Representative Farms Economic Outlook for the August 2022 FAPRI/AFPC Baseline

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**REPRESENTATIVE FARMS ECONOMIC
OUTLOOK FOR THE AUGUST 2022
FAPRI/AFPC BASELINE**

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REPRESENTATIVE FARMS ECONOMIC OUTLOOK FOR THE AUGUST 2022 FAPRI/AFPC BASELINE

The farm-level economic impacts of the FAPRI August 2022 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 2022-2027 study period. 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 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 conducted, adjustments, if necessary, are made to program elections. Coronavirus Food Assistance Program (CFAP) payments for 2020 on were included in this analysis on all eligible inventory/production/acres. The analysis was conducted using a whole farm simulation model 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) August 2022 Baseline.

The simulations incorporate historical risk faced by farmers for prices and production. This report presents the results of the August 2022 Baseline in a risk context using selected simulated probabilities and ranges for annual financial measures. 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 2027.

DEFINITIONS OF VARIABLES IN THE SUMMARY TABLES

- **Overall Financial Position, 2022-2027** -- As a means of summarizing the representative farms' economic efficiencies, liquidity positions, and solvency positions, AFPC classifies each farm as being in a good (green), marginal (yellow) or poor (red) position. AFPC defines a farm to be in a good financial position when it has less than a 25 percent chance each of a negative ending cash position and less than a 25 percent chance of losing real net worth through 2027. If the probabilities of these occurrences are between 25 and 50 percent, the farm is classified as marginal. Probabilities greater than 50 percent place the farm in a poor financial position.
- **Receipts** -- 2022-2027 average cash receipts from all farm related sources, including market sales, PLC/ARC payments, marketing loan gains/LDPs, crop insurance indemnities, and other receipts.
- **Payments** -- 2022-2027 average annual PLC or ARC payments and marketing loan gains/LDPs for representative farms and ranches.
- **NCFI** -- 2022-2027 average net cash farm income equals average total receipts minus average total cash expenses.
- **Reserve 2027** -- equals total cash on hand at the end of year 2027. 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).

- **Net Worth 2027** -- equity equals total assets including land minus total debt from all sources and is reported at the end of 2027.
- **CRNW** -- annualized percentage change in the operator's real net worth from January 1, 2020 through December 31, 2027, after adjusting for inflation.

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 2022 through 2027. 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 August 2022 Baseline.

Under the August 2022 Baseline, 41 of the 64 crop farms are in good liquidity condition (less than a 25 percent chance of negative ending cash reserves by 2027). Eleven crop farms have between a 25 percent and a 50 percent likelihood of negative ending cash reserves, and the remaining 12 crop farms have greater than a 50 percent chance of negative ending cash reserves. Additionally, 42 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). Twelve crop farms have between a 25 percent and 50 percent likelihood of losing real net worth, and ten crop farms have greater than a 50 percent probability of decreasing real net worth by 2027. The following discussion provides an overall evaluation by commodity considering both liquidity and equity measures.

- FEEDGRAIN FARMS: Eighteen of the 25 feedgrain farms are in good overall financial condition. Six farms are classified in marginal condition; one is in poor condition.

- WHEAT FARMS: Nine representative wheat farms are classified in good overall financial condition, one is in marginal condition, and one is in poor condition.

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

- RICE FARMS: Five of the 15 rice farms are projected to be in good financial condition. Two rice farms are also projected to be in marginal condition, while eight are in poor condition.

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

- BEEF CATTLE RANCHES: Five of the 10 cattle ranches are classified in good financial condition, and five are projected to be in poor condition; none are in marginal condition.

Table 1. FAPRI August 2022 Baseline Crop and Livestock Prices, 2020-2027.

	2020	2021	2022	2023	2024	2025	2026	2027
Crop Prices								
Corn ($/bu.)	4.53	5.95	6.34	5.22	4.65	4.59	4.43	4.37
Wheat ($/bu.)	5.05	7.63	9.05	7.11	6.44	6.02	5.84	5.77
Upland Cotton Lint ($/lb.)	0.6630	0.9200	0.9573	0.7921	0.7493	0.7594	0.7589	0.7542
Sorghum ($/bu.)	5.04	5.95	6.40	5.28	4.80	4.81	4.70	4.66
Soybeans ($/bu.)	10.80	13.30	14.22	12.36	11.85	11.44	11.23	11.22
Barley ($/bu.)	4.75	5.31	6.85	5.87	5.18	5.00	4.90	4.84
Oats ($/bu.)	2.77	4.55	5.59	4.28	4.01	4.03	4.02	4.02
All Rice ($/cwt.)	14.40	15.80	18.00	16.04	15.74	15.51	15.44	15.53
Soybean Meal ($/ton)	374.19	414.91	371.67	312.90	291.25	285.62	281.88	283.37
All Hay ($/ton)	156.00	186.00	217.18	192.16	173.04	166.58	165.36	166.35
Peanuts ($/ton)	420.00	486.00	478.38	475.28	460.99	446.80	443.05	443.95
Cattle Prices								
Feeder Cattle ($/cwt)	145.82	157.65	180.54	197.54	211.62	219.03	220.45	218.22
Fed Cattle ($/cwt)	108.51	122.40	142.35	150.98	156.53	158.87	159.39	157.81
Culled Cows ($/cwt)	58.56	63.56	77.82	82.77	85.39	87.77	88.32	86.96
Milk Price								
U.S. All Milk Price ($/cwt)	18.16	18.54	25.09	22.32	20.41	19.84	19.66	19.66

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

Table 2. FAPRI August 2022 Baseline Assumed Rates of Change in Input Prices and Annual Changes in Land Values, 2021-2027.

	2021	2022	2023	2024	2025	2026	2027
Annual Rate of Change for Input Prices Paid							
Seed Prices (%)	3.98	11.88	10.23	3.80	1.12	0.66	0.53
All Fertilizer Prices (%)	33.87	48.58	-13.94	-20.53	-13.11	-4.97	0.20
Herbicide Prices (%)	9.23	18.22	1.47	-1.04	0.34	1.54	1.60
Insecticide Prices (%)	5.90	18.89	2.76	0.47	1.16	1.84	1.90
Fuel and Lube Prices (%)	33.22	41.41	-19.25	-9.24	-4.14	1.97	3.53
Machinery Prices (%)	16.67	16.48	-1.53	-5.67	-2.69	0.09	0.99
Wages (%)	5.72	6.23	3.01	3.87	3.86	3.61	3.36
Supplies (%)	8.60	10.88	1.54	0.74	1.69	2.11	2.16
Repairs (%)	6.37	9.01	0.55	0.37	1.93	2.50	2.61
Services (%)	3.61	7.78	3.49	0.29	1.41	2.24	2.19
Taxes (%)	2.52	4.38	2.33	9.52	3.11	2.90	2.28
PPI Items (%)	9.83	13.87	0.05	-2.75	-0.90	0.61	0.79
PPI Total (%)	8.96	12.46	0.94	-1.49	-0.26	1.04	1.17
Annual Change in Consumer Price Index (%)	4.69	7.75	3.34	1.88	1.88	2.15	2.17
Annual Rate of Change for U.S. Land Prices (%)	6.96	12.43	0.96	1.06	0.06	0.92	1.61

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

Representative Farm: Feed Grains

- Overall, eighteen feed grain farms are characterized as good, six are marginal, and one is in poor condition.

- Seven of the twenty-five farms will be under moderate to severe cash flow stress; five of the farms have a greater than 25 percent chance of losing real net worth.
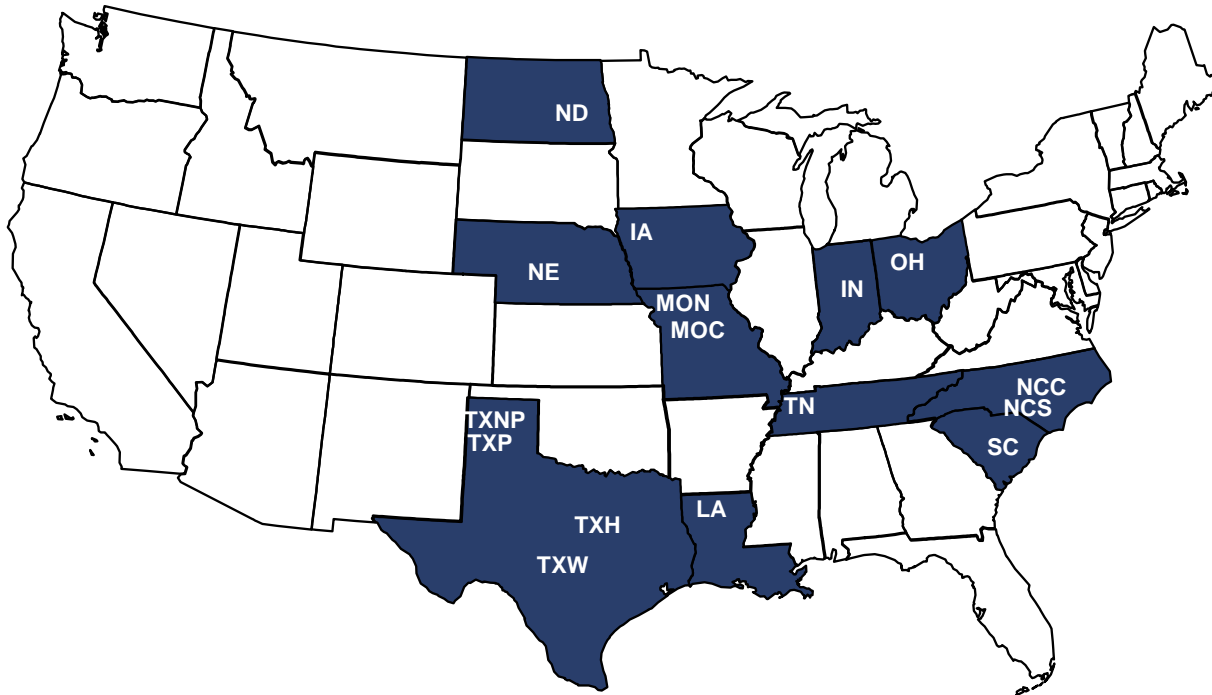
Characteristics of Panel Farms Producing Feed Grains, 2021.

	Cropland	Assets	Debt/Asset	Gross Receipts	Feed Grains
	(acres)	($1,000)	(ratio)	($1,000)	(acres)
IAG1350	1,350	3,603.00	0.16	1,389.60	1,350
IAG3400	3,400	12,196.00	0.19	3,313.10	3,400
NEG2400	2,400	7,085.00	0.16	3,158.40	2,400
NEG4500	4,500	21,449.00	0.17	5,410.80	4,000
NDG3000	3,000	6,831.00	0.18	1,569.90	2,500
NDG9000	9,000	24,012.00	0.20	4,484.30	7,500
ING1000	1,000	4,390.00	0.17	945.60	1,000
ING3500	3,500	14,636.00	0.17	3,536.70	3,500
OHG850	850	4,828.00	0.18	736.00	765
OHG1800	1,800	6,388.00	0.17	1,766.30	1,620
MOCG2300	2,300	13,473.00	0.17	1,924.00	2,300
MOCG4200	4,200	19,513.00	0.15	3,482.30	4,200
MONG2300	2,300	22,125.00	0.18	2,673.60	2,250
LANG2500	2,500	4,830.00	0.20	2,381.90	1,625
TNG2500	2,500	6,094.00	0.19	2,055.80	2,500
TNG5000	5,000	13,194.00	0.16	4,485.30	5,000
NCSP2000	2,000	5,122.00	0.16	1,990.60	1,600
NCC2030	2,000	3,052.00	0.17	1,448.20	1,400
SCC2000	2,000	3,979.00	0.14	1,906.00	1,200
SCG3500	3,500	8,830.00	0.15	4,041.90	2,150
TXNP3450	3,450	9,689.00	0.14	3,625.30	1,554
TXNP10880	10,880	22,686.00	0.14	11,540.80	5,234
TXPG3000	3,000	7,043.00	0.21	2,312.90	1,880
TXHG3000	3,000	3,627.00	0.20	1,538.20	2,000
TXWG1600	1,600	2,052.00	0.15	802.30	1,100

Representative Farm: Feed Grains

Economic Viability of Representative Farms over the 2022-2027 Period

Farm Name	Overall Ranking		P(Negative Ending Cash)	P(Real Net Worth Declines)
18/6/1	2022	2027	2022-2027	2022-2027
IAG1350			16-46	18-25
IAG3400			1-6	1-1
NEG2400			1-1	1-1
NEG4500			1-20	1-4
NDG3000			2-17	43-14
NDG9000			1-1	2-1
ING1000			1-1	1-1
ING3500			1-1	1-1
OHG850			4-28	1-1
OHG1800			1-1	1-1
MOCG2300			1-1	1-1
MOCG4200			1-1	1-1
MONG2300			1-1	1-1
LANG2500			1-19	21-20
TNG2500			1-2	3-1
TNG5000			1-1	1-1
NCSP2000			21-47	47-42
NCC2030			1-1	1-1
SCC2000			4-25	28-25
SCG3500			1-3	13-4
TXNP3450			1-1	1-1
TXNP10880			1-1	1-1
TXPG3000			27-48	12-14
TXHG3000			7-35	25-31
TXWG1600			47-79	28-50

1 Viability is classified as good (green), moderate (yellow), and poor (red) based on the probabilities:

<25	25-50	>50

2 P(NegativeEnding Cash) is the probability that the farm will have a cash flow deficit. Reported values represent the probabilities for 2022 and 2027.

3 P(Real Net Worth Decline) is the probability that the farm will have a loss in real net worth relative to the beginning net worth. Reported values represent the probabilities for losing real net worth from 2020 to 2022 and from 2020 to 2027.

Implications of the August 2022 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Feed Grains and Oilseeds

	Receipts ($1,000)	Payments ($1,000)	NCFI ($1,000)	Reserve 2027 ($1,000)	Net Worth 2027 ($1,000)	CRNW (%)
IAG1350	1,263.22	16.82	218.95	46.90	3,746.61	1.31
IAG3400	2,992.22	35.23	836.78	2,073.40	14,267.78	3.99
NEG2400	2,780.06	33.33	777.71	2,863.35	9,373.65	5.55
NEG4500	4,764.79	47.81	931.53	1,555.53	23,113.94	2.15
NDG3000	1,763.80	23.70	480.10	716.15	7,339.37	2.28
NDG9000	5,335.47	67.85	1,848.87	6,299.83	28,817.16	4.79
ING1000	870.56	10.83	326.70	845.12	5,206.07	3.88
ING3500	3,283.23	36.07	900.88	2,775.40	17,573.77	3.99
OHG850	680.98	6.17	216.39	159.91	5,163.22	2.36
OHG1800	1,582.07	18.39	770.65	2,945.34	8,849.17	6.58
MOCG2300	1,767.41	17.29	787.74	2,375.20	16,230.01	4.02
MOCG4200	3,194.92	27.74	1,503.97	5,510.46	25,207.55	4.96
MONG2300	2,149.31	20.04	932.80	2,498.60	25,278.34	3.49
LANG2500	2,229.98	26.58	328.69	682.12	4,736.20	1.29
TNG2500	1,910.96	16.96	515.06	1,653.75	7,192.81	4.09
TNG5000	4,125.71	29.81	1,288.77	5,296.14	17,398.96	5.52
NCSP2000	1,859.53	57.59	288.61	78.99	4,967.60	0.23
NCC2030	1,336.05	18.62	463.29	1,921.65	4,339.32	7.12
SCC2000	1,745.80	37.74	266.88	413.53	4,172.47	1.15
SCG3500	3,706.58	71.22	655.36	2,214.58	10,059.73	2.79
TXNP3450	3,245.69	39.30	916.84	4,387.69	13,035.86	5.43
TXNP10880	10,188.17	79.67	2,333.23	12,510.15	31,141.04	5.73
TXPG3000	2,230.61	42.37	390.68	31.00	7,044.88	1.88
TXHG3000	1,368.36	16.34	223.55	251.85	3,444.80	0.69
TXWG1600	703.12	10.87	99.39	(391.94)	1,875.93	(0.94)

1 Receipts are average annual total cash receipts including government payments, 2022-2027 ($1,000)

2 Payments are average annual total government payments, 2022-2027 ($1,000)

3 NCFI is average annual net cash farm income, 2022-2027 ($1,000)

4 Reserve 2027 is average ending cash reserves, 2027 ($1,000)

5 Net Worth 2027 is average nominal ending net worth, 2027 ($1,000)

6 CRNW is average percentage change in real net worth over 2022-2027 period, (%)

Representative Farm: Wheat

- Nine wheat farms are projected to be in good overall financial condition, one is in marginal condition, and one is in poor condition.

- Two of the eleven wheat farms are expected to feel significant liquidity pressure over the period; these two farms also have a 25 percent or greater chance of losing wealth.
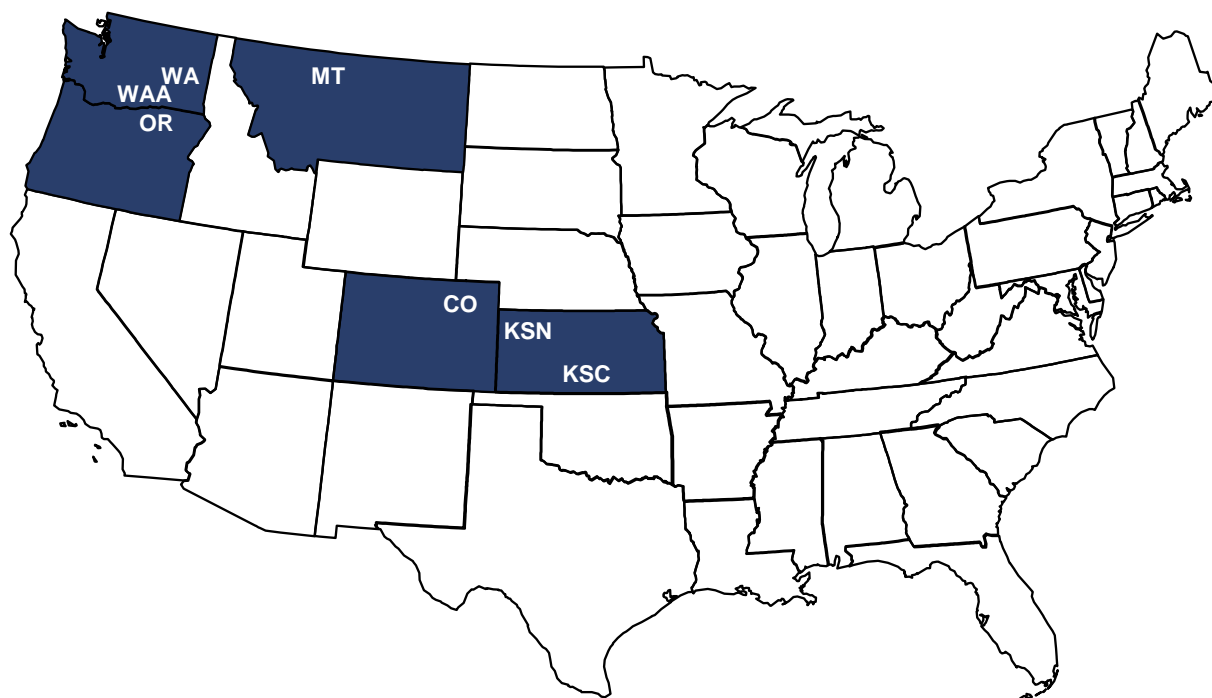
Characteristics of Panel Farms Producing Wheat, 2021.

	Cropland	Assets	Debt/Asset	Gross Receipts	Wheat
	(acres)	($1,000)	(ratio)	($1,000)	(acres)
WAW2800	2,800	3,737.00	0.15	1,740.60	1,840
WAW10000	10,000	12,448.00	0.15	5,960.80	5,800
WAAW5500	5,500	2,873.00	0.16	909.10	2,600
ORW4500	4,500	2,280.00	0.18	677.00	2,250
MTW9500	9,500	10,904.00	0.17	2,564.90	3,534
KSCW3000	3,000	4,526.00	0.17	1,681.30	1,000
KSCW8000	8,000	10,608.00	0.18	4,781.20	3,000
KSNW4000	4,000	3,245.00	0.18	1,238.10	1,200
KSNW8000	8,000	11,964.00	0.15	4,225.10	1,200
COW3000	3,000	4,277.00	0.17	658.90	1,013
COW11500	11,500	17,189.00	0.19	3,450.50	3,633

Representative Farm: Wheat

Economic Viability of Representative Farms over the 2022-2027 Period

Farm Name	Overall Ranking		P(Negative Ending Cash)	P(Real Net Worth Declines)
9/1/1	2022	2027	2022-2027	2022-2027
WAW2800			2-2	4-1
WAW10000			1-6	3-3
WAAW5500			42-90	49-77
ORW4500			18-39	26-25
MTW9500			1-1	27-1
KSCW3000			1-1	1-1
KSCW8000			1-1	3-1
KSNW4000			2-5	3-2
KSNW8000			1-1	1-1
COW3000			1-1	26-1
COW11500			1-8	34-4

1 Viability is classified as good (green), moderate (yellow), and poor (red) based on the probabilities:

<25	25-50	>50

2 P(NegativeEnding Cash) is the probability that the farm will have a cash flow deficit. Reported values represent the probabilities for 2022 and 2027.

3 P(Real Net Worth Decline) is the probability that the farm will have a loss in real net worth relative to the beginning net worth. Reported values represent the probabilities for losing real net worth from 2020 to 2022 and from 2020 to 2027.

Implications of the August 2022 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Wheat

	Receipts	Payments	NCFI	Reserve 2027	Net Worth 2027	CRNW
	($1,000)	($1,000)	($1,000)	($1,000)	($1,000)	(%)
WAW2800	1,555.81	32.05	373.22	1,346.79	4,806.29	4.83
WAW10000	5,319.17	91.50	1,108.78	4,093.06	15,718.01	4.62
WAAW5500	814.49	17.56	75.47	(889.38)	2,259.13	(3.22)
ORW4500	606.26	12.95	191.35	132.69	2,323.44	1.45
MTW9500	2,252.85	53.24	877.59	2,566.92	12,641.81	3.48
KSCW3000	1,919.73	9.06	584.70	1,787.24	6,283.57	6.58
KSCW8000	4,816.79	40.11	1,182.95	4,986.45	13,747.74	5.63
KSNW4000	1,148.53	14.23	378.66	905.45	3,894.35	4.20
KSNW8000	3,707.42	22.50	1,446.68	5,679.18	16,910.78	6.54
COW3000	731.75	7.55	346.08	839.79	5,183.11	4.27
COW11500	3,342.97	24.63	939.79	2,198.31	18,715.13	2.69

1 Receipts are average annual total cash receipts including government payments, 2022-2027 ($1,000)

2 Payments are average annual total government payments, 2022-2027 ($1,000)

3 NCFI is average annual net cash farm income, 2022-2027 ($1,000)

4 Reserve 2027 is average ending cash reserves, 2027 ($1,000)

5 Net Worth 2027 is average nominal ending net worth, 2027 ($1,000)

6 CRNW is average percentage change in real net worth over 2022-2027 period, (%)

Representative Farm: Cotton

- Seven of the thirteen cotton farms are characterized in good overall financial condition over the 2022-2027 projection period, four are in marginal condition, and two are in poor condition.

- Five representative cotton farms are projected to experience significant cash flow problems (having a greater than 25 percent chance of a cash flow deficit); these five farms along with one additional farm are expected to face a 25 percent or greater chance of losing real equity over the period.
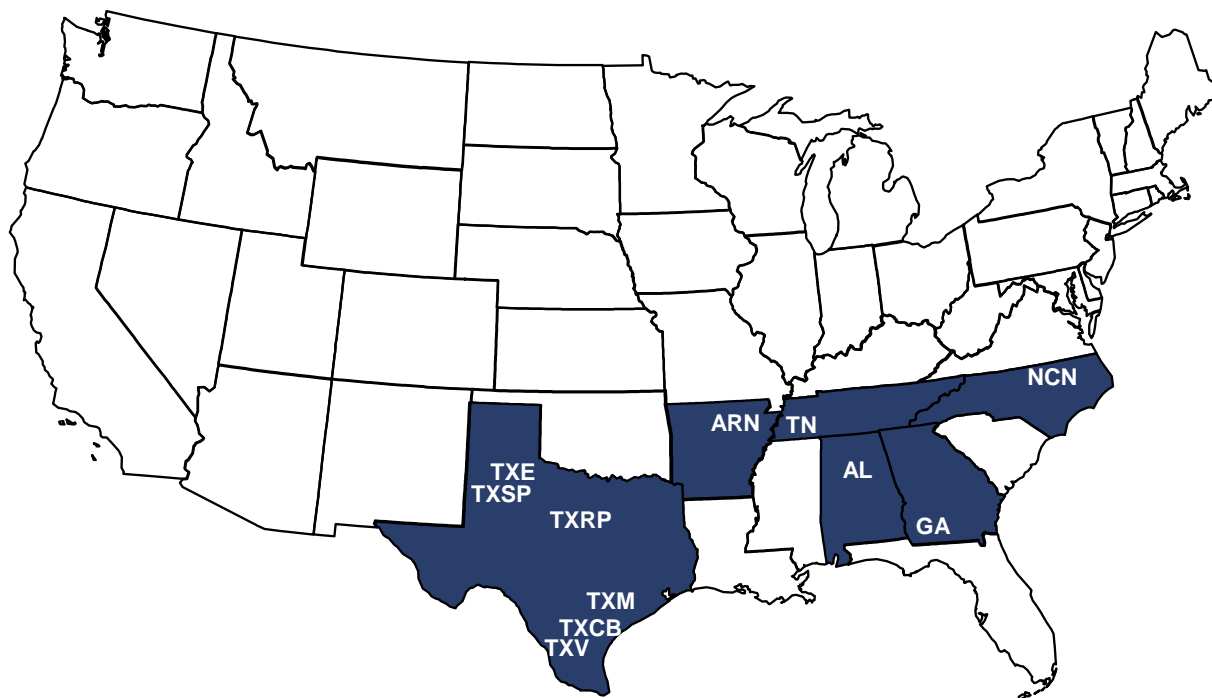
Characteristics of Panel Farms Producing Cotton, 2021.

	Cropland	Assets	Debt/Asset	Gross Receipts	Cotton
	(acres)	($1,000)	(ratio)	($1,000)	(acres)
TXSP4500	4,500	3,697.00	0.18	2,761.60	4,380
TXEC5000	5,000	4,971.00	0.11	3,054.90	4,700
TXRP3000	3,000	1,999.00	0.26	897.90	1,800
TXMC3000	3,000	3,941.00	0.17	1,919.70	1,500
TXCB4000	4,000	4,606.00	0.17	2,819.40	2,000
TXCB10000	10,000	12,590.00	0.19	7,214.60	5,000
TXVC5500	5,500	9,713.00	0.16	4,692.20	2,550
ARNC5000	5,000	14,383.00	0.18	5,810.70	2,500
TNC3000	3,000	4,601.00	0.15	2,611.20	825
TNC4000	4,000	6,950.00	0.17	3,444.90	1,000
ALC3500	3,500	7,592.00	0.18	3,796.80	1,050
GAC2500	1,250	10,582.00	0.17	3,864.30	1,250
NCNP1600	1,600	4,195.00	0.17	1,457.60	640

Representative Farm: Cotton

Economic Viability of Representative Farms over the 2022-2027 Period

Farm Name	Overall Ranking		P(Negative Ending Cash)	P(Real Net Worth Declines)
7/4/2	2022	2027	2022-2027	2022-2027
TXSP4500			4-40	29-48
TXEC5000			1-12	24-21
TXRP3000			31-85	33-61
TXMC3000			6-31	38-35
TXCB4000			4-28	16-28
TXCB10000			1-1	6-2
TXVC5500			1-1	2-1
ARNC5000			1-2	2-1
TNC3000			1-1	1-1
TNC4000			1-18	18-25
ALC3500			1-1	1-1
GAC2500			1-1	4-1
NCNP1600			21-90	64-86

1 Viability is classified as good (green), moderate (yellow), and poor (red) based on the probabilities:

<25	25-50	>50

2 P(NegativeEnding Cash) is the probability that the farm will have a cash flow deficit. Reported values represent the probabilities for 2022 and 2027.

3 P(Real Net Worth Decline) is the probability that the farm will have a loss in real net worth relative to the beginning net worth. Reported values represent the probabilities for losing real net worth from 2020 to 2022 and from 2020 to 2027.

Implications of the August 2022 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Cotton

	Receipts	Payments	NCFI	Reserve 2027	Net Worth 2027	CRNW
	($1,000)	($1,000)	($1,000)	($1,000)	($1,000)	(%)
TXSP4500	2,457.75	28.25	296.80	268.81	3,215.66	(1.15)
TXEC5000	2,685.66	45.71	479.98	1,741.47	5,770.81	2.27
TXRP3000	821.46	10.33	49.34	(571.76)	1,429.67	(2.67)
TXMC3000	2,121.06	24.57	359.64	529.94	4,127.66	1.80
TXCB4000	2,492.73	21.76	300.11	685.88	4,625.74	0.98
TXCB10000	6,428.79	67.85	1,177.13	5,550.15	15,248.55	4.57
TXVC5500	4,230.70	42.17	797.90	3,855.44	11,858.25	4.20
ARNC5000	5,002.16	69.06	1,177.76	3,226.62	16,624.12	3.52
TNC3000	2,385.96	34.05	620.06	2,729.28	6,470.08	6.35
TNC4000	3,096.12	49.19	454.24	1,013.59	6,999.55	0.97
ALC3500	3,230.84	37.87	895.54	4,088.39	9,709.93	5.35
GAC2500	3,583.92	133.25	658.20	2,235.78	12,200.17	3.34
NCNP1600	1,334.45	42.56	77.01	(743.25)	3,350.32	(2.83)

1 Receipts are average annual total cash receipts including government payments, 2022-2027 ($1,000)

2 Payments are average annual total government payments, 2022-2027 ($1,000)

3 NCFI is average annual net cash farm income, 2022-2027 ($1,000)

4 Reserve 2027 is average ending cash reserves, 2027 ($1,000)

5 Net Worth 2027 is average nominal ending net worth, 2027 ($1,000)

6 CRNW is average percentage change in real net worth over 2022-2027 period, (%)

Representative Farm: Rice

- Five of the fifteen representative rice farms are projected to be in good overall financial condition, two are in marginal condition, and eight are in poor condition.

- Nine of the rice farms are expected to face moderate to severe cash flow problems; nine farms are also projected to experience a 25 percent or greater chance of declining real net worth.

Characteristics of Panel Farms Producing Rice, 2021.

	Cropland	Assets	Debt/Asset	Gross Receipts	Rice
	(acres)	($1,000)	(ratio)	($1,000)	(acres)
CAR1200	1,200	5,871.00	0.15	2,267.50	1,200
CAR3000	3,000	16,858.00	0.19	5,935.00	3,000
CABR800	800	5,712.00	0.16	1,629.60	800
CACR800	800	4,672.00	0.19	1,445.80	800
TXR1500	1,500	3,008.00	0.24	896.60	600
TXR3000	3,000	2,064.00	0.17	2,279.50	1,500
TXBR1800	1,800	1,202.00	0.17	1,769.70	900
TXER2500	2,500	1,915.00	0.13	2,923.90	1,250
LASR2000	2,000	2,976.00	0.20	1,596.00	1,000
ARMR6500	6,500	11,697.00	0.17	6,655.60	650
ARSR3240	3,240	6,383.00	0.17	3,069.80	1,458
ARWR2500	2,500	11,007.00	0.18	2,454.40	833
ARHR4000	4,000	10,220.00	0.19	3,811.80	2,640
MSDR5000	5,000	21,775.00	0.19	3,934.70	1,667
MOBR4000	4,000	11,684.00	0.21	3,084.10	1,320

Representative Farm: Rice

Economic Viability of Representative Farms over the 2022-2027 Period

Farm Name	Overall Ranking		P(Negative Ending Cash)	P(Real Net Worth Declines)
5/2/8	2022	2027	2022-2027	2022-2027
CAR1200	yellow	red	11-83	62-46
CAR3000	red	red	85-99	93-99
CABR800	red	red	86-99	92-93
CACR800	red	red	99-99	99-99
TXR1500	red	red	88-82	92-56
TXR3000	red	yellow	30-19	77-28
TXBR1800	yellow	green	16-8	51-13
TXER2500	yellow	yellow	2-4	25-11
LASR2000	red	red	43-79	99-93
ARMR6500	green	green	1-3	8-4
ARSR3240	green	green	8-11	20-8
ARWR2500	yellow	yellow	17-73	33-31
ARHR4000	red	red	30-79	71-59
MSDR5000	green	green	4-4	5-1
MOBR4000	green	yellow	4-28	12-9

1 Viability is classified as good (green), moderate (yellow), and poor (red) based on the probabilities:

<25	25-50	>50

2 P(NegativeEnding Cash) is the probability that the farm will have a cash flow deficit. Reported values represent the probabilities for 2022 and 2027.

3 P(Real Net Worth Decline) is the probability that the farm will have a loss in real net worth relative to the beginning net worth. Reported values represent the probabilities for losing real net worth from 2020 to 2022 and from 2020 to 2027.

Implications of the August 2022 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Rice

	Receipts	Payments	NCFI	Reserve 2027	Net Worth 2027	CRNW
	($1,000)	($1,000)	($1,000)	($1,000)	($1,000)	(%)
CAR1200	2,247.41	48.63	201.50	(478.14)	5,686.51	(0.07)
CAR3000	5,839.94	118.80	(242.19)	(5,813.77)	11,703.99	(4.65)
CABR800	1,607.10	41.01	113.25	(1,251.02)	4,912.52	(1.74)
CACR800	1,282.81	31.79	(182.19)	(2,714.09)	2,509.38	(8.47)
TXR1500	1,138.45	8.61	189.74	(341.95)	2,699.33	0.65
TXR3000	2,767.39	14.04	444.16	736.37	2,579.83	4.97
TXBR1800	2,068.27	8.83	325.83	862.12	1,798.26	7.96
TXER2500	2,927.91	13.20	395.48	1,499.54	2,658.14	5.76
LASR2000	1,652.68	10.21	105.08	(455.56)	2,079.25	(4.18)
ARMR6500	6,180.91	57.40	1,253.15	5,216.46	14,808.60	4.98
ARSR3240	3,076.31	22.50	549.34	1,450.65	7,483.49	3.67
ARWR2500	2,340.79	15.39	295.74	(629.53)	10,560.96	0.46
ARHR4000	3,909.63	26.42	419.20	(1,015.57)	9,146.23	(0.55)
MSDR5000	4,484.42	33.88	1,401.45	3,030.57	24,969.04	3.68
MOBR4000	2,983.30	16.16	457.75	591.30	11,506.15	1.49

1 Receipts are average annual total cash receipts including government payments, 2022-2027 ($1,000)

2 Payments are average annual total government payments, 2022-2027 ($1,000)

3 NCFI is average annual net cash farm income, 2022-2027 ($1,000)

4 Reserve 2027 is average ending cash reserves, 2027 ($1,000)

5 Net Worth 2027 is average nominal ending net worth, 2027 ($1,000)

6 CRNW is average percentage change in real net worth over 2022-2027 period, (%)

Representative Farm: Dairy

- Fifteen of the twenty dairy operations are in good overall financial condition, one of the dairies is classified in marginal condition, and four dairies are in poor condition.

- Five of the dairies are projected to experience moderate to severe cash flow stress; four of these operations are also projected to face a 25 percent or greater chance of losing real net worth by 2027.
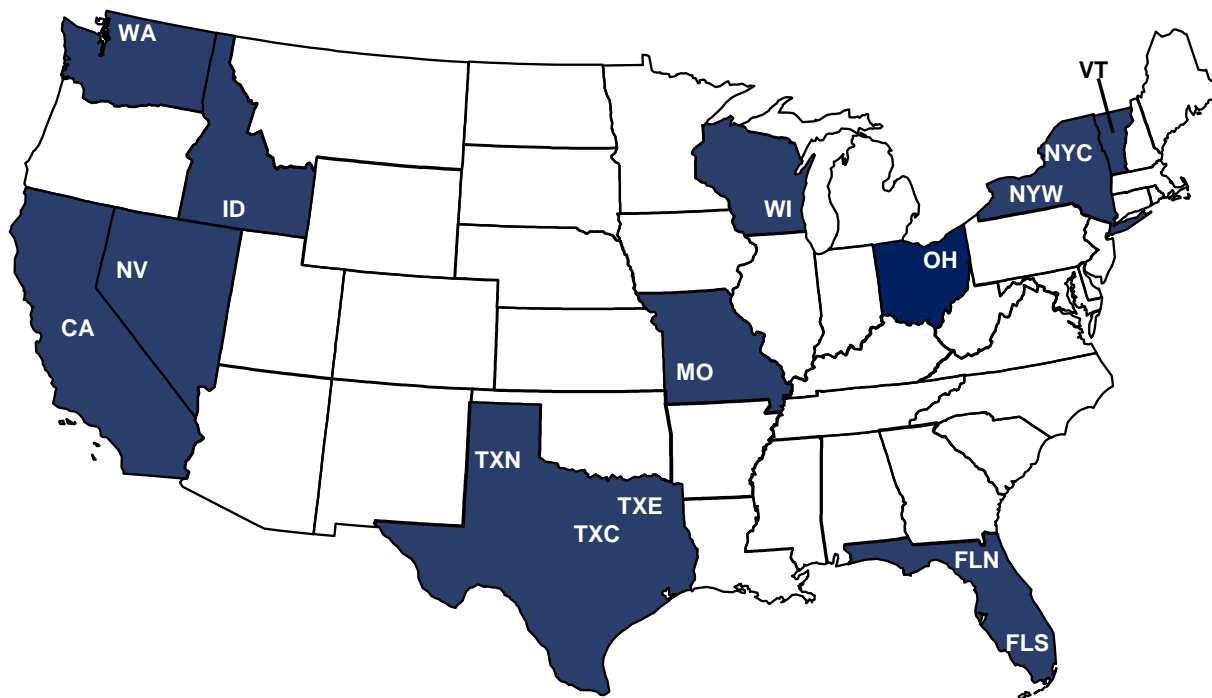
Characteristics of Panel Farms Producing Milk, 2021.

	Cropland	Assets	Debt/Asset	Gross Receipts	Cows
	(acres)	($1,000)	(ratio)	($1,000)	(number)
CAD2000	700	24,278.00	0.21	11,011.30	2,000
WAD300	250	4,684.00	0.27	1,531.10	300
WAD1200	850	16,120.00	0.21	6,822.20	1,200
IDD1500	850	11,320.00	0.19	9,037.20	1,500
NVD1000	500	7,792.00	0.19	5,236.90	1,000
TXND3800	1,920	24,677.00	0.18	17,632.90	3,800
TXCD1500	616	10,749.00	0.20	6,784.70	1,500
TXED400	950	2,847.00	0.28	1,385.70	400
WID180	800	5,558.00	0.23	1,591.40	180
WID1700	3,200	24,307.00	0.23	10,471.90	1,700
OHD400	800	8,147.00	0.23	2,522.50	400
NYWD400	800	5,534.00	0.23	2,300.30	400
NYWD1200	2,100	18,482.00	0.24	6,699.40	1,200
NYCD180	400	2,961.00	0.21	1,256.30	180
NYCD800	1,800	13,552.00	0.21	4,609.50	800
VTD160	220	2,035.00	0.31	882.50	160
VTD400	1,000	6,354.00	0.26	2,721.70	400
MOGD550	460	3,693.00	0.23	1,749.00	550
FLND550	600	4,091.00	0.17	3,266.90	550
FLSD1750	400	11,277.00	0.21	9,066.90	1,750

Representative Farm: Dairy

Economic Viability of Representative Farms over the 2022-2027 Period

Farm Name	Overall Ranking		P(Negative Ending Cash)	P(Real Net Worth Declines)
15/1/4	2022	2027	2022-2027	2022-2027
CAD2000	🟨	🟩	27-15	37-5
WAD300	🟥	🟥	68-77	29-26
WAD1200	🟩	🟩	2-1	6-1
IDD1500	🟩	🟩	1-1	7-1
NVD1000	🟩	🟩	1-1	20-1
TXND3800	🟨	🟩	3-1	31-1
TXCD1500	🟨	🟨	29-26	44-20
TXED400	🟥	🟥	80-86	62-56
WID180	🟩	🟩	1-1	1-1
WID1700	🟩	🟩	1-1	2-1
OHD400	🟩	🟩	1-1	1-1
NYWD400	🟩	🟩	1-1	1-1
NYWD1200	🟩	🟩	1-1	1-1
NYCD180	🟩	🟩	1-1	1-1
NYCD800	🟩	🟩	1-1	1-1
VTD160	🟥	🟥	92-99	64-86
VTD400	🟨	🟥	45-87	48-63
MOGD550	🟩	🟩	8-11	6-7
FLND550	🟩	🟩	6-3	13-1
FLSD1750	🟨	🟩	13-2	31-1

1 Viability is classified as good (green), moderate (yellow), and poor (red) based on the probabilities:

<25	25-50	>50

2 P(NegativeEnding Cash) is the probability that the farm will have a cash flow deficit. Reported values represent the probabilities for 2022 and 2027.

3 P(Real Net Worth Decline) is the probability that the farm will have a loss in real net worth relative to the beginning net worth. Reported values represent the probabilities for losing real net worth from 2020 to 2022 and from 2020 to 2027.

Implications of the August 2022 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Milk

	Receipts	Payments	NCFI	Reserve 2027	Net Worth 2027	CRNW
	($1,000)	($1,000)	($1,000)	($1,000)	($1,000)	(%)
CAD2000	12,507.00	57.40	1,656.66	3,352.23	28,301.60	4.46
WAD300	1,639.34	33.86	169.74	(356.39)	4,329.59	1.87
WAD1200	7,716.72	41.64	1,419.86	4,584.48	20,699.71	6.09
IDD1500	10,297.59	51.37	2,278.80	9,500.18	19,177.25	10.83
NVD1000	5,866.09	34.48	1,007.64	4,018.02	11,084.95	7.54
TXND3800	20,742.93	63.13	3,526.80	14,860.57	37,787.36	8.62
TXCD1500	7,856.88	38.23	775.18	1,380.98	12,240.17	3.80
TXED400	1,490.88	32.93	82.47	(529.19)	2,453.94	0.86
WID180	1,616.19	34.31	449.69	1,117.97	6,400.95	4.65
WID1700	11,667.76	69.32	2,375.37	8,564.18	31,196.76	6.61
OHD400	2,776.98	38.58	636.02	1,718.76	9,674.28	5.28
NYWD400	2,558.25	39.25	606.00	1,805.05	7,093.86	6.58
NYWD1200	7,723.29	49.09	1,812.92	5,415.67	22,606.25	5.95
NYCD180	1,313.51	29.11	359.08	1,072.36	3,863.89	6.45
NYCD800	5,223.11	43.28	1,292.72	4,261.11	17,402.27	6.24
VTD160	939.04	20.61	42.90	(628.88)	1,434.07	(1.72)
VTD400	2,927.17	38.82	199.28	(864.95)	5,307.71	(0.03)
MOGD550	1,819.02	30.16	400.90	1,219.13	4,621.87	6.19
FLND550	3,589.64	34.13	504.83	1,409.02	5,714.14	6.88
FLSD1750	10,314.45	40.76	1,558.06	4,906.00	16,448.59	8.44

1 Receipts are average annual total cash receipts including government payments, 2022-2027 ($1,000)

2 Payments are average annual total government payments, 2022-2027 ($1,000)

3 NCFI is average annual net cash farm income, 2022-2027 ($1,000)

4 Reserve 2027 is average ending cash reserves, 2027 ($1,000)

5 Net Worth 2027 is average nominal ending net worth, 2027 ($1,000)

6 CRNW is average percentage change in real net worth over 2022-2027 period, (%)

Representative Farm: Cow/Calf

- Five of the ten cow-calf operations are projected to be in good overall financial condition, none of the ranches are in marginal condition, and five are in poor condition.

- Five ranches face the threat of severe cash flow stress; these five ranches each also face a significant chance (25 percent or greater) of losing real wealth.
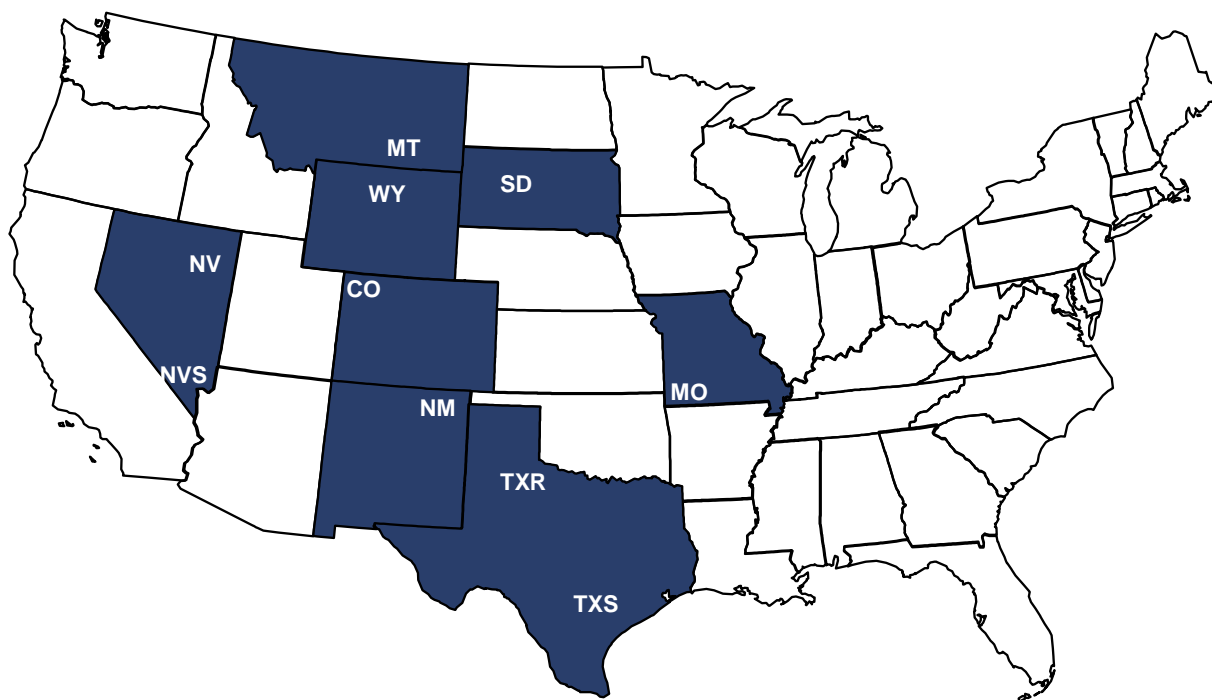
Characteristics of Panel Farms Producing Beef Cattle, 2021.

	Cropland	Assets	Debt/Asset	Gross Receipts	Cows
	(acres)	($1,000)	(ratio)	($1,000)	(number)
NVB650	1,300	11,393.00	0.02	558.10	650
NVSB550	125	3,363.00	0.05	463.70	550
MTB600	900	8,517.00	0.02	551.30	600
WYB475	330	2,529.00	0.04	512.70	475
COB250	650	14,126.00	0.01	319.60	250
NMB210	0	6,747.00	0.02	208.70	210
SDB600	1,000	8,405.00	0.05	587.00	600
MOB250	450	3,849.00	0.03	549.00	250
TXRB400	0	10,303.00	0.01	437.70	400
TXSB300	100	6,023.00	0.02	322.80	300

Representative Farm: Cow/Calf

Economic Viability of Representative Farms over the 2022-2027 Period

Farm Name	Overall Ranking		P(Negative Ending Cash)	P(Real Net Worth Declines)
5/0/5	2022	2027	2022-2027	2022-2027
NVB650	🟥	🟥	34-31	99-88
NVSB550	🟥	🟩	75-7	99-14
MTB600	🟨	🟩	2-1	99-6
WYB475	🟥	🟥	70-93	99-95
COB250	🟥	🟥	37-32	99-99
NMB210	🟥	🟥	99-27	99-99
SDB600	🟥	🟥	99-99	99-75
MOB250	🟩	🟩	1-1	10-1
TXRB400	🟨	🟩	24-1	96-1
TXSB300	🟨	🟩	1-1	99-1

1 Viability is classified as good (green), moderate (yellow), and poor (red) based on the probabilities:

🟩 <25	🟨 25-50	🟥 >50

2 P(NegativeEnding Cash) is the probability that the farm will have a cash flow deficit. Reported values represent the probabilities for 2022 and 2027.

3 P(Real Net Worth Decline) is the probability that the farm will have a loss in real net worth relative to the beginning net worth. Reported values represent the probabilities for losing real net worth from 2020 to 2022 and from 2020 to 2027.

Implications of the August 2022 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Beef Cattle

	Receipts	Payments	NCFI	Reserve 2027	Net Worth 2027	CRNW
	($1,000)	($1,000)	($1,000)	($1,000)	($1,000)	(%)
NVB650	707.05	0.00	159.45	76.41	13,207.55	0.55
NVSB550	638.47	0.00	156.06	223.02	4,057.18	1.84
MTB600	704.27	0.00	234.51	625.12	10,353.88	1.36
WYB475	536.60	0.00	65.16	(259.14)	2,683.45	(0.56)
COB250	376.82	0.00	121.08	58.59	15,939.46	0.07
NMB210	266.66	0.00	98.65	28.09	7,653.73	0.27
SDB600	780.03	0.00	110.51	(634.82)	9,304.03	0.30
MOB250	596.72	1.90	240.05	656.56	5,026.88	2.74
TXRB400	569.50	0.00	176.91	459.92	12,564.28	1.34
TXSB300	424.27	0.00	188.19	498.80	7,322.42	1.37

1 Receipts are average annual total cash receipts including government payments, 2022-2027 ($1,000)

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4 Reserve 2027 is average ending cash reserves, 2027 ($1,000)

5 Net Worth 2027 is average nominal ending net worth, 2027 ($1,000)

6 CRNW is average percentage change in real net worth over 2022-2027 period, (%)

AFPC Briefing Series

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