**Rising Gas Prices**

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Introduction

According to Energy Information Administration (EIA) (2022) estimations, the gas prices in the US will continue to increase due to lower-than-average gas inventories resulting from factors affecting supply and demand. The gas production has been lower than demand, implying that demand has outpaced output and making gas inventories low. Again, the economic sanctions against Russia resulted into the reduced capacity of the United States to refine more gas, leading to a supply shock that increased retail prices. Notably, energy is a pertinent factor of production. The increase in economic growth in the US has led to an increment in the demand for gas. Unfortunately, gas prices have remained high due to low supply. Consequently, the gas prices in the US are highly dynamic, with high demand and low production output, low inventories, and market disruptions contributing to the rise in prices.

**Dynamics of the US Gas Prices in 2022**

Gas prices in the US have been constantly increasing from January to October 2022. In January 2022, the premium all formulations retail gasoline was priced at $4.04 per gallon, midgrade all formulations at $3.77, regular conventional at $3.19, regular all formulations at $3.32, and all grades all formulations at $3.41. The retail price reached its highest in June 2022 with premium, midgrade, regular conventional, regular all formulation, and all grades all formulation retailing at $5.7, $5.39, $4.76, $4.93, and $5.03 per gallon of each grade, respectively (Carlier, 2022). The price of regular gasoline had increased by $0.01 day-over-day by November 3, from $3.68 in the first quarter of 2022 to $4.49 in the second quarter of 2022. Again, the gas prices have been relative to crude oil prices, which have been generally increasing since January 3 to October 31, 2022. For instance, Brent closed at $78.98 per barrel in January 3 to $92.81 in October 31, the OPEC basket at $78 in January 3 to $93.17 in October 31, WTI at $76.08 in January 3 to $86.53 in October 31 (Sonnichsen, 2022a). The price increase peaked in March 2022 due to the Great Recession caused by Russia-Ukraine. However, the decrease from August 2022 reflects the market uncertainty over the looming global recession.

**Factors that Influence Rise in Gas Prices in the US**

Gas prices are determined by market sentiments, inventories, as well as supply and demand. Notably, oil is a global commodity. A shock in the supply and demand of oil anywhere in the world can cause a spike in the country despite the US being the world’s largest oil producer (Sonnichsen, 2022b). Hence, the disruption of oil markets since the onset of Russia-Ukraine conflict has enhanced the uncertainty relating to the supply of crude oil, thereby increasing prices as the demand remains high. Again, supply-side factors such as importation and exportation volume, storage level, and production amount affect gas prices. Ferris (2022) states that the US imports 8% of oil from Russia, which accounts for 3.36% of the 20 million barrels the country uses daily. It is worth noting that many of the US refineries perform most efficiently using imported heavy crude oil. The country cannot pump more when oil prices spike due to constraints and limitations in infrastructure. Thus, an embargo on Russian crude oil and the reduced capacity of the US to refine more gas has reduced supply at a time when the demand is high, leading to a rise in prices.

Economic growth affects gas prices. According to Sonnichsen (2022b), an increase in the demand for goods and services from industrial and commercial sectors during economic growth increases gas consumption since gas is an essential input factor in the production process of an economy. Thus, the level of economic growth is a demand-side factor that affects gas prices. Notably, the US has experienced economic growth since the post-pandemic period, making the demand for gas to outstrip supply. This increases prices. Again, the retail price of gas is determined by the change in tax regime, costs and profits of distribution and marketing, cost of crude oil, and refining costs and profits. EIA (2022a) indicates that 53.6% of retail prices of gas in 2021 were paid for crude oil. Hence, the cost of crude oil is the main factor that affects retail gas price and is, in turn, determined by economic factors such as physical, trading, and financial factors (EIA, 2022b). These market factors increase and reduce the cost of crude oil and, in turn, determine the gas prices. Therefore, an increase in the cost of crude oil increases the gas price.

Gas prices have been rising due to lower-than-average gas inventories resulting from the factors that affect supply and demand. The gas inventories from April to October 2022 were 17% below the five-year average, influencing the storage level and prices (EIA, 2022b). Abel et al. (2013) argue that gas consumption decreases when the disruption of oil supply leads to an increase in prices, inferring a reduction in output of factors of production that creates a supply shock. Therefore, the rise in gas prices due to low inventories can be explained using the law of supply and demand, which describes how the change in the price affects supply and demand. Ferris (2022) indicates that the increase in demand and decrease in supply made President Joe Biden to authorize the release of oil from reserves twice, leading to a decrease in gas inventories. However, the release made no long-term difference as the demand outpaced output.

Conclusion

Gas prices have been increasing in the US since 2019 but accelerated in 2022 due to market disruption, low-than-average oil inventories, and changes in supply and demand. Market disruption decreased the supply of crude oil, thereby, decreasing output and lowering oil inventories, leading to an increase in prices. Market sentiments such as physical, trade, and financial market factors that include production capacity, spot prices, daily open interests of crude oil, future positions of commercial participants and non-commercial investors, as well as commodity index assets influenced gasoline prices.

**References**

Abel, A. B., Blanchard, O. J., Bernanke, B., & Croushore, D. (2017). *Macroeconomics*. Pearson UK.

Carlier, M. (2022). Monthly retail price of gasoline in the United States from April 2019 to August 2022 by type. Retrieved 4 November 2022, from <https://www.statista.com/statistics/204133/retail-prices-of-motor-fuel-in-the-united-states-since-2009/>

Energy Information Administration [EIA]. (2022a). *Gasoline explained Factors affecting gasoline prices*. Retrieved 4 November 2022, from <https://www.eia.gov/energyexplained/gasoline/factors-affecting-gasoline-prices.php>

Energy Information Administration [EIA]. (2022b). *Energy & Financial Markets. What drives crude oil prices?* Retrieved 4 November 2022, from <https://www.eia.gov/finance/markets/crudeoil/>

Ferris, R. (2022). *Why gas prices have soared in America*. Retrieved 4 November 2022, from <https://www.cnbc.com/2022/03/26/why-gas-prices-have-soared-in-america.html>

Sonnichsen, N. (2022a). *The closing price of Brent, OPEC basket, and WTI crude oil at the beginning of each week from March 2, 2020, to October 31, 2022*. Retrieved 4 November 2022, from <https://www.statista.com/statistics/326017/weekly-crude-oil-prices/>

Sonnichsen, N. (2022b). *Oil and Gasoline Prices- Statistics & Facts*. Retrieved 4 November 2022, from <https://www.statista.com/topics/839/gas-prices/#dossierKeyfigures>