# Refining costs essay samples

Business, Marketing



In the long term, the rise and fall in gasoline prices track its origin to the dynamic cost of crude oil. However, global crude oil market forces of worldwide demand, supply and competition have a significant cause to the prices of gasoline in the short term. With the aspired economic recovery, gasoline demand is on the rise despite the challenging unrest in oil producing regions (Africa and the Mideast). The combination of the increasing demand and a decreasing supply escalate gasoline prices. The gasoline price components include: 70% of the oil price, 13% of the price is taxes, marketing and distribution costs account to 11% of the price and refining costs make up to 8% of the price of gasoline at the pump. The cost distribution is dynamic depending on seasonal changes as the gasoline refineries retool to shift from winter grade to summer grade gasoline. The limitation of refineries in an attempt to adjust is another contributor of gasoline price hiking since some refineries may go out of the market permanently or temporarily. Along with these outages of refineries in the gasoline market, OPEC production decisions, non-OPEC supply growth, exchange rates and weather events all figure into the price of crude oil hence the price of gasoline. The factors that lead to high prices in oil and gasoline include:

The gasoline refining process comes with costs that are traceable to the pump price of gasoline. The process involves the cracking of crude oil, which is formulated to chemical component and later made to gasoline. The refining costs in it defer from region to region depending on the targeted consumers since various customers require different processing steps and additives in their formulation of gasoline. The variation is also experienced in

some other months due to the adjustment in refinery operations. For instance, when refineries are in dire need of retooling for the sake of summer-blended gasoline production, the cost of refinery operations go high and so do the gasoline prices.

The costs of refining crude oil for gasoline are bound to rise further due to federal and state laws that act to restrain operations of various gasoline producing companies. In the US for instance, the greenhouse gas emissions, the ozone national ambient quality standards, the mandate of EPA to buy commercially unavailable cellulosic biofuel, Tier III gasoline mandate and other regulations are attributable to the rising refinery costs which are reflected in the pump price of gasoline.

# **Distribution and Marketing costs**

The retail dealer's profits and costs combine to constitute up to 11% of the price of gasoline. The transportation of gasoline involves lengthy supply chain hence higher costs. Gasoline has to be transported by pipeline from the refineries to the terminals near the consumption areas, which is then transported by trucks to the individual stations. Additionally, prior to delivery, train or truck transport ethanol because most pipelines cannot transport it. All these costs account to the gasoline pricing at the pump since the retailers purchase cost of gasoline in addition to accruing operational costs of the station servicing are translated to the final price of gasoline. The price also reflects the local market factors and conditions like the marketing strategy used by the owner and the location of the service station. It is true because even if the various gas stations are brand-named as BP, Exxon, Shell or other major oil companies, these major oil companies own less than

5% of these gas stations. Independent individuals and businesses who deal in buying and selling of gasoline to the public own the wider majority of these stations.

# **Demand and supply**

Demand and supply are key major factors that determined the prices of oil. As the demand for oil increases, the price of gasoline also goes up. People normally travel. The travelling consumes a lot of gasoline. People normally work and travel, and this requires oil. The rising demand for oil spikes their prices. The higher demand of oil may trigger the supply to go down. The suppliers of oil may not meet the demand. When the supply of oil is unable to meet the gasoline market demand, it triggers the prices. Suppliers will tend to increase the prices of the gasoline. In general, the global demand and supply of gasoline determines the prices of gasoline. When the oil supplies are unable to meet the global market demand, the prices tend to hike up.

The information relayed by the Energy Information Administration (EIA) gives projection that the world oil consumption in total would be 1. 05 million bpd in 2013 and in 2014 the projection could be 1. 4 million bpd. The projection revealed that most of the Asian countries would consume a lot of energies as they use high amounts of energy to spur off their economies. On the other hand, due to restrictions on the oil drilling to conserve the environment, the supply of gasoline could go down. For example, due to government policies, oil in Gulf Mexico is projected to go down by 10 percent in production level as from 2010. The shortage in oil supply leads to increasing in their prices.

#### Taxes

Taxes are important in determining the prices of commodities. When taxes are levied on goods and services, they tend to increase the price of that service or good. Most of the countries collect their revenues by levying taxes on their goods or services. Such goods that bear levies are expensive as compared to other untaxed goods and services. Gasoline prices normally go up as most of the countries apply levies on them. In most countries, the exercise taxes levied on gasoline is 18. 4 percent per gallon. This percentage taxed is reflected by the high prices of gasoline. Other additional taxes levied on the gasoline also contribute to high prices. Prices of gasoline are directly proportional to the taxes levied on them. The higher the levies on the gasoline, the higher the prices they bear.

## Risk and uncertainties

There are risks and unforeseen circumstances that are associated with the oil and natural gas development. In the year 2008, the National Petroleum Council projected a range of factors associated to energy demand and supply. It projected that although, by 2030, the energy supplied will be high there would be many uncertainties to the expansion of oil natural gas and oil. The risks associated with expansion of oil and gas includes the instability in the political environment both the North Africa and the Middle East. The Latin America and the resurgence of the nationalism would also contribute to the high prices in gasoline. The civil unrest in the Nigeria, the pirates off the coast of Africa also have a significant impact on the prices of the gasoline. The anticipated war in the Middle East makes oil prices high as most of the traders inject major disruptions anticipated to the oil prices. All these risks

and uncertainties have significant impacts on the gasoline prices. The risks and uncertainties contribute to high prices and would lead to challenges in meeting the demand of energy projected.

## **OPEC Production Restraint**

Most of the oil and energy supply comes from the oil producing countries. For instance in 2012, 23 percent of oil supplied came from OPEC countries. OPEC countries include Angola, Algeria, Iran, Kuwait, Ecuador, Iraq, Libya, Saudi Arabia, Nigeria, United Arab Emirates, Qatar and Venezuela. These countries have the capacity to produce oil in excess as they have much of the world's well-known oil conventional reserves. However, for the countries to maintain high oil prices, they mutually agree on targets that minimize the oil supply from member states. In the December, 2008 due to the OPEC convention, Iraq had to cut down 4. 2 million bpd production in order to maintain high oil prices. Further in 2012, OPEC members agreed to cut down 465, 000 bpd in order to keep the prices of oil high. The OPEC policies make the member states to maintain their oil prices as per the conventions. This in turn keeps the prices of oil and gasoline high.

## **Conclusion**

Gasoline prices are high and continue to rise because the current world oil demand is growing rapidly and is thus outpacing oil supply. As a result, this causes an increase in oil prices and hence a significant increase in gasoline prices. Environmental and political uncertainties like the sanctions on Iran and the civil war in other oil producing nations lead to risk premium addition to gasoline prices by traders. Environmental regulations targeting refineries

lead to shutting down of gasoline producing plants, and incoming regulations will lead to increase in the cost of production, which will be passed on to the final consumer. Furthermore, the closure of these plants makes gasoline supply low during the outages thus making gasoline prices rise during equipment failure and routine maintenance of oil refinery plants.