

Net Farm Income Outlook Using KFMA Data

2025 Estimate and a Review of 2024

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2025-06

A farm level approach to estimating NFI

- Use of KFMA farms with 3 years of data
- Advantages
 - Provides a distribution of NFI
 - May be easier to grasp
- Disadvantages
 - Allocating from state back to farm level (yields)
- Rewrote model in R this last winter (4,000 lines of code)

Income and expenses that are fully estimated

- Yields (I estimate yields every week)
 - _ Prices
 - State grain prices from NASS
 - Future prices
- Fertilizer
 - Based on nutrient removal
 - Nov to Dec fertilizer prices
- Crop insurance revenue
- Government payments

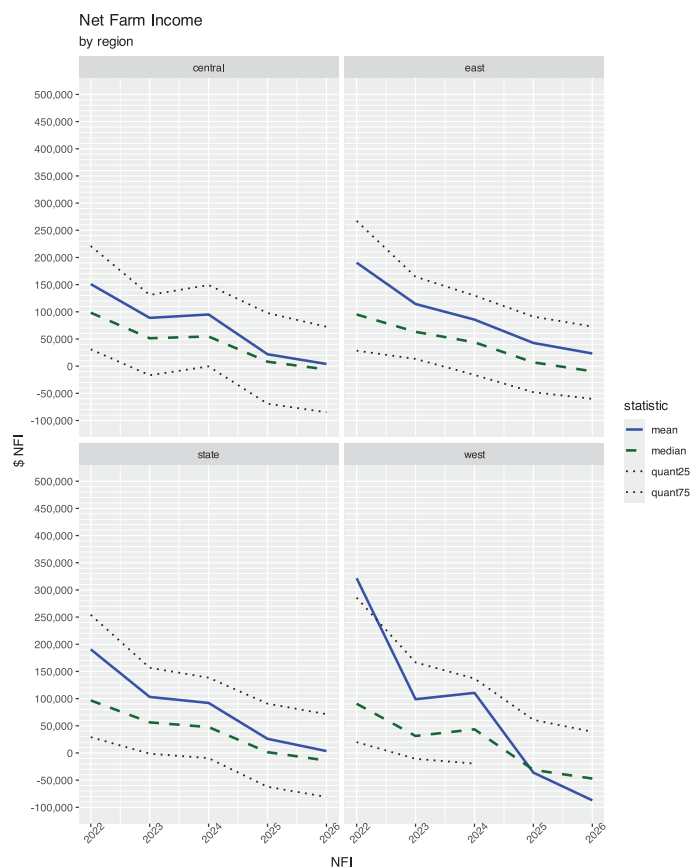
Other differences

- Assumption of accrual accounting
- ECAP payments were counted in government payments for 2024
- I haven't modeled any other supplemental ad hoc payments for 2025 yet
- KFMA NFI is highly correlated to Kansas NFI

Forecast for 2025

- ECAP payments counted in 2024
- Nothing currently in model for additional ad hoc payments in 2025
- Other factors
 - Crop ins revenue down by \$35K
 - Overall expenses are about the same as last year even with fertilizer \$10K less than last year
 - I've already factored in a good wheat crop

5

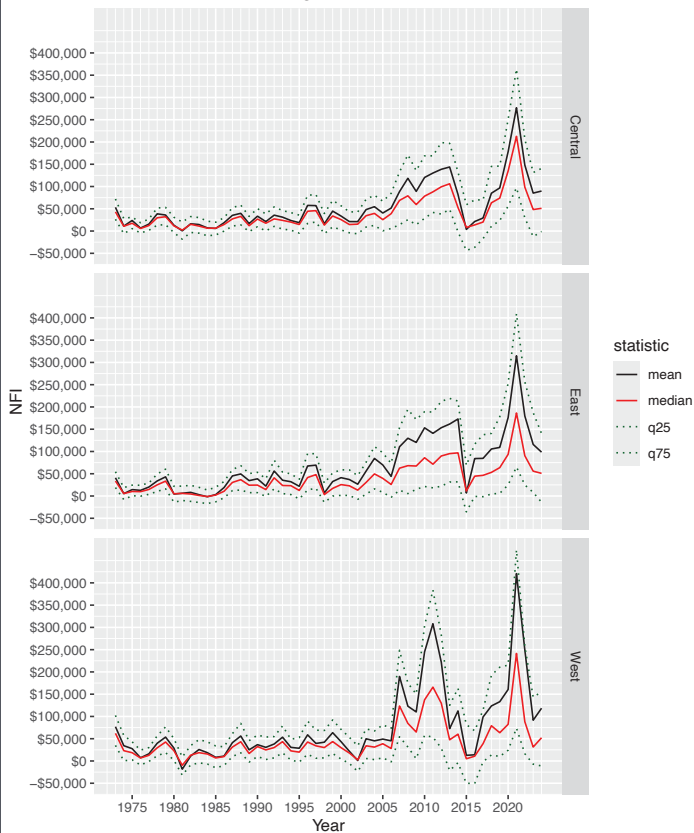


Net Farm Income by Region

- The trend in NFI is bleak
- Mean is almost always higher than the medium
 - skewed distribution
- Biggest decline in western Kansas
- Bottom 25% is not always the same farms

6

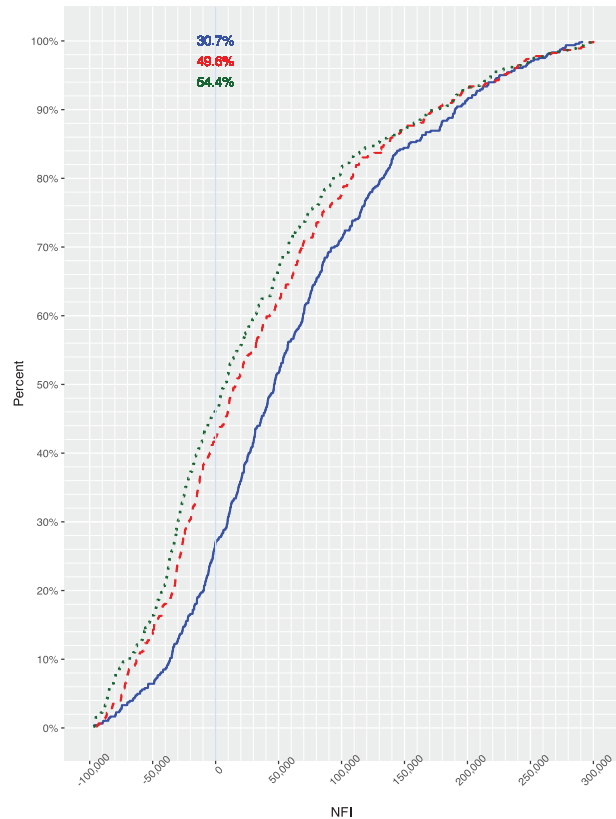
Net Farm Income by Region



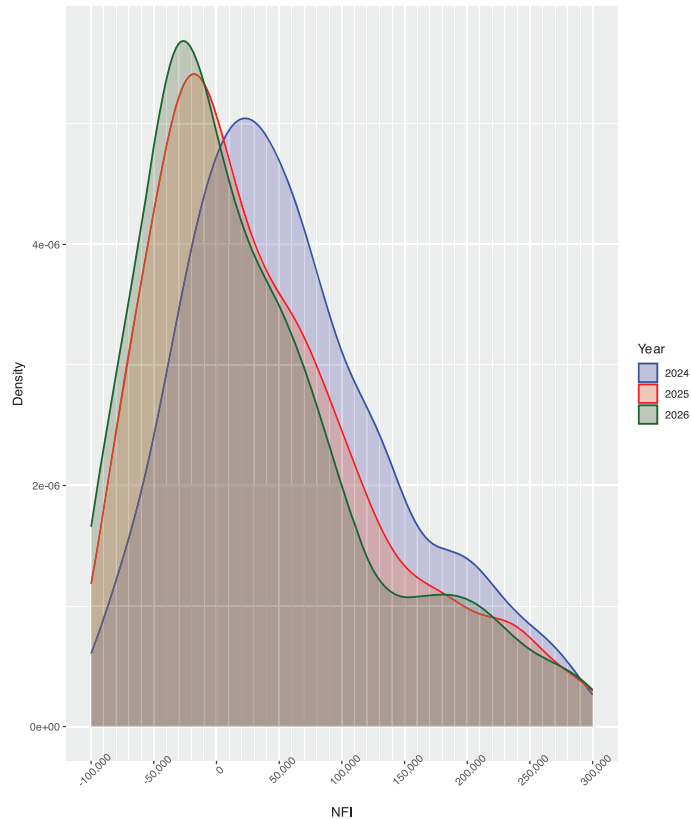
Net Farm Income Statistics by Farm Type



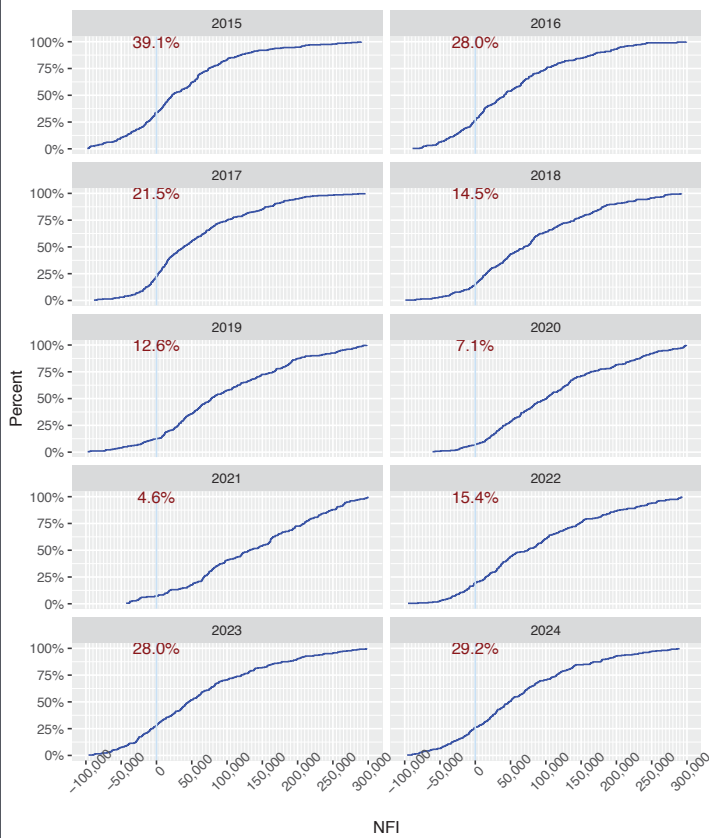
CDF of Net Farm Income by Year
State of Kansas



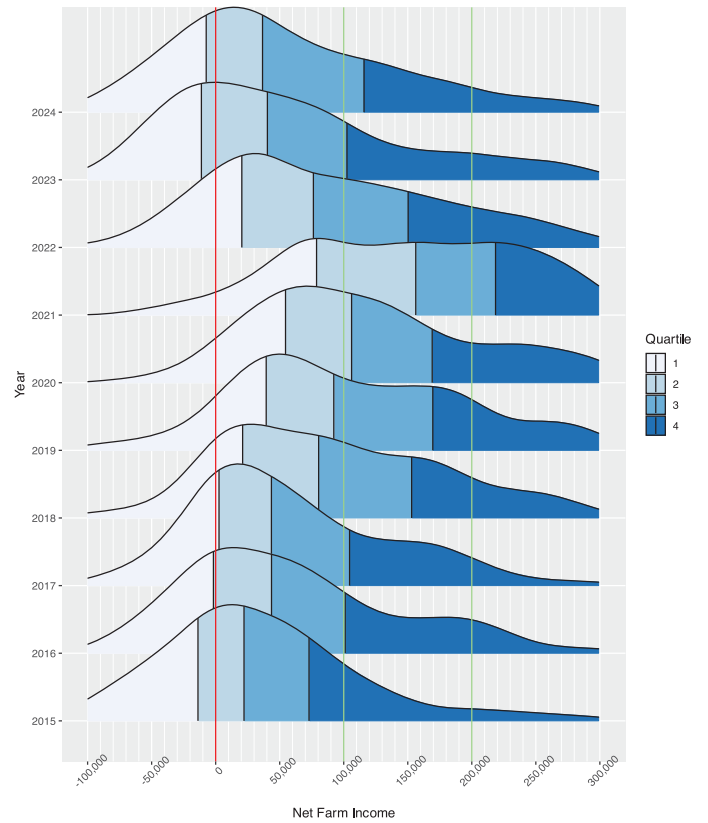
PDF of Net Farm Income by Year
State of Kansas



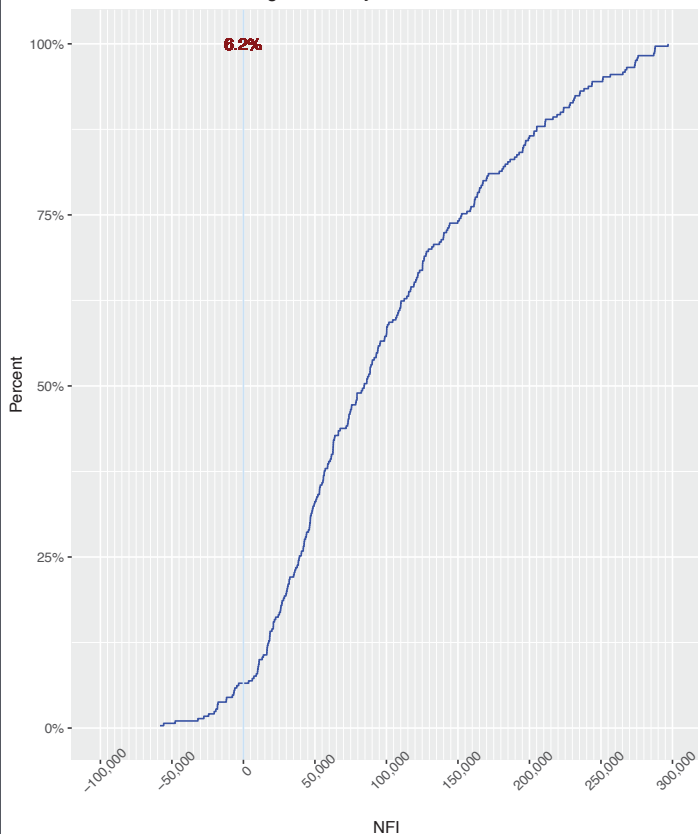
CDF of 10-Year Net Farm Income



PDF of Net Farm Income by Year
State of Kansas



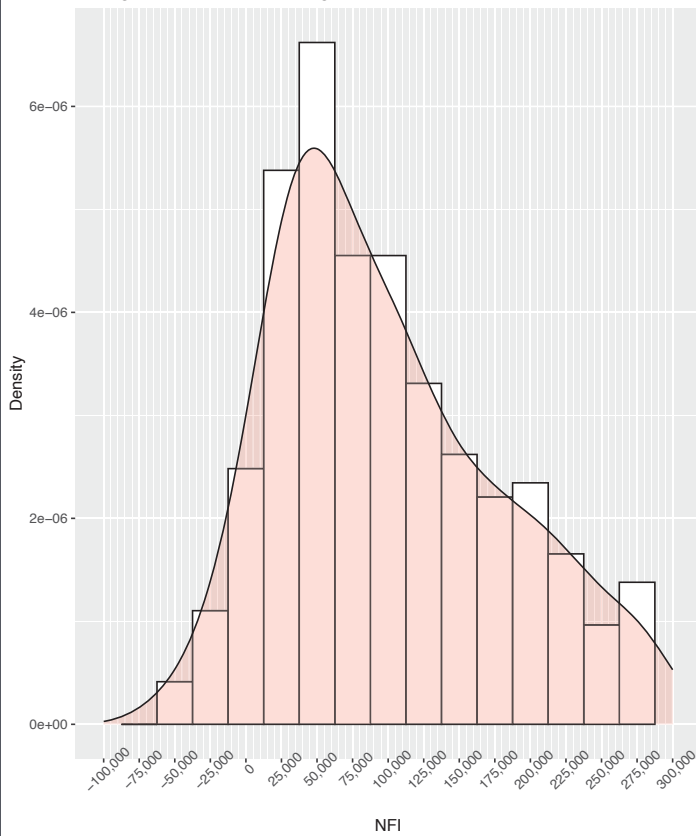
CDF of 10-Year Average of NFI by Farm



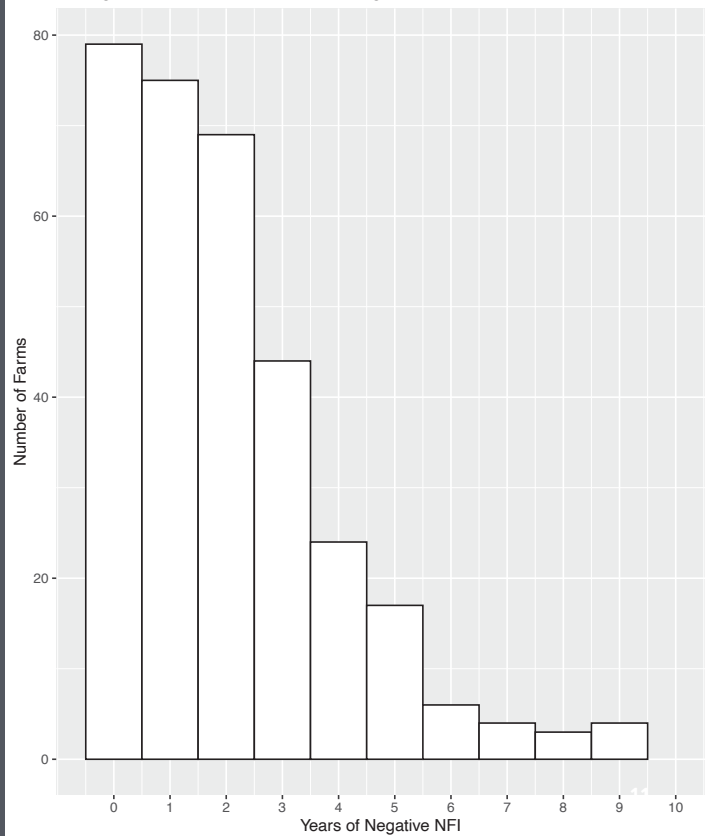
Distribution of NFI - 10 yr combined

- 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

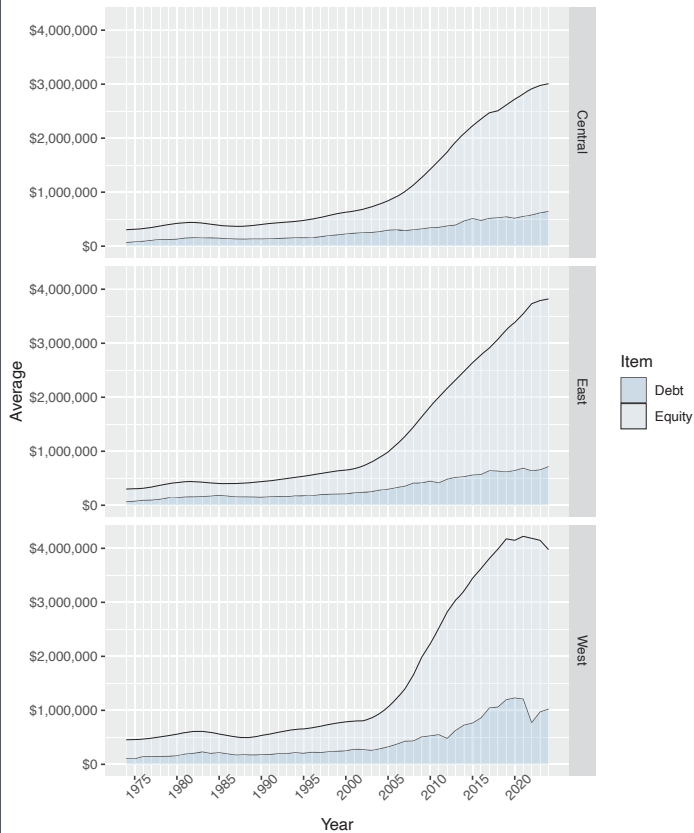
Histogram of 10-Year Average of NFI by Farm



Histogram of Number of Years of Negative NFI by Farm Count



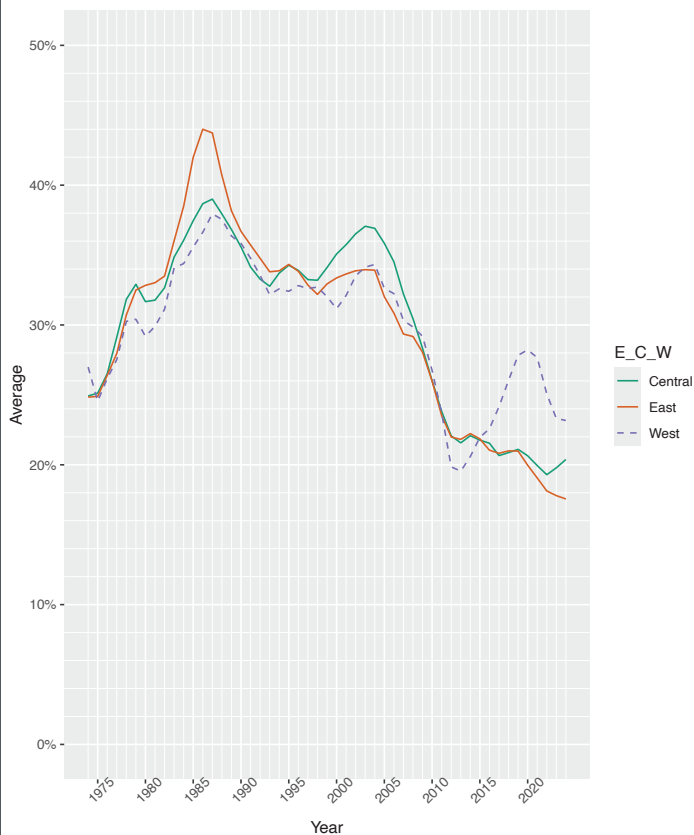
Kansas Balance Sheet by Region



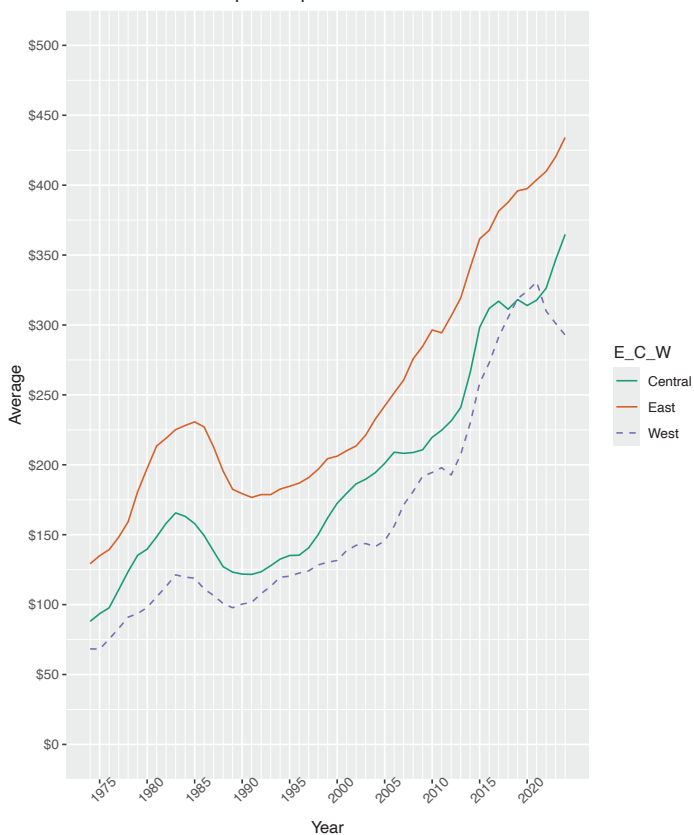
Balance sheets are strong

- Rising land values contribute to higher equity
- D/A ratios are strong
- D/A ratio is a lagging indicator of farm troubles
- Masked in this graph is the increase in debt

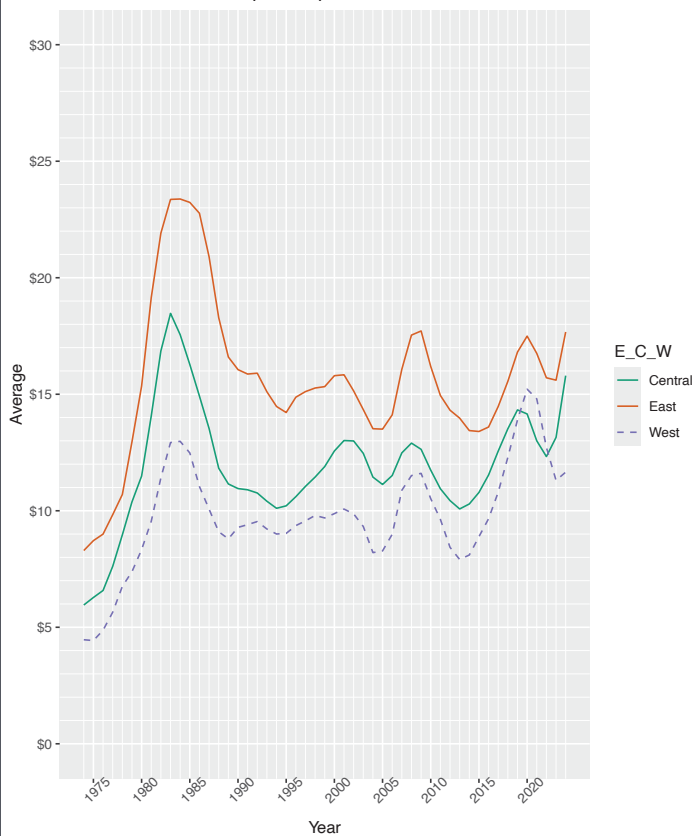
Kansas Debt/Asset Ratio



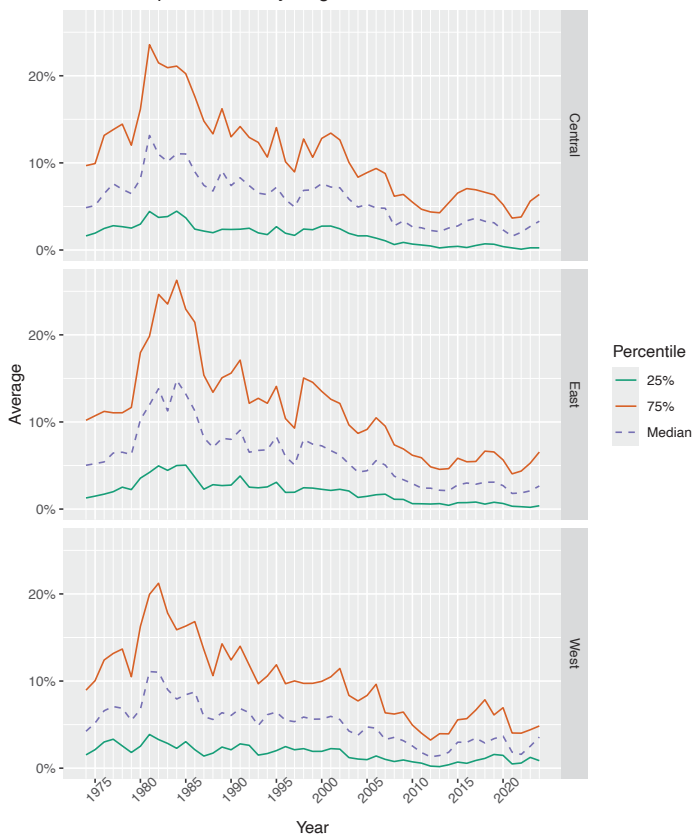
Kansas Farm Debt per Crop Acre



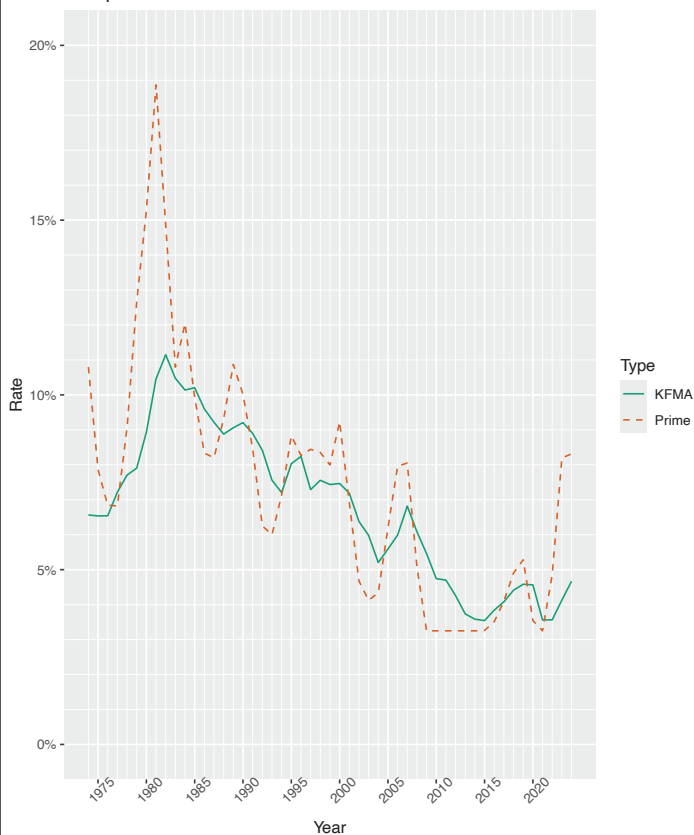
Kansas Farm Interest per Crop Acre



Interest Expense Ratio by Region



Comparison of Interest Rates



Interest rates paid by farmers are relatively low

- This is across all debt
- Increase in overall rate the last 2 years as short-term rates increase
- At what point do rates and interest become a problem?

15

Other issues

- Oil supply
 - So far, oil is still in the low \$70 range
 - Could be a factor for fertilizer prices
- Machinery is still the biggest expense item on most farms
 - Do prices ever come down?
 - Farmers can manage this more than most other expenses

16

Questions?

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