Diesel Fuel Price Outlook for 2024

Gregg Ibendahl

February 2, 2024

Introduction¹

This is part of an series of newsletter discussing the outlook for diesel fuel over the next 12 months. Diesel costs are a major expense item for nearly every farm so estimating diesel prices over the next year could help farmers with planning and fuel purchase decisions. These articles will briefly analyze the current fuel environment and then discuss factors that could drive prices upward or downward over the next year.

Current prices

Current diesel and gasoline prices are shown in Figure 1. Diesel prices declined during the first half of 2023, then starting rising until October, and finally declined again. The end result is that prices heading into 2024 are lower than they were last year for diesel while gasoline prices are about the same as last year. Of particular interest to farmers is the diesel premium widened during the last half of 2023 although it still is less than last year at this time.

Current supply

Diesel stocks remain below the typical range from the previous five-year years (Figure 3) Stocks of diesel fuel have improved slightly since 2022 but are at the very bottom range of normal supplies. Refinery capacity in the U.S. remains below the levels before Covid so improving the supply of diesel is likely to be a long-term process. Entering 2024, diesel stocks are higher than they were a year ago.

Diesel price premium

Figures 4 and 5 show the diesel price premium relative to gasoline. The diesel premium reached a record level at the end of 2022. However it dropped every week until July of 2023. In July, the price premium was actually below historical levels. However, the price premium rose from July 2023 to November 2023. The price premium has declined slightly but the current premium of \$0.65 is about twice the typical premium range from the previous five years.

email: ibendahl@ksu.edu

 $^{^1{\}rm Kansas}$ State University - Department of Agricultural Economics Ag
Manager.info

Discussion

There are several factors driving diesel prices. The first is the world oil price. Despite conflicts in Russia/Ukraine and the middle East, oil prices remain in the \$70 range. The second is the continual capacity constraints facing the U.S. refinery system. Capacity has declined since Covid and may never be at those levels again. Current capacity is often utilized at nearly 95% of capacity. Thus, any hiccup in the refinery system can lead to price spikes. The price premium of diesel to gas widened during Covid and the capacity constraints in U.S. refinery systems mean that it could take years before the premiums disappears.

Outlook

Figure 5 shows the projected diesel prices for the next 12 months. This model is based on the oil futures price and the expectation of the diesel to gasoline premium. The futures market is indicating steady oil prices and the diesel premium is expected to follow the trend from 2023 where the premium declined until the summer and then starting increasing again. However, the oil market is very volatile and this forecast could change very quickly.

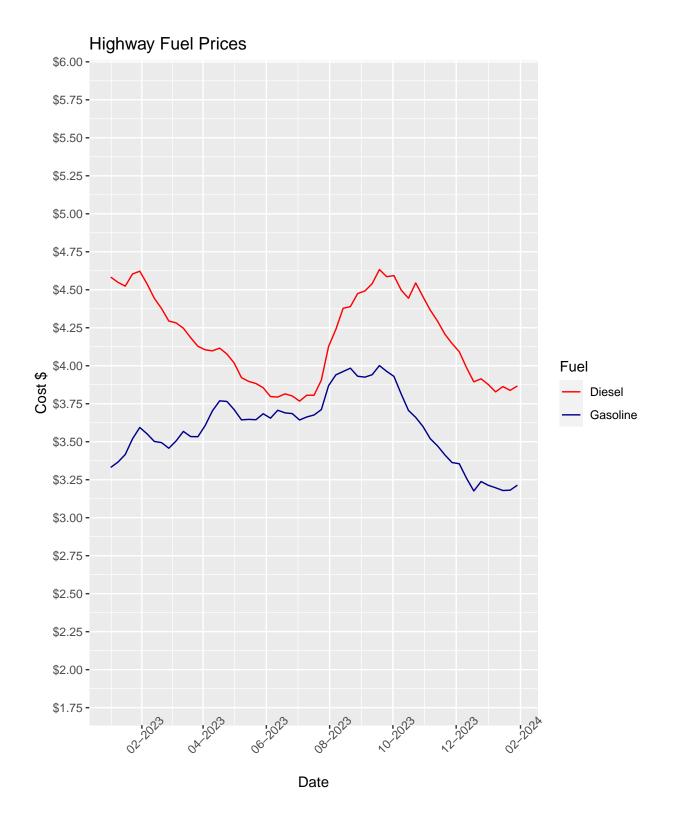


Figure 1: U.S. Highway Gasoline and Diesel Prices Since 2022

U.S. Highway Diesel Prices by Week for 2023 and 2024 Plus/minus one Std Dev of previous 5 years in gray

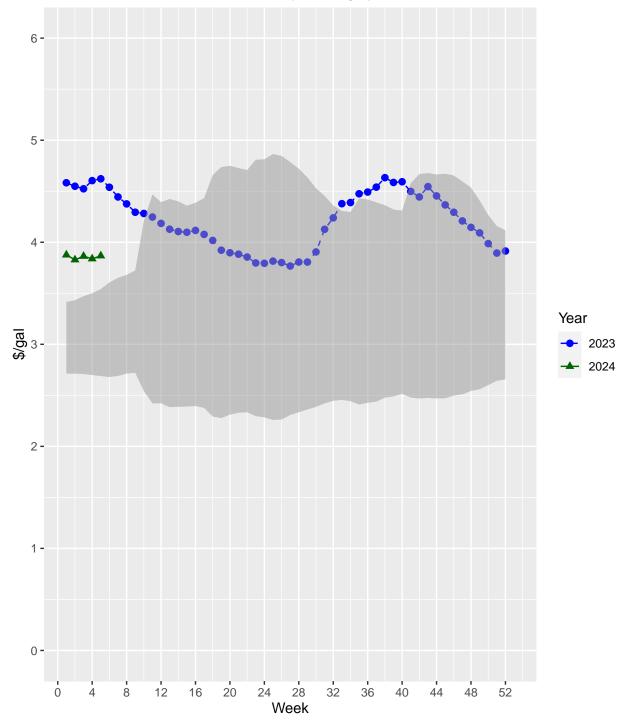
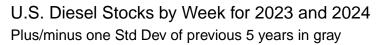


Figure 2: Diesel Prices Relative to the Last Five Years



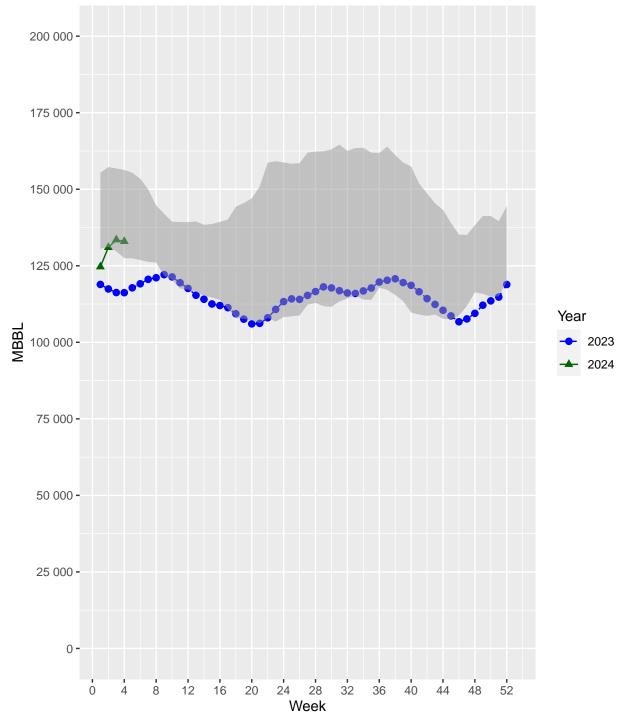


Figure 3: Diesel Stocks Relative to the Last Five Years

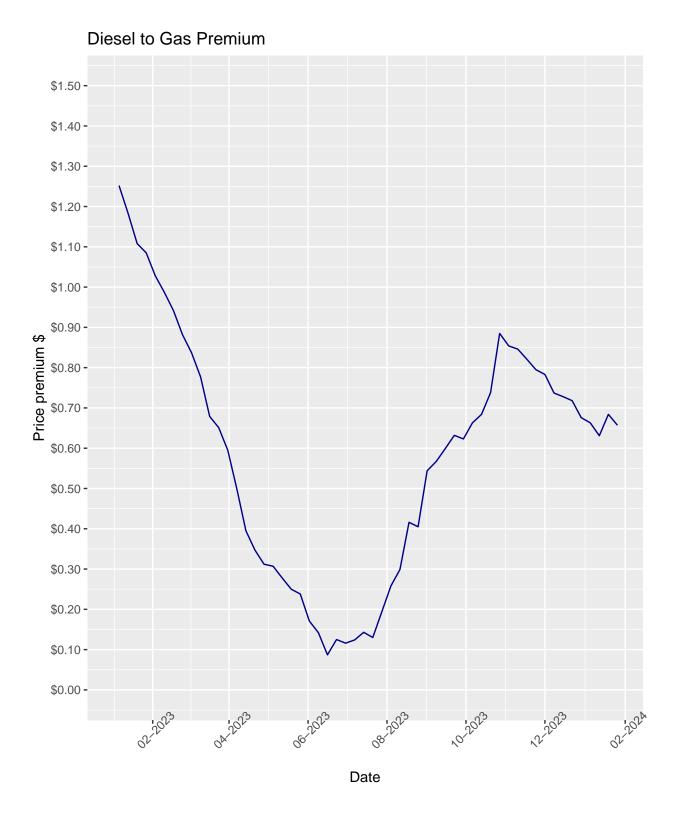


Figure 4: Diesel Premium to Gasoline

U.S. Diesel Price Premium by Week for 2023 and 2024 Plus/minus one Std Dev of previous 5 years in gray

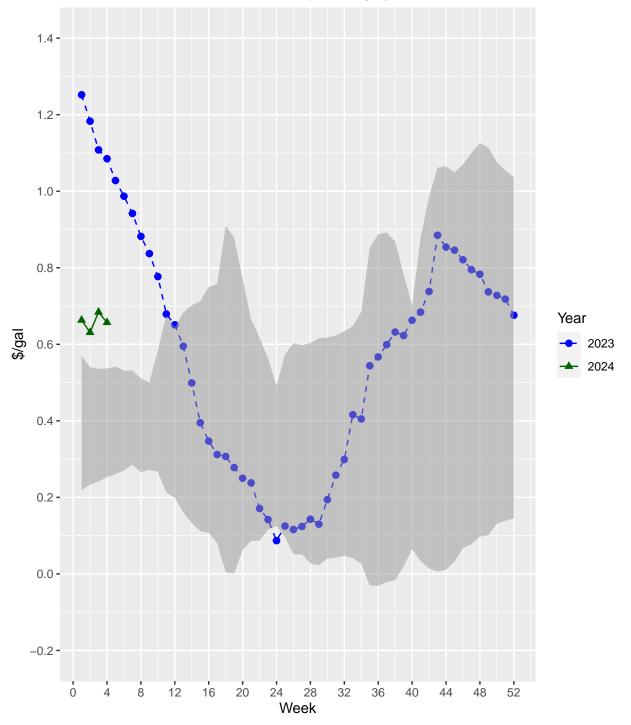


Figure 5: Diesel Price Premium Relative to the Last Five Years

Predicted U.S. Highway Diesel Price for Next 12 Months confidence interval in gray

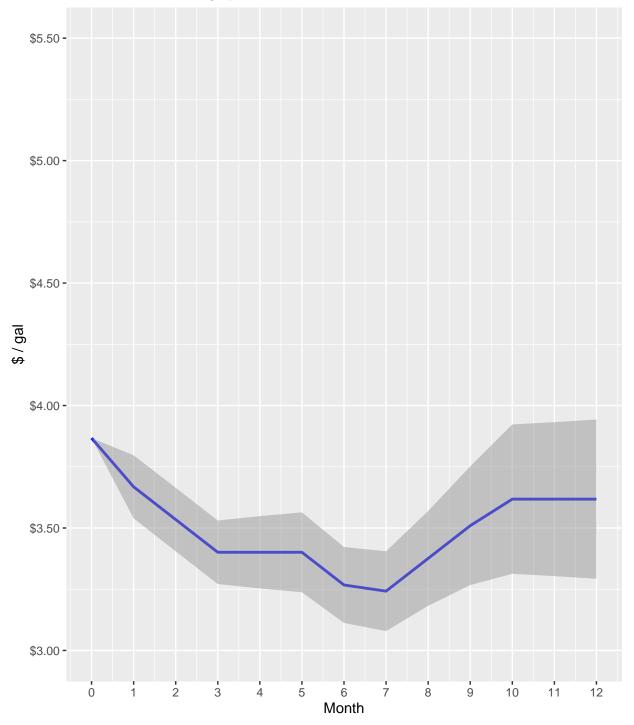


Figure 6: 12 Month Price Prediction for Diesel Fuel