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Trends Among the Major US Oil Companies

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Committee on Commerce

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Trends Among the Major US Oil Companies

Overview

The Exxon Mobil proposed merger is only another step in a long period of consolidation that has been taking place in the domestic oil industry. Ever since the end of price and allocation controls in 1981, the industry has been adapting to an increasingly competitive environment. The dramatic decline in oil prices in 1986 intensified pressures on the industry while the renewed price declines of 1998 means the process will go on. At first, the emphasis was on control of operating costs and elimination of internal redundant capacity. By the beginning of the 1990s, emphasis shifted toward reductions in working capital, most notably inventories. With no letup in competitive pressures, and diminishing returns from internal cost-cutting, attention has shifted toward strategic alliances and mergers, which allow the combined ventures to revisit all aspects of operations.

To a large extent, these pressures and the industry response reflect what is happening in other industries exposed to growing competition. But there are also important differences. The oil industry is less concentrated than many others. The top three car makers in the US account for over 75% of the domestic market, the top three soft-drink producers about 85%. It would take more than the 25 largest private oil companies to match the lower of these concentration ratios, yet no one doubts both industries are very competitive. Moreover, among the larger US companies, retrenchment and rationalization has gone even further than for the industry as a whole. The shares of the larger companies, here defined as those companies subject to the FRS reporting system, in the country's oil and gas production, refinery output, and gasoline sales are all lower today than in the early 80s.

Another big difference between oil and other industries are the drastic declines in the price of its major product, crude oil, that occurred first in 1986, and again, in 1998. While the industry was able to adapt with difficulty to the first, which was followed by a period of rough stability, the second is causing enormous difficulties. In 1998, employment in oil and gas extraction was nearly 400 thousand below its 1982 peak of about 710 thousand. In the past 12 months alone, employment in this sector has fallen by about 50 thousand and losses are continuing to mount.

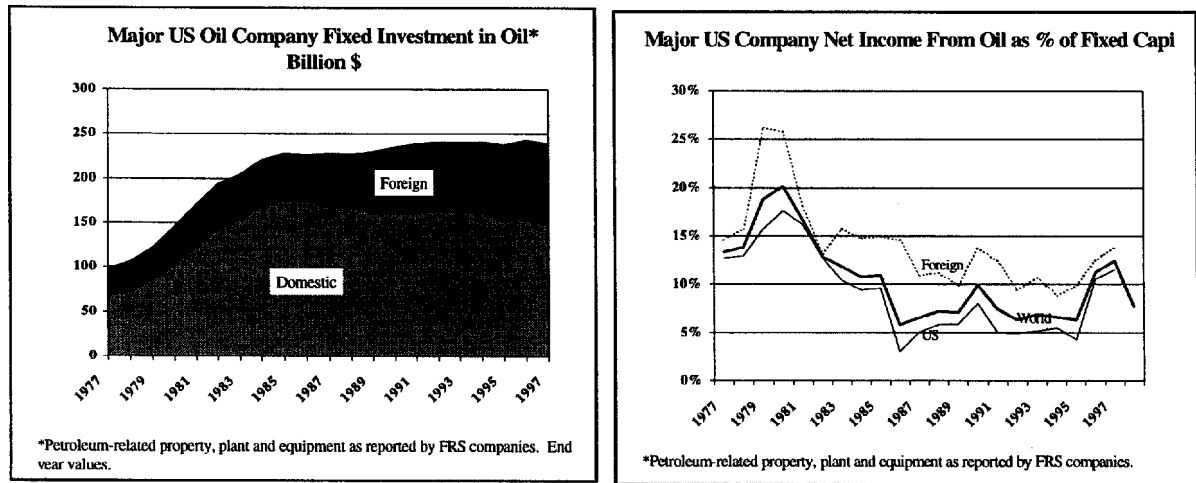
In a competitive environment, the gains from efficiency improvements by and large flow through to consumers rather than add to company profits. This indeed appears to be the case. Major oil company returns to their petroleum-related assets remain well below their levels of the early 1980s. While there was a modest recovery in 1996-97, they fell back dramatically in 1998.

Overall, retrenchment is inevitable for an industry facing low growth, depressed prices, and intense competition. A process of consolidation offers the best opportunity for preserving the core strengths of what remains a critical industry for the country.

In my testimony, I focus first on trends within the broader group of major companies defined as those who are subject to the FRS requirements of the Department of Energy and then turn to the world's seven largest privately owned oil companies.

Major Company Investment Trends

As part of the long-term consolidation process, there has been a slowdown in the pace of investment by the major oil companies, especially in the US.



The decline in oil prices in 1986 brought an end to the strong buildup in oil investment. Since that year, as shown in the chart in the upper left, the world-wide value of petroleum-related property, plant and equipment reported by the major companies remained more or less constant through 1997, as growth in the value of foreign fixed investments offset ongoing declines in the US. Presumably, both figures are likely to show declines in 1998 and this year as companies adjust to the current depression in oil prices. The chart above on the right shows trends in major company net income from oil as a percent of their fixed capital invested. Returns as measured on this basis fell back drastically from their early 80s levels, especially returns in the US, and all the rationalization steps to date have only kept returns in about the 5 to 10% range. There was a brief improvement in 1996-97 but preliminary indications suggest 1998 returns will, on a worldwide basis, fall back to pre-1996 levels.

The sharp decline in the US oil industry's earnings in 1998 and, apparently, also the first quarter of 1999 is a clear sign of the industry's competitiveness. The beneficiaries are the consumers who now pay the lowest price for oil products (ex tax) since 1986 in nominal and the lowest since the 1940s in real dollars. US oil consumers saved \$40 billion last year as a result of lower prices and this led to a reduction in the CPI of nearly 0.7% all by itself.

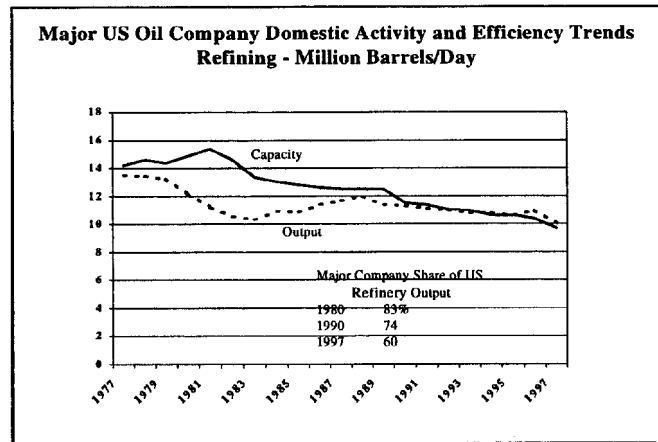
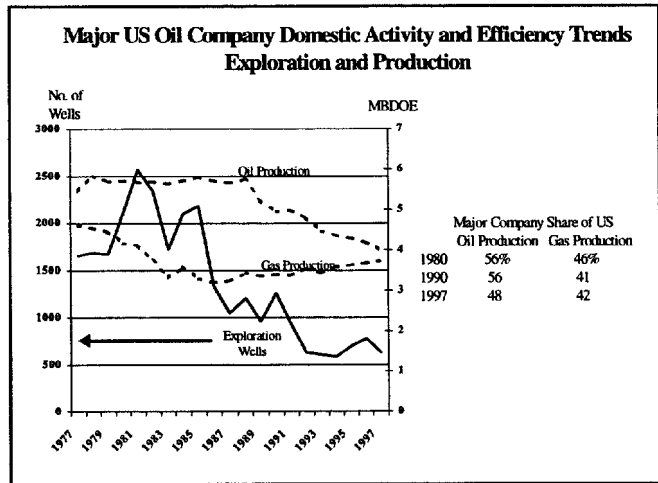
Major Company Domestic Activity and Efficiency Trends

So far, the discussion has focused on financial indicators. I would like to turn now to specific, domestic, operational developments in production, refining, and marketing

among the major companies. The trends are all toward rationalization, efficiency improvement, and a declining role in the overall US industry.

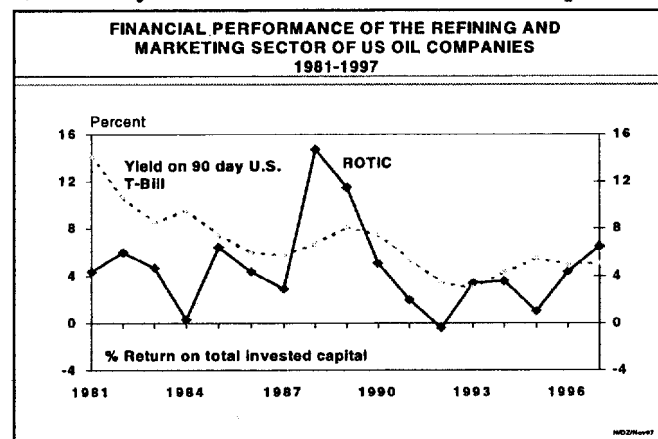
Exploration and Production

The chart on the right shows trends in exploratory wells drilled by the major companies and oil and gas production. The number of wells drilled annually in the 1990s was down by about 75% from the early '80s peak of about 2,500. Industry data suggest 1998 will show a significant decline from 1990-97 levels for these companies as well as for the industry as a whole. Oil production by the reporting companies has shown a gentle decline over the 1990s while gas production has been making modest advances. In neither case has oil or gas production fallen back by anything like the decline in exploration activity, perhaps an indicator of the technological advances and efficiency gains associated with finding and producing reserves. As the table shows, the major companies' shares of total US oil and gas production is significantly lower now than in the early 1980s, a sign that the consolidation process to date has not added to industry concentration in the producing sector.



Refining

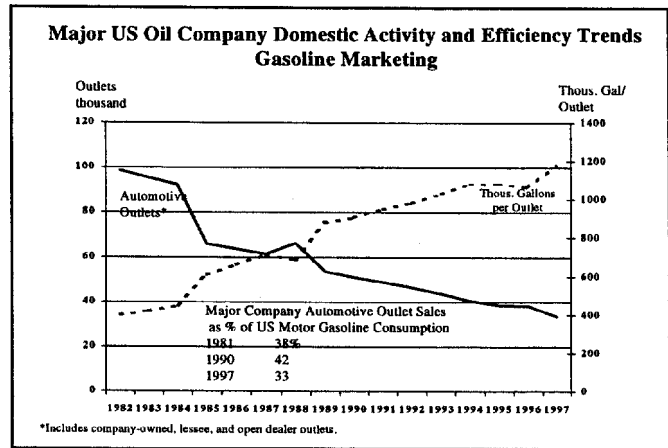
The end of controls set the stage for a major rationalization of the downstream segments of the industry. For the major companies, the early 80s left them with substantial spare refining capacity that, as shown in the chart above, was only eliminated by the end of the decade. Since then, refinery output of these companies has moved about in line with reported capacity (as measured at the beginning of each year). This process included outright withdrawals from this segment of the business. In 1997, these companies accounted for 60% of US refinery output, down from 74% in 1990 and 83% in 1980. (Exxon and



Mobil have both been part of the withdrawal process. Both sold refineries in New Jersey that are continuing in full operation by their new independent owners.)

Gasoline Marketing

The process of share reduction has also occurred in gasoline marketing. As shown in the chart on the right, the number of automotive outlets reported by the FRS companies (company-owned, lessee, and open dealerships) declined from nearly 100 thousand in 1982 to less than 40 thousand in 1997. Over the same period, the average volume of gasoline sold at each outlet tripled, rising from 400 thousand gallons to about 1.2 million. As in refining, this rationalization and efficiency improvement was accompanied by a decline in overall market share, especially in the 1990s. In 1997, the reporting companies' gasoline sales through their associated automotive outlets amounted to 33% of national gasoline consumption, down from 42% in 1990 and 38% in 1981.



Shares of the World's 7 Largest (Pre-Merger) Majors in US & World Crude Production

We now focus on the world's seven largest (pre-merger) private oil companies. The sharp decline in the US oil industry's upstream earnings, in 1998 and, apparently, also the first quarter of 1999 is a clear sign of the industry's competitiveness. The beneficiaries are the consumers who now pay the lowest price for oil products (ex tax) since 1986 in nominal and the lowest since the 1950s in real dollars. An indication of the industry's competitiveness is that the reduced crude oil prices were fully passed through to refined products prices. This confirms the findings of a recent study by the National Petroleum Council which states that "significant price excursions of major light petroleum products in the United States will continue to be driven primarily by movements in the global price of crude oil".¹

Crude oil prices are determined internationally and, in turn, determine domestic crude prices since nearly 60% of US crude is imported. The

MAJOR COMPANIES SHARE OF OIL PRODUCTION PIRA			
	U.S.		World excl. U.S.
	1997 %	1988 %	1997 %
Exxon	6.8	7.8	1.5
BP	6.7	8.8	1.1
Shell	5.9	5.4	2.8
Texaco	4.8	5.4	0.8
Chevron	4.1	5.0	1.1
Mobil	2.9	3.0	1.1
Amoco	2.8	4.2	0.5
Total	34.0	40.0	8.9
Total Production MMB/D	8.27	9.76	65.0

¹ US Petroleum Product Supply, Dec. 1998, p. 9

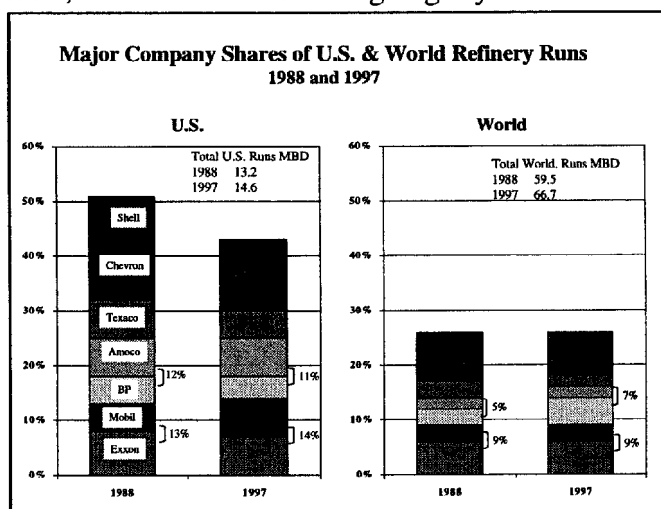
role of the US majors in US and global crude production is declining, both in share and volume, as the chart on this page shows. The low shares of the 7 majors in world oil production outside the US reflects the large share of world oil production concentrated in OPEC and other producing countries where state oil companies predominate. Thus, the 7 majors' current share of world oil production is much too small to affect world oil prices. The world's largest companies in terms of oil production are, in descending order, the state-owned companies of Saudi Arabia, Iran, Mexico, China and Venezuela.

Shares of the World's 7 Largest (Pre-Merger) Majors in U.S. & World Refinery Runs

The chart below shows shares of US and world refinery runs of the seven companies in 1988 and 1997. The panel on the left shows the company shares of total US runs. The seven collectively in 1988 accounted for just over 50% of US refinery runs. In 1997, their share was significantly lower, 43%. The combined shares of BP and Amoco as well as Exxon and Mobil were relatively constant, with BP-Amoco falling slightly from 12% to 11%, and Exxon-Mobil rising slightly from 13% to 14%.²

As shown on the right, the seven companies together account for just over 25% of world refinery runs, well below their US shares. Neither the BP-Amoco pairing, nor Exxon-Mobil reach a 10% share on a world basis.

The chart suggests that certainly on a global basis, refining is highly competitive, a condition that would not change if Exxon and Mobil kept their refineries after a merger.³ The US figures are higher. However, it should be kept in mind that oil products are traded in a world market. In 1998, the US imported about 2 MMB/D of products (including imports from the US Virgin Islands), over 10% of total consumption. There are also other very large international players besides the seven discussed here. These include Saudi Aramco and Petroleos de Venezuela, both of whom have global refining capacities larger than BP's, including US ventures.



² In 1998, Mobil sold its 155,000 barrel/day refinery in Paulsboro, New Jersey to Valero Energy Corporation. The sale reduces the combined Exxon-Mobil share of US refining by about 1.5 percentage points below the 14% figure for 1997.

³ Exxon/Mobil's share of refining capacity is nearly 13% in both the US and Europe, 9% in Asia Pacific and less than 3% elsewhere.

Texas and Louisiana

Within the US, the Gulf Coast has the greatest concentration of refining capacity. The table on the right shows shares of crude refining capacity for the seven majors in Texas and Louisiana as of January 1, 1999. The two states' total refining capacity is 7.0 MMB/D.

Exxon and Mobil have shares of nearly 13% and 8% respectively. BP and Amoco have a combined share of 10%, Motiva, the joint venture between Texaco, Saudi Aramco and Shell also has a share of 10%. The seven companies altogether account for somewhat less than half of total crude refining capacity in the two states. A number of the companies in the "Others" category have refining capacities in the region comparable to most of the 7 majors. These include companies such as Citgo, Conoco, Crown, Clark, Koch, Marathon, etc.⁴

In Texas & Louisiana – 1/1/99

	%
Exxon	13
Mobil	7
BP	4
Amoco	6
Motiva*	10
Shell**	5
Chevron	1
Others	54

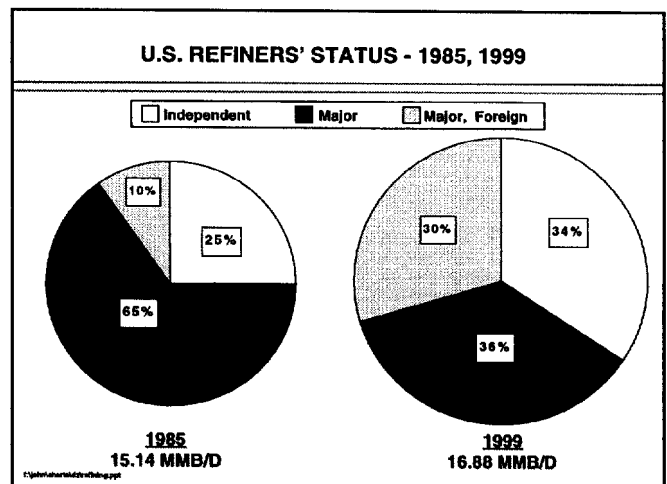
* Joint venture between Texaco, Shell, and Saudi Aramco

** includes all of Deer Park Shell-Pemex interest.

Source: *Oil & Gas Journal 1998 Worldwide Refining Survey*

Share of Crude Refining Capacity

An important factor in analyzing the competitiveness of the refining sector of the US oil industry is the composition of this sector among the different groups of companies and the movements of these groups. The chart at the right shows the sharp decline of the US majors in both share and volume of total US refining capacity since 1985 and the substantial growth of independent refiners during this period, obviously an indication of the domestic refining industry's dynamic competitiveness. Between 1985 and 1999, the US majors' share of refining capacity dropped from 65% to 36% as both independents and new foreign players gained.



⁴ It should be kept in mind that a substantial amount of products refined at the US Gulf Coast is consumed elsewhere. For example, the Gulf Coast is the single largest supply source of products to the very competitively priced US East Coast.

Conclusion

The US oil market is highly competitive at all levels. No company has a dominant share of any segment of the market. This would still be true after the Exxon/Mobil merger. Equally important is the US market's open access to the global oil market. Currently over 50% of our crude oil requirements and over 10% of our refined products requirements are imported and these shares move continuously with supply/demand changes. Even in the most concentrated oil industry region, Texas and Louisiana, the Exxon/Mobil's combined share of refining capacity is only 20% of the area's total. Thus, we expect the US oil industry to continue to be a competitive part of the world oil market.

Since companies can't control the price of crude or the prices of products they sell, they can only respond to difficult market conditions by acting on what they do control, their costs. Last year simply intensified pressures on the industry to move faster. Even the largest companies could no longer consider themselves exempt.