

## Statement

**J. S. Carter**  
**Regional Director, United States**  
**ExxonMobil Fuels Marketing Company**

before the  
**Senate Permanent Subcommittee on Investigations**

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Mr. Chairman, ExxonMobil appreciates the opportunity to appear before the Senate Permanent Subcommittee on Investigations today to discuss the causes of price volatility in the gasoline marketplace and our recommendations to help reduce future fluctuations. ExxonMobil has previously provided a considerable number of documents for the Subcommittee's review and has worked closely and cooperatively with the Subcommittee staff over the past nine months to provide information to enhance understanding of the gasoline marketplace.

ExxonMobil markets fuel products in 47 states and the District of Columbia. Our goal is to provide reliable supplies of products to our customers at competitive prices while respecting the environment and protecting the safety of the communities we serve. We understand the public's sensitivity to price swings and the impact of fluctuating prices on consumers' budgets. The gasoline market is the only market where consumers can see prices daily while driving to and from work. In addition to the corner gasoline station, these prices increasingly appear just outside the entrances to huge retailers who use low gas prices to attract customers into their parking lots. Gasoline prices are reported daily through surveys conducted by independent companies, and are frequently broadcast on the evening news. Oil markets reflect the latest unrest in the world even before the ink in the morning's headlines is dry. As a result, our customers readily know when prices are rising or falling.

As the Subcommittee is aware, the FTC conducted a detailed investigation into the causes of price increases in Midwest markets in the spring and summer of 2000, and concluded that a combination of the EPA fuel quality requirements and unforeseen market circumstances was responsible for the price spike. The investigation found no evidence of collusion or anti-competitive behavior in the oil industry. To the contrary, Commissioner Swindle stated that the industry acted quickly in response to the price spike, which was intense but relatively short-lived because of the effective workings of the market.

My testimony will address the Subcommittee's questions regarding retail pricing, marketing and distribution infrastructure, and industry consolidation. In addition, it will present recommendations to help mitigate the price volatility in the retail market. Mr. Chairman, I hope my testimony today will leave you with the following messages:

- § Gasoline price volatility is a reflection of a highly competitive market operating with high transparency and a tight supply / demand balance;
- § The gasoline market is very efficient at setting prices that reflect supply and demand; and
- § The free market should be allowed to set prices to the benefit of consumers.

### **Pricing Practices**

The Subcommittee asked a number of questions about how ExxonMobil sets prices. Over 90 percent of our branded retail outlets are operated by dealers or distributors. These independent business operators establish the retail prices they charge to their customers. Regarding pricing to dealers, to whom we deliver product, our practices include competitive zone pricing. This practice has been used by ExxonMobil throughout the United States for more than 30 years. Zone pricing allows us to take into account localized competitive conditions in setting the wholesale prices we charge to our dealers. Through careful analysis of local market conditions, we establish "price zones," which group together a number of dealers who face similar competition. All dealers within a zone are charged the same price, one that is appropriate to local competitive conditions.

Zone pricing provides the most reliable method of assessing and responding to local competition faced by dealers operating in a competitive environment, with high transparency and a tight balance between supply and demand.

Because zone pricing reflects supply and demand conditions at the local level, it is a reflection, rather than a cause, of price volatility.\*

Pricing to distributors, who pick up product at our terminals, is commonly called "rack pricing". In establishing rack prices, ExxonMobil examines spot market prices and published prices of key competitors, and determines a proper competitive rack pricing relationship between ExxonMobil and these key competitors. As prices in the spot market fluctuate with supply and demand conditions, ExxonMobil adjusts rack prices accordingly, within the context of the previously defined competitive relationship to other suppliers in the market. All distributors purchasing the same product at a given ExxonMobil terminal pay the same rack price.

### **Market is Increasingly Competitive**

The refining and marketing business in the United States operates in an intensely and increasingly competitive environment. Retail gasoline marketing has evolved over the past 30 to 40 years, from its historic focus on the petroleum products and services such as automotive repair, to the current emphasis on customer service, convenience, and driver needs.

One factor contributing to this evolution is improved gasoline quality. The Clean Air Act Amendments of 1990 and subsequent federal and state actions have increased minimum gasoline quality standards. For example, all gasoline today must contain a detergent additive. Although our branded gasoline still possesses unique properties, consumers have concluded that most gasoline, regardless of brand, is adequate to meet their needs assuming the correct octane level is used. One result is that a market once served in large part by the so-called "major" brands today includes significant new entrants, such as convenience store chains, supermarkets, and discount retailers. For instance, over 200 different retail "brands" are available in the greater Boston market. There are over 300 in the greater Houston market. Thus, today more than ever, the consumer has many choices.

The historic financial returns generated by the domestic refining and marketing industry reflect the intense competition. Domestic refining and marketing companies combined generated an average return on capital of just under five percent per year from 1981 through 1998. By contrast, during the same period, the average return on equity of the companies in the S&P 500 Index was approximately 13 percent.<sup>[1]</sup> These relatively low industry returns tend to motivate companies to seek out economies of scale to increase efficiency.

More recent entrants to the gasoline market, especially "hypermarkets", large grocery, discount, or membership club retailers, can typically establish a significant market presence in a relatively short time. They tend to use very competitive gasoline pricing to build traffic on their site. The increased traffic, in turn, generates incremental store sales with margins much higher than those on gasoline. These sales synergies are fueling a high growth rate for the hypermarkets. Some experts say hypermarket share of the retail gasoline market could rise from 4% today, to almost 16% over the next three to five years,<sup>2</sup> which is higher than ExxonMobil's current market share. The traditional "major" suppliers combined today hold approximately 45% of the retail gasoline market.<sup>3</sup>

As with any business, petroleum refining and marketing must earn a reasonable return on the capital invested in the business in order to remain viable. The trend among traditional gasoline retailers has been to close smaller retail outlets, and enhance revenue from remaining stores by adding convenience stores and car washes.

Increased competition has clearly benefited the consumer in two ways. First, gasoline marketing margins have generally declined over time. Second, although it may not be readily evident, gasoline prices have also declined. Over the past 80 years, inflation-adjusted retail gasoline prices have exhibited a general downward trend, with some interim fluctuation due to changes in crude oil prices and other short-term factors. Measured in 1999 dollars, prices have declined from around \$2.50 in 1920 to just above \$1.50 in 2000, even while taxes have increased. Today, taxes make up about 30 percent of the retail price.<sup>4</sup>

In refining, the trend has been toward larger, more efficient refineries. As refinery investment costs become more difficult to recover, smaller refineries become uneconomic. Highly efficient refineries can expand production incrementally, while less-efficient spare capacity becomes unaffordable.

### **Reasons for Price Volatility**

The causes of price volatility can be best explained by looking at three factors which impact the petroleum retailing market - market transparency, crude oil prices, and the proliferation of fuel specifications in the U.S.

### **Market Transparency**

Although futures markets have always been responsive to news events, in recent years some trends have increased market transparency. News is available more quickly with the advent of 24-hour cable news and Internet communications, and trading volume in the futures market has increased. When new information appears, market participants immediately assess its impact and take actions based on their interpretations of the likely outcomes. Participants in the NYMEX and other futures markets include not only some oil companies, but also a large number of traders and investors. Rather than purchasing or selling physical barrels of oil, market participants trade contracts for these barrels. The value of the contracts represents the value of the oil at a specified time in the future. But most market participants (over 99 percent) never actually receive or deliver the oil.<sup>5</sup> Instead, they buy the contracts, then sell again before expiration, or vice versa. Essentially, they are trading financial instruments in an open market.

ExxonMobil uses oil-related derivatives on a limited basis in conjunction with physical barrel transactions. We do not trade derivatives or engage in speculative trading in the futures markets.

Most crude oil and gasoline transactions are linked to published spot market prices, or to commodity futures prices determined in markets such as the NYMEX. Given that these prices reflect the available information about supply and demand, the resulting retail gasoline prices are also reflective of market conditions. Importantly for consumers, this transparency supports an efficient free market that helps to balance supply and demand and provide the lowest possible price at any point in time.

### **Cost of Crude Oil**

At current price levels, the cost of crude oil comprises approximately 40 percent of the retail price of gasoline. Every one dollar change in the price of a 42-gallon barrel of crude oil results in a two to three cent per gallon increase in the cost to produce a gallon of gasoline. During the past three years, crude oil prices have ranged from a low of around \$10 per barrel to a high of over \$30 per barrel. Exclusive of other related factors, this \$20 range in crude prices would account for gasoline price variation of between 40 and 60 cents per gallon.

Increases in crude prices since late January have been a major factor in the recent rise in gasoline prices. During this period, crude prices have increased by over \$7 per barrel, accounting for 15 to 20 cents of the overall 30 cent per gallon increase in average retail gasoline prices.

### **Proliferation of Fuel Specifications**

Fuel specifications developed in recent years to address air quality requirements, especially in the summer months, have placed significant demands on the petroleum industry. Because of efforts by states to comply with the Clean Air Act Amendments of 1990, gasoline specifications have become more numerous and complex since 1995. As a result, the number of unique grades has increased from six in 1980, to over 25 today. Some specifications apply to fairly small geographic regions, such as a metropolitan area comprising a few counties. These more localized "boutique" fuels and the differences between summer and winter product blends present challenges for both the refining and distribution systems.

Summer grades are generally more difficult and expensive to refine than winter grades because they require additional processing to meet more stringent environmental standards. Summer grades generally must have lower volatility, or less tendency to evaporate during warmer months. For the sake of clarity, the term "volatility" here refers to the volatility of gasoline itself, not volatility of prices. Reducing gasoline volatility requires removing some of the lightest, most volatile components that make up finished gasoline. To meet other aspects of the specifications, some of the heaviest components must also be removed. Removal of these components effectively reduces the total volume of summer gasoline production capacity of a typical refinery versus its winter capacity.

Thus, in summer, supply is tighter when demand is typically highest. Under normal conditions, adequate refining capacity exists, complemented by some imported gasoline, to meet peak demand. But the entire system is closely balanced, and this balance is more sensitive to changes in summer than in winter. A refinery or pipeline disruption can quickly upset the balance in one or more regions of the country, leading to price increases, which attract incremental supply. In winter, demand is lower and producibility is higher, so a similar disruption has less overall impact, and a smaller price increase is required to attract additional supply.

One of the most difficult grades to refine is Phase 2 Reformulated Gasoline (RFG 2) with ethanol, which has been used to supply the Chicago and Milwaukee areas since the spring of 2000. Because adding ethanol raises gasoline volatility, even more of the light components must be removed from this grade than from others to allow the finished blend to meet specifications. Initial difficulties in refining RFG 2 with ethanol contributed to the supply shortfalls and resultant price spikes in the Midwest in 2000. This was noted in the final

FTC report on its investigation into Midwest gasoline prices.<sup>6</sup> The FTC also noted as a factor the disputed Unocal patent on the most efficient production method for the unique gasoline blendstock needed for ethanol reformulation. This fuel is known as Reformulated Blendstock for Oxygenate Blending (RBOB). Because refiners were forced to either pay Unocal high royalties or use a less efficient method of producing RBOB, manufacturing costs went up and production went down. The FTC noted that two Midwest refiners reported reduced RBOB production capability as a result of the Unocal patents. In testimony to Congress, another refiner reported a significant drop in RBOB production. Furthermore, at least one previous gasoline supplier to the Midwest reportedly avoided that market in 2000 due to Unocal patent concerns.

Since 2000, ExxonMobil has taken specific steps to increase our capacity to produce summer grades of fuel at a number of our refineries, and we ship gasoline components from our Baton Rouge, Louisiana refinery for finished blending at our Joliet, Illinois refinery, which serves the challenging Midwest market. In addition, the EPA's 2001 relaxation of the volatility specifications for RFG 2 with ethanol has increased our production capacity for this grade.

To produce the many required grades of cleaner-burning gasoline and meet other environmental requirements, the domestic refining and marketing industry invested over \$20 billion during the 1990's. The cost and complexity of these upgrades undoubtedly contributed to the closure of over 50 smaller and less efficient refineries. Even so, overall refining capacity has continued to increase, by a total of about one million barrels per day, as larger refineries with greater economies of scale have expanded capacity. The net result is that imports of finished products were essentially unchanged during the 1990's, even as demand continued to grow.<sup>7</sup>

This prior expansion of refining capacity is being challenged, and further expansion is being impeded, by retroactive and erroneous reinterpretation of New Source Review (NSR) guidelines and regulations. This retroactive reinterpretation has increased the number of projects requiring time-consuming and costly review, creating a backlog and bottleneck, thereby delaying even minor changes, including routine maintenance and modifications intended to improve refining capacity, energy efficiency, and environmental performance. NSR reforms are needed to address the difficult and uncertain environment the current interpretation creates for refiners.

The effects on the domestic refining industry of various regulatory driven product specification changes including reducing sulfur in gasoline and diesel fuel, and removing MTBE from the gasoline pool, were assessed as part of the 2000 report by the National Petroleum Council (NPC) entitled "*U.S. Petroleum Refining: Assuring the Adequacy and Availability of Cleaner Fuels.*" In this report, NPC concluded that these changes will be very expensive to refiners, and difficult if not impossible to complete in the proposed time frame. In addition, they will lead to less supply flexibility, and present an increased likelihood of localized supply disruptions and the associated increase in price volatility.<sup>8</sup>

Boutique gasoline specifications also present distribution challenges. Gasoline is distributed by a complex system of pipelines, ships, barges, storage terminals, and delivery trucks. In large part, the system was designed and constructed many years ago, to handle a small number of different products, not the complex array of fuels with differing specifications that exists today. This added complexity has limited the flexibility of the system and, in many cases, reduced the number of alternate supply points available in the event of a disruption. Even so, the system works efficiently under normal circumstances.

The key role of the distribution system becomes evident upon examining the configuration of industry refining capacity. The Texas and Louisiana Gulf Coast region is home to approximately 44 percent of US refining capacity. But demand in this region is only 16 percent of the US total. The rest of the demand is elsewhere, requiring product distribution from this region to others, primarily by pipeline shipment. The Northeast contains about 12 percent of refining capacity, but comprises 37 percent of US demand. Similarly, the Midwest has 24 percent of the refining capacity, but 30 percent of demand.<sup>9</sup> As a result, the major consumption centers in the Northeast and Midwest rely heavily on product distribution by pipeline to meet the balance of their needs not provided by local refining capacity.

At the local distribution level, numerous supply terminals are typically located within reasonable distances of each other, especially near major metropolitan centers. If one terminal experiences a product shortage, other terminals in the area can often supply sufficient product to meet the immediate need. For example, a terminal may be temporarily unable to supply gasoline for any of a number of reasons. If regulations result in nearby terminals supplying gasoline of a different specification, those terminals may be unable to assist in covering the shortfall. If this occurs, obtaining additional supplies will be more costly, difficult, and time consuming.

The problem is best illustrated by example. The metropolitan Detroit, Michigan area requires a specific grade in

the summer, known as "7.8 RVP conventional" gasoline, which is more stringent than that required in neighboring areas. When the Wolverine Pipeline experienced a disruption in early 2000, the ability to ship product to the Detroit area was significantly reduced during the repair period. Since only a few local terminals supplied this grade, the nearest major alternate source of 7.8 RVP gasoline was Pittsburgh, Pennsylvania. Many tank trucks were dispatched to nearby terminals, and some to Pittsburgh, to pick up gasoline. But this did not fill the gap in supply to Detroit, for two reasons. First, at some terminals near Detroit, trucks typically waited in line for five or six hours to get gasoline, significantly reducing total delivery capacity of the fleet. Second, insufficient excess trucking capacity was available to haul enough product from Pittsburgh due to the long distance involved.

Due to these factors, our cost of truck transportation to Detroit stations nearly tripled, from a normal level of about 1.7 cents per gallon to approximately 4.5 cents per gallon. The Detroit situation also had an impact on the Pittsburgh market. In the Detroit area, prices rose because demand exceeded available supply. The incremental demand from Detroit created a potential supply shortfall in Pittsburgh, raising prices there as well. As this example illustrates, the lack of substitutable grades created by localized boutique specifications can contribute to local or regional price volatility and significantly reduced distribution capacity.

ExxonMobil has taken a number of steps to address distribution issues. As mentioned in the FTC report on the Midwest prices, market participants tend to respond quickly to any disruption and take appropriate actions to restore balance between supply and demand.

To help mitigate the effects of boutique fuels in the long term, ExxonMobil proposes that the number of unique gasoline specifications be reduced, increasing the flexibility of both refining and distribution and facilitating interchangeability of supplies across geographies. The EPA Staff White Paper, issued in October, 2001<sup>10</sup>, examined the boutique fuels issue and reached similar conclusions about the impact of the current specifications. The paper also proposed several options for reducing the number of unique specifications while maintaining or improving emissions performance of each area currently covered by Federal, State, or local fuel programs.

#### **Factors Not Contributing to Price Volatility**

The number of recent petroleum industry mergers has become the focus of much discussion. However, examination reveals Midwest and West Coast refining and marketing profiles have not changed significantly as a result of industry consolidation.

With respect to refining, as of January 1, 1997, before most of the industry consolidation occurred, the West Coast (from Washington to California) included 22 gasoline-producing refineries, owned by 14 companies. Five years later, those same 22 refineries were owned by 12 companies. Applying the measure used by both the Federal Trade Commission (FTC) and the Department of Justice in their merger review process, West Coast gasoline refining reflects the same "moderate" degree of concentration now as before these mergers occurred.

A similar picture emerges in the Midwest. As of January 1, 1997, the Midwest included 27 gasoline-producing refineries, owned by 19 companies. After five years, there were 25 refineries owned by 18 companies. Using the same measure, refining in the Midwest was classified as "not concentrated" in 1997 and retains that classification today.<sup>11</sup> Regarding consolidation in gasoline marketing, the entry of the hypermarkets and other new competitors indicates increasing competition. Forecasts predict further increases in market share for these new participants at the expense of the so-called major brands. Thus, significant competition will continue in these markets.

#### **Recommendations**

ExxonMobil believes a number of steps can be taken to minimize the effects of market disruptions and increase industry capacity. We recommend the following:

- § Reduce the number of boutique fuels, which will increase flexibility of refining and distribution, thereby mitigating some price volatility effects without adversely impacting the environment. The API five-fuel proposal, put forth last summer, is a good starting point.
- § Coordinate the timing of future specification changes regarding ultra low-sulfur diesel fuel and removal of MTBE from the gasoline pool. In particular, appropriate sequencing of these changes with the current requirement to reduce sulfur in gasoline, will minimize overlap and facilitate the necessary investments.
- § Appropriately interpret and enforce the New Source Review rules, which will enhance the industry's ability to invest in the necessary upgrades to operate efficiently and achieve incremental capacity increases while achieving the program's original environmental objectives.

Mr. Chairman, thank you for the opportunity to comment. I would be happy to address any questions the Subcommittee may wish to ask.

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\* The FTC thoroughly investigated zone pricing in its multi-year Western States Investigation and found no evidence that zone pricing was inappropriate or illegal in any way.

[1](#) U.S. Petroleum Refining: Assuring the Adequacy and Affordability of Cleaner Fuels; National Petroleum Council; June, 2000.

[2](#) U.S. Hypermart Petroleum Market Study; Energy Analysts International, Inc. ("EAI"); May, 2001.

[3](#) Share of Market Database; Lundberg Survey; December 2001.

[4](#) Gasoline and the American People; Cambridge Energy Research Associates (CERA); 2001

[5](#) NYMEX Delivery Statistics; New York Mercantile Exchange; April, 2002

[6](#) Final Report: Midwest Gasoline Price Investigation; Federal Trade Commission; April 29, 2001

[7](#) NPC Study; June; 2000

[8](#) Ibid.

[9](#) 2000 Petroleum Supply Annual; Energy Information Agency (EIA)

[10](#) Staff White Paper: Study of Unique Gasoline Fuel Blends, Effects on Fuel Supply and Distribution, and Potential Improvements; US Environmental Protection Agency (EPA); October, 2001

[11](#) Oil & Gas Journal