

CRS Report for Congress

The Use of Profit by the Five Major Oil Companies

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Summary

The price of crude oil began to increase in the last quarter of 2003, and has led to the high prices observed from 2004 through 2007. The Iraq War, unexpectedly high demand growth in China, India, and the United States, and hurricanes Katrina and Rita, along with a number of other factors, all contributed to the rising price.

An important result of these largely unexpected events was that the oil industry, as represented by the five major integrated oil companies doing business in the United States, experienced rapidly expanding revenues and profits. Some observers characterized these profits as “windfall” gains, while others pointed to the increasing scarcity and rising costs observable in the oil industry. Some saw “price gouging” in high gasoline prices, while others saw the market working to avoid physical supply shortages.

The larger profits experienced by the oil industry and the five major integrated oil companies can be used in a variety of ways. Profits might be used to expand exploration and development of crude oil resources to expand the supply of oil. Refineries might be constructed, and technology improved at existing refineries, to expand the supply of petroleum products, most notably, gasoline. Profits might also be used to provide increased returns to the owners of the oil companies, the shareholders. This end might be accomplished through dividend payments and share repurchase plans. Profits might also be used to improve the balance sheets of the companies through debt reduction, potentially improving their financial health should they face a downturn in the market in the future. Until the effects of corporate plans that reflect a market characterized by higher oil prices can be observed, profits might tend to build up as cash reserves, as experienced by some of the five firms since 2004.

How the profits generated over the past four years are used will help to determine whether oil and petroleum product markets remain tight with high prices, or whether they loosen, develop extra capacity, and lead to moderating prices.

This report will be updated.

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The Use of Profit by the Five Major Oil Companies

The five major integrated oil companies operating in the U.S. market have earned net incomes totaling \$308 billion since 2004.¹ In the previous four years, from 2000 to 2003, they earned net incomes of \$171 billion.² This 80% increase in profit has attracted public attention and raised the issue of whether “windfall” profits had accrued to the firms. At the same time that these oil companies were earning increased profits, U.S. gasoline consumers were facing prices that rose above \$3.00 per gallon, raising concerns that the increased profits might be tied to “price gouging” by the oil companies.

This report analyzes the uses of accrued profits by the five major integrated oil companies from 2004 through 2006.³ Although the oil industry is composed of thousands of firms involved in many different aspects of the business, these five firms represent the visible face of the oil industry to the American public. These companies also earned 90% of the total earnings of integrated oil companies, and 74% of the earnings of all the integrated oil companies, the independent oil and gas producers, and the independent refiners and marketers in 2006. Because of their size, the decisions they make with respect to utilizing profits will largely determine how the industry’s use of profit is viewed by the public.

How the industry uses its recent profits is important because the demand and supply balance, and hence petroleum product prices for the U.S. consumer, will be affected by the decisions made. For example, one of the commonly cited reasons for high gasoline prices in 2007 is that refinery capacity has been offline as a result of catching up on deferred maintenance and of accidents. If investments had been made in new refineries over the past 20 years, the balance between refinery capacity and product demand might not be as tight, thus reducing the pressure on gasoline prices.

Oil Prices and Profits

A primary source of the increased profits of the five oil companies has been the increased price of crude oil on the world market. The increasing price of crude oil

¹ Earnings include both domestic and international net incomes.

² Total SA, the French integrated oil company, is by some measures similar in size to the five companies analyzed in this report. However, Total’s business interests in the U.S. market are limited, and for that reason Total is not included in this report.

³ The five major integrated oil companies active in the U.S. market are ExxonMobil Corporation (ExxonMobil), BP p.l.c. (BP), Royal Dutch Shell p.l.c. (Shell), Chevron Corporation (Chevron), and ConocoPhillips.

has been attributed to the growth in demand from China, India, the United States, and other areas, as well as to hurricanes Katrina and Rita and a variety of other factors.⁴ Few if any of these factors could be influenced by the five companies.

Crude oil prices began their rise toward the end of 2003, and although volatile, have remained at or near historically high levels since then.

Table 1. U.S. Composite Cost of Crude Oil to Refiners

(dollars per barrel)

Year	2000	2001	2002	2003	2004	2005	2006
Price	28.26	22.95	24.10	28.53	36.98	50.24	60.23

Source: Energy Information Administration, at [<http://www.eia.doe.gov>].

Note: The composite cost of crude oil represents the average price U.S. refiners pay for oil, and is closely related to petroleum product prices.

All five of the companies produce crude oil. Over the period 2004-2006, ExxonMobil produced an average of 2.6 million barrels per day (b/d), and was the leading producer among the five companies. Shell averaged 2.1 million b/d, BP averaged 2.5 million b/d, Chevron averaged 1.7 million b/d, and ConocoPhillips averaged 1.0 million b/d. Higher world prices for crude oil increased the revenue from this production in proportion to the increase in prices.

In addition to the increasing price of crude oil, tightness in the refining industry contributed to the increase in petroleum product prices, notably gasoline. All five of the selected companies are active in the refining industry. In 2006, these five companies accounted for approximately 41% of total U.S. refining capacity.

Table 2. Refining Capacity of Major Integrated Oil Companies

(millions of barrels per day)

	2000	2001	2002	2003	2004	2005	2006
ExxonMobil	1.77	1.79	1.80	1.84	1.84	1.86	1.86
BP	1.66	1.56	1.50	1.50	1.50	1.47	1.47
Shell	-----	-----	-----	.59	.59	.53	.57
Chevron	1.04	1.05	1.08	1.00	1.00	1.01	1.01
ConocoPhillips	.938	2.25	2.27	2.19	2.19	2.29	2.22
Total	6.44	6.65	6.65	7.13	7.13	7.16	7.13

Source: American Petroleum Institute, *Basic Petroleum Data Book*, Section VIII, Table 11, February 2007, and Energy Information Administration.

Note: Shell data is for wholly owned refining capacity only. Shell also has a joint venture with Saudi Refining, Inc., called Motiva Enterprises, that operated an average of more than 800,000 barrels per day of refining capacity from 2000-2006.

⁴ See CRS Report RL32530, *World Oil Demand and its Effect on Oil Prices*, by Robert Pirog, for a more complete analysis of the factors influencing world crude oil prices.

Although, historically, refining margins and profitability have tended to be volatile over time, profit margins have remained at or near historic highs since 2004 as a result of the tightening balance between the growth of demand outpacing the growth in supply, as well as the damage and disruption caused by hurricanes Katrina and Rita.

For the five companies, operating in both the upstream (exploration and production) and downstream (refining, distribution, and marketing) segments of the oil market has led to growing profitability, as shown in **Table 3**.

Table 3. Net Income of Major Integrated Oil Companies
(billions of dollars)

	2000	2001	2002	2003	2004	2005	2006
ExxonMobil	17.7	15.3	11.4	21.5	25.3	36.1	39.5
BP	9.3	8.4	5.6	12.4	15.4	19.3	22.2
Shell	12.7	10.5	9.4	12.7	19.2	26.2	25.4
Chevron	5.1	3.2	1.1	7.2	13.3	14.1	17.1
ConocoPhillips	1.8	1.6	-0.29	4.7	8.1	13.5	13.5
Total	46.6	39.0	27.2	58.5	81.3	109.2	117.7

Source: Oil Daily, Profit Profile Supplements for covered years, company data, Securities and Exchange Commission filings.

Profits declined for the five companies from 2000 through 2002, then doubled in 2003. Profits rose by 39% in 2004, 34% in 2005, and 8% in 2006. Profits continued to increase in 2007, with three of the five companies gaining more than 10% compared to the first quarter of 2006, ConocoPhillips gaining 7.7%, and only BP experiencing a decline in net income. The magnitude of the profits earned, as well as the rapidity with which they accrued, has created a challenge for the oil companies: how to best utilize these resources and meet the varied demands of shareholders and the public.

Profit Allocation

Private corporations, such as the five major integrated oil companies, operate for the purpose of maximizing shareholder value, that is, to enhance, as much as possible, the value of the shares held by investors and the returns earned by those shares. The goal of maximizing shareholder value can be achieved in various ways. The management may choose to reinvest profits in the business, deploying new technology and capital equipment or hiring more workers. The management might also acquire assets for the corporation through merger or acquisition. Another strategy might be to directly pay cash dividends to the shareholders, or to buy back the company's shares on the open market to enhance the price of outstanding shares. The management also might decide to alter the capital structure of the company by reducing the outstanding debt of the company. Finally, the management might decide to hold the profits as cash, or other short-term assets, to acquire the flexibility

to implement resource allocation decisions in the future. Of course, the company may apply the profits to several or all of these uses.

In principle, the expected rate of return on investments should be at least as great as the current rate of return earned by the company. If the management cannot identify investment opportunities that have expected rates of return in excess of the current rate of return, the profit is typically returned to the shareholders in the form of dividends or other payments.

Capital Expenditures

Many capital investment expenditures in the oil industry are allocated to projects that cost billions of dollars and will likely be online for decades. For example, an efficiently scaled refinery is likely to cost between \$3 billion and \$5 billion and operate for more than 30 years. When planning and investing in such facilities, the underlying variables that determine potential profits must not only be favorable now, but must also be forecast to be favorable for decades to come. Because of the magnitude of the funding required for such an investment, a mistake might cause damage to the company for years. These factors tend to create an investment philosophy in the oil industry that is characterized by a deliberate pace as well as a degree of conservatism in making capital expenditures.

These characteristics have been observable in the oil industry during the recent period of high profits. Some might have expected the increased price of oil to lead to an immediate boom in exploration and refinery construction. A slower pace of capital investment is consistent with a view that the currently high price of oil might decline in the future, leading to an investment reference price below the currently observable price, or a forecast that demand growth might slow or even decline.

Even if the decision had been quickly taken to invest in either upstream or downstream activities, there would likely be a lag between the decision to invest and substantial expenditures being made on the project. Many investment projects related to the oil industry require environmental permits from a number of federal, state, and local agencies, all of which might require studies to be undertaken and approvals to be granted. Several years in the permitting process might be expected.

Capital expenditures included in **Table 4** might not be for only new or expanded capacity. Environmental regulations affect both the petroleum product slate as well as refinery sites, and may require capital investment to maintain compliance.

**Table 4. Capital Expenditures
of Major Integrated Oil Companies**

(billions of dollars)

	2000	2001	2002	2003	2004	2005	2006
ExxonMobil	8.4	9.9	11.4	12.8	11.9	13.8	15.5
BP	8.8	12.2	12.1	11.9	12.3	12.3	12.3
Shell	6.6	9.6	12.1	12.2	8.7	10.8	22.9
Chevron	3.6	9.7	7.6	5.6	6.3	8.7	13.8
ConocoPhillips	2.0	3.0	4.4	6.1	9.5	11.6	15.6
Total	29.4	44.4	47.6	48.6	48.7	57.2	80.1

Source: Securities and Exchange Commission Filing, forms 10-K and 20-F.

Table 4 shows that capital expenditures increased by less than ½% in 2004 compared to 2003, while net income rose by 39%. While capital expenditures rose by 17% from 2004 to 2005, profits rose by 34%. However, capital expenditures rose by 40% from 2005 to 2006, while profits rose by 8%. The lag in capital expenditures might reflect a reassessment by the oil companies of future prices and profits, or it may reflect other factors that are less fundamental.

While it is possible that oil firms might want to invest both upstream and downstream to take advantage of favorable business conditions, their actions run the risk of reducing the potential profit of the market. Economic theory suggests that industries adjust to tight markets through relatively small increases in supply. Because the efficient scale of the oil industry tends to be large, investments tend to have a large enough effect on production levels, or capacity, to materially affect the market. For example, if only two of the five major firms decided to build new refineries, this might result in more than 1 million barrels a day of refining capacity coming online, an almost 6% increment, which could be enough to change the relative market balance.

Mergers and Acquisitions

Depending on the relative prices of known oil resources and exploration, and existing facilities and construction, it has, on occasion, in the past, been cheaper for a company that wishes to expand to acquire assets financially, rather than through exploration and/or construction. This, along with other reasons, like scaling the company to an appropriate size for international competition, has led to periods of merger and acquisition activity in the oil industry.

Many of the major oil companies were involved in merger activity from 1998 to 2002. In 1999, Exxon and Mobil merged. BP followed its 1998 acquisition of Amoco with a takeover of Arco in 2000. Conoco and Phillips merged in 2002, and Chevron and Texaco combined in 2001.

Recent years have seen few transactions on the scale of 1998-2002. Chevron acquired Unocal in 2005 in a deal that was reported to cost \$18 billion. ConocoPhillips acquired Burlington Resources in 2006 for a reported \$35.5 billion.

Dividends and Stock Acquisition

If management has access to capital investment projects that are projected to earn more than the current rate of return for the company, carrying them out will increase the value of the company and can lead to capital appreciation for its outstanding shares. If such profitable projects cannot be identified, paying out dividends may be appropriate. Dividend payouts have positive and negative aspects. Shareholders may appreciate the immediate returns, but this payout is unlikely to lead to long-term capital appreciation of the shares. Taken in a positive light, the payout of dividends signals high earnings by the firm; taken in a negative light, they signal that management does not have wealth-increasing opportunities to use the funds to generate capital appreciation.

**Table 5. Cash Dividends
Paid by Major Integrated Oil Companies**
(billions of dollars)

	2000	2001	2002	2003	2004	2005	2006
ExxonMobil	6.12	6.25	6.21	6.51	7.11	7.47	7.86
BP	4.41	4.82	5.26	5.65	6.04	8.18	7.96
Shell	N/A	N/A	N/A	6.54	N/A	10.84	8.43
Chevron	2.66	2.73	2.96	3.03	3.37	3.87	4.45
ConocoPhillips	0.47	0.47	0.68	1.10	1.23	1.64	2.27
Total	13.66	14.27	15.11	22.83	17.75	34.0	30.97

Source: Securities and Exchange Commission Filings, 10-K and 20-F.

Note: Royal Dutch Shell data is incomplete due to the administrative restructuring of the company. As a result, totals are not directly comparable.

Cash dividends paid reflect the product of dividends per share times the number of shares outstanding. For example, ExxonMobil's 20.7% increase in dividends paid out between 2003 and 2007 represents a 20.7% increase in dividends per share only if the number of shares outstanding is constant. If the number of shares increases due to new issues, then the actual return is less. If the number of shares falls, the actual return to shareholders from dividend payments is greater. Thus, it is important to review the total shares outstanding, as shown in **Table 6**.

Table 6. Shares Outstanding of Major Integrated Oil Companies
(millions of shares)

	2000	2001	2002	2003	2004	2005	2006
ExxonMobil	6,936	6,809	6,700	6,568	6,401	6,133	5,729
BP	N/A	N/A	N/A	N/A	1,167	1,167	950
Shell	N/A	N/A	N/A	N/A	N/A	3,817	3,695
Chevron	713	1,149	1,137	1,137	2,107	2,232	2,164
ConocoPhillips	623	623	704	708	718	1,423	1,690

Source: Securities and Exchange Commission Filings, forms 10-K and 20-F.

Share repurchase programs reduce the number of shares outstanding in the market, as the company buys back its own shares and keeps them in the company treasury. For the company, share repurchase creates a potential source of quickly available capital. Treasury shares may be resold in the market without further Securities and Exchange Commission registration and approval.

From the point of view of the investor, share repurchase programs should increase the capital value of the shares they hold, other things equal. This appreciation is due to the asset base of the company being divided among a smaller number of outstanding shares, in principle making each share worth more. Compared to dividends, there may also be tax advantages associated with this type of value appreciation.

ExxonMobil reduced its shares outstanding by 12.7% between 2003 and 2006. BP reduced its shares by 18.6% from 2004 to 2006, and Shell shares outstanding declined by 3.2% from 2005 to 2006. Although Chevron and ConocoPhillips data are more associated with share increases, these increases are likely at least partly associated with the mergers the companies were involved with in 2005 and 2006, respectively.

Table 7. Earnings-per-Share of Major Integrated Oil Companies
(dollars per share)

	2000	2001	2002	2003	2004	2005	2006
ExxonMobil	5.04	2.21	1.68	3.23	3.89	5.71	6.62
BP	0.66	3.52	2.33	2.78	4.46	5.48	6.67
Shell	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chevron	7.97	3.68	1.07	6.96	6.28	3.68	7.97
ConocoPhillips	10.26	8.13	-0.57	6.91	11.60	9.55	9.66

Source: Oil Daily, Profit Profile Supplements, various yearly reports.

Earnings-per-share is a popular indicator used by investors as a factor in determining the viability of a financial investment. During a period of share repurchasing, earnings-per-share reflects not only the earning power of the company,

but the extent of repurchases. For example, earnings-per-share at ExxonMobil rose by 15.9% from 2005 to 2006, while earnings rose by 9.4% over the same period. As a result, the more than doubling of earnings-per-share experienced by ExxonMobil and BP, as well as the 40% and 14% increments at ConocoPhillips and Chevron, respectively, since the beginning of the current round of oil price increases that began in 2003, reflect not only market conditions but corporate strategy as well.

Debt and Capital Structure

Companies might use profits to alter their capital structure, defined as the balance of debt and equity financing. Corporate finance theory has long held that the choice of capital structure should have no effect on the value of a company in a perfect market.⁵ In the real world of finance, however, where bankruptcy is a potential reality, many analysts look upon debt reduction as an important way to strengthen the balance sheet of a company, improving its financial health.

Table 8. Long-Term Debt of Major Integrated Oil Companies

(billions of dollars)

	2000	2001	2002	2003	2004	2005	2006
ExxonMobil	7.28	7.09	6.65	4.75	8.96	6.22	5.73
BP	14.77	12.32	11.92	12.86	12.90	13.92	16.72
Shell	N/A	N/A	N/A	9.10	N/A	9.91	9.58
Chevron	12.49	8.70	19.87	16.11	10.45	12.13	7.67
ConocoPhillips	4.13	8.26	18.91	16.34	14.37	10.75	23.09

Source: Securities and Exchange Commission Filings, forms 10-K and 20-F.

Although reducing debt might be a desirable corporate strategy, eliminating it entirely is not likely to be efficient. Debt financing, compared to equity financing, offers several attractive characteristics. Corporate interest payments are tax-deductible, while dividend payments are paid from after-tax income. This differential allows a greater net return from identical assets, one financed through debt, the other financed with equity. Additionally, issuing debt does not dilute the ownership base of the company for existing shareholders, nor does it dilute the capital value of an equity share.

Offsetting these advantages are several disadvantages. Interest payments are a fixed liability of the firm, unlike dividends, which are paid at the discretion of management. If interest payments are not paid on time and in full, legal consequences might ensue. Debt holders stand ahead of equity holders for repayment if the firm is forced into liquidation. Increasing proportions of debt on the balance sheet also make bankruptcy more possible, making the firm riskier.

⁵ Richard A. Brealey and Stewart C. Myers, *Principles of Corporate Finance*, McGraw-Hill, 4th ed., pp. 399-401.

Table 8 suggests that the major integrated oil companies seemingly have not followed the same strategy with respect to debt management. ExxonMobil has reduced its long-term debt by 36% since it peaked in 2004. BP, which had roughly steady levels of long-term debt in 2003 and 2004, saw increases in 2005 and 2006. Shell's limited available data show, again, a roughly steady approach, while Chevron reduced its long-term debt by 37% in one year from 2005 to 2006, achieving its lowest long-term debt level in the data period. ConocoPhillips increased its long-term debt in 2006, again likely related to its purchase of Burlington Resources in March 2006.

Short-term debt is defined as maturing in one year or less. While short-term debt constitutes an immediate obligation on yearly earnings, short-term interest rates are usually lower than long-term rates, making this mode of financing cheaper in many cases.

Table 9. Short-Term Debt of the Major Integrated Oil Companies
(billions of dollars)

	2000	2001	2002	2003	2004	2005	2006
ExxonMobil	6.16	3.70	4.09	4.07	3.28	1.77	1.70
BP	6.41	9.09	10.08	9.45	10.18	18.01	22.34
Shell	N/A	N/A	N/A	11.27	N/A	34.44	6.01
Chevron	3.09	8.42	5.35	1.70	0.82	0.74	2.16
ConocoPhillips	0.26	1.12	0.84	1.44	0.62	1.75	4.04

Source: Securities and Exchange Commission forms 10-K and 20-F.

As shown in **Table 9**, the major integrated oil companies showed divergent policy with respect to short-term debt. ExxonMobil has reduced its debt every year since 2002. BP saw expanding debt since 2003. Chevron showed low short-term debt levels from 2003 until 2005, but short-term debt turned upward in 2006. ConocoPhillips also has accumulated short-term debt since 2004.

Cash

When revenues and profits accrue quickly, and perhaps unexpectedly, there may be little alternative to holding those returns as cash balances until a strategy for using them can be developed and put in motion.

**Table 10. Cash Holdings
of the Major Integrated Oil Companies**

(billions of dollars)

	2000	2001	2002	2003	2004	2005	2006
ExxonMobil	7.08	6.55	7.23	10.63	18.53	28.67	32.80
BP	1.17	1.81	1.73	2.06	1.36	2.96	2.60
Shell	11.43	6.67	1.56	1.95	9.20	11.73	9.00
Chevron	1.89	2.21	2.96	4.27	9.29	10.04	11.40
ConocoPhillips	N/A	0.14	0.31	0.49	1.39	2.21	0.82
Total	21.57	17.38	13.79	19.40	39.77	55.61	56.62

Source: Securities and Exchange Commission Filings, forms 10-K and 20-F.

As shown in **Table 10**, although the total cash held by the companies has increased by more than \$37 billion since 2003, over 60% of those holdings were in the hands of one company, ExxonMobil. At the other companies, the results are more mixed, with both increases and decreases observable.

While holding cash balances might be unavoidable in the short-run, a long-term strategy based on increasing cash holdings is likely to be questionable. While cash offers flexibility, it generally offers little or no return. The price for flexibility is the potential return lost by holding it. In the longer term, financial analysts generally agree that more productive uses should be identified for cash balances, or they should be returned to shareholders in the form of dividends if no feasible investment opportunities can be identified.

Conclusion

It is likely that the increases in the price of oil that began in late 2003 and persist today were unexpected by the major integrated companies. The onset of the war in Iraq and the rapid growth of oil demand in China, India, and even the United States, were not generally forecast. Hurricanes Katrina and Rita were associated with even greater degrees of uncertainty than the war and demand growth.

As a result, and especially in the context of 2002 being a relatively weak year for oil company financials, it is likely that no set plan existed for the use of the rapidly growing profits that began to accrue in 2004. In the several years that have passed since 2003, capital expenditures have begun to expand, investor returns have been enhanced, acquisitions have been made, and balance sheets have been strengthened, even though cash balance levels are still high and growing.

In time, as corporate plans more reflect a crude oil market characterized by higher prices, long-term assets might be accumulated, supplies of both crude oil and petroleum products might be enhanced, and consumers might see a slacker market where prices may moderate from current levels. Until that time, investors in the oil industry may continue to see high rates of dividend payout, stock repurchase plans, and the accumulation of short-term assets.