ENERGY MARKETS

Mergers and Many Other Factors Affect U.S. Gasoline Markets

Why GAO Did This Study

Gasoline is subject to dramatic price swings. A multitude of factors cause volatility in U.S. gasoline markets, including world crude oil costs, limited refining capacity, and low inventories relative to demand.

Since the 1990s, another factor affecting U.S. gasoline markets has been a wave of mergers in the petroleum industry, several of them between large oil companies that had previously competed with each other. For example, in 1999, Exxon, the largest U.S. oil company, merged with Mobil, the second largest.

This testimony is based primarily on Energy Markets: Effects of Mergers and Market Concentration in the U.S. Petroleum Industry (GAO-04-96, May 17, 2004). This report examined mergers in the U.S. petroleum industry from the 1990s through 2000, the changes in market concentration (the distribution of market shares among competing firms) and other factors affecting competition in the U.S. petroleum industry, how U.S. gasoline marketing has changed since the 1990s, and how mergers and market concentration in the U.S. petroleum industry have affected U.S. gasoline prices at the wholesale level.

To address these issues, GAO purchased and analyzed a large body of data and developed state-of-the-art econometric models for isolating the effects of eight specific mergers and increased market concentration on wholesale gasoline prices. Experts peer-reviewed GAO’s analysis.


To view the full product, including the scope and methodology, click on the link above. For more information, contact Jim Wells at (202) 512-3841 or wellsj@gao.gov.

What GAO Found

One of the many factors that can impact gasoline prices is mergers within the U.S. petroleum industry. Over 2,600 such mergers have occurred since the 1990s. The majority occurred later in the period, most frequently among firms involved in exploration and production. Industry officials cited various reasons for the mergers, particularly the need for increased efficiency and cost savings. Economic literature also suggests that firms sometimes merge to enhance their ability to control prices.

Partly because of the mergers, market concentration has increased in the industry, mostly in the downstream (refining and marketing) segment. For example, market concentration in refining increased from moderately to highly concentrated on the East Coast and from unconcentrated to moderately concentrated on the West Coast. Concentration in the wholesale gasoline market increased substantially from the mid-1990s so that by 2002, most states had either moderately or highly concentrated wholesale gasoline markets. On the other hand, market concentration in the upstream (exploration and production) segment remained unconcentrated by the end of the 1990s. Anecdotal evidence suggests that mergers also have changed other factors affecting competition, such as firms’ ability to enter the market.

Two major changes have occurred in U.S. gasoline marketing related to mergers, according to industry officials. First, the availability of generic gasoline, which is generally priced lower than branded gasoline, has decreased substantially. Second, refiners now prefer to deal with large distributors and retailers, which has motivated further consolidation in distributor and retail markets.

Based on data from the mid-1990s through 2000, GAO’s econometric analyses indicate that mergers and increased market concentration generally led to higher wholesale gasoline prices in the United States. Six of the eight mergers GAO modeled led to price increases, averaging about 2 cents per gallon. Increased market concentration, which reflects the cumulative effects of mergers and other competitive factors, also led to increased prices in most cases. For conventional gasoline, the predominant type used in the country, the change in wholesale price due to increased market concentration ranged from a decrease of about 1 cent per gallon to an increase of about 5 cents per gallon. For boutique fuels sold in the East Coast and Gulf Coast regions, wholesale prices increased by about 1 cent per gallon, while prices for boutique fuels sold in California increased by over 7 cents per gallon. GAO also identified price increases of one-tenth of a cent to 7 cents that were caused by other factors included in the models—particularly low gasoline inventories relative to demand, high refinery capacity utilization rates, and supply disruptions in some regions.

FTC disagreed with GAO’s methodology and findings. However, GAO believes its analyses are sound.