RESEARCH BRIEF ON

TRANSPORTATION FUEL PRICES

Gasoline is a vital economic component of a modern economy and plays an integral role in the transportation needs of the United States. On July 10, 2017, the American Automobile Association reported that, nationwide, the average price of regular gasoline was $2.26 per gallon. On that date in 2016, the average price of regular gasoline was $2.24 per gallon. The following is a review of the issues surrounding current price levels.

COMPONENTS OF THE RETAIL PRICE OF GASOLINE

The United States Energy Information Administration (EIA) reports that the cost to produce and deliver gasoline to consumers includes the cost of crude oil to refiners, refinery processing costs, marketing and distribution costs, the retail station costs, and taxes. The prices paid by consumers at the pump reflect these costs, as well as the profits (and sometimes losses) of refiners, marketers, distributors, and retail station owners.
According to the EIA, crude oil is the biggest portion of the cost of gasoline. In 2016, crude oil accounted for about 45 percent of the cost of a gallon of regular grade gasoline. In comparison, for the years 2007 through 2016, crude oil composed 62 percent of the cost of a gallon of regular gasoline. The share of the retail price of regular grade gasoline attributable to crude oil costs varies somewhat over time and among regions.

Federal, state, and local taxes are a large component of the retail price of gasoline. Taxes (not including county and local taxes) currently account for approximately 21 percent of the cost of a gallon of gasoline. Within this national average, federal excise taxes are 18.4 cents per gallon. In Nevada, State excise taxes are 23 cents per gallon gasoline. The tax is distributed with 17.65 cents going to the State Highway Fund and 5.35 cents going to cities and counties. In addition to these excise taxes, a 0.75-cent fee is collected for the State Petroleum Cleanup Trust Fund, and a 0.055-cent inspection fee is directed to the State Department of Agriculture for fuel pump inspections. Furthermore, there is up to 9 cents per gallon of optional fuel taxes in counties that have adopted a street and highway plan as part of a master plan, with slightly higher rates in Clark and Washoe Counties where the rates are indexed to inflation.

Refining costs and profits comprise about 18 percent of the retail price of gasoline. This component varies from region to region due to the different formulations required in different parts of the country.

Distribution, marketing, and retail dealer costs and profits combined make up 16 percent of the cost of a gallon of gasoline. From the refinery, most gasoline is shipped first by pipeline to terminals near consuming areas and then loaded into trucks for delivery to individual stations. The price on the pump reflects the price of transporting the gasoline and marketing the brand of the oil company and the other costs of operating the service station. It also reflects local market conditions and factors, such as the desirability of the location and the marketing strategy of the owner.

GASOLINE PRICE FLUCTUATIONS

Growth in U.S. oil production along with only modest growth in demand has reduced the U.S. reliance on imported oil supplies. According to the EIA, the Organization of the Petroleum Exporting Countries (OPEC), which is comprised of 12 oil producing countries, influences oil prices worldwide because its members possess such a great portion of the world’s oil supply. The organization accounts for about 40 percent of the world’s production of crude oil and about 60 percent of the total internationally traded petroleum.

Despite recent turmoil in oil-producing regions, gasoline prices have undergone a relative downward trend. This is in part due to the supply and demand for crude oil. While demand is dampened by increased technological efficiency and the slowing global economy, crude oil production, especially in the U.S., has increased.

Gasoline prices normally fluctuate due to factors such as the season and local retail station competition. Weather, world events, and military conflicts can also increase the cost of gas. When crude oil prices are stable, retail gasoline prices tend to rise gradually before and during the summer when people drive more, and prices fall in the winter. The EIA cites that from 2000 to 2015, the average price for regular gasoline was about 47 cents per gallon higher in the summer months compared to January during that time period.
Prices of gasoline vary from state to state for several reasons. Taxes are one reason, for example. Additionally, states farthest from the Gulf Coast often have higher gasoline prices. The proximity of refineries to crude oil supplies can be a factor, as well as shipping costs from refinery to market. Regional environmental programs also can add to the cost of production, storage, and distribution. Some areas of the country are required to use special “reformulated” gasoline with additives to help reduce carbon monoxide, smog, and toxic air pollutants that result when gasoline is burned or evaporates during fueling. Competition can be substantial between areas with only one or a few gas stations versus areas with a large number of gas stations in close proximity.

**Unforeseen supply disruptions**

Any event that slows or stops production of gasoline for a short time, such as planned or unplanned refinery maintenance, can prompt bidding for available supplies. If the transportation system cannot support the flow of surplus supplies from one region to another, prices will remain comparatively high.

Unrest, or the threat of unrest, in oil-producing regions may drive prices higher. In response to actual or perceived threats to oil supplies, actors within the market may drive prices higher in an attempt to secure reserves in the near term or until the situation is resolved.

**Crude oil supplies**

In its *Annual Energy Outlook 2017*, the EIA cites key factors that may affect prices for petroleum, including world demand, crude oil production, and supplies of other liquid fuels. Long-term price variation will likely be driven by the future demand of developing and emerging countries. Higher levels of expected economic growth will lead to increased demand and prices. Decisions by OPEC regarding growth expectations may adversely affect prices if production does not meet future levels of growth in these and other developing countries.