

Revised Net Farm Income Projections for 2023 and 2024 - September Update

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Introduction¹

In February, Ibendahl and O'Brien released a net farm income estimate for 2023 (A Preliminary Estimate of 2022 Kansas Net Farm Income and a Projection for 2023). At that time, Net Farm Income (NFI) was projected to be \$41K for 2023. Since then, the projected NFI has come into sharper focus with a better estimate of grain prices, cost of inputs, government payments and production expenses.

This update to the NFI forecast incorporates those changes into the 2023 estimate and also projects NFI for 2024. Full details of how this estimate is put together can be found in the January article of estimating net farm income². This forecast is for Kansas Farm Management Association grain farms only. This September NFI estimate was first presented at the Risk and Profit conference in August.

At this point of the year, wheat yields are known, and we have a pretty good idea of what the yields look like for the spring planted crops. In addition, there are more months of grain prices available. Compared to the January estimate, total revenue is slightly lower as crop insurance will help overcome lower grain prices to some extent. Without crop insurance, grain revenue would be much lower.

On the expense side, things have improved considerably. Fertilizers and fuel in particular have both declined in price. Anhydrous, which at one point was near \$1,500 per ton, is now less than half that price. Herbicides have also declined by 20 percent this year. The resulting input price declines have resulted in an improvement of around \$400,000 per farm in operating expenses. The important question for NFI estimation is whether these price declines will be seen in 2023 or 2024. If more of the input price declines happen later rather than earlier, 2023 NFI could be lower with 2024 NFI higher.

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²A Preliminary Estimate of 2022 Kansas Net Farm Income and a Projection for 2023 | AgManager.info

Results

Figure 1 shows the average actual revenues and expenses for 503 KFMA grain farms for 2022 and 2022. The table also shows the estimated 2023 revenues and expenses and the predicted 2024 revenues and expenses. Net farm income is expected to increase by 32% in 2023, from \$190,000 to \$250,000. Net farm income then is forecast to fall by 71% in 2024 to \$73,000. However, that last estimate is still very uncertain as the estimate includes normal rainfall and the government payment number is unknown until county yields are reported.

Figure 2 shows the average and median as well as the 25th and 75th percentile of net farm income for 2020 through the estimated 2024 values. The average is higher than the median as some of the larger farms help to raise the overall average. As forecast, 2024 projections still show an average farm earning positive NFI although it is much lower than recent years.

Figure 3 shows a cumulative distribution for the 2022, 2023, and 2024 estimated net farm incomes. At any given NFI amount, the graph shows the percentage of farms that have that particular level of NFI or lower. The 50-percentile point is the median level of NFI. Normally a cumulative distribution shows a line from 0 to 100 percent to represent the entire distribution of farms. However, because there is such a wide variation in NFI, the tails have been trimmed to highlight the main area of the graph. As this figure shows, 30% of the farms in 2024 are expected to have a negative net farm income.

Conclusions

Most grain farmers in Kansas should have a very profitable year in 2023 but not at the level of 2021. The bounce back in NFI for 2023 can be attributed to lower input costs and higher crop insurance payments as the early year higher prices should help many producers. While input prices have been decreasing during 2023, these many not all show up until 2024. Thus, the estimate provided here could be overestimating 2023 NFI while underestimating 2024 NFI. The major worry going into 2024 is that 30% of Kansas grain farms could have negative net farm income. In addition, the average NFI will be much lower. This could result in farms increasing their debt levels at a time when interest rates could be rising.

	2021	2022	2023(p)	Est 2024
Income				
Beef	\$ 71,026	\$ 81,007	\$ 105,309	\$ 115,840
Dairy-livestock	103	-	-	-
Dairy-milk	394	-	-	-
Sheep	192	88	88	88
Swine	3,167	3,641	3,641	3,641
Poultry and eggs	264	219	219	219
Other livestock	871	1,769	1,786	1,786
Custom feeding	4,152	4,410	4,718	4,718
Ad hoc pmt - Livestock	3,595	-	-	-
<i>minus Feed purchased</i>	<u>23,853</u>	<u>31,319</u>	<u>39,148</u>	<u>43,063</u>
<i>Livestock VFP</i>	<u>\$ 59,911</u>	<u>\$ 59,815</u>	<u>\$ 76,614</u>	<u>\$ 83,230</u>
Corn	304,315	253,982	195,928	173,268
Grain sorghum	66,004	34,272	35,166	34,125
Soybeans	261,849	197,463	206,955	200,783
Sunflowers	714	216	-	-
Wheat	138,985	139,529	149,886	138,697
Hay and forage	18,014	25,196	27,716	30,488
Other crop	-	-	-	-
Govt payment (farm bill only)	17,842	25,568	8,747	-
Ad hoc pmt - Crops	42,169	-	-	-
Crop ins proceeds	15,799	147,745	195,660	66,340
Machine work	14,906	14,930	15,079	15,833
Other income and hedging	30,819	38,758	40,696	41,510
<i>Crop VFP</i>	<u>\$ 911,418</u>	<u>\$ 877,660</u>	<u>\$ 875,833</u>	<u>\$ 701,043</u>
TOTAL VFP	\$ 971,328	\$ 937,475	\$ 952,448	\$ 784,273
Expenses				
Hired Labor	23,332	25,335	25,446	26,784
Machinery Repairs	59,596	63,151	63,203	65,250
Irrigation Repairs	1,857	2,767	2,905	2,992
Building Repairs	3,751	3,935	4,132	4,256
Seed/Other Crop Expenses	78,226	81,700	78,632	83,262
Crop Insurance	24,557	32,131	32,640	33,321
Fertilizer-Lime	100,413	155,254	119,768	110,637
Machine Hire	25,647	25,133	25,225	25,713
Organization Fees, Publications	5,438	5,594	5,412	5,538
Vet-Med-Drugs	3,610	3,538	3,715	3,826
Misc Crop Expense	3,455	4,113	4,186	4,317
Misc Livestock Expense	2,426	2,677	2,811	2,895
Dairy Expense	45	-	-	-
Gas-Fuel-Oil	28,541	39,802	30,301	28,861
Irrigation Energy	3,679	6,758	5,407	4,866
Real Estate Taxes	11,493	11,827	12,063	12,305
Personal Property Taxes	2,435	2,667	2,600	2,687
General Farm Insurance	14,212	15,608	15,542	16,059
Utilities	6,807	7,105	7,006	7,249
Cash Farm Rent	49,563	51,295	53,859	56,552
Herbicide-Insecticide	80,174	98,939	96,986	102,409
Conservation	2,530	2,194	2,003	2,067
Auto Expense	838	866	763	724
Other expenses	(15)	57	57	57
<i>Total Operating Expenses</i>	<u>\$ 532,612</u>	<u>\$ 642,445</u>	<u>\$ 594,663</u>	<u>\$ 602,628</u>
Interest paid	20,379	21,325	22,391	22,391
Depreciation - machinery	68,012	75,270	76,775	78,311
Depreciation - buildings	7,389	8,099	8,261	8,261
Total Farm Expenses	\$ 628,392	\$ 747,139	\$ 702,091	\$ 711,591
Net Farm Income	\$ 342,936	\$ 190,336	\$ 250,357	\$ 72,682

Figure 1: 2021, 2022, Predicted 2023 and Estimated 2024 Net farm income

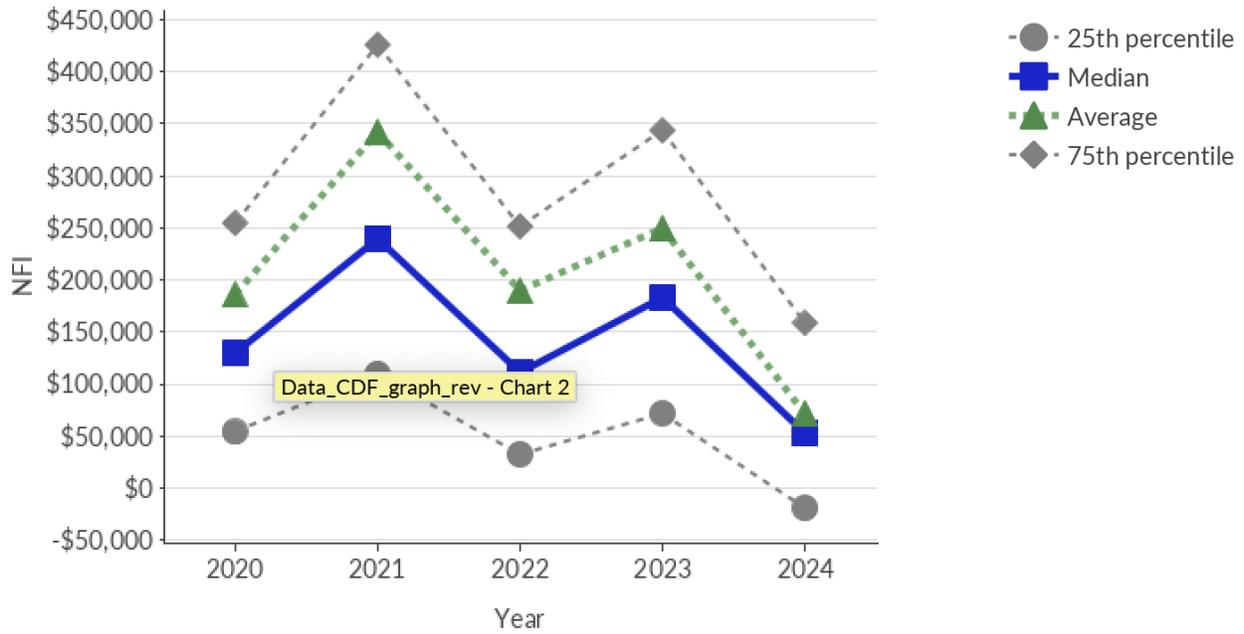


Figure 2. The 25th Percentile, the Median, the Average, and the 75th Percentile of Net Farm Income From 507 KFMA Grain Farms

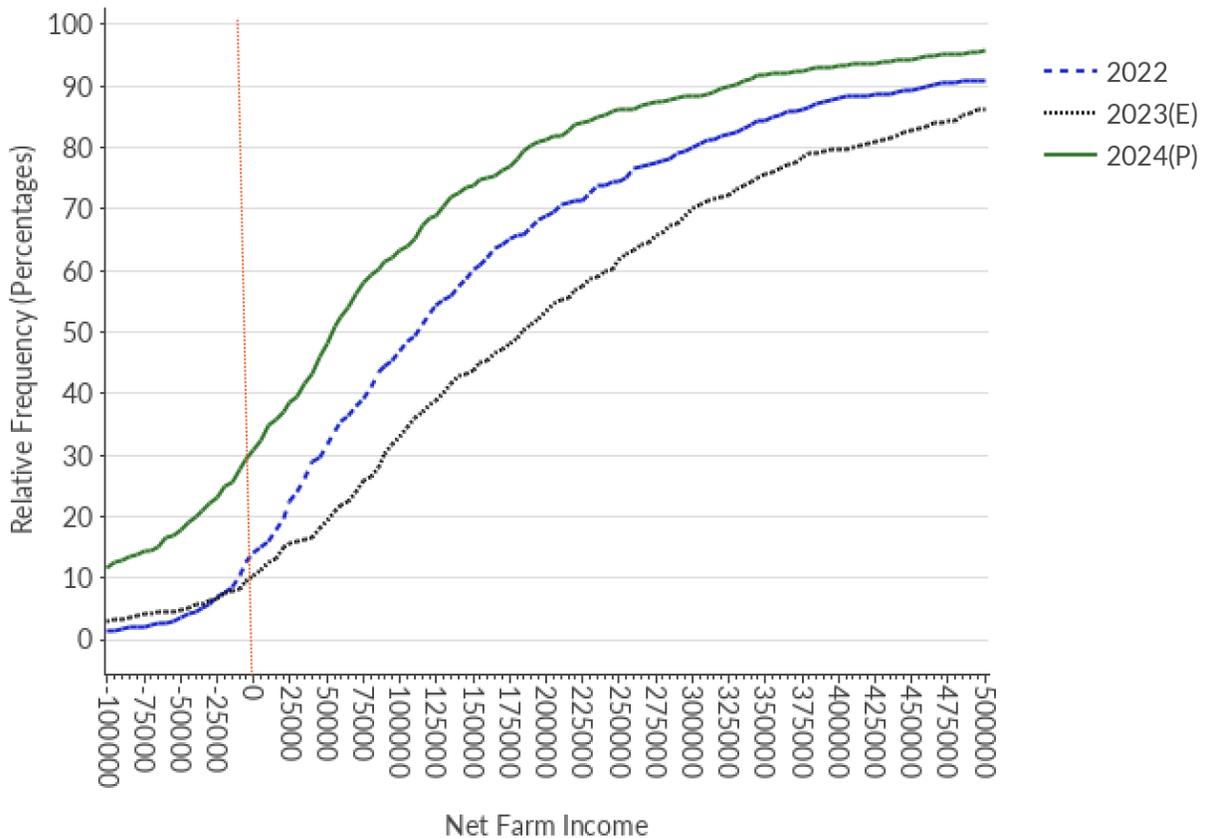


Figure 3. Comparison of 2022 NFI and Predicted 2023 and 2024 NFI for KFMA Grain Farms