Net Farm Income Outlook

2025 and 2026 Estimates

Gregg Ibendahl - K-State
Risk and Profit - August 2025

Government payments to the rescue?

	2023	2024	Est 2025	Est 2026
Income				
Livestock VFP	*$ 89,564*	*$ 93,053*	*$ 96,047*	*$ 97,055*
Corn	210,252	208,950	212,374	188,889
Grain sorghum	32,090	28,081	31,747	30,553
Soybeans	159,769	145,829	164,458	187,745
Wheat	112,267	115,816	103,359	98,565
Govt payment (farm bill only)	22,472	66,295	16,914	108,460
Crop ins proceeds	110,060	50,145	8,344	10,262
Crop VFP	*$ 720,699*	*$ 676,320*	*$ 599,591*	*$ 688,087*
TOTAL VFP	**$ 810,263**	**$ 769,372**	**$ 695,637**	**$ 785,143**
Expenses				
Seed/Other Crop Expenses	83,050	84,560	86,251	88,838
Crop Insurance	31,028	26,428	26,956	27,765
Fertilizer-Lime	139,705	119,807	112,363	137,426
Gas-Fuel-Oil	33,140	30,486	30,791	31,099
Herbicide-Insecticide	93,396	86,790	88,525	90,296
Total Operating Expenses	*$ 608,924*	*$ 580,243*	*$ 582,308*	*$ 619,750*
Interest paid	25,578	32,034	32,354	32,678
Depreciation - machinery	79,538	83,742	82,067	82,888
Total Farm Expenses	***$ 722,215***	***$ 704,358***	***$ 705,152***	***$ 743,822***
Net Farm Income	***$ 88,049***	***$ 65,014***	***$ (9,515)***	***$ 41,320***

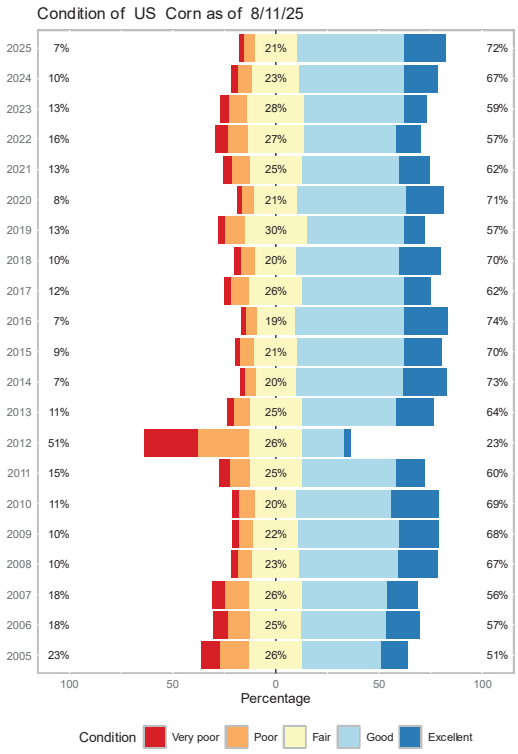
- Based on KFMA farms
  - 2024 has some of the extra government payments already included ($50K)
  - 2025 extra payments NOT yet included in estimate
  - 2026 DOES include changes from OB3 (One Big Beautiful Bill)
- 2026 could see a significant increase in fertilizer prices
- Significant difference between grain and beef farms

Outline for today

- Yields
- Inputs
- Diesel
- Fertilizer
- More detail on NFI

Crop yields

Corn looks really good in the US



- Only 7% in the poor or very poor category
- Last year was a record year and this year is even better
- 72 % in the good and excellent category
  - only 1 year in last 20 was better

Most state will have very good yields

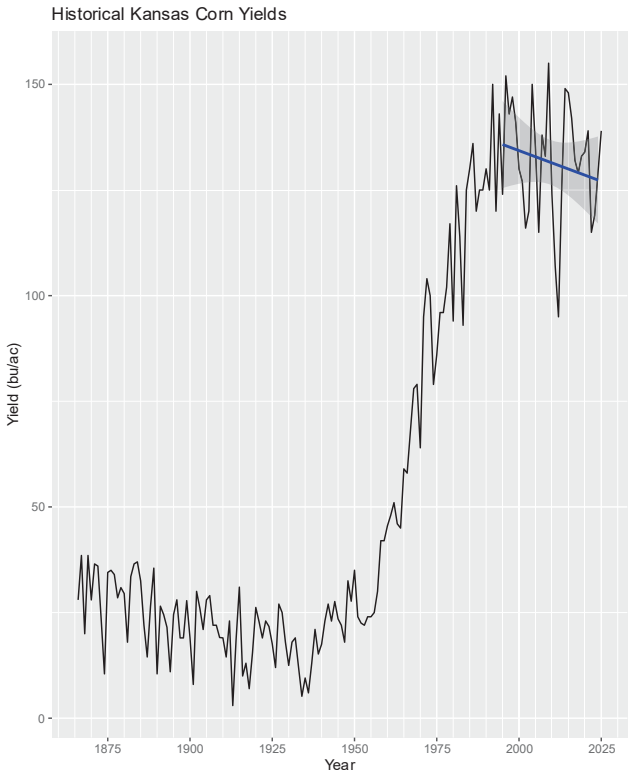
Corn Yields per Acre by State - 8/11/25

Bushels per harvested acre

State	Last year	2025 prediction Lower CI	Predicted	Upper CI	R squared
Colorado	116.0	121.7	126.1	130.4	−0.02
Illinois	217.0	210.4	214.4	218.4	0.63
Indiana	198.0	197.4	200.8	204.2	0.71
Iowa	211.0	215.4	220.8	226.3	0.46
Kansas	129.0	132.1	135.4	138.7	0.71
Kentucky	178.0	181.0	184.2	187.4	0.82
Michigan	181.0	173.0	175.5	178.0	0.49
Minnesota	174.0	194.8	199.2	203.6	0.26
Missouri	183.0	183.4	188.6	193.8	0.79
Nebraska	188.0	198.7	201.7	204.7	0.69
North_Carolina	87.0	143.8	147.8	151.8	0.84
North_Dakota	149.0	139.3	143.6	147.9	0.30
Ohio	177.0	187.2	190.3	193.4	0.73
Pennsylvania	138.0	165.8	170.0	174.3	0.68
South_Dakota	164.0	164.9	169.5	174.1	0.49
Tennessee	152.0	165.3	168.7	172.1	0.82
Texas	112.0	129.4	134.1	138.7	0.57
Wisconsin	174.0	183.3	186.9	190.5	0.41

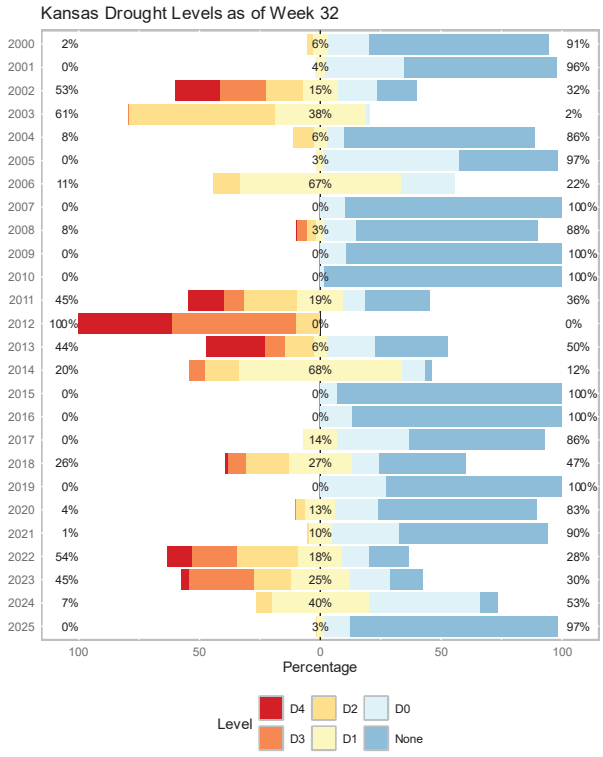
- NASS predicting 188.8 bu/ac US yield
  - My estimate is 188.2 US
- I'm predicting 135.4 bu/ac in Kansas
  - much better than last year which was much better than the year before that
  - NASS at 139 for Kansas

Kansas historical corn yields



- Unique among all the other states
- The explanation I get from students and others is often wrong

Kansas corn predictions using drought monitor data

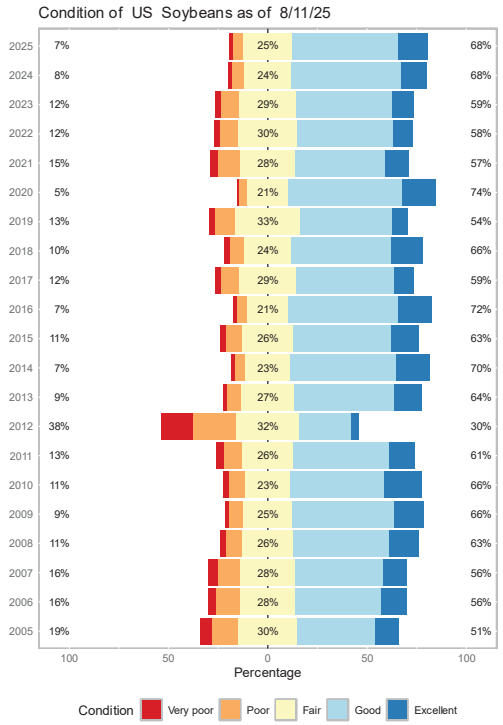


Predicted CRD Yields

week - 32

CRD	Trend Yield	Predicted Yields: Lower Bounds	Most Likely Yield	Upper Bounds	R squared
NORTHWEST	104.9	107.0	113.1	119.2	0.50
NORTH CENTRAL	132.8	132.9	140.1	147.4	0.45
NORTHEAST	176.0	176.5	183.3	190.2	0.60
WEST CENTRAL	92.8	94.6	103.3	111.9	0.36
CENTRAL	114.1	114.1	123.6	133.1	0.25
EAST CENTRAL	128.3	132.1	140.6	149.1	0.51
SOUTHWEST	181.1	175.5	184.5	193.4	0.02
SOUTH CENTRAL	144.4	141.8	149.8	157.7	0.11
SOUTHEAST	105.3	106.4	117.1	127.8	0.34

Soybeans also in good shape



- Only 7% in the poor or very poor category
- 68 % in the good and excellent category
  - Almost identical to last year

Most state will have very good yields

Soybean Yields per Acre by State - 8/11/25

Bushels per harvested acre

State	Last year	2025 prediction Lower CI	Predicted	Upper CI	R squared
Arkansas	55.0	56.7	57.9	59.1	0.35
Illinois	64.0	62.4	63.7	64.9	0.16
Indiana	59.0	59.9	60.9	61.9	0.45
Iowa	60.0	59.4	61.5	63.7	0.10
Kansas	35.0	38.7	41.2	43.8	0.37
Kentucky	48.0	53.3	54.9	56.5	0.43
Louisiana	52.0	56.6	59.1	61.5	0.40
Michigan	49.0	48.0	49.5	51.0	0.04
Minnesota	45.0	48.4	50.2	51.9	0.06
Mississippi	56.0	59.9	60.9	61.9	0.67
Missouri	49.0	51.5	53.2	55.0	0.48
Nebraska	57.5	61.3	62.8	64.4	0.49
North_Carolina	39.0	41.3	42.4	43.6	0.63
North_Dakota	37.5	33.0	34.5	36.0	0.07
Ohio	50.0	56.2	57.4	58.6	0.37
South_Dakota	43.0	44.8	46.5	48.2	0.14
Tennessee	42.0	46.0	47.6	49.2	0.63
Wisconsin	48.0	49.3	51.9	54.4	0.07

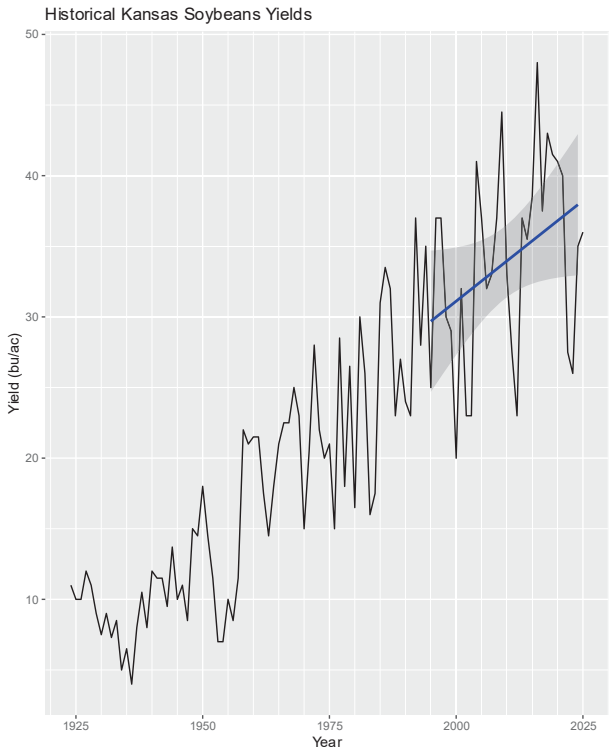
- NASS predicting 53.6 bu/ac US yield
  - My estimate is identical S
- I'm predicting 41.2 bu/ac in Kansas
  - Up from 35.0 last year
  - NASS at 36.0 for Kansas

Kansas soybean yield predictions using drought monitor data

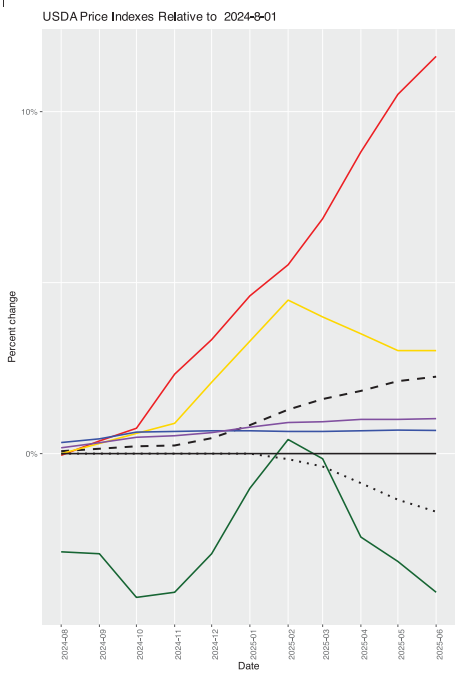
Predicted CRD Yields

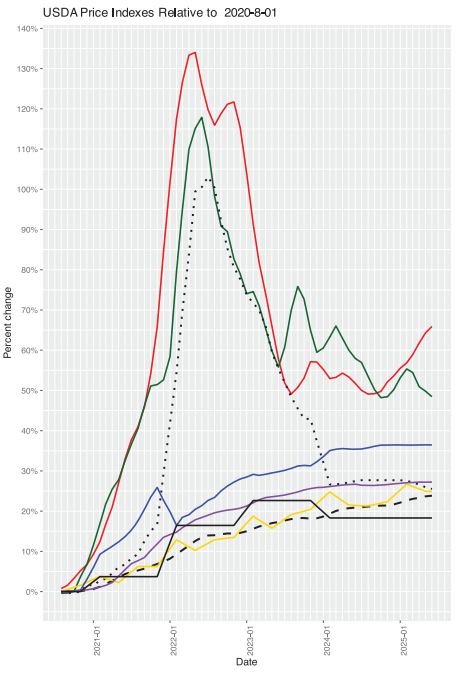
week - 32

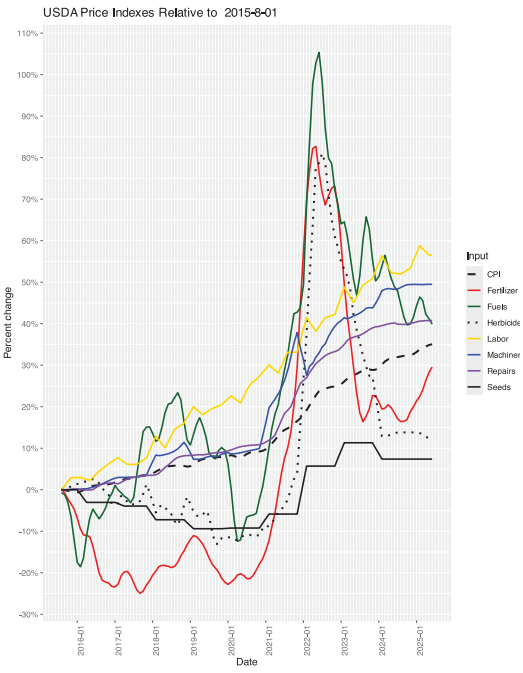
CRD	Trend Yield	Predicted Yields: Lower Bounds	Most Likely Yield	Upper Bounds	R squared
NORTHWEST	49.0	46.0	49.0	51.9	−0.06
NORTH CENTRAL	40.9	41.3	44.1	47.0	0.51
NORTHEAST	51.8	50.4	53.3	56.2	0.23
WEST CENTRAL	48.3	44.2	50.6	57.0	0.04
CENTRAL	32.3	33.6	37.5	41.3	0.39
EAST CENTRAL	38.3	38.1	41.7	45.4	0.30
SOUTHWEST	64.8	64.6	67.0	69.3	0.27
SOUTH CENTRAL	28.9	30.1	33.0	35.9	0.42
SOUTHEAST	32.3	32.8	36.2	39.7	0.36



Input outlook

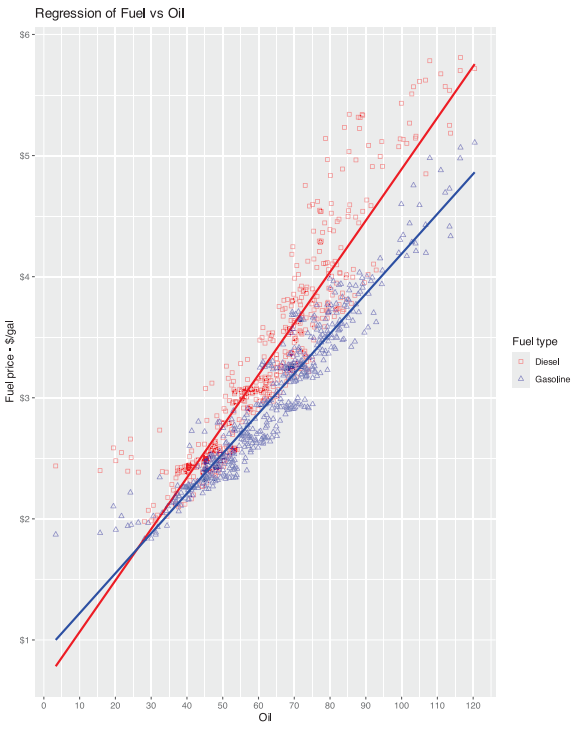






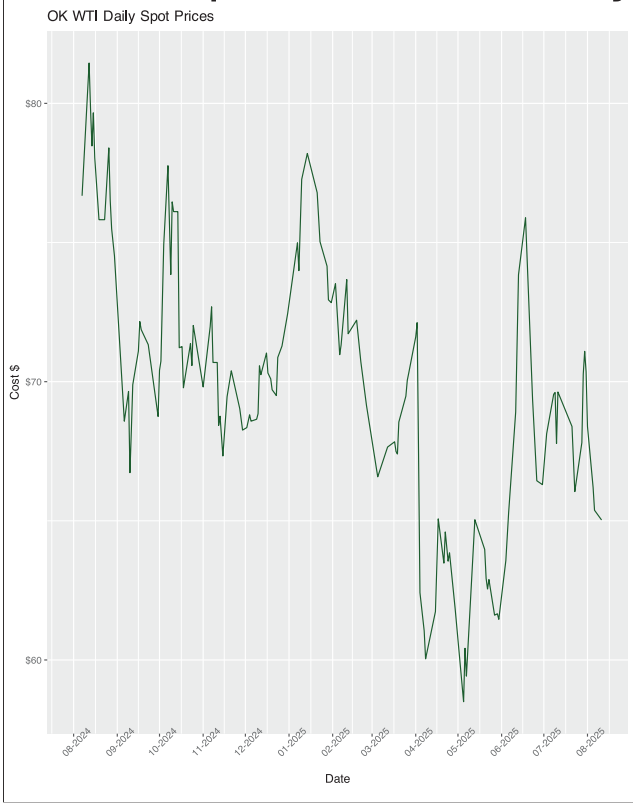
Oil and diesel

Predicting oil price is the key to diesel price



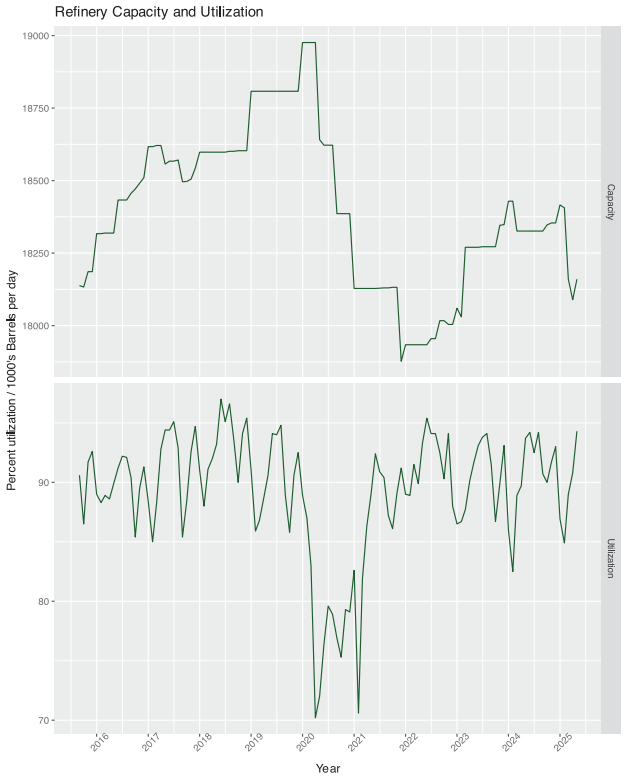
- High correlation between oil and diesel
  - Not as strong as oil and gas though
- This regression line is not as accurate as it once was
  - Diesel seems to have more price variability
  - More of a recent issue
  - Refinery capacity is a big problem

Oil prices for the last year



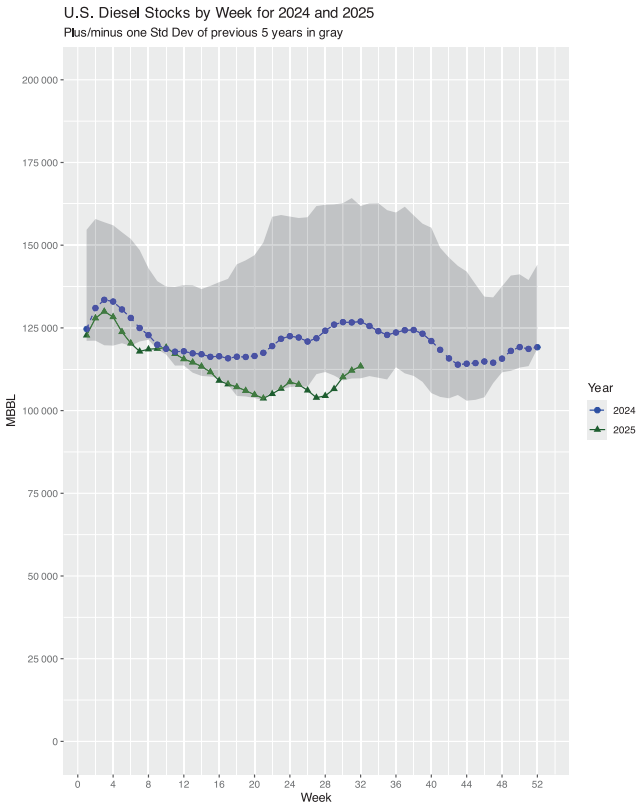
- $60 to $70 range
- Russian/Ukraine war premium seems to have vanished
  - At the start of war, oil was at $130
  - Maybe there should be more of a war premium
  - Ukraine is now targeting Russian oil refineries but it doesn't affect price
- Oil futures provide little information
- Futures market seems to have little concern about world events

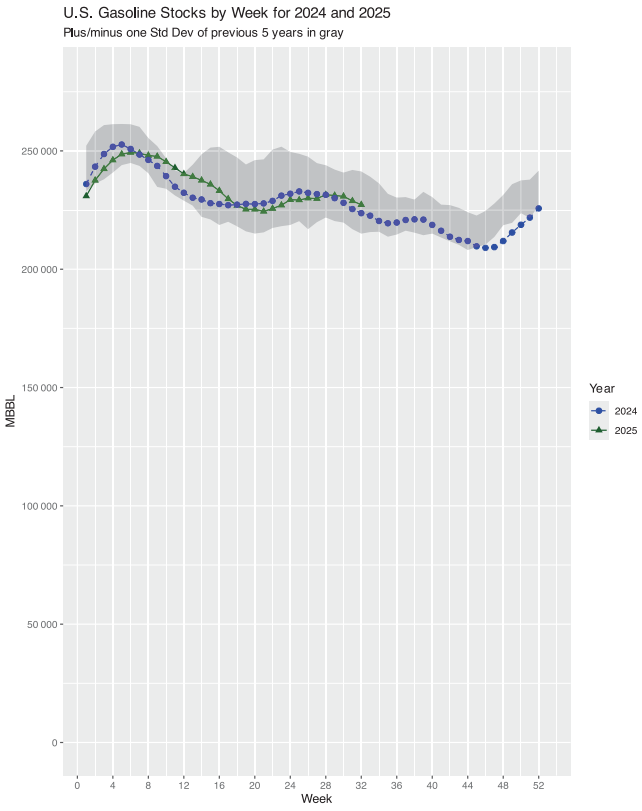
Refinery issues are a concern and getting worse



- Capacity is getting worse
  - Loss of refineries in California
- Utilization remains very high
  - Despite age of most refineries
- Drilling more oils won't help the gasoline and diesel supply issues

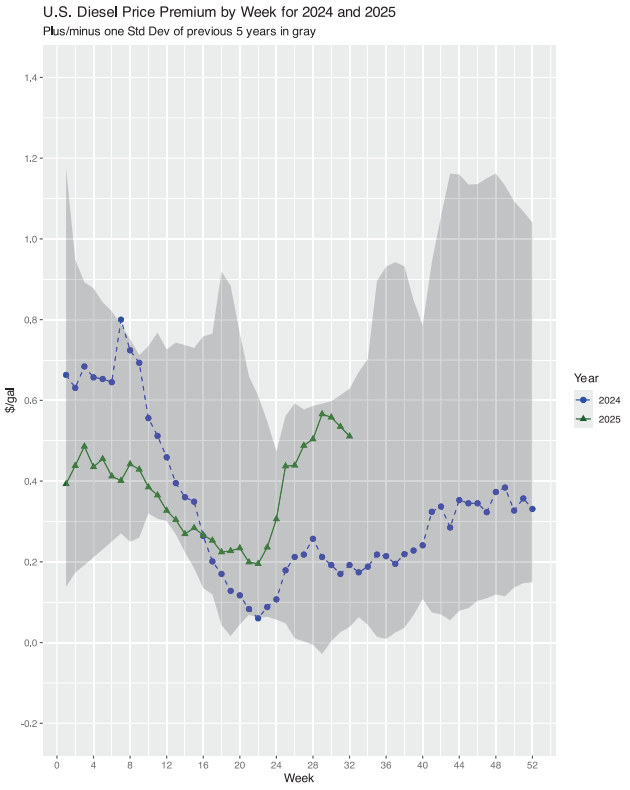
Fuel stocks





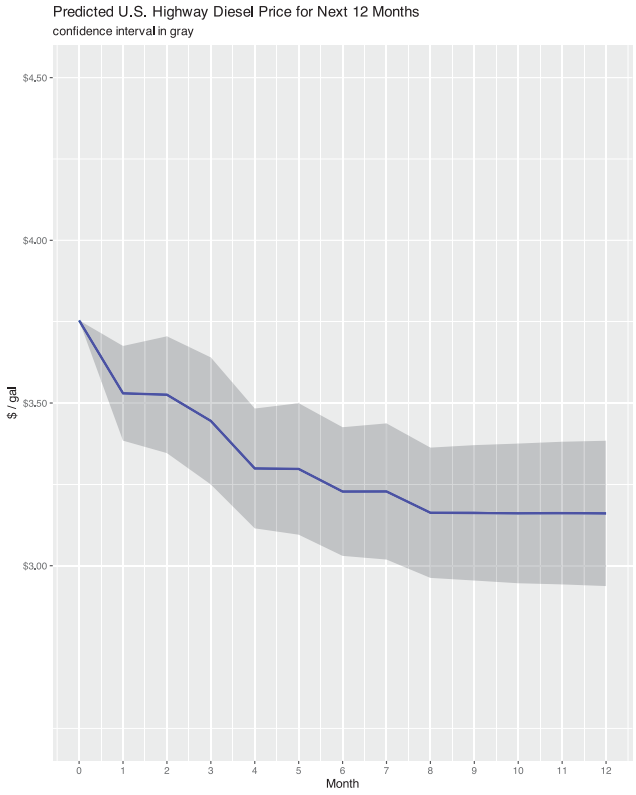
Diesel price premium

The emerging pattern for the diesel premium



- Smallest at the start of the summer driving season
- Increasing throughout the year
- Peaking late in year
- $0.60 if fairly typical now

Price prediction for the next 12 months



- Based on oil futures market and the diesel premium
- Assumption that the premium is following the same pattern as last year
- Is the oil futures price too low?
  - Well below $70 now
  - should there be a bigger confidence interval on estimate?
  - Are world events even a consideration in futures prices?

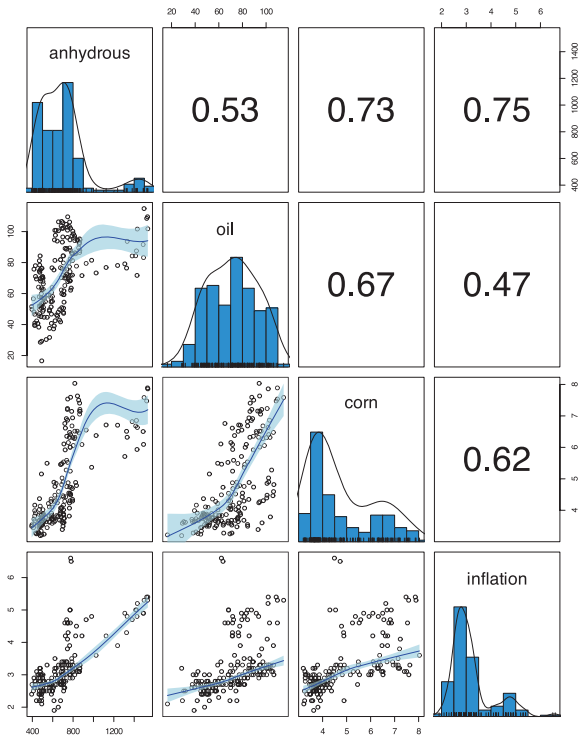
Fertilizer

Latest fertilizer prediction model

Term	Coefficient	P-value
Intercept	-225.89	< 0.001
Oil (lag 6 mo)	2.65	< 0.001
Corn	65.33	< 0.001
Inflation (lead 2 mo)	132.69	< 0.001

- based on corn futures price
- oil price
  - lag 6 months
- inflation expectations
  - 2 month lead

Latest fertilizer prediction model

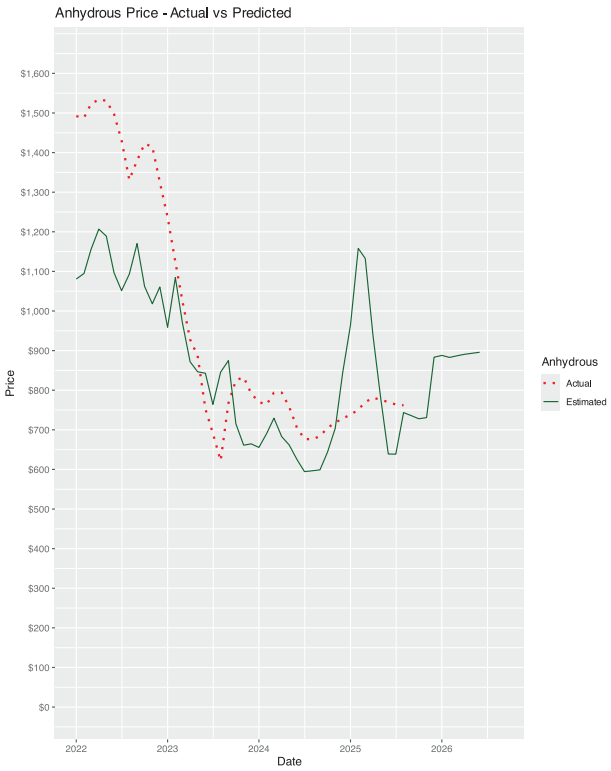


- Inflation may be most important factor in model
- Corn price has second best correlation
- Corn and oil have a strong correlation (0.67)

How has model worked in the past

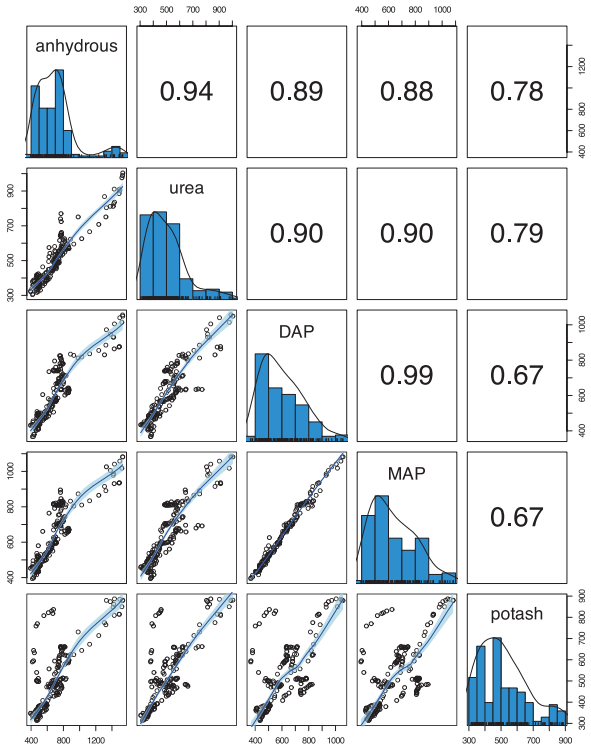
- Correlation typically above 0.70
- Misses some of the peaks
  - Either overestimates
  - Some underestimation as well
- Expectations about inflation seem to be very important

Predictions for the next 12 months



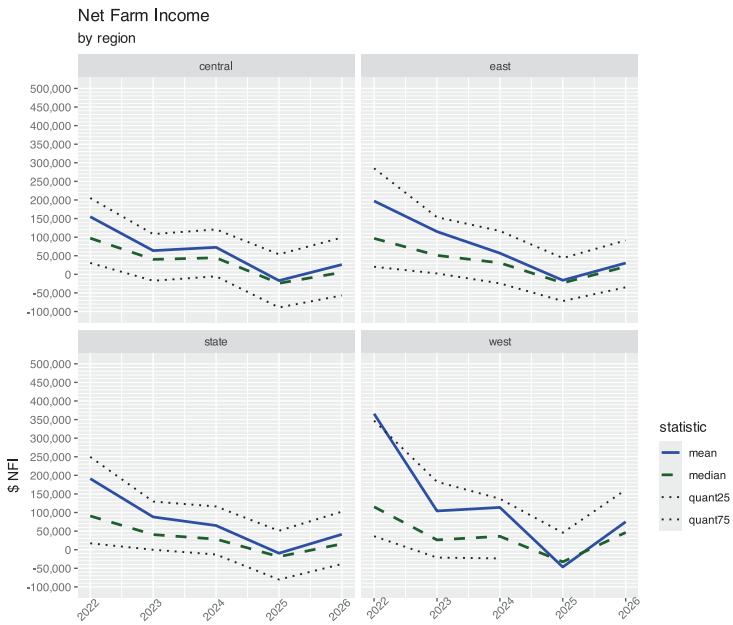
- Oil prices in the mid $60s (present oil price)
- Inflation of 5% within next year

High correlation with other fertilizers (for the moment)

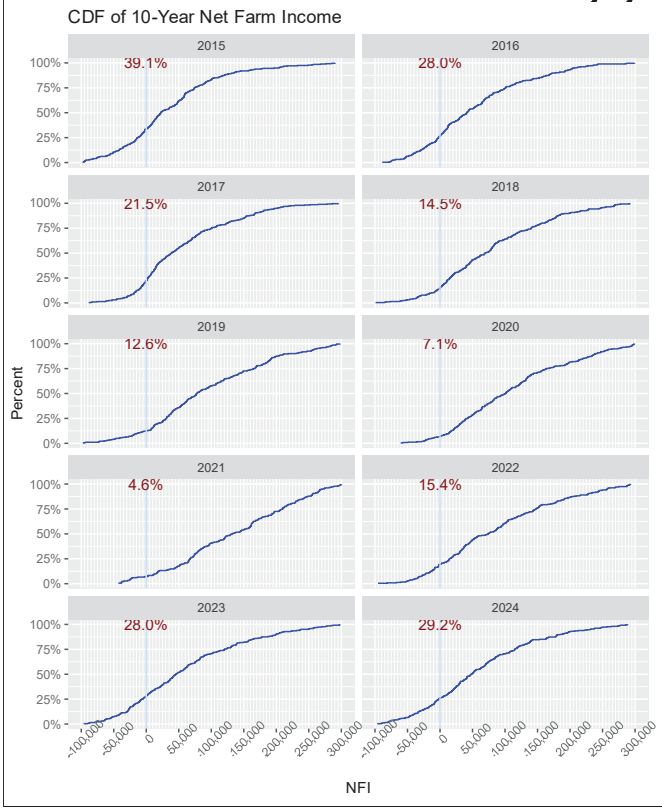


- Typically a very strong correlation with other fertilizers
  - Urea, DAP, and MAP all have N so probably not surprising
- We could be diverging from this relationship
  - Anhydrous is difficult to export given it is a gas
  - Other fertilizers are solids so easier to export
  - Strong world fertilizer prices could make Urea, DAP, and MAP more expensive relative to anhydrous

More detail on NFI

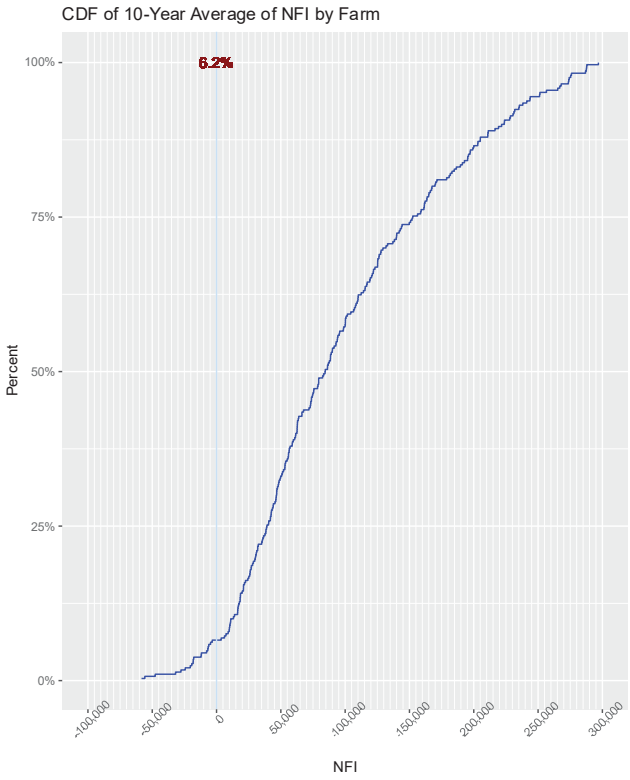


Distribution of NFI by year

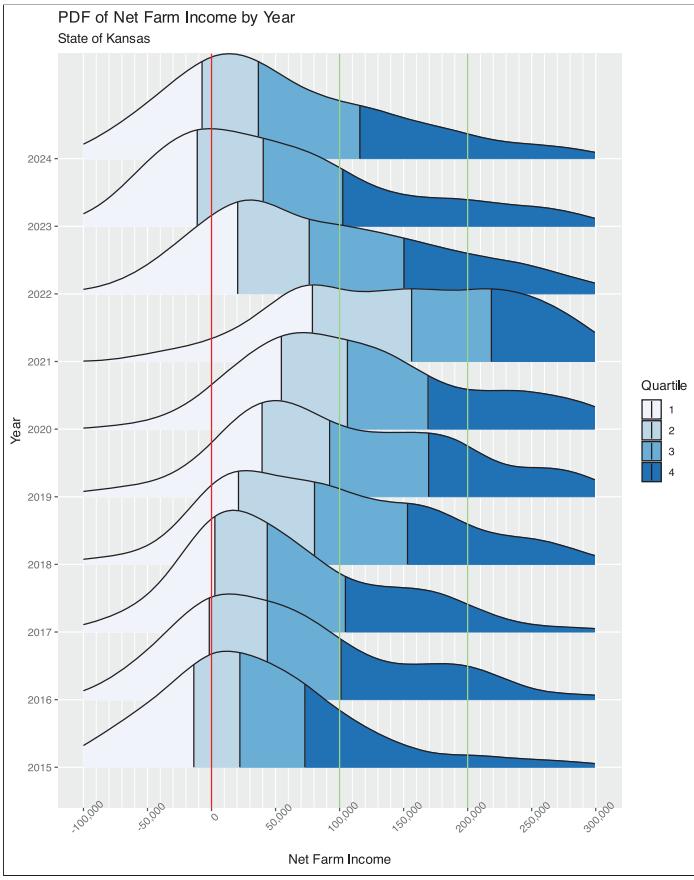


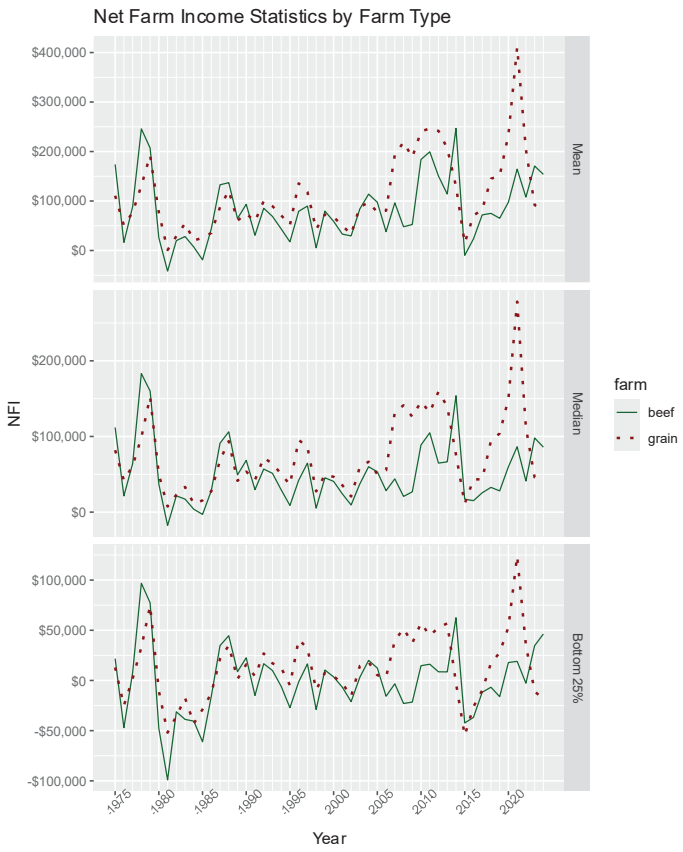
- How a CDF works
  - A point on the blue line represents the % of farmers earning that NFI or lower
  - The more horizontal the line the greater the range of NFI
  - Lines to the right are better
- Last year 30% of farmers had negative NFI
  - 2nd worse year in 10
  - This is even after significant extra government payments
  - on the positive side, 70% of farmers had positive NFI

Distribution of NFI – 10 yr combined



- When averaged across 10 years, most farms are doing OK
  - Based on a panel dataset (consistent set of farms)
- There may be motives other than profit contributing to the 6% of farms with a negative 10-yr NFI
- The median NFI over 10-years was about $75,000 per year





Questions

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