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

Briefing Paper 16-1

March 2016

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

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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 29 states. The chief purpose of this analysis is to project the economic viability of those farms by region and commodity for 2016 through 2020. The data necessary to simulate the economic activity of these operations is developed through ongoing cooperation with panels of agricultural producers in selected states. The Food and Agricultural Policy Research Institute (FAPRI) provided projected prices, policy variables, and input inflation rates in their January 2016 Baseline.

Under the January 2016 Baseline, 27 of the 63 crop farms are considered in good liquidity condition (less than a 25 percent chance of negative ending cash by 2020). Ten crop farms have between a 25 percent and a 50 percent likelihood of negative ending cash, and the remaining 26 crop farms have greater than a 50 percent chance of negative ending cash. Additionally, 25 of the 63 crop farms are considered in good equity position (less than a 25 percent chance of decreasing real net worth during the study period). Six crop farms have between a 25 percent and 50 percent likelihood of losing real net worth, and 32 crop farms have greater than a 50 percent probability of decreasing real net worth by 2020. The following discussion provides an overall evaluation by commodity considering both liquidity and equity measures.

- FEEDGRAIN FARMS: Ten of the 23 feedgrain farms are in good overall financial condition. Two farms are classified in marginal condition, and eleven are in poor condition.

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

- COTTON FARMS: Three of the 15 cotton farms are classified in good condition, four are in marginal condition, and eight are in poor condition.

- RICE FARMS: Nine of the 14 rice farms are projected to be in good financial condition. One rice farm is projected to be in marginal condition; four are in poor condition.

- DAIRY FARMS: Twelve of the 20 dairies are in good overall financial condition. Four are classified in marginal condition, and four are in poor condition.

- BEEF CATTLE RANCHES: Two of the 11 cattle ranches are classified in good financial condition, eight are in marginal condition, and one is projected to be in poor condition.

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

The farm level economic impacts of the FAPRI January 2016 Baseline on representative crop and livestock operations are projected in this report, assuming provisions of the 2014 Farm Bill continue throughout the 2014-2020 study period. Crop farms are assumed to have elected ARC or PLC on a crop by crop basis that resulted in the highest projected ending cash reserves at the end of the period. Based on interviews with a sample of producers, farms are currently assumed to not purchase SCO/STAX. The analysis was conducted over the 2014-2020 planning horizon using FLIPSIM, AFPC's whole farm simulation model. Data to simulate farming operations in the nation's major production regions came from two sources:

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

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

The FLIPSIM policy simulation model incorporates the historical risk faced by farmers for prices and production. This report presents the results of the January 2016 Baseline in a risk context using selected simulated probabilities and ranges for annual net cash farm income values. The probability of a farm experiencing negative ending cash reserves and the probability of a farm losing real net worth are included as indicators of the cash flow and equity risks facing farms through the year 2020.

DEFINITIONS OF VARIABLES IN THE SUMMARY TABLES

- **Overall Financial Position, 2016-2020** -- As a means of summarizing the representative farms' economic efficiency, liquidity, and solvency position, AFPC classifies each farm as being in either 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 2020. 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.
- **Receipts** -- 2016-2020 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** -- 2016-2020 average annual PLC or ARC payments and marketing loan gains/LDPs for crop farms.
- **NCFI** -- 2016-2020 average net cash farm income equals average total receipts minus average total cash expenses.
- **Reserve 2020** -- equals total cash on hand at the end of year 2020. 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 2020** -- equity equals total assets including land minus total debt from all sources and is reported at the end of 2020.
- **CRNW** -- annualized percentage change in the operator's real net worth from January 1, 2016 through December 31, 2020, after adjusting for inflation.

Table 1. FAPRI January 2016 Baseline Projections of Crop and Livestock Prices, 2014-2020.

	2014	2015	2016	2017	2018	2019	2020
Crop Prices							
Corn ($/bu.)	3.70	3.60	3.75	3.83	3.92	3.96	3.98
Wheat ($/bu.)	5.99	4.99	4.96	5.00	5.22	5.33	5.39
Cotton ($/lb.)	0.6130	0.5923	0.5716	0.6046	0.6372	0.6442	0.6437
Sorghum ($/bu.)	4.03	3.34	3.47	3.54	3.61	3.65	3.68
Soybeans ($/bu.)	10.10	8.82	8.76	9.38	9.41	9.71	9.85
Barley ($/bu.)	5.30	5.31	4.40	4.51	4.68	4.80	4.83
Oats ($/bu.)	3.21	2.18	2.45	2.44	2.47	2.48	2.50
Rice ($/cwt.)	13.30	12.80	13.49	13.59	13.95	14.19	14.19
Soybean Meal ($/ton)	351.47	283.87	297.33	315.26	314.13	321.71	322.56
All Hay ($/ton)	172.00	148.60	149.05	156.50	161.84	165.25	165.82
Peanuts ($/ton)	440.00	369.30	353.86	352.04	354.29	359.60	365.68
Cattle Prices							
Feeder Cattle ($/cwt)	225.07	226.52	193.87	171.06	159.33	155.48	159.66
Fed Cattle ($/cwt)	154.56	148.12	133.16	122.70	118.06	116.85	119.70
Culled Cows ($/cwt)	104.09	99.76	84.69	75.31	70.71	69.90	72.89
Milk Price							
U.S. All Milk Price ($/cwt)	24.07	17.13	15.85	16.88	17.62	18.01	18.21

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

Table 2. FAPRI January 2016 Baseline Assumed Rates of Change in Input Prices and Annual Changes in Land Values, 2015-2020.

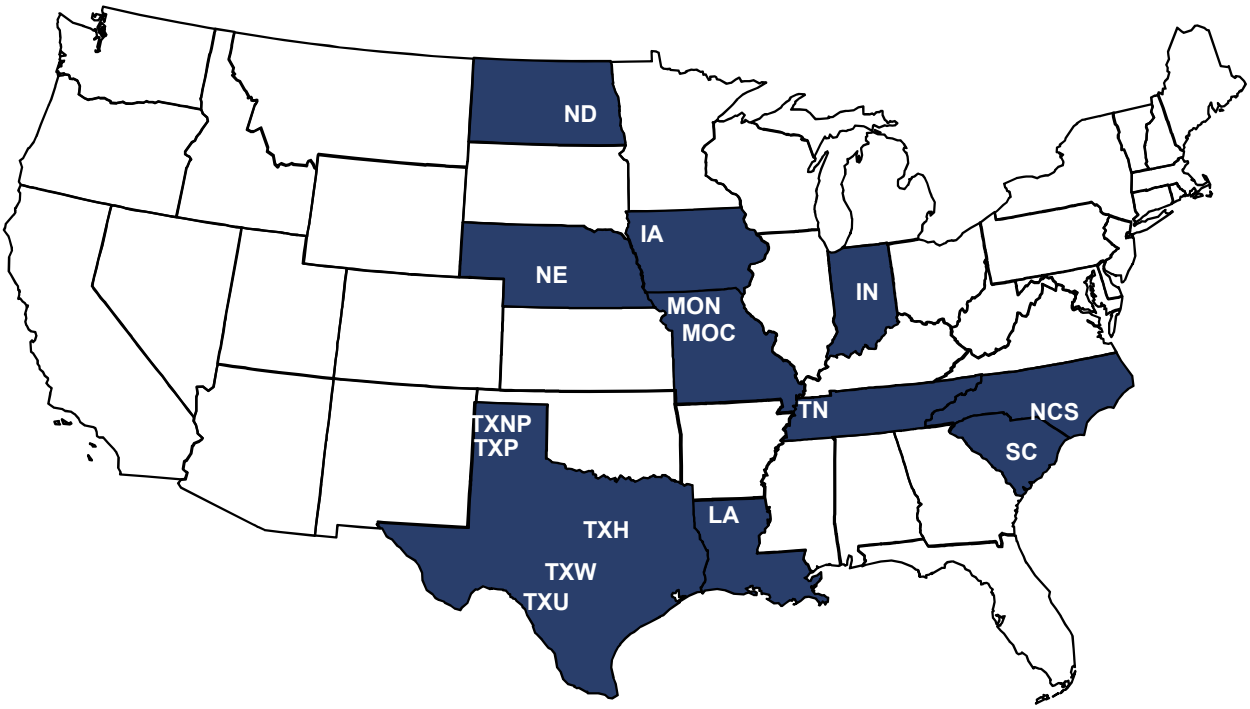
	2015	2016	2017	2018	2019	2020
Annual Rate of Change for Input Prices Paid						
Seed Prices (%)	0.00	-1.56	-1.68	-0.22	1.26	2.08
All Fertilizer Prices (%)	-10.82	-10.06	-3.81	5.73	4.88	4.00
Herbicide Prices (%)	-3.41	-5.22	5.91	6.56	5.54	4.72
Insecticide Prices (%)	-6.58	-5.14	3.96	5.33	4.66	3.89
Fuel and Lube Prices (%)	-34.69	-10.24	12.93	13.08	8.56	7.09
Machinery Prices (%)	3.60	-1.81	2.36	4.05	4.06	3.60
Wages (%)	3.55	2.45	3.09	3.34	3.40	3.36
Supplies (%)	0.16	0.57	1.76	2.08	1.87	1.68
Repairs (%)	-0.47	0.73	2.67	3.03	2.81	2.62
Services (%)	2.60	1.27	2.65	3.28	3.36	3.23
Taxes (%)	1.90	1.10	1.68	0.74	1.40	1.93
PPI Items (%)	-3.39	-4.28	0.58	1.80	2.01	2.34
PPI Total (%)	-2.75	-3.31	0.93	2.02	2.18	2.40
Annual Change in Consumer Price Index (%)	0.13	1.21	2.56	2.68	2.54	2.50
Annual Rate of Change for U.S. Land Prices (%)	2.37	-3.22	-1.72	-0.82	-0.80	-0.38

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

Representative Farm: Feed Grains

- Overall, ten feed grain farms are characterized as good, two are marginal, and eleven are in poor condition.

- Eight of the twenty-three farms will be under severe cash flow stress; twelve farms have high likelihoods (greater than a 50 percent chance) of losing real net worth.



Characteristics of Panel Farms Producing Feed Grains, 2015.

	Cropland (acres)	Assets ($1,000)	Debt/Asset (ratio)	Gross Receipts ($1,000)	Feed Grains (acres)
IAG1350	1,350	6,635.00	0.24	963.20	1,350
IAG3400	3,400	16,011.00	0.22	2,190.80	3,400
NEG2400	2,400	7,323.00	0.18	1,815.50	2,400
NEG4300	4,300	25,820.00	0.17	3,415.20	4,000
NDG3000	3,000	4,558.00	0.23	1,103.20	2,500
NDG8000	8,000	28,556.00	0.18	3,208.70	5,750
ING1000	1,000	3,805.00	0.17	547.00	1,000
ING2200	2,200	10,526.00	0.18	1,309.80	2,200
MOCG2300	2,300	16,823.00	0.17	1,180.10	2,300
MOCG4000	4,000	23,020.00	0.16	1,790.70	4,000
MONG2300	2,300	11,759.00	0.15	1,642.10	2,250
LAG2640	2,640	1,948.00	0.26	1,607.70	2,244
LANG2500	2,500	9,468.00	0.15	1,867.50	1,750
TNG900	900	2,575.00	0.24	443.00	900
TNG2200	2,200	5,264.00	0.23	955.90	2,200
NCSP1800	1,800	4,881.00	0.24	1,021.40	1,440
SCG3500	3,500	13,143.00	0.19	2,288.40	2,625
TXNP3000	3,000	2,316.00	0.17	1,543.30	1,200
TXNP10000	10,000	19,655.00	0.15	5,709.80	5,700
TXPG2500	2,500	5,699.00	0.22	1,583.80	1,453
TXHG2500	2,500	2,833.00	0.48	614.00	1,700
TXWG1600	1,600	1,619.00	0.22	537.80	1,050
TXUG1600	1,600	1,014.00	0.12	1,431.70	150

Representative Farm: Feed Grains

Economic Viability of Representative Farms over the 2016-2020 Period

Farm Name	Overall Ranking		P(Negative Ending Cash)	P(Real Net Worth Declines)
10/2/11	2016	2020	2016-2020	2016-2020
IAG1350			99-99	99-99
IAG3400			95-96	99-98
NEG2400			1-29	81-76
NEG4300			1-45	93-90
NDG3000			2-32	79-64
NDG8000			1-1	23-9
ING1000			1-8	52-19
ING2200			16-50	90-68
MOCG2300			1-1	7-1
MOCG4000			1-1	1-1
MONG2300			1-1	5-4
LAG2640			49-57	75-62
LANG2500			1-1	35-6
TNG900			78-76	91-74
TNG2200			69-73	96-74
NCSP1800			93-99	99-99
SCG3500			1-4	42-22
TXNP3000			5-31	27-34
TXNP10000			1-1	1-1
TXPG2500			3-4	17-4
TXHG2500			99-99	99-99
TXWG1600			96-99	98-99
TXUG1600			1-1	7-12

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 2016 and 2020.

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 2014 to 2016 and from 2014 to 2020.

Implications of the January 2016 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Feed Grains and Oilseeds

	Receipts	Payments	NCFI	Reserve 2020	Net Worth 2020	CRNW
	($1,000)	($1,000)	($1,000)	($1,000)	($1,000)	(%)
IAG1350	977.08	37.19	1.02	(1,452.81)	3,946.60	(3.40)
IAG3400	2,229.84	91.87	106.35	(2,339.40)	10,618.80	(2.30)
NEG2400	1,822.72	66.28	221.89	455.71	5,713.34	(0.90)
NEG4300	3,445.08	114.19	436.28	217.61	19,962.81	(0.97)
NDG3000	1,207.98	47.72	200.52	251.43	3,478.78	(0.25)
NDG8000	3,549.30	136.01	1,054.79	4,318.77	25,058.96	1.29
ING1000	605.99	23.34	208.47	242.95	3,313.19	0.92
ING2200	1,453.71	53.05	312.72	(24.03)	8,669.13	0.28
MOCG2300	1,521.58	48.66	755.21	1,743.58	15,600.05	1.77
MOCG4000	2,303.81	70.76	1,117.50	3,041.72	21,920.55	2.10
MONG2300	1,627.32	52.98	459.83	1,468.32	10,525.90	1.12
LAG2640	1,750.30	68.32	168.78	(122.80)	1,492.45	(0.69)
LANG2500	1,963.10	92.77	458.63	1,555.91	8,834.58	1.79
TNG900	481.47	11.31	125.68	(169.66)	1,921.56	(0.16)
TNG2200	1,028.82	35.11	231.94	(318.89)	4,003.65	0.22
NCSP1800	1,156.74	116.65	20.20	(1,172.06)	2,772.61	(4.44)
SCG3500	2,350.75	146.06	435.96	1,523.11	11,007.49	1.03
TXNP3000	1,648.10	85.36	230.39	247.66	2,265.55	0.77
TXNP10000	5,770.15	258.44	1,761.35	7,504.44	21,412.96	4.18
TXPG2500	1,737.75	89.05	462.44	839.34	5,327.90	3.06
TXHG2500	698.54	67.38	(72.27)	(1,970.51)	294.77	(15.37)
TXWG1600	544.76	41.42	(3.72)	(767.35)	657.26	(8.55)
TXUG1600	1,349.89	104.10	201.28	564.60	1,112.47	4.08

1 Receipts are average annual total cash receipts including government payments, 2016-2020 ($1,000)

2 Payments are average annual total government payments, 2016-2020 ($1,000)

3 NCFI is average annual net cash farm income, 2016-2020 ($1,000)

4 Reserve 2020 is average ending cash reserves, 2020 ($1,000)

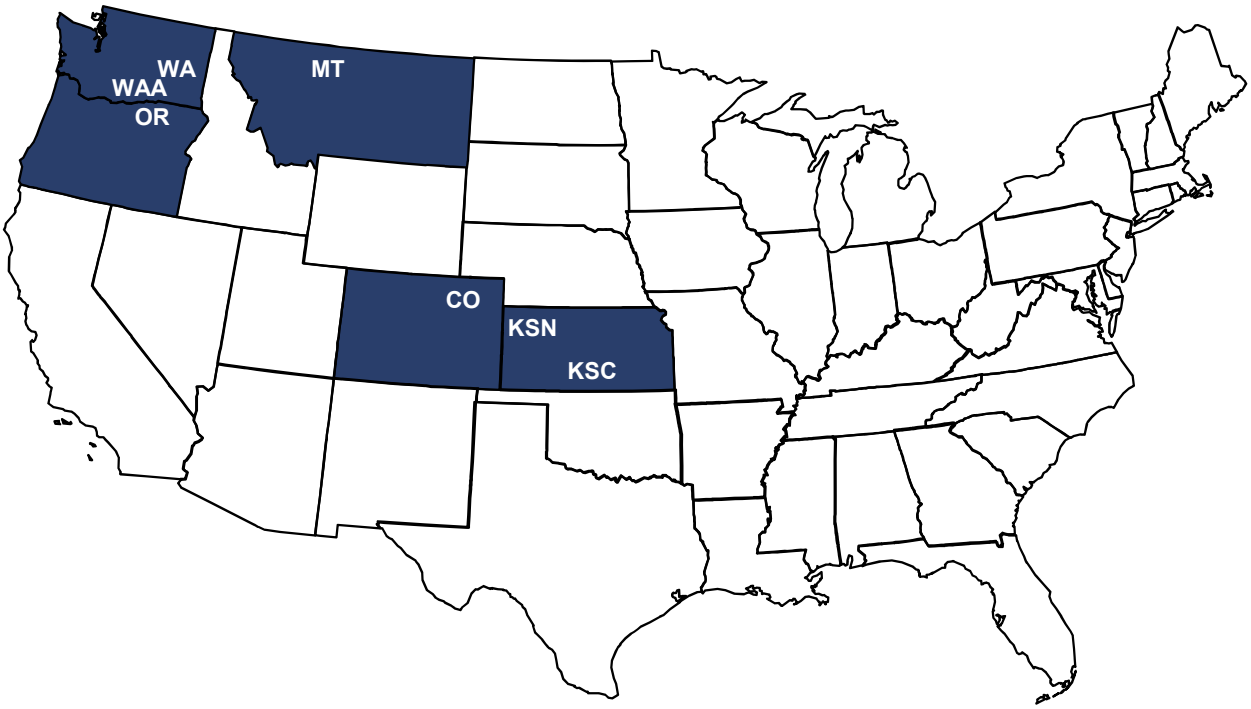
5 Net Worth 2020 is average nominal ending net worth, 2020 ($1,000)

6 CRNW is average percentage change in real net worth over 2016-2020 period, (%)

Representative Farm: Wheat

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

- Six of the eleven wheat farms are expected to feel significant liquidity pressure over the period; those six farms along with one additional farm have a greater than 50 percent chance of losing real equity.



Characteristics of Panel Farms Producing Wheat, 2015.

	Cropland (acres)	Assets ($1,000)	Debt/Asset (ratio)	Gross Receipts ($1,000)	Wheat (acres)
WAW2000	2,000	2,486.00	0.14	720.70	1,320
WAW7000	7,000	9,506.00	0.24	2,272.10	4,060
WAAW4500	4,000	2,325.00	0.21	419.50	2,000
ORW4100	4,100	2,093.00	0.16	378.20	1,950
MTW7000	7,000	7,398.00	0.18	994.80	4,200
KSCW2000	2,000	2,983.00	0.22	482.40	1,000
KSCW5300	5,300	6,334.00	0.16	1,125.50	3,445
KSNW4000	4,000	4,827.00	0.24	754.50	1,500
KSNW5980	5,980	10,253.00	0.29	1,307.10	1,820
COW3000	3,000	3,104.00	0.16	380.80	970
COW5640	5,640	4,459.00	0.20	684.10	1,900

Representative Farm: Wheat

Economic Viability of Representative Farms over the 2016-2020 Period

Farm Name	Overall Ranking		P(Negative Ending Cash)	P(Real Net Worth Declines)
4/1/6	2016	2020	2016-2020	2016-2020
WAW2000			1-1	1-2
WAW7000			98-99	99-99
WAAW4500			96-99	99-99
MTW7000			1-1	1-1
ORW4100			6-16	62-56
KSCW2000			6-61	89-77
KSCW5300			1-1	1-3
KSNW4000			97-88	92-81
KSNW5980			99-99	99-99
COW3000			1-1	14-13
COW5640			25-86	97-92

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 2016 and 2020.

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 2014 to 2016 and from 2014 to 2020.

Implications of the January 2016 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Wheat

	Receipts	Payments	NCFI	Reserve 2020	Net Worth 2020	CRNW
	($1,000)	($1,000)	($1,000)	($1,000)	($1,000)	(%)
WAW2000	791.24	32.18	244.80	1,017.57	2,497.25	2.70
WAW7000	2,508.61	116.63	(73.16)	(3,578.67)	4,425.34	(7.02)
WAAW4500	439.06	24.38	6.27	(637.75)	1,254.40	(5.44)
ORW4100	427.85	29.84	127.33	215.77	1,723.64	(0.33)
MTW7000	1,179.81	107.95	529.92	2,110.18	7,025.12	2.52
KSCW2000	498.45	20.04	112.76	(70.61)	2,165.06	(0.96)
KSCW5300	1,142.64	54.07	385.41	1,983.75	6,123.85	2.46
KSNW4000	841.38	54.84	163.69	(496.86)	3,397.14	(0.81)
KSNW5980	1,431.93	77.96	26.40	(2,519.89)	5,698.94	(3.45)
COW3000	413.69	22.36	149.54	378.96	2,738.40	0.93
COW5640	732.00	43.74	137.60	(378.84)	3,228.94	(1.41)

1 Receipts are average annual total cash receipts including government payments, 2016-2020 ($1,000)

2 Payments are average annual total government payments, 2016-2020 ($1,000)

3 NCFI is average annual net cash farm income, 2016-2020 ($1,000)

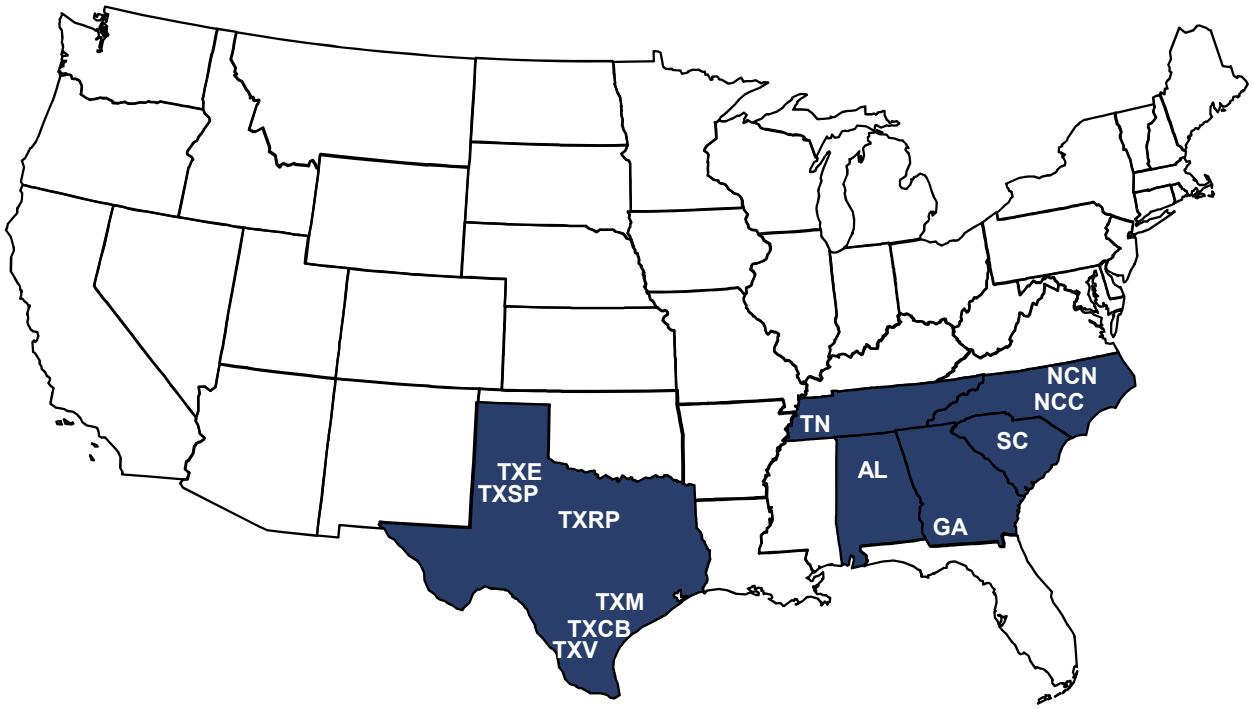
4 Reserve 2020 is average ending cash reserves, 2020 ($1,000)

5 Net Worth 2020 is average nominal ending net worth, 2020 ($1,000)

6 CRNW is average percentage change in real net worth over 2016-2020 period, (%)

Representative Farm: Cotton

- Three of the fifteen cotton farms are characterized in good overall financial condition over the 2016-2020 period, four are in marginal condition, and eight are in poor condition.
- Eight of the farms are projected to experience severe cash flow problems (having a greater than 50 percent chance of a cash flow deficit).
- Nine farms are expected to have a greater than 50 percent chance of losing real equity over the period.



Characteristics of Panel Farms Producing Cotton, 2015.

	Cropland (acres)	Assets ($1,000)	Debt/Asset (ratio)	Gross Receipts ($1,000)	Cotton (acres)
TXSP2500	2,500	1,711.00	0.37	867.50	2,275
TXSP4500	4,500	3,679.00	0.28	1,971.40	4,047
TXEC5000	5,000	4,101.00	0.24	2,001.20	4,150
TXRP2500	2,500	1,252.00	0.26	450.10	1,000
TXMC1800	1,800	1,626.00	0.20	683.50	810
TXCB3000	3,000	2,433.00	0.19	1,280.80	1,350
TXCB9200	9,200	6,428.00	0.20	4,367.90	3,680
TXVC4500	4,500	6,390.00	0.14	1,856.50	1,395
TNC2500	2,500	3,050.00	0.06	1,313.10	250
TNC4050	4,050	7,383.00	0.20	2,479.70	2,025
ALC3000	3,000	2,311.00	0.31	1,520.00	1,050
GAC2300	2,300	10,110.00	0.21	2,449.80	1,200
SCC1800	1,800	4,382.00	0.24	1,336.70	900
NCC1700	1,700	2,892.00	0.22	953.30	225
NCNP1500	1,500	3,537.00	0.29	954.60	375

Representative Farm: Cotton

Economic Viability of Representative Farms over the 2016-2020 Period

Farm Name	Overall Ranking		P(Negative Ending Cash)	P(Real Net Worth Declines)
3/4/8	2016	2020	2016-2020	2016-2020
TXSP2500			80-98	78-92
TXSP4500			17-54	52-48
TXEC5000			35-24	5-3
TXRP2500			99-99	99-99
TXMC1800			65-77	85-83
TXCB3000			37-45	22-30
TXCB9200			35-56	67-71
TXVC4500			1-1	15-10
TNC2500			1-1	1-1
TNC4050			3-33	89-67
ALC3000			84-97	98-97
GAC2300			9-31	99-72
SCC1800			24-35	68-42
NCC1700			39-86	98-95
NCNP1500			99-99	99-99

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 2016 and 2020.

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 2014 to 2016 and from 2014 to 2020.

Implications of the January 2016 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Cotton

	Receipts	Payments	NCFI	Reserve 2020	Net Worth 2020	CRNW
	($1,000)	($1,000)	($1,000)	($1,000)	($1,000)	(%)
TXSP2500	894.11	53.06	3.14	(1,201.51)	385.83	(14.51)
TXSP4500	1,951.43	117.41	295.16	(101.89)	2,714.90	0.01
TXEC5000	2,177.22	155.04	433.91	314.80	3,854.74	2.87
TXRP2500	413.17	30.79	32.52	(393.33)	602.03	(6.25)
TXMC1800	925.74	75.94	87.11	(262.16)	1,047.50	(3.33)
TXCB3000	1,122.09	117.48	179.31	47.07	1,901.47	0.39
TXCB9200	3,868.82	340.15	303.52	(248.39)	4,064.08	(2.54)
TXVC4500	1,991.53	186.26	419.72	1,193.88	6,091.97	1.79
TNC2500	1,389.14	48.53	361.73	2,129.80	3,751.02	4.69
TNC4050	2,592.42	175.84	222.15	315.42	5,879.68	0.23
ALC3000	1,614.22	102.54	37.01	(1,587.30)	514.82	(14.02)
GAC2300	2,575.66	412.21	378.48	211.31	8,220.14	0.64
SCC1800	1,414.94	177.44	223.20	178.16	3,554.80	1.13
NCC1700	987.49	31.85	90.27	(389.64)	1,807.58	(3.21)
NCNP1500	1,018.86	148.83	25.44	(1,497.99)	1,566.51	(6.56)

1 Receipts are average annual total cash receipts including government payments, 2016-2020 ($1,000)

2 Payments are average annual total government payments, 2016-2020 ($1,000)

3 NCFI is average annual net cash farm income, 2016-2020 ($1,000)

4 Reserve 2020 is average ending cash reserves, 2020 ($1,000)

5 Net Worth 2020 is average nominal ending net worth, 2020 ($1,000)

6 CRNW is average percentage change in real net worth over 2016-2020 period, (%)

Representative Farm: Rice

- Nine of the fourteen representative rice farms are projected to be in good overall financial condition, one is in marginal condition, and four are in poor condition.
- Four of the rice farms are expected to face severe cash flow problems; those same four farms also have high likelihoods of losing real equity.

Characteristics of Panel Farms Producing Rice, 2015.

	Cropland (acres)	Assets ($1,000)	Debt/Asset (ratio)	Gross Receipts ($1,000)	Rice (acres)
CAR550	550	3,592.00	0.24	792.90	500
CAR3000	3,000	13,621.00	0.18	4,775.20	3,000
CABR1300	1,300	9,610.00	0.16	2,009.00	1,200
CACR800	800	5,850.00	0.14	1,326.50	800
TXR1500	1,500	2,320.00	0.18	870.70	600
TXR3000	3,000	1,998.00	0.10	1,882.40	1,500
TXBR1800	1,800	1,614.00	0.13	1,019.10	1,200
TXER3200	3,200	2,651.00	0.21	1,369.50	1,067
LASR2000	2,000	3,200.00	0.24	1,361.70	1,000
ARMR6500	6,500	11,515.00	0.45	3,586.40	325
ARSR3240	3,240	6,587.00	0.20	1,993.40	1,296
ARWR2500	2,500	7,851.00	0.17	1,696.10	1,250
ARHR3000	3,000	7,885.00	0.31	2,129.00	1,800
MSDR5000	5,000	17,974.00	0.18	3,362.70	1,667

Representative Farm: Rice

Economic Viability of Representative Farms over the 2016-2020 Period

Farm Name	Overall Ranking		P(Negative Ending Cash)	P(Real Net Worth Declines)
9/1/4	2016	2020	2016-2020	2016-2020
CAR550			99-99	99-99
CAR3000			4-11	15-11
CABR1300			1-1	1-1
CACR800			4-4	22-12
TXR1500			14-4	5-1
TXR3000			1-1	2-1
TXBR1800			1-1	1-1
TXER3200			26-58	74-80
LASR2000			1-1	28-2
ARMR6500			99-99	99-99
ARSR3240			3-8	80-45
ARWR2500			29-47	78-47
ARHR3000			99-99	99-99
MSDR5000			13-21	4-5

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 2016 and 2020.

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 2014 to 2016 and from 2014 to 2020.

Implications of the January 2016 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Rice

	Receipts	Payments	NCFI	Reserve 2020	Net Worth 2020	CRNW
	($1,000)	($1,000)	($1,000)	($1,000)	($1,000)	(%)
CAR550	804.15	25.11	110.12	(673.33)	2,272.84	(2.89)
CAR3000	4,792.90	135.73	723.12	2,638.18	12,424.48	1.95
CABR1300	2,046.08	60.31	663.07	3,199.96	9,490.57	2.64
CACR800	1,322.05	39.89	275.30	884.49	5,147.35	0.66
TXR1500	894.55	43.19	256.82	360.14	2,321.63	3.34
TXR3000	1,839.90	70.66	434.93	1,563.70	2,772.37	8.52
TXBR1800	1,083.80	47.23	359.45	1,841.32	2,453.73	9.90
TXER3200	1,776.98	69.45	161.60	(80.02)	2,082.81	(1.66)
LASR2000	1,374.59	56.08	287.35	1,105.87	3,025.58	4.28
ARMR6500	3,850.12	163.06	(939.18)	(11,348.81)	(1,591.40)	(27.59)
ARSR3240	2,083.05	89.46	385.33	1,100.59	5,626.22	1.27
ARWR2500	1,735.98	81.79	320.59	(23.25)	6,616.76	0.60
ARHR3000	2,211.31	95.25	95.60	(3,165.08)	3,618.44	(5.54)
MSDR5000	3,633.60	109.82	1,062.43	1,011.48	16,235.29	1.66

1 Receipts are average annual total cash receipts including government payments, 2016-2020 ($1,000)

2 Payments are average annual total government payments, 2016-2020 ($1,000)

3 NCFI is average annual net cash farm income, 2016-2020 ($1,000)

4 Reserve 2020 is average ending cash reserves, 2020 ($1,000)

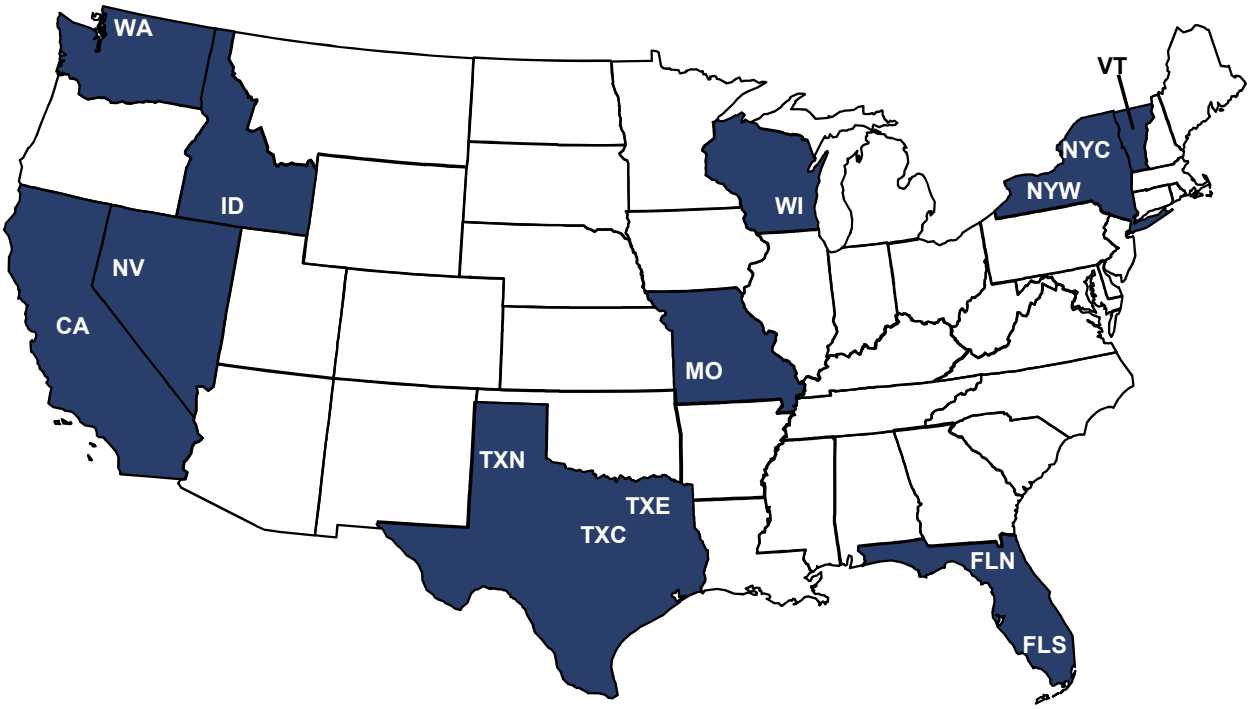
5 Net Worth 2020 is average nominal ending net worth, 2020 ($1,000)

6 CRNW is average percentage change in real net worth over 2016-2020 period, (%)

Representative Farm: Dairy

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

- Five of the dairies are projected to experience severe liquidity pressure; however, only two dairies face a greater than 50 percent chance of losing real equity.



Characteristics of Panel Farms Producing Milk, 2015.

	Cropland (acres)	Assets ($1,000)	Debt/Asset (ratio)	Gross Receipts ($1,000)	Cows (number)
CAD2000	1,200	26,477.00	0.22	9,288.60	2,000
WAD300	250	4,385.00	0.13	1,195.50	300
WAD850	605	12,469.00	0.20	4,320.80	850
IDD3000	1,500	32,593.00	0.18	14,809.50	3,000
NVD1000	200	9,097.00	0.16	5,095.10	1,000
TXND3800	1,920	31,657.00	0.23	17,558.90	3,800
TXCD1500	616	10,777.00	0.18	6,519.80	1,500
TXED400	950	3,449.00	0.24	1,431.10	400
WID145	600	3,773.00	0.25	836.30	145
WID1000	2,000	13,405.00	0.20	5,808.30	1,000
NYWD500	1,000	7,293.00	0.16	2,781.80	500
NYWD1200	2,100	17,812.00	0.19	6,312.00	1,200
NYCD180	400	3,985.00	0.22	860.00	180
NYCD675	1,500	13,259.00	0.17	3,408.40	675
VTD140	220	1,822.00	0.34	643.10	140
VTD400	1,000	5,691.00	0.23	2,051.10	400
MOGD550	0	4,398.00	0.17	1,432.60	550
MOGD180	0	1,426.00	0.18	518.60	180
FLND550	600	4,557.00	0.19	2,805.70	550
FLSD1750	400	12,888.00	0.20	8,627.10	1,750

Representative Farm: Dairy

Economic Viability of Representative Farms over the 2016-2020 Period

Farm Name	Overall Ranking		P(Negative Ending Cash)	P(Real Net Worth Declines)
12/4/4	2016	2020	2016-2020	2016-2020
CAD2000			9-8	1-3
WAD300			20-55	55-68
WAD850			3-1	1-1
IDD3000			64-56	11-30
NVD1000			1-1	1-2
TXND3800			15-41	2-17
TXCD1500			59-63	13-49
TXED400			65-43	4-12
WID145			15-29	2-10
WID1000			1-1	2-2
NYWD500			1-1	1-1
NYWD1200			1-1	1-1
NYCD180			19-27	1-4
NYCD675			1-1	1-1
VTD140			99-99	93-99
VTD400			71-58	3-18
MOGD550			1-1	1-1
MOGD180			1-1	1-1
FLND550			24-17	1-6
FLSD1750			68-30	4-10

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 2016 and 2020.

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 2014 to 2016 and from 2014 to 2020.

Implications of the January 2016 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Milk

	Receipts	Payments	NCFI	Reserve 2020	Net Worth 2020	CRNW
	($1,000)	($1,000)	($1,000)	($1,000)	($1,000)	(%)
CAD2000	9,768.12	0.68	1,576.17	3,213.16	22,200.95	1.91
WAD300	1,257.88	2.82	116.24	(72.80)	3,474.11	(1.09)
WAD850	4,561.80	1.68	997.24	3,078.56	11,811.77	3.93
IDD3000	14,800.56	0.73	1,163.61	(759.04)	24,886.57	(0.15)
NVD1000	5,087.20	0.00	767.20	2,583.21	8,436.31	2.90
TXND3800	18,020.31	0.53	1,778.91	965.67	23,801.49	0.62
TXCD1500	6,705.87	0.00	242.55	(760.06)	7,189.61	(2.46)
TXED400	1,473.48	0.00	253.64	67.91	2,683.61	1.45
WID145	841.26	2.71	209.60	151.32	2,850.64	0.58
WID1000	5,920.85	7.17	1,036.61	3,614.15	12,160.58	3.48
NYWD500	2,907.43	5.37	856.27	4,265.48	8,294.14	6.13
NYWD1200	6,599.33	1.29	1,488.96	6,317.48	17,425.76	3.89
NYCD180	891.32	0.00	203.84	110.20	3,093.88	0.24
NYCD675	3,553.30	0.00	968.30	2,376.81	12,599.44	2.75
VTD140	672.43	3.14	9.87	(768.29)	712.85	(6.84)
VTD400	2,149.18	11.34	244.43	(122.57)	4,249.52	0.19
MOGD550	1,471.18	0.00	598.78	2,142.94	4,876.10	6.00
MOGD180	536.42	0.00	188.13	480.37	1,388.74	4.15
FLND550	2,863.49	0.00	406.59	658.42	4,054.22	2.57
FLSD1750	8,847.41	0.00	957.90	1,265.77	11,293.74	2.54

1 Receipts are average annual total cash receipts including government payments, 2016-2020 ($1,000)

2 Payments are average annual total government payments, 2016-2020 ($1,000)

3 NCFI is average annual net cash farm income, 2016-2020 ($1,000)

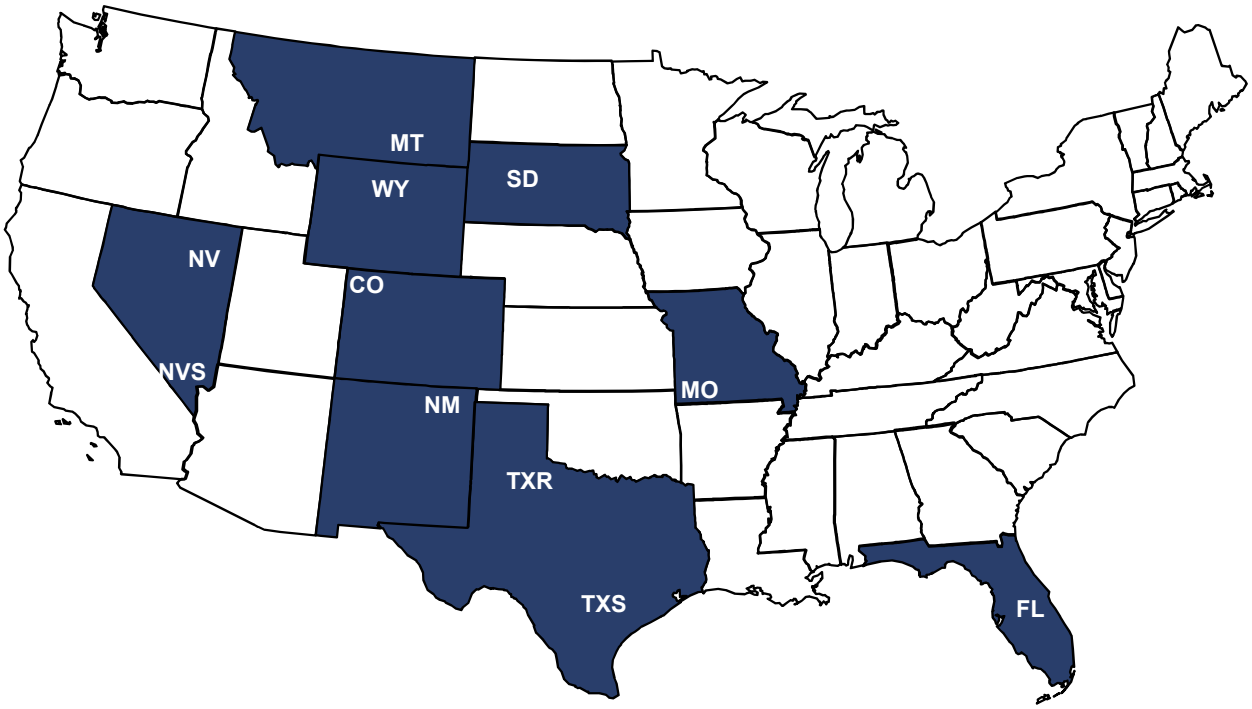
4 Reserve 2020 is average ending cash reserves, 2020 ($1,000)

5 Net Worth 2020 is average nominal ending net worth, 2020 ($1,000)

6 CRNW is average percentage change in real net worth over 2016-2020 period, (%)

Representative Farm: Cow/Calf

- Two of eleven cow-calf operations are projected to be in good overall financial condition, eight are in marginal condition, and one is in poor condition.
- One of the operations will face significant liquidity pressure over the period; however, nine of the operations do face a severe threat of losing real equity.



Characteristics of Panel Farms Producing Beef Cattle, 2015.

	Cropland (acres)	Assets ($1,000)	Debt/Asset (ratio)	Gross Receipts ($1,000)	Cows (number)
NVB650	1,300	8,709.00	0.02	812.60	650
NVSB550	125	3,432.00	0.05	737.80	550
MTB600	0	8,970.00	0.02	672.20	600
WYB475	330	6,630.00	0.02	566.80	435
COB275	650	14,989.00	0.02	406.70	275
NMB240	0	7,738.00	0.01	345.60	240
SDB375	1,150	8,316.00	0.01	456.90	375
MOB250	280	3,668.00	0.03	469.50	250
TXRB400	0	9,059.00	0.01	643.10	400
TXSB275	0	5,497.00	0.02	350.60	275
FLB1155	5,400	26,814.00	0.01	1,194.90	1,155

Representative Farm: Cow/Calf

Economic Viability of Representative Farms over the 2016-2020 Period

Farm Name	Overall Ranking		P(Negative Ending Cash)	P(Real Net Worth Declines)
2/8/1	2016	2020	2016-2020	2016-2020
NVB650			1-1	91-99
NVSB550			1-1	1-1
MTB600			1-1	7-71
WYB475			1-1	40-97
COB275			1-1	99-99
NMB240			1-1	72-99
SDB375			1-21	24-99
MOB250			1-1	1-1
TXRB400			1-10	47-99
TXSB275			1-62	86-99
FLB1155			1-1	46-99

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 2016 and 2020.

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 2014 to 2016 and from 2014 to 2020.

Implications of the January 2016 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Beef Cattle

	Receipts	Payments	NCFI	Reserve 2020	Net Worth 2020	CRNW
	($1,000)	($1,000)	($1,000)	($1,000)	($1,000)	(%)
NVB650	635.58	0.00	235.73	823.43	8,137.09	(0.60)
NVSB550	587.64	0.00	279.95	1,386.66	3,581.70	1.76
MTB600	492.47	0.00	198.90	771.96	8,318.36	(0.65)
WYB475	443.17	0.00	135.19	209.92	5,942.23	(1.13)
COB275	286.65	0.00	105.53	351.41	13,713.64	(1.05)
NMB240	269.72	0.00	130.38	221.07	7,080.94	(1.03)
SDB375	338.02	0.00	118.06	58.71	7,503.34	(1.24)
MOB250	394.34	5.23	209.82	746.06	3,585.00	0.12
TXRB400	492.75	0.00	152.18	120.52	8,226.93	(1.12)
TXSB275	272.09	0.00	80.94	(20.42)	4,885.97	(1.36)
FLB1155	911.15	0.00	354.76	1,745.54	25,311.60	(0.57)

1 Receipts are average annual total cash receipts including government payments, 2016-2020 ($1,000)

2 Payments are average annual total government payments, 2016-2020 ($1,000)

3 NCFI is average annual net cash farm income, 2016-2020 ($1,000)

4 Reserve 2020 is average ending cash reserves, 2020 ($1,000)

5 Net Worth 2020 is average nominal ending net worth, 2020 ($1,000)

6 CRNW is average percentage change in real net worth over 2016-2020 period, (%)

AFPC Briefing Series

The briefing series is designed to facilitate presentation by AFPC related to requests for specific policy impact analyses. The materials included in this package are intended only as visual support for an oral presentation. The user is cautioned against drawing extraneous conclusions from the material. In most instances, an AFPC Working Paper will follow the briefing series. AFPC welcomes comments and discussions of these results and their implications. Address such comments to:

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or call 979-845-5913.

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

Working Paper 16-1

March 2016

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 29 states. The chief purpose of this analysis is to project the economic viability of those farms by region and commodity for 2016 through 2020. The data necessary to simulate the economic activity of these operations is developed through ongoing cooperation with panels of agricultural producers in selected states. The Food and Agricultural Policy Research Institute (FAPRI) provided projected prices, policy variables, and input inflation rates in their January 2016 Baseline.

Under the January 2016 Baseline, 27 of the 63 crop farms are considered in good liquidity condition (less than a 25 percent chance of negative ending cash by 2020). Ten crop farms have between a 25 percent and a 50 percent likelihood of negative ending cash, and the remaining 26 crop farms have greater than a 50 percent chance of negative ending cash. Additionally, 25 of the 63 crop farms are considered in good equity position (less than a 25 percent chance of decreasing real net worth during the study period). Six crop farms have between a 25 percent and 50 percent likelihood of losing real net worth, and 32 crop farms have greater than a 50 percent probability of decreasing real net worth by 2020. The following discussion provides an overall evaluation by commodity considering both liquidity and equity measures.

- FEEDGRAIN FARMS: Ten of the 23 feedgrain farms are in good overall financial condition. Two farms are classified in marginal condition, and eleven are in poor condition.

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

- COTTON FARMS: Three of the 15 cotton farms are classified in good condition, four are in marginal condition, and eight are in poor condition.

- RICE FARMS: Nine of the 14 rice farms are projected to be in good financial condition. One rice farm is projected to be in marginal condition; four are in poor condition.

- DAIRY FARMS: Twelve of the 20 dairies are in good overall financial condition. Four are classified in marginal condition, and four are in poor condition.

- BEEF CATTLE RANCHES: Two of the 11 cattle ranches are classified in good financial condition, eight are in marginal condition, and one is projected to be in poor condition.

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

AFPC Working Paper 16-1

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

The farm level economic impacts of the FAPRI January 2016 Baseline on representative crop and livestock operations are projected in this report. The analysis was conducted over the 2014-2020 planning horizon using FLIPSIM, AFPC's whole farm simulation model. Data to simulate farming operations in the nation's major production regions came from two sources:

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

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

The FLIPSIM policy simulation model incorporates the historical risk faced by farmers for prices and production. This report presents the results of the January 2016 Baseline in a risk context using selected simulated probabilities and ranges for annual net cash farm income values. The probability of a farm experiencing negative ending cash reserves and the probability of a farm losing real net worth are included as indicators of the cash flow and equity risks facing farms through the year 2020.

This report is organized into ten sections. The first section summarizes the process used to develop the representative farms and the key assumptions utilized for the farm level analysis. The second section summarizes the FAPRI January 2016 Baseline and the policy and price assumptions used for the representative farm analyses. The third through sixth sections present the results of the simulation analyses for feed grain, wheat, cotton, and rice farms. The seventh and eighth sections summarize simulation results for dairy and cattle. Two appendices constitute the final sections of the report. Appendix A provides tables to summarize the physical and financial characteristics for each of the representative farms. Appendix B provides the names of producers, land grant faculty, and industry leaders who cooperated in the panel interview process to develop the representative farms.

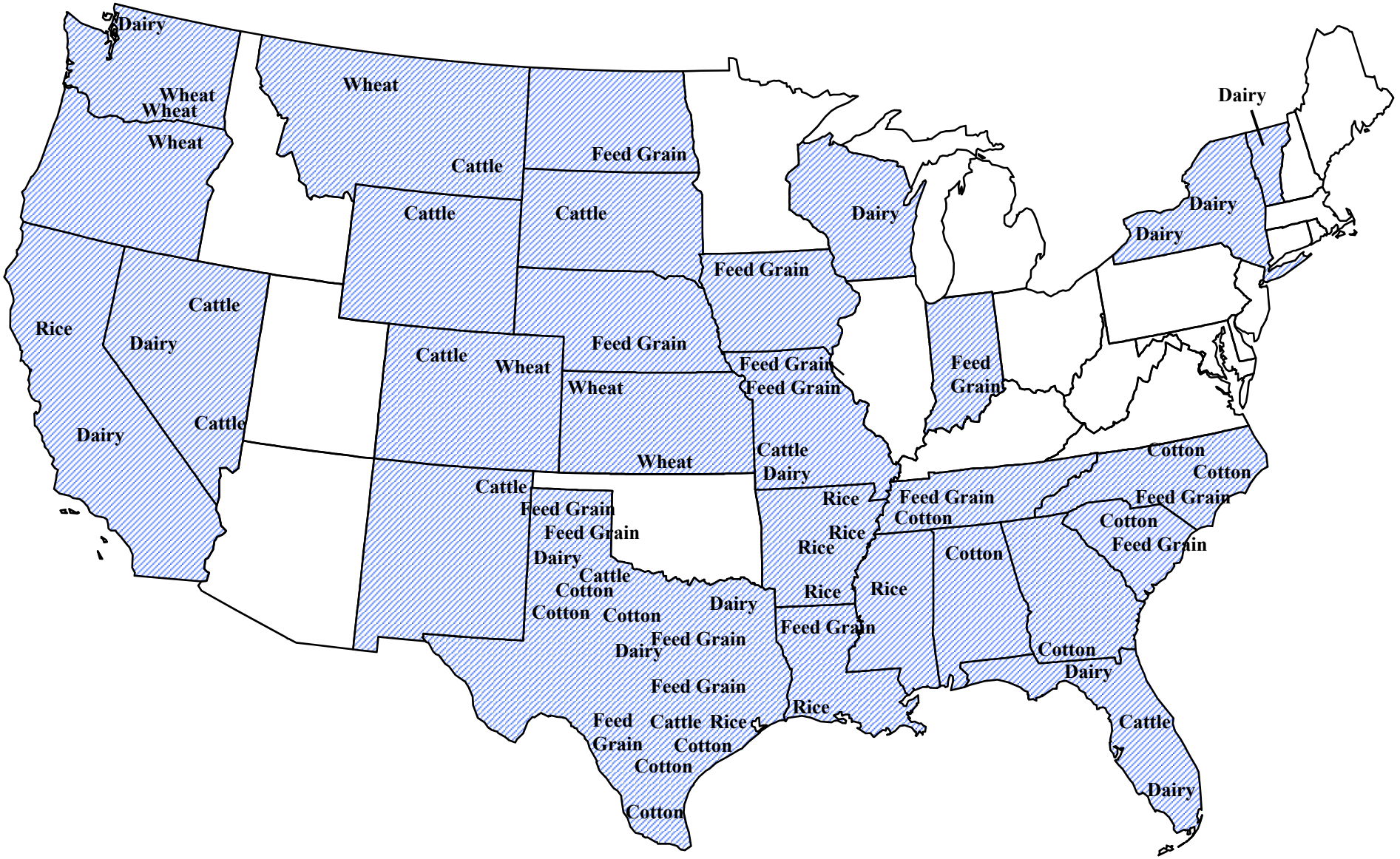
Panel Process

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

All farms used in the analysis have been updated through panel discussions since February 2010, with the majority being updated in the last two years. All of the crop farms are assumed to begin 2014 with 20 percent intermediate-term and long-term debt. Initial debt levels in 2014 for dairy farms were set at 30 percent and initial debt levels for beef cattle ranches were 1 percent for land and 5 percent for cattle and machinery. The debt levels the farms have at the outset of 2014 are based on a stratified tabulation of the ERS-USDA Farm Cost and Returns Survey (using the survey data for moderate to large size farms in states where AFPC has representative farms) and panel member input.

Figure 1. Representative Farms and Ranches



Key Assumptions of Report

- All farms classified as moderate scale are the size (acres or number of livestock) considered to be representative of a majority of full-time commercial farming operations in the study area. In many regions, a second farm two to three times larger than the moderate scale farm is developed as an indicator of size economies.

- The farm level simulation model incorporates price and yield risk faced by farmers. Historical yield variability for crops and production for livestock (sale weights, birth rates, and milk per cow) over the past ten years are assumed to prevail for the planning horizon. Random crop, livestock, and milk prices are simulated using the January 2016 Baseline by FAPRI as the forecast of average prices. Prices reflect national price volatility caused by international production and demand as well as U.S. production risk.

- Historical crop yields (2014-2015) were held constant based on actual values obtained from the producers. Crop yields for 2016-2020 were simulated stochastically based on the average yields provided by the producers and the historical yield variability for the farm. Prices were held constant at producer-provided values for 2014. FAPRI's January 2016 Baseline prices were localized for the farms and used as the average prices for 2015-2020 to simulate stochastic crop and livestock prices.

- Dairy and beef cattle herd sizes were held constant for all farms over the 2016-2020 planning horizon.

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

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

- No off-farm income, including family employment, was included in the analyses. Therefore, the farm reflects only the ability of the farm to provide for family living and capital replacement.

- Farm program parameters, average annual prices, crop and livestock yield trends, interest rates, and input cost inflation (deflation) are based on the January 2016 FAPRI Baseline which incorporates the provisions of the 2014 Farm Bill.

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

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

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

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

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

Table 1. FAPRI January 2016 Baseline Projections of Crop Prices, Loan Rates, and Reference Prices, 2014-2020

	2014	2015	2016	2017	2018	2019	2020
Crop Prices							
Corn ($/bu.)	3.70	3.60	3.75	3.83	3.92	3.96	3.98
Wheat ($/bu.)	5.99	4.99	4.96	5.00	5.22	5.33	5.39
Cotton ($/lb.)	0.6130	0.5923	0.5716	0.6046	0.6372	0.6442	0.6437
Sorghum ($/bu.)	4.03	3.34	3.47	3.54	3.61	3.65	3.68
Soybeans ($/bu.)	10.10	8.82	8.76	9.38	9.41	9.71	9.85
Barley ($/bu.)	5.30	5.31	4.40	4.51	4.68	4.80	4.83
Oats ($/bu.)	3.21	2.18	2.45	2.44	2.47	2.48	2.50
Rice ($/cwt.)	13.30	12.80	13.49	13.59	13.95	14.19	14.19
Soybean Meal ($/ton)	351	284	297	315	314	322	323
All Hay ($/ton)	172	149	149	157	162	165	166
Peanuts ($/ton)	440	369	354	352	354	360	366
Loan Rates							
Corn ($/bu.)	1.95	1.95	1.95	1.95	1.95	1.95	1.95
Wheat ($/bu.)	2.94	2.94	2.94	2.94	2.94	2.94	2.94
Cotton ($/lb.)	0.5200	0.5200	0.4850	0.4732	0.4837	0.5164	0.5200
Sorghum ($/bu.)	1.95	1.95	1.95	1.95	1.95	1.95	1.95
Soybeans ($/bu.)	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Barley ($/bu.)	1.95	1.95	1.95	1.95	1.95	1.95	1.95
Oats ($/bu.)	1.39	1.39	1.39	1.39	1.39	1.39	1.39
Rice ($/cwt.)	6.50	6.50	6.50	6.50	6.50	6.50	6.50
Peanuts ($/ton)	355.00	355.00	355.00	355.00	355.00	355.00	355.00
Reference Prices							
Corn ($/bu.)	3.70	3.70	3.70	3.70	3.70	3.70	3.70
Wheat ($/bu.)	5.50	5.50	5.50	5.50	5.50	5.50	5.50
Cotton ($/lb.)	0	0	0	0	0	0	0
Sorghum ($/bu.)	3.95	3.95	3.95	3.95	3.95	3.95	3.95
Soybeans ($/bu.)	8.40	8.40	8.40	8.40	8.40	8.40	8.40
Barley ($/bu.)	4.95	4.95	4.95	4.95	4.95	4.95	4.95
Oats ($/bu.)	2.40	2.40	2.40	2.40	2.40	2.40	2.40
Rice ($/cwt.)	14	14	14	14	14	14	14
Peanuts ($/ton)	535	535	535	535	535	535	535

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

Table 2. FAPRI January 2016 Baseline Projections of Livestock and Milk Prices, 2014-2020

	2014	2015	2016	2017	2018	2019	2020
Cattle Prices							
Feeder Cattle ($/cwt)	225.07	226.52	193.87	171.06	159.33	155.48	159.66
Fed Cattle ($/cwt)	154.56	148.12	133.16	122.70	118.06	116.85	119.70
Culled Cows ($/cwt)	104.09	99.76	84.69	75.31	70.71	69.90	72.89
Milk Prices -- National and State							
All Milk Price ($/cwt)	24.07	17.13	15.85	16.88	17.62	18.01	18.21
California ($/cwt)	22.12	15.26	14.44	15.51	16.19	16.58	16.76
Florida ($/cwt)	28.20	21.29	19.48	20.26	21.00	21.41	21.61
Idaho ($/cwt)	23.10	16.74	14.98	15.82	16.56	16.96	17.16
Missouri ($/cwt)	24.60	17.53	16.09	17.11	17.85	18.25	18.45
Nevada ($/cwt)	24.80	17.81	16.46	17.50	18.24	18.64	18.84
New York ($/cwt)	25.40	18.11	16.90	17.99	18.74	19.13	19.33
Texas ($/cwt)	24.60	17.64	16.24	17.26	18.00	18.40	18.61
Vermont ($/cwt)	25.50	18.20	17.00	18.09	18.84	19.23	19.42
Washington ($/cwt)	24.70	17.25	16.21	17.34	18.09	18.47	18.66
Wisconsin ($/cwt)	24.50	17.67	16.21	17.21	17.94	18.35	18.56

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

Table 3. FAPRI January 2016 Baseline Assumed Rates of Change in Input Prices, Annual Interest Rates, and Annual Changes in Land Values, 2015-2020

	2015	2016	2017	2018	2019	2020
Annual Rate of Change for Input Prices Paid						
Seed Prices (%)	0.00	-1.56	-1.68	-0.22	1.26	2.08
All Fertilizer Prices (%)	-10.82	-10.06	-3.81	5.73	4.88	4.00
Herbicide Prices (%)	-3.41	-5.22	5.91	6.56	5.54	4.72
Insecticide Prices (%)	-6.58	-5.14	3.96	5.33	4.66	3.89
Fuel and Lube Prices (%)	-34.69	-10.24	12.93	13.08	8.56	7.09
Machinery Prices (%)	3.60	-1.81	2.36	4.05	4.06	3.60
Wages (%)	3.55	2.45	3.09	3.34	3.40	3.36
Supplies (%)	0.16	0.57	1.76	2.08	1.87	1.68
Repairs (%)	-0.47	0.73	2.67	3.03	2.81	2.62
Services (%)	2.60	1.27	2.65	3.28	3.36	3.23
Taxes (%)	1.90	1.10	1.68	0.74	1.40	1.93
PPI Items (%)	-3.39	-4.28	0.58	1.80	2.01	2.34
PPI Total (%)	-2.75	-3.31	0.93	2.02	2.18	2.40
Annual Change in Consumer Price Index (%)	0.13	1.21	2.56	2.68	2.54	2.50
Annual Rate of Change for U.S. Land Prices (%)	2.37	-3.22	-1.72	-0.82	-0.80	-0.38

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

FAPRI JANUARY 2016 BASELINE

Projected crop prices for FAPRI's January 2016 Baseline are summarized in Table 1. Cotton, corn, wheat, sorghum, and soybean expected prices all decline in 2015. From 2015-2020, prices are projected to mildly increase. Individual crop prices are projected to move as follows:

- Corn prices are projected to decline to $3.60/bu in 2015 before increasing slightly in the latter projected years and ending at 3.98/bu in 2020.
- Wheat prices are not projected to bottom until 2016 at $4.96/bu. Prices are expected to then rise to $5.39/bu by 2020.
- Cotton prices are not expected to rise above the $0.60/lb until 2017 when they reach $0.6046/lb and peak in 2019 at $0.6442/lb.
- Rice prices oscillate in the mid $13/cwt range before slowly increasing and end 2020 at $14.19/cwt.
- Sorghum prices decline from a high of $4.03/bu. in 2014, ending the projection period at $3.68/bu.
- Prices for Soybeans are expected to fall from $10.10/bu. in 2014 to a low of $8.76/bu in 2016 and finish 2020 at $9.85/bu.

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

Projected livestock prices and state and national milk prices for FAPRI's January 2016 Baseline are summarized in Table 2. Feeder cattle prices are expected to see growth until 2015, while milk prices are projected to peak in 2014. Cattle and milk prices are projected to move as follows:

- Feeder cattle prices are projected to reach a high of $226.52/cwt in 2015 and then fall to $155.48/cwt in 2019 before ending at $159.66/cwt in 2020.
- Fed cattle prices are expected to decrease from the high in 2014 of $154.56/cwt, ending 2020 at $119.70/cwt.
- Culled cow prices range between $69.90/cwt and $104.09/cwt.
- Milk prices are expected to range from $15.85/cwt to $24.07/cwt for the 2014-2020 study period.

Projected annual rates of change for variable cash expenses are summarized in Table 3. The rates of change in input prices come from FAPRI's January 2016 Baseline. Fertilizer prices are projected to decline in 2015-2017 before increasing in 2018. Fuel prices are projected to decline sharply in 2015 and another 10 percent in 2016 before reversing course and increasing at approximately 7-13 percent annually through 2020. Projected annual rates of change in land values over the 2015 – 2020 period were provided by the January 2016 FAPRI Baseline and exhibit an overall decline after an increase in 2015.

Definitions of Variables in the Summary Tables

- **Overall Financial Position, 2016-2020 --** As a means of summarizing the representative farms' economic efficiency, liquidity, and solvency position, AFPC classifies each farm as being in either a good, marginal or poor position. AFPC assumes a farm is in a good financial position when it has less than a 25 percent chance of a negative ending cash balance and a less than 25 percent chance of losing real net worth. If the probabilities of these events are between 25 and 50 percent the farm is classified as marginal. A probability greater than 50 percent places the farm in a poor financial position.

- **Change in Real Net Worth, 2016-2020 --** Annualized percentage change in the operator's net worth from January 1, 2016 through December 31, 2020, after adjusting for inflation. This value reflects the real annualized increase or decrease in net worth or equity for the farm over the planning horizon including changes in real estate values.

- **Net Income Adjustment (NIA) to Maintain Real Net Worth, 2016-2020 --** NIA is the annual change in net cash farm income necessary to insure the farm maintains its real net worth during 2016-2020. A positive NIA indicates the additional annual net income needed to maintain real net worth. A negative NIA indicates the annual loss in net income the farm can endure and still maintain real net worth.

- **Net Income Adjustment (NIA) for Zero Ending Cash Balance in 2020 --** NIA is the loss in annual net cash farm income a farm can withstand and have a zero ending cash balance in 2020. A positive NIA indicates the annual increase in receipts necessary for a zero ending cash balance, while a negative NIA indicates the annual decrease in receipts that results in a zero ending cash balance.

- **Government Payments/Receipts, 2016-2020 --** Sum of all farm program payments (PLC or ARC and marketing loan gains/loan deficiency payments) divided by total receipts received from the market plus PLC or ARC, marketing loan gains/loan deficiency payments, Dairy Margin Protection Plan (DMPP) payments, crop insurance indemnities, and other farm related receipts.

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

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

- **Net Cash Farm Income --** Equals total cash receipts minus all cash expenses. Net cash farm income is used to pay family living expenses, principal payments, income taxes, self employment taxes, and machinery replacement costs. The values in the tables are the averages for each year in the planning horizon.

- **Probability of Negative Ending Cash Balance --** The number of times out of 100 that the farm's ending cash reserves before borrowing are less than zero. This probability is reported for each year to indicate how the cash flow risk for the farm changes over the planning horizon.

- **Ending Cash Reserves --** Equals total cash on hand at the end of the year. Ending cash equals beginning cash reserves plus net cash farm income and interest earned on cash reserves less principal payments, federal taxes (income and self employment), state income taxes, family living withdrawals, and actual machinery replacement costs (not depreciation).

- **Nominal Net Worth --** Equity at the end of each year equals total assets including land minus total debt from all sources. Nominal net worth is not adjusted for inflation and averages are reported for each year in the planning horizon.

- **Probability of Decreasing Real Net Worth Over 2014-2020 --** The number of times out of 100 that real net worth at the end of 2020 is less than real net worth at the start of 2014.

Figure 2. Representative Farms Producing Feed Grains and Oilseeds

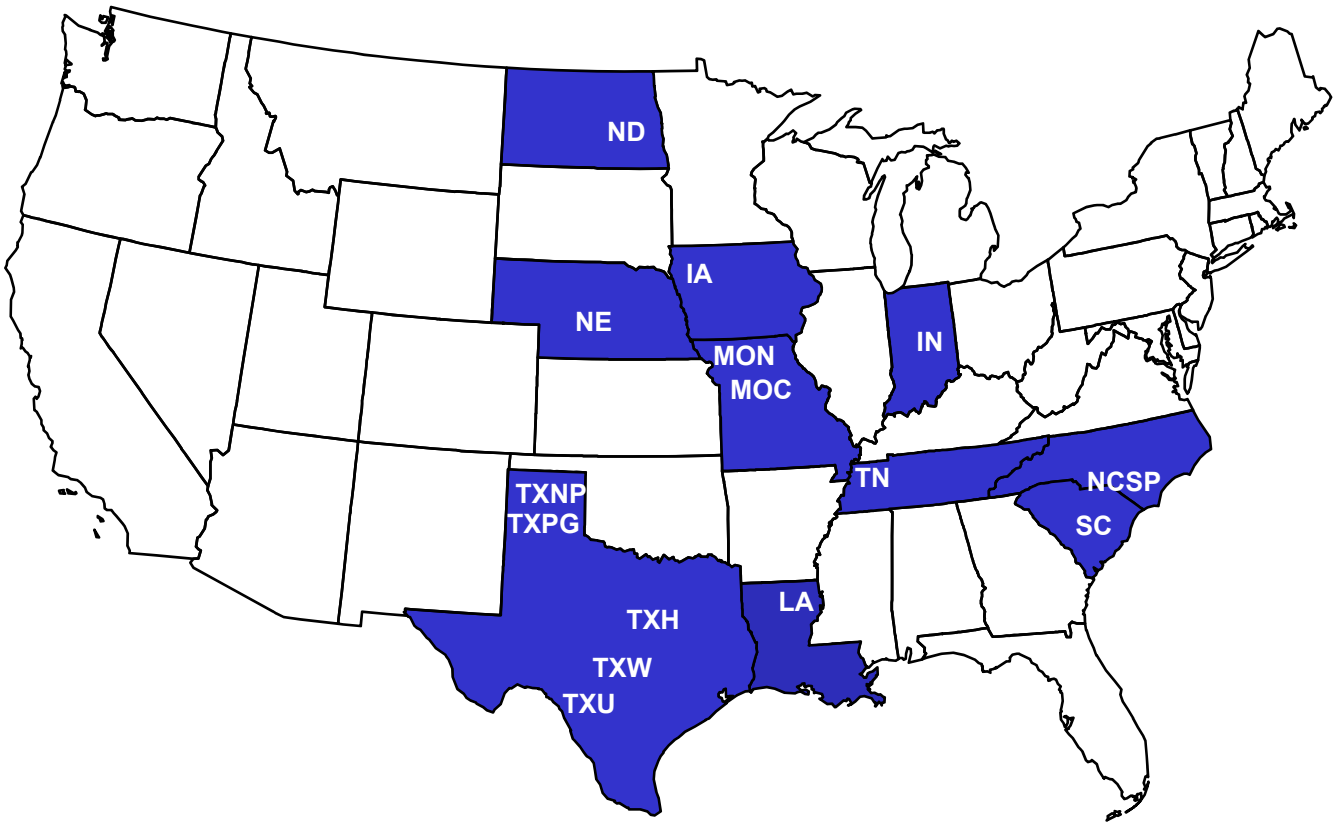


Table 4. Implications of the January 2016 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Feed Grains and Oilseeds.

	IAG1350	IAG3400	NEG2400	NEG4300	NDG3000	NDG8000	ING1000	ING2200
Overall Financial Position 2016-2020 Average	Poor	Poor	Poor	Poor	Poor	Good	Good	Marginal
Change Real Net Worth (%) 2016-2020 Average	-3.40	-2.30	-0.90	-0.97	-0.25	1.29	0.92	0.28
NIA to Maintain Real Net Worth (%/Rec.)	21.33	17.03	4.08	9.73	2.30	-6.47	-3.80	2.84
NIA for Zero Ending Cash Balance (%/Rec.)	27.44	19.35	-4.67	-1.17	-4.09	-24.29	-11.17	0.32
Govt Payments/Receipts (%) 2016-2020 Average	4.00	4.32	3.79	3.46	4.17	4.06	3.99	3.75
Cost to Receipts Ratio (%) 2016-2020 Average	104.33	99.40	91.59	90.73	86.66	72.78	68.21	81.18
Total Cash Receipts ($1000)								
2014	926.23	2,111.89	1,718.60	3,271.95	1,117.82	3,334.48	616.84	1,481.37
2015	917.82	2,095.86	1,765.04	3,311.21	1,110.47	3,278.80	534.33	1,292.85
2016	964.19	2,204.63	1,816.65	3,420.18	1,168.21	3,390.15	562.37	1,354.65
2017	974.28	2,227.76	1,826.65	3,446.67	1,201.26	3,514.06	604.86	1,450.76
2018	967.93	2,206.21	1,805.24	3,421.33	1,201.93	3,549.55	610.74	1,464.14
2019	985.06	2,245.27	1,829.48	3,465.64	1,229.14	3,631.57	623.06	1,491.98
2020	993.96	2,265.31	1,835.57	3,471.60	1,239.39	3,661.18	628.94	1,507.02
2016-2020 Average	977.08	2,229.84	1,822.72	3,445.08	1,207.98	3,549.30	605.99	1,453.71
Government Payments ($1000)								
2014	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2015	71.60	168.07	157.39	260.26	59.91	138.99	6.22	14.34
2016	86.62	211.60	161.37	272.24	91.89	218.15	20.20	45.40
2017	49.50	122.65	90.06	156.09	62.51	176.78	30.78	70.01
2018	22.51	56.58	39.05	68.77	36.17	117.74	25.66	58.19
2019	14.47	36.48	22.09	40.25	26.55	91.43	20.55	47.03
2020	12.86	32.06	18.80	33.63	21.50	75.95	19.49	44.61
2016-2020 Average	37.19	91.87	66.28	114.19	47.72	136.01	23.34	53.05
Net Cash Farm Income ($1000)								
2014	-71.28	-50.21	5.69	111.72	58.91	656.74	177.23	266.24
2015	-23.16	24.99	188.84	375.37	111.85	757.16	129.27	154.52
2016	39.05	169.91	296.74	557.14	203.01	963.69	174.77	251.80
2017	33.31	165.79	285.03	529.30	220.55	1,090.07	213.04	338.43
2018	-4.03	86.67	212.11	417.61	194.74	1,071.68	213.06	328.59
2019	-19.99	73.59	181.66	379.80	198.36	1,093.18	221.60	325.10
2020	-43.26	35.77	133.90	297.57	185.94	1,055.31	219.86	319.70
2016-2020 Average	1.02	106.35	221.89	436.28	200.52	1,054.79	208.47	312.72
Ending Cash Reserves ($1000)								
2014	-133.96	80.91	912.30	1,789.05	514.12	2,923.96	263.50	646.80
2015	-411.91	-434.59	813.08	1,519.55	378.62	2,883.40	205.32	393.84
2016	-623.49	-836.72	807.15	1,317.45	367.56	2,976.08	199.46	224.84
2017	-786.85	-1,176.66	862.82	1,236.69	376.73	3,385.63	227.15	171.20
2018	-987.29	-1,532.24	803.80	935.39	351.74	3,670.50	225.55	83.59
2019	-1,216.62	-1,897.74	655.73	650.84	317.00	4,054.98	233.78	29.66
2020	-1,452.81	-2,339.40	455.71	217.61	251.43	4,318.77	242.95	-24.03
Nominal Net Worth ($1000)								
2014	5,176.40	12,730.96	6,002.73	21,292.22	3,511.16	22,631.47	3,143.16	8,736.80
2015	4,985.28	12,403.46	5,948.02	21,218.79	3,521.44	23,382.60	3,152.12	8,658.88
2016	4,689.93	11,843.12	5,905.52	20,716.15	3,475.85	23,239.92	3,129.56	8,441.80
2017	4,493.74	11,469.79	5,909.32	20,453.75	3,477.03	23,547.33	3,171.03	8,429.07
2018	4,318.80	11,251.34	5,869.34	20,282.37	3,479.13	23,961.03	3,213.95	8,479.50
2019	4,131.22	10,953.06	5,788.56	20,154.09	3,481.72	24,582.48	3,274.14	8,590.62
2020	3,946.60	10,618.80	5,713.34	19,962.81	3,478.78	25,058.96	3,313.19	8,669.13
Prob. of Negative Ending Cash (%)								
2015	99	99	1	1	1	1	1	1
2016	99	96	1	1	2	1	1	16
2017	99	95	4	9	12	1	5	32
2018	99	95	10	21	22	1	7	44
2019	99	96	20	32	26	1	6	51
2020	99	97	30	45	32	1	9	51
Prob. of Decreasing Real Net Worth Over 2014-2020 (%)	1	1	1	1	1	1	1	1

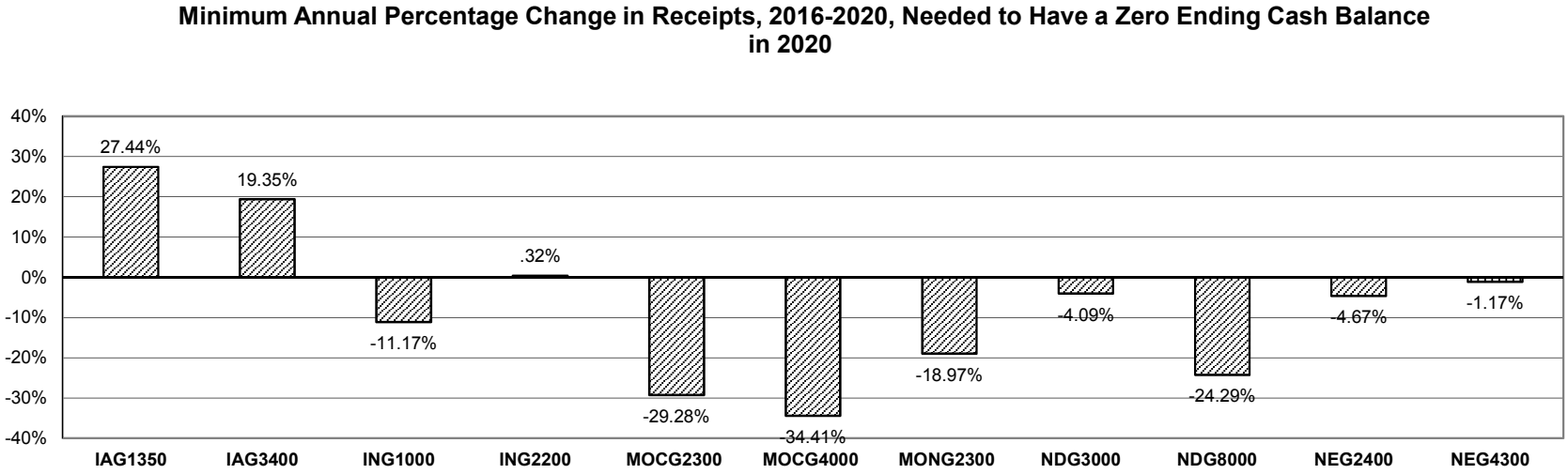
Table 5. Implications of the January 2016 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Feed Grains and Oilseeds.

	MOCG2300	MOCG4000	MONG2300	LAG2640	LANG2500	TNG900	TNG2200	NCSP1800	SCG3500
Overall Financial Position									
2016-2020 Average	Good	Good	Good	Poor	Good	Poor	Poor	Poor	Good
Change Real Net Worth (%)									
2016-2020 Average	1.77	2.10	1.12	-0.69	1.79	-0.16	0.22	-4.44	1.03
NIA to Maintain Real									
Net Worth (%/Rec.)	-20.29	-23.04	-4.15	0.00	-6.50	3.32	2.42	16.02	-2.16
NIA for Zero Ending									
Cash Balance (%/Rec.)	-29.28	-34.41	-18.97	1.26	-14.73	6.18	5.57	18.16	-12.41
Govt Payments/Receipts (%)									
2016-2020 Average	3.36	3.22	3.37	4.14	4.74	2.48	3.58	10.37	6.48
Cost to Receipts Ratio (%)									
2016-2020 Average	52.45	53.57	73.74	93.83	77.94	76.85	80.44	100.56	83.05
Total Cash Receipts ($1000)									
2014	1,249.45	1,977.59	1,779.47	1,657.20	1,817.43	442.77	943.95	986.65	2,339.85
2015	1,375.38	2,087.25	1,601.20	1,608.40	1,816.14	445.85	962.51	1,039.57	2,172.90
2016	1,425.18	2,162.46	1,585.03	1,680.45	1,913.09	449.32	961.73	1,118.94	2,239.06
2017	1,512.77	2,292.78	1,628.53	1,728.67	1,937.03	475.11	1,020.02	1,140.76	2,309.20
2018	1,529.60	2,317.94	1,621.18	1,745.08	1,967.08	482.94	1,031.92	1,155.40	2,355.71
2019	1,562.56	2,362.64	1,642.83	1,784.51	1,992.03	496.13	1,057.18	1,178.91	2,406.20
2020	1,577.78	2,383.22	1,659.03	1,812.78	2,006.25	503.84	1,073.26	1,189.68	2,443.59
2016-2020 Average	1,521.58	2,303.81	1,627.32	1,750.30	1,963.10	481.47	1,028.82	1,156.74	2,350.75
Government Payments ($1000)									
2014	0.00	0.00	0.00	10.65	11.16	0.00	0.00	0.00	41.33
2015	41.05	61.85	46.69	83.47	92.14	26.39	74.71	84.16	139.38
2016	52.05	78.43	56.32	124.25	140.78	15.87	47.53	133.53	198.26
2017	62.26	93.82	66.73	81.91	102.26	15.64	48.38	122.25	162.37
2018	49.84	74.54	55.43	54.92	86.95	10.39	34.03	112.10	134.47
2019	41.26	57.33	45.59	42.74	68.43	7.42	23.27	110.01	117.49
2020	37.90	49.70	40.81	37.77	65.42	7.22	22.34	105.37	117.71
2016-2020 Average	48.66	70.76	52.98	68.32	92.77	11.31	35.11	116.65	146.06
Net Cash Farm Income ($1000)									
2014	392.85	669.89	517.42	-25.37	174.20	67.47	68.15	-167.83	297.64
2015	574.10	874.63	426.66	77.92	338.42	93.36	155.18	-50.24	257.01
2016	656.56	1,002.25	440.21	205.03	484.40	112.81	192.30	68.25	392.82
2017	752.23	1,131.48	485.14	215.51	487.29	128.80	250.38	64.49	449.31
2018	767.62	1,132.93	453.82	173.82	467.31	127.83	243.89	28.93	449.85
2019	792.01	1,159.73	460.39	143.74	448.25	128.50	242.39	-13.66	456.13
2020	807.64	1,161.13	459.59	105.79	405.89	130.47	230.73	-46.99	431.70
2016-2020 Average	755.21	1,117.50	459.83	168.78	458.63	125.68	231.94	20.20	435.96
Ending Cash Reserves ($1000)									
2014	806.60	1,154.53	1,103.68	169.27	942.95	117.04	336.12	315.05	1,425.37
2015	914.16	1,440.88	1,195.45	59.02	980.43	-2.63	112.42	-26.44	1,269.78
2016	1,033.72	1,645.22	1,192.87	24.49	1,053.65	-67.57	-81.13	-265.86	1,235.70
2017	1,244.82	1,982.29	1,322.14	42.05	1,247.46	-120.77	-133.20	-427.21	1,318.66
2018	1,378.02	2,312.95	1,391.18	25.44	1,401.21	-156.67	-226.64	-661.05	1,367.49
2019	1,612.78	2,685.22	1,447.35	-20.83	1,522.11	-176.90	-257.93	-920.85	1,437.51
2020	1,743.58	3,041.72	1,468.32	-122.80	1,555.91	-169.66	-318.89	-1,172.06	1,523.11
Nominal Net Worth ($1000)									
2014	13,821.68	19,003.97	9,614.22	1,526.24	7,821.41	1,968.37	4,052.57	3,917.76	10,251.77
2015	14,166.81	19,602.18	9,976.32	1,452.43	7,959.03	1,964.42	4,043.67	3,720.74	10,490.21
2016	14,155.76	19,588.61	9,844.56	1,486.39	8,008.32	1,910.66	3,907.89	3,514.28	10,337.01
2017	14,419.66	19,966.92	9,934.46	1,532.22	8,189.90	1,873.80	3,893.26	3,352.26	10,408.49
2018	14,751.75	20,571.09	10,090.21	1,547.55	8,418.98	1,865.73	3,891.85	3,163.29	10,555.65
2019	15,222.84	21,236.50	10,302.96	1,564.85	8,648.88	1,885.70	3,987.27	2,977.85	10,755.63
2020	15,600.05	21,920.55	10,525.90	1,492.45	8,834.58	1,921.56	4,003.65	2,772.61	11,007.49
Prob. of Negative Ending Cash (%)									
2015	1	1	1	49	1	53	1	84	1
2016	1	1	1	49	1	79	69	93	1
2017	1	1	1	50	1	81	71	95	1
2018	1	1	1	51	1	82	74	97	1
2019	1	1	1	51	1	79	74	99	2
2020	1	1	1	57	1	76	74	99	4
Prob. of Decreasing Real Net Worth									
Over 2014-2020 (%)	1	1	1	1	1	1	1	1	1

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

	TXNP3000	TXNP10000	TXPG2500	TXHG2500	TXWG1600	TXUG1600
Overall Financial Position 2016-2020 Average	Marginal	Good	Good	Poor	Poor	Marginal
Change Real Net Worth (%) 2016-2020 Average	0.77	4.18	3.06	-15.37	-8.55	4.08
NIA to Maintain Real Net Worth (%/Rec.)	-2.69	-19.04	-8.98	30.08	19.73	-4.17
NIA for Zero Ending Cash Balance (%/Rec.)	-2.83	-29.15	-9.45	49.39	24.97	-8.79
Govt Payments/Receipts (%) 2016-2020 Average	5.34	4.64	5.16	9.71	7.70	7.93
Cost to Receipts Ratio (%) 2016-2020 Average	87.69	71.42	75.10	113.02	102.51	85.76
Total Cash Receipts ($1000)						
2014	1,481.27	5,464.14	1,623.93	627.49	706.37	1,343.95
2015	1,579.36	5,565.68	1,553.26	613.30	495.86	1,341.07
2016	1,634.42	5,760.02	1,638.61	680.32	526.12	1,341.36
2017	1,634.71	5,743.82	1,723.64	692.94	542.19	1,323.60
2018	1,644.13	5,752.36	1,760.24	700.19	546.95	1,345.58
2019	1,658.15	5,780.51	1,778.67	709.52	552.34	1,362.15
2020	1,669.08	5,814.06	1,787.61	709.73	556.19	1,376.79
2016-2020 Average	1,648.10	5,770.15	1,737.75	698.54	544.76	1,349.89
Government Payments ($1000)						
2014	14.11	57.16	8.94	5.56	11.87	61.99
2015	102.71	351.54	14.52	13.99	11.26	136.72
2016	140.98	468.52	65.83	74.53	42.78	170.66
2017	98.44	311.65	102.34	72.33	44.88	106.47
2018	69.89	197.47	100.25	65.99	41.68	84.49
2019	59.77	155.69	89.78	63.26	39.10	76.91
2020	57.70	158.84	87.07	60.78	38.65	81.96
2016-2020 Average	85.36	258.44	89.05	67.38	41.42	104.10
Net Cash Farm Income ($1000)						
2014	-63.46	1,076.88	197.62	-105.55	152.58	142.87
2015	236.77	1,588.73	328.71	-98.50	-14.84	229.46
2016	358.86	1,982.52	479.73	-25.51	23.18	260.93
2017	304.96	1,899.02	511.97	-27.20	15.19	222.41
2018	225.48	1,759.05	479.28	-56.74	1.23	191.09
2019	166.89	1,635.47	443.28	-103.54	-14.27	177.70
2020	95.76	1,530.70	397.94	-148.37	-43.91	154.29
2016-2020 Average	230.39	1,761.35	462.44	-72.27	-3.72	201.28
Ending Cash Reserves ($1000)						
2014	104.97	3,416.28	264.81	-252.61	142.06	377.11
2015	178.29	4,018.44	260.32	-579.17	-14.66	444.26
2016	349.95	4,786.54	376.96	-837.77	-132.58	515.56
2017	476.56	5,613.26	549.13	-1,045.07	-250.09	594.22
2018	511.66	6,361.09	647.75	-1,306.54	-389.77	593.90
2019	457.66	7,029.77	782.99	-1,611.83	-544.40	624.97
2020	247.66	7,504.44	839.34	-1,970.51	-767.35	564.60
Nominal Net Worth ($1000)						
2014	1,830.73	15,319.92	4,236.61	1,691.21	1,314.53	752.06
2015	1,965.96	16,599.47	4,416.30	1,462.02	1,240.12	823.45
2016	2,148.57	17,489.64	4,566.23	1,235.72	1,130.39	912.06
2017	2,285.18	18,467.59	4,748.41	1,035.76	1,006.06	979.76
2018	2,343.59	19,620.02	4,933.02	815.64	900.50	1,029.34
2019	2,340.60	20,570.45	5,201.68	577.55	793.09	1,082.38
2020	2,265.55	21,412.96	5,327.90	294.77	657.26	1,112.47
Prob. of Negative Ending Cash (%)						
2015	3	1	2	99	76	1
2016	5	1	4	99	96	1
2017	6	1	5	99	98	1
2018	9	1	4	99	99	1
2019	16	1	4	99	99	1
2020	31	1	5	99	99	2
Prob. of Decreasing Real Net Worth Over 2014-2020 (%)	1	1	1	1	1	1

Figure 3. Feed Grain and Oilseed Farms



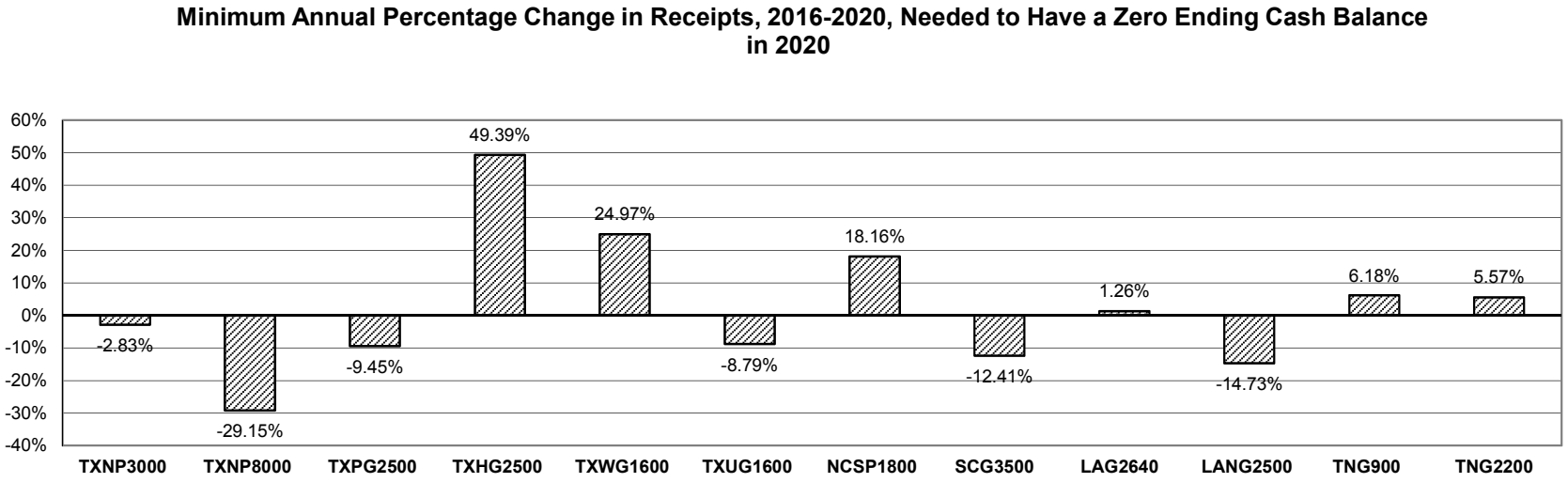


Figure 4. Feed Grain and Oilseed Farms

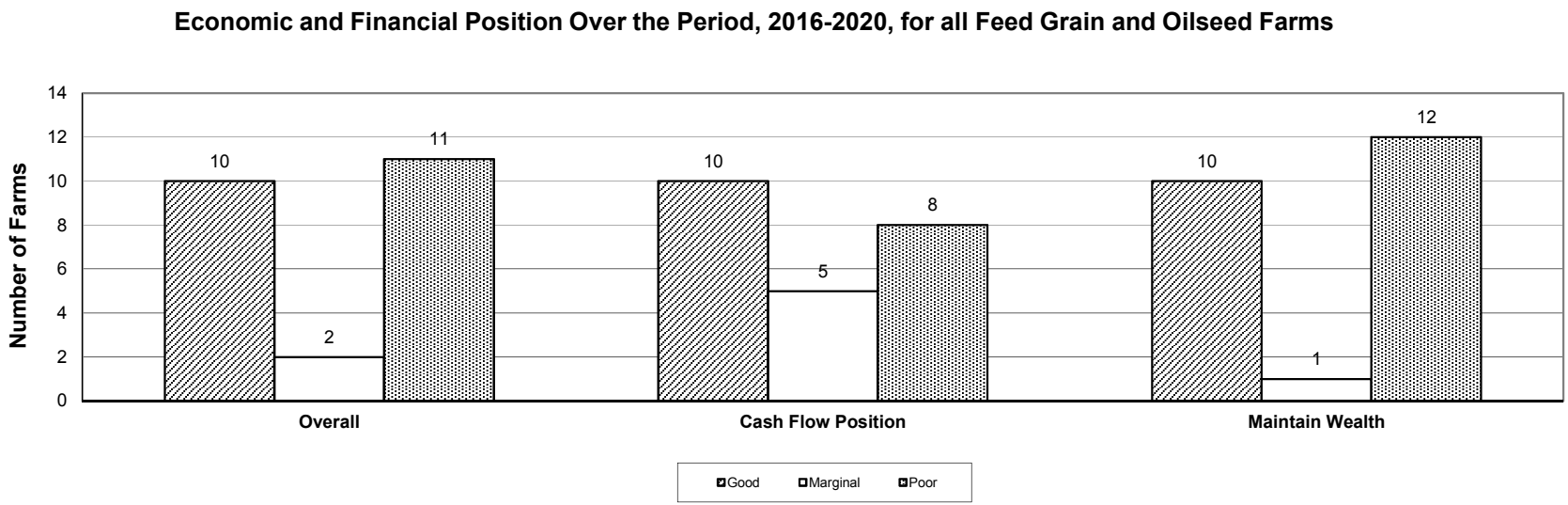


Figure 5. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Feed Grain and Oilseed Farms

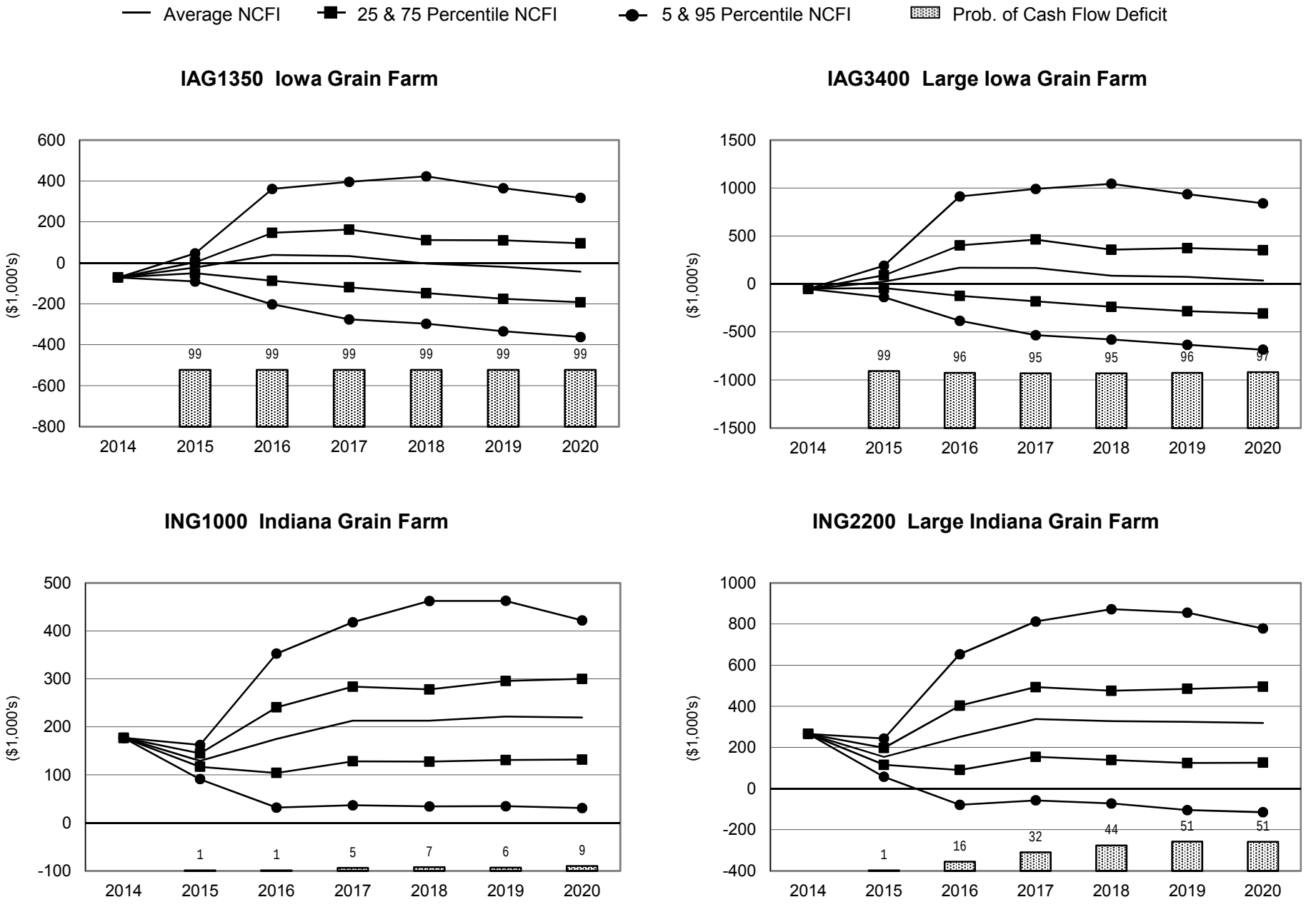


Figure 6. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Feed Grain and Oilseed Farms

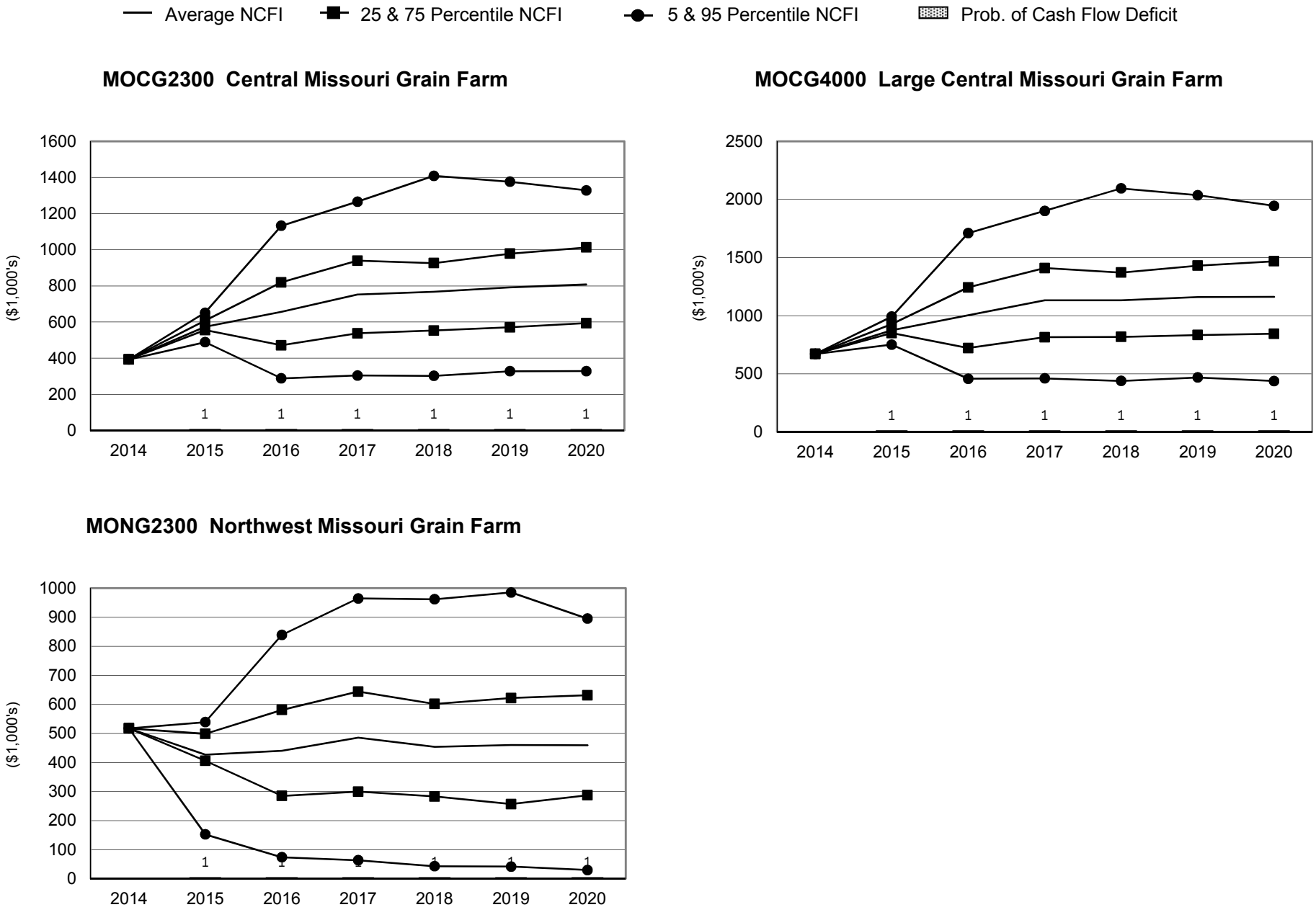


Figure 7. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Feed Grain and Oilseed Farms

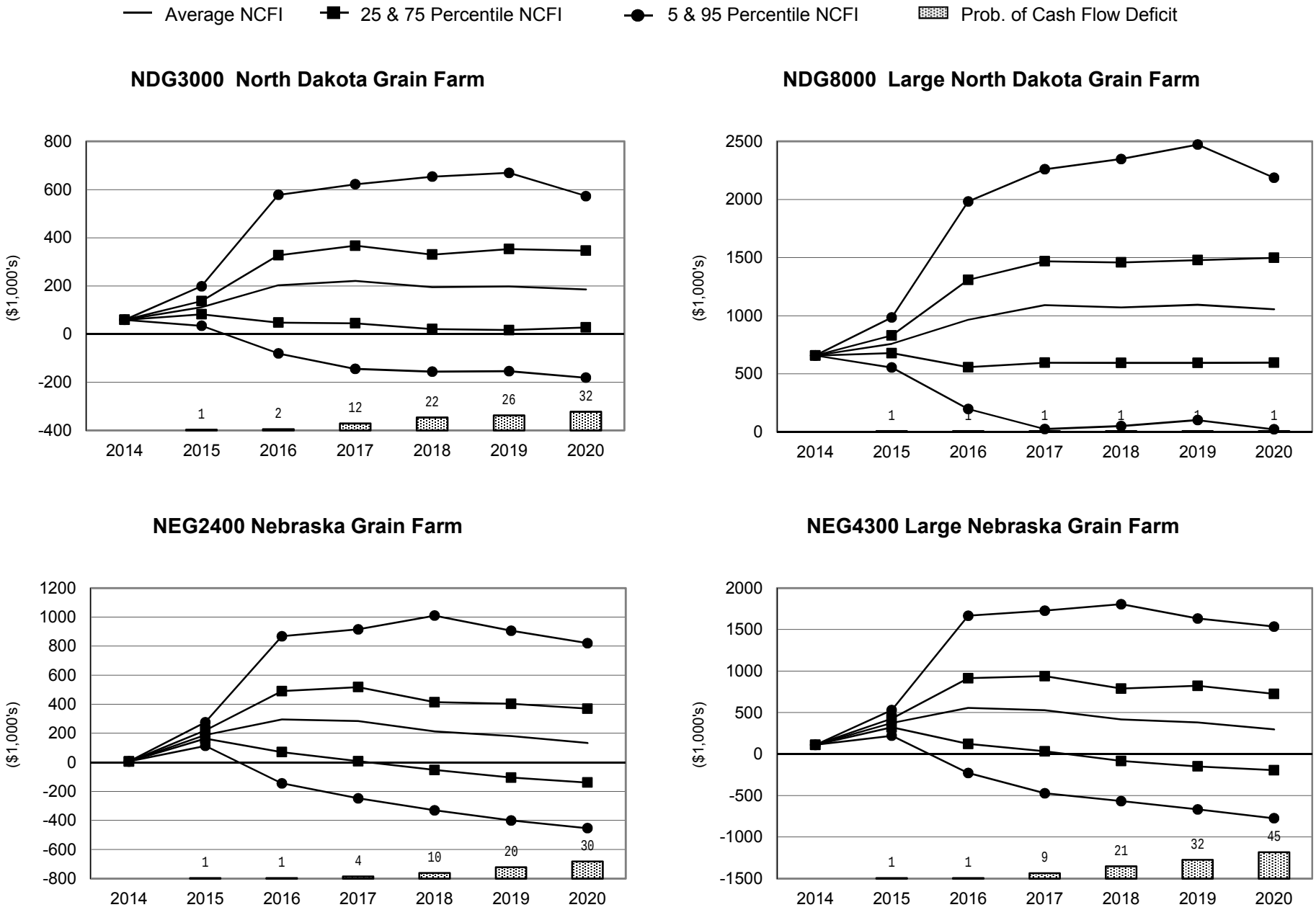


Figure 8. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Feed Grain and Oilseed Farms

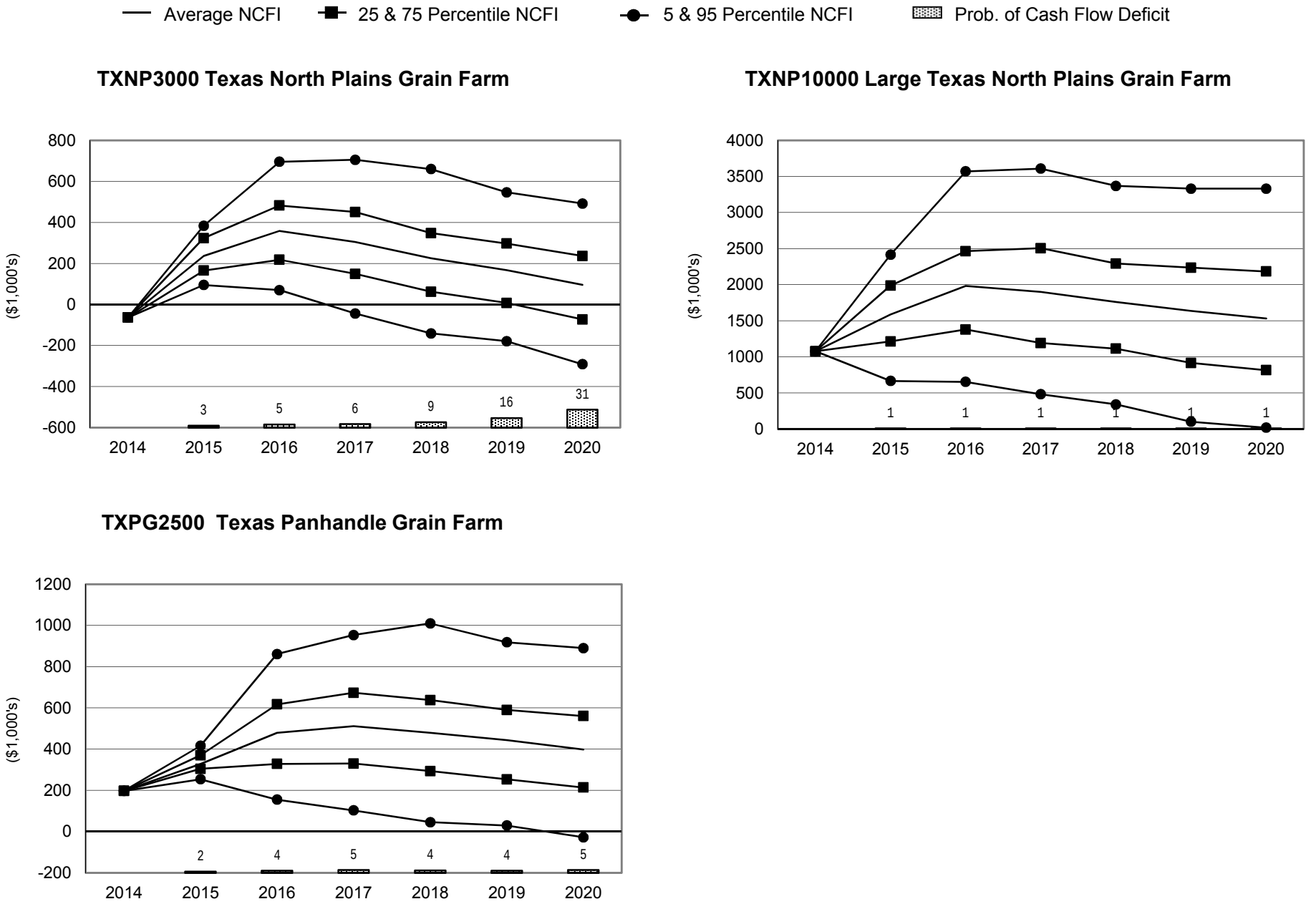


Figure 9. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Feed Grain and Oilseed Farms

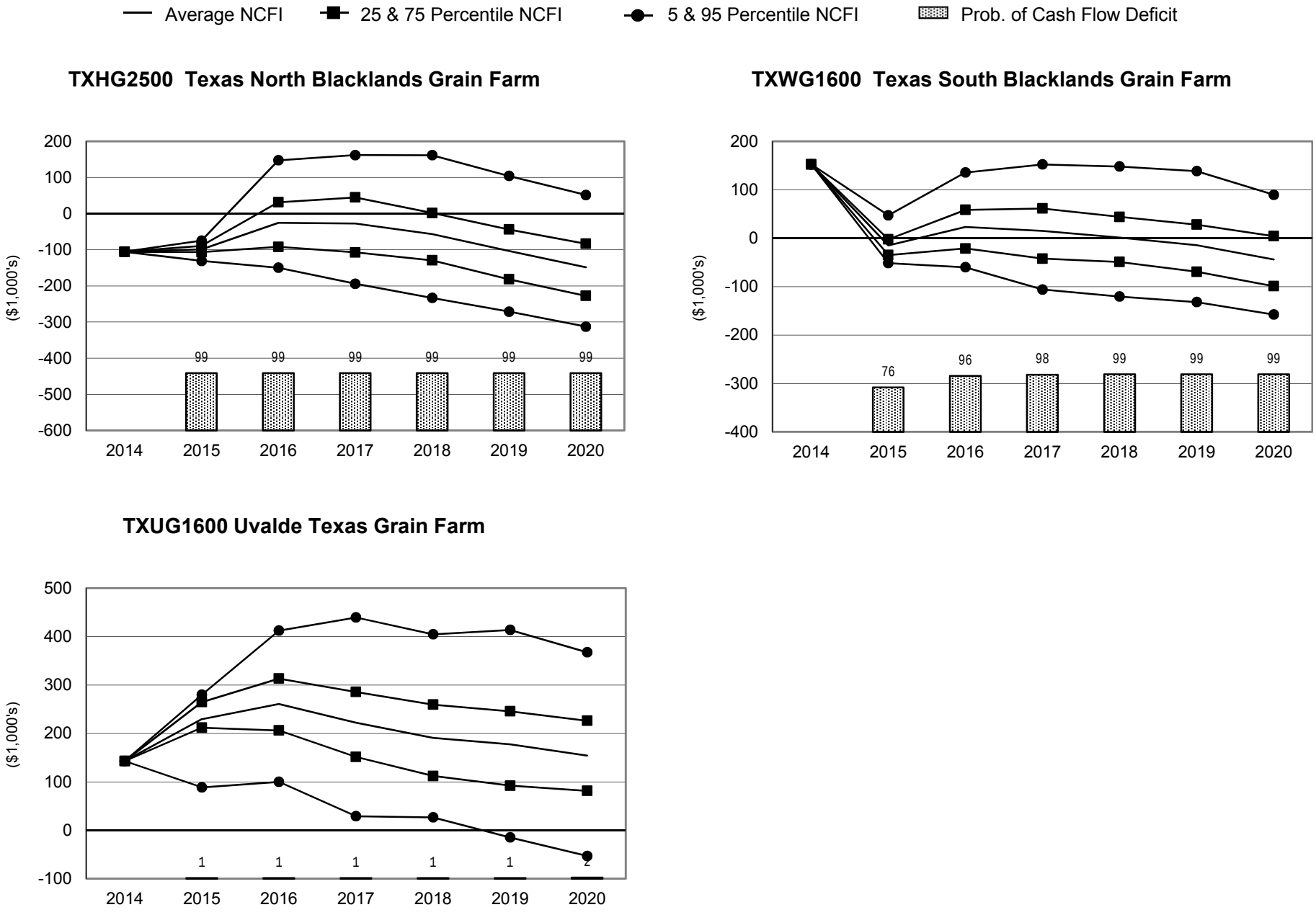


Figure 10. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Feed Grain and Oilseed Farms

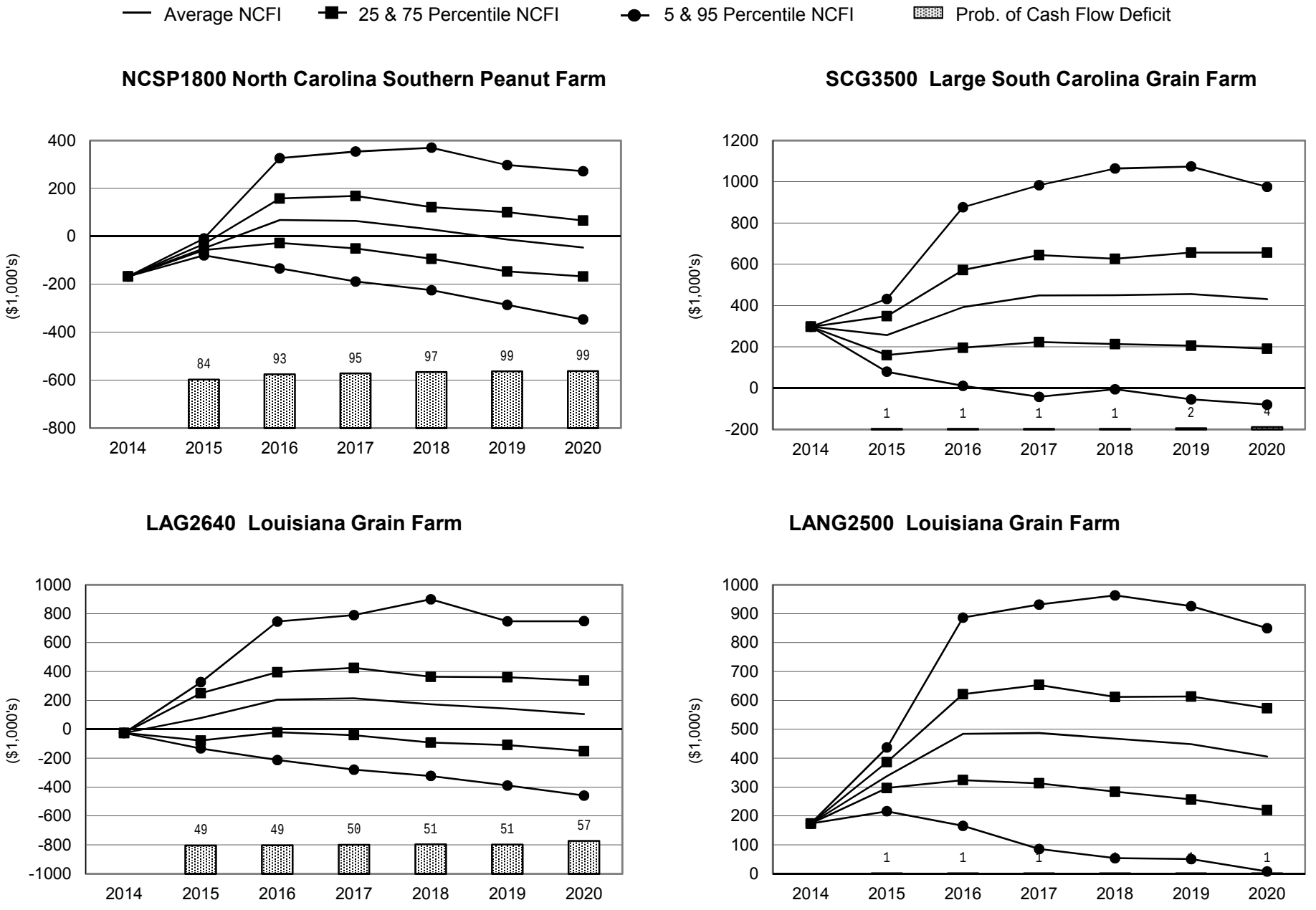


Figure 11. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Feed Grain and Oilseed Farms

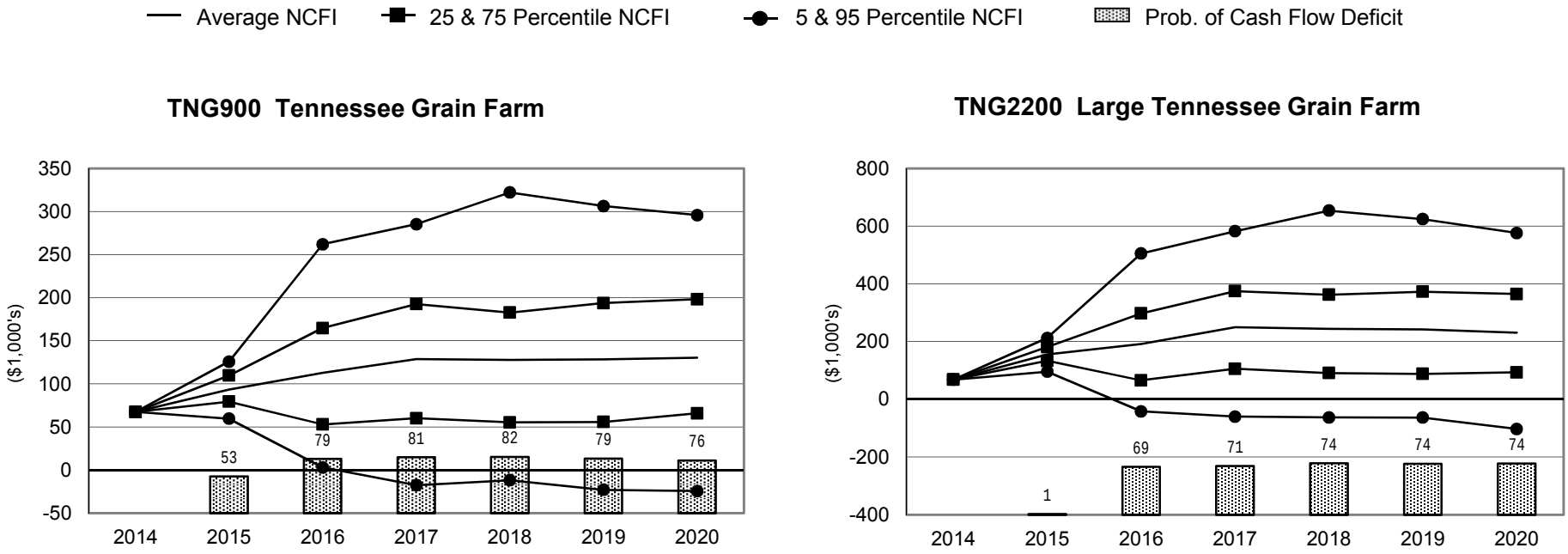


Figure 12. Representative Farms Producing Wheat

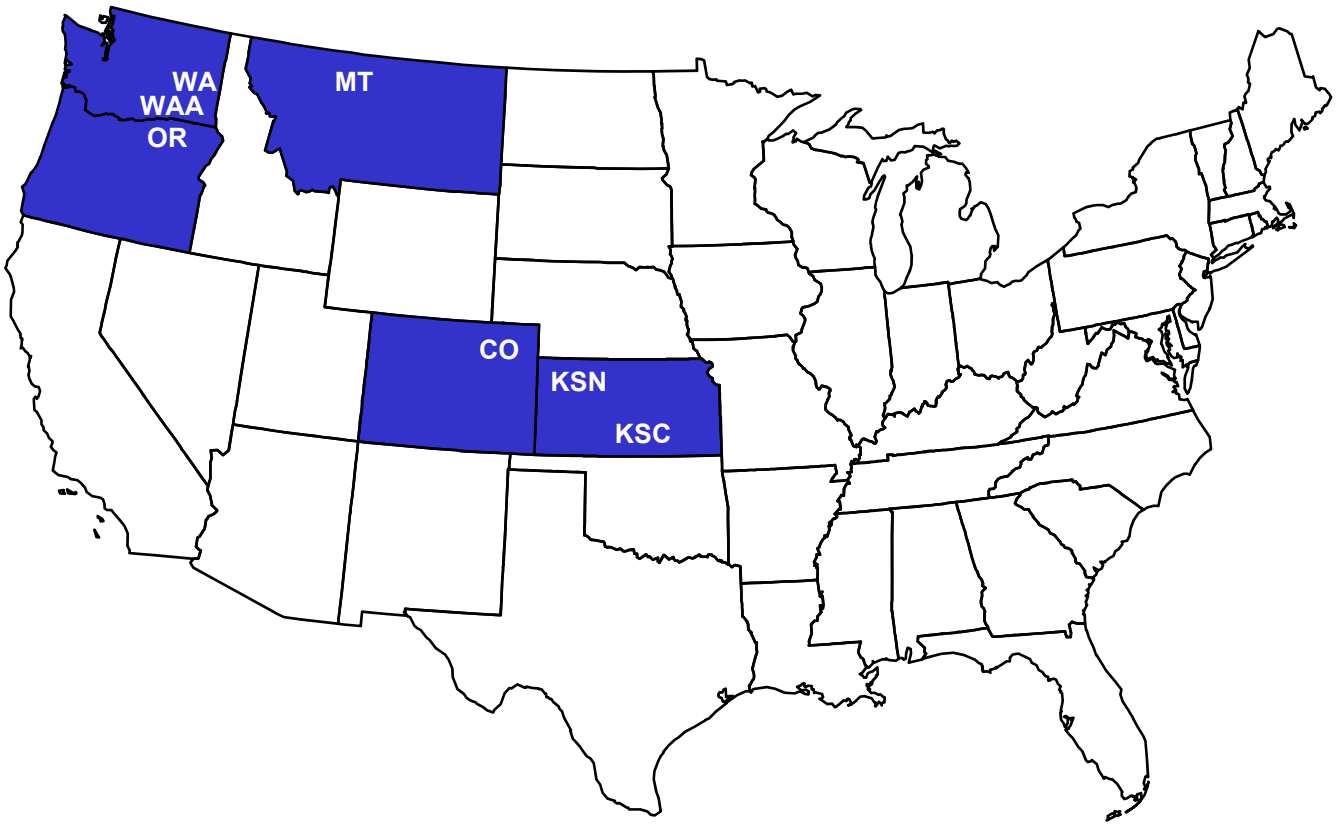
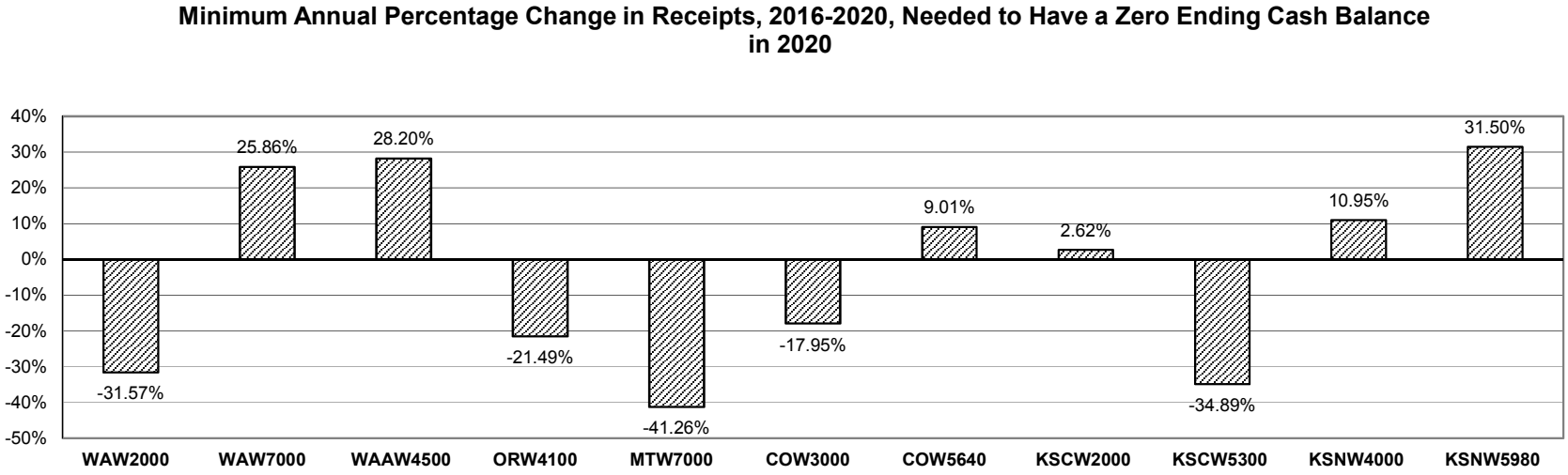


Table 7. Implications of the January 2016 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Wheat.

	WAW2000	WAW7000	WAAW4500	ORW4100	MTW7000	COW3000	COW5640	KSCW2000	KSCW5300	KSNW4000	KSNW5980
Overall Financial Position 2016-2020 Average	Good	Poor	Poor	Marginal	Good	Good	Poor	Poor	Good	Poor	Poor
Change Real Net Worth (%) 2016-2020 Average	2.70	-7.02	-5.44	-0.33	2.52	0.93	-1.41	-0.96	2.46	-0.81	-3.45
NIA to Maintain Real Net Worth (%/Rec.)	-10.46	21.36	26.30	-5.45	-18.69	-3.85	9.31	8.39	-12.88	6.73	21.03
NIA for Zero Ending Cash Balance (%/Rec.)	-31.57	25.86	28.19	-21.49	-41.25	-17.95	9.01	2.62	-34.89	10.95	31.49
Govt Payments/Receipts (%) 2016-2020 Average	4.28	4.85	5.86	7.33	9.36	5.57	6.15	4.30	5.05	6.83	5.69
Cost to Receipts Ratio (%) 2016-2020 Average	70.87	105.30	102.34	73.43	57.06	65.70	83.40	80.09	68.40	83.22	101.60
Total Cash Receipts ($1000)											
2014	820.13	2,572.36	486.47	479.40	1,154.62	419.45	762.32	472.99	1,063.45	812.95	1,348.52
2015	735.52	2,316.34	396.47	380.13	1,022.75	371.12	652.83	462.19	1,062.12	721.24	1,243.45
2016	766.39	2,391.43	421.19	402.91	1,080.12	391.35	690.88	474.08	1,085.09	791.30	1,355.32
2017	783.39	2,495.80	434.26	418.10	1,167.46	407.11	719.89	491.24	1,125.75	819.42	1,400.98
2018	797.25	2,538.72	444.30	436.11	1,211.45	419.72	743.46	498.31	1,142.26	850.29	1,442.73
2019	803.97	2,557.56	448.83	441.03	1,221.81	424.22	751.58	510.96	1,172.76	869.45	1,473.53
2020	805.19	2,559.52	446.72	441.08	1,218.21	426.04	754.19	517.64	1,187.35	876.44	1,487.08
2016-2020 Average	791.24	2,508.61	439.06	427.85	1,179.81	413.69	732.00	498.45	1,142.64	841.38	1,431.93
Government Payments ($1000)											
2014	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2015	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.14	65.57	7.08	29.15
2016	40.46	99.98	25.63	23.73	60.24	16.32	32.18	28.48	72.96	55.66	93.14
2017	44.51	165.23	32.18	32.42	129.75	25.03	48.84	26.84	70.95	58.54	85.58
2018	33.09	130.97	26.41	34.74	130.81	26.13	51.09	17.16	48.44	57.66	78.75
2019	24.11	102.16	21.71	30.82	115.71	23.17	45.32	14.53	41.19	53.56	69.59
2020	18.72	84.83	15.95	27.52	103.22	21.14	41.26	13.20	36.79	48.77	62.72
2016-2020 Average	32.18	116.63	24.38	29.84	107.95	22.36	43.74	20.04	54.07	54.84	77.96
Net Cash Farm Income ($1000)											
2014	238.08	5.38	55.92	159.70	436.05	132.16	153.31	72.62	247.52	107.01	-66.97
2015	191.29	-103.82	-6.17	85.82	355.86	108.35	80.03	90.40	305.23	63.43	-100.75
2016	244.84	20.62	26.90	119.64	454.03	141.23	138.52	107.33	361.33	153.29	50.14
2017	255.30	46.93	27.42	128.72	542.26	154.75	156.15	120.19	396.26	171.76	72.37
2018	252.03	-26.58	16.64	135.61	569.39	154.90	158.41	112.21	392.72	173.73	50.99
2019	242.47	-152.50	-0.93	130.81	553.00	148.95	129.42	113.42	394.44	171.23	-0.52
2020	229.35	-254.26	-38.70	121.88	530.92	147.85	105.49	110.64	382.29	148.45	-41.00
2016-2020 Average	244.80	-73.16	6.27	127.33	529.92	149.54	137.60	112.76	385.41	163.69	26.40
Ending Cash Reserves ($1000)											
2014	602.07	204.48	105.47	193.55	1,098.63	269.62	348.00	217.39	1,144.55	-61.29	-512.43
2015	662.00	-372.38	-58.64	144.50	1,083.79	284.40	185.24	170.41	1,217.39	-218.76	-960.25
2016	719.38	-911.49	-144.51	126.89	1,259.52	311.19	72.35	103.91	1,333.39	-302.60	-1,271.20
2017	813.02	-1,355.55	-206.48	162.13	1,496.71	360.46	-6.42	85.36	1,524.52	-308.99	-1,457.07
2018	901.54	-1,858.54	-283.77	199.17	1,690.03	385.38	-107.10	34.05	1,696.15	-395.31	-1,724.38
2019	968.59	-2,686.94	-392.41	220.72	1,927.02	366.56	-224.07	-11.36	1,876.82	-422.27	-2,115.89
2020	1,017.57	-3,578.67	-637.75	215.77	2,110.18	378.96	-378.84	-70.61	1,983.75	-496.86	-2,519.89
Nominal Net Worth ($1000)											
2014	2,064.46	7,691.87	1,871.39	1,767.78	5,925.58	2,565.93	3,618.62	2,288.08	5,077.49	3,631.61	7,395.26
2015	2,133.14	7,232.42	1,815.86	1,759.31	6,064.10	2,596.79	3,533.00	2,322.06	5,294.82	3,612.14	7,221.99
2016	2,171.43	6,701.20	1,697.00	1,729.58	6,163.39	2,584.29	3,428.43	2,243.40	5,382.57	3,493.16	6,797.80
2017	2,264.93	6,255.41	1,606.47	1,725.17	6,340.11	2,610.41	3,370.59	2,217.34	5,548.43	3,453.57	6,525.83
2018	2,349.53	5,793.00	1,519.87	1,737.05	6,525.98	2,653.87	3,339.22	2,196.44	5,731.36	3,421.14	6,280.82
2019	2,430.17	5,121.47	1,413.31	1,738.02	6,782.47	2,697.14	3,319.68	2,179.17	5,932.51	3,435.18	5,933.93
2020	2,497.25	4,425.34	1,254.40	1,723.64	7,025.12	2,738.40	3,228.94	2,165.06	6,123.85	3,397.14	5,698.94
Prob. of Negative Ending Cash (%)											
2015	1	99	98	1	1	1	1	1	1	99	99
2016	1	99	97	7	1	1	25	6	1	98	99
2017	1	98	94	10	1	1	57	27	1	90	99
2018	1	98	92	11	1	1	72	43	1	90	99
2019	1	99	94	13	1	1	81	53	1	87	99
2020	1	99	99	16	1	1	87	61	1	89	99
Prob. of Decreasing Real Net Worth Over 2014-2020 (%)	1	1	1	1	1	1	1	1	1	1	1

Figure 13. Wheat Farms



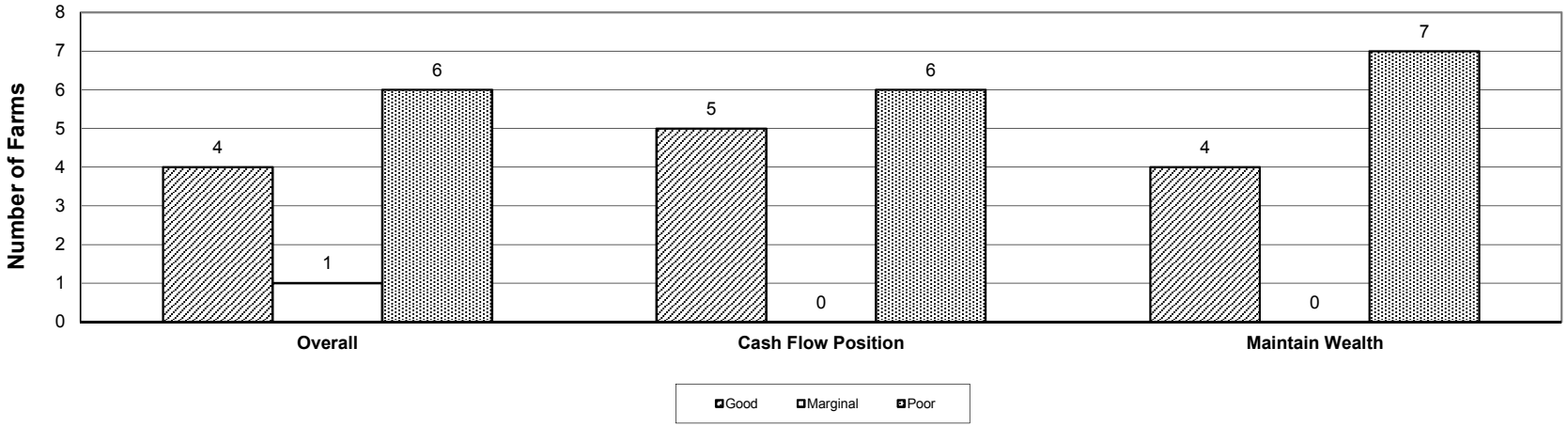


Figure 14. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Wheat Farms

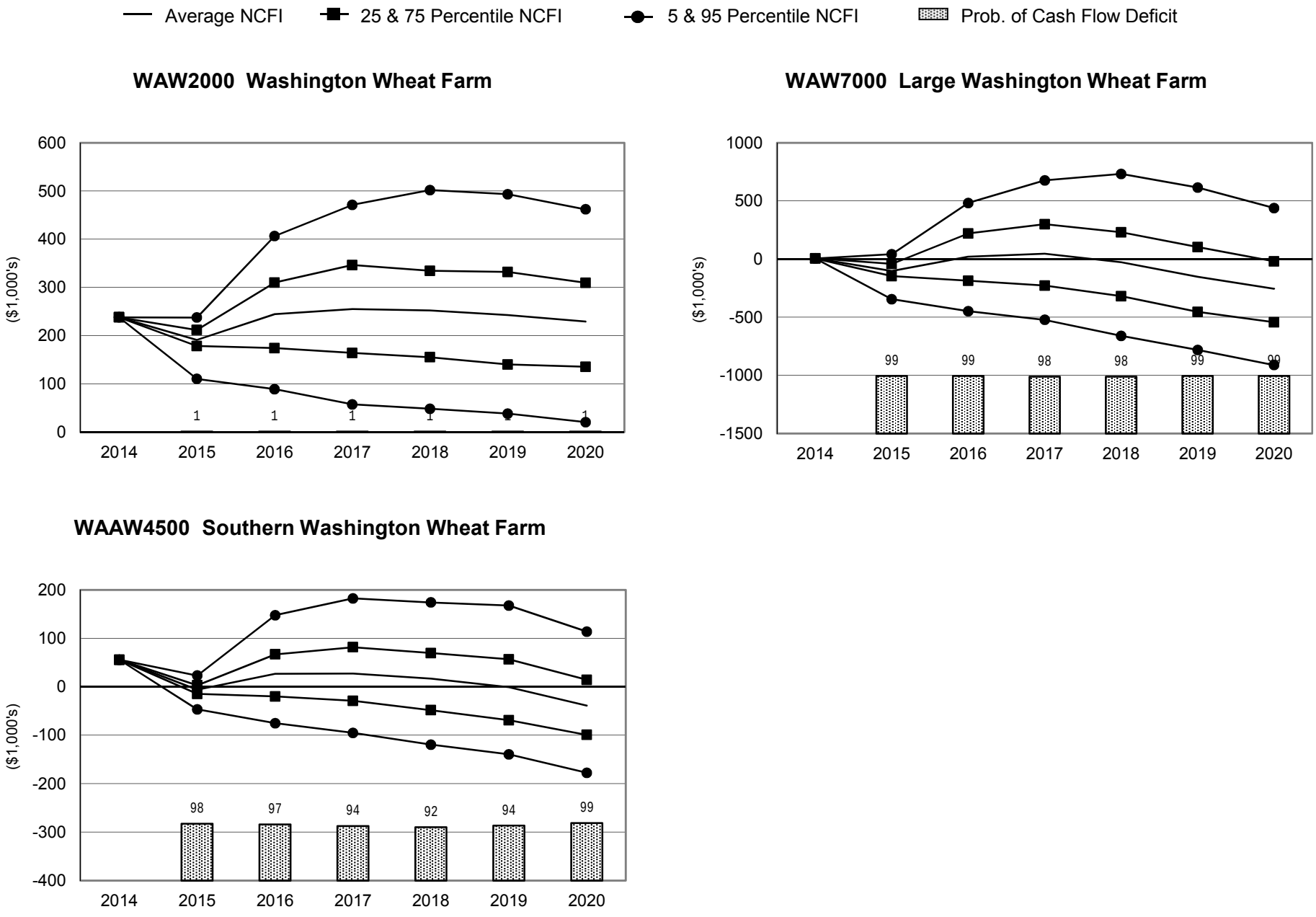


Figure 15. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Wheat Farms

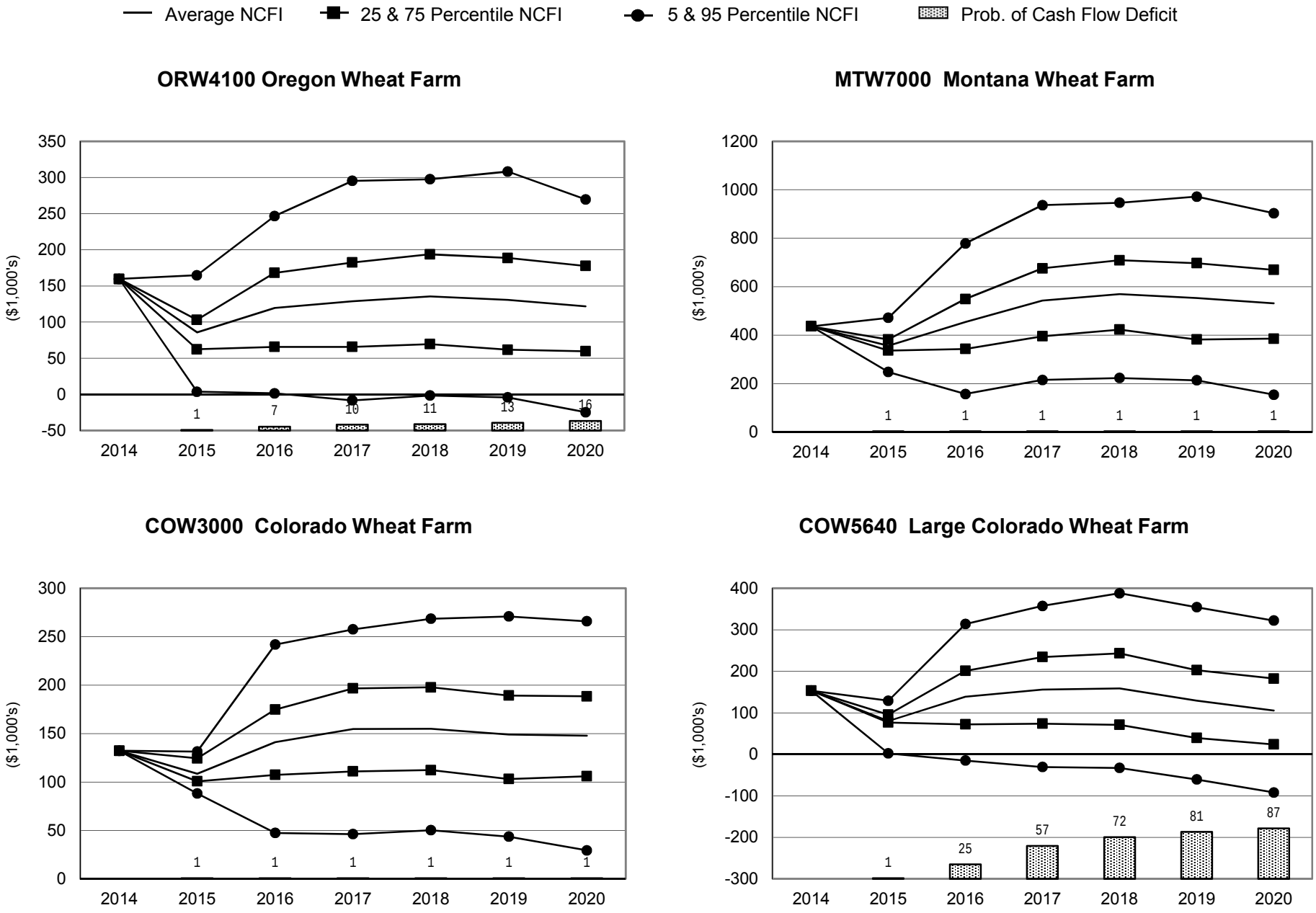


Figure 16. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Wheat Farms

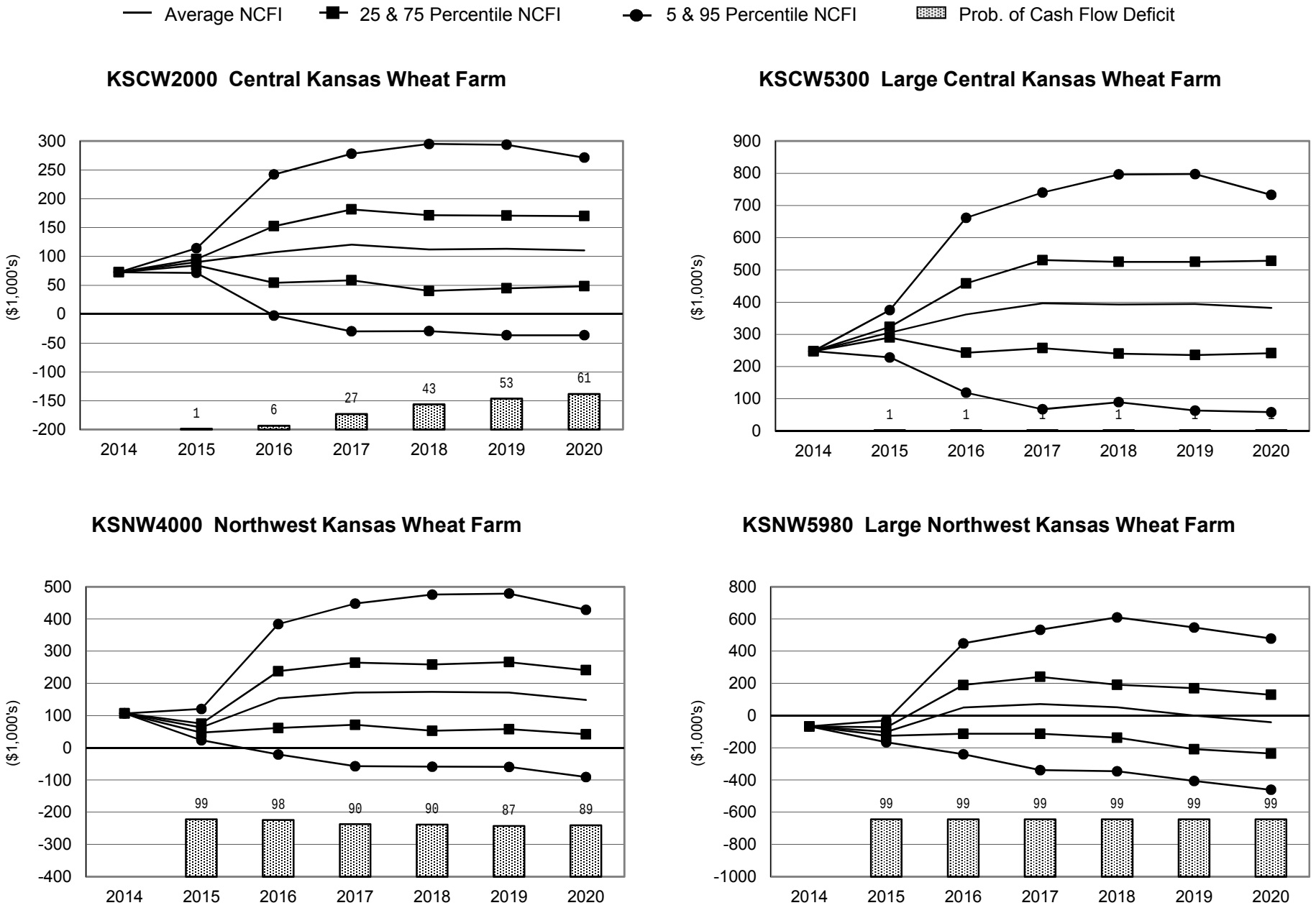


Figure 17. Representative Farms Producing Cotton

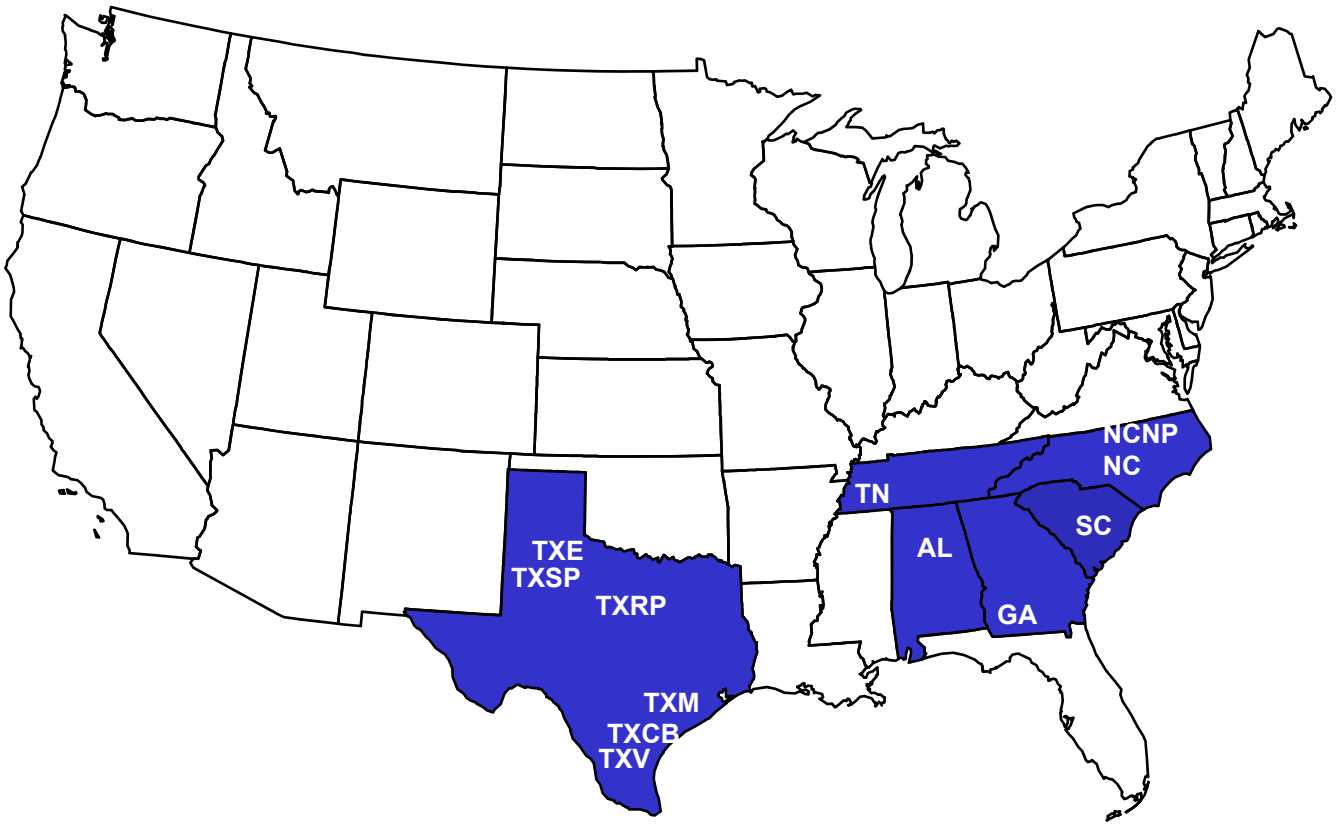


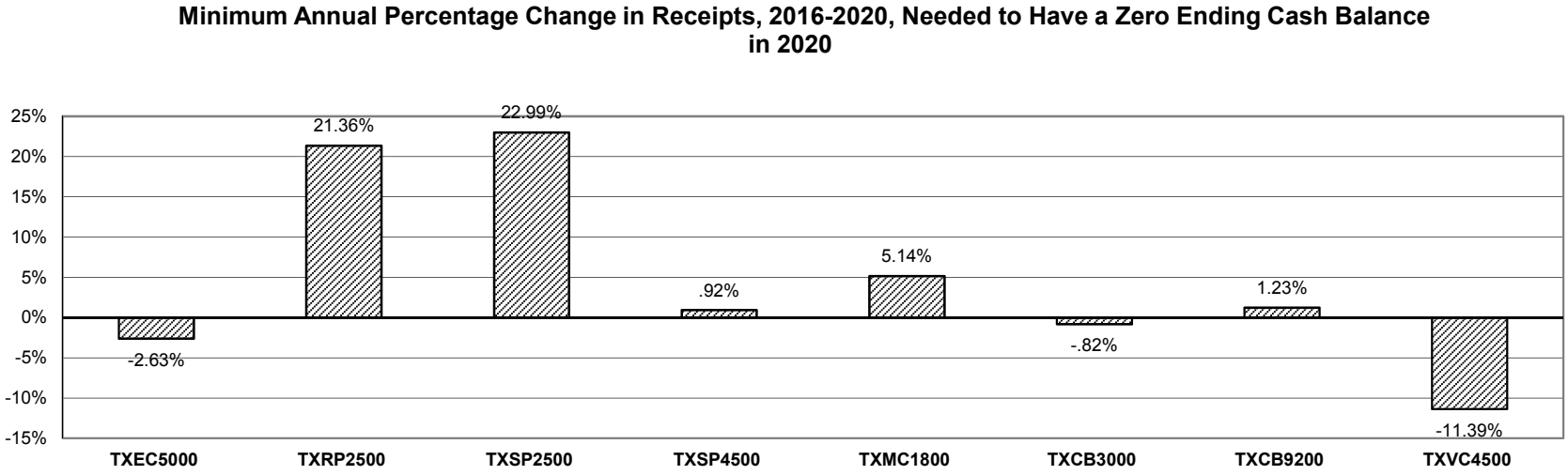
Table 8. Implications of the January 2016 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Cotton.

	TXSP2500	TXSP4500	TXEC5000	TXRP2500	TXMC1800	TXCB3000	TXCB9200	TXVC4500
Overall Financial Position								
2016-2020 Average	Poor	Poor	Good	Poor	Poor	Marginal	Poor	Good
Change Real Net Worth (%)								
2016-2020 Average	-14.51	0.01	2.87	-6.25	-3.33	0.39	-2.54	1.79
NIA to Maintain Real								
Net Worth (%/Rec.)	13.82	-0.47	-4.64	20.12	5.82	-0.71	3.65	-5.29
NIA for Zero Ending								
Cash Balance (%/Rec.)	22.99	0.92	-2.63	21.35	5.13	-0.81	1.23	-11.39
Govt Payments/Receipts (%)								
2016-2020 Average	6.21	6.38	7.45	7.65	8.43	10.69	9.15	9.53
Cost to Receipts Ratio (%)								
2016-2020 Average	106.75	86.92	80.53	92.97	93.30	86.75	95.61	80.56
Total Cash Receipts ($1000)								
2014	830.10	1,887.13	1,949.54	367.28	1,199.72	1,219.88	3,859.26	1,880.27
2015	875.21	1,910.03	2,103.68	403.78	692.52	1,101.57	3,776.48	1,789.62
2016	863.20	1,889.48	2,111.58	403.09	889.56	1,089.55	3,766.62	1,932.55
2017	869.67	1,900.97	2,128.35	407.70	914.19	1,112.11	3,822.89	1,970.04
2018	896.90	1,958.53	2,184.58	416.13	931.80	1,128.33	3,881.04	1,997.86
2019	914.99	1,989.39	2,215.54	417.13	942.98	1,137.29	3,927.58	2,025.52
2020	925.77	2,018.77	2,246.05	421.80	950.17	1,143.18	3,945.99	2,031.66
2016-2020 Average	894.11	1,951.43	2,177.22	413.17	925.74	1,122.09	3,868.82	1,991.53
Government Payments ($1000)								
2014	40.78	90.69	87.29	10.35	43.60	39.86	102.20	47.02
2015	57.39	126.68	135.82	16.24	26.26	54.54	180.79	68.11
2016	77.65	172.33	216.39	34.94	85.49	140.71	435.75	222.53
2017	51.10	112.56	151.11	31.30	80.91	121.99	348.39	195.08
2018	44.35	99.03	135.56	31.03	73.83	111.22	311.89	175.29
2019	43.78	96.54	131.70	28.59	68.92	106.19	301.72	168.49
2020	48.42	106.57	140.42	28.10	70.56	107.28	303.02	169.92
2016-2020 Average	53.06	117.41	155.04	30.79	75.94	117.48	340.15	186.26
Net Cash Farm Income ($1000)								
2014	-39.30	153.11	214.99	-17.94	273.44	240.95	252.16	262.84
2015	73.27	335.82	454.16	44.46	-78.63	161.39	201.09	258.24
2016	82.32	373.98	484.97	56.48	99.03	195.84	385.09	440.41
2017	46.26	335.76	456.81	45.97	108.21	207.61	391.09	450.90
2018	11.21	300.05	451.73	35.90	95.00	182.55	332.75	426.60
2019	-36.73	259.29	398.27	19.86	77.62	165.00	259.77	405.87
2020	-87.36	206.72	377.77	4.40	55.70	145.53	148.88	374.81
2016-2020 Average	3.14	295.16	433.91	32.52	87.11	179.31	303.52	419.72
Ending Cash Reserves ($1000)								
2014	-88.37	422.73	-7.50	-50.00	293.12	42.64	809.00	356.19
2015	-178.18	343.82	64.58	-91.27	58.36	46.12	538.11	392.29
2016	-267.23	322.91	54.11	-154.61	-45.08	82.40	389.50	579.43
2017	-386.15	302.45	185.81	-217.11	-80.59	159.90	386.85	833.87
2018	-601.82	159.74	276.01	-286.40	-139.36	133.14	299.06	1,025.23
2019	-863.02	40.58	292.17	-326.49	-187.20	91.65	64.80	1,143.63
2020	-1,201.51	-101.89	314.80	-393.33	-262.16	47.07	-248.39	1,193.88
Nominal Net Worth ($1000)								
2014	1,108.28	2,530.14	2,999.82	952.33	1,504.41	1,748.17	4,810.19	5,225.79
2015	1,080.91	2,595.90	3,200.24	950.58	1,312.79	1,812.23	4,629.26	5,404.07
2016	1,023.60	2,664.97	3,328.64	863.19	1,235.97	1,838.48	4,539.13	5,521.25
2017	923.69	2,707.75	3,464.60	775.80	1,197.74	1,892.93	4,510.56	5,675.75
2018	779.88	2,690.96	3,615.95	696.43	1,150.25	1,889.72	4,436.58	5,837.07
2019	613.94	2,729.62	3,745.22	653.27	1,128.66	1,893.76	4,250.96	5,967.88
2020	385.83	2,714.90	3,854.74	602.03	1,047.50	1,901.47	4,064.08	6,091.97
Prob. of Negative Ending Cash (%)								
2015	80	4	7	99	23	40	24	1
2016	80	18	35	99	65	38	35	2
2017	84	27	21	99	68	31	40	1
2018	92	42	17	99	71	35	45	1
2019	95	49	22	99	74	42	50	1
2020	98	54	25	99	77	46	57	2
Prob. of Decreasing Real Net Worth								
Over 2014-2020 (%)	1	1	1	1	1	1	1	1

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

	TNC2500	TNC4050	ALC3000	GAC2300	SCC1800	NCC1700	NCNP1500
Overall Financial Position 2016-2020 Average	Good	Marginal	Poor	Marginal	Marginal	Poor	Poor
Change Real Net Worth (%) 2016-2020 Average	4.69	0.23	-14.02	0.64	1.13	-3.21	-6.56
NIA to Maintain Real Net Worth (%/Rec.)	-14.38	1.30	12.68	-0.87	-1.79	11.76	17.00
NIA for Zero Ending Cash Balance (%/Rec.)	-33.46	-2.30	17.31	-1.49	-2.27	9.08	26.22
Govt Payments/Receipts (%) 2016-2020 Average	3.70	7.01	6.61	16.13	12.86	3.36	14.86
Cost to Receipts Ratio (%) 2016-2020 Average	76.14	92.39	100.33	85.79	86.05	92.51	98.84
Total Cash Receipts ($1000)							
2014	1,384.79	2,538.67	1,523.14	2,290.86	1,308.42	1,003.74	935.39
2015	1,291.88	2,398.28	1,524.11	2,388.34	1,309.40	933.16	931.80
2016	1,328.32	2,455.05	1,564.73	2,539.23	1,376.11	934.34	997.57
2017	1,379.82	2,550.84	1,594.50	2,522.99	1,382.33	979.64	1,006.52
2018	1,383.76	2,602.38	1,616.25	2,564.79	1,414.68	987.30	1,017.24
2019	1,415.16	2,656.13	1,636.97	2,605.05	1,439.87	1,010.79	1,031.84
2020	1,438.63	2,697.68	1,658.66	2,646.24	1,461.72	1,025.35	1,041.12
2016-2020 Average	1,389.14	2,592.42	1,614.22	2,575.66	1,414.94	987.49	1,018.86
Government Payments ($1000)							
2014	10.29	82.29	35.62	61.07	38.48	9.41	14.76
2015	77.17	126.44	123.66	305.50	138.72	36.56	103.16
2016	90.63	216.14	157.90	483.10	209.61	42.93	174.09
2017	65.58	189.66	118.58	415.31	179.19	38.03	153.53
2018	36.28	166.50	89.87	395.28	169.40	29.30	143.54
2019	24.53	150.77	73.07	383.21	163.61	24.36	137.80
2020	25.64	156.13	73.28	384.15	165.39	24.62	135.19
2016-2020 Average	48.53	175.84	102.54	412.21	177.44	31.85	148.83
Net Cash Farm Income ($1000)							
2014	293.63	91.20	-27.91	-44.45	59.32	98.30	-47.39
2015	270.18	52.70	45.59	218.42	147.96	72.19	2.64
2016	347.88	179.74	106.35	453.73	248.77	88.70	80.87
2017	389.56	252.19	89.09	401.91	236.31	112.26	67.56
2018	364.37	248.29	42.64	378.05	226.96	92.75	30.58
2019	357.85	233.09	-7.13	340.79	211.13	91.33	-9.98
2020	348.96	197.42	-45.88	317.91	192.84	66.29	-41.85
2016-2020 Average	361.73	222.15	37.01	378.48	223.20	90.27	25.44
Ending Cash Reserves ($1000)							
2014	1,063.51	775.49	224.90	214.06	303.08	330.27	14.35
2015	1,155.25	545.15	-14.17	105.01	195.43	200.66	-209.81
2016	1,320.52	433.22	-285.50	218.79	163.10	45.14	-431.80
2017	1,556.08	423.32	-519.67	227.11	184.34	-36.92	-595.54
2018	1,752.83	390.44	-849.46	201.74	158.98	-151.85	-843.66
2019	1,951.37	386.83	-1,198.93	194.02	172.92	-252.74	-1,185.00
2020	2,129.80	315.42	-1,587.30	211.31	178.16	-389.64	-1,497.99
Nominal Net Worth ($1000)							
2014	2,712.07	5,892.50	1,810.43	7,938.73	3,284.20	2,322.76	2,605.84
2015	2,848.58	5,894.83	1,630.29	7,906.18	3,332.59	2,251.39	2,482.24
2016	3,002.01	5,738.56	1,471.91	7,865.90	3,319.31	2,121.62	2,295.04
2017	3,194.34	5,731.37	1,270.03	7,889.94	3,356.19	2,034.57	2,156.70
2018	3,367.47	5,764.37	1,022.88	7,983.19	3,401.42	1,949.58	1,971.78
2019	3,562.22	5,879.84	818.58	8,135.17	3,494.82	1,894.55	1,767.25
2020	3,751.02	5,879.68	514.82	8,220.14	3,554.80	1,807.58	1,566.51
Prob. of Negative Ending Cash (%)							
2015	1	1	54	8	14	1	99
2016	1	4	84	10	24	39	99
2017	1	13	87	19	28	62	99
2018	1	22	94	27	34	74	99
2019	1	26	95	32	36	79	99
2020	1	33	98	31	35	86	99
Prob. of Decreasing Real Net Worth Over 2014-2020 (%)	1	1	1	1	1	1	1

Figure 18. Cotton Farms



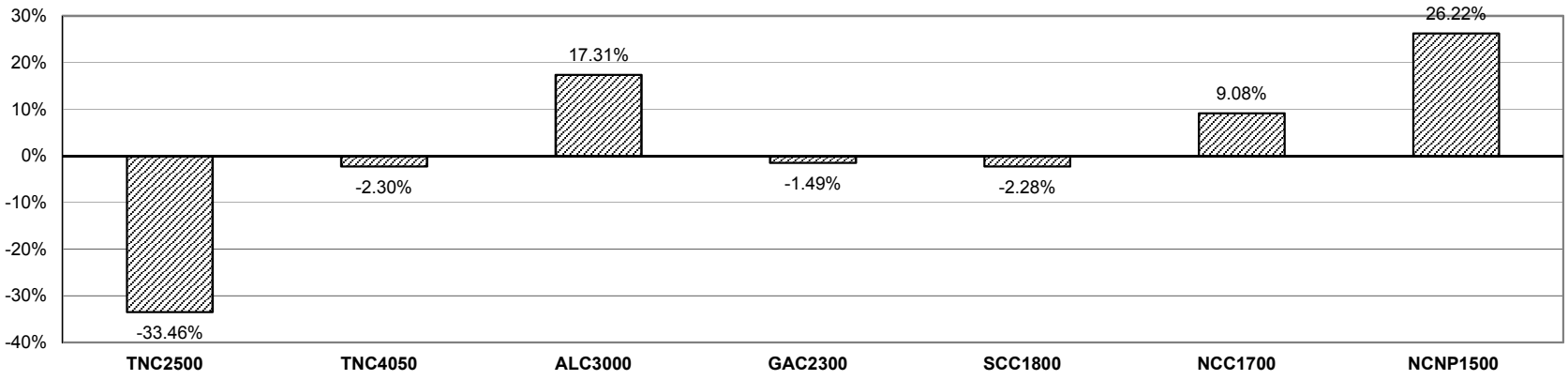


Figure 19. Cotton Farms

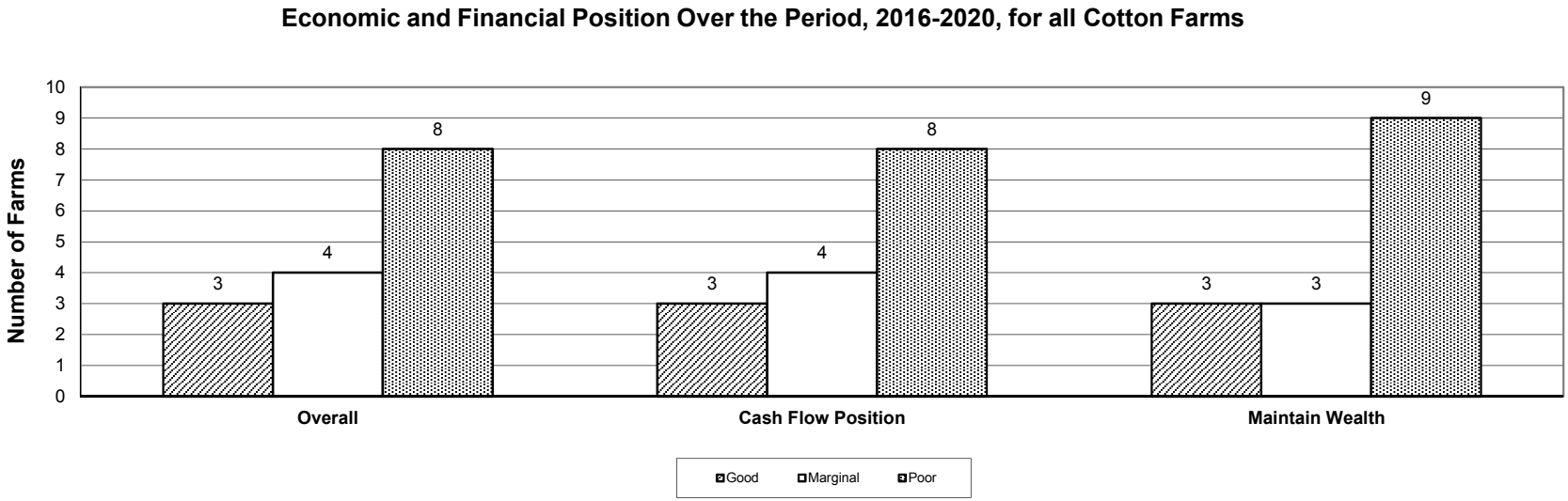


Figure 20. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Cotton Farms

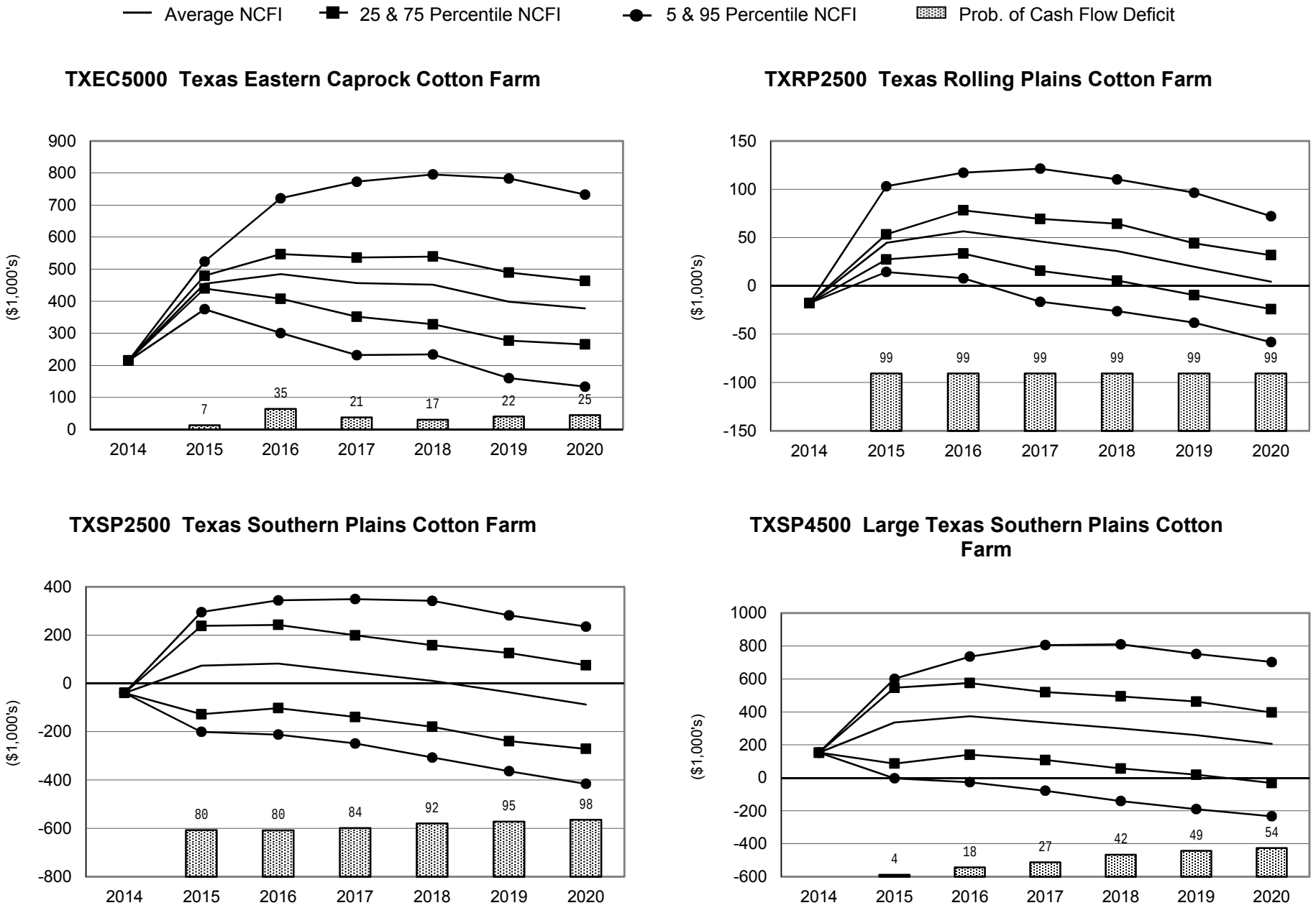


Figure 21. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Cotton Farms

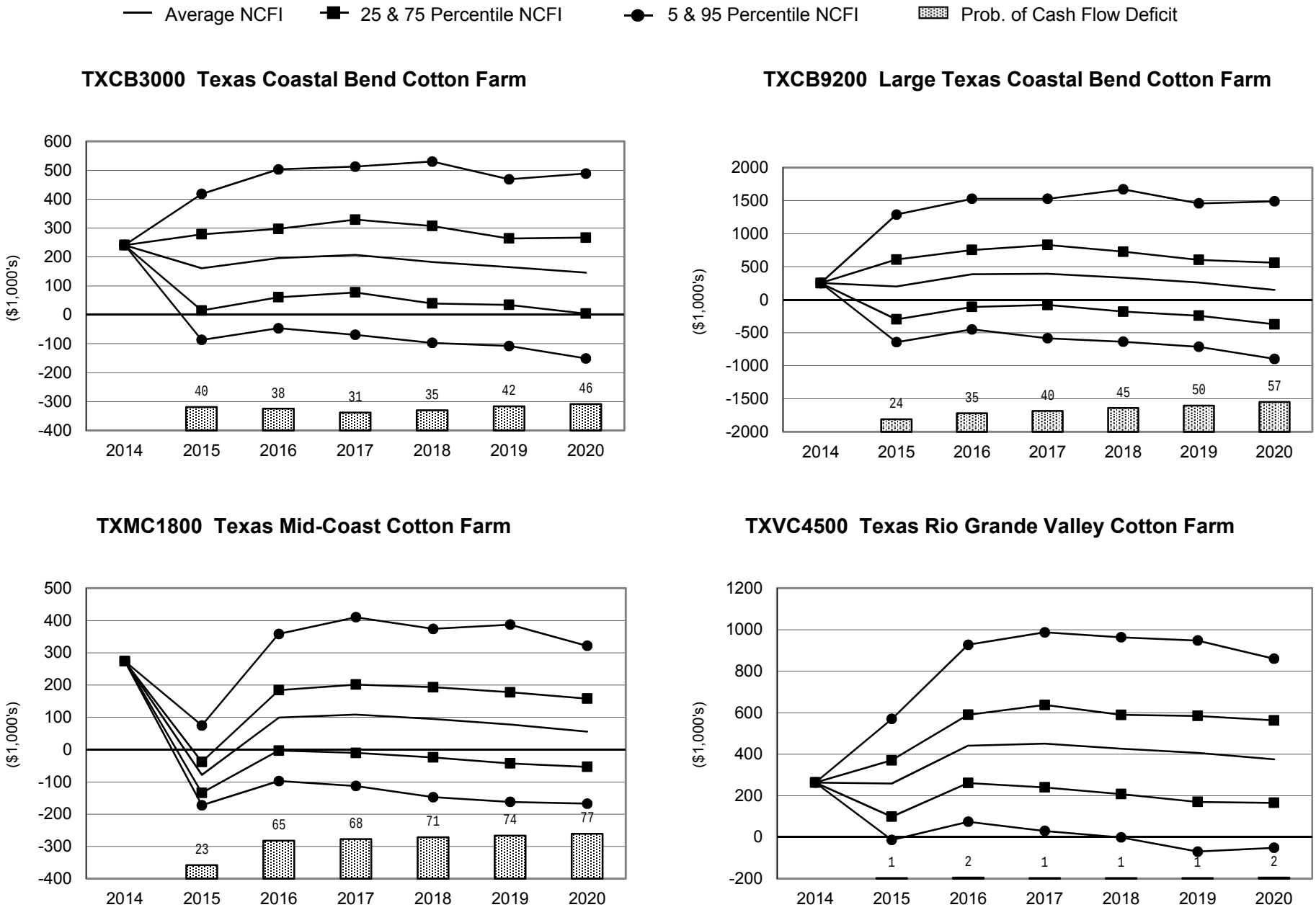


Figure 22. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Cotton Farms

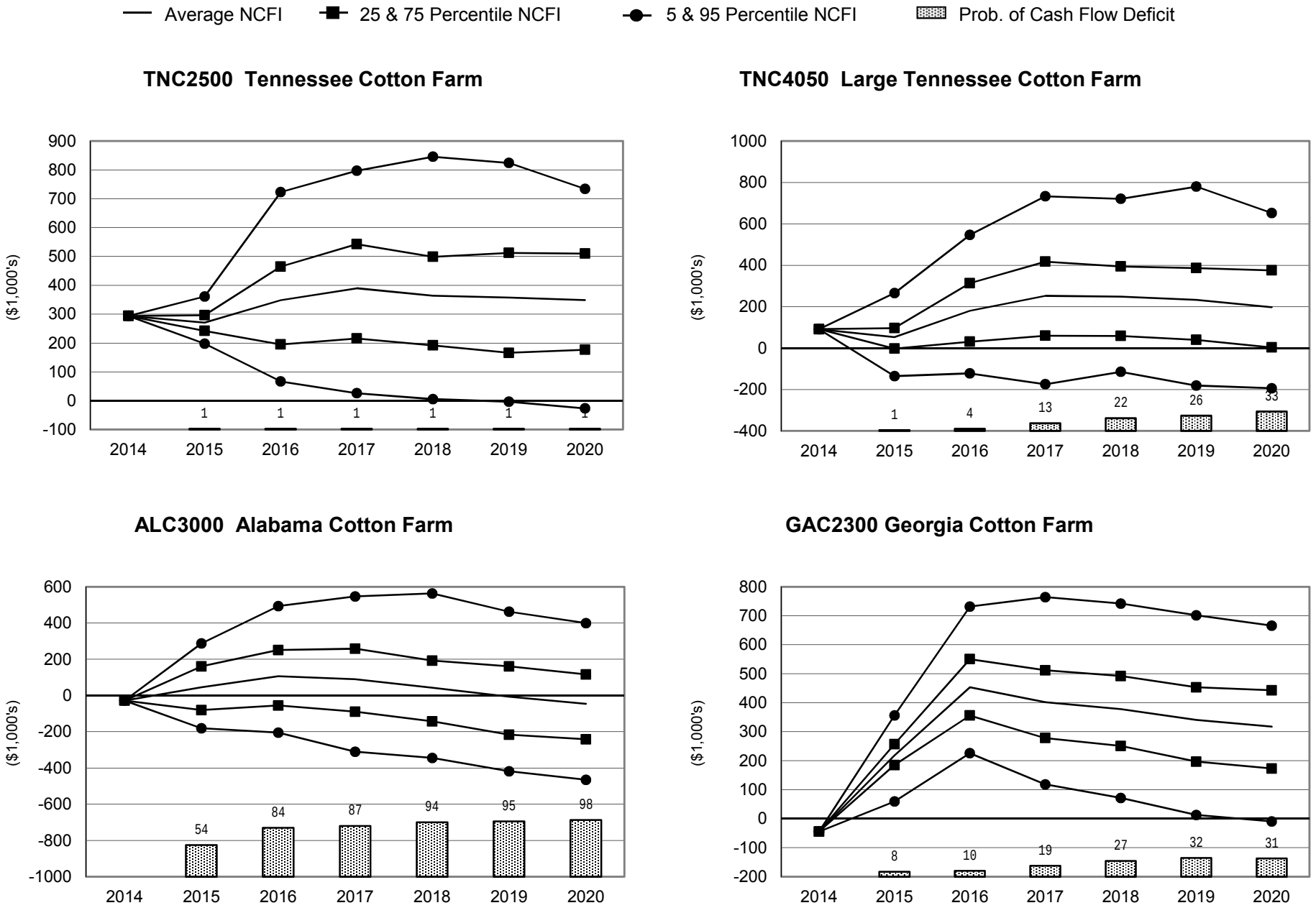


Figure 23. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Cotton Farms

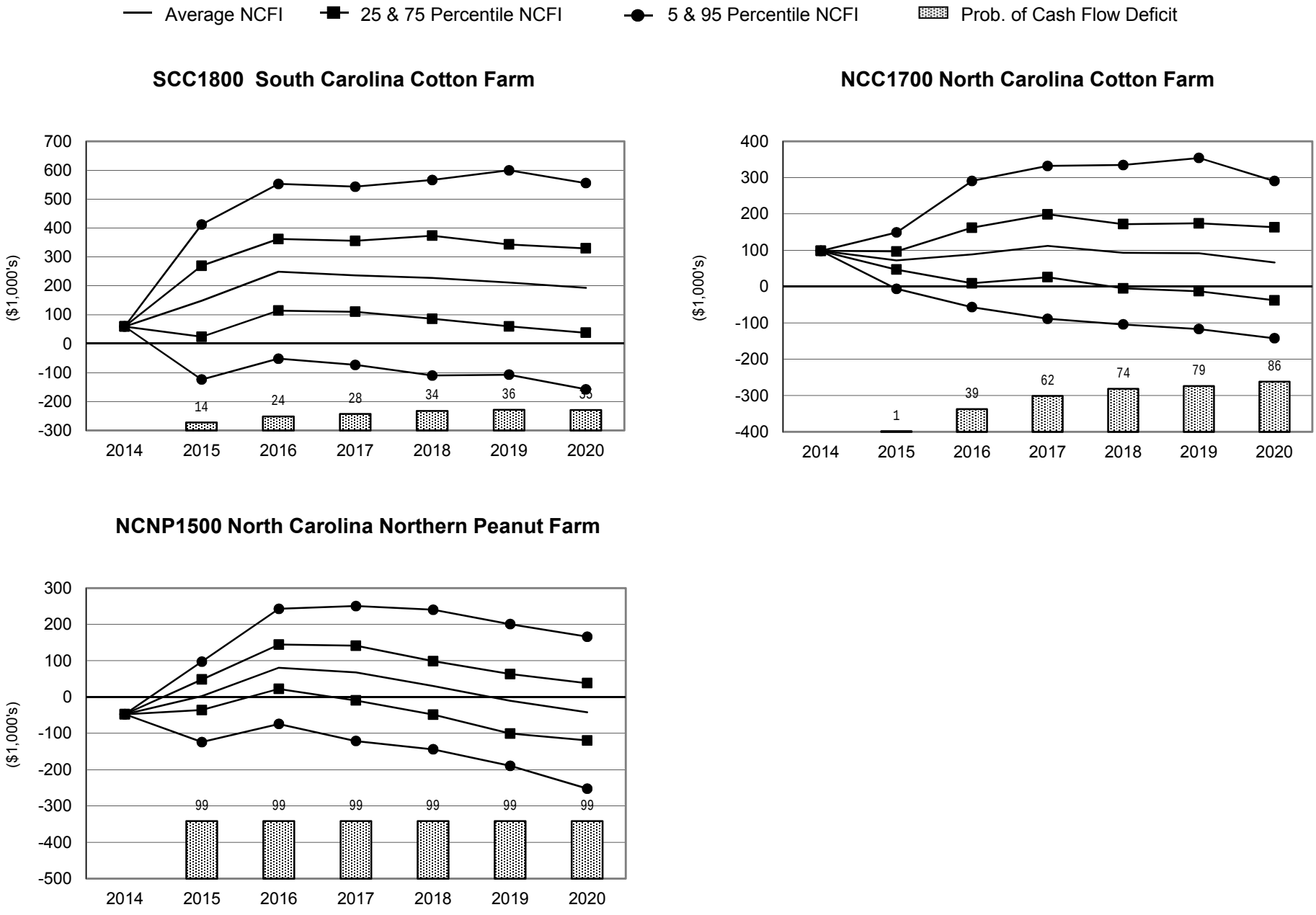


Figure 24. Representative Farms Producing Rice

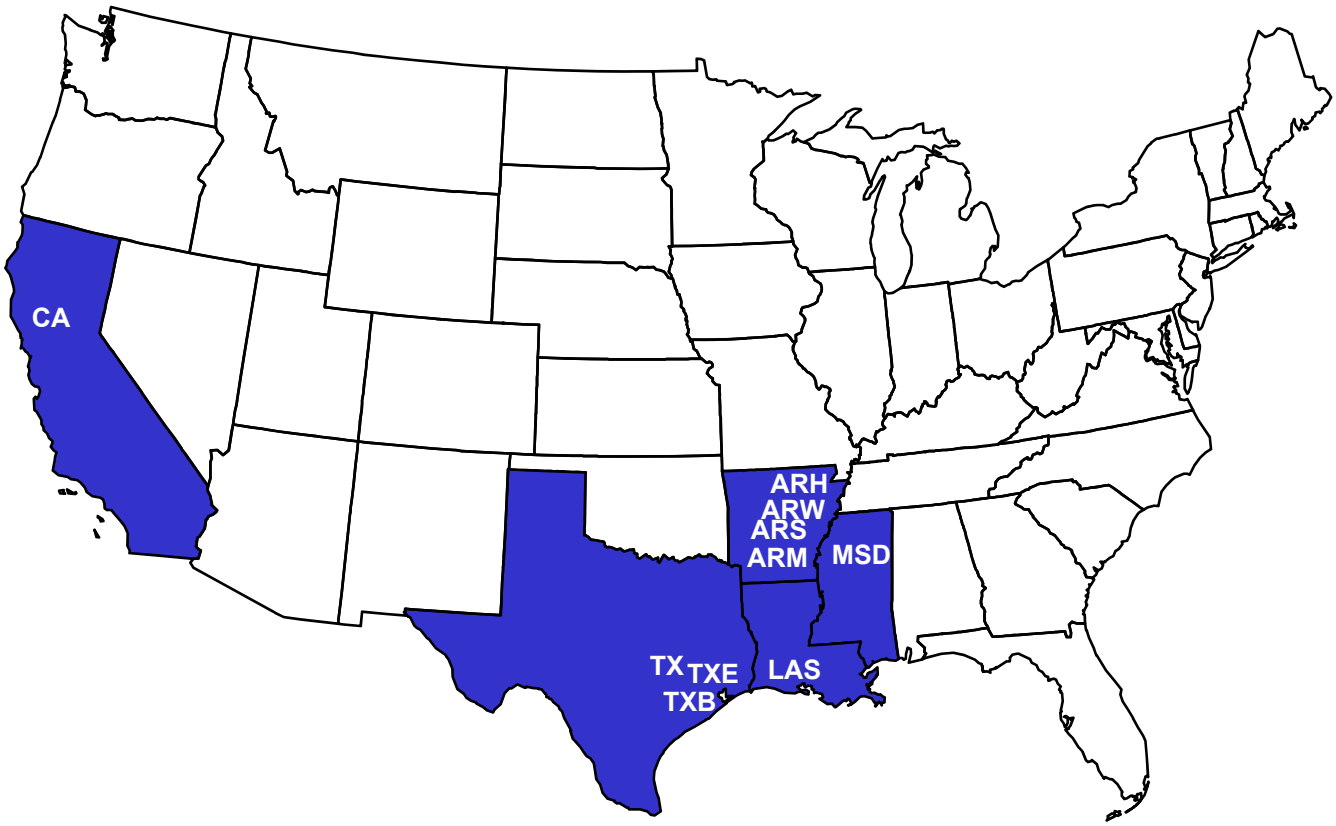


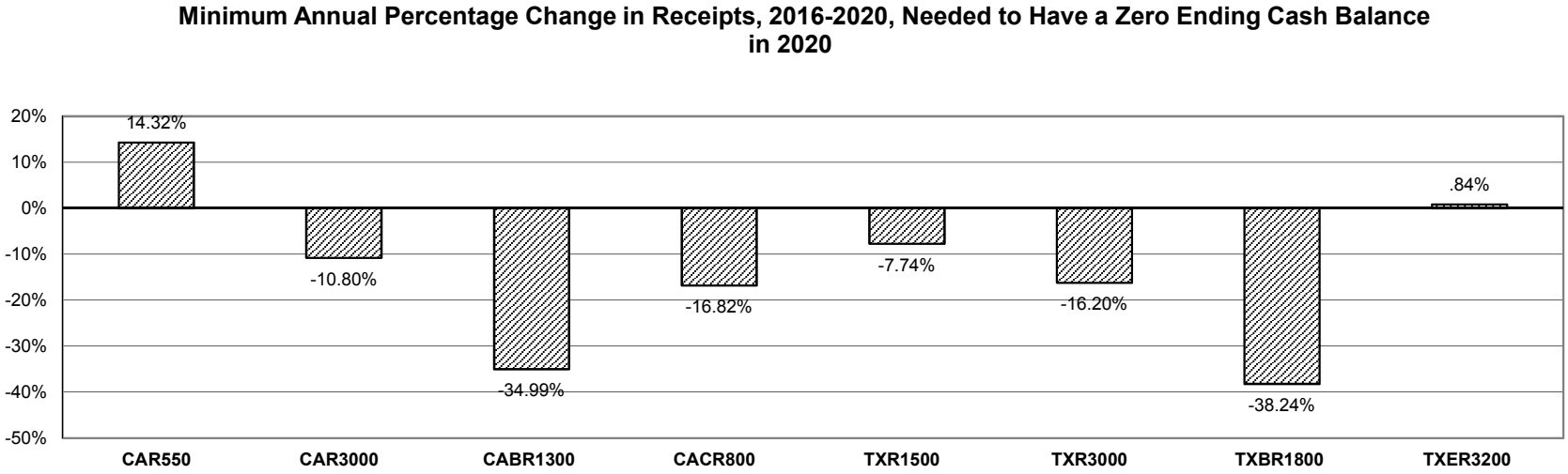
Table 10. Implications of the January 2016 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Rice.

	CAR550	CAR3000	CABR1300	CACR800	TXR1500	TXR3000	TXBR1800	TXER3200
Overall Financial Position 2016-2020 Average	Poor	Good	Good	Good	Good	Good	Good	Poor
Change Real Net Worth (%) 2016-2020 Average	-2.89	1.95	2.64	0.66	3.34	8.52	9.90	-1.66
NIA to Maintain Real Net Worth (%/Rec.)	10.17	-5.31	-17.75	-1.71	-9.28	-12.12	-24.23	1.92
NIA for Zero Ending Cash Balance (%/Rec.)	14.32	-10.80	-34.99	-16.82	-7.74	-16.20	-38.24	0.84
Govt Payments/Receipts (%) 2016-2020 Average	3.02	3.89	2.86	4.04	4.60	3.70	4.17	3.77
Cost to Receipts Ratio (%) 2016-2020 Average	88.01	269791.00	68.75	68840.20	73.04	78.24	68.37	92.52
Total Cash Receipts ($1000)								
2014	753.57	4,545.22	1,912.04	1,262.43	844.92	1,711.25	0.11	1,991.47
2015	751.72	4,487.90	1,913.43	1,236.22	804.75	1,649.29	976.24	1,467.52
2016	793.85	4,733.84	2,019.30	1,304.58	873.16	1,785.63	1,056.92	1,723.86
2017	790.75	4,709.35	2,011.96	1,300.05	871.03	1,787.64	1,054.57	1,734.25
2018	808.71	4,813.29	2,057.53	1,328.96	901.57	1,853.87	1,092.13	1,790.75
2019	813.53	4,854.04	2,069.81	1,337.83	911.71	1,882.01	1,104.81	1,812.21
2020	813.89	4,853.98	2,071.81	1,338.82	915.31	1,890.33	1,110.57	1,823.82
2016-2020 Average	804.15	4,792.90	2,046.08	1,322.05	894.55	1,839.90	1,083.80	1,776.98
Government Payments ($1000)								
2014	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2015	19.90	113.09	47.80	31.61	34.23	56.00	37.43	53.12
2016	33.99	193.18	81.65	54.00	58.47	95.66	63.94	92.22
2017	26.32	139.63	63.22	41.81	45.27	74.07	49.50	73.30
2018	26.63	139.81	63.97	42.31	45.81	74.95	50.09	73.84
2019	19.84	106.67	47.66	31.52	34.13	55.84	37.32	55.47
2020	18.76	99.33	45.07	29.81	32.28	52.80	35.29	52.45
2016-2020 Average	25.11	135.73	60.31	39.89	43.19	70.66	47.23	69.45
Net Cash Farm Income ($1000)								
2014	42.44	225.17	428.96	130.45	116.70	120.38	221.21	205.16
2015	99.72	549.11	582.36	226.08	197.16	310.66	273.02	-64.62
2016	161.68	919.95	726.67	330.86	296.57	520.00	389.62	256.81
2017	128.85	791.24	683.20	298.28	276.34	467.62	369.46	207.15
2018	113.58	740.21	665.95	277.51	262.32	450.16	368.53	174.62
2019	91.59	644.48	637.25	250.62	232.75	409.95	354.71	122.56
2020	54.87	519.74	602.27	219.23	216.11	326.91	314.92	46.83
2016-2020 Average	110.12	723.12	663.07	275.30	256.82	434.93	359.45	161.60
Ending Cash Reserves ($1000)								
2014	-144.40	1,198.92	1,283.68	439.30	-1.31	466.72	597.49	362.30
2015	-225.91	1,290.25	1,629.94	484.77	29.55	627.03	758.31	72.58
2016	-251.70	1,712.20	2,043.51	587.19	140.50	985.20	995.02	108.65
2017	-362.21	2,109.76	2,422.38	696.86	303.22	1,251.40	1,225.85	147.39
2018	-433.85	2,400.56	2,759.34	803.45	368.21	1,488.56	1,445.78	144.00
2019	-521.42	2,576.94	3,006.95	865.39	339.39	1,641.16	1,628.15	93.12
2020	-673.33	2,638.18	3,199.96	884.49	360.14	1,563.70	1,841.32	-80.02
Nominal Net Worth ($1000)								
2014	2,738.68	10,635.66	7,582.83	4,884.76	1,750.05	1,404.49	1,189.94	2,400.68
2015	2,686.46	10,858.40	7,979.01	4,942.18	1,840.10	1,567.01	1,360.61	2,195.65
2016	2,622.48	11,191.77	8,279.86	4,923.30	1,967.00	1,934.45	1,625.95	2,245.85
2017	2,532.87	11,524.21	8,598.43	4,963.63	2,103.20	2,217.39	1,839.38	2,265.59
2018	2,468.77	11,885.22	8,943.79	5,050.18	2,191.13	2,479.16	2,047.46	2,266.57
2019	2,399.05	12,220.93	9,242.19	5,115.06	2,228.52	2,702.23	2,230.61	2,224.74
2020	2,272.84	12,424.48	9,490.57	5,147.35	2,321.63	2,772.37	2,453.73	2,082.81
Prob. of Negative Ending Cash (%)								
2015	99	2	1	2	29	1	1	7
2016	99	4	1	4	14	1	1	27
2017	99	6	1	5	4	1	1	27
2018	99	8	1	5	1	1	1	34
2019	99	10	1	5	5	1	1	39
2020	99	11	1	4	5	1	1	59
Prob. of Decreasing Real Net Worth Over 2014-2020 (%)	1	1	1	1	1	1	1	1

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

	LASR2000	ARMR6500	ARSR3240	ARWR2500	ARHR3000	MSDR5000
Overall Financial Position 2016-2020 Average	Good	Poor	Marginal	Marginal	Poor	Good
Change Real Net Worth (%) 2016-2020 Average	4.28	-27.59	1.27	0.60	-5.54	1.66
NIA to Maintain Real Net Worth (%/Rec.)	-9.34	35.52	-3.05	-1.07	14.36	-5.95
NIA for Zero Ending Cash Balance (%/Rec.)	-15.56	50.67	-9.77	0.25	25.30	-5.46
Govt Payments/Receipts (%) 2016-2020 Average	3.97	4.50	4.37	4.83	4.23	3.11
Cost to Receipts Ratio (%) 2016-2020 Average	80.75	131.56	84.56	6002.50	97.45	73.99
Total Cash Receipts ($1000)						
2014	1,309.21	3,691.30	1,956.77	1,491.92	2,025.50	4,095.37
2015	1,249.58	3,491.39	1,882.54	1,570.34	1,993.88	3,331.51
2016	1,333.01	3,690.92	2,016.34	1,680.70	2,137.75	3,477.73
2017	1,342.84	3,830.18	2,049.51	1,705.31	2,157.95	3,581.49
2018	1,382.31	3,853.81	2,090.01	1,741.12	2,221.42	3,637.00
2019	1,402.41	3,927.93	2,122.13	1,769.91	2,259.80	3,718.71
2020	1,412.36	3,947.77	2,137.26	1,782.88	2,279.65	3,753.08
2016-2020 Average	1,374.59	3,850.12	2,083.05	1,735.98	2,211.31	3,633.60
Government Payments ($1000)						
2014	0.00	14.33	0.00	0.00	0.00	0.00
2015	56.33	116.92	70.76	79.59	99.63	122.48
2016	78.34	269.15	136.72	125.30	141.48	175.93
2017	61.31	193.56	103.22	93.34	105.50	126.79
2018	57.82	147.28	87.41	80.29	94.73	99.44
2019	42.82	109.67	63.37	57.99	70.00	77.54
2020	40.08	95.68	56.58	52.03	64.53	69.41
2016-2020 Average	56.08	163.06	89.46	81.79	95.25	109.82
Net Cash Farm Income ($1000)						
2014	105.39	-981.93	82.13	-71.21	-152.06	1,260.83
2015	192.55	-809.35	216.91	202.39	32.15	846.87
2016	327.58	-537.06	430.68	372.88	212.48	1,087.46
2017	301.15	-615.16	423.70	350.46	154.72	1,121.84
2018	292.30	-909.19	393.80	322.29	109.38	1,055.93
2019	273.98	-1,159.50	367.08	297.48	44.95	1,056.94
2020	241.71	-1,475.02	311.39	259.84	-43.53	989.96
2016-2020 Average	287.35	-939.18	385.33	320.59	95.60	1,062.43
Ending Cash Reserves ($1000)						
2014	724.95	-984.67	951.23	268.60	-631.91	465.42
2015	677.39	-2,630.38	787.00	139.58	-1,102.56	487.74
2016	775.69	-4,091.22	796.06	95.52	-1,503.86	576.11
2017	838.58	-5,425.08	921.36	94.46	-1,804.03	853.00
2018	887.77	-7,199.89	981.53	66.54	-2,183.68	923.80
2019	1,013.35	-9,081.82	1,087.83	42.61	-2,613.10	1,044.90
2020	1,105.87	-11,348.81	1,100.59	-23.25	-3,165.08	1,011.48
Nominal Net Worth ($1000)						
2014	2,267.05	7,650.17	5,233.36	6,213.18	5,508.48	14,115.10
2015	2,307.55	6,236.23	5,155.57	6,363.77	5,291.82	14,746.30
2016	2,465.71	4,956.50	5,224.90	6,342.65	4,936.79	14,805.77
2017	2,579.43	3,665.86	5,324.06	6,379.74	4,625.13	15,123.43
2018	2,708.08	2,082.14	5,413.33	6,454.66	4,326.48	15,450.08
2019	2,924.08	491.17	5,590.62	6,562.19	4,018.38	15,903.62
2020	3,025.58	-1,591.40	5,626.22	6,616.76	3,618.44	16,235.29
Prob. of Negative Ending Cash (%)						
2015	1	99	2	4	99	4
2016	1	99	4	29	99	14
2017	1	99	5	33	99	15
2018	1	99	6	39	99	20
2019	1	99	7	43	99	18
2020	1	99	8	47	99	22
Prob. of Decreasing Real Net Worth Over 2014-2020 (%)	1	1	1	1	1	1

Figure 25. Rice Farms



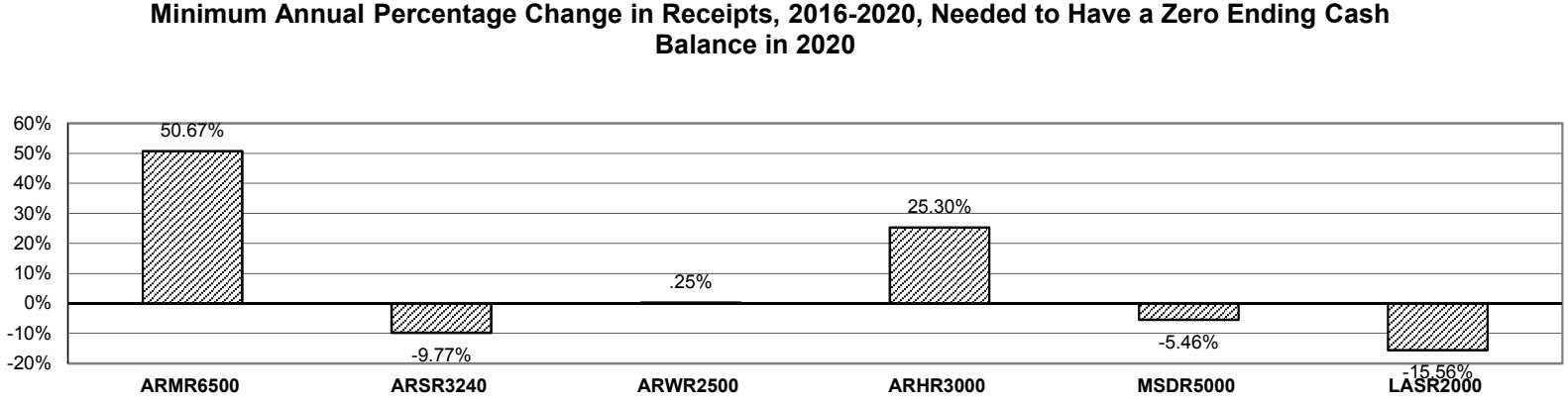


Figure 26. Rice Farms

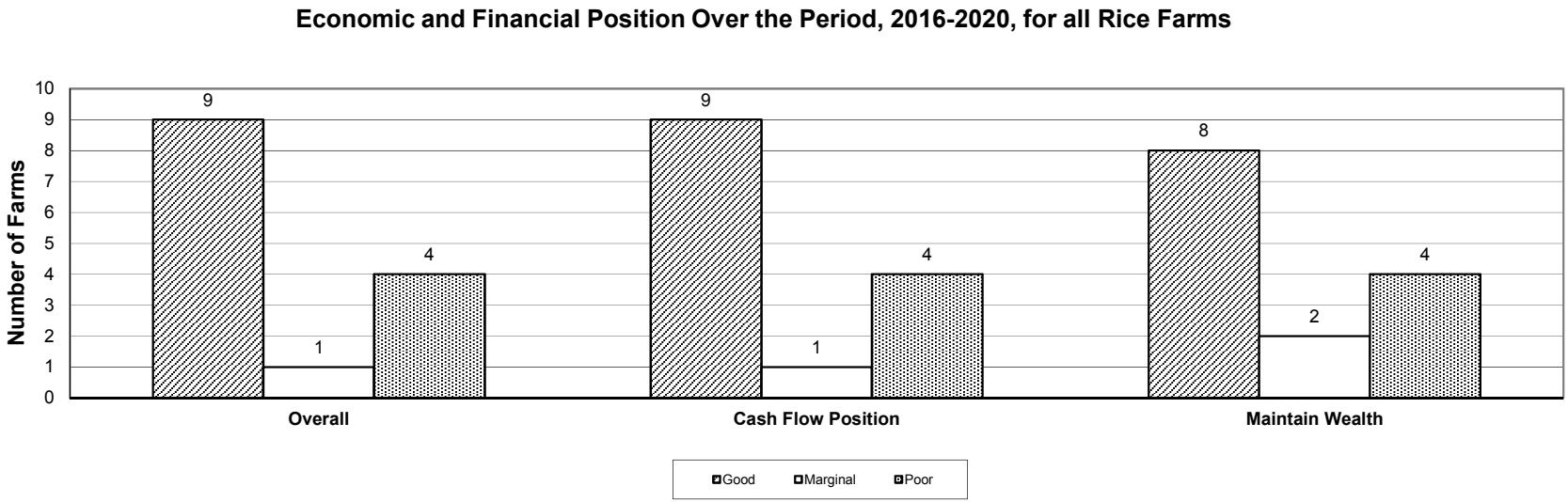


Figure 27. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Rice Farms

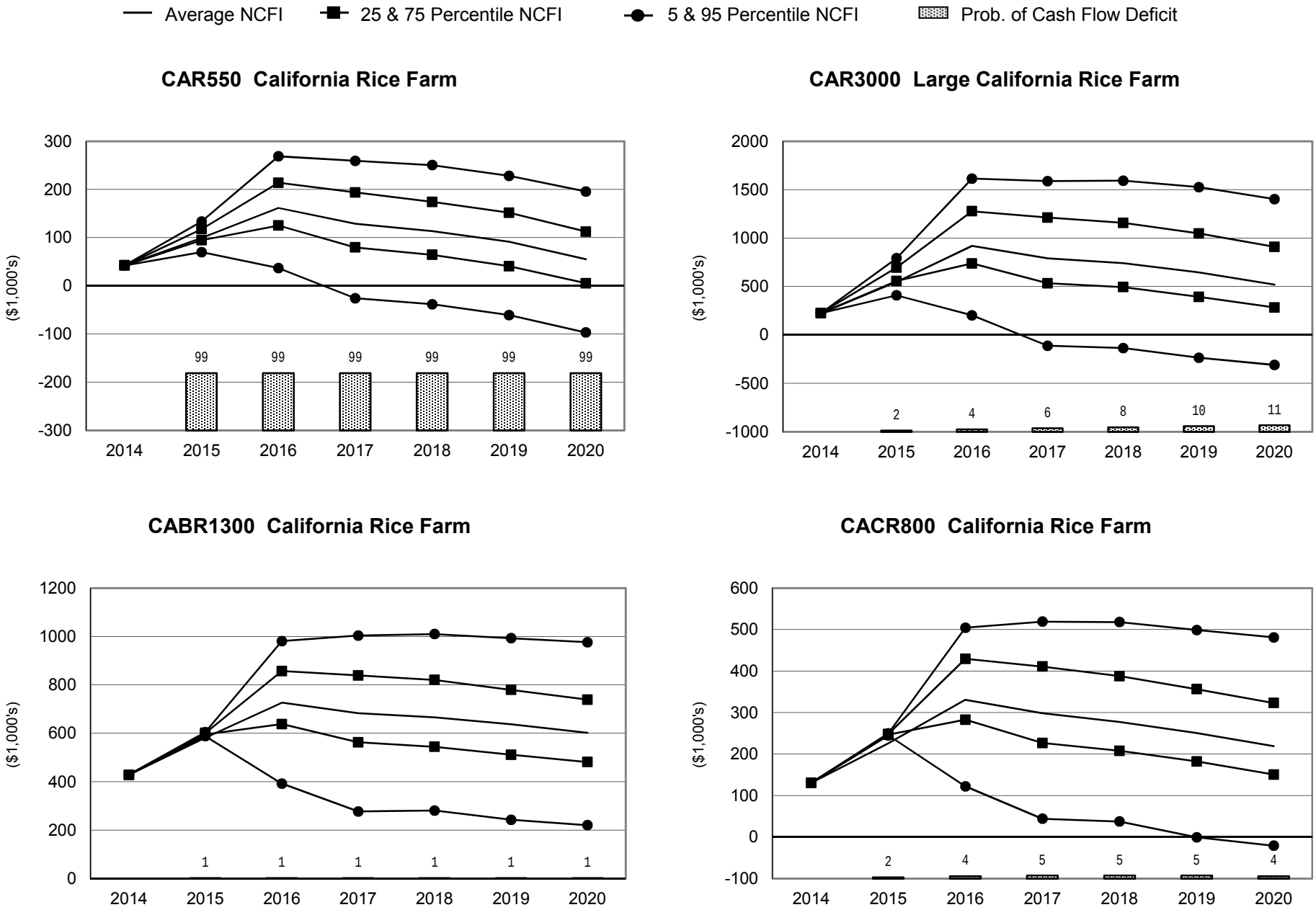


Figure 28. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Rice Farms

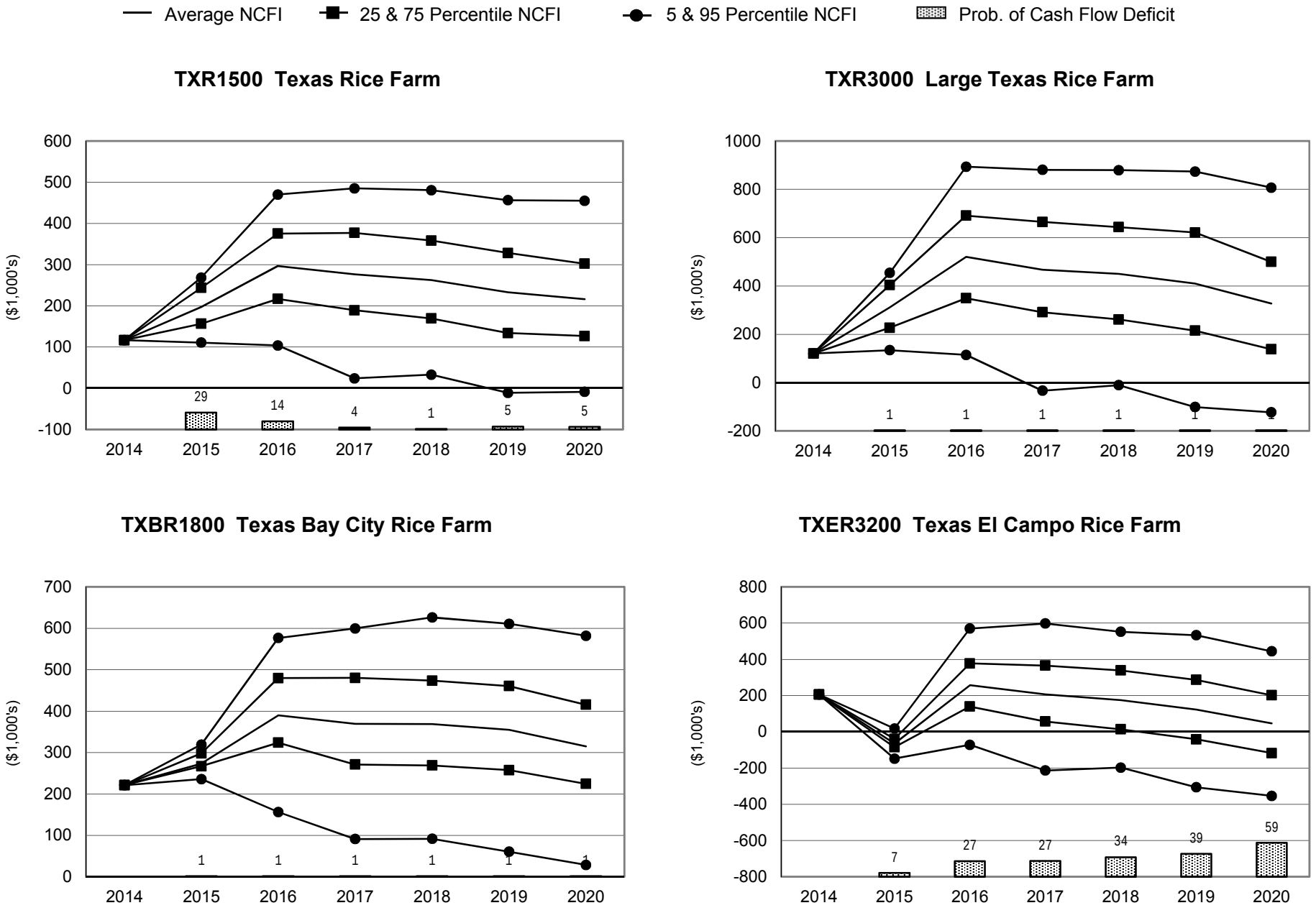


Figure 29. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Rice Farms

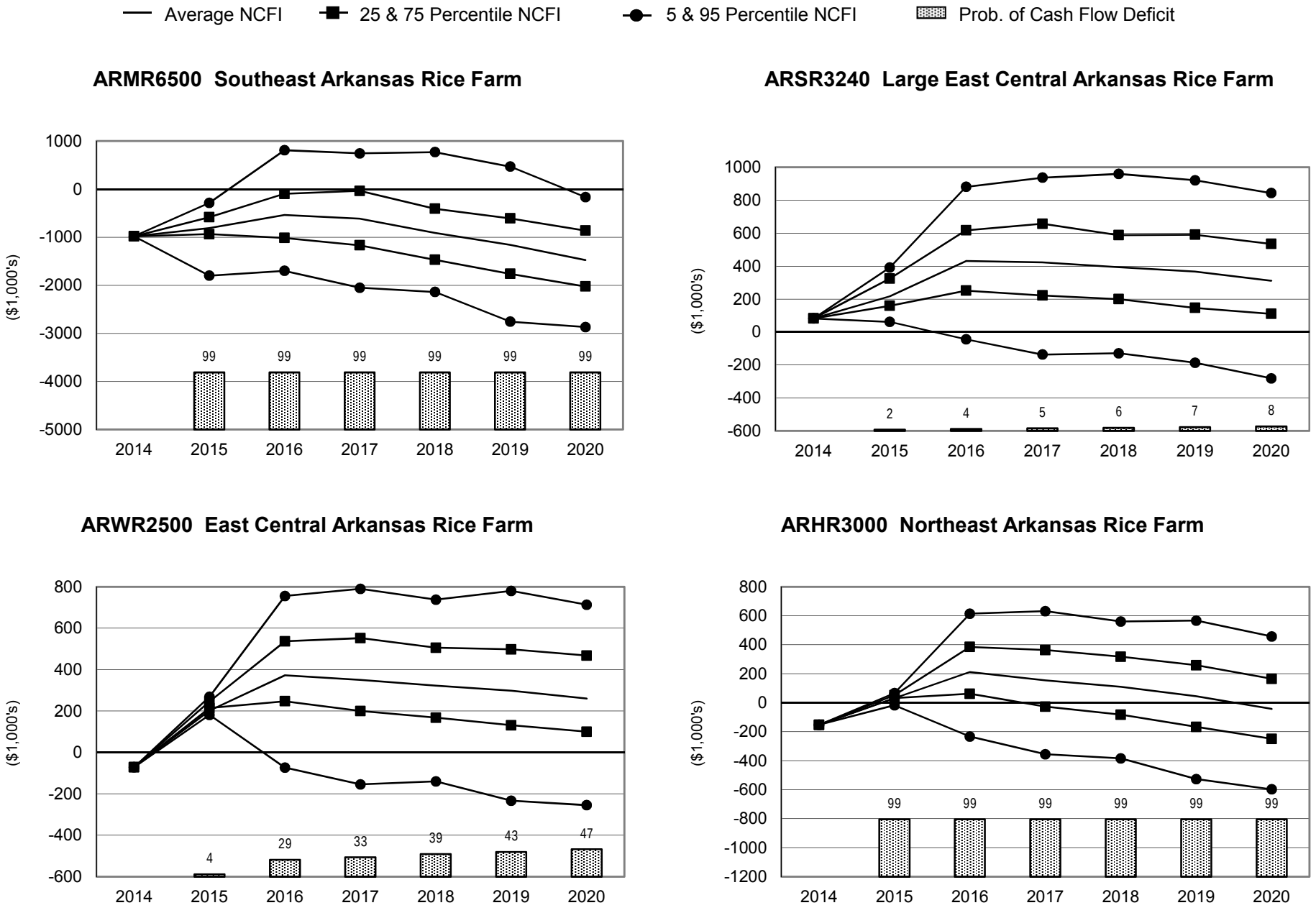


Figure 30. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Rice Farms

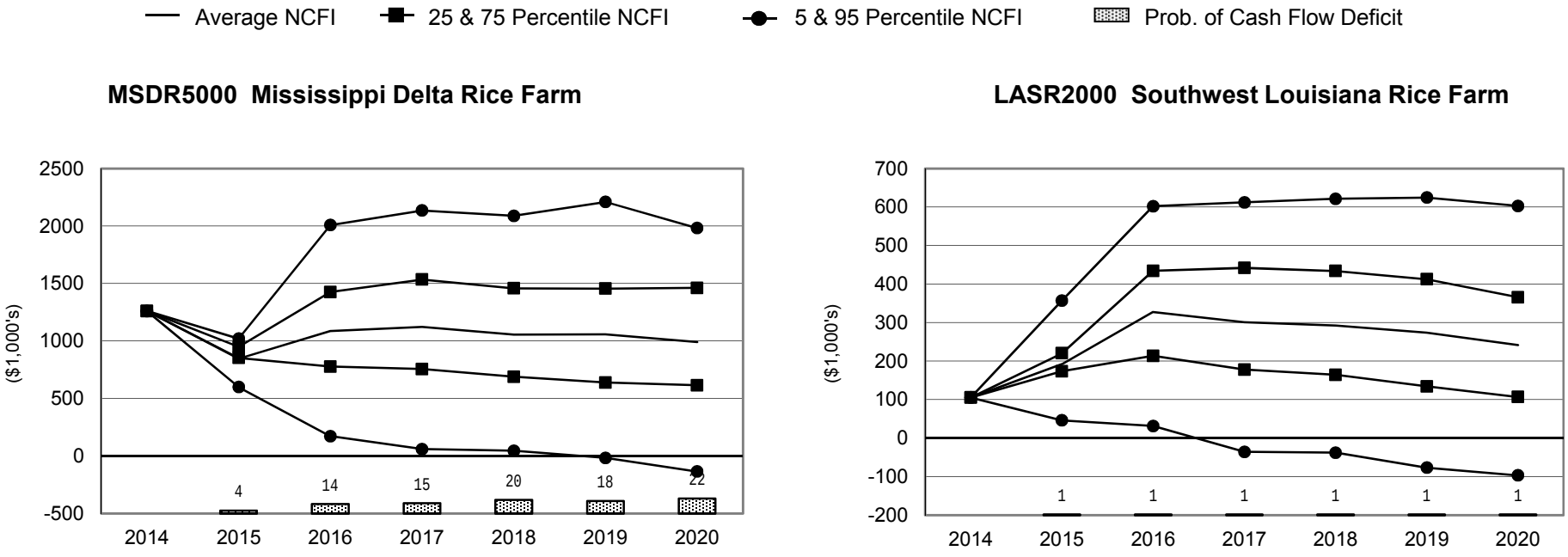


Figure 31. Representative Farms Producing Milk

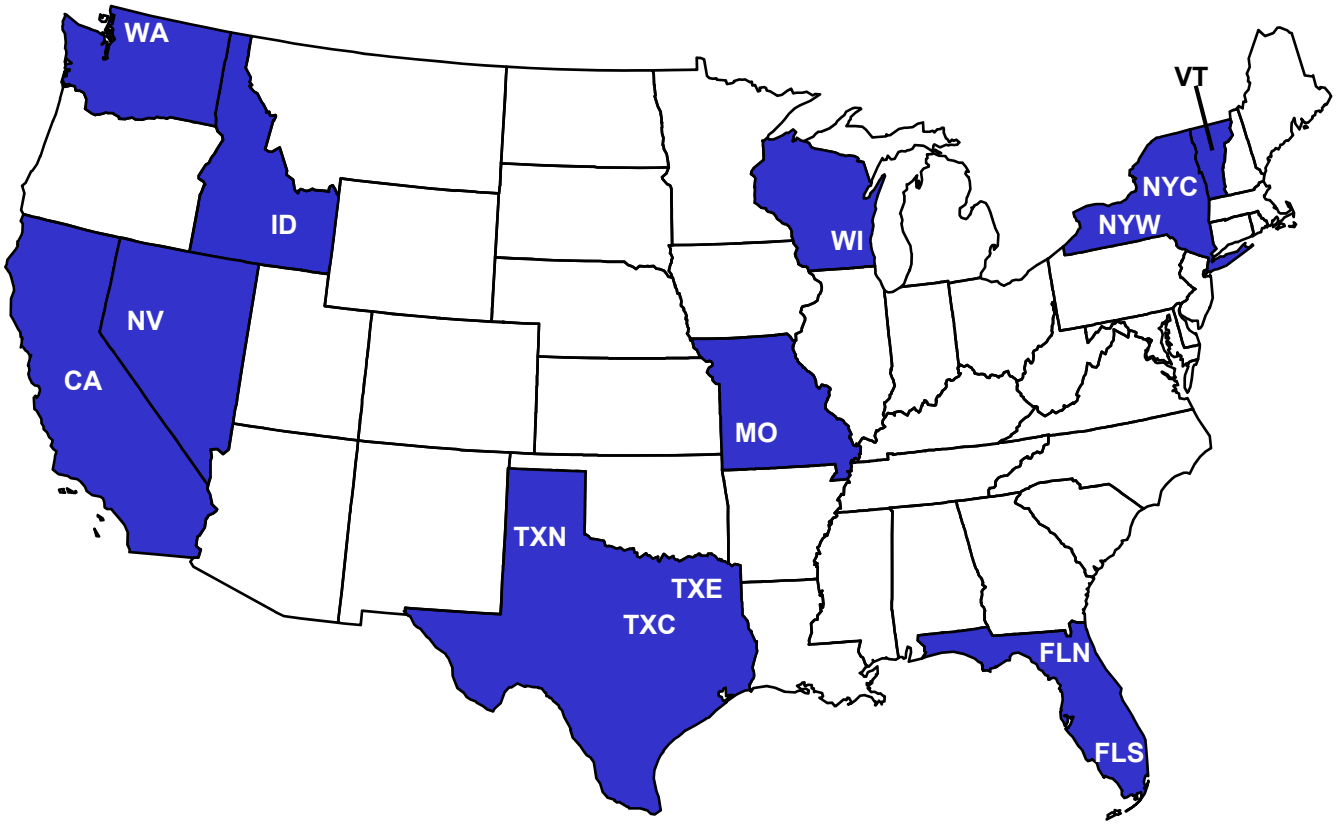


Table 12. Implications of the January 2016 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Milk.

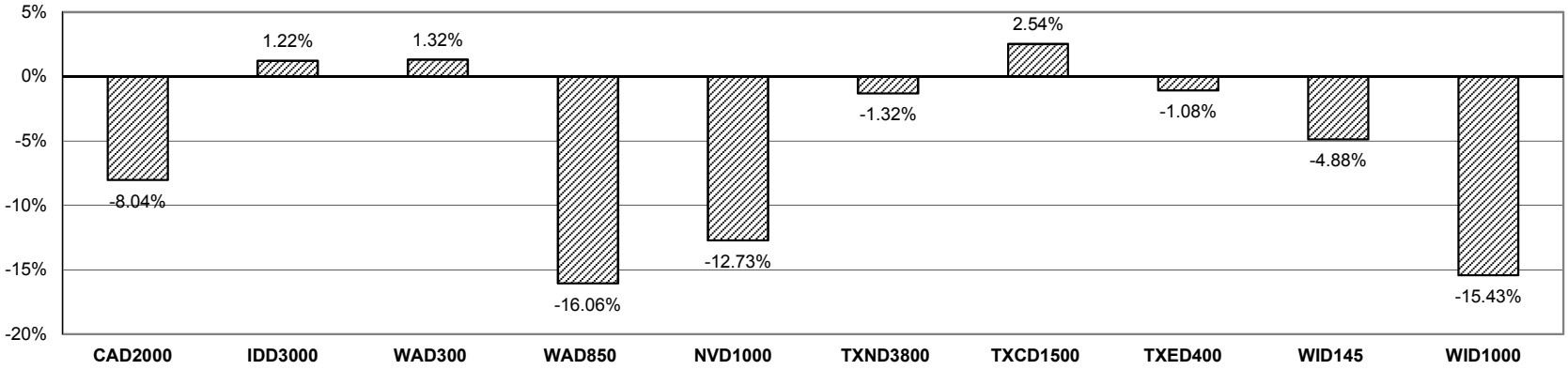
	CAD2000	WAD300	WAD850	IDD3000	NVD1000	TXND3800	TXCD1500	TXED400	WID145	WID1000
Overall Financial Position										
2016-2020 Average	Good	Poor	Good	Poor	Good	Marginal	Poor	Marginal	Marginal	Good
Change Real Net Worth (%)										
2016-2020 Average	1.91	-1.09	3.93	-0.15	2.90	0.62	-2.46	1.45	0.58	3.48
NIA to Maintain Real										
Net Worth (%/Rec.)	-2.22	9.21	-8.73	3.85	-3.57	1.42	6.73	-0.47	1.29	-5.38
NIA for Zero Ending										
Cash Balance (%/Rec.)	-8.04	1.32	-16.06	1.22	-12.73	-1.32	2.54	-1.08	-4.88	-15.43
Govt Payments/Receipts (%)										
2016-2020 Average	0.01	0.24	0.04	0.00	0.00	0.00	0.00	0.00	0.34	0.12
Cost to Receipts Ratio (%)										
2016-2020 Average	84.83	92.75	79.95	94.21	85.93	91.33	97.58	84.37	76.69	84.63
Total Cash Receipts ($1000)										
2014	12,765.68	1,693.03	6,011.27	19,741.30	6,816.03	23,548.73	8,616.97	1,944.34	1,089.75	7,696.42
2015	9,290.99	1,195.07	4,319.34	14,804.47	4,925.79	17,572.17	6,524.87	1,431.78	832.93	5,825.30
2016	8,906.11	1,138.98	4,123.08	13,525.32	4,639.18	16,471.22	6,145.51	1,339.00	775.32	5,418.77
2017	9,453.02	1,218.04	4,416.63	14,274.67	4,921.01	17,452.91	6,498.96	1,424.43	815.71	5,726.51
2018	9,853.63	1,270.06	4,610.99	14,913.19	5,139.27	18,193.86	6,767.69	1,488.15	847.31	5,981.56
2019	10,181.11	1,315.51	4,773.74	15,447.99	5,303.93	18,758.23	6,973.01	1,538.37	873.24	6,161.45
2020	10,446.70	1,346.80	4,884.54	15,841.67	5,432.63	19,225.33	7,144.19	1,577.47	894.74	6,315.95
2016-2020 Average	9,768.12	1,257.88	4,561.80	14,800.56	5,087.20	18,020.31	6,705.87	1,473.48	841.26	5,920.85
Government Payments ($1000)										
2014	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2015	0.00	7.37	0.00	0.00	0.00	0.00	0.00	0.00	5.47	0.00
2016	0.00	7.34	0.00	0.00	0.00	0.00	0.00	0.00	5.98	0.00
2017	0.00	3.73	1.14	0.00	0.00	0.00	0.00	0.00	3.87	5.06
2018	0.36	1.38	3.19	0.86	0.00	0.42	0.00	0.00	1.74	16.00
2019	1.35	0.87	2.50	1.16	0.00	0.69	0.00	0.00	1.07	9.17
2020	1.72	0.78	1.58	1.64	0.00	1.56	0.00	0.00	0.88	5.65
2016-2020 Average	0.68	2.82	1.68	0.73	0.00	0.53	0.00	0.00	2.71	7.17
Net Cash Farm Income ($1000)										
2014	4,409.62	544.05	2,170.04	6,175.59	2,403.48	7,459.10	2,236.80	644.57	442.69	2,554.17
2015	1,538.73	103.11	774.24	1,974.81	874.54	2,458.07	750.11	268.53	216.85	909.28
2016	1,237.25	63.44	643.85	695.54	631.58	1,343.80	157.83	215.41	172.76	569.83
2017	1,472.89	99.54	804.37	956.09	730.22	1,666.64	245.27	231.96	199.50	745.90
2018	1,637.93	128.58	907.06	1,233.08	803.85	1,899.15	285.32	265.04	217.25	895.61
2019	1,718.25	141.72	1,281.72	1,376.56	820.02	1,925.49	260.75	270.38	226.99	1,453.68
2020	1,814.50	147.90	1,349.18	1,556.80	850.31	2,059.49	263.57	285.41	231.50	1,518.05
2016-2020 Average	1,576.17	116.24	997.24	1,163.61	767.20	1,778.91	242.55	253.64	209.60	1,036.61
Ending Cash Reserves ($1000)										
2014	1,654.57	265.26	1,157.95	1,280.91	1,284.40	2,125.79	931.34	102.93	233.82	1,910.97
2015	1,565.29	234.29	1,132.87	918.85	1,318.79	2,356.32	664.51	42.45	201.63	1,912.75
2016	1,088.55	138.80	1,002.60	-510.33	1,150.87	1,641.01	-154.24	-79.46	95.91	1,603.33
2017	1,510.86	80.41	1,368.16	-741.56	1,444.29	1,163.12	-285.04	-46.43	110.14	1,814.74
2018	1,964.05	28.18	1,776.86	-838.55	1,807.06	757.88	-440.99	-27.37	98.45	2,112.84
2019	2,557.71	-23.98	2,429.91	-834.11	2,164.08	398.56	-587.95	14.02	111.05	2,847.98
2020	3,213.16	-72.80	3,078.56	-759.04	2,583.21	965.67	-760.06	67.91	151.32	3,614.15
Nominal Net Worth ($1000)										
2014	20,252.96	3,896.61	9,634.53	25,933.17	7,224.83	23,696.03	8,614.05	2,480.94	2,762.43	10,344.73
2015	20,798.60	3,859.03	9,913.32	26,528.96	7,523.53	24,224.98	8,871.21	2,589.23	2,826.49	10,645.37
2016	20,031.29	3,630.12	9,756.67	24,778.60	7,293.82	22,849.52	8,111.85	2,476.16	2,737.90	10,247.37
2017	19,975.30	3,505.69	9,906.38	23,917.45	7,319.65	22,283.13	7,610.43	2,443.65	2,712.92	10,208.95
2018	20,415.40	3,455.25	10,282.18	23,779.01	7,572.69	22,349.20	7,337.54	2,470.12	2,713.85	10,448.94
2019	21,188.27	3,435.67	11,002.08	24,093.63	7,923.09	22,875.62	7,213.27	2,565.00	2,763.35	11,250.33
2020	22,200.95	3,474.11	11,811.77	24,886.57	8,436.31	23,801.49	7,189.61	2,683.61	2,850.64	12,160.58
Prob. of Negative Ending Cash (%)										
2015	1	1	1	22	1	1	1	32	1	1
2016	9	20	3	64	1	15	60	65	16	2
2017	13	39	5	62	2	32	60	56	20	4
2018	11	46	5	58	3	42	60	52	33	5
2019	10	52	3	57	2	44	63	49	32	3
2020	9	55	2	56	2	41	64	43	29	2
Prob. of Decreasing Real Net Worth										
Over 2014-2020 (%)	1	1	1	1	1	1	1	1	1	1

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

	NYWD500	NYWD1200	NYCD180	NYCD675	VTD140	VTD400	MOGD550	MOGD180	FLND550	FLSD1750
Overall Financial Position										
2016-2020 Average	Good	Good	Marginal	Good	Poor	Poor	Good	Good	Marginal	Marginal
Change Real Net Worth (%)										
2016-2020 Average	6.13	3.89	0.24	2.75	-6.84	0.19	6.00	4.15	2.57	2.54
NIA to Maintain Real										
Net Worth (%/Rec.)	-18.38	-10.38	2.77	-10.05	20.47	3.15	-21.69	-8.52	-2.18	-1.83
NIA for Zero Ending										
Cash Balance (%/Rec.)	-35.25	-23.15	-3.08	-17.96	28.52	1.38	-39.03	-19.90	-5.69	-3.42
Govt Payments/Receipts (%)										
2016-2020 Average	0.19	0.02	0.00	0.00	0.47	0.53	0.00	0.00	0.00	0.00
Cost to Receipts Ratio (%)										
2016-2020 Average	71.22	78.31	77.98	73.61	99.51	89.64	60.36	66.11	86.93	90.36
Total Cash Receipts ($1000)										
2014	3,674.41	8,529.86	1,186.15	4,719.29	858.41	2,766.46	1,874.49	682.46	3,603.05	11,039.59
2015	2,781.69	6,311.90	860.02	3,408.30	643.88	2,053.70	1,436.21	519.92	2,812.23	8,647.60
2016	2,661.91	6,003.93	815.53	3,232.48	613.77	1,955.04	1,353.41	491.17	2,649.78	8,167.74
2017	2,826.32	6,390.21	864.16	3,440.51	652.70	2,085.05	1,427.13	519.97	2,775.70	8,572.47
2018	2,935.86	6,674.52	899.97	3,592.02	679.67	2,173.85	1,482.26	541.13	2,881.93	8,909.34
2019	3,022.52	6,885.24	927.81	3,707.66	700.00	2,240.22	1,528.55	558.44	2,967.68	9,178.62
2020	3,090.51	7,042.77	949.14	3,793.82	716.04	2,291.76	1,564.53	571.42	3,042.37	9,408.85
2016-2020 Average	2,907.43	6,599.33	891.32	3,553.30	672.43	2,149.18	1,471.18	536.42	2,863.49	8,847.41
Government Payments ($1000)										
2014	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2015	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2016	4.46	0.00	0.00	0.00	1.52	5.50	0.00	0.00	0.00	0.00
2017	11.73	0.00	0.00	0.00	3.91	14.13	0.00	0.00	0.00	0.00
2018	5.42	3.80	0.00	0.00	3.72	13.44	0.00	0.00	0.00	0.00
2019	2.55	1.28	0.00	0.00	3.30	11.92	0.00	0.00	0.00	0.00
2020	2.67	1.39	0.00	0.00	3.25	11.72	0.00	0.00	0.00	0.00
2016-2020 Average	5.37	1.29	0.00	0.00	3.14	11.34	0.00	0.00	0.00	0.00
Net Cash Farm Income ($1000)										
2014	1,607.97	3,454.96	488.54	2,082.97	222.72	839.04	975.62	342.40	1,079.65	2,790.10
2015	829.96	1,486.10	204.92	940.04	40.49	242.74	588.69	185.51	463.53	1,108.81
2016	736.71	1,191.87	163.08	785.13	7.21	175.01	518.77	162.77	338.54	784.35
2017	833.12	1,416.41	192.54	920.82	14.97	231.85	579.08	181.76	374.39	838.12
2018	888.53	1,557.06	211.42	1,006.10	17.25	268.92	608.38	192.04	420.56	1,012.33
2019	904.49	1,620.32	221.69	1,052.27	10.24	275.28	635.52	199.05	435.16	1,034.04
2020	918.50	1,659.13	230.45	1,077.20	-0.31	271.07	652.14	205.02	464.30	1,120.67
2016-2020 Average	856.27	1,488.96	203.84	968.30	9.87	244.43	598.78	188.13	406.59	957.90
Ending Cash Reserves ($1000)										
2014	1,719.26	2,696.99	190.39	934.36	-102.03	260.28	878.48	262.82	345.41	-95.03
2015	1,993.64	3,110.18	142.50	1,034.40	-242.29	121.12	990.63	273.33	327.54	-142.02
2016	2,183.68	3,191.10	69.92	949.49	-391.28	-114.46	1,050.98	257.49	191.76	-484.98
2017	2,656.46	3,904.80	88.23	1,316.30	-470.77	-133.62	1,300.10	301.33	295.24	-169.98
2018	3,121.67	4,673.31	95.64	1,644.38	-558.27	-140.90	1,568.68	349.71	405.63	267.84
2019	3,708.39	5,487.33	105.24	1,969.72	-654.44	-126.62	1,848.39	413.52	528.70	755.04
2020	4,265.48	6,317.48	110.20	2,376.81	-768.29	-122.57	2,142.94	480.37	658.42	1,265.77
Nominal Net Worth ($1000)										
2014	5,589.33	13,420.39	2,994.80	10,233.97	1,284.38	4,298.33	3,412.69	1,095.68	3,481.68	9,978.57
2015	6,101.22	14,400.46	3,113.19	11,025.74	1,221.08	4,409.10	3,647.02	1,149.10	3,699.39	10,321.80
2016	6,275.14	14,419.68	3,020.00	10,945.37	1,071.05	4,159.90	3,709.03	1,137.73	3,557.73	9,918.82
2017	6,622.19	14,813.47	2,983.96	11,147.05	960.31	4,079.75	3,905.55	1,167.32	3,553.63	9,861.66
2018	7,058.65	15,513.18	2,996.25	11,503.26	869.53	4,073.27	4,182.68	1,220.94	3,653.74	10,153.81
2019	7,673.35	16,396.02	3,034.11	11,956.95	785.41	4,147.58	4,515.17	1,302.37	3,825.36	10,648.10
2020	8,294.14	17,425.76	3,093.88	12,599.44	712.85	4,249.52	4,876.10	1,388.74	4,054.22	11,293.74
Prob. of Negative Ending Cash (%)										
2015	1	1	1	1	99	9	1	1	1	36
2016	1	1	19	1	99	72	1	1	24	69
2017	1	1	19	1	99	68	1	1	24	54
2018	1	1	24	1	99	65	1	1	21	42
2019	1	1	26	1	99	61	1	1	19	36
2020	1	1	28	1	99	58	1	1	17	30
Prob. of Decreasing Real Net Worth										
Over 2014-2020 (%)	1	1	1	1	1	1	1	1	1	1

Figure 32. Dairy Farms

Minimum Annual Percentage Change in Receipts, 2016-2020, Needed to Have a Zero Ending Cash Balance in 2020



Minimum Annual Percentage Change in Receipts, 2016-2020, Needed to Have a Zero Ending Cash Balance in 2020

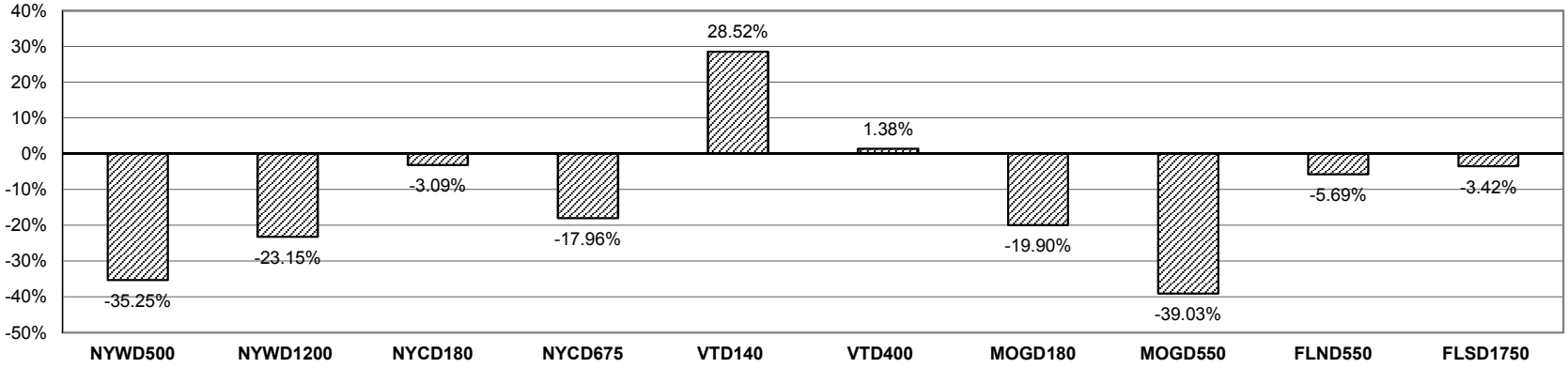


Figure 33. Dairy Farms

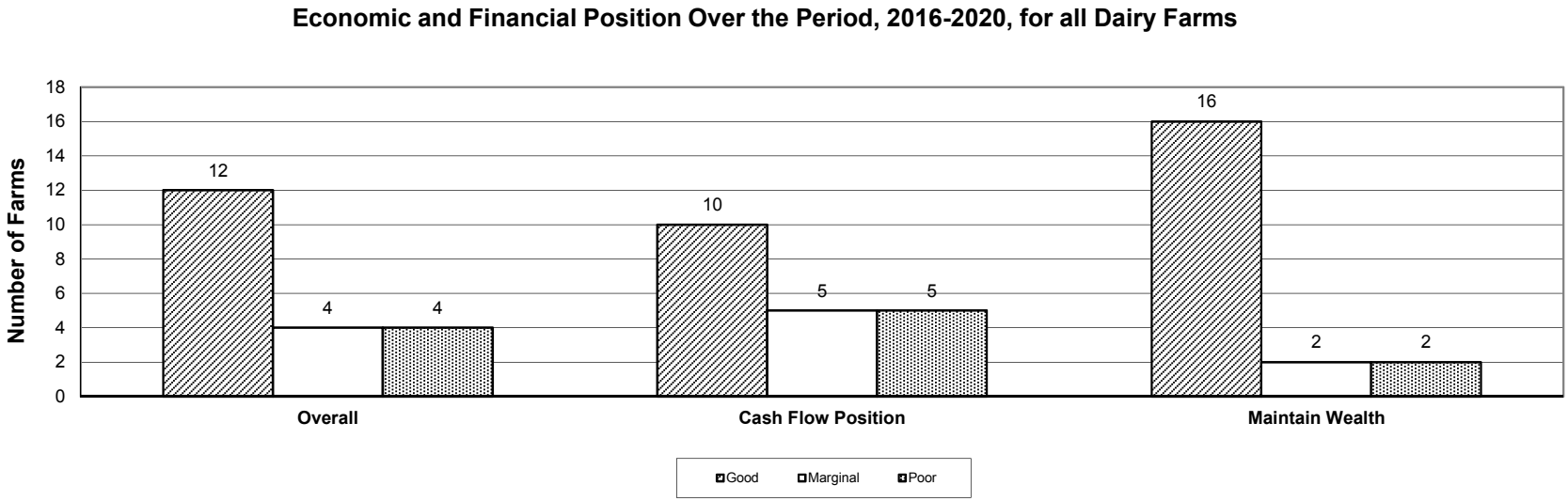


Figure 34. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Dairy Farms

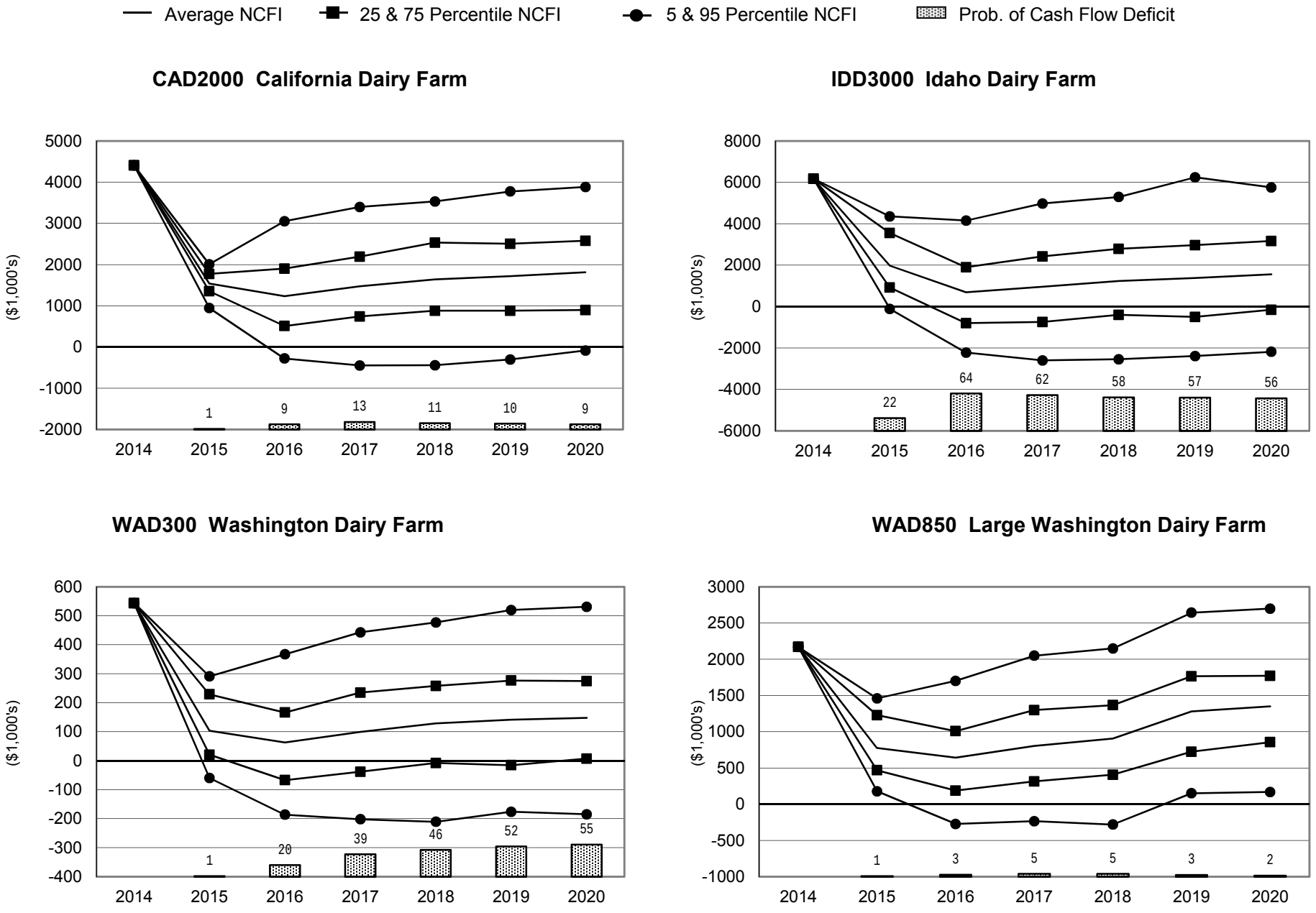


Figure 35. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Dairy Farms

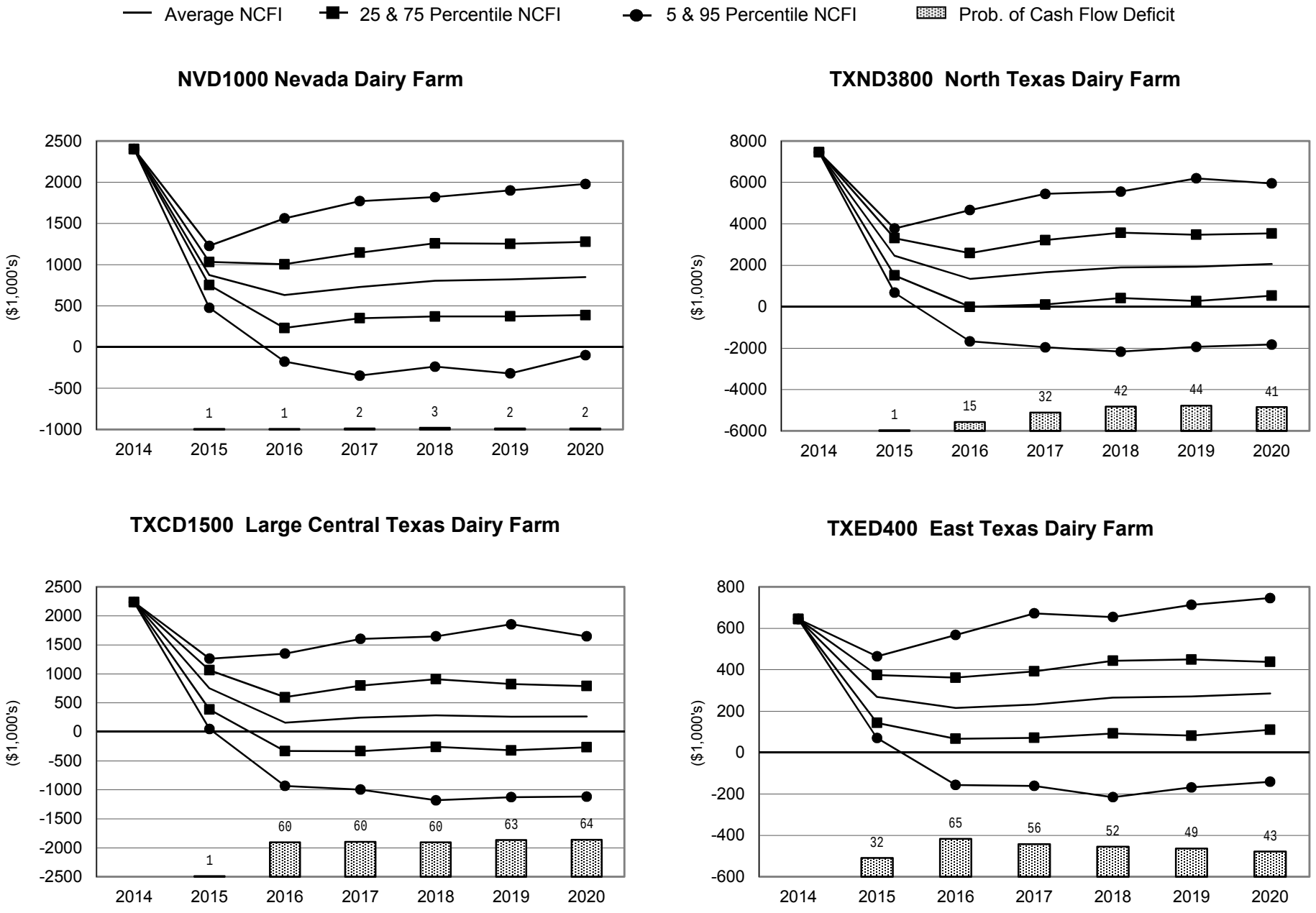


Figure 36. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Dairy Farms

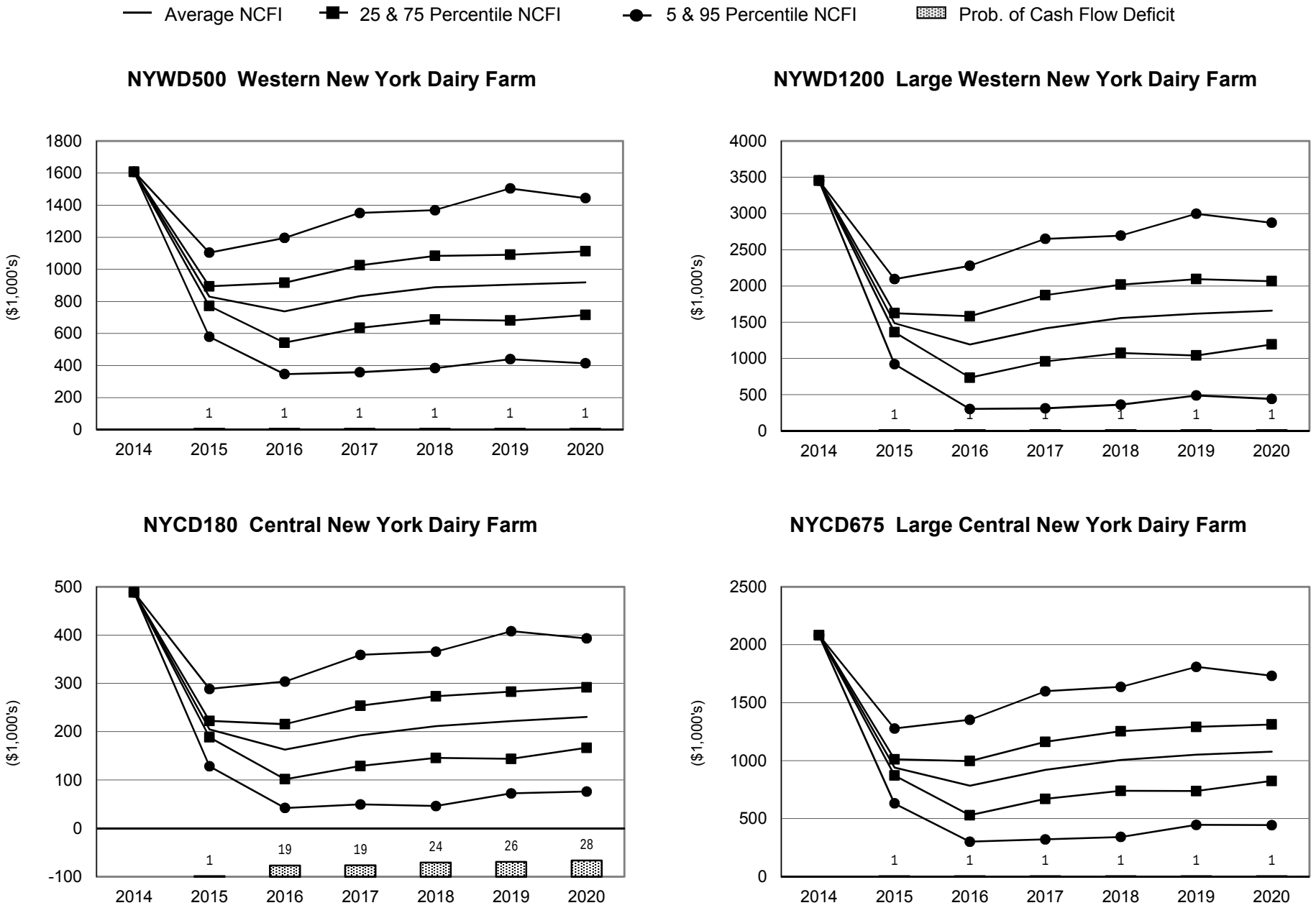


Figure 37. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Dairy Farms

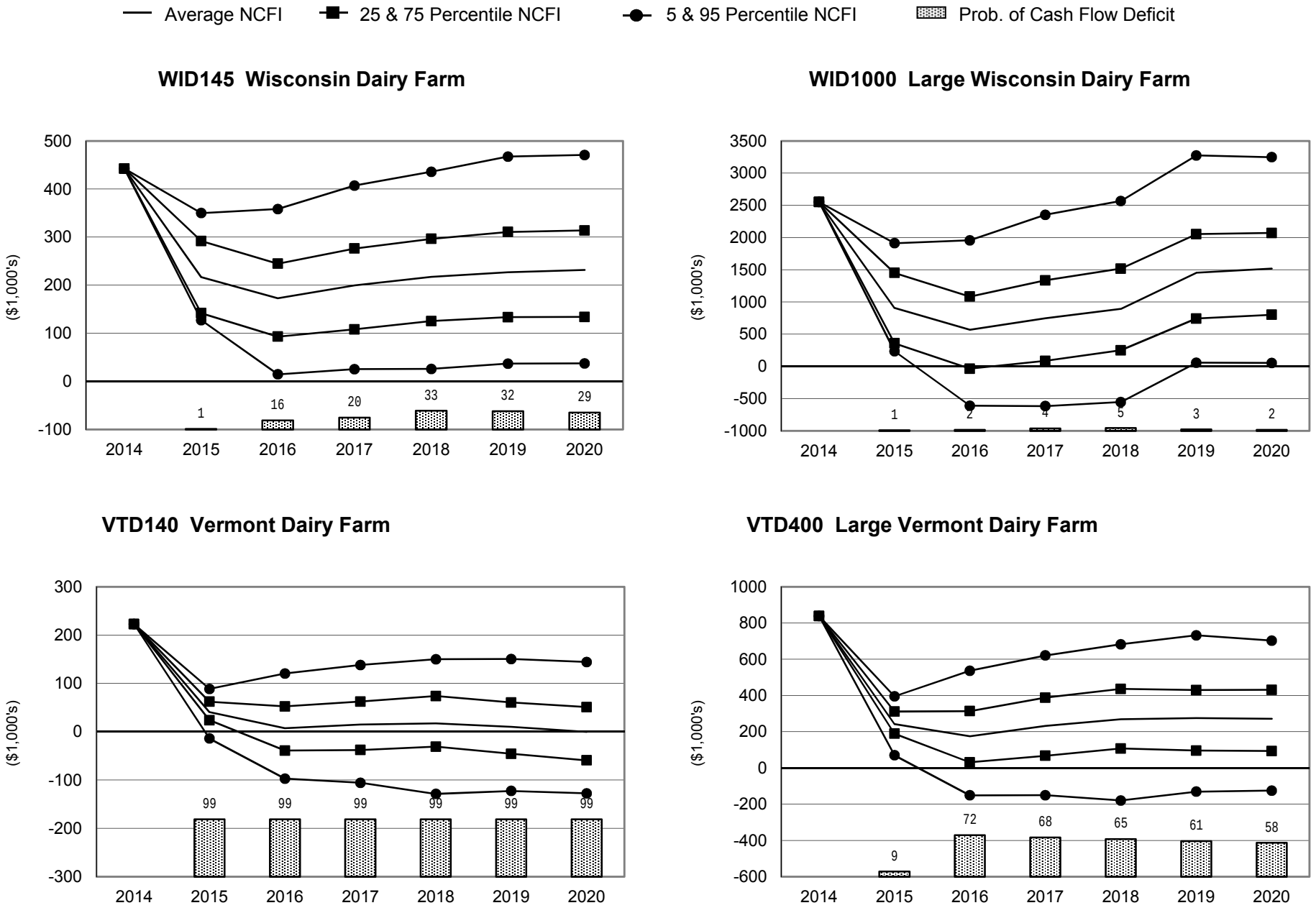


Figure 38. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Dairy Farms

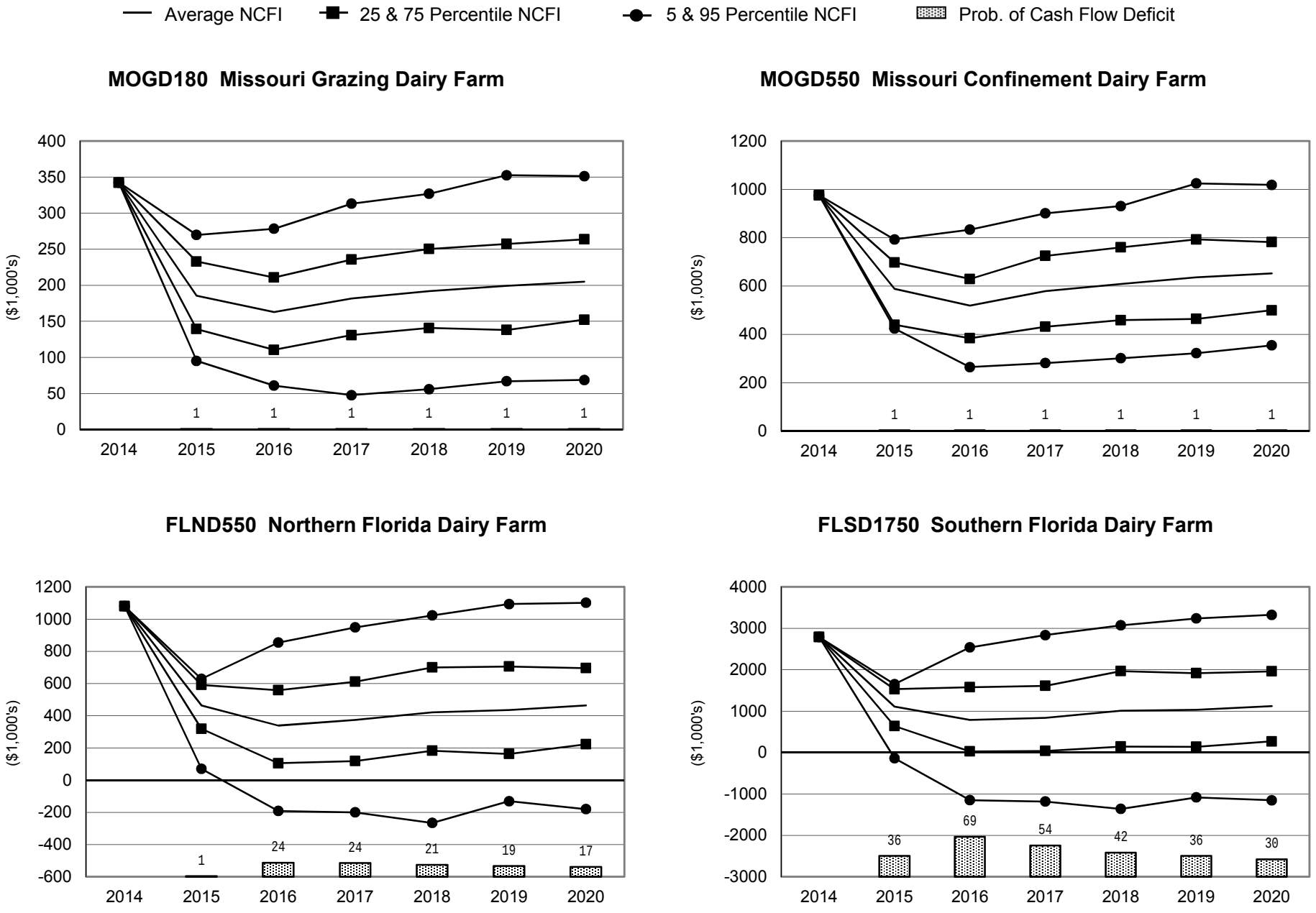


Figure 39. Representative Ranches Producing Beef Cattle

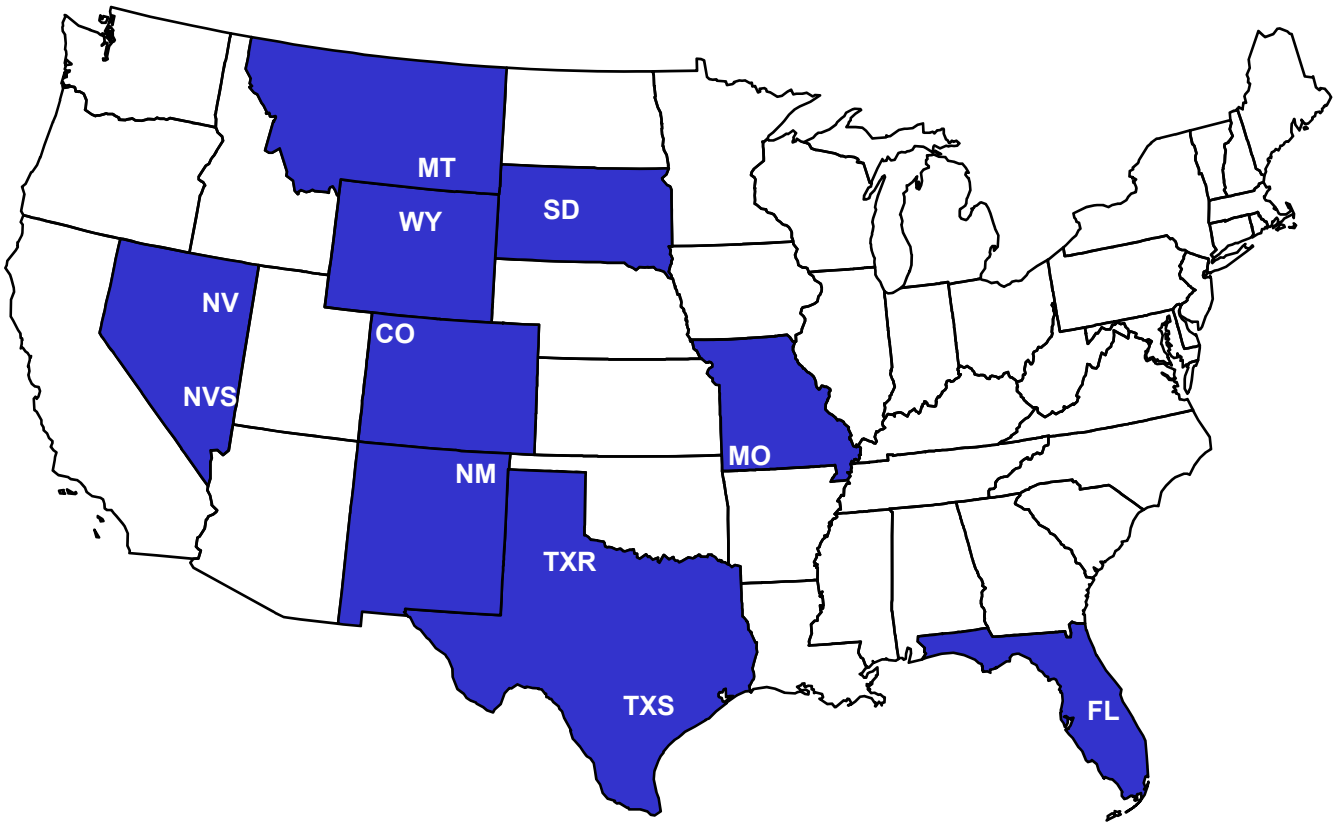


Table 14. Implications of the January 2016 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Beef Cattle.

	NVB650	NVSB550	MTB600	WYB475	COB275	NMB240	SDB375	MOB250	TXRB400	TXSB275	FLB1155
Overall Financial Position											
2016-2020 Average	Marginal	Good	Marginal	Marginal	Marginal	Marginal	Marginal	Marginal	Marginal	Poor	Marginal
Change Real Net Worth (%)											
2016-2020 Average	-0.60	1.76	-0.65	-1.13	-1.05	-1.03	-1.24	0.12	-1.12	-1.36	-0.57
NIA to Maintain Real											
Net Worth (%/Rec.)	22.82	-8.90	36.97	31.04	123.81	79.20	60.05	4.58	53.59	62.21	61.14
NIA for Zero Ending											
Cash Balance (%/Rec.)	-30.01	-56.00	-38.78	-9.20	-36.18	-17.08	-3.84	-51.56	-6.12	1.48	-48.86
Govt Payments/Receipts (%)											
2016-2020 Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.35	0.00	0.00	0.00
Cost to Receipts Ratio (%)											
2016-2020 Average	63.70	52.93	60.77	70.37	64.29	52.30	66.38	47.49	70.05	71.46	62.03
Total Cash Receipts ($1000)											
2014	831.32	735.28	671.88	505.34	402.99	343.93	458.21	477.25	650.25	350.25	1,195.71
2015	812.27	735.35	672.08	564.86	400.81	346.29	456.80	462.89	643.12	350.55	1,194.46
2016	716.00	652.83	572.74	493.48	317.27	302.33	390.95	423.88	559.62	309.13	1,038.01
2017	644.26	595.75	501.84	447.49	288.73	274.72	344.01	397.28	500.33	275.48	925.51
2018	608.37	564.59	464.12	424.33	276.05	257.58	319.91	381.77	469.97	261.24	868.36
2019	598.22	556.41	454.60	418.72	272.50	254.85	312.78	380.57	460.35	254.20	850.92
2020	611.05	568.64	469.07	431.80	278.71	259.13	322.43	388.19	473.47	260.38	872.96
2016-2020 Average	635.58	587.64	492.47	443.17	286.65	269.72	338.02	394.34	492.75	272.09	911.15
Government Payments ($1000)											
2014	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2015	0.00	0.00	0.00	0.00	25.00	0.00	0.00	1.53	0.00	0.00	0.00
2016	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.71	0.00	0.00	0.00
2017	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.53	0.00	0.00	0.00
2018	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.31	0.00	0.00	0.00
2019	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.52	0.00	0.00	0.00
2020	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.06	0.00	0.00	0.00
2016-2020 Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.23	0.00	0.00	0.00
Net Cash Farm Income ($1000)											
2014	312.06	413.56	352.22	189.07	211.32	202.21	226.27	278.11	253.28	151.55	593.02
2015	418.01	437.55	367.62	254.64	221.03	202.07	232.28	277.81	250.12	162.43	634.84
2016	331.00	361.01	283.96	202.98	147.76	169.92	178.52	247.47	225.99	120.46	502.58
2017	259.65	295.04	214.53	148.14	112.64	135.12	132.82	220.02	165.89	99.16	390.40
2018	211.33	257.97	178.17	120.47	95.23	116.99	102.32	195.62	131.22	64.72	314.53
2019	187.34	241.97	155.32	107.73	85.06	111.21	90.75	191.07	120.09	60.05	278.78
2020	189.32	243.75	162.51	96.65	86.97	118.69	85.88	194.91	117.71	60.32	287.52
2016-2020 Average	235.73	279.95	198.90	135.19	105.53	130.38	118.06	209.82	152.18	80.94	354.76
Ending Cash Reserves ($1000)											
2014	177.88	471.96	281.65	58.34	232.85	60.33	9.05	328.71	-107.05	35.47	501.56
2015	402.34	733.99	447.96	154.52	372.25	148.43	111.35	451.75	-9.91	76.29	802.67
2016	550.26	906.28	549.22	211.17	403.95	194.84	149.37	546.19	69.57	77.31	1,061.34
2017	661.51	1,054.32	636.61	240.31	389.95	217.68	155.11	628.84	113.63	54.12	1,294.59
2018	728.91	1,169.43	693.64	218.42	359.65	222.28	141.52	663.52	126.74	24.83	1,476.97
2019	773.39	1,266.19	735.75	212.76	354.33	211.25	95.24	703.71	127.58	1.80	1,621.31
2020	823.43	1,386.66	771.96	209.92	351.41	221.07	58.71	746.06	120.52	-20.42	1,745.54
Nominal Net Worth ($1000)											
2014	8,572.25	2,977.44	8,478.69	6,253.18	16,503.08	7,387.27	7,876.82	3,452.31	8,640.53	5,258.04	25,666.51
2015	8,539.45	3,265.95	8,803.65	6,469.82	14,784.35	7,632.40	8,180.17	3,570.06	8,927.56	5,390.35	26,526.70
2016	8,287.32	3,255.72	8,491.56	6,220.45	14,290.27	7,371.15	7,899.12	3,520.22	8,605.20	5,178.08	25,733.07
2017	8,141.06	3,272.28	8,314.29	6,051.27	13,983.00	7,216.27	7,708.00	3,506.07	8,403.55	5,022.79	25,335.98
2018	8,090.68	3,327.33	8,247.83	5,951.46	13,817.64	7,138.09	7,604.18	3,507.25	8,295.20	4,946.88	25,228.70
2019	8,071.62	3,419.15	8,248.87	5,912.43	13,726.82	7,072.58	7,504.78	3,533.57	8,227.15	4,904.84	25,194.38
2020	8,137.09	3,581.70	8,318.36	5,942.23	13,713.64	7,080.94	7,503.34	3,585.00	8,226.93	4,885.97	25,311.60
Prob. of Negative Ending Cash (%)											
2015	1	1	1	1	1	1	1	1	99	1	1
2016	1	1	1	1	1	1	1	1	1	2	1
2017	1	1	1	1	1	1	1	1	1	14	1
2018	1	1	1	1	1	1	2	1	3	32	1
2019	1	1	1	1	1	1	9	1	7	49	1
2020	1	1	1	1	1	1	21	1	10	62	1
Prob. of Decreasing Real Net Worth											
Over 2014-2020 (%)	1	1	1	1	1	1	1	1	1	1	1

Figure 40. Beef Cattle Ranches

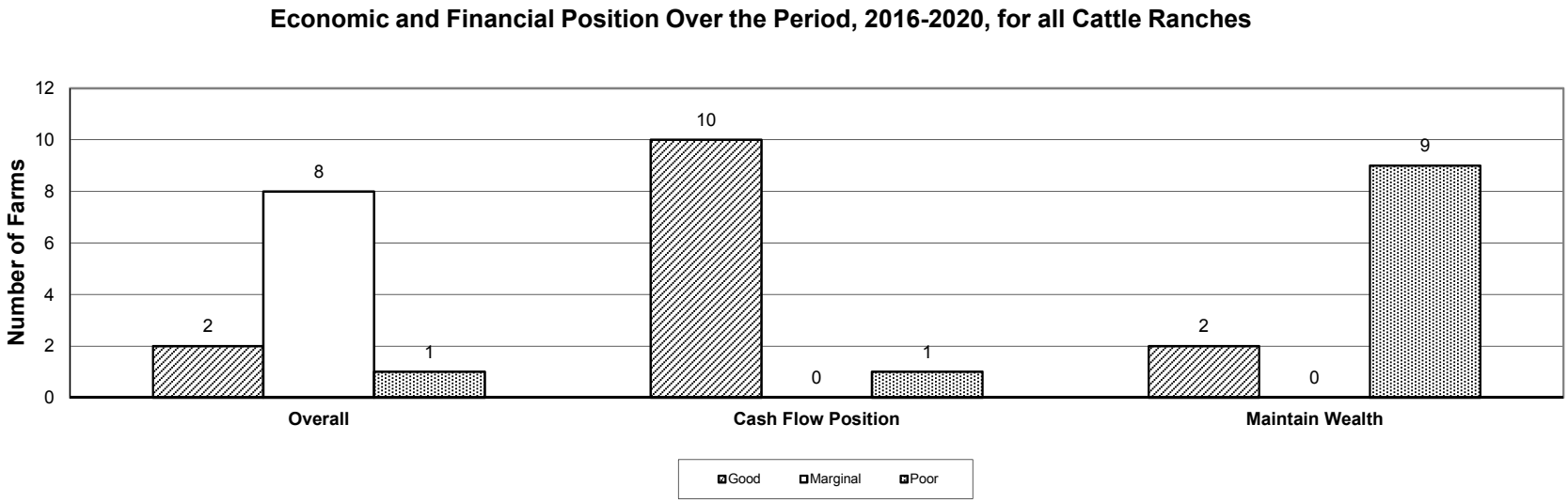


Figure 41. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Beef Cattle Ranches

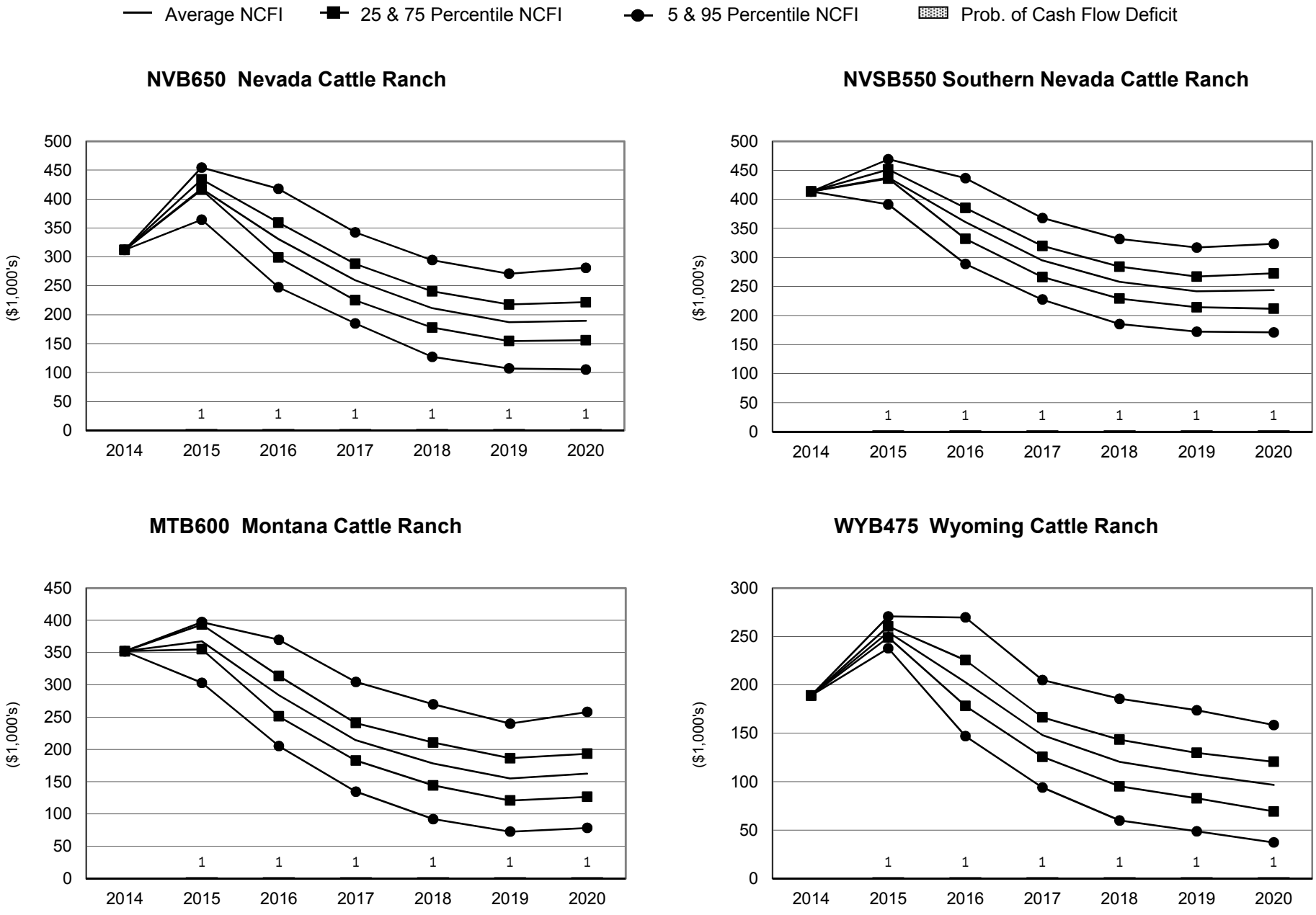


Figure 42. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Beef Cattle Ranches

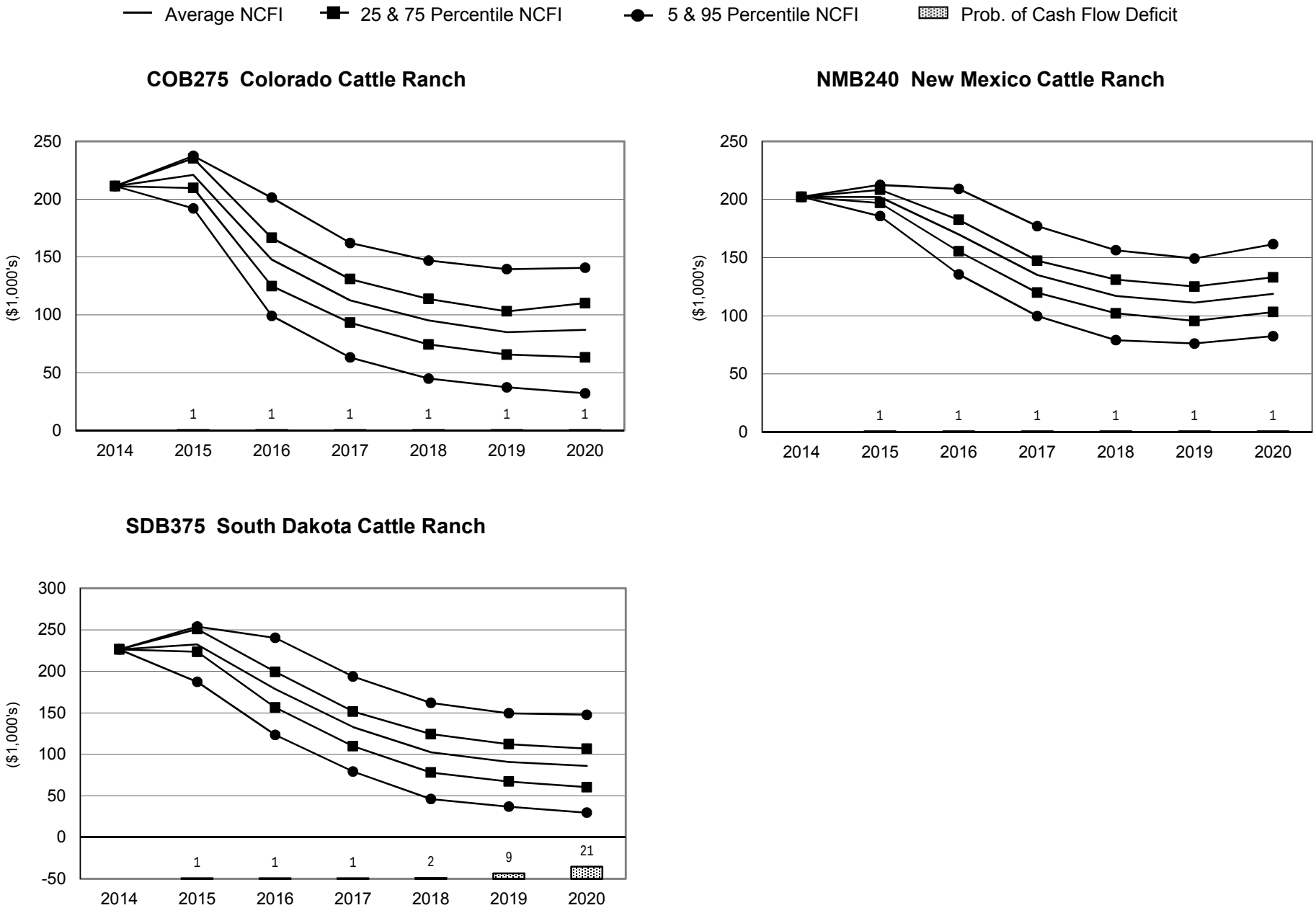
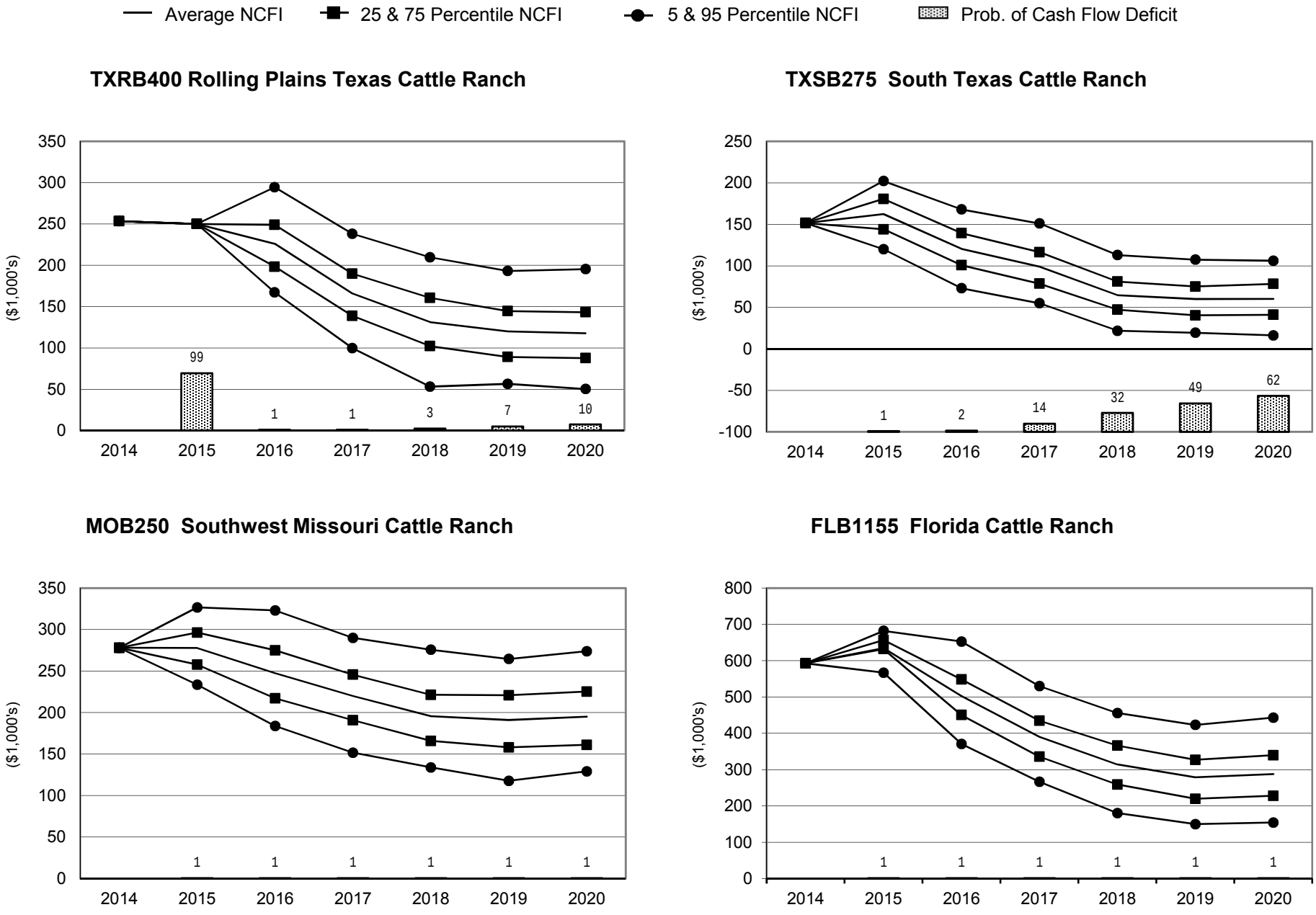


Figure 43. Net Cash Farm Income and Probabilities of a Cash Flow Deficit: Beef Cattle Ranches



APPENDIX A:

CHARACTERISTICS OF REPRESENTATIVE FARMS

2015 CHARACTERISTICS OF PANEL FARMS PRODUCING FEED GRAINS AND OILSEEDS

IAG1350 IAG1350 is a 1,350-acre northwestern Iowa (Webster County) grain farm. The farm is moderate-sized for the region and plants 880 acres of corn and 470 acres of soybeans annually. Sixty-nine percent of this farm's 2015 receipts come from corn production.

IAG3400 This 3,400-acre large-sized grain farm is located in northwestern Iowa (Webster County). It plants 2,040 acres of corn and 1,360 acres of soybeans each year, realizing 64 percent of receipts from corn production.

NEG2400 South-central Nebraska (Dawson County) is home to this 2,400-acre grain farm. This farm plants sixty-seven percent of cultivated acres to corn and thirty-three percent to soybeans. The farm splits its corn acres evenly between yellow and white food-grade corn. Sixty-five percent of gross receipts are derived from corn sales.

NEG4300 This is a 4,300-acre grain farm located in south-central Nebraska (Dawson County). This operation plants 3,000 acres of corn and 1,000 acres of soybeans each year. Remaining acres are planted to alfalfa. A portion (25 percent) of the corn acreage is food-grade corn. In 2015, 69 percent of total receipts were generated from corn production.

NDG3000 NDG3000 is a 3,000-acre, moderate-sized, south central North Dakota (Barnes County) grain farm that plants 500 acres of wheat, 1,000 acres of corn, and 1,500 acres of soybeans. One hundred acres are enrolled in the Conservation Reserve Program. The farm generated 40 percent of 2015 receipts from soybean sales and 44 percent from corn sales.

NDG8000 This is an 8,000-acre, large-sized grain farm in south central North Dakota (Barnes County) that grows 3,000 acres of soybeans, 2,250 acres of corn, 2,000 acres of wheat, and 300 acres of sunflowers annually. The remaining acreage is enrolled in the Conservation Reserve Program. Soybean and corn sales accounted for 67 percent of 2015 receipts.

ING1000 Shelby County, Indiana, is home to this 1,000-acre moderate-sized feedgrain farm. This farm annually plants corn and soybeans in a 50/50 rotation. Due to this farm's proximity to Indianapolis, land development pressures will likely constrain further expansion of this operation. Fifty-five percent of 2015 receipts came from corn sales.

ING2200 ING2200 is a large-sized grain farm located in east central Indiana (Shelby County). This farm plants 1,100 acres to corn and 1,100 acres to soybeans each year. In 2015, 58 percent of gross receipts were generated by corn sales.

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

	IAG1350	IAG3400	NEG2400	NEG4300	NDG3000	NDG8000	ING1000	ING2200
County	Webster	Webster	Dawson	Dawson	Barnes	Barnes	Shelby	Shelby
Total Cropland	1,350.00	3,400.00	2,400.00	4,300.00	3,000.00	8,000.00	1,000.00	2,200.00
Acres Owned	450.00	1,100.00	600.00	2,150.00	720.00	4,000.00	300.00	770.00
Acres Leased	900.00	2,300.00	1,800.00	2,150.00	2,280.00	4,000.00	700.00	1,430.00
Assets ($1000)								
Total	6,635.00	16,011.00	7,323.00	25,820.00	4,558.00	28,556.00	3,805.00	10,526.00
Real Estate	5,645.00	13,891.00	4,828.00	20,597.00	3,100.00	20,968.00	2,514.00	8,122.00
Machinery	991.00	2,120.00	1,631.00	3,599.00	1,045.00	4,568.00	609.00	1,495.00
Other & Livestock	0.00	0.00	864.00	1,624.00	414.00	3,020.00	682.00	909.00
Debt/Asset Ratios								
Total	0.24	0.22	0.18	0.17	0.23	0.18	0.17	0.18
Intermediate	0.22	0.31	0.28	0.21	0.46	0.33	0.36	0.33
Long Run	0.18	0.18	0.18	0.18	0.18	0.18	0.14	0.16
2015 Gross Receipts ($1,000)*								
Total	963.20	2,190.80	1,815.50	3,415.20	1,103.20	3,208.70	547.00	1,309.80
Corn	668.80	1,402.80	1,177.30	2,350.20	450.60	1,127.40	302.40	760.90
	0.69	0.64	0.65	0.69	0.41	0.35	0.55	0.58
Wheat	0.00	0.00	0.00	0.00	150.60	730.70	0.00	0.00
	0.00	0.00	0.00	0.00	0.14	0.23	0.00	0.00
Soybeans	222.80	619.90	480.80	579.60	442.10	1,039.30	238.40	534.50
	0.23	0.28	0.27	0.17	0.40	0.32	0.44	0.41
Hay	0.00	0.00	0.00	225.10	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00
Other Receipts	0.00	0.00	0.00	0.00	0.00	13.80	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2015 Planted Acres**								
Total	1,350.00	3,400.00	2,400.00	4,300.00	3,100.00	8,000.00	1,000.00	2,200.00
Corn	880.00	2,040.00	1,600.00	3,000.00	1,000.00	2,250.00	500.00	1,100.00
	0.65	0.60	0.67	0.70	0.32	0.28	0.50	0.50
Wheat	0.00	0.00	0.00	0.00	500.00	2,000.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.16	0.25	0.00	0.00
Soybeans	470.00	1,360.00	800.00	1,000.00	1,500.00	3,000.00	500.00	1,100.00
	0.35	0.40	0.33	0.23	0.48	0.38	0.50	0.50
Hay	0.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00
CRP	0.00	0.00	0.00	0.00	100.00	250.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.03	0.03	0.00	0.00

*Receipts for 2015 are included to indicate the relative importance of each enterprise to the farm. Percents indicate the percentage of the total receipts accounted for by the livestock categories and the crops.

**Acreages for 2015 are included to indicate the relative importance of each enterprise to the farm. Total planted acreage may exceed total cropland available due to double cropping. Percents indicate the percentage of total planted acreage accounted for by the crop.

2015 PANEL FARMS PRODUCING FEED GRAINS AND OILSEEDS

MOCG2300 MOCG2300 is a 2,300-acre grain farm located in central Missouri (Carroll County) and plants 1,150 acres of corn and 1,150 acres of soybeans annually. This farm is located in the Missouri River bottom, an area with a large concentration of livestock production. This farm generated 58 percent of its total revenue from corn and 39 percent from soybeans during 2015.

MOCG4000 This is a 4,000-acre central Missouri (Carroll County) grain farm with 2,000 acres of corn and 2,000 acres of soybeans. This farm is located in the Missouri River bottom, an area with a large concentration of livestock production. Corn sales accounted for 59 percent of farm receipts and soybeans accounted for 38 percent in 2015.

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

LAG2640 This is a 2,640-acre diversified farm located in north Louisiana (Morehouse Parish). LAG2640 plants 264 acres of cotton and wheat, 1,056 acres of corn, and 1,188 acres of soybeans each year. During 2015, 77 percent of farm receipts were generated from corn and soybean sales.

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

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

TNG2200 West Tennessee (Henry County) is home to this 2,200-acre, large-sized grain farm. Farmers in this part of Tennessee are known for their early and continued adoption of conservation practices, including widespread implementation of no-till farming. TNG2200 plants 1,100 acres of corn, 300 acres of wheat, and 1,100 acres of soybeans (300 of which are double-cropped after wheat). The farm generated 49 percent of its 2015 gross receipts from sales of corn and 35 percent from soybeans.

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

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

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

	MOCG2300	MOCG4000	MONG2300	LAG2640	LANG2500	TNG900	TNG2200	NCSP1800	SCG3500
County	Carroll	Carroll	Nodaway	Morehouse	Madison	Henry	Henry	Bladen	Clarendon
Total Cropland	2,300.00	4,000.00	2,300.00	2,640.00	2,500.00	900.00	2,200.00	1,800.00	3,500.00
Acres Owned	1,380.00	1,600.00	1,150.00	0.00	1,250.00	150.00	550.00	630.00	1,400.00
Acres Leased	920.00	2,400.00	1,150.00	2,640.00	1,250.00	750.00	1,650.00	1,170.00	2,100.00
Pastureland									
Acres Owned	0.00	0.00	450.00	0.00	0.00	0.00	0.00	0.00	1,400.00
Acres Leased	0.00	0.00	150.00	0.00	0.00	0.00	0.00	0.00	0.00
Assets ($1000)									
Total	16,823.00	23,020.00	11,759.00	1,948.00	9,468.00	2,575.00	5,264.00	4,881.00	13,143.00
Real Estate	13,785.00	18,464.00	8,627.00	553.00	6,680.00	1,403.00	3,045.00	2,524.00	10,062.00
Machinery	1,535.00	1,611.00	1,023.00	1,173.00	1,761.00	1,046.00	1,918.00	1,818.00	1,712.00
Other & Livestock	1,503.00	2,945.00	2,109.00	221.00	1,027.00	126.00	302.00	539.00	1,368.00
Debt/Asset Ratios									
Total	0.17	0.16	0.15	0.26	0.15	0.24	0.23	0.24	0.19
Intermediate	0.35	0.38	0.17	0.34	0.18	0.34	0.37	0.38	0.44
Long Run	0.16	0.15	0.16	0.14	0.17	0.17	0.16	0.15	0.18
Number of Livestock									
Beef Cows	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
2015 Gross Receipts ($1,000)*									
Total	1,180.10	1,790.70	1,642.10	1,607.70	1,867.50	443.00	955.90	1,021.40	2,288.40
Cattle	0.00	0.00	424.40	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.26	0.00	0.00	0.00	0.00	0.00	0.00
Corn	684.10	1,057.50	620.80	693.40	650.60	249.50	469.10	540.40	660.10
	0.58	0.59	0.38	0.43	0.35	0.56	0.49	0.53	0.29
Wheat	0.00	0.00	0.00	75.10	0.00	27.40	74.70	0.00	450.10
	0.00	0.00	0.00	0.05	0.00	0.06	0.08	0.00	0.20
Soybeans	455.00	671.30	526.50	553.10	289.20	137.20	337.40	68.90	401.60
	0.39	0.38	0.32	0.34	0.16	0.31	0.35	0.07	0.18
Cotton	0.00	0.00	0.00	217.30	215.30	0.00	0.00	0.00	694.60
	0.00	0.00	0.00	0.14	0.12	0.00	0.00	0.00	0.30
Peanuts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	327.90	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	0.00
Other Receipts	0.00	0.00	12.80	0.00	0.00	2.50	0.00	0.00	0.00
	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00
2015 Planted Acres**									
Total	2,300.00	4,000.00	2,900.00	2,772.00	2,500.00	1,000.00	2,500.00	1,800.00	4,725.00
Corn	1,150.00	2,000.00	1,125.00	1,056.00	950.00	500.00	1,100.00	1,224.00	1,400.00
	0.50	0.50	0.39	0.38	0.38	0.50	0.44	0.68	0.30
Wheat	0.00	0.00	0.00	264.00	0.00	100.00	300.00	0.00	1,225.00
	0.00	0.00	0.00	0.10	0.00	0.10	0.12	0.00	0.26
Soybeans	1,150.00	2,000.00	1,125.00	1,188.00	800.00	400.00	1,100.00	216.00	1,225.00
	0.50	0.50	0.39	0.43	0.32	0.40	0.44	0.12	0.26
Cotton	0.00	0.00	0.00	264.00	250.00	0.00	0.00	0.00	875.00
	0.00	0.00	0.00	0.10	0.10	0.00	0.00	0.00	0.19
Peanuts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	360.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00
CRP	0.00	0.00	50.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
Improved Pasture	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00

*Receipts for 2015 are included to indicate the relative importance of each enterprise to the farm. Percents indicate the percentage of the total receipts accounted for by the livestock categories and the crops.

**Acreages for 2015 are included to indicate the relative importance of each enterprise to the farm. Total planted acreage may exceed total cropland available due to double cropping. Percents indicate the percentage of total planted acreage accounted for by the crop.

2015 PANEL FARMS PRODUCING FEED GRAINS AND OILSEEDS

TXNP3000 This is a 3,000-acre diversified grain farm located on the northern High Plains of Texas (Moore County). This farm plants 630 acres of cotton, 960 acres of irrigated corn, 240 acres of irrigated sorghum for seed production, and 870 acres of irrigated wheat annually. Forty-three percent of total receipts are generated from corn sales.

TXNP10000 TXNP10000 is a large-sized diversified grain farm located in the Texas Panhandle (Moore County). This farm annually plants 2,000 acres of cotton (1,600 irrigated/400 dryland); 3,200 acres of irrigated corn; 2,500 acres of grain sorghum (1,000 irrigated for seed production/500 dryland/1,000 irrigated for commercial use); and 1,500 acres of winter wheat (1200 irrigated/300 dryland). Forty percent of 2015 cash receipts were derived from corn sales.

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

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

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

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

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

	TXNP3000	TXNP10000	TXPG2500	TXHG2500	TXWG1600	TXUG1600
County	Moore	Moore	Deaf Smith	Hill	Williamson	Uvalde
Total Cropland	3,000.00	10,000.00	2,500.00	2,500.00	1,600.00	1,600.00
Acres Owned	450.00	3,300.00	1,875.00	400.00	150.00	0.00
Acres Leased	2,550.00	6,700.00	625.00	2,100.00	1,450.00	1,600.00
Pastureland						
Acres Owned	0.00	0.00	0.00	60.00	30.00	0.00
Acres Leased	0.00	0.00	0.00	240.00	170.00	0.00
Assets ($1000)						
Total	2,316.00	19,655.00	5,699.00	2,833.00	1,619.00	1,014.00
Real Estate	1,335.00	11,261.00	3,324.00	1,500.00	1,006.00	0.00
Machinery	837.00	4,224.00	2,081.00	1,251.00	515.00	500.00
Other & Livestock	144.00	4,169.00	294.00	82.00	98.00	514.00
Debt/Asset Ratios						
Total	0.17	0.15	0.22	0.48	0.22	0.12
Intermediate	0.21	0.28	0.31	0.39	0.29	0.24
Long Run	0.16	0.15	0.18	0.18	0.18	0.00
Number of Livestock						
Beef Cows	0.00	0.00	0.00	40.00	40.00	0.00
2015 Gross Receipts ($1,000)*						
Total	1,543.30	5,709.80	1,583.80	614.00	537.80	1,431.70
Cattle	0.00	0.00	0.00	40.40	45.80	0.00
	0.00	0.00	0.00	0.07	0.09	0.00
Corn	666.60	2,272.10	1,169.30	184.40	194.30	103.00
	0.43	0.40	0.74	0.30	0.36	0.07
Grain Sorghum	246.40	1,539.20	20.10	174.90	64.30	0.00
	0.16	0.27	0.01	0.29	0.12	0.00
Wheat	211.40	398.70	172.10	84.60	32.70	160.90
	0.14	0.07	0.11	0.14	0.06	0.11
Cotton	337.30	1,229.40	157.30	123.80	200.70	1,116.10
	0.22	0.22	0.10	0.20	0.37	0.78
Other Receipts	0.00	0.00	65.00	0.00	0.00	0.00
	0.00	0.00	0.04	0.00	0.00	0.00
2015 Planted Acres**						
Total	2,700.00	9,200.00	2,500.00	2,800.00	1,600.00	1,600.00
Corn	960.00	3,200.00	1,270.00	800.00	750.00	150.00
	0.36	0.35	0.51	0.29	0.47	0.09
Grain Sorghum	240.00	2,500.00	183.00	900.00	300.00	0.00
	0.09	0.27	0.07	0.32	0.19	0.00
Wheat	870.00	1,500.00	847.00	500.00	150.00	750.00
	0.32	0.16	0.34	0.18	0.09	0.47
Cotton	630.00	2,000.00	200.00	300.00	400.00	700.00
	0.23	0.22	0.08	0.11	0.25	0.44
Improved Pasture	0.00	0.00	0.00	300.00	0.00	0.00
	0.00	0.00	0.00	0.11	0.00	0.00

*Receipts for 2015 are included to indicate the relative importance of each enterprise to the farm. Percents indicate the percentage of the total receipts accounted for by the livestock categories and the crops.

**Acreages for 2015 are included to indicate the relative importance of each enterprise to the farm. Total planted acreage may exceed total cropland available due to double cropping. Percents indicate the percentage of total planted acreage accounted for by the crop.

2015 CHARACTERISTICS OF PANEL FARMS PRODUCING WHEAT

WAW2000 This is a 2,000-acre moderate-sized grain farm in the Palouse of southeastern Washington (Whitman County). It plants 1,320 acres of wheat, 140 acres of barley, and 540 acres of dry peas. Disease concerns dictate rotating a minimum acreage of barley and peas to maintain wheat yields. This farm generated 71 percent of 2015 receipts from wheat.

WAW7000 A 7,000-acre, large-sized grain farm in the Palouse of southeastern Washington (Whitman County). Annually, this farm allocates 4,060 acres to wheat, 350 acres to barley, and 1,750 acres to dry peas. Diseases that inhibit wheat yield dictate the rotation of a minimum acreage of barley and peas. Wheat sales accounted for 69 percent of 2015 receipts.

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

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

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

COW3000 A 3,000-acre northeast Colorado (Washington County), moderate-sized farm that plants 970 acres of winter wheat, 905 acres of millet, and 500 acres of corn each year. COW3000 has adopted minimum tillage practices on most of its acres. This farm generated 34 percent of its receipts from wheat, 39 percent from millet, and 24 percent from corn.

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

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

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

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

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

Appendix Table A4. Characteristics of Panel Farms Producing Wheat.

	WAW2000	WAW7000	WAAW4500	ORW4100	MTW7000	COW3000	COW5640	KSCW2000	KSCW5300	KSNW4000	KSNW5980
County	Whitman	Whitman	Adams	Morrow	Chouteau	Washington	Washington	Sumner	Sumner	Thomas	Thomas
Total Cropland	2,000.00	7,000.00	4,000.00	4,100.00	7,000.00	3,000.00	5,640.00	2,000.00	5,300.00	4,000.00	5,980.00
Acres Owned	600.00	2,310.00	2,000.00	1,600.00	4,200.00	1,500.00	1,880.00	700.00	1,325.00	1,170.00	1,800.00
Acres Leased	1,400.00	4,690.00	2,000.00	2,500.00	2,800.00	1,500.00	3,760.00	1,300.00	3,975.00	2,830.00	4,180.00
Pastureland											
Acres Owned	0.00	0.00	0.00	0.00	0.00	200.00	0.00	0.00	0.00	400.00	500.00
Assets ($1000)											
Total	2,486.00	9,506.00	2,325.00	2,093.00	7,398.00	3,104.00	4,459.00	2,983.00	6,334.00	4,827.00	10,253.00
Real Estate	1,231.00	5,949.00	1,796.00	937.00	4,709.00	2,322.00	2,989.00	2,093.00	3,724.00	3,714.00	8,249.00
Machinery	572.00	3,533.00	511.00	803.00	1,417.00	378.00	1,093.00	660.00	1,344.00	1,096.00	1,973.00
Other & Livestock	683.00	24.00	17.00	353.00	1,272.00	404.00	377.00	229.00	1,267.00	17.00	31.00
Debt/Asset Ratios											
Total	0.14	0.24	0.21	0.16	0.18	0.16	0.20	0.22	0.16	0.24	0.29
Intermediate	0.20	0.26	0.25	0.21	0.35	0.18	0.35	0.42	0.25	0.30	0.30
Long Run	0.18	0.17	0.18	0.15	0.18	0.18	0.16	0.17	0.18	0.18	0.18
2015 Gross Receipts ($1,000)*											
Total	720.70	2,272.10	419.50	378.20	994.80	380.80	684.10	482.40	1,125.50	754.50	1,307.10
Wheat	514.30	1,564.10	402.00	367.20	994.80	129.20	370.20	193.10	643.90	339.30	304.10
	0.71	0.69	0.96	0.97	1.00	0.34	0.54	0.40	0.57	0.45	0.23
Grain Sorghum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	86.00	53.80	124.80	185.40
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.05	0.17	0.14
Barley	43.60	108.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.06	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Corn	0.00	0.00	0.00	0.00	0.00	92.90	158.10	101.50	216.90	277.80	711.30
	0.00	0.00	0.00	0.00	0.00	0.24	0.23	0.21	0.19	0.37	0.54
Soybeans	0.00	0.00	0.00	0.00	0.00	0.00	0.00	75.70	145.30	0.00	69.80
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.13	0.00	0.05
Dry Peas	162.80	559.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.23	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Millet	0.00	0.00	0.00	0.00	0.00	149.10	146.80	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.39	0.22	0.00	0.00	0.00	0.00
Other Receipts	0.00	40.60	17.50	11.00	0.00	9.60	9.00	0.00	0.00	5.60	7.50
	0.00	0.02	0.04	0.03	0.00	0.03	0.01	0.00	0.00	0.01	0.01
2015 Planted Acres**											
Total	2,000.00	6,650.00	2,500.00	2,150.00	4,200.00	2,675.00	3,930.00	2,000.00	5,300.00	3,000.00	4,980.00
Wheat	1,320.00	4,060.00	2,000.00	1,950.00	4,200.00	970.00	1,900.00	1,000.00	3,445.00	1,500.00	1,820.00
	0.66	0.61	0.80	0.91	1.00	0.36	0.48	0.50	0.65	0.50	0.37
Grain Sorghum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	333.00	265.00	500.00	740.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.05	0.17	0.15
Barley	140.00	350.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.07	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Corn	0.00	0.00	0.00	0.00	0.00	500.00	890.00	333.00	795.00	1,000.00	2,290.00
	0.00	0.00	0.00	0.00	0.00	0.19	0.23	0.17	0.15	0.33	0.46
Soybeans	0.00	0.00	0.00	0.00	0.00	0.00	0.00	334.00	795.00	0.00	130.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.15	0.00	0.03
Dry Peas	540.00	1,750.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.27	0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Millet	0.00	0.00	0.00	0.00	0.00	905.00	890.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.34	0.23	0.00	0.00	0.00	0.00
CRP	0.00	490.00	500.00	200.00	0.00	300.00	250.00	0.00	0.00	0.00	0.00
	0.00	0.07	0.20	0.09	0.00	0.11	0.06	0.00	0.00	0.00	0.00

*Receipts for 2015 are included to indicate the relative importance of each enterprise to the farm. Percents indicate the percentage of the total receipts accounted for by the livestock categories and the crops.

**Acreages for 2015 are included to indicate the relative importance of each enterprise to the farm. Total planted acreage may exceed total cropland available due to double cropping. Percents indicate the percentage of total planted acreage accounted for by the crop.

2015 CHARACTERISTICS OF PANEL FARMS PRODUCING COTTON

TXSP2500 A 2,500-acre Texas South Plains (Dawson County) cotton farm that is moderate-sized for the area. TXSP2500 plants 2,275 acres of cotton (1,800 dryland, 475 irrigated). For 2015, 100 percent of receipts came from cotton.

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

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

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

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

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

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

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

Appendix Table A5. Characteristics of Panel Farms Producing Cotton.

	TXSP2500	TXSP4500	TXEC5000	TXRP2500	TXMC1800	TXCB3000	TXCB9200	TXVC4500
County	Dawson	Dawson	Crosby	Jones	Wharton	San Patricio	Nueces	Willacy
Total Cropland	2,500.00	4,500.00	5,000.00	2,500.00	1,800.00	3,000.00	9,200.00	4,500.00
Acres Owned	500.00	900.00	1,000.00	875.00	180.00	600.00	920.00	1,500.00
Acres Leased	2,000.00	3,600.00	4,000.00	1,625.00	1,620.00	2,400.00	8,280.00	3,000.00
Pastureland								
Acres Leased	0.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00
Assets ($1000)								
Total	1,711.00	3,679.00	4,101.00	1,252.00	1,626.00	2,433.00	6,428.00	6,390.00
Real Estate	882.00	1,171.00	1,408.00	944.00	669.00	1,533.00	2,450.00	4,340.00
Machinery	829.00	2,115.00	2,693.00	210.00	912.00	680.00	2,878.00	1,598.00
Other & Livestock	0.00	393.00	0.00	97.00	46.00	220.00	1,100.00	452.00
Debt/Asset Ratios								
Total	0.37	0.28	0.24	0.26	0.20	0.19	0.20	0.14
Intermediate	0.37	0.40	0.27	0.13	0.23	0.27	0.30	0.09
Long Run	0.17	0.17	0.16	0.18	0.18	0.18	0.17	0.18
Number of Livestock								
Beef Cows	0.00	0.00	0.00	50.00	0.00	0.00	0.00	0.00
2015 Gross Receipts ($1,000)*								
Total	867.50	1,971.40	2,001.20	450.10	683.50	1,280.80	4,367.90	1,856.50
Cattle	0.00	0.00	0.00	62.30	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00
Cotton	867.50	1,929.30	1,900.90	287.60	301.70	767.40	2,673.10	816.90
	1.00	0.98	0.95	0.64	0.44	0.60	0.61	0.44
Grain Sorghum	0.00	0.00	83.00	0.00	159.80	463.10	1,103.20	807.70
	0.00	0.00	0.04	0.00	0.23	0.36	0.25	0.44
Wheat	0.00	41.00	17.40	100.10	0.00	0.00	0.00	0.00
	0.00	0.02	0.01	0.22	0.00	0.00	0.00	0.00
Corn	0.00	0.00	0.00	0.00	131.70	50.30	591.60	0.00
	0.00	0.00	0.00	0.00	0.19	0.04	0.14	0.00
2015 Planted Acres**								
Total	2,275.00	4,167.00	5,000.00	2,000.00	1,800.00	3,000.00	9,200.00	4,500.00
Cotton	2,275.00	4,047.00	4,150.00	1,000.00	810.00	1,350.00	3,680.00	1,395.00
	1.00	0.97	0.83	0.50	0.45	0.45	0.40	0.31
Grain Sorghum	0.00	0.00	550.00	0.00	540.00	1,500.00	3,680.00	2,880.00
	0.00	0.00	0.11	0.00	0.30	0.50	0.40	0.64
Wheat	0.00	120.00	300.00	1,000.00	0.00	0.00	0.00	0.00
	0.00	0.03	0.06	0.50	0.00	0.00	0.00	0.00
Corn	0.00	0.00	0.00	0.00	450.00	150.00	1,840.00	0.00
	0.00	0.00	0.00	0.00	0.25	0.05	0.20	0.00

*Receipts for 2015 are included to indicate the relative importance of each enterprise to the farm. Percents indicate the percentage of the total receipts accounted for by the livestock categories and the crops.

**Acreages for 2015 are included to indicate the relative importance of each enterprise to the farm. Total planted acreage may exceed total cropland available due to double cropping. Percents indicate the percentage of total planted acreage accounted for by the crop.

2015 CHARACTERISTICS OF PANEL FARMS PRODUCING COTTON

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

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

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

GAC2300 Southwest Georgia (Decatur County) is home to a 2,300-acre cotton farm that plants 1,200 acres to cotton, 550 acres to peanuts, and 550 acres to corn. In 2015, farm receipts were comprised of cotton sales (45 percent), corn (18 percent), and peanut sales (23 percent). The farm also runs a 125-head beef cow herd, generating 6 percent of 2015 receipts.

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

NCC1700 This is a 1,700-acre cotton farm located on the upper coastal plain of North Carolina (Wayne County). NCC1700 plants 225 acres of cotton, 230 acres of wheat, and 1,325 acres of soybeans annually. Cotton accounted for 17 percent of this farm's 2015 receipts.

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

Appendix Table A6. Characteristics of Panel Farms Producing Cotton.

	TNC2500	TNC4050	ALC3000	GAC2300	SCC1800	NCC1700	NCNP1500
County	Fayette	Haywood	Lawrence	Decatur	Calhoun	Wayne	Edgecombe
Total Cropland	2,500.00	4,050.00	3,000.00	2,300.00	1,800.00	1,700.00	1,500.00
Acres Owned	250.00	1,000.00	0.00	1,150.00	450.00	225.00	500.00
Acres Leased	2,250.00	3,050.00	3,000.00	1,150.00	1,350.00	1,475.00	1,000.00
Pastureland							
Acres Owned	0.00	0.00	0.00	100.00	200.00	0.00	0.00
Acres Leased	0.00	0.00	0.00	100.00	0.00	0.00	0.00
Assets ($1000)							
Total	3,050.00	7,383.00	2,311.00	10,110.00	4,382.00	2,892.00	3,537.00
Real Estate	808.00	4,870.00	362.00	7,355.00	2,884.00	1,389.00	2,090.00
Machinery	713.00	1,320.00	1,888.00	1,794.00	1,289.00	1,219.00	1,348.00
Other & Livestock	1,529.00	1,193.00	62.00	960.00	209.00	284.00	99.00
Debt/Asset Ratios							
Total	0.06	0.20	0.31	0.21	0.24	0.22	0.29
Intermediate	0.09	0.44	0.32	0.40	0.40	0.31	0.35
Long Run	0.11	0.16	0.16	0.17	0.18	0.17	0.17
Number of Livestock							
Beef Cows	0.00	0.00	0.00	125.00	0.00	0.00	0.00
2015 Gross Receipts ($1,000)*							
Total	1,313.10	2,479.70	1,520.00	2,449.80	1,336.70	953.30	954.60
Cattle	0.00	0.00	0.00	144.80	0.00	0.00	0.00
	0.00	0.00	0.00	0.06	0.00	0.00	0.00
Cotton	215.80	1,590.30	656.30	1,091.30	663.70	157.50	262.10
	0.16	0.64	0.43	0.45	0.50	0.17	0.28
Grain Sorghum	97.50	0.00	0.00	0.00	0.00	0.00	0.00
	0.07	0.00	0.00	0.00	0.00	0.00	0.00
Wheat	0.00	156.50	127.00	0.00	40.50	96.00	68.80
	0.00	0.06	0.08	0.00	0.03	0.10	0.07
Soybeans	479.90	450.60	47.80	0.00	55.90	466.50	129.20
	0.37	0.18	0.03	0.00	0.04	0.49	0.14
Corn	250.30	266.20	615.40	443.20	162.90	0.00	131.10
	0.19	0.11	0.41	0.18	0.12	0.00	0.14
Peanuts	0.00	0.00	0.00	551.00	328.80	0.00	281.80
	0.00	0.00	0.00	0.23	0.25	0.00	0.30
Other Receipts	206.80	4.00	0.00	0.00	0.00	210.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.22	0.00
2015 Planted Acres**							
Total	2,280.00	4,525.00	3,000.00	2,500.00	1,980.00	1,880.00	1,725.00
Cotton	250.00	2,025.00	1,050.00	1,200.00	900.00	225.00	375.00
	0.11	0.45	0.35	0.48	0.46	0.12	0.22
Grain Sorghum	250.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.11	0.00	0.00	0.00	0.00	0.00	0.00
Wheat	0.00	475.00	450.00	0.00	180.00	330.00	225.00
	0.00	0.11	0.15	0.00	0.09	0.18	0.13
Soybeans	1,250.00	1,425.00	150.00	0.00	180.00	1,325.00	375.00
	0.55	0.32	0.05	0.00	0.09	0.71	0.22
Corn	500.00	600.00	1,350.00	550.00	360.00	0.00	375.00
	0.22	0.13	0.45	0.22	0.18	0.00	0.22
Peanuts	0.00	0.00	0.00	550.00	360.00	0.00	375.00
	0.00	0.00	0.00	0.22	0.18	0.00	0.22
CRP	30.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.01	0.00	0.00	0.00	0.00	0.00	0.00

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**Acreages for 2015 are included to indicate the relative importance of each enterprise to the farm. Total planted acreage may exceed total cropland available due to double cropping. Percents indicate the percentage of total planted acreage accounted for by the crop.

2015 CHARACTERISTICS OF PANEL FARMS PRODUCING RICE

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

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

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

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

TXR1500 This 1,500-acre rice farm located west of Houston, Texas (Colorado County) is moderate-sized for the region. TXR1500 harvests 600 acres of rice. The farm generated 95 percent of its receipts from rice during 2015.

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

TXBR1800 The Texas Gulf Coast (Matagorda County) is home to this 1,800-acre rice farm. TXBR1800 generally plants a third of its acres to rice annually and fallows the remainder. The farm generated 96 percent of its receipts from rice during 2015.

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

Appendix Table A7. Characteristics of Panel Farms Producing Rice.

	CAR550	CAR3000	CABR1300	CACR800	TXR1500	TXR3000	TXBR1800	TXER3200
County	Sutter	Sutter	Butte	Colusa	Colorado	Colorado	Matagorda	Wharton
Total Cropland	550.00	3,000.00	1,300.00	800.00	1,500.00	3,000.00	1,800.00	3,200.00
Acres Owned	275.00	769.00	520.00	320.00	405.00	0.00	0.00	640.00
Acres Leased	275.00	2,231.00	780.00	480.00	1,095.00	3,000.00	1,800.00	2,560.00
Assets ($1000)								
Total	3,592.00	13,621.00	9,610.00	5,850.00	2,320.00	1,998.00	1,614.00	2,651.00
Real Estate	2,800.00	9,211.00	6,516.00	3,929.00	1,071.00	64.00	0.00	1,468.00
Machinery	792.00	2,839.00	1,371.00	377.00	964.00	1,079.00	812.00	1,183.00
Other & Livestock	0.00	1,571.00	1,723.00	1,544.00	286.00	856.00	802.00	0.00
Debt/Asset Ratios								
Total	0.24	0.18	0.16	0.14	0.18	0.10	0.13	0.21
Intermediate	0.21	0.28	0.21	0.20	0.23	0.18	0.26	0.23
Long Run	0.18	0.18	0.19	0.15	0.15	0.16	0.00	0.18
2015 Gross Receipts ($1,000)*								
Total	792.90	4,775.20	2,009.00	1,326.50	870.70	1,882.40	1,019.10	1,369.50
Rice	773.00	4,662.10	1,961.20	1,294.90	826.50	1,821.40	981.70	1,071.70
	0.98	0.98	0.98	0.98	0.95	0.97	0.96	0.78
Soybeans	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.80
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Corn	0.00	0.00	0.00	0.00	0.00	0.00	0.00	227.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17
Other Receipts	0.00	0.00	0.00	0.00	10.00	5.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
2015 Planted Acres**								
Total	500.00	3,000.00	1,200.00	800.00	600.00	1,500.00	1,200.00	2,134.00
Rice	500.00	3,000.00	1,200.00	800.00	600.00	1,500.00	1,200.00	1,067.00
	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.50
Soybeans	0.00	0.00	0.00	0.00	0.00	0.00	0.00	107.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05
Corn	0.00	0.00	0.00	0.00	0.00	0.00	0.00	960.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45

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**Acreages for 2015 are included to indicate the relative importance of each enterprise to the farm. Total planted acreage may exceed total cropland available due to double cropping. Percents indicate the percentage of total planted acreage accounted for by the crop.

2015 CHARACTERISTICS OF PANEL FARMS PRODUCING RICE

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

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

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

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

ARHR3000 ARHR3000 is a 3,000-acre large-sized northeast Arkansas (Lawrence County) rice farm that annually harvests 1,800 acres of rice, 1,050 acres of soybeans, and 150 acres of corn. Rice sales accounted for 76 percent of 2015 farm receipts.

MSDR5000 MSDR5000 is a 5,000-acre Mississippi Delta (Bolivar County) rice farm that annually harvests 1,667 acres of rice, 2,833 acres of soybeans, and 500 acres of corn. Rice sales accounted for 38 percent of 2015 farm receipts. Soybeans account for 50 percent and corn 8 percent of receipts.

Appendix Table A8. Characteristics of Panel Farms Producing Rice.

	LASR2000	ARMR6500	ARSR3240	ARWR2500	ARHR3000	MSDR5000
County	Acadia	Desha	Arkansas	Cross	Lawrence	Bolivar
Total Cropland	2,000.00	6,500.00	3,240.00	2,500.00	3,000.00	5,000.00
Acres Owned	200.00	1,200.00	648.00	1,250.00	1,000.00	3,000.00
Acres Leased	1,800.00	5,300.00	2,592.00	1,250.00	2,000.00	2,000.00
Assets ($1000)						
Total	3,200.00	11,515.00	6,587.00	7,851.00	7,885.00	17,974.00
Real Estate	1,277.00	6,365.00	3,049.00	5,999.00	4,620.00	14,200.00
Machinery	1,134.00	5,108.00	2,640.00	1,543.00	3,222.00	3,256.00
Other & Livestock	788.00	41.00	898.00	309.00	43.00	518.00
Debt/Asset Ratios						
Total	0.24	0.45	0.20	0.17	0.31	0.18
Intermediate	0.49	0.31	0.29	0.25	0.23	0.27
Long Run	0.18	0.17	0.18	0.16	0.16	0.16
2015 Gross Receipts ($1,000)*						
Total	1,361.70	3,586.40	1,993.40	1,696.10	2,129.00	3,362.70
Rice	913.50	282.20	1,117.20	1,120.20	1,621.10	1,266.70
	0.67	0.08	0.56	0.66	0.76	0.38
Soybeans	143.60	1,774.00	526.80	496.30	324.90	1,665.80
	0.11	0.50	0.26	0.29	0.15	0.50
Corn	0.00	1,095.90	181.30	0.00	83.50	307.70
	0.00	0.31	0.09	0.00	0.04	0.09
Wheat	0.00	43.30	97.40	0.00	0.00	0.00
	0.00	0.01	0.05	0.00	0.00	0.00
Cotton	0.00	294.90	0.00	0.00	0.00	0.00
	0.00	0.08	0.00	0.00	0.00	0.00
2015 Planted Acres**						
Total	1,500.00	6,650.00	3,564.00	2,500.00	3,000.00	5,000.00
Rice	1,000.00	325.00	1,296.00	1,250.00	1,800.00	1,667.00
	0.67	0.05	0.36	0.50	0.60	0.33
Soybeans	500.00	4,050.00	1,620.00	1,250.00	1,050.00	2,833.00
	0.33	0.61	0.46	0.50	0.35	0.57
Corn	0.00	1,800.00	324.00	0.00	150.00	500.00
	0.00	0.27	0.09	0.00	0.05	0.10
Wheat	0.00	150.00	324.00	0.00	0.00	0.00
	0.00	0.02	0.09	0.00	0.00	0.00
Cotton	0.00	325.00	0.00	0.00	0.00	0.00
	0.00	0.05	0.00	0.00	0.00	0.00

*Receipts for 2015 are included to indicate the relative importance of each enterprise to the farm. Percents indicate the percentage of the total receipts accounted for by the livestock categories and the crops.

**Acreages for 2015 are included to indicate the relative importance of each enterprise to the farm. Total planted acreage may exceed total cropland available due to double cropping. Percents indicate the percentage of total planted acreage accounted for by the crop.

2015 CHARACTERISTICS OF PANEL FARMS PRODUCING MILK

CAD2000 A 2,000-cow, large-sized central California (Tulare County) dairy, the farm plants 1,750 acres of hay/silage for which it employs custom harvesting. Milk sales generated 88 percent of 2015 total receipts.

WAD300 A 300-cow, moderate-sized northern Washington (Whatcom County) dairy. This farm plants 250 acres of silage and generated 91 percent of its 2015 gross receipts from milk sales.

WAD850 An 850-cow, large-sized northern Washington (Whatcom County) dairy. This farm plants 605 acres for silage annually. During 2015, 90 percent of this farm's gross receipts came from milk.

IDD3000 A 3,000-cow, large-sized dairy located in the Magic Valley of Idaho (Twin Falls County). This farm plants 1,250 acres of corn silage annually. Milk sales account for 90 percent of 2015 gross receipts.

NVD1000 A 1,000-cow, moderate-sized Nevada (Churchill County) dairy. This farm plants 375 acres of hay and 250 acres of corn silage annually. Milk sales accounted for 89 percent of NVD1000's gross receipts for 2015.

TXND3800 A 3,800-cow, large-sized dairy located in the South Plains of Texas (Bailey County). This farm plants 1,920 acres of corn silage annually. Milk sales account for 85 percent of 2015 gross receipts.

TXCD1500 A 1,500-cow, large-sized central Texas (Erath County) dairy, TXCD1500 plants 466 acres of silage and 308 acres of hay annually. During 2015, milk sales accounted for 87 percent of receipts.

TXED400 A 400-cow, moderate-sized northeast Texas (Hopkins County) dairy. This farm has 400 acres of silage and 125 acres of hay. During 2015, milk sales represented 87 percent of annual receipts.

WID145 A 145-cow, moderate-sized eastern Wisconsin (Winnebago County) dairy, the farm plants 210 acres of silage, 70 acres for hay, 140 acres of corn, and 130 acres of soybeans. Milk constituted 81 percent of this farm's 2015 receipts.

WID1000 A 1000-cow, large-sized eastern Wisconsin (Winnebago County) dairy, the farm plants 650 acres of hay, 650 acres of silage, and 600 acres of corn. Milk sales comprised 89 percent of the farm's 2015 receipts.

Appendix Table A9. Characteristics of Panel Farms Producing Milk.

	CAD2000	WAD300	WAD850	IDD3000	NVD1000	TXND3800	TXCD1500	TXED400	WID145	WID1000
County	Tulare	Whatcom	Whatcom	Twin Falls	Churchill	Bailey	Erath	Hopkins	Winnebago	Winnebago
Total Cropland	1,200.00	250.00	605.00	1,500.00	200.00	1,920.00	616.00	950.00	600.00	2,000.00
Acres Owned	700.00	125.00	300.00	1,500.00	150.00	1,920.00	253.00	475.00	330.00	800.00
Acres Leased	500.00	125.00	305.00	0.00	50.00	0.00	363.00	475.00	270.00	1,200.00
Pastureland										
Acres Owned	0.00	0.00	0.00	0.00	0.00	0.00	264.00	0.00	40.00	0.00
Assets ($1000)										
Total	26,477.00	4,385.00	12,469.00	32,593.00	9,097.00	31,657.00	10,777.00	3,449.00	3,773.00	13,405.00
Real Estate	16,110.00	3,063.00	7,425.00	18,729.00	3,411.00	12,906.00	3,705.00	1,718.00	2,207.00	7,266.00
Machinery	1,662.00	278.00	855.00	1,107.00	660.00	2,251.00	1,570.00	648.00	803.00	1,243.00
Other & Livestock	8,704.00	1,044.00	4,189.00	12,757.00	5,026.00	16,501.00	5,502.00	1,083.00	763.00	4,896.00
Debt/Asset Ratios										
Total	0.22	0.13	0.20	0.18	0.16	0.23	0.18	0.24	0.25	0.20
Intermediate	0.19	0.06	0.14	0.13	0.14	0.24	0.15	0.23	0.26	0.18
Long Run	0.25	0.16	0.27	0.22	0.23	0.26	0.25	0.26	0.26	0.27
Number of Livestock										
Dairy Cows	2,000.00	300.00	850.00	3,000.00	1,000.00	3,800.00	1,500.00	400.00	145.00	1,000.00
Cwt Milk/Cow	263.00	223.00	277.00	269.00	257.00	233.00	208.00	191.00	272.00	286.00
2015 Gross Receipts ($1,000)*										
Total	9,288.60	1,195.50	4,320.80	14,809.50	5,095.10	17,558.90	6,519.80	1,431.10	836.30	5,808.30
Milk	8,142.90	1,082.10	3,887.40	13,311.90	4,517.60	14,873.30	5,683.70	1,239.10	681.20	5,143.00
	0.88	0.91	0.90	0.90	0.89	0.85	0.87	0.87	0.81	0.89
Dairy Cattle	1,145.70	106.00	433.40	1,497.50	577.50	2,685.60	836.10	192.00	91.60	562.50
	0.12	0.09	0.10	0.10	0.11	0.15	0.13	0.13	0.11	0.10
Hay	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19.80	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00
Corn	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	71.50
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Soybeans	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.10	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00
2015 Planted Acres**										
Total	1,750.00	250.00	605.00	1,250.00	625.00	1,920.00	774.00	525.00	600.00	2,000.00
Hay	750.00	0.00	0.00	0.00	375.00	0.00	308.00	125.00	70.00	650.00
	0.43	0.00	0.00	0.00	0.60	0.00	0.40	0.24	0.12	0.33
Silage	1,000.00	250.00	605.00	1,250.00	250.00	1,920.00	466.00	400.00	210.00	650.00
	0.57	1.00	1.00	1.00	0.40	1.00	0.60	0.76	0.35	0.33
Corn	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	140.00	600.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.30
Soybeans	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	130.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.00

*Receipts for 2015 are included to indicate the relative importance of each enterprise to the farm. Percents indicate the percentage of the total receipts accounted for by the livestock categories and the crops.

**Acreages for 2015 are included to indicate the relative importance of each enterprise to the farm. Total planted acreage may exceed total cropland available due to double cropping. Percents indicate the percentage of total planted acreage accounted for by the crop.

2015 CHARACTERISTICS OF PANEL FARMS PRODUCING MILK (continued)

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

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

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

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

VTD140 A 140-cow, moderate-sized Vermont (Washington County) dairy. VTD140 plants 20 acres of hay and 200 acres of silage annually. Milk accounted for 89 percent of the 2015 receipts for this farm.

VTD400 A 400-cow, large-sized Vermont (Washington County) dairy. This farm plants 100 acres of hay and 900 acres of silage annually. Milk sales represent 88 percent of VTD400's gross receipts in 2015.

MOGD550 A 550-cow, grazing dairy in southwest Missouri (Dade County), the farm grazes cows on 385 acres of improved pasture. Milk accounted for 85 percent of gross farm receipts for 2015.

MOGD180 A 180-cow, grazing dairy in southwest Missouri (Dade County), the farm grazes cows on 285 acres of improved pasture. Milk accounted for 87 percent of gross farm receipts for 2015.

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

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

Appendix Table A10. Characteristics of Panel Farms Producing Milk.

	NYWD500	NYWD1200	NYCD180	NYCD675	VTD140	VTD400	MOGD550	MOGD180	FLND550	FLSD1750
County	Wyoming	Wyoming	Cayuga	Cayuga	Washington	Washington	Dade	Dade	Lafayette	Okeechobee
Total Cropland	1,000.00	2,100.00	400.00	1,500.00	220.00	1,000.00	0.00	0.00	600.00	400.00
Acres Owned	600.00	1,400.00	320.00	1,125.00	100.00	525.00	0.00	0.00	450.00	400.00
Acres Leased	400.00	700.00	80.00	375.00	120.00	475.00	0.00	0.00	150.00	0.00
Pastureland										
Acres Owned	0.00	50.00	0.00	50.00	60.00	50.00	385.00	180.00	60.00	470.00
Acres Leased	0.00	0.00	0.00	0.00	0.00	50.00	0.00	50.00	0.00	0.00
Assets ($1000)										
Total	7,293.00	17,812.00	3,985.00	13,259.00	1,822.00	5,691.00	4,398.00	1,426.00	4,557.00	12,888.00
Real Estate	2,816.00	9,168.00	2,702.00	6,632.00	871.00	3,321.00	2,022.00	643.00	2,130.00	6,072.00
Machinery	954.00	1,974.00	425.00	1,698.00	322.00	800.00	330.00	116.00	454.00	720.00
Other & Livestock	3,523.00	6,670.00	858.00	4,929.00	629.00	1,571.00	2,046.00	667.00	1,973.00	6,096.00
Debt/Asset Ratios										
Total	0.16	0.19	0.22	0.17	0.34	0.23	0.17	0.18	0.19	0.20
Intermediate	0.20	0.18	0.15	0.15	0.19	0.20	0.18	0.21	0.16	0.14
Long Run	0.24	0.26	0.25	0.20	0.20	0.25	0.24	0.24	0.24	0.23
Number of Livestock										
Dairy Cows	500.00	1,200.00	180.00	675.00	140.00	400.00	550.00	180.00	550.00	1,750.00
Cwt Milk/Cow	256.00	265.00	233.00	259.00	220.00	255.00	118.00	135.00	220.00	213.00
2015 Gross Receipts ($1,000)*										
Total	2,781.80	6,312.00	860.00	3,408.40	643.10	2,051.10	1,432.60	518.60	2,805.70	8,627.10
Milk	2,514.20	5,654.20	737.10	3,015.40	569.30	1,813.70	1,217.10	450.70	2,489.90	7,875.80
	0.90	0.90	0.86	0.89	0.89	0.88	0.85	0.87	0.89	0.91
Dairy Cattle	267.60	657.80	123.00	393.00	68.20	237.40	215.50	67.90	315.80	751.30
	0.10	0.10	0.14	0.12	0.11	0.12	0.15	0.13	0.11	0.09
Other Receipts	0.00	0.00	0.00	0.00	5.50	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00
2015 Planted Acres**										
Total	1,000.00	2,100.00	400.00	1,500.00	220.00	1,000.00	358.00	285.00	730.00	600.00
Hay	0.00	0.00	0.00	0.00	20.00	100.00	0.00	285.00	130.00	300.00
	0.00	0.00	0.00	0.00	0.09	0.10	0.00	1.00	0.18	0.50
Silage	950.00	1,900.00	350.00	1,225.00	200.00	900.00	0.00	0.00	600.00	300.00
	0.95	0.91	0.88	0.82	0.91	0.90	0.00	0.00	0.82	0.50
Improved Pasture	0.00	0.00	0.00	0.00	0.00	0.00	358.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
Corn	50.00	200.00	50.00	275.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.05	0.10	0.13	0.18	0.00	0.00	0.00	0.00	0.00	0.00

*Receipts for 2015 are included to indicate the relative importance of each enterprise to the farm. Percents indicate the percentage of the total receipts accounted for by the livestock categories and the crops.

**Acreages for 2015 are included to indicate the relative importance of each enterprise to the farm. Total planted acreage may exceed total cropland available due to double cropping. Percents indicate the percentage of total planted acreage accounted for by the crop.

2015 CHARACTERISTICS OF PANEL RANCHES PRODUCING BEEF CATTLE

NVB650 NVB650 is a 650-cow ranch located in northeastern Nevada (Elko County). The operation consists of 1,300 acres of owned hay meadow and 8,725 acres of owned range, supplemented by 3,560 AUMs of public land. Each year, the ranch harvests 975 acres of hay. Annually, cattle sales represent all of the ranch's receipts.

NVSB550 NVSB550 is a 550-cow ranch located in southeastern Nevada (Lincoln County). The operation consists of 125 acres of owned hay meadow and 275 acres of owned range, supplemented by 6,600 AUMs of public land. Annually, cattle sales represent 95 percent of the ranch's receipts.

MTB600 A 600-cow ranch located on the eastern plains of Montana (Custer County), MTB600 runs cows on a combination of owned land and land leased from federal, state, and private sources. The ranch owns 14,000 acres of pasture. 800 acres of hay are produced annually. Also, all deeded acres are leased for hunting. Cattle sales represented 99 percent of this ranch's 2015 receipts.

WYB475 This 475-cow ranch is located in north central Wyoming (Washakie County). The ranch leases 2000 AUMs from the U.S. Forest Service and owns 1,500 acres of range. Annually, the ranch harvests 330 acres of alfalfa and grass hay on owned ground. In 2015, cattle sales accounted for 89 percent of gross receipts.

COB275 This 275-cow ranch is located in northwestern Colorado (Routt County). Federal land provides seven percent of the ranch's grazing needs. The ranch owns 2,300 acres of rangeland, and the cattle graze federal land during the summer. Cattle sales accounted for 65 percent of the ranch's 2015 total receipts.

NMB240 NMB240 is a 240-cow ranch located in northeastern New Mexico (Union County). During 2015, 95 percent of gross receipts were derived from cattle sales with the balance of receipts generated from fee hunting.

SDB375 SDB375 is a 375-cow West River (Meade County, South Dakota) beef cattle ranch. This operation produces hay on 1,150 acres of owned cropland, and runs its cows on 6,700 acres of owned native range. In 2015, cattle sales accounted for 100 percent of gross receipts.

MOB250 A 250-cow beef cattle operation is the focal point of this diversified livestock and crop farm located in southwest Missouri (Dade County). MOB250 plants 120 acres of corn, 120 acres of wheat, 160 acres of soybeans, and 280 acres of hay. Improved pasture makes up another 570 acres of this ranch. During 2015, cattle sales comprised 68 percent of gross receipts.

TXRB400 The western Rolling Plains of Texas (King County) is home to this 400-head cow-calf operation. This ranch operates on 20,000 acres (half owned, half leased) of native range. Eighty-eight percent of 2015 receipts came from cattle sales, while 12 percent came from fee hunting.

TXSB275 A 275-head cow-calf operation is the central focus of this full-time agricultural operation in south central Texas (Gonzales County). Contract broiler production and hunting income are vital to the ranch's viability. Cattle sales accounted for 91 percent of 2015 gross receipts.

FLB1155 This is a 1,155-cow ranch located in central Florida (Osceola County). FLB1155 runs cows on 5,400 acres of owned improved pasture, from which 3,560 acres of hay are harvested annually. Sales of sod are a burgeoning source of agricultural income for area ranches. During 2015, cattle sales represented 92 percent of total receipts.

OTHERS Five other representative farms have beef cattle operations along with their crop production (MONG2300, TXHG2500, TXWG1600, TXRP2500, and GAC2300). These farming operations have from 40 to 300 cows. Cattle contributed from 6 to 26 percent of gross receipts for these farms in 2015.

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

	NVB650	NVSB550	MTB600	WYB475	COB275	NMB240	SDB375	MOB250	TXRB400	TXSB275	FLB1155
County	Elko	Lincoln	Custer	Washakie	Routt	Union	Meade	Dade	King	Gonzales	Osceola
Total Cropland	1,300.00	125.00	0.00	330.00	650.00	0.00	1,150.00	280.00	0.00	0.00	5,400.00
Acres Owned	1,300.00	125.00	0.00	330.00	450.00	0.00	1,150.00	175.00	0.00	0.00	5,400.00
Acres Leased	0.00	0.00	0.00	0.00	200.00	0.00	0.00	105.00	0.00	0.00	0.00
Pastureland											
Acres Owned	8,725.00	275.00	14,000.00	1,500.00	2,300.00	10,072.00	6,700.00	570.00	10,000.00	900.00	0.00
Acres Leased	0.00	0.00	0.00	0.00	0.00	2,261.00	700.00	280.00	15,000.00	775.00	0.00
Federal AUMs Leas	3,560.00	6,600.00	1,350.00	2,000.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
State/Private AUM	2,000.00	0.00	7,600.00	700.00	750.00	0.00	0.00	0.00	0.00	0.00	0.00
Assets ($1000)											
Total	8,709.00	3,432.00	8,970.00	6,630.00	14,989.00	7,738.00	8,316.00	3,668.00	9,059.00	5,497.00	26,814.00
Real Estate	6,693.00	1,194.00	6,799.00	4,749.00	13,700.00	6,812.00	6,770.00	1,904.00	7,706.00	4,703.00	23,634.00
Machinery	450.00	399.00	387.00	391.00	463.00	167.00	306.00	333.00	154.00	147.00	201.00
Other & Livestock	1,566.00	1,839.00	1,783.00	1,490.00	827.00	758.00	1,240.00	1,431.00	1,199.00	647.00	2,979.00
Debt/Asset Ratios											
Total	0.02	0.05	0.02	0.02	0.02	0.01	0.01	0.03	0.01	0.02	0.01
Intermediate	0.07	0.10	0.06	0.07	0.13	0.07	0.05	0.10	0.04	0.09	0.03
Long Run	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Number of Livestock											
Beef Cows	650.00	550.00	600.00	435.00	275.00	240.00	375.00	250.00	400.00	275.00	1,155.00
2015 Gross Receipts ($1,000)*											
Total	812.60	737.80	672.20	566.80	406.70	345.60	456.90	469.50	643.10	350.60	1,194.90
Cattle	812.60	704.30	665.20	506.00	263.10	326.60	456.90	321.30	563.10	318.10	1,100.90
	1.00	0.95	0.99	0.89	0.65	0.95	1.00	0.68	0.88	0.91	0.92
Corn	0.00	0.00	0.00	0.00	0.00	0.00	0.00	70.10	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.00	0.00	0.00
Soybeans	0.00	0.00	0.00	0.00	0.00	0.00	0.00	41.80	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00
Wheat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.80	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00
Hay	0.00	33.60	0.00	50.80	110.10	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.05	0.00	0.09	0.27	0.00	0.00	0.00	0.00	0.00	0.00
Other Receipts	0.00	0.00	7.00	10.00	8.50	19.00	0.00	6.00	80.00	32.50	94.00
	0.00	0.00	0.01	0.02	0.02	0.06	0.00	0.00	0.12	0.09	0.08
2015 Planted Acres**											
Total	975.00	125.00	800.00	330.00	650.00	0.00	1,150.00	1,250.00	0.00	500.00	3,560.00
Corn	0.00	0.00	0.00	0.00	0.00	0.00	0.00	120.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00
Soybeans	0.00	0.00	0.00	0.00	0.00	0.00	0.00	160.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.00
Wheat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	120.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00
Hay	975.00	125.00	800.00	330.00	650.00	0.00	1,150.00	280.00	0.00	100.00	3,560.00
	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.22	0.00	0.20	1.00

*Receipts for 2015 are included to indicate the relative importance of each enterprise to the farm. Percents indicate the percentage of the total receipts accounted for by the livestock categories and the crops.

**Acreages for 2015 are included to indicate the relative importance of each enterprise to the farm. Total planted acreage may exceed total cropland available due to double cropping. Percents indicate the percentage of total planted acreage accounted for by the crop.

APPENDIX B:

LIST OF PANEL FARM COOPERATORS

FEED GRAIN FARMS (CONTINUED)

Indiana

Facilitators

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

Panel Participants

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

Iowa

Facilitators

Mr. Jerry Chizek - County Extension Director, Webster County

Panel Participants

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

Louisiana

Facilitators

Mr. Kurt Guidry - Professor, LSU Ag Center

Panel Participants

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

Louisiana - Northeast

Facilitators

Mr. Kurt Guidry - Professor, LSU Ag Center

Panel Participants

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

FEED GRAIN FARMS (CONTINUED)

Missouri - Central

Facilitators

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

Panel Participants

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

Missouri - Northwest

Panel Participants

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

Nebraska - Central

Facilitators

Mr. Bruce Treffer - Extension Educator, Dawson County

Panel Participants

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

North Dakota

Facilitators

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

Panel Participants

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

FEED GRAIN FARMS (CONTINUED)

South Carolina

Facilitators

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

Panel Participants

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

Tennessee

Facilitators

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

Panel Participants

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

Texas - Northern Blackland Prairie

Facilitators

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

Panel Participants

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

Texas - Northern High Plains

Facilitators

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

Panel Participants

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

FEED GRAIN FARMS (CONTINUED)

Texas - Panhandle

Facilitators

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

Panel Participants

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

Texas - Southern Blackland Prairie

Facilitators

Mr. Dustin Coufal - County Extension Agent, Williamson County

Panel Participants

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

Texas - Southwest

Facilitators

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

Panel Participants

Mr. Rollie Deering
Mr. David Foy
Ms. Gisele Jefferson
Mr. Dave Lillich
Ms. Sara Olsen
Mr. Craig Saxton
Mr. Harlan Schaffert
Mr. John Wright
Mr. Ward Deering
Mr. William Harman
Mr. Terry Kuntz
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. Steve Busse
Mr. Richard Calliham
Mr. Dennis Franklin
Mr. Lee Juenemann
Mr. Lance Leebrick
Mr. Steve Schertz
Rich Calliham
Mr. Sam Crouse
Mr. Lyman Goetsch
Mr. Brian Laufer
Mr. Harold Mizell

Kansas - South Central

Facilitators

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

Panel Participants

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

Oregon - North Central

Facilitators

Jon Farquharson

Panel Participants

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

WHEAT FARMS (CONTINUED)

Washington

Facilitators

Mr. Aaron Esser - County Director, WSU Extension

Panel Participants

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

Washington - Palouse

Facilitators

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

Panel Participants

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

COTTON FARMS

Alabama

Panel Participants

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

Arkansas - Adams Land Co. Gin

Facilitators

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

Panel Participants

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

Georgia - Southwest

Facilitators

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

Panel Participants

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

North Carolina

Facilitators

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

Panel Participants

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

South Carolina

Facilitators

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

Panel Participants

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

COTTON FARMS (CONTINUED)

Tennessee

Facilitators

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

Panel Participants

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

Texas - Coastal Bend

Facilitators

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

Panel Participants

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

Texas - Eastern Caprock

Facilitators

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

Panel Participants

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

Texas - Mid Coast

Facilitators

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

Panel Participants

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

COTTON FARMS (CONTINUED)

Texas - Rio Grande Valley

Facilitators

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

Panel Participants

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

Texas - Rolling Plains

Facilitators

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

Panel Participants

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

Texas - Southern High Plains

Facilitators

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

Panel Participants

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

RICE FARMS

Arkansas

Facilitators

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

Panel Participants

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

Arkansas - East Central-Arkansas County

Facilitators

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

Panel Participants

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

Arkansas - East Central-Cross County

Facilitators

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

Panel Participants

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

Arkansas - Northeast-Lawrence County

Facilitators

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

Panel Participants

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

California - Butte County

Facilitators

Dr. Cass Mutters - Farm Advisor, University of California

Panel Participants

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

RICE FARMS (CONTINUED)

California - Colusa County

Facilitators

Dr. Cass Mutters - Farm Advisor, University of California

Panel Participants

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

California - Sutter County

Facilitators

Dr. Chris Greer - Farm Advisor, University of California

Panel Participants

Mr. Paul Baggett
Mr. Jack DeWitt
Mr. Ned Lemenager
Mr. Walt Trevethan
Mr. Bob Van Dyke
Mr. Steve Butler
Mr. Scott Leathers
Mr. Paul Lowery
Mr. Scott Tucker
Mr. Wayne Vineyard

Louisiana - Southwest-Acadiana

Facilitators

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

Panel Participants

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

Missouri - Bootheel West

Panel Participants

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

Texas - Bay City-Matagorda County

Facilitators

Mr. Brent Batchelor - County Extension Agent, Matagorda County

Panel Participants

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

Texas - Eagle Lake-Colorado County

Panel Participants

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

RICE FARMS (CONTINUED)

Texas - El Campo-Wharton County

Panel Participants

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

DAIRY FARMS

California

Facilitators

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

Panel Participants

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

Florida - North

Facilitators

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

Panel Participants

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

Florida - South

Facilitators

Mr. Ray Hodge

Panel Participants

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

Idaho

Facilitators

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

Panel Participants

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

Missouri

Facilitators

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

Panel Participants

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

DAIRY FARMS (CONTINUED)

Nevada - Fallon

Facilitators

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

Panel Participants

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

New York - Western

Facilitators

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

Panel Participants

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

Texas - Central

Facilitators

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

Panel Participants

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

Texas - Northeast

Facilitators

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

Panel Participants

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

Texas - South Plains

Facilitators

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

Panel Participants

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

DAIRY FARMS (CONTINUED)

Vermont

Facilitators

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

Panel Participants

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

Washington

Facilitators

Mr. Chris Benedict - Extension Faculty, Whatcom County

Panel Participants

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

Wisconsin

Facilitators

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

Panel Participants

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

BEEF PRODUCERS

Colorado

Facilitators

Mr. Todd Hagenbuch - County Extension Agent, Routt County

Panel Participants

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

Florida

Panel Participants

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

Missouri - Southwest

Facilitators

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

Panel Participants

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

Montana

Facilitators

Mr. Michael Schuldt - County Extension Agent, Custer County

Panel Participants

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

Nevada

Facilitators

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

Panel Participants

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

New Mexico

Facilitators

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

Panel Participants

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

BEEF PRODUCERS (CONTINUED)

South Dakota

Facilitators

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

Panel Participants

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

Texas - Rolling Plains

Facilitators

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

Panel Participants

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

Texas - South

Facilitators

Mr. Dwight Sexton - County Extension Agent, Gonzales County

Panel Participants

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

Wyoming

Facilitators

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

Panel Participants

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

PEANUT FARMS

North Carolina - Elizabethtown

Facilitators

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

Panel Participants

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

North Carolina - Rocky Mount

Facilitators

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

Panel Participants

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