



Highlights of [GAO-04-982T](#), a report to Subcommittee on Energy and Air Quality, Committee on Energy and Commerce, House of Representatives

## Why GAO Did This Study

Gasoline is subject to dramatic price swings. A multitude of factors affect U.S. gasoline markets, including world crude oil costs and limited refining capacity. Since the 1990s, another factor affecting U.S. gasoline markets has been a wave of mergers in the petroleum industry, several 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 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 industry, how U.S. gasoline marketing has changed since the 1990s, and how mergers and market concentration in the 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.

[www.gao.gov/cgi-bin/getrpt?GAO-04-982T](http://www.gao.gov/cgi-bin/getrpt?GAO-04-982T).

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](mailto:wellsj@gao.gov).

## ENERGY MARKETS

# Mergers and Other Factors that Affect the U.S. Refining Industry

## What GAO Found

Mergers have altered the structure of the U.S. petroleum industry, including the refining market. Over 2,600 mergers have occurred in the U.S. petroleum industry since the 1990s, mostly later in the period. 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 in the East Coast and from unconcentrated to moderately concentrated in 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. Anecdotal evidence suggests that mergers also have changed other factors affecting competition, such as the ability of new firms 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 1 cent to 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 example, wholesale prices for boutique fuels sold in the East and Gulf Coasts—fuels supplied by fewer refiners than conventional gasoline—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, supply disruptions in some regions, and high refinery capacity utilization rates. For example, we found that a 1 percent increase in refinery capacity utilization rates resulted in price increases of one-tenth to two-tenths of a cent per gallon.

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