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Oil Industry Profit Review 2005

Robert Pirog, Resources, Science, and Industry Division

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Abstract. This report analyzes the industry's profit performance in 2005. While recent profits in the oil industry are of interest to investors, analysts, and public policy specialists, among others, a longer term perspective is important in understanding the performance of the industry. For example, as recently as 2002, the financial picture in the oil industry was far different, with declining earnings in key sectors, such as refining. The oil industry historically has been cyclic, with periods of high earnings often followed by sharp declines, driven by movements in the world price of crude oil. For this reason, projections of future industry performance based on current performance are likely to be mistaken.

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Committees of Congress

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Summary

The increase in world oil prices that began in 2004 and continued into 2005 led to increasing revenues and net incomes for all sectors of the oil industry. In 2004 and continuing into 2005, increasing world demand, led by China, India, and the United States, created a tight market in both oil production and refining, at a time where spare capacity was already at historically low levels. In addition, in 2004 and 2005, world political events including the war in Iraq, political unrest in Nigeria, and the political climate in Venezuela, among others, contributed to a market psychology that pushed up prices.

In the U.S. domestic market, the effects of hurricanes Katrina and Rita continue to be felt both in oil production and oil refining. The hurricanes also contributed to the profitability of the oil industry in the U.S. market. However, while profits were high, the oil market demonstrated its ability to supply consumers as feared shortages associated with the hurricanes were very limited.

The profits of the five major integrated oil companies accounted for three quarters of all the profits earned by the integrated oil companies. In this group, oil production led the way as the most profitable segment, even though production of oil and natural gas generally declined.

On a percentage basis, the percentage growth in profits for the independent oil and gas producers was even higher than the integrated oil companies. Their total profit, however, was only about 15% of the profit of the integrated companies.

Independent refiners and marketers earned a 92% profit increase in 2005 compared to 2004. Valero, the largest firm in this group and the largest refiner in the United States, led the way with a 99% increase in profit and earned almost two thirds of the profit of the group as a whole.

High levels of profit, coupled with declining growth rates for profit, appear likely to continue in 2006. The potential volatility of the world oil market leaves any forecast for the industry uncertain.

This report will not be updated.

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The average spot market price for West Texas Intermediate (WTI), a reference grade of U.S. crude oil, was up 36.5% in 2005 compared to 2004, refinery capacity utilization rates ran in excess of 90% for much of the year, and two hurricanes, Katrina and Rita, struck the U.S. gulf coast, the location of a major portion of the U.S. oil production and refining industry. As a result of these, and other domestic and world oil market conditions, the oil industry as a whole, brought in record revenues, and earned record profits, in 2005.[1]

In 2005, the oil industry recorded revenues of $1.62 trillion, of which 81% was accounted for by the five major integrated oil companies. Profits for the industry totaled almost $140 billion, 76% of which were earned by the five major integrated oil companies, with the largest company, ExxonMobil, earning over 25% of the total profit. Although the financial results for the industry were at record levels, the performance of the various sectors of the industry, as well as individual companies within those sectors, varied, leaving some firms as relative under-performers compared to the industry leaders.

This report analyzes the industry's profit performance in 2005.[2] While recent profits in the oil industry are of interest to investors, analysts, and public policy specialists, among others, a longer term perspective is important in understanding the performance of the industry. For example, as recently as 2002, the financial picture in the oil industry was far different, with declining earnings in key sectors, such as refining. The oil industry historically has been cyclic, with periods of high earnings often followed by sharp declines, driven by movements in the world price of crude oil. For this reason, projections of future industry performance based on current performance are likely to be mistaken.

Integrated Oil Company Profits

Integrated oil companies operate in both the upstream (exploration and production) and the downstream (refining and marketing) segments of the industry. Among the integrated oil companies listed in **Table 1**, the five largest companies are usually identified as the major oil companies, or super-majors. ExxonMobil is the largest such company; its profits in 2005 were almost a third larger than either of its largest competitors, Royal Dutch Shell and BP.

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[1] This report explicitly analyzes the production, refining, and marketing components of the industry.

[2] The profit performance of the oil industry since 2002 is analyzed in CRS Report RL33021, *Oil Industry Profits: Analysis of Recent Performance*, by Robert Pirog.

Table 1. Financial Performance of the Integrated Oil Companies, 2005
(millions of dollars)

Company	Revenues		Net income		Return on sales	Return on equity
	2005	% change	2005	% change		
ExxonMobil	370,998	24.5	36,130	42.6	9.7	32.5
Royal Dutch/Shell	306,731	15.1	22,940	30.4	7.5	25.2
BP	253,621	25.1	19,314	25.2	7.6	24.1
Chevron	198,200	27.6	14,099	5.8	7.1	22.5
Conoco Phillips	183,364	33.9	13,529	66.4	7.4	25.6
Marathon	63,673	27.6	3,022	140.4	4.7	25.8
Amerada Hess	22,747	35.9	1,242	27.1	5.5	19.7
Occidental	15,208	33.8	5,281	105.6	34.7	35.1
Murphy	11,877	42.1	846	20.7	7.1	24.4
Total	**$1,426,419**	**24.5**	**$116,403**	**36.4**	**8.2**	**26.8**

Source: *Oil Daily*, Profit Profile Supplement, vol. 56, no. 46, March 9, 2006, p. 10, and Financial Data by Company at [http://www.Hoovers.com/free/], and company annual reports.

Note: Percent change values reflect changes from 2004.

Revenue growth among the integrated oil companies in 2005 was driven by increases in the price of crude oil. Even though four of the nine companies experienced a decline in oil production, and seven of the nine experienced a decline in natural gas production, as shown in **Table 2**, their revenues increased on average by 24.5% in 2005. With output declining, it is likely that revenue growth was based on price increases.

Table 2. Upstream Results of the Integrated Oil Companies, 2005

Company	Net income 2005	Net income % Change	Oil production (000 b/d)	Oil production % Change	Gas production (mm cf/d)	Gas production % Change
ExxonMobil	24,349	46.0	2,523	-1.9	9,251	-6.2
Royal Dutch/Shell	14,238	44.9	2,093	-7.1	8,263	-6.2
BP	25,491	41.0	2,562	1.2	8,424	-0.9
Chevron	11,724	23.5	1,669	-2.4	4,233	6.9
Conoco Phillips	8,430	47.8	907	0.2	3,270	-1.4
Marathon	2,998	76.2	191	12.4	932	-6.7
Amerada Hess	1,058	40.1	244	-0.8	544	-5.4
Occidental	6,293	46.7	431	1.4	674	5.8
Murphy	748	46.1	103	12.0	90	-35.7
Total	**$95,329**	**40.0**	**10,723**	**0.5**	**35,681**	**0.2**

Source: *Oil Daily*, Profit Profile Supplement, vol. 56, no. 46, March 9, 2006, p. 10.

Note: Percent change values reflect changes from 2004.

Two profit rates, return on sales and return on equity, are presented in **Table 1**. In an advertisement appearing soon after the oil companies announced their 4th quarter 2005 financial results, the American Petroleum Institute (API) sought to compare the returns earned in the oil industry to other American industries.[3] They compared return on sales in the oil industry to returns earned in seven other industries, as well as U.S. industry as a whole, for the period October 2000 through September 2005. They found that the oil and natural gas industry earned only 0.3% more than industry as a whole, and was ranked sixth of the eight covered industries, just above the average for all U.S. industry.[4] The integrated oil companies, earning returns of 8.2% on sales in 2005, exceeded the historical API rates of return by over 41%.

Since calculating return on sales dilutes the effect of growing total profits of the industry due to higher prices and growing revenues, another standard percentage measure of profitability, return on equity, is presented. This measure indicates the success of the company and industry in earning profit by utilizing the invested capital of the owners; the shareholders of the company. This measure is widely used by

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[3] For example, *The New York Times*, January 30, 2006, p. A11.

[4] Banks led with returns of 17.3%, followed by pharmaceuticals at 16.2%, real estate at 10.8%, health care at 7.7%, software and services at 7.6%, oil and natural gas at 5.8%, utilities at 5.2%, retailing at 3.4%, and all U.S. industry at 5.5%.

investors and financial analysts in evaluating the performance of firms seeking access to capital markets. By this measure, the integrated oil companies returned 26.8% in 2005, over three times the return on sales. The industry leader, ExxonMobil earned 32.5%.[5] These rates of return are likely to assure these firms, and the industry's, position as a desirable investment as long as the price of oil remains high.[6]

Table 3. Downstream Results of the Integrated Oil Companies, 2005

Company	Net income		Product sales (000 b/d)	
	2005	% Change	2005	% Change
ExxonMobil	$7,992	40.1	8,257	0.6
Royal Dutch/Shell	7,532	14.3	7.057	-7.1
BP	4,405	-15.9	5,888	-8.0
Chevron	2,766	-14.9	3,768	-3.6
Conoco Phillips	4,173	52.1	3,251	3.5
Marathon	3,013	114.3	1,455	3.9
Amerada Hess	515	14.2	456	6.5
Occidental	—	—	—	—
Murphy	125	52.4	358	5.6
Total	**$30,521**	**13.9**	**30,490**	**-2.8**

Source: *Oil Daily*, Profit Profile Supplement, vol. 56, no. 46, March 9, 2006, p. 10.

Note: Percent change values reflect changes from 2004.

Tables 2 and 3 disaggregate the upstream and downstream performance of the integrated oil companies in 2005. **Tables 1 and 2** show that upstream net income growth led overall corporate net income growth for most of the companies, and they earned almost 50% of their total net income from upstream activities. Although oil and gas production was up by less than 1% for each product, in oil, three of the four largest producers experienced declining output. In natural gas, four of the five largest producers experienced declining output, due to the hurricanes and other factors.

Table 3 presents financial results for the downstream activities of the integrated oil companies for 2005. While product sales were down by 2.8%, net incomes were up by 13.9%. ExxonMobil's performance was enhanced by its ability to increase sales while its major competitors suffered declines in sales ranging from 3.6% to 8%. Refinery operations were affected by hurricanes Katrina and Rita and other special

[5] ExxonMobil's return on assets, another common profit measure, was 17.4% in 2005.

[6] The key question for investors and others is whether these returns will continue in the future, something unknowable.

factors.[7] For example, the BP refinery at Texas City was out of operation in the third quarter 2005 due to an explosion and fire.[8] The effect of these events was that, despite high refining margins, several firms were unable to take full advantage of the earning potential that was available because of unexpected plant closures.

While it might appear from the data in **Table 3** that, contrary to popular belief, refining and marketing were under-performers in 2005, the results must be set against the performance of 2004. While net income grew by only 13.9% in 2005, this followed net incomes that had increased by 96.7% in 2004, allowing refining to lead industry profits in that year.[9] In other words, the increases of 2005 were above, and beyond, the gains made in 2004.

Hurricanes Katrina and Rita also affected downstream profitability. While the effects of the hurricanes served to raise refining margins and product prices, they accomplished that by closing a substantial fraction of the area capacity. Refinery utilization rates dropped to 75% at the beginning of October 2005 from 97% at the end of August 2005. Many of the major refiners, including ExxonMobil, ConocoPhillips, Chevron, Shell, BP, and Valero, all had refineries that were forced to close as a result of damage to the facility, or to support infrastructure. The result was that many companies were not able to take advantage of the high margins and profits because their facilities were non-operational. The high returns to operating refineries did provide an incentive to companies with damaged facilities to get them back on line as quickly as possible.

Independent Oil and Gas Producers

Table 4 presents financial results for 2005 for the independent oil and gas producers. Their revenues were only about 4% of that of the integrated oil companies, but their net incomes were over 14% of that of the integrated oil companies. With the exception of Devon and Andarko, which lost 13.4% and 13.9% of their oil production, respectively, as well as 7.4% and 23.1% of their natural gas production, all the companies in this group were able to expand output. However, the declines posted by Devon and Andarko led the group as a whole to show a decline of 2.8% in oil production, but a 2.4% increase in natural gas production.

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[7] CRS Report RS22233, *Oil and Gas: Supply Issues After Katrina and Rita*, by Robert L. Bamberger and Lawrence Kumins, for more on the effects of the hurricanes.

[8] Jeff Gosmano, "Upstream Drives Strong Q4 Profits for Majors," *Oil Daily*, vol. 56, no. 46, March 9, 2006, p. 9.

[9] *Oil Daily*, Profit Profile, February 28, 2005, p. 8.

Table 4. Financial Performance of Independent Oil and Gas Producers, 2005

(millions of dollars)

Company	Revenues		Net income	
	2005	% Change	2005	% Change
Devon	10,741	16.9	2,920	34.2
Andarko	7,100	16.8	2,466	54.0
Burlington	7,587	35.0	2,683	75.7
Apache	7,584	42.2	2,618	57.3
Kerr McGee	5,917	34.5	3,420	702.0
Chesapeake	4,655	72.2	880	100.4
EOG	3,620	59.4	1,252	103.9
XTO	3,519	80.6	1,152	126.8
Pioneer	2,373	33.2	535	70.9
Newfield	1,762	30.2	348	11.5
Total	**$54,858**	**35.0**	**$18,274**	**91.9**

Source: *Oil Daily*, Profit Profile Supplement, vol. 56, no. 46, March 9, 2006, p. 11.

Note: Percent change values reflect changes from 2004.

For 2005, four of the ten companies in this group more than doubled their net incomes compared to 2004. The results for the fourth quarter 2005 were even better, as seven of the ten companies were able to more than double their net incomes compared to the fourth quarter of 2004. For the group as a whole, net income increased by 160.8% compared to the fourth quarter 2004. However, the performance of the firms was also affected by asset acquisitions and relinquishments.[10]

Independent Refiners and Marketers

Valero is the leading firm among the group of independent refiners and marketers. Valero accounted for 58% of the group's revenue and 64% of the group's net income. After its acquisition of Premcor, Valero became the largest refiner in the United States, with a total capacity of over 2.2 million barrels per day, over 13% of total U.S. capacity. The acquisition of Premcor by Valero contributed approximately 800,000 barrels per day of refining capacity at four refineries to the Valero total. Valero only had ownership of these facilities for one full quarter, the fourth, in 2005.

[10] Ibid.

Table 5. Financial Performance of Independent Refiners and Marketers, 2005
(millions of dollars)

Company	Revenues		Net income	
	2005	% Change	2005	% Change
Valero	82,162	50.4	3,590	99.0
Sunoco	33,764	32.4	974	61.0
Tesoro	15,170	35.1	507	54.6
Frontier	4,001	39.8	272	288.6
Holly	3,213	43.1	168	100.0
Alon	2,329	36.4	104	316.0
Total	**$140,639**	**43.3**	**$5,615**	**92.6**

Source: *Oil Daily*, Profit Profile Supplement, vol. 56, no. 46, March 9, 2006, p. 11.

Note: Percent change values reflect changes from 2004.

Independent refiners and marketers benefitted from the same set of market conditions that affected the integrated oil companies. These factors include refinery outages as a result of hurricanes Katrina and Rita, a wide price spread between high quality light sweet crude and lower quality heavy sour crude, high product prices, and high throughput at their operable refineries. It was reported that refiner margins exceeded $30 per barrel in September 2005. As a result of hurricane Katrina, gasoline prices on the New York Mercantile Exchange reached a peak equivalency of $122 per barrel, while crude oil, also high priced, was just above $70 per barrel. This $52 spread between crude oil and petroleum products was a key factor in the profitability of the entire refining industry in the fourth quarter of 2005.[11] The independent refiners and marketers earned one third of their 2005 profits in the fourth quarter of 2005.

2006 Profit Outlook

Crude oil prices finished the first quarter of 2006 above $65 per barrel. Residual effects from the hurricanes still inhibit domestic production of crude oil and natural gas, and although it is likely that high prices have slowed the pace of demand growth to some extent, oil market conditions remain tight. These factors suggest that profit levels are likely to remain high in the oil and natural gas industry, at least through the first quarter of 2006, and possibly throughout the year, unless the world price of oil unexpectedly declines.

[11] Matt Piotrowski, "Refiners Close 2005 With Stellar Profits," *Oil Daily*, vol. 46, no. 56, March 9, 2006, pp. 8-9.

Unless there is a sharp worsening of market conditions, profit growth rates, although not necessarily profits themselves, are on track to decline markedly in 2006. Given the high profit growth rates attained in 2005, these rates are likely to be sustained only by rapidly rising prices in the oil and petroleum product markets. Even though profits may remain at historically high levels, this outcome might be interpreted as disappointing by the financial community, affecting the ability of the oil companies to attract capital for risky projects through the financial markets.

The positive net income performance of the oil industry developed so quickly, and the magnitudes were so large in 2005, that they seemed to, perhaps, overcome plans to use the money. As a result, the major firms in the industry built up their cash reserves, with ExxonMobil, Chevron, and ConocoPhillips, the three largest integrated U.S. oil companies, together holding over $40 billion. In addition, special dividends were paid to shareholders and stock re-purchase plans were common in the industry.

This year may see the beginning of new investments in the industry resulting from the earnings of 2005. Time lags between earnings and increased investment activity are not uncommon in the oil industry. Because many of the companies in the industry have a global perspective, investment may or may not take place in the United States. In addition, the balance between refining investment and exploration and production will also likely reflect the profit expectations of the industry. Even if investment takes place outside the United States it will still contribute to world capacity. In a world market that is linked and interdependent, increased oil production and refining capacity anywhere in the world can benefit the U.S. market in terms of potential supply availability and relative price stability.

Conclusion

While the oil industry recorded high profits in 2004, they increased to record levels in 2005. A combination of factors, from political unrest to the effect of large hurricanes, tightened the oil and petroleum products markets, driving up prices, but not resulting in wide-spread shortages for consumers.

The industry approaches 2006 with a financial position that could result in expanded investment and capacity, either in the United States and/or worldwide. Expanded capacity is likely to reduce the near term ability of the industry to maintain the profit levels of 2006, but may be necessary in the longer term.