5.37	4.84	6.92	5.57	-5.55	-4.38	6.73	5.53	5.05
Govt Payments/Receipts (%)									
2020-2025 Average	5.22	2.61	7.17	3.24	7.23	4.61	5.48	3.49	1.76
Cost to Receipts Ratio (%)									
2020-2025 Average	86.76	81.52	80.07	86.56	107.20	107.33	77.22	91.85	92.23
Total Cash Receipts ($1000)									
2019	2,156.09	6,585.02	1,112.30	4,424.91	786.00	2,417.92	1,574.59	3,083.68	8,959.28
2020	2,380.32	7,154.59	1,223.27	4,798.06	873.21	2,663.72	1,679.25	3,383.47	9,751.94
2021	2,126.72	6,292.52	1,133.12	4,248.50	798.21	2,412.68	1,587.20	3,075.43	8,784.46
2022	2,147.60	6,341.45	1,145.45	4,283.32	807.54	2,437.89	1,606.42	3,100.91	8,834.95
2023	2,182.26	6,459.82	1,160.40	4,367.79	817.89	2,474.15	1,620.01	3,151.86	8,973.92
2024	2,203.29	6,526.83	1,167.51	4,412.78	823.72	2,494.48	1,629.68	3,172.79	9,046.59
2025	2,219.76	6,572.66	1,172.67	4,450.11	830.16	2,520.59	1,624.95	3,192.80	9,101.04
2020-2025 Average	2,209.99	6,557.98	1,167.07	4,426.76	825.12	2,500.59	1,624.58	3,179.54	9,082.15
Government Payments ($1000)									
2019	23.09	55.15	18.38	69.47	8.08	22.58	24.59	42.44	42.06
2020	198.98	495.64	107.55	349.18	80.00	195.35	118.70	220.32	538.79
2021	100.21	109.81	80.16	104.63	56.44	99.94	85.71	93.12	93.15
2022	106.67	119.88	84.51	112.74	59.64	106.94	89.17	97.01	97.04
2023	99.90	113.10	79.08	105.99	55.83	100.50	83.08	90.28	90.31
2024	96.17	110.13	75.74	102.58	53.54	96.95	79.09	86.04	86.07
2025	96.02	109.95	75.76	102.41	53.55	96.97	79.10	85.96	85.59
2020-2025 Average	116.33	176.42	83.80	146.25	59.83	116.11	89.14	112.12	165.16
Net Cash Farm Income ($1000)									
2019	480.89	1,538.16	299.32	1,067.39	29.37	82.95	385.21	437.37	1,421.45
2020	625.97	1,953.28	393.55	1,376.70	80.96	249.21	480.37	602.80	1,636.98
2021	379.78	1,065.59	296.38	813.14	4.88	-9.27	370.77	315.63	809.83
2022	367.46	1,032.09	291.29	778.84	-8.91	-48.57	367.80	295.23	718.81
2023	371.45	1,056.45	289.88	797.66	-18.69	-71.18	359.90	300.12	720.52
2024	366.54	1,056.53	282.36	788.65	-30.87	-105.33	354.15	283.95	708.79
2025	352.66	1,023.02	273.17	748.17	-45.14	-140.04	319.68	264.36	638.64
2020-2025 Average	410.64	1,197.83	304.44	883.86	-2.96	-20.86	375.44	343.68	872.26
Ending Cash Reserves ($1000)									
2019	383.15	1,459.10	237.52	654.41	-225.50	-745.50	267.30	293.04	1,300.51
2020	644.28	2,217.60	394.91	1,165.95	-267.87	-779.65	435.73	559.89	2,063.44
2021	721.55	2,412.95	466.87	1,274.59	-397.08	-1,055.16	536.24	630.28	2,266.05
2022	808.61	2,625.02	542.31	1,388.74	-493.26	-1,359.99	634.16	671.21	2,342.01
2023	893.44	2,745.38	635.49	1,515.58	-603.25	-1,675.86	730.25	668.49	2,437.56
2024	926.68	2,882.29	708.95	1,558.15	-735.39	-2,067.01	819.79	709.05	2,523.53
2025	985.43	2,917.40	786.19	1,591.32	-914.65	-2,483.00	878.67	696.78	2,495.07
Nominal Net Worth ($1000)									
2019	4,220.64	14,205.13	2,227.72	10,169.04	1,220.85	3,931.44	2,405.05	3,381.40	10,107.97
2020	4,511.07	15,143.23	2,409.85	10,925.35	1,221.16	3,952.28	2,594.09	3,675.07	10,926.65
2021	4,677.58	15,600.39	2,542.84	11,352.26	1,161.22	3,785.06	2,731.32	3,806.38	11,265.64
2022	4,798.70	15,944.58	2,655.65	11,636.62	1,079.24	3,543.45	2,858.96	3,922.06	11,564.23
2023	4,938.78	16,326.75	2,774.24	11,978.41	990.66	3,289.23	2,986.31	4,031.25	11,820.10
2024	5,092.03	16,726.62	2,900.95	12,375.66	896.21	3,022.99	3,115.24	4,136.14	12,091.91
2025	5,218.90	17,039.39	3,007.92	12,718.40	779.88	2,707.89	3,212.72	4,219.25	12,273.64
Prob. of Negative Ending Cash (%)									
2020	1	1	1	1	99	99	11	2	1
2021	1	1	1	1	99	99	13	3	5
2022	1	1	1	2	99	99	14	5	7
2023	1	1	1	2	99	99	14	7	8
2024	1	2	1	4	99	99	15	8	10
2025	1	4	1	6	99	99	15	13	13
Prob. of Decreasing Real Net Worth									
Over 2020-2025	1	1	1	1	98	95	9	1	3

Figure 29. Dairy Farms

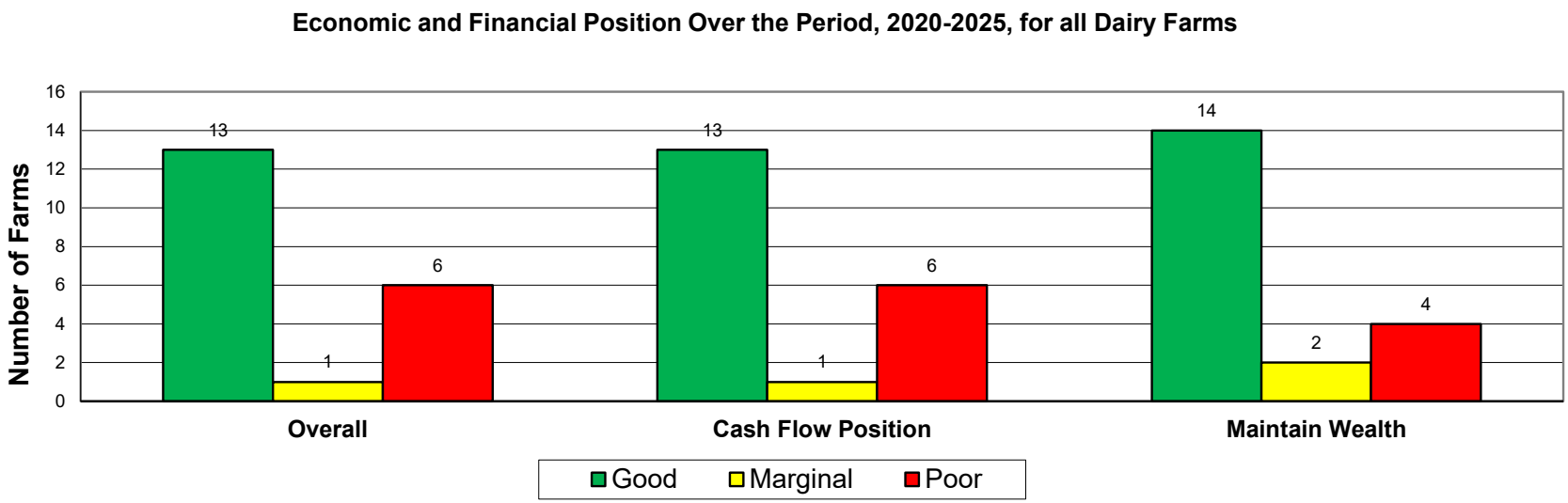


Figure 30. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Dairy Farms

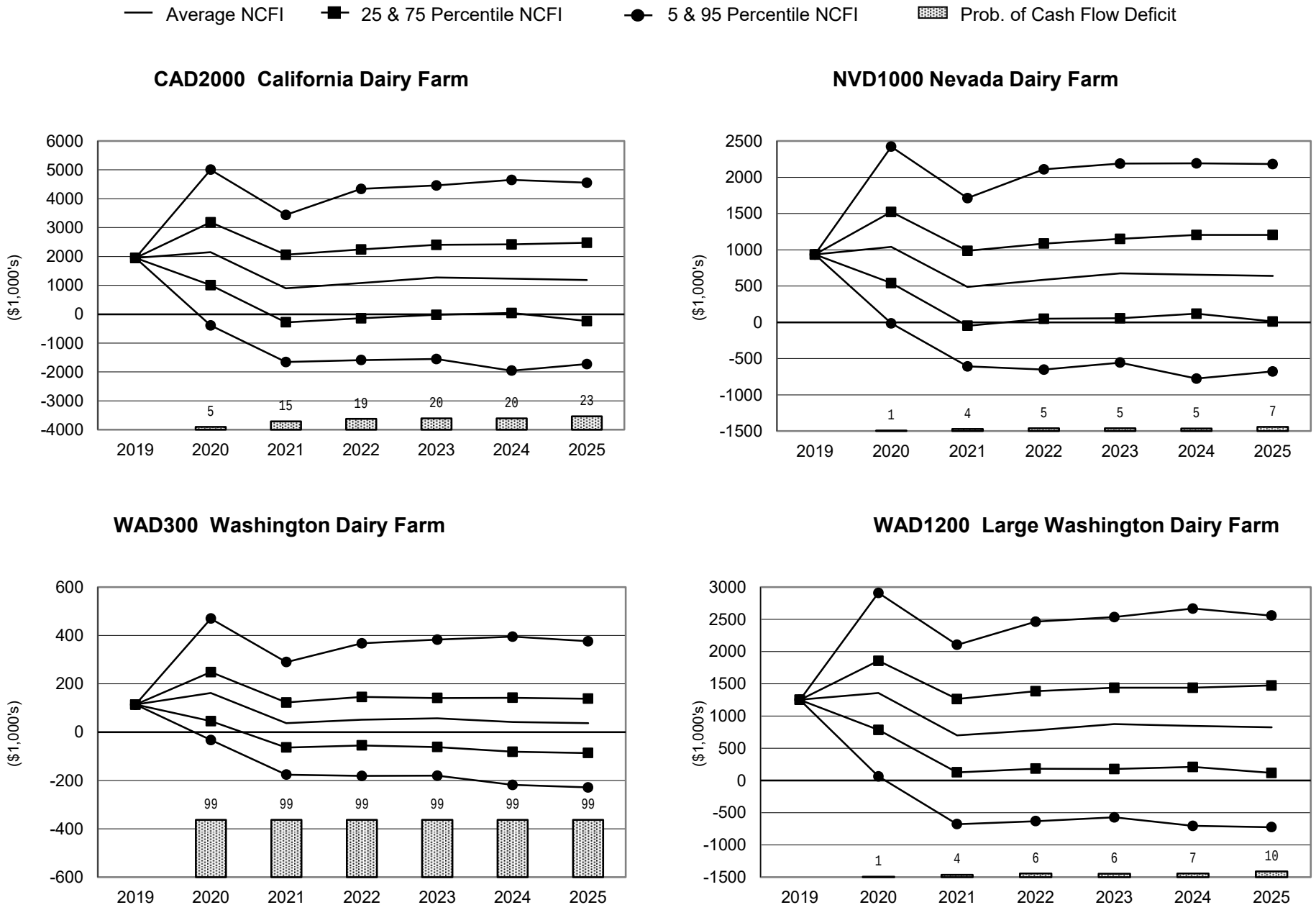


Figure 31. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Dairy Farms

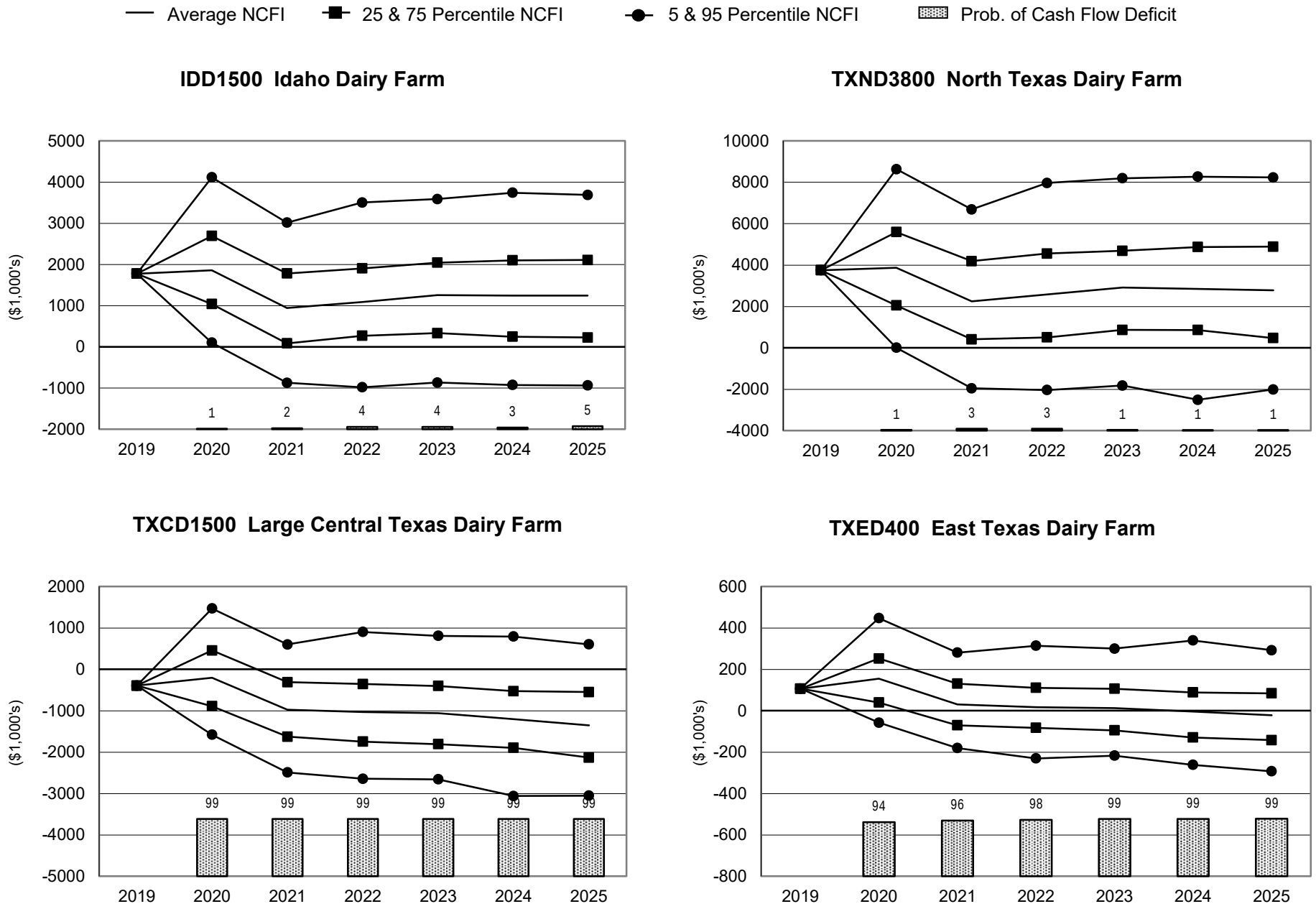


Figure 32. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Dairy Farms

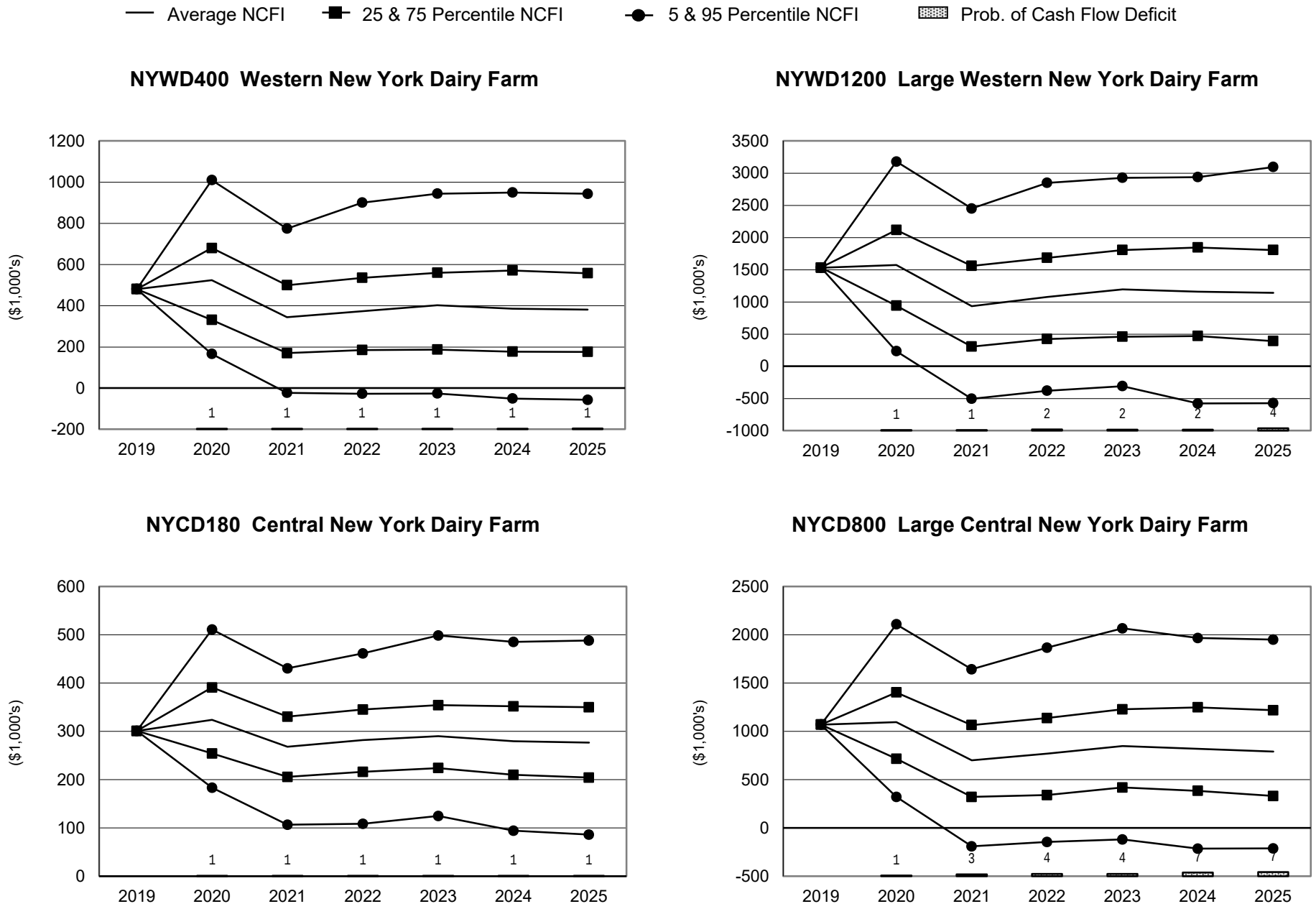


Figure 33. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Dairy Farms

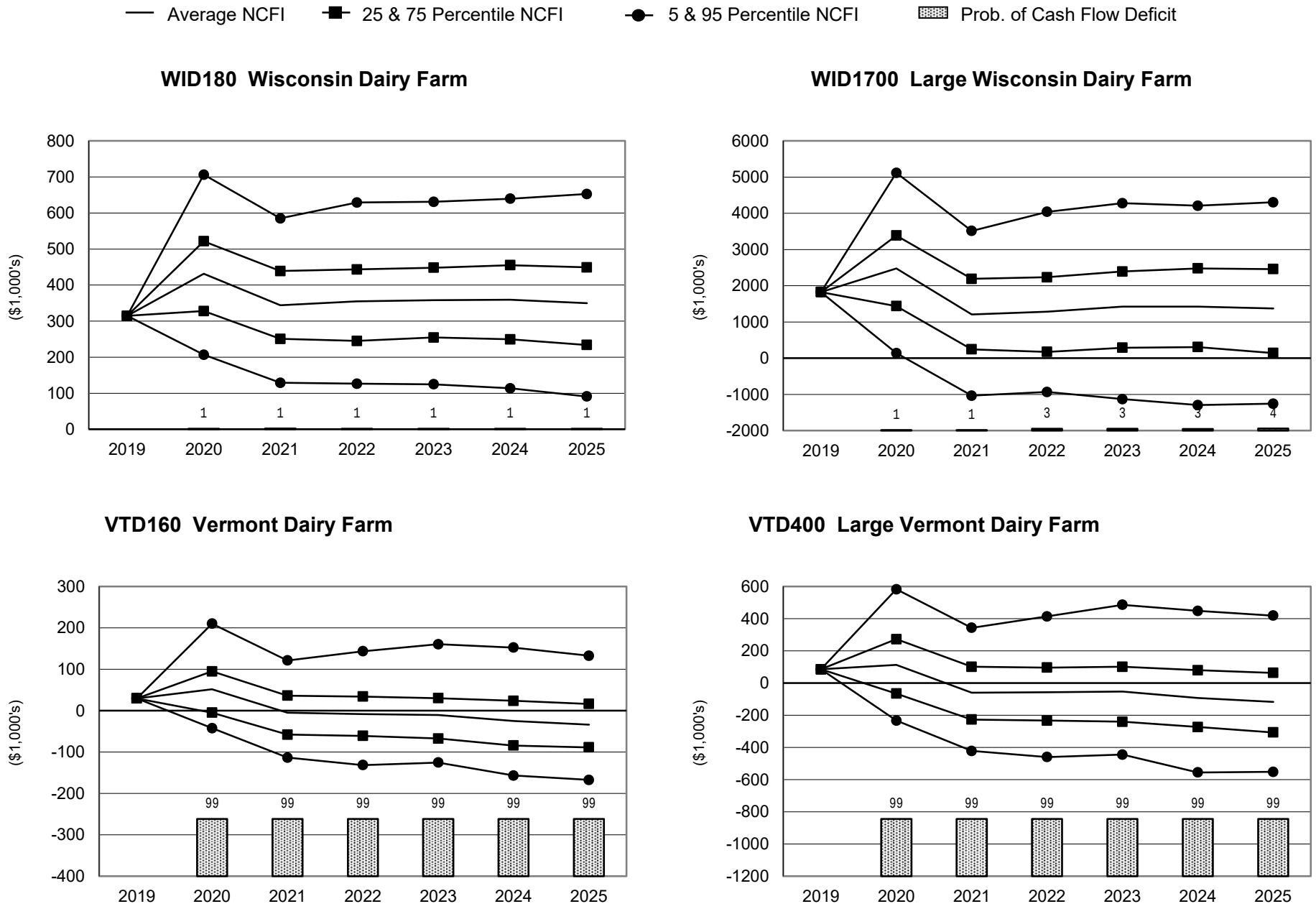


Figure 34. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Dairy Farms

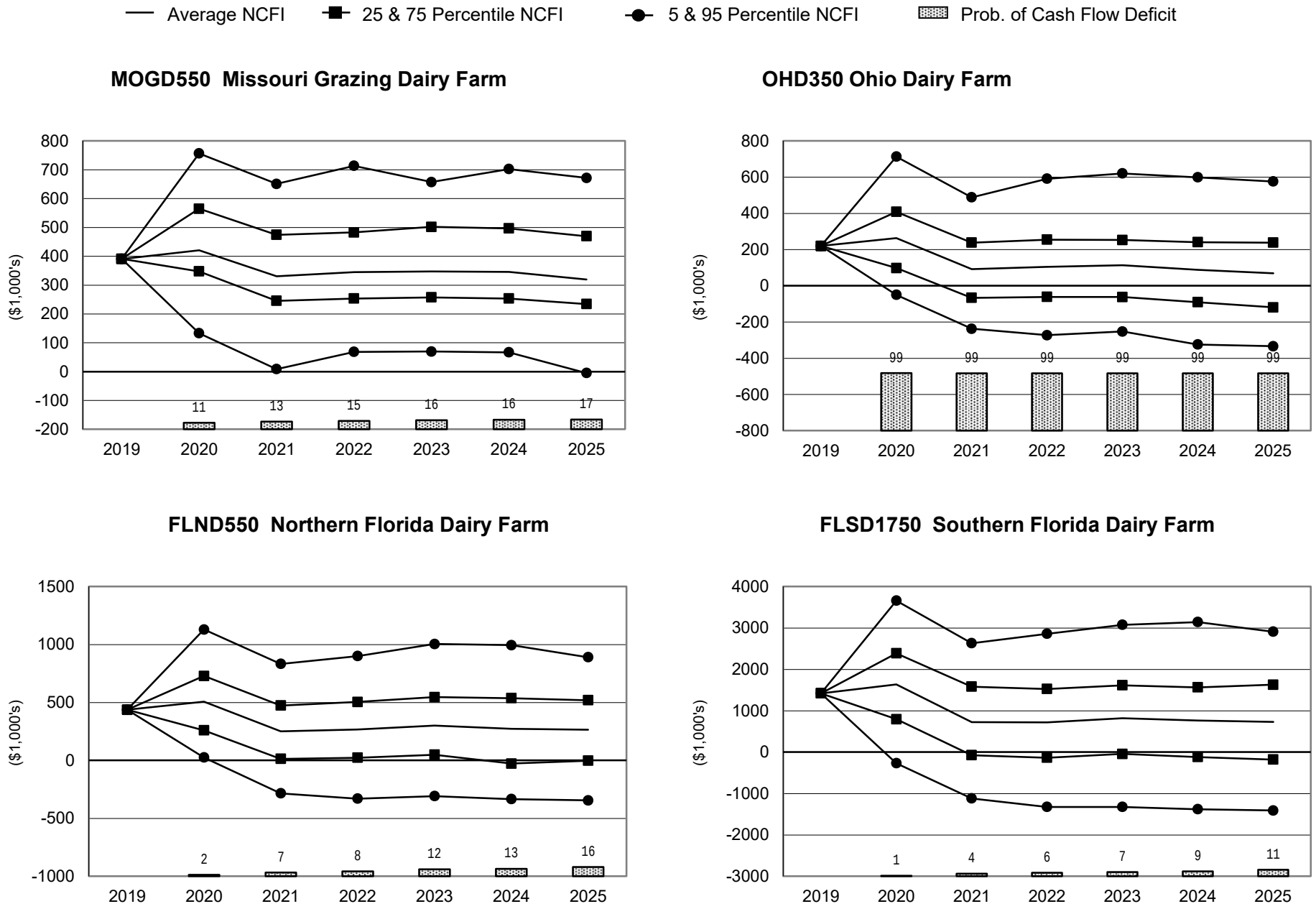


Figure 35. Representative Ranches Producing Beef Cattle

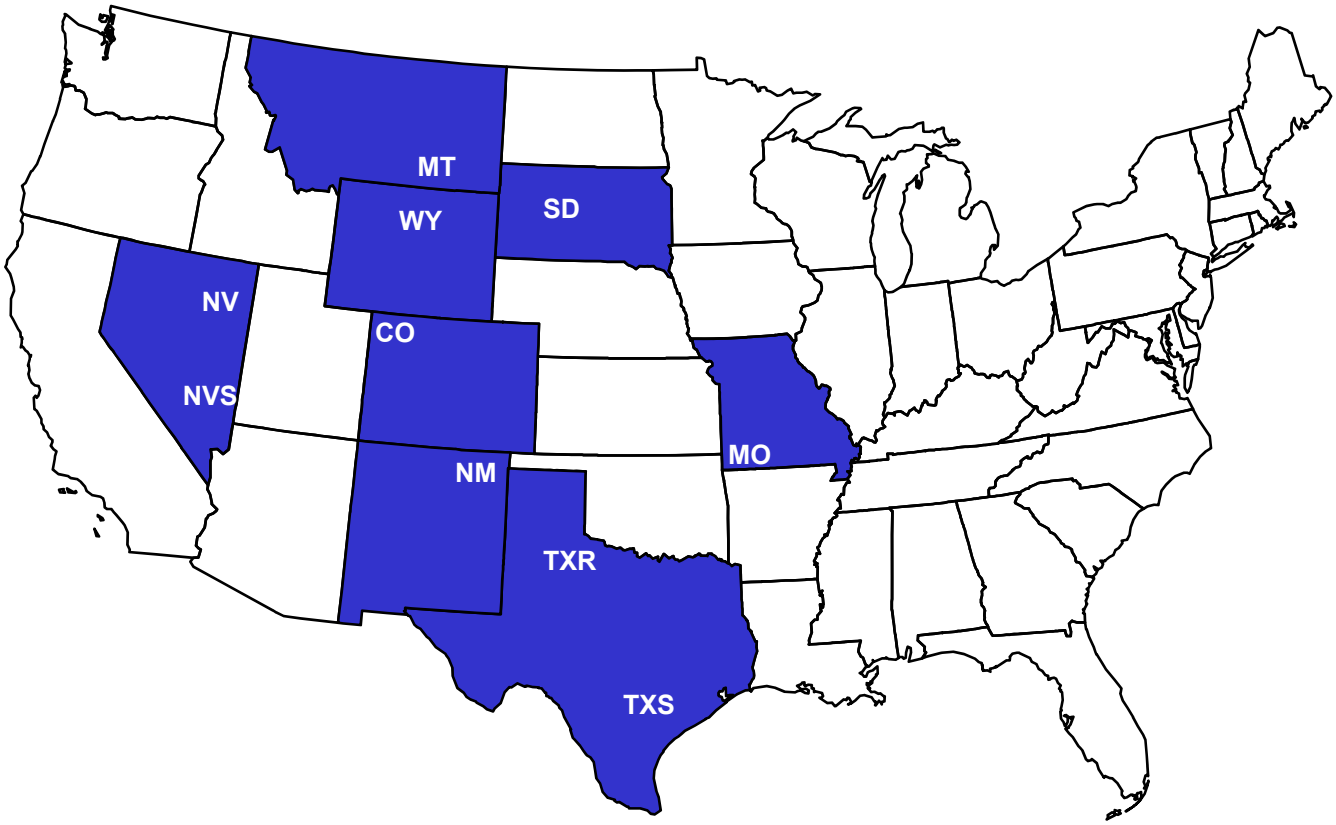


Table 14. Implications of the Preliminary 2021 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Beef Cattle.

	NVB650	NVSB550	MTB600	WYB475	COB275	NMB210	SDB600	MOB250	TXRB400	TXSB300
Overall Financial Position										
2020-2025 Ranking	Marginal	Marginal	Good	Poor	Good	Marginal	Marginal	Good	Good	Good
Change Real Net Worth (%)										
2020-2025 Average	1.94	2.22	2.52	-0.10	2.15	1.68	0.04	4.08	2.07	2.11
Govt Payments/Receipts (%)										
2020-2025 Average	1.20	1.11	1.19	1.29	0.86	1.14	1.20	2.58	1.12	1.28
Cost to Receipts Ratio (%)										
2020-2025 Average	91.84	94.63	85.55	100.86	72.10	87.03	118.68	64.39	82.13	72.21
Total Cash Receipts ($1000)										
2019	549.12	448.53	528.77	445.78	359.11	182.96	583.15	457.59	416.30	327.22
2020	614.19	492.74	585.02	492.42	384.37	202.75	634.97	494.58	449.08	357.53
2021	532.53	441.54	512.77	437.74	348.92	180.80	557.97	426.40	410.03	308.08
2022	569.17	473.86	550.17	455.11	366.62	193.85	605.90	444.33	442.08	333.60
2023	593.73	494.59	575.68	470.59	377.92	202.32	636.47	457.59	463.37	350.48
2024	607.91	506.35	590.08	481.53	385.89	207.20	654.87	464.26	475.63	360.22
2025	612.63	512.23	596.41	487.31	385.84	209.58	663.07	471.01	481.06	364.35
2020-2025 Average	588.36	486.88	568.35	470.78	374.93	199.42	625.54	459.69	453.54	345.71
Government Payments ($1000)										
2019	10.97	1.41	10.12	3.71	7.31	0.00	11.25	56.40	0.00	14.18
2020	44.28	32.91	41.77	38.18	19.76	13.84	45.62	44.08	30.07	27.37
2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.59	0.00	0.00
2022	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.08	0.00	0.00
2023	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.09	0.00	0.00
2024	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.01	0.00	0.00
2025	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.02	0.00	0.00
2020-2025 Average	7.38	5.48	6.96	6.36	3.29	2.31	7.60	12.31	5.01	4.56
Net Cash Farm Income ($1000)										
2019	93.88	71.37	125.88	46.09	150.78	37.29	29.65	229.87	86.31	118.61
2020	157.02	115.43	175.43	91.25	173.29	53.32	65.87	266.09	115.24	147.84
2021	63.54	54.83	95.41	24.63	134.31	29.92	-28.44	190.54	73.69	95.54
2022	88.39	74.97	126.28	29.14	145.63	40.22	3.09	203.18	101.49	116.04
2023	101.95	85.53	144.75	32.60	152.24	43.49	11.54	213.04	116.67	131.38
2024	104.33	87.21	150.09	33.11	156.64	46.18	9.23	215.17	124.99	136.89
2025	93.08	80.75	146.48	21.17	152.04	46.51	-5.67	215.52	123.86	137.94
2020-2025 Average	101.39	83.12	139.74	38.65	152.36	43.27	9.27	217.26	109.32	127.61
Ending Cash Reserves ($1000)										
2019	123.46	35.83	63.58	-91.95	183.91	-33.87	-244.46	189.14	106.31	86.30
2020	166.73	54.44	109.71	-113.35	250.35	-35.98	-328.63	285.01	147.03	135.26
2021	137.61	21.51	124.00	-167.36	276.41	-53.07	-480.20	347.87	158.96	135.57
2022	141.47	17.38	157.09	-216.67	334.91	-80.11	-627.41	395.67	185.48	168.83
2023	106.78	9.86	155.26	-264.54	397.06	-87.57	-772.84	464.24	219.63	166.50
2024	86.63	-10.87	157.89	-337.84	459.09	-94.61	-925.56	535.00	265.79	210.56
2025	-18.30	-26.38	178.15	-463.01	512.05	-99.36	-1,101.51	599.17	310.46	247.45
Nominal Net Worth ($1000)										
2019	10,806.79	3,133.31	7,844.90	2,217.13	14,421.29	5,652.32	7,473.56	3,253.88	8,221.25	5,646.86
2020	10,995.80	3,187.23	8,005.14	2,224.47	14,695.86	5,729.06	7,383.53	3,361.23	8,255.32	5,676.70
2021	11,040.70	3,188.48	8,072.13	2,181.14	14,814.11	5,743.95	7,283.23	3,443.84	8,316.63	5,709.61
2022	10,946.54	3,191.67	8,061.14	2,140.28	14,682.37	5,672.82	7,125.40	3,499.50	8,265.01	5,687.02
2023	10,922.82	3,204.17	8,097.72	2,098.66	14,670.79	5,644.26	7,000.03	3,572.16	8,275.80	5,700.92
2024	10,977.37	3,227.03	8,186.76	2,058.33	14,778.17	5,659.48	6,908.62	3,664.25	8,357.32	5,753.44
2025	10,959.81	3,229.74	8,227.74	1,991.62	14,807.22	5,645.53	6,767.36	3,738.17	8,397.43	5,783.42
Prob. of Negative Ending Cash (%)										
2020	4	18	4	99	6	99	99	1	1	1
2021	9	38	5	99	4	99	99	1	1	1
2022	11	40	5	99	2	99	99	1	1	1
2023	21	44	6	99	2	99	99	1	1	1
2024	27	50	9	99	1	99	99	1	1	1
2025	52	53	8	99	1	99	99	1	1	1
Prob. of Decreasing Real Net Worth										
Over 2020-2025	1	1	1	45	1	1	17	1	1	1

Figure 36. Beef Cattle Ranches

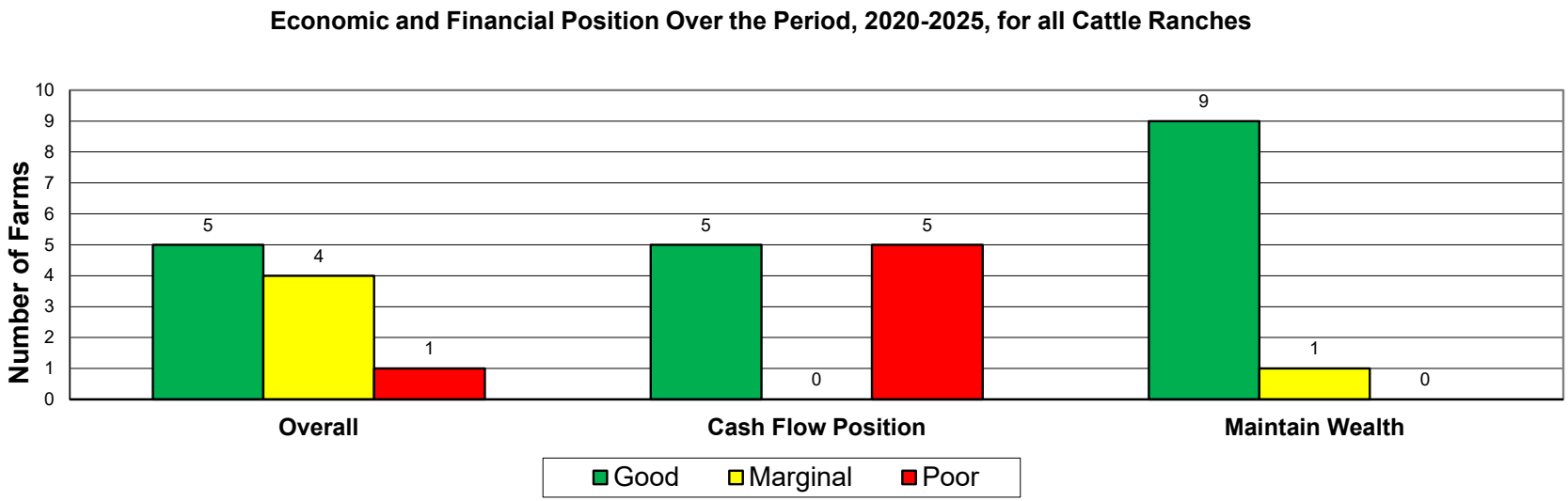


Figure 37. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Beef Cattle Ranches

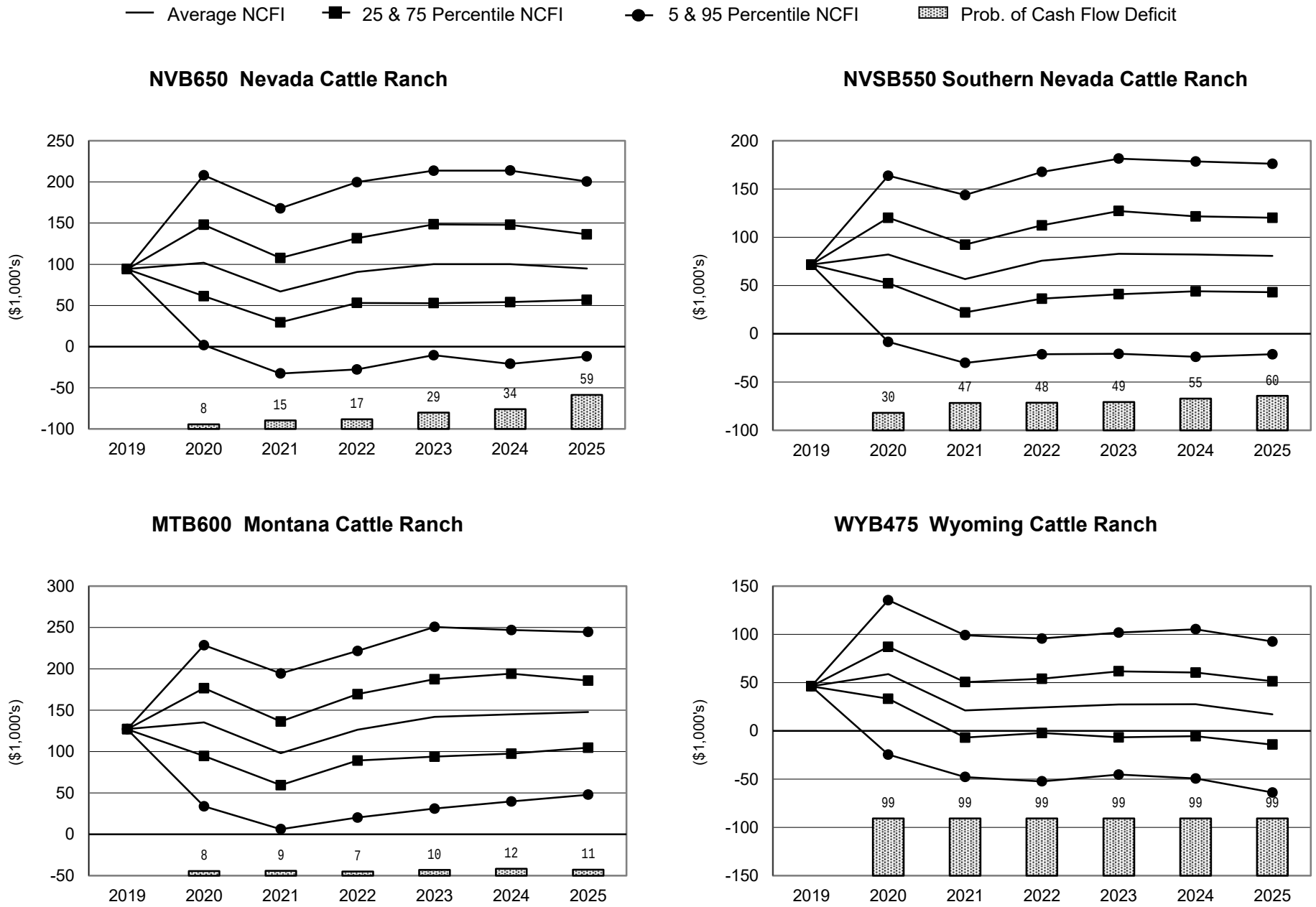


Figure 38. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Beef Cattle Ranches

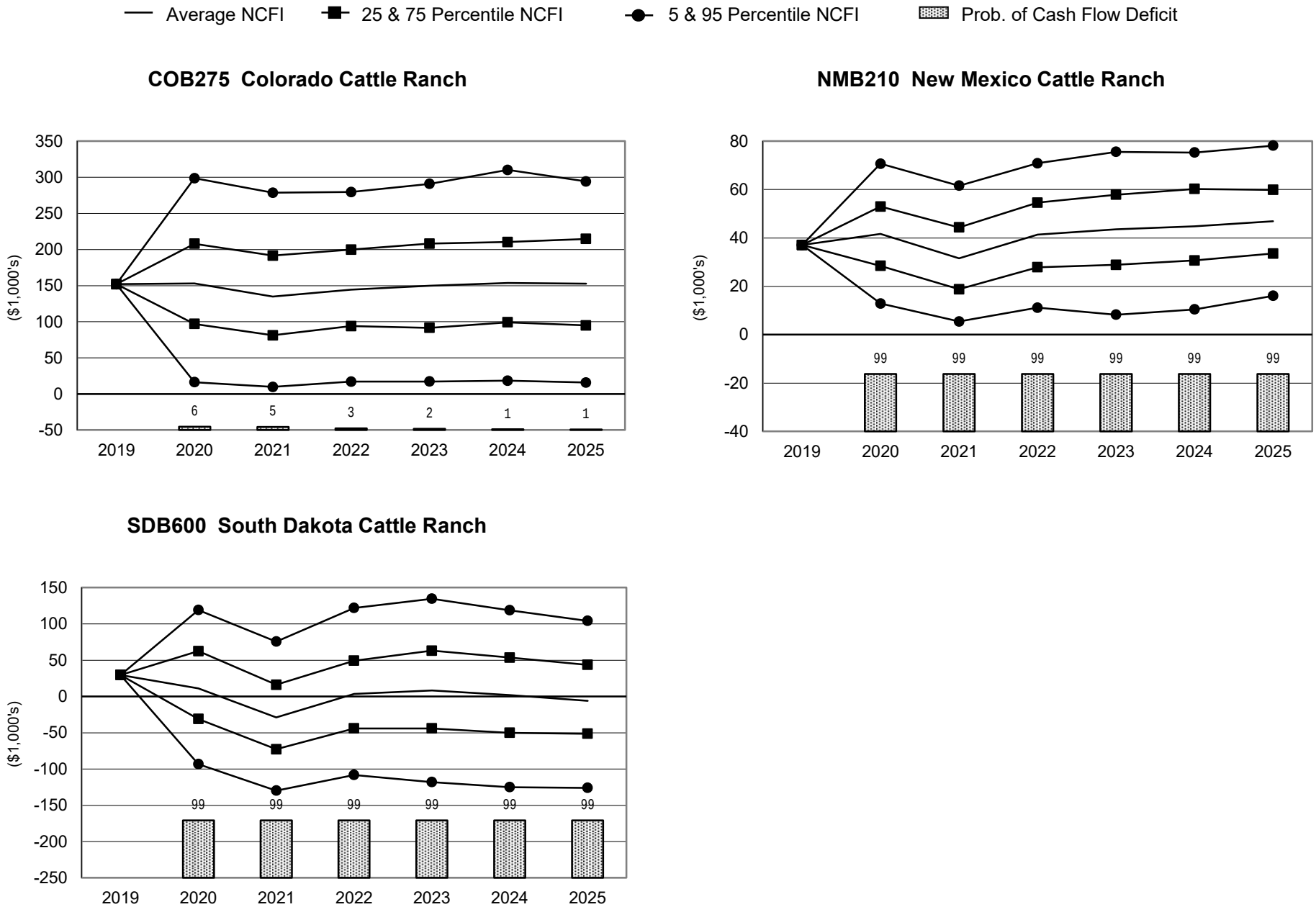
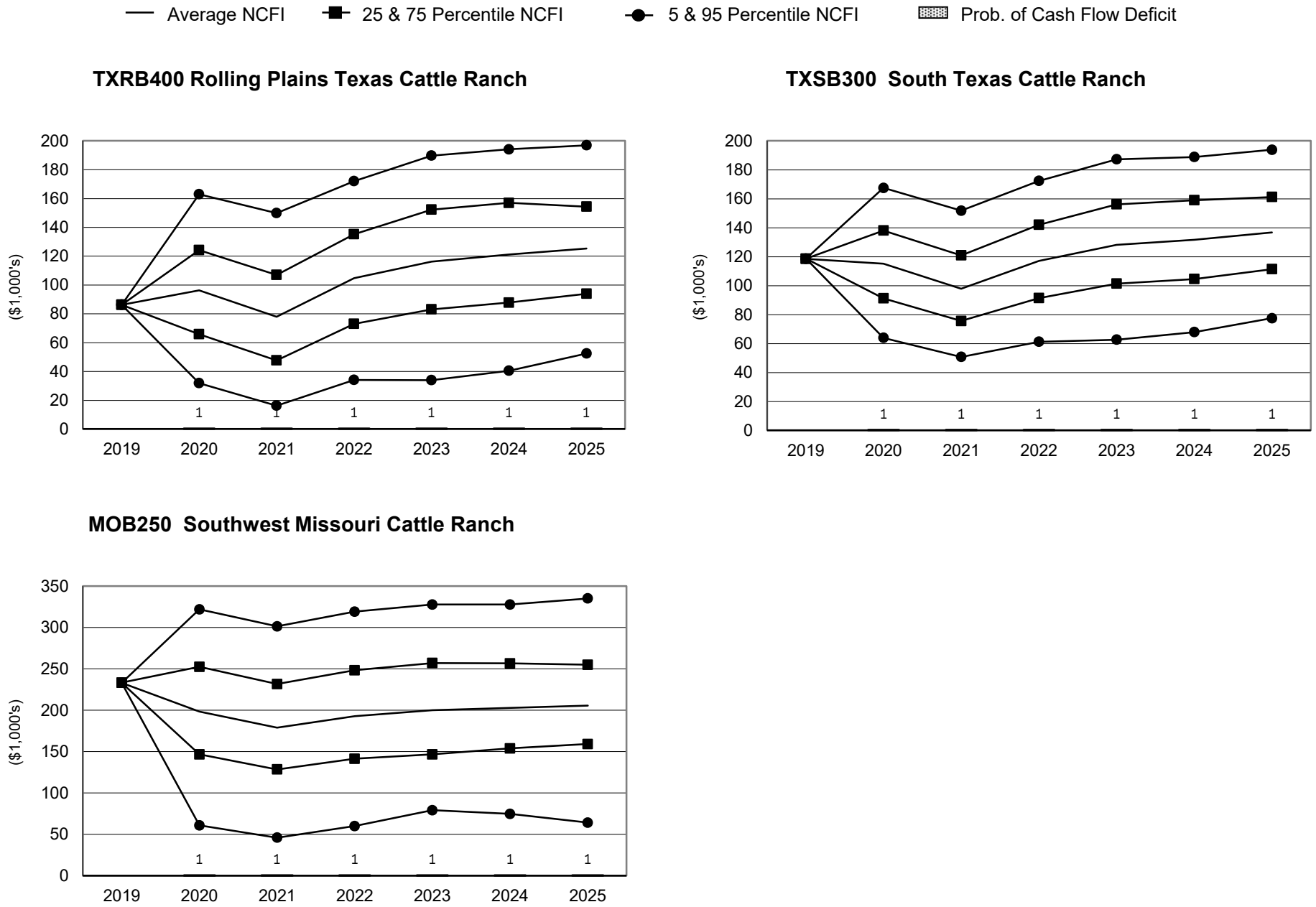


Figure 39. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Beef Cattle Ranches



APPENDIX A:

CHARACTERISTICS OF REPRESENTATIVE FARMS

2019 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-seven percent of this farm's 2019 receipts come from corn production.

IAG3400 This 3,400-acre large-sized grain farm is located in northwestern Iowa (Webster County). It plants 2,210 acres of corn and 1,190 acres of soybeans each year, realizing 66 percent of receipts from corn production.

NEG2400 South-central Nebraska (Dawson County) is home to this 2,400-acre grain farm. This farm plants 1,600 acres to corn and 800 acres 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.

NEG4500 This is a 4,500-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 2019, 70 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 2019 receipts from soybean sales and 40 percent from corn sales.

NDG9000 This is an 9,000-acre, large-sized grain farm in south central North Dakota (Barnes County) that grows 4,500 acres of soybeans, 2,500 acres of corn, 1,250 acres of wheat, and 500 acres of barley annually. The remaining acreage is enrolled in the Conservation Reserve Program. Soybean and corn sales accounted for 75 percent of 2019 receipts.

ING1000 Shelby County, Indiana, is home to this 1,000-acre moderate-sized feedgrain farm. This farm annually plants 475 acres of corn, 525 acres of soybeans, and 50 acres of wheat that is double cropped with soybeans. Due to this farm's proximity to Indianapolis, land development pressures will likely constrain further expansion of this operation. Forty-eight percent of 2019 receipts came from corn sales.

ING3250 ING3250 is a large-sized grain farm located in east central Indiana (Shelby County). This farm plants 1,625 acres to corn and 1,625 acres to soybeans each year. In 2019, 54 percent of gross receipts were generated by corn sales.

OHG700 This is a 700 acre, moderate sized grain farm in north western Ohio (Henry County). This farm planted 105 acres of corn and 280 acres of soybeans in 2019. Because of the wet spring there were 315 acres that were not planted and was taken as preventive planting insurance. Normally would be 350 acres each of corn and soybeans. Twenty-one percent of 2019 receipts were generated by corn sales.

OHG1500 This is a 1,500 acre, large-sized grain farm in north western Ohio (Henry County). This farm planted 202 acres of corn, 304 acres of soybeans, and 150 acres of wheat in 2019. Because of the wet spring there were 844 acres that were not planted and was taken as preventive planting insurance. Normally would be 675 acres each of corn and soybeans plus the 150 acres of wheat. Twenty percent of 2019 receipts were generated by corn sales.

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

	IAG1350	IAG3400	NEG2400	NEG4500	NDG3000	NDG9000	ING1000	ING3250	OHG700	OHG1500
County	Webster	Webster	Dawson	Dawson	Barnes	Barnes	Shelby	Shelby	Henry	Henry
Total Cropland	1,350.00	3,400.00	2,400.00	4,500.00	3,000.00	9,000.00	1,000.00	3,250.00	700.00	1,500.00
Acres Owned	250.00	850.00	600.00	2,150.00	720.00	4,000.00	300.00	1,138.00	350.00	375.00
Acres Leased	1,100.00	2,550.00	1,800.00	2,350.00	2,280.00	5,000.00	700.00	2,112.00	350.00	1,125.00
Assets ($1000)										
Total	3,312.00	10,220.00	6,029.00	19,274.00	4,086.00	20,723.00	3,312.00	11,065.00	3,307.00	4,204.00
Real Estate	2,570.00	8,373.00	4,234.00	15,276.00	3,020.00	15,149.00	2,708.00	9,319.00	2,928.00	2,928.00
Machinery	742.00	1,778.00	1,600.00	3,999.00	964.00	4,270.00	538.00	1,486.00	355.00	901.00
Other & Livestock	0.00	70.00	194.00	0.00	102.00	1,304.00	65.00	260.00	24.00	374.00
Debt/Asset Ratios										
Total	0.30	0.18	0.20	0.23	0.15	0.18	0.19	0.19	0.19	0.17
Intermediate	0.14	0.16	0.27	0.22	0.08	0.26	0.24	0.25	0.13	0.15
Long Run	0.18	0.18	0.18	0.18	0.17	0.17	0.18	0.18	0.19	0.19
2019 Gross Receipts ($1,000)*										
Total	980.10	2,285.70	2,103.30	3,697.60	1,317.00	4,090.60	661.10	2,307.90	360.60	739.00
Corn	652.40	1,496.00	1,417.20	2,573.50	522.60	1,350.90	317.70	1,242.80	75.60	149.10
	0.67	0.66	0.67	0.70	0.40	0.33	0.48	0.54	0.21	0.20
Wheat	0.00	0.00	0.00	0.00	148.10	426.70	20.70	0.00	0.90	69.90
	0.00	0.00	0.00	0.00	0.11	0.10	0.03	0.00	0.00	0.10
Soybeans	258.90	616.30	586.60	656.20	522.50	1,719.30	265.20	886.90	135.70	177.40
	0.26	0.27	0.28	0.18	0.40	0.42	0.40	0.38	0.38	0.24
Barley	0.00	0.00	0.00	0.00	0.00	210.20	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
Hay	0.00	0.00	0.00	290.50	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00
Other	68.90	173.40	99.60	177.40	123.90	383.40	57.50	178.20	148.40	342.60
	0.07	0.08	0.05	0.05	0.09	0.09	0.09	0.08	0.41	0.46
2019 Planted Acres**										
Total	1,350.00	3,400.00	2,400.00	4,300.00	3,100.00	9,000.00	1,050.00	3,250.00	385.00	656.20
Corn	880.00	2,210.00	1,600.00	3,000.00	1,000.00	2,500.00	475.00	1,625.00	105.00	202.50
	0.65	0.65	0.67	0.70	0.32	0.28	0.45	0.50	0.27	0.31
Wheat	0.00	0.00	0.00	0.00	500.00	1,250.00	50.00	0.00	0.00	150.00
	0.00	0.00	0.00	0.00	0.16	0.14	0.05	0.00	0.00	0.23
Soybeans	470.00	1,190.00	800.00	1,000.00	1,500.00	4,500.00	525.00	1,625.00	280.00	303.80
	0.35	0.35	0.33	0.23	0.48	0.50	0.50	0.50	0.73	0.46
Barley	0.00	0.00	0.00	0.00	0.00	500.00	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	0.00
Hay	0.00	0.00	0.00	300.00	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
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	0.00	0.00	0.03	0.03	0.00	0.00	0.00	0.00

*Receipts for 2019 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 2019 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.

2019 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 53 percent of its total revenue from corn and 39 percent from soybeans during 2019.

MOCG4200 This is a 4,200-acre central Missouri (Carroll County) grain farm with 2,310 acres of corn and 1,890 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 59 percent of farm receipts and soybeans accounted for 33 percent in 2019.

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 50 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 2019, 46 percent of the farm's total receipts were from corn, 44 percent from soybeans, and 8 percent from cattle sales.

LANG2500 This is a 2,500-acre northeast Louisiana (Madison Parish) diversified grain farm. This farm harvests 500 acres of rice, 875 acres of soybeans, 375 acres of cotton, and 750 acres of corn. For 2019, 48 percent of farm receipts came from corn and soybean sales.

TNG2500 This is a 2,500-acre, moderate-sized grain farm in West Tennessee (Gibson County). Annually, this farm plants 1,025 acres of corn, 1,475 acres of soybeans, and 375 acres of wheat (planted before soybeans) in a region of Tennessee recognized for the high level of implementation of conservation practices by farmers. For 2019, 38 percent of farm receipts were from sales of corn and 43 percent from soybeans.

TNG5000 West Tennessee (Gibson County) is home to this 5,000-acre, large-sized grain farm. Farmers in this part of Tennessee are known for their early and continued adoption of conservation practices, including no-till farming. TNG5000 plants 2,500 acres of corn, 500 acres of wheat, 2,500 acres of soybeans (500 of which are double-cropped after wheat). The farm generated 49 percent of its 2019 gross receipts from sales of corn and 35 percent from soybeans.

NCSP2000 A 2,000-acre diversified farm located in southern North Carolina (Bladen County). NCSP2000 plants 400 acres of peanuts, 1,100 acres of corn, and 500 acres of soybeans. Fifty-two percent of receipts for this farm came from corn and soybean sales in 2019; forty-three percent of receipts came from peanut sales.

NCC2030 This is a 2,030-acre grain farm located on the upper coastal plain of North Carolina (Wayne County). NCC2030 plants 400 acres of corn, 200 acres of wheat, and 1,000 acres of soybeans annually. Corn accounted for 21 percent of this farm's 2019 receipts, while soybeans accounted for 38 percent.

SCC2000 SCC2000 is a moderate-sized, 2,000-acre grain farm in South Carolina (Orangeburg County) consisting of 800 acres of corn, 550 acres of cotton, 250 acres of peanuts, and 400 acres of soybeans. Forty-four percent of the farm's receipts were from corn sales during 2019.

SCG3500 A 3,500-acre, large-sized South Carolina (Clarendon County) grain farm with 1,800 acres of corn, 750 acres of cotton, 600 acres of peanuts, and 350 acres of soybeans. The farm generated 46 percent of 2019 receipts from corn sales and 4 percent from soybean sales.

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

	MOCG2300	MOCG4200	MONG2300	LANG2500	TNG2500	TNG5000	NCSP2000	NCC2030	SCC2000	SCG3500
County	Carroll	Carroll	Nodaway	Madison	Gibson	Gibson	Bladen	Wayne	Clarendon	Clarendon
Total Cropland	2,300.00	4,200.00	2,300.00	2,500.00	2,500.00	5,000.00	2,000.00	2,000.00	2,000.00	3,500.00
Acres Owned	1,380.00	1,800.00	1,610.00	500.00	625.00	1,375.00	700.00	225.00	550.00	1,400.00
Acres Leased	920.00	2,400.00	690.00	2,000.00	1,875.00	3,625.00	1,300.00	1,775.00	1,450.00	2,100.00
Assets ($1000)										
Total	12,202.00	17,760.00	12,840.00	3,812.00	5,096.00	11,561.00	5,190.00	2,274.00	3,388.00	7,230.00
Real Estate	10,744.00	14,937.00	11,785.00	2,164.00	3,808.00	8,547.00	3,479.00	1,448.00	2,276.00	5,110.00
Machinery	1,216.00	1,983.00	1,021.00	1,586.00	1,217.00	2,282.00	1,711.00	670.00	1,102.00	1,946.00
Other & Livestock	242.00	840.00	34.00	62.00	71.00	732.00	0.00	156.00	10.00	174.00
Debt/Asset Ratios										
Total	0.17	0.17	0.18	0.20	0.18	0.16	0.32	0.13	0.17	0.16
Intermediate	0.17	0.15	0.27	0.21	0.22	0.19	0.26	0.22	0.12	0.11
Long Run	0.18	0.18	0.16	0.17	0.16	0.16	0.18	0.10	0.18	0.18
2019 Gross Receipts ($1,000)*										
Total	1,403.70	2,514.20	1,547.80	1,873.00	1,519.90	3,230.50	1,267.40	1,101.50	1,353.90	2,655.00
Corn	744.50	1,488.40	708.30	514.30	581.00	1,585.70	491.80	228.80	598.30	1,210.20
	0.53	0.59	0.46	0.28	0.38	0.49	0.39	0.21	0.44	0.46
Wheat	0.00	0.00	0.00	0.00	118.70	184.60	0.00	72.30	0.00	0.00
	0.00	0.00	0.00	0.00	0.08	0.06	0.00	0.07	0.00	0.00
Soybeans	545.20	816.60	680.40	381.60	651.90	1,136.30	166.00	418.30	107.70	104.30
	0.39	0.33	0.44	0.20	0.43	0.35	0.13	0.38	0.08	0.04
Cotton	0.00	0.00	0.00	294.90	0.00	0.00	0.00	0.00	341.90	500.10
	0.00	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.25	0.19
Peanuts	0.00	0.00	0.00	0.00	0.00	0.00	546.60	0.00	227.90	661.30
	0.00	0.00	0.00	0.00	0.00	0.00	0.43	0.00	0.17	0.25
Rice	0.00	0.00	0.00	457.80	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.24	0.00	0.00	0.00	0.00	0.00	0.00
Hay	0.00	0.00	33.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	113.90	209.10	126.20	224.50	168.20	323.90	63.00	382.10	78.00	179.10
	0.08	0.08	0.08	0.12	0.11	0.10	0.05	0.35	0.06	0.07
2019 Planted Acres**										
Total	2,300.00	4,200.00	2,750.00	2,500.00	2,875.00	5,500.00	2,000.00	1,600.00	2,000.00	3,500.00
Corn	1,150.00	2,310.00	1,125.00	750.00	1,025.00	2,500.00	1,100.00	400.00	800.00	1,800.00
	0.50	0.55	0.41	0.30	0.36	0.46	0.55	0.25	0.40	0.51
Wheat	0.00	0.00	0.00	0.00	375.00	500.00	0.00	200.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.13	0.09	0.00	0.13	0.00	0.00
Soybeans	1,150.00	1,890.00	1,125.00	875.00	1,475.00	2,500.00	500.00	1,000.00	400.00	350.00
	0.50	0.45	0.41	0.35	0.51	0.46	0.25	0.63	0.20	0.10
Cotton	0.00	0.00	0.00	375.00	0.00	0.00	0.00	0.00	550.00	750.00
	0.00	0.00	0.00	0.15	0.00	0.00	0.00	0.00	0.28	0.21
Peanuts	0.00	0.00	0.00	0.00	0.00	0.00	400.00	0.00	250.00	600.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.13	0.17
Rice	0.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00
Hay	0.00	0.00	50.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CRP	0.00	0.00	20.00	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	0.00	0.00
Pasture	0.00	0.00	430.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00

*Receipts for 2019 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 2019 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.

2019 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 1206 acres of cotton, 1,294 acres of irrigated corn, 260 acres of irrigated sorghum for seed production, and 432 acres of irrigated wheat annually. Forty-seven percent of total receipts are generated from corn sales.

TXNP10880 TXNP10880 is a large-sized diversified grain farm located in the Texas Panhandle (Moore County). This farm annually plants 4,454 acres of cotton (3,962 irrigated/492 dryland); 3,962 acres of irrigated corn; 1,272 acres of grain sorghum (530 irrigated for seed production/492 dryland/250 irrigated for commercial use); and 492 acres of dryland winter wheat. Thirty-nine percent of 2019 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 534 acres (350 irrigated and 184 dryland), 1,000 acres planted to irrigated corn, 783 acres are planted to cotton (600 irrigated and 183 dryland), and grain sorghum is planted on 183 dryland acres. Fifty-seven percent of 2019 cash receipts were generated by corn sales.

TXHG3000 This 3,000-acre grain farm is located on the Blackland Prairie of Texas (Hill County). On this farm, 2,000 acres of corn, 500 acres of cotton, and 500 acres of wheat are planted annually. Grain sales accounted for 75 percent of 2019 receipts with cotton accounting for fourteen percent of sales. Forty beef cows live on 300 acres of improved pasture and contribute approximately two percent of total receipts.

TXWG1600 This 1,600-acre farm is located on the Blackland Prairie of Texas (Williamson County). TXWG1600 plants 800 acres of corn, 300 acres of sorghum, 400 acres of cotton, and 100 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 57 percent of 2019 receipts with cotton accounting for 33 percent of sales.

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

	TXNP3450	TXNP10880	TXPG2500	TXHG3000	TXWG1600
County	Moore	Moore	Deaf Smith	Hill	Williamson
Total Cropland	3,450.00	10,880.00	2,500.00	3,000.00	1,600.00
Acres Owned	2,588.00	4,160.00	1,875.00	450.00	150.00
Acres Leased	862.00	6,720.00	625.00	2,550.00	1,450.00
Assets ($1000)					
Total	8,218.00	19,616.00	5,854.00	2,275.00	1,740.00
Real Estate	6,454.00	12,121.00	3,737.00	1,211.00	1,299.00
Machinery	1,378.00	5,018.00	1,907.00	1,038.00	382.00
Other & Livestock	386.00	2,477.00	210.00	27.00	58.00
Debt/Asset Ratios					
Total	0.16	0.15	0.20	0.28	0.17
Intermediate	0.22	0.20	0.26	0.18	0.08
Long Run	0.15	0.16	0.17	0.18	0.17
2019 Gross Receipts ($1,000)*					
Total	2,592.90	8,287.80	1,805.90	1,191.70	586.70
Corn	1,217.30	3,227.00	1,028.80	717.90	227.50
	0.47	0.39	0.57	0.60	0.39
Wheat	92.00	61.20	116.30	125.40	24.40
	0.04	0.01	0.06	0.11	0.04
Cotton	981.40	3,530.90	503.80	169.60	193.60
	0.38	0.43	0.28	0.14	0.33
Grain Sorghum	144.00	967.40	21.10	52.60	83.90
	0.06	0.12	0.01	0.04	0.14
Cattle	0.00	0.00	0.00	22.10	0.00
	0.00	0.00	0.00	0.02	0.00
Other	158.20	501.40	135.90	104.10	57.30
	0.06	0.06	0.08	0.09	0.10
2019 Planted Acres**					
Total	3,192.00	10,180.00	2,500.00	3,300.00	1,600.00
Corn	1,294.00	3,962.00	1,000.00	2,000.00	800.00
	0.41	0.39	0.40	0.61	0.50
Wheat	432.00	492.00	534.00	500.00	100.00
	0.14	0.05	0.21	0.15	0.06
Cotton	1,206.00	4,454.00	783.00	500.00	400.00
	0.38	0.44	0.31	0.15	0.25
Grain Sorghum	260.00	1,272.00	183.00	0.00	300.00
	0.08	0.13	0.07	0.00	0.19
Pasture	0.00	0.00	0.00	300.00	0.00
	0.00	0.00	0.00	0.09	0.00

*Receipts for 2019 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 2019 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.

2019 CHARACTERISTICS OF PANEL FARMS PRODUCING WHEAT

WAW2800 This is a 2,800-acre moderate-sized grain farm in the Palouse of southeastern Washington (Whitman County). It plants 1,840 acres of wheat and 800 acres of dry peas. Disease concerns dictate rotating a minimum acreage of peas to maintain wheat yields. This farm generated 61 percent of 2019 receipts from wheat.

WAW10000 A 10,000-acre, large-sized grain farm in the Palouse of southeastern Washington (Whitman County). Annually, this farm allocates 5,800 acres to wheat and 2,700 acres to dry peas. Diseases that inhibit wheat yield dictate the rotation of a minimum acreage of peas. Wheat sales accounted for 60 percent of 2019 receipts.

WAAW5500 South-central Washington (Adams County) is home to this 5,500-acre, large-sized wheat farm. Annually, this farm plants 2,600 acres of wheat in a wheat-fallow rotation. Additionally, 300 acres are enrolled in CRP. In 2019, 91 percent of the farm's income came from wheat.

ORW4500 ORW4500 is a 4,500-acre large-sized grain farm located in northeastern Oregon (Morrow County). This farm plants 2,250 acres annually in a wheat-fallow rotation. Eighty-six percent of this farm's 2019 total receipts came from wheat sales.

MTW8000 North-central Montana (Chouteau County) is home to this 8,000-acre farm on which 3,840 acres of wheat (1,920 acres of winter wheat, 1,344 acres of spring wheat, and 544 acres of Durham), 240 acres of barley, and 720 acres of dry peas are planted each year. MTW8000 uses no-till production practices. In 2019, 66 percent of receipts came from wheat.

KSCW2000 South central Kansas (Sumner County) is home to this 2,000-acre, moderate-sized grain farm. KSCW2000 plants 800 acres of winter wheat, 1,100 acres of soybeans, 200 acres of cotton, and 500 acres of corn each year. For 2019, 18 percent of gross receipts came from wheat.

KSCW5300 A 5,300-acre, large-sized grain farm in south central Kansas (Sumner County) that plants 2,385 acres of winter wheat, 1,590 acres of corn, and 3,352 acres of soybeans. Twenty-one percent of this farm's 2019 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 1,200 acres of winter wheat (wheat-fallow rotation), 1,200 acres of corn, and 600 acres of sorghum. This farm generated 33 percent of 2019 receipts from wheat and 56 percent of its receipts from feed grains.

KSNW7000 KSNW7000 is a 7,000-acre, large-sized northwest Kansas (Thomas County) grain farm that annually plants 1,700 acres of winter wheat, 3,770 acres of corn, 700 acres of sorghum, and 130 acres of soybeans. The farm generated 15 percent of receipts from wheat and 78 percent from feed grains during 2019.

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 56 percent of its receipts from wheat and 36 percent from corn.

COW6000 A 6,000-acre, large-sized northeast Colorado (Washington County) wheat farm. It plants 2,000 acres of wheat, 1,000 acres of millet, and 1,000 acres of corn. During 2019, 52 percent of gross receipts came from wheat sales and 23 percent came from corn sales.

Appendix Table A4. Characteristics of Panel Farms Producing Wheat.

	WAW2800	WAW10000	WAAW5500	ORW4500	MTW8000	KSCW2000	KSCW5300	KSNW4000	KSNW7000	COW3000	COW6000
County	Whitman	Whitman	Adams	Morrow	Chouteau	Sumner	Sumner	Thomas	Thomas	Washington	Washington
Total Cropland	2,800.00	10,000.00	5,500.00	4,500.00	8,000.00	2,000.00	5,300.00	4,000.00	7,000.00	3,000.00	6,000.00
Acres Owned	800.00	2,500.00	2,500.00	2,000.00	4,200.00	700.00	1,325.00	1,170.00	2,100.00	2,100.00	3,000.00
Acres Leased	2,000.00	7,500.00	3,000.00	2,500.00	3,800.00	1,300.00	3,975.00	2,830.00	4,900.00	900.00	3,000.00
Assets ($1000)											
Total	3,271.00	11,187.00	2,417.00	1,962.00	7,549.00	2,794.00	6,312.00	4,418.00	8,446.00	4,366.00	6,771.00
Real Estate	2,527.00	7,817.00	1,792.00	1,410.00	5,367.00	2,002.00	4,036.00	3,370.00	6,206.00	4,066.00	5,464.00
Machinery	506.00	2,434.00	624.00	547.00	1,372.00	546.00	1,569.00	991.00	1,996.00	298.00	1,307.00
Other & Livestock	237.00	936.00	0.00	5.00	810.00	246.00	707.00	57.00	244.00	2.00	0.00
Debt/Asset Ratios											
Total	0.15	0.15	0.24	0.20	0.15	0.13	0.16	0.19	0.19	0.18	0.22
Intermediate	0.09	0.19	0.08	0.15	0.24	0.05	0.20	0.21	0.27	0.11	0.08
Long Run	0.17	0.16	0.18	0.16	0.15	0.17	0.17	0.18	0.17	0.17	0.15
2019 Gross Receipts ($1,000)*											
Total	1,229.80	4,210.60	613.60	454.90	1,446.30	857.40	2,165.70	884.60	1,927.50	387.60	841.90
Corn	0.00	0.00	0.00	0.00	0.00	192.10	629.70	325.50	1,188.80	141.90	197.00
	0.00	0.00	0.00	0.00	0.00	0.22	0.29	0.37	0.62	0.37	0.23
Wheat	754.80	2,506.90	555.70	389.60	956.90	150.50	454.70	292.70	283.40	217.80	434.30
	0.61	0.60	0.91	0.86	0.66	0.18	0.21	0.33	0.15	0.56	0.52
Soybeans	0.00	0.00	0.00	0.00	0.00	254.70	847.90	0.00	74.90	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.30	0.39	0.00	0.04	0.00	0.00
Cotton	0.00	0.00	0.00	0.00	0.00	178.10	0.00	0.00	0.00	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
Grain Sorghum	0.00	0.00	0.00	0.00	0.00	5.10	17.50	190.50	225.80	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.22	0.12	0.00	0.00
Barley	3.60	47.30	2.50	0.00	94.50	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.01	0.00	0.00	0.07	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	0.00	0.00	0.00	0.00	165.70
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
Dry Peas	315.80	1,143.90	0.00	0.00	298.90	0.00	0.00	0.00	0.00	0.00	0.00
	0.26	0.27	0.00	0.00	0.21	0.00	0.00	0.00	0.00	0.00	0.00
Other	155.70	512.50	55.50	65.30	96.00	76.70	216.00	75.90	154.50	28.00	45.00
	0.13	0.12	0.09	0.14	0.07	0.09	0.10	0.09	0.08	0.07	0.05
2019 Planted Acres**											
Total	2,640.00	8,700.00	2,900.00	2,250.00	4,800.00	2,600.00	7,327.00	3,000.00	6,300.00	1,987.50	4,000.00
Corn	0.00	0.00	0.00	0.00	0.00	500.00	1,590.00	1,200.00	3,770.00	675.00	1,000.00
	0.00	0.00	0.00	0.00	0.00	0.19	0.22	0.40	0.60	0.34	0.25
Wheat	1,840.00	5,800.00	2,600.00	2,250.00	3,840.00	800.00	2,385.00	1,200.00	1,700.00	1,012.50	2,000.00
	0.70	0.67	0.90	1.00	0.80	0.31	0.33	0.40	0.27	0.51	0.50
Soybeans	0.00	0.00	0.00	0.00	0.00	1,100.00	3,352.00	0.00	130.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.42	0.46	0.00	0.02	0.00	0.00
Cotton	0.00	0.00	0.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00
Grain Sorghum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	600.00	700.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.11	0.00	0.00
Barley	0.00	0.00	0.00	0.00	240.00	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
Millet	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,000.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25
Dry Peas	800.00	2,700.00	0.00	0.00	720.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.30	0.31	0.00	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00
CRP	0.00	200.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	300.00	0.00
	0.00	0.02	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.00

*Receipts for 2019 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 2019 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.

2019 CHARACTERISTICS OF PANEL FARMS PRODUCING COTTON

TXSP4500 The Texas South Plains (Dawson County) is home to this 4,500-acre, large-sized cotton farm that grows 4,380 acres of cotton (2,880 dryland, 1,500 irrigated), and 120 irrigated acres of peanuts. Cotton sales comprised 77 percent of 2019 receipts.

TXEC5000 This 5,000-acre farm is located on the Eastern Caprock of the Texas South Plains (Crosby County). Annually, 4,700 acres are planted to cotton (2,230 irrigated and 2,470 dryland) and 300 acres to dryland wheat. In 2019, cotton sales accounted for 76 percent of gross receipts.

TXRP3000 TXRP3000 is a 3,000-acre cotton farm located in the Rolling Plains of Texas (Jones County). This farm plants 1,800 acres of cotton and 1,200 acres of winter wheat each year. The area is limited by rainfall, and the farm uses a conservative level of inputs. Sixty-six percent of 2019 farm receipts came from cotton sales. Fifty head of beef cows generated four percent of farm receipts.

TXMC2500 This 2,500-acre cotton farm is located on the Coastal Plain of southeast Texas (Wharton County). TXMC2500 farms 300 acres of sorghum, 1,455 acres of cotton, and 655 acres of corn. In 2019, cotton sales comprised 60 percent of total cash receipts on this operation.

TXCB3750 A 3,750-acre cotton farm located on the Texas Coastal Bend (San Patricio County) that farms 1,687.5 acres of cotton, 1,875 acres of sorghum, and 187.5 acres of corn annually. Forty-seven percent of 2019 cash receipts were generated by cotton.

TXCB10000 Nueces County, Texas is home to this 10,000-acre farm. Annually, 4,500 acres are planted to cotton, 4,000 acres to sorghum, and 1,500 acres of corn. Cotton sales accounted for 49 percent of 2019 receipts.

TXVC5500 This 5,500-acre farm is located in the lower Rio Grande Valley of Texas (Willacy County) and plants 2,550 acres to cotton (425 irrigated and 2,125 acres dryland), 2,295 acres to sorghum (170 irrigated and 2,125 dryland), and 255 acres of corn. In 2019, 41 percent of TXVC5500's cash receipts were generated by cotton sales.

ARNC5000 This 5,000-acre farm is located in northern Arkansas (Mississippi County) and plants 2,500 acres to cotton, 500 acres to corn, 1,000 acres of soybeans, and 1,000 acres to peanuts. In 2019, 46 percent of ARNC5000's cash receipts were generated by cotton sales.

TNC3000 A 3,000-acre, moderate-sized West Tennessee (Fayette County) cotton farm. TNC3000 consists of 825 acres of cotton, 1,375 acres of soybeans, and 800 acres of corn. Cotton accounted for 32 percent of 2019 gross receipts, with corn and soybeans contributing 24 percent and 28 percent, respectively.

TNC4050 TNC4050 is a 4,050-acre, large-sized West Tennessee (Haywood County) cotton farm. This farm plants 1,500 acres of cotton, 1,950 acres of soybeans, 550 acres of corn, and 750 acres of wheat each year. During 2019, cotton sales generated 36 percent of gross receipts.

Appendix Table A5. Characteristics of Panel Farms Producing Cotton.

	TXSP4500	TXEC5000	TXRP3000	TXMC2500	TXCB3750	TXCB10000	TXVC5500	ARNC5000	TNC3000	TNC4050
County	Dawson	Crosby	Jones	Wharton	San Patricio	Nueces	Willacy	Mississippi	Fayette	Haywood
Total Cropland	4,500.00	5,000.00	3,000.00	2,500.00	3,750.00	10,000.00	5,500.00	5,000.00	3,000.00	4,050.00
Acres Owned	500.00	1,250.00	875.00	180.00	600.00	1,500.00	1,750.00	1,000.00	300.00	1,000.00
Acres Leased	4,000.00	3,750.00	2,125.00	2,320.00	3,150.00	8,500.00	3,750.00	4,000.00	2,700.00	3,050.00
Assets ($1000)										
Total	2,700.00	4,278.00	1,763.00	2,453.00	3,026.00	8,943.00	7,531.00	12,097.00	2,685.00	7,324.00
Real Estate	691.00	1,754.00	1,404.00	866.00	1,674.00	4,996.00	5,275.00	6,295.00	1,259.00	4,675.00
Machinery	1,874.00	2,006.00	325.00	1,341.00	1,144.00	2,776.00	1,562.00	4,326.00	806.00	2,122.00
Other & Livestock	135.00	518.00	34.00	247.00	209.00	1,171.00	693.00	1,476.00	620.00	527.00
Debt/Asset Ratios										
Total	0.16	0.13	0.44	0.24	0.20	0.18	0.17	0.16	0.12	0.18
Intermediate	0.16	0.13	0.18	0.28	0.23	0.26	0.21	0.22	0.13	0.23
Long Run	0.17	0.18	0.34	0.18	0.18	0.17	0.19	0.15	0.17	0.17
2019 Gross Receipts ($1,000)*										
Total	2,318.50	2,607.70	721.80	1,545.70	1,879.90	4,695.00	3,610.60	4,454.40	2,055.80	2,914.30
Corn	0.00	0.00	0.00	263.90	48.10	498.50	114.80	332.40	498.50	338.90
	0.00	0.00	0.00	0.17	0.03	0.11	0.03	0.08	0.24	0.12
Wheat	0.00	0.00	94.60	0.00	0.00	0.00	0.00	0.00	0.00	274.60
	0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.09
Soybeans	0.00	0.00	0.00	0.00	0.00	0.00	0.00	486.80	575.60	737.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.28	0.25
Cotton	1,785.70	1,984.80	477.10	929.60	876.90	2,319.30	1,467.80	2,033.90	655.90	1,052.30
	0.77	0.76	0.66	0.60	0.47	0.49	0.41	0.46	0.32	0.36
Grain Sorghum	0.00	18.40	0.00	115.70	501.00	1,273.30	658.60	0.00	0.00	0.00
	0.00	0.01	0.00	0.08	0.27	0.27	0.18	0.00	0.00	0.00
Peanuts	97.60	0.00	0.00	0.00	0.00	0.00	0.00	957.80	0.00	0.00
	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.00	0.00
Rice	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cattle	0.00	0.00	28.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	435.20	604.50	121.60	231.00	453.90	603.80	1,369.40	643.50	325.90	511.50
	0.19	0.23	0.17	0.15	0.24	0.13	0.38	0.14	0.16	0.18
2019 Planted Acres**										
Total	4,500.00	5,000.00	3,000.00	2,410.00	3,750.00	10,000.00	5,100.00	5,000.00	3,000.00	4,750.00
Corn	0.00	0.00	0.00	655.00	187.50	1,500.00	255.00	500.00	800.00	550.00
	0.00	0.00	0.00	0.27	0.05	0.15	0.05	0.10	0.27	0.12
Wheat	0.00	300.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00	750.00
	0.00	0.06	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.16
Soybeans	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,000.00	1,375.00	1,950.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.46	0.41
Cotton	4,380.00	4,700.00	1,800.00	1,455.00	1,687.50	4,500.00	2,550.00	2,500.00	825.00	1,500.00
	0.97	0.94	0.60	0.60	0.45	0.45	0.50	0.50	0.28	0.32
Grain Sorghum	0.00	0.00	0.00	300.00	1,875.00	4,000.00	2,295.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.12	0.50	0.40	0.45	0.00	0.00	0.00
Peanuts	120.00	0.00	0.00	0.00	0.00	0.00	0.00	1,000.00	0.00	0.00
	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.00

*Receipts for 2019 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 2019 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.

2019 CHARACTERISTICS OF PANEL FARMS PRODUCING COTTON

ALC3500 A 3,500-acre cotton farm located in northern Alabama (Lawrence County) that plants 1,050 acres to cotton, 1,050 acres to corn, 1,400 acres of soybeans and 875 acres to wheat (double cropped with soybeans) annually. This farm was early to adopt no-till cropping practices. Cotton sales accounted for 29 percent of total farm receipts during 2019.

GAC2500 Southwest Georgia (Decatur County) is home to a 2,500-acre cotton farm that plants 1,250 acres to cotton, 800 acres to peanuts, and 450 acres to corn. In 2019, farm receipts were comprised of cotton sales (39 percent), corn (14 percent), and peanut sales (35 percent). The farm also runs a 125-head beef cow herd, generating 3 percent of 2019 receipts.

NCNP1600 A 1,600-acre diversified farm located in northern North Carolina (Edgecombe County). NCNP1600 plants 320 acres of peanuts, 240 acres of corn, 640 acres of cotton, and 400 acres of soybeans. Twenty-six percent of receipts for this farm came from peanut sales in 2019, 42 percent from cotton sales and 22 percent came from corn and soybean sales.

Appendix Table A6. Characteristics of Panel Farms Producing Cotton.

	ALC3500	GAC2500	NCNP1600
County	Lawrence	Decatur	Edgecombe
Total Cropland	3,500.00	1,250.00	1,600.00
Acres Owned	350.00	1,250.00	600.00
Acres Leased	3,150.00	0.00	1,000.00
Assets ($1000)			
Total	5,602.00	10,569.00	3,917.00
Real Estate	2,818.00	8,419.00	2,574.00
Machinery	1,774.00	1,551.00	1,343.00
Other & Livestock	1,010.00	599.00	0.00
Debt/Asset Ratios			
Total	0.16	0.18	0.25
Intermediate	0.23	0.25	0.24
Long Run	0.18	0.18	0.16
2019 Gross Receipts ($1,000)*			
Total	2,728.60	3,269.50	1,286.10
Corn	607.60	466.50	138.90
	0.22	0.14	0.11
Wheat	429.20	0.00	0.00
	0.16	0.00	0.00
Soybeans	555.70	0.00	141.40
	0.20	0.00	0.11
Cotton	788.50	1,283.60	545.60
	0.29	0.39	0.42
Peanuts	0.00	1,141.30	339.50
	0.00	0.35	0.26
Cattle	0.00	96.10	0.00
	0.00	0.03	0.00
Other	347.50	282.10	120.60
	0.13	0.09	0.09
2019 Planted Acres**			
Total	4,375.00	2,750.00	1,600.00
Corn	1,050.00	450.00	240.00
	0.24	0.16	0.15
Wheat	875.00	0.00	0.00
	0.20	0.00	0.00
Soybeans	1,400.00	0.00	400.00
	0.32	0.00	0.25
Cotton	1,050.00	1,250.00	640.00
	0.24	0.46	0.40
Peanuts	0.00	800.00	320.00
	0.00	0.29	0.20
Pasture	0.00	250.00	0.00
	0.00	0.09	0.00

*Receipts for 2019 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 2019 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.

2019 CHARACTERISTICS OF PANEL FARMS PRODUCING RICE

CAR1200 CAR1200 is a 1,200-acre moderate-sized rice farm in the Sacramento Valley of California (Sutter and Yuba Counties) that plants 1,200 acres of rice annually. This farm generated 98 percent of 2019 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 2019, all receipts were generated from rice sales.

CABR1000 The Sacramento Valley (Butte County) is home to CABR1000, a 1,000-acre rice farm. CABR1000 harvests 1,000 acres of rice annually, generating 98 percent of 2019 farm receipts from rice sales.

CACR800 CACR800 is an 800-acre rice farm located in the Sacramento Valley of California (Colusa County). This farm harvests 800 acres of rice each year. During 2019, 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 2019.

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 2019 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 96 percent of its receipts from rice during 2019.

TXER2500 This 2,500-acre rice farm is located in the Texas Gulf Coast (Wharton County). TXER2500 harvests 1,250 acres of rice each year. The farm also grows 1,250 acres of corn. Sixty-nine percent of 2019 receipts came from rice sales.

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 200 acres of soybeans. During 2019, 56 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 650 acres of rice, 3,900 acres of soybeans, and 1,950 acres of corn. For 2019, 13 percent of gross receipts came from rice sales, 27 percent from corn sales, and 49 percent from soybean sales.

Appendix Table A7. Characteristics of Panel Farms Producing Rice.

	CAR1200	CAR3000	CABR1000	CACR800	TXR1500	TXR3000	TXBR1800	TXER2500	LASR2000	ARMR6500
County	Sutter	Sutter	Butte	Colusa	Colorado	Colorado	Matagorda	Wharton	Acadia	Desha
Total Cropland	1,200.00	3,000.00	1,000.00	800.00	1,500.00	3,000.00	1,800.00	2,500.00	2,000.00	6,500.00
Acres Owned	275.00	900.00	400.00	240.00	405.00	0.00	0.00	0.00	200.00	1,200.00
Acres Leased	925.00	2,100.00	600.00	560.00	1,095.00	3,000.00	1,800.00	2,500.00	1,800.00	5,300.00
Assets ($1000)										
Total	3,996.00	14,570.00	6,090.00	4,530.00	2,613.00	1,592.00	1,090.00	1,114.00	2,856.00	9,445.00
Real Estate	2,663.00	11,163.00	4,275.00	4,200.00	1,409.00	108.00	146.00	100.00	1,550.00	5,952.00
Machinery	919.00	3,067.00	1,592.00	328.00	1,191.00	1,249.00	731.00	880.00	1,160.00	2,744.00
Other & Livestock	413.00	339.00	224.00	2.00	14.00	235.00	213.00	134.00	146.00	749.00
Debt/Asset Ratios										
Total	0.14	0.20	0.18	0.19	0.25	0.20	0.12	0.05	0.19	0.17
Intermediate	0.10	0.26	0.20	0.04	0.26	0.23	0.13	0.04	0.19	0.22
Long Run	0.17	0.17	0.18	0.18	0.17	0.18	0.19	0.18	0.18	0.16
2019 Gross Receipts ($1,000)*										
Total	1,817.40	4,998.90	1,617.20	1,282.60	896.00	1,978.90	1,134.30	2,264.90	1,422.60	5,132.60
Corn	0.00	0.00	0.00	0.00	0.00	0.00	0.00	514.50	0.00	1,373.20
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.00	0.27
Soybeans	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	72.40	2,487.20
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.49
Rice	1,775.30	4,998.90	1,577.30	1,254.90	860.60	1,910.10	1,082.70	1,572.00	801.50	680.10
	0.98	1.00	0.98	0.98	0.96	0.97	0.96	0.69	0.56	0.13
Other	42.20	0.00	39.90	27.70	35.40	68.80	51.50	178.30	548.60	592.10
	0.02	0.00	0.03	0.02	0.04	0.04	0.05	0.08	0.39	0.12
2019 Planted Acres**										
Total	1,200.00	3,000.00	1,000.00	800.00	600.00	1,500.00	600.00	2,500.00	1,200.00	6,500.00
Corn	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,250.00	0.00	1,950.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.00	0.30
Soybeans	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	200.00	3,900.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.60
Rice	1,200.00	3,000.00	1,000.00	800.00	600.00	1,500.00	600.00	1,250.00	1,000.00	650.00
	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.50	0.83	0.10

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**Acreages for 2019 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.

2019 CHARACTERISTICS OF PANEL FARMS PRODUCING RICE

ARSR3240 ARSR3240 is a 3,240-acre, large-sized Arkansas (Arkansas County) rice farm that harvests 1,458 acres of rice, 1,458 acres of soybeans, and 324 acres of corn each year. Fifty-nine percent of this farm's 2019 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 2019, rice sales generated 63 percent of gross receipts.

ARHR4000 ARHR4000 is a 4,000-acre large-sized northeast Arkansas (Lawrence County) rice farm that annually harvests 2,400 acres of rice, 1,400 acres of soybeans, and 200 acres of corn. Rice sales accounted for 75 percent of 2019 farm receipts.

MSDR5000 MSDR5000 is a 5,000-acre Mississippi Delta (Bolivar County) rice farm that annually harvests 1,667 acres of rice and 3,333 acres of soybeans. Rice sales accounted for 39 percent of 2019 farm receipts. Soybeans account for 43 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 47 percent of farm receipts in 2019.

Appendix Table A8. Characteristics of Panel Farms Producing Rice.

	ARSR3240	ARWR2500	ARHR4000	MSDR5000	MOBR4000
County	Arkansas	Cross	Lawrence	Bolivar	Pemiscot
Total Cropland	3,240.00	2,500.00	4,000.00	5,000.00	4,000.00
Acres Owned	648.00	1,250.00	1,000.00	3,000.00	1,000.00
Acres Leased	2,592.00	1,250.00	3,000.00	2,000.00	3,000.00
Assets ($1000)					
Total	5,855.00	7,899.00	9,208.00	18,581.00	9,971.00
Real Estate	3,758.00	6,301.00	6,002.00	14,553.00	6,923.00
Machinery	1,581.00	1,568.00	3,012.00	3,263.00	2,918.00
Other & Livestock	516.00	29.00	194.00	766.00	130.00
Debt/Asset Ratios					
Total	0.16	0.16	0.16	0.17	0.20
Intermediate	0.15	0.13	0.12	0.21	0.21
Long Run	0.17	0.14	0.18	0.17	0.18
2019 Gross Receipts ($1,000)*					
Total	2,630.10	1,871.30	3,247.60	3,812.10	2,624.20
Corn	220.70	0.00	127.50	0.00	453.50
	0.08	0.00	0.04	0.00	0.17
Wheat	3.60	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00
Soybeans	654.50	538.20	511.10	1,779.50	638.50
	0.25	0.29	0.16	0.47	0.24
Rice	1,551.00	1,181.10	2,420.10	1,641.60	1,235.10
	0.59	0.63	0.75	0.43	0.47
Other	200.40	151.90	188.90	391.00	297.00
	0.08	0.08	0.06	0.10	0.11
2019 Planted Acres**					
Total	3,240.00	2,500.00	4,240.00	5,000.00	4,000.00
Corn	324.00	0.00	200.00	0.00	880.00
	0.10	0.00	0.05	0.00	0.22
Soybeans	1,458.00	1,250.00	1,400.00	3,333.00	1,800.00
	0.45	0.50	0.33	0.67	0.45
Rice	1,458.00	1,250.00	2,640.00	1,667.00	1,320.00
	0.45	0.50	0.62	0.33	0.33

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**Acreages for 2019 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.

2019 CHARACTERISTICS OF PANEL FARMS PRODUCING MILK

CAD2000 A 2,000-cow, large-sized central California (Tulare County) dairy, the farm plants 975 acres of hay/silage for which it employs custom harvesting. Milk sales generated 89 percent of 2019 total receipts.

WAD300 A 300-cow, moderate-sized northern Washington (Whatcom County) dairy. This farm plants 250 acres of silage and generated 89 percent of its 2019 gross receipts from milk sales.

WAD1200 A 1,200-cow, large-sized northern Washington (Whatcom County) dairy. This farm plants 850 acres for silage annually. During 2019, 89 percent of this farm's gross receipts came from milk.

IDD1500 A 1,500-cow, large-sized dairy located in the Magic Valley of Idaho (Twin Falls County). This farm plants 550 acres of corn silage and 300 acres of hay annually. Milk sales account for 88 percent of 2019 gross receipts.

NVD1000 A 1,000-cow, moderate-sized Nevada (Churchill County) dairy. This farm plants 475 acres of hay and 200 acres of corn silage annually. Milk sales accounted for 94 percent of NVD1000's gross receipts for 2019.

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 89 percent of 2019 gross receipts.

TXCD1500 A 1,500-cow, large-sized central Texas (Erath County) dairy, TXCD1500 plants 416 acres of silage and 500 acres of hay annually. During 2019, milk sales accounted for 94 percent of receipts.

TXED400 A 400-cow, moderate-sized northeast Texas (Hopkins County) dairy. This farm has 200 acres of hay. During 2019, milk sales represented 86 percent of annual receipts.

WID180 A 180-cow, moderate-sized eastern Wisconsin (Winnebago County) dairy, the farm plants 120 acres of silage, 50 acres for hay, 200 acres of corn, 100 acres of wheat, and 180 acres of soybeans. Milk constituted 76 percent of this farm's 2019 receipts.

WID1700 A 1,700-cow, large-sized eastern Wisconsin (Winnebago County) dairy, the farm plants 850 acres of haylage, 1,000 acres of silage, 75 acres of soybeans, 150 acres of wheat, and 1,200 acres of corn. Milk sales comprised 88 percent of the farm's 2019 receipts.

OHD350 A 350-cow, moderate-sized central Ohio (Gonzalez County) dairy, the farm plants 575 acres of silage, 200 acres of corn, 50 acres of soybeans, and 50 acres of wheat. Milk sales comprised 84 percent of the farm's 2019 receipts.

Appendix Table A9. Characteristics of Panel Farms Producing Milk.

	CAD2000	WAD300	WAD1200	IDD1500	NVD1000	TXND3800	TXCD1500	TXED400	WID180	WID1700	OHD350
County	Tulare	Whatcom	Whatcom	Twin Falls	Churchill	Bailey	Erath	Hopkins	Winnebago	Winnebago	Wayne
Total Cropland	700.00	250.00	850.00	850.00	500.00	1,920.00	616.00	950.00	800.00	3,200.00	700.00
Acres Owned	600.00	125.00	425.00	425.00	300.00	1,920.00	363.00	475.00	400.00	1,600.00	350.00
Acres Leased	100.00	125.00	425.00	425.00	200.00	0.00	253.00	475.00	400.00	1,600.00	350.00
Assets ($1000)											
Total	23,997.00	4,380.00	16,071.00	12,491.00	7,598.00	25,560.00	10,090.00	2,635.00	4,258.00	19,008.00	7,422.00
Real Estate	17,402.00	3,702.00	11,562.00	8,230.00	4,546.00	12,807.00	5,936.00	1,690.00	2,938.00	14,058.00	5,665.00
Machinery	913.00	218.00	1,272.00	839.00	617.00	2,177.00	1,665.00	418.00	892.00	1,311.00	1,012.00
Other & Livestock	5,681.00	460.00	3,238.00	3,423.00	2,435.00	10,576.00	2,489.00	526.00	429.00	3,640.00	744.00
Debt/Asset Ratios											
Total	0.20	0.29	0.20	0.19	0.17	0.10	0.43	0.27	0.22	0.21	0.26
Intermediate	0.20	0.11	0.21	0.23	0.12	0.30	0.19	0.24	0.17	0.17	0.19
Long Run	0.26	0.24	0.26	0.26	0.26	0.16	0.26	0.23	0.27	0.27	0.25
2019 Gross Receipts ($1,000)*											
Total	10,909.50	1,407.90	6,730.10	8,439.30	5,101.40	18,369.70	6,647.60	1,309.90	1,286.30	9,883.40	1,942.40
Corn	5.30	5.70	37.00	58.50	0.00	7.00	0.00	0.00	37.40	138.70	10.80
	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.03	0.01	0.01
Wheat	18.20	0.00	0.00	1.90	0.00	25.90	0.00	0.00	5.60	5.00	1.70
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Soybeans	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.10	5.50	3.70
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00
Grain Sorghum	0.00	0.00	0.00	0.00	0.00	13.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hay	0.00	10.10	30.50	25.50	0.00	0.00	0.00	1.30	5.30	27.80	2.00
	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cattle	1,090.70	61.60	416.50	551.30	273.00	1,737.30	369.90	114.40	60.70	364.20	189.90
	0.10	0.04	0.06	0.07	0.05	0.10	0.06	0.09	0.05	0.04	0.10
Other	109.60	75.30	261.90	392.70	33.00	174.90	43.20	67.50	176.80	655.20	107.40
	0.01	0.05	0.04	0.05	0.01	0.01	0.01	0.05	0.14	0.07	0.06
Milk	9,685.70	1,255.20	5,984.20	7,409.40	4,795.40	16,411.50	6,234.50	1,126.70	979.30	8,687.00	1,626.80
	0.89	0.89	0.89	0.88	0.94	0.89	0.94	0.86	0.76	0.88	0.84
2019 Planted Acres**											
Total	1,775.00	250.00	850.00	850.00	675.00	912.00	916.00	200.00	650.00	3,275.00	875.00
Corn	800.00	90.00	350.00	550.00	200.00	336.00	416.00	0.00	320.00	2,200.00	500.00
	0.45	0.36	0.41	0.65	0.30	0.37	0.45	0.00	0.49	0.67	0.57
Wheat	800.00	0.00	0.00	0.00	0.00	576.00	0.00	0.00	100.00	150.00	50.00
	0.45	0.00	0.00	0.00	0.00	0.63	0.00	0.00	0.15	0.05	0.06
Soybeans	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	180.00	75.00	50.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.02	0.06
Hay	175.00	160.00	500.00	300.00	475.00	0.00	500.00	200.00	50.00	850.00	275.00
	0.10	0.64	0.59	0.35	0.70	0.00	0.55	1.00	0.08	0.26	0.31

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**Acreages for 2019 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.

2019 CHARACTERISTICS OF PANEL FARMS PRODUCING MILK (continued)

NYWD400 A 400-cow, moderate-sized western New York (Wyoming County) dairy. This farm plants 50 acres of corn, 750 acres of silage, and double crops 425 acres of haylage annually. Milk sales accounted for 94 percent of the gross receipts for this farm in 2019.

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 96 percent of the gross receipts for this farm in 2019.

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 78 percent of the gross receipts for this farm in 2019.

NYCD800 A 800-cow, large-sized central New York (Cayuga County) dairy. This farm plants 950 acres of silage and 850 acres of hay annually. Milk sales accounted for 87 percent of the gross receipts for this farm in 2019.

VTD160 A 160-cow, moderate-sized Vermont (Washington County) dairy. VTD160 plants 25 acres of hay and 235 acres of silage annually. Milk accounted for 89 percent of the 2019 receipts for this farm.

VTD400 A 400-cow, large-sized Vermont (Washington County) dairy. This farm plants 75 acres of hay and 600 acres of silage annually. Milk sales represent 80 percent of VTD400's gross receipts in 2019.

MOGD550 A 550-cow, grazing dairy in southwest Missouri (Dade County), the farm grazes cows on 300 acres of improved pasture cut for hay. The dairy uses minimal inputs with 9,000 lbs of milk per cow. Milk accounted for 63 percent of gross farm receipts for 2019.

FLND550 A 550-cow, moderate-sized north Florida (Lafayette County) dairy. The dairy grows 130 acres of hay and 200 acres of silage each year. All other feed requirements are purchased in a pre-mixed ration. Milk sales accounted for 84 percent of the 2019 farm receipts.

FLSD1750 A 1,750-cow, large-sized south-central Florida (Okeechobee County) dairy, FLSD1750 plants 200 acres of corn and 130 acres of hay. Milk sales represent 92 percent of 2019 total receipts.

Appendix Table A10. Characteristics of Panel Farms Producing Milk.

	NYWD400	NYWD1200	NYCD180	NYCD800	VTD160	VTD400	MOGD550	FLND550	FLSD1750
County	Wyoming	Wyoming	Cayuga	Cayuga	Washington	Washington	Dade	Lafayette	Okeechobee
Total Cropland	800.00	2,100.00	400.00	1,800.00	220.00	1,000.00	460.00	600.00	400.00
Acres Owned	480.00	1,400.00	320.00	1,350.00	100.00	525.00	460.00	450.00	400.00
Acres Leased	320.00	700.00	80.00	450.00	120.00	475.00	0.00	150.00	0.00
Assets ($1000)									
Total	5,441.00	18,399.00	2,811.00	12,913.00	1,813.00	5,998.00	3,123.00	4,049.00	12,138.00
Real Estate	3,879.00	13,479.00	1,872.00	9,293.00	1,219.00	4,298.00	2,174.00	2,229.00	7,120.00
Machinery	756.00	2,051.00	439.00	1,704.00	332.00	1,043.00	260.00	446.00	655.00
Other & Livestock	806.00	2,869.00	500.00	1,916.00	261.00	658.00	689.00	1,374.00	4,364.00
Debt/Asset Ratios									
Total	0.22	0.23	0.21	0.21	0.33	0.34	0.23	0.16	0.17
Intermediate	0.22	0.25	0.17	0.23	0.16	0.19	0.18	0.18	0.22
Long Run	0.27	0.27	0.27	0.25	0.26	0.26	0.27	0.26	0.26
2019 Gross Receipts ($1,000)*									
Total	2,157.30	6,586.10	1,114.50	4,428.80	786.90	2,421.60	1,581.70	3,086.20	8,964.60
Corn	1.20	1.50	34.30	42.90	1.60	91.20	0.00	26.80	0.00
	0.00	0.00	0.03	0.01	0.00	0.04	0.00	0.01	0.00
Hay	0.00	0.00	38.40	22.70	1.40	6.80	65.00	7.40	23.00
	0.00	0.00	0.03	0.01	0.00	0.00	0.04	0.00	0.00
Cattle	71.20	227.90	52.10	174.80	48.70	130.20	91.50	186.70	458.40
	0.03	0.04	0.05	0.04	0.06	0.05	0.06	0.06	0.05
Other	48.90	65.70	119.40	329.20	39.00	249.10	435.50	263.30	258.30
	0.02	0.01	0.11	0.07	0.05	0.10	0.28	0.09	0.03
Milk	2,036.00	6,291.00	870.40	3,859.20	696.00	1,944.30	989.70	2,602.00	8,224.90
	0.94	0.96	0.78	0.87	0.89	0.80	0.63	0.84	0.92
2019 Planted Acres**									
Total	800.00	2,100.00	400.00	1,800.00	260.00	675.00	300.00	330.00	300.00
Corn	375.00	900.00	200.00	950.00	100.00	600.00	0.00	200.00	0.00
	0.47	0.43	0.50	0.53	0.39	0.89	0.00	0.61	0.00
Hay	425.00	1,200.00	200.00	850.00	160.00	75.00	300.00	130.00	300.00
	0.53	0.57	0.50	0.47	0.62	0.11	1.00	0.39	1.00

*Receipts for 2019 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 2019 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.

2019 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 91 percent 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 375 acres of owned range, supplemented by 7,600 AUMs of public land. Annually, cattle sales represent 89 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 82 percent of this ranch's 2019 receipts.

WYB475 This 475-cow ranch is located in north central Wyoming (Washakie County). The ranch leases 2750 AUMs from the U.S. Forest Service and owns 1,500 acres of range. Annually, the ranch harvests 315 acres of alfalfa and grass hay on owned ground. In 2019, cattle sales accounted for 91 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 57 percent of the ranch's 2019 total receipts.

NMB210 NMB210 is a 210-cow ranch located in northeastern New Mexico (Union County). During 2019, 95 percent of gross receipts were derived from cattle sales with the balance of receipts generated from fee hunting.

SDB600 SDB600 is a 600-cow West River (Meade County, South Dakota) beef cattle ranch. This operation produces hay on 1,000 acres of owned cropland, and runs its cows on 6,500 acres of owned native range. In 2019, cattle sales accounted for 96 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 160 acres of corn, 160 acres of wheat, and 200 acres of soybeans. Improved pasture makes up another 570 acres of this ranch. During 2019, cattle sales comprised 44 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-one percent of 2019 receipts came from cattle sales, while 19 percent came from fee hunting.

TXSB300 A 300-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 85 percent of 2019 gross receipts.

OTHERS Five other representative farms have beef cattle operations along with their crop production (MONG2300, TXHG2700, TXWG1600, TXRP2500, and GAC2300). These farming operations have from 40 to 300 cows. Cattle contributed approximately 10 percent of gross receipts for these farms in 2019.

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

	NVB650	NVSB550	MTB600	WYB475	COB275	NMB210	SDB600	MOB250	TXRB400	TXSB300
County	Elko	Lincoln	Custer	Washakie	Routt	Union	Meade	Dade	King	Gonzales
Total Cropland	1,300.00	125.00	900.00	330.00	650.00	0.00	1,000.00	360.00	0.00	100.00
Acres Owned	1,300.00	125.00	900.00	330.00	450.00	0.00	1,000.00	215.00	0.00	100.00
Acres Leased	0.00	0.00	0.00	0.00	200.00	0.00	0.00	145.00	0.00	0.00
Assets ($1000)										
Total	10,964.00	3,235.00	7,944.00	2,352.00	14,601.00	5,764.00	7,890.00	3,337.00	8,327.00	5,719.00
Real Estate	9,869.00	2,286.00	6,879.00	1,607.00	13,666.00	5,367.00	6,480.00	2,551.00	7,714.00	5,191.00
Machinery	397.00	426.00	344.00	293.00	480.00	140.00	646.00	348.00	178.00	157.00
Other & Livestock	698.00	523.00	722.00	453.00	455.00	257.00	764.00	437.00	435.00	371.00
Debt/Asset Ratios										
Total	0.01	0.03	0.01	0.06	0.01	0.02	0.05	0.02	0.01	0.01
Intermediate	0.15	0.17	0.12	0.09	0.09	0.20	0.16	0.17	0.20	0.15
Long Run	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
2019 Gross Receipts ($1,000)*										
Total	549.70	448.90	530.20	446.20	360.40	183.00	583.20	461.10	416.30	327.30
Corn	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.50	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00
Wheat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.90	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00
Soybeans	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.40	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00
Grain Sorghum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hay	3.80	14.30	32.30	2.30	58.70	0.00	1.10	0.00	0.00	0.10
	0.01	0.03	0.06	0.01	0.16	0.00	0.00	0.00	0.00	0.00
Cattle	501.40	399.70	434.70	405.40	206.10	173.00	557.40	200.90	336.20	278.90
	0.91	0.89	0.82	0.91	0.57	0.95	0.96	0.44	0.81	0.85
Other	44.50	34.90	63.20	38.50	95.50	10.00	24.60	192.40	80.10	48.30
	0.08	0.08	0.12	0.09	0.27	0.06	0.04	0.42	0.19	0.15
2019 Planted Acres**										
Total	975.00	125.00	800.00	315.00	650.00	0.00	800.00	520.00	20,000.00	725.00
Corn	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	0.31	0.00	0.00
Wheat	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	0.31	0.00	0.00
Soybeans	0.00	0.00	0.00	0.00	0.00	0.00	0.00	200.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39	0.00	0.00
Hay	975.00	125.00	800.00	315.00	650.00	0.00	800.00	0.00	0.00	100.00
	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.14
Pasture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20,000.00	625.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.86

*Receipts for 2019 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 2019 are included to indicate the relative importance of each enterprise to the farm. Total planted acreage may exceed total cropland available due to double cropping. Percents indicate the percentage of total planted acreage accounted for by the crop.

APPENDIX B:

LIST OF PANEL FARM COOPERATORS

FEED GRAIN FARMS

Indiana

Facilitators

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

Panel Participants

Mr. David Brown
Mr. Gary Everhart
Mr. Jason & Dan Foltz
Mr. Darrell Linville
Mr. Gary Robards
Mr. Michael Steinbarger
Mr. Keith Theobald
Mr. Kevin Carson
Mr. Richard Fix
Ms. Carmen Hawk
Mr. Mark Nigh
Mr. Ken Simpson
Mr. Doug Theobald
Mr. Jeremy Weaver

Iowa

Facilitators

Mr. Jerry Chizek - County Extension Director, Webster County

Panel Participants

Mr. Doug Adams
Mr. Dean Black
Mr. A.J. Blair
Mr. Neal Hoefing
Mr. Gregg Hora
Mr. Todd Lundgren
Mr. Steve Peterson
Mr. Doug Stanek
Mr. Brent Wells
Mr. Loren Wuebker
Mr. Brad Black
Mr. Perry Black
Mr. Brian Carver
Mr. T.H. Hoefing
Mr. Tyler Lane
Mr. Jay Lynch
Mr. William Secor
Mr. Jason Stanek
Mr. Kent Wuebker

Missouri - Central

Facilitators

Mr. Parman Green

Panel Participants

Mr. Joe Brockmeier
Mr. Kevin Casner
Mr. Kyle Durham
Mr. Todd Gibson
Mr. Jack Harriman
Mr. Mike Hisle
Mr. Glenn Kaiser
Mr. David Kipping
Mr. Craig Linneman
Mr. James Wheeler
Mr. Michael Brockmeier
Mr. Mark Casner
Mr. Dennis Germann
Mr. Dale Griffith
Mr. Todd Hensiek
Mr. Preston Hisle
Mr. Marc Kaiser
Mr. Robert Kipping
Mr. Mike Ritchhart

Missouri - Northwest

Facilitators

Mr. Peter Zimmel - FAPRI, University of Missouri

Panel Participants

Mr. Terry Ecker
Mr. Russell Miller
Mr. Nick Rosenbohm
Mr. Curtis Lewis
Mr. Matt Rosenbohm
Mr. Andrew Stoll

FEED GRAIN FARMS (CONTINUED)

Nebraska - Central

Facilitators

Ms. Sarah Sivits
Mr. Bruce Treffer - Extension Educator, Dawson County

Panel Participants

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

North Dakota

Facilitators

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

Panel Participants

Mr. John Robert Anderson
Mr. Jim Broten
Mr. Mike Clemens
Mr. Leland Guscette
Mr. Jason Haugen
Mr. Greg Shanenko
Mr. Eric Broten
Mr. Wade Bruns
Mr. Mark Formo
Mr. Rob Hanson
Mr. Charlie Kreidelcamp
Mr. Anthony Thilmony

Ohio

Facilitators

Mr. Ben Brown - Assistant Professor

Panel Participants

Mr. Dean Bixel
Mr. Mark Drewes
Mr. Todd Hesterman
Mr. Eric Johnson
Mr. Kevin Thierry
Mr. Scott Conrad
Mr. Matt Eggers
Mr. Tim Holbrook
Mr. Jeremy Tedrow

Ohio - Napoleon

Facilitators

Mr. Ben Brown - Assistant Professor

Panel Participants

Mr. Dean Bixel
Mr. Mark Drewes
Mr. Todd Hesterman
Mr. Eric Johnson
Mr. Kevin Thierry
Mr. Scott Conrad
Mr. Matt Eggers
Mr. Tim Holbrook
Mr. Jeremy Tedrow

FEED GRAIN FARMS (CONTINUED)

South Carolina

Facilitators

Mr. Scott Mickey
Dr. Nathan Smith

Panel Participants

Mr. Neal Baxley
Mr. Chris Cogdill
Mr. Sam DuRant
Mr. Steven Gamble
Mr. Tommy Lee
Mr. John Michael Parimuha
Ms. Vikki Brogdon
Mr. Harry DuRant
Mr. Jason Gamble
Mr. Barry Hutto
Mr. Joe McKeower

Tennessee - Trenton

Facilitators

Mr. Jeff Lannom - Extension Agent & County Director, Weakley County
Mr. Danny Morris
Mr. Philip Shelby - Extension Agent, Gibson County
Mr. Tim Smith - County Extension Agent, Obion County

Panel Participants

Mr. Steven Agee
Mr. Kenneth Barnes
Mr. Mike Brundige
Mr. Kaleb Dinwiddie
Mr. Bobby Garner
Mr. Brent Griggs
Mr. Rob Holman
Mr. Todd Littleton
Mr Ben Moore
Mr. David Oliver
Mr. John Parrish
Mr. Hedrick Shoaf
Mr. Keith Steele
Mr. James Wall
Mr. Jay Yeargin
Mr. Brent Baier
Mr. Randy Boals
Mr. John Chester
Mr. Mike Freeman
Mr. Derek Griffin
Mr. Gary Hall
Mr. Josh Little
Mr. Jason Luckey
Mr. Scotty Ogg
Mr. Eric Owen
Mr. Eric Partee
Mr. Kevin Smethwick
Mr. Seth Taylor
Mr. Jody Wright

Texas - Northern Blackland Prairie

Facilitators

Mr. Zach Davis - County Extension Agent, Hill County

Panel Participants

Mr. Chad Kaska
Mr. Chad Radke
Mr. Todd Kimbrell, Jr.
Mr. John Sawyer

Texas - Northern High Plains

Facilitators

Mr. Marcel Fischbacher - County Extension Agent, Moore County

Panel Participants

Mr. Tommy Cartrite
Mr. Justin Garrett
Mr. Casey Kimbrell
Mr. Chandler Preston
Mr. Stan Spain
Mr. Dee Vaughan
Mr. Brent Clark
Mr. Kelly Hays
Mr. Tom Moore
Mr. Jon Reznik
Mr. Darren Stallwitz
Ms. Linda Williams

FEED GRAIN FARMS (CONTINUED)

Texas - Panhandle

Facilitators

Mr. Rick Auckerman - County Extension Agent, Texas Cooperative Extension

Panel Participants

Mr. Michael Carlson
Mr. Roy Carlson
Mr. Greg Chavez
Mr. Steve Hoffman
Mr. Bob Meyer
Mr. Tom Schlabs

Texas - Southern Blackland Prairie

Facilitators

Mr. Cooper Terrill - County Extension Agent, Williamson County

Panel Participants

Mr. Terry Pekar
Mr. Herbert Raesz
Mr. Ken Seggern

Texas - Southwest

Facilitators

Mr. Samantha Korzekwa - County Extension Agent, Uvalde County

Panel Participants

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

WHEAT FARMS

Colorado

Facilitators

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

Panel Participants

Mr. Rollie Deering
Mr. David Foy
Mr. William Harman
Mr. Terry Kuntz
Mr. Dave Lillich
Ms. Sara Olsen
Mr. Craig Saxton
Mr. Harlan Schaffert
Mr. John Wright
Mr. Ward Deering
Mr. Dale Hansen
Mr. Barry Hinkhouse
Mr. Shane Leoffler
Mr. Max Olsen
Mr. Ken Remington
Mr. Calvin Schaffert
Mr. Dave Wagers

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. Tanner Brown
Rich Calliham
Mr. Sam Crouse
Mr. Lee Juenemann
Mr. Lance Leebrick
Mr. Steve Busse
Mr. Richard Calliham
Mr. Aaron Horinek
Mr. Brian Laufer
Mr. Steve Schertz

Kansas - South Central

Facilitators

Mr. Randy Hein - County Extension Agent, Sumner County
Mr. Zach Simon - County Extension Agent, Sedgwick County

Panel Participants

Mr. Colton Day
Mr. Doug Hisken
Mr. Kent Ott
Mr. Mike Slack
Troy & Julia Strnad
Mr. Robert White
Mr. Dennis Gruenbacher
Mr. Aaron Lange
Mr. Steve Schmidt
Mr. Nick Steffen
Mr. Tim Turek

Montana - North Central

Facilitators

Mr. Lochiel Edwards

Panel Participants

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

WHEAT FARMS (CONTINUED)

Oregon - North Central

Facilitators

Jon Farquharson

Panel Participants

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

Washington

Facilitators

Mr. Aaron Esser - County Director, WSU Extension

Panel Participants

Mr. Trevor Jantz
Mr. Mike Miller
Mr. Travis Simonson
Mr. Traven Smith
Mr. Ron Jirava
Mr. Justin Simonson
Mr. Tim Smith
Mr. Steve Taylor

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. Gavin Clark
Mr. Aaron Gfeller
Ms. Kenda Hergert
Ms. Heidi Kopf
Mr. Gary Largent
Mr. Steve Mader
Mr. Clark Miller
Mr. Chris Schultheis
Mr. Steve Teade
Mr. Asa Clark
Mr. Scot Cocking
Mr. David Harlow
Mr. Dean Kinzer
Mr. Brian Largent
Mr. Michael Largent
Ms. Amy McKay
Mr. Bruce Nelson
Mr. David Swannack
Mr. Jon Whitman

COTTON FARMS

Alabama

Panel Participants

Mr. James Blythe
Mr. Jarred Darnell
Mr. William Lee
Mr. Paul Clark
Dr. Steve Ford
Ms. Larkin Martin

Arkansas

Facilitators

Mr. Ray Benson
Mr. Ronnie Kennett
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. Kenny Jackson

Georgia - Southwest

Facilitators

Ms. Nan Bostick - County Extension Coordinator, Decatur County
Mr. Cody Powell
Dr. Adam Rabinowitz

Panel Participants

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

North Carolina

Facilitators

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

Panel Participants

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

South Carolina

Facilitators

Mr. Jonathan Croft
Mr. Scott Mickey
Dr. Nathan Smith

Panel Participants

Mr. Jimmie Griner
Mr. John McLaurin
Mr. Landrum Weathers
Mr. Dean Hutto
Mr. David Tindal

COTTON FARMS (CONTINUED)

Tennessee

Facilitators

Mr. Walter Battle - Co-Director, Haywood County Extension
Mr. Chuck Danehower - Extension Area Specialist, Farm Management
Mr. Danny Morris
Mr. Tyson Raper
Ms. Lindsay Stephenson-Griffin
Mr. Jeff Via - County Extension Director, Fayette County

Panel Participants

Mr. Harris Armour, III
Mr. R. Morris English, Jr.
Mr. Lee Graves
Mr. Ed Karcher
Mr. Allen King
Mr. Travis Lonon
Mr. Hassell Smith
Mr. Chuck Dacus
Mr. Willie German
Mr. Dewayne Hendrix
Mr. Rob Karcher
Mr. John King
Mr. Kinney McRae
Mr. Ronald Woods

Texas - Coastal Bend

Facilitators

Mr. Bobby McCool - 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. Jason Ott - County Extension Agent, Nueces County
Mr. John Parker - Vice President, Texas AgFinance

Panel Participants

Mr. Travis Adams
Mr. Colin Chopelas
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

Ms. Caitlin Jackson

Panel Participants

Mr. Lloyd Arthur
Mr. Mark Schoepf
Mr. Brooks Ellison
Mr. Conner Wilmeth

Texas - Mid Coast

Facilitators

Mr. Jeff Nunley - Executive Director, South Texas Cotton & Grain Association
Mr. Jimmy Roppolo - General Manager, United Ag

Panel Participants

Mr. Daniel Gavranovic
Mr. Cedric Popp
Mr. Darrell Schoeneberg
Mr. Duane Lutringer
Mr. Michael Popp
Mr. Mike Watz

COTTON FARMS (CONTINUED)

Texas - Rio Grande Valley

Facilitators

Mr. Matthew Rodriguez - County Extension Agent

Panel Participants

Mr. Jerry Chappell
Mr. Spence Pennington
Mr. Zachary Swanberg
Mr. Joe Pennington
Mr. Ivan Salazar
Mr. Mark Willis

Texas - Rolling Plains

Facilitators

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

Panel Participants

Mr. Larry Lytle
Mr. Cody Roberts
Mr. Mike Sloan
Mr. Rick Vickers
Mr. Terry White
Mr. Michael McLellan
Mr. Brian Sandbothe
Mr. Dale Spurgin
Mr. Ferdie Walker

Texas - Southern High Plains

Facilitators

Mr. Gary Roschetzky - County Extension Agent, Dawson County

Panel Participants

Mr. Terry Coleman
Mr. Kirk Tidwell
Mr. Donald Vogler
Mr. Will Cozart
Mr. Johnny Ray Todd
Mr. David Warren

RICE FARMS

Arkansas

Facilitators

Mr. Chuck Capps
Mr. Steve Kelley
Mr. Steven Stone
Dr. Brad Watkins - Research Assistant Professor, U. of Arkansas Cooperative Extension
Mr. Gus Wilson

Panel Participants

Mr. John Gates
Mr. Andy Gill
Mr. Joe Mencer
Mr. Jim Whitaker
Mr. Andrew Gill
Mr. Tad Keller
Mr. Matt Miles
Mr. Sam Whitaker

Arkansas - East Central-Arkansas County

Facilitators

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

Panel Participants

Mr. Brandon Bauman
Mr. Monty Bohanan
Mr. Stephen Hoskyn
Mr. Garth Jessup
Mr. Derek Bohanan
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

Panel Participants

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

Arkansas - Northeast-Lawrence County

Facilitators

Mr. Michael Andrews
Mr. Bryce Baldridge
Ms. Courtney Sisk
Dr. Brad Watkins - Research Assistant Professor, U. of Arkansas Cooperative Extension

Panel Participants

Mr. Greg Baltz
Mr. Ricky Burris
Mr. Doug Cox
Mr. Joe Richardson
Mr. Jeremy Baltz
Mr. Ronald Cavenaugh
Mr. Bruce Manning
Mr. Vic Stone

California - Butte County

Facilitators

Dr. Luis Espino
Mr. Tim Johnson - President and CEO, California Rice Commission

Panel Participants

Mr. Ken Anderson
Mr. Imran Khan
Mr. Peter Rystrom
Mr. Josh Sheppard
Mr. Seth Fiack
Mr. Eric Larrabee
Mr. Steve Rystrom
Mr. Eric Waterbury

RICE FARMS (CONTINUED)

California - Colusa County

Facilitators

Dr. Luis Espino
Mr. Tim Johnson - President and CEO, California Rice Commission

Panel Participants

Mr. Don Bransford
Mr. Leo LaGrande
Mr. Alex Struckmeyer
Mr. Jim LaGrande
Mr. Charles Marsh
Mr. Robert Sutton

California - Sutter County

Facilitators

Dr. Chris Greer - Farm Advisor, University of California
Mr. Tim Johnson

Panel Participants

Mr. Bard Anderson
Mr. Tom Butler
Mr. Scott Leathers
Mr. Charley Mathews
Mr. Rick Nelson
Mr. Don Traynham
Mr. Bob Van Dyke
Mr. Paul Baggett
Mr. Mike DeWit
Mr. Ned Lemenager
Mr. Jon Munger
Mr. Michael Rue
Mr. Scott Tucker
Mr. Wayne Vineyard

Louisiana - Northeast

Facilitators

Mr. Scott Franklin

Panel Participants

Mr. Ed Greer
Mr. Jim Lingo
Mr. John Owen
Mr. Heath Herring
Mr. Jon Michael Livingston
Mr. Russ Ratcliff

Louisiana - Southwest-Acadiana

Panel Participants

Mr. Al Cramer
Mr. David Lacour
Mr. Jackie Loewer
Mr. Christian Richard
Mr. Tommy Faulk
Mr. Alan Lawson
Mr. Micah Loewer
Mr. Fred Zaunbrecher

Mississippi - Cleveland

Facilitators

Dr. Larry Falconer - Extension Professor
Mr. Craig hankins - Extension Agent

Panel Participants

Mr. Michael Aguzzi
Mr. Gary Fioranelli
Mr. Kirk Satterfield
Mr. Austin Davis
Mr. Randy Howarth

RICE FARMS (CONTINUED)

Missouri

Facilitators

Mr. Trent Haggard - Director, Fisher Delta Research Center

Panel Participants

Mr. John Anderson
Mr. Rance Daniels
Mr. Jim Priggel
Mr. Alex Clark
Mr. Russ Hoggard
Mr. Will Spargo

Texas - Bay City-Matagorda County

Panel Participants

Mr. Donnie Bulanek
Mr. Billy Mann
Mr. Bob Reed
Mr. Paul Sliva
Mr. Barrett Franz
Mr. Curt Mowery
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

Texas - El Campo-Wharton County

Panel Participants

Mr. Daniel Berglund
Mr. Mark Rasmussen
Mr. Glen Rod
Mr. Timothy Gertson
Mr. L.G. Raun
Mr. Tommy Turner

DAIRY FARMS

California

Facilitators

Dr. J.P. Martins

Panel Participants

Mr. Steve Gaspar
Mr. Claudio Ribeiro
Mr. Dino Giacomazzi
Mr. Jeff Wilbur

Florida - North

Facilitators

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

Panel Participants

Mr. Johan Heijkoop
Mr. Rod Land
Mr. Klaas Reynevelds
Mr. Everett Kerby
Mr. Terry Reagan
Mr. George Wedsted

Florida - South

Facilitators

Mr. Ray Hodge - Director of Govt Relations, Southeast Milk

Panel Participants

Mr. Ben Butler
Mr. Jacob Larson
Mr. Tony Moens
Mr. Sutton Rucks, Jr.
Mr. Tommy Watkins
Mr. Bob Butler
Mr. Woody Larson
Mr. Keith Rucks
Mr. Glynn Rutledge

Idaho

Facilitators

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

Panel Participants

Mr. Willie Bokma
Mr. Ted Vander Scheaf
Mr. Christopher Stevenson
Mr. Pete Wiersma

Missouri

Facilitators

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

Panel Participants

Mr. Niall Murphy
Mr. Bernie Van Dalfsen
Mr. Craig Zydenbos
Mr. Gary Nolan
Mr. Zach Ward

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. Cameron Mills
Mr. David Perazzo
Mr. Jeff Whitaker

DAIRY FARMS (CONTINUED)

New York - Central

Facilitators

Ms. Betsy Hicks

Panel Participants

Mr. Eric Carey
Mr. and Mrs. Mike McMahon
Mr. & Mrs. Todd & Josie Spencer
Ms. Amanda Fitzsimmons
Mr. Kenton Patchen
Mr. Zach Young

New York - Western

Facilitators

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

Panel Participants

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

Ohio - Wooster

Facilitators

Mr. Ben Brown - Assistant Professor
Ms. Dianne Shoemaker

Panel Participants

Ms. Jenny Bernhard
Mr. Henry Hughes
Ms. Joan Winkler
Mr. Gary Dotterer
Mr. Joe Miley
Ms. Rebecca Winkler

Texas - Central

Facilitators

Mr Lonnie Jenschke - County Agent, TexasAgriLife Extension
Dr. Jason Johnson - Area Economist, TexasAgriLIfe Extension

Panel Participants

Mr. Frans Beukeboom
Mr. Johan Koke
Mr. Henk Postmus
Mr. Johann DeBoer
Mr. Clemens Kuiper

Texas - Northeast

Facilitators

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

DAIRY FARMS (CONTINUED)

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. Larry Hancock
Mr. Reed Mulliken
Mr. Bob Wade
Mr. Matt Beckerink
Mr. David Lawerence
Mr. Joe Osterkamp

Vermont

Facilitators

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

Panel Participants

Mr. Paul Bourbeau
Mr. Ashley Farr
Mr. Steven Jones
Mr. Les Pike
Mr. Onan Whitcomb
Mr. David & Deb Conant
Mr. Ted Foster
Mrs. Polly McEwing
Mrs. Kathrine Scribner

Washington

Facilitators

Dr. Amber Itle
Dr. Susan Kerr - Dairy Extension Specialist, WSU

Panel Participants

Mr. John/Rich Appel
Mr. Rod & Jon De Jong
Mr. Troy Lenssen
Mr. Ed Pomeroy
Mr. Galen Smith
Mr. Harold Van Berkum
Mr. Peter Vlas
Mr. Ed Blok
Mr. Larry DeHaan
Mr. Sherman Polinder
Mr. Jeff Rainey
Mr. John Steensma
Mr. Jerry Van Dellen

Wisconsin

Facilitators

Ms. Tina Kohlman

Panel Participants

Mr. David Beck
Mr. John Diedrichs
Mr. Roger Grade
Mr. Clint Hodorff
Ms. Linda Hodorff
Mr. Randy Julka
Mr. and Mrs. Charlie Knigge
Mr. Jeff Liner
Mr. Jeff Reiden
Mr. John Ruedinger
Mr. Rob Stone
Mr. Bill & Tammy Wiese
Mr. Mark Breunig
Ms. Gooitske Dijkstra
Mr. Ben Hesselink
Mr. Corey Hodorff
Mr. Matt Hunter
Mr. Jim Kasten
Mr. Pete Knigge
Mr. Chris Pollack
Mr. Jim Rickert
Mr. Steve Smits
Mr. Jason Vorpahl

BEEF PRODUCERS

California

Facilitators

Mr. Josh Davy - Livestock and Natural Resources Rep, UC-Davis Extension
Mr. Larry Forero - Farm Advisor, Livestock and Natl. Res., California Cooperative Extension
Mr. Glenn Nader - Farm Advisor, Livestock and Natl. Res., California Cooperative Extension

Panel Participants

Mr. Jerry Hemsted
Mr. Dick O'Sullivan
Mr. Britt Schumacher
Mr. Ron Masingale
Mr. Wally Roney

Colorado

Facilitators

Mr. Todd Hagenbuch - County Extension Agent, Routt County
Mr. CJ Mucklow - Western Region Director

Panel Participants

Mr. Doug Carlson
Mr. Larry Monger
Mr. Jim Rossi
Ms. Kathy Smith
Mr. Jay Fetcher
Mr. Dustin Neelis
Mr. Phillip Rossi
Mr. Justin Warren

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. Marc Allison
Mr. Scott Daniel
Mr. James A. Nivens
Mr. Gary D. Wolf
Mr. Steve Allison
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. Alyn Haughian
Mr. Andy Zook
Mr. Art Drange
Mr. Kendall Groer
Mr. Scot Robinson

BEEF PRODUCERS (CONTINUED)

Nevada

Facilitators

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

Panel Participants

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

Nevada - Caliente

Facilitators

Ms. Holly Gatzke
Dr. Tom Harris - Dept. of Resource Econ, University of Nevada

Panel Participants

Mr. Pete Delmue
Ms. Kena Lytle-Gloeckner
Mr. Sam Higbee
Mr. Robert Mathews

New Mexico

Facilitators

Ms. Talisha Valdez - County Extension Agent, Union County

Panel Participants

Mr. Justin Bennett
Mr. Blair Clavel
Mr. Russell Kear
Mr. Red Miller
Mr. Derek Walker
Mr. Damon Brown
Mr. John Gilbert
Mr. J.C. Miller
Mr. John Vincent

South Dakota

Facilitators

Ms. Adele Harty

Panel Participants

Mr. Kory Bierle
Mr. Jim Cantrell
Mr. Casey Doud
Ray & Linda Gilbert
Mr. Willis Kopren
Mr. Andrew Snyder
Mr. Reed Cammack
Mr. Gary Clanton
Mr. Josh Geigle
Mr. Riley Kammerer
Mr. Sam Smith
Mr. Monty Williams

Texas - Rolling Plains

Facilitators

Mr. Thomas Boyle - County Extension Agent, Dickens 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

BEEF PRODUCERS (CONTINUED)

Texas - South

Facilitators

Mr. Dwight Sexton - County Extension Agent, Gonzales County

Panel Participants

Mr. Jason Breitschopf
Mr. Brian Fink
Mr. Michael Kuck
Mr. Michael Ehrig
Mr. Mitchell Hardcastle
Mr. Billy Parker

Wyoming - Worland

Facilitators

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

Panel Participants

Mr. Matt Brown
Mr. Maurice Bush
Mr. Mike Healy
Mr. Gary Rice
Ms. Teresa Brown
Mr. Tim Flitner
Mr. Dan Rice

PEANUT FARMS

North Carolina - Conway

Facilitators

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

Panel Participants

Mr. Clarke Fox
Mr. Wayne Harrell
Mr. Brad West
Mr. Ray Garner
Mr. Donny Lassiter
Mr. Donnie White

North Carolina - Elizabethtown

Facilitators

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

Panel Participants

Mr. Robert Byrd
Mr. Jart Hudson
Mr. Dan McDuffie
Mr. Dan Ward
Mr. Wade Byrd
Mr. Alex Jordan
Mr. Sean Morris
Mr. Wilbur Ward