

## Seasonality of Diesel Prices: Should I be locking in prices for this fall?

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Trying to figure out the fuel market is similar to any other market – it is awfully tough! Regardless of how tough it may be, because producers use fuel they have decisions to make as to when and how they should purchase fuel. Thus, it is important for producers to consider the information that is available to them when they make their decisions.

Figure 1 shows historical and forecasted monthly non-taxable diesel fuel prices for two different price series. The SW KS series represents bulk delivered prices in southwest Kansas and the corresponding forecasts based on a crude-oil-futures-price model. The US (EIA)<sup>1</sup> series is a national series reported by the government and its corresponding forecast (the specifics of their forecast model are unknown). A number of things can be seen from this figure. First, the obvious, is that diesel prices the last several years have been extremely high relative to the past and it appears they will stay that way for the foreseeable future. Second, prices have exhibited large swings in relatively short time periods. For example, SW KS prices in 2005 were around \$2/gal in the July/August time period and then back to that level in December, but they went over \$2.75 to get there. Similarly, 2006 started the year around \$2/gal and ended the year only slightly higher, at around \$2.10, but prices were above \$2.80 in August. A third point from figure 1 is that current futures-based forecasts are suggesting that prices should be lower in the coming months and then increase slightly thereafter. On the other hand, the EIA forecast calls for prices to trend down slightly over the course of the next 18 months. Neither forecast is suggesting the price spikes that were observed in 2005 and again in 2006. Yet, as producers think about pre-pricing fuel needs for this fall, it is those price spikes they tend to remember.

Over the last 10 years, on average, diesel prices have increased from the early to mid-summer months (May-July) into the fall. Figure 2 shows the 10-year average seasonal price indices for diesel fuel in SW KS and the NYMEX crude oil futures. As would be expected, diesel price patterns tend to follow crude oil price patterns quite closely. Seasonally, diesel prices tend to be highest in late summer and early fall (Aug-Oct) and thus producers should possibly consider pricing or pre-purchasing fall fuel needs now. But, forward contract prices might already reflect such anticipated seasonal price changes. Moreover, one needs to ask “How predictable is the seasonal price pattern?” Figure 3 shows the seasonal price patterns for diesel fuel for each of the last 10 years along with the 10-year average (i.e., the line depicted in figure 2). While interpreting figure 3 is quite difficult as lines are going in every different direction, that is exactly the point – the seasonal pattern depicted in figure 2 is not particularly accurate for any given year. For example, prices in 1998 basically were at their highest in January and then declined throughout the year. However, the opposite pattern prevailed in 1999, where prices were low in January and then increased throughout the year. However, upon closer examination, it can be seen that prices in June and July are below the annual average most years. Thus, purchasing fuel this summer (June/July) for fall needs may not be a bad idea by historical standards.

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<sup>1</sup> EIA is the Energy Information Administration

Of course, there have been several years that prices did continue to decline from June/July through the fall. Furthermore, the price forecasts shown in figure 1 do not suggest a need to be overly aggressive with pricing fuel. That is, the forecasts suggest that buying fuel as it is needed may not be a bad strategy.

Because pricing fuel can be so difficult, some folks might recommend locking in fuel prices whenever it can be done at profitable levels. Figure 4 shows monthly diesel fuel and corn prices in southwest Kansas since 2001. Diesel fuel prices surpassed the \$2/gal mark in 2005 and have been trading in the \$2-\$3/gal range ever since. But, corn prices did not make their big upward move until after fall harvest in 2006. That is, in 2005 and 2006, when we saw the first big spikes in the price of diesel fuel, corn producers were still getting only \$2.25-\$2.50/bu for corn. On the other hand, today fuel remains in the \$2-\$3 range, but corn prices are trading closer to \$4/bu. It can be seen from this figure that trying to tie diesel pricing decisions with crop profitability likely makes little sense for most producers.

Given this information, what's a producers supposed to do? As we stated at the beginning of this article, figuring out fuel markets is tough. Probably the most important thing to recognize from the information presented here is that no one particular strategy for pricing fuel will work all the time. That is, some years producers should buy fuel as it is needed, while other years they should forward price their fuel. The fact that prices can swing wildly in either direction in very short time periods suggests spreading purchases over time is likely a good risk management strategy.

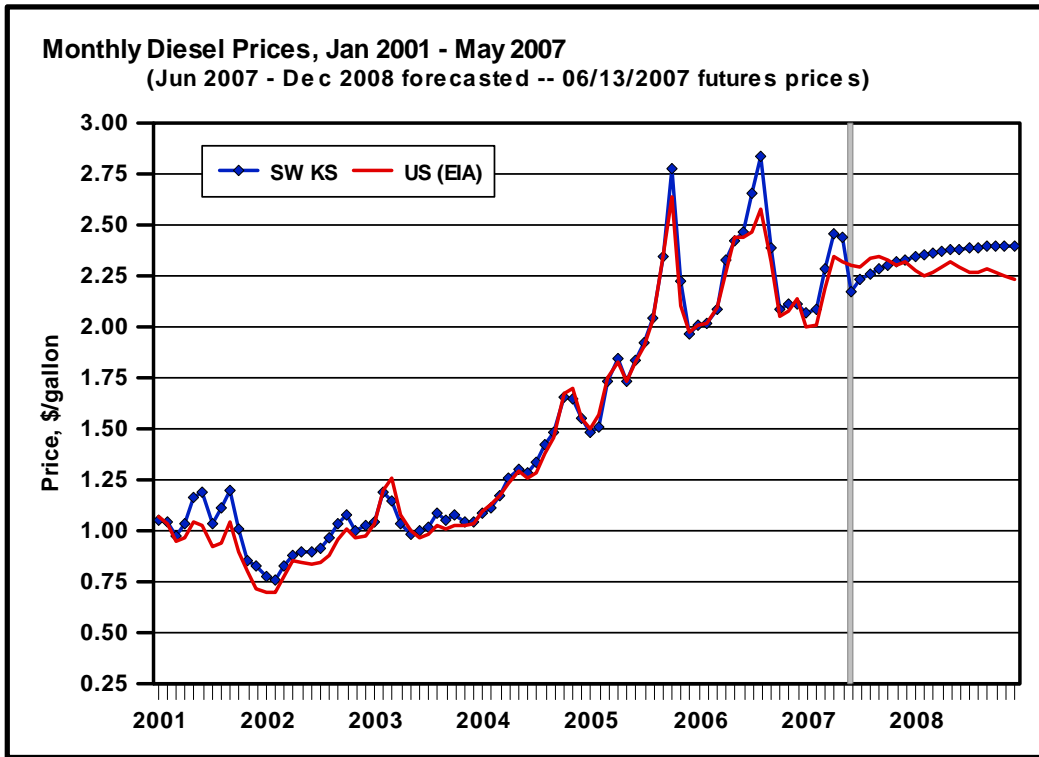


Figure 1

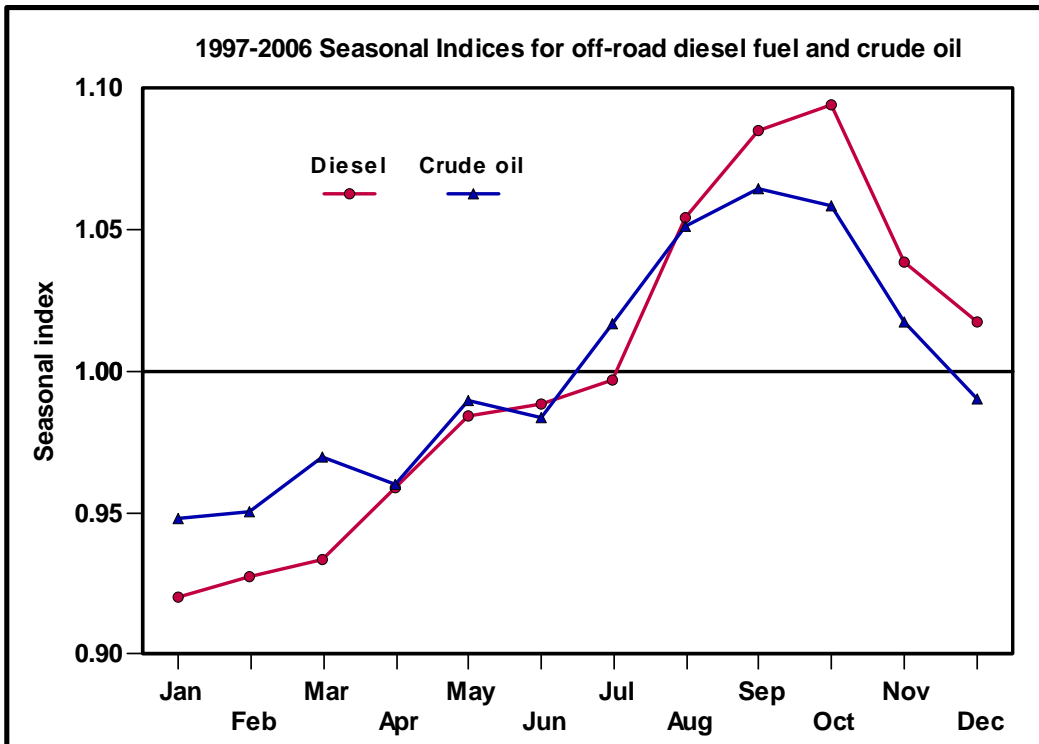


Figure 2

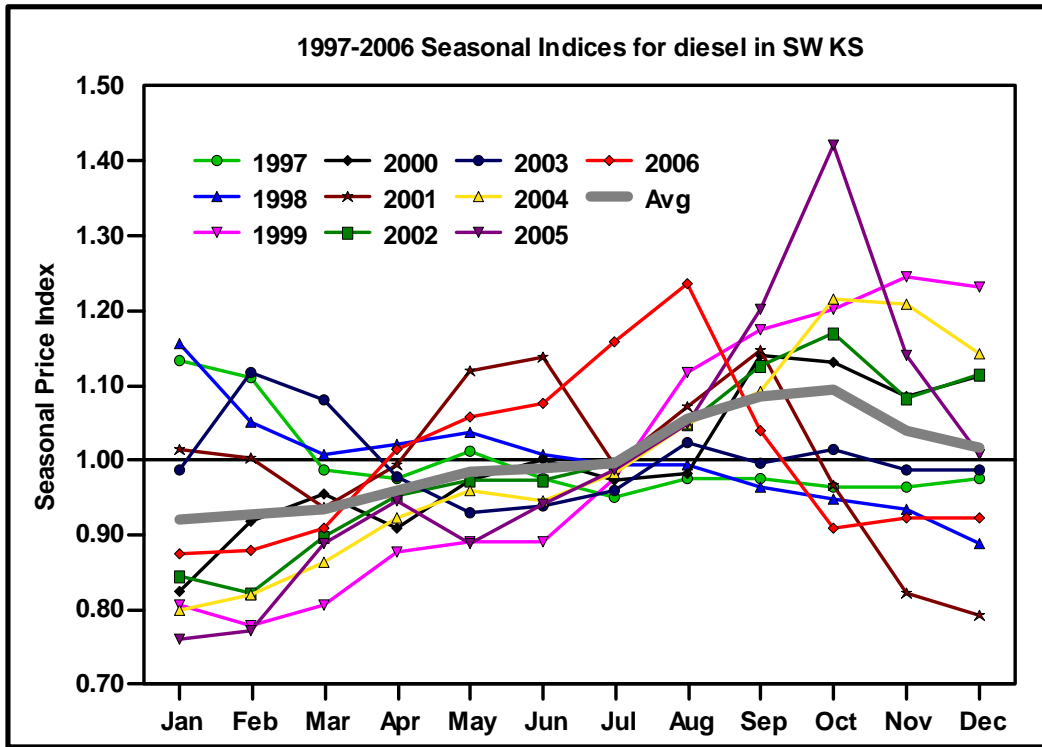


Figure 3

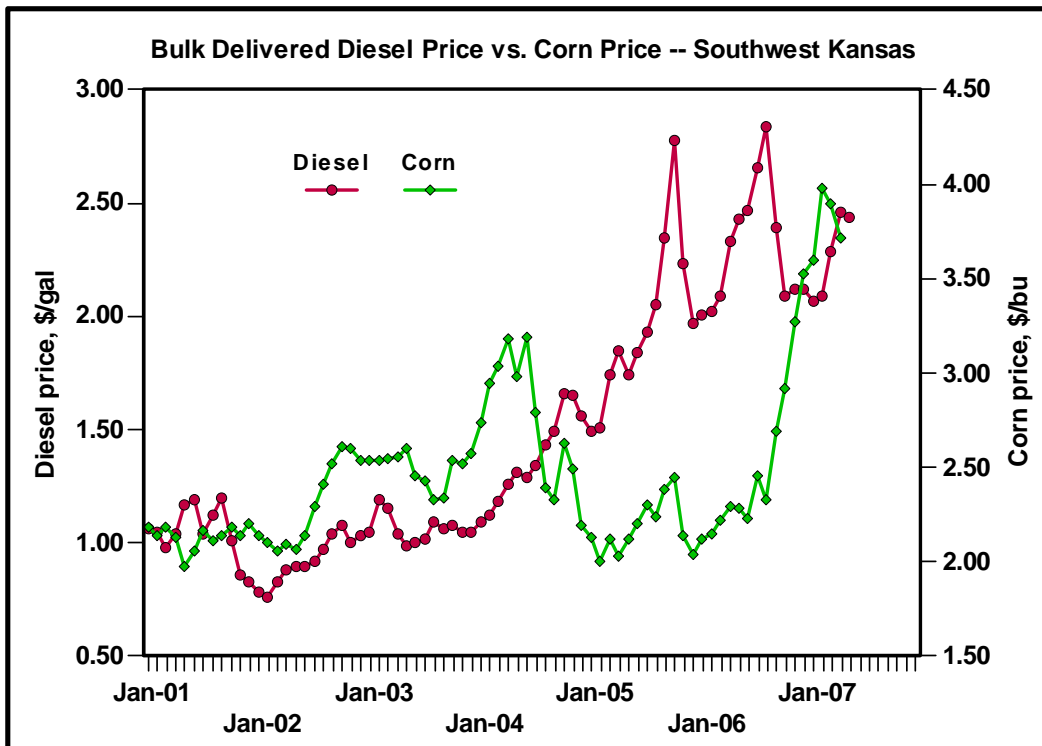


Figure 4